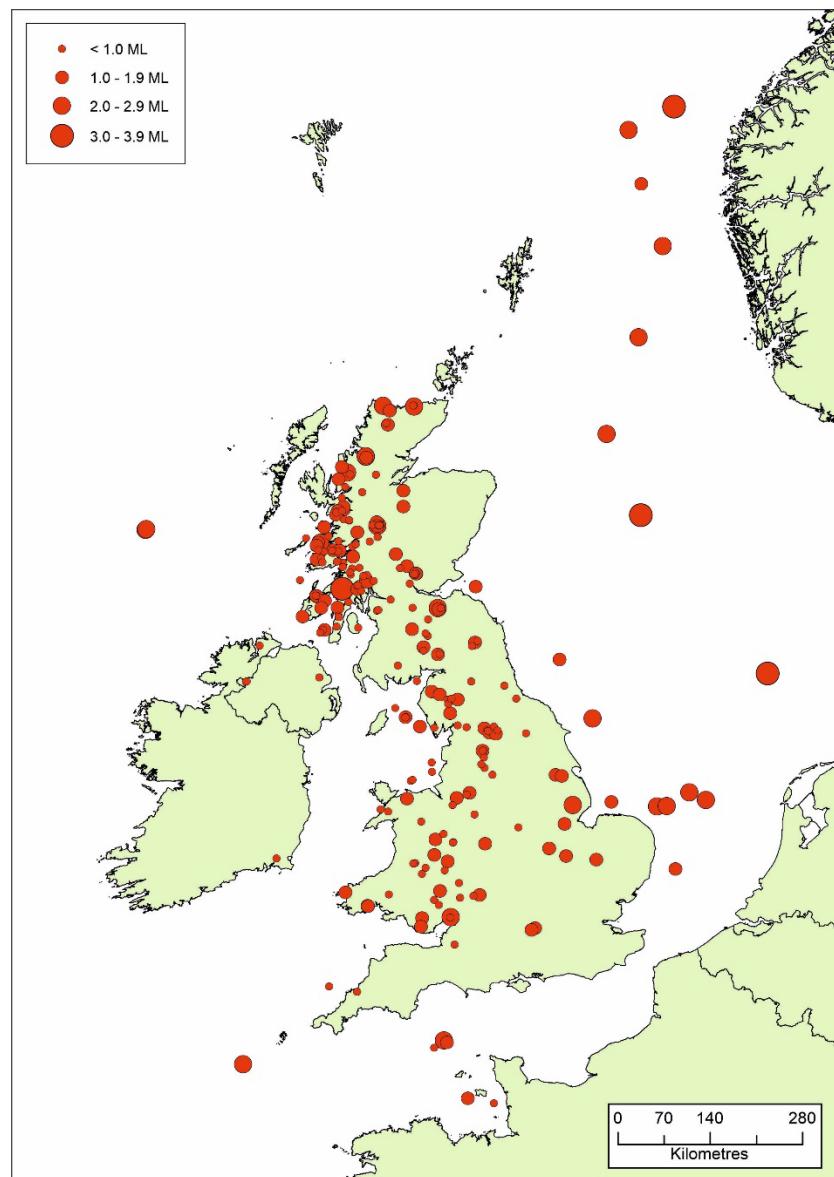


# The British Geological Survey Earthquake Bulletin for 2021

D D Galloway (Editor)

*Contributors:* G D Ford



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*British Geological Survey offices*

**Environmental Science Centre, Keyworth, Nottingham  
NG12 5GG**

Tel 0115 936 3100

**BGS Central Enquiries Desk**

Tel 0115 936 3141

email [enquiries@bgs.ac.uk](mailto:enquiries@bgs.ac.uk)

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Tel 0131 667 1000

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**Natural History Museum, Cromwell Road, London SW7 5BD**

Tel 020 7589 4090

Tel 020 7942 5344/45

email [bgslondon@bgs.ac.uk](mailto:bgslondon@bgs.ac.uk)

**Cardiff University, Main Building, Park Place, Cardiff  
CF10 3AT**

Tel 029 2167 4280

**Maclean Building, Crownmarsh Gifford, Wallingford  
OX10 8BB**

Tel 01491 838800

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# 1 Introduction

The British Geological Survey (BGS) through its National Earthquake Information Service operates a nationwide network of seismograph stations in the United Kingdom (UK). Earthquakes in the UK and coastal waters are detected within limits dependent on the distribution of seismograph stations. Location accuracy is improved in offshore areas through data exchange with neighbouring countries. This bulletin contains locations, magnitudes and phase data for all natural earthquakes detected and located by the BGS during 2021, listed in Tables 1 and 2. Maps showing seismic activity in 2021 (Figure 1), and the larger magnitude events since 1979 ( $ML > 2.5$ ) and since 1970 ( $ML > 3.5$ ) are also included. The bulletin covers all of the UK land mass and its coastal waters including the North Sea ( $12^{\circ}\text{W}$  to  $6^{\circ}\text{E}$  and  $48^{\circ}\text{N}$  to  $64^{\circ}\text{N}$ ).

All events believed to be of tectonic origin are included. Acoustic disturbances, such as sonic booms from supersonic aircraft, are included when they are felt. The airborne waves are readily identified by their slow travel time across an array but they are frequently mistaken as small earthquakes by the public. They are indicated by 'SONIC' in the locality column of Table 1.

Significant non-natural events, such as induced events and explosions, are also included in Table 1. Smaller events that are known, or suspected to be of explosive origin are excluded from the bulletin where possible. These include explosions due to quarrying, mining, weapon testing or disposal, naval exercises, geophysical prospecting and civil engineering. Unfortunately, identification by record character, location and time of occurrence is not always conclusive and some man-made events may be included in the bulletin or, more rarely, a small natural event may have been excluded.

# 2 The BGS UK Seismograph Network

The UK seismograph network consists of 91 (56 permanent and 35 temporary) stations with broadband, short period and strong motion accelerometers. Of the permanent sites, some 48 are equipped with broadband seismometers and 31 have strong motion accelerometers, 25 of which are co-located with broadband sensors. The remaining 2 sites are equipped with short period seismometers. Data from all stations are transferred in near real-time to the BGS offices in Edinburgh for automatic processing, analysis and archiving. Seismic events are detected using automatic processing algorithms, but they can also be extracted manually from the archive of continuous data, then analysed to determine event types, locations and magnitudes. Operational BGS seismograph stations are shown in Figure 2.

The detection capabilities of a network depend upon station distribution, instrument sensitivity and background noise levels. Figure 2 also shows the magnitude detection thresholds for the seismograph stations operational during 2021. The contours show earthquake magnitudes ( $ML$ ) that can be detected. Signal amplitudes must exceed the background noise level by a factor of two at four or more stations. A noise amplitude of 10 nm (high noise) is assumed for all stations. These detection levels hold true only if all stations are operational and that noise levels do not change. Smaller events may go undetected unless they are felt and reported to BGS by local inhabitants, in which case detection can be strongly dependent on the population density.

In average noise conditions (4 nm) we expect the network to detect all events with a magnitude of approximately 1.5  $ML$  and above. Noise sources such as wind, ocean waves and traffic vary considerably with time (typically 0.5 to 15 nanometres, at 10 Hz) causing the magnitude thresholds to increase or decrease. In conditions of high noise, 0.5  $ML$  should be added to the contour values, causing the threshold to rise to about 2.0  $ML$ . Normally, however, an earthquake of this size would be felt, if not detected, in the areas of poorer instrumental coverage. Therefore we expect the

bulletin to contain all earthquakes of magnitude 2.0 ML and above during periods where all stations were operational and noise levels did not exceed a threshold of 10 nm.

Given the variability in the earthquake detection threshold, as governed by ambient noise conditions and the geometry of the observing network, the bulletin is biased towards certain localities. Figure 3 shows only earthquakes with magnitude 2.5 ML or above, in the period 1979 to 2021. The data set is considered complete for these magnitudes in all localities onshore. Seismicity for the period 1970 to 2021 is shown in Figure 4 with a threshold magnitude of 3.5 ML. In the time period from 1970 to 1979, the only seismic monitoring instrumentation was the network around Edinburgh (LOWNET) and Eskdalemuir (ESK) and a station near Kyle of Lochalsh (KYL). As a result, the data set is only likely to be complete for magnitudes of 3.5 ML and above.

## 3 Earthquake Parameters and Their Errors

### HYPOCENTRE LOCATION

By accurately measuring the arrival times of at least four seismic phases at a minimum of three stations, a location can be found for an earthquake that satisfies the observed pattern of arrivals. Instrumental locations in the bulletin were obtained using the computer program HYPOCENTER (Lienert and Havskov 1995) that iteratively adjusts a trial hypocentre (latitude, longitude, depth, and origin time) until the observed and computed arrival times coincide closely.

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

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. Depth is usually only well constrained when there is a station very close to the epicentre.

The best depth determinations are obtained when an earthquake or earthquake series occurs almost beneath a network. For events at larger distances the depth errors can be many kilometres.

### MAGNITUDE

All earthquakes in the bulletin have been assigned a local magnitude (ML) as defined by Richter (1935):

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

Where A is the maximum deflection (centre to peak in mm) registered on a Wood-Anderson seismograph and  $A_0$  is that for a 'standard' magnitude zero earthquake at the same distance. The  $A_0$  term is thus a distance correction factor, tabulated by Richter to 200 km, and later adjusted to include up to 600 km. Although Richter intended his method to be an approximate quantification of earthquake size and his attenuation term,  $A_0$ , strictly only applies to California, the formula is still used worldwide today. The ML magnitudes in this bulletin have been calculated according to Richter's formula after 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 is not possible, the mean of the magnitudes from a number of verticals are used. Ground motion registered at a seismograph varies with site conditions, distance and 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 error on magnitudes quoted in the bulletin will normally be less than 0.4 ML.

## INTENSITY

Intensity is a measure of the effect of the shaking produced by an earthquake on people, structures and objects. It decreases with distance from a maximum value ( $I_{\max}$ ) usually found close to the epicentre. The maximum felt intensity is quoted, where known, with reference to the European Macroseismic Scale (EMS), (Grünthal, 1998).

## FOCAL MECHANISM

Earthquake focal mechanisms provide information on the fault geometry and type of faulting that caused the earthquake, and can be used to better understand tectonic processes occurring within the Earth's crust. Calculating them involves mapping directions where the initial motion of the seismic P-waves is up (compressional) or down (dilatational) on a spherical projection. This results in distinctive "beach-ball" diagrams that show two shaded quadrants and two white quadrants that represent upward and downward initial motions. The dividing lines between the quadrants on the "beach-ball" define the orientation of the fault planes and the directions of slip. It is not possible to determine which of the two possible fault planes shown in the mechanism is the actual fault, so *a priori* information such as aftershock distribution is sometimes used to infer the causative fault. The strike and dip describe the orientation of the fault, and the rake describes the direction of slip (-90° for thrust or reverse faulting, 90° for normal faulting and 0° or 180° for strike-slip). The axes of maximum and minimum compression are denoted by black and white squares, respectively. The grid search method of Snoke *et al.* (1984) is used to determine the best-fitting fault plane solutions.

## 4 Summary of 2021 Seismicity

There were 320 earthquakes located by the BGS seismic monitoring network during the year, with 27 having magnitudes of 2.0 ML or above and four having magnitudes of 3.0 ML or above. Some nine events with a magnitude of 2.0 ML or above were reported felt, together with a further 15 smaller ones, giving a total of 24 felt earthquakes in 2021.

Of the 320 earthquakes located some 70 of them were events, with magnitudes between -1.0 ML and 1.2 ML, that occurred near the village of Carharrack, Cornwall. These were recorded by a local network belonging to the United Downs Deep Geothermal Project (UDDGP) and are a consequence of testing of their wells, which are intended for geothermal energy production. The largest three occurred at 12:33 UTC (magnitude 1.1 ML) and 12:36 UTC (magnitude 1.2 ML) on 19 January and at 15:18 UTC (magnitude 1.1 ML) on 3 February. All three events were reported felt to both the BGS and to the site operators by residents in Carharrack and Gwennap. Typical reports described, "ground shook and felt rumbling", "a moderate shaking", "the windows rattled" and "when standing on the ground outside you could feel the earth shifting", indicating an intensity of around 3 EMS for all three events.

The largest onshore earthquake in 2021, with a magnitude of 3.4 ML and a focal depth of 12 km, occurred at 01:44 UTC on 16 November near the village of Achnamara, Argyll & Bute (Figure 5). The BGS received over 130 reports, via online macroseismic questionnaires, of the earthquake being felt in Achnamara, Tayvallich, Lochgilphead, Tarbert, Ardrishaig and in several surrounding villages and hamlets from within around 40 km of the epicentre. Typical reports described, "we felt and heard a loud, deep rumbling", "the loud bang woke us all up", "sounded like a large explosion", "the house and windows shook" and "it was like rolling thunder". A maximum intensity of 5 EMS was assigned for this event (Figure 6). It locates approximately 23 km southwest of the magnitude 5.2 ML Argyll earthquake on 28 November 1880, the largest recorded Scottish earthquake, which was felt all along the west coast of Scotland, east as far as Perthshire, throughout the Inner and Outer Hebrides and in Northern Ireland. It also locates around 45 km

SSE of the magnitude 4.1 ML Oban earthquake of 29 September 1986, which was felt over an area of around 30,000 km<sup>2</sup> with a maximum intensity of 5 EMS.

The largest offshore earthquake in 2021, with a magnitude of 3.8 ML, occurred at 20:36 UTC on 20 August with a location in the Southern North Sea, approximately 190 km northwest of Borkum (Germany), 260 km WSW of Esbjerg (Denmark) and 300 km northeast of Cromer, Norfolk (Figure 7). No reports were received that this event was felt. This event locates approximately 80 km SSW of the magnitude 4.0 ML Central North Sea earthquake, on 18 October 1994, that was felt in the Dan gas and oil field and 90 km south of the magnitude 4.0 ML Central North Sea earthquake, on 7 July 1993, that was felt in the Gorm gas and oil field. A further sixteen earthquakes occurred in the Norwegian/North Sea areas during the year, with magnitudes between 1.4 ML and 3.2 ML.

At 05:42 UTC on 8 February an earthquake, with a magnitude of 2.1 ML and a focal depth of around 3 km, occurred approximately 8 km from Diabaig, a remote coastal fishing and crofting township in Wester Ross, Highland. It was reported felt in Diabaig, Gairloch, Poolewe, Kinlochewe and Charlestown. Reports described, “woke to the bed shaking”, “we experienced a rumbling, shaky wave motion”, “was like a large lorry passing outside”, “bedside unit lamp shook” and “pictures on window sill rattled”. A maximum intensity of 3 EMS was assigned for this event. This is the largest event detected in the general area, within 10 km, since the magnitude 2.8 ML Gairloch earthquake on 15 May 2013 which was weakly felt in Gairloch and a few surrounding villages and hamlets with a maximum intensity of 3 EMS. It also locates approximately 5 km southwest of the magnitude 3.4 ML Kinlochewe earthquake on 11 June 1978 which was felt throughout the region with a maximum intensity of 4 EMS.

An earthquake, with a magnitude of 2.3 ML and a depth of 34 km, occurred at 02:47 UTC on 31 March in the North Atlantic Ocean. It located in the Rockall Trough area, near the Hebrides Seamount, approximately 220 km northwest of Dunfanaghy, a small town on the north coast of County Donegal, Ireland and 180 km WSW of the Island of Barra in the Outer Hebrides, Scotland. It was preceded around 3 hours earlier, at 00:05 UTC, by a magnitude 2.0 ML earthquake at the same depth and in the same location. This is an area that has experienced little seismicity in both the historical and instrumental periods, with only five events located within a 100 km radius of these events. The closest being an earthquake with a magnitude of 3.3 ML on 13 April 1980 approximately 20 km to the SSW and one with a magnitude of 2.7 ML on 21 July 2007 around 20 km to the southeast.

At 15:02 UTC on 15 May an earthquake, with a magnitude of 2.5 ML and a depth of 7 km, occurred around 3 km SSE of Durness, Highland (Figure 8). It was not reported felt. This is the largest event detected in the general area since a magnitude 2.4 ML earthquake on 9 January 2015, which was felt by a single resident in Durness. Historically, the largest earthquakes to have occurred nearby were the magnitude 2.5 ML Thurso event on 3 July 1862 and the magnitude 3.1 ML Durness event on 26 September 1887, which were both felt in the region with a maximum intensity of 4 EMS.

An earthquake, with a magnitude of 2.9 ML and a focal depth of 9 km, occurred at 15:16 UTC on 16 May near the market town of Caldicot, Monmouthshire, SE Wales (Figure 9). It was reported felt by several residents in towns and villages in the counties of Monmouthshire, South Gloucestershire and City of Bristol, who described “the coffee table and sofa vibrated”, “all the windows rattled” and “initially thought a car had hit the house”. A maximum intensity of 4 EMS was assigned for this event. Eighteen minutes later, at 15:34 UTC, a magnitude 0.6 ML earthquake occurred in the same region. This is the largest earthquake to have occurred in the region since the magnitude 2.9 ML Cardiff event on 20 June 2002.

At 14:58 UTC on 2 June, an earthquake with a magnitude of 2.1 ML and a depth of around 12 km, occurred near the village of Mareham-le-Fen, Lincolnshire. It was not reported felt. This earthquake locates approximately 36 km SSE of the magnitude 5.2 ML Market Rasen event on 27 February 2008, which was widely felt (with a maximum intensity of 6 EMS) across England and Wales and caused damage to chimneys and masonry over a widespread area. It also locates around

35 km ENE of the magnitude 4.2 ML Lincoln earthquake on 1 August 1755, which was felt over an area of around 25,000 km<sup>2</sup> with a maximum intensity of 6 EMS.

A magnitude 2.0 ML earthquake with a depth of around 10 km occurred at 20:03 UTC on 26 June, with an epicentre in the Celtic Sea, approximately 65 km southwest of the Isles of Scilly and 135 km WSW of Penzance, Cornwall. This is an area that has experienced little seismicity in both the historical and instrumental periods, with only 12 other events located since 1970 within a 50 km radius of this event. One of these events was the magnitude 3.6 ML SW Scilly Isles earthquake on 25 May 1985, which was not reported felt.

At 13:14 UTC on 2 July, an earthquake with a magnitude of 2.1ML and a depth of 7 km, occurred near the village of Melvich, Highland. It was reported felt by several residents in Melvich, Reay, Westfield and Dounreay who described, “standing in kitchen when the whole house started to shake”, “the windows and doors rattled” and “we thought it was a roll of thunder”. A maximum intensity of 3 EMS was assigned for this event. A further two events occurred near Melvich on 2 July, at 14:00 UTC and 16:18 UTC, with magnitudes of 0.6 ML and 0.8 ML, respectively.

An earthquake, with a magnitude of 2.5 ML and a focal depth of around 5 km, occurred at 10:01 UTC on 26 July near the town of Penicuik, Midlothian (Figure 10). The BGS received over 100 reports, via online macroseismic questionnaires, of the earthquake being felt in Penicuik and in several surrounding villages and hamlets, mainly within approximately 15 km of Penicuik. Typical reports described, “our house and neighbouring properties all shook”, “it was like two sharp jolts”, “was like a small explosion” and “there was a large shake and a muffled thump”. A maximum intensity of 4 EMS was assigned for this event. These are the largest events in the region since a magnitude 2.2 ML earthquake on 13 November 2014 and a magnitude 2.0 ML earthquake on 3 December 2014, which were both felt in the Penicuik area, with intensities of 3 EMS.

A magnitude 2.0 ML earthquake with a depth of around 5 km occurred at 08:39 UTC on 25 August, with an epicentre in the English Channel, approximately 55 km northwest of Guernsey, Channel Islands. Two other earthquakes occurred in the same region (within 20 km) of the English Channel during 2021, on 17 June and 27 July with magnitudes of 1.8 ML and 0.9 ML, respectively.

At 21:29 UTC on 19 November, an earthquake with a magnitude of 2.2 ML and a depth of 7.5 km, occurred near the village of Roybridge, Highland. It was reported felt by a few residents in Roybridge, Spean Bridge and Gairlochy. Reports described, “it reminded me of a quarry blast”, “rumbling which was heard over the television”, “we thought a gas tank had exploded” and “felt and sounded like a train rumbling past”. A maximum intensity of 3 EMS was assigned for this event. Eight other earthquakes occurred near Roybridge during the year, with magnitudes between 0.4 ML and 1.6 ML. None were reported felt.

Two earthquakes with magnitudes of 2.5 ML occurred within 5 minutes of each other on 11 December near the village of Ullapool, Highland (Figure 11). They occurred at 17:32 and 17:37 UTC, at depths of 6 km and 7 km, respectively. Both were felt weakly by residents of Ullapool and surrounding villages. Typical reports described, “the house creaked, like it had been hit by a huge gust of wind”, “very brief vibration and noise” and “impact felt through house”. A maximum intensity of 3 EMS was assigned for both these events. In October 1987 there was a sequence of over twenty earthquakes near Ullapool that included two events on 4 October, a few hours apart, with magnitudes of 3.0 ML. Both these events were widely felt across the area with a maximum intensity of around 4 EMS. Historically, the largest earthquake to have occurred in the region was the magnitude 4.4 ML Ullapool earthquake on 31 May 1948, which was felt strongly in Ullapool with a maximum intensity of around 5 EMS.

An earthquake, with a magnitude of 2.1 ML and a focal depth of around 8 km, occurred at 00:01 UTC on 21 December on the Isle of Mull, Argyll & Bute. It was reported felt in Tobermory (Mull) and was also reported felt in Glenborrodale and Kilchoan. Reports described, “sound similar to a heavy vehicle approaching”, “thought lorry was going past outside” and “structure creaked a

little”. A maximum intensity of 3 EMS was assigned for this event. A further ten events occurred on the Isle of Mull during the year with two of them reported as felt. The two felt events, which were felt weakly on the island, occurred on 1 April and 12 October, with magnitudes of 1.4 ML and 1.1 ML, respectively. The magnitude 2.1 ML event locates approximately 35 km WNW of the magnitude 4.1 ML Oban earthquake of 29 September 1986, which was felt over an area of around 30,000 km<sup>2</sup> with a maximum intensity of 5 EMS. It also locates around 25 km SSW of the magnitude 4.0 ML Moidart earthquake on 4 August 2017, which was felt widely across the region, from Inverness to the northeast, to Glasgow in the south and Islay to the west, with a maximum intensity of 5 EMS.

## 5 UK Seismicity Statistics

Figure 12 shows a histogram of mainland UK earthquakes above magnitude 2.0 detected each year in different magnitude ranges. This shows significant variation across the 50 years of modern instrumental monitoring. In the first few years of the 1970s, instrumental coverage across the UK was sparse and relatively few events were detected although more events were detected in the second half of the decade. The annual catalogues are thought to be complete at magnitude 3.5 ML or greater for 1970 to 1978, and for magnitude 2.5 ML and greater from 1979. Almost all of the earthquakes above 2.5 ML would be felt by people. Some of the peaks seen in Figure 12 have obvious explanations:

- In 1980, there was a continuing long aftershock sequence of the Carlisle earthquake of 26 December 1979 (4.7 ML). The largest two (both 3.8 ML) occurred in January and December 1980, the latter almost one year later than the mainshock. A local, temporary station was installed in a Longtown church three days after the mainshock, followed by three more distant stations in 1980.
- The largest instrumentally recorded earthquake onshore UK occurred on the Lleyn Peninsula, Gwynedd in 1984 (19 July) with a magnitude of 5.4 ML. A multi-station monitoring network was installed, shortly afterwards, across North Wales. The aftershock sequence continued for more than a year and confirmed that the activity was relatively deep for UK earthquakes, at around 20 km.
- The high peak in 2002 is dominated by an earthquake sequence near Manchester, which started on 19 October 2002 and continued until January 2003. Some 53 events above magnitude 2.0 ML were recorded and 37 were felt, the largest with a magnitude of 3.9 ML. Temporary stations were deployed to record the smaller events.
- The peak in 2014, is the result of an extended coal-mining induced series of earthquakes near New Ollerton, Nottinghamshire, which were studied with a temporary mobile network of monitoring stations. Some 65 events were felt, of which ten were magnitude 2.0 ML or greater.
- In 1974-75, there are clear peaks in earthquakes with magnitudes of 3.0 ML and greater during this period; around half of them were centred near Kintail, NW Scotland. There were few monitoring stations in the UK at this time, so it is not known whether they were accompanied by many or a few smaller magnitude events.
- The Bishops Castle, Shropshire, earthquake in April 1990 (5.1 ML) and the Market Rasen, Lincolnshire earthquake in February 2008 (5.2 ML), both showed very limited aftershock sequences despite being well monitored. The former had seven aftershocks (all less than or equal to 1.5 ML and none felt) and the latter had eleven aftershocks, with magnitudes ranging between 0.6 ML and 2.8 ML, (the largest felt locally).

- The year 2016 is quite remarkable for producing the fewest earthquakes in the whole 49 year series, in all magnitude ranges above 2.0 ML, with a total of only three events in the 2.0 ML - 2.9 ML range and none above that.

Figure 13 shows the statistics for all earthquakes known to be felt from 1979 to 2021, including those below magnitude 2.0 ML. As might be expected, Figure 13 shows three of the same peaks as for the event occurrences seen in Figure 12; namely the 1984 Lleyn, 2002 Manchester and 2014 New Ollerton events. However, there were many events felt with magnitudes below 2.0 ML, and these were mainly related to coal mining.

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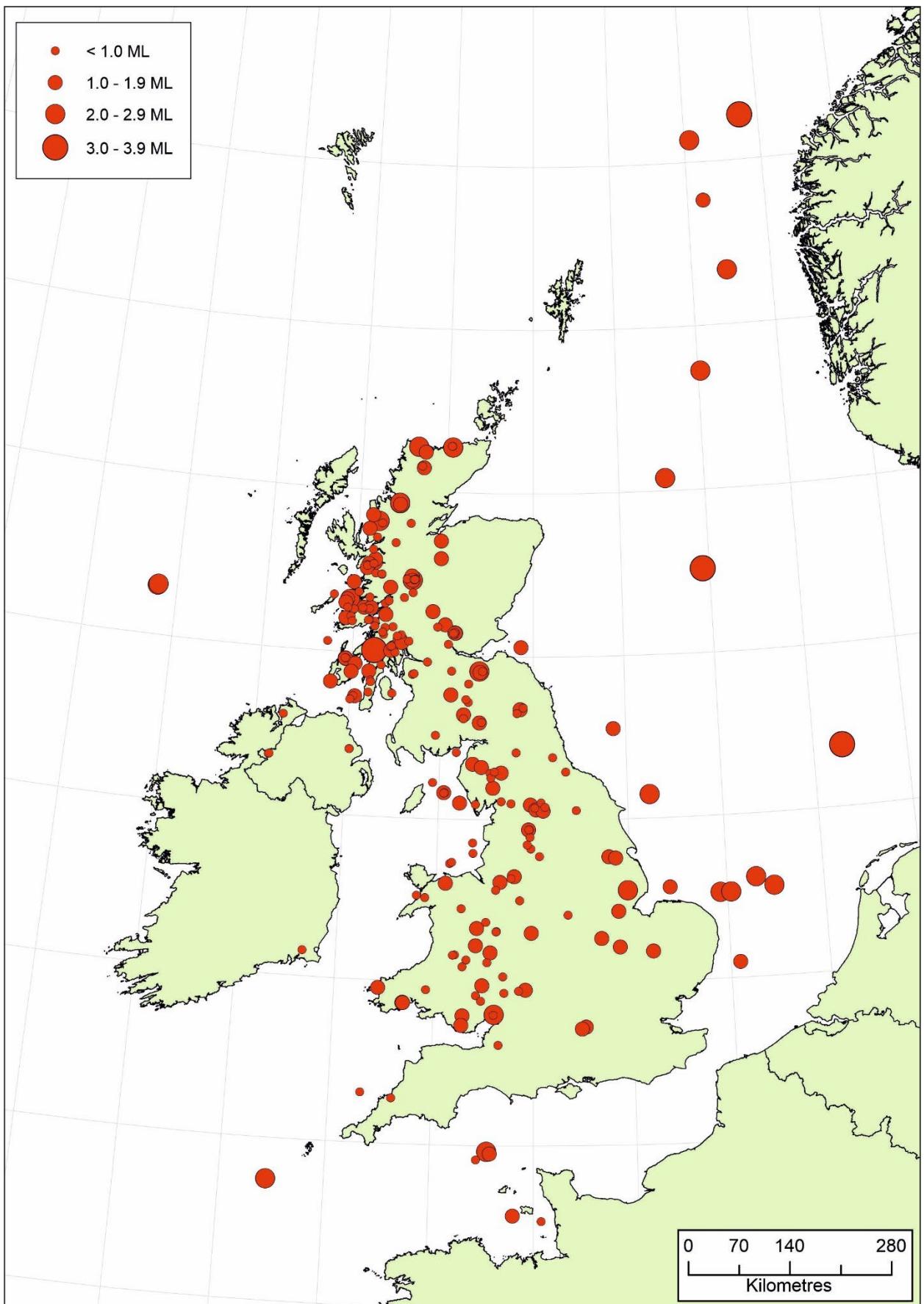
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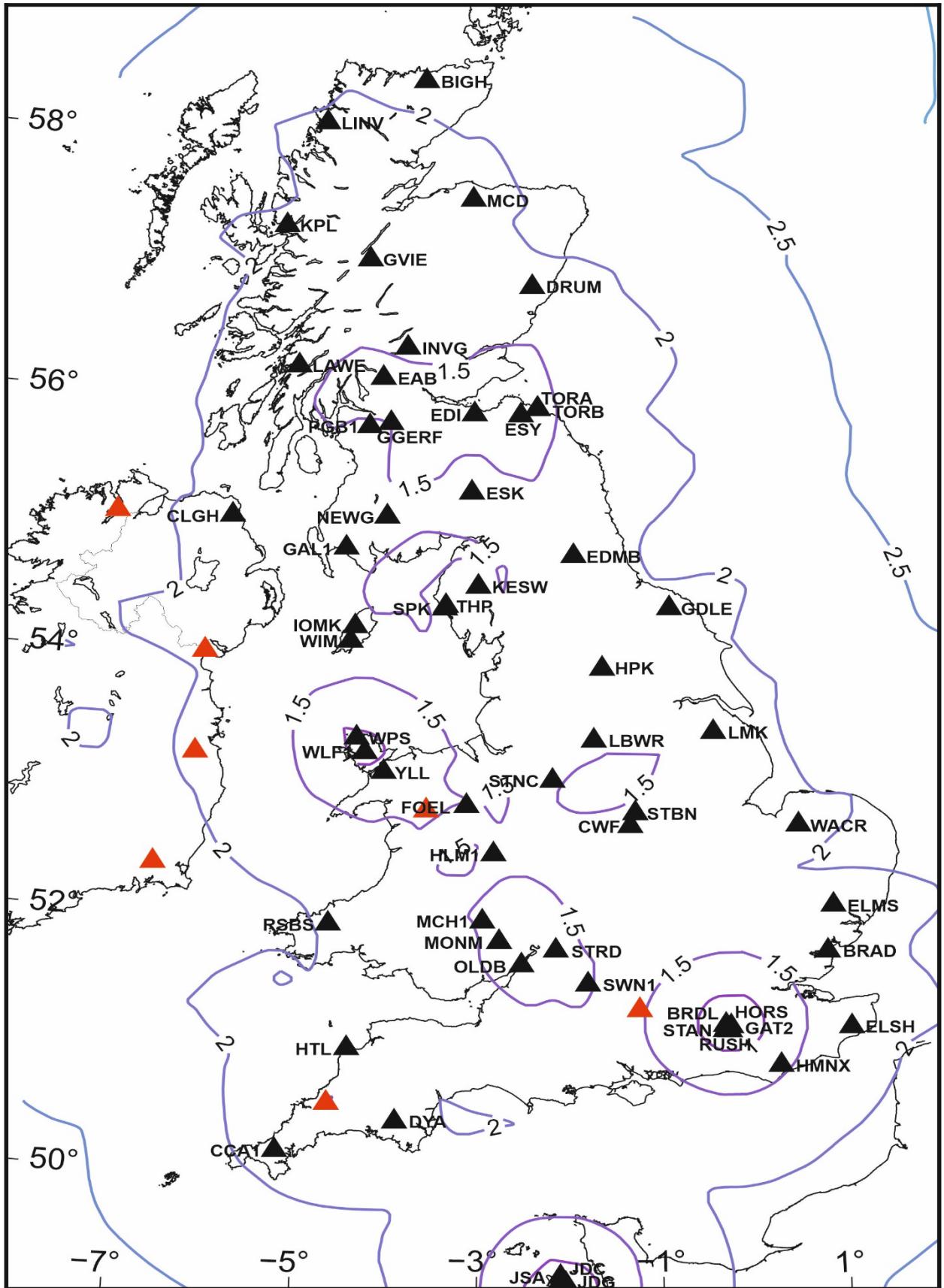
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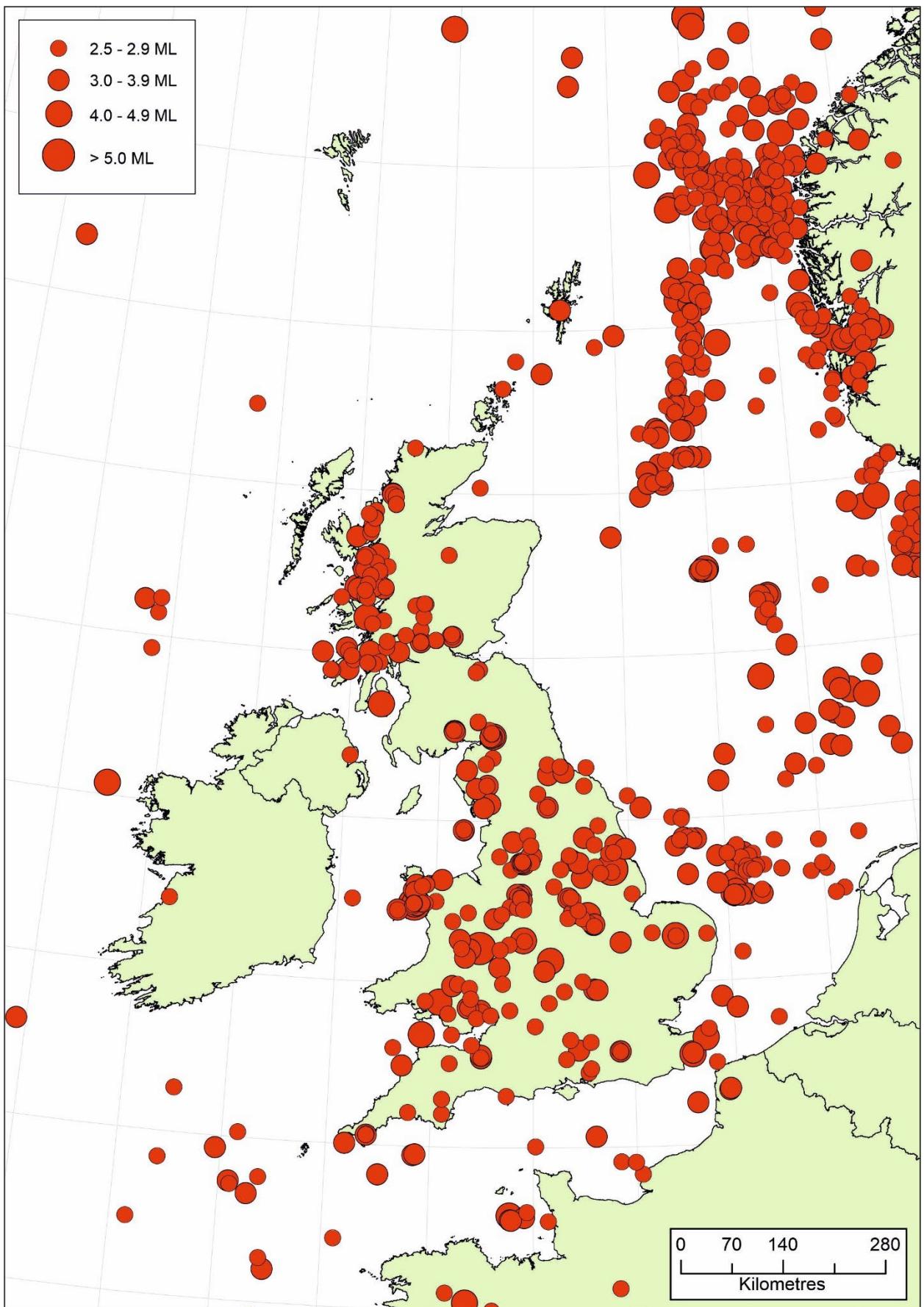
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- Lienert, B.R.E. and Havskov, J., 1995. A computer program for locating earthquakes both locally and globally, *Seis. Res. Lett.*, **66**, 26-36.
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- Snoke, J. A., Munsey, J.W., Teague, A.C. and Bollinger, G.A. 1984. A program for focal mechanism determination by combined use of polarity and SV –P amplitude ratio data, *Earthquake Notes*, **55, 3, 15**.



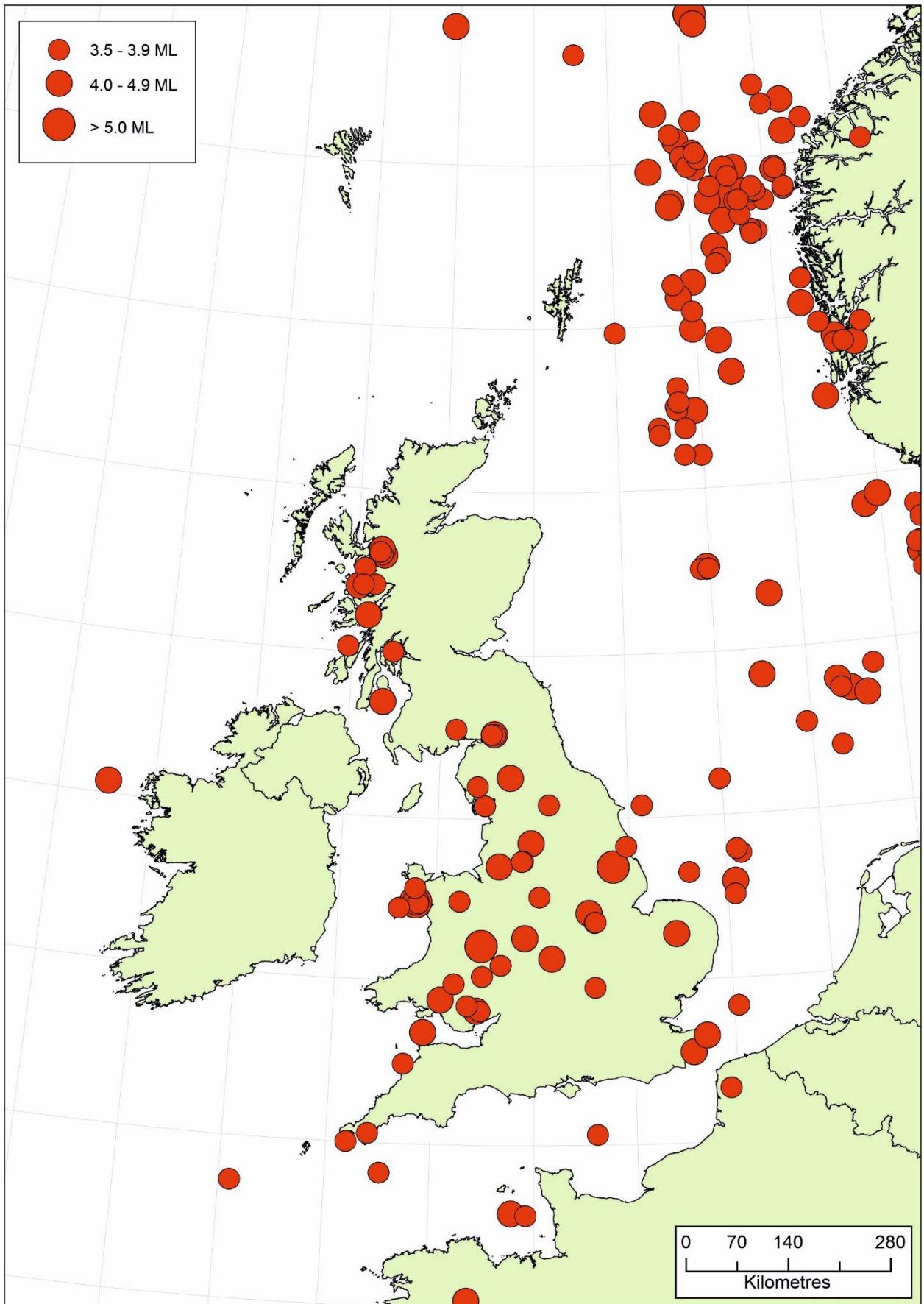
**Figure 1.** Epicentres of earthquakes in 2021 as listed in Table 1.



**Figure 2. Detection capability of the network during 2021.** The contours show earthquake magnitudes (ML) that can be detected. Signal amplitudes must exceed the background noise level by a factor of two at four or more stations. A noise amplitude of 10 nm (high noise) is assumed for all stations. Black triangles show stations operated by BGS. Red triangles show stations operated by partner agencies that are incorporated into our real time data acquisition and contribute to our detection and location capability.



**Figure 3. Epicentres of earthquakes with magnitudes of 2.5 ML and above, in the period 1979 to 2021.**



**Figure 4. Epicentres of earthquakes with magnitudes of 3.5 ML and above, in the period 1970 to 2021.**

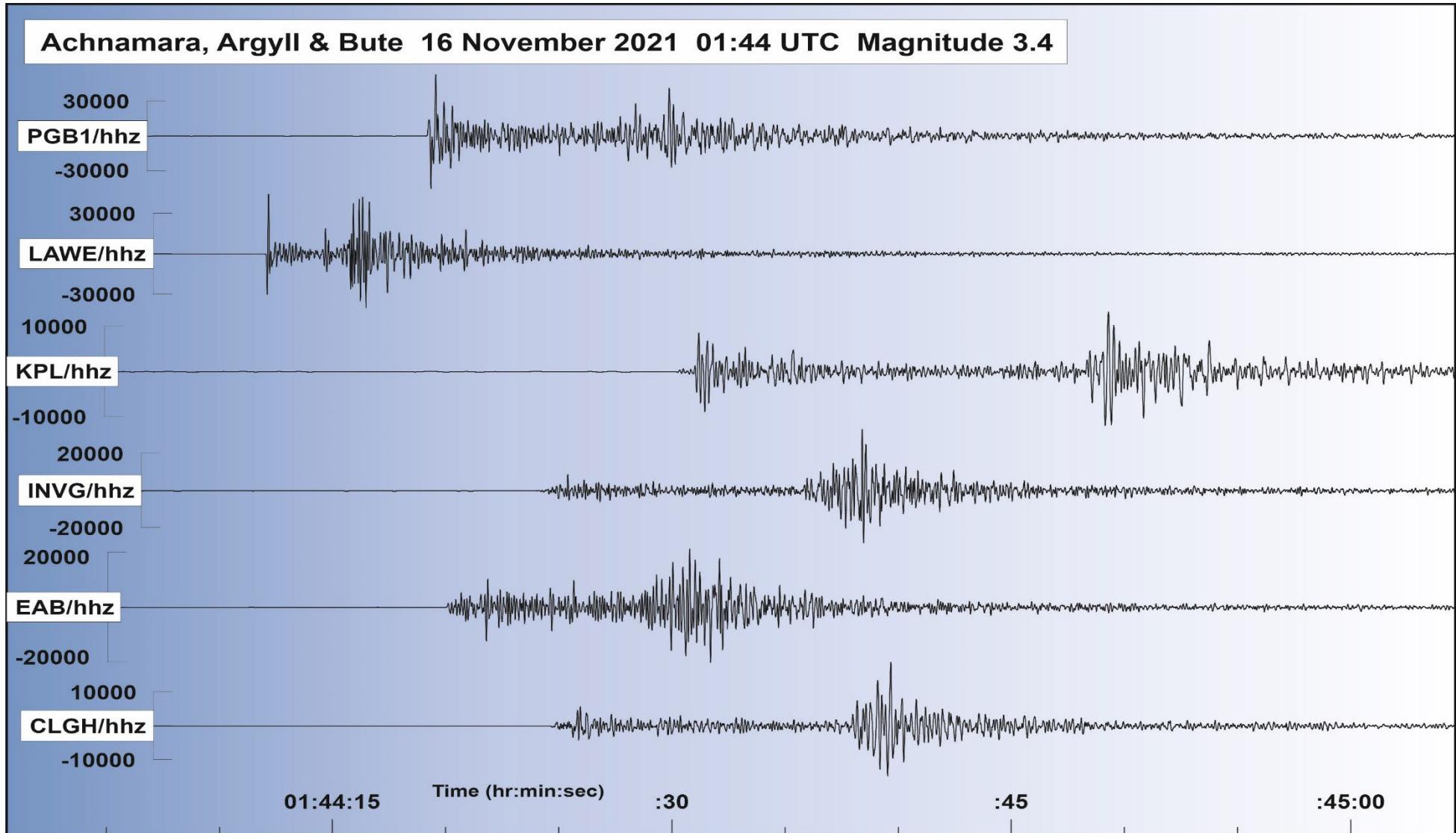
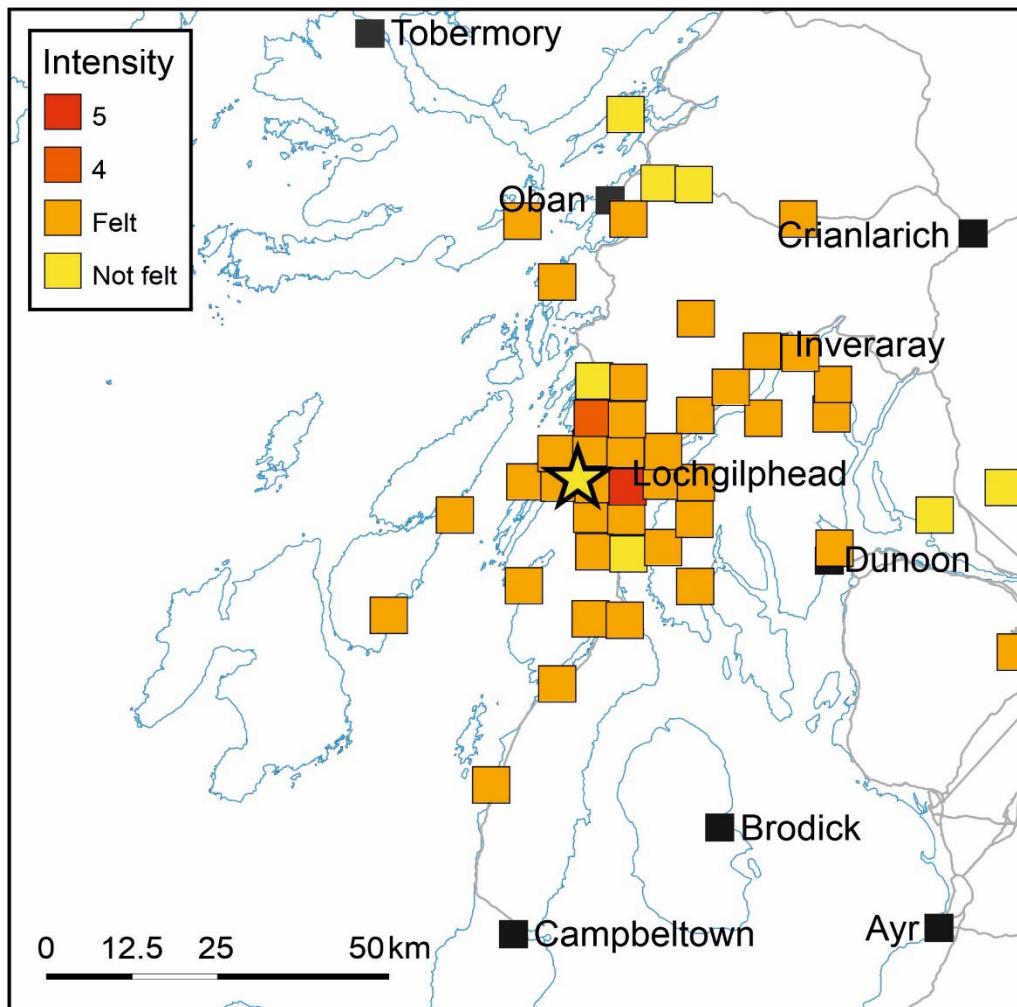
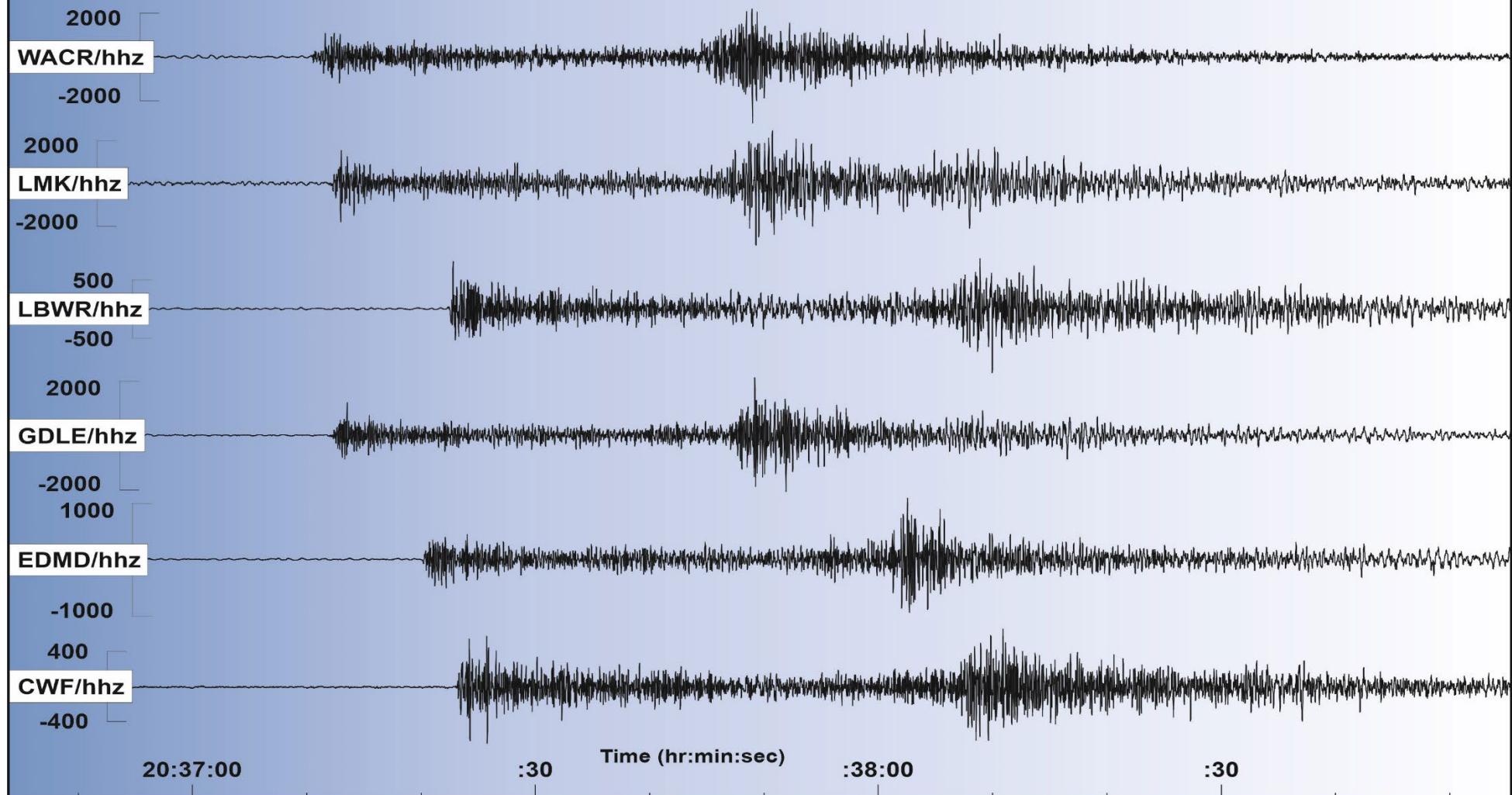


Figure 5. Seismograms of the ground displacements from the magnitude 3.4 ML Achnamara, Argyll & Bute earthquake, 16 November 2021, recorded by BGS seismograph stations.



**Figure 6.** Macroseismic intensities (EMS) for the magnitude 3.4 ML Achnamara, Argyll & Bute earthquake on 16 November 2021. The yellow star shows the epicentre. Intensities are calculated in 5 km grid squares from over 130 reports from people who felt the earthquake. A minimum of five observations are needed in any grid square to calculate a value of intensity, otherwise the value is calculated as 'Felt' but no intensity is calculated (orange squares). Yellow squares indicate that any reports from these locations suggested that the earthquake was 'Not Felt'.

**Southern North Sea 20 August 2021 20:36 UTC Magnitude 3.8**



**Figure 7.** Seismograms of the ground displacements from the magnitude 3.8 ML Southern North Sea earthquake, 20 August 2021 recorded by BGS seismograph stations.

Durness, Highland 15 May 2021 15:02 UTC Magnitude 2.5

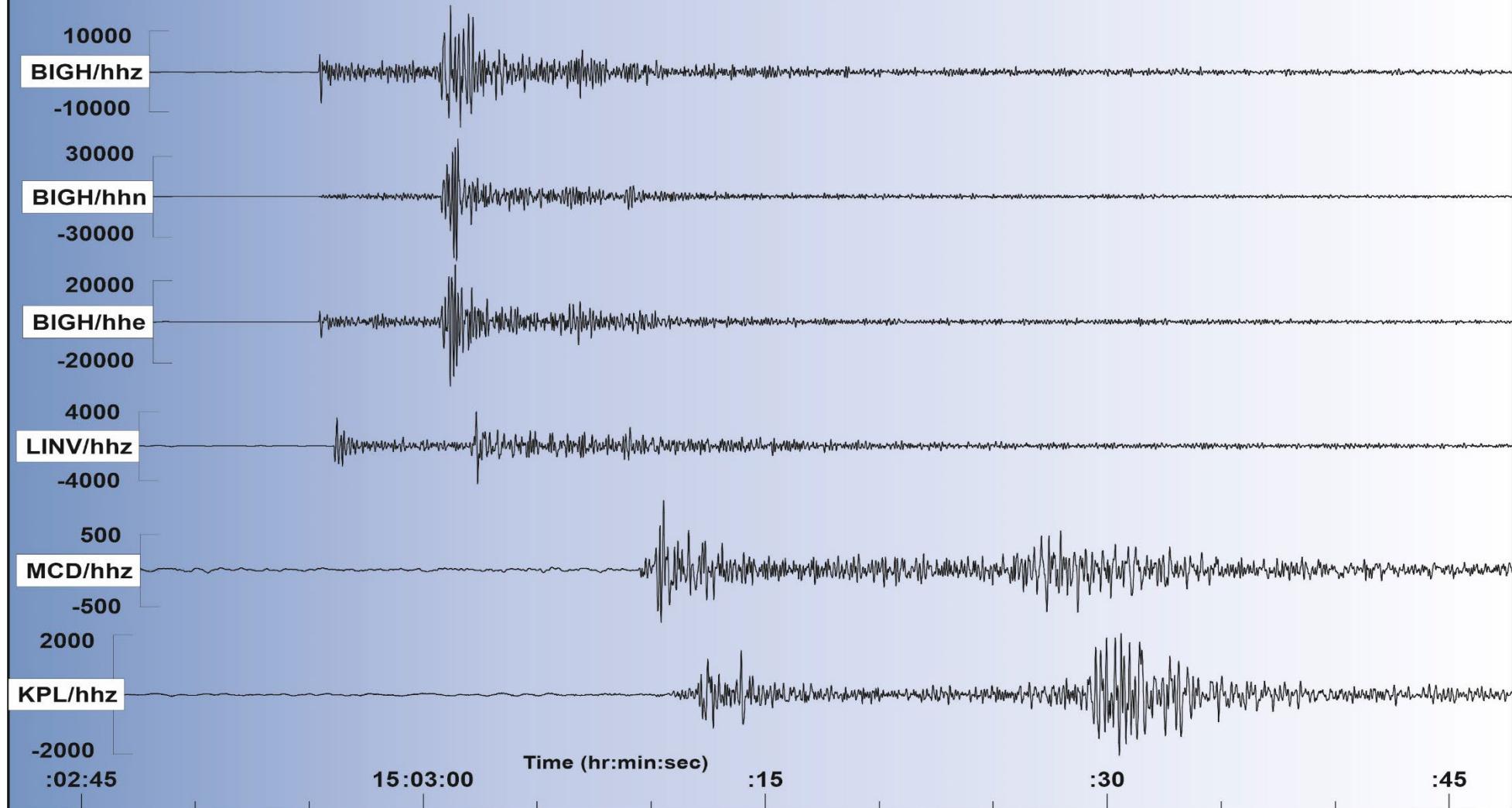
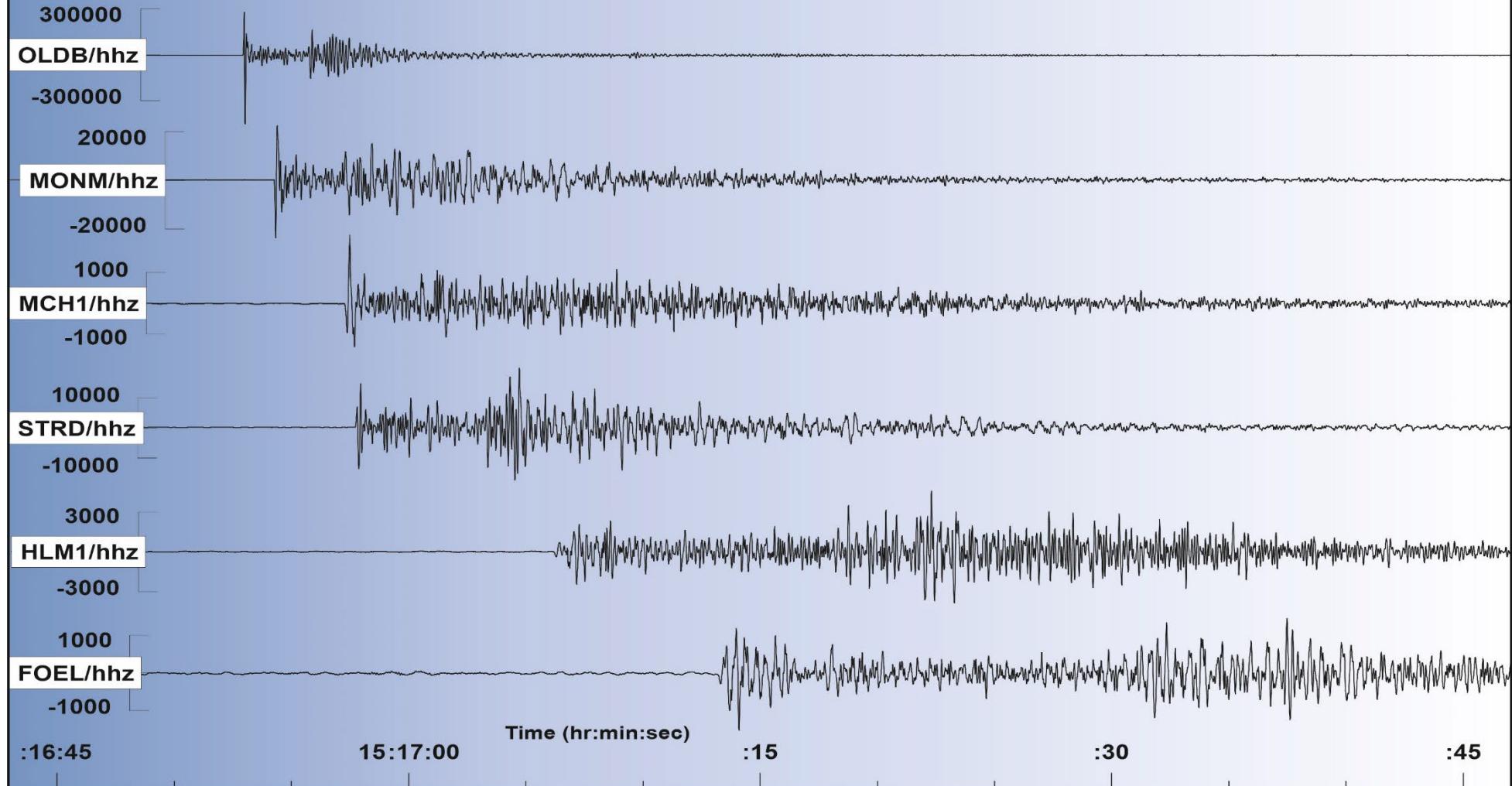


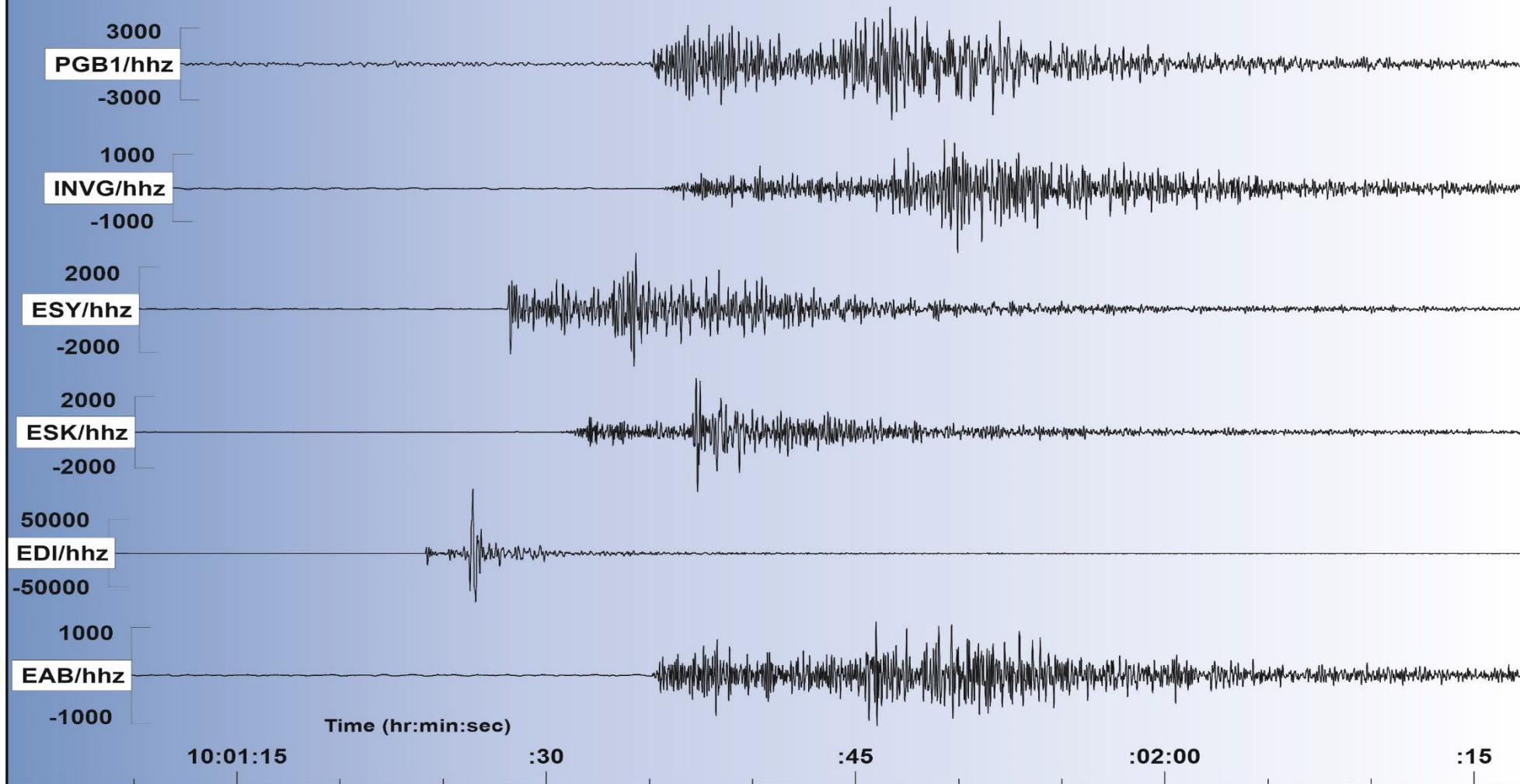
Figure 8. Seismograms of the ground displacements from the magnitude 2.5 ML Durness, Highland earthquake, 15 May 2021, recorded by BGS seismograph stations.

**Caldicot, Monmouthshire 16 May 2021 15:16 UTC Magnitude 2.9**



**Figure 9.** Seismograms of the ground displacements from the magnitude 2.9 ML Caldicot, Monmouthshire earthquake, 16 May 2021, recorded by BGS seismograph stations.

**Penicuik, Midlothian 26 July 2021 10:01 UTC Magnitude 2.5**



**Figure 10.** Seismograms of the ground displacements from the magnitude 2.5 ML Penicuik, Midlothian earthquake, 26 July 2021, recorded by BGS seismograph stations.

Ullapool, Highland 11 December 2021 17:32 UTC (Magnitude 2.5) 17:37 UTC (Magnitude 2.5)

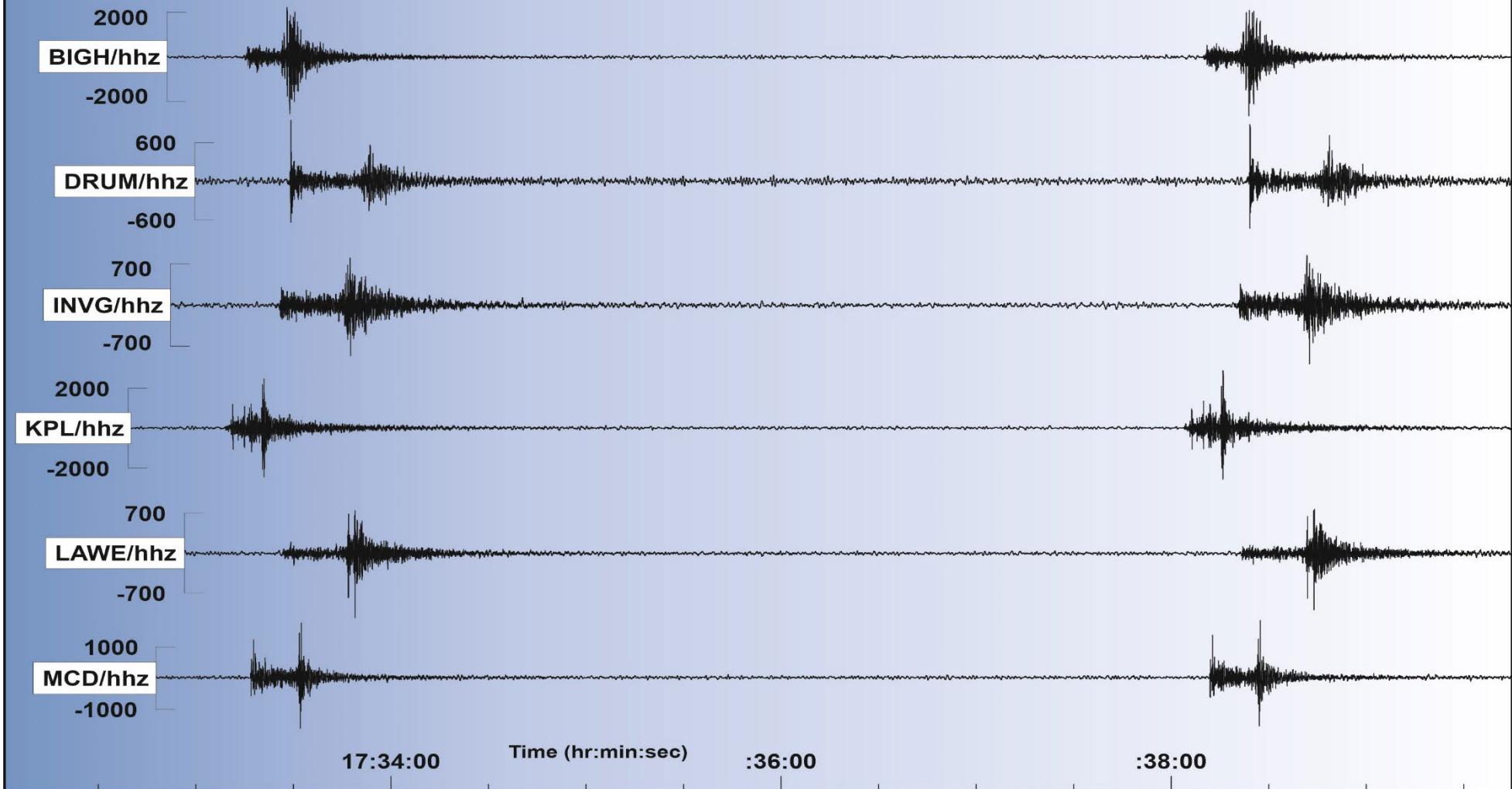


Figure 11. Seismograms of the ground displacements from the magnitude 2.5 ML Ullapool, Highland earthquakes, 11 December 2021, recorded by BGS seismograph stations.

