BRITISH GEOLOGICAL SURVEY

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Bulletin of British Earthquakes 2018

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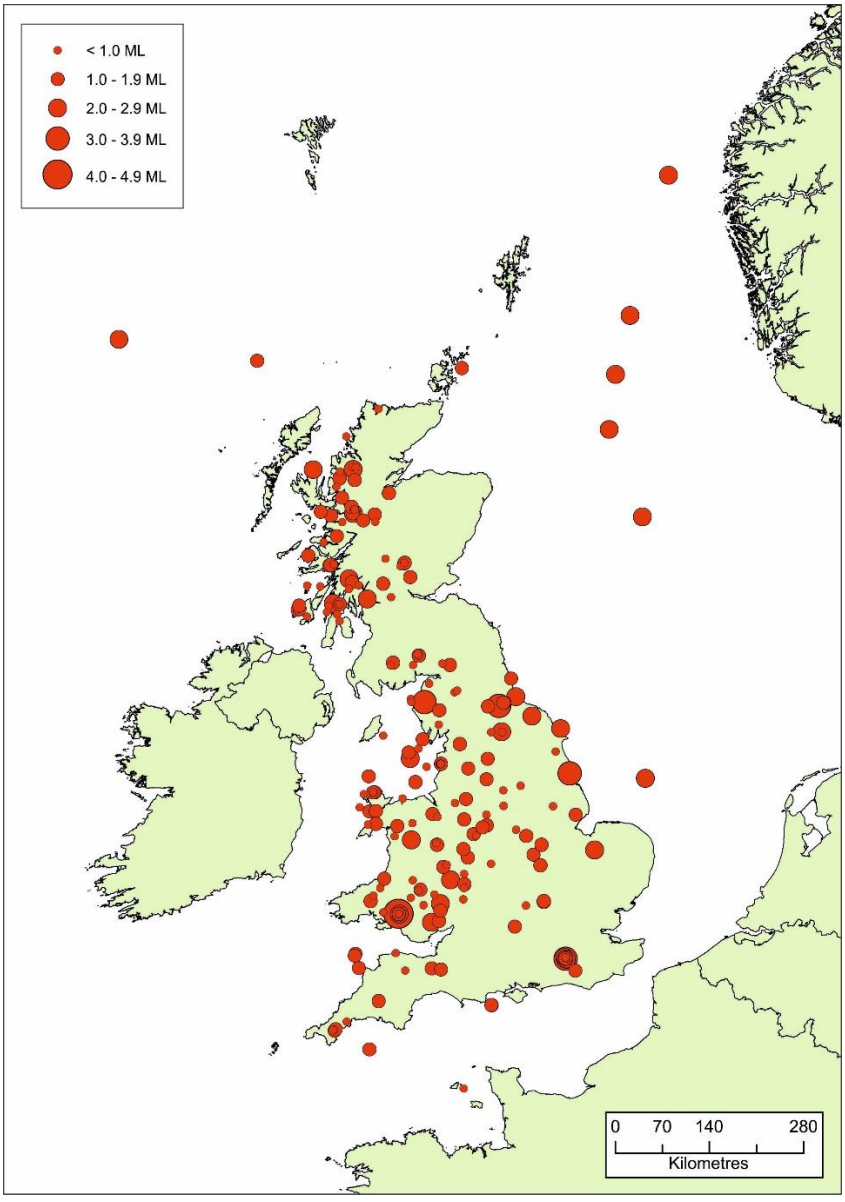

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1 Introduction

The British Geological Survey's (BGS) Seismic Monitoring and 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 earthquakes detected and located by the BGS during 2018, listed in Tables 1 and 2. Maps showing seismic activity in 2018 (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°W to 6°E and 48°N to 64°N).

All events believed to be of tectonic origin are included. Coalfield events are also 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, which received media attention or were greater than magnitude 2.5 ML or felt by local residents, 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 100 (59 permanent and 41 temporary) stations with broadband, short period and strong motion accelerometers. Of the permanent sites, some 45 are equipped with broadband seismometers and 31 have strong motion accelerometers, 25 of which are co-located with broadband sensors. The remaining 8 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 2018. The contours show earthquake magnitudes (ML) that can be detected. Signal amplitudes must exceed the background noise level by a factor of two at five of more stations. A noise amplitude of 10 nm (high noise) is assumed for all stations. These detection levels hold true only if data from all stations are continuously monitored. 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.

The whole of the UK is covered by the seismograph network for approximately magnitude 1.5 ML, and above, at times of average ambient noise levels. 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, 0.8 ML should be added

to the contour values, causing the threshold to rise to about 2.3 ML. Normally, however, an earthquake of this size would be felt, if not detected, in the areas of poorer instrumental coverage. The bulletin can, therefore, be assumed to be complete for all earthquakes of magnitude 2.3 ML and above.

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 2018. The data set is considered complete for these magnitudes in all localities onshore. Seismicity for the period 1970 to 2018 is shown in Figure 4 with a threshold magnitude of 3.5 ML. This is the period covered by BGS instrumentation that, in the early years, only consisted of the network around Edinburgh (LOWNET) and Eskdalemuir (ESK) and a station near Kyle of Lochalsh (KYL). The data set is likely to be complete for such magnitudes.

3 Earthquake Parameters and Their Errors

HYPOCENTRE LOCATION

By accurately timing the signal onsets 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 errors 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 the 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 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 determine 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 2018 Seismicity

There were 283 earthquakes located by the BGS seismic monitoring network during the year, with 36 having magnitudes of 2.0 ML or above, six having magnitudes of 3.0 ML or above and two having magnitudes of 4.0 ML or above. Some 16 events with a magnitude of 2.0 ML or above were reported felt, together with a further 14 smaller ones, bringing the total to 30 felt earthquakes in 2018.

The largest onshore earthquake of the year, with a magnitude of 4.6 ML and a focal depth of around 8 km, occurred on 17 February at 14:31 UTC and located near Cwmllynfell, Neath Port Talbot, South Wales, approximately 18 km NNE of Swansea (Figure 5). It was the largest event to occur on mainland Britain in almost ten years, since the magnitude 5.2 ML Market Rasen earthquake on 27 February 2008, which was widely felt across England and Wales. The earthquake occurred in a part of South Wales that has been struck by a number of other significant earthquakes in the last few hundred years, although there has been relatively little seismicity in the last few decades. A magnitude 5.2 ML earthquake in 1906 was one of the most damaging British earthquakes of the 20th Century, with damage to chimneys and walls reported across South Wales. Earthquakes with magnitudes of 5.2 ML and 5.1 ML occurred near Swansea in 1727 and 1775, respectively. The epicentre of the earthquake on 17 February 2018 is close to the epicentre of the 1775 event. The focal mechanism obtained for this event shows near vertical, strike slip faulting with either left-lateral slip on a fault that strikes NE or right-lateral slip on a fault that strikes NW (Figure 6). Neither of these is a good match for observed surface faulting near the epicentre. However, the NW plane is a good match to the strike of the main Varsican Thrust, which cuts through the region. The NE plane is a reasonable match to the Acadian age faults that are observed at the surface to the north of the epicentre. Data from over 7,800 questionnaires collected online,

were used to determine how widely the earthquake was felt (Figure 7). Data were grouped by postcode into 5 km by 5 km squares and an EMS (European Macroseismic Scale) intensity was calculated in each. We received data for 1,363 different squares. An intensity of 5 EMS was reported widely throughout South Wales. An intensity of 5 EMS was also observed in North Devon (approximately 80 km away); Bristol (100 km); Stroud, Gloucester and Cheltenham (approximately 120 km). Intensities of 4 EMS were observed at Swindon (145 km), Birmingham (155 km) and Liverpool (190 km). Reports are clearly biased towards areas of higher population density, with relatively few reports from Pembrokeshire or North Wales. The earthquake was felt as far away as Blackpool, 240 km NNE of the epicentre; in the East Midlands, 200 km northeast; Oxford, 180 km east; Southampton, 200 km southeast; and as far east as Slough and Windsor, 225 km from the epicentre. The earthquake was also felt in much of Devon and Cornwall. Over half of the reports (4,543) stated that people considered the shaking to be moderate in strength, while 2,833 reports stated that it was weak. The shaking was described as severe by 317 people. There were just over 200 reports of superficial damage, but on closer examination, many of these refer to existing cracks in plaster. It was followed by seven aftershocks, with magnitudes ranging between 0.5 ML and 2.2 ML, none of which were reported felt (Baptie et al, 2018).

The largest offshore earthquake of the year occurred in the Norwegian Sea, at 18:13 UTC on 18 October, with a magnitude of 4.3 ML and a focal depth of around 19 km (Figure 8). It located approximately 430 km NNE of Lerwick, Shetland Islands and 400 km NNW of Bergen, Norway. A further six events occurred in the Norwegian/North Sea areas during the year, with magnitudes ranging between 2.3 ML and 2.8 ML.

On 27 January, at 21:11 UTC, an earthquake with a magnitude of 1.2 ML, occurred on the Island of Mull, Argyll & Bute. It was felt by a single resident in Croggan, a small settlement in the south of the island, who described, “a weak vibration”. The following day, on 28 January at 17:10 UTC, an earthquake with a magnitude of 1.6 ML, occurred in the same vicinity and was felt by the same resident, in Croggan. Both were assigned intensities of 2 EMS. These earthquakes locate approximately 6 km southeast of the magnitude 4.1 ML Oban earthquake of 29 September 1986, which was felt over an area of around 30,000 km^2 with a maximum intensity of 5 EMS.

An earthquake, with a magnitude of 2.2 ML, occurred on 16 February at 06:48 UTC with a location in the Irish Sea, approximately 40 km west of Blackpool, Lancashire and 60 km NNW of Rhyl, Denbighshire. Six other earthquakes occurred in the Irish Sea region in 2018, with magnitudes ranging between 0.5 ML and 1.4 ML.

A magnitude 3.4 ML earthquake occurred at 07:33 UTC on 28 February, with an epicentre near the market town of Cockermouth, approximately 13 km east of Workington and 18 km NE of Whitehaven, Cumbria. (Figure 9). The BGS received over 130 reports, via an online macroseismic questionnaire, of the earthquake being felt, most of them from people living close to the epicentre and in the nearby towns of Workington and Whitehaven. The intensity of the shaking was generally weak or moderate, enough to cause windows and objects to rattle, indicating an intensity of at least 4 EMS. This is the largest earthquake in Cumbria since a magnitude 3.5 ML earthquake, on 21 December 2010, near Coniston. The region has experienced many earthquakes over the past few hundred years. The largest of these was a magnitude 5.0 ML earthquake near Whitehaven in 1786, which caused some minor damage in Barrow, Cockermouth, Egremont, Whitehaven and Worthington.

On 6 March, at 04:51 UTC, an earthquake with a magnitude of 1.3 ML occurred approximately 5 km north of the village of Grasmere, Cumbria. It was reported felt by a single resident in Great Langdale, Cumbria, who described “a rumbling sound a bit like thunder”, indicating an intensity of 2 EMS.

An earthquake, with a magnitude of 2.7 ML, occurred at 08:14 UTC on 9 March, near the village of Llanymawddwy, Gwynedd, approximately 50 km southwest of Wrexham. The BGS received around 25 reports, via an online macroseismic questionnaire, of the earthquake being felt, most of them from people living close to the epicentre. Typical reports described “definite but indistinct

low frequency audible rumble", "standing in kitchen and the crockery shook", "heard a quite loud rumbling noise", "felt the floor vibrate beneath my feet" and "thought it was a large farm vehicle going past the house". A maximum intensity of 3 EMS was assigned for this earthquake.

On 29 April, at 18:19 UTC, an earthquake with a magnitude of 2.6 ML, occurred near the hamlet of Ormsary, in the rural district of Knapdale, Argyll and Bute. It was reported felt by several residents in Tarbert, Achahoish, Ardrishaig, Minard, Clachan, Tayvallich, Srondoire, Lochgilphead, Inverneil and Portavadie, who described "a rumbling sound coming from everywhere", "sounded like a large vehicle driving past" and "the windows and the patio door rattled", indicating an intensity of 3 EMS. The following day, on 1 May at 06:15 UTC, a similar sized earthquake (magnitude 2.5 ML), occurred in the same region, near Ormsary. It was also felt, in the same hamlets and villages, with an intensity of 3 EMS.

A magnitude 2.1 ML earthquake occurred at 22:59 UTC on 2 May, near Eredine, Argyll & Bute, approximately 10 km west of Inveraray. It was reported felt by several residents, within around 25 km of the epicentre, who described "a rumble that built and faded, like a train passing", "a low pitch rumbling and faint sound" and "was like a lorry going past the house", indicating an intensity of 3 EMS.

On 10 May, at 22:08 UTC, an earthquake with a magnitude of 1.6 ML, occurred near the village of Tarbert, Argyll & Bute. It was felt by several residents in Tarbert and by a few more in both Stronachullin and Inverneil, who described "sounded like thunder" and "the windows rattled". A maximum intensity of 3 EMS was assigned for this earthquake.

On 5 June, at 21:19 UTC, a magnitude 1.9 ML earthquake occurred near the hamlet of Lowgill, Lancashire. It was reported felt by a single resident in Clapham, North Yorkshire (approximately 9 km from the epicentre), who described "we thought it was thunder", indicating an intensity of 2 EMS.

An earthquake, with a magnitude of 3.8 ML, occurred on 9 June, at 22:14 UTC, near Grimsby, North East Lincolnshire (Figure 10). The recent deployment of a number of UKArray stations to the north and west meant the event was well recorded and a well constrained focal mechanism shows strike slip faulting on fault planes that strike either NNE-SSW or ESE-WNW. (Figure 11). The BGS received over 600 reports, via an online macroseismic questionnaire, of the earthquake being felt throughout Lincolnshire and Yorkshire, Rutland, Leicestershire, Peterborough, Nottinghamshire and Norfolk (Figure 12). Typical reports described "the whole house shook for a couple of seconds", "heard a rumble with a simultaneous trembling", "the bed started to shake", "the radiator jolted" and "thought it was a lorry crashing outside". A maximum intensity of 4 EMS was assigned for this earthquake. This is a region that has experienced a few earthquakes of this size, and larger, in the historical past. In 1703, a magnitude 4.2 ML event occurred near Hull, in 1750 a magnitude 4.7 ML event occurred in the Southern North Sea (approximately 20 km offshore Mablethorpe) and in 1954, a magnitude 4.2 ML event occurred near Bridlington. The largest know British earthquake, a magnitude 6.1 ML in 1931, occurred approximately 100 km to the east in the Southern North Sea.

A magnitude 3.0 ML earthquake occurred at 10:53 UTC on 5 July, near the village of Newdigate, in the Mole Valley, Surrey (Figure 13). The BGS received over 800 reports, via online macroseismic questionnaires, of the earthquake being felt (Figure 14). The majority of the reports received were from residents in Newdigate, Charlwood, Horley and Dorking, Surrey and from Crawley and Horsham, West Sussex. Typical reports described, "was outdoors close to a building and you could hear it creak", "felt a large impact then two or three seconds of shaking", "it was like a huge explosion", "my chairs at the table shook and the lights moved" and "the aerial rattled and the ground shook". A maximum intensity of 5 EMS was assigned for this event. This was the largest earthquake in the general area (within 50 km) since a magnitude 2.9 ML event near Chichester, West Sussex on 14 December 2012, which was felt in West Sussex, East Sussex and Surrey with a maximum intensity of 3 EMS. It is also the largest in a sequence of earthquakes recorded in the Newdigate area, between 1 April and 19 October. The other events in the sequence

had magnitudes between -0.4 ML and 2.6 ML and seven of them were felt by people living nearby, and were all assigned intensities of 3 EMS. The magnitude 2.6 ML event, on 1 April was the first earthquake the BGS has detected in Surrey. Five temporary sensors were installed by the BGS in mid-July, close to the epicentral area, as there was much public concern that the earthquake sequence may have been triggered by nearby hydrocarbon exploration and production.

On 18 July, at 21:59 UTC, an earthquake with a magnitude of 1.1 ML, occurred in Caernarfon Bay. It was reported felt, by a few residents, in Caernarfon, Talysarn, Llanfaelog and Cwm-y-glo, Gwynedd. An intensity of 3 EMS was assigned for this earthquake.

An earthquake, with a magnitude of 2.2 ML, and a depth of around 10 km, occurred at 03:26 UTC on 25 July, with a location near Rosemary Bank in the North Atlantic Ocean, approximately 310 km WNW of Stornoway, the main settlement of the Western Isles, Scotland.

On 2 August at 17:42 UTC, a magnitude 2.7 ML earthquake occurred near Downham Market, approximately 16 km SSE of King's Lynn and 60 km west of Norwich, Norfolk. The BGS received some 30 reports, via online macroseismic questionnaires, of the earthquake being felt. The reports received, all within 35 km of the epicentre, were from residents, in Downham Market, Swaffham, King's Lynn, Wisbech, Thetford and surrounding villages and hamlets, Norfolk and from Brandon, Suffolk and Spalding, Lincolnshire. Typical reports described, "it was so quick I just heard the slight rattling of the house", "wondered whether there had been an explosion to make the floor shake", "just a little rumble and vibration", "chair I was sitting in started vibrating", "felt like the whole room shook for a few seconds" and "sounded and felt like thunder". An intensity of 3 EMS was assigned for this event.

An earthquake, with a magnitude of 1.8 ML, occurred at 02:56 UTC on 4 August, with a location approximately 3 km NNW of the county town of Oakham, Rutland. It was felt by several residents in the town of Oakham and by another, single resident in the nearby village of Langham. Reports described "open windows started to rattle", "there was a rumbling sound and the dogs started barking", "very quiet bang than a rumble" and "a sudden sound like an explosion was heard", indicating an intensity of 3 EMS.

Near Fryup, a hamlet within the North York Moors National Park, North Yorkshire, an earthquake, with a magnitude of 2.8 ML, occurred on 28 August, at 04:59 UTC. Earthquakes of this size are usually felt when they occur onshore but no felt reports were received. The relatively remote location, within the National Park, and the depth (around 31 km), probably contributed to the lack of felt effects at the surface.

On 30 August, at 22:34 UTC, an earthquake with a magnitude of 2.4 ML occurred in the Firth of Clyde, around 1 km north of Greenock and 3 km ENE of Gourock, Inverclyde (Figure 15). The BGS received around 60 reports, via online macroseismic questionnaires, of the earthquake being felt, with the majority of reports coming from Greenock, Gourock and Port Glasgow, Inverclyde and Helensburgh, Kilcreggan and Dunoon, Argyll & Bute. Reports described "a low rumble for a few seconds", "house shook briefly", "short loud screeching and shaking" and "felt the ground rumble", indicating an intensity of 3 EMS.

Near Penryn, Cornwall, an earthquake with a magnitude of 1.1 ML, occurred at 03:05 UTC on 14 September. It was felt by a single resident in Porkellis, who described feeling a "slight tremor". Eleven days later, at 13:42 UTC on 25 September, a magnitude 1.4 ML earthquake occurred in the same area. It was reported felt by a single resident in Pencoys and another in Kergilljack, who described, "the windows seemed to rattle" and "it was like something hitting the building", indicating an intensity of 3 EMS.

An earthquake, with a magnitude of 3.1 ML, occurred on 15 September, at 18:39 UTC, near Newton Aycliffe, County Durham (Figure 16). This earthquake occurred in an area where there has been little other recorded seismicity and is the largest earthquake in this part of the UK since a magnitude 3.6 ML event, near Ripon, North Yorkshire, on 3 January 2011, which was felt with a maximum intensity of 5 EMS. The BGS received no reports of this event being felt, perhaps because

of the relatively deep focus of around 24 km. The recent deployment of UKArray stations to the north and west meant the event was well recorded and a well constrained focal mechanism shows strike slip faulting on fault planes that strike either NNE-SSW or ESE-WNW (Figure 17).

On 24 October at 20:18 UTC, a magnitude 1.3 ML earthquake occurred near the village of Ffestiniog, Gwynedd. It was reported felt by residents in Ffestiniog, Minffordd, Waunfawr, Cym-y-glo, Maentwrog, Trawsfynydd, Bethesda, Llanelltyd and Ganllwyd. Typical reports described, "a weak trembling" and "a weak rumbling sound", indicating an intensity of 3 EMS.

An earthquake, with a magnitude of 2.0 ML, occurred on 29 October, at 21:08 UTC, on the Isle of Skye, Highland. It was felt by a few residents, in the village of Gedintailor, who reported, "it was the noise we really noticed. A sort of grating metal type noise".

On 12 November, at 23:05 UTC, an earthquake with a magnitude of 2.3 ML, occurred near the market town of Leominster, Herefordshire. It was reported felt by a single resident in Church Stretton, Shropshire (approximately 30 km from the epicentre), who described "a weak rumbling sound, which was only just noticeable" and "what felt like a slight shake", indicating an intensity of 2 EMS.

Near Blackpool, Lancashire, an earthquake, with a magnitude of 1.5 ML, occurred on 11 December, at 11:21 UTC (Figure 18). The BGS received several reports, via online macroseismic questionnaires, of the event being felt. The reports received, all from within 3 km of the epicentre, were from residents in Weeton, Mereside, Westby, Higher Ballam and Whitehills Business Park, Blackpool. Typical reports described, "we felt a slight rumble for around two seconds", "just a little rumble and vibration" and "my window rattled", indicating an intensity of around 2 EMS. This was the largest in a series of 57 earthquakes, with magnitudes between -0.9 ML and 1.5 ML, that have occurred, in the Blackpool region, since hydraulic fracturing started, on 18 October, at Preston New Road, near Blackpool. Only one other event in the series was felt. It occurred on 29 October, at 11:30 UTC, with a magnitude of 1.1 ML. It was reported felt by a single resident, sitting in a caravan, approximately 500 metres from the epicentre, at Maple Farm Nursery, Moss House Lane, Blackpool, who described, "feeling a weak shaking" and "was more audible than sensory".

5 UK Seismicity Statistics

In Figure 19, the histogram of earthquakes above magnitude 2.0 detected per year in different magnitude ranges, shows significant variation across the 49 years of modern instrumental monitoring. In the early years, the 1970s, instrumental coverage across the UK was sparse, and that influences the picture, although it was improving 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 19 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 onshore earthquake known in the UK's history 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.

- The largest earthquake in Scotland for 18 years, with a magnitude of 4.0 ML, occurred on Moidart, Highland in 2017 (4 August). Only five other earthquakes of this size or greater have been observed in Scotland, in the period of instrumental recording from 1970.

- The magnitude 4.6 ML earthquake near Cwmllynfell, Neath Port Talbot, South Wales in 2018 (17 February) was the largest earthquake on mainland Britian in almost 10 years, since the magnitude 5.2 ML Market Rasen earthquake on 27 February 2008. The epicentre was approximately 18 km NNE of Swansea and it was felt across all of Wales and much of England.

Figures 20 and 21 show the statistics for all earthquakes known to be felt from 1979 to 2018, including those below magnitude 2.0 ML. As might be expected, Figure 20 shows three of the same peaks as for the event occurrences seen in Figure 19; 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.

Figure 21 shows the split between the number of felt events in coalfield areas (most of them mining-induced) and those which are natural earthquakes. It can be seen that the coalfield event distribution across the 40 years (1979 - 2018), largely mirrors the distribution of smaller events (2.0 ML or less) in Figure 20. As UK mining-induced events almost always occur within one km of the surface, they are felt at low magnitudes as they are close to the communities exposed. Natural earthquakes in the UK are generally in the depth range 3-20 km. By the year 2000, deep coal mining across the UK was tailing off and the upsurge in the mining-induced events in 2014 was associated with the Thoresby mine at New Ollerton, Nottinghamshire, which closed in 2015. The lack of mining events in 1984 is caused by the general miners' strike that year.

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References

Baptie, B., Ford, G. and Galloway, D., 2018. The South Wales earthquake of 17 February 2018. *British Geological Survey Open Report*, OR/18/019.

Grünthal, G., (Ed) 1998. European Macroseismic scale 1998. Cahiers du Centre European de Geodynamique et de Seismologie. **Vol 15.**

Lienert, B.R.E. and Havskov, J., 1995. A computer program for locating earthquakes both locally and globally, *Seis. Res. Lett*., **66**, 26-36.

Richter, C., 1935. An instrumental earthquake magnitude scale, *Bull.Seism. Soc.Am.*,**25,** 1-32.

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**.

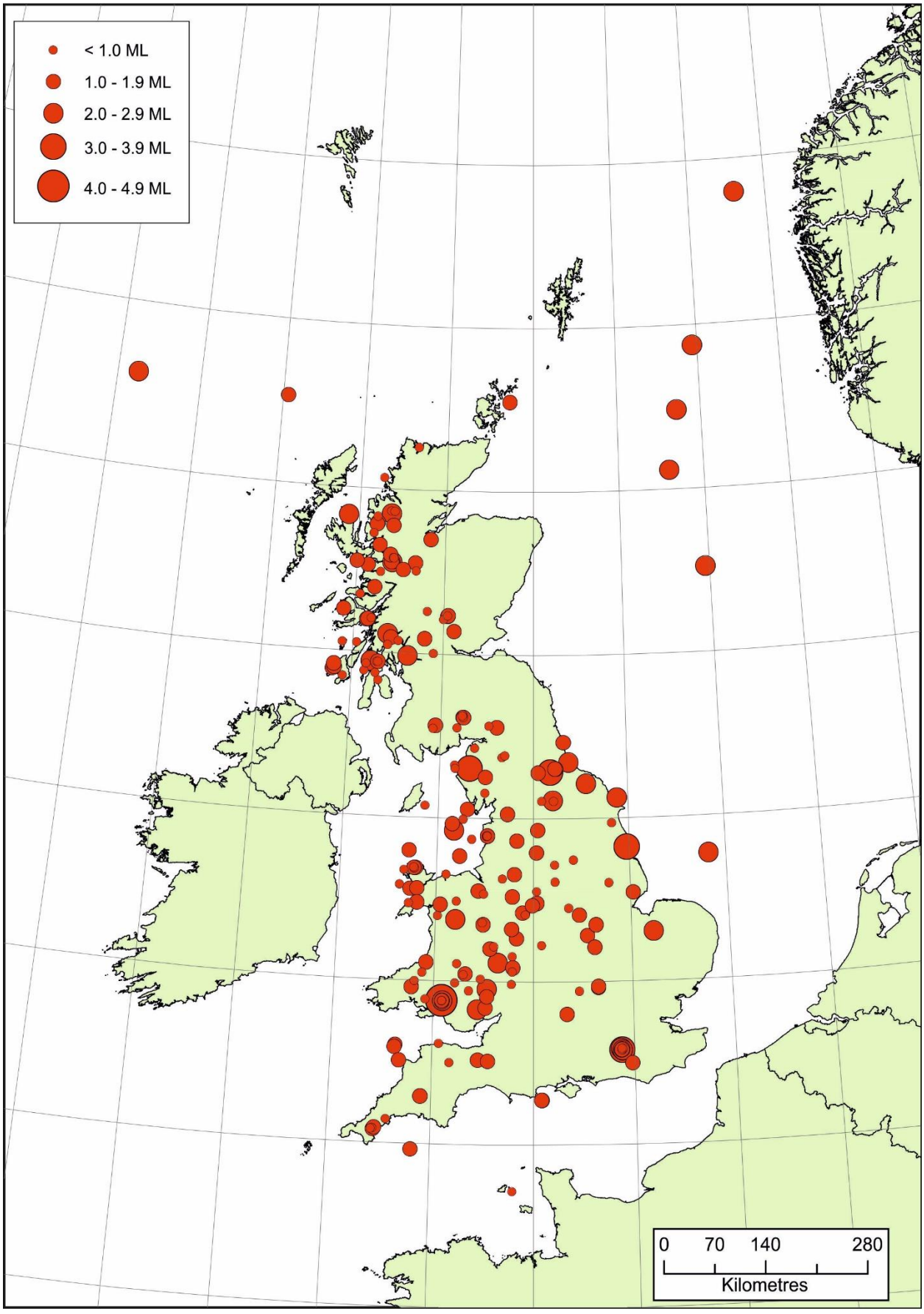

Figure 1. Epicentre map of earthquakes in 2018 as listed in Table 1.

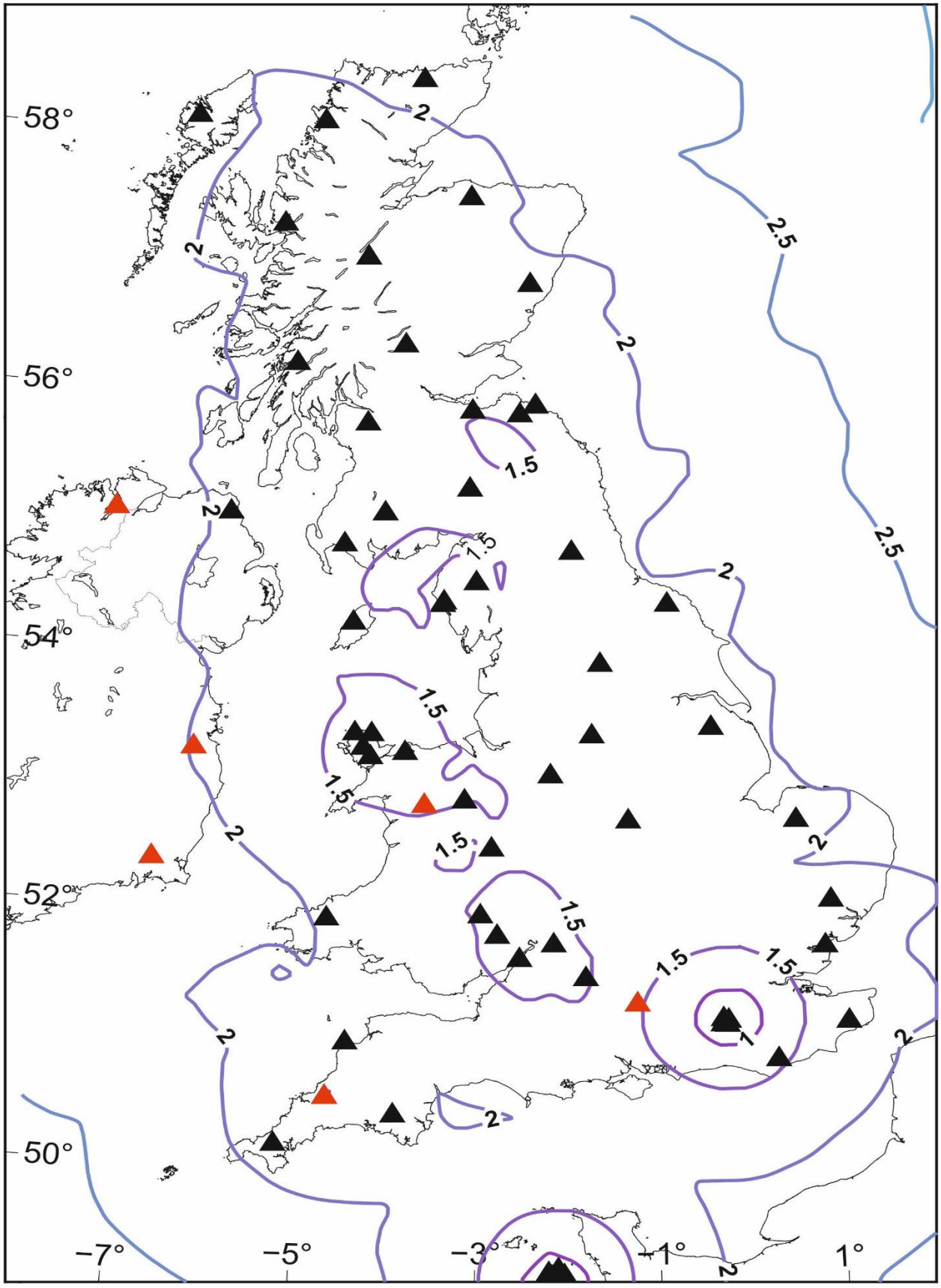

Figure 2. Detection capability of the network during 2018. The contours show earthquake magnitudes (ML) that can be detected. Signal amplitudes must exceed the background noise level by a factor of two at five of more stations. A noise amplitude of 10 nm (high noise) is assumed for all stations. Black 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.

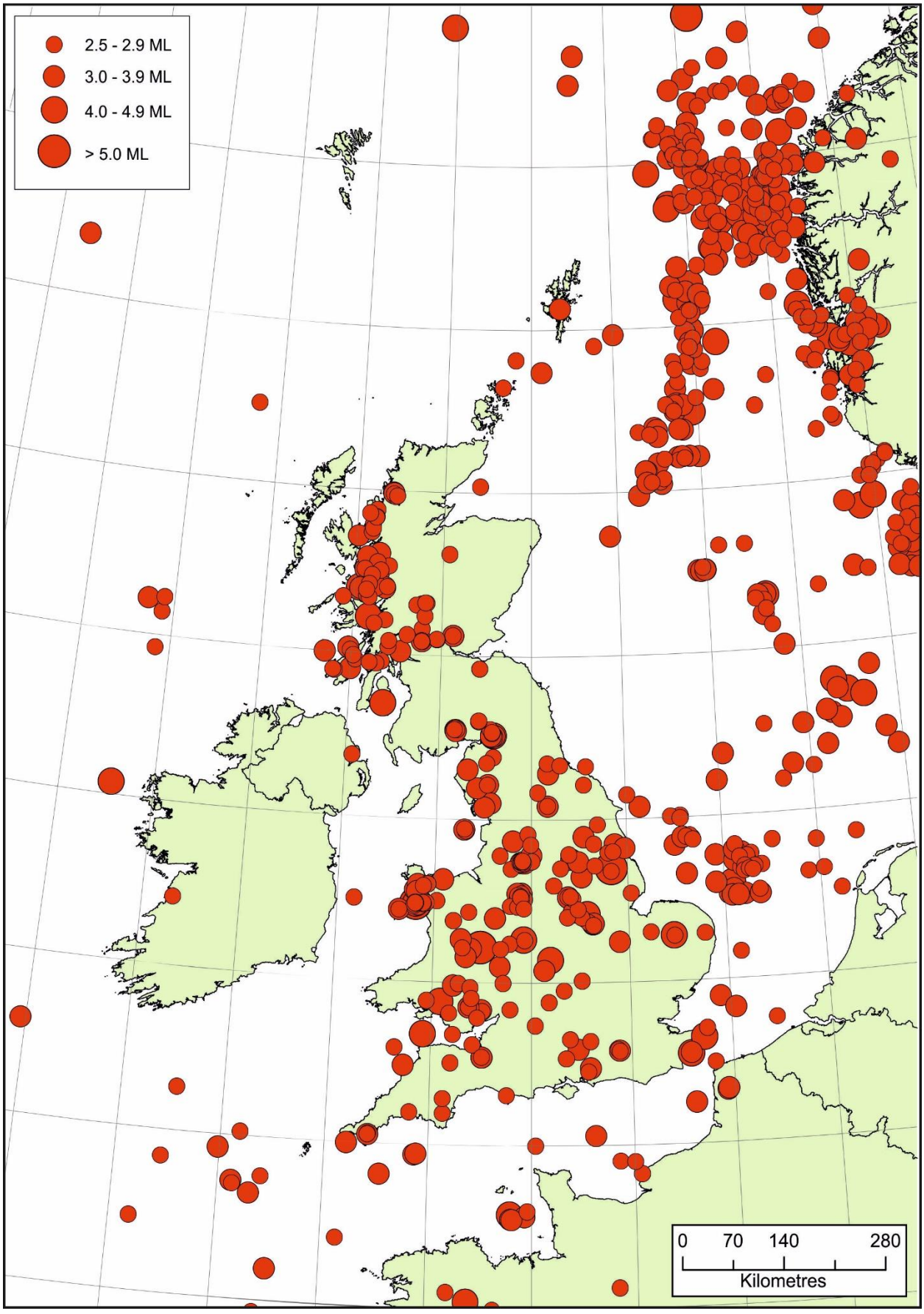

Figure 3. Epicentres of earthquakes with magnitudes of 2.5 ML and above, in the period 1979 to 2018.