## MAGNITUDE BY YEAR MAINLAND UK EARTHQUAKES (1970 - 2021)

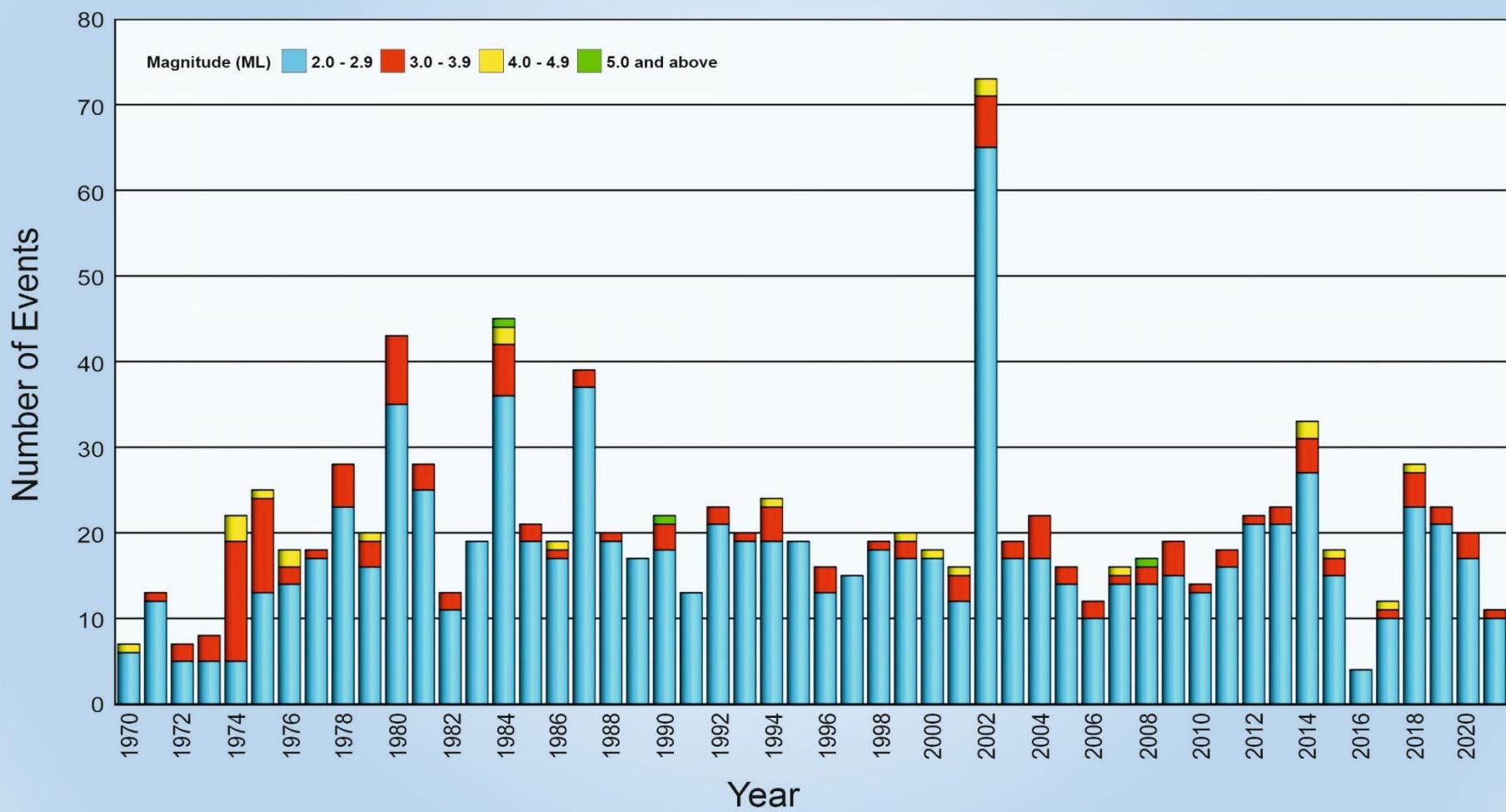


Figure 12. Histogram showing the number of mainland UK events, magnitude 2.0 ML or greater, detected 1970-2021.

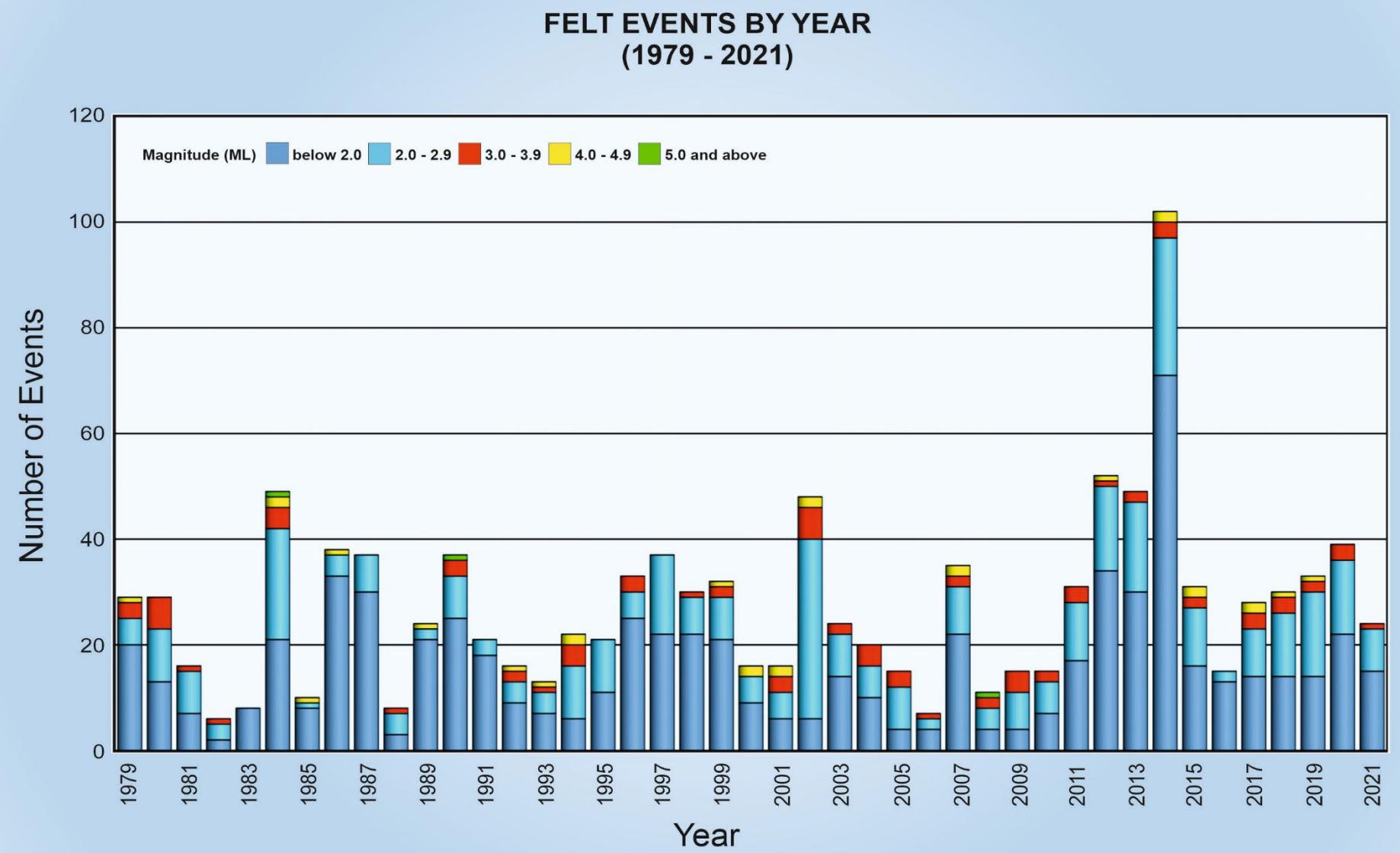


Figure 13. Histogram showing the number of felt events, 1979-2021.

**TABLE 1 : CATALOGUE OF EVENTS : 2021**

<b>Year</b>	<b>Mo</b>	<b>Dy</b>	<b>Hr</b>	<b>Mn</b>	<b>Secs</b>	<b>Lat</b>	<b>Lon</b>	<b>kmE</b>	<b>kmN</b>	<b>Dep</b>	<b>Mag</b>	<b>Locality</b>	<b>Int</b>	<b>No</b>	<b>Gap</b>	<b>RMS</b>	<b>ERH</b>	<b>ERZ</b>	<b>Comments</b>
2021	01	04	02	29	18.7	55.66	-3.43	310.2	641.9	7.4	0.6	SKIRLING, BORDERS		8	133	0.20	1.75	4.30	
2021	01	05	14	31	59.6	50.22	-5.17	173.6	40.9	4.8	-0.1	CARHARRACK, CORNWALL		7	93	0.00	0.54	0.40	GEOTHERMAL
2021	01	06	00	55	07.0	54.21	-1.84	410.3	479.2	5.9	0.8	LOFTHOUSE, N YORKSHIRE		11	83	0.30	2.42	2.30	
2021	01	06	13	34	08.1	50.23	-5.17	173.6	41.0	4.6	0.3	CARHARRACK, CORNWALL		8	80	0.00	0.45	0.40	GEOTHERMAL
2021	01	07	15	50	22.3	50.23	-5.18	173.4	41.1	4.9	-0.1	CARHARRACK, CORNWALL		8	76	0.10	1.03	0.80	GEOTHERMAL
2021	01	08	00	45	03.4	56.28	-3.75	291.7	711.5	7.7	0.6	BLACKFORD, PERTH/KINROSS		8	96	0.20	2.30	7.80	
2021	01	08	11	29	52.0	50.23	-5.17	173.6	41.0	4.6	-0.2	CARHARRACK, CORNWALL		7	93	0.00	0.45	0.40	GEOTHERMAL
2021	01	08	11	34	37.5	50.22	-5.17	173.7	40.9	4.9	-0.3	CARHARRACK, CORNWALL		7	92	0.00	0.54	0.40	GEOTHERMAL
2021	01	08	16	38	28.2	50.22	-5.17	173.6	40.9	4.6	0.2	CARHARRACK, CORNWALL		7	93	0.00	0.45	0.30	GEOTHERMAL
2021	01	08	16	50	34.7	55.30	-2.37	376.7	600.9	1.5	0.8	BYRNESS, NORTHUMBERLAND	10	203	0.10	2.66	1.60		
2021	01	08	16	50	36.3	50.23	-5.18	173.5	41.1	4.8	-0.2	CARHARRACK, CORNWALL		8	75	0.00	0.36	0.30	GEOTHERMAL
2021	01	08	17	03	01.6	50.22	-5.17	173.7	40.9	4.8	0.2	CARHARRACK, CORNWALL		8	81	0.00	0.45	0.40	GEOTHERMAL
2021	01	08	23	43	25.7	50.23	-5.18	173.3	41.0	4.1	-0.4	CARHARRACK, CORNWALL		8	73	0.10	0.94	0.90	GEOTHERMAL
2021	01	09	00	40	05.7	50.23	-5.18	173.5	41.1	4.5	-0.3	CARHARRACK, CORNWALL		8	75	0.00	0.58	0.50	GEOTHERMAL
2021	01	09	02	23	44.8	50.22	-5.17	173.6	40.9	4.6	-0.8	CARHARRACK, CORNWALL		8	81	0.00	0.45	0.40	GEOTHERMAL
2021	01	09	14	44	40.4	50.23	-5.17	173.6	41.0	4.4	-0.4	CARHARRACK, CORNWALL		7	99	0.00	0.45	0.40	GEOTHERMAL
2021	01	10	02	46	30.4	52.74	-2.99	333.3	316.3	13.1	0.8	CREWGREEN, POWYS		6	130	0.40	4.36	3.20	
2021	01	11	00	46	43.9	55.35	-2.30	381.0	606.5	0.3	1.0	MAKENDON, NORTHUMBERLAND		6	237	0.30	7.54	3.80	
2021	01	11	12	17	33.2	50.22	-5.17	173.7	40.9	4.7	-0.6	CARHARRACK, CORNWALL		7	92	0.00	0.67	0.50	GEOTHERMAL
2021	01	11	15	16	33.4	50.22	-5.17	173.6	40.9	4.6	0.3	CARHARRACK, CORNWALL		8	81	0.00	0.45	0.30	GEOTHERMAL
2021	01	11	15	34	26.4	50.23	-5.17	173.6	41.0	4.8	0.6	CARHARRACK, CORNWALL		8	79	0.00	0.36	0.30	GEOTHERMAL
2021	01	11	15	42	08.3	50.23	-5.17	173.6	41.1	4.9	0.4	CARHARRACK, CORNWALL		8	77	0.00	0.45	0.30	GEOTHERMAL
2021	01	11	16	08	27.0	50.23	-5.17	173.6	41.0	4.8	0.0	CARHARRACK, CORNWALL		8	78	0.00	0.45	0.40	GEOTHERMAL
2021	01	11	17	39	36.4	50.23	-5.17	173.6	41.0	4.8	0.5	CARHARRACK, CORNWALL		8	79	0.00	0.45	0.40	GEOTHERMAL
2021	01	12	13	08	00.0							SONIC - SE ENGLAND	3						FELT SE ENGLAND
2021	01	12	18	48	00.7	53.06	1.85	657.8	357.9	10.0	2.3	SOUTHERN NORTH SEA		10	261	0.40	5.77	8.80	40KM ENE CROMER
2021	01	14	10	39	43.9	50.23	-5.17	173.6	41.1	4.8	-0.4	CARHARRACK, CORNWALL		8	77	0.00	0.45	0.40	GEOTHERMAL
2021	01	15	10	08	34.0	50.22	-5.17	173.7	40.9	4.7	0.5	CARHARRACK, CORNWALL		8	81	0.00	0.36	0.30	GEOTHERMAL
2021	01	16	19	11	04.4	49.07	-1.86	410.0	-92.2	6.8	0.6	JERSEY, CHANNEL ISLANDS		3	344	0.00	0.00	0.00	15KM SE JERSEY
2021	01	17	12	22	17.1	57.52	-5.78	173.7	854.0	2.2	1.4	APPLECROSS, HIGHLAND		7	216	0.40	2.48	7.30	
2021	01	18	06	40	07.9	51.59	-3.43	300.9	189.0	2.9	1.5	TONYREFAIL, RHONDDA CT	3	7	113	0.20	3.40	8.10	FELT TONYREFAIL...
2021	01	18	07	41	02.4	56.55	-5.82	165.6	746.5	8.1	1.9	LOCHALINE, HIGHLAND	3	9	180	0.40	8.79	8.10	FELT LOCHALINE...
2021	01	18	11	29	32.6	50.22	-5.17	173.6	40.9	4.8	0.8	CARHARRACK, CORNWALL		8	79	0.00	0.58	0.40	GEOTHERMAL
2021	01	18	12	48	33.6	50.22	-5.17	173.7	40.9	4.8	-0.5	CARHARRACK, CORNWALL		8	81	0.00	0.58	0.50	GEOTHERMAL
2021	01	19	12	27	59.2	50.22	-5.18	173.3	40.7	4.7	-0.5	CARHARRACK, CORNWALL		8	74	0.00	0.58	0.50	GEOTHERMAL
2021	01	19	12	31	51.7	50.23	-5.17	173.6	41.0	4.8	0.5	CARHARRACK, CORNWALL		9	79	0.00	0.45	0.40	GEOTHERMAL
2021	01	19	12	31	53.8	50.23	-5.17	173.6	41.0	4.8	0.5	CARHARRACK, CORNWALL		8	77	0.00	0.58	0.50	GEOTHERMAL
2021	01	19	12	33	32.4	50.22	-5.17	173.6	40.9	4.8	1.1	CARHARRACK, CORNWALL	3	9	80	0.00	0.36	0.30	GEOTHERMAL
2021	01	19	12	35	35.3	50.23	-5.17	173.6	41.0	4.7	0.0	CARHARRACK, CORNWALL		8	79	0.00	0.45	0.40	GEOTHERMAL
2021	01	19	12	36	41.9	50.23	-5.17	173.6	41.0	4.8	1.2	CARHARRACK, CORNWALL	3	9	78	0.00	0.45	0.30	GEOTHERMAL
2021	01	19	12	45	01.5	50.23	-5.18	173.5	41.1	4.9	-0.2	CARHARRACK, CORNWALL		7	105	0.00	0.67	0.50	GEOTHERMAL
2021	01	19	14	35	22.0	50.23	-5.17	173.7	41.0	5.0	0.4	CARHARRACK, CORNWALL		8	80	0.00	0.45	0.40	GEOTHERMAL

**TABLE 1 : CATALOGUE OF EVENTS : 2021**

<b>Year</b>	<b>Mo</b>	<b>Dy</b>	<b>Hr</b>	<b>Mn</b>	<b>Secs</b>	<b>Lat</b>	<b>Lon</b>	<b>kmE</b>	<b>kmN</b>	<b>Dep</b>	<b>Mag</b>	<b>Locality</b>	<b>Int</b>	<b>No</b>	<b>Gap</b>	<b>RMS</b>	<b>ERH</b>	<b>ERZ</b>	<b>Comments</b>
2021	01	19	14	35	56.2	50.23	-5.17	173.6	41.0	5.0	0.6	CARHARRACK, CORNWALL	8	79	0.00	0.58	0.40	GEOTHERMAL	
2021	01	19	14	56	02.0	50.23	-5.17	173.6	41.0	4.9	-0.4	CARHARRACK, CORNWALL	7	77	0.00	0.64	0.50	GEOTHERMAL	
2021	01	19	14	57	04.5	50.23	-5.17	173.6	41.0	4.9	-0.1	CARHARRACK, CORNWALL	8	79	0.00	0.45	0.30	GEOTHERMAL	
2021	01	19	15	09	33.4	50.23	-5.17	173.6	41.1	4.9	-0.5	CARHARRACK, CORNWALL	7	92	0.00	0.58	0.40	GEOTHERMAL	
2021	01	19	15	13	38.8	50.23	-5.17	173.6	41.0	4.9	0.5	CARHARRACK, CORNWALL	8	79	0.00	0.36	0.30	GEOTHERMAL	
2021	01	19	15	30	32.6	50.23	-5.17	173.6	41.0	4.9	-0.2	CARHARRACK, CORNWALL	8	78	0.00	0.36	0.30	GEOTHERMAL	
2021	01	20	08	55	31.1	53.30	-2.40	373.0	378.4	15.1	1.9	KNUTSFORD, CHESHIRE	11	80	0.30	3.05	2.70		
2021	01	22	07	05	45.7	52.66	-3.17	320.9	307.9	9.1	1.4	WELSHPOOL, POWYS	7	80	0.10	2.28	1.80		
2021	01	22	13	33	06.1	50.23	-5.17	173.6	41.1	4.8	-0.4	CARHARRACK, CORNWALL	8	77	0.00	0.45	0.40	GEOTHERMAL	
2021	01	22	13	33	14.4	50.23	-5.18	173.5	41.1	5.1	-0.8	CARHARRACK, CORNWALL	7	96	0.00	0.76	0.60	GEOTHERMAL	
2021	01	22	13	33	29.7	50.23	-5.18	173.3	41.2	4.7	-1.0	CARHARRACK, CORNWALL	6	137	0.00	1.21	0.80	GEOTHERMAL	
2021	01	22	20	35	58.7	50.23	-5.17	173.7	41.0	4.9	-0.7	CARHARRACK, CORNWALL	8	80	0.00	0.45	0.30	GEOTHERMAL	
2021	01	22	21	55	21.5	50.23	-5.17	173.7	41.0	5.0	0.0	CARHARRACK, CORNWALL	8	82	0.00	0.45	0.30	GEOTHERMAL	
2021	01	22	22	00	24.0	50.23	-5.17	173.6	41.0	4.9	-0.6	CARHARRACK, CORNWALL	8	79	0.00	0.45	0.40	GEOTHERMAL	
2021	01	22	22	17	38.3	50.23	-5.17	173.6	41.1	4.8	-1.0	CARHARRACK, CORNWALL	7	93	0.00	0.76	0.50	GEOTHERMAL	
2021	01	25	13	06	50.3	55.19	-3.18	324.8	588.6	10.5	1.0	BORELAND, D & G	8	157	0.10	1.80	2.20	6KM WSW BORELAND	
2021	01	25	13	22	47.7	50.23	-5.18	173.5	41.1	4.6	-0.6	CARHARRACK, CORNWALL	8	74	0.00	0.45	0.40	GEOTHERMAL	
2021	01	25	17	11	20.3	50.23	-5.17	173.7	41.0	4.9	-0.4	CARHARRACK, CORNWALL	8	80	0.00	0.45	0.40	GEOTHERMAL	
2021	01	26	06	11	32.0	55.46	-5.95	150.3	626.0	7.9	0.6	KINTYRE, ARGYLL & BUTE	5	187	0.30	1.02	6.20	OFFSHORE KINTYRE	
2021	01	27	11	49	40.1	50.23	-5.18	173.5	41.1	4.8	-0.2	CARHARRACK, CORNWALL	8	75	0.00	0.45	0.40	GEOTHERMAL	
2021	01	27	11	57	48.2	50.23	-5.17	173.6	41.1	4.7	-0.5	CARHARRACK, CORNWALL	8	77	0.00	0.45	0.40	GEOTHERMAL	
2021	01	27	11	58	09.7	50.23	-5.18	173.4	41.2	4.9	-0.6	CARHARRACK, CORNWALL	7	100	0.00	0.45	0.30	GEOTHERMAL	
2021	01	27	11	58	27.9	50.23	-5.18	173.5	41.1	4.7	-0.6	CARHARRACK, CORNWALL	8	74	0.00	0.36	0.30	GEOTHERMAL	
2021	01	27	12	23	33.3	50.22	-5.17	173.7	40.8	4.4	-0.7	CARHARRACK, CORNWALL	8	83	0.10	0.89	0.80	GEOTHERMAL	
2021	01	27	12	50	30.8	50.23	-5.18	173.4	41.1	4.5	-0.3	CARHARRACK, CORNWALL	8	73	0.00	0.58	0.50	GEOTHERMAL	
2021	01	28	07	09	48.0	50.23	-5.17	173.7	41.0	4.6	-0.4	CARHARRACK, CORNWALL	7	82	0.00	0.50	0.40	GEOTHERMAL	
2021	01	29	10	37	54.7	52.83	-1.30	447.1	326.4	14.7	0.6	KEGWORTH, LEICESTERSHIRE	5	158	0.40	8.19	4.20		
2021	01	30	10	03	04.4	56.41	-5.67	173.7	729.7	2.7	0.7	MULL, ARGYLL & BUTE	5	226	0.20	6.74	3.40		
2021	01	30	21	42	32.9	54.20	-2.48	368.6	477.9	5.7	0.4	MASONGILL, N YORKSHIRE	7	108	0.20	2.20	1.50		
2021	01	31	08	59	12.3	52.37	0.43	565.1	277.3	4.8	1.3	ISLEHAM, CAMBRIDGESHIRE	4	162	0.40	6.12	2.20		
2021	01	20	18	05	16.1	51.96	-3.04	328.3	229.7	13.1	1.9	LLANVEYNNOE, HEREF	10	70	0.40	4.03	5.70		
2021	01	20	07	27	24.0	52.33	-3.61	290.4	271.9	10.8	0.5	RHYADER, POWYS	5	107	0.10	4.08	6.90	7KM WNW RHYADER	
2021	01	20	11	27	48.8	50.23	-5.17	173.8	41.1	4.5	0.1	CARHARRACK, CORNWALL	8	81	0.00	0.36	0.30	GEOTHERMAL	
2021	01	20	11	28	25.7	50.23	-5.17	173.6	41.0	4.7	-0.4	CARHARRACK, CORNWALL	8	79	0.00	0.36	0.30	GEOTHERMAL	
2021	01	20	11	30	08.6	50.23	-5.17	173.6	41.0	4.4	-0.6	CARHARRACK, CORNWALL	8	78	0.00	0.45	0.40	GEOTHERMAL	
2021	01	20	15	18	01.7	50.23	-5.17	173.6	41.0	4.9	1.1	CARHARRACK, CORNWALL	3	8	79	0.00	0.45	0.40	GEOTHERMAL
2021	01	20	15	24	24.8	50.23	-5.17	173.6	41.1	5.0	-0.6	CARHARRACK, CORNWALL	7	93	0.00	0.67	0.50	GEOTHERMAL	
2021	01	20	15	30	21.9	50.23	-5.18	173.4	41.0	4.7	-0.4	CARHARRACK, CORNWALL	7	98	0.00	0.67	0.50	GEOTHERMAL	
2021	01	20	15	35	59.9	50.23	-5.18	173.4	41.2	4.5	-0.5	CARHARRACK, CORNWALL	7	97	0.00	0.67	0.50	GEOTHERMAL	
2021	01	20	15	37	46.7	50.23	-5.18	173.4	41.0	4.6	-0.6	CARHARRACK, CORNWALL	7	97	0.00	0.58	0.50	GEOTHERMAL	
2021	01	20	16	07	35.2	50.23	-5.18	173.5	41.0	4.9	-0.2	CARHARRACK, CORNWALL	7	95	0.00	0.54	0.40	GEOTHERMAL	
2021	01	20	22	56.1	23.8	50.23	-5.17	173.6	41.1	5.1	-0.3	CARHARRACK, CORNWALL	8	77	0.00	0.45	0.30	GEOTHERMAL	

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<b>Year</b>	<b>Mo</b>	<b>Dy</b>	<b>Hr</b>	<b>Mn</b>	<b>Secs</b>	<b>Lat</b>	<b>Lon</b>	<b>kmE</b>	<b>kmN</b>	<b>Dep</b>	<b>Mag</b>	<b>Locality</b>	<b>Int</b>	<b>No</b>	<b>Gap</b>	<b>RMS</b>	<b>ERH</b>	<b>ERZ</b>	<b>Comments</b>
2021	02	04	13	19	42.8	50.23	-5.18	173.5	41.0	4.6	-0.9	CARHARRACK, CORNWALL		8	75	0.00	0.45	0.40	GEOTHERMAL
2021	02	04	13	28	01.5	50.23	-5.18	173.4	41.0	4.6	-1.0	CARHARRACK, CORNWALL		7	97	0.00	0.54	0.40	GEOTHERMAL
2021	02	04	14	36	33.1	50.23	-5.17	173.7	41.0	4.9	0.1	CARHARRACK, CORNWALL		8	80	0.00	0.45	0.30	GEOTHERMAL
2021	02	04	14	37	28.3	50.23	-5.17	173.6	41.0	4.9	-0.7	CARHARRACK, CORNWALL		8	79	0.00	0.36	0.30	GEOTHERMAL
2021	02	06	05	10	55.6	50.23	-5.17	173.8	41.2	4.3	-0.1	CARHARRACK, CORNWALL		8	79	0.00	0.45	0.40	GEOTHERMAL
2021	02	06	05	40	002.4	50.23	-5.17	173.7	41.1	4.2	-0.7	CARHARRACK, CORNWALL		8	79	0.00	0.36	0.30	GEOTHERMAL
2021	02	06	20	28	28.0	54.57	-2.94	339.4	519.9	7.7	0.7	DOCKRAY, CUMBRIA		8	150	0.30	3.68	9.30	
2021	02	08	05	42	37.5	57.62	-5.57	186.9	864.1	2.4	2.1	DIABAIG, HIGHLAND	3	11	191	0.30	8.59	4.20	FELT DIABAIG...
2021	02	12	03	48	51.8	55.92	-4.35	253.3	671.7	5.3	0.6	BEARSDEN, E DUNB'SHIRE		5	118	0.10	1.52	1.90	
2021	02	12	04	27	13.5	55.43	-3.43	309.4	616.3	8.1	0.6	GLENBRECK, BORDERS		8	107	0.30	5.16	5.20	
2021	02	14	02	10	29.2	56.68	-5.69	173.9	760.4	7.7	0.6	STRONTIAN, HIGHLAND		4	203	0.30	6.55	3.50	7KM WSW STRONTIAN
2021	02	14	09	04	13.9	57.03	1.84	633.0	799.4	9.7	3.1	CENTRAL NORTH SEA		21	182	0.40	9.04	3.90	240KM EAST ABERDEEN
2021	02	14	12	01	34.0	49.14	-2.41	370.3	-84.4	14.0	1.0	JERSEY, CHANNEL ISLANDS		4	217	0.00	2.77	2.20	12KM WSW JERSEY
2021	02	15	05	46	42.5	52.43	-0.24	519.4	282.8	7.5	1.2	SAWTRY, CAMBRIDGESHIRE		7	161	0.60	7.84	6.30	
2021	02	15	06	13	37.1	53.28	-2.48	368.3	375.7	11.6	0.7	WINCHAM, CHESHIRE		8	84	0.10	1.43	3.30	
2021	02	22	22	13	42.5	56.96	-4.77	231.7	789.3	7.8	1.2	ROYBRIDGE, HIGHLAND		9	102	0.30	3.45	7.20	
2021	02	22	02	42	26.6	53.54	-0.44	503.6	406.0	16.1	1.2	BRIGG, NORTH LINCS		11	144	0.30	2.34	0.00	4KM ESE BRIGG
2021	02	22	03	57	55.8	56.39	-5.54	181.3	727.5	6.9	0.6	KERRERA, ARGYLL & BUTE		5	209	0.10	4.44	2.90	
2021	03	01	08	39	40.3	54.19	-2.07	395.2	476.6	8.2	1.2	BUCKDEN, NORTH YORKSHIRE		10	77	0.10	1.08	3.40	
2021	03	02	06	23	50.5	52.90	-3.49	299.7	334.8	12.1	0.5	LLANDDERFEL, GWYNEDD		5	144	0.10	1.49	0.80	
2021	03	02	19	20	33.2	50.22	-5.17	173.7	40.9	5.1	-0.6	CARHARRACK, CORNWALL		7	91	0.10	2.19	1.50	GEOTHERMAL
2021	03	02	19	35	03.8	54.58	-2.69	355.1	520.3	2.5	1.1	THRIMBY, CUMBRIA		12	122	0.40	5.14	8.50	
2021	03	03	01	54	18.9	54.82	-3.67	292.9	548.1	8.0	0.3	SOLWAY FIRTH		6	99	0.20	2.16	6.60	15KM NW MARYPORT
2021	03	03	17	24	25.4	54.51	-2.92	340.6	513.1	7.3	0.1	HARTSOP, CUMBRIA		5	113	0.10	1.56	1.30	
2021	03	06	18	45	32.2	56.14	-3.89	282.4	695.7	10.1	0.4	BLAIRLOGIE, STIRLING		6	110	0.10	1.39	3.00	
2021	03	07	14	01	30.1	56.09	-5.19	201.6	692.8	7.7	0.3	BARNACARRY, ARGYLL/BUTE		4	202	0.10	1.94	4.10	
2021	03	08	17	35	27.5	56.11	-2.29	382.1	691.3	4.8	1.8	CENTRAL NORTH SEA		12	179	0.20	3.76	3.10	18KM NE DUNBAR
2021	03	12	20	50	16.9	56.97	-5.45	190.4	791.7	7.2	0.9	LOCH NEVIS, HIGHLAND		5	166	0.20	4.34	3.70	
2021	03	16	07	38	20.3	51.90	-2.31	378.7	222.3	11.0	0.8	HIGHNAM, GLOUCESTERSHIRE		3	244	0.10	3.83	5.30	
2021	03	16	11	20	28.0	55.28	-3.52	303.2	599.6	5.2	1.2	BEATTOCK, D & G		8	102	0.30	3.34	4.90	5KM WSW BEATTOCK
2021	03	17	23	56	35.3	52.19	2.18	685.8	263.4	10.8	1.9	SOUTHERN NORTH SEA		5	273	0.30	8.98	5.40	43KM SE LOWESTOFT
2021	03	18	03	08	08.9	56.70	-4.91	221.6	759.8	8.7	0.6	KINLOCHLEVEN, HIGHLAND		6	125	0.40	6.26	2.20	
2021	03	19	06	56	40.3	56.16	-4.77	227.8	700.2	6.0	0.2	ARDGARTAN, ARGYLL/BUTE		5	131	0.50	6.46	9.10	
2021	03	21	05	15	51.9	56.41	-5.69	172.6	729.7	2.5	0.2	MULL, ARGYLL & BUTE		5	229	0.10	3.93	2.10	
2021	03	21	20	51	41.4	56.43	-6.09	147.9	734.4	2.6	0.7	MULL, ARGYLL & BUTE		4	260	0.50	9.71	8.80	
2021	03	23	04	18	45.7	55.19	-3.14	327.6	589.3	2.3	0.6	BAILIEHILL, D & G		8	135	0.30	3.80	3.70	
2021	03	24	14	00	40.8	56.04	-5.17	202.3	687.3	11.0	1.2	CONCHRA, ARGYLL & BUTE		6	163	0.40	6.08	1.00	
2021	03	25	07	03	07.7	53.55	-1.88	408.0	406.0	15.7	0.8	HOLME, WEST YORKSHIRE		6	128	0.20	3.26	2.40	
2021	03	29	04	23	32.8	56.28	-3.76	291.1	711.6	7.2	1.1	BLACKFORD, PERTH/KINROSS	3	6	95	0.20	2.08	0.00	FELT BLACKFORD
2021	03	30	06	57	49.9	52.87	-0.26	517.4	331.9	7.5	1.8	GOSBERTON, LINCOLNSHIRE	2	6	163	0.30	5.27	1.40	FELT GOSBERTON
2021	03	31	00	05	01.4	56.60	-10.47	-119.2	777.1	34.3	2.0	NORTH ATLANTIC OCEAN		13	251	0.30	14.26	0.00	ROCKALL TROUGH AREA
2021	03	31	02	47	07.5	56.61	-10.45	-118.2	778.1	34.6	2.3	NORTH ATLANTIC OCEAN		22	251	0.30	7.40	0.00	ROCKALL TROUGH AREA

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2021	04	01	22	53	4.1	56.41	-6.21	140.3	732.1	7.1	1.4	MULL, ARGYLL & BUTE	2	6	240	0.30	1.39	2.70	FELT MULL
2021	04	04	12	58	41.9	52.24	-2.95	335.0	260.9	18.4	0.6	TITLEY, HEREFORDSHIRE		6	124	0.10	1.55	1.90	
2021	04	05	03	04	09.8	56.26	-3.77	290.6	709.1	2.5	0.6	BLACKFORD, PERTH/KINROSS		6	90	0.30	3.16	3.30	
2021	04	06	04	19	14.6	53.64	-2.06	396.0	416.3	4.2	0.9	LITTLEBOROUGH, GTR MAN		10	103	0.30	3.00	4.00	
2021	04	07	11	31	54.0	56.53	-6.04	151.8	744.4	8.9	0.8	MULL, ARGYLL & BUTE		4	248	0.20	8.54	5.80	
2021	04	11	19	27	39.1	56.40	-5.70	171.6	729.2	2.7	0.6	MULL, ARGYLL & BUTE		4	232	0.10	8.19	6.80	
2021	04	13	21	52	20.3	57.59	-5.49	191.3	861.5	4.9	0.9	TORRIDON, HIGHLAND		6	177	0.40	4.83	8.30	6KM NNE TORRIDON
2021	04	15	03	49	09.8	54.59	-0.84	475.0	522.4	1.0	1.0	BOULBY, NORTH YORKSHIRE		10	237	0.30	5.59	0.00	COLLAPSE TYPE EVENT
2021	04	15	18	39	44.4	55.77	-5.63	172.4	659.5	10.8	1.1	CLACHAN, ARGYLL & BUTE		7	173	0.30	4.70	6.40	
2021	04	19	06	27	15.1	51.84	-3.17	319.6	216.2	18.3	0.8	LLANGATTOCK, POWYS		5	182	0.10	1.84	1.10	
2021	04	20	12	11	40.0	58.31	-4.62	246.8	938.9	6.8	0.9	ALTNAHARRA, HIGHLAND		4	182	0.10	2.33	4.00	11KM WNW ALTNAHARRA
2021	04	20	19	55	19.3	54.11	-1.10	458.6	468.7	20.3	0.9	STILLINGTON, N YORKSHIRE		11	64	0.20	2.20	2.70	
2021	04	22	02	55	56.1	53.46	-3.75	283.9	396.9	8.4	0.4	IRISH SEA		5	180	0.40	5.79	4.40	15KM NNE LLANDUDNO
2021	04	25	06	34	54.4	53.47	-3.71	286.4	398.5	4.7	0.3	IRISH SEA		4	184	0.20	3.09	7.70	18KM NNE LLANDUDNO
2021	04	28	22	16	59.5	56.28	-3.76	291.3	711.3	7.1	0.7	BLACKFORD, PERTH/KINROSS		8	95	0.20	2.11	2.90	
2021	05	01	05	30	05.5	54.68	-3.31	315.3	532.1	11.3	1.0	COCKERMOUTH, CUMBRIA		7	153	0.20	3.45	6.30	
2021	05	04	00	27	12.7	54.13	-1.96	402.8	470.1	4.2	1.2	CONISTONE, N YORKSHIRE		11	108	0.50	4.72	6.70	
2021	05	06	04	15	38.9	55.66	-5.60	173.7	647.1	7.7	0.5	TAYINLOAN, ARGYLL/BUTE		8	164	0.40	6.67	4.10	
2021	05	06	20	19	54.4	51.23	-2.71	350.8	148.6	11.8	0.9	EASTON, SOMERSET		5	193	0.10	3.00	4.00	
2021	05	09	01	13	36.3	55.76	-4.67	232.4	654.9	7.1	0.8	KILBIRNIE, N AYRSHIRE		9	90	0.30	3.67	3.40	
2021	05	09	01	46	56.1	55.77	-4.64	234.6	656.1	7.5	0.3	KILBIRNIE, N AYRSHIRE		5	159	0.50	0.18	8.70	
2021	05	13	10	25	32.3	56.64	-6.19	142.9	757.9	7.4	1.6	MULL, ARGYLL & BUTE		7	201	0.40	2.98	4.40	
2021	05	14	01	50	52.4	56.38	-6.06	149.4	728.2	2.6	0.5	MULL, ARGYLL & BUTE		4	265	0.30	4.00	1.80	
2021	05	14	17	07	19.6	56.98	-5.58	182.3	793.1	6.3	0.7	LOCH NEVIS, HIGHLAND		5	182	0.30	8.92	3.30	
2021	05	15	15	02	47.1	58.55	-4.72	241.6	965.4	7.2	2.5	DURNESS, HIGHLAND		10	195	0.30	7.58	3.00	
2021	05	15	20	05	48.4	55.91	-6.15	140.8	676.5	7.9	1.6	ISLAY, ARGYLL & BUTE		8	148	0.20	6.11	6.20	
2021	05	15	20	07	55.1	55.92	-6.15	140.9	677.4	7.5	0.7	ISLAY, ARGYLL & BUTE		6	188	0.10	2.55	3.30	
2021	05	15	20	27	01.3	55.92	-6.16	140.1	677.4	7.6	1.4	ISLAY, ARGYLL & BUTE		8	148	0.30	8.51	7.30	
2021	05	15	20	38	44.7	55.92	-6.17	139.3	677.9	7.5	0.8	ISLAY, ARGYLL & BUTE		5	190	0.20	7.40	9.20	
2021	05	16	15	16	49.4	51.60	-2.80	344.3	189.8	9.0	2.9	CALDICOT, MONMOUTHSHIRE	4	32	106	0.30	2.75	2.40	FELT CALDICOT...
2021	05	16	15	34	12.7	51.60	-2.81	344.2	189.6	6.9	0.6	CALDICOT, MONMOUTHSHIRE		4	274	0.00	0.78	0.40	
2021	05	16	20	18	42.5	56.76	-4.72	233.5	766.3	11.7	0.7	LOCHTREIGHEAD, HIGHLAND		5	141	0.50	1.19	9.70	
2021	05	17	15	37	26.4	55.92	-6.17	139.3	677.6	7.5	1.8	ISLAY, ARGYLL & BUTE		9	194	0.30	1.33	0.60	
2021	05	18	10	58	13.3	55.92	-6.16	140.0	677.3	7.9	1.4	ISLAY, ARGYLL & BUTE		6	188	0.30	5.57	5.70	
2021	05	18	22	58	49.2	54.59	-1.32	444.2	521.4	4.8	0.5	STOCKTON, COUNTY DURHAM		6	176	0.10	2.55	2.50	
2021	05	20	06	34	17.2	54.64	-3.12	327.5	527.7	8.4	1.4	APPLETHWAITE, CUMBRIA		8	123	0.20	3.67	3.30	
2021	05	30	06	14	44.5	54.18	-3.23	319.4	477.2	12.1	0.5	ASKAM, CUMBRIA		7	164	0.20	2.33	4.70	
2021	05	31	01	43	25.3	50.62	-5.39	159.9	85.2	25.1	0.5	TREVOSE HEAD, CORNWALL		10	211	0.40	2.38	1.00	25KM NW TREVOSE HEAD
2021	05	31	12	24	12.4	55.46	-5.91	152.7	625.8	7.9	1.0	KINTYRE, ARGYLL & BUTE		6	132	0.40	4.47	1.00	OFFSHORE KINTYRE
2021	06	01	13	19	13.8	58.29	-4.58	249.0	936.7	7.8	1.0	ALTNAHARRA, HIGHLAND		4	174	0.20	2.44	6.50	8KM WNW ALTNAHARRA
2021	06	01	14	31	03.0	56.86	-6.07	152.2	781.4	7.3	1.3	EIGG, HIGHLAND		5	231	0.30	4.87	2.20	OFFSHORE EIGG
2021	06	01	17	24	60.0	55.64	-5.59	174.2	644.8	13.2	0.6	TAYINLOAN, ARGYLL/BUTE		7	161	0.30	5.48	6.50	

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2021	06	02	14	58	51.7	53.12	-0.06	529.9	360.1	11.8	2.1	MAREHAM-LE-FEN, LINCS	6	152	0.20	1.61	2.80		
2021	06	07	21	00	28.7	55.02	-4.13	264.0	571.9	4.1	0.4	MOSSDALE, D & G	7	83	0.30	3.40	0.00		
2021	06	10	00	48	58.9	55.52	-5.11	203.8	629.1	7.7	0.7	ARRAN, NORTH AYRSHIRE	7	114	0.20	2.73	0.00		
2021	06	13	04	08	16.5	56.92	-4.87	225.4	784.6	7.7	0.4	ROYBRIDGE, HIGHLAND	3	203	0.10	3.45	0.00		
2021	06	16	04	53	49.3	58.49	-4.55	251.4	958.2	7.5	1.0	TONGUE, HIGHLAND	4	223	0.40	3.56	2.30		
2021	06	17	06	55	52.9	49.90	-2.85	338.6	0.4	5.5	1.8	ENGLISH CHANNEL	11	186	0.30	13.27	7.10	50KM NW GUERNSEY	
2021	06	18	01	28	38.7	55.86	-5.37	189.4	668.0	17.5	0.5	TARBET, ARGYLL & BUTE	7	148	0.50	5.95	6.20		
2021	06	19	08	36	35.2	53.06	-4.42	237.8	353.7	7.5	0.6	CAERNARFON BAY	6	162	0.30	5.69	9.40		
2021	06	20	08	14	10.4	54.11	-1.80	413.1	468.2	6.3	1.0	HEATHFIELD, N YORKSHIRE	10	84	0.30	3.94	4.50		
2021	06	23	00	02	06.4	55.52	-3.82	285.4	627.0	7.5	1.7	DOUGLAS, S LANARKSHIRE	2	16	79	0.30	2.95	7.70	FELT CRAWFORD
2021	06	26	16	08	58.1	57.40	-4.13	272.2	836.6	7.3	1.4	SCATRAIG, HIGHLAND	7	67	0.40	4.30	1.80		
2021	06	26	20	03	29.1	49.49	-7.12	29.3	-32.9	9.7	2.0	CELTIC SEA	9	354	0.20	8.33	5.20	135KM WSW PENZANCE	
2021	06	29	06	24	22.4	52.27	-3.38	306.1	264.7	11.2	0.8	LLANDRINDOD WELLS, POWYS	6	109	0.10	3.40	5.50		
2021	07	02	13	14	05.3	58.55	-3.91	288.7	964.1	7.3	2.1	MELVICH, HIGHLAND	3	11	161	0.40	7.27	3.00	FELT MELVICH...
2021	07	02	14	00	27.8	58.56	-3.92	288.3	965.6	4.9	0.6	MELVICH, HIGHLAND	3	281	0.10	3.34	1.20		
2021	07	02	16	18	06.4	58.57	-3.93	287.9	965.8	6.5	0.8	MELVICH, HIGHLAND	4	281	0.10	3.25	2.20		
2021	07	03	08	43	55.8	53.03	-4.25	249.2	350.4	10.4	0.8	NEBO, GWYNEDD	6	142	0.30	2.01	5.10		
2021	07	04	19	52	33.0	53.14	-2.79	347.2	360.3	7.8	0.8	GATESHEATH, CHESHIRE	8	80	0.30	3.11	4.40	2KM NNW TATTENHALL	
2021	07	05	11	50	36.1	50.22	-5.17	173.6	40.9	4.7	-0.5	CARHARRACK, CORNWALL	7	94	0.00	0.67	0.50	GEOTHERMAL	
2021	07	10	03	10	39.7	62.54	3.51	683.3	1418.8	14.6	3.2	NORWEGIAN SEA	9	233	0.30	15.84	5.00	365KM NE LERWICK	
2021	07	11	11	50	56.8	56.54	-4.26	261.0	740.5	9.3	1.0	KILTYRIE, PERTH/KINROSS	7	70	0.20	3.55	4.00	8KM NNE KILLIN	
2021	07	11	16	11	25.8	56.33	-5.55	180.7	720.9	9.8	0.5	DUACHY, ARGYLL & BUTE	4	312	0.00	3.28	2.90	10KM SSW OBAN	
2021	07	12	04	54	26.0	51.77	-3.07	326.3	208.4	14.6	0.7	BLAENAVON, TORFAEN	5	140	0.50	2.05	6.80		
2021	07	12	15	15	24.6	55.38	-2.23	385.7	609.0	3.3	0.8	BARROW BURN, NORTHUMBLD	6	186	0.10	2.44	4.80		
2021	07	13	02	52	55.3	54.82	-2.38	375.7	547.6	4.1	0.9	ALSTON, CUMBRIA	8	129	0.20	2.15	5.90	4KM ENE ALSTON	
2021	07	14	17	52	25.9	55.86	-5.94	153.4	670.1	8.4	1.2	JURA, ARGYLL & BUTE	8	168	0.50	8.15	1.20		
2021	07	15	19	44	09.4	51.90	-4.17	250.6	224.3	7.5	0.9	FELINGWMUCHAF, CARMARTH	7	111	0.30	2.83	9.30		
2021	07	16	15	26	11.4	54.58	-2.84	345.7	521.3	4.7	0.8	HOWTOWN, CUMBRIA	7	111	0.30	3.75	5.90		
2021	07	17	00	59	00.2	56.12	-6.58	115.2	701.0	6.8	0.5	COLONSAY, ARGYLL & BUTE	5	230	0.30	7.12	9.40	20KM WEST COLONSAY	
2021	07	18	23	27	45.0	56.74	-5.94	159.3	767.8	9.3	0.9	KENTRA, HIGHLAND	3	226	0.30	6.85	1.60	FELT KENTRA...	
2021	07	19	04	29	08.8	52.37	-2.89	339.5	274.6	7.4	1.8	LEINTWARDINE, HEREF	11	124	0.20	3.23	2.50		
2021	07	19	22	06	10.2	51.91	-2.17	388.1	223.7	13.8	1.2	CHELTONHAM, GLOS	10	145	0.30	3.42	4.70		
2021	07	20	05	55	45.7	54.81	-5.97	144.9	553.4	7.9	0.5	BALLYCLARE, CO ANTRIM	5	164	0.30	4.19	6.30	7KM NNE BALLYCLARE	
2021	07	20	06	02	09.8	54.81	-5.97	144.7	553.8	8.3	0.5	BALLYCLARE, CO ANTRIM	5	163	0.20	3.91	6.10	7KM NNE BALLYCLARE	
2021	07	21	08	13	42.6	56.33	-5.14	205.9	719.9	6.4	0.6	KILCHRENAN, ARGYLL/BUTE	4	136	0.20	3.42	7.60		
2021	07	21	23	27	24.7	56.82	-5.24	202.5	774.0	10.9	1.2	DUISKY, HIGHLAND	8	148	0.30	5.03	1.20		
2021	07	22	01	07	25.2	54.20	-3.57	297.7	479.3	4.6	1.0	IRISH SEA	15	61	0.50	3.76	6.90		
2021	07	22	16	15	33.0	56.54	-6.17	143.6	746.7	6.8	0.7	MULL, ARGYLL & BUTE	5	199	0.30	6.44	6.30		
2021	07	25	06	28	57.9	56.69	-6.49	124.9	764.5	4.7	0.7	COLL, ARGYLL & BUTE	5	260	0.40	5.96	4.50		
2021	07	25	15	25	31.5	55.81	-3.81	286.6	659.0	7.9	0.1	SHOTTS, LANARKSHIRE	7	157	0.40	6.64	0.00		
2021	07	26	100	01	21.4	55.81	-3.20	325.1	658.4	5.3	2.5	PENICUIK, MIDLOTHIAN	4	15	72	0.30	2.73	3.30 FELT PENICUIK...	
2021	07	27	04	10	11.7	49.82	-3.12	319.4	-7.9	8.7	0.9	ENGLISH CHANNEL	5	176	0.20	9.35	6.40	50KM NW GUERNSEY	

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<b>Year</b>	<b>Mo</b>	<b>Dy</b>	<b>Hr</b>	<b>Mn</b>	<b>Secs</b>	<b>Lat</b>	<b>Lon</b>	<b>kmE</b>	<b>kmN</b>	<b>Dep</b>	<b>Mag</b>	<b>Locality</b>	<b>Int</b>	<b>No</b>	<b>Gap</b>	<b>RMS</b>	<b>ERH</b>	<b>ERZ</b>	<b>Comments</b>
2021	07	31	08	57	59.4	51.88	-2.60	358.5	219.8	3.7	0.7	WALFORD, HEREFORDSHIRE	6	125	0.20	2.20	4.30		
2021	08	01	05	15	22.8	55.62	-6.46	119.2	645.9	7.1	1.4	ISLAY, ARGYLL & BUTE	10	147	0.60	8.32	7.60	OFFSHORE ISLAY	
2021	08	05	14	27	20.2	55.80	-3.18	326.2	657.3	6.7	1.5	PENICUIK, MIDLOTHIAN	5	112	0.20	4.30	4.30		
2021	08	08	03	21	01.0	53.52	-0.30	513.0	404.3	23.0	1.7	CAISTOR, LINCOLNSHIRE	8	163	0.30	4.88	3.70		
2021	08	09	16	28	31.4	56.18	-4.97	215.6	702.3	12.6	1.2	LOCH GOIL, ARGYLL/BUTE	5	135	0.40	4.46	9.40		
2021	08	12	21	26	26.0	57.19	-4.12	272.1	812.8	7.8	1.0	KINGUSSIE, HIGHLAND	8	80	0.30	3.67	5.80	12KM NNW KINGUSSIE	
2021	08	14	13	25	34.5	59.45	2.05	629.7	1069.0	10.0	2.0	NORTHERN NORTH SEA	5	291	0.30	14.93	0.00	200KM ESE LERWICK	
2021	08	15	05	22	15.8	53.88	-2.12	392.4	442.6	9.0	1.4	COLNE, LANCASHIRE	14	104	0.30	3.29	1.60	4KM NE COLNE	
2021	08	16	02	43	10.5	53.79	-2.08	394.9	432.2	15.9	0.7	HEBDEN BRIDGE, W YORKS	7	76	0.10	0.94	1.20	6KM NW HEBDEN BRIDGE	
2021	08	16	15	52	22.7	55.81	-3.13	328.9	658.3	6.4	0.6	PENICUIK, MIDLOTHIAN	6	115	0.30	4.52	8.10		
2021	08	16	21	07	05.5	54.44	-4.15	260.5	507.2	9.3	0.9	IRISH SEA	9	132	0.20	2.39	7.10	20KM NE RAMSEY, IOM	
2021	08	17	06	45	44.9	55.23	-3.53	302.7	594.3	2.5	0.9	ST ANN'S, D & G	7	107	0.40	4.40	5.20	4KM WEST ST ANN'S	
2021	08	18	16	03	16.0	52.61	-2.05	396.3	301.5	7.5	1.0	WALSALL, WEST MIDLANDS	8	111	0.40	3.47	1.70		
2021	08	19	02	57	45.6	54.14	-1.98	401.2	472.0	9.9	0.4	KETTLEWELL, N YORKSHIRE	9	119	0.20	1.89	3.90		
2021	08	20	06	29	39.3	52.31	-6.69	80.1	279.0	4.6	0.8	TAGHMON, CO WEXFORD	3	214	0.20	0.00	0.00		
2021	08	20	07	56	44.9	57.08	-5.73	174.2	805.0	7.4	1.0	AIROR, HIGHLAND	5	201	0.20	7.25	1.00		
2021	08	20	20	36	22.2	54.75	4.62	825.6	559.8	10.0	3.8	SOUTHERN NORTH SEA	43	260	0.50	7.32	0.00	300KM NE CROMER	
2021	08	23	18	34	10.6	53.88	-2.10	393.5	442.8	13.0	0.9	COLNE, LANCASHIRE	13	80	0.20	2.15	3.60	4KM NE COLNE	
2021	08	25	08	39	30.4	49.93	-2.92	334.3	3.3	4.6	2.0	ENGLISH CHANNEL	11	184	0.40	12.92	2.70	55KM NW GUERNSEY	
2021	08	29	02	27	07.7	57.36	-5.16	209.9	834.3	11.2	0.9	CARNACH, HIGHLAND	6	93	0.10	3.59	3.10	10KM NE CARNACH	
2021	08	29	08	18	58.5	53.01	-2.29	380.5	346.0	9.4	0.8	SILVERDALE, STAFFS	9	91	0.10	1.22	1.60		
2021	08	29	14	43	58.8	54.77	-1.60	425.8	541.2	11.2	0.9	DURHAM, COUNTY DURHAM	11	185	0.20	2.41	4.40		
2021	08	29	19	04	05.9	56.38	-3.98	277.9	722.7	2.6	1.6	COMRIE, PERTH & KINROSS	3	13	64	0.30	2.48	2.00 FELT COMRIE	
2021	08	31	17	58	32.7	55.42	-6.02	145.9	621.3	5.4	0.5	KINTYRE, ARGYLL & BUTE	5	134	0.20	2.15	6.60	OFFSHORE KINTYRE	
2021	09	02	19	38	31.5	52.45	-3.19	319.3	284.8	8.4	1.1	ANCHOR, SHROPSHIRE	9	77	0.10	1.93	4.80		
2021	09	03	02	38	08.8	53.71	-3.28	315.3	424.5	20.6	0.8	IRISH SEA	7	123	0.10	2.15	2.70	20KM WNW SOUTHPORT	
2021	09	03	23	26	41.5	57.11	-5.61	181.4	808.0	7.5	1.2	ARNISDALE, HIGHLAND	8	182	0.20	5.00	5.20	4KM SW ARNISDALE	
2021	09	04	15	36	05.4	53.23	-2.70	353.5	371.0	11.5	1.2	KELSALL, CHESHIRE	14	69	0.20	1.79	2.60		
2021	09	04	22	03	27.0	53.88	-2.10	393.2	442.6	14.4	0.6	COLNE, LANCASHIRE	9	80	0.20	2.10	2.80	4KM NE COLNE	
2021	09	05	03	27	29.7	56.54	-5.69	173.2	744.8	8.5	0.7	MORVERN, HIGHLAND	4	212	0.20	1.83	2.60	4KM SE ARDTORNISH	
2021	09	08	04	18	05.9	54.39	-2.87	343.4	499.3	8.7	1.0	WINDERMERE, CUMBRIA	3	15	75	0.20	1.39	2.80 FELT WINDERMERE...	
2021	09	09	07	30	55.1	50.56	-4.79	202.3	76.9	7.1	0.7	TREQUITE, CORNWALL	8	164	0.00	0.94	0.70		
2021	09	11	15	58	17.1	52.63	-2.77	348.2	303.7	7.3	0.7	DORRINGTON, SHROPSHIRE	7	99	0.20	2.44	1.90		
2021	09	11	16	15	03.6	52.62	-2.77	347.6	303.3	8.6	0.7	DORRINGTON, SHROPSHIRE	8	99	0.20	2.38	3.60		
2021	09	16	03	16	32.1	56.55	-5.65	175.7	746.1	7.9	1.0	MORVERN, HIGHLAND	5	205	0.30	6.90	9.00	5KM ESE ARDTORNISH	
2021	09	17	08	05	55.6	57.07	-5.79	170.4	803.7	2.8	0.7	AIROR, HIGHLAND	5	210	0.50	7.10	8.50		
2021	09	17	15	31	36.4	56.24	-4.95	217.1	708.9	7.1	0.6	CAIRNDOW, ARGYLL & BUTE	4	153	0.20	3.61	5.90		
2021	09	19	09	26	06.9	55.19	-7.43	54.3	601.9	2.7	0.3	SLADRAN, COUNTY DONEGAL	3	257	0.20	9.21	9.40		
2021	09	23	12	07	14.3	57.09	-5.64	179.5	806.2	2.5	0.6	CORRAN, HIGHLAND	4	217	0.20	8.08	4.80		
2021	09	23	14	59	42.7	56.35	-4.15	267.3	719.4	2.5	0.7	ST FILLANS, P & K	5	146	0.20	6.80	3.10		
2021	09	24	20	31	42.7	57.15	-5.61	181.7	812.3	5.9	1.3	ARNISDALE, HIGHLAND	5	209	0.10	5.61	3.60	3KM NW ARNISDALE	
2021	09	27	14	03	23.6	56.48	-5.32	195.8	737.0	2.4	1.2	ACHNACAIRN, ARGYLL/BUTE	8	150	0.50	7.09	4.30		

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2021	09	28	04	14	28.0	51.73	-4.64	217.9	207.2	4.8	1.3	AMROTH, PEMBROKESHIRE	9	171	0.30	5.41	7.80		
2021	09	28	04	14	45.9	51.73	-4.63	218.3	207.4	6.2	1.9	AMROTH, PEMBROKESHIRE	10	169	0.40	6.02	6.70		
2021	09	28	04	31	02.5	51.73	-4.62	218.9	207.2	5.3	1.0	AMROTH, PEMBROKESHIRE	6	168	0.20	4.85	7.50		
2021	10	03	17	29	06.8	56.62	-5.33	195.4	752.2	7.7	0.9	DUROR, HIGHLAND	4	197	0.10	2.88	4.00	4KM SW DUROR	
2021	10	04	09	33	01.8	60.66	2.88	666.4	1207.5	10.0	2.8	NORTHERN NORTH SEA	7	322	0.40	3.23	0.00	230KM ENE LERWICK	
2021	10	04	10	57	13.3	57.69	-5.71	178.8	872.7	5.6	1.2	BADACHRO, HIGHLAND	5	216	0.30	3.92	8.20		
2021	10	09	22	06	24.7	51.91	-5.13	184.5	227.6	6.1	1.2	LLANDELOY, PEMBROKESHIRE	8	222	0.20	3.86	2.20		
2021	10	12	01	27	11.1	55.52	-5.62	171.3	630.7	10.2	0.6	KINTYRE, ARGYLL & BUTE	8	121	0.20	3.00	7.60		
2021	10	12	14	27	06.1	56.60	-6.23	140.7	753.8	7.5	1.1	MULL, ARGYLL & BUTE	2	4	256	0.30	1.95	2.50	FELT KILCHOAN
2021	10	14	06	26	19.2	56.28	-3.75	291.5	710.7	6.1	0.6	BLACKFORD, PERTH/KINROSS	6	117	0.10	2.56	4.10		
2021	10	14	06	30	47.0	56.28	-3.74	292.1	710.9	3.0	1.5	BLACKFORD, PERTH/KINROSS	13	72	0.30	4.29	8.30		
2021	10	15	08	24	04.0	56.28	-3.76	291.2	711.2	8.7	1.0	BLACKFORD, PERTH/KINROSS	10	95	0.30	2.84	7.70		
2021	10	15	08	27	58.4	56.29	-3.76	291.1	712.1	7.8	0.7	BLACKFORD, PERTH/KINROSS	7	96	0.20	2.22	7.30		
2021	10	15	22	26	49.1	53.10	2.96	732.2	367.9	10.0	2.0	SOUTHERN NORTH SEA	10	287	0.30	8.85	0.00	110KM NE LOWESTOFT	
2021	10	15	22	34	31.4	56.27	-3.79	289.3	710.3	3.2	0.5	BLACKFORD, PERTH/KINROSS	5	203	0.20	4.72	7.40		
2021	10	16	14	07	42.7	53.70	-2.13	391.2	422.1	5.2	0.8	WALSDEN, WEST YORKSHIRE	9	125	0.10	2.02	2.20		
2021	10	17	04	45	06.4	53.05	2.06	672.3	358.5	10.0	2.1	SOUTHERN NORTH SEA	9	270	0.40	9.75	0.00	50KM ENE CROMER	
2021	10	17	15	18	20.5	56.15	-4.93	217.9	698.6	2.9	1.3	CORROW, ARGYLL & BUTE	3	13	81	0.50	4.14	6.40	FELT CARRICK CASTLE
2021	10	17	21	10	29.9	53.21	-3.83	277.9	370.0	5.8	1.0	DOLGARROG, CONWY	3	6	118	0.10	2.48	5.90	FELT DOLGARROG...
2021	10	18	17	50	46.9	58.15	1.08	581.0	922.4	10.0	2.0	CENTRAL NORTH SEA	7	289	0.50	13.60	0.00	220KM NE ABERDEEN	
2021	10	19	17	57	04.1	52.19	-3.46	300.5	255.5	4.0	0.9	NEWBRIDGE-ON-WYE, POWYS	6	123	0.20	3.44	4.60		
2021	10	22	00	07	34.0	57.42	-5.59	184.5	842.2	7.7	0.9	TORNAPRESS, HIGHLAND	6	173	0.30	2.77	6.60		
2021	10	29	06	09	05.4	56.65	-5.26	200.0	755.3	3.4	0.7	ACHINDARROCH, HIGHLAND	5	152	0.30	8.17	1.90		
2021	11	01	07	13	11.7	56.97	-5.45	190.5	792.1	7.7	0.6	KINLOCHARKAIG, HIGHLAND	5	165	0.30	5.66	6.10		
2021	11	04	02	00	17.9	53.22	2.60	707.1	379.0	10.0	2.4	SOUTHERN NORTH SEA	7	297	0.60	6.82	0.00	95KM ENE CROMER	
2021	11	04	23	24	55.3	52.07	-2.62	357.2	242.0	8.0	0.4	HEREFORD, HEREFORDSHIRE	4	155	0.10	1.52	2.00	5KM ENE HEREFORD	
2021	11	05	22	47	11.9	56.02	-5.07	208.6	684.9	8.1	0.9	GLENLEAN, ARGYLL & BUTE	8	110	0.20	2.94	5.60		
2021	11	06	20	09	11.7	56.22	-5.04	211.8	707.1	7.8	0.2	INVERARAY, ARGYLL/BUTE	4	147	0.20	1.94	4.70	3KM SE INVERARAY	
2021	11	07	17	14	41.5	54.16	-1.76	415.5	473.3	5.4	0.9	DALLOWGILL, N YORKSHIRE	11	87	0.60	4.66	5.60		
2021	11	08	01	39	30.0	54.32	-3.92	275.4	493.4	9.3	1.2	IRISH SEA	12	100	0.30	2.83	4.80	30KM EAST RAMSEY, IOM	
2021	11	08	10	31	36.4	54.32	-3.90	276.6	493.4	9.4	0.7	IRISH SEA	6	182	0.20	2.90	5.50	30KM EAST RAMSEY, IOM	
2021	11	10	19	58	39.4	56.23	-5.35	192.6	709.3	6.5	0.4	DALAVICH, ARGYLL & BUTE	3	220	0.00	2.84	1.50	5KM SW DALAVICH	
2021	11	12	05	21	59.8	55.47	-3.48	306.3	620.2	4.8	0.6	TWEEDSMUIR, BORDERS	7	159	0.30	9.84	5.60	5KM SW TWEEDSMUIR	
2021	11	14	05	12	57.3	56.32	-5.32	194.6	718.7	4.4	0.9	DALAVICH, ARGYLL & BUTE	5	132	0.20	5.12	3.50	6KM NNW DALAVICH	
2021	11	14	18	05	45.7	56.10	-5.16	203.3	693.7	10.2	0.5	BARNACARRY, ARGYLL/BUTE	6	113	0.20	2.83	5.30		
2021	11	15	10	04	49.8	56.93	-4.69	236.6	784.9	7.6	0.5	ROYBRIDGE, HIGHLAND	4	196	0.30	5.95	0.00		
2021	11	15	22	30	00.6	54.31	-3.91	275.6	492.8	8.7	0.2	IRISH SEA	5	203	0.30	5.27	1.40	30KM EAST RAMSEY, IOM	
2021	11	16	00	13	12.4	56.91	-4.71	234.9	783.6	7.7	0.6	ROYBRIDGE, HIGHLAND	4	193	0.30	4.16	0.00		
2021	11	16	01	44	07.0	56.03	-5.54	179.7	687.9	12.4	3.4	ACHNAMARA, ARGYLL/BUTE	5	33	158	0.40	4.25	3.60	FELT ACHNAMARA...
2021	11	16	02	42	39.3	56.91	-4.74	233.1	783.2	7.5	1.6	ROYBRIDGE, HIGHLAND	10	102	0.40	6.26	6.50		
2021	11	16	04	09	55.0	56.92	-4.71	235.3	783.8	7.8	0.9	ROYBRIDGE, HIGHLAND	4	193	0.20	4.52	2.30		
2021	11	16	04	50	31.9	56.92	-4.71	234.9	784.1	7.9	0.5	ROYBRIDGE, HIGHLAND	4	193	0.20	3.31	6.10		

**TABLE 1 : CATALOGUE OF EVENTS : 2021**

<b>Year</b>	<b>Mo</b>	<b>Dy</b>	<b>Hr</b>	<b>Mn</b>	<b>Secs</b>	<b>Lat</b>	<b>Lon</b>	<b>kmE</b>	<b>kmN</b>	<b>Dep</b>	<b>Mag</b>	<b>Locality</b>	<b>Int</b>	<b>No</b>	<b>Gap</b>	<b>RMS</b>	<b>ERH</b>	<b>ERZ</b>	<b>Comments</b>	
2021	11	17	15	47	42.5							SONIC - NE YORKSHIRE	3							FELT NE YORKSHIRE
2021	11	19	00	48	51.0	56.92	-4.70	235.7	784.1	7.7	0.7	ROYBRIDGE, HIGHLAND		4	194	0.20	3.44	6.40		
2021	11	19	21	29	54.1	56.91	-4.74	233.2	783.3	7.5	2.2	ROYBRIDGE, HIGHLAND	3	13	102	0.50	4.92	2.20	FELT ROYBRIDGE...	
2021	11	24	18	18	14.8	53.15	0.81	588.1	365.2	16.7	1.6	SOUTHERN NORTH SEA		7	239	0.20	5.77	2.30	33KM EAST SKEGNESS	
2021	11	29	09	30	0.6	52.33	-3.65	287.5	271.4	9.3	0.7	RHAYADER, POWYS		6	118	0.20	1.97	3.10	10KM NW RHAYADER	
2021	11	20	12	40	17.9	52.54	-0.62	493.5	294.7	7.9	1.7	LAXTON, NORTHANTS		10	129	0.20	1.98	4.90		
2021	11	20	13	30	48.9	57.83	-5.10	215.8	886.9	8.3	1.5	ULLAPOOL, HIGHLAND		5	192	0.20	4.21	7.50	6KM SSE ULLAPOOL	
2021	11	20	06	15	22.4	61.53	2.40	634.0	1302.0	10.0	1.5	NORWEGIAN SEA		3	213	0.60	14.20	0.00	250KM NE LERWICK	
2021	11	20	00	02	50.1	57.27	-5.67	178.7	825.8	3.8	0.7	LOCH ALSH, HIGHLAND		5	197	0.30	5.82	9.60	2KM SW BALMACARA	
2021	11	20	04	02	49.0	53.58	-3.27	316.0	410.5	11.2	0.9	IRISH SEA		10	80	0.20	2.28	3.40	11KM WNW FORMBY	
2021	11	20	06	10	42.0	55.76	-6.02	147.7	659.1	12.2	1.0	ISLAY, ARGYLL & BUTE		7	163	0.20	4.02	5.90		
2021	11	21	17	32	57.8	57.85	-5.11	215.5	888.3	6.1	2.5	ULLAPOOL, HIGHLAND	3	9	194	0.30	6.66	9.30	FELT ULLAPOOL...	
2021	11	21	17	37	52.9	57.85	-5.11	215.2	888.5	7.3	2.5	ULLAPOOL, HIGHLAND	3	10	194	0.40	8.01	8.70	FELT ULLAPOOL...	
2021	11	21	18	28	25.9	57.09	-5.75	172.8	806.3	8.0	1.7	LOCH HOURN, HIGHLAND		5	205	0.30	6.23	8.50	10KM NNE MALLAIG	
2021	11	21	08	21	19.0	56.26	-5.37	191.3	712.6	4.2	0.4	DALAVICH, ARGYLL & BUTE		3	174	0.20	1.22	0.00	5KM WEST DALAVICH	
2021	11	21	16	33	44.3	57.04	-5.79	170.0	800.7	7.8	1.0	LOCH NEVIS, HIGHLAND		4	210	0.10	7.33	6.70	4KM NNE MALLAIG	
2021	11	21	01	20	4.4	55.11	-0.28	509.4	580.9	24.3	1.4	CENTRAL NORTH SEA		12	269	0.40	13.41	7.50	70KM ENE SUNDERLAND	
2021	11	21	14	14	19.2	56.55	-5.84	163.9	746.3	8.5	0.8	LOCHALINE, HIGHLAND		4	228	0.40	4.03	0.00		
2021	11	21	20	04	25.4	54.22	-2.69	355.0	480.8	7.7	0.1	LUPTON, CUMBRIA		6	136	0.20	2.47	3.90		
2021	11	21	16	53	21.1	57.61	-4.83	230.9	861.1	6.6	0.8	GRUDIE, HIGHLAND		7	149	0.60	6.49	5.00		
2021	11	21	20	25	45.4	54.68	-7.69	33.5	547.0	12.1	0.6	KILLETER, COUNTY TYRONE		4	156	0.20	7.75	7.80		
2021	11	22	00	01	20.0	56.64	-6.13	146.8	757.6	7.5	2.1	MULL, ARGYLL & BUTE	3	15	201	0.40	4.02	1.20	FELT TOBERMORY...	
2021	11	22	06	13	38.5	54.69	-7.67	34.7	547.4	11.2	0.3	KILLETER, COUNTY TYRONE		3	244	0.40	6.37	4.90		
2021	11	22	06	50	09.8	51.47	-3.45	299.4	175.6	9.5	1.2	COWBRIDGE, GLAMORGAN		6	169	0.30	4.09	3.90	VALE OF GLAMORGAN	
2021	11	22	06	04	35.6	62.27	2.13	614.4	1383.3	10.4	2.7	NORWEGIAN SEA		8	253	0.40	7.94	7.50	295KM NE LERWICK	
2021	11	22	02	07	54.6	54.29	0.45	559.6	491.2	18.8	2.2	SOUTHERN NORTH SEA		10	242	0.50	9.85	6.50	40KM NE FLAMBOROUGH	
2021	11	22	01	20	07.3	51.46	-0.96	472.5	173.8	9.4	1.1	READING, BERKSHIRE		11	104	0.30	4.58	8.10		
2021	11	22	02	15	09.4	51.44	-1.03	467.1	171.2	5.9	1.8	READING, BERKSHIRE		14	101	0.30	2.86	4.00		