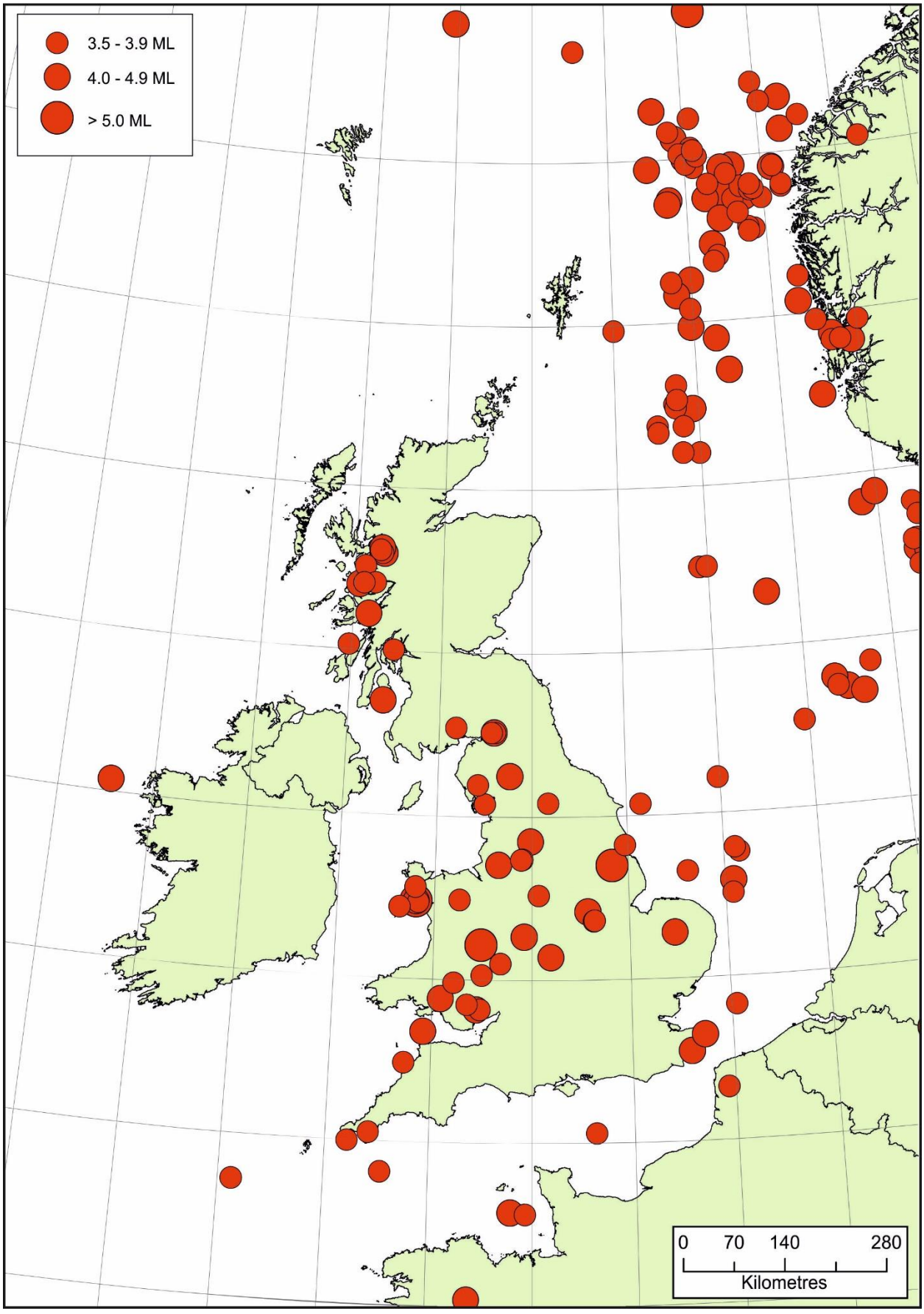

Figure 4. Epicentres of earthquakes with magnitudes of 3.5 ML and above, in the period 1970 – 2018.

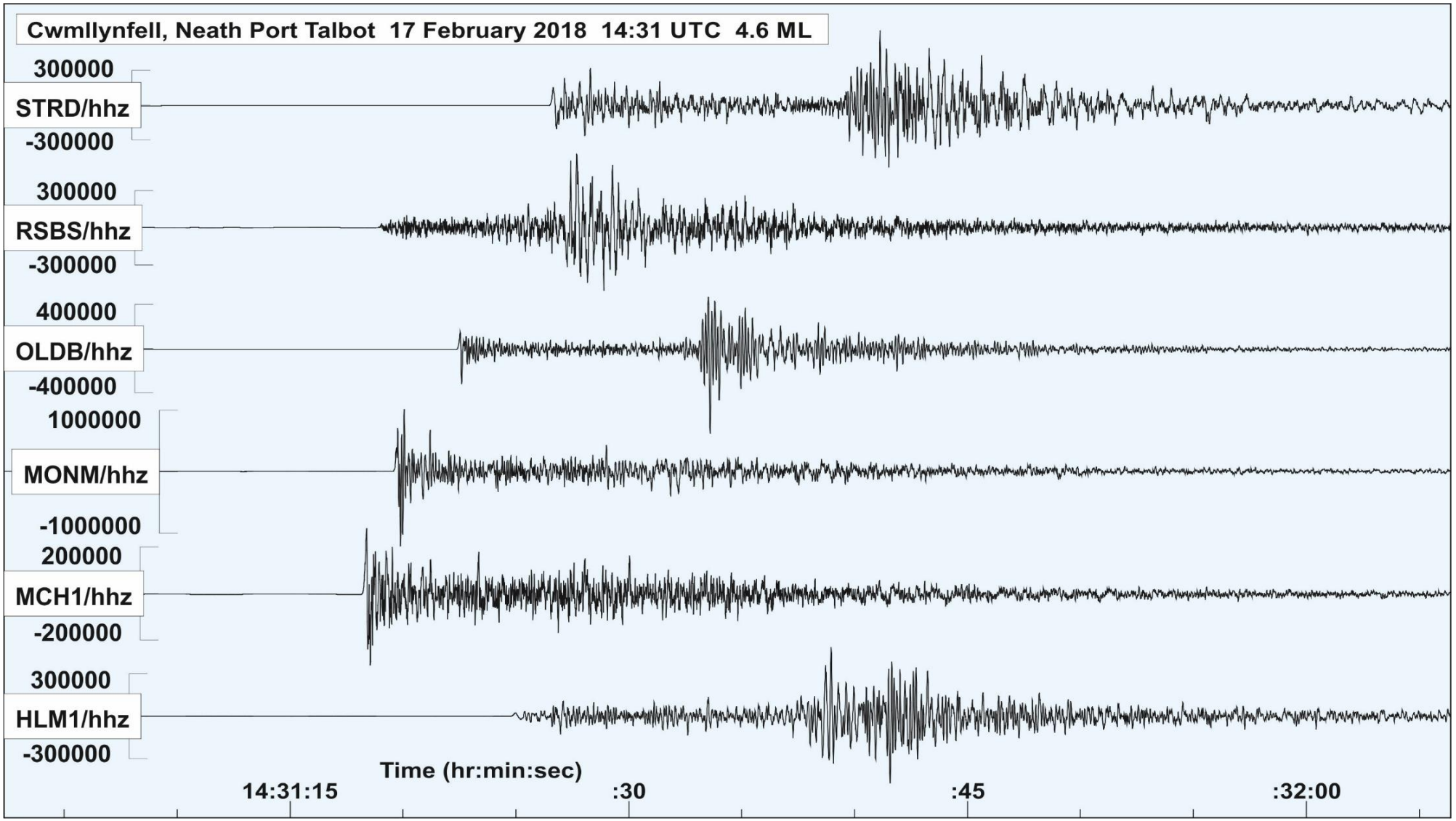

Figure 5. Seismograms of the ground displacement from the magnitude 4.6 ML Cwmllynfell, Neath Port Talbot (South Wales) earthquake, 17 February 2018, recorded by BGS seismograph stations.

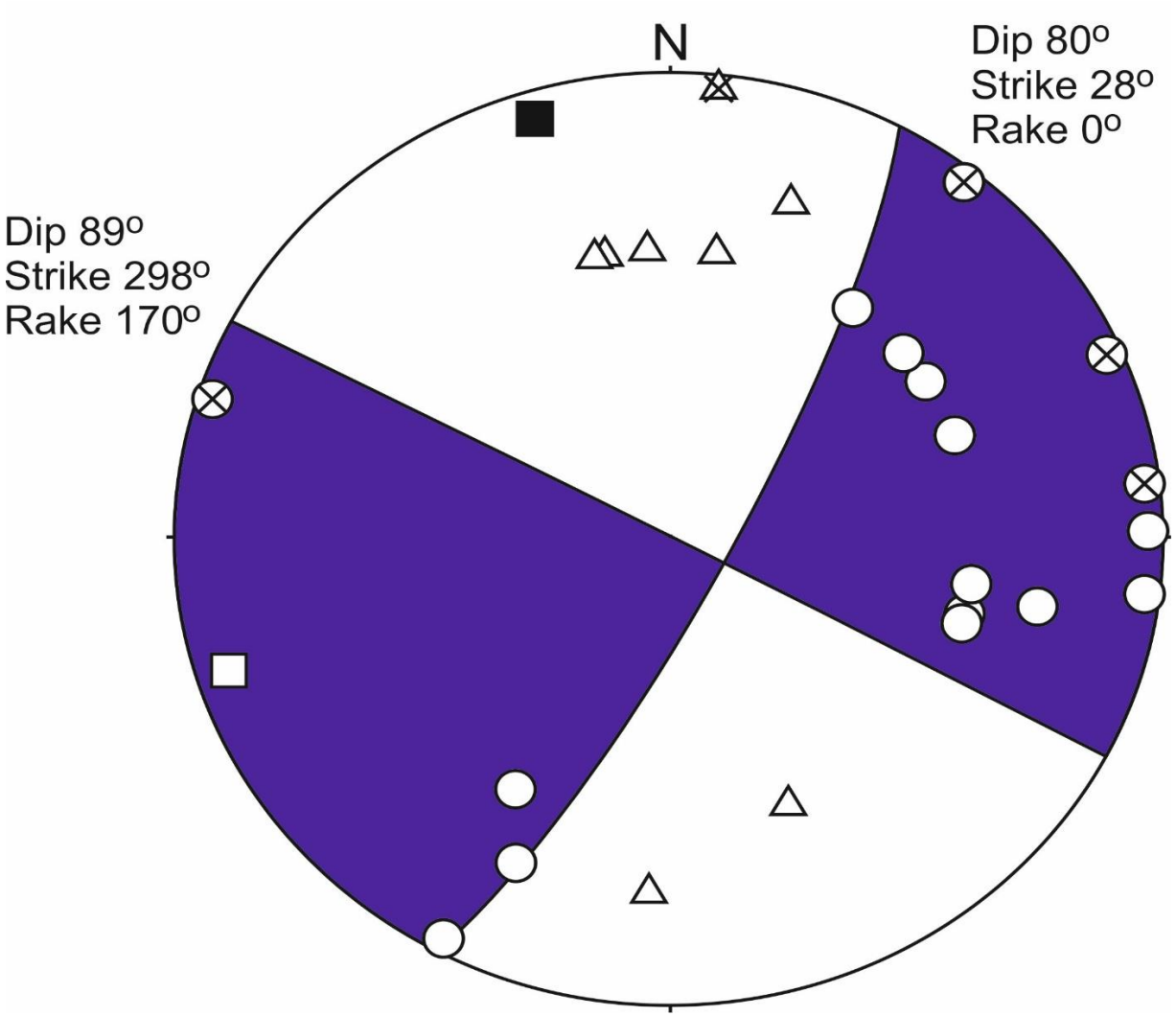

Figure 6. Lower hemisphere, equal projection of the focal mechanism for the Cwmllynfell (South Wales) earthquake on 17 February 2018. The blue shaded areas show areas of compressional first motion. The white circles and triangles show measured compressional and dilatational first motions, respectively. Black crosses show SH/V amplitude ratios. The black and white squares show the orientations of the axes of maximum (P) and minimum (T) compression, respectively (Snoke et al,. 1984).

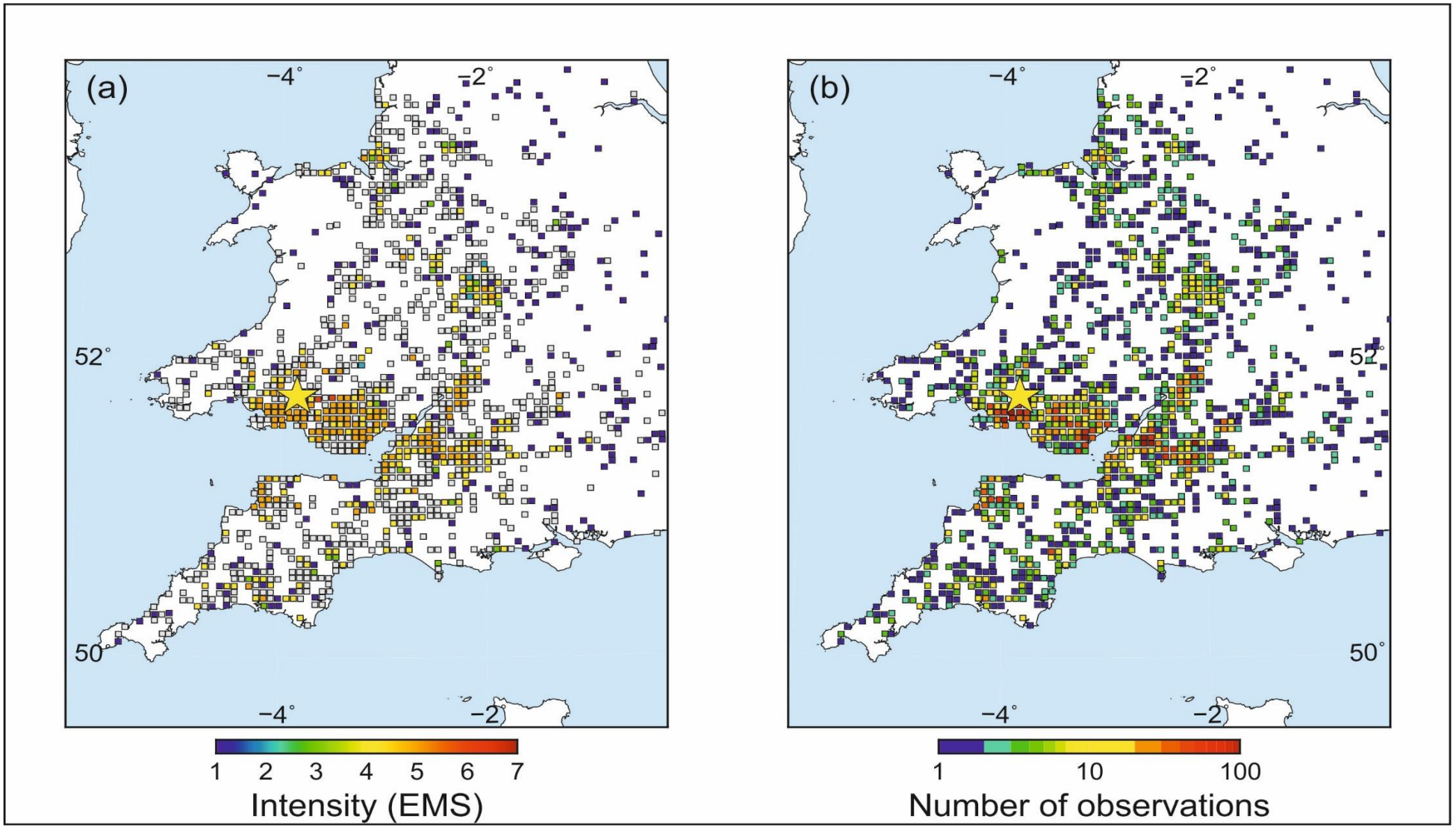

Figure 7. (a) Macroseismic intensities for the Cwmlynnfell (South Wales) earthquake on 17 February 2018 calculated in 5 km grid squares. A minimum of five observations are required to calculate an intensity value. Squares are coloured by intensity. (b) Shows the number of observations to determine each intensity value.

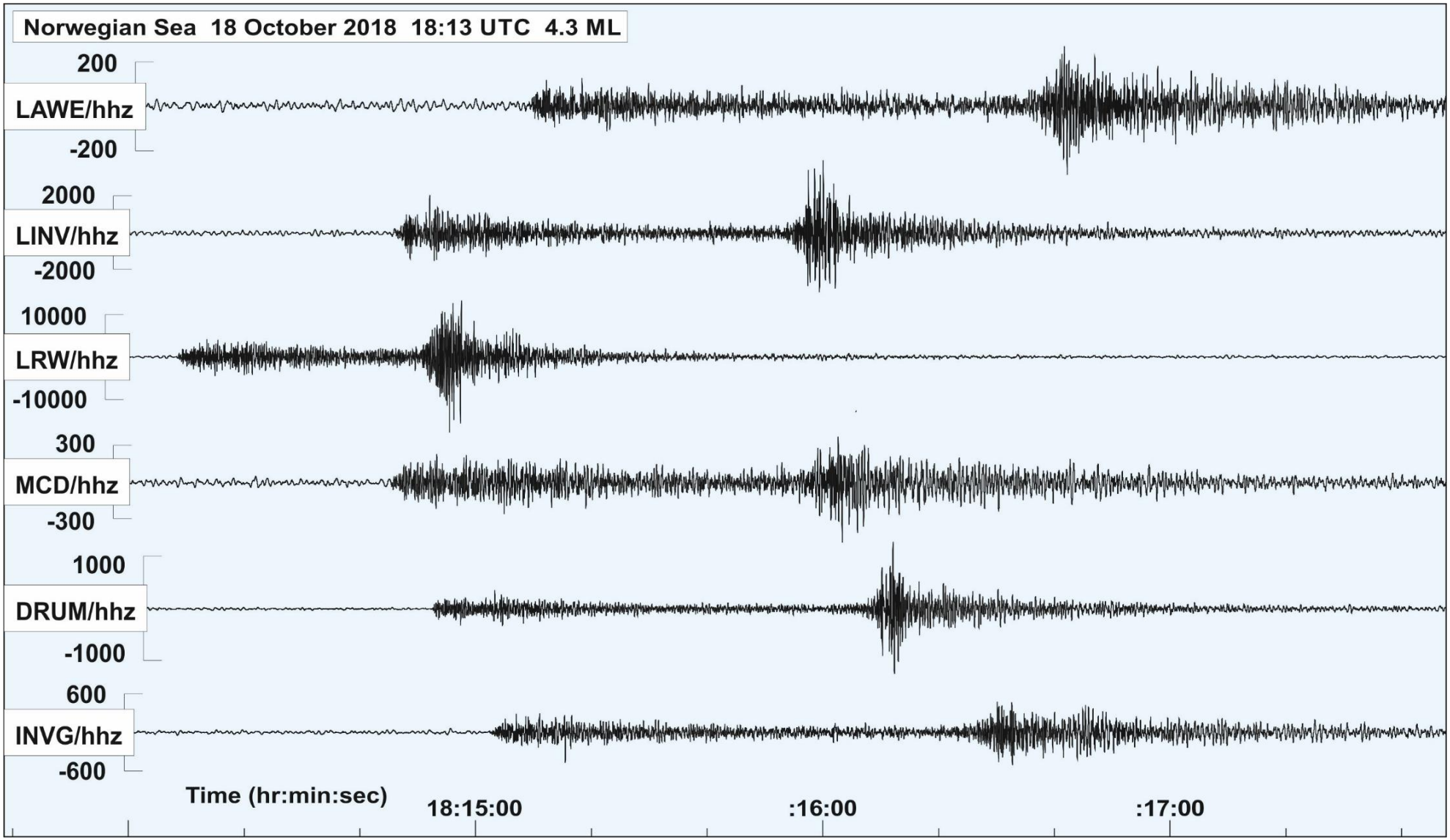

Figure 8. Seismograms of the ground displacement from the magnitude 4.3 ML Norwegian Sea earthquake, 18 October 2018, recorded by BGS seismograph stations.

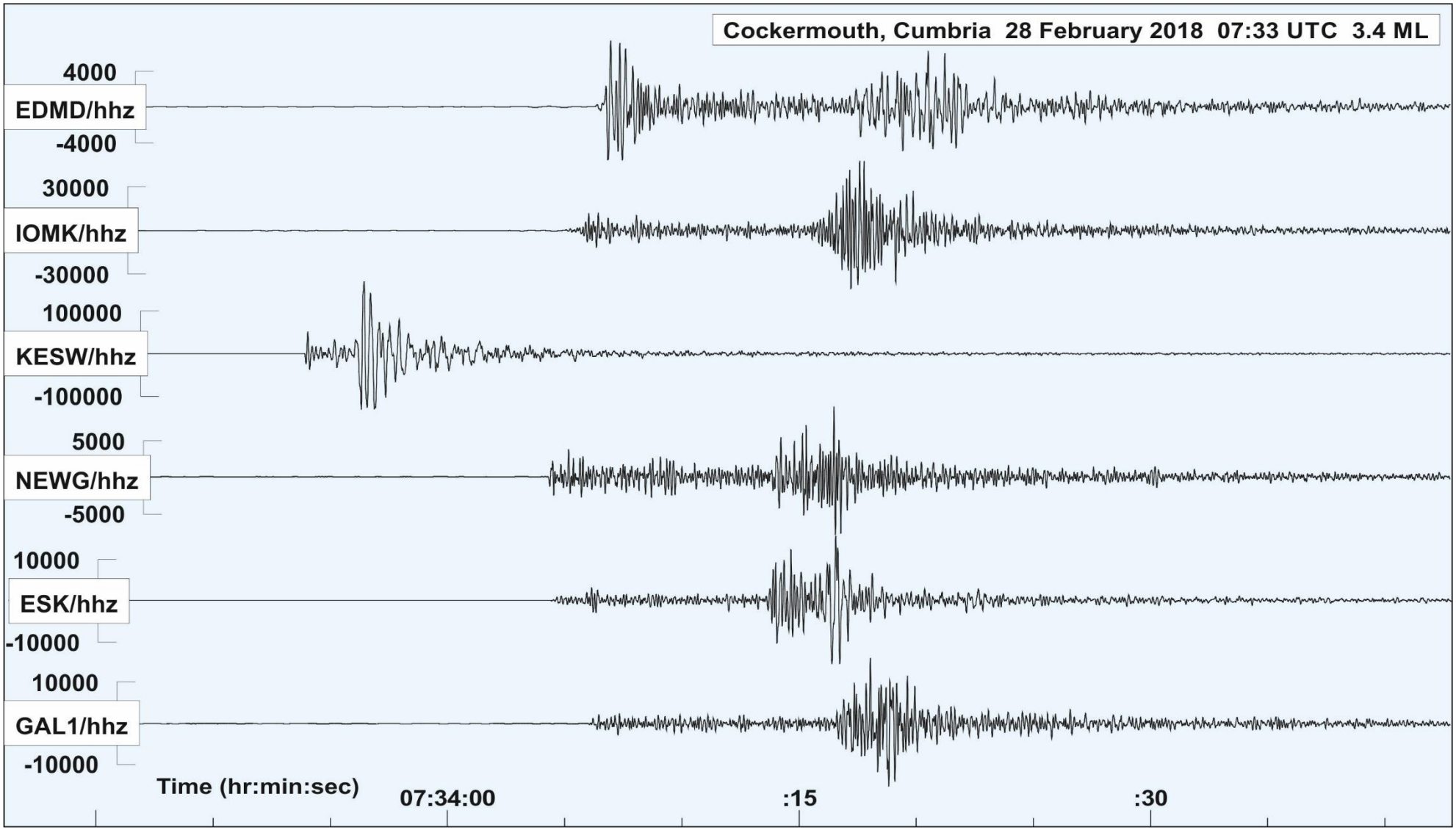

Figure 9. Seismograms of the ground displacement from the magnitude 3.4 ML Cockermouth, Cumbria earthquake, 28 February 2018, recorded by BGS seismograph stations.

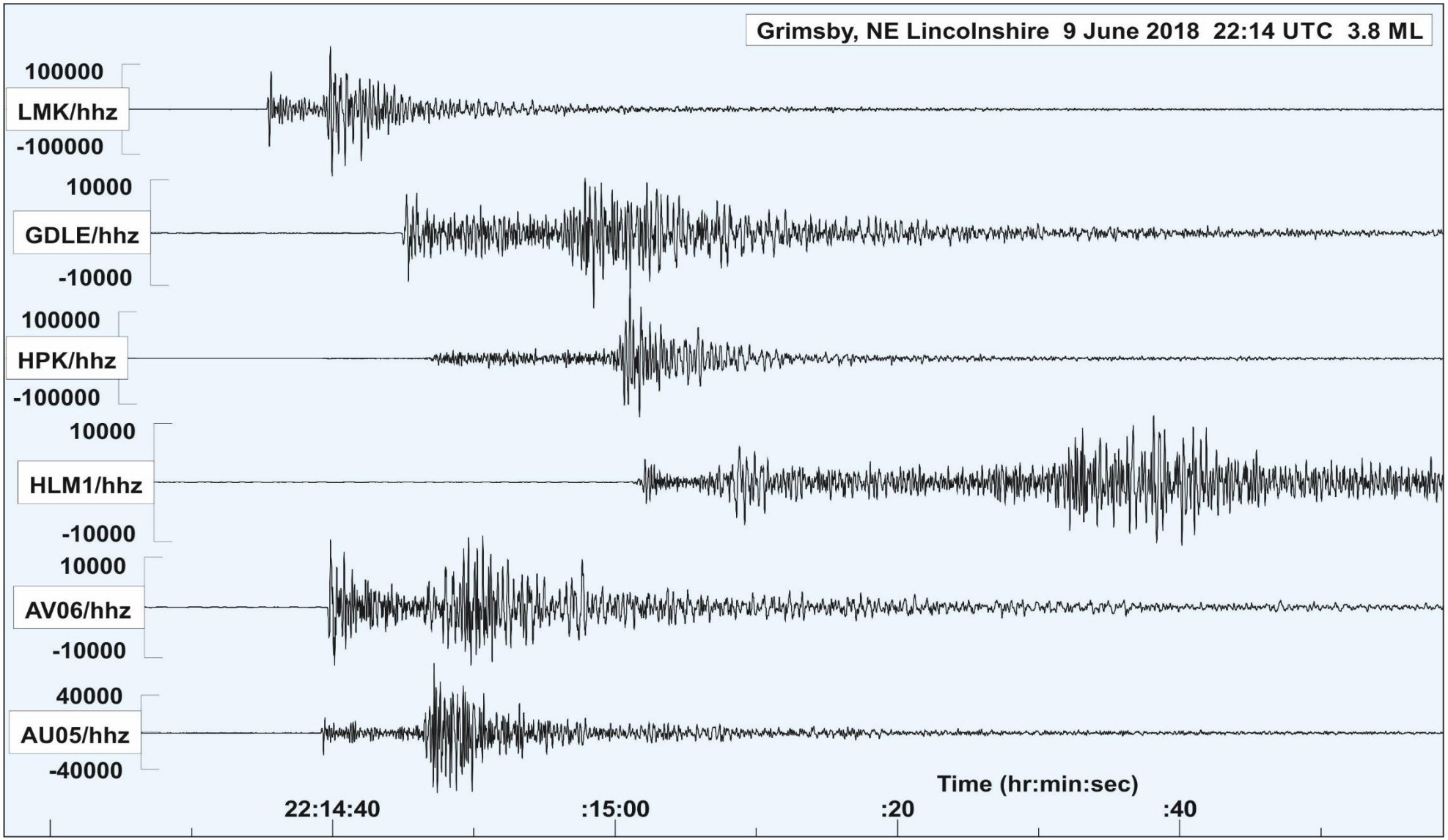

Figure 10. Seismograms of the ground displacement from the magnitude 3.8 ML Grimsby, North East Lincolnshire earthquake, 9 June 2018, recorded by BGS seismograph stations.

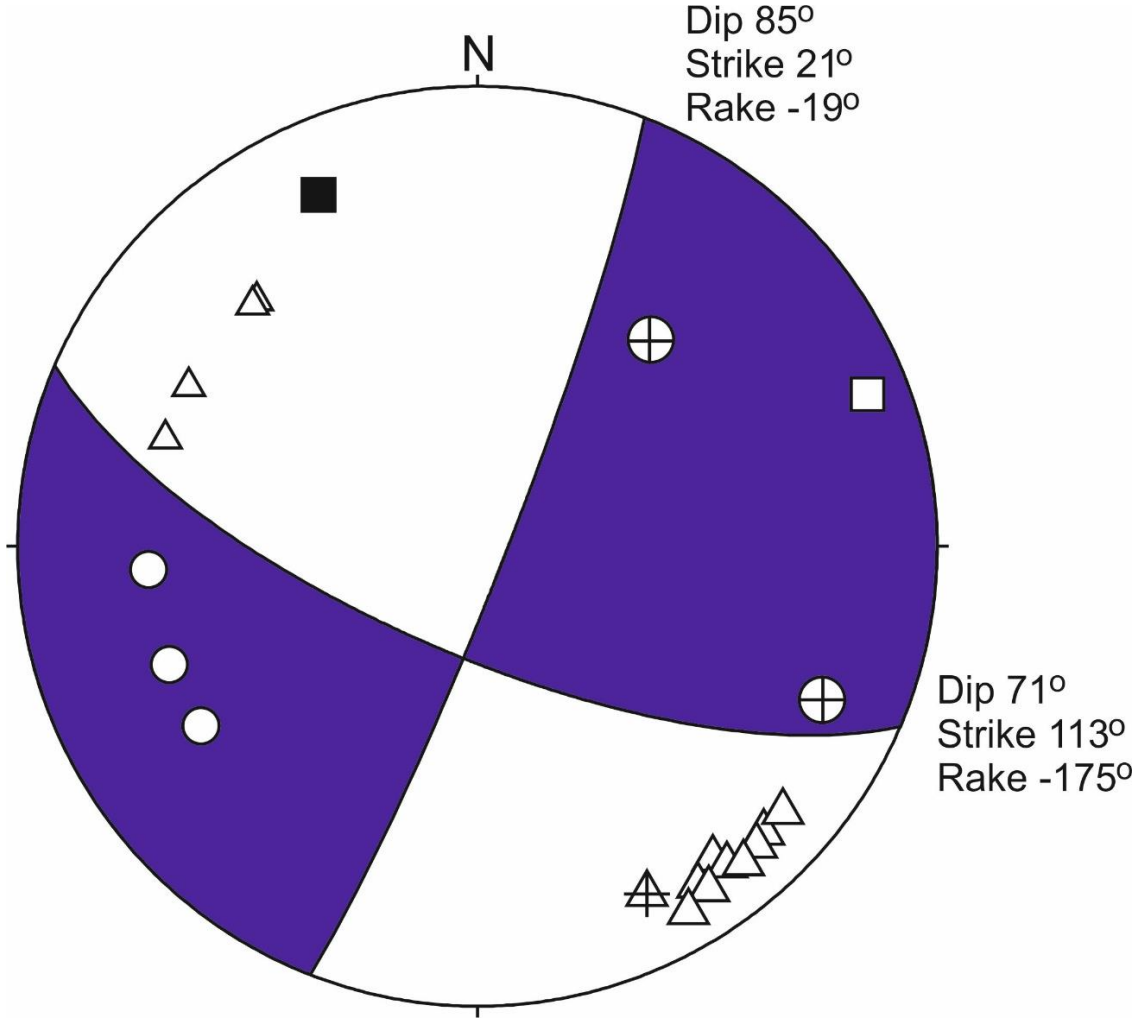

Figure 11. Lower hemisphere, equal projection of the focal mechanism for the Grimsby earthquake on 9 June 2018. The blue shaded areas show areas of compressional first motion. The white circles and triangles show measured compressional and dilatational first motions, respectively. Black crosses show SH/V amplitude ratios. The black and white squares show the orientations of the axes of maximum (P) and minimum (T) compression, respectively (Snoke et al,. 1984)

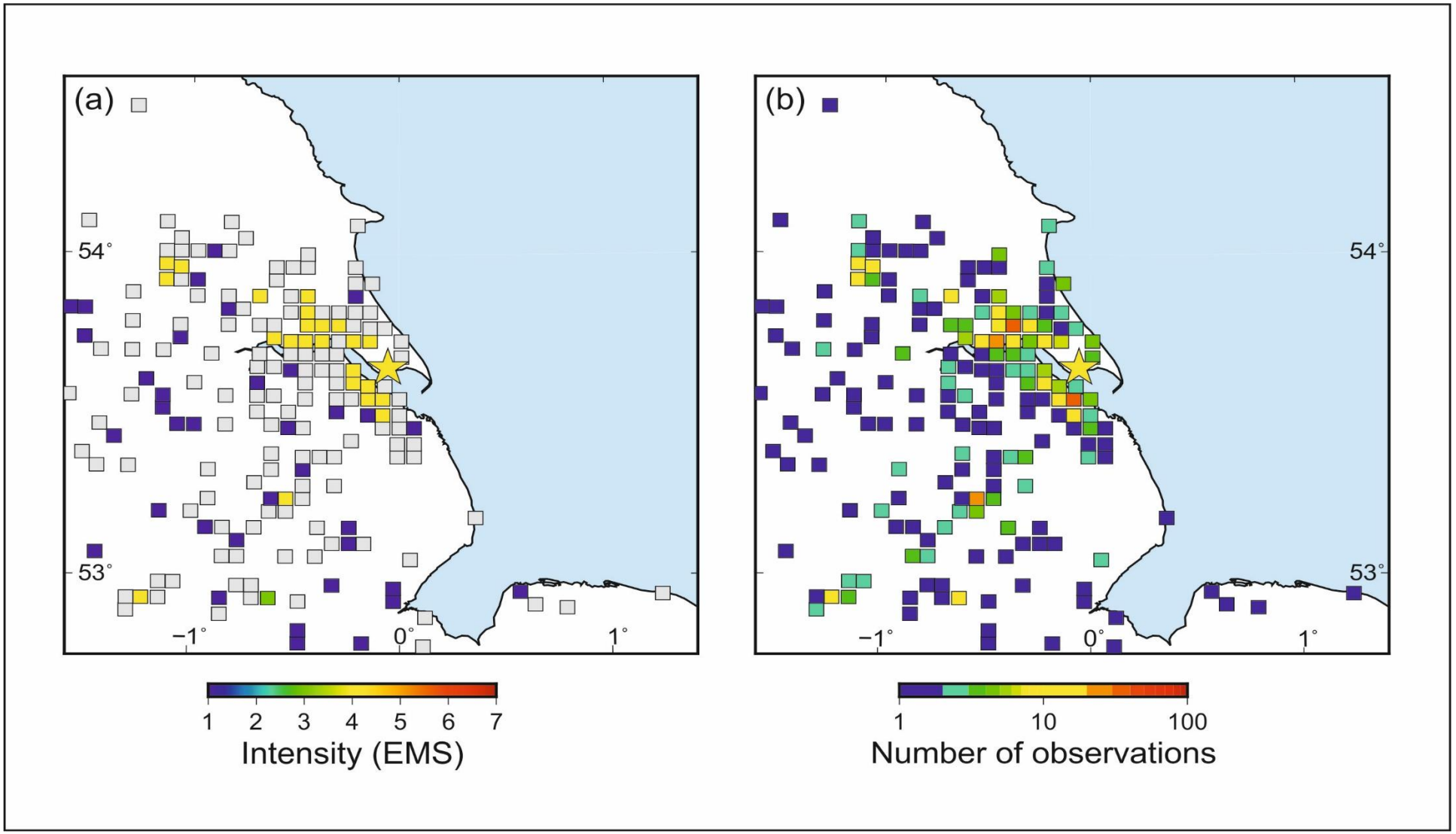

Figure 12. (a) Macroseismic intensities for the Grimsby earthquake on 9 June 2018 calculated in 5 km grid squares. A minimum of five observations are required to calculate an intensity value. Squares are coloured by intensity. (b) Shows the number of observations to determine each intensity value.

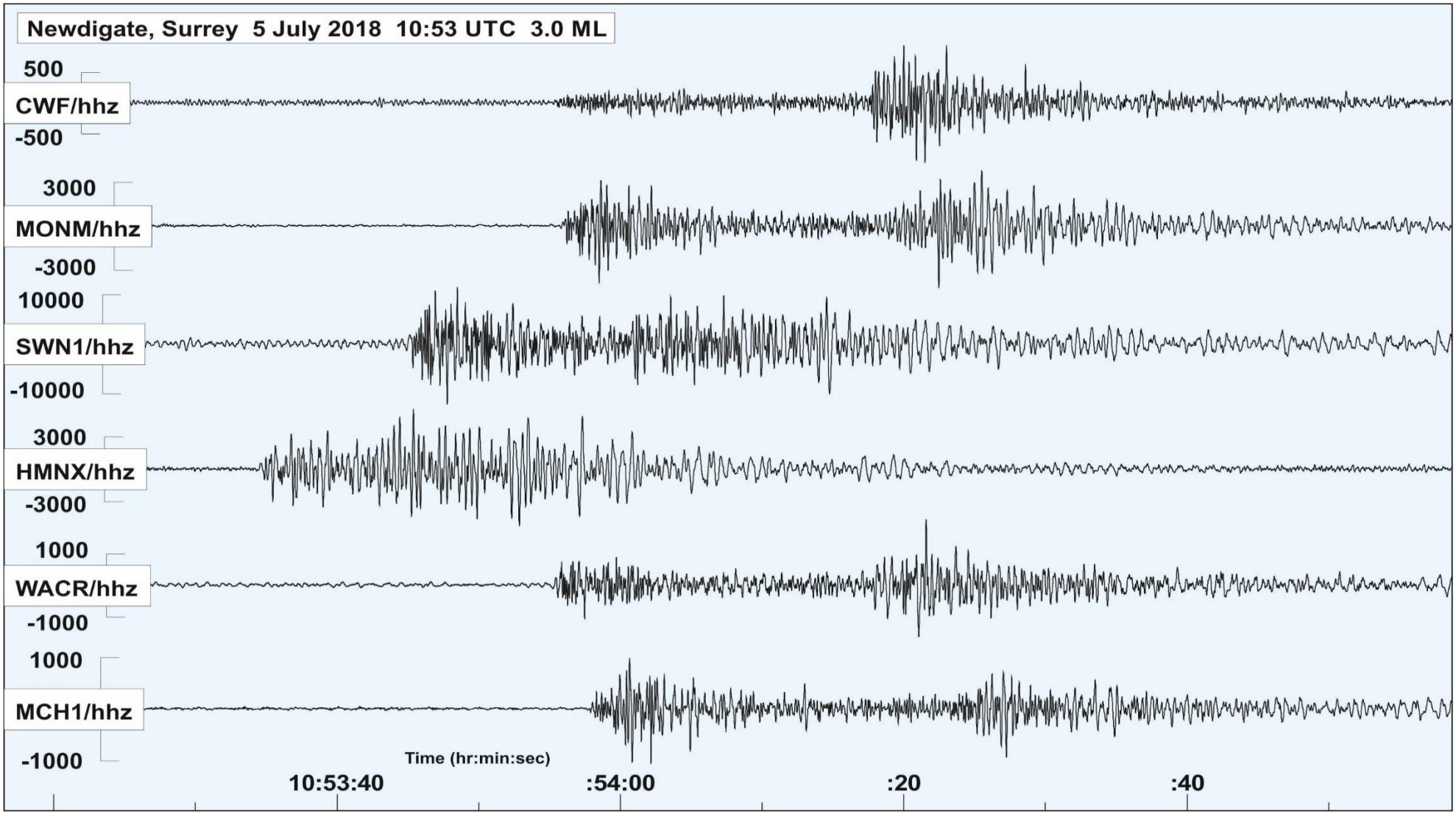

Figure 13. Seismograms of the ground displacement from the magnitude 3.0 ML Newdigate, Surrey earthquake, 5 July 2018, recorded by BGS seismograph stations.

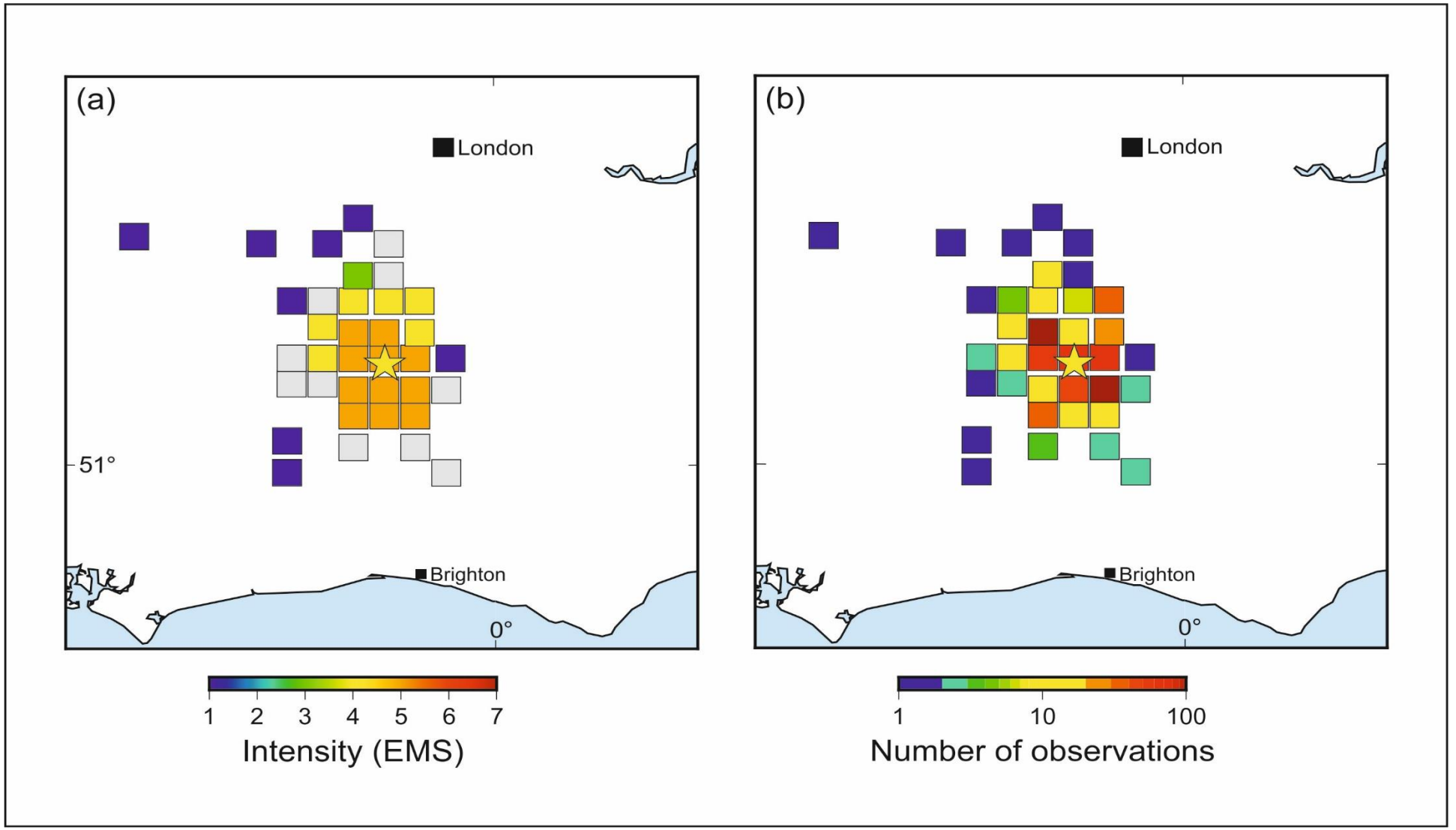

Figure 14. (a) Macroseismic intensities for the Newdigate earthquake on 5 July 2018 calculated in 5 km grid squares. A minimum of five observations are required to calculate an intensity value. Squares are coloured by intensity. (b) Shows the number of observations to determine each intensity value.

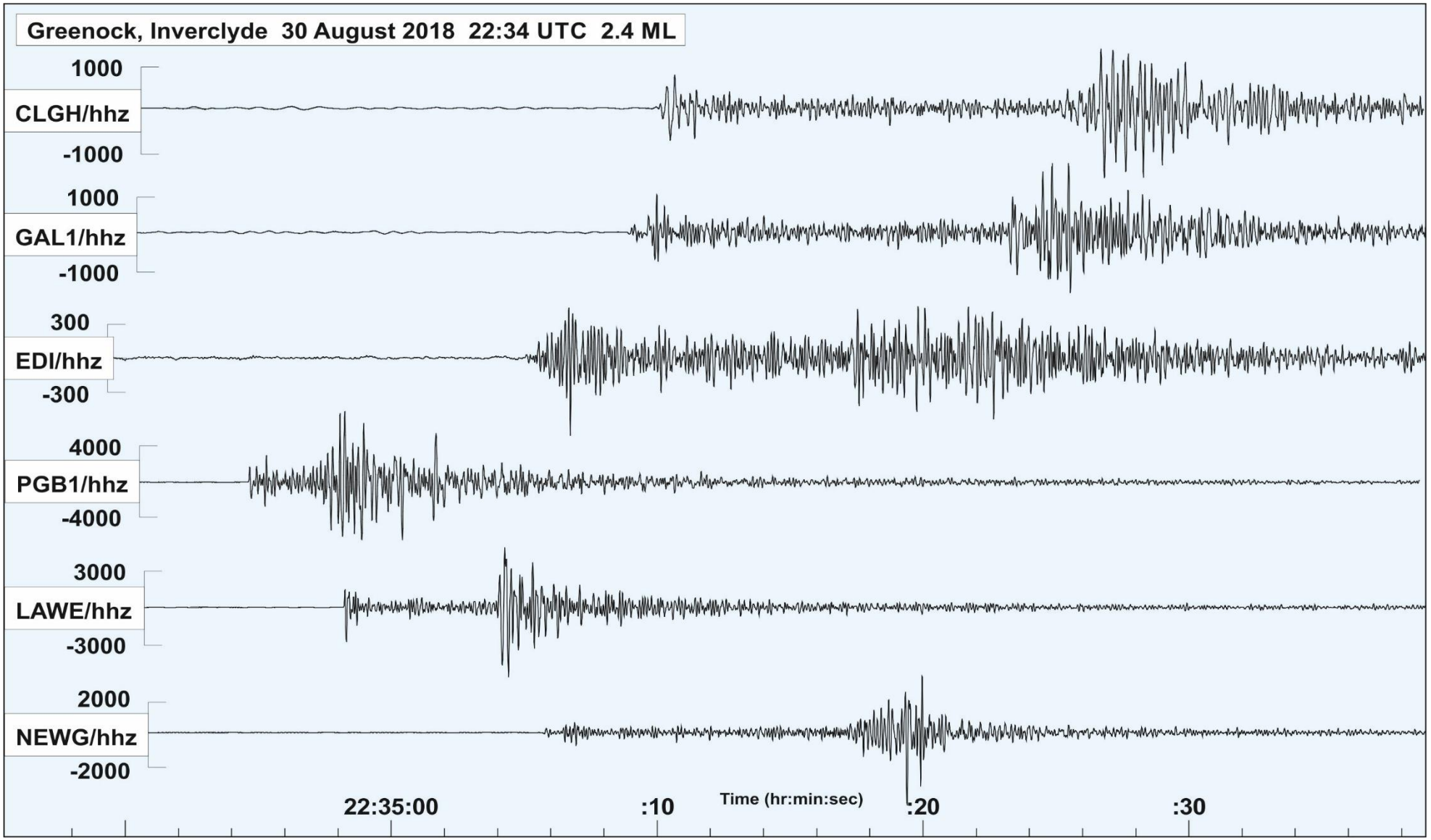

Figure 15. Seismograms of the ground displacement from the magnitude 2.4 ML Greenock, Inverclyde earthquake, 30 August 2018, recorded by BGS seismograph stations.

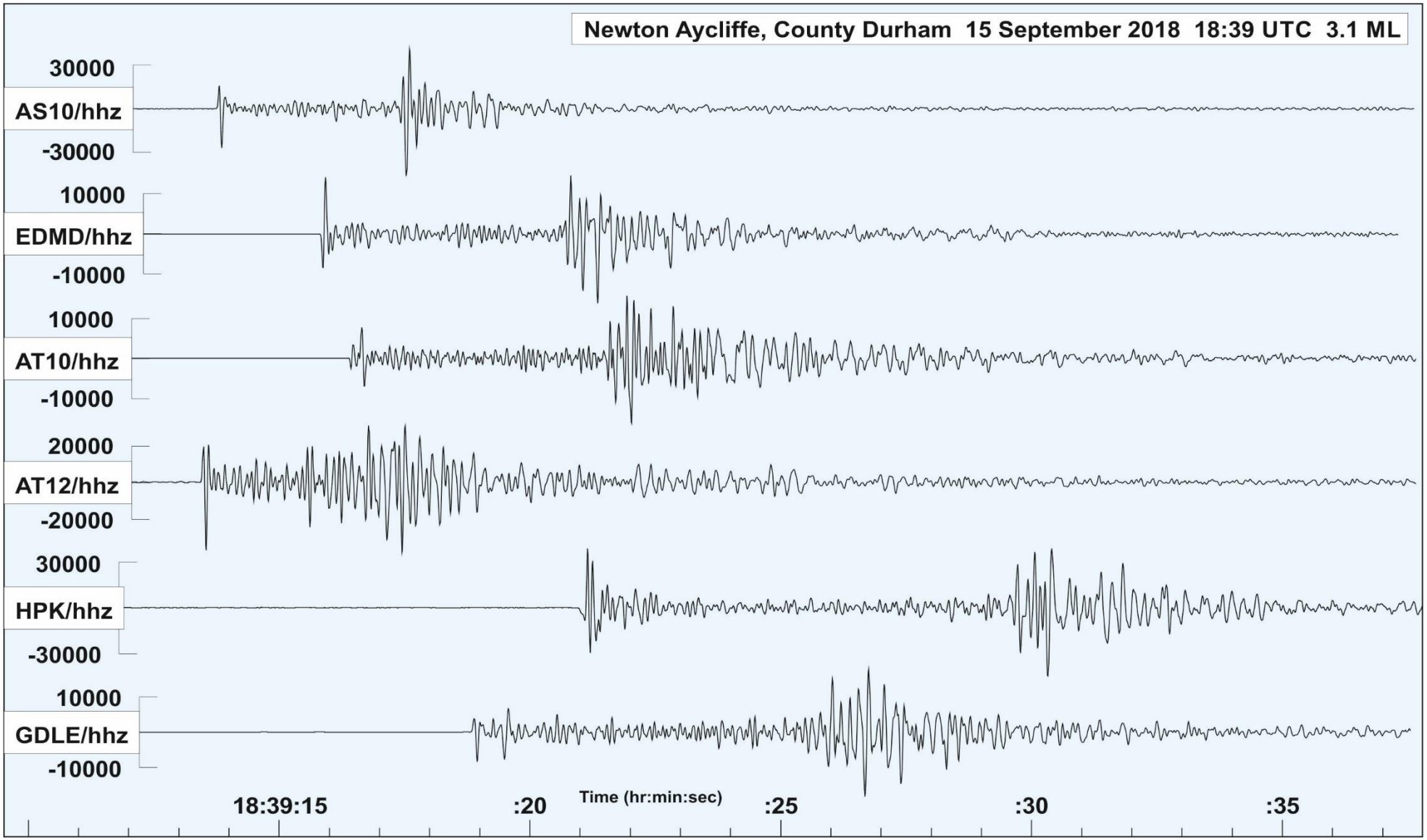

Figure 16. Seismograms of the ground displacement from the magnitude 3.1 ML Newton Aycliffe, County Durham earthquake, 15 September 2018, recorded by BGS seismograph stations.

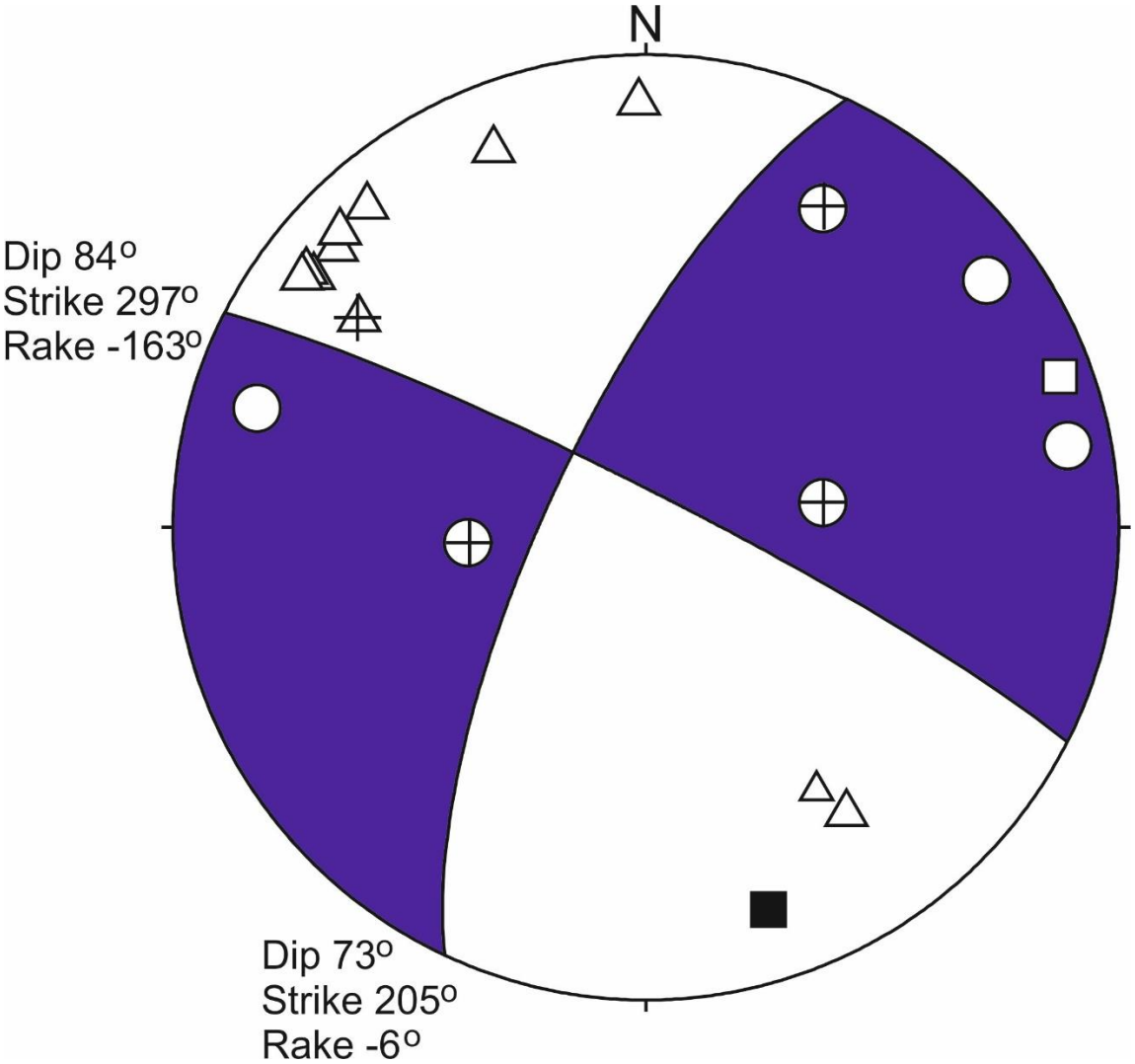

Figure 17. Lower hemisphere, equal projection of the focal mechanism for the Newton Aycliffe on 15 September 2018. The blue shaded areas show areas of compressional first motion. The white circles and triangles show measured compressional and dilatational first motions, respectively. Black crosses show SH/V amplitude ratios. The black and white squares show the orientations of the axes of maximum (P) and minimum (T) compression, respectively (Snoke et al,. 1984)

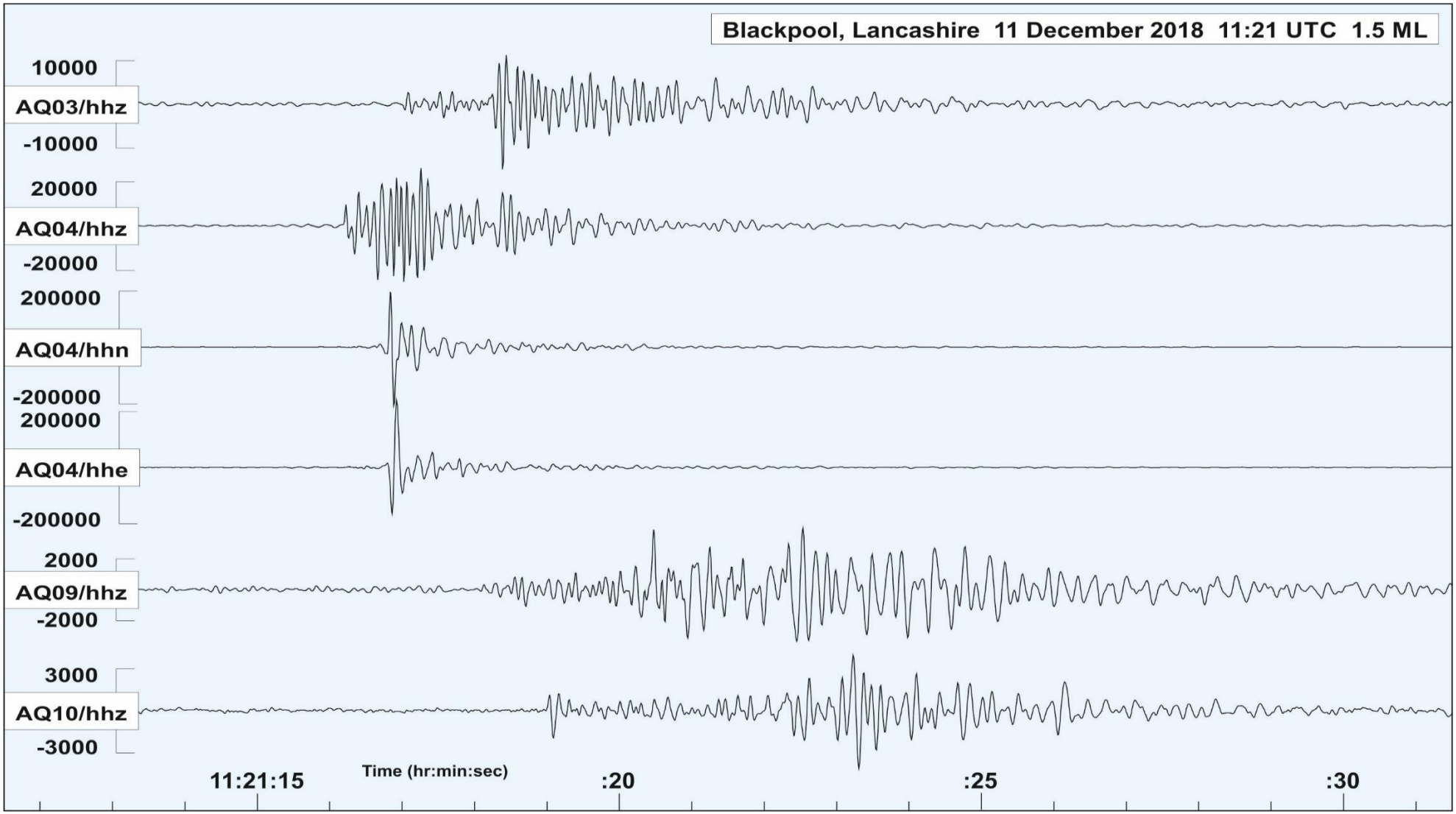

Figure 18. Seismograms of the ground displacement from the magnitude 1.5 ML Blackpool, Lancashire earthquake, 11 December 2018, recorded by BGS seismograph stations.

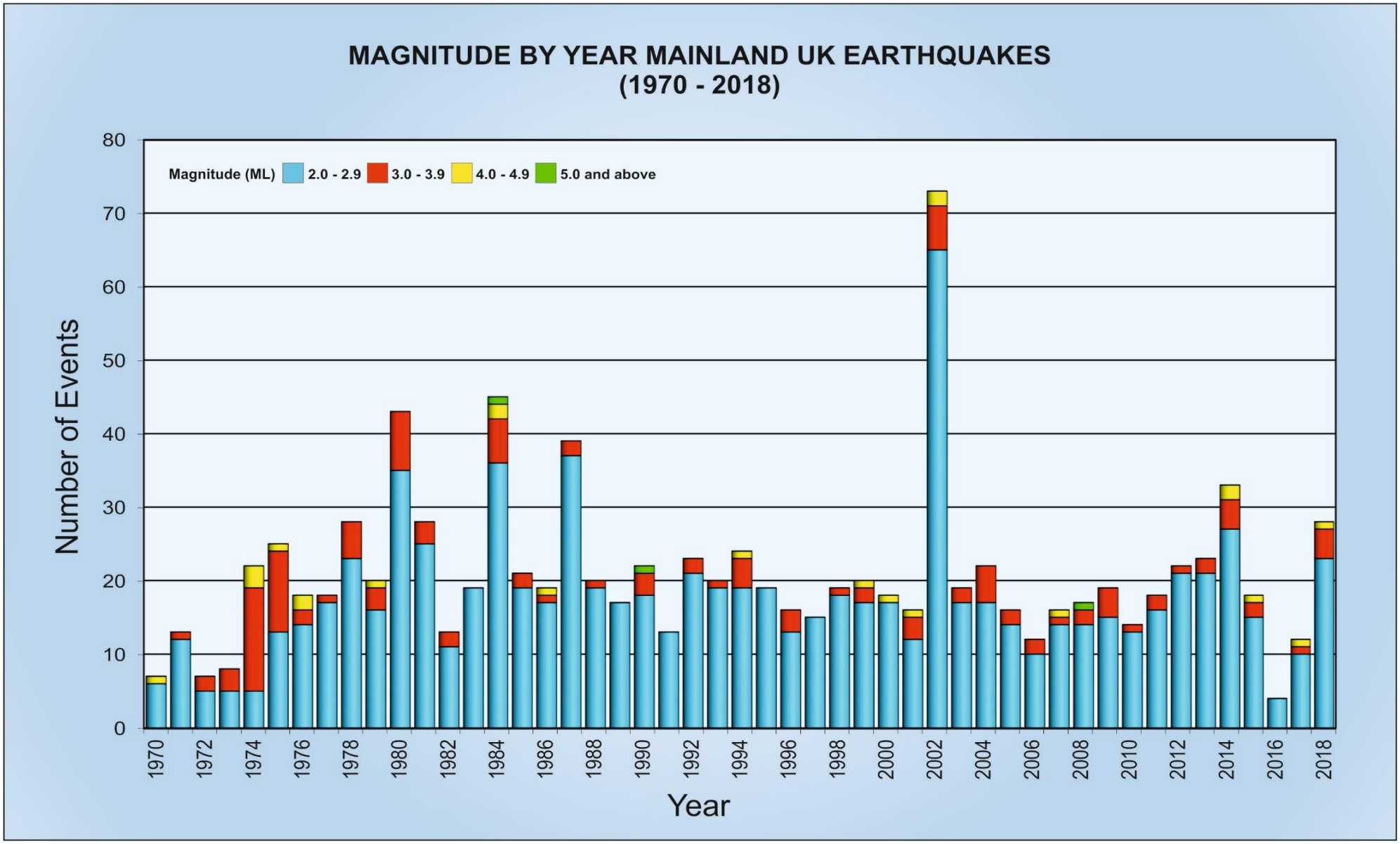

Figure 19. Histogram showing the number of events, magnitude 2.0 ML or greater, detected 1970-2018.

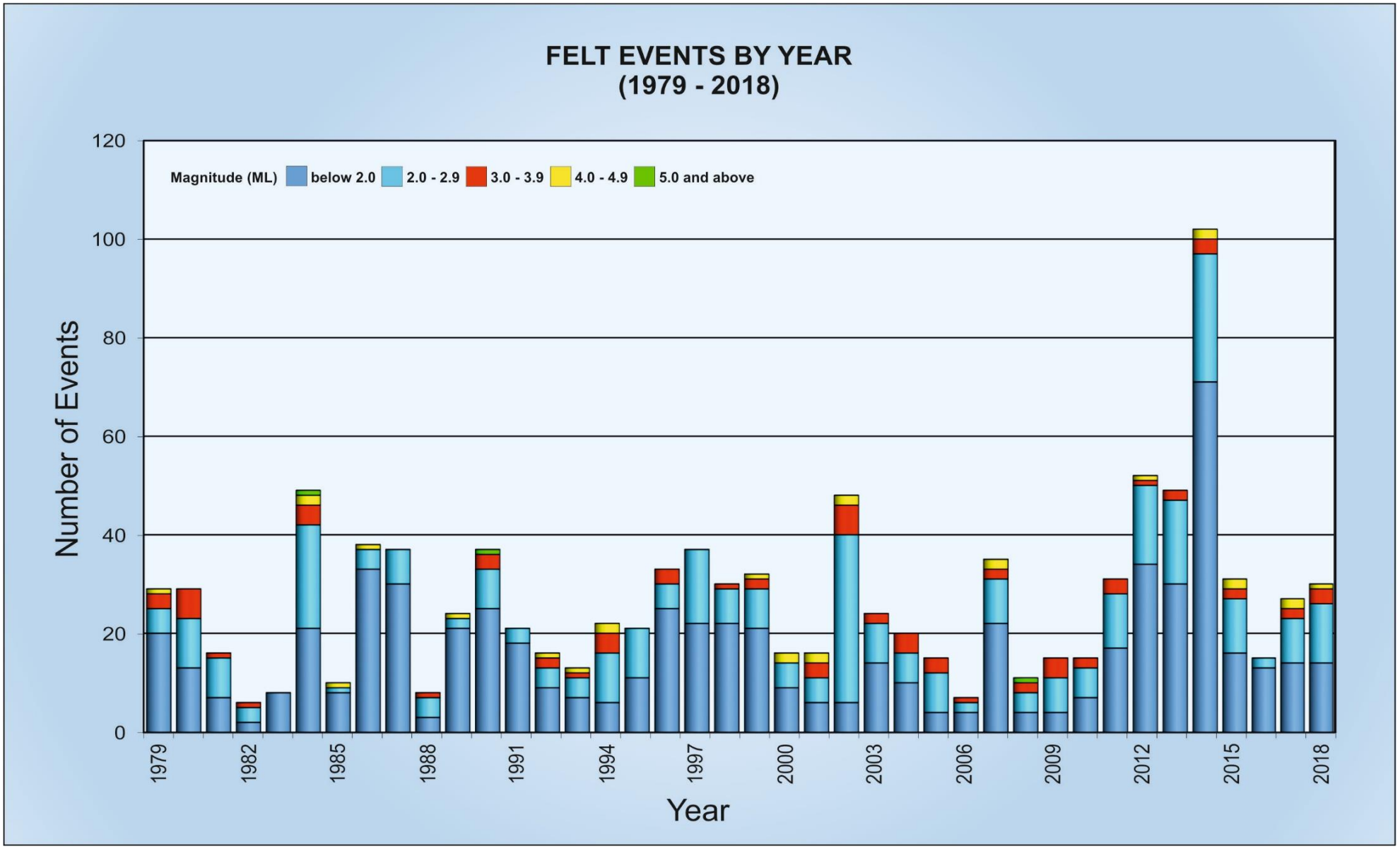

Figure 20. Histogram showing the number of felt events, 1979-2018.

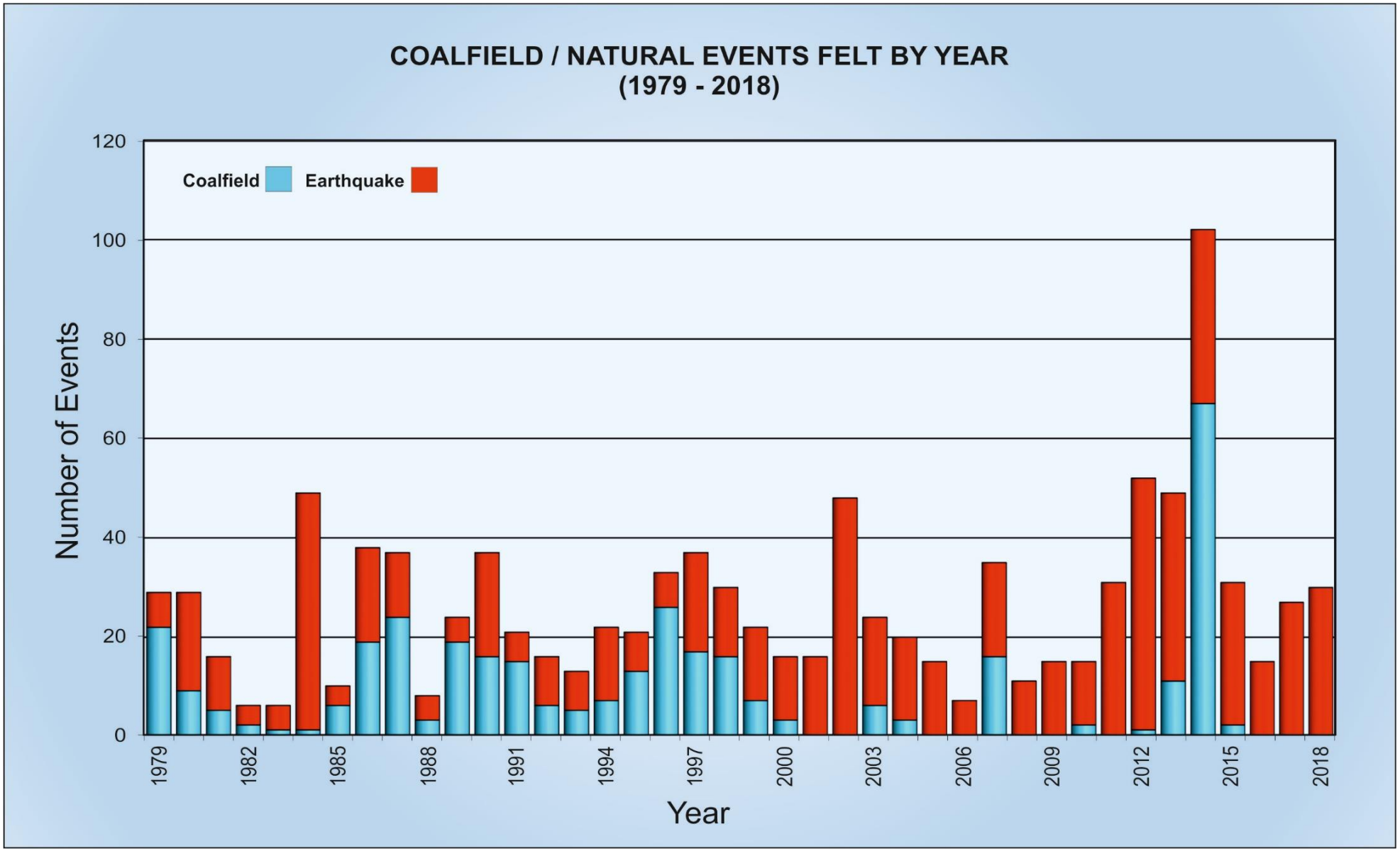

Figure 21. Histogram showing the split between the number of felt events in coalfield areas and those which are natural earthquakes, 1979-2018.