**TABLE 2 : PHASE DATA**

January 4 2021	Time: 02:29 18.7 UTC	Magnitude: 0.6 ML	LAWE	HZ	102.0	EP	00:45	20.30	0.21
Lat: 55.662	Lon: -3.427	Depth: 7.4 km	LAWE	HN	102.0	ES	00:45	32.34	0.05
Grid Ref: 310.24 kmE	641.86 kmN	RMS: 0.20 secs	LAWE	HN	102.0	IAML	00:45	35.36	3 0.20
Locality: SKIRLING,BORDERS			LAWE	HE	102.0	IAML	00:45	36.54	2 0.17
Velocity model: Lownet	Xnear: 100.0 Xfar: 200.0		DRUM	HZ	105.0	EP	00:45	20.62	0.16
STAT CO DIST PHAS WT P HrMn SECS AMPL PERI RES			DRUM	HE	105.0	ES	00:45	32.71	-0.22
EDI HZ 32.7 EP 02:29 24.57		-0.04	DRUM	HE	105.0	IAML	00:45	34.73	7 0.17
EDI HN 32.7 ES 02:29 28.84		-0.11	DRUM	HN	105.0	IAML	00:45	35.06	5 0.21
EDI HN 32.7 IAML 02:29 29.10	13 0.14		ESK	HZ	113.0	EP	00:45	22.49	0.71
EDI HE 32.7 IAML 02:29 29.59	15 0.21		ESK	HN	113.0	ES	00:45	35.08	-0.13
ESK HZ 40.9 EP 02:29 26.07		0.16	ESK	HE	113.0	IAML	00:45	37.78	3 0.26
ESK HN 40.9 ES 02:29 31.13		-0.07	ESK	HN	113.0	IAML	00:45	38.15	3 0.26
ESK HE 40.9 IAML 02:29 34.91	2 0.16		NEWG	HZ	133.0	EP	00:45	25.01	0.23
ESK HN 40.9 IAML 02:29 37.06	3 0.15		NEWG	HN	133.0	ES	00:45	40.27	-0.14
GGERF CE 53.8 ES 02:29 34.36		-0.20	NEWG	HN	133.0	IAML	00:45	42.91	1 0.14
GGERF CN 53.8 IAML 02:29 34.69	3 0.12		NEWG	HE	133.0	IAML	00:45	44.27	2 0.09
GGERF CE 53.8 IAML 02:29 35.20	3 0.21								
PGB1 HZ 68.4 EP 02:29 30.39		0.23	January 8 2021	Time: 16:50 34.7 UTC	Magnitude: 0.8 ML				
PGB1 HE 68.4 ES 02:29 38.53		-0.02	Lat: 55.302	Lon: -2.367	Depth: 1.5 km				
PGB1 HN 68.4 IAML 02:29 39.17	10 0.23		Grid Ref: 376.70 kmE	600.94 kmN	RMS: 0.10 secs				
PGB1 HE 68.4 IAML 02:29 40.57	10 0.18		Locality: BYRNESS,NORTHUMBERLAND						
NEWG HZ 79.1 EP 02:29 31.59		-0.22	Velocity model: Lownet	Xnear: 100.0 Xfar: 200.0					
NEWG HN 79.1 ES 02:29 41.40		-0.01	STAT CO DIST PHAS WT P HrMn SECS AMPL PERI RES						
NEWG HE 79.1 IAML 02:29 44.22	3 0.21		EKA	BZ	50.4	EP	16:50	43.78	-0.13
NEWG HN 79.1 IAML 02:29 46.14	4 0.10		EKA	BZ	50.4	ES	16:50	50.66	0.00
EAB HZ 81.7 EP 02:29 32.46		0.23	ESK	HZ	53.2	EP	16:50	44.21	-0.13
EAB HN 81.7 ES 02:29 41.97		-0.17	ESK	HN	53.2	ES	16:50	51.28	-0.13
EAB HN 81.7 IAML 02:29 43.36	2 0.09		ESK	HN	53.2	IAML	16:50	52.27	5 0.33
EAB HE 81.7 IAML 02:29 45.71	2 0.07		ESK	HE	53.2	IAML	16:50	55.78	3 0.10
INVG HZ 93.5 EP 02:29 34.18		0.12	EDI	HE	86.3	ES	16:51	00.28	0.04
INVG HE 93.5 IAML 02:29 48.62	1 0.34		EDI	HE	86.3	IAML	16:51	02.13	4 0.25
INVG HN 93.5 IAML 02:29 51.71	1 0.13		EDI	HN	86.3	IAML	16:51	02.54	3 0.15
LAWE HZ 140.0 EP 02:29 41.04		-0.00	KESW	HZ	92.4	EP	16:50	50.58	0.16
LAWE HN 140.0 ES 02:29 57.62		0.24	KESW	HN	92.4	IAML	16:51	04.37	4 0.42
LAWE HE 140.0 IAML 02:29 59.49	2 0.25		KESW	HE	92.4	IAML	16:51	04.68	4 0.31
LAWE HN 140.0 IAML 02:30 00.39	3 0.36		AQ12	HZ	99.4	EP	16:50	51.56	0.03
			AQ12	HN	99.4	ES	16:51	03.74	-0.11
January 6 2021	Time: 00:55 07.0 UTC	Magnitude: 0.8 ML	AQ12	HE	99.4	IAML	16:51	05.23	5 0.18
Lat: 54.208	Lon: -1.842	Depth: 5.9 km	AQ12	HN	99.4	IAML	16:51	05.61	4 0.27
Grid Ref: 410.30 kmE	479.17 kmN	RMS: 0.30 secs	AS07	HZ	120.0	EP	16:50	54.62	-0.09
Locality: LOFTHOUSE,N YORKSHIRE			NEWG	HZ	120.0	EP	16:50	54.88	0.16
Velocity model: Lownet	Xnear: 100.0 Xfar: 200.0		NEWG	HN	120.0	ES	16:51	09.62	0.25
STAT CO DIST PHAS WT P HrMn SECS AMPL PERI RES			NEWG	HE	120.0	IAML	16:51	11.19	2 0.19
AS07 HZ 8.1 EP 00:55 09.11		0.06	NEWG	HN	120.0	IAML	16:51	11.51	3 0.19
AS07 HE 8.1 ES 00:55 10.66		0.10	AP12	HZ	125.0	EP	16:50	55.57	0.16
AS07 HE 8.1 IAML 00:55 10.80	50 0.07		AP12	HE	125.0	IAML	16:51	11.82	4 0.23
AS07 HE 8.1 IAML 00:55 10.82	25 0.16		AP12	HN	125.0	IAML	16:51	12.01	3 0.19
HPK HZ 31.2 EP 00:55 12.62		-0.18	GAL1	HZ	157.0	EP	16:50	59.84	-0.32
HPK HN 31.2 ES 00:55 16.64		-0.42	EAB	HE	158.0	ES	16:51	19.22	0.16
HPK HN 31.2 IAML 00:55 16.93	11 0.14		EAB	HE	158.0	IAML	16:51	21.00	2 0.17
HPK HE 31.2 IAML 00:55 16.96	23 0.18		EAB	HN	158.0	IAML	16:51	21.55	2 0.08
AS10 HE 38.4 ES 00:55 19.00		0.03							
AS10 HN 38.4 IAML 00:55 19.12	11 0.11		January 10 2021	Time: 02:46 30.4 UTC	Magnitude: 0.8 ML				
AS10 HE 38.4 IAML 00:55 19.23	24 0.21		Lat: 52.740	Lon: -2.988	Depth: 13.1 km				
AR09 HE 39.1 ES 00:55 18.95		-0.33	Grid Ref: 333.30 kmE	316.31 kmN	RMS: 0.40 secs				
AR07 HE 46.7 ES 00:55 21.22		-0.01	Locality: CREWGRENNE, POWYS						
AT10 HE 46.9 ES 00:55 21.05		-0.27	Velocity model: Lownet	Xnear: 100.0 Xfar: 200.0					
AT10 HE 46.9 IAML 00:55 21.30	5 0.23		STAT CO DIST PHAS WT P HrMn SECS AMPL PERI RES						
AT10 HE 46.9 IAML 00:55 21.50	8 0.23		FOEL	HZ	21.9	IP	D	02:46	35.15
AQ12 HZ 64.5 EP 00:55 18.02		0.02	FOEL	HE	21.9	ES	02:46	38.18	-0.03
AQ12 HE 64.5 ES 00:55 25.64		-0.40	FOEL	HE	21.9	IAML	02:46	38.63	7 0.20
AQ12 HE 64.5 IAML 00:55 28.40	2 0.08		FOEL	HE	21.9	IAML	02:46	39.25	5 0.21
AQ12 HE 64.5 IAML 00:55 30.19	2 0.09		HLM1	HZ	25.7	IP	D	02:46	35.40
GDLE HE 70.9 ES 00:55 27.85		0.14	HLM1	HN	25.7	ES	02:46	38.86	-0.30
GDLE HE 70.9 IAML 00:55 31.45	10 0.15		HLM1	HN	25.7	IAML	02:46	39.26	7 0.12
GDLE HE 70.9 IAML 00:55 32.02	12 0.52		HLM1	HE	25.7	IAML	02:46	39.29	13 0.21
AS02 HN 73.3 ES 00:55 28.32		-0.07	CWF	HZ	113.0	EP	02:46	49.08	0.46
AS02 HN 73.3 IAML 00:55 28.57	4 0.18		CWF	HN	113.0	ES	02:47	01.71	-0.24
AS02 HE 73.3 IAML 00:55 29.23	2 0.20		CWF	HN	113.0	IAML	02:47	03.56	4 0.07
LBWR HZ 90.0 EP 00:55 22.41		0.46	CWF	HE	113.0	IAML	02:47	04.46	2 0.15
LBWR HN 90.0 ES 00:55 33.23		0.34	WLF1	HZ	113.0	EP	02:46	48.66	0.19
LBWR HN 90.0 IAML 00:55 36.23	5 0.27		WLF1	HN	113.0	ES	02:47	01.02	-0.66
LBWR HE 90.0 IAML 00:55 36.48	6 0.13		WLF1	HE	113.0	IAML	02:47	02.15	6 0.31
KESW HZ 92.3 EP 00:55 22.82		0.52	WLF1	HN	113.0	IAML	02:47	02.23	5 0.18
			WPS	HE	125.0	ES	02:47	04.76	-0.00
January 8 2021	Time: 00:45 03.4 UTC	Magnitude: 0.6 ML	WPS	HN	125.0	IAML	02:47	06.44	3 0.31
Lat: 56.284	Lon: -3.750	Depth: 7.7 km	WPS	HE	125.0	IAML	02:47	06.59	4 0.34
Grid Ref: 291.68 kmE	711.54 kmN	RMS: 0.20 secs	RSBS	HZ	148.0	EP	02:46	54.13	0.51
Locality: BLACKFORD,PERTH/KINROSS			RSBS	HN	148.0	ES	02:47	11.28	0.68
Velocity model: Lownet	Xnear: 100.0 Xfar: 200.0		RSBS	HE	148.0	IAML	02:47	12.47	1 0.07
STAT CO DIST PHAS WT P HrMn SECS AMPL PERI RES			RSBS	HN	148.0	IAML	02:47	13.17	2 0.19
INVG HZ 24.2 EP 00:45 08.09		0.07							
INVG HN 24.2 ES 00:45 11.36		-0.05	January 11 2021	Time: 00:46 43.9 UTC	Magnitude: 1.0 ML				
INVG HN 24.2 IAML 00:45 11.95	2 0.18		Lat: 55.352	Lon: -2.300	Depth: 0.3 km				
INVG HE 24.2 IAML 00:45 13.58	2 0.17		Grid Ref: 380.98 kmE	606.49 kmN	RMS: 0.30 secs				
EAB HZ 37.9 EP 00:45 10.12		-0.03	Locality: MAKENDON,NORTHUMBERLAND						
EAB HE 37.9 ES 00:45 14.84		-0.26	Velocity model: Lownet	Xnear: 100.0 Xfar: 200.0					
EAB HE 37.9 IAML 00:45 15.38	3 0.13		STAT CO DIST PHAS WT P HrMn SECS AMPL PERI RES						
EAB HE 37.9 IAML 00:45 16.57	3 0.13		EKA	BZ	54.5	IP	C	00:46	53.77
ED1 HZ 53.2 EP 00:45 12.45		-0.04	ED1	HZ	57.6	IP	C	00:46	54.25
ED1 HE 53.2 ES 00:45 18.95		-0.20	ED1	HN	57.6	ES	00:47	02.13	-0.16
ED1 HE 53.2 IAML 00:45 19.07	3 0.25		ED1	HN	57.6	IAML	00:47	02.85	9 0.17
ED1 HE 53.2 IAML 00:45 19.30	4 0.30		ED1	HE	57.6	IAML	00:47	06.39	4 0.04
PGB1 HZ 69.7 EP 00:45 14.89		-0.16	ED1	HZ	84.7	EP	00:46	58.95	0.23

**TABLE 2 : PHASE DATA**

EDI	HN	84.7	ES	00:47	09.48	-0.03	EAB	HN	172.0	IAML	12:23	07.74	3	0.18
EDI	HE	84.7	IAML	00:47	10.68	3 0.16								
EDI	HN	84.7	IAML	00:47	11.23	4 0.09								
KESW	HZ	99.4	EP	00:47	01.24	0.20								
KESW	HN	99.4	IAML	00:47	16.04	4 0.11								
KESW	HE	99.4	IAML	00:47	16.09	6 0.20								
AQ12	HZ	106.0	EP	00:47	02.17	0.10								
AQ12	HE	106.0	ES	00:47	15.13	-0.17								
AQ12	HN	106.0	IAML	00:47	16.55	5 0.18								
AQ12	HE	106.0	IAML	00:47	16.81	8 0.09								
NEWG	HZ	126.0	EP	00:47	05.22	0.15								
NEWG	HN	126.0	ES	00:47	21.16	0.68								
NEWG	HE	126.0	IAML	00:47	22.60	3 0.21								
NEWG	HN	126.0	IAML	00:47	23.15	6 0.17								
January 12 2021			Time: 18:48 00.7 UTC			Magnitude: 2.3 ML								
Lat:	53.056		Lon:	1.847		Depth: 10.0 km								
Grid Ref:	657.76	kmE	357.93	kmN		RMS: 0.40 secs								0.03
Locality:	SOUTHERN NORTH SEA													
Velocity model:	Lownet	Xnear:	250.0	Xfar:	500.0									
Comment:	40KM ENE CROMER													
STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES				
WACR	HZ	89.9	EP			18:48	16.27	-0.02						
WACR	HE	89.9	ES			18:48	27.72	0.02						
WACR	HE	89.9	IAML			18:48	31.80	61 0.25						
WACR	HN	89.9	IAML			18:48	33.72	52 0.21						
ELMS	HZ	122.0	EP			18:48	20.34	-0.90						
ELMS	HN	122.0	ES			18:48	36.63	0.36						
LMK	HZ	152.0	EP			18:48	26.07	0.39						
LMK	HN	152.0	ES			18:48	43.62	-0.32						
LMK	HN	152.0	IAML			18:48	51.33	90 0.25						
LMK	HE	152.0	IAML			18:48	52.40	87 0.40						
CWF	HZ	215.0	EP			18:48	34.63	0.60						
CWF	HE	215.0	IAML			18:49	06.91	12 0.19						
CWF	HN	215.0	IAML			18:49	09.73	17 0.22						
ELSH	HZ	218.0	EP			18:48	34.52	0.18						
ELSH	HN	218.0	IAML			18:49	02.83	42 0.57						
ELSH	HE	218.0	IAML			18:49	06.01	47 0.30						
LBWR	HZ	242.0	EP			18:48	37.23	-0.14						
LBWR	HE	242.0	IAML			18:49	18.67	25 0.26						
LBWR	HN	242.0	IAML			18:49	19.79	33 0.36						
AS02	HZ	261.0	EP			18:48	39.99	0.16						
AR07	HZ	304.0	EP			18:48	45.08	-0.07						
HLM1	HZ	324.0	EP			18:48	47.45	-0.29						
FOEL	HZ	339.0	EP			18:48	49.33	-0.29						
January 16 2021			Time: 19:11 04.4 UTC			Magnitude: 0.6 ML								
Lat:	49.070		Lon:	-1.863		Depth: 6.8 km								
Grid Ref:	410.01	kmE	-92.21	kmN		RMS: 0.00 secs								
Locality:	JERSEY, CHANNEL ISLANDS													
Velocity model:	Lownet	Xnear:	100.0	Xfar:	200.0									
Comment:	15KM SE JERSEY													
STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES				
JDC	EE	19.3	ES			19:11	11.07	0.04						
JDG	EZ	19.3	EP			19:11	08.21	-0.02						
JDG	EE	19.3	ES			19:11	11.00	-0.02						
JDG	EE	19.3	IAML			19:11	11.59	8 0.18						
JDG	EN	19.3	IAML			19:11	12.35	12 0.34						
JDC	EZ	19.3	EP			19:11	08.24	0.00						
JDC	EN	19.3	IAML			19:11	11.41	44 0.11						
JDC	EE	19.3	IAML			19:11	11.71	54 0.22						
JSA	HZ	26.1	EP			19:11	09.37	0.02						
JSA	HN	26.1	ES			19:11	12.95	-0.01						
JSA	HN	26.1	IAML			19:11	13.12	4 0.08						
JSA	HE	26.1	IAML			19:11	13.17	6 0.12						
January 17 2021			Time: 12:22 17.1 UTC			Magnitude: 1.4 ML								
Lat:	57.520		Lon:	-5.779		Depth: 2.2 km								
Grid Ref:	173.74	kmE	854.03	kmN		RMS: 0.40 secs								
Locality:	APPLECROSS, HIGHLAND													
Velocity model:	Lownet	Xnear:	100.0	Xfar:	200.0									
STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES				
KPL	HZ	21.5	IP			12:22	21.46	0.17						
KPL	HE	21.5	ES			12:22	23.94	-0.39						
KPL	HE	21.5	IAML			12:22	24.18	81 0.16						
KPL	HN	21.5	IAML			12:22	24.18	30 0.15						
LINV	HZ	78.0	EP			12:22	30.16	-0.31						
LINV	HN	78.0	IAML			12:22	38.35	6 0.22						
LINV	HE	78.0	IAML			12:22	44.03	7 0.14						
LAWE	HZ	142.0	EP			12:22	40.17	-0.16						
LAWE	HE	142.0	ES			12:22	57.88	0.62						
LAWE	HE	142.0	IAML			12:22	59.95	15 0.33						
LAWE	HN	142.0	IAML			12:23	00.01	22 0.37						
MCD	HZ	151.0	EP			12:22	42.22	0.55						
MCD	HN	151.0	IAML			12:23	00.64	10 0.23						
MCD	HE	151.0	IAML			12:23	00.85	15 0.13						
BIGH	HZ	155.0	EP			12:22	42.76	0.64						
BIGH	HE	155.0	IAML			12:23	03.68	7 0.24						
BIGH	HN	155.0	IAML			12:23	03.81	7 0.24						
INVG	HZ	161.0	EP			12:22	43.57	0.52						
INVG	HN	161.0	IAML			12:23	04.42	4 0.31						
INVG	HE	161.0	IAML			12:23	04.59	3 0.09						
EAB	HZ	172.0	EP			12:22	45.15	0.48						
EAB	HE	172.0	IAML			12:23	06.94	8 0.44						
January 18 2021			Time: 06:40 07.9 UTC			Magnitude: 1.5 ML								
Lat:	51.591		Lon:	-3.431		Depth: 2.9 km								
Grid Ref:	300.88	kmE	189.04	kmN		RMS: 0.20 secs								
Locality:	TONYREFAIL, RHONDDA CT													
Velocity model:	Lownet	Xnear:	100.0	Xfar:	200.0									
Comment:	FELT TONYREFAIL...					Intensity: 3								
STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES				
MONM	HZ	51.3	IP			D	06:40	16.84						
MONM	HE	51.3	ES				06:40	23.78						
MONM	HN	51.3	IAML				06:40	24.54	24 0.27					
MONM	HE	51.3	IAML				06:40	24.63	26 0.43					
OLDB	HZ	61.5	EP				06:40	18.33						
OLDB	HE	61.5	ES				06:40	26.46						
OLDB	HN	61.5	IAML				06:40	30.29	60 0.41					
OLDB	HE	61.5	IAML				06:40	30.52	86 0.36					
STRD	HZ	90.1	EP				06:40	23.09						
STRD	HE	90.1	IAML				06:40	35.62	17 0.46					
STRD	HN	90.1	IAML				06:40	40.87	21 0.33					
HTL	HZ	99.1	EP				06:40	24.81						
HTL	HE	99.1	ES				06:40	36.36						
HTL	HN	99.1	IAML				06:40	38.93	18 0.20					
RSBS	HZ	99.2	EP				06:40	39.25	10 0.30					
RSBS	HE	99.2	IAML				06:40	41.67	10 0.07					
RSBS	HN	99.2	IAML				06:40</td							

**TABLE 2 : PHASE DATA**

HPK	HE	89.4	IAML	08:55	58.69	90	0.22		CLGH	HN	43.7	IAML	06:11	46.32	2	0.12		
HLM1	HZ	92.9	IP	C	08:55	46.29		-0.05	LAWE	HZ	95.0	EP	06:11	47.87		0.22		
HLM1	HE	92.9	ES		08:55	57.39		-0.08	LAWE	HN	95.0	ES	06:11	58.85		-0.19		
HLM1	HN	92.9	IAML		08:55	59.72	43	0.11	LAWE	HE	95.0	IAML	06:12	01.07	1	0.13		
HLM1	HE	92.9	IAML		08:55	59.88	47	0.20	LAWE	HE	95.0	IAML	06:12	01.14	2	0.17		
CWF	HZ	96.7	EP		08:55	47.30		0.46	PGB1	HN	100.0	ES	06:12	00.15		-0.26		
CWF	HN	96.7	ES		08:55	57.93		-0.40	PGB1	HN	100.0	IAML	06:12	02.75	6	0.20		
CWF	HN	96.7	IAML		08:56	01.41	43	0.18	PGB1	HE	100.0	IAML	06:12	02.95	8	0.40		
CWF	HE	96.7	IAML		08:56	01.89	48	0.11	GAL1	HZ	103.0	EP	06:11	49.44		0.52		
AS07	HZ	110.0	IP	D	08:55	49.21		0.40	GAL1	HN	103.0	ES	06:12	01.15		-0.08		
AS07	HN	110.0	ES		08:56	01.64		-0.11	GAL1	HN	103.0	IAML	06:12	03.47	3	0.56		
AS07	HE	110.0	IAML		08:56	03.28	56	0.09	GAL1	HE	103.0	IAML	06:12	03.75	2	0.48		
AS07	HN	110.0	IAML		08:56	03.74	58	0.08	NEWG	HZ	116.0	EP	06:11	51.04		0.16		
AQ12	HZ	128.0	EP		08:55	51.57		0.18										
AQ12	HN	128.0	IAML		08:56	08.07	13	0.10	January 29 2021		Time: 10:37 54.7 UTC		Magnitude: 0.6 ML					
AQ12	HE	128.0	IAML		08:56	09.69	20	0.08	Lat: 52.833		Lon: -1.301		Depth: 14.7 km					
WLF1	HZ	133.0	EP		08:55	52.24		0.27	Grid Ref: 447.09 kmE 326.43 kmN				RMS: 0.40 secs					
WLF1	HN	133.0	IAML		08:56	08.08	86	0.27	Locality: KEGWORTH, LEICESTERSHIRE									
WLF1	HE	133.0	IAML		08:56	08.61	45	0.19	Velocity model: Lownet Xnear: 100.0 Xfar: 200.0									
GDLE	HZ	163.0	EP		08:55	56.03		-0.06	STAT CO DIST PHAS WT P HrMn SECS AMPL PERI RES									
January 22 2021		Time: 07:05 45.7 UTC		Magnitude: 1.4 ML					STBN CO DIST PHAS WT P HrMn SECS AMPL PERI RES									
Lat: 52.663		Lon: -3.170		Depth: 9.1 km					STBN CZ 3.6 EP 10:37 57.23							-0.15		
Grid Ref: 320.88 kmE 307.93 kmN				RMS: 0.10 secs					STBN CN 3.6 ES 10:37 59.44							0.10		
Locality: WELSHPOOL, POWYS									STBN CE 3.6 IAML 10:37 59.57									
Velocity model: Mid Wales Xnear: 80.0 Xfar: 200.0									STBN CN 3.6 IAML 10:37 59.58									
STAT CO DIST PHAS WT P HrMn SECS AMPL PERI RES									LBWR HZ 69.3 EP 10:38 06.40									
FOEL	HZ	25.3	EP		07:05	50.42		0.05	LBWR HE 69.3 IAML 10:38 17.50									
FOEL	HN	25.3	ES		07:05	53.78		0.05	LBWR HN 69.3 IAML 10:38 17.80							4	0.11	
FOEL	HN	25.3	IAML		07:05	53.93	51	0.14	HLM1 HZ 112.0 EP 10:38 12.62								-0.15	
FOEL	HE	25.3	IAML		07:05	53.99	37	0.22	HLM1 HN 112.0 ES 10:38 25.57								-0.38	
HLM1	HZ	25.4	EP		07:05	50.44		0.06	HLM1 HN 112.0 IAML 10:38 26.64							2	0.21	
HLM1	HN	25.4	ES		07:05	53.64		-0.10	HLM1 HE 112.0 IAML 10:38 26.64							2	0.28	
HLM1	HN	25.4	IAML		07:05	53.99	27	0.25	FOEL HZ 128.0 EP 10:38 16.27								1.27	
HLM1	HE	25.4	IAML		07:05	54.16	29	0.12	WACR HZ 131.0 EP 10:38 15.22								-0.10	
YLL	EZ	85.7	EP		07:06	00.12		-0.11										
MONM	HZ	95.0	EP		07:06	01.80		0.15	January 30 2021		Time: 10:03 04.4 UTC		Magnitude: 0.7 ML					
MONM	HN	95.0	ES		07:06	13.09		-0.05	Lat: 56.405		Lon: -5.668		Depth: 2.7 km					
MONM	HN	95.0	IAML		07:06	13.67	12	0.16	Grid Ref: 173.71 kmE 729.67 kmN				RMS: 0.20 secs					
MONM	HE	95.0	IAML		07:06	13.74	12	0.13	Locality: MULL, ARGYLL & BUTE									
WLF1	HZ	108.0	EP		07:06	03.43		-0.15	Velocity model: Lownet Xnear: 100.0 Xfar: 200.0									
LBWR	HZ	127.0	EP		07:06	06.45		-0.05	STAT CO DIST PHAS WT P HrMn SECS AMPL PERI RES									
LBWR	HN	127.0	IAML		07:06	23.44	24	0.41	LAWE HZ 23.2 EP 10:03 08.74								-0.03	
LBWR	HE	127.0	IAML		07:06	23.75	24	0.12	LAWE HE 23.2 ES 10:03 11.63								-0.37	
RSBS	HZ	133.0	EP		07:06	07.63		0.20	LAWE HN 23.2 IAML 10:03 12.15							17	0.17	
RSBS	HN	133.0	IAML		07:06	26.22	8	0.06	LAWE HE 23.2 IAML 10:03 12.17							17	0.17	
RSBS	HE	133.0	IAML		07:06	26.40	8	0.07	EAB HZ 85.8 EP 10:03 19.17								0.28	
January 25 2021		Time: 13:06 50.3 UTC		Magnitude: 1.0 ML					PGB1 HZ 99.0 EP 10:03 21.11								0.20	
Lat: 55.186		Lon: -3.181		Depth: 10.5 km					INVG HZ 100.0 EP 10:03 21.29								0.16	
Grid Ref: 324.81 kmE 588.61 kmN				RMS: 0.10 secs					INVG HE 100.0 ES 10:03 33.32								-0.05	
Locality: BORELAND, D & G									INVG HE 100.0 IAML 10:03 34.97							2	0.11	
Velocity model: Lownet Xnear: 100.0 Xfar: 200.0									INVG HN 100.0 IAML 10:03 35.14							2	0.13	
Comment: 6KM WSW BORELAND									KPL HZ 104.0 EP 10:03 21.49								-0.17	
STAT CO DIST PHAS WT P HrMn SECS AMPL PERI RES									KPL HN 104.0 ES 10:03 34.24								-0.05	
ESK	HZ	14.6	IP	D	13:06	53.62		0.04	KPL HE 104.0 IAML 10:03 36.41								2	0.19
ESK	HN	14.6	ES		13:06	56.19		0.20	KPL HE 104.0 IAML 10:03 36.46								2	0.14
ESK	HN	14.6	IAML		13:06	56.27	56	0.10										
ESK	HE	14.6	IAML		13:06	56.38	90	0.10	January 30 2021		Time: 21:42 32.9 UTC		Magnitude: 0.4 ML					
EKA	BZ	16.4	IP	D	13:06	53.70		-0.16	Lat: 54.196		Lon: -2.481		Depth: 5.7 km					
EKA	BZ	16.4	ES		13:06	56.37		-0.10	Grid Ref: 368.62 kmE 477.93 kmN				RMS: 0.20 secs					
KESW	HZ	66.7	EP		13:07	01.51		-0.01	Locality: MASONGILL, N YORKSHIRE									
KESW	HN	66.7	ES		13:07	09.93		0.20	Velocity model: Lownet Xnear: 50.0 Xfar: 100.0									
KESW	HN	66.7	IAML		13:07	12.04	4	0.28	STAT CO DIST PHAS WT P HrMn SECS AMPL PERI RES									
KESW	HE	66.7	IAML		13:07	12.49	2	0.12	AR09 HZ 4.2 EP 21:42 34.63								0.17	
NEWG	HZ	67.3	EP		13:07	01.50		-0.10	AR09 HN 4.2 ES 21:42 35.42								-0.17	
NEWG	HE	67.3	ES		13:07	09.84		-0.02	AR09 HE 4.2 IAML 21:42 35.69								204	0.12
NEWG	HE	67.3	IAML		13:07	10.63	4	0.11	AR07 HZ 22.3 IP D 21:42 37.32								0.08	
NEWG	HN	67.3	IAML		13:07	10.70	4	0.10	AR07 HN 22.3 ES 21:42 40.34								-0.06	
AQ12	HZ	87.8	EP		13:07	04.71		-0.11	AR07 HE 22.3 IAML 21:42 40.50								8	0.12
AQ12	HN	87.8	ES		13:07	15.47		0.03	AR07 HE 22.3 IAML 21:42 41.02								10	0.23
AQ12	HE	87.8	IAML		13:07	15.98	6	0.07	AQ12 HZ 32.1 IP D 21:42 39.07								0.15	
AQ12	HE	87.8	IAML		13:07	16.30	6	0.11	AQ12 HN 32.1 ES 21:42 43.05								-0.25	
GALL	HZ	104.0	EP		13:07	07.14		-0.15	AQ12 HE 32.1 IAML 21:42 43.31								5	0.12
GALL	HN	104.0	IAML		13:07	21.42	5	0.12	AQ12 HE 32.1 IAML 21:42 43.33								2	0.20
GALL	HE	104.0	IAML		13:07	21.62	3	0.23	AS07 HZ 35.9 IP C 21:42 39.72									0.19
PGB1	HN	108.0	ES		13:07	20.92		0.19	AS07 HE 35.9 IAML 21:42 44.44								4	0.13
PGB1	HN	108.0	IAML		13:07	21.59	16	0.19	AS07 HE 35.9 IAML 21:42 44.45								3	0.22
PGB1	HE	108.0	IAML		13:07	21.81	23	0.35	AR05 HZ 37.9 EP 21:42 39.97									0.17
EAB	HZ	133.0	EP		13:07	11.61		0.08	AR05 HN 37.9 ES 21:42 44.59								7	0.15
EAB	HN	133.0	ES		13:07	27.00		-0.04	AR05 HE 37.9 IAML 21:42 45.22								4	0.16
EAB	HN	133.0	IAML		13:07	28.18	2	0.07	AR05 HE 37.9 TAML 21:42 45.22								4	0.16
EAB	HE	133.0	IAML		13:07	29.01	2	0.08	K									

**TABLE 2 : PHASE DATA**

WACR	HN	41.9	ES	08:59	24.96	-0.35	AQ12	HE	19.1	IAML	20:28	34.69	34	0.08							
WACR	HN	41.9	IAML	08:59	25.52	44 0.07	AP12	HZ	36.0	EP	20:28	34.33		-0.14							
WACR	HE	41.9	IAML	08:59	25.52	52 0.18	AP12	HN	36.0	ES	20:28	38.82		-0.37							
ELMS	HZ	49.1	EP	08:59	20.91	-0.01	AP12	HE	36.0	IAML	20:28	39.11	14	0.10							
CWF	HZ	125.0	EP	08:59	32.82	0.17	AP12	HN	36.0	IAML	20:28	39.92	9	0.15							
CWF	HN	125.0	ES	08:59	47.05	-0.48	AR07	HZ	71.1	EP	20:28	40.23		0.31							
CWF	HN	125.0	IAML	08:59	48.31	4 0.21	ESK	HZ	84.8	IP	C	20:28	42.41	0.37							
CWF	HE	125.0	IAML	08:59	49.79	4 0.39	ESK	HE	84.8	ES		20:28	52.04	-0.24							
LMK	HE	131.0	ES	08:59	49.98	0.74	ESK	HN	84.8	IAML	20:28	53.62	3	0.35							
							ESK	HE	84.8	IAML	20:28	54.34	3	0.25							
February 1 2021				Time: 18:05	16.1 UTC	Magnitude: 1.9 ML	EKA	BZ	86.1	EP	20:28	42.48		0.23							
Lat: 51.961				Lat: -3.043		Depth: 13.1 km	EKA	BZ	86.1	ES	20:28	52.16		-0.50							
Grid Ref: 328.34 kmE				229.73 kmN		RMS: 0.40 secs	NEWG	HE	103.0	ES	20:28	57.16		0.05							
Locality: LLANVEYNOC, HEREF							NEWG	HE	103.0	IAML	20:28	58.02	2	0.13							
Velocity model: Lownet				Xnear: 100.0		Xfar: 200.0	IOMK	HZ	111.0	EP	20:28	46.80		0.68							
STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES	IOMK	HN	111.0	ES	20:28	59.18	-0.16				
MONM	HZ	21.3	IP	9	D	18:05	21.40	0.95			IOMK	HN	111.0	IAML	20:29	00.51	1 0.08				
MONM	HE	21.3	ES			18:05	24.18	-0.43			IOMK	HE	111.0	IAML	20:29	00.81	1 0.11				
MONM	HN	21.3	IAML			18:05	25.26	298 0.17													
MONM	HE	21.3	IAML			18:05	25.27	166 0.28													
OLDB	HZ	47.7	IP		D	18:05	24.59	0.22													
OLDB	HE	47.7	ES			18:05	30.10	-0.33													
OLDB	HE	47.7	IAML			18:05	31.13	120 0.29													
OLDB	HN	47.7	IAML			18:05	31.35	293 0.27													
STRD	HZ	64.1	IP	C		18:05	26.74	-0.18													
STRD	HE	64.1	ES			18:05	34.39	-0.46													
STRD	HE	64.1	IAML			18:05	35.25	137 0.09													
STRD	HN	64.1	IAML			18:05	35.26	119 0.10													
FOEL	HZ	104.0	IP	C		18:05	33.34	0.35													
FOEL	HN	104.0	ES			18:05	45.33	-0.02													
FOEL	HN	104.0	IAML			18:05	45.90	25 0.30													
FOEL	HE	104.0	IAML			18:05	46.41	25 0.34													
RSBS	HZ	117.0	EP			18:05	34.98	0.15													
RSBS	HE	117.0	ES			18:05	48.70	0.16													
RSBS	HE	117.0	IAML			18:05	51.07	41 0.07													
RSBS	HN	117.0	IAML			18:05	51.39	40 0.07													
WOL	BZ	145.0	EP			18:05	39.42	0.58													
WOL	BN	145.0	ES			18:05	56.48	1.01													
WOL	BN	145.0	IAML			18:05	57.43	30 0.43													
WOL	BE	145.0	IAML			18:05	57.64	16 0.40													
CWF	HZ	146.0	EP			18:05	38.78	-0.25													
CWF	HE	146.0	ES			18:05	55.61	-0.20													
CWF	HE	146.0	IAML			18:05	56.38	16 0.15													
CWF	HN	146.0	IAML			18:05	56.52	13 0.06													
WLF1	HZ	174.0	EP			18:05	42.35	-0.26													
WLF1	HE	174.0	ES			18:06	01.64	-0.35													
WLF1	HN	174.0	IAML			18:06	03.80	15 0.18													
WLF1	HE	174.0	IAML			18:06	03.98	19 0.20													
DYA	HZ	181.0	EP			18:05	42.65	-0.87													
DYA	HE	181.0	ES			18:06	02.47	-1.09													
DYA	HE	181.0	IAML			18:06	05.68	12 0.16													
DYA	HN	181.0	IAML			18:06	06.48	14 0.10													
LWWR	HZ	183.0	EP			18:05	43.54	-0.32													
LWWR	HE	183.0	IAML			18:06	06.75	12 0.29													
LWWR	HN	183.0	IAML			18:06	07.78	15 0.19													
February 3 2021				Time: 07:27	24.0 UTC	Magnitude: 0.5 ML	PGB1	HN	212.0	IAML	05:43	38.66	47	0.39							
Lat: 52.334				Lat: -3.609		Depth: 10.8 km	PGB1	HE	212.0	IAML	05:43	38.96	31	0.36							
Grid Ref: 290.38 kmE				271.92 kmN		RMS: 0.10 secs	EDI	HZ	238.0	EP	05:43	13.47		0.31							
Locality: RHAYADER, POWYS							EDI	HN	238.0	IAML	05:43	46.03	8	0.37							
Velocity model: Mid Wales				Xnear: 80.0		Xfar: 200.0	EDI	HE	238.0	IAML	05:43	46.58	11	0.23							
Comment: 7KM WNW RHAYADER							GAL1	HZ	311.0	EP	05:43	22.02		-0.22							
STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES	February 12 2021	Time: 03:48	51.8 UTC	Magnitude: 0.6 ML							
HLM1	HZ	53.6	IP	C		07:27	33.32	0.00			Lat: 55.916	Lon: -4.348									
HLM1	HE	53.6	ES			07:27	39.82	-0.20			Grid Ref: 253.27 kmE	671.70 kmN	RMS: 0.10 secs								
HLM1	HN	53.6	IAML			07:27	40.14	2 0.10			Locality: BEARSDEN, E DUNB'SHIRE										
HLM1	HE	53.6	IAML			07:27	40.28	1 0.08			Velocity model: Lownet	Xnear: 500.0	Xfar: 1000.0								
FOEL	HZ	67.7	IP	D		07:27	35.82	0.19			STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES
FOEL	HN	67.7	ES			07:27	43.92	-0.07			GGERF	CZ	11.4	EP	03:48	54.33		0.08			
FOEL	HE	67.7	IAML			07:27	44.39	2 0.34			GGERF	CE	11.4	ES	03:48	55.96		-0.09			
FOEL	HN	67.7	IAML			07:27	44.61	2 0.30			GGERF	CN	11.4	IAML	03:48	56.23	46	0.16			
MONM	HZ	78.0	IP	D		07:27	37.46	0.17			GGERF	CE	11.4	IAML	03:48	56.35	63	0.25			
MONM	HN	78.0	ES			07:27	46.86	0.01			PGB1	HZ	14.4	EP	03:48	54.90		0.12			
MONM	HE	78.0	IAML			07:27	46.98	3 0.21			PGB1	HN	14.4	ES	03:48	56.86		-0.10			
MONM	HN	78.0	IAML			07:27	47.25	3 0.30			PGB1	HE	14.4	IAML	03:48	57.11	45	0.11			
RSBS	HZ	88.6	IP	C		07:27	38.75	-0.15			PGB1	HN	14.4	EP	03:48	57.14	71	0.28			
RSBS	HN	88.6	ES			07:27	49.56	-0.05			EAB	HZ	30.4	EP	03:48	57.54		0.06			
RSBS	HE	88.6	IAML			07:27	51.74	3 0.11			EAB	HN	30.4	ES	03:49	01.58		-0.06			
RSBS	HN	88.6	IAML			07:27	51.77	3 0.10			EAB	HE	30.4	IAML	03:49	02.07	5	0.15			
WPS	HN	133.0	ES			07:28	01.21	0.18			EAB	HN	30.4	IAML	03:49	02.35	6	0.16			
February 6 2021				Time: 20:28	28.0 UTC	Magnitude: 0.7 ML	INVG	HZ	60.0	EP	03:49	02.10		-0.04							
Lat: 54.571				Lat: -2.938		Depth: 7.7 km	INVG	HE	60.0	IAML	03:49	09.67	2	0.26							
Grid Ref: 339.37 kmE				519.95 kmN		RMS: 0.30 secs	INVG	HN	60.0	IAML	03:49	12.57	2	0.18							
Locality: DOCKRAY, CUMBRIA							LAWE	HZ	75.8	EP	03:49	04.72		0.15							
Velocity model: Lownet				Xnear: 100.0		Xfar: 200.0	LAWE	HE	75.8	IAML	03:49	13.78		-0.12							
STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES	LAWE	HN	75.8	ES	03:49	15.37	3	0.14			
KESW	HZ	11.0	IP	C		20:28	30.88	0.26			LAWE	HE	75.8	IAML	03:49	16.70	5	0.18			
KESW	HN	11.0	ES			20:28	32.41	-0.12			EAB	HN	75.8	IAML	03:49	17.70					
KESW	HE	11.0	IAML			20:28	33.03	24 0.11			INVG	HN	60.0	EP	03:49	20.10					
KESW	HN	11.0	IAML			20:28	33.07	34 0.07			INVG	HE	60.0	IAML	03:49	20.67					
AQ12	HZ	19.1	IP	D		20:28	31.89	0.00			INVG	HN	60.0	EP	03:49	21.57					
AQ12	HN	19.1	ES	</																	

**TABLE 2 : PHASE DATA**

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES	INVG	HN	366.0	IAML	09:06	05.77	13	0.30			
ESK	HZ	19.3	IP	C	04:27	17.60		0.22		-0.04	INVG	HE	366.0	IAML	09:06	10.83	9	0.30			
ESK	HN	19.3	ES		04:27	20.18					ESK	HZ	367.0	EP	09:05	04.52		-0.37			
ESK	HE	19.3	IAML		04:27	20.50	13	0.09			ESK	HE	367.0	IAML	09:06	04.87	39	0.56			
ESK	HN	19.3	IAML		04:27	20.57	16	0.07			ESK	HN	367.0	IAML	09:06	07.18	46	0.36			
EKA	BZ	20.5	EP		04:27	17.75		0.17			BIGH	HZ	379.0	EP	09:05	06.87		0.46			
EKA	BZ	20.5	ES		04:27	20.40		-0.17			BIGH	HE	379.0	ES	09:05	45.03		0.28			
EDI	HZ	56.8	EP		04:27	23.29		0.14			BIGH	HE	379.0	IAML	09:05	45.66	17	0.40			
EDI	HE	56.8	ES		04:27	30.08		-0.13			BIGH	HE	379.0	IAML	09:05	47.72	17	0.24			
EDI	HE	56.8	IAML		04:27	30.70	3	0.24			AS07	HZ	390.0	EP	09:05	07.18		-0.63			
EDI	HN	56.8	IAML		04:27	31.06	3	0.20			AS07	HN	390.0	IAML	09:05	42.83	46	0.60			
NEWG	HZ	61.7	EP		04:27	23.67		-0.25			AS07	HE	390.0	IAML	09:06	11.83	89	0.42			
NEWG	HE	61.7	ES		04:27	31.02		-0.51			EAB	HZ	391.0	EP	09:05	08.24		0.36			
NEWG	HE	61.7	IAML		04:27	31.51	1	0.09			EAB	HE	391.0	IAML	09:05	47.98	21	0.22			
NEWG	HN	61.7	IAML		04:27	32.95	3	0.12			EAB	HN	391.0	IAML	09:05	49.02	26	0.42			
PGB1	HZ	78.5	EP		04:27	26.99		0.45			BER	HZ	425.0	EP	09:05	12.35		0.19			
PGB1	HE	78.5	ES		04:27	36.25		0.17			AR07	HZ	433.0	EP	09:05	12.54		-0.64			
PGB1	HE	78.5	IAML		04:27	36.73	6	0.28			AR07	HE	433.0	IAML	09:06	23.00	88	0.32			
PGB1	HN	78.5	IAML		04:27	38.83	11	0.30			AR07	HN	433.0	IAML	09:06	27.65	65	0.34			
EAB	HZ	102.0	EP		04:27	29.51		-0.61			LINV	HZ	439.0	EP	09:05	13.49		-0.38			
EAB	HN	102.0	ES		04:27	42.25		-0.02			LINV	HN	439.0	IAML	09:05	58.47	9	0.40			
EAB	HN	102.0	IAML		04:27	43.25	2	0.12			LINV	HE	439.0	IAML	09:06	00.68	9	0.54			
EAB	HE	102.0	IAML		04:27	43.87	2	0.09			LAWE	HZ	452.0	EP	09:05	15.15		-0.39			
GALL	HZ	103.0	EP		04:27	30.58		0.25			LAWE	HN	452.0	IAML	09:06	02.58	15	0.22			
GALL	HE	103.0	ES		04:27	42.93		0.30			LAWE	HE	452.0	IAML	09:06	07.66	14	0.16			
GALL	HN	103.0	IAML		04:27	44.68	4	0.19			KPL	HZ	454.0	EP	09:05	16.23		0.44			
GALL	HE	103.0	IAML		04:27	45.38	2	0.15			KPL	HN	454.0	IAML	09:06	01.38	11	0.24			
INVG	HZ	117.0	EP		04:27	32.61		0.06			KPL	HE	454.0	IAML	09:06	05.31	13	0.26			
INVG	HN	117.0	IAML		04:27	47.51	1	0.16			AR01	HZ	455.0	EP	09:05	15.35		-0.62			
INVG	HE	117.0	IAML		04:27	47.56	1	0.27			AR01	HN	455.0	IAML	09:06	34.63	26	0.44			
FOO	HZ	541.0	EP								FOO	HZ	541.0	EP	09:05	26.02		-0.58			
February 14 2021											February 14 2021										
Lat:	56.681		Time:	02:10	29.2	UTC					Lat:	49.140		Time:	12:01	34.0	UTC				
Lon:	-5.691										Lon:	-2.407									
Grid Ref:	173.95	kmE		760.43	kmN						Grid Ref:	370.32	kmE		-84.36	kmN					
Locality:	STRONTIAN,HIGHLAND										Locality:	JERSEY,CHANNEL ISLANDS									
Velocity model:	Lownet	Xnear:	100.0	Xfar:	200.0						Velocity model:	Lownet	Xnear:	100.0	Xfar:	200.0					
Comment:	7KM WSW STRONTIAN										Comment:	12KM WSW JERSEY									
STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES	STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES
LAWE	HZ	50.2	IP	C	02:10	37.80		-0.03			JSA	HZ	18.0	EP	12:01	37.96		0.00			
LAWE	HN	50.2	ES		02:10	43.83		-0.31			JSA	HE	18.0	ES	12:01	40.86		0.00			
LAWE	HE	50.2	IAML		02:10	44.23	5	0.12			JSA	HN	18.0	IAML	12:01	41.07	48	0.20			
LAWE	HN	50.2	IAML		02:10	44.27	3	0.16			JSA	HE	18.0	IAML	12:01	41.08	21	0.21			
KPL	HZ	73.3	IP	D	02:10	41.54		0.16			JDC	HZ	27.0	EP	12:01	39.17		-0.04			
KPL	HE	73.3	ES		02:10	50.02		-0.27			JDG	HZ	27.0	EP	12:01	39.17		-0.03			
KPL	HE	73.3	IAML		02:10	50.77	3	0.16			JDG	EE	27.0	ES	12:01	43.00		-0.01			
KPL	HN	73.3	IAML		02:10	50.90	3	0.29			JDG	EE	27.0	IAML	12:01	43.49	24	0.19			
EAB	HZ	99.9	IP	D	02:10	45.96		0.41			JDG	EN	27.0	IAML	12:01	43.63	34	0.07			
EAB	HE	99.9	ES		02:10	57.62		0.11			JDC	EE	27.0	ES	12:01	43.08		0.05			
EAB	HN	99.9	IAML		02:10	59.17	2	0.15			ROSF	BZ	110.0	EP	12:01	51.75		0.08			
EAB	HE	99.9	IAML		02:10	59.65	2	0.07			ROSF	HN	110.0	ES	12:02	04.53		-0.05			
INVG	HZ	105.0	IP	D	02:10	46.61		0.24			ROSF	BE	110.0	IAML	12:02	04.90	6	0.16			
INVG	HN	105.0	ES		02:10	58.61		-0.31			ROSF	BN	110.0	IAML	12:02	06.96	5	0.19			
INVG	HE	105.0	IAML		02:10	59.62	2	0.13													
February 14 2021											February 15 2021										
Lat:	57.027		Time:	09:04	13.9	UTC					Lat:	52.430		Time:	05:46	42.5	UTC				
Lon:	1.840										Lon:	-0.243									
Grid Ref:	633.01	kmE		799.41	kmN						Grid Ref:	519.44	kmE		282.83	kmN					
Locality:	CENTRAL NORTH SEA										Locality:	SAWTRY,CAMBRIDGESHIRE									
Velocity model:	Lownet	Xnear:	500.0	Xfar:	1000.0						Velocity model:	Lownet	Xnear:	100.0	Xfar:	200.0					
Comment:	240KM EAST ABERDEEN										STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES
DRUM	HZ	263.0	EP		09:04	52.25		0.27			WACR	HZ	67.5	EP	05:46	53.49		-0.29			
DRUM	HN	263.0	ES		09:05	19.67		-0.11			WACR	HE	67.5	ES	05:47	00.71		-1.34			
DRUM	HN	263.0	IAML		09:05	33.06	57	0.32			WACR	HN	67.5	IAML	05:47	01.87	10	0.21			
DRUM	HE	263.0	IAML		09:05	34.82	70	0.33			CWF	HZ	79.9	EP	05:46	55.89		0.17			
MCD	HZ	313.0	EP		09:04	58.59		0.38			CWF	HE	79.9	ES	05:47	04.97		-0.44			
MCD	HN	313.0	ES		09:05	30.23		-0.34			CWF	HN	79.9	IAML	05:47	06.21	11	0.09			
MCD	HN	313.0	IAML		09:05	45.86	40	0.44			CWF	HE	79.9	IAML	05:47	06.35	8	0.05			
MCD	HE	313.0	IAML		09:05	57.64	51	0.44			STBN	CZ	81.7	EP	05:46	56.40		0.42			
EDI	HZ	333.0	EP		09:05	00.96		0.28			STBN	CE	81.7	ES	05:47	05.91		0.06			
EDI	HN	333.0	ES		09:05	34.43		-0.42			STBN	CE	81.7	IAML	05:47	06.70	8	0.15			
EDI	HE	333.0	IAML		09:05	50.92	34	0.49			STBN	CN	81.7	IAML	05:47	07.72	7	0.21			
EDI	HN	333.0	IAML		09:05	54.42	51	0.42			ELMS	HZ	92.1	EP	05:46	58.01		0.41			
GDLE	HZ	335.0	EP		09:05	00.97		0.09			ELMS	HE	92.1	ES	05:47	08.61		-0.05			
GDLE	HN	335.0	ES		09:05	35.78		0.60			ELMS	HE	92.1	IAML	05:47	09.74	16	0.48			
GDLE	HE	335.0	IAML		09:06	00.88	140	0.39			ELMS	HN	92.1	IAML	05:47	10.83	12	0.23			
GDLE	HN	335.0	IAML		09:06	05.07	145</														

**TABLE 2 : PHASE DATA**

AS02	HN	44.8	ES	06:13	50.69	-0.05	STBN	CZ	95.2	EP	02:42	42.11	0.13	
AS02	HN	44.8	IAML	06:13	51.17	6 0.20	STBN	CN	95.2	ES	02:42	53.49	0.24	
AS02	HE	44.8	IAML	06:13	51.95	3 0.10	STBN	CE	95.2	IAML	02:42	54.04	15 0.24	
LBWR	HZ	51.9	EP	06:13	46.21	0.13	STBN	CN	95.2	IAML	02:42	54.66	12 0.23	
LBWR	HN	51.9	ES	06:13	52.57	-0.06	GDLE	HZ	101.0	EP	02:42	42.94	0.05	
LBWR	HN	51.9	IAML	06:13	52.87	4 0.16	CWF	HZ	107.0	EP	02:42	43.45	-0.19	
LBWR	HE	51.9	IAML	06:13	54.25	6 0.26	CWF	HN	107.0	ES	02:42	55.73	-0.39	
FOEL	HZ	64.9	EP	06:13	48.30	0.18	CWF	HE	107.0	IAML	02:42	57.28	4 0.19	
AR07	HN	80.1	ES	06:14	00.04	-0.10	CWF	HN	107.0	IAML	02:42	57.44	6 0.09	
AR07	HN	80.1	IAML	06:14	00.49	11 0.32	WACR	HZ	115.0	EP	02:42	44.42	-0.45	
AR07	HE	80.1	IAML	06:14	01.11	8 0.25	WACR	HE	115.0	ES	02:42	57.62	-0.63	
HLM1	HZ	88.7	EP	06:13	51.65	-0.14	WACR	HE	115.0	IAML	02:42	58.68	4 0.19	
HLM1	HE	88.7	ES	06:14	02.43	-0.08	WACR	HN	115.0	IAML	02:42	58.82	5 0.11	
HLM1	HE	88.7	IAML	06:14	04.86	2 0.20								
HLM1	HN	88.7	IAML	06:14	05.52	2 0.28	February 26 2021							
CWF	HE	98.6	ES	06:14	05.09	0.00	Time: 03:57 55.8 UTC							
CWF	HE	98.6	IAML	06:14	08.05	2 0.17	Lat: 56.389							
CWF	HN	98.6	IAML	06:14	08.35	2 0.10	Grid Ref: 181.27 kmE 727.48 kmN							
WLF1	HN	128.0	ES	06:14	12.38	-0.04	Locality: KERRERA, ARGYLL & BUTE							
WLF1	HE	128.0	IAML	06:14	12.76	2 0.29	Velocity model: Lownet Xnear: 100.0 Xfar: 200.0							
WLF1	HN	128.0	IAML	06:14	13.04	5 0.32	STAT CO DIST PHAS WT P HrMn SECS AMPL PERI RES							
WPS	HE	136.0	ES	06:14	14.26	0.04	LAWE HZ 16.9 EP 03:57 59.26 -0.02							
February 21 2021							LAWE HN 16.9 ES 03:58 01.89 0.09							
Time: 22:13 42.5 UTC							LAWE HN 16.9 IAML 03:58 01.99 33 0.18							
Magnitude: 1.2 ML							LAWE HE 16.9 IAML 03:58 01.99 17 0.08							
Lat: 56.964							EAB HZ 78.0 EP 03:58 08.77 -0.06							
Lon: -4.769							EAB HN 78.0 ES 03:58 18.59 0.25							
Grid Ref: 231.67 kmE 789.26 kmN							EAB HE 78.0 IAML 03:58 19.99 2 0.10							
Locality: ROYBRIDGE, HIGHLAND							EAB HN 78.0 IAML 03:58 20.14 4 0.16							
Velocity model: Lownet Xnear: 100.0 Xfar: 200.0							PGB1 HN 92.1 ES 03:58 22.05 -0.06							
STAT CO DIST PHAS WT P HrMn SECS AMPL PERI RES							PGB1 HN 92.1 IAML 03:58 23.49 2 0.13							
KPL	HZ	67.9	EP	22:13	54.12	0.21	PGB1 HE 92.1 IAML 03:58 24.16 4 0.52							
KPL	HN	67.9	ES	22:14	02.12	-0.09	INVG HZ 92.7 EP 03:58 11.04 -0.08							
KPL	HN	67.9	IAML	22:14	06.16	6 0.15	INVG HN 92.7 ES 03:58 22.14 -0.15							
KPL	HE	67.9	IAML	22:14	06.24	4 0.17	INVG HE 92.7 IAML 03:58 22.94 1 0.14							
INVG	HZ	74.4	EP	22:13	54.73	-0.24	INVG HN 92.7 IAML 03:58 22.95 1 0.18							
INVG	HE	74.4	ES	22:14	03.52	-0.53	KPL HZ 106.0 EP 03:58 12.96 -0.18							
INVG	HN	74.4	IAML	22:14	07.43	6 0.40	KPL HN 106.0 ES 03:58 26.00 0.22							
INVG	HE	74.4	IAML	22:14	07.98	8 0.20								
LAWE	HZ	87.4	EP	22:13	56.98	0.03	March 1 2021							
LAWE	HN	87.4	ES	22:14	07.39	-0.09	Time: 08:39 40.3 UTC							
LAWE	HN	87.4	IAML	22:14	09.98	11 0.10	Lat: 54.185							
LAWE	HE	87.4	IAML	22:14	10.33	9 0.12	Lon: -2.073							
FAB	HZ	90.3	EP	22:13	57.62	0.19	Grid Ref: 395.24 kmE 476.60 kmN							
FAB	HE	90.3	ES	22:14	08.17	-0.13	Locality: BUCKDEN, NORTH YORKSHIRE							
EAB	HE	90.3	IAML	22:14	08.46	13 0.25	Velocity model: Lownet Xnear: 100.0 Xfar: 200.0							
EAB	HN	90.3	IAML	22:14	11.37	15 0.18	STAT CO DIST PHAS WT P HrMn SECS AMPL PERI RES							
MCD	HZ	114.0	EP	22:14	01.20	0.02	AS07 HZ 11.6 EP 08:39 43.09 -0.02							
MCD	HN	114.0	ES	22:14	15.00	0.21	AS07 HN 11.6 ES 08:39 45.18 0.05							
MCD	HN	114.0	IAML	22:14	17.37	8 0.23	AS07 HE 11.6 IAML 08:39 45.30 171 0.12							
MCD	HE	114.0	IAML	22:14	17.71	6 0.18	AR09 HZ 24.4 EP 08:39 44.92 -0.15							
PGB1	HZ	129.0	EP	22:14	04.22	0.80	AR09 HE 24.4 ES 08:39 48.41 -0.10							
PGB1	HN	129.0	ES	22:14	19.11	0.45	AR09 HN 24.4 IAML 08:39 48.59 316 0.10							
LINV	HZ	134.0	EP	22:14	04.01	-0.06	AR09 HE 24.4 IAML 08:39 48.72 146 0.08							
LINV	HE	134.0	ES	22:14	19.08	-0.71	AR07 HZ 32.8 EP 08:39 46.40 0.08							
LINV	HN	134.0	IAML	22:14	20.67	3 0.07	AR07 HN 32.8 ES 08:39 50.71 0.02							
LINV	HE	134.0	IAML	22:14	20.80	5 0.20	AR07 HE 32.8 IAML 08:39 50.90 17 0.22							
DRUM	HN	139.0	ES	22:14	21.53	0.51	AR07 HN 32.8 IAML 08:39 51.06 20 0.11							
DRUM	HN	139.0	IAML	22:14	23.39	7 0.14	HPK HZ 38.8 EP 08:39 47.09 -0.15							
DRUM	HE	139.0	IAML	22:14	23.76	7 0.15	HPK HN 38.8 ES 08:39 52.25 -0.03							
BIGH	HZ	178.0	EP	22:14	10.01	-0.09	HPK HN 38.8 IAML 08:39 52.44 41 0.16							
BIGH	HE	178.0	IAML	22:14	32.85	5 0.22	HPK HE 38.8 IAML 08:39 52.64 29 0.18							
BIGH	HN	178.0	IAML	22:14	33.01	3 0.30	AS10 HZ 43.8 EP 08:39 48.06 0.05							
February 23 2021							AS10 HN 43.8 ES 08:39 53.63 0.02							
Time: 02:42 26.6 UTC							AS10 HE 43.8 IAML 08:39 53.83 48 0.22							
Magnitude: 1.2 ML							AS10 HN 43.8 IAML 08:39 53.90 39 0.18							
Lat: 53.540							AQ12 HZ 52.3 EP 08:39 49.13 -0.24							
Lon: -0.436							AT10 HZ 62.0 EP 08:39 50.97 0.11							
Grid Ref: 503.63 kmE 405.98 kmN							AT10 HN 62.0 ES 08:39 58.44 -0.09							
RMS: 0.30 secs							AT10 HE 62.0 IAML 08:39 59.66 9 0.34							
Locality: BRIGG, NORTH LINCS							AT10 HN 62.0 IAML 08:40 01.84 10 0.30							
Velocity model: Lownet Xnear: 100.0 Xfar: 200.0							AP12 HZ 79.0 EP 08:39 53.56 0.08							
Comment: 4KM ESE BRIGG							AP12 HN 79.0 ES 08:40 03.16 0.09							
STAT CO DIST PHAS WT P HrMn SECS AMPL PERI RES							AP12 HN 79.0 IAML 08:40 03.41 8 0.14							
LMK	HZ	11.8	IP	C	02:42	30.14	AP12 HE 79.0 IAML 08:40 03.59 6 0.14							
LMK	HE	11.8	ES		02:42	32.67	KESW HZ 80.7 EP 08:39 53.86 0.11							
LMK	HN	11.8	IAML		02:42	33.64	KESW HE 80.7 IAML 08:40 05.03 5 0.12							
LMK	HE	11.8	IAML		02:42	34.00	KESW HN 80.7 IAML 08:40 06.02 12 0.34							
AU05	HE	45.9	ES		02:42	40.83	0.23	LBWR HZ 90.2 EP 08:39 55.53 0.29						
AU05	HE	45.9	IAML		02:42	41.28	51 0.31	LBWR HE 90.2 ES 08:40 05.98 -0.13						
AU05	HN	45.9	IAML		02:42	41.64	36 0.20	LBWR HE 90.2 IAML 08:40 06.30 13 0.15						
AU08	HZ	66.6	IP	D	02:42	37.91	0.04	LBWR HN 90.2 IAML 08:40 07.73 17 0.21						
AU08	HE	66.6	ES		02:42	46.55	0.42							
AU08	HE	66.6	IAML		02:42	48.54	5 0.14							
AU08	HN	66.6	IAML		02:42	48.55	10 0.24							
AV06	HZ	69.4	EP		02:42	38.19	-0.10							
AV06	HN	69.4	ES		02:42	46.83	-0.03							
AV06	HN	69.4	IAML		02:42	47.59	9 0.20							
AV06	HE	69.4	IAML		02:42	48.84	7 0.12							
AU18	HZ	80.8	IP	C	02:42	40.03	0.09							
AU18	HN	80.8	IAML		02:42	51.09	4 0.14							
AU18	HE	80.8	IAML		02:42	52.07	6 0.32							
LBWR	HZ	86.9	IP	C	02:42	40.77	-0.10							
LBWR	HE	86.9	ES		02:42	51.55	0.23							
LBWR	HE	86.9	IAML		02:42	52.93	9 0.16							
LBWR	HN	86.9	IAML		02:42	53.43	16 0.29							
HPK	HN	91.2	ES		02:42	52.23	-0.09							
HPK	HE	91.2	IAML		02:42	54.24	11 0.15							
HPK	HN													

**TABLE 2 : PHASE DATA**

FOEL	HE	19.7	IAML	06:23	57.50	29	0.20		AQ12	HE	13.5	ES	17:24	30.49	-0.11	
HLM1	HZ	59.3	EP	06:24	00.53		-0.07		KESW	HZ	14.9	EP	17:24	28.70	0.07	
HLM1	HN	59.3	ES	06:24	07.55		0.08		KESW	HN	14.9	ES	17:24	30.88	-0.08	
HLM1	HE	59.3	IAML	06:24	07.86	2	0.27		KESW	HN	14.9	IAML	17:24	30.98	4 0.10	
HLM1	HN	59.3	IAML	06:24	07.97	1	0.10		KESW	HE	14.9	IAML	17:24	31.14	3 0.09	
WLF1	HZ	74.4	EP	06:24	02.71		-0.18		AP12	HZ	31.7	EP	17:24	31.38	0.14	
WLF1	HN	74.4	ES	06:24	11.30		-0.01		AP12	HN	31.7	ES	17:24	35.34	-0.15	
WLF1	HN	74.4	IAML	06:24	11.45	3	0.07		AP12	HE	31.7	IAML	17:24	35.59	3 0.12	
WLF1	HE	74.4	IAML	06:24	11.50	2	0.19		AP12	HN	31.7	IAML	17:24	35.71	3 0.19	
WPS	HZ	87.3	EP	06:24	04.81		-0.06		AR09	HZ	44.3	EP	17:24	33.35	0.11	
WPS	HE	87.3	ES	06:24	14.86		0.22		AR09	HN	44.3	ES	17:24	38.92	-0.03	
WPS	HE	87.3	IAML	06:24	14.94	1	0.13		EDMD	HZ	71.3	EP	17:24	37.58	0.25	
WPS	HN	87.3	IAML	06:24	15.27	1	0.15		EDMD	HN	71.3	ES	17:24	45.68	-0.35	
EDMD	HE	71.3	IAML						EDMD	HN	71.3	IAML	17:24	45.88	2 0.14	
EDMD	HE	71.3	IAML						EDMD	HE	71.3	IAML	17:24	46.06	2 0.25	
March 2 2021				Time: 19:35 03.8 UTC		Magnitude: 1.1 ML			March 6 2021				Time: 18:45 32.2 UTC		Magnitude: 0.4 ML	
Lat: 54.576				Lat: 54.576		Depth: 2.5 km			Lat: 56.140				Lat: 56.140		Depth: 10.1 km	
Grid Ref: 355.14 kmE				Grid Ref: 355.14 kmE		RMS: 0.40 secs			Grid Ref: 282.38 kmE				Grid Ref: 282.38 kmE		RMS: 0.10 secs	
Locality: THRIMBY, CUMBRIA				Locality: THRIMBY, CUMBRIA					Locality: BLAIRLOGIE, STIRLING				Locality: BLAIRLOGIE, STIRLING			
Velocity model: Lownet Xnear: 500.0 Xfar: 1000.0				Velocity model: Lownet Xnear: 500.0 Xfar: 1000.0					Velocity model: Lownet Xnear: 100.0 Xfar: 200.0				Velocity model: Lownet Xnear: 100.0 Xfar: 200.0			
STAT CO DIST PHAS WT P HrMn SECS AMPL PERI RES				STAT CO DIST PHAS WT P HrMn SECS AMPL PERI RES					STAT CO DIST PHAS WT P HrMn SECS AMPL PERI RES				STAT CO DIST PHAS WT P HrMn SECS AMPL PERI RES			
AQ12 HZ 15.9 IP C 19:35 06.65 -0.36				EAB HZ 28.1 EP 18:45 37.38 -0.10					EAB HZ 28.1 EP 18:45 41.43 0.09				EAB HZ 28.1 IAML 18:45 41.84 6 0.08			
AQ12 HE 15.9 ES 19:35 08.92 -0.46				EAB HZ 28.1 ES 18:45 41.87 4 0.08					EAB HZ 28.1 IAML 18:45 41.87 4 0.08				EAB HZ 28.1 IAML 18:45 41.87 4 0.08			
KESW HZ 26.6 IP C 19:35 08.61 -0.18				INVG HZ 33.3 EP 18:45 38.21 -0.07					INVG HZ 33.3 ES 18:45 42.77 0.04				INVG HZ 33.3 IAML 18:45 43.64 2 0.25			
KESW HN 26.6 ES 19:35 12.23 -0.23				INVG HZ 33.3 IAML 18:45 43.70 2 0.31					INVG HZ 33.3 IAML 18:45 43.70 2 0.31				INVG HZ 33.3 IAML 18:45 43.70 2 0.31			
KESW HN 26.6 IAML 19:35 12.71 15 0.09				PGB1 HZ 51.9 EP 18:45 41.10 -0.04					PGB1 HZ 51.9 ES 18:45 47.71 0.05				PGB1 HZ 51.9 IAML 18:45 47.71 0.05			
KESW HE 26.6 IAML 19:35 12.72 25 0.24				PGB1 HZ 51.9 IAML 18:45 47.82 4 0.15					PGB1 HZ 51.9 IAML 18:45 47.95 4 0.20				PGB1 HZ 51.9 IAML 18:45 47.95 4 0.20			
AS07 HZ 60.8 EP 19:35 13.72 -0.75				LAWE HZ 94.4 ES 18:45 58.99 -0.04					LAWE HZ 94.4 IAML 18:46 00.48 1 0.15				LAWE HZ 94.4 IAML 18:46 00.48 1 0.15			
AS07 HE 60.8 IAML 19:35 24.32 10 0.08				LAWE HZ 94.4 IAML 18:46 01.97 1 0.14					LAWE HZ 94.4 IAML 18:46 01.97 1 0.14				LAWE HZ 94.4 IAML 18:46 01.97 1 0.14			
AS07 HE 60.8 IAML 19:35 25.40 11 0.05				ESK HZ 101.0 EP 18:45 49.00 0.19					ESK HZ 101.0 ES 18:46 00.81 -0.12				ESK HZ 101.0 ES 18:46 00.81 -0.12			
ESK HZ 88.7 EP 19:35 18.72 -0.04				ESK HZ 101.0 IAML 18:46 03.32 1 0.20					ESK HZ 101.0 IAML 18:46 03.68 1 0.11				ESK HZ 101.0 IAML 18:46 03.68 1 0.11			
ESK HN 88.7 ES 19:35 29.11 -0.60				DRUM HZ 122.0 ES 18:46 06.24 0.02					DRUM HZ 122.0 IAML 18:46 07.71 2 0.23				DRUM HZ 122.0 IAML 18:46 07.71 2 0.23			
ESK HE 88.7 IAML 19:35 34.29 6 0.27				DRUM HZ 122.0 IAML 18:46 09.32 3 0.27					DRUM HZ 122.0 IAML 18:46 09.32 3 0.27				DRUM HZ 122.0 IAML 18:46 09.32 3 0.27			
ESK HN 88.7 IAML 19:35 34.51 5 0.24																
EKA BZ 89.4 EP 19:35 19.08 0.20																
HPK HZ 97.9 EP 19:35 20.07 -0.11																
HPK HE 97.9 IAML 19:35 34.56 14 0.22																
HPK HN 97.9 IAML 19:35 37.04 10 0.32																
AT10 HZ 101.0 EP 19:35 20.78 0.09																
AT10 HE 101.0 ES 19:35 33.17 0.13																
AT10 HE 101.0 IAML 19:35 34.61 10 0.14																
AT10 HE 101.0 IAML 19:35 35.17 19 0.34																
NEWG HZ 116.0 EP 19:35 23.30 0.39																
NEWG HN 116.0 IAML 19:35 40.22 2 0.15																
NEWG HE 116.0 IAML 19:35 40.60 4 0.31																
AS02 HZ 123.0 EP 19:35 24.60 0.55																
AS02 HE 123.0 ES 19:35 38.98 0.11																
AS02 HE 123.0 IAML 19:35 40.81 6 0.22																
AS02 HE 123.0 IAML 19:35 40.86 6 0.15																
IOMK HZ 126.0 EP 19:35 25.07 0.47																
IOMK HE 126.0 IAML 19:35 40.53 1 0.19																
IOMK HE 126.0 IAML 19:35 41.18 4 0.36																
GALL HZ 134.0 EP 19:35 26.20 0.47																
GALL HE 134.0 IAML 19:35 43.03 2 0.20																
GALL HE 134.0 IAML 19:35 44.79 4 0.18																
LBWR HZ 145.0 EP 19:35 27.72 0.31																
LBWR HE 145.0 IAML 19:35 47.67 15 0.26																
LBWR HE 145.0 IAML 19:35 47.99 13 0.39																
March 3 2021				Time: 01:54 18.9 UTC		Magnitude: 0.3 ML			March 7 2021				Time: 14:01 30.1 UTC		Magnitude: 0.3 ML	
Lat: 54.816				Lat: 54.816		Depth: 8.0 km			Lat: 56.087				Lat: 56.087		Depth: 7.7 km	
Grid Ref: 292.89 kmE				Grid Ref: 292.89 kmE		RMS: 0.20 secs			Grid Ref: 201.55 kmE				Grid Ref: 201.55 kmE		RMS: 0.10 secs	
Locality: SOLWAY FIRTH				Locality: SOLWAY FIRTH					Locality: BARNACARRY, ARGYLL/BUTE				Locality: BARNACARRY, ARGYLL/BUTE			
Velocity model: Lownet Xnear: 500.0 Xfar: 1000.0				Velocity model: Lownet Xnear: 500.0 Xfar: 1000.0					Velocity model: Lownet Xnear: 100.0 Xfar: 200.0				Velocity model: Lownet Xnear: 100.0 Xfar: 200.0			
Comment: 15KM NW MARYPORT				Comment: 15KM NW MARYPORT					Comment: 18KM NE DUNBAR				Comment: 18KM NE DUNBAR			
STAT CO DIST PHAS WT P HrMn SECS AMPL PERI RES				STAT CO DIST PHAS WT P HrMn SECS AMPL PERI RES					STAT CO DIST PHAS WT P HrMn SECS AMPL PERI RES				STAT CO DIST PHAS WT P HrMn SECS AMPL PERI RES			
KESW HZ 44.2 EP 01:54 26.55 -0.13				EAB HZ 23.2 EP 14:01 34.55 -0.03					EAB HZ 23.2 EP 14:01 34.55 -0.03				EAB HZ 23.2 EP 14:01 34.55 -0.03			
KESW HE 44.2 ES 01:54 32.00 -0.33				EAB HZ 23.2 ES 14:01 37.77 -0.07					EAB HZ 23.2 ES 14:01 37.77 -0.07				EAB HZ 23.2 ES 14:01 37.77 -0.07			
KESW HN 44.2 IAML 01:54 32.37 2 0.12				LAWE HZ 23.2 IAML 14:01 37.90 5 0.11					LAWE HZ 23.2 IAML 14:01 37.90 5 0.11				LAWE HZ 23.2 IAML 14:01 37.90 5 0.11			
KESW HE 44.2 IAML 01:54 32.62 3 0.24				LAWE HZ 23.2 IAML 14:01 38.02 4 0.11					LAWE HZ 23.2 IAML 14:01 38.02 4 0.11				LAWE HZ 23.2 IAML 14:01 38.02 4 0.11			
NEWG HZ 49.3 EP 01:54 27.59 0.14				PGB1 HZ 53.8 EP 14:01 39.44 0.10					PGB1 HZ 53.8 EP 14:01 39.44 0.10				PGB1 HZ 53.8 EP 14:01 39.44 0.10			
NEWG HE 49.3 ES 01:54 33.47 -0.19				PGB1 HZ 53.8 ES 14:01 46.04 3 0.25					PGB1 HZ 53.8 ES 14:01 46.04 3 0.25				PGB1 HZ 53.8 ES 14:01 46.04 3 0.25			
NEWG HE 49.3 IAML 01:54 34.28 2 0.07				PGB1 HZ 53.8 IAML 14:01 46.47 5 0.25					PGB1 HZ 53.8 IAML 14:01 46.47 5 0.25				PGB1 HZ 53.8 IAML 14:01 46.47 5 0.25			
NEWG HE 49.3 IAML 01:54 34.63 2 0.08				EDBI HZ 60.0 EP 14:01 46.87 1 0.13					EDBI HZ 60.0 EP 14:01 46.87 1 0.13				EDBI HZ 60.0 EP 14:01 46.87 1 0.13			
ESK HZ 63.1 EP 01:54 29.65 0.04				EDBI HZ 60.0 ES 14:01 47.08 2 0.05					EDBI HZ 60.0 ES 14:01 47.08 2 0.05				EDBI HZ 60.0 ES 14:01 47.08 2 0.05			
ESK HE 63.1 IAML 01:54 37.84 4 0.20				EDBI HZ 60.0 IAML 14:01 47.37 3 0.16					EDBI HZ 60.0 IAML 14:01 47.37 3 0.16				EDBI HZ 60.0 IAML 14:01 47.37 3 0.16			
ESK HE 63.1 IAML 01:54 37.87 4 0.15				EDBI HZ 60.0 IAML 14:01 47.67 4 0.28					EDBI HZ 60.0 IAML 14:01 47.67 4 0.28				EDBI HZ 60.0 IAML 14:01 47.67 4 0.28			
GALL HZ 67.3 EP 01:54 30.28 0.04				EDBI HZ 60.0 ES 14:01 48.00 5 0.21					EDBI HZ 60.0 ES 14:01 48.00 5 0.21				EDBI HZ 60.0 ES 14:01 48.00 5 0.21			
GALL HE 67.3 ES 01:54 38.26 -0.23				EDBI HZ 60.0 IAML 14:01 48.37 6 0.21												

**TABLE 2 : PHASE DATA**

EAB	HZ	128.0	EP	17:35	48.51	0.12	March 17 2021	Time: 23:56 35.3 UTC	Magnitude: 1.9 ML
EAB	HE	128.0	IAML	17:36	06.16	13 0.22	Lat: 52.194	Lon: 2.183	Depth: 10.8 km
EAB	HN	128.0	IAML	17:36	06.30	13 0.24	Grid Ref: 685.83 kmE 263.38 kmN		RMS: 0.30 secs
PGB1	HZ	141.0	EP	17:35	50.55	0.23	Locality: SOUTHERN NORTH SEA		
PGB1	HE	141.0	ES	17:36	07.39	0.42	Velocity model: North Sea Xnear: 400.0 Xfar: 600.0		
PGB1	HN	141.0	IAML	17:36	08.17	37 0.22	Comment: 43KM SE LOWESTOFT		
PGB1	HE	141.0	IAML	17:36	08.97	48 0.40			
EDMD	HZ	144.0	EP	17:35	50.52	-0.20	STAT CO DIST PHAS WT P HrMn SECS AMPL PERI RES		
EDMD	HN	144.0	IAML	17:36	09.47	13 0.19	SIZE CZ 38.7 EP 23:56 41.53		-0.26
EDMD	HE	144.0	IAML	17:36	10.18	18 0.12	SIZE CN 38.7 ES 23:56 46.85		0.33
NEWG	HZ	165.0	EP	17:35	53.87	0.14	SIZE CE 38.7 IAML 23:56 47.93	140 0.06	
NEWG	HE	165.0	ES	17:36	13.21	0.34	SIZE CN 38.7 IAML 23:56 48.00	117 0.16	
NEWG	HN	165.0	IAML	17:36	16.04	14 0.12	ELMS HZ 82.4 EP 23:56 48.21		-0.42
NEWG	HE	165.0	IAML	17:36	17.54	17 0.10	ELMS HE 82.4 ES 23:56 58.30		-0.06
AQ12	HZ	189.0	EP	17:35	56.95	0.10	ELMS HN 82.4 IAML 23:56 59.76	55 0.20	
LAWE	HN	194.0	EP	17:35	57.97	0.56	ELMS HE 82.4 IAML 23:57 01.36	47 0.12	
LAWE	HE	194.0	IAML	17:36	23.54	5 0.16	BRAD CZ 101.0 EP 23:56 51.42		-0.11
LAWE	HN	194.0	IAML	17:36	25.24	6 0.20	BRAD CN 101.0 IAML 23:57 05.50	17 0.26	
LAWE	HE	194.0	IAML	17:36			BRAD CE 101.0 IAML 23:57 07.62	24 0.34	
March 12 2021							WACR HZ 121.0 EP 23:56 54.74		0.18
Lat: 56.969							WACR HE 121.0 IAML 23:57 15.20	29 0.31	
Grid Ref: 190.44 kmE 791.69 kmN							WACR HN 121.0 IAML 23:57 15.25	31 0.14	
Locality: LOCH NEVIS, HIGHLAND							ELSH HZ 137.0 EP 23:56 57.10		0.34
Velocity model: Lownet Xnear: 100.0 Xfar: 200.0							ELSH HN 137.0 IAML 23:57 14.22	23 0.72	
STAT CO DIST PHAS WT P HrMn SECS AMPL PERI RES							ELSH HE 137.0 IAML 23:57 16.01	28 0.32	
KPL	HZ	43.0	EP	20:50	25.04	0.16	March 18 2021	Time: 03:08 08.9 UTC	Magnitude: 0.6 ML
KPL	HE	43.0	ES	20:50	30.62	-0.11	Lat: 56.696	Lon: -4.913	Depth: 8.7 km
KPL	HE	43.0	IAML	20:50	30.91	10 0.26	Grid Ref: 221.65 kmE 759.81 kmN		RMS: 0.40 secs
KPL	HN	43.0	IAML	20:50	31.32	6 0.11	Locality: KINLOCHLEVEN, HIGHLAND		
LAWE	HZ	79.0	EP	20:50	29.87	-0.02	Velocity model: Lownet Xnear: 500.0 Xfar: 1000.0		
LAWE	HE	79.0	ES	20:50	39.25	-0.16	STAT CO DIST PHAS WT P HrMn SECS AMPL PERI RES		
LAWE	HN	79.0	IAML	20:50	39.85	5 0.10	LAWE HZ 57.0 EP 03:08 18.27		-0.32
LAWE	HE	79.0	IAML	20:50	41.54	6 0.28	LAWE HN 57.0 ES 03:08 25.15		-0.53
INVG	HZ	105.0	EP	20:50	33.62	0.00	LAWE HE 57.0 IAML 03:08 25.41	4 0.11	
INVG	HN	105.0	ES	20:50	45.59	-0.27	LAWE HN 57.0 IAML 03:08 25.43	3 0.16	
INVG	HE	105.0	IAML	20:50	45.79	3 0.08	INVG HZ 61.3 EP 03:08 19.21		-0.06
INVG	HN	105.0	IAML	20:50	45.99	2 0.13	INVG HN 61.3 ES 03:08 26.18		-0.68
EAB	HZ	110.0	EP	20:50	34.60	0.21	INVG HE 61.3 IAML 03:08 26.29	1 0.17	
EAB	HN	110.0	ES	20:50	47.49	0.29	EAB HZ 66.7 EP 03:08 20.37		0.25
EAB	HE	110.0	IAML	20:50	48.28	5 0.07	EAB HE 66.7 IAML 03:08 31.95	4 0.18	
EAB	HN	110.0	IAML	20:50	48.41	7 0.12	EAB HE 66.7 IAML 03:08 32.37	6 0.14	
LINV	HN	132.0	ES	20:50	52.00	-0.07	KPL HZ 84.5 EP 03:08 23.07		0.25
LINV	HE	132.0	IAML	20:50	52.91	1 0.13	KPL HN 84.5 ES 03:08 32.96		-0.05
LINV	HE	132.0	IAML	20:50	54.06	2 0.18	KPL HE 84.5 IAML 03:08 36.63	2 0.09	
March 16 2021							PGB1 HZ 102.0 EP 03:08 26.44		0.87
Lat: 51.898							PGB1 HE 102.0 ES 03:08 38.21		0.45
Grid Ref: 378.74 kmE 222.26 kmN							PGB1 HE 102.0 IAML 03:08 38.50	3 0.19	
Locality: HIGHNAM, GLOUCESTERSHIRE							PGB1 HE 102.0 IAML 03:08 38.60	4 0.24	
Velocity model: Lownet Xnear: 500.0 Xfar: 1000.0							LINV HZ 162.0 EP 03:08 34.26		-0.11
STAT CO DIST PHAS WT P HrMn SECS AMPL PERI RES							March 19 2021	Time: 06:56 40.3 UTC	Magnitude: 0.2 ML
STRD	HZ	16.9	EP	07:38	24.07	0.12	Lat: 56.163	Lon: -4.774	Depth: 6.0 km
STRD	HE	16.9	ES	07:38	26.54	-0.07	Grid Ref: 227.76 kmE 700.16 kmN		RMS: 0.50 secs
STRD	HE	16.9	IAML	07:38	27.22	39 0.14	Locality: ARDGARTAN, ARGYLL/BUTE		
STRD	HN	16.9	IAML	07:38	27.36	46 0.12	Velocity model: Lownet Xnear: 100.0 Xfar: 200.0		
OLDB	HZ	31.2	EP	07:38	26.04	0.00	STAT CO DIST PHAS WT P HrMn SECS AMPL PERI RES		
MONM	HZ	34.7	EP	07:38	26.49	-0.12	EAB HZ 27.3 IP C 06:56 45.82		0.37
MONM	HN	34.7	ES	07:38	31.27	0.07	EAB HE 27.3 IAML 06:56 48.42		-0.81
MONM	HE	34.7	IAML	07:38	31.37	8 0.12	EAB HN 27.3 IAML 06:56 49.24	4 0.07	
MONM	HE	34.7	IAML	07:38	31.40	7 0.15	EAB HE 27.3 ES 06:56 49.59	4 0.14	
March 16 2021							LAWE HZ 40.3 IP C 06:56 47.63		0.16
Lat: 55.281							LAWE HE 40.3 ES 06:56 52.25		-0.49
Grid Ref: 303.21 kmE 599.60 kmN							LAWE HN 40.3 IAML 06:56 52.75	2 0.21	
Locality: BEATOCK, D & G							LAWE HE 40.3 IAML 06:56 52.83	2 0.20	
Velocity model: Lownet Xnear: 100.0 Xfar: 200.0							PGB1 HZ 43.1 EP 06:56 48.16		0.23
Comment: 5KM WSW BEATOCK							PGB1 HE 43.1 IAML 06:56 53.52	8 0.24	
STAT CO DIST PHAS WT P HrMn SECS AMPL PERI RES							PGB1 HE 43.1 IAML 06:56 53.96	5 0.33	
ESK	HZ	20.6	EP	11:20	32.20	0.16	INVG HZ 54.0 EP 06:56 50.09		0.46
ESK	HN	20.6	ES	11:20	34.87	-0.12	INVG HN 54.0 ES 06:56 56.48		0.01
ESK	HE	20.6	IAML	11:20	35.31	35 0.09	INVG HE 54.0 IAML 06:56 58.41	1 0.09	
ESK	HN	20.6	IAML	11:20	35.32	32 0.10	INVG HE 54.0 IAML 06:56 58.73	1 0.06	
EKA	BZ	23.9	EP	11:20	32.63	0.03	NEWG HZ 121.0 EP 06:57 00.86		0.82
EKA	BZ	23.9	ES	11:20	35.61	-0.36	NEWG HE 121.0 ES 06:57 13.76		-0.72
NEWG	HZ	48.5	EP	11:20	36.62	0.07	NEWG HN 121.0 IAML 06:57 15.66	1 0.09	
NEWG	HN	48.5	ES	11:20	42.33	-0.47	NEWG HE 121.0 IAML 06:57 15.71	1 0.11	
NEWG	HE	48.5	IAML	11:20	43.49	11 0.14			
NEWG	HN	48.5	IAML	11:20	43.54	18 0.17			
KESW	HZ	81.6	EP	11:20	42.10	0.39			
KESW	HE	81.6	IAML	11:20	53.37	11 0.43			
KESW	HN	81.6	IAML	11:20	53.53	6 0.40			
GALL	HZ	88.8	EP	11:20	43.02	0.23	March 21 2021	Time: 05:15 51.9 UTC	Magnitude: 0.2 ML
GALL	HN	88.8	IAML	11:20	54.56	12 0.14	Lat: 56.405	Lon: -5.686	Depth: 2.5 km
GALL	HE	88.8	IAML	11:20	54.93	8 0.15	Grid Ref: 172.60 kmE 729.72 kmN		RMS: 0.10 secs
AQ12	HE	106.0	ES	11:20	58.01	-0.35	Locality: MULL, ARGYLL & BUTE		
AQ12	HE	106.0	IAML	11:20	58.85	20 0.30	Velocity model: Lownet Xnear: 100.0 Xfar: 200.0		
AQ12	HN	106.0	IAML	11:20	59.27	13 0.08	STAT CO DIST PHAS WT P HrMn SECS AMPL PERI RES		
EDMD	HZ	112.0	EP	11:20	46.64	0.33	LAWE HZ 24.0 EP 05:15 56.54		0.03
EDMD	HN	112.0	ES	11:20	59.75	0.08	LAWE HE 24.0 ES 05:15 59.72		-0.12
EDMD	HE	112.0	IAML	11:21	00.42	23 0.30	LAWE HN 24.0 IAML 05:15 59.91	6 0.06	
EDMD	HN	112.0	IAML	11:21	00.74	20 0.18	LAWE HE 24.0 IAML 05:15 59.94	5 0.11	
EAB	HN	113.0	ES	11:21	00.27	0.06	EAB HZ 86.9 EP 05:16 06.78		0.12
EAB	HN	113.0	IAML	11:21	00.53	6 0.10	EAB HE 86.9 IAML 05:16 17.56		0.15
EAB	HE	113.0	IAML	11:21	01.14	4 0.24	EAB HN 86.9 IAML 05:16 19.15	1 0.20	
EAB	HE	113.0	IAML	11:21			EAB HE 86.9 IAML 05:16 19.29	1 0.14	

**TABLE 2 : PHASE DATA**

PGB1	HE	99.8	ES	05:16	20.82	-0.03	March 25 2021	Time: 07:03 07.7 UTC	Magnitude: 0.8 ML
INVG	HZ	101.0	EP	05:16	08.96	0.05	Lat: 53.550	Lon: -1.879	Depth: 15.7 km
INVG	HE	101.0	ES	05:16	21.16	-0.13	Grid Ref: 408.02 kmE 405.96 kmN	RMS: 0.20 secs	
INVG	HE	101.0	IAML	05:16	21.81	1 0.10	Locality: HOLME, WEST YORKSHIRE		
INVG	HN	101.0	IAML	05:16	22.70	1 0.23	Velocity model: Lownet Xnear: 100.0 Xfar: 200.0		
KPL	HZ	104.0	EP	05:16	09.19	-0.07	STAT CO DIST PHAS WT P HrMn SECS AMPL PERI RES		
March 21 2021				Time: 20:51 41.4 UTC	Magnitude: 0.7 ML		AS02 HZ 7.1 IP C 07:03 10.98		0.18
				Lat: 56.434	Lon: -6.090		AS02 HN 7.1 ES 07:03 13.20		0.16
				Grid Ref: 147.89 kmE 734.36 kmN	RMS: 0.50 secs		AS02 HN 7.1 IAML 07:03 13.49	24 0.17	
				Locality: MULL, ARGYLL & BUTE			AS02 HE 7.1 IAML 07:03 13.60	14 0.13	
				Velocity model: Lownet Xnear: 100.0 Xfar: 200.0			LBWR HZ 19.4 IP D 07:03 12.01		-0.10
							LBWR HN 19.4 ES 07:03 15.20		-0.10
STAT	CO	DIST	PHAS	WT P	HrMn	SECS AMPL PERI RES	LBWR HN 19.4 IAML 07:03 15.94	16 0.15	
LAWE	HZ	46.9	IP	D	20:51	49.74	LBWR HE 19.4 IAML 07:03 16.26	16 0.09	
LAWE	HN	46.9	ES		20:51	55.95	AR01 HN 35.2 ES 07:03 18.59		
LAWE	HN	46.9	IAML		20:51	56.40	AR01 HN 35.2 IAML 07:03 19.29	10 0.12	
LAWE	HE	46.9	IAML		20:51	56.46	AR01 HE 35.2 IAML 07:03 19.93	8 0.10	
KPL	HZ	104.0	EP		20:51	58.61	HPK HE 48.5 ES 07:03 22.46		-0.05
KPL	HE	104.0	ES		20:52	11.90	HPK HE 48.5 IAML 07:03 23.12	14 0.21	
KPL	HN	104.0	IAML		20:52	14.65	HPK HN 48.5 IAML 07:03 23.43	12 0.21	
KPL	HE	104.0	IAML		20:52	15.12	AR07 HZ 62.6 EP 07:03 18.46		0.03
EAB	HZ	112.0	IP	C	20:52	00.78	AR07 HN 62.6 ES 07:03 26.47		0.23
EAB	HE	112.0	ES		20:52	14.58	AR07 HE 62.6 IAML 07:03 27.05	5 0.17	
EAB	HE	112.0	IAML		20:52	16.64	AR07 HN 62.6 IAML 07:03 27.71	8 0.17	
EAB	HN	112.0	IAML		20:52	18.49	FOEL HZ 115.0 EP 07:03 26.25		0.17
INVG	HZ	126.0	EP		20:52	02.99			
INVG	HE	126.0	ES		20:52	17.15			
INVG	HN	126.0	IAML		20:52	19.92			
INVG	HE	126.0	IAML		20:52	21.61			
March 23 2021				Time: 04:18 45.7 UTC	Magnitude: 0.6 ML		March 29 2021	Time: 04:23 32.8 UTC	Magnitude: 1.1 ML
				Lat: 55.193	Lon: -3.138		Lat: 56.284	Lon: -3.759	Depth: 7.2 km
				Grid Ref: 327.56 kmE 589.34 kmN	RMS: 0.30 secs		Grid Ref: 291.12 kmE 711.55 kmN	RMS: 0.20 secs	
				Locality: BAILIEHILL, D & G			Locality: BLACKFORD, PERTH/KINROSS		
				Velocity model: Lownet Xnear: 100.0 Xfar: 200.0			Velocity model: Lownet Xnear: 100.0 Xfar: 200.0		
STAT	CO	DIST	PHAS	WT P	HrMn	SECS AMPL PERI RES	Comment: FELT BLACKFORD	Intensity: 3	
ESK	HZ	14.4	EP		04:18	48.67			
ESK	HE	14.4	ES		04:18	50.63	STAT CO DIST PHAS WT P HrMn SECS AMPL PERI RES		
ESK	HN	14.4	IAML		04:18	50.88	INVG HZ 23.8 EP 04:23 37.38		0.02
ESK	HE	14.4	IAML		04:18	50.90	INVG HE 23.8 ES 04:23 40.56		-0.16
KESW	HZ	67.3	EP		04:18	57.37	INVG HN 23.8 IAML 04:23 40.93	13 0.08	
KESW	HN	67.3	IAML		04:19	06.78	EAB HZ 37.4 EP 04:23 39.58		
KESW	HE	67.3	IAML		04:19	08.64	EAB HE 37.4 ES 04:23 44.09		0.12
NEWG	HZ	70.1	EP		04:18	57.47	EAB HN 37.4 IAML 04:23 47.63	13 0.05	-0.27
NEWG	HN	70.1	IAML		04:19	08.53	EDI HZ 53.6 EP 04:23 41.82		
NEWG	HE	70.1	IAML		04:19	08.66	EDI HN 53.6 ES 04:23 48.55		-0.12
EDMD	HZ	85.3	EP		04:19	00.84	EDI HE 53.6 IAML 04:23 50.50	11 0.38	
EDMD	HE	85.3	ES		04:19	10.46	EDI CN 53.6 EP 04:23 50.75	13 0.39	
EDMD	HN	85.3	IAML		04:19	13.62	GGERF CZ 57.1 EP 04:23 42.73		0.26
EDMD	HE	85.3	IAML		04:19	14.25	GGERF CN 57.1 IAML 04:23 50.05	9 0.34	
AP12	HE	98.6	ES		04:19	14.35	GGERF CE 57.1 IAML 04:23 50.19	9 0.28	
AP12	HE	98.6	IAML		04:19	15.19	GGERF CN 57.1 IAML 04:23 50.81	10 0.34	
AP12	HN	98.6	IAML		04:19	15.64	LAWE HZ 102.0 EP 04:23 49.62		0.22
GALL	HZ	107.0	EP		04:19	03.44	LAWE HE 102.0 IAML 04:24 04.81	9 0.19	
GALL	HE	107.0	ES		04:19	16.70	LAWE HN 102.0 IAML 04:24 05.01	12 0.17	
GALL	HE	107.0	IAML		04:19	18.60	DRUM HZ 105.0 EP 04:23 50.01		0.08
GALL	HN	107.0	IAML		04:19	18.72	DRUM HE 105.0 IAML 04:24 04.22	22 0.24	
PGB1	HE	109.0	ES		04:19	17.83	DRUM HN 105.0 IAML 04:24 08.19	12 0.16	
PGB1	HE	109.0	IAML		04:19	20.14	March 30 2021	Time: 06:57 49.9 UTC	Magnitude: 1.8 ML
PGB1	HN	109.0	IAML		04:19	20.91	Lat: 52.871	Lon: -0.255	Depth: 7.5 km
IOMK	HZ	139.0	EP		04:19	08.70	Grid Ref: 517.44 kmE 331.85 kmN	RMS: 0.30 secs	
IOMK	HN	139.0	IAML		04:19	26.37	Locality: GOSBERTON, LINCOLNSHIRE		
IOMK	HE	139.0	IAML		04:19	27.16	Velocity model: Lownet Xnear: 100.0 Xfar: 300.0		
IOMK	HE	139.0	IAML		04:19	0.14	Comment: FELT GOSBERTON	Intensity: 2	
March 24 2021				Time: 14:00 40.8 UTC	Magnitude: 1.2 ML		STAT CO DIST PHAS WT P HrMn SECS AMPL PERI RES		
				Lat: 56.038	Lon: -5.174		WACR HZ 61.8 EP 06:58 00.15		-0.21
				Grid Ref: 202.30 kmE 687.33 kmN	RMS: 0.40 secs		WACR HE 61.8 ES 06:58 07.55		-0.43
				Locality: CONCHRA, ARGYLL & BUTE			WACR HN 61.8 IAML 06:58 08.72	48 0.18	
				Velocity model: Lownet Xnear: 100.0 Xfar: 200.0			WACR CN 61.8 IAML 06:58 10.25	58 0.14	
STAT	CO	DIST	PHAS	WT P	HrMn	SECS AMPL PERI RES	STBN CZ 67.0 EP 06:58 01.20		0.03
LAWE	HZ	28.4	EP		14:00	46.36	STBN CE 67.0 IAML 06:58 09.76	25 0.23	
LAWE	HN	28.4	ES		14:00	49.51	STBN CN 67.0 IAML 06:58 10.15	48 0.21	
LAWE	HN	28.4	IAML		14:00	50.26	CWF HZ 72.5 IP C 06:58 02.02		-0.03
LAWE	HE	28.4	IAML		14:00	50.41	CWF HE 72.5 ES 06:58 10.45		-0.45
PGB1	HZ	50.0	IP	C	14:00	49.86	CWF CN 72.5 IAML 06:58 10.99	40 0.14	
PGB1	HE	50.0	ES		14:00	55.41	CWF HE 72.5 IAML 06:58 11.17	18 0.10	
PGB1	HN	50.0	IAML		14:00	55.98	LBWR HZ 115.0 EP 06:58 08.77		0.14
PGB1	HE	50.0	IAML		14:00	56.37	LBWR HE 115.0 IAML 06:58 22.44		0.16
EAB	HZ	54.7	EP		14:00	50.54	LBWR HN 115.0 IAML 06:58 23.57	55 0.16	
EAB	HE	54.7	ES		14:00	56.76	ELMS HZ 121.0 EP 06:58 24.38	39 0.10	
EAB	HN	54.7	IAML		14:00	57.31	ELMS HE 121.0 IAML 06:58 26.78	48 0.45	
EAB	HE	54.7	IAML		14:00	57.74	ELMS HN 121.0 IAML 06:58 26.98	63 0.25	
INVG	HZ	82.4	IP	D	14:00	54.83	BRAD CZ 149.0 EP 06:58 14.05		0.54
INVG	HE	82.4	ES		14:01	04.61	BRAD CN 149.0 IAML 06:58 34.92	14 0.18	
INVG	HN	82.4	IAML		14:01	07.13	BRAD CE 149.0 IAML 06:58 36.64	13 0.26	
INVG	HE	82.4	IAML		14:01	07.29	March 31 2021	Time: 00:05 01.4 UTC	Magnitude: 2.0 ML
							Lat: 56.597	Lon: -10.468	Depth: 34.3 km
							Grid Ref: -119.16 kmE 777.11 kmN	RMS: 0.30 secs	
							Locality: NORTH ATLANTIC OCEAN		
GALL	HZ	134.0	EP		14:01	02.51	Velocity model: Lownet Xnear: 500.0 Xfar: 1000.0		
GALL	HN	134.0	IAML		14:01	19.04	Comment: ROCKALL TROUGH AREA		
GALL	HE	134.0	IAML		14:01	19.52	STAT CO DIST PHAS WT P HrMn SECS AMPL PERI RES		
IDGL	HZ	251.0	EP		00:05	36.23	IDGL HZ 251.0 EP 00:05 36.23		0.17

**TABLE 2 : PHASE DATA**

IDGL	HE	251.0	ES	00:06	00.77	-0.61	Lat: 56.410	Lon: -6.210	Depth: 7.1 km	
IDGL	HN	251.0	IAML	00:06	03.06	13 0.28	Grid Ref: 140.33 kmE	732.14 kmN	RMS: 0.30 secs	
IDGL	HE	251.0	IAML	00:06	06.37	13 0.64	Locality: MULL,ARGYLL & BUTE			
KPL	HZ	304.0	EP	00:05	42.70	0.06	Velocity model: Lownet	Xnear: 100.0	Xfar: 300.0	
KPL	HN	304.0	ES	00:06	12.61	-0.15	Comment: FELT MULL		Intensity: 2	
KPL	HE	304.0	IAML	00:06	17.26	4 0.46	STAT CO DIST PHAS WT P HrMn SECS AMPL PERI RES			
KPL	HN	304.0	IAML	00:06	23.03	5 0.52	LAWE HZ 52.9 EP 22:25 43.02		-0.11	
LAWE	HZ	315.0	EP	00:05	44.19	0.19	LAWE HN 52.9 ES 22:25 49.71		-0.04	
LAWE	HN	315.0	ES	00:06	15.37	0.26	LAWE HN 52.9 IAML 22:25 49.96	20 0.20		
LAWE	HE	315.0	IAML	00:06	19.45	6 0.22	LAWE HN 52.9 IAML 22:25 50.06	19 0.19		
LAWE	HN	315.0	IAML	00:06	19.55	5 0.26	KPL HZ 109.0 EP 22:25 51.58		-0.22	
IGLA	HZ	361.0	EP	00:05	48.90	-0.77	KPL HE 109.0 ES 22:26 04.77		0.02	
IGLA	HN	361.0	ES	00:06	24.55	-0.38	KPL HE 109.0 IAML 22:26 07.53	6 0.14		
IGLA	HE	361.0	IAML	00:06	27.04	4 0.38	KPL HN 109.0 IAML 22:26 08.05	4 0.38		
IGLA	HN	361.0	IAML	00:06	29.68	4 0.58	EAB HZ 119.0 EP 22:25 53.82		0.48	
LINV	HZ	361.0	EP	00:05	49.83	0.10	EAB HE 119.0 ES 22:26 06.97		-0.44	
LINV	HE	361.0	ES	00:06	24.31	-0.72	EAB HN 119.0 IAML 22:26 09.89	11 0.13		
LINV	HE	361.0	IAML	00:06	27.15	5 0.17	EAB HE 119.0 IAML 22:26 10.63	12 0.10		
LINV	HN	361.0	IAML	00:06	28.86	3 0.20	PGB1 HZ 126.0 EP 22:25 54.79		0.28	
EAB	HZ	381.0	EP	00:05	52.44	0.13	PGB1 HE 126.0 IAML 22:26 12.12	12 0.24		
EAB	HE	381.0	IAML	00:06	33.28	3 0.25	PGB1 HN 126.0 IAML 22:26 16.68	16 0.44		
EAB	HN	381.0	IAML	00:06	33.77	3 0.30	INVG HZ 134.0 EP 22:25 55.64		0.07	
PGB1	HZ	381.0	EP	00:05	52.32	0.00	INVG HN 134.0 ES 22:26 11.60		0.33	
ILTH	HZ	388.0	EP	00:05	53.42	0.32	INVG HN 134.0 IAML 22:26 12.37	11 0.23		
ILTH	HN	388.0	ES	00:06	30.79	-0.06	INVG HE 134.0 IAML 22:26 12.63	10 0.18		
ILTH	HN	388.0	IAML	00:06	33.62	3 0.33	NEWG HZ 190.0 EP 22:26 02.61		-0.57	
ILTH	HE	388.0	IAML	00:06	37.23	3 0.23	NEWG HN 190.0 IAML 22:26 27.54	4 0.21		
INVG	HZ	396.0	EP	00:05	54.23	0.09	NEWG HE 190.0 IAML 22:26 31.40	3 0.11		
INVG	HN	396.0	ES	00:06	32.81	0.16				
INVG	HN	396.0	IAML	00:06	37.28	3 0.38	April 4 2021 Time: 12:58 41.9 UTC Magnitude: 0.6 ML			
INVG	HE	396.0	IAML	00:06	38.45	2 0.52	Lat: 52.242 Lon: -2.952 Depth: 18.4 km			
BIGH	HZ	446.0	EP	00:06	00.34	0.02	Grid Ref: 335.00 kmE 260.89 kmN RMS: 0.10 secs			
DSB	HZ	456.0	EP	00:06	02.00	0.41	Locality: TITLEY,HEREFORDSHIRE			
DSB	HN	456.0	ES	00:06	46.07	0.52	Velocity model: Mid Wales Xnear: 80.0 Xfar: 200.0			
DSB	HE	456.0	IAML	00:06	49.87	2 0.24	STAT CO DIST PHAS WT P HrMn SECS AMPL PERI RES			
DSB	HN	456.0	IAML	00:06	52.15	2 0.54	MCH1 HZ 27.4 EP 12:58 47.31		-0.10	
KESW	HZ	515.0	EP	00:06	09.22	0.19	MCH1 HN 27.4 ES 12:58 51.44		0.06	
WLF1	HZ	535.0	EP	00:06	11.63	0.11	MCH1 HN 27.4 IAML 12:58 51.57	17 0.14		
WLF1	HN	535.0	EP	00:06	11.63		MCH1 HE 27.4 IAML 12:58 51.63	22 0.12		
March 31 2021			Time: 02:47 07.5 UTC		Magnitude: 2.3 ML					
Lat: 56.607			Lat: -10.454		Depth: 34.6 km					
Grid Ref: -118.17 kmE			Grid Ref: 778.11 kmN		RMS: 0.30 secs					
Locality: NORTH ATLANTIC OCEAN										
Velocity model: Lownet			Xnear: 500.0		Xfar: 1000.0					
Comment: ROCKALL TROUGH AREA										
STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES
IDGL	HZ	252.0	EP	02:47	42.04	-0.16	MONM HZ 45.9 EP 12:58 49.96			-0.11
IDGL	HE	252.0	IAML	02:48	07.34	27 0.19	MONM HE 45.9 IAML 12:58 56.05			0.09
IDGL	HN	252.0	IAML	02:48	09.16	32 0.20	MONM HE 45.9 IAML 12:58 56.32	2 0.12		
KPL	HN	303.0	ES	02:48	18.50	-0.13	FOEL HZ 74.0 EP 12:58 52.34			0.03
KPL	HE	303.0	IAML	02:48	21.27	10 0.20	FOEL HE 74.0 EP 12:58 52.34			
KPL	HN	303.0	IAML	02:48	22.70	9 0.08	STRD HZ 75.0 EP 12:58 54.43			0.01
LAWE	HZ	314.0	EP	02:47	50.27	0.24	STRD HN 75.0 ES 12:59 03.46			0.01
LAWE	HE	314.0	ES	02:48	21.02	-0.05	STRD HE 75.0 IAML 12:59 04.60	13 0.37		
LAWE	HE	314.0	IAML	02:48	25.51	12 0.15	STRD HE 75.0 IAML 12:59 05.46	7 0.39		
LAWE	HN	314.0	IAML	02:48	25.66	11 0.22	RSBS HZ 127.0 EP 12:59 02.24			0.00
LINV	HZ	360.0	EP	02:47	55.91	0.22	RSBS HE 127.0 IAML 12:59 18.56	1 0.10		
LINV	HE	360.0	ES	02:48	30.16	-0.71	RSBS HE 127.0 IAML 12:59 18.88	1 0.16		
LINV	HN	360.0	IAML	02:48	31.30	6 0.14				
LINV	HE	360.0	IAML	02:48	33.13	10 0.13	April 5 2021 Time: 03:04 09.8 UTC Magnitude: 0.6 ML			
IGLA	HZ	362.0	EP	02:47	55.28	-0.64	Lat: 56.262 Lon: -3.766 Depth: 2.5 km			
IGLA	HN	362.0	IAML	02:48	32.14	8 0.12	Grid Ref: 290.62 kmE 709.12 kmN RMS: 0.30 secs			
IGLA	HE	362.0	IAML	02:48	32.18	6 0.19	Locality: BLACKFORD,PERTH/KINROSS			
EAB	HZ	380.0	EP	02:47	58.32	-0.03	Velocity model: Lownet	Xnear: 100.0 Xfar: 200.0		
EAB	HE	380.0	IAML	02:48	37.61	8 0.18	STAT CO DIST PHAS WT P HrMn SECS AMPL PERI RES			
EAB	HN	380.0	IAML	02:48	38.51	5 0.14	INVG HZ 25.2 EP 03:04 14.43		-0.18	
PGB1	HZ	381.0	EP	02:47	58.12	-0.25	INVG HN 25.2 ES 03:04 17.69		-0.41	
ILTH	HZ	388.0	EP	02:47	59.16	-0.10	INVG HN 25.2 IAML 03:04 17.94	5 0.10		
ILTH	HE	388.0	ES	02:48	36.92	-0.11	INVG HE 25.2 IAML 03:04 17.98	6 0.10		
ILTH	HN	388.0	IAML	02:48	39.06	5 0.26	EAB HZ 36.4 EP 03:04 16.63		0.12	
ILTH	HE	388.0	IAML	02:48	43.19	7 0.15	EAB HE 36.4 ES 03:04 21.44		0.06	
INVG	HZ	395.0	EP	02:48	00.43	0.27	EAB HE 36.4 IAML 03:04 24.64	6 0.07		
INVG	HN	395.0	ES	02:48	38.80	0.21	EAB HE 36.4 IAML 03:04 24.68	4 0.07		
INVG	HE	395.0	IAML	02:48	41.13	5 0.08	EDI HZ 52.1 ES 03:04 25.63		-0.28	
INVG	HE	395.0	IAML	02:48	41.35	6 0.12	EDI HN 52.1 IAML 03:04 25.78	2 0.12		
NEWG	HZ	423.0	EP	02:48	03.86	0.18	EDI HE 52.1 IAML 03:04 26.04	2 0.10		
BIGH	HZ	444.0	EP	02:48	06.36	0.08	PGB1 HZ 67.2 EP 03:04 21.40		-0.07	
DSB	HE	456.0	IAML	02:48	53.09	4 0.36	LAWE HZ 101.0 EP 03:04 27.21		0.48	
DSB	HN	456.0	IAML	02:48	54.64	3 0.23	LAWE HE 101.0 ES 03:04 39.07		0.00	
EDI	HZ	456.0	EP	02:48	08.28	0.47	DRUM HE 107.0 IAML 03:04 41.44	7 0.16		
DSB	HZ	456.0	EP	02:48	07.75	-0.02	DRUM HE 107.0 IAML 03:04 41.58	3 0.16		
DSB	HN	456.0	ES	02:48	51.89	0.12	DRUM HE 107.0 IAML 03:04 40.94		0.32	
ESK	HZ	475.0	EP	02:48	09.97	-0.16	DRUM HE 107.0 IAML 03:04 41.59	5 0.15		
DRUM	HZ	488.0	EP	02:48	11.86	0.06				
KESW	HZ	515.0	EP	02:48	15.35	0.24	April 6 2021 Time: 04:19 14.6 UTC Magnitude: 0.9 ML			
WLF1	HZ	535.0	EP	02:48	17.52	-0.15	Lat: 53.643 Lon: -2.061 Depth: 4.2 km			
AQ12	HZ	543.0	EP	02:48	18.51	-0.15	Grid Ref: 395.97 kmE 416.30 kmN RMS: 0.30 secs			
EDMD	HZ	569.0	EP	02:48	21.55	-0.26	Locality: LITTLEBOROUGH,GTR MAN			
AR09	HZ	572.0	EP	02:48	22.89	0.55	Velocity model: Lownet	Xnear: 500.0 Xfar: 1000.0		
AS02	HZ	638.0	EP	02:48	30.80	0.25	STAT CO DIST PHAS WT P HrMn SECS AMPL PERI RES			
HLM1	HZ	668.0	EP	02:48	34.68	0.36	AS02 HZ 11.0 IP D 04:19 17.30		0.24	
KPL	HZ	303.0	EP	02:47	48.68	0.06	AS02 HZ 11.0 ES 04:19 19.15		0.33	
							AS02 HZ 11.0 IAML 04:19 19.32	49 0.08		
							AS02 HZ 11.0 IAML 04:19 19.47	35 0.11		
April 1 2021			Time: 22:25 34.1 UTC		Magnitude: 1.4 ML					
							AR01 HZ 19.9 EP 04:19 18.37		-0.17	
							AR01 HZ 19.9 ES 04:19 21.04		-0.34	

TABLE 2 : PHASE DATA

AR01	HN	19.9	IAML	04:19	21.20	68	0.14		LAWE	HN	149.0	ES	21:53	01.34	-0.22
AR01	HE	19.9	IAML	04:19	21.23	29	0.10	0.00	LAWE	HE	149.0	IAML	21:53	03.76	3 0.34
LBWR	HZ	34.9	EP	04:19	21.09			-0.32	LAWE	HN	149.0	IAML	21:53	04.48	3 0.14
LBWR	HE	34.9	ES	04:19	25.48				INVG	HZ	157.0	EP	21:52	45.31	-0.05
LBWR	HE	34.9	IAML	04:19	25.78	14	0.09		INVG	HN	157.0	IAML	21:53	05.45	1 0.25
LBWR	HN	34.9	IAML	04:19	26.09	19	0.12		INVG	HE	157.0	IAML	21:53	05.60	2 0.16
HPK	HZ	45.4	EP	04:19	22.64			-0.15							
HPK	HE	45.4	ES	04:19	28.32			-0.42	April 15 2021			Time: 03:49 09.8 UTC	Magnitude: 1.0 ML		
HPK	HN	45.4	IAML	04:19	28.66	12	0.20		Lat: 54.591			Lat: -0.839	Depth: 1.0 km		
HPK	HE	45.4	IAML	04:19	28.76	14	0.30		Grid Ref: 475.01 kmE 522.39 kmN			Grid Ref: 475.01 kmE 522.39 kmN	RMS: 0.30 secs		
AR07	HZ	47.2	EP	04:19	23.26			0.18	Locality: BOULBY, NORTH YORKSHIRE						
AR07	HN	47.2	ES	04:19	29.06			-0.18	Velocity model: Lownet Xnear: 100.0 Xfar: 200.0						
AR07	HE	47.2	IAML	04:19	29.49	14	0.32		Comment: COLLAPSE TYPE EVENT						
AR07	HN	47.2	IAML	04:19	29.82	6	0.12		STAT CO DIST PHAS WT P HrMn SECS AMPL PERI RES						
AQ02	HN	55.5	ES	04:19	31.52			0.15	GDLE HZ 18.9 EP 03:49 13.52						
AQ02	HN	55.5	IAML	04:19	32.16	24	0.23		GDLE HE 18.9 ES 03:49 17.06						
AQ02	HE	55.5	IAML	04:19	32.54	21	0.22		GDLE HN 18.9 IAML 03:49 17.46						
AQ04	HN	61.8	ES	04:19	33.50			0.43	GDLE HE 18.9 IAML 03:49 19.85						
AQ12	HZ	99.3	EP	04:19	31.52			0.34	AT10 HZ 32.9 EP 03:49 16.07						
EDMD	HN	132.0	ES	04:19	52.37			0.42	AT10 HN 32.9 ES 03:49 20.84						
EDMD	HN	132.0	IAML	04:19	53.60	6	0.17		AT10 HN 32.9 IAML 03:49 21.60						
EDMD	HE	132.0	IAML	04:19	53.89	5	0.23		AT10 HE 32.9 IAML 03:49 22.93						
WLF1	HN	160.0	ES	04:19	58.28			-0.51	AU18 HE 39.1 ES 03:49 22.65					0.03	
WLF1	HE	160.0	IAML	04:19	59.07	4	0.25		AU18 HE 39.1 IAML 03:49 24.82					13 0.31	
WLF1	HN	160.0	IAML	04:19	59.15	4	0.17		AU18 HN 39.1 IAML 03:49 26.41					18 0.37	
									AT12 HZ 39.4 EP 03:49 16.57					-0.70	
April 7 2021									AT12 HN 39.4 ES 03:49 22.86					0.16	
Lat: 56.526									AT12 HN 39.4 IAML 03:49 26.33						
Grid Ref: 151.82 kmE 744.39 kmN									AT12 HE 39.4 IAML 03:49 26.52						
Locality: MULL, ARGYLL & BUTE									AU11 HZ 44.3 EP 03:49 18.03					-0.06	
Velocity model: Lownet Xnear: 500.0 Xfar: 1000.0									AU11 HN 44.3 IAML 03:49 24.72						
STAT CO DIST PHAS WT P HrMn SECS AMPL PERI RES									AU11 HE 44.3 IAML 03:49 26.13						
LAWE	HZ	49.2	EP		11:32	02.42		-0.04	EDMD HZ 77.2 EP 03:49 23.79						
LAWE	HN	49.2	ES		11:32	08.33		-0.34	EDMD HE 77.2 IAML 03:49 38.08						
LAWE	HN	49.2	IAML		11:32	08.55	9	0.08	EDMD HE 77.2 IAML 03:49 39.22					0.50	
LAWE	HE	49.2	IAML		11:32	08.81	13	0.10	AS07 HZ 80.7 EP 03:49 24.08						
KPL	HZ	93.5	EP		11:32	09.20		-0.09	AS07 HE 80.7 IAML 03:49 38.83						
KPL	HN	93.5	ES		11:32	20.44		-0.05	AS07 HN 80.7 IAML 03:49 39.72						
KPL	HN	93.5	IAML		11:32	22.71	2	0.18	AR09 HZ 112.0 EP 03:49 28.75					0.01	
KPL	HE	93.5	IAML		11:32	23.16	3	0.14	AR09 HE 112.0 IAML 03:49 46.80						
EAB	HZ	112.0	EP		11:32	12.26		0.12	AR09 HE 112.0 IAML 03:49 47.43						
EAB	HE	112.0	ES		11:32	25.69		0.28	AQ12 HE 125.0 IAML 03:49 48.46						
EAB	HN	112.0	IAML		11:32	26.42	2	0.36	AQ12 HN 125.0 IAML 03:49 49.63						
EAB	HE	112.0	IAML		11:32	27.15	2	0.20	AS02 HZ 138.0 EP 03:49 32.95					0.27	
INVG	HZ	123.0	EP		11:32	14.19		0.32	AS02 HE 138.0 IAML 03:49 52.01						
INVG	HE	123.0	ES		11:32	28.21		-0.21	AS02 HN 138.0 IAML 03:49 52.02						
INVG	HN	123.0	IAML		11:32	29.34	2	0.05							
INVG	HE	123.0	IAML		11:32	29.40	2	0.08							
April 11 2021									April 15 2021			Time: 18:39 34.4 UTC	Magnitude: 1.1 ML		
Lat: 56.400									Lat: 55.775			Lat: -5.629	Depth: 10.8 km		
Grid Ref: 171.59 kmE 729.22 kmN									Grid Ref: 172.43 kmE 659.48 kmN			Grid Ref: 172.43 kmE 659.48 kmN	RMS: 0.30 secs		
Locality: MULL, ARGYLL & BUTE									Locality: CLACHAN, ARGYLL & BUTE						
Velocity model: Lownet Xnear: 500.0 Xfar: 1000.0									Velocity model: Lownet Xnear: 100.0 Xfar: 200.0						
STAT CO DIST PHAS WT P HrMn SECS AMPL PERI RES									STAT CO DIST PHAS WT P HrMn SECS AMPL PERI RES						
LAWE	HZ	24.4	EP		19:27	43.76		0.02	LAWE HZ 55.9 EP 18:39 43.62						
LAWE	HN	24.4	ES		19:27	46.94		-0.18	LAWE HN 55.9 ES 18:39 50.76						
LAWE	HN	24.4	IAML		19:27	47.12	13	0.16	LAWE HE 55.9 IAML 18:39 52.71						
LAWE	HE	24.4	IAML		19:27	47.15	12	0.12	LAWE HE 55.9 IAML 18:39 52.94						
EAB	HZ	87.7	EP		19:27	54.09		0.14	PGB1 HZ 72.0 EP 18:39 46.80					0.36	
EAB	HN	87.7	ES		19:28	04.82		0.05	PGB1 HE 72.0 ES 18:39 54.94					-0.29	
EAB	HE	87.7	IAML		19:28	06.63	3	0.10	PGB1 HE 72.0 IAML 18:39 56.29						
EAB	HN	87.7	IAML		19:28	06.68	4	0.24	PGB1 HE 72.0 IAML 18:39 58.96						
INVG	HZ	102.0	EP		19:27	56.37		0.15	CLGH HZ 82.9 EP 18:39 48.40					0.27	
INVG	HE	102.0	ES		19:28	08.63		-0.08	CLGH HN 82.9 IAML 18:39 57.90						
INVG	HN	102.0	IAML		19:28	09.97	2	0.10	CLGH HE 82.9 IAML 18:40 00.88						
INVG	HE	102.0	IAML		19:28	10.13	2	0.14	CLGH HE 82.9 IAML 18:40 02.10						
KPL	HN	105.0	ES		19:28	09.11		-0.10	EAB HZ 92.9 EP 18:39 49.61					-0.08	
KPL	HE	105.0	IAML		19:28	11.28	2	0.17	EAB HE 92.9 IAML 18:40 01.11					0.25	
KPL	HN	105.0	IAML		19:28	11.37	1	0.18	EAB HE 92.9 IAML 18:40 03.54						
									EAB HE 92.9 IAML 18:40 03.74					6 0.23	
									NEWG HZ 115.0 EP 18:39 53.11					0.13	
									NEWG HN 115.0 ES 18:40 06.25					-0.30	
April 13 2021									NEWG HE 115.0 IAML 18:40 08.85						
Lat: 57.595									NEWG HE 115.0 IAML 18:40 08.92						
Grid Ref: 191.28 kmE 861.46 kmN									GAL1 HZ 117.0 EP 18:39 53.85					0.62	
Locality: TORRIDON, HIGHLAND									GAL1 HE 117.0 ES 18:40 06.67					-0.32	
Velocity model: Lownet Xnear: 500.0 Xfar: 1000.0									GAL1 HE 117.0 IAML 18:40 07.03						
Comment: 6KM NNE TORRIDON									GAL1 HE 117.0 IAML 18:40 09.85						
STAT CO DIST PHAS WT P HrMn SECS AMPL PERI RES									INVG HZ 123.0 EP 18:39 54.29					0.20	
KPL	HZ	30.0	EP		21:52	25.92		0.05	INVG HE 123.0 IAML 18:40 12.41						
KPL	HN	30.0	ES		21:52	29.53		-0.41	INVG HE 123.0 IAML 18:40 12.50						
KPL	HE	30.0	IAML		21:52	29.71	8	0.10							
KPL	HN	30.0	IAML		21:52	29.76	7	0.13							
LINV	HZ	64.0	EP		21:52	31.39		0.14							
LINV	HN	64.0	ES		21:52	38.79		-0.45							
LINV	HN	64.0	IAML		21:52	44.40	2	0.09							
LINV	HE	64.0	IAML		21:52	44.56	3	0.07							
MCD	HZ	134.0	EP		21:52	41.79		-0.28							
MCD	HE	134.0	IAML		21:52	59.32	7	0.24							
MCD	HN	134.0	IAML		21:52	59.43	5	0.34							
BIGH	HZ	137.0	EP		21:52	43.11		0.65							
BIGH	HE	137.0	ES		21:52	58.45		-0.18							
BIGH	HN	137.0	IAML		21:53	00.19	4	0.11							
BIGH	HE	137.0	IAML		21:53	00.41	5	0.09							
LAWE	HZ	149.0	EP		21:52	44.90		0.75							
									April 19 2021			Time: 06:27 15.1 UTC	Magnitude: 0.8 ML		
									Lat: 51.838			Lat: -3.167	Depth: 18.3 km		
									Grid Ref: 319.60 kmE 216.18 kmN			Grid Ref: 319.60 kmE 216.18 kmN	RMS: 0.10 secs		
									Locality: LLANGATTOCK, POWYS						
									Velocity model: Lownet Xnear: 100.0 Xfar: 200.0						
STAT CO DIST PHAS WT P HrMn SECS AMPL PERI RES									STAT CO DIST PHAS WT P HrMn SECS AMPL PERI RES						
MCH1	HZ	21.2	IP		C	06:27	19.82		MCH1 HZ 21.2 IP C 06:27 23.31						
MCH1	HE	21.2	ES						MCH1 HE 21.2 IAML 06:27 23.65						
MCH1	HN	21.2	IAML						MCH1 HN 21.2 IAML 06:27 23.69						
MONM	HZ	25.0	IP		C	06:27	20.22		MONM HZ 25.0 IAML 06:27 24.36						
MONM	HE	25.0	ES						MONM HE 25.0 IAML 06:27 24.63						
MONM	HN	25.0	IAML						MONM HN 25.0 IAML 06:27 22.0 0.17						

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TABLE 2 : PHASE DATA

MONM	HE	25.0	IAML	06:27	24.87	7	0.18		WPS	HN	50.3	ES	02:56	11.77	0.31												
STRD	HZ	69.6	EP	06:27	26.82		0.08		WPS	HE	50.3	IAML	02:56	12.57	1 0.07												
STRD	HE	69.6	ES	06:27	35.14		-0.13		WPS	HN	50.3	IAML	02:56	13.05	2 0.11												
STRD	HE	69.6	IAML	06:27	36.02	9	0.19		FOEL	HZ	72.9	EP	02:56	09.03	0.73												
STRD	HN	69.6	IAML	06:27	36.34	9	0.27		FOEL	HE	72.9	ES	02:56	16.72	-0.49												
HLM1	HN	78.2	ES	06:27	37.55		0.07		FOEL	HN	72.9	IAML	02:56	17.46	3 0.28												
HLM1	HE	78.2	IAML	06:27	38.21	2	0.06		FOEL	HE	72.9	IAML	02:56	18.82	5 0.40												
HLM1	HN	78.2	IAML	06:27	38.94	1	0.09		IOMK	HZ	104.0	EP	02:56	12.64	-0.12												
RSBS	HZ	109.0	EP	06:27	32.66		0.23		IOMK	HE	104.0	ES	02:56	24.90	-0.01												
RSBS	HN	109.0	ES	06:27	44.95		-0.16		HLM1	HZ	120.0	EP	02:56	15.34	0.39												
RSBS	HN	109.0	IAML	06:27	46.95	3	0.09		HLM1	HE	120.0	ES	02:56	28.55	-0.16												
RSBS	HE	109.0	IAML	06:27	47.34	2	0.06		HLM1	HE	120.0	IAML	02:56	29.89	1 0.26												
									HLM1	HN	120.0	IAML	02:56	30.84	1 0.24												
April 20 2021				Time: 12:11 40.0 UTC				Magnitude: 0.9 ML																			
Lat: 58.312				Lon: -4.616				Depth: 6.8 km																			
Grid Ref: 246.76 kmE 938.88 kmN				RMS: 0.10 secs																							
Locality: ALTNAHARRA, HIGHLAND																											
Velocity model: Lownet Xnear: 100.0 Xfar: 200.0																											
Comment: 11KM WNW ALTNAHARRA																											
STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES	April 25 2021				Magnitude: 0.3 ML												
LINV	HZ	38.8	EP			12:11	46.96			0.05	Time: 06:34 54.4 UTC																
LINV	HN	38.8	ES			12:11	51.87			-0.08	Lat: 53.471																
LINV	HE	38.8	IAML			12:11	51.94	6	0.04		Grid Ref: 286.44 kmE 398.53 kmN																
LINV	HN	38.8	IAML			12:11	52.19	13	0.30		RMS: 0.20 secs																
BIGH	HZ	45.9	EP			12:11	47.95			-0.07	Locality: IRISH SEA																
BIGH	HN	45.9	ES			12:11	53.92			0.04	Velocity model: Lownet Xnear: 100.0 Xfar: 200.0																
BIGH	HN	45.9	IAML			12:11	54.84	10	0.34		Comment: 18KM NNE LLANDUDNO																
BIGH	HE	45.9	IAML			12:11	55.53	7	0.35		STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES						
MCD	HZ	114.0	EP			12:11	58.61			-0.07	WLF1	HZ	49.9	EP	06:35	02.90											
KPL	HZ	125.0	EP			12:12	00.39			0.18	WLF1	HE	49.9	ES	06:35	09.47											
KPL	HN	125.0	IAML			12:12	16.39	4	0.28		WLF1	HN	49.9	IAML	06:35	10.45	2	0.16									
KPL	HE	125.0	IAML			12:12	17.03	6	0.39		WPS	HZ	52.9	EP	06:35	03.62											
											WPS	HN	52.9	ES	06:35	10.70											
											WPS	HE	52.9	IAML	06:35	11.46	2	0.11									
											WPS	HN	52.9	IAML	06:35	12.25	3	0.33									
April 20 2021				Time: 19:55 19.3 UTC				Magnitude: 0.9 ML					April 28 2021			Magnitude: 0.7 ML											
Lat: 54.111				Lon: -1.103				Depth: 20.3 km					Time: 22:16 59.5 UTC														
Grid Ref: 458.64 kmE 468.74 kmN				RMS: 0.20 secs								Lat: 56.282			Depth: 7.1 km												
Locality: STILLINGTON,N YORKSHIRE												Grid Ref: 291.30 kmE 711.33 kmN			RMS: 0.20 secs												
Velocity model: Lownet Xnear: 100.0 Xfar: 200.0												Locality: BLACKFORD,PERTH/KINROSS															
STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES	Velocity model: Lownet Xnear: 100.0 Xfar: 200.0																
AU07	HN	9.4	ES			19:55	25.81			-0.11	STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES						
AU07	HE	9.4	IAML			19:55	27.18	24	0.33		INVG	HZ	24.0	EP	22:17	04.09											
AU07	HN	9.4	IAML			19:55	27.63	25	0.21		INVG	HN	24.0	ES	22:17	07.44											
AU11	HZ	14.8	IP	C		19:55	23.71			0.14	INVG	HE	24.0	IAML	22:17	07.63	3	0.10									
AU11	HE	14.8	ES			19:55	26.87			0.21	INVG	HE	24.0	IAML	22:17	08.48	3	0.36									
AU11	HN	14.8	IAML			19:55	27.62	10	0.26		EAB	HZ	37.5	IP	C	22:17	06.24										
AU11	HE	14.8	IAML			19:55	27.72	15	0.24		EAB	HN	37.5	ES		22:17	10.95										
AU08	HZ	28.9	IP	C		19:55	25.31			0.05	EAB	HE	37.5	IAML	22:17	11.51	5	0.17									
AU08	HE	28.9	ES			19:55	29.64			0.05	EAB	HE	37.5	IAML	22:17	11.79	6	0.18									
AU08	HN	28.9	IAML			19:55	30.34	8	0.14		EDI	HN	53.4	ES	22:17	15.11											
AU08	HE	28.9	IAML			19:55	31.01	11	0.15		EDI	HN	53.4	IAML	22:17	15.24	5	0.09									
AT10	HZ	29.3	IP	D		19:55	25.35			0.02	EDI	HE	53.4	IAML	22:17	15.46	4	0.10									
AT10	HN	29.3	ES			19:55	29.91			0.19	PGB1	HZ	69.3	EP	22:17	10.99											
AT10	HE	29.3	IAML			19:55	30.38	13	0.33		LAWE	HZ	102.0	EP	22:17	16.32											
AT10	HN	29.3	IAML			19:55	30.69	4	0.27		LAWE	HE	102.0	ES	22:17	28.49											
AO05	HZ	31.7	IP	D		19:55	25.41			-0.18	DRUM	HN	105.0	EP	22:17	16.81											
AO05	HN	31.7	ES			19:55	29.99			-0.16	DRUM	HE	105.0	ES	22:17	29.12											
AO05	HN	31.7	IAML			19:55	30.26	17	0.07		ESK	HZ	113.0	EP	22:17	18.20											
AO05	HE	31.7	IAML			19:55	30.66	23	0.16		ESK	HN	113.0	IAML	22:17	34.22	3	0.21									
GDL	HZ	39.4	IP	D		19:55	26.69			0.00	ESK	HE	113.0	IAML	22:17	34.49	4	0.24									
GDL	HE	39.4	ES			19:55	31.75			-0.31	NEWG	HZ	133.0	EP	22:17	21.25											
GDL	HN	39.4	IAML			19:55	34.56	10	0.24		NEWG	HN	133.0	IAML	22:17	38.86	2	0.07									
GDL	HE	39.4	IAML			19:55	34.82	14	0.22		NEWG	HE	133.0	IAML	22:17	39.58	3	0.19									
AV06	HZ	41.0	IP	C		19:55	26.98			0.07	May 1 2021				Time: 05:30 05.5 UTC			Magnitude: 1.0 ML									
AV06	HN	41.0	IAML			19:55	33.20	6	0.30		KESW	HZ	16.7	IP	D	05:30</											

TABLE 2 : PHASE DATA

**TABLE 2 : PHASE DATA**

Grid Ref: 149.38 kmE 728.25 kmN Locality: MULL,ARGYLL & BUTE Velocity model: Lownet Xnear: 125.0 Xfar: 250.0	RMS: 0.30 secs	CLGH HN 92.3 ES 20:06 14.36 -0.32 CLGH HN 92.3 IAML 20:06 16.84 34 0.24 CLGH HE 92.3 IAML 20:06 16.86 21 0.17 0.43 PGB1 HZ 105.0 EP 20:06 05.94 PGB1 HN 105.0 IAML 20:06 20.63 23 0.18 PGB1 HE 105.0 IAML 20:06 20.88 23 0.14 0.16 EAB HZ 117.0 EP 20:06 07.57 EAB HE 117.0 IAML 20:06 25.22 15 0.48 EAB HN 117.0 IAML 20:06 26.07 13 0.30 -0.24 IDGL HZ 127.0 EP 20:06 08.66 0.18 IDGL HN 127.0 ES 20:06 24.06 IDGL HE 127.0 IAML 20:06 25.57 27 0.22 IDGL HE 127.0 IAML 20:06 25.59 17 0.20 INVG HZ 143.0 EP 20:06 11.39 0.24 INVG HN 143.0 ES 20:06 27.52 -0.25 INVG HE 143.0 IAML 20:06 31.13 8 0.12 INVG HE 143.0 IAML 20:06 31.51 9 0.28
May 14 2021 Time: 17:07 19.6 UTC Magnitude: 0.7 ML Lat: 56.978 Lon: -5.583 Depth: 6.3 km Grid Ref: 182.29 kmE 793.11 kmN RMS: 0.30 secs Locality: LOCH NEVIS,HIGHLAND Velocity model: Lownet Xnear: 100.0 Xfar: 200.0	STAT CO DIST PHAS WT P HrMn SECS AMPL PERI RES KPL HZ 40.5 EP 17:07 26.83 0.07 KPL HE 40.5 ES 17:07 31.52 -0.50 KPL HN 40.5 IAML 17:07 31.60 3 0.30 KPL HE 40.5 IAML 17:07 31.76 8 0.22 LAWE HZ 80.7 EP 17:07 33.23 0.21 LAWE HE 80.7 ES 17:07 42.58 -0.26 LAWE HN 80.7 IAML 17:07 47.28 6 0.16 LAWE HE 80.7 IAML 17:07 47.40 4 0.12 -0.09 INVG HZ 112.0 EP 17:07 37.87 -0.06 INVG HE 112.0 ES 17:07 51.34 -0.06 INVG HE 112.0 IAML 17:07 52.52 2 0.10 INVG HN 112.0 IAML 17:07 54.58 2 0.08 EAB HZ 117.0 EP 17:07 39.00 0.40 EAB HN 117.0 ES 17:07 52.48 -0.02 EAB HE 117.0 IAML 17:07 55.12 3 0.19 EAB HN 117.0 IAML 17:07 55.13 2 0.06 LINV HZ 132.0 EP 17:07 41.63 0.71 LINV HE 132.0 IAML 17:07 57.60 2 0.24 LINV HN 132.0 IAML 17:07 58.38 1 0.28	GAL1 HZ 148.0 EP 20:06 11.82 -0.01 GAL1 HN 148.0 IAML 20:06 30.32 13 0.26 GAL1 HE 148.0 IAML 20:06 30.34 16 0.22 0.23 KPL HZ 162.0 EP 20:06 14.04 KPL HN 162.0 IAML 20:06 35.03 2 0.40 KPL HE 162.0 IAML 20:06 36.02 5 0.22
May 15 2021 Time: 20:07 55.1 UTC Magnitude: 0.7 ML Lat: 55.920 Lon: -6.148 Depth: 7.5 km Grid Ref: 140.87 kmE 677.43 kmN RMS: 0.10 secs Locality: ISLAY,ARGYLL & BUTE Velocity model: Lownet Xnear: 100.0 Xfar: 200.0	STAT CO DIST PHAS WT P HrMn SECS AMPL PERI RES LAWE HZ 60.1 EP 20:08 05.33 0.03 LAWE HE 60.1 ES 20:08 12.67 -0.06 LAWE HN 60.1 IAML 20:08 13.55 5 0.28 LAWE HE 60.1 IAML 20:08 16.97 6 0.18 CLGH HZ 93.2 EP 20:08 10.44 -0.01 CLGH HN 93.2 IAML 20:08 23.56 4 0.24 CLGH HE 93.2 IAML 20:08 23.68 2 0.24 EAB HZ 117.0 EP 20:08 14.11 0.00 EAB HE 117.0 IAML 20:08 30.39 2 0.26 EAB HN 117.0 IAML 20:08 30.66 1 0.10 IDGL HZ 128.0 EP 20:08 15.74 -0.02 IDGL HN 128.0 IAML 20:08 32.30 2 0.20 IDGL HE 128.0 IAML 20:08 32.45 2 0.31 0.15 INVG HZ 142.0 EP 20:08 18.01 INVG HE 142.0 IAML 20:08 36.89 1 0.33 INVG HN 142.0 IAML 20:08 37.09 1 0.23 GAL1 HE 148.0 IAML 20:08 37.07 2 0.26 GAL1 HN 148.0 IAML 20:08 38.85 2 0.26	May 15 2021 Time: 20:27 01.3 UTC Magnitude: 1.4 ML Lat: 55.919 Lon: -6.160 Depth: 7.6 km Grid Ref: 140.12 kmE 677.36 kmN RMS: 0.30 secs Locality: ISLAY,ARGYLL & BUTE Velocity model: Lownet Xnear: 100.0 Xfar: 200.0
May 15 2021 Time: 15:02 47.1 UTC Magnitude: 2.5 ML Lat: 58.548 Lon: -4.723 Depth: 7.2 km Grid Ref: 241.55 kmE 965.39 kmN RMS: 0.30 secs Locality: DURNESS,HIGHLAND Velocity model: Lownet Xnear: 500.0 Xfar: 1000.0	STAT CO DIST PHAS WT P HrMn SECS AMPL PERI RES BIGH HZ 47.7 IP C 15:02 55.38 0.02 BIGH HN 47.7 ES 15:03 00.72 -0.68 BIGH HE 47.7 IAML 15:03 01.13 374 0.12 BIGH HN 47.7 IAML 15:03 01.51 548 0.34 LINV HZ 52.6 IP D 15:02 56.10 0.00 LINV HN 52.6 ES 15:03 02.01 -0.68 LINV HE 52.6 IAML 15:03 02.62 132 0.14 LINV HN 52.6 IAML 15:03 09.14 162 0.32 MCD HZ 138.0 EP 15:03 09.46 0.23 MCD HN 138.0 ES 15:03 25.83 0.42 MCD HN 138.0 IAML 15:03 26.69 113 0.20 MCD HE 138.0 IAML 15:03 28.24 65 0.10 KPL HZ 145.0 EP 15:03 10.50 0.27 KPL HN 145.0 IAML 15:03 30.05 67 0.22 KPL HE 145.0 IAML 15:03 30.21 152 0.44 DRUM HZ 226.0 EP 15:03 20.55 -0.13 DRUM HE 226.0 IAML 15:03 52.72 47 0.26 DRUM HN 226.0 IAML 15:03 53.60 33 0.38 INVG HZ 240.0 EP 15:03 22.81 0.37 INVG HE 240.0 IAML 15:03 55.19 44 0.62 INVG HN 240.0 IAML 15:03 56.77 27 0.38 LAWE HZ 258.0 EP 15:03 24.59 -0.12 LAWE HE 258.0 IAML 15:04 00.01 83 0.24 LAWE HN 258.0 IAML 15:04 07.53 27 0.48 EAB HZ 264.0 EP 15:03 25.77 0.31 EAB HE 264.0 IAML 15:04 01.40 56 0.50 EAB HN 264.0 IAML 15:04 04.70 43 0.42 LRW HZ 268.0 EP 15:03 26.08 0.10 LRW HE 268.0 IAML 15:04 08.33 26 0.32 LRW HN 268.0 IAML 15:04 09.32 20 0.38 ESK HZ 371.0 EP 15:03 38.80 -0.12 ESK HN 371.0 IAML 15:04 17.69 12 0.18 ESK HE 371.0 IAML 15:04 31.52 13 0.54	STAT CO DIST PHAS WT P HrMn SECS AMPL PERI RES LAWE HZ 60.7 IP C 20:27 11.41 -0.13 LAWE HE 60.7 ES 20:27 18.85 -0.20 LAWE HN 60.7 IAML 20:27 19.72 29 0.16 LAWE HE 60.7 IAML 20:27 23.25 34 0.23 CLGH HZ 93.1 EP 20:27 16.80 0.21 CLGH HN 93.1 ES 20:27 27.41 -0.37 CLGH HE 93.1 IAML 20:27 29.74 21 0.18 CLGH HE 93.1 IAML 20:27 29.80 16 0.21 PGB1 HZ 106.0 EP 20:27 19.01 0.49 PGB1 HN 106.0 IAML 20:27 33.55 16 0.18 PGB1 HE 106.0 IAML 20:27 33.79 14 0.14 0.20 EAB HZ 117.0 EP 20:27 20.51 EAB HE 117.0 IAML 20:27 36.58 8 0.32 EAB HN 117.0 IAML 20:27 38.97 9 0.34 IDGL HZ 127.0 EP 20:27 21.57 -0.12 IDGL HN 127.0 IAML 20:27 38.60 17 0.23 IDGL HE 127.0 IAML 20:27 38.60 11 0.22 -0.28 INVG HZ 143.0 EP 20:27 23.69 INVG HE 143.0 ES 20:27 40.07 -0.48 INVG HN 143.0 IAML 20:27 44.05 6 0.17 INVG HE 143.0 IAML 20:27 44.59 4 0.02 GAL1 HZ 149.0 EP 20:27 25.29 0.53 GAL1 HN 149.0 IAML 20:27 43.35 8 0.25 GAL1 HE 149.0 IAML 20:27 43.35 10 0.22 KPL HZ 161.0 EP 20:27 27.08 KPL HE 161.0 IAML 20:27 48.92 4 0.34 KPL HN 161.0 IAML 20:27 49.00 2 0.11 0.58
May 15 2021 Time: 20:05 48.4 UTC Magnitude: 1.6 ML Lat: 55.912 Lon: -6.149 Depth: 7.9 km Grid Ref: 140.76 kmE 676.54 kmN RMS: 0.20 secs Locality: ISLAY,ARGYLL & BUTE Velocity model: Lownet Xnear: 100.0 Xfar: 200.0	STAT CO DIST PHAS WT P HrMn SECS AMPL PERI RES LAWE HZ 60.6 IP C 20:05 58.51 -0.14 LAWE HE 60.6 ES 20:06 05.92 -0.22 LAWE HE 60.6 IAML 20:06 06.70 33 0.22 LAWE HN 60.6 IAML 20:06 06.74 38 0.16 CLGH HZ 92.3 EP 20:06 03.77 0.19	May 15 2021 Time: 20:38 44.7 UTC Magnitude: 0.8 ML Lat: 55.923 Lon: -6.174 Depth: 7.5 km Grid Ref: 139.27 kmE 677.86 kmN RMS: 0.20 secs Locality: ISLAY,ARGYLL & BUTE Velocity model: Lownet Xnear: 100.0 Xfar: 200.0
STAT CO DIST PHAS WT P HrMn SECS AMPL PERI RES LAWE HZ 61.1 EP 20:38 54.90 -0.09 LAWE HE 61.1 ES 20:39 02.45 -0.08 LAWE HN 61.1 IAML 20:39 03.24 6 0.26 LAWE HE 61.1 IAML 20:39 06.75 7 0.20 CLGH HZ 93.7 EP 20:39 00.38 0.32		