TABLE 1 : CATALOGUE OF EVENTS : 2018

YearMoDy	HrMnSecs	Lat	Lon	kmE	kmN	Dep	Mag	Locality	Int	No	Gap	RMS	ERH	ERZ	Comments
20180101	074958.9	56.29	-3.76	290.8	711.8	8.1	1.2	BLACKFORD,PERTH/KINROSS		7	96	0.20	2.20	6.10	
20180106	192248.5	51.68	-2.96	333.8	198.1	5.9	1.0	LLANGYBI,MONMOUTHSHIRE		8	127	0.30	3.55	4.20	
20180109	224329.9	53.09	0.05	537.3	356.9	3.2	1.0	STICKNEY,LINCOLNSHIRE		5	168	0.20	2.61	2.50	
20180110	212318.2	57.73	-5.27	205.1	876.2	9.2	0.5	DUNDONNELL,HIGHLAND		4	164	0.30	6.99	11.00	
20180111	173209.8	52.11	-4.24	246.8	247.7	13.4	0.9	LLANWENOG,CEREDIGION		7	167	0.30	4.09	10.40	
20180116	161312.8	57.01	-4.65	239.0	794.2	4.5	0.6	INVERGARRY,HIGHLAND		4	152	0.30	4.44	10.30	11KM SE INVERGARRY
20180118	100406.9	56.43	-4.00	276.7	728.2	7.7	0.6	COMRIE,PERTH & KINROSS		4	253	0.10	2.83	1.30	
20180118	161546.3	49.93	-4.37	230.2	6.3	7.8	1.7	ENGLISH CHANNEL		4	266	0.30	8.99	19.00	55KM ESE FALMOUTH
20180121	150031.0	53.37	-4.46	236.2	389.0	6.6	0.2	LLANFECHELL,ANGLESEY		5	113	0.10	1.52	1.00	
20180127	211153.3	56.40	-5.72	170.5	728.8	6.8	1.2	MULL,ARGYLL & BUTE	2	5	172	0.30	4.87	4.30	FELT CROGGAN
20180128	171035.7	56.40	-5.67	173.5	729.6	6.1	1.6	MULL,ARGYLL & BUTE	2	5	170	0.10	2.34	1.50	FELT CROGGAN
20180129	233557.7	54.11	-3.39	309.3	469.4	4.2	1.0	WALNEY ISLAND,CUMBRIA		9	168	0.20	2.77	5.80	OFFSHORE LOCATION
20180205	005924.4	55.13	-4.12	265.0	583.8	5.1	1.0	DALRY,D & G		10	64	0.40	4.17	4.50	
20180205	153247.0	57.06	-5.74	173.0	803.2	7.5	1.8	KNOYDART,HIGHLAND		6	165	0.60	9.94	3.80	5KM NW INVERIE
20180210	122816.6	52.40	-2.88	340.1	278.7	8.2	1.5	CLUNGUNFORD,SALOP		10	73	0.30	3.79	8.10	
20180216	064857.1	53.85	-3.66	291.0	440.3	3.5	2.2	IRISH SEA		23	79	0.30	2.42	2.60	
20180216	222106.3	51.77	-4.16	251.1	210.6	7.8	0.7	PONTYBEREM,CARMARTHS		8	102	0.20	1.56	3.10	
20180217	143107.6	51.77	-3.83	273.5	209.2	7.5	4.6	CWMLLYNFELL,NPT	5	42	82	0.50	3.26	9.10	FELT WALES...
20180217	143521.0	51.76	-3.82	274.3	208.4	7.5	1.8	CWMLLYNFELL,NPT		8	112	0.30	2.55	7.50	
20180217	144022.6	51.76	-3.82	274.4	208.4	7.5	0.7	CWMLLYNFELL,NPT		5	207	0.20	3.22	6.90	
20180217	150935.5	51.75	-3.82	274.1	207.2	7.8	1.2	CWMLLYNFELL,NPT		6	121	0.20	2.26	6.60	
20180217	160710.4	51.76	-3.82	274.2	208.0	8.0	0.5	CWMLLYNFELL,NPT		4	207	0.10	2.55	5.20	
20180217	162706.6	51.77	-3.83	273.9	209.2	7.8	1.5	CWMLLYNFELL,NPT		6	111	0.10	0.99	2.80	
20180217	231732.7	51.76	-3.82	274.5	208.3	7.8	2.2	CWMLLYNFELL,NPT		16	86	0.40	2.78	8.20	
20180218	042752.9	54.75	-2.66	357.3	539.4	8.2	0.2	GLASSONBY,CUMBRIA		6	160	0.20	2.48	2.90	
20180218	045606.3	53.22	-1.55	430.3	369.7	10.2	0.7	HOLYMOORSIDE,DERBYS		10	167	0.30	3.99	4.40	
20180218	110033.8	51.76	-3.83	274.1	208.4	7.7	1.6	CWMLLYNFELL,NPT		11	84	0.40	3.18	7.40	
20180218	113547.4	53.38	-4.44	237.9	390.0	7.1	1.1	LLANFECHELL,ANGLESEY		5	170	0.30	9.44	3.60	
20180224	053715.1	51.82	-2.93	335.7	213.5	11.6	1.1	LLANARTH,MONMOUTHSHIRE		6	136	0.20	2.33	1.20	
20180224	233753.7	53.32	-2.39	373.8	380.1	12.6	1.4	KNUTSFORD,CHESHIRE		11	53	0.30	3.72	6.30	
20180225	233516.2	56.01	-4.21	262.5	681.8	8.8	0.8	LENNOXTOWN,E DUNBARTON		8	81	0.30	3.09	4.30	
20180228	073350.8	54.61	-3.36	312.2	525.2	5.7	3.4	COCKERMOUTH,CUMBRIA	4	32	67	0.50	2.95	4.70	FELT CUMBRIA...
20180304	000038.7	52.08	-3.41	303.6	243.6	3.8	0.9	BUILTH WELLS,POWYS		9	89	0.20	2.37	6.10	7KM SSW BUILTH WELLS
20180305	211839.4	52.13	-2.42	371.1	247.7	4.5	0.4	CRADLEY,HEREFORDSHIRE		5	191	0.10	2.01	4.00	
20180306	045159.2	54.51	-3.02	334.1	512.8	6.7	1.3	GRASMERE,CUMBRIA	2	10	83	1.10	16.34	8.30	FELT GREAT LANGDALE
20180308	033150.7	56.47	-3.91	282.3	732.5	4.3	1.0	CRIEFF,PERTH & KINROSS		8	83	0.40	4.30	4.10	11KM NNW CRIEFF
20180308	041235.0	56.47	-3.91	282.2	732.9	4.5	0.6	CRIEFF,PERTH & KINROSS		6	107	0.50	6.08	0.00	11KM NNW CRIEFF
20180309	021229.2	51.24	-3.87	269.5	150.4	12.5	0.7	LYNTON,DEVON		7	135	0.30	5.32	4.00	
20180309	081408.4	52.76	-3.60	292.3	318.9	12.1	2.7	LLANYMAWDDWY,GWYNEDDD	3	19	68	0.30	2.56	1.70	FELT LLANYMAWDDWY...
20180311	182657.0	53.58	-1.93	404.6	409.6	7.5	1.6	MARSDEN,WEST YORKSHIRE		17	90	0.50	4.12	9.50	
20180312	153234.0	53.38	-4.47	235.6	390.2	8.7	1.1	LLANFECHELL,ANGLESEY		8	126	0.10	3.79	1.30	
20180312	153810.6	53.38	-4.45	236.8	389.9	8.5	0.4	LLANFECHELL,ANGLESEY		5	127	0.00	0.54	0.20	

TABLE 1 : CATALOGUE OF EVENTS : 2018

YearMoDy	HrMnSecs	Lat	Lon	kmE	kmN	Dep	Mag	Locality	Int	No	Gap	RMS	ERH	ERZ	Comments
20180315	035311.8	54.21	-1.82	411.9	479.8	4.5	0.6	HEALEY,NORTH YORKSHIRE		4	164	0.10	2.50	2.90	
20180315	104452.7	50.59	-4.20	244.1	78.5	2.6	1.2	LAMERTON,DEVON		4	154	0.30	3.84	6.20	
20180315	220931.9	53.04	-2.43	371.0	349.6	9.6	1.1	WYBUNBURY,CHESHIRE EAST		9	101	0.20	2.20	2.80	
20180316	235412.3	53.86	-1.90	406.5	440.7	11.5	1.0	KEIGHLEY,WEST YORKSHIRE		5	149	0.20	5.51	5.10	
20180317	163749.5	59.74	1.89	618.7	1101.8	20.2	2.8	NORTHERN NORTH SEA		20	113	0.40	4.76	6.60	175KM ESE LERWICK
20180317	234023.2	58.14	-5.47	195.9	921.7	3.4	0.7	REIFF,HIGHLAND		4	155	0.20	2.64	3.90	7KM NORTH REIFF
20180319	010836.3	57.16	-5.19	207.2	811.9	3.3	0.4	GLEN MORISTON,HIGHLAND		5	139	0.10	3.29	3.50	
20180320	011820.5	53.94	-0.35	508.2	451.0	12.5	0.9	HUTTON,EAST YORKSHIRE		15	198	0.30	4.65	3.80	
20180325	133502.6	52.70	-3.02	330.7	312.1	11.5	1.2	WESTBURY,SHROPSHIRE		10	112	0.20	3.40	1.70	
20180326	235000.0	55.11	-3.64	295.5	580.4	4.4	0.5	DUMFRIES,D & G		7	64	0.40	4.44	5.70	
20180330	232230.4	50.55	-1.83	412.1	72.7	5.0	1.8	ENGLISH CHANNEL		6	163	0.40	6.43	0.00	14KM SE SWANAGE
20180331	113718.8	50.55	-1.83	411.9	72.7	5.0	1.4	ENGLISH CHANNEL		6	163	0.30	3.85	0.00	14KM SE SWANAGE
20180401	111058.8	51.16	-0.27	521.0	141.0	0.0	2.6	NEWDIGATE,SURREY	3	18	86	0.50	3.75	0.00	FELT SURREY...
20180401	111400.1	51.16	-0.26	521.7	141.0	0.0	1.8	NEWDIGATE,SURREY		10	158	0.50	3.75	0.00	
20180401	121111.4	51.16	-0.24	523.1	141.9	0.0	1.7	NEWDIGATE,SURREY		8	155	0.50	3.96	0.00	
20180401	133313.5	49.43	-2.40	370.9	-52.0	4.1	0.9	GUERNSEY,CHANNEL ISLES		5	179	0.20	18.68	0.70	
20180402	094544.6	57.56	-5.20	208.4	856.5	7.5	1.1	KINLOCHEWE,HIGHLAND		7	76	0.20	2.82	6.50	7KM SE KINLOCHEWE
20180403	035158.2	56.19	-4.41	250.2	702.0	7.8	1.3	ABERFOYLE,STIRLING		12	56	0.30	2.51	3.70	
20180407	215456.2	51.60	-1.33	446.5	189.3	13.1	1.7	EAST HENDRED,OXON		9	97	0.30	5.02	5.70	
20180408	141819.6	57.31	-5.50	189.5	830.1	9.0	1.0	SALLACHY,HIGHLAND		6	110	0.20	3.89	2.80	
20180408	213958.9	51.00	-0.05	537.0	123.8	1.0	1.6	SCAYNES HILL,W SUSSEX		7	176	0.60	6.87	0.00	
20180409	212235.6	53.39	-4.47	235.8	390.7	8.5	0.6	LLANFECHELL,ANGLESEY		7	126	0.20	4.90	1.60	
20180413	175720.4	57.70	-5.26	205.6	872.6	9.1	2.2	KINLOCHEWE,HIGHLAND		9	103	0.30	7.40	4.10	10KM NNE KINLOCHEWE
20180414	140157.6	56.80	-5.58	181.4	772.9	7.4	1.6	LOCH SHIEL,HIGHLAND		11	143	0.30	4.81	6.40	
20180416	044003.3	58.52	-4.69	243.2	962.4	9.6	0.8	DURNESS,HIGHLAND		4	201	0.30	13.01	4.30	6KM SE DURNESS
20180418	065400.4	55.88	-5.45	184.5	671.0	8.8	0.6	TARBERT,ARGYLL & BUTE		5	158	0.30	3.73	0.00	
20180418	121814.1	56.41	-5.69	172.2	729.9	2.5	1.0	MULL,ARGYLL & BUTE		5	215	0.20	6.65	2.90	
20180420	145936.4	51.91	-2.94	335.7	224.2	20.7	2.1	PANDY,MONMOUTHSHIRE		14	80	0.20	3.00	2.00	
20180420	181404.1	57.04	1.91	637.2	801.3	10.0	2.6	CENTRAL NORTH SEA		15	297	0.60	15.93	0.00	240KM EAST ABERDEEN
20180422	104952.2	57.59	-5.58	186.3	860.8	4.5	1.0	TORRIDON,HIGHLAND		7	120	0.40	6.80	6.40	6KM NW TORRIDON
20180423	003951.6	54.22	-1.58	427.3	480.1	2.6	2.1	MASHAM,NORTH YORKSHIRE		22	77	0.30	2.24	3.50	5KM ESE MASHAM
20180425	190838.6	53.59	-4.58	229.1	414.0	6.9	1.4	IRISH SEA		7	177	0.40	9.36	1.70	25KM NW AMLWCH
20180426	232755.4	52.45	-1.83	411.6	283.6	7.8	0.6	BIRMINGHAM,W MIDLANDS		5	177	0.30	4.49	3.40	
20180427	163016.8	52.09	-3.37	306.0	244.6	5.3	1.7	BUILTH WELLS,POWYS		13	72	0.30	2.56	4.20	6KM SSE BUILTH WELLS
20180427	234758.1	52.82	-2.16	389.2	325.1	8.4	0.7	SEIGHFORD,STAFFS		8	113	0.20	2.25	8.10	
20180428	122047.2	52.85	-2.22	385.3	327.8	7.7	1.3	ECCLESHALL,STAFFS		8	99	0.30	3.67	0.20	
20180428	203834.9	51.16	-0.24	523.0	141.7	1.0	1.5	NEWDIGATE,SURREY		10	156	0.30	3.96	0.00	
20180429	181900.4	55.89	-5.58	176.3	672.4	8.9	2.6	ORMSARY,ARGYLL & BUTE	3	18	142	0.40	4.94	5.20	FELT TARBERT...
20180501	061559.9	55.89	-5.58	176.3	672.1	8.6	2.5	ORMSARY,ARGYLL & BUTE	3	12	158	0.40	5.26	7.30	FELT TARBERT...
20180502	225910.5	56.23	-5.23	199.8	709.0	4.7	2.1	EREDINE,ARGYLL & BUTE	3	9	85	0.30	3.89	4.90	FELT INVERARAY...
20180503	193606.0	53.35	-4.67	222.2	387.3	11.3	0.7	HOLYHEAD,ANGLESEY		5	274	0.00	1.30	0.90	5KM NNW HOLYHEAD
20180503	202459.0	54.21	-1.57	428.0	479.9	4.3	0.7	MASHAM,NORTH YORKSHIRE		8	122	0.20	1.75	2.30	6KM ESE MASHAM

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20180508	072221.8	52.80	-3.96	267.9	324.4	21.9	0.5	GANLLWYD,GYWNEDD		4	225	0.10	3.39	3.00	
20180510	024414.6	52.00	-4.39	236.2	236.1	4.8	0.8	PENBOYR,CARMARTHENSHIRE		5	160	0.20	6.52	6.00	
20180510	220825.7	55.88	-5.42	186.1	670.9	7.5	1.6	TARBERT,ARGYLL & BUTE	3	11	149	0.30	5.54	1.30	FELT TARBERT...
20180511	052117.1	51.04	-3.10	323.0	127.4	8.4	1.1	TAUNTON,SOMERSET		7	209	0.30	6.09	5.10	
20180515	010941.8	57.11	-4.68	237.8	805.3	7.7	1.0	FORT AUGUSTUS,HIGHLAND		7	89	0.30	3.85	6.20	
20180520	022456.0	51.21	-4.73	209.3	148.8	10.2	1.2	BRISTOL CHANNEL		7	162	0.30	5.85	6.20	OFF LUNDY ISLAND
20180520	204048.4	55.77	-5.72	166.6	659.1	8.8	0.9	GIGHA,ARGYLL & BUTE		7	163	0.50	7.37	8.90	OFFSHORE LOCATION
20180523	060939.8	61.58	3.20	675.6	1311.1	10.1	2.5	NORWEGIAN SEA		6	184	0.40	7.03	7.30	285KM NE LERWICK
20180525	200643.6	57.16	-5.17	208.1	812.0	7.9	0.8	GLEN MORISTON,HIGHLAND		6	117	0.30	6.24	6.90	
20180526	025326.7	51.76	-3.82	274.1	208.9	7.8	0.9	CWMLLYNFELL,NPT		7	100	0.30	2.98	8.30	
20180528	020939.8	54.31	-3.02	333.5	491.5	10.5	0.8	SATTERTHWAITE,CUMBRIA		5	154	0.30	3.26	6.40	
20180530	092244.4	57.11	-5.19	207.0	806.6	7.5	1.8	GLEN SHIEL,HIGHLAND		8	150	0.40	8.54	3.60	18KM SSE MORVICH
20180530	092356.2	57.11	-5.21	205.9	806.3	7.7	2.4	GLEN SHIEL,HIGHLAND		9	151	0.50	8.23	2.20	18KM SSE MORVICH
20180530	092729.6	57.11	-5.21	205.3	806.6	7.0	1.0	GLEN SHIEL,HIGHLAND		4	175	0.20	4.59	0.00	18KM SSE MORVICH
20180531	122941.6	57.11	-6.00	157.8	808.9	7.9	1.0	SKYE,HIGHLAND		4	178	0.40	2.85	3.50	
20180601	224336.4	52.22	-3.54	294.7	258.8	8.6	0.6	NEWBRIDGE-ON-WYE,POWYS		9	78	0.10	1.43	2.20	
20180604	140742.0	53.13	-4.54	230.3	361.9	7.7	1.2	CAERNARFON BAY		6	244	0.20	4.68	0.60	
20180605	021536.4	53.49	-1.16	455.5	399.7	6.8	0.7	DONCASTER,S YORKSHIRE		5	174	0.30	4.71	8.90	
20180605	211941.3	54.05	-2.54	364.7	462.3	9.1	1.9	LOWGILL,LANCASHIRE	2	21	55	0.50	3.19	8.60	FELT CLAPHAM
20180606	175823.4	54.61	-1.53	430.6	524.0	17.0	1.8	NEWTON AYCLIFFE,DURHAM		18	163	0.20	2.22	1.90	
20180608	063052.6	54.61	-1.54	429.7	524.1	14.2	1.1	NEWTON AYCLIFFE,DURHAM		15	162	0.30	3.12	8.10	
20180609	221428.9	53.65	-0.06	528.5	418.6	19.3	3.8	GRIMSBY,NE LINCOLNSHIRE	4	49	182	0.40	5.12	2.00	FELT NE LINCS...
20180610	184849.4	53.18	-4.75	216.0	367.9	7.1	0.5	CAERNARFON BAY		6	186	0.20	7.20	6.90	12KM SW RHOSCOLYN
20180612	005130.2	52.73	-3.04	329.5	314.7	9.9	0.8	MIDDLETOWN,POWYS		7	135	0.10	1.43	1.20	
20180612	042633.8	52.96	-1.92	405.2	340.8	11.0	1.0	CROXDEN,STAFFORDSHIRE		6	112	0.20	2.59	5.00	
20180612	225629.6	51.00	-3.66	283.8	124.0	8.4	0.5	KNOWSTONE,DEVON		5	180	0.40	9.71	8.10	
20180614	235305.4	56.52	-6.25	138.7	744.0	7.8	1.5	MULL,ARGYLL & BUTE		6	230	0.20	6.94	5.30	
20180615	004511.5	52.57	-0.90	474.4	297.3	5.2	1.1	KIBWORTH,LEICESTERSHIRE		5	189	0.30	5.66	5.10	6KM NE KIBWORTH
20180615	203046.6	56.11	-6.22	137.6	699.1	8.3	0.6	COLONSAY,ARGYLL & BUTE		5	216	0.30	9.35	0.30	
20180625	200551.5	55.78	-6.41	123.2	662.4	5.1	1.0	ISLAY,ARGYLL & BUTE		6	187	0.30	4.74	9.60	
20180627	122823.6	51.18	-0.24	523.0	143.4	0.0	2.6	NEWDIGATE,SURREY	3	14	153	1.00	9.14	0.00	FELT SURREY...
20180628	073833.3	55.86	-5.68	169.8	669.2	8.3	0.9	ORMSARY,ARGYLL & BUTE		5	184	0.30	5.38	4.50	
20180628	213325.2	53.43	-1.55	429.6	393.1	2.4	0.9	SHEFFIELD,S YORKSHIRE		8	92	0.50	4.94	5.80	8KM NW SHEFFIELD
20180629	055411.5	51.17	-0.25	522.2	142.4	0.1	2.4	NEWDIGATE,SURREY	3	13	154	0.80	6.39	0.00	FELT SURREY...
20180629	182227.6	56.10	-5.22	199.9	693.9	10.6	0.7	BARNACARRY,ARGYLL/BUTE		7	122	0.20	2.64	3.30	
20180702	064558.4	57.46	-5.65	181.0	846.6	6.3	0.9	SHIELDAIG,HIGHLAND		6	137	0.30	5.15	3.10	
20180705	021639.0	55.26	-3.52	303.4	597.0	4.1	0.7	JOHNSTONEBRIDGE,D & G		7	146	0.20	4.88	1.10	
20180705	105325.1	51.16	-0.25	522.4	141.7	0.2	3.0	NEWDIGATE,SURREY	5	24	84	1.00	7.94	0.00	FELT SURREY...
20180710	024857.8	54.15	-4.28	251.0	474.8	1.9	0.5	IRISH SEA		8	124	0.20	2.38	2.30	13KM OFF ISLE OF MAN
20180710	160310.3	51.17	-0.23	523.4	143.0	0.0	1.9	NEWDIGATE,SURREY	3	10	153	0.70	6.29	0.00	FELT NEWDIGATE...
20180711	101126.9	54.69	-1.25	448.3	532.6	8.2	2.3	HARTLEPOOL,CO DURHAM		24	168	0.30	3.98	5.40	
20180712	031856.6	55.23	-3.51	303.7	594.4	4.1	1.0	JOHNSTONEBRIDGE,D & G		13	60	0.40	3.31	9.40	

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20180715	040407.0	55.13	-2.96	339.0	582.6	2.5	0.2	LANGHOLM,D & G		7	155	0.30	4.00	4.00	
20180718	022607.9	55.09	-4.17	261.7	579.9	10.2	0.2	DALRY,D & G		6	128	0.20	2.91	2.40	
20180718	035956.8	51.17	-0.26	521.6	143.0	0.2	1.9	NEWDIGATE,SURREY	3	14	91	0.90	4.62	0.00	FELT NEWDIGATE...
20180718	040009.7	51.17	-0.26	521.6	143.0	0.2	0.2	NEWDIGATE,SURREY		2	203	0.30	1.40	0.00	
20180718	133318.8	51.16	-0.24	522.9	141.4	0.0	2.4	NEWDIGATE,SURREY	3	15	113	0.80	4.04	0.00	FELT SURREY...
20180718	133338.4	51.16	-0.24	522.9	141.4	0.0	0.9	NEWDIGATE,SURREY		3	183	0.30	4.75	0.00	
20180718	215908.5	53.13	-4.40	239.7	362.3	12.8	1.1	CAERNARFON BAY	3	8	127	0.10	1.94	2.00	FELT CAERNARFON...
20180721	045327.1	56.99	-5.46	190.1	793.8	7.5	0.6	LOCH NEVIS,HIGHLAND		4	150	0.20	4.37	6.60	
20180725	032633.4	59.13	-11.51	-143.0	1066.3	10.0	2.2	NORTH ATLANTIC		9	245	0.50	2.74	0.00	ROSEMARY BANK
20180726	093543.9	57.57	-5.59	185.4	858.7	4.0	1.0	TORRIDON,HIGHLAND		5	122	0.20	3.86	3.90	
20180727	035838.3	52.17	-2.41	371.9	252.7	7.5	1.5	SUCKLEY,WORCESTERSHIRE		13	109	0.40	3.53	0.20	
20180728	053935.7	52.23	-4.16	252.3	261.2	6.5	1.0	CILCENNIN,CEREDIGION		7	125	0.20	2.14	4.60	
20180728	221802.5	52.31	-2.42	371.4	268.1	12.9	0.5	EARDISTON,WORCS		5	150	0.10	2.79	2.60	
20180729	000308.5	55.80	-6.37	126.0	664.6	4.4	1.7	ISLAY,ARGYLL & BUTE		7	206	0.80	0.09	3.20	
20180802	174251.9	52.61	0.45	565.9	303.9	4.4	2.7	DOWNHAM MARKET,NORFOLK	3	10	121	0.40	4.79	4.50	FELT NORFOLK
20180804	025624.1	52.70	-0.71	486.8	311.8	2.7	1.8	OAKHAM,RUTLAND	3	14	150	0.40	4.04	8.70	FELT OAKHAM...
20180804	120056.3	54.86	-3.26	319.2	552.6	4.2	0.0	ABBEYTOWN,CUMBRIA		5	158	0.30	6.04	2.20	
20180805	102952.6	53.73	-2.34	377.4	425.7	9.7	1.0	BAXENDEN,LANCASHIRE		10	82	0.20	1.43	1.20	
20180807	122631.8	59.10	-2.56	367.8	1023.7	10.3	1.4	ORKNEY ISLANDS		5	160	0.10	0.73	4.50	
20180808	000108.8	53.26	-2.63	357.8	374.1	15.4	0.9	CROWTON,CHESHIRE		10	70	0.20	2.22	3.20	
20180812	211400.6	53.07	-3.02	331.7	353.3	3.8	0.6	GWERSYLLT,WREXHAM		4	246	0.10	2.82	2.20	
20180816	195102.5	51.18	-4.74	208.2	146.1	16.6	1.2	BRISTOL CHANNEL		8	163	0.30	4.37	3.00	OFF LUNDY ISLAND
20180818	032158.2	51.16	-0.25	522.2	141.4	2.1	-0.2	NEWDIGATE,SURREY		5	117	0.00	0.36	0.30	
20180819	144231.4	55.70	-6.18	137.1	652.8	6.8	0.6	ISLAY,ARGYLL & BUTE		7	167	0.50	7.33	5.50	
20180819	200019.9	53.99	-3.47	303.8	455.8	9.6	0.6	IRISH SEA		5	173	0.30	3.98	6.20	30KM WNW FLEETWOOD
20180819	220622.1	53.53	-3.53	298.4	405.3	13.3	1.2	IRISH SEA		14	62	0.20	3.19	5.10	30KM WEST FORMBY
20180826	215951.8	58.24	1.19	587.5	932.0	8.2	2.3	CENTRAL NORTH SEA		11	166	0.30	6.54	7.30	230KM NE ABERDEEN
20180828	045921.2	54.42	-0.88	472.6	503.7	31.6	2.8	FRYUP,NORTH YORKSHIRE		51	111	0.20	3.04	1.00	
20180830	210243.0	53.93	-3.69	288.7	449.6	2.5	1.3	IRISH SEA		18	81	0.40	3.08	3.30	45KM WNW BLACKPOOL
20180830	223448.9	55.97	-4.77	227.0	678.6	11.8	2.4	GREENOCK,INVERCLYDE	3	16	69	0.30	3.44	3.30	FELT GREENOCK...
20180906	082332.7	55.23	-3.51	304.0	594.2	4.1	1.2	JOHNSTONEBRIDGE,D & G		9	62	0.40	3.24	4.20	
20180906	194006.7	55.27	-3.54	302.4	598.2	4.0	0.6	JOHNSTONEBRIDGE,D & G		4	186	0.30	6.23	7.80	
20180907	190013.7	52.94	-2.02	398.5	337.5	7.5	1.5	CRESSWELL,STAFFORDSHIRE		13	93	0.30	2.64	7.80	
20180909	034829.8	53.31	-3.80	280.0	381.1	6.8	0.3	LLANDUDNO,CONWY		5	217	0.30	6.53	6.60	
20180914	000336.0	50.18	-5.11	177.7	35.4	1.0	0.9	PENRYN,CORNWALL		4	208	0.30	3.61	0.00	
20180914	001948.1	50.17	-5.12	177.6	35.2	1.0	0.3	PENRYN,CORNWALL		3	210	0.20	3.18	0.00	
20180914	030505.9	50.16	-5.11	178.1	34.1	1.0	1.1	PENRYN,CORNWALL	2	4	216	0.30	4.21	0.00	FELT PORKELLIS
20180915	020150.3	59.06	-7.89	62.7	1034.6	12.6	1.6	NW ISLE OF LEWIS		5	314	0.30	5.53	6.10	100KM NW LEWIS
20180915	181513.7	56.11	-5.91	156.8	697.7	6.7	0.9	JURA,ARGYLL & BUTE		6	180	0.20	4.08	6.10	OFFSHORE JURA
20180915	183909.0	54.57	-1.64	423.3	519.3	23.7	3.1	NEWTON AYCLIFFE,DURHAM		46	120	0.30	1.98	2.00	
20180916	073203.4	50.65	-3.23	312.7	84.5	6.2	2.0	SIDMOUTH,DEVON		10	109	0.50	6.80	2.90	OFFSHORE LOCATION
20180916	102646.7	55.66	-5.41	185.7	646.0	9.4	0.9	ARRAN,NORTH AYRSHIRE		6	145	0.20	2.19	4.50	

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20180917	165637.5	55.11	-2.78	350.1	580.1	13.0	1.4	CATLOWDY,CUMBRIA		7	136	0.40	4.61	7.10	
20180919	005943.8	53.11	-1.93	404.8	356.7	13.9	0.4	LEEK,STAFFODSHIRE		5	188	0.20	5.80	3.30	6KM EAST LEEK
20180921	054203.8	52.43	-2.80	345.7	281.7	6.6	0.7	CRAVEN ARMS,SHROPSHIRE		5	208	0.20	7.20	1.90	
20180924	013457.1	54.65	-3.67	292.1	529.7	4.2	0.4	WORKINGTON,CUMBRIA		6	133	0.30	2.84	3.70	OFFSHORE WORKINGTON
20180925	134218.9	50.19	-5.08	179.9	36.5	1.0	1.4	PENRYN,CORNWALL	3	4	199	0.30	4.64	0.00	FELT PENCOYS...
20180925	175432.1	53.54	1.64	641.2	410.7	13.9	2.3	SOUTHERN NORTH SEA		6	288	0.40	4.96	6.30	110KM EAST GRIMSBY
20180926	130207.8	58.97	1.43	596.9	1014.1	23.3	2.8	CENTRAL NORTH SEA		10	164	0.40	9.04	2.60	190KM SE LERWICK
20180927	053413.8	54.61	-3.66	292.7	525.2	4.4	0.4	WORKINGTON,CUMBRIA		5	143	0.20	1.50	0.00	OFFSHORE WORKINGTON
20180928	082824.2	57.02	-4.95	221.0	796.3	14.3	1.7	INVERGARRY,HIGHLAND		5	112	0.30	4.48	7.00	10KM SW INVERGARRY
20180928	225500.1	51.18	-0.23	524.0	143.5	2.4	-0.4	NEWDIGATE,SURREY		4	165	0.00	0.50	0.20	
20180929	111615.8	57.40	-4.34	259.3	836.8	7.7	1.4	LOCHEND,HIGHLAND		7	92	0.30	3.42	6.20	
20181004	173505.8	52.03	-3.07	326.8	237.4	16.1	0.9	CRASWELL,HEREFORDSHIRE		5	127	0.20	4.37	2.70	
20181005	232647.3	55.89	-5.42	186.0	671.4	8.3	0.5	TARBERT,ARGYLL & BUTE		4	156	0.60	0.80	6.80	
20181006	061534.3	52.42	-0.75	484.8	281.6	5.6	1.0	KETTERING,NORTHANTS		5	184	0.40	6.44	3.20	
20181006	162926.6	50.30	-4.86	196.5	48.0	1.0	0.6	GRAMPOUND,CORNWALL		8	166	0.30	3.33	0.00	
20181007	064804.4	52.82	-1.06	463.5	325.3	6.0	1.4	KEYWORTH,NOTTS		7	129	0.30	3.28	3.20	6KM SSE KEYWORTH
20181010	120456.9	50.17	-5.15	175.3	34.8	1.0	0.8	PENRYN,CORNWALL		6	285	0.00	0.86	0.00	
20181012	142125.4	51.66	-3.12	322.7	196.1	6.8	2.4	NEWBRIDGE,CAERPHILLY		11	104	0.30	3.16	7.80	
20181013	030514.9	57.66	-5.58	186.7	868.8	7.7	0.8	TALLADALE,HIGHLAND		5	123	0.40	5.03	3.30	
20181013	043720.7	51.89	-3.29	311.1	221.7	7.3	0.8	TALYBONT-ON-USK,POWYS		4	216	0.40	6.81	5.00	
20181014	022440.3	55.23	-3.52	303.4	594.0	2.5	0.8	JOHNSTONEBRIDGE,D & G		8	62	0.50	4.33	4.90	
20181015	094919.8	51.98	-3.58	291.8	232.9	7.9	0.9	SENNYBRIDGE,POWYS		5	180	0.10	2.34	2.30	
20181018	154853.3	53.79	-2.97	336.1	432.8	2.1	-0.4	BLACKPOOL,LANCASHIRE		11	104	0.10	0.67	0.80	IND
20181018	181310.3	63.68	2.42	618.7	1540.9	19.4	4.3	NORWEGIAN SEA		18	220	0.40	7.84	4.50	430KM NNE LERWICK
20181018	225446.5	53.79	-2.97	336.0	432.6	2.8	-0.9	BLACKPOOL,LANCASHIRE		10	104	0.10	0.85	0.90	IND
20181018	234441.7	53.79	-2.97	336.0	432.9	1.9	-0.4	BLACKPOOL,LANCASHIRE		11	109	0.10	0.95	1.20	IND
20181019	132048.3	53.79	-2.97	336.1	432.8	2.3	0.0	BLACKPOOL,LANCASHIRE		9	102	0.10	0.76	0.80	IND
20181019	234344.9	51.18	-0.25	522.1	143.6	2.3	-0.4	NEWDIGATE,SURREY		4	184	0.00	0.32	0.20	
20181020	034401.1	53.79	-2.96	336.4	432.9	2.2	-0.2	BLACKPOOL,LANCASHIRE		12	92	0.10	0.67	1.00	IND
20181020	034455.1	51.03	-2.90	337.1	125.7	2.8	1.2	CURRY RIVEL,SOMERSET		9	174	0.20	2.25	1.80	
20181021	144552.7	57.20	-5.25	203.6	816.4	6.2	1.0	GLEN MORISTON,HIGHLAND		5	119	0.30	6.26	7.50	
20181023	094457.0	51.97	-2.43	370.3	230.4	8.8	0.9	DYMOCK,GLOUCESTERSHIRE		4	166	0.10	1.64	9.40	
20181023	144532.2	53.79	-2.96	336.5	432.9	0.6	0.0	BLACKPOOL,LANCASHIRE		13	90	0.20	0.89	0.60	IND
20181024	130229.1	53.79	-2.96	336.4	432.8	2.2	0.3	BLACKPOOL,LANCASHIRE		10	92	0.10	0.63	0.90	IND
20181024	132626.3	53.79	-2.96	336.4	432.9	2.2	0.2	BLACKPOOL,LANCASHIRE		10	93	0.10	0.67	0.90	IND
20181024	135131.2	53.79	-2.97	336.3	432.9	1.8	-0.3	BLACKPOOL,LANCASHIRE		11	97	0.20	1.21	1.60	IND
20181024	143830.1	53.79	-2.97	336.4	432.9	2.1	-0.1	BLACKPOOL,LANCASHIRE		10	94	0.10	0.67	0.80	IND
20181024	201805.6	52.94	-3.91	271.6	340.0	9.0	1.3	FFESTINIOG,GWYNEDD	3	11	124	0.20	2.72	2.50	FELT FFESTINIOG...
20181024	235612.8	53.79	-2.96	336.4	432.6	2.4	-0.3	BLACKPOOL,LANCASHIRE		11	91	0.10	0.54	0.60	IND
20181025	145927.1	53.79	-2.96	336.4	432.9	2.3	0.3	BLACKPOOL,LANCASHIRE		10	93	0.10	0.67	0.90	IND
20181025	170033.8	53.79	-2.97	336.2	432.9	2.1	-0.1	BLACKPOOL,LANCASHIRE		11	99	0.10	0.54	0.70	IND
20181025	170413.3	53.79	-2.96	336.6	432.6	2.2	-0.6	BLACKPOOL,LANCASHIRE		9	116	0.10	0.54	0.70	IND