**TABLE 2 : PHASE DATA**

CLGH	HN	93.7	ES	20:39	11.00	-0.31	AP12	HE	303.0	IAML	15:18	18.27	20	0.62
CLGH	HN	93.7	IAML	20:39	13.13	5 0.24	AP12	HN	303.0	IAML	15:18	18.68	12	0.19
CLGH	HE	93.7	IAML	20:39	13.27	4 0.18	DSB	HZ	304.0	EP	15:17	33.53		0.51
EAB	HZ	118.0	EP	20:39	04.04	0.18	DSB	HE	304.0	IAML	15:18	11.47	20	0.54
EAB	HE	118.0	IAML	20:39	20.08	2 0.28	DSB	HN	304.0	IAML	15:18	12.89	21	0.40
EAB	HN	118.0	IAML	20:39	21.10	2 0.17	AU07	HZ	305.0	EP	15:17	33.40		0.17
IDGL	HZ	127.0	EP	20:39	05.15	-0.03	AU07	HN	305.0	IAML	15:18	16.43	177	0.31
IDGL	HE	127.0	IAML	20:39	22.09	2 0.20	AU07	HE	305.0	IAML	15:18	17.79	155	0.35
IDGL	HN	127.0	IAML	20:39	22.19	4 0.25	AQ12	HZ	315.0	EP	15:17	34.02		-0.47
GALL	HN	150.0	ES	20:39	25.98	0.22	AQ12	HE	315.0	IAML	15:18	16.61	22	0.28
GALL	HN	150.0	IAML	20:39	26.84	2 0.25	AQ12	HN	315.0	IAML	15:18	25.87	16	0.52
GALL	HE	150.0	IAML	20:39	27.31	2 0.29	IOMK	HZ	318.0	EP	15:17	34.76		-0.10
							IOMK	HE	318.0	IAML	15:18	18.85	8	0.50
May 16 2021							IOMK	HN	318.0	IAML	15:18	22.07	8	0.30
Lat: 51.604							AV06	HZ	325.0	EP	15:17	35.68		0.02
Grid Ref: 344.33 kmE							AV06	HE	325.0	IAML	15:18	25.05	51	0.37
Locality: CALDICOT,MONMOUTHSHIRE							AV06	HN	325.0	IAML	15:18	25.95	69	0.96
Velocity model: Mid Wales Xnear: 100.0							AT10	HZ	327.0	EP	15:17	35.84		-0.07
Comment: FELT CALDICOT...							AT10	HE	327.0	IAML	15:18	25.63	90	0.30
STAT CO DIST PHAS WT P HrMn SECS AMPL PERI RES							AT10	HN	327.0	IAML	15:18	28.81	60	0.36
OLDB HZ 18.7 IP C 15:16 52.93 -0.04							KESW	HZ	333.0	EP	15:17	36.07		-0.60
OLDB HN 18.7 ES 15:16 55.57 0.02							KESW	HE	333.0	IAML	15:18	26.52	41	0.74
OLDB HN 18.7 IAML 15:16 56.01 10725 0.40							KESW	HN	333.0	IAML	15:18	26.53	23	0.40
OLDB HE 18.7 IAML 15:16 56.38 6790 0.30							GDLE	HZ	341.0	EP	15:17	37.58		-0.08
MONM HZ 26.1 IP D 15:16 54.25 0.09							GDLE	HE	341.0	IAML	15:18	29.54	88	0.40
MONM HE 26.1 ES 15:16 57.87 0.28							GDLE	HN	341.0	IAML	15:18	32.94	94	0.34
MONM HE 26.1 IAML 15:16 58.08 1252 0.38							May 16 2021							
MONM HN 26.1 IAML 15:16 58.17 723 0.16							Time: 15:34 12.7 UTC							Magnitude: 0.6 ML
MCH1 HZ 45.7 IP 15:16 57.28 -0.07							Lat: 51.602							Depth: 6.9 km
MCH1 HN 45.7 ES 15:17 02.94 -0.14							Grid Ref: 344.18 kmE							RMS: 0.00 secs
MCH1 HN 45.7 IAML 15:17 03.45 120 0.14							Locality: CALDICOT,MONMOUTHSHIRE							
MCH1 HE 45.7 IAML 15:17 03.53 250 0.28							Velocity model: Lownet Xnear: 100.0 Xfar: 250.0							
STRD HZ 48.3 IP C 15:16 57.69 -0.08							STAT CO DIST PHAS WT P HrMn SECS AMPL PERI RES							
STRD HN 48.3 ES 15:17 03.37 -0.43							OLDB HZ 18.9 IP C 15:34 16.43 -0.02							
STRD HN 48.3 IAML 15:17 04.00 788 0.34							OLDB HN 18.9 ES 15:34 19.14 -0.03							
STRD HE 48.3 IAML 15:17 04.27 1084 0.24							OLDB HN 18.9 IAML 15:34 19.78 62 0.18							
SWN1 HZ 70.3 IP C 15:17 01.77 0.38							OLDB HE 18.9 IAML 15:34 20.01 46 0.31							
HLM1 HZ 102.0 EP 15:17 06.03 -0.39							MONM HZ 26.4 EP 15:34 17.76 0.02							
HLM1 HE 102.0 IAML 15:17 21.96 144 0.28							MONM HE 26.4 ES 15:34 21.43 0.03							
HLM1 HN 102.0 IAML 15:17 22.03 114 0.24							MONM HE 26.4 IAML 15:34 21.58 4 0.11							
WOL BZ 115.0 EP 15:17 08.66 0.35							MONM HN 26.4 IAML 15:34 21.63 7 0.16							
WOL BE 115.0 IAML 15:17 23.51 566 0.35							MCH1 HZ 46.0 EP 15:34 20.83 -0.03							
WOL BN 115.0 IAML 15:17 23.76 798 0.30							MCH1 HE 46.0 ES 15:34 26.76 -0.03							
HTL HZ 135.0 EP 15:17 11.83 0.39							HTL HZ 46.0 IAML 15:34 26.90 3 0.18							
HTL HN 135.0 IAML 15:17 29.33 144 0.24							HTL HN 46.0 IAML 15:34 26.92 2 0.10							
HTL HE 135.0 IAML 15:17 33.59 162 0.44							STRD HZ 48.5 EP 15:34 21.31 0.06							
RSBS HZ 139.0 EP 15:17 11.71 -0.35							STRD HN 48.5 ES 15:34 27.46 0.00							
RSBS HE 139.0 IAML 15:17 30.46 255 0.32							STRD HN 48.5 IAML 15:34 27.72 9 0.14							
RSBS BN 139.0 IAML 15:17 30.78 186 0.20							STRD HE 48.5 IAML 15:34 27.84 9 0.15							
FOEL HZ 146.0 EP 15:17 13.01 0.02							May 16 2021							
FOEL HN 146.0 ES 15:17 30.43 0.45							Time: 20:18 42.5 UTC							Magnitude: 0.7 ML
FOEL HE 146.0 IAML 15:17 33.12 164 0.56							Lat: 56.759							Depth: 11.7 km
FOEL HE 146.0 IAML 15:17 33.64 130 0.36							Grid Ref: 233.50 kmE							RMS: 0.50 secs
LLW BZ 150.0 EP 15:17 13.74 0.03							Locality: LOCHTREIGHEAD,HIGHLAND							
LLW BN 150.0 ES 15:17 31.30 0.09							Velocity model: Lownet Xnear: 100.0 Xfar: 200.0							
LLW BE 150.0 IAML 15:17 33.27 54 0.35							STAT CO DIST PHAS WT P HrMn SECS AMPL PERI RES							
LLW BN 150.0 IAML 15:17 34.40 65 0.35							INVG HZ 55.7 EP 20:18 52.01 -0.01							
DYA HZ 152.0 EP 15:17 13.48 -0.50							INVG HE 55.7 ES 20:18 58.54 -0.47							
DYA HE 152.0 IAML 15:17 34.23 298 0.26							INVG HN 55.7 IAML 20:18 59.06 3 0.13							
DYA HE 152.0 IAML 15:17 35.09 244 0.34							INVG HE 55.7 IAML 20:19 03.70 4 0.05							
CWF HZ 163.0 EP 15:17 15.24 -0.13							EAB HZ 67.8 EP 20:18 54.83 0.95							
CWF HN 163.0 ES 15:17 33.86 -0.22							EAB HE 67.8 ES 20:19 02.23 0.00							
CWF HE 163.0 IAML 15:17 34.67 424 0.50							EAB HE 67.8 IAML 20:19 02.32 6 0.08							
CWF BN 163.0 IAML 15:17 34.91 336 0.42							EAB HE 67.8 IAML 20:19 02.49 6 0.10							
STNC HZ 170.0 EP 15:17 16.98 0.61							LAWE HZ 69.3 EP 20:18 53.62 -0.47							
STNC HE 170.0 IAML 15:17 38.30 558 0.34							LAWE HN 69.3 IAML 20:19 05.51 7 0.13							
STNC BN 170.0 IAML 15:17 42.80 392 0.46							LAWE HE 69.3 IAML 20:19 05.52 7 0.13							
SBD BZ 175.0 EP 15:17 16.54 -0.44							KPL HZ 85.8 EP 20:18 56.65 0.04							
SBD BE 175.0 IAML 15:17 38.84 207 0.65							KPL HE 85.8 IAML 20:19 07.00 2 0.11							
SBD BN 175.0 IAML 15:17 41.24 128 0.40							KPL HN 85.8 IAML 20:19 10.28 2 0.05							
LBWR HZ 213.0 EP 15:17 22.18 0.47							LINV HZ 157.0 EP 20:19 06.77 -0.24							
LBWR HN 213.0 IAML 15:17 48.91 382 0.40							LINV HE 157.0 IAML 20:19 26.66 2 0.18							
LBWR HE 213.0 IAML 15:17 53.21 318 0.56							LINV HN 157.0 IAML 20:19 28.39 1 0.19							
WLF1 BN 217.0 IAML 15:17 49.93 306 0.30							May 17 2021							
WLF1 HE 217.0 IAML 15:17 49.94 288 0.32							Time: 15:37 26.4 UTC							
AS02 HZ 224.0 EP 15:17 23.13 0.06							Lat: 55.921							
AS02 HE 224.0 IAML 15:17 51.98 218 0.34							Depth: 7.5 km							
AS02 BN 224.0 IAML 15:17 52.95 140 0.62							Grid Ref: 139.32 kmE							
WPS HZ 231.0 EP 15:17 24.55 0.69							Locality: ISLAY,ARGYLL & BUTE							
WPS HN 231.0 IAML 15:17 53.75 62 0.46							Velocity model: Lownet Xnear: 100.0 Xfar: 200.0							
WPS HE 231.0 IAML 15:17 53.92 82 0.40							STAT CO DIST PHAS WT P HrMn SECS AMPL PERI RES							
CCA1 HZ 232.0 EP 15:17 23.25 -0.84							LAWE HZ 61.2 IP C 15:37 36.56 -0.18							
CCA1 HE 232.0 IAML 15:17 59.05 44 0.38							LAWE HE 61.2 ES 15:37 44.01 -0.29							
CCA1 BN 232.0 IAML 15:17 01.84 53 0.42							LAWE HN 61.2 IAML 15:37 44.86 66 0.16							
AQ04 HZ 242.0 EP 15:17 25.62 0.34							LAWE HE 61.2 TAML 15:37 48.46 78 0.17							
AQ04 HE 242.0 IAML 15:17 59.28 98 0.24							CLGH HZ 93.4 EP 15:37 41.89 0.14							
AQ04 HE 242.0 IAML 15:17 04.44 112 0.46							CLGH HE 93.4 IAML 15:37 54.88 38 0.17							
WACR HZ 266.0 EP 15:17 28.70 0.43							CLGH HE 93.4 IAML 15:37 54.89 49 0.26							
WACR HE 266.0 IAML 15:18 04.27 80 0.24							PGB1 HZ 106.0 EP 15:37 44.13 0.36							
WACR HN 266.0 IAML 15:18 04.77 73 0.16														

TABLE 2 : PHASE DATA

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CLGH	HE	44.1	IAML	12:24	28.00	4	0.14		GAL1	HN	103.0	IAML	17:25	30.74	2	0.15						
CLGH	HN	44.1	IAML	12:24	31.23	5	0.10		GAL1	HE	103.0	IAML	17:25	30.75	3	0.30						
LAWE	HZ	94.4	EP	12:24	27.75		-0.13		NEWG	HZ	104.0	EP	17:25	16.95		0.05						
LAWE	HN	94.4	ES	12:24	38.77		-0.43		NEWG	HN	104.0	ES	17:25	28.68		-0.56						
LAWE	HN	94.4	IAML	12:24	41.02	3	0.14		NEWG	HN	104.0	IAML	17:25	28.82	2	0.18						
LAWE	HE	94.4	IAML	12:24	41.10	6	0.14		NEWG	HE	104.0	IAML	17:25	31.05	1	0.08						
PGB1	HZ	98.0	EP	12:24	28.79		0.34		INVG	HZ	130.0	EP	17:25	20.56		-0.05						
PGB1	HE	98.0	ES	12:24	40.10		-0.08		INVG	HN	130.0	IAML	17:25	38.01	1	0.10						
PGB1	HN	98.0	IAML	12:24	42.67	20	0.20		INVG	HE	130.0	IAML	17:25	38.46	1	0.15						
PGB1	HE	98.0	IAML	12:24	43.10	17	0.29															
GALL	HZ	101.0	EP	12:24	29.42		0.47															
GALL	HN	101.0	IAML	12:24	43.78	8	0.22															
GALL	HE	101.0	IAML	12:24	44.27	4	0.13															
IDGL	HZ	111.0	EP	12:24	30.98		0.59															
IDGL	HN	111.0	ES	12:24	43.53		0.00															
IDGL	HN	111.0	IAML	12:24	44.81	2	0.14															
IDGL	HE	111.0	IAML	12:24	45.05	4	0.23															
NEWG	HZ	114.0	EP	12:24	31.02		0.16															
NEWG	HN	114.0	ES	12:24	44.19		-0.15															
NEWG	HN	114.0	IAML	12:24	47.37	9	0.16															
NEWG	HE	114.0	IAML	12:24	47.37	7	0.11															
June 1 2021				Time: 13:19 13.8 UTC				Magnitude: 1.0 ML				Time: 14:58 51.7 UTC				Magnitude: 2.1 ML						
Lat: 58.293				Lon: -4.576				Depth: 7.8 km				Lat: 53.122				Depth: 11.8 km						
Grid Ref: 249.02 kmE 936.67 kmN				RMS: 0.20 secs				Grid Ref: 529.94 kmE 360.11 kmN				Grid Ref: 529.94 kmE 360.11 kmN				RMS: 0.20 secs						
Locality: ALTNAHARRA,HIGHLAND				Velocity model: Lownet Xnear: 75.0 Xfar: 150.0				Locality: MAREHAM-LE-FEN,LINCS				Locality: MAREHAM-LE-FEN,LINCS				Locality: MAREHAM-LE-FEN,LINCS						
Comment: 8KM WNW ALTNAHARRA				Velocity model: Lownet Xnear: 75.0 Xfar: 150.0				Velocity model: Lownet Xnear: 100.0 Xfar: 200.0				Velocity model: Lownet Xnear: 100.0 Xfar: 200.0				Velocity model: Lownet Xnear: 100.0 Xfar: 200.0						
STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES		STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES
LINV	HZ	40.0	EP			13:19	20.91		0.08			LMK	HZ	41.3	EP	14:58	59.14					0.10
LINV	HN	40.0	ES			13:19	25.83		-0.14			LMK	HN	41.3	ES	14:59	04.42					0.03
LINV	HN	40.0	IAML			13:19	26.51	8	0.13			LMK	HE	41.3	IAML	14:59	05.20	218	0.25			
LINV	HE	40.0	IAML			13:19	26.76	5	0.13			LMK	HN	41.3	IAML	14:59	05.45	585	0.26			
BIGH	HZ	44.9	EP			13:19	21.80		0.21			WACR	HZ	63.9	EP	14:59	02.50					0.00
BIGH	HN	44.9	ES			13:19	27.11		-0.18			WACR	HE	63.9	ES	14:59	10.34					-0.04
BIGH	HN	44.9	IAML			13:19	27.69	6	0.25			WACR	HE	63.9	IAML	14:59	11.57	68	0.22			
BIGH	HE	44.9	IAML			13:19	28.84	7	0.20			WACR	HN	63.9	IAML	14:59	12.01	58	0.14			
MCD	HZ	111.0	EP			13:19	31.87		-0.06			ELMS	HZ	135.0	EP	14:59	12.83					-0.22
MCD	HN	111.0	ES			13:19	45.16		-0.02			ELMS	HN	135.0	ES	14:59	28.95					0.33
MCD	HN	111.0	IAML			13:19	45.81	13	0.20			ELMS	HN	135.0	IAML	14:59	30.66	57	0.33			
MCD	HE	111.0	IAML			13:19	45.84	11	0.18			ELMS	HE	135.0	IAML	14:59	33.57	82	0.34			
KPL	HZ	124.0	EP			13:19	34.34		0.52			GDLE	HZ	153.0	EP	14:59	15.22					-0.49
KPL	HE	124.0	IAML			13:19	50.31	6	0.16			GDLE	HN	153.0	ES	14:59	33.22					-0.01
KPL	HN	124.0	IAML			13:19	50.94	7	0.16			GDLE	HE	153.0	IAML	14:59	35.70	39	0.24			
June 1 2021				Time: 14:31 03.0 UTC				Magnitude: 1.3 ML				Time: 21:00 28.7 UTC				Magnitude: 0.4 ML						
Lat: 56.858				Lon: -6.066				Depth: 7.3 km				Lat: 55.023				Lat: -4.127						
Grid Ref: 152.17 kmE 781.41 kmN				RMS: 0.30 secs				Grid Ref: 264.04 kmE 571.90 kmN				Grid Ref: 264.04 kmE 571.90 kmN				Grid Ref: 264.04 kmE 571.90 kmN						
Locality: EIGG,HIGHLAND				Velocity model: Lownet Xnear: 100.0 Xfar: 200.0				Locality: Borders D & G				Locality: Borders D & G				Locality: Borders D & G						
Comment: OFFSHORE EIGG				Velocity model: Borders D & G				Velocity model: Borders D & G				Velocity model: Borders D & G				Velocity model: Borders D & G						
STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES		STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES
KPL	HZ	59.2	IP			14:31	13.05		0.05			NEWG	HZ	12.4	EP	21:00	31.50					0.10
KPL	HE	59.2	ES			14:31	20.16		-0.15			NEWG	HN	12.4	ES	21:00	33.19					-0.11
KPL	HE	59.2	IAML			14:31	20.88	14	0.15			GAL1	HZ	41.3	IAML	21:00	33.31	16	0.06			
KPL	HN	59.2	IAML			14:31	20.90	11	0.14			GAL1	HE	41.3	EP	21:00	36.07					-0.02
LAWE	HZ	78.2	IP	C	14:31	16.10		0.13				GA1	HN	41.3	ES	21:00	40.94					-0.38
LAWE	HN	78.2	ES		14:31	25.04		-0.41				GA1	HE	41.3	IAML	21:00	41.29	2	0.11			
LAWE	HN	78.2	IAML		14:31	25.48	16	0.20				GA1	HE	41.3	EP	21:00	41.51	2	0.17			
LAWE	HE	78.2	IAML		14:31	25.51	34	0.21				ESK	HZ	67.2	EP	21:00	40.10					-0.23
EAB	HZ	130.0	EP			14:31	24.33		0.40			ESK	HN	67.2	ES	21:00	48.49					-0.08
EAB	HN	130.0	ES			14:31	39.61		0.38			ESK	HE	67.2	IAML	21:00	49.36	1	0.27			
EAB	HE	130.0	IAML			14:31	42.31	6	0.16			ESK	HN	67.2	IAML	21:00	49.45	2	0.21			
EAB	HN	130.0	IAML			14:31	43.29	7	0.20			EKA	BZ	70.7	EP	21:00	40.45					-0.46
INVG	HZ	133.0	EP			14:31	24.57		0.19			EKA	HN	81.5	EP	21:00	43.03					0.36
INVG	HN	133.0	ES			14:31	39.94		-0.06			EKA	HE	81.5	EP	21:00	43.03					0.17
INVG	HN	133.0	IAML			14:31	42.67	6	0.15			EKA	HN	89.5	EP	21:00	55.45	1	0.05			
INVG	HE	133.0	IAML			14:31	42.80	6	0.06			EKA	HE	89.5	IAML	21:00	55.87	1	0.12			
LINV	HZ	153.0	EP			14:31	26.86		-0.29			PGB1	HZ	90.7	EP	21:00	44.67					0.53
LINV	HN	153.0	IAML			14:31	47.45	3	0.33			PGB1	HN	90.7	ES	21:00	55.17					0.09
LINV	HE	153.0	IAML			14:31	47.46	4	0.09			PGB1	HE	90.7	IAML	21:00	55.55	3	0.19			
June 1 2021				Time: 17:24 60.0 UTC				Magnitude: 0.6 ML				Time: 00:48 58.9 UTC				Magnitude: 0.7 ML						

**TABLE 2 : PHASE DATA**

ESK	HZ	123.0	EP	00:49	19.42	0.64	LAWE	HE	44.6	ES	01:28	52.25	-0.32
ESK	HN	123.0	ES	00:49	33.21	-0.09	LAWE	HN	44.6	IAML	01:28	53.04	2 0.07
ESK	HE	123.0	IAML	00:49	34.77	2 0.22	LAWE	HE	44.6	IAML	01:28	53.15	2 0.11
ESK	HN	123.0	IAML	00:49	34.94	2 0.25	PGB1	HZ	55.5	EP	01:28	48.42	0.07
							PGB1	HN	55.5	ES	01:28	55.25	-0.16
June 13 2021				Time: 04:08	16.5 UTC	Magnitude: 0.4 ML	PGB1	HN	55.5	IAML	01:28	55.44	4 0.20
Lat: 56.920				Lon: -4.868		Depth: 7.7 km	PGB1	HE	55.5	IAML	01:28	57.57	3 0.34
Grid Ref: 225.45 kmE				784.61 kmN		RMS: 0.10 secs	EAB	HZ	73.8	EP	01:28	51.33	0.29
Locality: ROYBRIDGE, HIGHLAND							EAB	HN	73.8	ES	01:28	59.76	-0.29
Velocity model: Lownet Xnear: 100.0 Xfar: 200.0							EAB	HN	73.8	IAML	01:29	03.15	2 0.23
STAT CO DIST PHAS WT P HrMn SECS AMPL PERI RES							EAB	HE	73.8	IAML	01:29	03.39	2 0.13
KPL HZ 66.6 EP 04:08 27.80 0.13							CLGH	HZ	98.5	EP	01:28	55.30	0.75
KPL HN 66.6 ES 04:08 35.69 -0.13							CLGH	HN	98.5	ES	01:29	05.63	-0.49
KPL HE 66.6 IAML 04:08 36.82 1 0.14							CLGH	HE	98.5	IAML	01:29	07.63	4 0.36
KPL HN 66.6 IAML 04:08 39.12 1 0.10							CLGH	HN	98.5	IAML	01:29	07.66	2 0.15
LAWE HZ 80.4 EP 04:08 29.78 -0.06							NEWG	HZ	109.0	EP	01:28	56.30	0.20
LAWE HN 80.4 ES 04:08 39.63 0.06							GAL1	HE	118.0	ES	01:29	10.22	-0.71
LAWE HE 80.4 IAML 04:08 42.42 3 0.14							ESK	HN	149.0	ES	01:29	19.85	1.23
LAWE HE 80.4 IAML 04:08 42.60 4 0.12							ESK	HE	149.0	IAML	01:29	20.96	1 0.31
EAB HZ 87.7 EP 04:08 31.14 0.14							ESK	HN	149.0	IAML	01:29	21.02	1 0.19
EAB HE 87.7 ES 04:08 41.44 -0.15													
EAB HE 87.7 IAML 04:08 44.54 1 0.20													
EAB HN 87.7 IAML 04:08 45.30 2 0.09													
June 16 2021				Time: 04:53	49.3 UTC	Magnitude: 1.0 ML	June 19 2021				Time: 08:36	35.2 UTC	Magnitude: 0.6 ML
Lat: 58.487				Lon: -4.550		Depth: 7.5 km	Lat: 53.056				Lon: -4.421		Depth: 7.5 km
Grid Ref: 251.36 kmE				958.20 kmN		RMS: 0.40 secs	Grid Ref: 237.77 kmE				353.75 kmN		RMS: 0.30 secs
Locality: TONGUE, HIGHLAND							Locality: CAERNARFON BAY						
Velocity model: Lownet Xnear: 100.0 Xfar: 200.0							Velocity model: Lownet Xnear: 100.0 Xfar: 200.0						
STAT CO DIST PHAS WT P HrMn SECS AMPL PERI RES							STAT CO DIST PHAS WT P HrMn SECS AMPL PERI RES						
BIGH HZ 37.3 EP 04:53 56.21 0.24							WLF1 HZ 26.0 EP 08:36 40.12 0.04						
BIGH HN 37.3 ES 04:54 00.40 -0.42							WLF1 HE 26.0 ES 08:36 43.59 -0.05						
BIGH HN 37.3 IAML 04:54 00.63 37 0.10							WLF1 HE 26.0 IAML 08:36 43.94 24 0.10						
BIGH HE 37.3 IAML 04:54 00.66 21 0.16							WLF1 HN 26.0 IAML 08:36 44.20 13 0.07						
LINV HZ 53.6 IP D 04:53 58.64 0.15							WPS HZ 38.6 EP 08:36 42.04 0.00						
LINV HN 53.6 ES 04:54 04.76 -0.41							WPS HE 38.6 ES 08:36 46.67 -0.36						
LINV HE 53.6 IAML 04:54 04.91 7 0.10							WPS HE 38.6 IAML 08:36 48.02 4 0.23						
LINV HN 53.6 IAML 04:54 05.01 8 0.14							WPS HN 38.6 IAML 08:36 48.14 3 0.20						
MCD HZ 126.0 EP 04:54 10.09 0.29							LLW BZ 55.8 EP 08:36 44.98 0.26						
MCD HN 126.0 ES 04:54 24.88 0.14							LLW BN 55.8 ES 08:36 51.60 -0.07						
MCD HE 126.0 IAML 04:54 26.14 4 0.21							LLW BE 55.8 IAML 08:36 52.12 4 0.15						
MCD HE 126.0 IAML 04:54 27.49 3 0.28							LLW BN 55.8 IAML 08:36 52.42 4 0.16						
KPL HZ 144.0 EP 04:54 12.84 0.66							FOEL HE 84.1 ES 08:36 59.24 -0.12						
KPL HN 144.0 IAML 04:54 32.90 2 0.16							FOEL HE 84.1 IAML 08:36 59.48 3 0.27						
KPL HE 144.0 IAML 04:54 33.07 2 0.17							FOEL HN 84.1 IAML 08:37 00.00 3 0.10						
June 17 2021				Time: 06:55	52.9 UTC	Magnitude: 1.8 ML	RSBS HZ 125.0 EP 08:36 55.13						
Lat: 49.900				Lon: -2.855		Depth: 5.5 km	RSBS HN 125.0 IAML 08:37 11.98						
Grid Ref: 338.60 kmE				0.40 kmN		RMS: 0.30 secs	RSBS HE 125.0 IAML 08:37 12.08						
Locality: ENGLISH CHANNEL							IOMK HZ 134.0 EP 08:36 57.57 0.80						
Velocity model: Lownet Xnear: 100.0 Xfar: 200.0							IOMK HN 134.0 ES 08:37 12.82 0.29						
Comment: 50KM NW GUERNSEY							IOMK HE 134.0 IAML 08:37 13.24 1 0.21						
STAT CO DIST PHAS WT P HrMn SECS AMPL PERI RES							IOMK HN 134.0 IAML 08:37 13.45 1 0.33						
JSA HZ 93.3 EP 06:56 08.55 0.21													
JSA HN 93.3 ES 06:56 19.35 -0.28													
JSA HE 93.3 IAML 06:56 21.03 17 0.22													
JSA HE 93.3 IAML 06:56 22.08 24 0.18													
DYA HZ 97.2 EP 06:56 08.90 -0.09													
DYA HN 97.2 IAML 06:56 20.39 -0.37													
DYA HE 97.2 IAML 06:56 22.65 20 0.15													
DYA HE 97.2 IAML 06:56 22.89 26 0.16													
JDG EZ 97.8 EP 06:56 09.14 0.11													
JDG EE 97.8 IAML 06:56 22.81 29 0.28													
JDG EN 97.8 IAML 06:56 23.09 36 0.40													
JDC EZ 97.8 EP 06:56 09.15 0.12													
JDC EE 97.8 IAML 06:56 22.97 81 0.18													
JDC EN 97.8 IAML 06:56 23.17 244 0.14													
SBD BZ 150.0 EP 06:56 17.51 0.61													
SBD BE 150.0 ES 06:56 35.07 0.63													
SBD BN 150.0 IAML 06:56 35.77 22 0.20													
SBD BE 150.0 IAML 06:56 37.84 10 0.16													
HTL HZ 168.0 EP 06:56 19.58 0.15													
HTL HE 168.0 IAML 06:56 43.93 9 0.22													
HTL HE 168.0 IAML 06:56 44.29 14 0.35													
CCA1 HN 173.0 ES 06:56 40.16 0.21													
CCA1 HN 173.0 IAML 06:56 42.98 14 0.16													
CCA1 HE 173.0 IAML 06:56 43.10 9 0.06													
ROSF BZ 177.0 EP 06:56 19.81 -0.74													
ROSF BE 177.0 IAML 06:56 42.73 14 0.24													
ROSF BN 177.0 IAML 06:56 43.87 7 0.16													
MONM HN 216.0 IAML 06:56 53.23 9 0.34													
MONM HE 216.0 IAML 06:56 54.50 8 0.30													
MCH1 HE 234.0 IAML 06:56 58.31 9 0.36													
MCH1 HN 234.0 IAML 06:56 59.03 8 0.15													
HLM1 HE 291.0 IAML 06:57 14.97 3 0.60													
HLM1 HE 291.0 IAML 06:57 16.82 2 0.18													
June 18 2021				Time: 01:28	38.7 UTC	Magnitude: 0.5 ML	June 20 2021				Time: 08:14	10.4 UTC	Magnitude: 1.0 ML
Lat: 55.859				Lon: -5.365		Depth: 17.5 km	Lat: 54.109				Lon: -1.800		Depth: 6.3 km
Grid Ref: 189.43 kmE				667.98 kmN		RMS: 0.50 secs	Grid Ref: 413.07 kmE				468.16 kmN		RMS: 0.30 secs
Locality: TARSET, ARGYLL & BUTE							Locality: HEATHFIELD, N YORKSHIRE						
Velocity model: Lownet Xnear: 100.0 Xfar: 200.0							Velocity model: Lownet Xnear: 100.0 Xfar: 200.0						
Comment: FELT CRAWFORD							Comment: GGERF CZ 43.7 EP 00:02 14.02 0.03						
STAT CO DIST PHAS WT P HrMn SECS AMPL PERI RES							GGERF CN 43.7 ES 00:02 19.61 0.05						
LAWE HZ 44.6 IP D 01:28 46.86 0.14							GGERF CE 43.7 IAML 00:02 19.97 22 0.23						
							GGERF CN 43.7 IAML 00:02 20.02 24 0.22						
June 23 2021				Time: 00:02	06.4 UTC	Magnitude: 1.7 ML							
Lat: 55.523				Lon: -3.816		Depth: 7.5 km							
Grid Ref: 285.37 kmE				626.97 kmN		RMS: 0.30 secs							
Locality: DOUGLAS, S LANARKSHIRE							Locality: DOUGLAS, S LANARKSHIRE						
Velocity model: Lownet Xnear: 100.0 Xfar: 200.0							Velocity model: Lownet Xnear: 100.0 Xfar: 200.0						
Comment: GGERF CZ 43.7 EP 00:02 14.02 0.03							Comment: GGERF CZ 43.7 EP 00:02 14.02 0.03						
STAT CO DIST PHAS WT P HrMn SECS AMPL PERI RES							GGERF CN 43.7 ES 00:02 19.61 0.05						
							GGERF CE 43.7 IAML 00:02 19.97 22 0.23						
							GGERF CN 43.7 IAML 00:02 20.02 24 0.22						

**TABLE 2 : PHASE DATA**

ESK	HZ	45.0	IP	D	00:02	14.27	0.03	GEL01	CE	160.0	IAML	20:04	12.25	33	0.39					
ESK	HN	45.0	ES		00:02	19.49	-0.49	GEL01	CN	160.0	IAML	20:04	12.66	12	0.10					
ESK	HN	45.0	IAML		00:02	19.73	72 0.13	GEL09	CZ	161.0	EP	20:03	54.63		0.21					
ESK	HE	45.0	IAML		00:02	20.60	42 0.09	GEL09	CE	161.0	IAML	20:04	13.52	33	0.29					
NEWG	HZ	52.2	IP	C	00:02	15.19	-0.15	GEL09	CN	161.0	IAML	20:04	14.88	27	0.12					
NEWG	HE	52.2	ES		00:02	21.26	-0.62	GEL02	CZ	162.0	EP	20:03	54.34		-0.16					
NEWG	HN	52.2	IAML		00:02	22.02	51 0.12	GEL02	CE	162.0	IAML	20:04	13.87	31	0.10					
NEWG	HE	52.2	IAML		00:02	22.06	58 0.09	GEL02	CN	162.0	IAML	20:04	15.11	42	0.14					
PGB1	HZ	52.9	IP	D	00:02	15.59	0.14	GEL04	CN	163.0	IAML	20:04	14.37	36	0.20					
PGB1	HE	52.9	ES		00:02	22.03	-0.05	GEL07	CZ	163.0	EP	20:03	54.76		0.13					
PGB1	HE	52.9	IAML		00:02	22.38	94 0.26	GEL04	CZ	163.0	EP	20:03	54.51		-0.15					
PGB1	HN	52.9	IAML		00:02	22.71	84 0.14	GEL04	CE	163.0	ES	20:04	13.44		0.15					
EDI	HZ	59.6	EP		00:02	16.28	-0.20	GEL04	CE	163.0	IAML	20:04	14.13	55	0.23					
EDI	HE	59.6	ES		00:02	23.70	-0.15	GEL03	CZ	164.0	EP	20:03	54.56		-0.26					
EDI	HE	59.6	IAML		00:02	24.00	48 0.17	GEL03	CE	164.0	IAML	20:04	13.97	43	0.15					
EDI	HN	59.6	IAML		00:02	24.54	50 0.20	GEL03	CN	164.0	IAML	20:04	14.02	44	0.11					
EAB	HZ	81.0	IP	D	00:02	19.85	0.02	DYA	HZ	252.0	EP	20:04	05.91		0.11					
EAB	HE	81.0	IAML		00:02	33.33	18 0.18	DYA	HN	252.0	IAML	20:04	34.64	5	0.20					
EAB	HN	81.0	IAML		00:02	33.49	19 0.21	DYA	HE	252.0	IAML	20:04	39.31	4	0.28					
GALL	HZ	92.7	EP		00:02	21.76	0.16	June 29 2021 Time: 06:24 22.4 UTC Magnitude: 0.8 ML												
GALL	HN	92.7	IAML		00:02	36.15	83 0.23	Lat: 52.272 Lon: -3.376 Grid Ref: 306.12 kmE 264.70 kmN Locality: LLANDRINDOD WELLS, POWYS Velocity model: Mid Wales Xnear: 80.0 Xfar: 200.0												
GALL	HE	92.7	IAML		00:02	36.17	97 0.19	STAT CO DIST PHAS WT P HrMn SECS AMPL PERI RES												
KESW	HZ	113.0	EP		00:02	25.80	0.94	MCH1	HZ	40.0	EP	06:24	29.52		0.03					
KESW	HE	113.0	IAML		00:02	41.09	16 0.26	MCH1	HN	40.0	ES	06:24	34.49		-0.11					
KESW	HN	113.0	IAML		00:02	41.65	14 0.25	MCH1	HE	40.0	IAML	06:24	34.67	9	0.26					
LAWE	HZ	129.0	EP		00:02	27.34	0.22	MCH1	HN	40.0	IAML	06:24	34.69	12	0.20					
LAWE	HE	129.0	ES		00:02	42.22	-0.04	HLM1	HZ	43.5	EP	06:24	30.01		-0.06					
LAWE	HE	129.0	IAML		00:02	44.33	35 0.31	HLM1	HN	43.5	IAML	06:24	30.18	5	0.24					
LAWE	HN	129.0	IAML		00:02	44.51	21 0.27	HLM1	HE	43.5	IAML	06:24	30.21	3	0.24					
AQ12	HZ	139.0	EP		00:02	28.79	0.17	MONM	HZ	62.1	EP	06:24	33.13		0.05					
AQ12	HN	139.0	IAML		00:02	48.01	19 0.09	MONM	HN	62.1	ES	06:24	40.81		0.04					
AQ12	HE	139.0	IAML		00:02	48.85	20 0.10	MONM	HE	62.1	IAML	06:24	41.15	11	0.10					
EDMD	HZ	141.0	EP		00:02	29.51	0.65	MONM	HN	62.1	IAML	06:24	41.25	14	0.16					
EDMD	HN	141.0	IAML		00:02	48.35	44 0.25	LLW	BZ	67.2	EP	06:24	34.09		0.17					
EDMD	HE	141.0	IAML		00:02	48.38	57 0.22	LLW	BE	67.2	ES	06:24	42.09		-0.11					
IOMK	HZ	149.0	EP		00:02	30.20	0.23	LLW	BN	67.2	IAML	06:24	42.29	2	0.19					
IOMK	HE	149.0	IAML		00:02	50.19	6 0.26	LLW	BE	67.2	IAML	06:24	42.32	3	0.10					
IOMK	HN	149.0	IAML		00:02	50.51	7 0.12	FOEL	HZ	69.8	EP	06:24	34.56		0.19					
CLGH	HZ	154.0	EP		00:02	31.09	0.37	FOEL	HN	69.8	ES	06:24	42.87		-0.11					
CLGH	HE	154.0	IAML		00:02	51.15	19 0.14	FOEL	HE	69.8	IAML	06:24	43.12	6	0.11					
CLGH	HN	154.0	IAML		00:02	51.44	14 0.34	FOEL	HN	69.8	IAML	06:24	43.37	6	0.20					
AR09	HZ	169.0	EP		00:02	33.16	0.21	RSBS	HZ	100.0	EP	06:24	38.90		-0.12					
DRUM	HZ	175.0	EP		00:02	33.57	-0.09	RSBS	HE	100.0	IAML	06:24	53.31	5	0.08					
DRUM	HE	175.0	IAML		00:02	56.95	14 0.20	RSBS	HN	100.0	IAML	06:24	53.63	4	0.11					
DRUM	HN	175.0	IAML		00:02	57.77	21 0.20	July 2 2021 Time: 13:14 05.3 UTC Magnitude: 2.1 ML												
KPL	HZ	232.0	EP		00:02	40.70	0.03	Lat: 58.551 Lon: -3.913 Grid Ref: 288.69 kmE 964.09 kmN Locality: MELVICH, HIGHLAND Velocity model: Lownet Xnear: 200.0 Xfar: 400.0 Comment: FELT MELVICH... Intensity: 3												
June 23 2021 Time: 16:08 58.1 UTC Magnitude: 1.4 ML Lat: 57.402 Lon: -4.128 Grid Ref: 272.15 kmE 836.60 kmN RMS: 0.40 secs Locality: SCATRAIG, HIGHLAND Velocity model: Lownet Xnear: 100.0 Xfar: 200.0																				
STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES	STAT CO DIST PHAS WT P HrMn SECS AMPL PERI RES					BIGH				
MCD	HZ	56.1	IP	C	16:09	07.52	-0.15	BIGH					BIGH					6.5		
MCD	HN	56.1	ES		16:09	14.31	-0.38	BIGH					BIGH					6.5		
MCD	HN	56.1	IAML		16:09	15.38	22 0.38	BIGH					BIGH					IP		
MCD	HE	56.1	IAML		16:09	15.94	16 0.23	BIGH					BIGH					13:14		
KPL	HZ	92.0	EP		16:09	13.22	0.05	BIGH					BIGH					13:14		
KPL	HN	92.0	ES		16:09	23.66	-0.55	BIGH					BIGH					13:14		
KPL	HE	92.0	IAML		16:09	26.60	12 0.27	BIGH					BIGH					13:14		
KPL	HN	92.0	IAML		16:09	27.60	14 0.23	BIGH					BIGH					13:14		
LINV	HZ	105.0	EP		16:09	15.56	0.43	LINV					LINV					13:14		
LINV	HE	105.0	IAML		16:09	29.66	13 0.13	LINV					LINV					13:14		
LINV	HN	105.0	IAML		16:09	29.91	9 0.12	LINV					LINV					13:14		
DRUM	HZ	113.0	IP	C	16:09	16.52	0.01	MCD					MCD					13:14		
DRUM	HE	113.0	IAML		16:09	34.39	17 0.19	MCD					MCD					13:14		
DRUM	HN	113.0	IAML		16:09	34.75	16 0.21	MCD					MCD					13:14		
BIGH	HZ	122.0	EP		16:09	18.09	0.22	BIGH					BIGH					13:14		
BIGH	HN	122.0	ES		16:09	32.60	0.26	BIGH					BIGH					13:14		
BIGH	HE	122.0	IAML		16:09	33.62	6 0.12	BIGH					BIGH					13:14		
BIGH	HN	122.0	IAML		16:09	33.69	5 0.17	BIGH					BIGH					13:14		
EAB	HZ	136.0	EP		16:09	20.61	0.76	DRUM					DRUM					13:14		
EAB	HE	136.0	ES		16:09	36.16	0.40	DRUM												

**TABLE 2 : PHASE DATA**

Locality: MELVICH,HIGHLAND												WLF1	HN	109.0	IAML	19:53	04.18	6	0.14		
Velocity model: Lownet Xnear: 100.0 Xfar: 200.0												WLF1	HE	109.0	IAML	19:53	05.03	3	0.09		
STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES											
BIGH	HZ	7.9	IP		D	14:00	29.61		-0.12		July 10 2021							Magnitude: 3.2 ML			
BIGH	HN	7.9	ES			14:00	31.19		0.07		Lat: 62.540							Depth: 14.6 km			
BIGH	HE	7.9	IAML			14:00	31.68	79	0.21		Grid Ref: 683.25 kmE 1418.85 kmN							RMS: 0.30 secs			
BIGH	HN	7.9	IAML			14:00	31.84	27	0.12		Locality: NORWEIGIAN SEA										
LINV	HZ	88.0	EP			14:00	42.63		0.12		Velocity model: Lownet Xnear: 1000.0 Xfar: 2000.0										
LINV	HN	88.0	ES			14:00	53.15		-0.07		Comment: 365KM NE LERWICK										
LINV	HE	88.0	IAML			14:00	54.01	2	0.15		STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES
LINV	HN	88.0	IAML			14:00	55.94	2	0.24		FOO	HZ	132.0	EP	03:11	00.16				-0.30	
MCD	HE	116.0	ES			14:01	00.84		0.00		FOO	HE	132.0	ES	03:11	15.93				0.30	
MCD	HE	116.0	IAML			14:01	01.93	2	0.16		FOO	HE	132.0	IAML	03:11	16.96	179	0.27			
MCD	HN	116.0	IAML			14:01	02.72	3	0.25		FOO	HN	132.0	IAML	03:11	17.40	116	0.20			
July 2 2021											BER	HZ	259.0	EP	03:11	16.95				0.20	
Lat: 58.566											BER	HN	259.0	ES	03:11	43.62				-0.20	
Grid Ref: 287.92 kmE 965.79 kmN											BER	HN	259.0	IAML	03:11	55.29	21	0.28			
Locality: MELVICH,HIGHLAND											BER	HE	259.0	IAML	03:11	56.56	30	0.32			
Velocity model: Lownet Xnear: 200.0 Xfar: 400.0											LRW	HZ	367.0	EP	03:11	30.58				0.35	
STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES	LRW	HN	367.0	IAML	03:12	16.60	17	0.26			
BIGH	HZ	8.2	IP		D	16:18	08.20		-0.12		LRW	HN	367.0	IAML	03:12	16.76	19	0.29			
BIGH	HN	8.2	ES			16:18	09.79		0.07		SOFL	HZ	545.0	EP	03:11	52.48				-0.05	
BIGH	HE	8.2	IAML			16:18	10.17	106	0.20		SOFL	HE	545.0	IAML	03:12	49.30	80	0.46			
BIGH	HN	8.2	IAML			16:18	10.42	36	0.09		SOFL	HN	545.0	IAML	03:12	52.39	55	0.58			
LINV	HZ	87.8	EP			16:18	21.19		0.12		BIGH	HZ	607.0	EP	03:12	00.74				0.50	
LINV	HN	87.8	ES			16:18	31.71		-0.07		BIGH	HE	607.0	IAML	03:13	03.49	8	0.32			
LINV	HE	87.8	IAML			16:18	32.53	2	0.16		BIGH	HN	607.0	IAML	03:13	06.86	8	0.28			
LINV	HN	87.8	IAML			16:18	34.41	2	0.24		MCD	HZ	668.0	EP	03:12	08.08				0.20	
MCD	HZ	117.0	EP			16:18	25.57		0.00		MCD	HN	668.0	IAML	03:13	16.65	19	0.32			
MCD	HE	117.0	IAML			16:18	40.50	2	0.11		MCD	HE	668.0	IAML	03:13	16.68	21	0.34			
MCD	HN	117.0	IAML			16:18	41.76	3	0.33		DRUM	HZ	711.0	EP	03:12	13.18				-0.11	
LAWE	HE	272.0	IAML			16:18	11.25	2	0.40		DRUM	HE	711.0	IAML	03:13	25.87	33	0.44			
LAWE	HN	272.0	IAML			16:18	12.09	1	0.42		DRUM	HN	711.0	IAML	03:13	29.53	39	0.44			
July 3 2021											INVG	HZ	803.0	EP	03:12	24.31				-0.48	
Lat: 53.029											EAB	HN	835.0	EP	03:12	28.37				-0.42	
Grid Ref: 249.20 kmE 350.37 kmN											July 11 2021										
Locality: NEBO,GYWNEDD											July 11 2021										
Velocity model: Lownet Xnear: 100.0 Xfar: 200.0											Lat: 56.536										
STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES	Lat: -4.260										
WLF1	HZ	30.6	EP			08:44	01.51		0.05		Grid Ref: 261.03 kmE 740.50 kmN										
WLF1	HN	30.6	ES			08:44	05.45		-0.12		Locality: KILTYRIE,PERTH/KINROSS										
WLF1	HN	30.6	IAML			08:44	05.58	18	0.15		Velocity model: Lownet Xnear: 100.0 Xfar: 200.0										
WLF1	HE	30.6	IAML			08:44	05.67	31	0.07		Comment: 8KM NNE KILLIN										
LLW	BZ	44.1	EP			08:44	03.51		-0.04		STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES
LLW	BN	44.1	ES			08:44	08.88		-0.31		INVG	HZ	18.0	IP	C	11:51	00.52			-0.06	
LLW	BN	44.1	IAML			08:44	09.01	5	0.14		INVG	HE	18.0	ES		11:51	03.02			-0.28	
LLW	BE	44.1	IAML			08:44	09.38	5	0.17		INVG	HE	18.0	IAML		11:51	03.10	58	0.08		
WPS	HZ	44.6	IP		C	08:44	03.77		0.17		INVG	HN	18.0	IAML		11:51	03.14	88	0.10		
WPS	HE	44.6	ES			08:44	09.08		-0.20		EAB	HZ	39.0	IP	D	11:51	04.00			0.20	
WPS	HN	44.6	IAML			08:44	09.29	7	0.11		EAB	HN	39.0	IAML		11:51	08.87			0.00	
WPS	HE	44.6	IAML			08:44	09.29	9	0.18		LAWE	HZ	76.8	EP		11:51	09.68			0.06	
FOEL	HZ	72.2	EP			08:44	08.17		0.21		LAWE	HE	76.8	ES		11:51	18.80			-0.15	
FOEL	HE	72.2	IAML			08:44	18.00	6	0.27		LAWE	HN	76.8	IAML		11:51	21.09	6	0.20		
FOEL	HN	72.2	IAML			08:44	18.13	3	0.15		LAWE	HE	76.8	IAML		11:51	21.33	6	0.16		
HLM1	HZ	108.0	EP			08:44	13.77		0.20		DRUM	HZ	116.0	EP		11:51	16.04			0.29	
HLM1	HN	108.0	IAML			08:44	29.63	2	0.07		DRUM	HE	116.0	IAML		11:51	31.29	5	0.27		
HLM1	HE	108.0	IAML			08:44	29.66	2	0.12		DRUM	HN	116.0	IAML		11:51	31.70	8	0.12		
KPL	HZ	123.0	IP			08:44	44.37		0.12		KPL	HN	123.0	IP	D	11:51	17.17			0.48	
KPL	HE	123.0	ES			08:44	45.86	6	0.14		KPL	HN	123.0	ES		11:51	31.00			-0.17	
KPL	HN	123.0	IAML			08:44	46.07	8	0.13		KPL	HN	123.0	IAML		11:51	32.14	5	0.25		
AQ01	HN	52.3	ES			08:44	48.80		0.31		KPL	HE	123.0	IAML		11:51	32.46	4	0.20		
AQ01	HN	52.3	IAML			08:44	50.26	18	0.14		MCD	HZ	132.0	EP		11:51	17.66			-0.27	
AQ01	HE	52.3	IAML			08:44	50.30	31	0.31		MCD	HN	132.0	EP		11:51	21.50			-0.18	
LLW	BZ	66.9	IP		C	08:44	44.37		0.12		NEWG	HZ	158.0	EP		11:51	21.50				
LLW	BN	66.9	ES			08:44	52.05		-0.42		July 11 2021										
LLW	BN	66.9	IAML			08:44	52.25	2	0.12		July 11 2021										
LLW	BE	66.9	IAML			08:44	52.28	1	0.12		Lat: 56.330										
HLM1	HZ	69.1	EP			08:44	44.72		0.08		Lat: -5.547										
HLM1	HE	69.1	ES			08:44	52.97		-0.17		Grid Ref: 180.75 kmE 720.93 kmN										
HLM1	HN	69.1	IAML			08:44	53.46	5	0.16		Locality: DUACHY,ARGYLL & BUTE										
HLM1	HE	69.1	IAML			08:44	53.51	11	0.26		Velocity model: Lownet Xnear: 100.0 Xfar: 200.0										
AS02	HZ	70.9	EP			08:44	44.89		0.00		Comment: 10KM SSW OBAN										
AS02	HN	70.9	ES			08:44	53.01		-0.55		STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES
AS02	HN	70.9	IAML			08:44	53.64	4	0.23		LAWE	HZ	12.0	IP	C	16:11	28.77			0.05	
AS02	HE	70.9	IAML			08:44	55.54	5	0.14		LAWE	HE	12.0	ES		16:11	30.78			-0.03	
LBWR	HZ	76.9	EP			08:44	45.95		0.11		LAWE	HE	12.0	IAML		16:11	31.07	15	0.09		
LBWR	HE	76.9	ES			08:44	55.03		-0.17		LAWE	HN	12.0								

**TABLE 2 : PHASE DATA**

MONM	HE	19.8	IAML	04:54	33.66	44	0.11		EAB	HN	106.0	ES	17:52	55.85	-0.19									
MONN	HN	19.8	IAML	04:54	33.91	20	0.12		EAB	HN	106.0	IAML	17:52	58.45	6 0.27									
MCH1	HZ	25.8	IP	D	04:54	31.72		0.57	EAB	HE	106.0	IAML	17:52	58.90	7 0.20									
MCH1	HN	25.8	ES		04:54	34.66		-0.24	IDGL	HZ	133.0	EP	17:52	46.95	-0.24									
MCH1	HZ	25.8	IAML		04:54	35.28	14	0.07	IDGL	HN	133.0	IAML	17:53	04.05	4 0.15									
MCH1	HE	25.8	IAML		04:54	35.34	16	0.18	IDGL	HE	133.0	IAML	17:53	05.22	3 0.30									
STRD	HZ	62.5	EP		04:54	36.85		0.20	INVG	HZ	134.0	EP	17:52	47.97	0.58									
STRD	HN	62.5	IAML		04:54	44.44	7	0.17	INVG	HN	134.0	ES	17:53	03.01	-0.04									
STRD	HE	62.5	IAML		04:54	44.55	5	0.09	INVG	HN	134.0	IAML	17:53	05.76	4 0.30									
HLM1	HZ	84.3	EP		04:54	40.64		0.58	INVG	HE	134.0	IAML	17:53	07.07	3 0.07									
HLM1	HE	84.3	ES		04:54	49.86		-0.46	GAL1	HZ	135.0	EP	17:52	48.33	0.73									
HLM1	HE	84.3	IAML		04:54	50.78	2	0.12	GAL1	HE	135.0	IAML	17:53	05.53	8 0.19									
HLM1	HN	84.3	IAML		04:54	50.98	1	0.14	GAL1	HN	135.0	IAML	17:53	05.85	5 0.27									
HTL	HZ	131.0	EP		04:54	45.74		-0.92	NEWG	HZ	136.0	EP	17:52	48.02	0.30									
HTL	HE	131.0	IAML		04:54	45.74			NEWG	HN	136.0	ES	17:53	02.76	-0.86									
HTL	HE	131.0	IAML		04:54	45.74			NEWG	HE	136.0	IAML	17:53	05.62	4 0.11									
July 12 2021									July 15 2021															
Lat:	55.375		Time: 15:15	24.6	UTC		Magnitude:	0.8	ML	Lat:	51.897		Time: 19:44	09.4	UTC	Magnitude: 0.9	ML							
Lon:	-2.226						Depth:	3.3	km	Lon:	-4.171					Depth: 7.5	km							
Grid Ref:	385.68	kmE	609.03	kmN			RMS:	0.10	secs	Grid Ref:	250.64	kmE	224.33	kmN		RMS: 0.30	secs							
Locality:	BARROW BURN,NORTHUMBLD						Locality:	FELINGWMUCHAF,CARMARTH		Locality:	FELINGWMUCHAF,CARMARTH													
Velocity model:	Lownet	Xnear:	100.0	Xfar:	200.0		Velocity model:	Lownet	Xnear:	100.0	Xfar:	200.0		Velocity model:	Lownet	Xnear:	100.0	Xfar:	200.0					
STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES	STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES			
EDSK	HZ	62.4	EP		C	15:15	35.45		-0.05	RSBS	HZ	39.9	EP	19:44	16.42		-0.04							
EDSK	HN	62.4	ES			15:15	43.48		0.05	RSBS	HN	39.9	ES	19:44	21.39		-0.24							
EDSK	HN	62.4	IAML			15:15	44.10	5	0.18	RSBS	HN	39.9	IAML	19:44	21.68	7	0.08							
EDSK	HE	62.4	IAML			15:15	45.40	2	0.09	RSBS	HE	39.9	IAML	19:44	21.87	5	0.15							
EDMD	HZ	62.9	EP			15:15	35.63		0.12	MONM	HZ	94.4	IP	C	19:44	24.93		0.06						
EDMD	HE	62.9	ES			15:15	43.48		0.03	MONM	HE	94.4	ES	19:44	35.79		-0.40							
EDMD	HE	62.9	IAML			15:15	43.61	5	0.10	MONM	HE	94.4	IAML	19:44	35.95	4	0.14							
EDMD	HN	62.9	IAML			15:15	46.87	10	0.13	MONM	HN	94.4	IAML	19:44	36.47	4	0.38							
ESY	HZ	65.1	IP	D		15:15	35.88		-0.05	HTL	HZ	103.0	EP	19:44	26.46		0.29							
ESY	HE	65.1	ES			15:15	44.15		-0.02	HTL	HE	103.0	ES	19:44	38.45		0.02							
ESY	HN	65.1	IAML			15:15	44.94	4	0.10	HTL	HE	103.0	IAML	19:44	39.32	4	0.16							
ESY	HE	65.1	IAML			15:15	45.08	3	0.09	HTL	HN	103.0	IAML	19:44	39.33	5	0.19							
KESW	HZ	104.0	EP			15:15	41.72		-0.23	HLM1	HZ	112.0	EP		19:44	27.76		0.09						
KESW	HN	104.0	IAML			15:15	57.29	2	0.16	HLM1	HE	112.0	IAML	19:44	43.41	3	0.18							
KESW	HE	104.0	IAML			15:15	57.53	6	0.41	HLM1	HN	112.0	IAML	19:44	43.79	4	0.09							
AQ12	HE	110.0	ES			15:15	56.08		-0.08	FOEL	HZ	129.0	EP		19:44	30.70		0.51						
AQ12	HE	110.0	IAML			15:15	58.02	4	0.08	WLF1	HZ	156.0	EP	4	19:44	35.65		1.69						
AQ12	HN	110.0	IAML			15:15	58.22	3	0.06	WLF1	HE	156.0	IAML	19:44	53.41	4	0.18							
NEWG	HZ	131.0	IP	C		15:15	46.44		0.39	WLF1	HN	156.0	IAML	19:44	54.03	2	0.12							
NEWG	HE	131.0	IAML			15:16	03.30	2	0.09	DYA	HZ	164.0	EP		19:44	35.10		-0.03						
NEWG	HN	131.0	IAML			15:16	04.29	4	0.16	DYA	HE	164.0	IAML	19:44	54.06	2	0.25							
July 13 2021							Magnitude:	0.9	ML	July 16 2021						Magnitude:	0.8	ML						
Lat:	54.823		Time: 02:52	55.3	UTC		Depth:	4.1	km	Lat:	54.584		Time: 15:26	11.4	UTC	Magnitude:	0.8	ML						
Lon:	-2.379						Grid Ref:	345.65	kmE	521.32	kmN		Grid Ref:	345.65	kmE	521.32	kmN		RMS:	0.30	secs			
Grid Ref:	375.65	kmE	547.65	kmN			Locality:	HOWTOWN,CUMBRIA		Locality:	HOWTOWN,CUMBRIA		Locality:	HOWTOWN,CUMBRIA										
Locality:	ALSTON,CUMBRIA		Velocity model:	Borders	Xnear:	100.0	Xfar:	200.0		Velocity model:	Lownet	Xnear:	100.0	Xfar:	200.0		Velocity model:	Lownet	Xnear:	100.0	Xfar:	200.0		
Comment:	4KM ENE	ALSTON					Comment:	4KM ENE	ALSTON		STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES			
EDMD	HZ	26.8	IP	C		02:53	00.44		0.13	KESW	HZ	17.0	IP	C	15:26	14.82		0.04						
EDMD	HN	26.8	ES			02:53	03.62		-0.23	KESW	HN	17.0	ES		15:26	16.89		-0.40						
EDMD	HN	26.8	IAML			02:53	03.84	62	0.17	KESW	HN	17.0	IAML		15:26	17.24	31	0.14						
EDMD	HE	26.8	IAML			02:53	00.68	22	0.04	KESW	HE	17.0	IAML		15:26	17.32	38	0.26						
AQ12	HZ	49.3	EP			02:53	04.22		0.17	AQ12	HZ	17.4	IP	D	15:26	14.97		0.10						
AQ12	HE	49.3	ES			02:53	10.06		-0.18	AQ12	HN	17.4	ES		15:26	17.40		-0.03						
AQ12	HE	49.3	IAML			02:53	10.50	11	0.08	AR09	HZ	47.7	IP	D	15:26	19.81		-0.06						
AQ12	HN	49.3	IAML			02:53	10.63	11	0.08	EDMD	HZ	63.0	EP		15:26	22.37		0.22						
KESW	HZ	53.6	EP			02:53	04.90		0.17	EDMD	HE	63.0	ES		15:26	29.62		-0.41						
KESW	HE	53.6	IAML			02:53	12.66	3	0.09	EDMD	HE	63.0	IAML		15:26	30.01	11	0.17						
KESW	HN	53.6	IAML			02:53	15.84	3	0.24	EDMD	HN	63.0	IAML		15:26	30.12	8	0.09						
AR09	HZ	66.6	EP			02:53	07.03		0.15	ESK	HZ	84.8	EP		15:26	25.73		0.15						
AR09	HN	66.6	ES			02:53	14.84		-0.25	ESK	HE	84.8	ES		15:26	35.92		-0.04						
EKA	BZ	75.5	EP			02:53	08.55		0.24	ESK	HE	84.8	IAML		15:26	37.92	3	0.26						
EKA	BZ	75.5	ES			02:53	17.23		-0.29	ESK	HN	84.8	IAML		15:26	38.19	4	0.16						
ESK	HZ	76.2	EP			02:53	08.63		0.24	NEWG	HZ	107.0	EP		15:26	29.33		0.31						
ESK	HE	76.2	ES			02:53	17.48		-0.19	NEWG	HN	107.0	EP		15:26	42.57	2	0.13						
ESK	HN	76.2	IAML			02:53	20.66	10	0.19	NEWG	HE	107.0	IAML		15:26	43.21	2	0.13						
ESK	HE	76.2	IAML			02:53	20.78	8	0.18	GAL1	HZ	124.0	EP		15:26	32.35		0.64						
NEWG	HZ	123.0	EP			02:53	16.17		0.18	GAL1	HN	124.0	ES		15:26	46.20		-0.37						
NEWG	HE	123.0	ES			02:53	30.36		-0.29	GAL1	HE	124.0	IAML		15:26	47.31	2	0.19						
NEWG	HN	123.0	IAML			02:53	30.85	2	0.18	GAL1	HN	124.0	IAML		15:26	47.40	4	0.19						
NEWG	HE	123.0	IAML			02:53	32.09	3	0.11															
GALL	HZ	150.0	EP			02:53	20.16		0.38															
July 14 2021							Magnitude:	1.2	ML	July 17 2021						Magnitude:	0.5	ML						

**TABLE 2 : PHASE DATA**

IDGL	HN	130.0	ES	00:59	36.43	-0.15	HLM1	HE	83.1	ES	22:06	33.99	-0.16
IDGL	HN	130.0	IAML	00:59	38.91	2 0.40	HLM1	HN	83.1	IAML	22:06	35.36	7 0.08
IDGL	HE	130.0	IAML	00:59	39.19	1 0.23	HLM1	HE	83.1	IAML	22:06	37.86	9 0.20
EAB	HZ	140.0	EP	00:59	23.27	0.68	CWF	HZ	109.0	EP	22:06	28.09	0.28
EAB	HN	140.0	IAML	00:59	41.96	1 0.16	CWF	HN	109.0	ES	22:06	40.37	-0.31
EAB	HE	140.0	IAML	00:59	42.86	1 0.15	CWF	HE	109.0	IAML	22:06	41.99	12 0.16
INVG	HZ	161.0	EP	00:59	26.33	0.70	CWF	HN	109.0	IAML	22:06	42.44	9 0.09
INVG	HN	161.0	IAML	00:59	47.10	1 0.17	FOEL	HZ	129.0	EP	22:06	31.50	0.77
INVG	HE	161.0	IAML	00:59	49.69	1 0.27	FOEL	HN	129.0	IAML	22:06	48.73	3 0.14
							FOEL	HE	129.0	IAML	22:06	50.59	3 0.19
July 18 2021				Time: 23:27	45.0 UTC	Magnitude: 0.9 ML	LBWR	HZ	169.0	EP	22:06	36.74	0.66
				Lat: 56.740	Lon: -5.936	Depth: 9.3 km	RSBS	HZ	177.0	EP	22:06	37.11	0.00
				Grid Ref: 159.33 kmE	767.83 kmN	RMS: 0.30 secs	HTL	HZ	190.0	EP	22:06	39.91	1.17
				Locality: KENTRA, HIGHLAND									
				Velocity model: Lownet	Xnear: 100.0 Xfar: 200.0								
				Comment: FELT KENTRA...	Intensity: 3								
STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES			
LAWE	HZ	62.9	EP			23:27	55.66						
LAWE	HE	62.9	ES			23:28	03.11						
LAWE	HE	62.9	IAML			23:28	04.26	3 0.11					
LAWE	HN	62.9	IAML			23:28	04.64	3 0.10					
KPL	HZ	68.9	EP			23:27	56.35	-0.14					
EAB	HZ	116.0	EP			23:28	04.28	0.44					
EAB	HE	116.0	ES			23:28	17.62	-0.01					
EAB	HN	116.0	IAML			23:28	19.83	4 0.11					
EAB	HE	116.0	IAML			23:28	19.92	4 0.07					
INVG	HZ	121.0	EP			23:28	04.56	-0.04					
INVG	HN	121.0	ES			23:28	18.88	-0.05					
INVG	HE	121.0	IAML			23:28	20.68	5 0.15					
INVG	HN	121.0	IAML			23:28	21.04	5 0.20					
MCD	HZ	187.0	EP			23:28	15.48		1.87				
July 19 2021				Time: 04:29	08.8 UTC	Magnitude: 1.8 ML	July 20 2021						
				Lat: 52.366	Lon: -2.889	Depth: 7.4 km	Time: 05:54	59.7 UTC	Magnitude: 0.5 ML				
				Grid Ref: 339.48 kmE	274.63 kmN	RMS: 0.20 secs	Lat: 54.810	Lon: -5.971	Depth: 7.9 km				
				Locality: LEINTWARDINE, HEREF			Grid Ref: 144.88 kmE	553.37 kmN	RMS: 0.30 secs				
				Velocity model: Lownet	Xnear: 100.0 Xfar: 200.0		Velocity model: Lownet	Xnear: 100.0 Xfar: 200.0					
STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES			
HLM1	HZ	17.0	IP	C		04:29	12.33	0.01					
HLM1	HE	17.0	ES			04:29	14.92	0.01					
HLM1	HN	17.0	IAML			04:29	15.19	440 0.17					
HLM1	HE	17.0	IAML			04:29	15.28	348 0.15					
MCH1	HZ	41.7	IP	C		04:29	15.97	-0.14					
MCH1	HE	41.7	ES			04:29	21.26	-0.22					
MCH1	HN	41.7	IAML			04:29	21.42	105 0.15					
MCH1	HE	41.7	IAML			04:29	21.45	101 0.20					
MONM	HZ	58.9	IP	C		04:29	18.85	0.08					
MONM	HE	58.9	ES			04:29	26.26	0.19					
MONM	HN	58.9	IAML			04:29	26.75	48 0.20					
MONM	HE	58.9	IAML			04:29	27.50	42 0.24					
FOEL	HZ	61.9	IP	C		04:29	19.34	0.04					
FOEL	HN	61.9	ES			04:29	26.98	-0.01					
FOEL	HE	61.9	IAML			04:29	27.26	19 0.27					
FOEL	HN	61.9	IAML			04:29	27.51	22 0.10					
STRD	HZ	82.4	EP			04:29	22.63	0.20					
STRD	HE	82.4	ES			04:29	32.41	0.01					
STRD	HN	82.4	IAML			04:29	35.54	34 0.09					
STRD	HE	82.4	IAML			04:29	36.47	28 0.13					
CWF	HZ	115.0	IP	D		04:29	26.95	-0.53					
CWF	HE	115.0	IAML			04:29	43.23	43 0.12					
CWF	HN	115.0	IAML			04:29	43.43	33 0.10					
LBWR	HZ	139.0	EP			04:29	31.45		0.36				
LBWR	HE	139.0	ES			04:29	49.65	29 0.17					
LBWR	HN	139.0	IAML			04:29	50.30	26 0.24					
AS02	HZ	146.0	EP			04:29	32.20	0.24					
HTL	HZ	188.0	EP			04:29	38.52	0.88					
HTL	HE	188.0	IAML			04:30	02.73	10 0.31					
HTL	HN	188.0	IAML			04:30	05.94	9 0.24					
HPK	HZ	196.0	EP			04:29	38.42	-0.26					
DYA	HZ	227.0	EP			04:29	43.43	0.95					
July 19 2021				Time: 22:06	10.2 UTC	Magnitude: 1.2 ML	July 20 2021						
				Lat: 51.911	Lon: -2.173	Depth: 13.8 km	Time: 06:02	09.8 UTC	Magnitude: 0.5 ML				
				Grid Ref: 388.10 kmE	223.67 kmN	RMS: 0.30 secs	Lat: 54.814	Lon: -5.974	Depth: 8.3 km				
				Locality: CHELTENHAM, GLOS			Grid Ref: 144.71 kmE	553.82 kmN	RMS: 0.20 secs				
				Velocity model: Lownet	Xnear: 100.0 Xfar: 200.0		Velocity model: Lownet	Xnear: 100.0 Xfar: 200.0					
STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES			
STRD	HZ	15.1	IP	D		22:06	13.92	0.10					
STRD	HE	15.1	ES			22:06	16.65	0.18					
STRD	HN	15.1	IAML			22:06	17.29	105 0.20					
STRD	HE	15.1	IAML			22:06	17.36	81 0.09					
OLDB	HZ	38.2	EP			22:06	16.67	-0.40					
OLDB	HN	38.2	ES			22:06	21.82	-0.27					
OLDB	HE	38.2	IAML			22:06	22.48	64 0.39					
OLDB	HN	38.2	IAML			22:06	22.72	68 0.41					
MONM	HZ	44.2	IP	C		22:06	18.06	0.05					
MONM	HE	44.2	ES			22:06	23.96	0.24					
MONM	HN	44.2	IAML			22:06	24.24	18 0.14					
MONM	HE	44.2	IAML			22:06	24.25	23 0.17					
MCH1	HZ	57.6	IP	C		22:06	20.03	-0.04					
MCH1	HE	57.6	ES			22:06	27.40	0.12					
MCH1	HN	57.6	IAML			22:06	27.92	16 0.10					
MCH1	HE	57.6	IAML			22:06	27.96	10 0.13					
HLM1	HZ	83.1	EP			22:06	23.81	-0.23					
July 21 2021				Time: 08:13	42.6 UTC	Magnitude: 0.6 ML	July 21 2021						
				Lat: 56.332	Lon: -5.140	Depth: 6.4 km	Time: 23:27	24.7 UTC	Magnitude: 1.2 ML				
				Grid Ref: 205.90 kmE	719.93 kmN	RMS: 0.20 secs	Lat: 56.816	Lon: -5.237	Depth: 10.9 km				
				Locality: KILCHRENNAN, ARGYLL/BUTE			Grid Ref: 202.45 kmE	774.04 kmN	RMS: 0.30 secs				
				Velocity model: Lownet	Xnear: 60.0 Xfar: 120.0		Velocity model: Lownet	Xnear: 60.0 Xfar: 120.0					
STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES			
LAWE	HZ	17.9	EP			08:13	46.07	-0.10					
LAWE	HE	17.9	ES			08:13	48.81	0.01					
LAWE	HN	17.9	IAML			08:13	49.24	33 0.26					
LAWE	HE	17.9	IAML			08:13	50.42	24 0.44					
EAB	HN	52.3	ES			08:13	58.31	0.05					
EAB	HE	52.3	IAML			08:13	59.19	4 0.34					
EAB	HN	52.3	IAML			08:13	59.87	2 0.21					
INVG	HZ	68.6	EP			08:13	54.51	0.34					
INVG	HN	68.6	ES			08:14	02.34	-0.30					
INVG	HE	68.6	IAML			08:14	02.78	2 0.18					
INVG	HN	68.6	IAML			08:14	03.86	1 0.26					
KPL	HZ	116.0	EP			08:14	02.47	0.94					
KPL	HE	116.0	IAML			08:14	19.53	3 0.32					
KPL	HN	116.0	IAML			08:14	19.71	3 0.52					
July 21 2021				Time: 23:27	24.7 UTC	Magnitude: 1.2 ML	July 21 2021						

**TABLE 2 : PHASE DATA**

LAWE	HZ	62.7	EP	23:27	35.13	-0.15	EAB	HN	120.0	ES	16:16	06.95	0.18	
LAWE	HE	62.7	ES	23:27	42.87	-0.14	EAB	HN	120.0	IAML	16:16	08.24	1 0.29	
LAWE	HE	62.7	IAML	23:27	43.54	8 0.15	EAB	HE	120.0	IAML	16:16	08.93	2 0.15	
LAWE	HN	62.7	IAML	23:27	43.88	8 0.09	INVG	HZ	132.0	EP	16:15	54.32	0.09	
KPL	HZ	63.5	IP	C	23:27	35.67	0.29	INVG	HN	132.0	ES	16:16	09.53	-0.23
KPL	HE	63.5	ES	23:27	42.99	-0.19	INVG	HE	132.0	IAML	16:16	11.24	2 0.12	
KPL	HE	63.5	IAML	23:27	43.30	10 0.19	INVG	HN	132.0	IAML	16:16	11.92	2 0.19	
KPL	HN	63.5	IAML	23:27	47.27	7 0.12	CLGH	HE	163.0	ES	16:16	17.52	0.15	
INVG	HZ	85.1	IP	C	23:27	38.83	0.06	CLGH	HE	163.0	IAML	16:16	18.38	2 0.51
INVG	HE	85.1	ES	23:27	48.54	-0.52	CLGH	HN	163.0	IAML	16:16	22.33	2 0.22	
INVG	HN	85.1	IAML	23:27	51.26	13 0.15	LINV	HZ	188.0	EP	16:16	03.25	1.38	
INVG	HE	85.1	IAML	23:27	51.76	10 0.21	LINV	HE	188.0	IAML	16:16	23.13	1 0.20	
EAB	HZ	89.1	EP	23:27	39.81	0.41	LINV	HN	188.0	IAML	16:16	23.14	1 0.20	
EAB	HE	89.1	ES	23:27	50.35	0.20								
EAB	HN	89.1	IAML	23:27	52.94	19 0.06	July 25 2021							
EAB	HE	89.1	IAML	23:27	53.28	18 0.12	Time: 06:28 57.9 UTC							
MCD	HZ	147.0	EP	23:27	48.66	0.70	Lat: 56.691							
MCD	HN	147.0	IAML	23:28	07.30	6 0.20	Grid Ref: 124.94 kmE 764.48 kmN							
MCD	HE	147.0	IAML	23:28	07.76	9 0.30	Locality: COLL, ARGYLL & BUTE							
LINV	HZ	148.0	EP	23:27	47.94	-0.13	Velocity model: Lownet Xnear: 100.0 Xfar: 200.0							
LINV	HE	148.0	ES	23:28	04.53	-0.62	STAT CO DIST PHAS WT P HrMn SECS AMPL PERI RES							
LINV	HE	148.0	IAML	23:28	06.88	3 0.10	LAWE HZ 82.7 EP 06:29 11.65							
LINV	HN	148.0	IAML	23:28	07.62	1 0.10	LAWE HN 82.7 IAML 06:29 22.05							
DRUM	HZ	168.0	EP	23:27	51.25	0.42	LAWE HE 82.7 IAML 06:29 22.55							
DRUM	HN	168.0	IAML	23:28	13.57	9 0.12	KPL HZ 88.5 IP D 06:29 12.80							
DRUM	HE	168.0	IAML	23:28	13.90	5 0.13	KPL HE 88.5 ES 06:29 23.20							
BIGH	HN	203.0	IAML	23:28	25.09	2 0.12	KPL HN 88.5 IAML 06:29 26.33							
BIGH	HE	203.0	IAML	23:28	25.72	3 0.24	KPL HE 88.5 IAML 06:29 26.33							
							EAB HZ 144.0 EP 06:29 21.83						0.67	
July 22 2021							EAB HN 144.0 IAML 06:29 39.90							
							EAB HE 144.0 IAML 06:29 40.05							
							INVG HZ 153.0 EP 06:29 23.28						0.80	
							INVG HN 153.0 ES 06:29 41.07						0.65	
							INVG HE 153.0 IAML 06:29 43.93						2 0.14	
							INVG HN 153.0 IAML 06:29 43.93						2 0.17	
							LINV HZ 180.0 EP 06:29 25.58						-0.46	
							LINV HE 180.0 IAML 06:29 48.68						1 0.22	
							LINV HN 180.0 IAML 06:29 51.01						0 0.14	
							July 25 2021							
							Time: 01:07 25.2 UTC							
							Magnitude: 1.0 ML							
							Lat: 54.199							
							Lon: -3.568							
							Depth: 4.6 km							
							RMS: 0.50 secs							
							Locality: IRISH SEA							
							Velocity model: Lownet Xnear: 100.0 Xfar: 200.0							
STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES				
AP12	HZ	23.2	IP	C	01:07	29.51								
AP12	HE	23.2	ES		01:07	32.46		-0.09						
AP12	HN	23.2	IAML		01:07	32.60	19	0.10						
AP12	HE	23.2	IAML		01:07	32.75	15	0.08						
KESW	HZ	52.8	IP	C	01:07	34.50		0.07						
KESW	HE	52.8	ES		01:07	40.93		-0.27						
KESW	HN	52.8	IAML		01:07	41.15	9	0.14						
KESW	HE	52.8	IAML		01:07	41.17	15	0.17						
AQ10	HZ	57.9	EP		01:07	35.15		-0.02						
AQ10	HE	57.9	ES		01:07	41.80		-0.69						
AQ10	HN	57.9	IAML		01:07	42.37	19	0.22						
AQ10	HE	57.9	IAML		01:07	45.39	14	0.17						
AQ12	HZ	59.3	EP		01:07	35.12		-0.34						
AQ04	Hz	61.3	EP		01:07	35.91		0.22						
AQ04	HN	61.3	ES		01:07	43.29		-0.10						
AQ04	HE	61.3	IAML		01:07	45.99	11	0.13						
AQ04	HE	61.3	IAML		01:07	47.04	12	0.14						
IOMK	HZ	65.5	EP		01:07	36.73		0.35						
IOMK	HN	65.5	ES		01:07	44.04		-0.53						
IOMK	HE	65.5	IAML		01:07	46.26	3	0.07						
IOMK	HN	65.5	IAML		01:07	46.43	4	0.08						
AQ02	HZ	71.7	EP		01:07	37.87		0.56						
AQ02	HE	71.7	ES		01:07	47.32		1.13						
AQ02	HN	71.7	IAML		01:07	48.07	13	0.24						
AQ02	HE	71.7	IAML		01:07	48.37	12	0.43						
AR09	HZ	73.6	EP		01:07	37.61		-0.08						
AR07	HZ	76.0	EP		01:07	38.47		0.45						
GAL1	HZ	105.0	EP		01:07	42.96		0.49						
GAL1	HN	105.0	ES		01:07	55.63		0.51						
GAL1	HE	105.0	IAML		01:07	56.65	2	0.19						
GAL1	HN	105.0	IAML		01:07	56.75	2	0.11						
WPS	HZ	108.0	EP		01:07	42.57		-0.37						
WPS	HE	108.0	IAML		01:07	56.51	4	0.11						
WPS	HN	108.0	IAML		01:07	56.59	3	0.20						
NEWG	HZ	111.0	EP		01:07	43.95		0.55						
NEWG	HE	111.0	ES		01:07	56.67		-0.05						
NEWG	HN	111.0	IAML		01:07	58.19	3	0.11						
NEWG	HE	111.0	IAML		01:07	58.26	4	0.17						
WFL1	HZ	115.0	EP		01:07	43.65		-0.39						
WFL1	HN	115.0	ES		01:07	56.96		-0.87						
WFL1	HE	115.0	IAML		01:07	58.88	7	0.20						
WFL1	HN	115.0	IAML		01:07	59.06	4	0.12						
ESK	HZ	127.0	EP		01:07	45.83		-0.03						
ESK	HN	127.0	ES		01:08	00.64		-0.35						
ESK	HE	127.0	IAML		01:08	01.71	6	0.27						
ESK	HN	127.0	IAML		01:08	02.22	4	0.25						
FOEL	HZ	148.0	EP		01:07	48.43		-0.53						
July 22 2021							July 26 2021							
							Time: 10:01 21.4 UTC							
							Magnitude: 2.5 ML							
							Lat: 55.813							
							Lon: -3.196							
							Depth: 5.3 km							
							Grid Ref: 325.06 kmE 658.39 kmN							
							RMS: 0.30 secs							
							Locality: PENICUIK, MIDLOTHIAN							
							Velocity model: Lownet Xnear: 1000.0 Xfar: 200.0							
							Comment: FELT PENICUIK... Intensity: 4							
STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES				
LAWE	HZ	57.1	EP		16:15	42.54		-0.19						
LAWE	HE	57.1	ES		16:15	49.87		0.01						
LAWE	HN	57.1	IAML		16:15	50.53	2	0.06						
LAWE	HE	57.1	IAML		16:15	50.65	2	0.09						
EAB	HZ	120.0	EP		16:15	52.65		0.15						
							ESY HZ 38.2 IP C 10:01 28.10						-0.25	
							ESY HZ 38.2 ES 10:01 32.95						-0.50	
							ESY HN 38.2 IAML 10:01 34.37						127 0.22	
	</													

TABLE 2 : PHASE DATA

EAB	HN	82.6	ES	10:01	45.40		0.06	CLGH	HN	64.4	IAML	05:15	41.91	19	0.10			
EAB	HE	82.6	IAML	10:01	45.82	82	0.10	CLGH	HE	64.4	IAML	05:15	41.92	15	0.12			
EAB	HN	82.6	IAML	10:01	49.44	85	0.13	IDGL	HZ	90.7	EP	05:15	38.19		0.44			
INVG	HZ	86.4	EP	10:01	35.61		-0.20	IDGL	HN	90.7	ES	05:15	48.39		-0.29			
INVG	HN	86.4	IAML	10:01	49.61	57	0.13	IDGL	HN	90.7	IAML	05:15	51.02	18	0.16			
NEWG	HE	86.4	IAML	10:01	50.63	53	0.15	IDGL	HE	90.7	IAML	05:15	51.04	10	0.19			
NEWG	HZ	101.0	EP	10:01	37.78		-0.32	LAWE	HZ	97.0	EP	05:15	38.03		-0.70			
NEWG	HE	101.0	IAML	10:01	52.52	281	0.16	LAWE	HE	97.0	ES	05:15	49.92		-0.44			
NEWG	HN	101.0	IAML	10:01	52.75	536	0.32	LAWE	HN	97.0	IAML	05:15	52.63	12	0.16			
DRUM	HZ	130.0	EP	10:01	42.46		-0.07	LAWE	HE	97.0	IAML	05:15	52.64	22	0.14			
DRUM	HN	130.0	ES	10:01	58.20		0.21	PGB1	HZ	126.0	EP	05:15	44.01		0.79			
DRUM	HN	130.0	IAML	10:02	01.98	172	0.12	GAL1	HZ	140.0	EP	05:15	46.07		0.91			
DRUM	HE	130.0	IAML	10:02	03.95	121	0.26	EAB	HZ	147.0	EP	05:15	46.98		0.76			
EDMD	HZ	134.0	EP	10:01	43.66		0.55	EAB	HE	147.0	ES	05:16	03.80		0.47			
EDMD	HN	134.0	ES	10:01	59.47		0.48	EAB	HE	147.0	IAML	05:16	06.18	7	0.26			
EDMD	HE	134.0	IAML	10:02	01.88	160	0.18	EAB	HN	147.0	IAML	05:16	08.04	6	0.06			
EDMD	HN	134.0	IAML	10:02	03.05	110	0.16	NEWG	HZ	152.0	EP	05:15	47.83		0.86			
KESW	HZ	136.0	EP	10:01	43.74		0.29	INVG	HZ	175.0	EP	05:15	51.10		0.98			
KESW	HN	136.0	IAML	10:02	02.42	127	0.30	ILTH	HZ	178.0	EP	05:15	51.30		0.89			
KESW	HE	136.0	IAML	10:02	03.32	146	0.60	ILTH	HE	178.0	IAML	05:16	13.98	4	0.24			
GAL1	HZ	143.0	EP	10:01	44.15		-0.16	ILTH	HN	178.0	IAML	05:16	15.71	2	0.26			
GAL1	HN	143.0	ES	10:02	00.99		-0.07	KPL	HZ	197.0	EP	05:15	52.95		0.13			
GAL1	HE	143.0	IAML	10:02	02.83	230	0.22											
GAL1	HN	143.0	IAML	10:02	02.84	258	0.22	August	5	2021	Time:	14:27	20.2	UTC	Magnitude: 1.5 ML			
LAWE	HZ	146.0	EP	10:01	44.92		0.11	Lat:	55.803	Lon:	-3.178	Depth:	6.7	km				
LAWE	HN	146.0	IAML	10:02	01.84	89	0.24	Grid Ref:	326.17	kmE	657.26	kmN	RMS:	0.20	secs			
LAWE	HE	146.0	IAML	10:02	04.81	92	0.17	Locality:	PENICUIK,MIDLOTHIAN									
AP12	HZ	167.0	EP	10:01	47.55		-0.31	Velocity model:	Lownet	Xnear:	1000.0	Xfar:	200.0					
AP12	HE	167.0	IAML	10:02	09.12	124	0.50	STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES
AP12	HN	167.0	IAML	10:02	11.17	79	0.22	EDI	HZ	13.4	IP	C	14:27	23.07		0.01		
KPL	HZ	227.0	EP	10:01	55.35		0.00	EDI	HN	13.4	ES		14:27	25.15		-0.02		
KPL	HE	227.0	IAML	10:02	25.61	22	0.20	EDI	HN	13.4	IAML		14:27	25.28	370	0.12		
KPL	HN	227.0	IAML	10:02	26.85	28	0.60	EDI	HE	13.4	IAML		14:27	25.39	305	0.13		
July	27	2021	Time:	04:10	11.7	UTC	Magnitude:	0.9	ML	ESY	HZ	37.5	IP	C	14:27	27.05		0.10
Lat:	49.823	Lon:	-3.120	Depth:	8.7	km				ESY	HZ	54.2	EP		14:27	29.58		0.05
Grid Ref:	319.45	kmE	-7.91	kmN	RMS:	0.20	secs	ESY	HE	54.2	ES		14:27	35.94		-0.41		
Locality:	ENGLISH CHANNEL							ESY	HE	54.2	IAML		14:27	36.16	21	0.14		
Velocity	model:	Lownet	Xnear:	500.0	Xfar:	1000.0		ESY	HN	54.2	IAML		14:27	37.52	11	0.12		
Comment:	50KM NW GUERNSEY							EAB	HZ	84.1	EP		14:27	34.30		0.13		
STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	EAB	HE	84.1	ES		14:27	44.08		-0.30		
DYA	HZ	89.4	EP			04:10	26.25	EAB	HN	84.1	IAML		14:27	48.36	10	0.14		
DYA	HN	89.4	ES			04:10	36.67	EAB	HE	84.1	IAML		14:27	49.57	9	0.13		
DYA	HE	89.4	IAML			04:10	37.97	GAL1	HZ	143.0	EP		14:27	43.07		0.08		
DYA	HN	89.4	IAML			04:10	38.61	GAL1	HE	143.0	ES		14:28	00.01		0.36		
JSA	HZ	98.5	EP			04:10	27.50	GAL1	HN	143.0	IAML		14:28	01.83	22	0.13		
JSA	ES	98.5	ES			04:10	38.80	GAL1	HE	143.0	IAML		14:28	01.83	19	0.19		
JSA	HE	98.5	IAML			04:10	40.68											
JSA	HN	98.5	IAML			04:10	40.80	August	8	2021	Time:	03:21	01.0	UTC	Magnitude: 1.7 ML			
SBD	BZ	139.0	EP			04:10	33.70	Lat:	53.523	Lon:	-0.296	Depth:	23.0	km				
CCA1	HN	156.0	ES			04:10	52.56	Grid Ref:	512.95	kmE	404.30	kmN	RMS:	0.30	secs			
CCA1	HN	156.0	IAML			04:10	53.34	Locality:	CAISTOR,LINCOLNSHIRE									
CCA1	HE	156.0	IAML			04:10	54.15	Velocity model:	Lownet	Xnear:	500.0	Xfar:	1000.0					
ROSF	BZ	166.0	EP			04:10	36.99	STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES
ROSF	BE	166.0	ES			04:10	54.70	LMK	HZ	7.6	EP		03:21	04.65		-0.43		
ROSF	BE	166.0	IAML			04:10	55.77	LMK	HE	7.6	ES		03:21	08.26		0.22		
ROSF	BN	166.0	IAML			04:10	55.98	LMK	HE	7.6	IAML		03:21	08.59	159	0.31		
July	31	2021	Time:	08:57	59.4	UTC	Magnitude:	0.7	ML	LMK	HN	7.6	IP		03:21	16.84		-0.06
Lat:	51.875	Lon:	-2.603	Depth:	3.7	km			STBN	CZ	99.3	EP		03:21	29.09		0.60	
Grid Ref:	358.49	kmE	219.82	kmN	RMS:	0.20	secs	STBN	CE	99.3	ES		03:21	29.71	21	0.23		
Locality:	WALFORD,HEREFORDSHIRE							STBN	CE	99.3	IAML		03:21	29.72	37	0.29		
Velocity	model:	Lownet	Xnear:	100.0	Xfar:	200.0			HPK	HE	100.0	ES		03:21	28.53		-0.22	
STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	HPK	HN	100.0	IAML		03:21	29.85	20	0.14		
MONM	HZ	14.4	IP			08:58	02.25	HPK	HE	100.0	IAML		03:21	29.88	24	0.11		
MONM	HN	14.4	ES			08:58	04.53	GDLE	HZ	106.0	ES		03:21	30.54		0.42		
MONM	HE	14.4	IAML			08:58	04.91	GDLE	HN	106.0	IP		03:21	31.30	22	0.34		
MONM	HN	14.4	IAML			08:58	04.93	GDLE	HE	106.0	IAML		03:21	31.94	20	0.52		
OLDB	HZ	24.2	IP	D	08:58	03.76	0.04	WACR	HZ	108.0	EP		03:21	18.21		0.04		
MCH1	HZ	30.4	IP	D	08:58	05.07		CDFL	HN	108.0	IP		03:21	31.20	6	0.11		
MCH1	HN	30.4	ES			08:58	09.22	CDFL	HE	108.0	IAML		03:21	31.44		-0.33		
MCH1	HN	30.4	IAML			08:58	09.55	WACR	HN	110.0	EP		03:21	18.18		-0.33		
MCH1	HE	30.4	IAML			08:58	10.76	CDFL	HN	110.0	IAML		03:21	31.62		-0.09		
STRD	HZ	32.3	EP			08:58	05.45	WACR	HE	110.0	IP		03:21	31.92	7	0.20		
STRD	HN	32.3	ES			08:58	09.83	WACR	HN	110.0	ES		03:21	32.47	6	0.11		
STRD	HN	32.3	IAML			08:58	10.23	WACR	HE	110.0	IAML		03:21	32.15	18	0.24		
STRD	HE	32.3	IAML			08:58	10.35	AS02	HN	112.0	ES		03:21	32.82	11	0.14		
HLM1	HZ	74.0	EP			08:58	12.15	AS02	HN	112.0	IAML		03:21	32.82				
HLM1	HE	74.0	ES			08:58	21.12	AS02	HE	112.0	IAML		03:21	32.82	11	0.14		
HLM1	HE	74.0	IAML			08:58	21.54	AS02	HE	112.0	IAML		03:21	32.82				
HLM1	HN	74.0	IAML			08:58	23.31	AS02	HE	112.0	IAML		03:21	32.82				
RSBS	HZ	148.0	EP			08:58	23.83	AS02	HE	112.0	IAML		03:21	32.82				
RSBS	HN	148.0	IAML			08:58	43.71	AS02	HE	112.0	IAML		03:21	32.82				
RSBS	HE	148.0	IAML			08:58	43.74	AS02	HE	112.0	IAML		03:21	32.82				
August	1	2021	Time:	05:15	22.8	UTC	Magnitude:	1.4	ML	August	9	2021	Time:	16:28	31.4	UTC	Magnitude: 1.2 ML	
Lat:	55.625	Lon:	-6.462	Depth:	7.1	km			Lat:	56.178	Lon:	-4.971	Depth:	12.6	km			
Grid Ref:	119.16	kmE	645.86	kmN	RMS:	0.60	secs	Grid Ref:	215.61	kmE	702.34	kmN	RMS:	0.40	secs			
Locality:	ISLAY,ARGYLL & BUTE							Locality:	LOCH GOIL,ARGYLL/BUTE									
Velocity	model:	Lownet	Xnear:	100.0	Xfar:	200.0		Velocity model:	Lownet	Xnear:	100.0	Xfar:	200.0					
STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES
CLGH	HZ	64.4	EP			05:15	34.10	LAWE	HZ	28.1	IP	C	16:28	36.94		0.20		
CLGH	HE	64.4	ES			05:15	40.83	LAWE	HE	28.1	ES		16:28	40.35		-0.28		
CLGH	HE	64.4	IAML			05:15	40.83	LAWE	HN	28.1	IAML		16:28	40.49	45	0.12		
CLGH	HE	64.4	IAML			05:15	40.83	LAWE	HE	28.1	IAML		16:28	40.57	35	0.16		
CLGH	HE	64.4	IAML			05:15	40.83	EAB	HZ	39.4	IP	C	16:28	38.90		0.43		
CLGH	HE	64.4	IAML			05:15	40.83	EAB	HE	39.4	ES		16:28	43.51		-0.12		
CLGH	HE	64.4	IAML			05:15	40.83	EAB	HN	39.4	IAML		16:28	44.98	16	0.03		
CLGH																		

**TABLE 2 : PHASE DATA**

PGB1	HE	50.9	ES	16:28	46.29	-0.37	LBWR	HN	59.1	IAML	05:22	34.57	22	0.21										
PGB1	HE	50.9	IAML	16:28	47.18	27 0.26	LBWR	HE	59.1	IAML	05:22	35.03	14	0.06										
PGB1	HN	50.9	IAML	16:28	47.55	26 0.50	AQ12	HZ	74.7	IP	D	05:22	28.34	0.06										
INVG	HZ	63.7	IP	C	16:28	42.56	0.34	AT10	HZ	82.2	IP	C	05:22	29.64	0.20									
INVG	HE	63.7	ES		16:28	49.58	-0.53	STNC	HZ	87.8	IP	C	05:22	30.83	0.54									
INVG	HE	63.7	IAML		16:28	52.11	8 0.08	KESW	HZ	102.0	EP		05:22	32.54	0.05									
INVG	HN	63.7	IAML		16:28	54.37	14 0.08	KESW	HE	102.0	IAML		05:22	45.67	5 0.32									
CLGH	HZ	141.0	EP		16:28	53.68	-0.01	KESW	HN	102.0	IAML		05:22	45.78	7 0.28									
CLGH	HE	141.0	ES		16:29	09.51	-0.46	EDMD	HZ	106.0	EP		05:22	33.54	0.41									
CLGH	HN	141.0	IAML		16:29	12.53	8 0.17	EDMD	HE	106.0	IAML		05:22	45.90	20 0.29									
CLGH	HE	141.0	IAML		16:29	12.76	8 0.22	EDMD	HN	106.0	IAML		05:22	46.59	21 0.12									
							FOEL	HZ	132.0	EP		05:22	36.83	-0.10										
August	12	2021			Time:	21:26	26.0	UTC	Magnitude:	1.0	ML	CWF	HZ	138.0	EP	05:22	37.93	0.16						
					Lat:	57.188		Lon:	-4.117		Depth: 7.8 km		HLM1	HZ	160.0	EP	05:22	40.57	-0.38					
					Grid Ref:	272.07	kmE	812.76	kmN		RMS: 0.30 secs													
					Locality:	KINGUSSIE	, HIGHLAND					August	16	2021		Time:	02:43	10.5	UTC	Magnitude: 0.7	ML			
					Velocity model:	Lownet	Xnear:	100.0	Xfar:	200.0			Lat:	53.786		Lon:	-2.077		Depth: 15.9 km					
					Comment:	12KM NNW KINGUSSIE							Grid Ref:	394.93	kmE	432.21	kmN		RMS: 0.10 secs					
STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES		Locality:	HEBDEN	BRIDGE	, W YORKS									
MCD	HZ	68.0	EP			21:26	37.42					Velocity model:	Lownet	Xnear:	500.0	Xfar:	1000.0							
MCD	HE	68.0	ES			21:26	45.53					Comment:	6KM NW HEBDEN BRIDGE											
MCD	HE	68.0	IAML			21:26	49.59	17	0.14			STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES		
MCD	HN	68.0	IAML			21:26	49.72	12	0.14			AS03	HZ	8.2	EP	02:43	13.72					0.02		
INVG	HZ	84.8	EP			21:26	39.96					AS03	HN	8.2	ES	02:43	16.12					0.08		
INVG	HE	84.8	ES			21:26	49.68					AS03	HN	8.2	IAML	02:43	16.52	12	0.08					
INVG	HE	84.8	IAML			21:26	53.82	5	0.22			AS03	HE	8.2	IAML	02:43	16.55	16	0.10					
INVG	HN	84.8	IAML			21:26	54.19	4	0.22			AR01	HZ	20.0	EP	02:43	14.84					-0.10		
KPL	HZ	94.2	EP			21:26	41.71					AR01	HN	20.0	ES	02:43	18.19					0.01		
KPL	HN	94.2	ES			21:26	52.38					AR01	HE	20.0	IAML	02:43	18.32	15	0.14					
KPL	HN	94.2	IAML			21:26	55.63	5	0.48			AR01	HN	20.0	IAML	02:43	18.35	16	0.14					
KPL	HE	94.2	IAML			21:26	55.89	14	0.16			AS02	HZ	26.5	EP	02:43	15.82					0.00		
DRUM	HZ	104.0	EP			21:26	43.19					AS02	HN	26.5	ES	02:43	19.53					-0.17		
DRUM	HE	104.0	ES			21:26	55.28					AS02	HN	26.5	IAML	02:43	19.68	12	0.09					
DRUM	HE	104.0	IAML			21:27	00.39	7	0.28			AS02	HE	26.5	IAML	02:43	19.79	7	0.11					
DRUM	HN	104.0	IAML			21:27	00.51	7	0.37			AR07	HZ	34.3	EP	02:43	16.96					0.03		
EAB	HN	112.0	EP			21:26	45.03					AR07	HN	34.3	ES	02:43	21.68					0.05		
EAB	HE	112.0	IAML			21:27	02.49	3	0.10			AR07	HE	34.3	IAML	02:43	22.02	8	0.17					
EAB	HN	112.0	IAML			21:27	03.40	3	0.22			AR07	HN	34.3	IAML	02:43	22.12	15	0.16					
LINV	HZ	125.0	EP			21:26	46.23					HPK	HZ	35.4	EP	02:43	17.08					-0.01		
LINV	HE	125.0	ES			21:27	00.81					HPK	HE	35.4	ES	02:43	21.83					-0.08		
LINV	HE	125.0	IAML			21:27	01.08	3	0.16			HPK	HE	35.4	IAML	02:43	21.98	21	0.24					
LINV	HN	125.0	IAML			21:27	03.19	3	0.14			HPK	HN	35.4	IAML	02:43	22.15	15	0.20					
LAWE	HZ	130.0	EP			21:26	47.03					LBWR	HZ	48.7	EP	02:43	19.27					0.17		
LAWE	HN	130.0	IAML			21:27	05.59	3	0.17			LBWR	HE	48.7	ES	02:43	25.44					0.05		
LAWE	HE	130.0	IAML			21:27	06.83	4	0.22			LBWR	HN	48.7	IAML	02:43	26.63	4	0.20					
BIGH	HE	146.0	IAML			21:27	07.50	3	0.16			LBWR	HE	48.7	IAML	02:43	26.70	4	0.08					
BIGH	HN	146.0	IAML			21:27	07.96	2	0.10			AS07	HZ	52.8	EP	02:43	19.70					-0.04		
												AS07	HE	52.8	IAML	02:43	26.03	7	0.22					
August	14	2021			Time:	13:25	34.5	UTC	Magnitude:	2.0	ML	AS07	HN	52.8	IAML	02:43	26.10	10	0.22					
					Lat:	59.445		Lon:	2.052		Depth: 10.0 km													
					Grid Ref:	629.67	kmE	1069.04	kmN		RMS: 0.30 secs													
					Locality:	NORTHERN NORTH SEA						August	16	2021		Time:	15:52	22.7	UTC	Magnitude:	0.6	ML		
					Velocity model:	North Sea	Xnear:	400.0	Xfar:	600.0				Lat:	55.813		Lon:	-3.134		Depth: 6.4 km				
					Comment:	200KM ESE LERWICK							Grid Ref:	328.94	kmE	658.33	kmN		RMS: 0.30 secs					
STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES			Locality:	PENICUIK	, MIDLOTHIAN									
LRW	HZ	197.0	EP			13:26	03.74					Velocity model:	Lownet	Xnear:	100.0	Xfar:	200.0							
LRW	HN	197.0	IAML			13:26	32.21	10	0.18			STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES		
LRW	HE	197.0	IAML			13:26	32.50	16	0.28			EDI	HZ	12.8	EP	15:52	25.66					0.09		
BIGH	HZ	359.0	EP			13:26	23.38					EDI	HE	12.8	ES	15:52	27.70					0.00		
BIGH	HE	359.0	ES			13:26	59.37					EDI	HN	12.8	IAML	15:52	27.78	35	0.14					
BIGH	HN	359.0	IAML			13:26	59.65	3	0.19			ESY	HZ	34.6	EP	15:52	28.73					-0.20		
BIGH	HE	359.0	IAML			13:26	59.81	3	0.38			ESY	HN	55.4	EP	15:52	32.75					0.61		
MCD	HZ	372.0	EP			13:26	25.40					ESK	HN	55.4	ES	15:52	38.63					-0.43		
DRUM	HE	388.0	ES			13:27	05.88					ESK	HE	55.4	IAML	15:52	38.78	4	0.11					
DRUM	HE	388.0	IAML			13:27	06.85	4	0.40			ESK	HN	55.4	IAML	15:52	39.09	2	0.19					
DRUM	HN	388.0	IAML			13:27	07.35	5	0.41			EAB	HZ	86.0	EP	15:52	36.99					0.11		
LINV	HZ	443.0	EP			13:26	33.31					EAB	HN	86.0	ES	15:52	47.06					-0.20		
												NEWG	HN	104.0	ES	15:52	52.03					0.00		
August	15	2021			Time:	05:22	15.8	UTC	Magnitude:	1.4	ML	NEWG	HE	104.0	IAML	15:52	53.88	2	0.26					
					Lat:	53.879		Lon:	-2.116		Depth: 9.0 km			NEWG	HN	104.0	IAML	15:52	54.47	4	0.13			
					Grid Ref:	392.37	kmE	442.56	kmN		RMS: 0.30 secs			GAL1	HZ	145.0	EP	15:52	45.76					0.08
					Locality:	COLNE	, LANCASHIRE																	
					Velocity model:	Lownet	Xnear:	100.0	Xfar:	200.0														
					Comment:	4KM NE COLNE																		
STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES														
AR01	HZ	24.8	IP	C	05:22	20.8																		

TABLE 2 : PHASE DATA

NEWG	HN	75.5	IAML	21:07	28.63	3	0.18		HPK	HE	31.1	IAML	02:57	55.60	8	0.16		
AQ12	HZ	90.9	EP	21:07	20.44		-0.05		HPK	HN	31.1	IAML	02:57	55.98	8	0.14		
AQ12	HE	90.9	IAML	21:07	32.08	6	0.06		AR09	HZ	31.4	EP	02:57	51.41		-0.03		
AQ12	HN	90.9	IAML	21:07	32.62	8	0.10		AR09	HN	31.4	ES	02:57	55.53		-0.16		
AR09	HZ	114.0	EP	21:07	24.35		0.28		AR09	HE	31.4	IAML	02:57	55.96	16	0.10		
AR09	HE	114.0	IAML	21:07	39.11	26	0.25		AR09	HN	31.4	IAML	02:57	56.03	15	0.07		
AR09	HN	114.0	IAML	21:07	39.43	18	0.25		AR07	HZ	35.3	EP	02:57	52.07		0.07		
ESK	HZ	115.0	EP	21:07	24.11		-0.07		AR07	HN	35.3	ES	02:57	56.74		0.08		
ESK	HN	115.0	IAML	21:07	39.07	3	0.29		AR07	HZ	35.3	IAML	02:57	58.07	4	0.40		
ESK	HE	115.0	IAML	21:07	39.72	4	0.14		AR07	HE	35.3	IAML	02:57	58.65	4	0.22		
EDMD	HZ	148.0	EP	21:07	29.76		0.91		AQ12	HZ	59.9	EP	02:57	55.89		0.07		
EDMD	HN	148.0	IAML	21:07	47.97	8	0.22		AQ12	HN	59.9	ES	02:58	02.89		-0.39		
EDMD	HE	148.0	IAML	21:07	48.90	5	0.24		AQ12	HE	59.9	IAML	02:58	04.52	1	0.06		
ILTH	HZ	150.0	EP	21:07	28.83		-0.26		AQ12	HN	59.9	IAML	02:58	05.40	1	0.07		
ILTH	HN	150.0	IAML	21:07	47.78	2	0.20		EDMD	HZ	76.5	EP	02:57	58.47		0.14		
ILTH	HE	150.0	IAML	21:07	47.93	1	0.22		EDMD	HE	76.5	ES	02:58	07.54		-0.07		
August 17 2021				Time: 06:45	46.4	UTC	Magnitude: 0.9	ML	EDMD	HE	76.5	IAML	02:58	09.20	3	0.24		
Lat: 55.233				Lon: -3.530			Depth: 2.5	km	EDMD	HN	76.5	IAML	02:58	09.80	2	0.19		
Grid Ref: 302.71 kmE				594.27 kmN			RMS: 0.40	secs	LBWR	HZ	84.3	EP	02:57	59.79		0.19		
Locality: ST ANN'S, D & G								LBWR	HN	84.3	IAML	02:58	12.10	1	0.08			
Velocity model: Lownet Xnear: 100.0 Xfar: 200.0								LBWR	HE	84.3	IAML	02:58	12.72	2	0.24			
Comment: 4KM WEST ST ANN'S								AP12	HE	85.9	ES	02:58	10.22		0.03			
STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES								
ESK	HZ	22.7	IP	C	06:45	50.91			0.13		KESW	HN	88.3	EP	02:58	00.51		0.31
ESK	HN	22.7	ES		06:45	53.64			-0.32									
ESK	HE	22.7	IAML		06:45	53.74	32	0.04										
ESK	HN	22.7	IAML		06:45	53.75	38	0.08										
EKA	BZ	26.1	EP		06:45	51.37			-0.01									
EKA	BZ	26.1	ES		06:45	54.49			-0.51									
NEWG	HZ	46.4	IP	C	06:45	54.74			-0.05									
NEWG	HN	46.4	ES		06:45	59.99			-0.90									
NEWG	HN	46.4	IAML		06:46	01.83	5	0.13										
NEWG	HE	46.4	IAML		06:45	54.83	13	0.09										
KESW	HZ	76.7	EP		06:46	00.01			0.44									
KESW	HN	76.7	IAML		06:46	09.38	2	0.13										
KESW	HE	76.7	IAML		06:46	11.81	5	0.31										
GAL1	HZ	85.8	IP	D	06:46	01.10			0.16									
PGB1	HN	88.2	ES		06:46	12.83			0.63									
PGB1	HN	88.2	IAML		06:46	14.76	7	0.17										
PGB1	HE	88.2	IAML		06:46	15.07	11	0.23										
AQ12	HZ	102.0	EP		06:46	04.01			0.54									
AQ12	HN	102.0	ES		06:46	15.81			-0.10									
AQ12	HN	102.0	IAML		06:46	16.96	7	0.08										
AQ12	HZ	102.0	IAML		06:46	17.21	7	0.22										
August 18 2021				Time: 16:03	16.0	UTC	Magnitude: 1.0	ML										
Lat: 52.611				Lon: -2.054			Depth: 7.5	km										
Grid Ref: 396.34 kmE				301.51 kmN			RMS: 0.40	secs										
Locality: WALSALL, WEST MIDLANDS																		
Velocity model: Lownet Xnear: 100.0 Xfar: 200.0																		
STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES								
CWF	HZ	52.4	EP		16:03	24.83			-0.17									
CWF	HN	52.4	ES		16:03	30.95			-0.62									
CWF	HN	52.4	IAML		16:03	31.16	17	0.20										
CWF	HE	52.4	IAML		16:03	31.32	7	0.10										
HLM1	HZ	57.0	EP		16:03	25.56			-0.20									
HLM1	HN	57.0	ES		16:03	32.29			-0.60									
HLM1	HE	57.0	IAML		16:03	32.63	24	0.12										
HLM1	HN	57.0	IAML		16:03	32.72	14	0.13										
FOEL	HZ	83.3	EP		16:03	30.18			0.34									
FOEL	HN	83.3	ES		16:03	39.88			-0.08									
FOEL	HN	83.3	IAML		16:03	40.11	4	0.44										
FOEL	HE	83.3	IAML		16:03	41.32	4	0.38										
LBWR	HZ	90.6	EP		16:03	31.33			0.37									
LBWR	HE	90.6	ES		16:03	42.19			0.31									
LBWR	HN	90.6	IAML		16:03	42.94	4	0.12										
LBWR	HE	90.6	IAML		16:03	43.21	4	0.21										
STRD	HZ	93.3	EP		16:03	31.73			0.40									
STRD	HN	93.3	ES		16:03	42.72			0.19									
STRD	HN	93.3	IAML		16:03	43.55	20	0.14										
STRD	HE	93.3	IAML		16:03	44.02	18	0.12										
MCH1	HZ	93.9	EP		16:03	31.23			-0.21									
MCH1	HN	93.9	IAML		16:03	44.59	2	0.20										
MCH1	HE	93.9	IAML		16:03	45.16	3	0.12										
MONM	HZ	100.0	EP		16:03	32.66			0.28									
MONM	HN	100.0	IAML		16:03	48.39	7	0.22										
MONM	HE	100.0	IAML		16:03	50.42	4	0.17										
RSBS	HZ	198.0	EP		16:03	46.26			0.18									
RSBS	HN	198.0	IAML		16:04	11.99	2	0.33										
RSBS	HE	198.0	IAML		16:04	12.57	2	0.22										
August 19 2021				Time: 02:57	45.6	UTC	Magnitude: 0.4	ML										
Lat: 54.144				Lon: -1.981			Depth: 9.9	km										
Grid Ref: 401.24 kmE				472.04 kmN			RMS: 0.20	secs										
Locality: KETTLEWELL, N YORKSHIRE																		
Velocity model: Lownet Xnear: 100.0 Xfar: 200.0																		
STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES								
AS07	HZ	12.5	EP		02:57	48.63			0.01									
AS07	HN	12.5	ES		02:57	50.91			0.10									
AS07	HN	12.5	IAML		02:57	50.97	33	0.10										
AS07	HE	12.5	IAML		02:57	51.05	7	0.06										
HPK	HZ	31.1	EP		02:57	51.20			-0.15									
HPK	HN	31.1	ES		02:57	55.33			-0.21									
HPK	HE	31.1	IAML		02:57	55.33												
August 20 2021				Time: 06:29	39.3	UTC	Magnitude: 0.8	ML										
Lat: 52.315				Lon: -6.694			Depth: 4.6	km										
Grid Ref: 80.14 kmE				278.96 kmN			RMS: 0.20	secs										
Locality: TAGHMON, CO WEXFORD																		
Velocity model: Lownet Xnear: 100.0 Xfar: 200.0																		
STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES								
IWEX	HZ	8.6	EP		06:29	41.09												
IWEX	HN	8.6	ES		06:29	42.88												
IWEX	HE	8.6	IAML		06:29	43.10	106	0.18										
RSBS	HZ	139.0	EP		06:30	02.33												
RSBS	HN	139.0	ES		06:30	18.03												
RSBS	HE	139.0	IAML		06:30	20.80	1	0.16										
RSBS	HN	139.0	IAML		06:30	21.52	1	0.07										
DSB	HZ	106.0	EP		06:29	56.89												
DSB	HN	106.0	ES		06:30	09.39												
DSB	HE	106.0	IAML		0													

TABLE 2 : PHASE DATA

AU11	HZ	365.0	EP	20:37	13.88		1.01	HPK	HE	32.3	IAML	18:34	21.87	17	0.30								
AU11	HN	365.0	IAML	20:37	52.04	250	0.24	AS02	HZ	37.2	EP	18:34	17.37		-0.03								
AU11	HE	365.0	IAML	20:37	52.29	170	0.30	AS02	HN	37.2	ES	18:34	22.08		-0.25								
AU07	HZ	369.0	EP	20:37	14.27		0.91	AS02	HE	37.2	IAML	18:34	22.39	10	0.10								
AU05	HZ	371.0	EP	20:37	14.48		0.88	AS02	HN	37.2	IAML	18:34	22.72	5	0.18								
AT10	HZ	377.0	EP	20:37	14.95		0.50	AQ07	HZ	37.5	EP	18:34	17.59		0.18								
AT10	HE	377.0	IAML	20:37	53.90	380	0.28	AQ07	HE	37.5	ES	18:34	22.57		0.22								
ELMS	HZ	382.0	EP	20:37	14.76		-0.20	AQ07	HN	37.5	IAML	18:34	22.74	48	0.26								
ELMS	HN	382.0	IAML	20:37	55.87	237	0.22	AS07	HZ	42.7	EP	18:34	23.30	33	0.33								
ELMS	HE	382.0	IAML	20:37	56.55	232	0.26	AS07	HN	42.7	ES	18:34	23.58		0.07								
HPK	HZ	415.0	EP	20:37	19.33		0.14	AS07	HE	42.7	IAML	18:34	23.69	17	0.10								
BRAD	CZ	417.0	EP	20:37	18.97		-0.37	AS07	HN	42.7	IAML	18:34	23.70	16	0.09								
EDMD	HZ	423.0	EP	20:37	20.09		-0.05	AR09	HZ	44.3	EP	18:34	18.44		-0.09								
EDMD	HE	423.0	IAML	20:38	02.20	253	0.24	AR09	HN	44.3	ES	18:34	23.85		-0.43								
EDMD	HN	423.0	IAML	20:38	05.09	251	0.14	LBWR	HZ	58.9	EP	18:34	20.69		-0.04								
AS07	HZ	428.0	EP	20:37	20.85		0.00	LBWR	HN	58.9	ES	18:34	27.85		-0.25								
LBWR	HZ	441.0	EP	20:37	22.26		-0.22	LBWR	HN	58.9	IAML	18:34	29.56	7	0.18								
LBWR	HN	441.0	IAML	20:38	07.60	92	0.28	LBWR	HE	58.9	IAML	18:34	29.95	5	0.10								
LBWR	HE	441.0	IAML	20:38	09.88	100	0.28	AQ12	HZ	75.1	EP	18:34	23.32		0.08								
CWF	HZ	450.0	EP	20:37	23.04		-0.54	AQ12	HE	75.1	ES	18:34	32.03		-0.41								
CWF	HN	450.0	IAML	20:38	10.46	73	0.08	AQ12	HN	75.1	IAML	18:34	32.44	2	0.08								
CWF	HE	450.0	IAML	20:38	11.00	76	0.16	AQ12	HE	75.1	IAML	18:34	32.47	3	0.09								
AS02	HZ	451.0	EP	20:37	23.58		-0.14	AT10	HN	81.2	IAML	18:34	36.06	7	0.36								
AS02	HE	451.0	IAML	20:38	09.37	131	0.32	AT10	HE	81.2	IAML	18:34	36.33	12	0.36								
AS02	HN	451.0	IAML	20:38	09.85	75	0.40	AP12	HZ	90.1	EP	18:34	25.81		0.29								
AR09	HZ	461.0	EP	20:37	24.76		-0.21	AP12	HN	90.1	ES	18:34	36.18		-0.20								
ELSH	HZ	464.0	EP	20:37	24.81		-0.48	AP12	HE	90.1	IAML	18:34	37.04	4	0.24								
ELSH	HN	464.0	IAML	20:38	13.82	56	0.32	AP12	HN	90.1	IAML	18:34	37.12	4	0.29								
ELSH	HE	464.0	IAML	20:38	19.62	62	0.24	KESW	HZ	102.0	EP	18:34	27.51		0.16								
AR07	HZ	467.0	EP	20:37	25.76		0.06	KESW	HE	102.0	IAML	18:34	40.25	2	0.21								
AR01	HZ	469.0	EP	20:37	25.90		0.02	KESW	HN	102.0	IAML	18:34	40.64	2	0.18								
AR01	HN	469.0	IAML	20:38	13.36	233	0.38	EDMD	HE	106.0	ES	18:34	40.40		0.05								
AR01	HE	469.0	IAML	20:38	13.45	207	0.40	EDMD	HE	106.0	IAML	18:34	40.66	7	0.28								
ESY	HZ	477.0	EP	20:37	27.11		0.21	EDMD	HN	106.0	IAML	18:34	41.28	9	0.30								
ESY	HN	477.0	IAML	20:38	14.05	164	0.28	August 25 2021 Time: 08:39 30.4 UTC Magnitude: 2.0 ML															
ESY	HE	477.0	IAML	20:38	14.51	142	0.22	Lat: 49.926 Lon: -2.916 Grid Ref: 334.26 kmE 3.34 kmN Locality: ENGLISH CHANNEL Velocity model: Lownet Xnear: 500.0 Xfar: 1000.0 Comment: 55KM NW GUERNSEY															
AQ12	HZ	477.0	EP	20:37	26.62		-0.38	STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES					
AQ07	HZ	485.0	EP	20:37	27.84		0.00	DYA	HZ	92.0	EP	08:39						-0.33					
AQ10	HZ	493.0	EP	20:37	28.99		0.13	DYA	HN	92.0	ES	08:39						-0.87					
KESW	HN	498.0	EP	20:37	29.11		-0.48	DYA	HE	92.0	IAML	08:39											
ESK	Hz	504.0	EP	20:37	29.88		-0.40	DYA	HN	92.0	IAML	08:39											
ESK	HE	504.0	IAML	20:38	19.23	64	0.14	JSA	HZ	98.2	EP	08:39											
ESK	HN	504.0	IAML	20:38	20.27	72	0.26	JSA	HE	98.2	IAML	08:40											
AQ05	HZ	505.0	EP	20:37	30.21		-0.12	JSA	HN	98.2	IAML	08:40											
DRUM	HZ	506.0	EP	20:37	30.66		0.16	JDC	EZ	103.0	EP	08:39											
DRUM	HE	506.0	IAML	20:38	19.72	79	0.16	JDC	EN	103.0	ES	08:40											
DRUM	HN	506.0	IAML	20:38	23.38	114	0.16	JDG	EE	103.0	IAML	08:40											
AP12	HZ	513.0	EP	20:37	31.10		-0.26	JDG	EZ	103.0	EP	08:39											
AP12	HN	513.0	IAML	20:38	22.06	44	0.28	JDG	EE	103.0	ES	08:39											
AP12	HE	513.0	IAML	20:38	25.10	27	0.18	JDC	EE	103.0	IAML	08:40											
HLM1	HZ	554.0	EP	20:37	36.11		-0.53	JDC	EN	103.0	IAML	08:40											
FOEL	HZ	555.0	EP	20:37	36.24		-0.43	JDG	EE	103.0	IAML	08:40											
FOEL	HN	555.0	IAML	20:38	31.54	59	0.36	JDG	EZ	103.0	EP	08:39											
FOEL	HE	555.0	IAML	20:38	31.82	47	0.22	JDG	EE	103.0	ES	08:39											
NEWG	HZ	568.0	EP	20:37	37.49		-0.81	JDG	EN	103.0	IAML	08:40											
INVG	HZ	577.0	EP	20:37	39.49		0.10	JDG	EE	103.0	IAML	08:40											
MCD	HZ	581.0	EP	20:37	39.39		-0.58	JDG	EN	103.0	IAML	08:40											
MCD	HE	581.0	IAML	20:38	40.53	33	0.16	JDG	EE	103.0	IAML	08:40											
MCD	HN	581.0	IAML	20:38	43.74	32	0.47	JDG	EN	103.0	IAML	08:40											
EAB	HZ	588.0	EP	20:37	40.83		0.02	JDG	EE	103.0	IAML	08:40											
EAB	HN	588.0	IAML	20:38	38.54	59	0.24	JDG	EN	103.0	IAML	08:40											
EAB	HE	588.0	IAML	20:38	39.81	68	0.30	JDG	EE	103.0	IAML	08:40											
IOMK	HZ	597.0	EP	20:37	40.72		-1.19	JDG	EN	103.0	IAML	08:40											
IOMK	HN	597.0	IAML	20:38	39.05	17	0.12	JDG	EE	103.0	IAML	08:40											
IOMK	HE	597.0	IAML	20:38	39.40	20	0.54	JDG	EN	103.0	IAML	08:40											
GALL	HZ	600.0	EP	20:37	41.38		-0.83	JDG	EE	103.0	IAML	08:40											
GALL	HE	600.0	IAML	20:38	39.82	31	0.16	JDG	EN	103.0	IAML	08:40											
GALL	HN	600.0	IAML	20:38	40.86	64	0.28	JDG	EE	103.0	IAML	08:40											
LAWE	HZ	654.0	EP	20:37	48.77		-0.28	ROSF	BZ	179.0	EP	08:39											
BIGH	HZ	668.0	EP	20:37	50.27		-0.52	ROSF	BE	179.0	IAML	08:40											
BIGH	HN	668.0	IAML	20:38	42.66	151	0.62	ROSF	BN	179.0	IAML	08:40											
BIGH	HE	668.0	IAML	20:38	56.13	17	0.23	MONM	HN	213.0	IAML	08:40											
KPL	HZ	701.0	EP	20:37	54.43		-0.44	MONM	HE	213.0	IAML	08:40											
KPL	HN	701.0	IAML	20:39	01.97	40	0.28	MCH1	HE	231.0	IAML	08:40											
KPL	HE	701.0	IAML	20:39	05.45	37	0.24	MCH1	HN	231.0	IAML	08:40											
HLM1	HN	701.0	IAML	20:39	28.80	14	0.12	HLM1	HE	288.0	IAML	08:40											
HLM1	HE	701.0	IAML	20:39	31.50	14	0.12	HLM1	HN	288.0	IAML	08:40											
August 23 2021 Time: 18:34 10.6 UTC Magnitude: 0.9 ML Lat: 53.881 Lon: -2.099 Depth: 13.0 km Grid Ref: 393.49 kmE 442.78 kmN RMS: 0.20 secs Locality: COLNE, LANCASHIRE Velocity model: Lownet Xnear: 100.0 Xfar: 200.0 Comment: 4KM NE COLNE																August 29 2021 Time: 02:27 07.7 UTC Magnitude: 0.9 ML							
Lat: 57.360 Lon: -5.161 Grid Ref: 209.89 kmE 834.34 kmN RMS: 0.10 secs Locality: CARNACH, HIGHLAND Velocity model: Lownet Xnear: 500.0 Xfar: 1000.0 Comment: 10KM NE CARNACH																Lat: 57.360 Lon: -5.161 Grid Ref: 209.89 kmE 834.34 kmN RMS: 0.10 secs Locality: CARNACH, HIGHLAND Velocity model: Lownet Xnear: 500.0 Xfar: 1000.0 Comment: 10KM NE CARNACH							
STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES	STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES		
AR01	HZ	25.7	EP	18:34	15.71			0.03			KPL	HZ	29.7	EP	02:27								
AR01	HN	25.7	ES	18:34	19.26			-0.09			KPL	HN	29.7	ES	02:27								
AR01	HN	25.7	IAML	18:34	19.76	27	0.13				KPL	HE	29.7	IAML	02:27								
AR01	HE	25.7	IAML	18:34	19.98	37	0.12				KPL	HN	29.7	IAML	02:27								
AR07	HZ	26.8	EP	18:34	16.09			0.25			KPL	HE	29.7	IAML	02:27								
AR07	HE	26.8	ES	18:34	19.91			0.28			KPL	HN	29.7	ES	02:27								
AR07	HE	26.8	IAML	18:34																			

**TABLE 2 : PHASE DATA**

MCD	HZ	117.0	EP	02:27	26.24	-0.03	Comment: FELT COMRIE	Intensity: 3
MCD	HN	117.0	IAML	02:27	42.05	5 0.14	STAT CO DIST PHAS WT P HrMn SECS AMPL PERI RES	
MCD	HE	117.0	IAML	02:27	42.06	5 0.16	INVG HZ 6.6 IP C 19:04 07.61	0.02
LAWE	HZ	123.0	EP	02:27	27.27	0.14	INVG HN 6.6 ES 19:04 08.53	-0.29
LAWE	HN	123.0	IAML	02:27	45.36	3 0.09	INVG HN 6.6 IAML 19:04 08.61	702 0.10
LAWE	HE	123.0	IAML	02:27	45.45	4 0.16	INVG HE 6.6 IAML 19:04 08.63	682 0.10
INVG	HZ	124.0	EP	02:27	27.20	-0.08	EAB HZ 31.0 EP 19:04 12.06	0.14
INVG	HE	124.0	IAML	02:27	43.74	2 0.10	EAB HN 31.0 ES 19:04 16.25	-0.07
INVG	HN	124.0	IAML	02:27	43.74	2 0.19	EAB HE 31.0 IAML 19:04 18.10	60 0.30
EAB	HZ	140.0	EP	02:27	29.56	0.05	EAB HN 31.0 IAML 19:04 18.69	64 0.33
EAB	HE	140.0	ES	02:27	45.36	-0.10	PGB1 HZ 70.8 EP 19:04 18.46	0.08
EAB	HE	140.0	IAML	02:27	46.85	4 0.23	PGB1 HE 70.8 ES 19:04 27.27	-0.23
EAB	HN	140.0	IAML	02:27	48.91	4 0.16	PGB1 HE 70.8 IAML 19:04 30.63	29 0.36
							PGB1 HN 70.8 IAML 19:04 33.22	24 0.15
August 29 2021				Time: 08:18	58.5 UTC	Magnitude: 0.8 ML	LAWE HZ 89.0 EP 19:04 21.20	0.01
Lat: 53.011				Lon: -2.290		Depth: 9.4 km	LAWE HN 89.0 ES 19:04 32.41	0.05
Grid Ref: 380.54 kmE				346.04 kmN		RMS: 0.10 secs	LAWE HE 89.0 IAML 19:04 35.96	62 0.16
Locality: SILVERDALE, STAFFS							LAWE HN 89.0 IAML 19:04 36.13	46 0.23
Velocity model: Lownet Xnear: 100.0 Xfar: 200.0							ESY HZ 99.2 EP 19:04 22.79	-0.01
STAT CO DIST PHAS WT P HrMn SECS AMPL PERI RES							ESY HN 99.2 ES 19:04 34.80	-0.34
STNC HZ 10.5 IP C 08:19 01.14							ESY HN 99.2 IAML 19:04 35.03	18 0.20
STNC HZ 10.5 EP 08:19 01.15							ESY HE 99.2 IAML 19:04 35.26	21 0.26
STNC HN 10.5 ES 08:19 03.21							DRUM HZ 109.0 EP 19:04 24.25	-0.03
STNC HN 10.5 IAML 08:19 03.40 86 0.07							DRUM HE 109.0 IAML 19:04 41.55	14 0.24
STNC HE 10.5 IAML 08:19 03.51 125 0.08							DRUM HN 109.0 IAML 19:04 41.73	20 0.21
LBWR HZ 57.5 EP 08:19 08.25							ESK HZ 128.0 EP 19:04 27.63	0.37
FOEL HZ 62.7 EP 08:19 09.11							ESK HN 128.0 IAML 19:04 44.72	12 0.26
FOEL HE 62.7 ES 08:19 16.94							ESK HE 128.0 IAML 19:04 44.90	19 0.22
FOEL HE 62.7 IAML 08:19 18.54 3 0.51							MCD HZ 141.0 EP 19:04 29.83	0.66
FOEL HN 62.7 IAML 08:19 18.96 2 0.39							MCD HE 141.0 IAML 19:04 48.64	19 0.20
AS02 HN 63.7 ES 08:19 17.23							MCD HN 141.0 IAML 19:04 49.32	17 0.14
AS02 HE 63.7 IAML 08:19 17.81 4 0.22							NEWG HZ 142.0 EP 19:04 29.52	0.27
AS02 HN 63.7 IAML 08:19 18.36 6 0.23							NEWG HN 142.0 IAML 19:04 48.84	6 0.18
HLM1 HZ 67.8 EP 08:19 10.04							NEWG HE 142.0 IAML 19:04 49.19	7 0.18
HLM1 HE 67.8 ES 08:19 18.25							KPL HZ 148.0 EP 19:04 30.67	0.57
HLM1 HE 67.8 IAML 08:19 19.53 4 0.25							KPL HE 148.0 IAML 19:04 51.10	10 0.19
HLM1 HN 67.8 IAML 08:19 21.34 2 0.09							KPL HN 148.0 IAML 19:04 51.36	9 0.14
CWF HN 72.7 ES 08:19 19.50							GAL1 HZ 175.0 EP 19:04 34.10	0.12
CWF HN 72.7 IAML 08:19 21.49 3 0.07							GAL1 HN 175.0 IAML 19:04 58.42	5 0.10
CWF HE 72.7 IAML 08:19 21.50 2 0.17							GAL1 HE 175.0 IAML 19:04 58.76	3 0.22
MCH1 HN 123.0 ES 08:19 33.00							CLGH HZ 197.0 EP 19:04 36.80	0.01
MCH1 HN 123.0 IAML 08:19 34.31 2 0.24							CLGH HN 197.0 IAML 19:05 03.49	11 0.46
MCH1 HE 123.0 IAML 08:19 35.94 3 0.22							CLGH HE 197.0 IAML 19:05 04.41	8 0.16
WLF1 HN 144.0 ES 08:19 37.71							LINV HZ 210.0 EP 19:04 38.07	-0.28
WLF1 HN 144.0 IAML 08:19 38.71 5 0.28							LINV HE 210.0 IAML 19:05 06.05	8 0.26
WLF1 HE 144.0 IAML 08:19 38.94 3 0.28							LINV HN 210.0 IAML 19:05 07.40	3 0.32
WPS HN 154.0 ES 08:19 40.69								
WPS HE 154.0 IAML 08:19 40.99 2 0.22								
WPS HN 154.0 IAML 08:19 42.08 3 0.10								
August 29 2021				Time: 14:43	58.8 UTC	Magnitude: 0.9 ML	August 31 2021	
Lat: 54.765				Lon: -1.599		Depth: 11.2 km	Time: 17:58	32.7 UTC
Grid Ref: 425.80 kmE				541.20 kmN		RMS: 0.20 secs	Magnitude: 0.5 ML	
Locality: DURHAM, COUNTY DURHAM							Lat: 55.420	
Velocity model: Lownet Xnear: 100.0 Xfar: 200.0							Lon: -6.016	
STAT CO DIST PHAS WT P HrMn SECS AMPL PERI RES							Grid Ref: 145.89 kmE	
EDMD HZ 24.5 IP C 14:44 03.47							621.35 kmN	
EDMD HN 24.5 ES 14:44 07.01							RMS: 0.20 secs	
EDMD HN 24.5 IAML 14:44 07.17 106 0.16								
EDMD HE 24.5 IAML 14:44 07.24 53 0.10								
AS10 HN 28.0 ES 14:44 08.13								
AS10 HN 28.0 IAML 14:44 08.33 40 0.18								
AS10 HE 28.0 IAML 14:44 08.66 20 0.30								
AT10 HZ 51.7 EP 14:44 07.46								
AT10 HN 51.7 IAML 14:44 14.09 5 0.22								
AT10 HE 51.7 IAML 14:44 14.40 5 0.17								
AS07 HZ 61.0 EP 14:44 08.92								
AS07 HN 61.0 IAML 14:44 17.18 6 0.10								
AS07 HE 61.0 IAML 14:44 17.19 5 0.09								
GDLE HZ 63.4 EP 14:44 09.46								
GDLE HN 63.4 ES 14:44 17.42								
GDLE HE 63.4 IAML 14:44 19.55 10 0.19								
GDLE HE 63.4 IAML 14:44 21.18 12 0.31								
AQ12 HZ 83.0 EP 14:44 12.43							September 2 2021	
AQ12 HN 83.0 ES 14:44 22.49							Time: 19:38	31.5 UTC
AQ12 HE 83.0 IAML 14:44 23.94 4 0.06							Magnitude: 1.1 ML	
AQ12 HN 83.0 IAML 14:44 24.19 6 0.05							Lat: 52.455	
AU08 HZ 93.7 EP 14:44 14.56							Lon: -3.188	
KESW HZ 99.1 EP 14:44 15.34							Grid Ref: 319.28 kmE	
AR07 HN 102.0 ES 14:44 27.90							284.82 kmN	
AR07 HE 102.0 IAML 14:44 29.58 9 0.36							RMS: 0.10 secs	
AR07 HN 102.0 IAML 14:44 29.64 14 0.30								
AP12 HZ 119.0 EP 14:44 18.00								
AP12 HE 119.0 IAML 14:44 34.27 1 0.07								
AP12 HE 119.0 IAML 14:44 34.92 1 0.13								
ESK HZ 120.0 EP 14:44 18.21								
ESK HN 120.0 IAML 14:44 33.70 3 0.22								
ESK HE 120.0 IAML 14:44 34.05 1 0.13								
August 29 2021				Time: 19:04	05.9 UTC	Magnitude: 1.6 ML		
Lat: 56.381				Lon: -3.977		Depth: 2.6 km		
Grid Ref: 277.94 kmE				572.71 kmN		RMS: 0.30 secs		
Locality: COMRIE, PERTH & KINROSS								
Velocity model: Lownet Xnear: 100.0 Xfar: 200.0								
STAT CO DIST PHAS WT P HrMn SECS AMPL PERI RES								
HLM1 HZ 22.1 IP C 19:38 35.94								
HLM1 HE 22.1 ES 19:38 38.99								
HLM1 HE 22.1 IAML 19:38 39.12 60 0.16								
FOEL HZ 48.4 EP 19:38 39.99								
FOEL HE 48.4 ES 19:38 46.03								
FOEL HE 48.4 IAML 19:38 46.33 16 0.16								
MCH1 HZ 52.5 EP 19:38 40.39								
MCH1 HE 52.5 ES 19:38 46.88								
MCH1 HN 52.5 IAML 19:38 47.06 8 0.22								
MCH1 HE 52.5 IAML 19:38 47.11 13 0.38								
LLW BZ 54.5 EP 19:38 40.98								
LLW BE 54.5 ES 19:38 47.66								
MONM HZ 73.3 EP 19:38 43.88								