TABLE 1 : CATALOGUE OF EVENTS : 2018

YearMoDy	HrMnSecs	Lat	Lon	kmE	kmN	Dep	Mag	Locality	Int	No	Gap	RMS	ERH	ERZ	Comments
20181026	021301.6	53.79	-2.97	336.4	432.8	2.3	-0.2	BLACKPOOL,LANCASHIRE		10	93	0.10	0.58	0.80	IND
20181026	112644.6	53.79	-2.96	336.5	432.9	2.2	0.2	BLACKPOOL,LANCASHIRE		11	90	0.10	0.54	0.80	IND
20181026	113658.4	53.79	-2.96	336.6	432.8	2.9	0.8	BLACKPOOL,LANCASHIRE		14	89	0.10	0.67	0.70	IND
20181026	203922.7	53.79	-2.97	336.4	432.6	2.3	-0.1	BLACKPOOL,LANCASHIRE		11	92	0.10	0.54	0.70	IND
20181027	104737.4	53.79	-2.96	336.6	432.8	2.2	-0.3	BLACKPOOL,LANCASHIRE		9	115	0.10	0.45	0.70	IND
20181027	105525.2	53.79	-2.96	336.6	433.0	2.5	0.8	BLACKPOOL,LANCASHIRE		14	89	0.10	0.67	0.40	IND
20181027	110716.6	53.79	-2.96	336.5	432.8	2.2	-0.2	BLACKPOOL,LANCASHIRE		9	91	0.10	0.63	0.80	IND
20181027	114431.1	53.79	-2.96	336.6	432.9	2.4	0.0	BLACKPOOL,LANCASHIRE		9	89	0.10	0.63	0.80	IND
20181027	131234.7	53.79	-2.96	336.5	432.8	2.2	-0.4	BLACKPOOL,LANCASHIRE		10	90	0.10	0.54	0.80	IND
20181029	113038.9	53.79	-2.96	336.6	433.0	2.9	1.1	BLACKPOOL,LANCASHIRE	2	14	88	0.10	0.67	0.70	IND,FELT BLACKPOOL
20181029	114329.3	53.79	-2.96	336.6	432.6	2.4	-0.4	BLACKPOOL,LANCASHIRE		9	93	0.10	0.76	0.80	IND
20181029	114441.8	53.79	-2.96	336.5	432.9	2.5	-0.2	BLACKPOOL,LANCASHIRE		8	98	0.10	0.85	1.00	IND
20181029	115834.5	53.79	-2.96	336.5	432.9	2.3	0.0	BLACKPOOL,LANCASHIRE		11	91	0.10	0.63	0.80	IND
20181029	180112.2	53.79	-2.96	336.6	432.9	2.5	0.5	BLACKPOOL,LANCASHIRE		12	89	0.10	0.63	0.40	IND
20181029	210852.2	57.67	-6.25	146.8	872.0	12.0	2.0	SKYE,HIGHLAND	2	9	163	0.30	5.50	4.90	FELT SKYE
20181029	211358.6	53.79	-2.96	336.5	432.8	2.3	0.1	BLACKPOOL,LANCASHIRE		11	90	0.10	0.54	0.70	IND
20181030	013737.4	53.79	-2.96	336.6	432.9	2.1	-0.3	BLACKPOOL,LANCASHIRE		10	88	0.10	0.54	0.80	IND
20181030	143638.4	53.79	-2.96	336.6	432.9	2.0	-0.5	BLACKPOOL,LANCASHIRE		10	88	0.10	0.45	0.90	IND
20181030	155540.0	53.79	-2.96	336.5	432.8	2.3	-0.4	BLACKPOOL,LANCASHIRE		10	90	0.10	0.67	0.80	IND
20181101	065058.8	53.79	-2.96	336.5	432.9	2.2	-0.3	BLACKPOOL,LANCASHIRE		9	112	0.10	0.76	0.90	IND
20181102	000856.3	52.53	-2.34	376.7	292.7	10.7	1.1	BRIDGNORTH,SHROPSHIRE		8	146	0.50	4.74	5.40	
20181102	174458.9	53.79	-2.96	336.6	432.9	2.2	-0.5	BLACKPOOL,LANCASHIRE		10	89	0.10	0.67	0.80	IND
20181102	225927.4	53.79	-2.96	336.6	432.9	2.2	-0.5	BLACKPOOL,LANCASHIRE		10	86	0.10	0.54	0.80	IND
20181103	060933.6	55.84	-6.39	125.3	669.1	6.0	1.4	ISLAY,ARGYLL & BUTE		6	207	0.10	3.32	5.60	
20181104	162406.2	53.79	-2.96	336.9	432.7	2.5	0.7	BLACKPOOL,LANCASHIRE		12	80	0.10	0.54	0.30	IND
20181109	013713.2	57.73	-5.19	209.9	875.6	2.7	0.9	LOCHBROOM,HIGHLAND		5	154	0.20	5.57	7.40	11KM SW LOCHBROOM
20181109	220524.7	53.11	-3.13	324.4	358.1	9.0	1.5	TREUDDYN,FLINTSHIRE		6	178	0.10	2.86	3.40	
20181112	185806.8	56.48	-3.91	282.5	733.0	2.5	1.4	CRIEFF,PERTH & KINROSS		8	107	0.30	3.26	3.30	
20181112	230559.4	52.23	-2.72	351.0	259.3	14.6	2.3	LEOMINSTER,HEREF	2	14	66	0.20	2.44	2.40	FELT CHURCH STRETTON
20181115	054328.8	52.64	-2.44	370.4	305.3	7.5	1.1	TELFORD,SHROPSHIRE		7	127	0.20	2.16	6.30	
20181115	164614.4	56.42	-5.61	177.3	730.8	2.0	0.8	MULL,ARGYLL & BUTE		5	167	0.40	8.42	6.40	
20181119	052344.1	54.56	-1.89	407.0	518.5	11.9	1.7	BARNARD CASTLE,DURHAM		17	95	0.40	3.45	3.40	
20181120	224458.5	56.15	-4.99	214.5	699.4	2.5	0.9	STRACHUR,ARGYLL & BUTE		8	119	0.50	7.00	8.00	
20181121	203647.2	55.75	-5.47	182.1	655.9	7.7	0.5	CLACHAN,ARGYLL & BUTE		5	156	0.30	4.47	0.00	
20181122	020302.7	53.21	-0.44	503.9	369.2	9.4	0.9	HEIGHINGTON,LINCS		6	111	0.30	3.18	0.00	
20181122	084346.2	54.77	-2.61	361.0	542.0	10.8	0.8	RENWICK,CUMBRIA		8	113	0.20	1.84	2.90	
20181122	180502.8	54.25	-0.23	515.3	485.3	1.0	2.1	FILEY,NORTH YORKSHIRE		23	241	0.30	5.96	3.80	OFFSHORE FILEY
20181124	131527.6	53.74	-3.28	315.5	428.4	13.4	0.9	IRISH SEA		11	65	0.20	1.80	1.80	16KM WSW BLACKPOOL
20181125	192919.5	56.52	-4.37	254.5	739.2	3.7	0.5	KILLIN,STIRLING		6	109	0.20	2.78	4.10	6KM NNW KILLIN
20181125	201423.5	56.19	-5.16	204.2	703.8	3.5	1.0	INVERARAY,ARGYLL/BUTE		6	92	0.40	7.05	6.80	7KM SW INVERARAY
20181126	140601.8	51.02	-4.64	214.6	127.9	31.2	1.3	OFF HARTLAND PT,DEVON		7	152	0.20	3.36	1.50	7KM OFFSHORE
20181203	201353.7	52.90	-1.27	449.1	334.3	5.7	0.8	LONG EATON,DERBYSHIRE		6	143	0.20	4.88	5.80	

TABLE 1 : CATALOGUE OF EVENTS : 2018

YearMoDy	HrMnSecs	Lat	Lon	kmE	kmN	Dep	Mag	Locality	Int	No	Gap	RMS	ERH	ERZ	Comments
20181205	191432.6	51.93	-0.69	490.1	226.9	6.2	1.5	SOULBURY,BUCKS		9	128	0.20	1.98	4.30	
20181205	194531.8	51.94	-0.69	489.9	227.8	5.8	1.0	SOULBURY,BUCKS		7	193	0.30	3.06	0.00	
20181209	055915.4	55.25	-3.53	302.6	596.2	2.4	0.7	JOHNSTONEBRIDGE,D & G		9	82	0.50	5.66	6.30	
20181210	103057.8	53.79	-2.96	336.8	432.9	2.1	-0.3	BLACKPOOL,LANCASHIRE		11	84	0.10	0.54	0.70	IND
20181211	093403.3	53.79	-2.96	336.6	433.0	1.8	-0.2	BLACKPOOL,LANCASHIRE		11	89	0.10	0.45	0.70	IND
20181211	093501.1	53.79	-2.96	336.6	433.0	1.8	-0.1	BLACKPOOL,LANCASHIRE		10	90	0.10	0.45	0.80	IND
20181211	095136.4	53.79	-2.96	336.5	433.1	1.4	-0.4	BLACKPOOL,LANCASHIRE		9	91	0.10	0.45	1.00	IND
20181211	095331.1	53.79	-2.96	336.7	433.0	1.6	0.1	BLACKPOOL,LANCASHIRE		10	86	0.10	0.45	0.90	IND
20181211	100644.6	53.79	-2.96	336.6	432.9	1.9	-0.1	BLACKPOOL,LANCASHIRE		10	87	0.10	0.36	0.50	IND
20181211	101846.4	53.79	-2.96	336.6	433.1	2.3	0.0	BLACKPOOL,LANCASHIRE		9	88	0.10	0.85	1.10	IND
20181211	102027.3	53.79	-2.97	336.2	433.2	0.0	-0.6	BLACKPOOL,LANCASHIRE		8	101	0.20	0.76	0.00	IND
20181211	102426.0	53.79	-2.96	336.6	433.1	1.8	-0.5	BLACKPOOL,LANCASHIRE		10	88	0.10	0.45	0.80	IND
20181211	103435.3	53.79	-2.96	336.6	433.1	1.7	0.0	BLACKPOOL,LANCASHIRE		9	89	0.10	0.36	0.70	IND
20181211	112115.2	53.79	-2.96	336.8	433.0	1.8	1.5	BLACKPOOL,LANCASHIRE	2	15	83	0.10	0.45	0.90	IND,FELT BLACKPOOL
20181212	164546.7	51.92	-4.45	231.8	227.9	6.4	1.4	PEN-Y-BONT,CARMARTHS		8	108	0.30	4.83	7.90	
20181213	132516.7	53.79	-2.96	336.7	433.0	2.1	0.0	BLACKPOOL,LANCASHIRE		11	86	0.10	0.58	0.90	IND
20181214	052617.3	52.99	-3.57	294.4	344.5	10.9	0.3	LLANGWM,CONWY		4	172	0.00	0.71	0.50	
20181214	130550.3	53.79	-2.96	336.6	433.0	1.8	-0.6	BLACKPOOL,LANCASHIRE		10	89	0.10	0.45	0.70	IND
20181214	130605.3	53.79	-2.96	336.6	433.0	1.7	-0.2	BLACKPOOL,LANCASHIRE		10	88	0.10	0.45	0.80	IND
20181214	130636.8	53.79	-2.96	336.6	433.0	1.8	-0.7	BLACKPOOL,LANCASHIRE		10	87	0.10	0.54	0.70	IND
20181214	130951.4	53.79	-2.96	336.8	433.0	1.7	0.1	BLACKPOOL,LANCASHIRE		11	84	0.10	0.45	1.00	IND
20181214	131830.3	53.79	-2.96	336.6	433.0	1.8	-0.1	BLACKPOOL,LANCASHIRE		10	88	0.10	0.45	0.90	IND
20181214	133442.2	53.79	-2.96	336.6	433.0	1.8	-0.4	BLACKPOOL,LANCASHIRE		9	94	0.10	0.45	0.90	IND
20181214	133550.1	53.79	-2.96	336.6	433.1	1.9	-0.5	BLACKPOOL,LANCASHIRE		8	97	0.10	0.36	0.60	IND
20181214	134105.5	53.79	-2.96	336.8	433.0	2.2	0.9	BLACKPOOL,LANCASHIRE		12	82	0.10	0.45	0.70	IND
20181214	145156.5	53.79	-2.96	336.7	433.0	2.1	0.1	BLACKPOOL,LANCASHIRE		11	85	0.10	0.54	0.80	IND
20181216	202300.0	52.95	-4.56	228.2	341.9	10.1	0.6	LLEYN PENINSULA		8	178	0.10	1.25	1.50	
20181219	154754.9	52.96	-4.39	239.6	343.3	20.3	1.0	LLEYN PENINSULA		8	159	0.10	1.66	3.50	
20181222	171337.3	56.70	-5.89	162.2	763.7	7.7	0.7	LAGA,HIGHLAND		5	192	0.20	7.77	0.10	
20181224	133618.4	51.89	-1.07	463.7	221.3	14.1	0.8	BICESTER,OXFORDSHIRE		5	271	0.20	5.52	3.80	
20181226	130601.2	54.93	-1.35	441.5	559.9	8.2	1.6	SEABURN,TYNE & WEAR		15	216	0.30	7.51	5.90	

TABLE 2 : PHASE DATA

January 1 2018 Time: 07:49 58.9 UTC Magnitude: 1.2 ML
Lat: 56.286N Lon: -3.764W Depth: 8.1 km
Grid Ref: 290.81 kmE 711.78 kmN RMS: 0.20 secs
Locality: BLACKFORD,PERTH/KINROSS
Velocity model: Lownet Xnear: 75.0 Xfar: 150.0

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES
INVG	HZ	23.4	IP		C	07:50	03.53			0.10
INVG	HN	23.4	ES			07:50	06.75			0.02
INVG	HE	23.4	IAML			07:50	07.15	17	0.10	
INVG	HN	23.4	IAML			07:50	07.18	15	0.08	
EDI	HZ	54.0	EP			07:50	08.13			-0.03
EDI	HE	54.0	ES			07:50	14.78			-0.13
EDI	HN	54.0	IAML			07:50	14.96	7	0.20	
EDI	HE	54.0	IAML			07:50	15.06	14	0.27	
PGB1	HZ	69.3	EP			07:50	10.39			-0.15
PGB1	HE	69.3	ES			07:50	18.89			-0.14
PGB1	HE	69.3	IAML			07:50	21.63	10	0.30	
PGB1	HN	69.3	IAML			07:50	23.34	6	0.24	
LAWE	HZ	101.0	EP			07:50	15.72			0.23
LAWE	HN	101.0	ES			07:50	27.70			0.10
LAWE	HE	101.0	IAML			07:50	30.64	17	0.12	
LAWE	HN	101.0	IAML			07:50	30.94	17	0.11	
DRUM	HZ	105.0	EP			07:50	16.30			0.23
DRUM	HE	105.0	ES			07:50	28.32			-0.27
DRUM	HE	105.0	IAML			07:50	30.60	23	0.26	
DRUM	HN	105.0	IAML			07:50	33.56	18	0.10	
ESK	HZ	114.0	EP			07:50	18.23			0.82
ESK	HN	114.0	IAML			07:50	34.16	5	0.24	
ESK	HE	114.0	IAML			07:50	35.11	6	0.27	
NEWG	HZ	133.0	EP			07:50	20.74			0.43
NEWG	HN	133.0	IAML			07:50	38.89	4	0.14	
NEWG	HE	133.0	IAML			07:50	39.69	6	0.22	

January 6 2018 Time: 19:22 48.5 UTC Magnitude: 1.0 ML
Lat: 51.677N Lon: -2.957W Depth: 5.9 km
Grid Ref: 333.84 kmE 198.07 kmN RMS: 0.30 secs
Locality: LLANGYBI,MONMOUTHSHIRE
Velocity model: Lownet Xnear: 100.0 Xfar: 200.0

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES
OLDB	HZ	28.2	EP			19:22	53.81			0.01
OLDB	HE	28.2	ES			19:22	57.73			0.07
MCH1	HZ	35.8	EP			19:22	55.27			0.22
MCH1	HE	35.8	ES			19:23	00.25			0.42
MCH1	HN	35.8	IAML			19:23	00.40	37	0.14	
MCH1	HE	35.8	IAML			19:23	00.44	27	0.12	
STRD	HZ	56.0	EP			19:22	58.00			-0.19
STRD	HE	56.0	ES			19:23	04.97			-0.28
STRD	HE	56.0	IAML			19:23	05.16	20	0.22	
STRD	HN	56.0	IAML			19:23	05.35	22	0.18	
HLM1	HZ	93.8	EP			19:23	04.06			-0.03
HLM1	HE	93.8	ES			19:23	15.08			-0.38
HLM1	HE	93.8	IAML			19:23	15.77	6	0.16	
HLM1	HN	93.8	IAML			19:23	18.12	6	0.12	
WOL	BN	127.0	ES			19:23	24.98			0.70
HTL	HZ	131.0	EP			19:23	09.82			0.12
HTL	HE	131.0	ES			19:23	24.84			-0.33
LLW	BE	139.0	ES			19:23	27.31			0.05
LLW	BN	139.0	IAML			19:23	27.69	1	0.17	
LLW	BE	139.0	IAML			19:23	27.87	2	0.28	
CWF	HE	163.0	EP			19:23	13.45			-0.93
CWF	HN	163.0	IAML			19:23	33.15	2	0.14	
CWF	HZ	163.0	IAML			19:23	33.34	2	0.35	

January 9 2018 Time: 22:43 29.9 UTC Magnitude: 1.0 ML
Lat: 53.091N Lon: 0.051W Depth: 3.2 km
Grid Ref: 537.33 kmE 356.86 kmN RMS: 0.20 secs
Locality: STICKNEY,LINCOLNSHIRE
Velocity model: Lownet Xnear: 100.0 Xfar: 200.0

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES
LMK	HZ	47.8	EP			22:43	38.77			0.07
LMK	HN	47.8	ES			22:43	45.13			-0.02
LMK	HN	47.8	IAML			22:43	45.54	17	0.36	
LMK	HE	47.8	IAML			22:43	45.93	15	0.35	
WACR	HZ	56.3	EP			22:43	39.84			-0.21
WACR	HE	56.3	ES			22:43	47.36			-0.13
WACR	HN	56.3	IAML			22:43	47.53	3	0.20	
WACR	HE	56.3	IAML			22:43	47.58	4	0.09	
CWF	HZ	99.5	EP			22:43	46.89			0.13
CWF	HE	99.5	ES			22:43	58.94			-0.16
CWF	HN	99.5	IAML			22:43	59.73	2	0.15	
CWF	HE	99.5	IAML			22:43	59.98	3	0.09	
LBWR	HE	123.0	ES			22:44	05.64			0.06
LBWR	HN	123.0	IAML			22:44	06.34	9	0.34	
LBWR	HE	123.0	IAML			22:44	06.83	10	0.42	
ELMS	HE	128.0	ES			22:44	07.23			0.53
ELMS	HN	128.0	IAML			22:44	07.24	5	0.33	
ELMS	HE	128.0	IAML			22:44	07.53	8	0.21	

January 10 2018 Time: 21:23 18.2 UTC Magnitude: 0.5 ML
Lat: 57.733N Lon: -5.274W Depth: 9.2 km
Grid Ref: 205.10 kmE 876.15 kmN RMS: 0.30 secs
Locality: DUNDONNELL,HIGHLAND
Velocity model: Lownet Xnear: 100.0 Xfar: 200.0

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES
LINV	HZ	46.3	EP			21:23	26.30			0.06
LINV	HN	46.3	ES			21:23	31.87			-0.24
LINV	HN	46.3	IAML			21:23	32.22	2	0.11	
LINV	HE	46.3	IAML			21:23	32.32	5	0.26	
KPL	HZ	49.4	EP			21:23	26.90			0.18
KPL	HE	49.4	ES			21:23	32.59			-0.34
KPL	HN	49.4	IAML			21:23	32.87	3	0.34	
KPL	HE	49.4	IAML			21:23	32.88	5	0.34	
LEWI	HE	105.0	EP			21:23	35.77			0.39
LEWI	HZ	105.0	ES			21:23	47.76			-0.15
LEWI	HZ	105.0	IAML			21:23	48.03	2	0.40	
LEWI	HN	105.0	IAML			21:23	48.89	2	0.25	
BIGH	HZ	117.0	EP			21:23	37.76			0.62
BIGH	HE	117.0	ES			21:23	50.54			-0.43

January 11 2018 Time: 17:32 09.8 UTC Magnitude: 0.9 ML
Lat: 52.106N Lon: -4.237W Depth: 13.4 km
Grid Ref: 246.82 kmE 247.70 kmN RMS: 0.30 secs
Locality: LLANWENOG,CEREDIGION
Velocity model: Lownet Xnear: 500.0 Xfar: 1000.0

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES
MCH1	HZ	85.8	EP			17:32	23.54			-0.24
MCH1	HN	85.8	ES			17:32	33.92			-0.09
MCH1	HE	85.8	IAML			17:32	33.97	6	0.20	
MCH1	HN	85.8	IAML			17:32	34.05	9	0.12	
LLW	BZ	91.3	EP			17:32	24.34			-0.21
LLW	BN	91.3	ES			17:32	34.91			-0.44
LLW	BE	91.3	IAML			17:32	36.99	1	0.25	
LLW	BN	91.3	IAML			17:32	38.45	2	0.25	
MONM	HN	103.0	ES			17:32	37.95			-0.24
MONM	HE	103.0	IAML			17:32	42.29	4	0.22	
MONM	HN	103.0	IAML			17:32	42.29	3	0.14	
HLM1	HZ	103.0	EP			17:32	26.54			0.23
HLM1	HE	103.0	ES			17:32	38.90			0.52
HLM1	HE	103.0	IAML			17:32	40.97	3	0.20	
HLM1	HN	103.0	IAML			17:32	41.51	4	0.18	
FOEL	HZ	112.0	EP			17:32	27.92			0.35
HTL	HZ	125.0	EP			17:32	29.19			-0.14
HTL	HE	125.0	ES			17:32	43.80			0.18
HTL	HN	125.0	IAML			17:32	44.78	6	0.24	
HTL	HE	125.0	IAML			17:32	44.90	4	0.08	
WLF1	HE	132.0	ES			17:32	45.45			0.07
WLF1	HN	132.0	IAML			17:32	47.24	4	0.10	
WLF1	HE	132.0	IAML			17:32	47.39	6	0.13	

January 16 2018 Time: 16:13 12.8 UTC Magnitude: 0.6 ML
Lat: 57.011N Lon: -4.651W Depth: 4.5 km
Grid Ref: 239.04 kmE 794.20 kmN RMS: 0.30 secs
Locality: INVERGARRY,HIGHLAND
Velocity model: Lownet Xnear: 500.0 Xfar: 1000.0
Comment: 11KM SE INVERGARRY

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES
KPL	HZ	70.8	EP			16:13	24.95			0.09
KPL	HN	70.8	ES			16:13	33.39			-0.25
KPL	HN	70.8	IAML			16:13	34.80	3	0.41	
KPL	HE	70.8	IAML			16:13	36.53	4	0.75	
INVG	HZ	74.8	EP			16:13	25.64			0.10
INVG	HE	74.8	ES			16:13	34.30			-0.52
INVG	HE	74.8	IAML			16:13	38.44	2	0.19	
INVG	HN	74.8	IAML			16:13	39.02	6	0.42	
LAWE	HN	95.4	ES			16:13	40.60			0.33
LAWE	HE	95.4	IAML			16:13	42.27	3	0.56	
LAWE	HN	95.4	IAML			16:13	43.75	2	0.16	
DRUM	HE	132.0	ES			16:13	50.34			0.25

January 18 2018 Time: 10:04 06.9 UTC Magnitude: 0.6 ML
Lat: 56.430N Lon: -4.000W Depth: 7.7 km
Grid Ref: 276.67 kmE 728.20 kmN RMS: 0.10 secs
Locality: COMRIE,PERTH & KINROSS
Velocity model: Lownet Xnear: 500.0 Xfar: 1000.0

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES
INVG	HZ	2.7	EP			10:04	08.64			0.10
INVG	HE	2.7	ES			10:04	09.69			-0.06
INVG	HE	2.7	IAML			10:04	09.75	97	0.10	
INVG	HN	2.7	IAML			10:04	09.79	116	0.05	
LAWE	HZ	88.5	EP			10:04	21.36			-0.12
LAWE	HN	88.5	ES			10:04	32.21			0.08
LAWE	HN	88.5	IAML			10:04	35.03	2	0.28	
LAWE	HE	88.5	IAML			10:04	35.10	1	0.31	
ESK	HN	134.0	ES			10:04	44.04			0.02
NEWG	HN	147.0	ES			10:04	47.24			-0.02

January 18 2018 Time: 16:15 46.3 UTC Magnitude: 1.7 ML
Lat: 49.932N Lon: -4.366W Depth: 7.8 km
Grid Ref: 230.22 kmE 6.29 kmN RMS: 0.30 secs
Locality: ENGLISH CHANNEL
Velocity model: Lownet Xnear: 500.0 Xfar: 1000.0
Comment: 55KM ESE FALMOUTH

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES
DYA	HZ	64.0	IP		C	16:15	57.24			0.08
DYA	HN	64.0	ES			16:16	04.78			-0.27
DYA	HE	64.0	IAML			16:16	05.19	32	0.10	
DYA	HN	64.0	IAML			16:16	05.45	17	0.17	
CCA1	HZ	67.9	EP			16:15	57.58			-0.17

TABLE 2 : PHASE DATA

CCA1	HN	67.9	ES	16:16	06.10			0.03
CCA1	HN	67.9	IAML	16:16	09.49	33	0.08	
CCA1	HE	67.9	IAML	16:16	10.17	24	0.08	
SBD	BZ	74.0	EP	16:15	58.89			0.19
SBD	BE	74.0	ES	16:16	07.35			-0.37
SBD	BE	74.0	IAML	16:16	10.55	84	0.16	
SBD	BN	74.0	IAML	16:16	10.68	60	0.10	
HTL	HN	118.0	ES	16:16	20.09			0.50
HTL	HE	118.0	IAML	16:16	21.43	25	0.24	
HTL	HN	118.0	IAML	16:16	21.75	32	0.26	

January 21 2018 Time: 15:00 31.0 UTC Magnitude: 0.2 ML
Lat: 53.372N Lon: -4.462W Depth: 6.6 km
Grid Ref: 236.23 kmE 388.98 kmN RMS: 0.10 secs
Locality: LLANFECHELL,ANGLESEY
Velocity model: Lleyn Xnear: 80.0 Xfar: 200.0

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES
WPS	HZ	4.0	IP		D	15:00	32.24			-0.10
WPS	HE	4.0	ES			15:00	33.32			0.08
WPS	HE	4.0	IAML			15:00	33.36	47	0.10	
WPS	HN	4.0	IAML			15:00	33.45	15	0.21	
WLF1	HZ	10.1	IP		C	15:00	33.01			-0.07
WLF1	HE	10.1	ES			15:00	34.51			0.02
WLF1	HE	10.1	IAML			15:00	34.60	26	0.10	
WLF1	HN	10.1	IAML			15:00	34.82	13	0.12	
YRC	EZ	15.4	EP			15:00	33.79			-0.07
YRC	EZ	15.4	ES			15:00	35.88			0.07
FOEL	HZ	100.0	EP			15:00	47.77			0.07
KESW	HZ	162.0	EP			15:00	57.23			0.22

January 27 2018 Time: 21:11 53.3 UTC Magnitude: 1.2 ML
Lat: 56.396N Lon: -5.719W Depth: 6.8 km
Grid Ref: 170.52 kmE 728.83 kmN RMS: 0.30 secs
Locality: MULL,ARGYLL & BUTE
Velocity model: Lownet Xnear: 500.0 Xfar: 1000.0
Comment: FELT CROGGAN Intensity: 2

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES
LAWE	HZ	24.9	IP		C	21:11	58.15			0.13
LAWE	HE	24.9	ES			21:12	01.13			-0.34
LAWE	HE	24.9	IAML			21:12	01.85	34	0.22	
LAWE	HN	24.9	IAML			21:12	01.87	34	0.25	
PGB1	HZ	101.0	EP			21:12	10.45			0.49
PGB1	HN	101.0	ES			21:12	22.50			0.36
PGB1	HN	101.0	IAML			21:12	23.67	9	0.20	
PGB1	HE	101.0	IAML			21:12	24.70	7	0.23	
INVG	HZ	103.0	EP			21:12	10.37			-0.04
INVG	HN	103.0	ES			21:12	22.62			-0.29
INVG	HN	103.0	IAML			21:12	23.95	7	0.08	
INVG	HE	103.0	IAML			21:12	25.16	7	0.10	
KPL	HZ	105.0	EP			21:12	10.59			-0.02
KPL	HE	105.0	ES			21:12	23.26			0.00
KPL	HE	105.0	IAML			21:12	24.78	13	0.14	
KPL	HN	105.0	IAML			21:12	25.25	8	0.18	
CLGH	HN	148.0	ES			21:12	34.20			-0.29

January 28 2018 Time: 17:10 35.7 UTC Magnitude: 1.6 ML
Lat: 56.404N Lon: -5.671W Depth: 6.1 km
Grid Ref: 173.52 kmE 729.56 kmN RMS: 0.10 secs
Locality: MULL,ARGYLL & BUTE
Velocity model: Lownet Xnear: 500.0 Xfar: 1000.0
Comment: FELT CROGGAN Intensity: 2

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES
LAWE	HZ	23.2	IP		C	17:10	40.30			-0.09
LAWE	HN	23.2	ES			17:10	43.84			0.01
LAWE	HE	23.2	IAML			17:10	44.15	149	0.22	
LAWE	HN	23.2	IAML			17:10	44.19	184	0.14	
PGB1	HZ	99.0	EP			17:10	52.11			0.30
PGB1	HE	99.0	ES			17:11	03.44			-0.15
PGB1	HN	99.0	IAML			17:11	05.47	13	0.15	
PGB1	HE	99.0	IAML			17:11	06.26	10	0.30	
INVG	HZ	100.0	EP			17:10	52.10			0.07
INVG	HN	100.0	ES			17:11	03.93			-0.04
INVG	HN	100.0	IAML			17:11	05.57	18	0.12	
INVG	HE	100.0	IAML			17:11	06.36	14	0.08	
KPL	HZ	104.0	EP			17:10	52.41			-0.09
KPL	HE	104.0	ES			17:11	04.80			0.01
KPL	HE	104.0	IAML			17:11	05.02	31	0.28	
KPL	HN	104.0	IAML			17:11	06.47	16	0.30	
CLGH	HN	150.0	ES			17:11	16.07			-0.03

January 29 2018 Time: 23:35 57.7 UTC Magnitude: 1.0 ML
Lat: 54.112N Lon: -3.387W Depth: 4.2 km
Grid Ref: 309.34 kmE 469.37 kmN RMS: 0.20 secs
Locality: WALNEY ISLAND,CUMBRIA
Velocity model: Lownet Xnear: 100.0 Xfar: 200.0
Comment: OFFSHORE LOCATION

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES
KESW	HZ	56.1	EP			23:36	07.27			-0.31
IOMK	HZ	78.7	EP			23:36	11.48			0.42
IOMK	HN	78.7	ES			23:36	20.61			-0.16
IOMK	HN	78.7	IAML			23:36	22.70	6	0.11	
IOMK	HE	78.7	IAML			23:36	22.74	7	0.12	
WPS	HZ	108.0	EP			23:36	15.46			-0.09
WPS	HE	108.0	ES			23:36	28.57			0.02
WPS	HE	108.0	IAML			23:36	30.68	4	0.93	
WPS	HN	108.0	IAML			23:36	32.40	4	0.92	
WLF1	HZ	113.0	EP			23:36	16.22			-0.17
WLF1	HE	113.0	ES			23:36	30.13			0.14
GAL1	HZ	120.0	EP			23:36	17.52			0.07
GAL1	HN	120.0	ES			23:36	31.78			-0.06
EDMD	HZ	122.0	EP			23:36	17.82			0.05
EDMD	HN	122.0	ES			23:36	32.52			0.13
EDMD	HN	122.0	IAML			23:36	33.72	5	0.14	
EDMD	HE	122.0	IAML			23:36	34.42	6	0.24	
NEWG	HZ	124.0	EP			23:36	18.08			-0.06
YRC	EZ	124.0	EP			23:36	17.82			-0.21
ESK	HZ	135.0	EP			23:36	20.20			0.52
ESK	HE	135.0	ES			23:36	35.54			-0.14
ESK	HE	135.0	IAML			23:36	36.90	3	0.27	
ESK	HN	135.0	IAML			23:36	37.37	2	0.20	

February 5 2018 Time: 00:59 24.4 UTC Magnitude: 1.0 ML
Lat: 55.130N Lon: -4.117W Depth: 5.1 km
Grid Ref: 265.04 kmE 583.79 kmN RMS: 0.40 secs
Locality: DALRY,D & G
Velocity model: Lownet Xnear: 100.0 Xfar: 200.0