**TABLE 2 : PHASE DATA**

MONM	HE	73.3	ES	19:38	52.80	0.09	HLM1	HN	80.6	ES	15:36	28.34	-0.30								
MONM	HE	73.3	IAML	19:38	52.99	7 0.20	HLM1	HN	80.6	IAML	15:36	28.61	9 0.20								
MONM	HN	73.3	IAML	19:38	53.49	5 0.20	HLM1	HE	80.6	IAML	15:36	28.84	12 0.30								
STRD	HZ	103.0	EP	19:38	48.66	0.26	AR07	HZ	86.2	EP	15:36	19.77	0.11								
RSBS	HZ	120.0	EP	19:38	51.17	0.13	AR07	HN	86.2	ES	15:36	29.77	-0.31								
RSBS	HE	120.0	IAML	19:39	06.80	3 0.07	AR07	HE	86.2	IAML	15:36	30.90	33 0.14								
RSBS	HN	120.0	IAML	19:39	07.52	3 0.23	AR07	HN	86.2	IAML	15:36	30.97	25 0.23								
WLF1	HZ	123.0	EP	19:38	51.24	-0.23	HPK	HZ	107.0	EP	15:36	22.90	0.02								
WLF1	HE	123.0	IAML	19:39	07.33	5 0.17	HPK	HE	107.0	ES	15:36	35.19	-0.46								
WLF1	HN	123.0	IAML	19:39	07.93	8 0.09	HPK	HE	107.0	IAML	15:36	36.28	13 0.24								
CWF	HZ	131.0	EP	19:38	52.65	0.03	HPK	HN	107.0	IAML	15:36	36.60	17 0.18								
							CWF	HZ	108.0	EP	15:36	23.29	0.28								
September 3 2021				Time: 02:38	08.8	UTC	Magnitude: 0.8	ML	CWF	HE	108.0	ES	15:36	35.88	0.00						
Lat: 53.710				Lat:	53.710	Lon: -3.283	Depth: 20.6	km	CWF	HN	108.0	IAML	15:36	38.29	7 0.16						
Grid Ref: 315.33				kmE	424.52	kmN	RMS: 0.10	secs	CWF	HE	108.0	IAML	15:36	38.98	6 0.14						
Locality: IRISH SEA							WLF1	HZ	114.0	EP	15:36	24.02	0.29								
Velocity model: Lownet				Xnear: 100.0		Xfar: 200.0	WLF1	HN	114.0	ES	15:36	36.79	-0.33								
Comment: 20KM WNW SOUTHPORT							WLF1	HN	114.0	IAML	15:36	37.26	17 0.29								
STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES	WLF1	HE	114.0	IAML	15:36	38.24	8 0.30				
AQ05	HZ	23.7	EP		02:38	14.22		0.14			WPS	HZ	122.0	EP	15:36	25.17	0.32				
AQ05	HN	23.7	ES		02:38	18.01		0.09			WPS	HN	122.0	IAML	15:36	39.46	8 0.22				
AQ03	HN	26.6	ES		02:38	18.41		-0.14			WPS	HE	122.0	IAML	15:36	39.81	3 0.16				
AQ03	HE	26.6	IAML		02:38	18.74	13	0.22			AS07	HZ	124.0	EP	15:36	25.47	0.18				
AQ03	HN	26.6	IAML		02:38	18.77	15	0.28			AS07	HN	124.0	IAML	15:36	42.60	7 0.10				
AQ06	HZ	27.6	EP		02:38	14.68		0.10			AS07	HE	124.0	IAML	15:36	42.82	8 0.10				
AQ06	HN	27.6	ES		02:38	18.72		-0.05			AP12	HZ	125.0	EP	15:36	25.77	0.31				
AQ06	HN	27.6	IAML		02:38	18.87	30	0.16			AP12	HE	125.0	ES	15:36	40.04	-0.08				
AQ06	HE	27.6	IAML		02:38	18.91	11	0.12			AP12	HE	125.0	IAML	15:36	40.32	8 0.20				
AQ10	HZ	37.7	EP		02:38	15.92		0.00			AP12	HN	125.0	IAML	15:36	40.56	4 0.26				
AQ10	HE	37.7	ES		02:38	20.99		-0.11			AQ12	HZ	134.0	EP	15:36	26.73	0.03				
AQ10	HE	37.7	IAML		02:38	21.17	10	0.16			AQ12	HE	134.0	IAML	15:36	43.28	11 0.15				
AQ10	HN	37.7	IAML		02:38	21.25	8	0.15			AQ12	HN	134.0	IAML	15:36	43.60	5 0.05				
AP12	HZ	66.7	EP		02:38	20.07		-0.01			KESW	HN	153.0	ES	15:36	47.28	0.31				
WLF1	HZ	87.5	EP		02:38	23.04		0.03			KESW	HN	153.0	IAML	15:36	47.68	7 0.36				
WLF1	HN	87.5	ES		02:38	33.26		-0.10			KESW	HE	153.0	IAML	15:36	48.43	10 0.42				
WLF1	HE	87.5	IAML		02:38	33.75	2	0.33			RSBS	HZ	199.0	EP	15:36	35.91	0.64				
WLF1	HN	87.5	IAML		02:38	35.16	3	0.20			RSBS	HE	199.0	IAML	15:37	03.14	2 0.20				
FOEL	HZ	91.5	EP		02:38	23.70		0.04			RSBS	HN	199.0	IAML	15:37	03.24	3 0.16				
FOEL	HN	91.5	IAML		02:38	34.91	3	0.24													
FOEL	HE	91.5	IAML		02:38	36.28	3	0.38													
September 3 2021				Time: 23:26	41.5	UTC	Magnitude: 1.2	ML	September 4 2021				Time: 22:03	27.0	UTC	Magnitude: 0.6	ML				
Lat: 57.111				Lat:	57.111	Lon: -5.610	Depth: 7.5	km	Lat: 53.879				Lat:	53.879	Lon: -2.103	Depth: 14.4	km				
Grid Ref: 181.43				kmE	807.99	kmN	RMS: 0.20	secs	Grid Ref: 393.23				Grid Ref:	393.23	kmE	442.56	kmN				
Locality: ARNISDALE, HIGHLAND							Locality: COLNE, LANCASHIRE					Locality:	COLNE								
Velocity model: Lownet				Xnear: 100.0		Xfar: 200.0	Velocity model: Lownet		Xnear: 100.0		Xfar: 200.0	Comment: 4KM NE COLNE									
Comment: 4KM SW ARNISDALE							STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES				
STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES	AR01	HZ	25.3	EP	22:03	32.14	0.05				
KPL	HZ	25.6	IP	C	23:26	46.43		0.15			AR01	HN	25.3	ES	22:03	35.74	-0.05				
KPL	HE	25.6	ES		23:26	49.66		-0.13			AR01	HE	25.3	IAML	22:03	36.41	19 0.12				
KPL	HE	25.6	IAML		23:26	49.97	57	0.26			AR07	HZ	26.7	EP	22:03	32.48	0.20				
KPL	HN	25.6	IAML		23:26	50.09	13	0.18			AR07	HN	26.7	ES	22:03	36.34	0.22				
LAWE	HZ	95.6	EP		23:26	56.97		-0.19			AR07	HE	26.7	IAML	22:03	36.80	18 0.20				
LAWE	HE	95.6	IAML		23:27	11.15	14	0.16			AR07	HN	26.7	IAML	22:03	36.90	20 0.20				
LAWE	HN	95.6	IAML		23:27	11.56	12	0.08			HPK	HZ	32.6	EP	22:03	33.33	0.18				
LINV	HZ	118.0	EP		23:27	00.69		0.07			HPK	HN	32.6	ES	22:03	37.83	0.21				
LINV	HE	118.0	ES		23:27	14.57		-0.03			HPK	HN	32.6	IAML	22:03	37.92	6 0.12				
LINV	HE	118.0	IAML		23:27	16.62	6	0.12			HPK	HE	32.6	IAML	22:03	38.39	8 0.20				
LINV	HN	118.0	IAML		23:27	17.14	3	0.10			AS02	HZ	37.0	EP	22:03	33.85	0.05				
INVG	HZ	122.0	EP		23:27	01.40		0.07			AS02	HN	37.0	ES	22:03	38.61	-0.14				
INVG	HE	122.0	ES		23:27	15.70		-0.12			AS02	HE	37.0	IAML	22:03	38.90	2 0.08				
INVG	HN	122.0	IAML		23:27	17.14	2	0.13			AS02	HN	37.0	IAML	22:03	39.23	3 0.17				
INVG	HE	122.0	IAML		23:27	18.19	4	0.22			AS07	HZ	43.0	EP	22:03	34.78	0.05				
EAB	HZ	129.0	EP		23:27	02.66		0.37			AS07	HN	43.0	ES	22:03	39.98	-0.38				
EAB	HE	129.0	ES		23:27	17.56		0.06			AS07	HE	43.0	IAML	22:03	40.13	7 0.09				
EAB	HE	129.0	IAML		23:27	19.14	6	0.18			AS07	HN	43.0	IAML	22:03	40.21	7 0.09				
EAB	HN	129.0	IAML		23:27	20.88	6	0.20			LBWR	HZ	58.7	EP	22:03	37.14	0.02				
MCD	HZ	151.0	EP		23:27	05.32		-0.16			LBWR	HE	58.7	ES	22:03	44.24	-0.26				
MCD	HE	151.0	IAML		23:27	24.76	6	0.32			LBWR	HE	58.7	IAML	22:03	45.31	2 0.10				
MCD	HN	151.0	IAML		23:27	25.43	5	0.22			LBWR	HN	58.7	IAML	22:03	45.80	4 0.20				
DRUM	HZ	191.0	EP		23:27	10.16		-0.55			AQ12	HZ	75.2	EP	22:03	39.78	0.13				
DRUM	HE	191.0	IAML		23:27	36.32	5	0.26			AQ12	HN	75.2	ES	22:03	48.43	-0.44				
DRUM	HN	191.0	IAML		23:27	38.19	6	0.22			AQ12	HE	75.2	IAML	22:03	48.86	1 0.07				
CLGH	HE	228.0	IAML		23:27	45.40	3	0.29			AQ12	HN	75.2	IAML	22:03	48.90	2 0.07				
CLGH	HN	228.0	IAML		23:27	46.77	3	0.20			AP12	HN	90.0	ES	22:03	52.61	-0.07				
September 4 2021				Time: 15:36	05.4	UTC	Magnitude: 1.2	ML	September 5 2021				Time: 03:27	29.7	UTC	Magnitude: 0.7	ML				
Lat: 53.234				Lat:	53.234	Lon: -2.697	Depth: 11.5	km	Lat: 56.540				Lat:	56.540	Lon: -5.690	Depth: 8.5	km				
Grid Ref: 353.48				kmE	371.03	kmN	RMS: 0.20	secs	Grid Ref: 173.17				Grid Ref:	173.17	kmE	744.75	kmN				
Locality: KELSALL, CHESHIRE							Locality: MORVERN, HIGHLAND				Locality:	MORVERN									
Velocity model: Lownet				Xnear: 100.0		Xfar: 200.0	Velocity model: Lownet		Xnear: 75.0		Xfar: 150.0	Comment: 4KM SE ARDTORNISH									
FOEL	HZ	51.1	EP		15:36	14.18		-0.09			STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES
FOEL	HE	51.1	ES		15:36	20.69		-0.06			LAWE	HZ	36.0	IP	C	03:27	36.14		0.04		
FOEL	HE	51.1	IAML		15:36	21.36	5														

**TABLE 2 : PHASE DATA**

KPL	HN	89.0	IAML	03:27	58.08	3	0.20		DYA	HE	62.5	IAML	07:31	14.79	5	0.12
KPL	HE	89.0	IAML	03:27	58.11	4	0.22									
EAB	HZ	92.3	EP	03:27	45.35			0.49	September	11	2021	Time: 15:58 17.1 UTC	Magnitude: 0.7 ML			
EAB	HE	92.3	IAML	03:27	59.41	2	0.11		Lat:	52.628		Lon: -2.766	Depth: 7.3 km			
EAB	HN	92.3	IAML	03:27	59.72	2	0.09		Grid Ref:	348.16 kmE	303.67 kmN	RMS: 0.20 secs				
INVG	HZ	102.0	EP	03:27	46.67			0.28	Locality:	DORRINGTON, SHROPSHIRE						
INVG	HN	102.0	ES	03:27	58.37			-0.25	Velocity model:	Lownet Xnear: 100.0	Xfar: 200.0					
INVG	HE	102.0	IAML	03:28	01.43	2	0.14		STAT	CO	DIST	PHAS	WT P	HrMn	SECS	AMPL PERI RES
INVG	HN	102.0	IAML	03:28	01.86	2	0.09		HLM1	HZ	14.4	IP	C	15:58	20.31	0.05
September	8	2021	Time: 04:18 05.9 UTC	Magnitude: 1.0 ML					HLM1	HN	14.4	ES		15:58	22.53	-0.03
Lat:	54.386		Lon: -2.872	Depth: 8.7 km					FOEL	HZ	41.3	EP		15:58	24.53	0.06
Grid Ref:	343.38 kmE	499.31 kmN	RMS: 0.20 secs					FOEL	HE	41.3	ES		15:58	29.80	-0.03	
Locality:	WINDERMERE, CUMBRIA		Velocity model:	Borders Xnear: 100.0	Xfar: 200.0			FOEL	HE	41.3	IAML		15:58	29.98	0.21	
Comment:	FELT WINDERMERE...		Intensity:	3				FOEL	HN	41.3	IAML		15:58	30.56	0.16	
STAT	CO	DIST	PHAS	WT P	HrMn	SECS	AMPL PERI	RES	MCH1	HZ	71.9	EP		15:58	29.04	-0.13
AQ12	HZ	9.7	EP	04:18	08.63		0.21		MCH1	HN	71.9	ES		15:58	37.67	-0.29
AQ12	HE	9.7	ES	04:18	10.26		0.04		MCH1	HN	71.9	IAML		15:58	37.74	0.20
AQ12	HN	9.7	IAML	04:18	10.70	72	0.08		MCH1	HE	71.9	IAML		15:58	38.01	0.22
AQ12	HE	9.7	IAML	04:18	10.72	84	0.08		MONM	HZ	87.8	EP		15:58	31.71	0.10
AP12	HZ	27.0	EP	04:18	10.91		-0.10		MONM	HE	87.8	ES		15:58	42.53	0.34
AP12	HN	27.0	ES	04:18	14.46		-0.20		MONM	HE	87.8	IAML		15:58	42.73	0.24
AP12	HN	27.0	IAML	04:18	14.88	12	0.14		MONM	HN	87.8	IAML		15:58	43.06	0.23
AP12	HE	27.0	IAML	04:18	15.76	9	0.12		CWF	HZ	99.4	EP		15:58	33.25	-0.18
KESW	HZ	27.1	EP	04:18	11.16		0.11		CWF	HN	99.4	IAML		15:58	45.86	0.18
KESW	HE	27.1	ES	04:18	14.66		-0.06		CWF	HE	99.4	IAML		15:58	47.63	0.09
KESW	HN	27.1	IAML	04:18	15.19	20	0.24		LBWR	HZ	111.0	EP		15:58	35.37	0.13
KESW	HN	27.1	IAML	04:18	15.30	11	0.17		LBWR	HE	111.0	IAML		15:58	51.28	0.10
AR09	HZ	33.3	EP	04:18	11.99		-0.07		LBWR	HN	111.0	IAML		15:58	51.96	0.10
AR09	HN	33.3	ES	04:18	16.06		-0.39		WLF1	HZ	132.0	EP		15:58	38.35	0.00
AR09	HE	33.3	IAML	04:18	16.55	215	0.10									
AR09	HN	33.3	IAML	04:18	16.72	184	0.10		September	11	2021	Time: 16:15 03.6 UTC	Magnitude: 0.7 ML			
AR07	HZ	51.1	EP	04:18	15.01		0.12		Lat:	52.625		Lon: -2.774	Depth: 8.6 km			
AR07	HN	51.1	IAML	04:18	19.83	18	0.28		Grid Ref:	347.61 kmE	303.35 kmN	RMS: 0.20 secs				
AR07	HE	51.1	IAML	04:18	20.06	15	0.44		Locality:	DORRINGTON, SHROPSHIRE		Velocity model:	Lownet Xnear: 100.0	Xfar: 200.0		
AQ10	HZ	52.5	EP	04:18	15.30		0.22		STAT	CO	DIST	PHAS	WT P	HrMn	SECS	AMPL PERI RES
AQ10	HN	52.5	ES	04:18	21.75		0.14		HLM1	HZ	13.9	IP	C	16:15	06.79	0.03
AQ10	HN	52.5	IAML	04:18	23.38	16	0.17		HLM1	HN	13.9	ES		16:15	09.03	0.00
AQ10	HE	52.5	IAML	04:18	23.83	13	0.20		HLM1	HN	13.9	IAML		16:15	09.09	1.0
AS07	HZ	62.5	EP	04:18	16.64		-0.14		HLM1	HE	13.9	IAML		16:15	09.75	0.20
AS07	HE	62.5	IAML	04:18	24.63	8	0.16		FOEL	HZ	41.1	EP		16:15	11.03	0.07
AS07	HN	62.5	IAML	04:18	24.64	7	0.12		FOEL	HE	41.1	ES		16:15	16.25	-0.04
EDMD	HZ	76.9	EP	04:18	19.21		0.17		FOEL	HE	41.1	IAML		16:15	16.46	0.23
EDMD	HE	76.9	ES	04:18	28.19		-0.19		FOEL	HN	41.1	IAML		16:15	16.67	0.36
EDMD	HE	76.9	IAML	04:18	28.54	21	0.20		MCH1	HZ	71.5	EP		16:15	15.48	-0.13
EDMD	HN	76.9	IAML	04:18	29.01	16	0.18		MCH1	HN	71.5	ES		16:15	24.08	-0.27
HPK	HZ	94.4	EP	04:18	22.20		0.29		MCH1	HN	71.5	IAML		16:15	24.23	0.18
HPK	HE	94.4	ES	04:18	33.20		-0.10		MCH1	HE	71.5	IAML		16:15	24.42	0.14
HPK	HE	94.4	IAML	04:18	33.92	9	0.13		MONM	HZ	87.4	EP		16:15	18.14	0.07
HPK	HN	94.4	IAML	04:18	34.82	10	0.20		MONM	HE	87.4	ES		16:15	28.86	0.26
ESK	HN	106.0	EP	04:18	23.77		0.00		MONM	HN	87.4	IAML		16:15	29.51	0.15
ESK	HN	106.0	IAML	04:18	37.21	2	0.30		MONM	HE	87.4	IAML		16:15	29.53	0.27
EKA	BZ	107.0	EP	04:18	24.00		0.01		CWF	HZ	100.0	EP		16:15	19.83	-0.20
AT08	HN	107.0	IAML	04:18	38.78	22	0.24		CWF	HN	100.0	IAML		16:15	32.48	0.13
AT08	HE	107.0	IAML	04:18	39.16	14	0.12		CWF	HE	100.0	IAML		16:15	35.46	0.13
AS02	HE	109.0	ES	04:18	37.48		0.02		LBWR	HZ	111.0	EP		16:15	22.07	0.23
AS02	HE	109.0	IAML	04:18	38.48	3	0.38		LBWR	HE	111.0	IAML		16:15	37.27	0.09
AS02	HN	109.0	IAML	04:18	38.69	3	0.14		LBWR	HN	111.0	IAML		16:15	37.44	0.12
IOMK	HZ	111.0	EP	04:18	24.52		-0.10		WLF1	HE	132.0	ES		16:15	40.02	-0.15
IOMK	HE	111.0	IAML	04:18	38.15	1	0.32		RSBS	HZ	154.0	EP		16:15	28.46	0.50
IOMK	HN	111.0	IAML	04:18	38.34	1	0.10		RSBS	HN	154.0	IAML		16:15	48.82	0.13
GALL	HE	130.0	IAML	04:18	42.31	2	0.31		RSBS	HE	154.0	IAML		16:15	49.27	0.17
GALL	HN	130.0	IAML	04:18	42.31	4	0.46									
September	9	2021	Time: 07:30 55.1 UTC	Magnitude: 0.7 ML					September	16	2021	Time: 03:16 32.1 UTC	Magnitude: 1.0 ML			
Lat:	50.558		Lon: -4.791	Depth: 7.1 km					Lat:	56.553		Lon: -5.650	Depth: 7.9 km			
Grid Ref:	202.34 kmE	76.92 kmN	RMS: 0.00 secs					Grid Ref:	175.70 kmE	746.06 kmN	RMS: 0.30 secs					
Locality:	TREQUITE, CORNWALL		Velocity model:	Cornwall Xnear: 200.0	Xfar: 500.0			Locality:	MORVERN, HIGHLAND		Velocity model:	Lownet Xnear: 500.0	Xfar: 1000.0			
Comment:	SKM ESE ARDTORNISH															
STAT	CO	DIST	PHAS	WT P	HrMn	SECS	AMPL PERI	RES	STAT	CO	DIST	PHAS	WT P	HrMn	SECS	AMPL PERI RES
SBD	BZ	7.5	EP	07:30	57.05		0.07		LAWE	HZ	36.1	IP	C	03:16	38.38	-0.14
SBD	BN	7.5	ES	07:30	58.35		-0.04		LAWE	HE	36.1	ES		03:16	42.74	-0.50
GEL03	CZ	44.2	EP	07:31	02.93		0.00		LAWE	HE	36.1	IAML		03:16	42.94	0.26
GEL03	CN	44.2	IAML	07:31	08.78	9	0.09		LAWE	HN	36.1	IAML		03:16	43.07	0.10
GEL03	CE	44.2	IAML	07:31	09.24	10	0.07		KPL	HZ	87.6	EP		03:16	46.47	-0.01
GEL09	CZ	45.7	EP	07:31	03.20		0.01		KPL	HN	87.6	IAML		03:16	56.75	-0.26
GEL09	CE	45.7	IAML	07:31	08.84	8	0.14		KPL	HE	87.6	IAML		03:17	00.17	0.22
GEL09	CN	45.7	IAML	07:31	09.17	10	0.11		KPL	HE	87.6	IAML		03:17	00.53	0.12
GEL02	CZ	47.3	EP	07:31	03.41		-0.06		EAB	HZ	90.7	EP		03:16	47.52	0.51
GEL02	CE	47.3	IAML	07:31	09.25	10	0.10		EAB	HN	90.7	IAML		03:17	01.65	0.10
GEL02	CN	47.3	IAML	07:31	09.41	8	0.10		EAB	HE	90.7	IAML		03:17	01.95	0.08
GEL05	CZ	51.6	EP	07:31	04.24		0.02		INVG	HZ	99.9	EP		03:16	48.88	0.43
GEL05	CE	51.6	IAML	07:31	10.62	5	0.08		INVG	HN	99.9	ES		03:17	00.14	-0.27
GEL05	CN	51.6	IAML	07:31	11.12	4	0.07		INVG	HE	99.9	IAML		03:17	03.21	0.06
CCA1	HZ	51.7	EP	07:31	04.24		0.01		INVG	HN	99.9	IAML		03:17	03.48	0.30
CCA1	HE	51.7	IAML	07:31	10.56	5	0.12		PGB1	H						

TABLE 2 : PHASE DATA

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HLM1	HN	149.0	IAML	04:15	11.24	12	0.26		INVG	HE	82.2	ES	17:29	30.46		0.05
HLM1	HE	149.0	IAML	04:15	12.55	7	0.12	-0.51	INVG	HE	82.2	IAML	17:29	33.19	4	0.10
DYA	HE	153.0	ES	04:15	09.78				KPL	HZ	82.2	IAML	17:29	33.42	4	0.09
DYA	HE	153.0	IAML	04:15	10.52	4	0.22		KPL	HZ	82.7	EP	17:29	20.45		-0.03
DYA	HN	153.0	IAML	04:15	12.84	3	0.05		KPL	HZ	82.7	ES	17:29	30.40		-0.05
FOEL	HZ	162.0	EP	04:14	54.44			0.64	KPL	HE	82.7	IAML	17:29	33.15	4	0.12
FOEL	HE	162.0	IAML	04:15	14.31	4	0.23		KPL	HN	82.7	IAML	17:29	33.50	3	0.35
FOEL	HN	162.0	IAML	04:15	15.38	4	0.31		PGB1	HZ	104.0	EP	17:29	24.06		0.22
WLF1	HZ	174.0	EP	04:14	55.58			0.19	PGB1	HN	104.0	ES	17:29	36.19		-0.07
WLF1	HN	174.0	IAML	04:15	16.77	9	0.20		PGB1	HN	104.0	IAML	17:29	37.65	7	0.18
WLF1	HE	174.0	IAML	04:15	18.02	13	0.18		PGB1	HE	104.0	IAML	17:29	37.86	15	0.41
September 28 2021				Time:	04:14	45.9	UTC	Magnitude:	1.9	ML						
Lat:	51.734			Lon:	-4.632			Depth:	6.2	km						
Grid Ref:	218.90	kmE	207.23	kmN				RMS:	0.40	secs						
Locality:	AMROTH, PEMBROKESHIRE															
Velocity model:	Lownet	Xnear:	100.0	Xfar:	200.0											
STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES						
RSBS	HZ	25.4	IP	C	04:14	50.76		-0.01								
RSBS	HE	25.4	ES		04:14	54.33		0.00								
RSBS	HE	25.4	IAML		04:14	54.49	163	0.06								
RSBS	HN	25.4	IAML		04:14	56.08	107	0.08								
HTL	HZ	83.0	EP		04:15	00.07			0.35							
HTL	HN	83.0	ES		04:15	09.50			-0.31							
HTL	HN	83.0	IAML		04:15	10.55	42	0.22								
HTL	HE	83.0	IAML		04:15	11.08	24	0.19								
MCH1	HZ	116.0	EP		04:15	04.67			-0.22							
MCH1	HN	116.0	ES		04:15	18.59			-0.16							
MCH1	HN	116.0	IAML		04:15	22.51	31	0.15								
MCH1	HE	116.0	IAML		04:15	22.77	28	0.12								
MONM	HE	127.0	ES		04:15	21.61			0.11							
MONM	HN	127.0	IAML		04:15	24.93	44	0.14								
MONM	HE	127.0	IAML		04:15	25.13	32	0.17								
LLW	BN	140.0	ES		04:15	24.39			-0.52							
LLW	BN	140.0	IAML		04:15	26.00	10	0.11								
LLW	BE	140.0	IAML		04:15	27.02	13	0.09								
HLM1	HZ	148.0	EP		04:15	09.86			0.24							
HLM1	HE	148.0	ES		04:15	27.42			0.48							
HLM1	HN	148.0	IAML		04:15	28.93	40	0.23								
HLM1	HE	148.0	IAML		04:15	28.96	21	0.17								
DYA	HZ	153.0	EP		04:15	10.28			0.05							
DYA	HE	153.0	IAML		04:15	29.27	8	0.11								
DYA	HN	153.0	IAML		04:15	30.57	10	0.09								
FOEL	HZ	161.0	EP		04:15	11.66			0.16							
FOEL	HE	161.0	IAML		04:15	33.11	18	0.40								
FOEL	HN	161.0	IAML		04:15	33.71	14	0.30								
STRD	HN	171.0	ES		04:15	33.76			1.45							
STRD	HE	171.0	IAML		04:15	34.89	36	0.24								
STRD	HN	171.0	IAML		04:15	35.59	22	0.14								
WLF1	HZ	174.0	EP		04:15	13.38			0.30							
WLF1	HN	174.0	IAML		04:15	34.49	26	0.12								
WLF1	HE	174.0	IAML		04:15	35.71	52	0.12								
September 28 2021				Time:	04:31	02.5	UTC	Magnitude:	1.0	ML						
Lat:	51.734			Lon:	-4.632			Depth:	5.3	km						
Grid Ref:	218.90	kmE	207.23	kmN				RMS:	0.20	secs						
Locality:	AMROTH, PEMBROKESHIRE															
Velocity model:	Lownet	Xnear:	100.0	Xfar:	200.0											
STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES						
RSBS	HZ	25.7	IP	C	04:31	07.40		-0.06								
RSBS	HE	25.7	ES		04:31	10.97		-0.07								
RSBS	HN	25.7	IAML		04:31	11.12	11	0.05								
RSBS	HE	25.7	IAML		04:31	11.15	18	0.08								
HTL	HZ	82.8	EP		04:31	16.68			0.28							
HTL	HE	82.8	ES		04:31	26.26			-0.25							
HTL	HN	82.8	IAML		04:31	27.21	6	0.19								
HTL	HE	82.8	IAML		04:31	28.34	5	0.15								
MCH1	HZ	116.0	EP		04:31	21.55			0.03							
MCH1	HN	116.0	ES		04:31	35.05			-0.32							
MCH1	HE	116.0	IAML		04:31	38.15	2	0.12								
MCH1	HN	116.0	IAML		04:31	38.92	3	0.23								
MONM	HN	126.0	EP		04:31	23.29			0.18							
MONM	HE	126.0	ES		04:31	38.28			0.16							
MONM	HE	126.0	IAML		04:31	39.88	4	0.13								
MONM	HN	126.0	IAML		04:31	41.58	4	0.13								
HLM1	HZ	148.0	EP		04:31	26.62			0.32							
HLM1	HN	148.0	IAML		04:31	45.57	4	0.21								
HLM1	HE	148.0	IAML		04:31	46.92	3	0.19								
WLF1	HN	174.0	ES		04:31	50.31			0.54							
WLF1	HE	174.0	IAML		04:31	51.49	5	0.21								
WLF1	HN	174.0	IAML		04:31	52.31	3	0.09								
October 3 2021				Time:	17:29	06.8	UTC	Magnitude:	0.9	ML						
Lat:	56.617			Lon:	-5.335			Depth:	7.7	km						
Grid Ref:	195.39	kmE	752.20	kmN				RMS:	0.10	secs						
Locality:	DUROR, HIGHLAND															
Velocity model:	Lownet	Xnear:	100.0	Xfar:	200.0											
Comment:	4KM SW DUROR															
STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES						
EAB	HZ	77.9	EP			17:29	19.75		-0.04							
EAB	HN	77.9	ES			17:29	29.12		-0.14							
EAB	HE	77.9	IAML			17:29	29.32	6	0.20							
EAB	HN	77.9	IAML			17:29	31.36	5	0.13							
INVG	HZ	82.2	EP			17:29	20.52		0.06							
INVG	HE	82.2	IAML			17:29	30.46									
INVG	HN	82.2	IAML			17:29	33.19	4	0.10							
INVG	HE	82.2	IAML			17:29	33.42	4	0.09							
INVG	HN	82.2	IAML			17:29	30.40									
INVG	HE	82.2	IAML			17:29	33.15	4	0.12							
INVG	HN	82.2	IAML			17:29	33.50	3	0.35							
INVG	HE	82.2	IAML			17:29	24.06									
INVG	HN	82.2	IAML			17:29	36.19	7	0.18							
INVG	HE	82.2	IAML			17:29	37.86	15	0.41							
October 4 2021				Time:	09:33	01.8	UTC	Magnitude:	2.8	ML						
Lat:	56.662			Lon:	2.877			Depth:	10.0	km						
Grid Ref:	666.38	kmE	1207.46	kmN				RMS:	0.40	secs</						

**TABLE 2 : PHASE DATA**

HLM1	HN	168.0	ES	22:07	11.05	0.25	Locality: BLACKFORD, PERTH/KINROSS Velocity model: Lownet Xnear: 100.0 Xfar: 200.0															
HLM1	HN	168.0	IAML	22:07	11.73	4 0.24	STAT CO DIST PHAS WT P HrMn SECS AMPL PERI RES															
HLM1	HE	168.0	IAML	22:07	13.27	2 0.14	INVG HZ 24.9 EP 06:30 51.81 0.09															
FOEL	HZ	171.0	EP	22:06	51.31	-0.41	INVG HE 24.9 ES 06:30 55.14 -0.04															
FOEL	HN	171.0	IAML	22:07	13.39	4 0.30	INVG HN 24.9 IAML 06:30 57.26 14 0.38															
FOEL	HE	171.0	IAML	22:07	13.77	5 0.46	INVG HE 24.9 IAML 06:30 57.54 12 0.26															
October 12 2021 Time: 01:27 11.1 UTC Magnitude: 0.6 ML																						
Lat: 55.516 Lon: -5.623 Depth: 10.2 km RMS: 0.20 secs																						
Grid Ref: 171.30 kmE 630.66 kmN Locality: KINTYRE, ARGYLL & BUTE																						
Velocity model: Lownet Xnear: 500.0 Xfar: 1000.0																						
STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES	EDI	HE	52.5	IP 06:30 56.34 0.05								
CLGH	HZ	57.3	EP	01:27	21.22	0.34	EDI	HN	52.5	IAML 06:31 02.89 -0.20												
CLGH	HN	57.3	ES	01:27	27.66	-0.37	EDI	HE	52.5	IAML 06:31 03.10 26 0.12												
CLGH	HN	57.3	IAML	01:27	28.32	4 0.12	GGERF	CZ	57.1	EP 06:30 57.14 0.15												
CLGH	HE	57.3	IAML	01:27	28.77	5 0.16	PGB1	HZ	69.5	EP 06:30 58.79 -0.16												
PGB1	HZ	78.9	EP	01:27	24.26	0.05	PGB1	HE	69.5	IAML 06:31 09.77 36 0.37												
PGB1	HE	78.9	ES	01:27	33.80	0.02	PGB1	HN	69.5	IAML 06:31 11.78 32 0.36												
PGB1	HE	78.9	IAML	01:27	34.08	8 0.08	ESY	HN	80.9	ES 06:31 10.44 -0.34												
PGB1	HN	78.9	IAML	01:27	34.19	8 0.14	ESY	HN	80.9	IAML 06:31 11.15 13 0.34												
LAWE	HZ	84.0	EP	01:27	24.93	-0.06	ESY	HE	80.9	IAML 06:31 11.61 12 0.24												
LAWE	HN	84.0	ES	01:27	34.92	-0.21	LAWE	HZ	103.0	EP 06:31 04.11 0.04												
LAWE	HE	84.0	IAML	01:27	35.82	1 0.17	LAWE	HN	103.0	IAML 06:31 19.29 17 0.20												
LAWE	HN	84.0	IAML	01:27	36.73	1 0.28	LAWE	HE	103.0	IAML 06:31 21.64 18 0.30												
GALL	HN	92.8	ES	01:27	37.50	0.02	DRUM	HZ	105.0	EP 06:31 04.34 -0.05												
GALL	HE	92.8	IAML	01:27	40.10	2 0.20	DRUM	HE	105.0	IAML 06:31 18.67 52 0.22												
GALL	HN	92.8	IAML	01:27	40.52	2 0.10	DRUM	HN	105.0	IAML 06:31 18.88 26 0.18												
NEWG	HZ	99.0	EP	01:27	27.57	0.26	ESK	HZ	112.0	EP 06:31 06.46 0.87												
NEWG	HN	99.0	ES	01:27	38.87	-0.28	ESK	HE	112.0	IAML 06:31 21.61 22 0.26												
NEWG	HN	99.0	IAML	01:27	41.84	2 0.15	ESK	HN	112.0	IAML 06:31 21.99 24 0.20												
NEWG	HE	99.0	IAML	01:27	42.03	1 0.14	NEWG	HZ	133.0	EP 06:31 08.71 -0.03												
EAB	HZ	110.0	EP	01:27	29.17	0.13	NEWG	HN	133.0	IAML 06:31 26.78 10 0.15												
EAB	HN	110.0	ES	01:27	42.43	0.30	NEWG	HE	133.0	IAML 06:31 28.15 13 0.16												
EAB	HN	110.0	IAML	01:27	43.52	2 0.36	MCD	HZ	148.0	EP 06:31 11.02 0.05												
EAB	HE	110.0	IAML	01:27	44.69	1 0.11	MCD	HN	148.0	IAML 06:31 31.23 9 0.29												
IDGL	HZ	130.0	EP	01:27	32.04	0.20	MCD	HE	148.0	IAML 06:31 32.65 10 0.26												
INVG	HZ	141.0	EP	01:27	33.12	-0.42	KPL	HZ	166.0	EP 06:31 13.97 0.52												
INVG	HE	141.0	IAML	01:27	52.36	1 0.26	KPL	HE	166.0	IAML 06:31 37.02 7 0.28												
INVG	HN	141.0	IAML	01:27	54.34	1 0.29	KPL	HN	166.0	IAML 06:31 37.15 9 0.70												
October 12 2021 Time: 14:27 06.1 UTC Magnitude: 1.1 ML																						
Lat: 56.604 Lon: -6.226 Depth: 7.5 km RMS: 0.30 secs																						
Locality: MULL, ARGYLL & BUTE																						
Velocity model: Lownet Xnear: 100.0 Xfar: 200.0																						
Comment: FELT KILCHOAN Intensity: 2																						
STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES	STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES	
LAWE	HZ	63.8	EP	14:27	16.90	0.04	INVG	HZ	24.1	EP 08:24 08.53 -0.10												
LAWE	HN	63.8	ES	14:27	24.33	-0.39	INVG	HN	24.1	ES 08:24 12.01 -0.01												
LAWE	HN	63.8	IAML	14:27	24.51	14 0.09	INVG	HN	24.1	IAML 08:24 12.15 6 0.08												
LAWE	HE	63.8	IAML	14:27	24.81	8 0.13	INVG	HE	24.1	IAML 08:24 12.17 6 0.10												
KPL	HZ	88.9	EP	14:27	20.78	0.05	EAB	HZ	37.4	IP C 08:24 10.69 0.00												
KPL	HE	88.9	ES	14:27	31.21	-0.21	EAB	HN	37.4	ES 08:24 15.31 -0.27												
KPL	HN	88.9	IAML	14:27	33.81	3 0.17	EAB	HE	37.4	IAML 08:24 15.79 10 0.05												
KPL	HE	88.9	IAML	14:27	35.38	5 0.16	EAB	HE	37.4	IAML 08:24 16.65 9 0.23												
EAB	HZ	125.0	EP	14:27	26.74	0.31	PGB1	HZ	69.1	EP 08:24 15.41 -0.18												
EAB	HN	125.0	IAML	14:27	42.56	6 0.28	ESY	HZ	81.8	EP 08:24 17.52 -0.06												
EAB	HE	125.0	IAML	14:27	42.63	6 0.16	ESY	HN	81.8	ES 08:24 27.41 -0.09												
INVG	HZ	136.0	EP	14:27	28.14	0.24	ESY	HN	81.8	IAML 08:24 27.80 3 0.08												
INVG	HN	136.0	ES	14:27	44.42	0.61	ESY	HE	81.8	IAML 08:24 31.08 4 0.38												
INVG	HN	136.0	IAML	14:27	45.06	6 0.22	LAWE	HZ	102.0	EP 08:24 20.92 0.29												
INVG	HE	136.0	IAML	14:27	45.52	7 0.14	LAWE	HN	102.0	ES 08:24 32.92 0.14												
October 14 2021 Time: 06:26 19.2 UTC Magnitude: 0.6 ML																						
Lat: 56.276 Lon: -3.753 Depth: 6.1 km RMS: 0.10 secs																						
Locality: BLACKFORD, PERTH/KINROSS																						
Velocity model: Lownet Xnear: 100.0 Xfar: 200.0																						
STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES	DRUM	HE	105.0	IP 08:24 21.04 -0.12								
INVG	HZ	24.6	EP	06:26	23.84	-0.06	DRUM	HN	105.0	IAML 08:24 35.39 22 0.16												
INVG	HN	24.6	ES	06:26	27.29	-0.08	DRUM	HE	105.0	IAML 08:24 35.76 11 0.29												
INVG	HN	24.6	IAML	06:26	27.46	2 0.09	ESK	HN	113.0	EP 08:24 23.16 0.79												
INVG	HE	24.6	IAML	06:26	28.27	2 0.18	ESK	HN	113.0	ES 08:24 35.56 -0.22												
EAB	HZ	37.5	EP	06:26	26.03	0.06	ESK	HE	113.0	IAML 08:24 38.72 7 0.24												
EAB	HN	37.5	ES	06:26	30.77	-0.16	ESK	HE	113.0	IAML 08:24 38.96 9 0.21												
EAB	HE	37.5	IAML	06:26	31.09	4 0.13	NEWG	HZ	133.0	EP 08:24 25.43 0.16												
EAB	HN	37.5	IAML	06:26	31.32	6 0.17	NEWG	HN	133.0	ES 08:24 43.17 3 0.20												
EDI	HZ	52.7	EP	06:26	28.40	0.10	NEWG	HE	133.0	IAML 08:24 43.95 4 0.17												
EDI	HN	52.7	ES	06:26	34.83	-0.13	MCD	HE	148.0	IAML 08:24 46.78 4 0.15												
EDI	HN	52.7	IAML	06:26	35.03	5 0.21	MCD	HN	148.0	IAML 08:24 47.85 3 0.10												
EDI	HE	52.7	IAML	06:26	35.26	6 0.29	GAL1	HZ	169.0	EP 08:24 30.36 0.07												
LAWE	HZ	102.0	EP	06:26	36.22	0.28	GAL1	HN	169.0	IAML 08:24 51.33 4 0.26												
LAWE	HN	102.0	IAML	06:26	50.92	3 0.14	GAL1	HE	169.0	IAML 08:24 51.86 3 0.16												
LAWE	HE	102.0	IAML	06:26	51.14	2 0.36	October 15 2021 Time: 08:27 58.4 UTC Magnitude: 0.7 ML															
DRUM	HZ	105.0	EP	06:26	36.46	-0.01	Lat: 56.289 Lon: -3.760 Depth: 7.8 km															
DRUM	HE	105.0	IAML	06:26	50.67	8 0.16	Grid Ref: 291.07 kmE 712.11 kmN RMS: 0.20 secs															
DRUM	HN	105.0	IAML	06:26	50.96	4 0.14	Locality: BLACKFORD, PERTH/KINROSS															
ESK	HE	112.0	IAML	06:26	53.60	4 0.28	Velocity model: Lownet Xnear: 100.0 Xfar: 200.0															
ESK	HN	112.0	IAML	06:26	53.89	3 0.18	STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES					
October 14 2021 Time: 06:30 47.0 UTC Magnitude: 1.5 ML																						
Lat: 56.278 Lon: -3.743 Depth: 3.0 km RMS: 0.30 secs																						
INVG	HZ	23.4	EP	08:28	02.93	-0.03	INVG	HN	23.4	ES 08:28 06.22 -0.04												
INVG	HN	23.4	IAML	08:28	06.51	4 0.07	INVG	HE	23													

**TABLE 2 : PHASE DATA**

EAB	HZ	37.5	IP	C	08:28	05.09	-0.06	AS02	HN	18.5	ES	14:07	49.22	0.11
EAB	HN	37.5	ES		08:28	09.73	-0.31	AS02	HN	18.5	IAML	14:07	49.54	15 0.10
EAB	HE	37.5	IAML		08:28	11.06	5 0.19	AS02	HE	18.5	IAML	14:07	49.64	17 0.28
EAB	HN	37.5	IAML		08:28	16.00	7 0.06	AR07	HE	39.7	ES	14:07	55.13	-0.07
ESY	HZ	82.4	EP		08:28	11.93	-0.19	AR07	HE	39.7	IAML	14:07	55.25	13 0.24
LAWE	HZ	102.0	EP		08:28	15.33	0.27	AR07	HN	39.7	IAML	14:07	55.97	9 0.21
LAWE	HN	102.0	ES		08:28	27.31	0.12	LBWR	HZ	42.5	EP	14:07	50.40	0.01
LAWE	HN	102.0	IAML		08:28	30.03	5 0.14	LBWR	HN	42.5	ES	14:07	55.84	-0.13
LAWE	HE	102.0	IAML		08:28	30.06	3 0.17	LBWR	HE	42.5	IAML	14:07	55.99	7 0.08
DRUM	HZ	105.0	EP		08:28	15.57	0.03	LBWR	HN	42.5	IAML	14:07	56.49	6 0.24
DRUM	HE	105.0	ES		08:28	27.96	-0.07	HPK	HN	44.5	ES	14:07	56.29	-0.19
DRUM	HE	105.0	IAML		08:28	29.83	10 0.21	HPK	HE	44.5	IAML	14:07	56.51	22 0.21
DRUM	HN	105.0	IAML		08:28	30.15	5 0.28	HPK	HN	44.5	IAML	14:07	56.57	24 0.14
ESK	HZ	114.0	EP		08:28	17.47	0.51	AS07	HZ	63.4	EP	14:07	53.62	-0.03
ESK	HE	114.0	ES		08:28	30.31	-0.16	AQ12	HZ	91.9	EP	14:07	58.30	0.24
ESK	HN	114.0	IAML		08:28	33.12	4 0.21	AQ12	HE	91.9	IAML	14:08	10.00	2 0.11
NEWG	HZ	134.0	EP		08:28	20.15	0.25	AQ12	HN	91.9	IAML	14:08	11.39	2 0.06
NEWG	HE	134.0	ES		08:28	35.40	-0.17	AP12	HE	101.0	ES	14:08	11.67	0.04
NEWG	HN	134.0	IAML		08:28	37.59	2 0.19	AP12	HE	101.0	IAML	14:08	13.68	3 0.28
NEWG	HE	134.0	IAML		08:28	38.38	3 0.20	AP12	HN	101.0	IAML	14:08	13.74	2 0.13
								KESW	HE	118.0	ES	14:08	16.45	0.25
October 15 2021														
Time:	22:26	49.1	UTC				Magnitude: 2.0 ML							
Lat:	53.104						Depth: 10.0 km							
Grid Ref:	732.19	kmE	367.86	kmN			RMS: 0.30 secs							
Locality:	SOUTHERN NORTH SEA													
Velocity model:	Lownet	Xnear:	500.0	Xfar:	1000.0									
Comment:	110KM NE LOWESTOFT													
STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES				
WACR	HZ	163.0	EP			22:27	14.54			-0.02				
WACR	HN	163.0	IAML			22:27	38.94	20	0.32					
WACR	HE	163.0	IAML			22:27	38.96	21	0.10					
ELMS	HZ	175.0	EP			22:27	16.23			0.16				
ELMS	HE	175.0	ES			22:27	36.05			0.31				
ELMS	HZ	175.0	IAML			22:27	37.87	34	0.14					
ELMS	HE	175.0	IAML			22:27	39.67	41	0.12					
BRAD	CZ	207.0	EP			22:27	20.04			0.01				
BRAD	CE	207.0	IAML			22:27	50.42	14	0.27					
BRAD	CN	207.0	IAML			22:27	51.06	20	0.29					
ELSH	HE	251.0	IAML			22:28	00.57	13	0.40					
ELSH	HN	251.0	IAML			22:28	03.23	15	0.21					
AU08	HZ	265.0	EP			22:27	28.13			0.70				
CWF	HZ	290.0	EP			22:27	30.66			0.14				
CWF	HN	290.0	IAML			22:28	17.92	4	0.22					
CWF	HE	290.0	IAML			22:28	19.85	3	0.32					
AR09	HZ	378.0	EP			22:27	41.34			-0.27				
HLM1	HZ	399.0	EP			22:27	44.24			0.02				
HLM1	HN	399.0	ES			22:28	24.23			-0.21				
HLM1	HE	399.0	IAML			22:28	43.06	2	0.18					
HLM1	HN	399.0	IAML			22:28	43.32	2	0.32					
MONM	HZ	416.0	EP			22:27	45.81			-0.47				
MONM	HE	416.0	ES			22:28	28.07			0.06				
MONM	HE	416.0	IAML			22:28	28.93	4	0.18					
MONM	HN	416.0	IAML			22:28	29.15	3	0.44					
MCH1	HZ	423.0	EP			22:27	46.58			-0.51				
MCH1	HN	423.0	ES			22:28	29.49			0.09				
MCH1	HN	423.0	IAML			22:28	30.33	4	0.24					
MCH1	HE	423.0	IAML			22:28	31.41	2	0.18					
October 15 2021							Magnitude: 0.5 ML							
Lat:	56.272						Depth: 3.2 km							
Grid Ref:	289.29	kmE	710.26	kmN			RMS: 0.20 secs							
Locality:	BLACKFORD, PERTH/KINROSS													
Velocity model:	Lownet	Xnear:	100.0	Xfar:	200.0									
Comment:	FELT CARRICK CASTLE						Intensity: 3							
STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES				
INVG	HZ	23.4	EP			22:34	35.76			-0.17				
INVG	HN	23.4	ES			22:34	39.20			0.00				
INVG	HN	23.4	IAML			22:34	41.05	3	0.52					
INVG	HE	23.4	IAML			22:34	41.40	2	0.26					
EAB	HZ	35.3	IP	C		22:34	37.98			0.04				
EAB	HN	35.3	ES			22:34	42.64			-0.05				
EAB	HE	35.3	IAML			22:34	45.25	4	0.38					
EAB	HN	35.3	IAML			22:34	45.87	6	0.24					
LAWE	HZ	99.8	EP			22:34	48.20			0.12				
LAWE	HE	99.8	IAML			22:35	03.11	3	0.24					
LAWE	HN	99.8	IAML			22:35	03.83	3	0.26					
ESK	HZ	113.0	EP			22:34	50.45			0.38				
ESK	HN	113.0	ES			22:35	03.33			-0.35				
ESK	HN	113.0	IAML			22:35	05.98	4	0.20					
ESK	HE	113.0	IAML			22:35	06.23	2	0.12					
NEWG	HZ	132.0	EP			22:34	53.10			0.10				
NEWG	HN	132.0	IAML			22:35	10.78	2	0.30					
NEWG	HE	132.0	IAML			22:35	11.32	2	0.22					
October 16 2021							Magnitude: 0.8 ML							
Lat:	53.695						Depth: 5.2 km							
Grid Ref:	391.22	kmE	422.10	kmN			RMS: 0.10 secs							
Locality:	WALSDEN, WEST YORKSHIRE													
Velocity model:	Lownet	Xnear:	100.0	Xfar:	200.0									
STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES				
AR01	HZ	14.0	IP	C	14:07	45.57			-0.10					
AR01	HN	14.0	ES		14:07	47.62			-0.19					
AR01	HN	14.0	IAML		14:07	47.70	73	0.12						
AR01	HE	14.0	IAML		14:07	47.74	118	0.12						
AS02	HZ	18.5	EP		14:07	46.56			0.14					
October 17 2021							Magnitude: 1.0 ML							
Lat:	53.213						Depth: 5.8 km							
Grid Ref:	277.88	kmE	370.03	kmN			RMS: 0.10 secs							
Locality:	DOLGARROG, CONWY													

**TABLE 2 : PHASE DATA**

Velocity model: Mid Wales Xnear: 80.0 Xfar: 200.0												INVG	HE	145.0	IAML	00:08	14.07	2	0.25
Comment: FELT DOLGARROG...												INVG	HN	145.0	IAML	00:08	15.35	2	0.10
STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES		EAB	HZ	157.0	EP	00:07	59.71		0.87
WLF1	HZ	38.8	EP			21:10	36.72		0.10			EAB	HN	157.0	IAML	00:08	18.12	2	0.08
WLF1	HN	38.8	ES			21:10	41.42		-0.06			EAB	HE	157.0	IAML	00:08	18.65	2	0.09
WLF1	HN	38.8	IAML			21:10	41.55	97	0.11										
WLF1	HE	38.8	IAML			21:10	42.03	31	0.26										
LLW	BZ	41.9	EP			21:10	37.25		0.11										
LLW	BE	41.9	ES			21:10	42.32		-0.06										
FOEL	HZ	55.4	EP			21:10	39.21		-0.19										
FOEL	HN	55.4	ES			21:10	46.36		0.10										
FOEL	HE	55.4	IAML			21:10	48.82	7	0.62										
FOEL	HN	55.4	IAML			21:10	50.97	6	0.27										
HLM1	HZ	100.0	EP			21:10	46.79		-0.01										
HLM1	HN	100.0	IAML			21:10	59.35	2	0.07										
HLM1	HE	100.0	IAML			21:10	59.83	2	0.27										
IOMK	HZ	126.0	EP			21:10	50.74		-0.02										
AS02	HZ	128.0	EP			21:10	51.11		0.02										
AS02	HN	128.0	IAML			21:11	07.13	7	0.22										
AS02	HE	128.0	IAML			21:11	07.31	6	0.29										
October 18 2021 Time: 17:50 46.9 UTC Magnitude: 2.0 ML												INVG	HE	78.9	ES	06:09	28.88		0.33
Lat: 58.154												INVG	HE	78.9	IAML	06:09	30.76	6	0.09
Grid Ref: 581.04 kmE												INVG	HN	78.9	IAML	06:09	30.78	6	0.24
Locality: CENTRAL NORTH SEA												KPL	HZ	80.6	EP	06:09	19.14		0.16
Velocity model: North Sea Xnear: 400.0 Xfar: 600.0												KPL	HE	80.6	IAML	06:09	32.44	2	0.17
Comment: 220KM NE ABERDEEN												KPL	HN	80.6	IAML	06:09	33.00	3	0.19
STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES		LINV	HZ	167.0	EP	06:09	32.45		0.50
DRUM	HZ	254.0	EP			17:51	23.29		0.26										
DRUM	HN	254.0	IAML			17:51	51.05	8	0.08										
DRUM	HE	254.0	IAML			17:51	52.43	12	0.10										
MCD	HZ	265.0	EP			17:51	24.43		0.09										
MCD	HN	265.0	IAML			17:51	53.60	4	0.07										
MCD	HE	265.0	IAML			17:51	53.94	5	0.10										
BIGH	HZ	295.0	EP			17:51	28.02		-0.01										
BIGH	HN	295.0	ES			17:51	57.75		-0.29										
BIGH	HE	295.0	IAML			17:51	59.84	5	0.34										
BIGH	HN	295.0	IAML			17:52	12.46	5	0.19										
INVG	HZ	364.0	EP			17:51	37.23		0.61										
INVG	HN	364.0	IAML			17:52	16.34	3	0.15										
INVG	HE	364.0	IAML			17:52	16.39	3	0.08										
EAB	HZ	394.0	EP			17:51	40.75		0.39										
EAB	HN	394.0	IAML			17:52	22.42	4	0.15										
EAB	HE	394.0	IAML			17:52	23.40	4	0.07										
EDMD	HZ	415.0	EP			17:51	42.16		-0.75										
LAWE	HN	444.0	EP			17:51	45.96		-0.67										
October 19 2021 Time: 17:57 04.1 UTC Magnitude: 0.9 ML												INVG	HE	105.0	IAML	07:13	44.28	3	0.14
Lat: 52.188												EAB	HZ	111.0	EP	07:13	30.36		0.54
Grid Ref: 300.54 kmE												EAB	HE	111.0	ES	07:13	43.10		0.08
Locality: NEWBRIDGE-ON-WYE, POWYS												EAB	HE	111.0	IAML	07:13	44.57	3	0.12
Velocity model: Lownet Xnear: 100.0 Xfar: 200.0												EAB	HN	111.0	IAML	07:13	46.14	4	0.17
STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES		LINV	HZ	132.0	EP	07:13	33.04		0.16
MCH1	HZ	37.8	EP			17:57	11.07		0.03										
MCH1	HN	37.8	ES			17:57	15.86		-0.23										
MCH1	HN	37.8	IAML			17:57	15.99	27	0.11										
MCH1	HE	37.8	IAML			17:57	16.03	20	0.15										
HLM1	HZ	53.7	EP			17:57	13.68		0.06										
HLM1	HN	53.7	ES			17:57	20.31		-0.24										
HLM1	HE	53.7	IAML			17:57	21.58	3	0.10										
HLM1	HN	53.7	IAML			17:57	22.10	4	0.27										
MONM	HZ	59.2	EP			17:57	14.51		0.11										
MONM	HN	59.2	ES			17:57	21.84		-0.07										
MONM	HN	59.2	IAML			17:57	22.19	10	0.33										
MONM	HE	59.2	IAML			17:57	22.30	9	0.10										
FOEL	HZ	80.0	EP			17:57	18.23		0.54										
FOEL	HN	80.0	ES			17:57	27.37		-0.23										
FOEL	HE	80.0	IAML			17:57	27.90	5	0.24										
FOEL	HN	80.0	IAML			17:57	27.93	4	0.19										
RSBS	HZ	92.2	EP			17:57	19.34		-0.21										
RSBS	HN	92.2	IAML			17:57	31.67	4	0.16										
RSBS	HE	92.2	IAML			17:57	33.02	5	0.08										
STRD	HN	99.9	ES			17:57	33.10		0.23										
STRD	HE	99.9	IAML			17:57	33.78	6	0.11										
STRD	HN	99.9	IAML			17:57	34.07	8	0.12										
October 22 2021 Time: 00:07 34.0 UTC Magnitude: 0.9 ML												INVG	HE	268.0	EP	02:00	57.16		0.63
Lat: 57.419												INVG	CZ	201.0	IAML	02:01	15.04	41	0.45
Lon: -5.589												INVG	CE	201.0	IAML	02:01	18.23	40	0.38
Grid Ref: 184.51 kmE												INVG	HN	251.0	IAML	02:01	40.33	31	0.50
Locality: TORNAPRESS, HIGHLAND												INVG	HE	251.0	IAML	02:01	42.33	27	0.68
Velocity model: Lownet Xnear: 100.0 Xfar: 200.0												CWF	HZ	268.0	EP	02:00	57.16		
STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES		CWF	HE	268.0	IAML	02:01	34.86	10	0.48
KPL	HZ	9.7	IP	C	00:07	36.51		0.11				CWF	HN	268.0	IAML	02:01	40.02	10	0.40
KPL	HN	9.7	ES		00:07	38.04		-0.09				LBWR	HN	289.0	IAML	02:01	39.75	20	0.32
KPL	HN	9.7	IAML		00:07	38.11	34	0.06				LBWR	HE	289.0	IAML	02:01	40.07	13	0.38
KPL	HE	9.7	IAML		00:07	38.23	30	0.											

TABLE 2 : PHASE DATA

MCH1	HN	27.0	ES	23:25	03.98	-0.06	AU18	HN	69.5	ES	17:15	01.74	-0.11						
MCH1	HN	27.0	IAML	23:25	04.29	9 0.08	AQ12	HZ	71.6	EP	17:14	53.87	0.23						
MCH1	HE	27.0	IAML	23:25	04.33	18 0.08	AQ12	HE	71.6	ES	17:15	02.26	-0.26						
MONM	HZ	28.9	IP	D	23:25	00.58	-0.02	LBWR	HE	83.9	ES	17:15	06.24	0.43					
MONM	HN	28.9	ES		23:25	04.55	0.04	LBWR	HE	83.9	IAML	17:15	09.31	10 0.13					
MONM	HN	28.9	IAML		23:25	04.85	6 0.12	LBWR	HN	83.9	IAML	17:15	09.55	6 0.08					
MONM	HE	28.9	IAML		23:25	05.00	4 0.14	KESW	HZ	99.7	EP	17:14	58.79	0.82					
STRD	HZ	45.9	EP		23:25	03.29	0.04	KESW	HN	99.7	ES	17:15	10.78	0.77					
STRD	HE	45.9	ES		23:25	09.02	-0.07	KESW	HN	99.7	IAML	17:15	12.59	2 0.08					
STRD	HE	45.9	IAML		23:25	09.82	4 0.11	KESW	HE	99.7	IAML	17:15	12.86	2 0.09					
STRD	HN	45.9	IAML		23:25	09.88	8 0.14												
HLM1	HZ	52.5	EP		23:25	04.52	0.21	November 8 2021											
HLM1	HE	52.5	ES		23:25	10.78	-0.15	Time: 01:39 30.0 UTC											
HLM1	HN	52.5	IAML		23:25	11.26	1 0.08	Lat: 54.321											
HLM1	HE	52.5	IAML		23:25	11.31	1 0.18	Grid Ref: 275.39 kmE 493.42 kmN											
<b>November 5 2021</b>																			
Time: 22:47 11.9 UTC																			
Magnitude: 0.9 ML																			
Lat: 56.019	Lon: -5.072				Depth: 8.1 km														
Grid Ref: 208.55 kmE	684.93 kmN				RMS: 0.20 secs														
Locality: GLENLEAN, ARGYLL & BUTE																			
Velocity model: Lownet Xnear: 100.0	Xfar: 200.0																		
STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES									
LAWE	HZ	33.6	IP	C	22:47	18.12	0.09	IOMK	HZ	42.9	IP	C	01:39	37.74	0.23				
LAWE	HN	33.6	ES		22:47	22.21	-0.26	IOMK	HE	42.9	IAML		01:39	37.96	13 0.13				
LAWE	HN	33.6	IAML		22:47	22.54	11 0.12	IOMK	HN	42.9	ES		01:39	42.56	-0.45				
LAWE	HE	33.6	IAML		22:47	22.75	10 0.34	IOMK	HN	42.9	IAML		01:39	43.28	9 0.15				
PGB1	HZ	43.4	IP	C	22:47	19.76	0.20	KESW	HZ	60.5	EP		01:39	39.94	-0.32				
PGB1	HN	43.4	ES		22:47	25.15	0.03	KESW	HN	60.5	ES		01:39	47.67	-0.09				
PGB1	HN	43.4	IAML		22:47	25.52	19 0.15	KESW	HE	60.5	IAML		01:39	48.56	6 0.10				
PGB1	HE	43.4	IAML		22:47	26.39	26 0.50	KESW	HN	60.5	IAML		01:39	49.29	10 0.15				
EAB	HZ	49.4	EP		22:47	20.71	0.20	AQ12	HZ	76.7	IP	C	01:39	42.54	-0.26				
EAB	HN	49.4	ES		22:47	26.52	-0.24	AQ12	HE	76.7	IAML		01:39	53.51	9 0.09				
EAB	HE	49.4	IAML		22:47	27.03	8 0.11	AQ12	HN	76.7	IAML		01:39	53.94	19 0.07				
EAB	HN	49.4	IAML		22:47	29.86	8 0.12	GAL1	HZ	79.5	EP		01:39	43.62	0.43				
INVG	HZ	78.3	EP		22:47	25.09	0.11	GAL1	HN	79.5	ES		01:39	52.72	-0.10				
INVG	HE	78.3	ES		22:47	34.29	-0.21	GAL1	HE	79.5	IAML		01:39	54.56	20 0.10				
INVG	HN	78.3	IAML		22:47	36.62	4 0.15	GAL1	HN	79.5	IAML		01:39	54.57	15 0.12				
INVG	HE	78.3	IAML		22:47	37.19	5 0.13	NEWG	HZ	90.9	EP		01:39	45.35	0.39				
NEWG	HZ	114.0	EP		22:47	30.24	-0.18	NEWG	HN	90.9	ES		01:39	55.77	-0.11				
NEWG	HN	114.0	ES		22:47	43.62	-0.29	NEWG	HE	90.9	IAML		01:39	56.95	9 0.23				
NEWG	HN	114.0	IAML		22:47	44.59	5 0.11	NEWG	HN	90.9	ES		01:39	57.01	8 0.15				
NEWG	HE	114.0	IAML		22:47	44.68	6 0.27	AR09	HZ	96.7	EP		01:39	45.99	0.08				
EDI	HZ	118.0	EP		22:47	31.60	0.47	WPS	HZ	109.0	EP	9	01:39	37.17	-10.60				
CLGH	HZ	123.0	EP		22:47	31.93	0.01	WPS	HN	109.0	ES		01:39	49.67	-0.50				
KPL	HZ	151.0	EP		22:47	36.28	0.40	WPS	HN	109.0	IAML		01:39	50.88	6 0.20				
								WPS	HE	109.0	IAML		01:39	51.31	11 0.33				
<b>November 6 2021</b>																			
Time: 20:09 11.7 UTC																			
Magnitude: 0.2 ML																			
Lat: 56.219	Lon: -5.035				Depth: 7.8 km														
Grid Ref: 211.84 kmE	707.07 kmN				RMS: 0.20 secs														
Locality: INVERARAY, ARGYLL/BUTE																			
Velocity model: Lownet Xnear: 100.0	Xfar: 200.0																		
Comment: 3KM SE INVERARAY																			
STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES									
LAWE	HZ	23.1	EP		20:09	16.35	0.16	ESK	HZ	120.0	EP		01:39	49.55	0.15				
LAWE	HN	23.1	ES		20:09	19.21	-0.22	ESK	HN	120.0	ES		01:40	03.29	-0.29				
LAWE	HN	23.1	IAML		20:09	19.62	3 0.07	ESK	HN	120.0	IAML		01:40	04.26	9 0.12				
LAWE	HE	23.1	IAML		20:09	19.63	3 0.08	ESK	HE	120.0	IAML		01:40	04.37	12 0.15				
EAB	HZ	43.4	EP		20:09	19.55	0.18	EKA	BZ	123.0	EP		01:39	49.83	0.00				
EAB	HN	43.4	ES		20:09	24.66	-0.27	EKA	BZ	123.0	ES		01:40	03.98	-0.34				
EAB	HE	43.4	IAML		20:09	24.96	4 0.12	AS07	HZ	129.0	EP		01:39	51.22	0.48				
EAB	HN	43.4	IAML		20:09	25.37	4 0.12	EDMD	HZ	139.0	EP		01:39	52.47	0.46				
PGB1	HN	56.9	ES		20:09	28.50	-0.02	November 8 2021											
INVG	HZ	65.6	EP		20:09	23.14	0.34	Time: 10:31 36.4 UTC											
INVG	HN	65.6	ES		20:09	30.71	-0.17	Lat: 54.321											
INVG	HE	65.6	IAML		20:09	32.36	2 0.11	Grid Ref: 276.57 kmE 493.39 kmN											
INVG	HN	65.6	IAML		20:09	34.13	2 0.07	Locality: IRISH SEA											
<b>November 7 2021</b>																			
Time: 17:14 41.5 UTC																			
Magnitude: 0.9 ML																			
Lat: 54.155	Lon: -1.763				Depth: 5.4 km														
Grid Ref: 415.48 kmE	473.29 kmN				RMS: 0.60 secs														
Locality: DALLOWGILL, N YORKSHIRE																			
Velocity model: Lownet Xnear: 100.0	Xfar: 200.0																		
STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES									
AS07	HZ	15.8	IP	D	17:14	44.79	0.05	GAL1	HZ	80.3	EP		10:31	49.95	0.25				
AS07	HE	15.8	ES		17:14	47.08	-0.05	GAL1	HN	80.3	ES		10:31	59.09	-0.32				
AS07	HN	15.8	IAML		17:14	47.31	16 0.07	GAL1	HE	80.3	IAML		10:32	00.85	5 0.09				
AS07	HE	15.8	IAML		17:14	47.39	15 0.07	GAL1	HE	80.3	IAML		10:32	00.86	6 0.10				
HPK	HZ	23.7	EP		17:14	46.06	0.02	NEWG	HZ	91.2	EP		10:31	51.72	0.33				
HPK	HE	23.7	ES		17:14	49.02	-0.35	NEWG	HN	91.2	ES		10:32	02.36	0.01				
HPK	HN	23.7	IAML		17:14	49.64	52 0.16	NEWG	HE	91.2	IAML		10:32	03.25	3 0.23				
HPK	HE	23.7	IAML		17:14	49.70	41 0.20	NEWG	HN	91.2	IAML		10:32	03.35	3 0.20				
AS10	HE	44.4	ES		17:14	55.24	0.09	ESK	HZ	119.0	EP		10:31	55.86	0.13				
AS10	HN	44.4	IAML		17:14	55.60	13 0.20	ESK	HN	119.0	ES		10:32	09.74	-0.11				
AS10	HE	44.4	IAML		17:14	55.62	25 0.23	ESK	HE	119.0	IAML		10:32	10.69	4 0.18				
AS09	HN	44.9	ES		17:14	53.71	-1.68	ESK	HN	119.0	IAML		10:32	10.88	4 0.24				
AS09	HE	44.9	IAML		17:14	55.55	23 0.10	November 10 2021											
AS09	HN	44.9	IAML		17:14	56.07	33 0.13	Time: 19:58 39.4 UTC											
AS07	HE	48.9	ES		17:14	56.53	0.16	Lat: 56.231											
AS07	HN	48.9	IAML		17:14	57.52	-0.27	Grid Ref: 192.63 kmE 709.30 kmN											
AU11	HN	54.4	ES		17:14	57.52	-0.27	Locality: DALAVICH, ARGYLL & BUTE											
AU11	HN	54.4	IAML		17:14	58.18	9 0.15	Velocity model: Lownet Xnear: 100.0	Xfar: 200.0										
AU11	HE	54.4	IAML		17:14	58.90	7 0.18	Comment: 5KM SW DALAVICH											
AS02	HN	68.5	ES		17:15	01.78	0.13	STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES	
AS02	HE	68.5	IAML		17:15	02.17	5 0.13	LAWE	HZ	4.6	IP	D	19:58	40.94	-0.04				
AS02	HN	68.5	IAML		17:15	02.28	10 0.22	LAWE	HN	4.6	ES		19:58	42.18	0.02				

**TABLE 2 : PHASE DATA**

LAWE	HE	4.6	IAML	19:58	42.29	54	0.10		INVG	HE	68.2	ES	10:05	09.35	-0.47	
LAWE	HN	4.6	IAML	19:58	42.36	42	0.06		INVG	HE	68.2	IAML	10:05	10.07	1 0.26	
EAB	HZ	62.8	EP	19:58	50.09		0.04		INVG	HN	68.2	IAML	10:05	10.71	1 0.09	
EAB	HN	62.8	ES	19:58	57.84		-0.02		KPL	HE	74.3	ES	10:05	11.13	-0.12	
EAB	HZ	62.8	IAML	19:58	58.55	1	0.20		KPL	HN	74.3	IAML	10:05	14.40	2 0.19	
EAB	HE	62.8	IAML	19:58	58.22	2	0.34		KPL	HE	74.3	IAML	10:05	14.60	4 0.23	
INVG	HZ	83.5	EP	19:58	53.26		0.00		EAB	HZ	85.0	EP	10:05	04.22	0.44	
INVG	HN	83.5	IAML	19:59	05.86	2	0.10		EAB	HE	85.0	ES	10:05	14.21	0.24	
INVG	HE	83.5	IAML	19:59	05.93	2	0.10		EAB	HE	85.0	IAML	10:05	14.56	2 0.25	
									EAB	HN	85.0	IAML	10:05	18.06	2 0.25	
November 12 2021				Time: 05:21	59.8	UTC		Magnitude: 0.6 ML		LAWE	HZ	86.2	EP	10:05	04.25	0.32
Lat: 55.467				Lat:	-3.482			Depth: 4.8 km		LAWE	HE	86.2	ES	10:05	13.89	-0.34
Grid Ref: 306.32				Grid Ref:	kmE 620.24	kmN		RMS: 0.30 secs		LAWE	HE	86.2	IAML	10:05	16.94	4 0.19
Locality: TWEEDSMUIR, BORDERS				Velocity model:	Lownet	Xnear: 75.0	Xfar: 150.0			LAWE	HN	86.2	IAML	10:05	17.01	6 0.11
Comment: 5KM SW TWEEDSMUIR																
STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES						
ESK	HZ	24.2	EP			05:22	04.54			0.10						
ESK	HN	24.2	ES			05:22	07.45			-0.37						
ESK	HZ	24.2	IAML			05:22	07.97	10	0.18							
ESK	HE	24.2	IAML			05:22	08.02	7	0.11							
EKA	BZ	25.3	EP			05:22	04.73			0.09						
NEWG	HZ	61.4	EP			05:22	10.35			-0.12						
NEWG	HE	61.4	IAML			05:22	18.92	2	0.15							
NEWG	HN	61.4	IAML			05:22	19.39	2	0.06							
PGB1	HZ	73.8	EP			05:22	12.50			0.10						
PGB1	HE	73.8	ES			05:22	21.36			-0.22						
PGB1	HE	73.8	IAML			05:22	24.57	4	0.13							
PGB1	HN	73.8	IAML			05:22	24.62	8	0.30							
EAB	HZ	96.6	EP			05:22	16.59			0.65						
EAB	HN	96.6	ES			05:22	27.38			-0.33						
EAB	HE	96.6	IAML			05:22	28.31	2	0.12							
EAB	HN	96.6	IAML			05:22	30.21	3	0.30							
KESW	HZ	101.0	EP			05:22	17.11			0.53						
GALL	HZ	103.0	EP			05:22	17.00			0.09						
GALL	HN	103.0	IAML			05:22	30.90	2	0.12							
GALL	HE	103.0	IAML			05:22	30.95	2	0.11							
November 14 2021				Time: 05:12	57.3	UTC		Magnitude: 0.9 ML								
Lat: 56.316				Lat:	-5.321			Depth: 4.4 km								
Grid Ref: 194.63				Grid Ref:	kmE 718.68	kmN		RMS: 0.20 secs								
Locality: DALAVICH, ARGYLL & BUTE				Velocity model:	Lownet	Xnear: 100.0	Xfar: 200.0									
Comment: 6KM NNW DALAVICH																
STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES						
LAWE	HZ	7.9	IP		D	05:12	59.12			0.00						
LAWE	HN	7.9	ES			05:13	00.32			-0.15						
LAWE	HE	7.9	IAML			05:13	00.42	125	0.10							
LAWE	HN	7.9	IAML			05:13	00.45	103	0.06							
EAB	HZ	62.6	EP			05:13	08.31			0.08						
EAB	HN	62.6	ES			05:13	15.99			-0.25						
EAB	HE	62.6	IAML			05:13	20.37	5	0.09							
EAB	HN	62.6	IAML			05:13	20.85	5	0.11							
PGB1	HZ	76.7	ES			05:13	20.29			0.31						
PGB1	HN	76.7	IAML			05:13	23.04	10	0.22							
PGB1	HE	76.7	IAML			05:13	23.25	9	0.30							
INVG	HZ	79.9	EP			05:13	10.79			-0.12						
INVG	HN	79.9	IAML			05:13	24.02	6	0.06							
INVG	HE	79.9	IAML			05:13	24.51	7	0.10							
KPL	HZ	116.0	EP			05:13	16.60			0.19						
KPL	HN	116.0	IAML			05:13	32.38	4	0.46							
KPL	HE	116.0	IAML			05:13	32.64	3	0.19							
November 14 2021				Time: 18:05	45.7	UTC		Magnitude: 0.5 ML								
Lat: 56.096				Lat:	-5.162			Depth: 10.2 km								
Grid Ref: 203.34				Grid Ref:	kmE 693.75	kmN		RMS: 0.20 secs								
Locality: BARNACARRY, ARGYLL/BUTE				Velocity model:	Lownet	Xnear: 100.0	Xfar: 200.0									
Comment: FELT ACHNAMARA...								Intensity: 5								
STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES						
LAWE	HZ	23.5	IP	C		18:05	50.31			0.03						
LAWE	HN	23.5	ES			18:05	53.43			-0.18						
LAWE	HE	23.5	IAML			18:05	53.65	6	0.10							
LAWE	HN	23.5	IAML			18:05	53.77	6	0.12							
EAB	HZ	52.3	EP			18:05	54.89			0.15						
EAB	HN	52.3	ES			18:06	01.11			-0.21						
EAB	HE	52.3	IAML			18:06	01.76	3	0.11							
PGB1	HZ	52.9	EP			18:05	54.96			0.15						
PGB1	HN	52.9	ES			18:06	01.34			-0.11						
PGB1	HE	52.9	IAML			18:06	01.47	6	0.21							
PGB1	HN	52.9	IAML			18:06	01.55	6	0.25							
INVG	HZ	78.5	EP			18:05	59.02			0.22						
INVG	HE	78.5	IAML			18:06	11.03	2	0.13							
INVG	HN	78.5	IAML			18:06	11.05	3	0.17							
NEWG	HN	124.0	ES			18:06	19.92			-0.20						
CLGH	HZ	128.0	EP			18:06	06.28			0.10						
November 15 2021				Time: 10:04	49.8	UTC		Magnitude: 0.5 ML								
Lat: 56.927				Lat:	-4.686			Depth: 7.6 km								
Grid Ref: 236.55				Grid Ref:	kmE 784.94	kmN		RMS: 0.30 secs								
Locality: ROYBRIDGE, HIGHLAND				Velocity model:	Lownet	Xnear: 150.0	Xfar: 300.0									
STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES						
INVG	HZ	68.2	EP			10:05	01.31			-0.07						
INVG	HE	68.2	IAML			10:05	01.31			-0.07						
INVG	HN	131.0	EP			01:44	28.13									
INVG	HE	131.0	IAML			01:44	44.05	634	0.44							
INVG	HN	131.0	IAML			01:44	44.82	700	0.14							
GAL1	HZ	140.0	EP			01:44	29.05			-0.02						
GAL1	HE	140.0	IAML			01:44	46.30	301	0.18							
GAL1	HN	140.0	IAML			01:44	49.88	283	0.36							

TABLE 2 : PHASE DATA

KPL	HZ	146.0	EP	01:44	30.18	0.34	PGB1	HE	123.0	IAML	02:43	14.85	16	0.24					
KPL	HE	146.0	IAML	01:44	49.68	802	0.24	PGB1	HN	123.0	IAML	02:43	15.77	19	0.40				
KPL	HN	146.0	IAML	01:44	53.24	428	0.32	DRUM	HZ	137.0	EP	02:43	01.90		0.63				
EDI	HZ	147.0	EP	01:44	30.58		0.49	DRUM	HE	137.0	IAML	02:43	19.79	12	0.10				
EDI	HN	147.0	IAML	01:44	51.03	420	0.34	DRUM	HN	137.0	IAML	02:43	20.79	15	0.10				
EDI	HE	147.0	IAML	01:44	51.42	420	0.40	LINV	HZ	140.0	EP	02:43	01.20		-0.47				
ESK	HZ	167.0	EP	01:44	32.60		-0.19	LINV	HE	140.0	IAML	02:43	18.71	16	0.24				
ESK	HN	167.0	IAML	01:44	54.94	478	0.18	LINV	HN	140.0	IAML	02:43	19.24	6	0.11				
ESK	HE	167.0	IAML	01:44	55.80	259	0.31	EDI	HN	146.0	IAML	02:43	20.75	8	0.34				
ESY	HZ	183.0	EP	01:44	35.20		0.41	EDI	HE	146.0	IAML	02:43	20.94	9	0.24				
ESY	HN	183.0	IAML	01:44	59.89	198	0.36	ESK	HE	202.0	IAML	02:43	35.95	4	0.22				
ESY	HE	183.0	IAML	01:45	00.49	147	0.30	ESK	HN	202.0	IAML	02:43	36.89	5	0.32				
IOMK	HZ	207.0	EP	01:44	37.08		-0.67	November 16 2021 Time: 04:09 55.0 UTC Magnitude: 0.9 ML											
IOMK	HN	207.0	IAML	01:45	05.02	105	0.30	Lat: 56.916 Lon: -4.706 Depth: 7.8 km Grid Ref: 235.29 kmE 783.76 kmN RMS: 0.20 secs											
IOMK	HE	207.0	IAML	01:45	05.75	87	0.40	Locality: ROYBRIDGE, HIGHLAND											
DRUM	HZ	212.0	EP	01:44	38.30		-0.10	Velocity model: Lownet Xnear: 150.0 Xfar: 300.0											
DRUM	HE	212.0	IAML	01:45	09.61	377	0.28	STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES	
DRUM	HN	212.0	IAML	01:45	10.58	552	0.34	INVG	HZ	67.9	EP	04:10	06.54		0.07				
MCD	HZ	222.0	EP	01:44	38.78		-0.87	INVG	HN	67.9	ES	04:10	14.37		-0.44				
MCD	HE	222.0	IAML	01:45	13.13	533	0.30	INVG	HN	67.9	IAML	04:10	15.64	2	0.10				
MCD	HN	222.0	IAML	01:45	14.77	533	0.28	INVG	HE	67.9	IAML	04:10	15.67	2	0.16				
KESW	HZ	223.0	EP	01:44	39.97		0.18	KPL	HZ	74.2	EP	04:10	07.44		0.05				
KESW	HN	223.0	IAML	01:45	13.23	194	0.48	KPL	HN	74.2	ES	04:10	16.30		-0.10				
KESW	HE	223.0	IAML	01:45	14.49	191	0.44	KPL	HN	74.2	IAML	04:10	19.64	6	0.12				
LINV	HZ	236.0	EP	01:44	41.21		-0.20	KPL	HE	74.2	IAML	04:10	19.72	8	0.22				
LINV	HE	236.0	IAML	01:45	14.21	298	0.26	EAB	HZ	84.1	EP	04:10	09.38		0.40				
LINV	HN	236.0	IAML	01:45	14.39	122	0.20	EAB	HE	84.1	ES	04:10	19.34		0.18				
AQ12	HZ	251.0	EP	01:44	43.21		-0.10	EAB	HN	84.1	IAML	04:10	19.65	4	0.25				
AQ12	HE	251.0	IAML	01:45	20.25	120	0.48	EAB	HE	84.1	IAML	04:10	23.21	6	0.16				
AQ12	HN	251.0	IAML	01:45	23.30	213	0.34	LAWE	HZ	84.6	EP	04:10	08.97		-0.05				
EDMD	HZ	263.0	EP	01:44	44.85		0.14	LAWE	HE	84.6	ES	04:10	19.11		-0.12				
EDMD	HN	263.0	IAML	01:45	26.02	293	0.44	LAWE	HE	84.6	IAML	04:10	22.08	6	0.22				
EDMD	HE	263.0	IAML	01:45	26.71	271	0.52	LAWE	HN	84.6	IAML	04:10	22.18	10	0.10				
AR09	HZ	282.0	EP	01:44	47.05		-0.15	November 16 2021 Time: 04:50 31.9 UTC Magnitude: 0.5 ML											
AS10	HZ	287.0	EP	01:44	48.25		0.45	Lat: 56.919 Lon: -4.713 Depth: 7.9 km Grid Ref: 234.87 kmE 784.11 kmN RMS: 0.20 secs											
AS10	HN	287.0	IAML	01:45	30.51	402	0.34	Locality: ROYBRIDGE, HIGHLAND											
AS10	HE	287.0	IAML	01:45	34.24	277	0.62	Velocity model: Lownet Xnear: 150.0 Xfar: 300.0											
BIGH	HZ	291.0	EP	01:44	46.97		-1.28	STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES	
BIGH	HE	291.0	IAML	01:45	31.73	177	0.56	INVG	HZ	68.4	EP	04:50	43.41		0.05				
BIGH	HN	291.0	IAML	01:45	36.32	83	0.22	INVG	HN	68.4	ES	04:50	51.45		-0.30				
AQ10	HZ	293.0	EP	01:44	48.86		0.41	INVG	HE	68.4	IAML	04:50	52.66	1	0.09				
AR07	HZ	300.0	EP	01:44	49.45		0.01	INVG	HN	68.4	IAML	04:50	52.81	1	0.11				
AR07	HE	300.0	IAML	01:45	34.38	354	0.30	INVG	HE	68.4	IAML	04:50	56.00	1	0.34				
AR07	HN	300.0	IAML	01:45	35.86	414	0.38	KPL	HZ	73.7	EP	04:50	44.30		0.17				
AS07	HZ	303.0	EP	01:44	49.49		-0.35	KPL	HN	73.7	ES	04:50	52.92		-0.17				
AS07	HN	303.0	IAML	01:45	33.69	165	0.36	KPL	HE	73.7	IAML	04:50	56.57	4	0.13				
AS07	HE	303.0	IAML	01:45	37.56	140	0.30	KPL	HE	73.7	IAML	04:50	56.60	5	0.22				
AT12	HZ	306.0	EP	01:44	51.25		1.12	EAB	HZ	84.5	EP	04:50	46.03		0.17				
AR01	HZ	331.0	EP	01:44	53.06		-0.17	EAB	HE	84.5	ES	04:50	56.22		0.14				
AR01	HE	331.0	IAML	01:45	44.57	136	0.52	EAB	HE	84.5	IAML	04:50	56.41	2	0.25				
AR01	HN	331.0	IAML	01:45	45.11	198	0.38	EAB	HN	84.5	IAML	04:51	00.09	3	0.18				
AT10	HZ	334.0	EP	01:44	53.92		0.29	LAWE	HZ	84.6	EP	04:50	45.85		0.00				
GDLE	HZ	350.0	EP	01:44	55.81		0.18	LAWE	HE	84.6	ES	04:50	55.98		-0.07				
GDLE	HE	350.0	IAML	01:45	49.88	161	0.32	LAWE	HE	84.6	IAML	04:50	57.13	3	0.27				
GDLE	HN	350.0	IAML	01:45	51.27	116	0.60	LAWE	HN	84.6	IAML	04:50	59.05	6	0.10				
AS02	HZ	358.0	EP	01:44	56.44		-0.25	November 19 2021 Time: 00:48 51.0 UTC Magnitude: 0.7 ML											
AS02	HN	358.0	IAML	01:45	49.05	75	0.24	Lat: 56.919 Lon: -4.700 Depth: 7.7 km Grid Ref: 235.67 kmE 784.08 kmN RMS: 0.20 secs											
AS02	HE	358.0	IAML	01:45	50.93	111	0.32	Locality: ROYBRIDGE, HIGHLAND											
AU11	HZ	358.0	EP	01:44	57.13		0.54	Velocity model: Lownet Xnear: 150.0 Xfar: 300.0											
AU11	HE	358.0	IAML	01:45	55.44	74	0.38	STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES	
AU07	HZ	362.0	EP	01:44	58.04		0.89	INVG	HZ	67.9	EP	00:49	02.42		0.03				
AU07	HE	362.0	IAML	01:45	52.69	270	0.40	INVG	HN	67.9	ES	00:49	10.50		-0.22				
AU07	HN	362.0	IAML	01:45	55.61	378	0.43	INVG	HE	67.9	IAML	00:49	11.54	2	0.12				
AU18	HZ	366.0	EP	01:44	57.45		-0.21	KPL	HZ	74.3	EP	00:49	03.47		0.14				
AU18	HE	366.0	IAML	01:45	54.98	105	0.38	KPL	HN	74.3	ES	00:49	12.22		-0.14				
AU18	HN	366.0	IAML	01:46	00.99	106	0.64	KPL	HE	74.3	IAML	00:49	15.58	3	0.12				
AU08	HZ	377.0	EP	01:44	59.51		0.50	KPL	HE	74.3	IAML	00:49	15.61	5	0.22				
AU08	HN	377.0	IAML	01:46	08.45	71	0.64	EAB	HZ	84.3	EP	00:49	04.99		0.06				
AU08	HE	377.0	IAML	01:46	08.72	101	0.48	EAB	HE	84.3	ES	00:49	15.26	3	0.14				
November 16 2021 Time: 02:42 39.3 UTC Magnitude: 1.6 ML												Intensity: 3							
Lat: 56.910 Lon: -4.742 Depth: 7.5 km Grid Ref: 233.07 kmE 783.18 kmN RMS: 0.40 secs												Intensity: 3							
Locality: ROYBRIDGE, HIGHLAND												Intensity: 3							
Velocity model: Lownet Xnear: 150.0 Xfar: 300.0												Intensity: 3							
STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES		Intensity: 3							
INVG	HZ	68.7	EP	02:42	50.44		-0.37	INVG	HN	68.7	IP	C	21:30	05.57	-0.07				
INVG	HE	68.7	ES	02:42	58.63		-0.61	INVG	HN	68.7	ES	21:30	13.38	-0.69					
INVG	HE	68.7	IAML	02:42	59.55	10	0.14	INVG	HE	68.7	IAML	21:30	14.93	52	0.10				
KPL	HZ	73.0	EP	02:42	51.38		-0.04	INVG	HE	68.7	IAML	21:30	14.83	43	0.09				
KPL	HE	73.0	IAML	02:43	03.49	16	0.10	INVG	HN	68.7	IAML	21:30	14.93	52	0.10				
KPL	HN	73.0	IAML	02:43	03.66	31	0.22	LAWE	HZ	82.9	EP	02:42	52.94	-0.04					
LAWE	HZ	82.9	EP	02:42	52.94		-0.04	LAWE	HE	82.9	ES	02:42	09.01	-0.01					
LAWE	HE	82.9	IAML	02:43	02.99	36	0.22	LAWE	HE	82.9	IAML	02:43	17.97	7	0.22				
LAWE	HN	82.9	IAML	02:43	06.12	57	0.10	LAWE	HN	82.9	IAML	02:43	18.08	9	0.10				
EAB	HZ	84.1	EP	02:42	53.36		0.17	November 19 2021 Time: 21:29 54.1 UTC Magnitude: 2.2 ML											

TABLE 2 : PHASE DATA

**TABLE 2 : PHASE DATA**

KPL	HE	7.9	IAML	00:02	53.15	26	0.11	BIGH	HN	101.0	IAML	17:33	28.91	395	0.16
KPL	HN	7.9	IAML	00:02	53.46	22	0.20	BIGH	HE	101.0	IAML	17:33	29.15	309	0.32
LAWE	HZ	114.0	EP	00:03	08.99		0.12	MCD	HZ	114.0	EP	17:33	16.81		0.16
LAWE	HE	114.0	ES	00:03	22.10		-0.44	MCD	HE	114.0	ES	17:33	30.08		-0.29
LAWE	HE	114.0	IAML	00:03	24.81	3	0.14	MCD	HE	114.0	IAML	17:33	31.84	186	0.16
LAWE	HN	114.0	IAML	00:03	24.82	3	0.12	MCD	HN	114.0	IAML	17:33	32.21	132	0.21
INVG	HZ	137.0	EP	00:03	12.79		0.41	INVG	HZ	171.0	EP	17:33	24.46		-0.37
INVG	HE	137.0	ES	00:03	28.26		-0.36	INVG	HE	171.0	IAML	17:33	46.45	40	0.24
INVG	HN	137.0	IAML	00:03	29.51	2	0.09	INVG	HN	171.0	IAML	17:33	47.30	29	0.12
INVG	HE	137.0	IAML	00:03	30.85	2	0.20	LAWE	HZ	177.0	EP	17:33	25.89		0.24
EAB	HZ	145.0	EP	00:03	14.07		0.43	LAWE	HE	177.0	IAML	17:33	48.93	74	0.12
EAB	HN	145.0	IAML	00:03	32.32	3	0.29	LAWE	HN	177.0	IAML	17:33	48.94	68	0.18
EAB	HE	145.0	IAML	00:03	32.56	4	0.22	DRUM	HZ	189.0	EP	17:33	27.15		0.05
MCD	HZ	149.0	EP	00:03	14.29		0.08	DRUM	HE	189.0	IAML	17:33	54.07	50	0.36
DRUM	HN	189.0	IAML					DRUM	HN	189.0	IAML	17:33	55.00	60	0.36
December 10 2021		Time: 04:02	49.0	UTC		Magnitude: 0.9	ML								
Lat: 53.584		Lon: -3.269				Depth: 11.2	km								
Grid Ref: 316.00		kME	410.49	kmN		RMS: 0.20	secs								
Locality: IRISH SEA															
Velocity model: Lownet		Xnear: 100.0		Xfar: 200.0											
Comment: 11KM WNW FORMBY															
STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES					
AQ07	HZ	49.1	EP			04:02	57.67			0.13					
AQ07	HN	49.1	ES			04:03	03.90			0.15					
AQ07	HN	49.1	IAML			04:03	04.27	12	0.10						
AQ07	HE	49.1	IAML			04:03	04.45	25	0.20						
AR01	HN	62.5	ES			04:03	07.39			0.01					
AR01	HE	62.5	IAML			04:03	08.20	4	0.14						
AR01	HN	62.5	IAML			04:03	08.48	5	0.12						
AR07	HN	70.4	ES			04:03	09.20			-0.29					
AR07	HE	70.4	IAML			04:03	10.24	8	0.22						
AR07	HN	70.4	IAML			04:03	11.03	7	0.10						
FOEL	HZ	77.4	EP			04:03	02.10			0.12					
FOEL	HN	77.4	ES			04:03	11.14			-0.29					
WPS	HN	84.1	ES			04:03	13.24			0.15					
AQ12	HN	101.0	ES			04:03	17.67			-0.02					
AQ12	HN	101.0	IAML			04:03	18.75	5	0.25						
AQ12	HE	101.0	IAML			04:03	19.17	7	0.08						
LBWR	HN	104.0	ES			04:03	19.16			0.50					
LBWR	HE	104.0	IAML			04:03	19.49	3	0.10						
LBWR	HN	104.0	IAML			04:03	19.90	3	0.10						
KESW	HZ	112.0	EP			04:03	07.06			-0.21					
KESW	HN	112.0	ES			04:03	20.21			-0.37					
KESW	HN	112.0	IAML			04:03	22.09	2	0.28						
KESW	HE	112.0	IAML			04:03	22.52	2	0.30						
IOMK	HZ	114.0	EP			04:03	07.42			-0.03					
IOMK	HN	114.0	ES			04:03	21.18			0.30					
HLM1	HN	121.0	ES			04:03	22.56			-0.30					
HLM1	HN	121.0	IAML			04:03	23.42	1	0.12						
HLM1	HE	121.0	IAML			04:03	23.76	2	0.22						
December 10 2021		Time: 06:10	42.0	UTC		Magnitude: 1.0	ML								
Lat: 55.759		Lon: -6.022				Depth: 12.2	km								
Grid Ref: 147.70		kME	659.06	kmN		RMS: 0.20	secs								
Locality: ISLAY,ARGYLL & BUTE															
Velocity model: Lownet		Xnear: 500.0		Xfar: 1000.0											
STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES					
LAWE	HZ	68.0	EP			06:10	53.05			-0.42					
LAWE	HE	68.0	ES			06:11	01.83			0.00					
LAWE	HN	68.0	IAML			06:11	02.45	4	0.16						
LAWE	HE	68.0	IAML			06:11	04.19	4	0.15						
PGB1	HZ	96.7	EP			06:10	58.26			0.34					
PGB1	HN	96.7	ES			06:11	09.49			-0.03					
PGB1	HN	96.7	IAML			06:11	10.61	17	0.16						
PGB1	HE	96.7	IAML			06:11	10.66	19	0.34						
EAB	HZ	116.0	EP			06:11	00.54			-0.11					
EAB	HE	116.0	IAML			06:11	16.75	2	0.11						
EAB	HN	116.0	IAML			06:11	16.98	2	0.16						
IDGL	HZ	121.0	EP			06:11	01.49			0.03					
GALL	HZ	130.0	EP			06:11	02.72			0.10					
GALL	HN	130.0	ES			06:11	17.48			-0.18					
GALL	HE	130.0	IAML			06:11	19.84	8	0.30						
GALL	HN	130.0	IAML			06:11	20.03	5	0.30						
NEWG	HZ	134.0	EP			06:11	03.21			-0.05					
NEWG	HN	134.0	ES			06:11	18.73			-0.04					
NEWG	HN	134.0	IAML			06:11	19.03	3	0.30						
NEWG	HE	134.0	IAML			06:11	21.31	3	0.14						
INVG	HZ	144.0	EP			06:11	05.06			0.36					
INVG	HN	144.0	IAML			06:11	26.51	2	0.26						
INVG	HN	144.0	IAML			06:11	26.88	2	0.32						
December 11 2021		Time: 17:32	57.8	UTC		Magnitude: 2.5	ML								
Lat: 57.846		Lon: -5.109				Depth: 6.1	km								
Grid Ref: 215.50		kME	888.26	kmN		RMS: 0.30	secs								
Locality: ULLAPOOL,HIGHLAND															
Velocity model: Lownet		Xnear: 150.0		Xfar: 300.0											
Comment: FELT ULLAPOOL...						Intensity: 3									
STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES					
KPL	HZ	65.1	EP			17:33	09.01			0.06					
KPL	HE	65.1	ES			17:33	16.60			-0.45					
KPL	HN	65.1	IAML			17:33	20.56	137	0.16						
KPL	HE	65.1	IAML			17:33	20.82	146	0.14						
BIGH	HZ	101.0	EP			17:33	14.90			0.38					
BIGH	HE	101.0	ES			17:33	26.36			-0.32					
December 12 2021		Time: 08:21	19.0	UTC		Magnitude: 0.4	ML								
Lat: 56.260		Lon: -5.370				Depth: 4.2	km								

**TABLE 2 : PHASE DATA**

Grid Ref: 191.30 kmE 712.60 kmN	RMS: 0.20 secs	EAB HZ 101.0 EP 14:14 36.22 0.38
Locality: DALAVICH, ARGYLL & BUTE		EAB HE 101.0 ES 14:14 48.51 0.56
Velocity model: Lownet Xnear: 100.0 Xfar: 200.0		EAB HE 101.0 IAML 14:14 49.82 2 0.21
Comment: SKM WEST DALAVICH		EAB HE 101.0 IAML 14:14 49.95 3 0.10
STAT CO DIST PHAS WT P HrMn SECS AMPL PERI RES		INVG HZ 112.0 EP 14:14 37.60 0.16
LAWE HZ 1.8 IP C 08:21 19.48 -0.25		INVG HN 112.0 ES 14:14 50.19 -0.52
LAWE HN 1.8 ES 08:21 20.40 0.13		INVG HE 112.0 IAML 14:14 52.18 2 0.17
LAWE HN 1.8 IAML 08:21 20.52 166 0.26		INVG HN 112.0 IAML 14:14 52.71 2 0.11
LAWE HE 1.8 IAML 08:21 20.54 148 0.22		
EAB HZ 64.5 EP 08:21 30.42 0.12	December 17 2021 Time: 20:04 25.4 UTC Magnitude: 0.1 ML	
EAB HN 64.5 ES 08:21 38.48 -0.08	Lat: 54.221 Lon: -2.690 Depth: 7.7 km	
EAB HE 64.5 IAML 08:21 38.84 4 0.14	Grid Ref: 355.02 kmE 480.82 kmN RMS: 0.20 secs	
EAB HN 64.5 IAML 08:21 38.96 3 0.26	Locality: LUPTON, CUMBRIA	
INVG HZ 84.1 EP 08:21 33.52 0.19	Velocity model: Lownet Xnear: 100.0 Xfar: 200.0	
INVG HN 84.1 ES 08:21 43.69 -0.11	STAT CO DIST PHAS WT P HrMn SECS AMPL PERI RES	
INVG HN 84.1 IAML 08:21 47.26 2 0.11	AQ12 HZ 24.3 IP D 20:04 30.25 0.16	
INVG HE 84.1 IAML 08:21 47.54 2 0.09	AQ12 HE 24.3 ES 20:04 33.42 -0.09	
December 15 2021 Time: 16:33 44.3 UTC Magnitude: 1.0 ML	AQ12 HE 24.3 IAML 20:04 33.64 2 0.11	
Lat: 57.040 Lon: -5.791 Depth: 7.8 km	AQ12 HN 24.3 IAML 20:04 33.78 2 0.08	
Grid Ref: 170.04 kmE 800.69 kmN RMS: 0.10 secs	AR07 HZ 29.3 EP 20:04 30.94 0.11	
Locality: LOCH NEVIS, HIGHLAND	AR07 HN 29.3 ES 20:04 34.94 0.15	
Velocity model: Lownet Xnear: 100.0 Xfar: 200.0	AR07 HN 29.3 IAML 20:04 35.03 3 0.21	
Comment: 4KM NNE MALLAIG	AR07 HE 29.3 IAML 20:04 36.26 2 0.15	
STAT CO DIST PHAS WT P HrMn SECS AMPL PERI RES	AP12 HZ 38.8 EP 20:04 32.33 0.02	
KPL HZ 34.3 EP 16:33 50.53 0.07	AP12 HN 38.8 ES 20:04 36.90 -0.45	
KPL HN 34.3 ES 16:33 54.86 -0.11	AP12 HN 38.8 IAML 20:04 37.44 2 0.15	
KPL HN 34.3 IAML 16:33 55.06 10 0.20	AP12 HE 38.8 IAML 20:04 38.64 1 0.30	
KPL HE 34.3 IAML 16:33 55.28 18 0.14	KESW HZ 48.9 EP 20:04 34.16 0.27	
LAWE HZ 90.1 EP 16:33 59.27 0.13	KESW HN 48.9 ES 20:04 40.22 0.14	
LAWE HN 90.1 ES 16:34 09.76 -0.21	KESW HE 48.9 IAML 20:04 40.65 2 0.38	
LAWE HE 90.1 IAML 16:34 12.28 8 0.22	KESW HE 48.9 IAML 20:04 41.53 1 0.12	
LAWE HE 90.1 IAML 16:34 12.29 13 0.26	AS07 HZ 49.2 EP 20:04 34.04 0.09	
INVG HZ 127.0 EP 16:34 04.96 0.14	AS07 HE 49.2 ES 20:04 39.76 -0.42	
INVG HN 127.0 ES 16:34 19.80 0.00	AS07 HN 49.2 IAML 20:04 40.09 2 0.17	
INVG HE 127.0 IAML 16:34 20.74 3 0.15	AS07 HE 49.2 IAML 20:04 40.20 2 0.12	
INVG HN 127.0 IAML 16:34 21.21 3 0.09	EDMD HE 82.6 ES 20:04 49.04 0.02	
EAB HZ 130.0 EP 16:34 05.39 0.09	EDMD HE 82.6 IAML 20:04 50.25 2 0.14	
EAB HE 130.0 IAML 16:34 22.24 3 0.08	EDMD HN 82.6 IAML 20:04 51.09 3 0.13	
EAB HN 130.0 IAML 16:34 22.55 2 0.08	December 19 2021 Time: 16:53 21.1 UTC Magnitude: 0.8 ML	
December 16 2021 Time: 01:20 54.4 UTC Magnitude: 1.4 ML	Lat: 57.608 Lon: -4.830 Depth: 6.6 km	
Lat: 55.110 Lon: -0.285 Depth: 24.3 km	Grid Ref: 230.94 kmE 861.06 kmN RMS: 0.60 secs	
Grid Ref: 509.39 kmE 580.86 kmN RMS: 0.40 secs	Locality: GRUDIE, HIGHLAND	
Locality: CENTRAL NORTH SEA	Velocity model: Lownet Xnear: 100.0 Xfar: 200.0	
Velocity model: North Sea Xnear: 400.0 Xfar: 600.0	STAT CO DIST PHAS WT P HrMn SECS AMPL PERI RES	
Comment: 70KM ENE SUNDERLAND	KPL HZ 57.8 EP 16:53 31.07 0.11	
STAT CO DIST PHAS WT P HrMn SECS AMPL PERI RES	KPL HN 57.8 ES 16:53 37.56 -0.60	
GDLR HZ 83.9 EP 01:21 07.96 0.12	KPL HN 57.8 IAML 16:53 38.74 2 0.28	
GDLR HE 83.9 ES 01:21 17.52 -0.15	KPL HE 57.8 IAML 16:53 38.74 2 0.26	
GDLR HE 83.9 IAML 01:21 23.75 33 0.30	MCD HZ 94.3 EP 16:53 36.61 -0.07	
GDLR HN 83.9 IAML 01:21 24.15 39 0.26	MCD HN 94.3 ES 16:53 47.50 -0.55	
AT12 HN 95.3 ES 01:21 21.60 1.16	MCD HN 94.3 IAML 16:53 50.95 7 0.20	
AT12 HN 95.3 IAML 01:21 22.62 30 0.31	MCD HE 94.3 IAML 16:53 51.39 8 0.18	
AT12 HE 95.3 IAML 01:21 24.98 34 0.33	BIGH HZ 113.0 EP 16:53 40.14 0.68	
AU18 HN 99.7 ES 01:21 21.32 -0.07	BIGH HZ 113.0 ES 16:53 52.52 -0.35	
AT10 HZ 100.0 EP 01:21 10.04 -0.06	BIGH HE 113.0 IAML 16:53 55.20 4 0.31	
AT10 HE 100.0 ES 01:21 21.26 -0.31	BIGH HE 113.0 IAML 16:53 56.28 4 0.10	
AT10 HE 100.0 IAML 01:21 24.57 8 0.27	INVG HZ 140.0 EP 16:53 44.19 0.61	
AT10 HN 100.0 IAML 01:21 27.70 12 0.40	INVG HN 140.0 ES 16:53 59.94 -0.04	
AV06 HZ 106.0 EP 01:21 10.84 0.04	INVG HE 140.0 IAML 16:54 01.62 1 0.25	
AV06 HE 106.0 ES 01:21 23.33 0.55	INVG HE 140.0 IAML 16:54 01.78 1 0.13	
AV06 HE 106.0 IAML 01:21 25.01 7 0.31	LAWE HZ 154.0 EP 16:53 46.40 0.83	
AV06 HN 106.0 IAML 01:21 25.53 6 0.22	LAWE HN 154.0 ES 16:54 03.95 0.52	
AU11 HN 110.0 ES 01:21 23.58 0.03	LAWE HE 154.0 IAML 16:54 06.51 2 0.28	
AU11 HN 110.0 IAML 01:21 23.89 5 0.22	LAWE HE 154.0 IAML 16:54 07.03 2 0.12	
AU11 HE 110.0 IAML 01:21 23.95 4 0.23	DRUM HZ 161.0 EP 16:53 47.84 1.23	
AU08 HZ 112.0 EP 01:21 11.66 0.08	DRUM HZ 161.0 EP 16:53 47.89 1.31	
AU08 HE 112.0 ES 01:21 24.38 0.25	EAB HZ 161.0 EP 16:53 47.89 1.31	
AU08 HN 112.0 IAML 01:21 27.59 7 0.15	EAB HN 161.0 IAML 16:54 08.20 2 0.12	
AU08 HE 112.0 IAML 01:21 28.16 5 0.13	EAB HE 161.0 IAML 16:54 08.55 1 0.18	
AQ12 HZ 176.0 EP 01:21 19.02 -0.42	December 19 2021 Time: 20:25 45.4 UTC Magnitude: 0.6 ML	
ESK HZ 187.0 EP 01:21 21.07 0.19	Lat: 54.684 Lon: -7.689 Depth: 12.1 km	
ESK HE 187.0 IAML 01:21 49.02 1 0.17	Grid Ref: 33.46 kmE 546.98 kmN RMS: 0.20 secs	
ESK HN 187.0 IAML 01:21 51.29 2 0.14	Locality: KILLETER, COUNTY TYRONE	
KESW HZ 190.0 EP 01:21 21.03 -0.22	Velocity model: Lownet Xnear: 100.0 Xfar: 200.0	
AS02 HE 205.0 ES 01:21 43.63 -0.51	STAT CO DIST PHAS WT P HrMn SECS AMPL PERI RES	
LBWR HE 212.0 ES 01:21 44.88 -0.69	IDGL HZ 44.4 EP 20:25 53.20 0.04	
LBWR HN 212.0 IAML 01:21 46.90 3 0.14	IDGL HN 44.4 ES 20:25 58.71 -0.15	
LBWR HE 212.0 IAML 01:21 54.67 3 0.12	IDGL HN 44.4 IAML 20:25 58.94 3 0.10	
December 16 2021 Time: 14:14 19.2 UTC Magnitude: 0.8 ML	IDGL HE 44.4 IAML 20:26 00.36 2 0.09	
Lat: 56.549 Lon: -5.841 Depth: 8.5 km	CLGH HZ 111.0 EP 20:26 03.68 0.40	
Grid Ref: 163.94 kmE 746.26 kmN RMS: 0.40 secs	CLGH HN 111.0 ES 20:26 16.24 -0.12	
Locality: LOCHANINE, HIGHLAND	CLGH HN 111.0 IAML 20:26 19.09 4 0.28	
Velocity model: Lownet Xnear: 100.0 Xfar: 200.0	CLGH HE 111.0 IAML 20:26 19.58 3 0.29	
STAT CO DIST PHAS WT P HrMn SECS AMPL PERI RES	ILTH HZ 114.0 ES 20:26 17.10 -0.11	
LAWE HZ 42.2 EP 14:14 26.68 0.02	IGLA HZ 179.0 EP 20:26 12.20 -0.40	
LAWE HN 42.2 ES 14:14 31.63 -0.44	IGLA HN 179.0 ES 20:26 32.08 -0.40	
LAWE HE 42.2 IAML 14:14 31.80 17 0.18		
LAWE HN 42.2 IAML 14:14 31.84 16 0.10		
KPL HZ 88.7 EP 14:14 33.62 -0.23		
KPL HE 88.7 IAML 14:14 46.77 2 0.26		
KPL HE 88.7 IAML 14:14 47.12 5 0.26	December 21 2021 Time: 00:01 20.0 UTC Magnitude: 2.1 ML	
	Lat: 56.642 Lon: -6.131 Depth: 7.5 km	
	Grid Ref: 146.76 kmE 757.64 kmN RMS: 0.40 secs	
	Locality: MULL, ARGYLL & BUTE	
	Velocity model: Lownet Xnear: 100.0 Xfar: 200.0	
	Comment: FELT TOBERMORY... Intensity: 3	

**TABLE 2 : PHASE DATA**

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES	Grid Ref:	614.39 kmE	1383.30 kmN	RMS: 0.40 secs								
LAWE	HZ	62.0	IP	C	00:01	30.28			-0.18		Locality:	NORWEGIAN SEA										
LAWE	HN	62.0	ES		00:01	37.65			-0.47		Velocity model:	Lownet Xnear: 500.0	Xfar: 1000.0									
LAWE	HN	62.0	IAML		00:01	37.74	110	0.12			Comment:	295KM NE LERWICK										
LAWE	HE	62.0	IAML		00:01	37.83	123	0.10			STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES	
KPL	HZ	82.9	IP	C	00:01	33.43			-0.24		FOO	HZ	170.0	EP	06:05	01.87				-0.13		
KPL	HN	82.9	ES		00:01	43.68			0.02		FOO	HN	170.0	ES	06:05	21.26				0.02		
KPL	HN	82.9	IAML		00:01	46.55	49	0.14			FOO	HN	170.0	IAML	06:05	22.38	22	0.24				
KPL	HE	82.9	IAML		00:01	46.67	71	0.16			FOO	HE	170.0	IAML	06:05	22.72	12	0.16				
EAB	HZ	122.0	EP		00:01	40.20			0.46		BER	HZ	271.0	EP	06:05	14.93				0.30		
EAB	HE	122.0	IAML		00:01	56.59	74	0.21			BER	HN	271.0	ES	06:05	43.01				-0.08		
EAB	HN	122.0	IAML		00:01	56.82	68	0.30			BER	HE	271.0	IAML	06:05	43.41	7	0.20				
INVG	HZ	131.0	EP		00:01	41.47			0.43		BER	HN	271.0	IAML	06:05	44.52	6	0.38				
INVG	HN	131.0	ES		00:01	56.24			-0.17		LRW	HZ	297.0	EP	06:05	18.49				0.64		
INVG	HE	131.0	IAML		00:01	58.44	55	0.10			LRW	HN	297.0	ES	06:05	49.28				0.61		
INVG	HN	131.0	IAML		00:01	58.90	46	0.22			LRW	HE	297.0	IAML	06:05	51.54	16	0.38				
PGB1	HZ	138.0	EP		00:01	42.74			0.69		LRW	HE	297.0	IAML	06:05	52.82	14	0.30				
PGB1	HN	138.0	ES		00:01	58.79			0.63		BIGH	HZ	536.0	EP	06:05	47.75				-0.02		
PGB1	HE	138.0	IAML		00:02	00.97	58	0.16			BIGH	HN	536.0	IAML	06:06	41.66	5	0.29				
PGB1	HE	138.0	IAML		00:02	01.20	72	0.21			BIGH	HE	536.0	IAML	06:06	43.47	5	0.26				
CLGH	HZ	174.0	EP		00:01	46.80			-0.25		MCD	HZ	602.0	EP	06:05	55.86				-0.21		
CLGH	HE	174.0	ES		00:02	06.29			-0.52		MCD	HN	602.0	ES	06:06	54.57				-0.21		
CLGH	HN	174.0	IAML		00:02	10.51	37	0.22			MCD	HE	602.0	IAML	06:06	56.01	9	0.18				
CLGH	HE	174.0	IAML		00:02	11.74	52	0.34			MCD	HN	602.0	IAML	06:06	56.14	12	0.20				
MCD	HZ	203.0	EP		00:01	50.32			-0.45		DRUM	HZ	651.0	EP	06:06	01.67				-0.45		
MCD	HN	203.0	IAML		00:02	19.97	15	0.25			DRUM	HE	651.0	IAML	06:07	06.24	17	0.34				
MCD	HE	203.0	IAML		00:02	20.15	14	0.14			DRUM	HN	651.0	IAML	06:07	07.46	15	0.14				
NEWG	HZ	207.0	EP		00:01	51.16			-0.08		KPL	HZ	701.0	EP	06:06	07.68				-0.65		
NEWG	HN	207.0	IAML		00:02	19.14	13	0.19			KPL	HE	701.0	IAML	06:07	16.65	3	0.58				
NEWG	HE	207.0	IAML		00:02	19.59	14	0.18			KPL	HN	701.0	IAML	06:07	18.03	2	0.42				
GALL	HZ	217.0	EP		00:01	52.43			0.00		INVG	HZ	739.0	EP	06:06	12.35				-0.78		
GALL	HE	217.0	IAML		00:02	21.12	9	0.19			INVG	HN	739.0	IAML	06:07	24.85	4	0.26				
GALL	HN	217.0	IAML		00:02	23.77	10	0.26			INVG	HE	739.0	IAML	06:07	24.87	6	0.16				
DRUM	HZ	225.0	EP		00:01	53.01			-0.43		December 25 2021	Time: 02:07 54.6 UTC	Magnitude: 2.2 ML									
DRUM	HE	225.0	IAML		00:02	24.63	23	0.26			Lat: 54.291	Lon: 0.453	Depth: 18.8 km									
DRUM	HN	225.0	IAML		00:02	25.39	29	0.37			Grid Ref: 559.6 kmE 491.1 kmN	RMS: 0.50 secs										
ESY	HZ	232.0	EP		00:01	54.65			0.25		Locality: SOUTHERN NORTH SEA											
ESK	HZ	235.0	EP		00:01	54.57			-0.13		Velocity model: Lownet Xnear: 500.0	Xfar: 1000.0										
BIGH	HZ	245.0	EP		00:01	54.26			-1.70		Comment: 40KM NE FLAMBOROUGH											
BIGH	HN	245.0	IAML		00:02	29.65	8	0.20			STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES	
BIGH	HE	245.0	IAML		00:02	30.80	9	0.24			GDLE	HZ	83.8	EP	02:08	08.87						
AQ12	HZ	325.0	EP		00:02	05.84			-0.18		GDLE	HN	83.8	ES	02:08	18.31						
AR09	HN	356.0	EP		00:02	09.53			-0.39		AT10	HZ	106.0	EP	02:08	11.39						
December 21 2021	Time: 06:13 38.5 UTC	Magnitude: 0.3 ML									AT10	HE	106.0	IAML	02:08	24.20	36	0.22				
Lat: 54.689	Lon: -7.670	Depth: 11.2 km									AT10	HN	106.0	IAML	02:08	24.43	32	0.16				
Grid Ref: 34.73 kmE 547.44 kmN	RMS: 0.40 secs										LMK	HZ	106.0	EP	02:08	11.70				0.22		
Locality: KILLETER, COUNTY TYRONE											LMK	HE	106.0	ES	02:08	23.31				-0.47		
Velocity model: Lownet Xnear: 100.0	Xfar: 200.0										LMK	HE	106.0	IAML	02:08	23.67	445	0.26				
STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES	LMK	HN	106.0	IAML	02:08	23.89	220	0.20				
IDGL	HZ	43.6	EP		06:13	46.01			-0.11		HPK	HZ	141.0	EP	02:08	16.70				0.41		
IDGL	HN	43.6	ES		06:13	51.48			-0.23		HPK	HE	141.0	ES	02:08	31.20				-0.90		
IDGL	HE	43.6	IAML		06:13	51.79	2	0.09			HPK	HN	141.0	IAML	02:08	31.98	62	0.16				
IDGL	HE	43.6	IAML		06:13	51.83	2	0.21			HPK	HE	141.0	IAML	02:08	32.43	68	0.20				
CLGH	HZ	109.0	EP		06:13	57.05			0.81		EDMD	HZ	167.0	EP	02:08	19.07				-0.50		
CLGH	HE	109.0	ES		06:14	09.13			-0.08		EDMD	HN	167.0	IAML	02:08	43.25	18	0.12				
CLGH	HE	109.0	IAML		06:14	10.43	2	0.50			EDMD	HE	167.0	IAML	02:08	47.11	16	0.20				
CLGH	HN	109.0	IAML		06:14	11.03	2	0.25			LBWR	HZ	174.0	ES	02:08	40.06				0.69		
ILTH	HN	114.0	ES		06:14	09.89			-0.36		LBWR	HE	174.0	IAML	02:08	40.44	60	0.24				
December 22 2021	Time: 06:50 09.8 UTC	Magnitude: 1.2 ML									LBWR	HN	174.0	IAML	02:08	40.95	49	0.10				
Lat: 51.470	Lon: -3.449	Depth: 9.5 km									WACR	HZ	175.0	EP	02:08	20.53				0.03		
Grid Ref: 299.37 kmE 175.61 kmN	RMS: 0.30 secs										WACR	HE	175.0	IAML	02:08	45.40	13	0.12				
Locality: COWBRIDGE, GLAMORGAN											WACR	HN	175.0	IAML	02:08	49.59	16	0.24				
Velocity model: Mid Wales Xnear: 150.0	Xfar: 300.0										AS02	HE	180.0	ES	02:08	40.92				0.33		
Comment: VALE OF GLAMORGAN											AS02	HN	180.0	IAML	02:08	41.74	22	0.16				
STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES	AS02	HE	180.0	IAML	02:08	43.13	28	0.24				
MCH1	HZ	66.4	IP	C	06:50	21.13			0.02		AR01	HN	195.0	IAML	02:08	47.33	16	0.18				
MCH1	HE	66.4	ES		06:50	29.16			-0.14		AR01	HE	195.0	IAML	02:08	48.36	22	0.14				
MCH1	HE	66.4	IAML		06:50	29.42	12	0.25			BRAD	CZ	286.0	EP	02:08	34.17				-0.16		
MCH1	HN	66.4	IAML		06:50	29.52	11	0.20			December 27 2021	Time: 01:20 07.3 UTC	Magnitude: 1.1 ML									
HTL	HZ	89.6	EP		06:50	25.33			0.46		Lat: 51.458	Lon: -0.957	Depth: 9.4 km									
HTL	HE	89.6	ES		06:50	35.54			-0.21		Grid Ref: 472.46 kmE 173.79 kmN	RMS: 0.30 secs										
HTL	HE	89.6	IAML		06:50	37.05	6	0.20			Locality: READING, BERKSHIRE											
HTL	HN	89.6	IAML		06:50	37.64	6	0.27														

**TABLE 2 : PHASE DATA**

MONM	HZ	135.0	EP	01:20	29.31	0.49
MONM	HE	135.0	ES	01:20	44.66	0.14
MONM	HN	135.0	IAML	01:20	46.82	3 0.23
MONM	HE	135.0	IAML	01:20	46.83	2 0.14
CWF	HZ	144.0	EP	01:20	30.32	0.09
CWF	HE	144.0	ES	01:20	46.14	-0.81
CWF	HN	144.0	IAML	01:20	48.34	3 0.10
CWF	HE	144.0	IAML	01:20	48.56	5 0.07
ELMS	HZ	152.0	EP	01:20	31.81	0.57
ELMS	HN	152.0	IAML	01:20	49.50	6 0.24
ELMS	HE	152.0	IAML	01:20	50.34	10 0.50
MCH1	HZ	153.0	EP	01:20	31.45	-0.04
MCH1	HE	153.0	ES	01:20	49.10	-0.04
MCH1	HN	153.0	IAML	01:20	50.74	3 0.18
MCH1	HE	153.0	IAML	01:20	51.39	2 0.20
HLM1	HZ	177.0	EP	01:20	34.75	0.05
December 27 2021 Time: 02:15 09.4 UTC Magnitude: 1.8 ML						
Lat: 51.435 Lon: -1.035 Depth: 5.9 km						
Grid Ref: 467.07 kmE 171.16 kmN RMS: 0.30 secs						
Locality: READING, BERKSHIRE						
Velocity model: Lownet Xnear: 500.0 Xfar: 1000.0						
STAT	CO	DIST	PHAS	WT P	HrMn	SECS AMPL PERI RES
WOL	BZ	18.8	IP	C	02:15	13.02 -0.09
WOL	BE	18.8	ES		02:15	15.67 -0.18
WOL	BE	18.8	IAML		02:15	16.85 99 0.17
WOL	BN	18.8	IAML		02:15	17.09 89 0.27
SWN1	HZ	53.9	EP		02:15	18.96 0.24
SWN1	HE	53.9	ES		02:15	26.19 0.65
BRDL	HZ	60.3	EP		02:15	19.39 -0.29
BRDL	HN	60.3	ES		02:15	27.36 0.14
BRDL	HN	60.3	IAML		02:15	30.49 33 0.28
BRDL	HE	60.3	IAML		02:15	31.88 35 0.32
RUSH	HZ	62.3	EP		02:15	19.91 -0.07
RUSH	HN	62.3	ES		02:15	27.85 0.12
RUSH	HN	62.3	IAML		02:15	29.30 45 0.30
RUSH	HE	62.3	IAML		02:15	31.56 42 0.60
OLDB	HN	108.0	ES		02:15	40.07 0.06
OLDB	HN	108.0	IAML		02:15	40.63 115 0.40
OLDB	HE	108.0	IAML		02:15	40.80 72 0.54
HMXN	HZ	115.0	EP		02:15	28.42 0.29
HMXN	HN	115.0	IAML		02:15	44.71 21 0.32
HMXN	HE	115.0	IAML		02:15	44.95 21 0.26
MONM	HZ	130.0	EP		02:15	30.45 -0.08
MONM	HN	130.0	ES		02:15	45.67 -0.31
MONM	HE	130.0	IAML		02:15	48.49 23 0.26
MONM	HN	130.0	IAML		02:15	48.59 15 0.17
BRAD	CZ	139.0	EP		02:15	31.62 -0.04
BRAD	CN	139.0	ES		02:15	47.52 -0.42
BRAD	CN	139.0	IAML		02:15	49.96 19 0.18
BRAD	CE	139.0	IAML		02:15	50.18 30 0.29
CWF	HZ	146.0	EP		02:15	32.67 -0.13
CWF	HE	146.0	IAML		02:15	49.89 18 0.28
CWF	HN	146.0	IAML		02:15	49.90 8 0.16
MCH1	HZ	149.0	EP		02:15	33.22 -0.03
MCH1	HE	149.0	ES		02:15	50.44 -0.25
MCH1	HE	149.0	IAML		02:15	52.05 19 0.16
MCH1	HN	149.0	IAML		02:15	52.43 18 0.30
STBN	CZ	157.0	EP		02:15	34.48 0.22
STBN	CN	157.0	IAML		02:15	53.18 10 0.22
STBN	CE	157.0	IAML		02:15	53.58 24 0.13
ELMS	HZ	158.0	EP		02:15	34.71 0.29
ELMS	HN	158.0	IAML		02:15	56.18 17 0.34
ELMS	HE	158.0	IAML		02:15	57.05 16 0.34
HLM1	HZ	175.0	EP		02:15	36.32 -0.52
HLM1	HN	175.0	ES		02:15	56.98 0.09
HLM1	HE	175.0	IAML		02:15	57.98 14 0.32
HLM1	HN	175.0	IAML		02:15	58.10 14 0.28
WACR	HZ	183.0	EP		02:15	38.12 0.33
WACR	HE	183.0	IAML		02:16	01.80 14 0.14
WACR	HN	183.0	IAML		02:16	03.31 12 0.14

TABLE 3

## GEOGRAPHIC COORDINATES OF SEISMOGRAPH STATIONS, 2021

Code	Name	Lat	Lon	E (km)	N (km)	Ht (m)	Comp
AP12	ULPHA	54.3100	-3.2670	317.66	491.23	220	BB
AQ01	HOSCAR	53.6068	-2.7944	347.53	412.54	24	BB
AQ02	BANKS	53.6905	-2.8967	340.88	421.94	17	BB
AQ03	WARTON	53.7595	-2.8866	341.65	429.61	23	BB
AQ04	BALLAM	53.7760	-2.9690	336.24	431.51	11	BB
AQ05	STAINING	53.8140	-2.9680	336.62	435.74	11	BB
AQ06	THISTLETON	53.8250	-2.9110	340.13	436.91	28	BB
AQ07	GOOSNARGH	53.8420	-2.6660	356.28	438.62	90	BB
AQ09	RAWCLIFFE	53.8846	-2.9048	340.62	443.54	7	BB
AQ10	GARSTANG	53.9150	-2.8270	345.78	446.86	22	BB
AQ12	SELSIDE	54.4370	-2.7520	351.32	504.88	389	BB
AR01	HASLINGDEN	53.7022	-2.3450	377.32	422.92	256	BB
AR05	SKIPTON	53.9910	-2.0190	398.85	454.99	259	BB
AR07	SLAIDBURN	53.9960	-2.4590	370.01	455.65	233	BB
AR09	INGLETON	54.2260	-2.4410	371.35	481.23	481	BB
AR10	KELD	54.4264	-2.2169	386.03	503.46	440	BB
AS02	UPPERMILL	53.5542	-1.9856	401.05	406.40	287	BB
AS03	WAINSTALLS	53.7674	-1.9563	402.98	430.12	376	BB
AS07	CARLTON	54.2540	-1.9380	404.14	484.26	411	BB
AS10	WINSTON	54.5520	-1.8320	410.96	517.43	156	BB
AT08	MYTON-ON-SWALE	54.0985	-1.3110	445.16	467.18	19	BB
AT10	SNILESWORTH	54.3700	-1.1760	453.63	497.48	333	BB
AT12	BISHOPTON	54.5770	-1.4480	435.78	520.34	62	BB
AU05	LAYTHAM	53.8599	-0.8741	474.15	441.00	3	BB
AU07	BIRKDALE	54.1120	-0.9590	468.15	468.96	102	BB
AU08	SOUTH WOLD	54.1238	-0.6613	487.59	470.60	175	BB
AU11	EAST NESS	54.1974	-0.9325	469.74	478.49	34	BB
AU15	NORMANBY	54.2285	-0.8794	473.15	482.00	60	BB
AU18	THORNTON DALE	54.2482	-0.7095	484.18	484.38	83	BB
AV06	GANTON	54.1630	-0.4820	499.21	475.20	173	BB
BIGH	UPPER BIGHOUSE	58.4932	-3.9102	288.75	957.69	70	BBSMR
BRAD	BRADWELL	51.7395	0.9045	600.63	208.53	11	BBSM
BRDL	BROAD LANE	51.1880	-0.2650	521.35	144.63	74	BB
CCA1	CARNMENELLIS	50.1866	-5.2277	169.62	36.90	210	BBSMR
CLGH	CUSHENDALL	55.0828	-6.1106	137.76	584.21	239	BBR
CWF	CHARNWOOD FST	52.7385	-1.3076	446.74	315.91	203	BBSMR
DRUM	DRUMTOCHTY	56.9123	-2.4865	370.48	780.23	208	BBSMR
DYA	YADSWORTHY	50.4353	-3.9310	262.88	61.34	292	BBR
EAB	ABERFOYLE	56.1887	-4.3386	254.97	701.95	294	BBR
EDI	EDINBURGH	55.9233	-3.1875	325.80	670.66	125	BBR
EDMD	EDMUND BYERS	54.8312	-1.9636	402.43	548.48	337	BBSMR
ELMS	ELMSETT	52.0934	0.9895	604.88	248.11	75	BBSMR
ELSH	ELHAM	51.1482	1.1345	619.32	143.44	126	BBSMR
ESK	ESKDALEMUIR	55.3165	-3.2052	323.52	603.16	261	BBR
ESY	STONEYPATH	55.9175	-2.6141	361.62	669.55	337	BBR
FOEL	FOEL WYLFA	52.8898	-3.2012	319.27	333.15	449	BBSMR
GAL1	GALLOWAY	54.8664	-4.7114	226.02	555.78	117	BBR
GAT2	GATWICK	51.1440	-0.2210	524.54	139.81	63	BB
GDLE	GLAISDALE	54.4218	-0.8157	476.94	503.57	228	BBSMR
GGERF	DALMARNOCK	55.8410	-4.2220	260.92	663.09	19	BBR
GVIE	GLENDOE VIEW	57.1010	-4.5590	245.04	804.04	663	BB
HLM1	LONG MYND	52.5184	-2.8807	340.25	291.57	429	BBR
HMX	HERSTMONCEUX	50.8674	0.3363	564.49	110.15	26	BBR
HORS	HORSE HILL	51.1760	-0.2090	525.29	143.39	68	BB
HPK	HAVERAH PARK	53.9581	-1.6241	424.66	451.42	233	BBSMR
HTL	HARTLAND	50.9943	-4.4849	225.64	124.66	86	BBSMR
INVG	INVERGELDIE	56.4273	-4.0452	273.96	727.99	279	BBSMR
IOMK	KIRK MICHAEL	54.2605	-4.5662	232.95	488.02	188	BBR
JDC	DAM (CREST)	49.1947	-2.0469			39	SMR

TABLE 3

## GEOGRAPHIC COORDINATES OF SEISMOGRAPH STATIONS, 2021

Code	Name	Lat	Lon	E (km)	N (km)	Ht (m)	Comp
JDG	DAM (GALLERY)	49.1947	-2.0469			7	SMR
JSA	ST AUBINS	49.1878	-2.1717			39	BBR
KESW	KESWICK	54.5886	-3.1048	328.70	522.05	282	BBSMR
KPL	PLOCKTON	57.3391	-5.6527	180.21	833.50	13	BBSMR
LAWE	LOCH AWE	56.2601	-5.3990	189.58	712.71	137	BBSMR
LBWR	LADYBOWER	53.4016	-1.7248	418.40	389.45	353	BBSMR
LINV	LOCHINVER	58.1470	-5.1970	211.94	922.03	57	BBR
LMK	MARKET RASEN	53.4573	-0.3274	511.15	396.92	133	BBSMR
LRW	LERWICK	60.1360	-1.1779	445.66	1139.27	98	BBSMR
MCD	COLEBURN DISTIL	57.5828	-3.2541	325.02	855.42	293	BBR
MCH1	MICHAELCHURCH	51.9974	-2.9983	331.47	233.74	219	BBSMR
MONM	MONMOUTH	51.8396	-2.8054	344.61	215.98	145	BBR
NEWG	NEW GALLOWAY	55.1173	-4.2299	257.88	582.59	151	BBR
OLDB	OLDBURY	51.6609	-2.5514	361.95	195.94	6	BBSMR
PGB1	GLENIFFERBRAES	55.8115	-4.4837	244.38	660.37	199	BBR
RSBS	ROSEBUSH	51.9530	-4.7448	211.48	231.84	278	BBR
RUSH	RUSS HILL	51.1480	-0.2680	521.24	140.17	99	BB
SOFL	SORNFELLI	62.0689	-6.9658			721	BBR
SPK	SELLA PARK	54.4183	-3.4913	303.24	503.58	50	SM
STAN	STAN HILL	51.1690	-0.2490	522.52	142.54	87	BB
STBN	SUTTON BONINGTON	52.8375	-1.2481	450.78	326.92	40	BBR
STNC	STOKE	53.0913	-2.2062	354.95	386.19	234	BBR
STRD	STROUD	51.7763	-2.1643	388.77	208.64	200	BBR
SWN1	SWINDON	51.5137	-1.8007	413.83	179.49	192	BBSMR
TORA	TORNESS A	55.9692	-2.4037	374.80	675.20	5	SM
TORB	TORNESS B	55.9673	-2.4085	374.50	674.99	5	SM
THP	THORPE	54.4183	-3.4913	303.24	503.58	50	SM
WACR	WEST ACRE	52.7247	0.6267	577.48	317.35	66	BBSMR
WIM	ISLE OF MAN	54.1475	-4.6738	225.39	475.73	386	1R
WLF1	LLYNFAES	53.2894	-4.3966	240.27	379.65	58	BBSMR
WPS	CAMAES, ANGLESEY	53.4004	-4.4986	233.98	392.19	16	BBSMR
YLL	LLANBERIS	53.1402	-4.1704	254.84	362.57	159	1R

**Component Codes:**

- 1 Single vertical seismometer  
 3 Orthogonal set of 3 seismometers  
 SM Strong motion seismometers  
 BB Broadband Instruments  
 R Station coordinates registered with the International Seismological Centre (ISC), England and the National Earthquake Information Centre (NEIC), USA

**TABLE 4**  
**Depth / crustal velocity models used in earthquake locations**

<b>Structural area</b>	<b>Depth to top of layer (km)</b>	<b>P-wave velocity (km/sec)</b>	<b>Vp/Vs</b>
North Sea	0.00	6.20	1.73
	12.00	6.50	
	23.00	7.10	
	31.00	8.05	
Lownet and general UK	0.00	4.00	1.73
	2.52	5.90	
	7.55	6.45	
	18.87	7.00	
	34.15	8.00	
Borders	0.00	4.10	1.71
	3.00	5.60	
	4.10	6.15	
	17.00	6.60	
	30.00	8.00	
North Wales (Lleyn)	0.00	5.40	1.68
	2.00	6.05	
	13.00	6.50	
	25.00	6.80	
	34.00	8.00	
Mid Wales	0.00	5.40	1.72
	3.80	6.05	
	15.50	6.65	
	34.30	8.00	
Cornwall	0.00	5.50	1.77
	0.30	5.76	
	15.00	6.90	
	30.00	8.00	

**TABLE 4**  
**Depth / crustal velocity models used in earthquake locations**

<b>Structural area</b>	<b>Depth to top of layer (km)</b>	<b>P-wave velocity (km/sec)</b>	<b>Vp/Vs</b>
Blackpool	0.00	1.80	1.72
	0.60	3.00	
	1.00	4.00	
	2.52	4.60	
	7.55	6.45	
	18.87	7.00	
	34.15	8.00	
Surrey	0.00	2.20	1.73
	0.20	2.40	
	0.40	2.60	
	0.70	2.70	
	1.20	3.10	
	1.50	3.60	
	1.80	4.70	
	2.10	5.00	
	2.40	5.50	
	7.60	6.40	
	18.90	7.00	
	34.20	8.00	

# Appendix 1 Key to Catalogue Encoding

YearMoDy	Year, month and day of event.
HrMn Secs	Time of occurrence of event in hours, mins and secs, (UTC).
Lat	Latitude of the event, positive latitude indicates North.
Lon	Longitude of the event, positive longitude indicates East.
kmE	UK National Grid Reference in kilometres east of grid origin.
kmN	UK National Grid Reference in kilometres north of grid origin.
Dep	Depth of the hypocentre in kilometres.
Mag	Richter local magnitude of the event.
Locality	A geographical indication of the epicentral area, usually the nearest town followed by the region. A key to the abbreviations used in the locality column are given below.
Int	Maximum EMS intensity. 2, 3, 4, 5 etc. describes the maximum EMS intensity produced by the event.
Comments	Additional comments about the event e.g.: C/F, see below under comments abbreviations.

The following abbreviations are extracted from the output of the location program HYPOCENTER (Leinart and Havskov, 1995)

No	Total number of P and S readings used in the event location.
Gap	Largest azimuthal separation in degrees between stations.
RMS	Root Mean Square of the travel time residuals in seconds.
ERH	Standard error of the epicentre in kilometres. When this column is blank, the error is large and indeterminate.
ERZ	Standard error of the focal depth in kilometres. When this column is blank, the error is large and indeterminate.

## Locality and Comments abbreviations

N Yorkshire	North Yorkshire
Rhondda CT	Rhondda Cynon Taff
D & G	Dumfries & Galloway
Heref	Herefordshire
E Dunb'shire	East Dunbartonshire
North Lincs	North Lincolnshire
Gtr Man	Greater Manchester
N Ayrshire	North Ayrshire
Lincs	Lincolnshire
S Lanarkshire	South Lanarkshire
Northumbld	Northumberland
Carmarth	Carmarthenshire
Glos	Gloucestershire
Co	County
W Yorks	West Yorkshire
Staffs	Staffordshire
P & K	Perth & Kinross
Northants	Northamptonshire
IOM	Isle of Man
...	and felt elsewhere

## Appendix 2 Key to Phase Data Encoding

Time	Time of occurrence of event in hours, mins and secs, (UTC).
Lat	Latitude of the event, positive latitude indicates North.
Lon	Longitude of the event, positive longitude indicates East.
Depth	Depth of the hypocentre in kilometres.
Grid Ref	UK National Grid Reference in kilometres east (kmE) and kilometres north (kmN) of grid origin.
RMS	Root Mean Square of the travel time residuals in seconds.
Velocity Model	Velocity model used in location.
Magnitude	Richter local magnitude of the event.
Locality	A geographical indication of the epicentral area, usually the nearest town followed by the region.
Intensity	Maximum EMS intensity. 2, 3, 4, 5 etc. describes the maximum EMS intensity produced by the event.
Comments	Additional comments about the event e.g.: C/F see list of comments and abbreviations in Appendix 1.
STAT	Station name
CO	Z=vertical N=north south E=east west
DIST	Distance from earthquake to station (km)
PHAS	Phase identifier; the first letter characterizes onset E=emergent I=impulsive, the second indicates the phase e.g. P, S, PG, PN, IAML
WT	Weighting factor to arrival. 0 or blank=full weighting to 4=zero weighting (ignore). 9=use P S interval only for this line.
P	Polarity C=Compression/up D=Dilatation/down
HrMn	Hour, Minute of event
SECS	Seconds of event
AMPL	Amplitude centre to peak in nanometres (nm)
PERI	Period in seconds
RES	Station residual

## Appendix 3 The European Macroseismic Scale (EMS 98)

### 1 - Not felt

Not felt, even under the most favourable circumstances.

### 2 - Scarcely felt

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

### 3 - Weak

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

### 4 - Largely observed

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

### 5 - Strong

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

### 6 - Slightly damaging

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

### 7 - Damaging

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

### 8 - Heavily damaging

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

### 9 - Destructive

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

### 10 - Very destructive

Many ordinary buildings collapse.

### 11 - Devastating

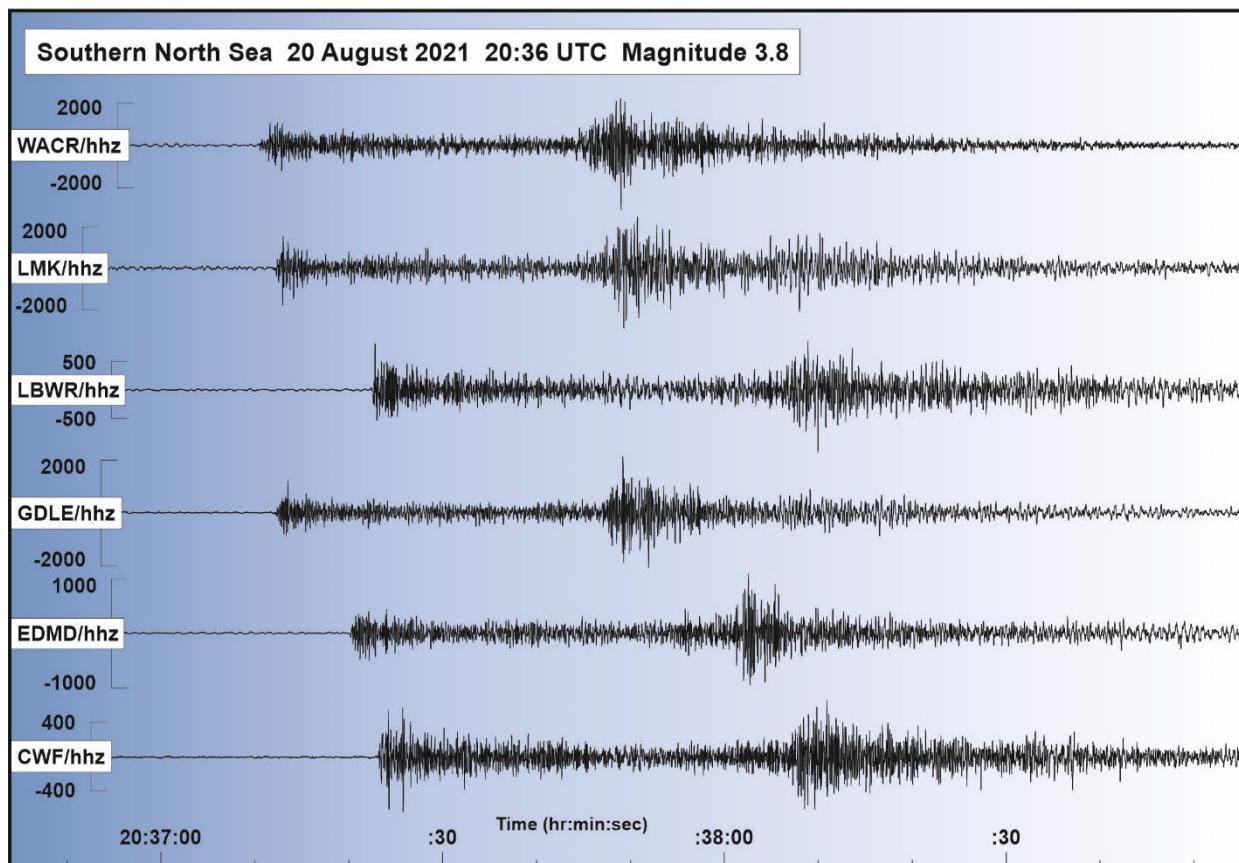
Most ordinary buildings collapse.

### 12 - Completely devastating

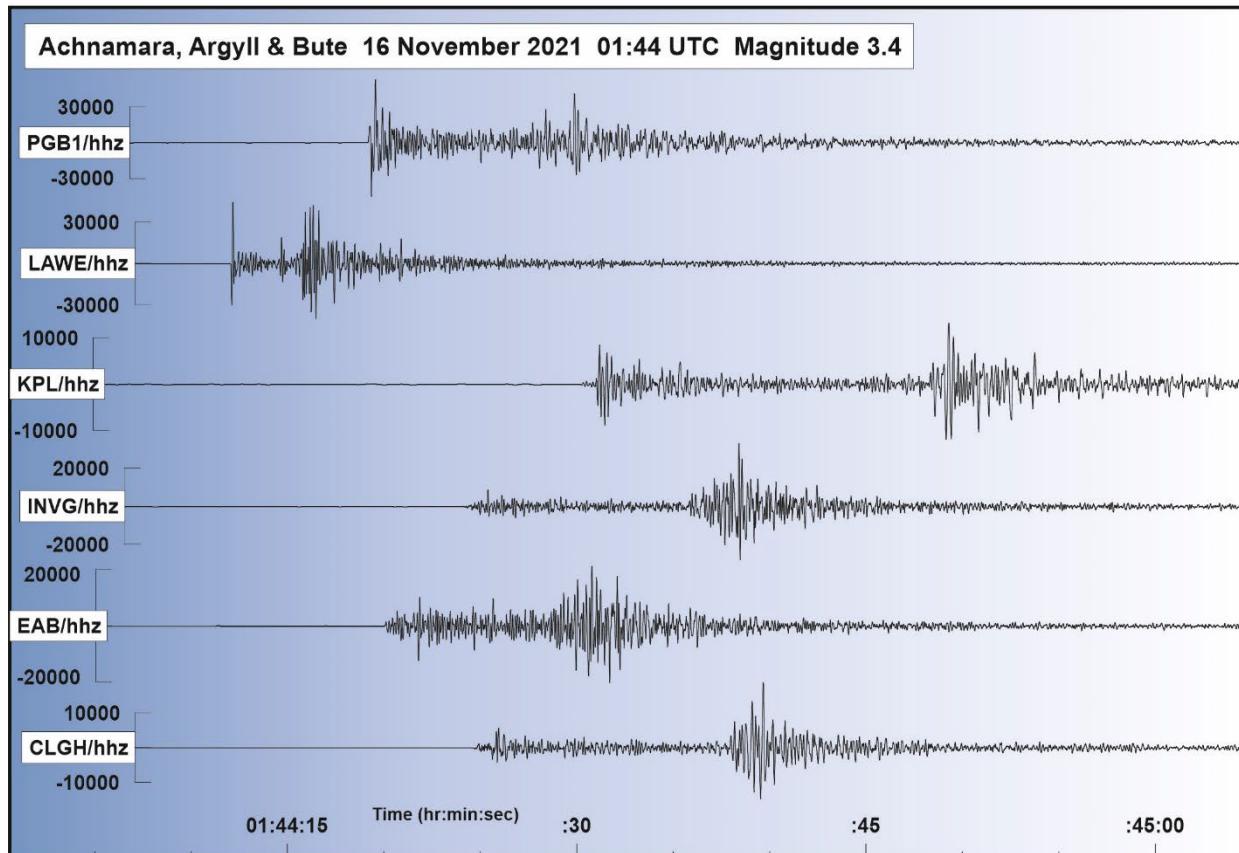
Practically all structures above and below ground are heavily damaged or destroyed.

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



Seismograms of the ground displacements from the magnitude 3.8 ML Southern North Sea earthquake on 20 August 2021.



Seismograms of the ground displacements from the magnitude 3.4 ML Achnamara, Argyll & Bute earthquake on 16 November 2021.