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES
NEWG	HZ	7.3	IP		C	00:59	26.34			0.07
NEWG	HN	7.3	ES			00:59	27.47			-0.14
NEWG	HE	7.3	IAML			00:59	27.72	91	0.10	
NEWG	HN	7.3	IAML			00:59	27.79	190	0.10	
GAL1	HZ	48.0	IP		C	00:59	32.80			-0.11
GAL1	HE	48.0	ES			00:59	38.50			-0.60
GAL1	HN	48.0	IAML			00:59	39.28	6	0.22	
GAL1	HE	48.0	IAML			00:59	39.67	4	0.07	
ESK	HZ	61.7	IP		C	00:59	34.41			-0.64
ESK	HN	61.7	ES			00:59	41.90			-0.91
ESK	HE	61.7	IAML			00:59	42.93	4	0.24	
ESK	HN	61.7	IAML			00:59	42.96	6	0.18	
PGB1	HZ	79.4	EP			00:59	38.09			0.30
PGB1	HE	79.4	ES			00:59	47.75			0.22
PGB1	HE	79.4	IAML			00:59	50.73	4	0.14	
PGB1	HN	79.4	IAML			00:59	51.39	5	0.14	
KESW	HZ	88.6	EP			00:59	39.58			0.34
KESW	HN	88.6	ES			00:59	50.60			0.55
KESW	HN	88.6	IAML			00:59	52.70	4	0.10	
KESW	HE	88.6	IAML			00:59	52.84	5	0.28	
IOMK	HZ	101.0	EP			00:59	41.57			0.43
IOMK	HN	101.0	IAML			00:59	54.05	13	0.12	
IOMK	HE	101.0	IAML			00:59	55.21	10	0.11	
EDI	HZ	106.0	EP			00:59	41.86			-0.05
EDI	HN	106.0	ES			00:59	55.15			0.47
EDI	HN	106.0	IAML			00:59	56.07	4	0.28	
EDI	HE	106.0	IAML			00:59	57.45	5	0.22	
CLGH	HN	127.0	ES			01:00	00.32			-0.09
CLGH	HE	127.0	IAML			01:00	02.93	6	0.20	
CLGH	HN	127.0	IAML			01:00	04.82	6	0.18	
INVG	HZ	145.0	EP			00:59	47.80			0.09
INVG	HE	145.0	ES			01:00	04.59			-0.11
INVG	HE	145.0	IAML			01:00	05.58	3	0.20	
INVG	HN	145.0	IAML			01:00	07.53	4	0.37	
LAWE	HZ	149.0	EP			00:59	49.02			0.64
LAWE	HE	149.0	IAML			01:00	08.79	4	0.36	
LAWE	HN	149.0	IAML			01:00	09.91	3	0.24	

February 5 2018 Time: 15:32 47.0 UTC Magnitude: 1.8 ML
Lat: 57.064N Lon: -5.744W Depth: 7.5 km
Grid Ref: 173.04 kmE 803.20 kmN RMS: 0.60 secs
Locality: KNOYDART,HIGHLAND
Velocity model: Lownet Xnear: 150.0 Xfar: 300.0
Comment: 5KM NW INVERIE

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES
LAWE	HZ	91.9	IP		D	15:33	02.55			0.39
LAWE	HE	91.9	ES			15:33	13.03			-0.17
LAWE	HN	91.9	IAML			15:33	16.12	49	0.20	
LAWE	HE	91.9	IAML			15:33	16.29	34	0.12	
LINV	HZ	125.0	EP			15:33	06.97			-0.28
INVG	HZ	126.0	EP			15:33	07.56			0.15
INVG	HN	126.0	ES			15:33	21.93			-0.36
INVG	HE	126.0	IAML			15:33	23.61	16	0.24	
INVG	HN	126.0	IAML			15:33	23.77	17	0.11	
LEWI	HZ	138.0	EP			15:33	08.88			-0.26
LEWI	HN	138.0	ES			15:33	24.90			-0.38
LEWI	HN	138.0	IAML			15:33	25.67	16	0.16	
LEWI	HE	138.0	IAML			15:33	25.68	29	0.16	
MCD	HZ	161.0	EP			15:33	12.86			0.46
MCD	HE	161.0	ES			15:33	30.03			-0.89
MCD	HN	161.0	IAML			15:33	31.67	15	0.30	
MCD	HE	161.0	IAML			15:33	32.56	14	0.13	
BIGH	HN	193.0	ES			15:33	39.33			1.33
BIGH	HE	193.0	IAML			15:33	41.91	9	0.28	
BIGH	HN	193.0	IAML			15:33	41.99	10	0.20	
BIGH	HZ	193.0	EP			15:33	17.70			1.21

February 10 2018 Time: 12:28 16.6 UTC Magnitude: 1.5 ML
Lat: 52.403N Lon: -2.880W Depth: 8.2 km
Grid Ref: 340.14 kmE 278.74 kmN RMS: 0.30 secs
Locality: CLUNGUNFORD,SALOP

TABLE 2 : PHASE DATA

Velocity model: Lownet Xnear: 100.0 Xfar: 200.0

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES
MCH1	HZ	45.8	IP		C	12:28	24.38			-0.17
MCH1	HN	45.8	ES			12:28	30.14			-0.24
MCH1	HE	45.8	IAML			12:28	30.32	36	0.17	
MCH1	HN	45.8	IAML			12:28	30.59	41	0.08	
FOEL	HZ	58.3	IP		D	12:28	26.52			0.00
FOEL	HN	58.3	ES			12:28	33.61			-0.19
FOEL	HN	58.3	IAML			12:28	34.09	40	0.33	
FOEL	HE	58.3	IAML			12:28	35.08	22	0.33	
MONM	HZ	62.9	EP			12:28	27.50			0.31
MONM	HE	62.9	ES			12:28	35.10			0.16
MONM	HE	62.9	IAML			12:28	35.29	37	0.32	
MONM	HN	62.9	IAML			12:28	35.94	24	0.36	
LLW	BZ	72.7	EP			12:28	28.80			0.10
STRD	HZ	85.4	EP			12:28	31.02			0.35
STRD	HE	85.4	ES			12:28	40.88			-0.10
STRD	HE	85.4	IAML			12:28	42.53	32	0.09	
STRD	HN	85.4	IAML			12:28	42.60	35	0.11	
CWF	HZ	113.0	EP			12:28	34.74			-0.21
SWN1	HZ	124.0	EP			12:28	35.98			-0.60
LBWR	HZ	136.0	EP			12:28	38.79			0.48
RSBS	HZ	137.0	EP			12:28	38.53			0.04
WLF1	HZ	142.0	EP			12:28	39.40			0.24

February 16 2018 Time: 06:48 57.1 UTC Magnitude: 2.2 ML
Lat: 53.847N Lon: -3.657W Depth: 3.5 km
Grid Ref: 291.00 kmE 440.27 kmN RMS: 0.30 secs
Locality: IRISH SEA
Velocity model: Lownet Xnear: 150.0 Xfar: 300.0

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES
AQ04	HZ	46.0	EP			06:49	05.48			0.09
AQ04	HN	46.0	ES			06:49	11.34			-0.08
AQ04	HN	46.0	IAML			06:49	13.47	316	0.18	
AQ04	HE	46.0	IAML			06:49	16.55	201	0.28	
AQ09	HZ	49.6	EP			06:49	05.88			-0.13
AQ09	HN	49.6	ES			06:49	11.94			-0.55
AQ09	HN	49.6	IAML			06:49	16.23	506	0.40	
AQ09	HE	49.6	IAML			06:49	19.24	522	0.30	
AQ03	HZ	51.6	EP			06:49	06.13			-0.18
AQ03	HE	51.6	ES			06:49	13.01			-0.01
AQ03	HE	51.6	IAML			06:49	13.87	334	0.16	
AQ03	HN	51.6	IAML			06:49	15.38	433	0.22	
AQ02	HZ	53.1	EP			06:49	06.67			0.13
AQ02	HE	53.1	ES			06:49	13.65			0.23
AQ02	HN	53.1	IAML			06:49	20.87	348	0.56	
AQ02	HE	53.1	IAML			06:49	21.37	211	0.40	
AQ10	HZ	55.1	EP			06:49	06.62			-0.24
AQ10	HN	55.1	ES			06:49	13.57			-0.39
AQ10	HE	55.1	IAML			06:49	17.16	280	0.40	
AQ10	HN	55.1	IAML			06:49	19.39	335	0.34	
AQ01	HZ	62.9	EP			06:49	08.17			0.11
AQ01	HE	62.9	IAML			06:49	19.63	262	0.42	
AQ01	HN	62.9	IAML			06:49	20.01	407	0.34	
AQ07	HZ	65.2	EP			06:49	08.52			0.08
AQ07	HE	65.2	IAML			06:49	22.93	256	0.36	
AQ07	HN	65.2	IAML			06:49	26.52	261	0.44	
WPS	HZ	74.6	IP		D	06:49	09.42			-0.47
WPS	HE	74.6	ES			06:49	19.45			0.24
WPS	HN	74.6	IAML			06:49	21.85	29	0.27	
WPS	HE	74.6	IAML			06:49	23.19	26	0.32	
IOMK	HZ	75.3	EP			06:49	10.18			0.16
IOMK	HE	75.3	ES			06:49	19.33			-0.10
IOMK	HE	75.3	IAML			06:49	22.97	127	0.31	
IOMK	HN	75.3	IAML			06:49	23.21	138	0.19	
WLF1	HZ	79.1	IP		C	06:49	09.97			-0.61
WLF1	HE	79.1	IAML			06:49	21.09	88	0.25	
WLF1	HN	79.1	IAML			06:49	21.94	53	0.31	
AR01	HZ	88.0	EP			06:49	12.39			0.39
KESW	HZ	90.0	EP			06:49	12.69			0.36
KESW	HN	90.0	ES			06:49	23.52			0.09
KESW	HE	90.0	IAML			06:49	28.32	59	0.26	
KESW	HN	90.0	IAML			06:49	29.75	42	0.29	
YRC	EZ	90.0	EP			06:49	11.83			-0.45
FOEL	HZ	111.0	EP			06:49	15.91			0.33
GAL1	HZ	133.0	EP			06:49	19.32			0.43
LBWR	HZ	137.0	EP			06:49	20.12			0.53
NEWG	HZ	146.0	EP			06:49	20.59			-0.25
EDMD	HZ	155.0	EP			06:49	21.94			-0.19
HLM1	HZ	157.0	EP			06:49	22.65			0.25
ESK	HZ	166.0	EP			06:49	23.76			0.04
MCH1	HZ	211.0	EP			06:49	30.17			0.79
MCH1	HN	211.0	IAML			06:49	55.25	20	0.48	
MCH1	HE	211.0	IAML			06:49	56.14	27	0.30	
RSBS	HZ	223.0	EP			06:49	30.91			-0.06
MONM	HZ	231.0	EP			06:49	31.48			-0.40
MONM	HN	231.0	IAML			06:50	03.42	26	0.36	
MONM	HE	231.0	IAML			06:50	07.51	28	0.42	

February 16 2018 Time: 22:21 06.3 UTC Magnitude: 0.7 ML
Lat: 51.774N Lon: -4.158W Depth: 7.8 km
Grid Ref: 251.13 kmE 210.62 kmN RMS: 0.20 secs
Locality: PONTYBEREM,CARMARTHS
Velocity model: Mid Wales Xnear: 80.0 Xfar: 200.0

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES
RSBS	HZ	45.0	EP			22:21	14.24			0.08
RSBS	HN	45.0	ES			22:21	19.69			-0.10
RSBS	HN	45.0	IAML			22:21	19.81	7	0.18	
RSBS	HE	45.0	IAML			22:21	20.12	5	0.11	
MCH1	HZ	83.6	EP			22:21	20.40			-0.12
MCH1	HE	83.6	ES			22:21	30.45			-0.28
MCH1	HE	83.6	IAML			22:21	31.17	3	0.17	
MCH1	HN	83.6	IAML			22:21	31.79	3	0.19	
HTL	HZ	89.7	EP			22:21	21.68			0.16
HTL	HE	89.7	ES			22:21	32.37			-0.07
HTL	HN	89.7	IAML			22:21	33.17	1	0.15	
HTL	HE	89.7	IAML			22:21	33.56	1	0.21	
MONM	HZ	93.7	EP			22:21	22.31			0.13
MONM	HE	93.7	ES			22:21	33.79			0.22
MONM	HN	93.7	IAML			22:21	34.24	4	0.13	
MONM	HE	93.7	IAML			22:21	34.71	4	0.27	
HLM1	HZ	120.0	EP			22:21	26.38			0.14
HLM1	HE	120.0	ES			22:21	40.73			0.16
HLM1	HE	120.0	IAML			22:21	42.51	2	0.24	
HLM1	HN	120.0	IAML			22:21	42.81	2	0.27	
FOEL	HZ	140.0	EP			22:21	29.32			0.10
DYA	HN	150.0	ES			22:21	47.71			-0.43
DYA	HN	150.0	IAML			22:21	48.06	2	0.20	
DYA	HE	150.0	IAML			22:21	48.31	2	0.21	
WLF1	HE	169.0	ES			22:21	52.26			-0.41

February 17 2018 Time: 14:31 07.6 UTC Magnitude: 4.6 ML
Lat: 51.767N Lon: -3.833W Depth: 7.5 km
Grid Ref: 273.53 kmE 209.23 kmN RMS: 0.50 secs
Locality: CWMLLYNFELL,NPT
Velocity model: Lownet Xnear: 100.0 Xfar: 200.0
Comment: FELT WALES... Intensity: 5

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES
MCH1	HZ	62.9	IP		C	14:31	18.24			-0.03
MCH1	HE	62.9	ES			14:31	25.68			-0.35
MCH1	HN	62.9	IAML			14:31	26.21	13905	0.26	
MCH1	HE	62.9	IAML			14:31	26.43	11537	0.23	
RSBS	HZ	66.1	IP		C	14:31	18.89			0.11
RSBS	HE	66.1	ES			14:31	26.43			-0.49
RSBS	HN	66.1	IAML			14:31	28.49	13237	0.31	
RSBS	HE	66.1	IAML			14:31	29.18	13467	0.34	
MONM	HZ	71.4	IP		C	14:31	19.61			0.04
MONM	HE	71.4	ES			14:31	28.35			0.07
MONM	HE	71.4	IAML			14:31	28.54	18629	0.19	
MONM	HN	71.4	IAML			14:31	31.69	14132	0.51	
OLDB	HZ	89.4	IP		C	14:31	22.41			0.07
OLDB	HN	89.4	ES			14:31	33.10			0.03
OLDB	HE	89.4	IAML			14:31	33.64		0.36	
OLDB	HN	89.4	IAML			14:31	33.70		0.28	
HTL	HZ	97.2	IP		D	14:31	24.52			0.95
HTL	HE	97.2	ES			14:31	34.72			-0.48
HTL	HE	97.2	IAML			14:31	35.79	5040	0.37	
HTL	HN	97.2	IAML			14:31	36.72	7740	0.23	
HLM1	HZ	106.0	IP		C	14:31	24.81			-0.18
HLM1	HN	106.0	ES			14:31	37.45			-0.20
HLM1	HE	106.0	IAML			14:31	39.91	14952	0.34	
HLM1	HN	106.0	IAML			14:31	41.12	13702	0.23	
STRD	HZ	115.0	IP		C	14:31	26.54			0.15
STRD	HE	115.0	ES			14:31	39.74			-0.34
STRD	HE	115.0	IAML			14:31	40.76	32763	0.33	
STRD	HN	115.0	IAML			14:31	42.30	47108	0.39	
FOEL	HZ	132.0	IP		D	14:31	29.46			0.52
FOEL	HE	132.0	ES			14:31	45.15			0.66
FOEL	HN	132.0	IAML			14:31	47.26	12868	0.23	
FOEL	HE	132.0	IAML			14:31	47.28	16253	0.38	
SWN1	HZ	144.0	IP		C	14:31	31.29			0.78
SWN1	HE	144.0	IAML			14:31	50.47	26239	0.29	
SWN1	HN	144.0	IAML			14:31	50.57	34765	0.31	
DYA	HZ	148.0	IP		D	14:31	30.17			-1.06
DYA	HE	148.0	IAML			14:31	48.64	10340	0.20	
DYA	HN	148.0	IAML			14:31	49.25	9540	0.14	
YRC	EZ	173.0	IP		C	14:31	34.81			0.28
WLF1	HZ	174.0	IP		D	14:31	34.46			-0.20
WLF1	HE	174.0	IAML			14:31	56.88	16945	0.35	
WLF1	HN	174.0	IAML			14:31	57.00	7216	0.25	
STNC	HZ	184.0	EP			14:31	36.24			0.21
STNC	HE	184.0	IAML			14:32	01.04	16074	0.24	
STNC	HN	184.0	IAML			14:32	02.92	17874	0.33	
WPS	HZ	187.0	IP		D	14:31	36.55			0.19
WPS	HN	187.0	ES			14:31	59.06			1.73
WPS	HE	187.0	IAML			14:32	02.60	2304	0.25	
WPS	HN	187.0	IAML			14:32	03.38	1902	0.24	
CCA1	HZ	201.0	IP		C	14:31	36.53			-1.62
CCA1	HE	201.0	IAML			14:32	02.66	5760	0.34	
CCA1	HN	201.0	IAML			14:32	02.76	5622	0.36	
CWF	HZ	203.0	IP		C	14:31	37.78			-0.65
LBWR	HZ	231.0	IP		C	14:31	41.97			0.04
IOMK	HZ	282.0	IP		D	14:31	47.80			-0.41
HPK	HZ	286.0	EP			14:31	48.37			-0.32
LMK	HZ	303.0	EP			14:31	50.54			-0.30
JLP	EZ	306.0	EP			14:31	49.20			-2.00
HMNX	HZ	307.0	IP		C	14:31	51.28			-0.09
JSA	HZ	310.0	IP		D	14:31	49.67			-2.06

TABLE 2 : PHASE DATA

JSA	HE	310.0	IAML		14:32	39.72	1183	0.47
JSA	HN	310.0	IAML		14:32	45.08	680	0.29
KESW	HZ	318.0	IP	D	14:31	52.18		-0.55
WACR	HZ	323.0	IP	C	14:31	52.69		-0.61
ELMS	HZ	334.0	EP		14:31	53.71		-0.95
GAL1	HZ	350.0	IP	D	14:31	55.91		-0.79
GAL1	HE	350.0	IAML		14:32	47.07	643	0.29
GAL1	HN	350.0	IAML		14:32	49.17	497	0.47
ELSH	HZ	352.0	IP	C	14:31	56.84		-0.13
GDLE	HZ	358.0	IP	D	14:31	57.51		-0.22
EDMD	HZ	363.0	IP	D	14:31	57.53		-0.80
NEWG	HZ	374.0	IP	D	14:31	59.08		-0.62
ESK	HZ	397.0	EP		14:32	01.66		-1.00
CLGH	HZ	399.0	EP		14:32	02.28		-0.57
PGB1	HZ	452.0	EP		14:32	08.67		-0.85
EDI	HZ	465.0	IP	D	14:32	10.42		-0.62
LAWE	HZ	511.0	EP		14:32	15.97		-0.82
INVG	HZ	519.0	IP	D	14:32	16.42		-1.45
DRUM	HZ	579.0	EP		14:32	24.27		-1.15
KPL	HZ	631.0	IP	C	14:32	30.96		-0.91
MCD	HZ	649.0	EP		14:32	32.77		-1.31
LINV	HZ	716.0	EP		14:32	40.70		-1.72
BIGH	HZ	749.0	EP		14:32	44.88		-1.70

February 17 2018 Time: 14:35 21.0 UTC Magnitude: 1.8 ML
Lat: 51.760N Lon: -3.821W Depth: 7.5 km
Grid Ref: 274.34 kmE 208.43 kmN RMS: 0.30 secs
Locality: CWMLLYNFELL,NPT
Velocity model: Lownet Xnear: 100.0 Xfar: 200.0

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES
MCH1	HZ	62.5	EP			14:35	31.58			-0.02
MCH1	HE	62.5	ES			14:35	38.84			-0.47
MCH1	HE	62.5	IAML			14:35	39.16	53	0.11	
MCH1	HN	62.5	IAML			14:35	39.30	53	0.18	
RSBS	HZ	67.2	EP			14:35	32.23			-0.11
RSBS	HE	67.2	ES			14:35	40.32			-0.28
RSBS	HE	67.2	IAML			14:35	41.28	41	0.09	
RSBS	HN	67.2	IAML			14:35	41.69	38	0.15	
MONM	HZ	70.7	EP			14:35	32.90			0.05
MONM	HE	70.7	ES			14:35	41.25			-0.24
MONM	HE	70.7	IAML			14:35	41.72	57	0.19	
MONM	HN	70.7	IAML			14:35	41.99	64	0.11	
OLDB	HZ	88.5	IP		D	14:35	35.91			0.32
OLDB	HE	88.5	ES			14:35	46.25			0.02
HTL	HE	96.9	ES			14:35	48.59			0.08
HTL	HE	96.9	IAML			14:35	49.42	5	0.17	
HTL	HN	96.9	IAML			14:35	49.95	9	0.15	
HLM1	HZ	106.0	EP			14:35	38.67			0.27
HLM1	HE	106.0	ES			14:35	51.43			0.34
HLM1	HE	106.0	IAML			14:35	53.05	18	0.28	
HLM1	HN	106.0	IAML			14:35	54.63	25	0.07	
STRD	HZ	114.0	EP			14:35	39.88			0.22
STRD	HE	114.0	ES			14:35	52.93			-0.33
STRD	HE	114.0	IAML			14:35	53.77	105	0.16	
STRD	HN	114.0	IAML			14:35	55.46	105	0.38	
FOEL	HZ	133.0	EP			14:35	42.82			0.42

February 17 2018 Time: 14:40 22.6 UTC Magnitude: 0.7 ML
Lat: 51.760N Lon: -3.820W Depth: 7.5 km
Grid Ref: 274.41 kmE 208.43 kmN RMS: 0.20 secs
Locality: CWMLLYNFELL,NPT
Velocity model: Lownet Xnear: 100.0 Xfar: 200.0

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES
MCH1	HZ	62.4	EP			14:40	33.16			-0.02
MCH1	HN	62.4	ES			14:40	40.56			-0.33
MCH1	HE	62.4	IAML			14:40	40.70	5	0.12	
MCH1	HN	62.4	IAML			14:40	40.89	4	0.10	
RSBS	HZ	67.2	EP			14:40	34.08			0.15
RSBS	HE	67.2	ES			14:40	41.97			-0.22
RSBS	HN	67.2	IAML			14:40	42.17	2	0.10	
RSBS	HE	67.2	IAML			14:40	42.74	3	0.14	
MONM	HZ	70.6	EP			14:40	34.53			0.10
MONM	HN	70.6	ES			14:40	43.08			0.02
MONM	HE	70.6	IAML			14:40	43.32	7	0.14	
MONM	HN	70.6	IAML			14:40	43.54	5	0.14	
HLM1	HZ	106.0	EP			14:40	40.04			0.05
HLM1	HN	106.0	ES			14:40	52.78			0.11
FOEL	HZ	133.0	EP			14:40	44.32			0.33

February 17 2018 Time: 15:09 35.5 UTC Magnitude: 1.2 ML
Lat: 51.749N Lon: -3.824W Depth: 7.8 km
Grid Ref: 274.10 kmE 207.21 kmN RMS: 0.20 secs
Locality: CWMLLYNFELL,NPT
Velocity model: Lownet Xnear: 100.0 Xfar: 200.0

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES
MCH1	HZ	63.2	EP			15:09	46.19			0.02
MCH1	HN	63.2	ES			15:09	53.52			-0.45
MCH1	HE	63.2	IAML			15:09	54.05	8	0.14	
MCH1	HN	63.2	IAML			15:09	54.39	8	0.05	
RSBS	HZ	67.4	EP			15:09	46.97			0.14
RSBS	HN	67.4	ES			15:09	54.92			-0.19
RSBS	HE	67.4	IAML			15:09	56.20	18	0.05	
RSBS	HN	67.4	IAML			15:09	56.31	16	0.09	
MONM	HZ	71.0	EP			15:09	47.51			0.13
MONM	HE	71.0	ES			15:09	56.15			0.10
MONM	HE	71.0	IAML			15:09	56.46	45	0.13	
MONM	HN	71.0	IAML			15:09	56.66	14	0.13	
HTL	HE	95.7	ES			15:10	02.59			-0.06
HTL	HE	95.7	IAML			15:10	03.63	2	0.34	
HTL	HN	95.7	IAML			15:10	04.56	3	0.22	
HLM1	HZ	107.0	EP			15:09	53.23			0.19
HLM1	HE	107.0	ES			15:10	05.96			0.11
HLM1	HE	107.0	IAML			15:10	08.80	6	0.08	
HLM1	HN	107.0	IAML			15:10	09.33	9	0.10	
STRD	HZ	115.0	EP			15:09	54.46			0.30
STRD	HE	115.0	ES			15:10	07.57			-0.21
STRD	HE	115.0	IAML			15:10	08.37	20	0.16	
STRD	HN	115.0	IAML			15:10	09.95	24	0.17	

February 17 2018 Time: 16:07 10.4 UTC Magnitude: 0.5 ML
Lat: 51.756N Lon: -3.823W Depth: 8.0 km
Grid Ref: 274.19 kmE 207.99 kmN RMS: 0.10 secs
Locality: CWMLLYNFELL,NPT
Velocity model: Lownet Xnear: 100.0 Xfar: 200.0

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES
MCH1	HZ	62.8	EP			16:07	21.04			0.00
MCH1	HE	62.8	ES			16:07	28.54			-0.26
MCH1	HN	62.8	IAML			16:07	28.79	2	0.22	
MCH1	HE	62.8	IAML			16:07	28.90	1	0.19	
RSBS	HZ	67.2	EP			16:07	21.75			0.02
RSBS	HE	67.2	ES			16:07	29.93			-0.05
RSBS	HE	67.2	IAML			16:07	30.75	2	0.12	
RSBS	HN	67.2	IAML			16:07	31.14	2	0.12	
MONM	HZ	70.9	EP			16:07	22.42			0.14
MONM	HE	70.9	ES			16:07	30.97			0.03
MONM	HE	70.9	IAML			16:07	31.29	4	0.22	
MONM	HN	70.9	IAML			16:07	31.42	3	0.12	
HLM1	HZ	107.0	EP			16:07	27.80			-0.07
HLM1	HN	107.0	ES			16:07	40.80			0.20
HLM1	HE	107.0	IAML			16:07	42.15	2	0.57	
HLM1	HN	107.0	IAML			16:07	43.69	1	0.14	

February 17 2018 Time: 16:27 06.6 UTC Magnitude: 1.5 ML
Lat: 51.767N Lon: -3.828W Depth: 7.8 km
Grid Ref: 273.87 kmE 209.22 kmN RMS: 0.10 secs
Locality: CWMLLYNFELL,NPT
Velocity model: Lownet Xnear: 100.0 Xfar: 200.0

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES
MCH1	HZ	62.6	IP		C	16:27	17.14			-0.07
MCH1	HE	62.6	ES			16:27	24.81			-0.13
MCH1	HN	62.6	IAML			16:27	25.02	26	0.11	
MCH1	HE	62.6	IAML			16:27	25.20	31	0.10	
RSBS	HZ	66.4	IP		D	16:27	17.85			0.04
RSBS	HN	66.4	ES			16:27	25.98			0.00
RSBS	HN	66.4	IAML			16:27	26.39	37	0.08	
RSBS	HE	66.4	IAML			16:27	27.31	44	0.06	
MONM	HZ	71.1	EP			16:27	18.58			0.07
MONM	HE	71.1	ES			16:27	27.20			0.01
MONM	HE	71.1	IAML			16:27	27.42	50	0.14	
MONM	HN	71.1	IAML			16:27	27.73	49	0.10	
OLDB	HZ	89.1	EP			16:27	21.43			0.16
HTL	HE	97.3	ES			16:27	34.13			-0.07
HTL	HE	97.3	IAML			16:27	34.73	6	0.12	
HTL	HN	97.3	IAML			16:27	35.55	7	0.19	
HLM1	HZ	106.0	EP			16:27	23.87			-0.08
HLM1	HN	106.0	ES			16:27	36.65			0.05
HLM1	HN	106.0	IAML			16:27	40.35	18	0.12	
HLM1	HE	106.0	IAML			16:27	40.66	19	0.15	

February 17 2018 Time: 23:17 32.7 UTC Magnitude: 2.2 ML
Lat: 51.759N Lon: -3.819W Depth: 7.8 km
Grid Ref: 274.47 kmE 208.32 kmN RMS: 0.40 secs
Locality: CWMLLYNFELL,NPT
Velocity model: Lownet Xnear: 100.0 Xfar: 200.0

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES
MCH1	HZ	62.4	IP		C	23:17	43.25			-0.05
MCH1	HE	62.4	ES			23:17	50.61			-0.39
MCH1	HE	62.4	IAML			23:17	50.97	120	0.12	
MCH1	HN	62.4	IAML			23:17	51.10	96	0.21	
RSBS	HZ	67.3	IP		D	23:17	44.02			-0.06
RSBS	HN	67.3	ES			23:17	51.96			-0.39
RSBS	HE	67.3	IAML			23:17	53.11	119	0.11	
RSBS	HN	67.3	IAML			23:17	53.43	97	0.14	
MONM	HZ	70.5	IP		C	23:17	44.67			0.12
MONM	HE	70.5	ES			23:17	53.28			0.11
MONM	HE	70.5	IAML			23:17	53.59	162	0.13	
MONM	HN	70.5	IAML			23:17	53.75	115	0.18	
OLDB	EZ	88.4	IP		C	23:17	47.48			0.20
OLDB	HN	88.4	ES			23:17	58.10			0.20
OLDB	EE	88.4	IAML			23:17	58.66	323	0.30	
OLDB	HN	88.4	IAML			23:17	58.83	643	0.24	
HTL	HE	96.9	EP			23:17	49.37			0.74
HTL	HE	96.9	ES			23:18	00.00			-0.22
HTL	HE	96.9	IAML			23:18	00.96	15	0.16	
HTL	HN	96.9	IAML			23:18	01.81	38	0.22	
HLM1	HZ	106.0	EP			23:17	49.96			-0.16
HLM1	HN	106.0	ES			23:18	02.38			-0.42
HLM1	HE	106.0	IAML			23:18	04.96	49	0.19	

TABLE 2 : PHASE DATA

HLM1	HN	106.0	IAML		23:18	06.46	63	0.11	
STRD	HZ	114.0	IP	C	23:17	51.58			0.23
STRD	HE	114.0	ES		23:18	04.72			-0.21
STRD	HE	114.0	IAML		23:18	05.58	257	0.16	
STRD	HN	114.0	IAML		23:18	07.29	243	0.37	
LLW	BZ	122.0	EP		23:17	52.88			0.39
LLW	BN	122.0	ES		23:18	07.03			0.13
LLW	BN	122.0	IAML		23:18	08.89	54	0.30	
LLW	BE	122.0	IAML		23:18	09.03	60	0.10	
FOEL	HZ	133.0	EP		23:17	54.54			0.43
FOEL	HN	133.0	ES		23:18	10.08			0.37
FOEL	HN	133.0	IAML		23:18	12.09	52	0.21	
FOEL	HE	133.0	IAML		23:18	12.45	40	0.23	
SBD	BZ	146.0	EP		23:17	55.04			-0.93
SBD	BE	146.0	IAML		23:18	13.75	37	0.10	
SBD	BN	146.0	IAML		23:18	14.72	42	0.10	
DYA	HZ	147.0	EP		23:17	55.28			-0.92
DYA	HE	147.0	IAML		23:18	13.75	45	0.23	
DYA	HN	147.0	IAML		23:18	14.36	66	0.10	
YLL	EZ	156.0	EP		23:17	57.41			0.09
WLF1	HZ	175.0	EP		23:17	59.88			-0.01
WLF1	HE	175.0	ES		23:18	20.57			0.87
WLF1	HN	175.0	IAML		23:18	21.53	46	0.24	
WLF1	HE	175.0	IAML		23:18	21.53	69	0.20	
CCA1	HZ	201.0	EP		23:18	01.69			-1.51
CCA1	HN	201.0	IAML		23:18	27.73	9	0.16	
CCA1	HE	201.0	IAML		23:18	29.51	14	0.10	
CWF	HZ	203.0	EP		23:18	03.01			-0.46
CWF	HN	203.0	IAML		23:18	28.15	21	0.34	
CWF	HE	203.0	IAML		23:18	28.36	12	0.13	
LBWR	HZ	231.0	EP		23:18	07.65			0.62
LBWR	HE	231.0	IAML		23:18	39.10	22	0.46	
LBWR	HN	231.0	IAML		23:18	42.23	30	0.42	

February 18 2018 Time: 04:27 52.9 UTC Magnitude: 0.2 ML
Lat: 54.748N Lon: -2.664W Depth: 8.2 km
Grid Ref: 357.26 kmE 539.44 kmN RMS: 0.20 secs
Locality: GLASSONBY,CUMBRIA
Velocity model: Borders Xnear: 100.0 Xfar: 200.0

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES
KESW	HZ	33.5	EP			04:27	59.18			0.08
KESW	HN	33.5	ES			04:28	03.52			0.03
EDMD	HZ	46.1	EP			04:28	01.23			0.15
EDMD	HN	46.1	ES			04:28	06.63			-0.24
EDMD	HE	46.1	IAML			04:28	07.00	2	0.18	
EDMD	HN	46.1	IAML			04:28	07.44	2	0.08	
ESK	HZ	72.1	EP			04:28	05.71			0.36
ESK	HE	72.1	ES			04:28	14.15			-0.03
ESK	HE	72.1	IAML			04:28	14.29	1	0.30	
ESK	HN	72.1	IAML			04:28	14.44	1	0.31	
NEWG	HE	108.0	ES			04:28	23.84			-0.39
GAL1	HN	132.0	ES			04:28	30.46			0.24
IOMK	HZ	135.0	EP			04:28	15.01			-0.03
IOMK	HN	135.0	ES			04:28	30.49			-0.26

February 18 2018 Time: 04:56 06.3 UTC Magnitude: 0.7 ML
Lat: 53.223N Lon: -1.546W Depth: 10.2 km
Grid Ref: 430.31 kmE 369.68 kmN RMS: 0.30 secs
Locality: HOLYMOORSIDE,DERBYS
Velocity model: Lownet Xnear: 500.0 Xfar: 1000.0

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES
LBWR	HZ	23.2	EP			04:56	11.23			0.36
LBWR	HE	23.2	ES			04:56	14.60			0.41
LBWR	HN	23.2	IAML			04:56	15.05	12	0.18	
LBWR	HE	23.2	IAML			04:56	15.44	16	0.24	
STNC	HZ	46.5	EP			04:56	14.61			0.18
STNC	HN	46.5	ES			04:56	20.73			0.38
STNC	HN	46.5	IAML			04:56	21.58	6	0.25	
STNC	HE	46.5	IAML			04:56	21.76	5	0.24	
AS02	HZ	47.1	EP			04:56	14.40			-0.12
AS02	HN	47.1	ES			04:56	20.13			-0.39
AS02	HE	47.1	IAML			04:56	20.70	9	0.16	
AS02	HN	47.1	IAML			04:56	20.95	6	0.12	
CWF	HZ	56.2	EP			04:56	16.03			0.12
CWF	HN	56.2	ES			04:56	22.51			-0.42
CWF	HN	56.2	IAML			04:56	22.70	3	0.14	
CWF	HE	56.2	IAML			04:56	22.78	3	0.14	
AR01	HZ	75.3	EP			04:56	18.79			-0.09
AR01	HN	75.3	ES			04:56	27.50			-0.55
HPK	HZ	82.0	EP			04:56	20.13			0.21
HPK	HN	82.0	ES			04:56	29.97			0.12
HPK	HN	82.0	IAML			04:56	30.25	9	0.14	
HPK	HE	82.0	IAML			04:56	31.53	5	0.18	
AQ01	HN	93.4	ES			04:56	32.56			-0.27
FOEL	HN	117.0	ES			04:56	39.33			0.19
HLM1	HZ	119.0	EP			04:56	25.46			-0.15
HLM1	HE	119.0	ES			04:56	39.47			-0.24
HLM1	HE	119.0	IAML			04:56	40.98	3	0.35	
HLM1	HN	119.0	IAML			04:56	41.65	2	0.25	
MCH1	HE	168.0	ES			04:56	51.77			0.25

February 18 2018 Time: 11:00 33.8 UTC Magnitude: 1.6 ML
Lat: 51.760N Lon: -3.825W Depth: 7.7 km
Grid Ref: 274.06 kmE 208.44 kmN RMS: 0.40 secs
Locality: CWMLLYNFELL,NPT
Velocity model: Lownet Xnear: 100.0 Xfar: 200.0

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES
MCH1	HZ	62.7	EP			11:00	44.45			-0.13
MCH1	HN	62.7	ES			11:00	51.81			-0.64
MCH1	HE	62.7	IAML			11:00	52.07	20	0.16	
MCH1	HN	62.7	IAML			11:00	52.19	17	0.10	
RSBS	HZ	66.9	EP			11:00	45.16			-0.08
RSBS	HE	66.9	ES			11:00	53.25			-0.35
RSBS	HN	66.9	IAML			11:00	54.43	24	0.09	
RSBS	HE	66.9	IAML			11:00	55.21	28	0.10	
MONM	HZ	70.9	EP			11:00	45.79			-0.05
MONM	HE	70.9	ES			11:00	54.41			-0.21
MONM	HE	70.9	IAML			11:00	54.70	75	0.14	
MONM	HN	70.9	IAML			11:00	55.60	14	0.27	
STRD	HZ	115.0	EP			11:00	52.82			0.18
STRD	HE	115.0	IAML			11:01	06.59	31	0.20	
STRD	HN	115.0	IAML			11:01	08.24	24	0.15	
LLW	BZ	122.0	EP			11:00	54.17			0.46
LLW	BE	122.0	ES			11:01	08.50			0.25
LLW	BE	122.0	IAML			11:01	10.21	15	0.15	
LLW	BN	122.0	IAML			11:01	10.23	10	0.10	
FOEL	HZ	133.0	EP			11:00	55.99			0.57
FOEL	HN	133.0	ES			11:01	11.35			0.15
FOEL	HN	133.0	IAML			11:01	13.29	12	0.26	
FOEL	HE	133.0	IAML			11:01	13.66	10	0.28	
SWN1	HZ	143.0	EP			11:00	57.56			0.75
SWN1	HE	143.0	ES			11:01	14.40			0.79
SWN1	HN	143.0	IAML			11:01	16.98	23	0.50	
SWN1	HE	143.0	IAML			11:01	16.99	16	0.30	
SBD	BZ	146.0	EP			11:00	57.56			0.30
DYA	HZ	148.0	EP			11:00	57.49			-0.01
DYA	HE	148.0	ES			11:01	14.62			-0.19
DYA	HE	148.0	IAML			11:01	15.69	8	0.14	
DYA	HN	148.0	IAML			11:01	15.86	8	0.11	
WLF1	HZ	175.0	EP			11:01	01.36			0.13
WLF1	HN	175.0	ES			11:01	21.37			0.11
WLF1	HE	175.0	IAML			11:01	22.81	10	0.22	
WLF1	HN	175.0	IAML			11:01	23.31	6	0.14	
WPS	HZ	188.0	EP			11:01	03.42			0.49

February 18 2018 Time: 11:35 47.4 UTC Magnitude: 1.1 ML
Lat: 53.382N Lon: -4.438W Depth: 7.1 km
Grid Ref: 237.86 kmE 390.04 kmN RMS: 0.30 secs
Locality: LLANFECHELL,ANGLESEY
Velocity model: Lownet Xnear: 100.0 Xfar: 200.0

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES
WPS	HZ	4.5	IP		D	11:35	49.26			0.15
WPS	HN	4.5	ES			11:35	50.24			-0.08
WPS	HE	4.5	IAML			11:35	50.43	199	0.08	
WPS	HN	4.5	IAML			11:35	50.45	138	0.10	
WLF1	HZ	10.7	IP		C	11:35	50.03			0.10
WLF1	HE	10.7	ES			11:35	51.57			-0.17
WLF1	HE	10.7	IAML			11:35	51.68	160	0.10	
WLF1	HN	10.7	IAML			11:35	51.70	72	0.15	
YRC	EZ	17.2	IP		C	11:35	50.84			-0.11
WIM	EZ	86.6	EP			11:36	02.14			0.34
IOMK	HZ	98.1	EP			11:36	03.84			0.29
IOMK	HN	98.1	ES			11:36	14.80			-0.52
IOMK	HN	98.1	IAML			11:36	17.18	8	0.26	
IOMK	HE	98.1	IAML			11:36	17.38	7	0.08	

February 24 2018 Time: 05:37 15.1 UTC Magnitude: 1.1 ML
Lat: 51.816N Lon: -2.933W Depth: 11.6 km
Grid Ref: 335.69 kmE 213.50 kmN RMS: 0.20 secs
Locality: LLANARTH,MONMOUTHSHIRE
Velocity model: Mid Wales Xnear: 75.0 Xfar: 150.0

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES
MONM	HZ	9.3	IP		D	05:37	18.44			-0.07
MONM	HE	9.3	ES			05:37	20.98			0.04
MONM	HE	9.3	IAML			05:37	21.08	74	0.10	
MONM	HN	9.3	IAML			05:37	21.21	35	0.12	
MCH1	HZ	20.7	IP		D	05:37	19.66			-0.07
MCH1	HN	20.7	ES			05:37	23.08			0.05
MCH1	HN	20.7	IAML			05:37	23.14	24	0.10	
MCH1	HE	20.7	IAML			05:37	23.16	12	0.10	
STRD	HZ	53.3	EP			05:37	24.32			-0.10
STRD	HE	53.3	ES			05:37	31.20			0.10
STRD	HE	53.3	IAML			05:37	31.32	21	0.14	
STRD	HN	53.3	IAML			05:37	31.36	18	0.44	
RSBS	HZ	126.0	EP			05:37	35.47			0.17
RSBS	HN	126.0	ES			05:37	49.95			0.15
RSBS	HE	126.0	IAML			05:37	52.05	4	0.06	
RSBS	HN	126.0	IAML			05:37	52.10	5	0.09	
HTL	HZ	141.0	EP			05:37	38.35			0.76
HTL	HE	141.0	ES			05:37	54.65			0.90
CWF	HE	151.0	ES			05:37	56.44			0.57
CWF	HE	151.0	IAML			05:37	56.67	3	0.34	
CWF	HN	151.0	IAML			05:37	57.24	2	0.10	

February 24 2018 Time: 23:37 53.7 UTC Magnitude: 1.4 ML
Lat: 53.317N Lon: -2.393W Depth: 12.6 km
Grid Ref: 373.82 kmE 380.11 kmN RMS: 0.30 secs
Locality: KNUTSFORD,CHESHIRE

TABLE 2 : PHASE DATA

Velocity model: Lownet Xnear: 100.0 Xfar: 200.0

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES
STNC	HZ	28.0	EP			23:37	59.08			0.06
STNC	HE	28.0	ES			23:38	03.31			0.39
STNC	HE	28.0	IAML			23:38	03.42	37	0.22	
STNC	HN	28.0	IAML			23:38	04.18	48	0.15	
LBWR	HZ	45.5	IP		C	23:38	01.48			-0.21
LBWR	HE	45.5	ES			23:38	07.18			-0.36
LBWR	HE	45.5	IAML			23:38	07.63	21	0.07	
LBWR	HN	45.5	IAML			23:38	07.65	35	0.26	
AQ04	HZ	63.8	EP			23:38	05.08			0.64
FOEL	HZ	72.0	EP			23:38	05.44			-0.35
FOEL	HE	72.0	ES			23:38	14.29			-0.34
FOEL	HE	72.0	IAML			23:38	16.69	16	0.28	
FOEL	HN	72.0	IAML			23:38	16.78	13	0.19	
HPK	HZ	87.6	EP			23:38	08.15			-0.02
HPK	HE	87.6	ES			23:38	18.67			-0.08
HPK	HE	87.6	IAML			23:38	19.62	45	0.11	
HPK	HN	87.6	IAML			23:38	20.85	47	0.15	
CWF	HZ	97.2	EP			23:38	09.99			0.36
WLF1	HZ	134.0	EP			23:38	14.46			-0.34
WPS	HZ	141.0	EP			23:38	15.70			-0.08
YRC	EZ	146.0	EP			23:38	17.13			0.60
MCH1	HZ	152.0	EP			23:38	17.28			-0.24
EDMD	HZ	171.0	EP			23:38	19.44			-0.44

February 25 2018 Time: 23:35 16.2 UTC Magnitude: 0.8 ML
Lat: 56.009N Lon: -4.206W Depth: 8.8 km
Grid Ref: 262.47 kmE 681.75 kmN RMS: 0.30 secs
Locality: LENNOXTOWN,E DUNBARTON
Velocity model: Lownet Xnear: 100.0 Xfar: 200.0

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES
PGB1	HZ	28.0	EP			23:35	21.23			-0.17
PGB1	HE	28.0	ES			23:35	24.90			-0.32
PGB1	HN	28.0	IAML			23:35	25.08	11	0.16	
PGB1	HE	28.0	IAML			23:35	25.37	18	0.30	
INVG	HZ	47.6	EP			23:35	24.44			0.00
INVG	HE	47.6	ES			23:35	30.24			-0.25
INVG	HE	47.6	IAML			23:35	30.45	4	0.16	
INVG	HN	47.6	IAML			23:35	30.62	2	0.37	
EDI	HZ	64.3	EP			23:35	27.24			0.24
EDI	HN	64.3	ES			23:35	34.62			-0.28
LAWE	HZ	79.3	EP			23:35	29.72			0.40
LAWE	HN	79.3	ES			23:35	38.86			-0.07
LAWE	HN	79.3	IAML			23:35	40.89	3	0.21	
LAWE	HE	79.3	IAML			23:35	42.65	7	0.10	
NEWG	HZ	99.3	EP			23:35	32.53			0.10
NEWG	HE	99.3	ES			23:35	43.82			-0.48
NEWG	HE	99.3	IAML			23:35	45.99	3	0.06	
NEWG	HN	99.3	IAML			23:35	47.24	4	0.30	
ESK	HZ	99.5	EP			23:35	32.59			0.10
ESK	HN	99.5	ES			23:35	44.67			0.26
ESK	HE	99.5	IAML			23:35	47.34	4	0.20	
ESK	HN	99.5	IAML			23:35	47.44	4	0.30	
GAL1	HZ	131.0	EP			23:35	37.92			0.73
GAL1	HN	131.0	ES			23:35	52.92			0.37
GAL1	HE	131.0	IAML			23:35	54.38	3	0.18	
GAL1	HN	131.0	IAML			23:35	54.54	2	0.09	
DRUM	HE	146.0	ES			23:35	56.06			-0.21

February 28 2018 Time: 07:33 50.8 UTC Magnitude: 3.4 ML
Lat: 54.614N Lon: -3.359W Depth: 5.7 km
Grid Ref: 312.25 kmE 525.18 kmN RMS: 0.50 secs
Locality: COCKERMOUTH,CUMBRIA
Velocity model: Lownet Xnear: 100.0 Xfar: 200.0
Comment: FELT CUMBRIA... Intensity: 4

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES
KESW	HZ	16.6	IP		D	07:33	53.98			-0.27
KESW	HN	16.6	ES			07:33	56.14			-0.59
KESW	HE	16.6	IAML			07:33	56.68	4126	0.38	
KESW	HN	16.6	IAML			07:33	56.85	6416	0.36	
SPK	EZ	21.7	IP	9	C	07:33	58.70			3.66
SPK	EN	21.7	ES	9		07:34	01.43			-0.33
SPK	EE	21.7	IAML			07:34	01.55	10301	0.11	
SPK	EN	21.7	IAML			07:34	01.73	16171	0.26	
THP	EZ	23.5	IP		C	07:33	55.07			
THP	EN	23.5	ES			07:33	58.02			
THP	EE	23.5	IAML			07:33	58.19	3673	0.20	
THP	EN	23.5	IAML			07:33	58.26	6224	0.32	
AQ12	HZ	44.0	IP		D	07:33	58.18			-0.52
AQ12	HN	44.0	ES			07:34	03.27			-1.16
AQ12	HN	44.0	IAML			07:34	03.46	2910	0.22	
AQ12	HE	44.0	IAML			07:34	03.73	1246	0.20	
AR09	HZ	73.6	IP		D	07:34	02.97			-0.35
ESK	HZ	78.9	EP			07:34	04.29			0.20
ESK	HE	78.9	ES			07:34	13.56			-0.19
ESK	HN	78.9	IAML			07:34	16.57	1811	0.24	
ESK	HE	78.9	IAML			07:34	16.75	2139	0.17	
NEWG	HZ	79.2	IP		D	07:34	04.40			0.28
NEWG	HE	79.2	ES			07:34	14.07			0.27
NEWG	HE	79.2	IAML			07:34	16.51	323	0.16	
NEWG	HN	79.2	IAML			07:34	16.73	522	0.10	
AQ10	HZ	85.1	EP			07:34	05.22			0.21
AQ10	HE	85.1	ES			07:34	15.07			-0.29
AQ10	HN	85.1	IAML			07:34	16.00	2304	0.20	
AQ10	HE	85.1	IAML			07:34	17.25	2514	0.20	
AQ09	HZ	86.4	EP			07:34	05.45			0.25
AQ09	HE	86.4	ES			07:34	15.66			-0.02
AQ09	HE	86.4	IAML			07:34	16.50	3648	0.38	
AQ09	HN	86.4	IAML			07:34	17.38	4894	0.34	
IOMK	HZ	87.6	EP			07:34	05.16			-0.27
IOMK	HN	87.6	ES			07:34	15.67			-0.41
IOMK	HE	87.6	IAML			07:34	17.90	1020	0.07	
IOMK	HN	87.6	IAML			07:34	18.10	1324	0.12	
GAL1	HZ	91.5	IP		D	07:34	06.09			0.07
GAL1	HN	91.5	ES			07:34	16.56			-0.54
GAL1	HN	91.5	IAML			07:34	17.84	908	0.20	
GAL1	HE	91.5	IAML			07:34	19.62	451	0.16	
AQ06	HZ	92.5	EP			07:34	06.51			0.35
AQ06	HE	92.5	ES			07:34	17.14			-0.20
AQ06	HN	92.5	IAML			07:34	19.48	2519	0.20	
AQ06	HE	92.5	IAML			07:34	23.07	1860	0.22	
EDMD	HZ	93.2	EP			07:34	06.41			0.15
EDMD	HE	93.2	ES			07:34	17.48			-0.03
EDMD	HN	93.2	IAML			07:34	19.30	1868	0.20	
EDMD	HE	93.2	IAML			07:34	19.89	2380	0.22	
AQ04	HZ	96.6	EP			07:34	07.20			0.41
AQ04	HN	96.6	ES			07:34	18.81			0.38
AQ04	HN	96.6	IAML			07:34	20.12	2009	0.28	
AQ07	HZ	97.1	EP			07:34	07.03			0.15
AQ07	HE	97.1	IAML			07:34	22.70	2845	0.28	
AQ07	HN	97.1	IAML			07:34	24.21	1518	0.28	
AS10	HZ	99.0	EP			07:34	07.68			0.50
AQ03	HZ	99.9	EP			07:34	07.88			0.58
AQ03	HE	99.9	ES			07:34	19.35			0.04
AQ03	HN	99.9	IAML			07:34	20.58	1769	0.18	
AQ03	HE	99.9	IAML			07:34	20.69	2982	0.34	
AS07	HZ	101.0	EP			07:34	07.40			-0.08
AQ02	HZ	107.0	EP			07:34	08.99			0.58
AR05	HZ	111.0	EP			07:34	09.15			0.01
HPK	HZ	134.0	EP			07:34	13.07			0.46
AT10	HZ	144.0	EP			07:34	15.14			1.15
AT08	HZ	145.0	EP			07:34	14.75			0.69
EDI	HZ	146.0	EP			07:34	14.63			0.37
AS02	HZ	148.0	EP			07:34	14.39			-0.20
PGB1	HZ	151.0	EP			07:34	15.16			0.15
WPS	HZ	154.0	EP			07:34	14.49			-0.91
WLF1	HZ	162.0	EP			07:34	15.78			-0.78
GDLE	HZ	166.0	EP			07:34	18.32			1.20
YRC	EZ	171.0	EP			07:34	16.77			-1.03
LBWR	HZ	172.0	EP			07:34	17.60			-0.37
FOEL	HZ	192.0	EP			07:34	19.51			-0.97

March 4 2018 Time: 00:00 38.7 UTC Magnitude: 0.9 ML
Lat: 52.082N Lon: -3.407W Depth: 3.8 km
Grid Ref: 303.60 kmE 243.61 kmN RMS: 0.20 secs
Locality: BUILTH WELLS,POWYS
Velocity model: Mid Wales Xnear: 150.0 Xfar: 200.0
Comment: 7KM SSW BUILTH WELLS

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES
MCH1	HZ	29.6	IP		D	00:00	44.04			0.15
MCH1	HN	29.6	ES			00:00	47.78			0.13
MCH1	HE	29.6	IAML			00:00	47.91	32	0.09	
MCH1	HN	29.6	IAML			00:00	48.16	17	0.08	
MONM	HZ	49.4	EP			00:00	47.14			-0.03
MONM	HE	49.4	ES			00:00	53.18			-0.11
MONM	HE	49.4	IAML			00:00	53.40	30	0.26	
MONM	HN	49.4	IAML			00:00	53.84	32	0.14	
HLM1	HZ	60.4	EP			00:00	48.88			-0.12
HLM1	HN	60.4	IAML			00:00	58.10	4	0.07	
HLM1	HE	60.4	IAML			00:00	58.57	4	0.23	
LLW	BZ	87.2	EP			00:00	53.73			0.33
LLW	BE	87.2	ES			00:01	03.82			-0.20
LLW	BN	87.2	IAML			00:01	04.22	3	0.20	
LLW	BE	87.2	IAML			00:01	04.62	3	0.10	
FOEL	HZ	91.0	EP			00:00	54.24			0.18
FOEL	HN	91.0	ES			00:01	05.04			-0.10
FOEL	HE	91.0	IAML			00:01	05.18	4	0.21	
FOEL	HN	91.0	IAML			00:01	05.42	5	0.14	
STRD	HZ	92.1	EP			00:00	53.88			-0.34
RSBS	HZ	92.9	EP			00:00	54.36			-0.01
SWN1	HZ	128.0	EP			00:01	00.07			0.18
HTL	HZ	142.0	EP			00:01	02.01			-0.07

March 5 2018 Time: 21:18 39.4 UTC Magnitude: 0.4 ML
Lat: 52.126N Lon: -2.422W Depth: 4.5 km
Grid Ref: 371.11 kmE 247.65 kmN RMS: 0.10 secs
Locality: CRADLEY,HEREFORDSHIRE
Velocity model: Lownet Xnear: 500.0 Xfar: 1000.0

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES
MONM	HZ	41.4	EP			21:18	46.89			0.05
MONM	HN	41.4	ES			21:18	52.28			-0.03
MONM	HN	41.4	IAML			21:18	52.46	8	0.16	
MONM	HE	41.4	IAML			21:18	52.89	4	0.32	
MCH1	HZ	42.1	EP			21:18	46.94			-0.03
MCH1	HN	42.1	ES			21:18	52.29			-0.23
MCH1	HN	42.1	IAML			21:18	52.42	7	0.10	
MCH1	HE	42.1	IAML			21:18	52.48	4	0.10	

TABLE 2 : PHASE DATA

STRD	HZ	42.9	EP		21:18	47.08			-0.01
STRD	HN	42.9	ES		21:18	52.69			-0.04
HLM1	HZ	53.7	EP		21:18	48.82			0.01
HLM1	HE	53.7	ES		21:18	55.58			-0.13
HLM1	HN	53.7	IAML		21:18	55.80	2	0.22	
HLM1	HE	53.7	IAML		21:18	55.81	2	0.24	
RSBS	HZ	161.0	EP		21:19	05.18			0.21
RSBS	HN	161.0	ES		21:19	23.85			0.19

March 6 2018 Time: 04:51 59.2 UTC Magnitude: 1.3 ML
Lat: 54.506N Lon: -3.018W Depth: 6.7 km
Grid Ref: 334.09 kmE 512.79 kmN RMS: 1.10 secs
Locality: GRASMERE,CUMBRIA
Velocity model: Lownet Xnear: 100.0 Xfar: 200.0
Comment: FELT GREAT LANGDALE Intensity: 2

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES
KESW	HZ	10.8	IP		D	04:52	01.50			-1.16
KESW	HE	10.8	ES			04:52	03.88			-1.34
KESW	HE	10.8	IAML			04:52	04.05	61	0.12	
KESW	HN	10.8	IAML			04:52	04.06	55	0.12	
SPK	EZ	31.5	IP		C	04:52	07.62			2.42
SPK	EE	31.5	ES			04:52	11.22			1.60
SPK	EN	31.5	IAML			04:52	11.54	98	0.11	
SPK	EE	31.5	IAML			04:52	12.00	61	0.23	
EDMD	HZ	77.1	IP		C	04:52	11.98			0.02
EDMD	HN	77.1	ES			04:52	21.38			0.07
EDMD	HN	77.1	IAML			04:52	22.37	17	0.18	
EDMD	HE	77.1	IAML			04:52	23.75	17	0.13	
ESK	HZ	91.0	IP		D	04:52	14.59			0.59
ESK	HN	91.0	ES			04:52	25.58			0.75
ESK	HE	91.0	IAML			04:52	26.51	7	0.19	
ESK	HN	91.0	IAML			04:52	27.04	5	0.10	
NEWG	HZ	103.0	IP		C	04:52	15.92			0.17
IOMK	HZ	104.0	IP		D	04:52	15.03			-0.84
IOMK	HN	104.0	ES			04:52	26.33			-1.74
IOMK	HN	104.0	IAML			04:52	27.12	14	0.13	
IOMK	HE	104.0	IAML			04:52	27.77	7	0.16	
WIM	EZ	115.0	EP			04:52	16.42			-1.01
LBWR	HZ	149.0	EP			04:52	22.45			0.09
WPS	HZ	157.0	EP			04:52	23.06			-0.17
WLF1	HZ	163.0	EP			04:52	23.97			-0.04

March 8 2018 Time: 03:31 50.7 UTC Magnitude: 1.0 ML
Lat: 56.470N Lon: -3.910W Depth: 4.3 km
Grid Ref: 282.35 kmE 732.50 kmN RMS: 0.40 secs
Locality: CRIEFF,PERTH & KINROSS
Velocity model: Lownet Xnear: 500.0 Xfar: 1000.0
Comment: 11KM NNW CRIEFF

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES
INVG	HZ	9.5	IP		C	03:31	52.91			-0.18
INVG	HE	9.5	ES			03:31	54.35			-0.45
INVG	HN	9.5	IAML			03:31	54.58	108	0.10	
INVG	HE	9.5	IAML			03:31	54.63	80	0.08	
EDI	HZ	75.6	EP			03:32	03.85			-0.05
EDI	HN	75.6	ES			03:32	12.99			-0.51
EDI	HN	75.6	IAML			03:32	13.17	9	0.28	
EDI	HE	75.6	IAML			03:32	13.43	5	0.20	
PGB1	HZ	81.5	EP			03:32	04.95			0.12
PGB1	HE	81.5	ES			03:32	15.00			-0.12
LAWE	HZ	95.0	EP			03:32	06.67			-0.24
LAWE	HN	95.0	ES			03:32	18.94			0.23
LAWE	HE	95.0	IAML			03:32	21.61	11	0.18	
LAWE	HN	95.0	IAML			03:32	21.69	12	0.28	
DRUM	HZ	100.0	EP			03:32	07.08			-0.65
MCD	HZ	130.0	EP			03:32	12.65			0.25
ESK	HZ	136.0	EP			03:32	13.87			0.64
ESK	HN	136.0	ES			03:32	30.25			0.60
ESK	HE	136.0	IAML			03:32	31.04	4	0.16	
ESK	HN	136.0	IAML			03:32	31.17	4	0.22	
KPL	HZ	144.0	EP			03:32	14.64			0.32
KPL	HN	144.0	ES			03:32	31.56			0.04
KPL	HN	144.0	IAML			03:32	32.64	7	0.20	
KPL	HE	144.0	IAML			03:32	32.75	6	0.18	

March 8 2018 Time: 04:12 35.0 UTC Magnitude: 0.6 ML
Lat: 56.474N Lon: -3.912W Depth: 4.5 km
Grid Ref: 282.24 kmE 732.95 kmN RMS: 0.50 secs
Locality: CRIEFF,PERTH & KINROSS
Velocity model: Lownet Xnear: 500.0 Xfar: 1000.0
Comment: 11KM NNW CRIEFF

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES
INVG	HZ	9.6	IP		C	04:12	36.70			-0.47
INVG	HE	9.6	ES			04:12	38.15			-0.62
INVG	HN	9.6	IAML			04:12	38.38	32	0.10	
INVG	HE	9.6	IAML			04:12	38.42	23	0.09	
PGB1	HE	81.8	ES			04:12	58.75			-0.06
LAWE	HZ	94.9	EP			04:12	50.44			-0.33
LAWE	HN	94.9	ES			04:13	02.80			0.50
LAWE	HN	94.9	IAML			04:13	05.46	3	0.28	
LAWE	HE	94.9	IAML			04:13	05.50	3	0.16	
DRUM	HZ	100.0	EP			04:12	50.95			-0.63
ESK	HE	136.0	ES			04:13	14.07			0.81
ESK	HE	136.0	IAML			04:13	15.00	1	0.20	
ESK	HN	136.0	IAML			04:13	15.16	1	0.17	
KPL	HZ	143.0	EP			04:12	58.40			0.33
KPL	HN	143.0	ES			04:13	15.39			0.47
KPL	HN	143.0	IAML			04:13	16.44	2	0.20	
KPL	HE	143.0	IAML			04:13	16.52	2	0.18	

March 9 2018 Time: 02:12 29.2 UTC Magnitude: 0.7 ML
Lat: 51.237N Lon: -3.870W Depth: 12.5 km
Grid Ref: 269.47 kmE 150.36 kmN RMS: 0.30 secs
Locality: LYNTON,DEVON
Velocity model: Lownet Xnear: 500.0 Xfar: 1000.0

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES
HTL	HZ	50.8	EP			02:12	38.12			0.18
HTL	HE	50.8	ES			02:12	44.01			-0.35
HTL	HE	50.8	IAML			02:12	44.23	4	0.31	
HTL	HN	50.8	IAML			02:12	44.86	5	0.34	
DYA	HZ	89.3	EP			02:12	43.90			-0.03
DYA	HN	89.3	ES			02:12	54.44			-0.27
DYA	HN	89.3	IAML			02:12	55.97	5	0.28	
DYA	HE	89.3	IAML			02:12	56.65	5	0.16	
SBD	BZ	94.2	EP			02:12	45.02			0.35
SBD	BE	94.2	ES			02:12	56.09			0.09
MONM	HZ	99.8	EP			02:12	45.50			0.02
MONM	HE	99.8	IAML			02:12	58.19	3	0.43	
MONM	HN	99.8	IAML			02:12	59.73	2	0.32	
RSBS	HZ	100.0	EP			02:12	45.70			0.15
RSBS	HE	100.0	ES			02:12	57.30			-0.21
RSBS	HN	100.0	IAML			02:12	59.27	2	0.11	
RSBS	HE	100.0	IAML			02:12	59.69	2	0.07	
MCH1	HZ	104.0	EP			02:12	45.92			-0.17
MCH1	HE	104.0	ES			02:12	58.12			-0.33
MCH1	HN	104.0	IAML			02:13	01.26	1	0.10	
MCH1	HE	104.0	IAML			02:13	02.22	2	0.09	
HLM1	HN	158.0	EP			02:12	54.43			0.57
HLM1	HZ	158.0	EP			02:12	54.43			

March 9 2018 Time: 08:14 08.4 UTC Magnitude: 2.7 ML
Lat: 52.757N Lon: -3.596W Depth: 12.1 km
Grid Ref: 292.31 kmE 318.94 kmN RMS: 0.30 secs
Locality: LLANYMAWDDWY,GWYNEDDD
Velocity model: Mid Wales Xnear: 100.0 Xfar: 200.0
Comment: FELT LLANYMAWDDWY... Intensity: 3

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES
LLW	BZ	11.2	IP		D	08:14	11.50			0.25
LLW	BN	11.2	ES			08:14	13.35			0.04
LLW	BN	11.2	IAML			08:14	13.53	792	0.10	
LLW	BE	11.2	IAML			08:14	13.78	298	0.11	
FOEL	HZ	30.5	IP		C	08:14	14.17			0.14
FOEL	HN	30.5	ES			08:14	17.71			-0.38
FOEL	HE	30.5	IAML			08:14	18.34	1724	0.46	
FOEL	HN	30.5	IAML			08:14	18.44	1179	0.36	
HLM1	HZ	55.2	IP		D	08:14	18.09			0.08
HLM1	HN	55.2	ES			08:14	24.45			-0.47
HLM1	HE	55.2	IAML			08:14	24.82	262	0.12	
HLM1	HN	55.2	IAML			08:14	25.19	356	0.12	
YLL	EZ	57.5	EP			08:14	18.34			-0.01
WLF1	HZ	79.9	EP			08:14	21.79			-0.08
WLF1	HE	79.9	ES			08:14	31.19			-0.39
WLF1	HE	79.9	IAML			08:14	31.42	360	0.20	
WLF1	HN	79.9	IAML			08:14	31.50	226	0.42	
YRC	EZ	85.7	EP			08:14	22.84			0.11
WPS	HZ	93.7	EP			08:14	24.05			0.11
WPS	HE	93.7	ES			08:14	34.94			-0.19
WPS	HE	93.7	IAML			08:14	35.60	86	0.18	
WPS	HN	93.7	IAML			08:14	37.76	82	0.13	
MCH1	HZ	93.8	EP			08:14	23.96			-0.02
MCH1	HN	93.8	ES			08:14	34.89			-0.31
MCH1	HN	93.8	IAML			08:14	35.10	269	0.26	
MCH1	HE	93.8	IAML			08:14	35.35	155	0.17	
STNC	HZ	101.0	EP			08:14	25.31			0.31
MONM	HZ	116.0	EP			08:14	27.54			0.30
MONM	HE	116.0	ES			08:14	41.00			0.19
MONM	HN	116.0	IAML			08:14	41.54	138	0.26	
MONM	HE	116.0	IAML			08:14	45.30	97	0.18	
RSBS	HZ	119.0	EP			08:14	27.64			-0.12
RSBS	HE	119.0	IAML			08:14	44.52	188	0.10	
RSBS	HN	119.0	IAML			08:14	44.79	216	0.12	
AR01	HZ	134.0	EP			08:14	30.44			0.37
AR01	HN	134.0	IAML			08:14	48.12	222	0.12	
AR01	HE	134.0	IAML			08:14	48.13	195	0.22	
LBWR	HZ	144.0	EP			08:14	32.04			0.43
LBWR	HN	144.0	IAML			08:14	50.26	190	0.38	
LBWR	HE	144.0	IAML			08:14	51.92	171	0.30	
STRD	HZ	147.0	EP			08:14	32.62			0.70
STRD	HN	147.0	IAML			08:14	50.73	333	0.18	
STRD	HE	147.0	IAML			08:14	52.32	234	0.22	
CWF	HZ	155.0	EP			08:14	33.43			0.39
CWF	HN	155.0	ES			08:14	50.70			-0.08
CWF	HE	155.0	IAML			08:14	51.51	97	0.20	
CWF	HN	155.0	IAML			08:14	51.59	217	0.31	
IOMK	HZ	179.0	EP			08:14	36.02			-0.11
IOMK	HN	179.0	IAML			08:14	58.65	74	0.24	
IOMK	HE	179.0	IAML			08:14	59.63	107	0.18	
AR09	HZ	180.0	EP			08:14	36.10			-0.22
HPK	HZ	187.0	EP			08:14	37.02			-0.12

TABLE 2 : PHASE DATA

HPK	HN	187.0	IAML		08:15	03.28	294	0.18	
HPK	HE	187.0	IAML		08:15	05.29	154	0.28	
DSB	BZ	194.0	EP		08:14	39.02			1.03

March 11 2018 Time: 18:26 57.0 UTC Magnitude: 1.6 ML
Lat: 53.583N Lon: -1.931W Depth: 7.5 km
Grid Ref: 404.57 kmE 409.63 kmN RMS: 0.50 secs
Locality: MARSDEN,WEST YORKSHIRE
Velocity model: Lownet Xnear: 100.0 Xfar: 200.0

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES
LBWR	HZ	24.4	IP		D	18:27	01.59			-0.14
LBWR	HE	24.4	ES			18:27	04.89			-0.27
LBWR	HE	24.4	IAML			18:27	05.60	176	0.11	
LBWR	HN	24.4	IAML			18:27	05.67	336	0.18	
AR01	HZ	30.4	EP			18:27	02.35			-0.30
AR01	HN	30.4	IAML			18:27	07.31	112	0.13	
AR01	HE	30.4	IAML			18:27	07.82	55	0.10	
HPK	HZ	46.4	EP			18:27	04.66			-0.47
HPK	HE	46.4	ES			18:27	10.29			-0.74
HPK	HE	46.4	IAML			18:27	10.57	117	0.18	
HPK	HN	46.4	IAML			18:27	10.97	159	0.18	
AS07	HZ	74.6	EP			18:27	09.36			-0.18
AS07	HN	74.6	ES			18:27	17.90			-0.76
AS07	HE	74.6	IAML			18:27	20.99	24	0.30	
AS07	HN	74.6	IAML			18:27	21.11	37	0.10	
AU11	HZ	94.8	EP			18:27	13.05			0.46
AU11	HN	94.8	ES			18:27	24.33			0.39
AU11	HN	94.8	IAML			18:27	26.14	17	0.24	
AU11	HE	94.8	IAML			18:27	26.17	45	0.18	
AT10	HZ	101.0	EP			18:27	13.80			0.25
AT10	HE	101.0	ES			18:27	25.30			-0.31
AT10	HE	101.0	IAML			18:27	27.42	44	0.32	
AT10	HN	101.0	IAML			18:27	28.47	32	0.24	
AU08	HZ	103.0	EP			18:27	14.38			0.49
CWF	HZ	103.0	EP			18:27	13.81			-0.05
CWF	HE	103.0	ES			18:27	25.42			-0.71
CWF	HE	103.0	IAML			18:27	26.53	10	0.20	
CWF	HN	103.0	IAML			18:27	27.90	8	0.16	
AQ12	HZ	109.0	EP			18:27	15.23			0.33
AU18	HZ	109.0	EP			18:27	15.43			0.60
AQ12	HN	109.0	ES			18:27	27.32			-0.61
AQ12	HE	109.0	IAML			18:27	29.40	12	0.11	
AQ12	HN	109.0	IAML			18:27	29.82	13	0.19	
FOEL	HN	115.0	ES			18:27	29.62			0.24
FOEL	HZ	115.0	EP			18:27	16.10			0.37
FOEL	HE	115.0	IAML			18:27	30.98	12	0.30	
FOEL	HN	115.0	IAML			18:27	31.91	17	0.40	
AV06	HZ	115.0	EP			18:27	16.43			0.66
AV06	HN	115.0	IAML			18:27	31.88	18	0.36	
AV06	HE	115.0	IAML			18:27	33.27	13	0.22	
GDLE	HZ	119.0	EP			18:27	16.90			0.58
GDLE	HE	119.0	ES			18:27	30.48			0.09
GDLE	HE	119.0	IAML			18:27	31.90	33	0.22	
GDLE	HN	119.0	IAML			18:27	33.82	28	0.22	
KESW	HZ	136.0	EP			18:27	19.41			0.57
KESW	HE	136.0	ES			18:27	35.29			0.54
KESW	HE	136.0	IAML			18:27	35.54	13	0.56	
KESW	HN	136.0	IAML			18:27	35.62	10	0.54	
EDMD	HZ	139.0	EP			18:27	19.61			0.37
LLW	BZ	142.0	EP			18:27	20.11			0.45
WPS	HZ	172.0	EP			18:27	23.33			-0.48
WPS	HN	172.0	IAML			18:27	45.07	4	0.08	
WPS	HE	172.0	IAML			18:27	45.54	3	0.10	

March 12 2018 Time: 15:32 34.0 UTC Magnitude: 1.1 ML
Lat: 53.383N Lon: -4.472W Depth: 8.7 km
Grid Ref: 235.61 kmE 390.23 kmN RMS: 0.10 secs
Locality: LLANFECHELL,ANGLESEY
Velocity model: Lleyn Xnear: 80.0 Xfar: 200.0

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES
WPS	HZ	2.7	IP		D	15:32	35.58			0.06
WPS	HE	2.7	ES			15:32	36.65			0.08
WPS	HE	2.7	IAML			15:32	36.70	397	0.10	
WPS	HN	2.7	IAML			15:32	36.78	158	0.13	
WLF1	HZ	11.5	IP		C	15:32	36.37			-0.05
WLF1	HE	11.5	ES			15:32	37.90			-0.20
WLF1	HE	11.5	IAML			15:32	37.96	307	0.10	
WLF1	HN	11.5	IAML			15:32	38.03	148	0.14	
YRC	EZ	16.2	IP		C	15:32	37.19			0.11
YLL	EZ	33.7	EP			15:32	39.83			0.00
LLW	BZ	80.3	EP			15:32	47.25			-0.21
LLW	BE	80.3	IAML			15:32	56.97	2	0.35	
LLW	BN	80.3	IAML			15:32	57.43	2	0.36	
IOMK	HZ	97.9	EP			15:32	50.07			-0.11
IOMK	HN	97.9	ES			15:33	01.12			-0.08
IOMK	HE	97.9	IAML			15:33	03.72	15	0.07	
IOMK	HN	97.9	IAML			15:33	03.80	10	0.12	
FOEL	HZ	101.0	EP			15:32	51.04			0.31
FOEL	HN	101.0	ES			15:33	02.32			0.20
HLM1	HZ	144.0	EP			15:32	57.36			0.09
HLM1	HN	144.0	ES			15:33	13.05			-0.07
HLM1	HN	144.0	IAML			15:33	15.93	4	0.26	
HLM1	HE	144.0	IAML			15:33	16.48	2	0.12	

March 12 2018 Time: 15:38 10.6 UTC Magnitude: 0.4 ML
Lat: 53.380N Lon: -4.454W Depth: 8.5 km
Grid Ref: 236.79 kmE 389.85 kmN RMS: 0.00 secs
Locality: LLANFECHELL,ANGLESEY
Velocity model: Lleyn Xnear: 80.0 Xfar: 200.0

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES
WPS	HZ	3.7	EP			15:38	12.16			0.00
WPS	HE	3.7	ES			15:38	13.24			0.01
WPS	HE	3.7	IAML			15:38	13.27	34	0.12	
WPS	HN	3.7	IAML			15:38	13.30	29	0.10	
WLF1	HZ	10.8	EP			15:38	12.90			-0.02
WLF1	HE	10.8	ES			15:38	14.50			-0.01
WLF1	HE	10.8	IAML			15:38	14.57	16	0.09	
WLF1	HN	10.8	IAML			15:38	14.65	22	0.10	
YRC	EZ	16.5	EP			15:38	13.73			0.01
IOMK	HZ	98.3	EP			15:38	26.84			-0.02
FOEL	HZ	100.0	EP			15:38	27.20			0.03

March 15 2018 Time: 03:53 11.8 UTC Magnitude: 0.6 ML
Lat: 54.214N Lon: -1.817W Depth: 4.5 km
Grid Ref: 411.93 kmE 479.84 kmN RMS: 0.10 secs
Locality: HEALEY,NORTH YORKSHIRE
Velocity model: Lownet Xnear: 100.0 Xfar: 200.0

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES
HPK	HE	31.1	ES			03:53	21.72			-0.09
HPK	HE	31.1	IAML			03:53	21.81	7	0.28	
HPK	HN	31.1	IAML			03:53	21.92	8	0.22	
EDMD	HZ	69.3	EP			03:53	23.76			0.17
EDMD	HE	69.3	ES			03:53	32.08			-0.13
EDMD	HE	69.3	IAML			03:53	32.60	4	0.20	
EDMD	HN	69.3	IAML			03:53	33.35	4	0.20	
LBWR	HE	90.6	ES			03:53	38.08			0.05
KESW	HZ	93.4	EP			03:53	27.47			0.09
KESW	HN	93.4	ES			03:53	38.67			-0.09
KESW	HE	93.4	IAML			03:53	41.18	3	0.32	
KESW	HN	93.4	IAML			03:53	41.35	3	0.30	

March 15 2018 Time: 10:44 52.7 UTC Magnitude: 1.2 ML
Lat: 50.585N Lon: -4.202W Depth: 2.6 km
Grid Ref: 244.13 kmE 78.52 kmN RMS: 0.30 secs
Locality: LAMERTON,DEVON
Velocity model: Lownet Xnear: 100.0 Xfar: 200.0

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES
DYA	HZ	25.4	IP		D	10:44	57.64			0.16
DYA	HE	25.4	IAML			10:44	57.71	31	0.07	
DYA	HN	25.4	IAML			10:44	57.72	26	0.07	
DYA	HN	25.4	ES			10:45	00.68			-0.33
SBD	BZ	34.3	EP			10:44	59.10			0.13
SBD	BN	34.3	ES			10:45	03.24			-0.35
HTL	HZ	49.7	EP			10:45	01.95			0.39
HTL	HE	49.7	ES			10:45	07.64			-0.42
HTL	HN	49.7	IAML			10:45	08.20	22	0.16	
HTL	HE	49.7	IAML			10:45	09.48	45	0.30	
CCA1	HZ	85.3	EP			10:45	07.57			0.47
CCA1	HN	85.3	ES			10:45	17.59			-0.05
CCA1	HE	85.3	IAML			10:45	19.81	10	0.18	
CCA1	HN	85.3	IAML			10:45	19.81	18	0.18	

March 15 2018 Time: 22:09 31.9 UTC Magnitude: 1.1 ML
Lat: 53.043N Lon: -2.432W Depth: 9.6 km
Grid Ref: 371.04 kmE 349.65 kmN RMS: 0.20 secs
Locality: WYBUNBURY,CHESHIRE EAST
Velocity model: Lownet Xnear: 100.0 Xfar: 200.0

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES
STNC	HZ	16.0	EP			22:09	35.50			0.14
STNC	HE	16.0	ES			22:09	38.04			0.17
STNC	HN	16.0	IAML			22:09	38.39	68	0.14	
STNC	HE	16.0	IAML			22:09	38.50	46	0.20	
LBWR	HZ	61.8	EP			22:09	42.34			-0.08
LBWR	HN	61.8	ES			22:09	49.88			-0.20
LBWR	HN	61.8	IAML			22:09	50.70	7	0.31	
LBWR	HE	61.8	IAML			22:09	51.22	7	0.07	
HLM1	HZ	65.8	EP			22:09	43.10			0.05
HLM1	HE	65.8	ES			22:09	51.25			0.08
HLM1	HN	65.8	IAML			22:09	52.07	4	0.16	
HLM1	HE	65.8	IAML			22:09	52.74	6	0.30	
CWF	HN	82.9	ES			22:09	55.41			-0.27
CWF	HE	82.9	IAML			22:09	56.17	3	0.19	
CWF	HN	82.9	IAML			22:09	56.91	4	0.18	
LLW	BZ	85.7	EP			22:09	45.93			-0.15
HPK	HE	115.0	ES			22:10	04.58			0.30
HPK	HN	115.0	IAML			22:10	05.65	9	0.31	
HPK	HE	115.0	IAML			22:10	06.44	12	0.18	
MCH1	HZ	123.0	EP			22:09	52.01			0.32
MCH1	HE	123.0	ES			22:10	06.10			-0.02
MCH1	HN	123.0	IAML			22:10	08.68	4	0.18	
MCH1	HE	123.0	IAML			22:10	09.01	4	0.18	
WLF1	HN	134.0	ES			22:10	08.65			-0.31
WLF1	HN	134.0	IAML			22:10	09.21	7	0.37	
WLF1	HE	134.0	IAML			22:10	09.49	7	0.26	
WPS	HN	144.0	ES			22:10	11.25			-0.03
WPS	HN	144.0	IAML			22:10	11.82	6	0.53	
WPS	HE	144.0	IAML			22:10	12.79	4	0.39	

TABLE 2 : PHASE DATA

March 16 2018 Time: 23:54 12.3 UTC Magnitude: 1.0 ML
Lat: 53.862N Lon: -1.901W Depth: 11.5 km
Grid Ref: 406.51 kmE 440.67 kmN RMS: 0.20 secs
Locality: KEIGHLEY,WEST YORKSHIR
Velocity model: Lownet Xnear: 100.0 Xfar: 200.0

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES
HPK	HZ	21.1	EP			23:54	16.59			-0.06
HPK	HE	21.1	ES			23:54	19.94			0.12
HPK	HN	21.1	IAML			23:54	20.05	32	0.20	
HPK	HE	21.1	IAML			23:54	20.08	30	0.18	
LBWR	HZ	52.5	EP			23:54	21.38			-0.04
LBWR	HN	52.5	ES			23:54	27.88			-0.18
LBWR	HN	52.5	IAML			23:54	28.45	11	0.21	
LBWR	HE	52.5	IAML			23:54	28.98	12	0.14	
EDMD	HE	108.0	ES			23:54	42.28			-0.25
KESW	HZ	113.0	EP			23:54	30.64			0.12
KESW	HN	113.0	ES			23:54	43.87			0.07
CWF	HZ	131.0	EP			23:54	33.60			0.47

March 17 2018 Time: 16:37 49.5 UTC Magnitude: 2.8 ML
Lat: 59.744N Lon: 1.892W Depth: 20.2 km
Grid Ref: 618.66 kmE 1101.76 kmN RMS: 0.40 secs
Locality: NORTHERN NORTH SEA
Velocity model: North Sea Xnear: 600.0 Xfar: 1000.0
Comment: 175KM ESE LERWICK

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES
LRW	HZ	177.0	EP			16:38	15.38			0.33
LRW	HE	177.0	ES			16:38	34.34			0.64
LRW	HE	177.0	IAML			16:38	39.34	76	0.15	
LRW	HN	177.0	IAML			16:38	45.15	86	0.44	
ASK	EZ	201.0	IP			16:38	17.83			-0.21
ASK	EN	201.0	ES			16:38	38.26			-0.62
BER	HZ	205.0	EP			16:38	18.23			-0.23
BER	HE	205.0	IAML			16:38	41.10	18	0.15	
BER	HN	205.0	IAML			16:38	50.73	20	0.24	
SUE	HZ	215.0	EP			16:38	19.48			-0.32
SUE	HE	215.0	ES			16:38	41.22			-0.70
BLS5	HZ	260.0	EP			16:38	25.84			0.41
BLS5	HE	260.0	ES			16:38	51.53			-0.14
ODD1	HZ	266.0	IP			16:38	26.51			0.32
ODD1	HE	266.0	ES			16:38	52.94			-0.03
FOO	HZ	269.0	EP			16:38	26.51			0.07
FOO	HN	269.0	ES			16:38	53.38			-0.03
HYA	HZ	284.0	EP			16:38	28.29			-0.09
HYA	HN	284.0	ES			16:38	56.99			0.22
SNART	EZ	343.0	EP			16:38	36.39			0.73
SNART	EE	343.0	ES			16:39	09.76			0.40
BIGH	HZ	360.0	EP			16:38	38.28			0.48
BIGH	HE	360.0	ES			16:39	13.46			0.40
BIGH	HN	360.0	IAML			16:39	15.13	17	0.26	
BIGH	HE	360.0	IAML			16:39	15.41	17	0.12	
MCD	HZ	383.0	EP			16:38	40.80			0.10
MCD	HN	383.0	ES			16:39	18.04			-0.05
MCD	HE	383.0	IAML			16:39	19.14	18	0.17	
MCD	HN	383.0	IAML			16:39	19.56	25	0.12	
DRUM	HZ	406.0	EP			16:38	43.96			0.42
DRUM	HN	406.0	ES			16:39	22.57			-0.43
DRUM	HE	406.0	IAML			16:39	24.32	29	0.20	
DRUM	HN	406.0	IAML			16:39	26.19	43	0.34	
LINV	HE	445.0	EP			16:38	47.95			-0.37
DOMB	HZ	470.0	EP			16:38	51.84			0.40
DOMB	HN	470.0	ES			16:39	37.02			0.36
INVG	HZ	509.0	EP			16:38	55.97			-0.28
INVG	HE	509.0	IAML			16:39	46.31	8	0.33	
INVG	HN	509.0	IAML			16:39	47.17	12	0.34	
KPL	HZ	514.0	EP			16:38	56.46			-0.45
EDI	HZ	521.0	EP			16:38	58.22			0.40
EDI	HE	521.0	IAML			16:39	50.52	16	0.48	
EDI	HN	521.0	IAML			16:39	51.72	15	0.22	
LEWI	HZ	534.0	EP			16:38	59.23			-0.23
LEWI	HN	534.0	IAML			16:39	51.59	6	0.24	
LEWI	HE	534.0	IAML			16:39	55.83	6	0.56	
LAWE	HZ	579.0	EP			16:39	03.93			-1.11
LAWE	HN	579.0	IAML			16:40	01.00	12	0.20	
LAWE	HE	579.0	IAML			16:40	02.58	12	0.28	
ESK	HZ	580.0	EP			16:39	04.70			-0.37
ESK	HN	580.0	IAML			16:40	02.23	8	0.48	
ESK	HE	580.0	IAML			16:40	05.28	9	0.31	

March 17 2018 Time: 23:40 23.2 UTC Magnitude: 0.7 ML
Lat: 58.137N Lon: -5.467W Depth: 3.4 km
Grid Ref: 195.93 kmE 921.66 kmN RMS: 0.20 secs
Locality: REIFF,HIGHLAND
Velocity model: Lownet Xnear: 100.0 Xfar: 200.0
Comment: 7KM NORTH REIFF

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES
LINV	HZ	15.9	IP		D	23:40	26.43			0.00
LINV	HN	15.9	ES			23:40	28.54			-0.21
LINV	HN	15.9	IAML			23:40	28.60	10	0.12	
LINV	HE	15.9	IAML			23:40	28.66	14	0.10	
LEWI	HZ	82.6	EP			23:40	37.52			0.29
LEWI	HN	82.6	ES			23:40	47.12			-0.31
LEWI	HN	82.6	IAML			23:40	47.50	4	0.40	
LEWI	HE	82.6	IAML			23:40	50.27	2	0.13	
KPL	HZ	89.5	EP			23:40	38.32			0.07
KPL	HN	89.5	ES			23:40	49.19			-0.02
KPL	HN	89.5	IAML			23:40	49.38	5	0.16	
KPL	HE	89.5	IAML			23:40	49.40	4	0.22	
BIGH	HZ	99.5	EP			23:40	40.02			0.21
BIGH	HN	99.5	ES			23:40	51.87			-0.03
BIGH	HN	99.5	IAML			23:40	54.52	4	0.46	
BIGH	HE	99.5	IAML			23:40	54.60	6	0.42	

March 19 2018 Time: 01:08 36.3 UTC Magnitude: 0.4 ML
Lat: 57.158N Lon: -5.188W Depth: 3.3 km
Grid Ref: 207.22 kmE 811.95 kmN RMS: 0.10 secs
Locality: GLEN MORISTON,HIGHLAND
Velocity model: Lownet Xnear: 100.0 Xfar: 200.0

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES
KPL	HZ	34.5	EP			01:08	42.88			0.24
KPL	HN	34.5	ES			01:08	47.09			-0.16
KPL	HE	34.5	IAML			01:08	47.24	1	0.23	
KPL	HN	34.5	IAML			01:08	47.46	3	0.23	
LAWE	HZ	101.0	EP			01:08	52.98			-0.14
LAWE	HN	101.0	ES			01:09	05.50			0.12
LAWE	HE	101.0	IAML			01:09	07.11	2	0.26	
LAWE	HN	101.0	IAML			01:09	07.56	2	0.15	
INVG	HZ	107.0	EP			01:08	54.04			-0.11
INVG	HN	107.0	IAML			01:09	09.30	2	0.17	
INVG	HE	107.0	IAML			01:09	09.46	2	0.13	
LINV	HZ	110.0	EP			01:08	54.62			0.08
LEWI	HZ	149.0	EP			01:09	00.25			-0.11
LEWI	HE	149.0	ES			01:09	17.88			-0.03

March 20 2018 Time: 01:18 20.5 UTC Magnitude: 0.9 ML
Lat: 53.944N Lon: -0.351W Depth: 12.5 km
Grid Ref: 508.22 kmE 451.05 kmN RMS: 0.30 secs
Locality: HUTTON,EAST YORKSHIRE
Velocity model: Lownet Xnear: 500.0 Xfar: 1000.0

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES
AV06	HZ	25.8	EP			01:18	25.43			-0.03
AU08	HZ	28.5	EP			01:18	25.82			-0.04
AU18	HZ	41.1	EP			01:18	27.51			-0.25
AU18	HN	41.1	ES			01:18	33.30			0.21
AU18	HN	41.1	IAML			01:18	33.59	11	0.47	
AU18	HE	41.1	IAML			01:18	33.76	10	0.33	
AU10	E2	41.5	ES			01:18	33.43			0.29
AU09	HE	41.9	ES			01:18	33.45			0.17
AU07	HN	44.0	ES			01:18	34.15			0.31
AU11	HZ	47.3	EP			01:18	28.45			-0.24
AU11	HE	47.3	ES			01:18	35.02			0.31
AU11	HE	47.3	IAML			01:18	35.17	10	0.18	
AU11	HN	47.3	IAML			01:18	35.24	5	0.18	
LMK	HZ	54.3	EP			01:18	29.81			0.03
LMK	HN	54.3	ES			01:18	36.89			0.30
LMK	HE	54.3	IAML			01:18	37.79	20	0.71	
LMK	HN	54.3	IAML			01:18	38.03	17	0.46	
GDLE	HZ	61.2	EP			01:18	30.53			-0.34
GDLE	HN	61.2	ES			01:18	38.46			-0.01
AT10	HN	71.8	ES			01:18	40.97			-0.35
HPK	HZ	83.6	EP			01:18	34.17			-0.15
HPK	HE	83.6	ES			01:18	44.12			-0.33
HPK	HE	83.6	IAML			01:18	44.63	7	0.20	
HPK	HN	83.6	IAML			01:18	44.89	7	0.24	
LBWR	HN	109.0	ES			01:18	50.73			-0.33
LBWR	HE	109.0	IAML			01:18	51.70	4	0.32	
LBWR	HN	109.0	IAML			01:18	51.95	7	0.21	
AR05	HZ	110.0	EP			01:18	37.84			-0.36
EDMD	HN	144.0	ES			01:19	00.03			0.48
CWF	HE	149.0	ES			01:19	01.10			0.33
CWF	HN	149.0	IAML			01:19	02.19	2	0.21	
CWF	HE	149.0	IAML			01:19	02.41	1	0.11	

March 25 2018 Time: 13:35 02.6 UTC Magnitude: 1.2 ML
Lat: 52.702N Lon: -3.025W Depth: 11.5 km
Grid Ref: 330.75 kmE 312.12 kmN RMS: 0.20 secs
Locality: WESTBURY,SHROPSHIRE
Velocity model: Mid Wales Xnear: 80.0 Xfar: 200.0

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES
HLM1	HZ	22.6	IP		D	13:35	06.99			-0.03
HLM1	HE	22.6	ES			13:35	10.01			-0.17
HLM1	HN	22.6	IAML			13:35	10.14	43	0.10	
HLM1	HE	22.6	IAML			13:35	10.27	65	0.34	
FOEL	HZ	24.0	IP		D	13:35	07.34			0.12
FOEL	HE	24.0	ES			13:35	10.62			0.09
FOEL	HN	24.0	IAML			13:35	10.74	51	0.18	
FOEL	HE	24.0	IAML			13:35	10.80	26	0.12	
LLW	BZ	46.2	EP			13:35	10.72			0.00
LLW	BN	46.2	ES			13:35	16.39			-0.16
LLW	BN	46.2	IAML			13:35	16.76	5	0.45	
LLW	BE	46.2	IAML			13:35	18.16	2	0.30	
MCH1	HZ	78.4	EP			13:35	16.38			0.45
MCH1	HN	78.4	ES			13:35	25.27			-0.24
MCH1	HE	78.4	IAML			13:35	25.82	6	0.30	
MCH1	HN	78.4	IAML			13:35	25.84	7	0.12	
MONM	HZ	97.2	EP			13:35	18.76			0.02
MONM	HN	97.2	ES			13:35	30.52			0.17
MONM	HN	97.2	IAML			13:35	35.21	7	0.12	

TABLE 2 : PHASE DATA

MONM	HE	97.2	IAML	13:35	35.50	5	0.32	
WLF1	HZ	113.0	EP	13:35	21.20			0.09
WLF1	HE	113.0	ES	13:35	34.08			-0.34
WLF1	HN	113.0	IAML	13:35	34.30	14	0.30	
WLF1	HE	113.0	IAML	13:35	37.75	9	0.07	
CWF	HZ	116.0	EP	13:35	21.22			-0.38
YRC	EZ	121.0	EP	13:35	22.65			0.37
WPS	HZ	126.0	EP	13:35	23.18			0.15
WPS	HE	126.0	ES	13:35	37.49			-0.23
WPS	HN	126.0	IAML	13:35	38.05	8	0.43	
WPS	HE	126.0	IAML	13:35	38.87	7	0.39	
HPK	HN	168.0	ES	13:35	47.84			-0.21
HPK	HN	168.0	IAML	13:35	49.66	17	0.18	
HPK	HE	168.0	IAML	13:35	50.03	14	0.28	

March 26 2018 Time: 23:50 00.0 UTC Magnitude: 0.5 ML
Lat: 55.107N Lon: -3.638W Depth: 4.4 km
Grid Ref: 295.51 kmE 580.41 kmN RMS: 0.40 secs
Locality: DUMFRIES,D & G
Velocity model: Borders Xnear: 100.0 Xfar: 200.0

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES
ESK	HZ	36.1	EP			23:50	06.25			-0.26
ESK	HN	36.1	ES			23:50	10.56			-0.60
ESK	HN	36.1	IAML			23:50	11.63	3	0.12	
ESK	HE	36.1	IAML			23:50	11.69	4	0.13	
NEWG	HZ	37.8	EP			23:50	06.67			-0.10
NEWG	HE	37.8	ES			23:50	11.01			-0.59
NEWG	HN	37.8	IAML			23:50	11.13	5	0.18	
NEWG	HE	37.8	IAML			23:50	11.15	4	0.18	
KESW	HZ	67.1	EP			23:50	11.54			-0.01
PGB1	HE	95.0	ES			23:50	28.09			0.58
PGB1	HE	95.0	IAML			23:50	30.45	3	0.18	
PGB1	HN	95.0	IAML			23:50	30.74	4	0.29	
EDI	HZ	95.2	EP			23:50	16.60			0.49
EDMD	HN	112.0	ES			23:50	32.43			0.36
IOMK	HE	112.0	ES			23:50	32.41			0.27

March 30 2018 Time: 23:22 30.4 UTC Magnitude: 1.8 ML
Lat: 50.553N Lon: -1.829W Depth: 5.0 km
Grid Ref: 412.11 kmE 72.66 kmN RMS: 0.40 secs
Locality: ENGLISH CHANNEL
Velocity model: Lownet Xnear: 500.0 Xfar: 1000.0
Comment: 14KM SE SWANAGE

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES
WOL	BZ	94.7	EP			23:22	45.85			-0.24
WOL	BE	94.7	ES			23:22	57.42			-0.15
WOL	BN	94.7	IAML			23:23	04.44	8	0.50	
WOL	BE	94.7	IAML			23:23	06.32	8	0.30	
SWN1	HZ	107.0	EP			23:22	47.86			-0.13
SWN1	HE	107.0	ES			23:23	01.79			0.94
SWN1	HN	107.0	IAML			23:23	04.27	22	0.74	
SWN1	HE	107.0	IAML			23:23	05.44	16	0.38	
STRD	HZ	138.0	EP			23:22	52.63			-0.07
JSA	HZ	154.0	EP			23:22	55.24			0.32
JSA	HE	154.0	ES			23:23	12.94			0.09
JSA	HE	154.0	IAML			23:23	14.08	25	0.38	
JSA	HN	154.0	IAML			23:23	14.37	19	0.42	
MONM	HZ	159.0	EP			23:22	55.26			-0.36
MONM	HE	159.0	ES			23:23	14.02			-0.02
MONM	HN	159.0	IAML			23:23	15.15	34	0.72	
MONM	HE	159.0	IAML			23:23	15.54	23	0.26	
MCH1	HZ	180.0	EP			23:22	58.07			-0.48
MCH1	HE	180.0	ES			23:23	19.23			0.11
MCH1	HE	180.0	IAML			23:23	19.99	28	0.30	
MCH1	HN	180.0	IAML			23:23	20.68	18	0.18	

March 31 2018 Time: 11:37 18.8 UTC Magnitude: 1.4 ML
Lat: 50.553N Lon: -1.832W Depth: 5.0 km
Grid Ref: 411.90 kmE 72.66 kmN RMS: 0.30 secs
Locality: ENGLISH CHANNEL
Velocity model: Lownet Xnear: 100.0 Xfar: 200.0
Comment: 14KM SE SWANAGE

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES
WOL	BZ	94.8	EP			11:37	34.40			-0.11
SWN1	HZ	107.0	EP			11:37	36.53			0.14
DYA	HZ	149.0	EP			11:37	42.21			-0.54
DYA	HN	149.0	ES			11:38	00.31			0.05
DYA	HN	149.0	IAML			11:38	00.58	6	0.28	
DYA	HE	149.0	IAML			11:38	03.24	6	0.34	
JSA	HE	154.0	ES			11:38	01.57			0.35
JSA	HE	154.0	IAML			11:38	02.86	8	0.34	
JSA	HN	154.0	IAML			11:38	03.43	6	0.17	
MONM	HZ	158.0	EP			11:37	43.76			-0.24
MONM	HE	158.0	ES			11:38	02.86			0.43
MONM	HE	158.0	IAML			11:38	03.56	7	0.22	
MONM	HN	158.0	IAML			11:38	03.64	8	0.26	
MCH1	HE	180.0	ES			11:38	07.82			0.32
MCH1	HE	180.0	IAML			11:38	08.13	6	0.26	
MCH1	HN	180.0	IAML			11:38	09.26	6	0.20	

April 1 2018 Time: 11:10 58.8 UTC Magnitude: 2.6 ML
Lat: 51.155N Lon: -0.269W Depth: 0.0 km
Grid Ref: 521.04 kmE 141.01 kmN RMS: 0.50 secs
Locality: NEWDIGATE,SURREY
Velocity model: Surrey Xnear: 500.0 Xfar: 1000.0
Comment: FELT SURREY... Intensity: 3

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES
HMNX	HZ	53.2	EP			11:11	09.26			-0.19
HMNX	HN	53.2	ES			11:11	16.47			-0.74
HMNX	HN	53.2	IAML			11:11	19.96	456	0.60	
HMNX	HE	53.2	IAML			11:11	20.21	594	0.65	
WOL	BZ	68.9	EP			11:11	11.94			-0.02
WOL	BN	68.9	ES			11:11	21.43			-0.13
WOL	BN	68.9	IAML			11:11	26.19	310	0.48	
WOL	BE	68.9	IAML			11:11	29.20	449	0.51	
ELSH	HZ	98.2	EP			11:11	16.58			0.04
ELSH	HN	98.2	ES			11:11	30.30			0.84
ELSH	HN	98.2	IAML			11:11	34.12	97	0.49	
ELSH	HE	98.2	IAML			11:11	40.53	193	0.61	
SWN1	HZ	114.0	EP			11:11	19.23			0.22
SWN1	HE	114.0	ES			11:11	33.23			-0.52
SWN1	HE	114.0	IAML			11:11	44.20	129	0.58	
SWN1	HN	114.0	IAML			11:11	47.81	223	0.77	
ELMS	HZ	136.0	EP			11:11	22.38			0.12
ELMS	HN	136.0	ES			11:11	39.09			-0.29
ELMS	HE	136.0	IAML			11:11	40.63	174	0.45	
ELMS	HN	136.0	IAML			11:11	45.83	204	0.46	
STRD	HZ	149.0	EP			11:11	24.47			0.35
STRD	HE	149.0	ES			11:11	42.79			0.20
STRD	HN	149.0	IAML			11:11	50.84	193	0.61	
STRD	HE	149.0	IAML			11:11	52.82	167	0.38	
WACR	HZ	185.0	EP			11:11	29.37			0.33
WACR	HN	185.0	ES			11:11	52.09			1.00
CWF	HZ	190.0	EP			11:11	29.24			-0.47
CWF	HN	190.0	ES			11:11	51.57			-0.69
CWF	HN	190.0	IAML			11:11	57.01	21	0.38	
CWF	HE	190.0	IAML			11:11	57.84	27	0.49	
MONM	HZ	192.0	EP			11:11	30.01			0.11
MONM	HN	192.0	ES			11:11	52.62			0.04
MONM	HE	192.0	IAML			11:11	58.97	69	0.26	
MONM	HN	192.0	IAML			11:11	59.60	139	0.43	
MCH1	HZ	211.0	EP			11:11	32.00			-0.35
MCH1	HN	211.0	ES			11:11	56.74			-0.08
MCH1	HN	211.0	IAML			11:12	01.83	91	0.36	
MCH1	HE	211.0	IAML			11:12	02.72	76	0.57	
HLM1	HZ	235.0	EP			11:11	34.77			-0.70
HLM1	HE	235.0	ES			11:12	02.55			0.33
JSA	HZ	258.0	EP			11:11	39.32			1.25
DYA	HZ	270.0	EP			11:11	39.82			0.05
FOEL	HZ	279.0	EP			11:11	40.90			0.00
RSBS	HZ	323.0	EP			11:11	45.88			-0.45
EDMD	HZ	425.0	EP			11:11	58.68			-0.26

April 1 2018 Time: 11:14 00.1 UTC Magnitude: 1.8 ML
Lat: 51.155N Lon: -0.260W Depth: 0.0 km
Grid Ref: 521.67 kmE 141.02 kmN RMS: 0.50 secs
Locality: NEWDIGATE,SURREY
Velocity model: Surrey Xnear: 100.0 Xfar: 300.0

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES
HMNX	HZ	52.7	EP			11:14	10.44			-0.22
HMNX	HN	52.7	ES			11:14	17.52			-0.84
HMNX	HN	52.7	IAML			11:14	20.61	64	0.25	
HMNX	HE	52.7	IAML			11:14	21.25	89	0.55	
WOL	BZ	69.5	EP			11:14	13.08			-0.26
WOL	BE	69.5	ES			11:14	23.54			0.54
WOL	BN	69.5	IAML			11:14	28.35	36	0.45	
WOL	BE	69.5	IAML			11:14	29.98	46	0.45	
ELSH	HZ	97.6	EP			11:14	17.76			0.04
ELSH	HN	97.6	ES			11:14	31.20			0.62
ELMS	HZ	136.0	EP			11:14	23.48			-0.01
ELMS	HN	136.0	ES			11:14	40.09			-0.47
ELMS	HN	136.0	IAML			11:14	41.19	24	0.41	
ELMS	HE	136.0	IAML			11:14	41.46	25	0.68	
STRD	HZ	149.0	EP			11:14	25.78			0.30
STRD	HE	149.0	ES			11:14	43.85			-0.16
WACR	HZ	185.0	EP			11:14	30.87			0.58
WACR	HE	185.0	ES			11:14	51.71			-0.62
WACR	HN	185.0	IAML			11:14	58.71	17	0.48	
WACR	HE	185.0	IAML			11:14	59.50	16	0.32	
CWF	HZ	190.0	EP			11:14	31.94			0.92
CWF	HN	190.0	ES			11:14	53.71			0.12
CWF	HN	190.0	IAML			11:14	58.83	3	0.40	
CWF	HE	190.0	IAML			11:14	58.99	3	0.42	
MONM	HZ	192.0	EP			11:14	31.75			0.50
MONM	HN	192.0	ES			11:14	53.88			-0.11
MONM	HE	192.0	IAML			11:14	56.19	11	0.60	
MONM	HN	192.0	IAML			11:14	56.21	14	0.48	
MCH1	HZ	212.0	EP			11:14	33.51			-0.19
MCH1	HE	212.0	ES			11:14	58.21			-0.01
MCH1	HN	212.0	IAML			11:15	02.62	11	0.34	
MCH1	HE	212.0	IAML			11:15	03.41	8	0.54	

April 1 2018 Time: 12:11 11.4 UTC Magnitude: 1.7 ML
Lat: 51.163N Lon: -0.239W Depth: 0.0 km
Grid Ref: 523.12 kmE 141.95 kmN RMS: 0.50 secs
Locality: NEWDIGATE,SURREY
Velocity model: Surrey Xnear: 100.0 Xfar: 300.0

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES

TABLE 2 : PHASE DATA

HMNX	HN	52.1	ES		12:11	29.07		-0.46
HMNX	HE	52.1	IAML		12:11	32.47	57	0.64
HMNX	HN	52.1	IAML		12:11	36.05	58	0.50
WOL	BZ	70.7	EP		12:11	24.87		0.01
WOL	BE	70.7	ES		12:11	34.60		-0.06
WOL	BN	70.7	IAML		12:11	38.50	21	0.50
WOL	BE	70.7	IAML		12:11	41.78	33	0.45
ELSH	HZ	96.1	EP	4	12:11	29.37		0.54
SWN1	HZ	116.0	EP	4	12:11	32.71		0.82
ELMS	HZ	134.0	EP		12:11	34.97		0.38
ELMS	HN	134.0	ES		12:11	51.14		-0.36
ELMS	HN	134.0	IAML		12:11	54.79	16	0.46
ELMS	HE	134.0	IAML		12:11	55.09	23	0.50
STRD	HZ	150.0	EP		12:11	37.69		0.75
STRD	HN	150.0	ES		12:11	55.20		-0.36
WACR	HN	184.0	ES		12:12	03.71		0.33
WACR	HN	184.0	IAML		12:12	06.62	11	0.24
WACR	HE	184.0	IAML		12:12	11.05	12	0.36
MONM	HZ	193.0	EP		12:11	43.77		1.06
MONM	HN	193.0	ES		12:12	05.47		-0.06
MONM	HE	193.0	IAML		12:12	09.40	7	0.26
MONM	HN	193.0	IAML		12:12	11.99	12	0.38
MCH1	HE	213.0	ES		12:12	09.18		-0.57
MCH1	HN	213.0	IAML		12:12	12.20	4	0.36
MCH1	HE	213.0	IAML		12:12	14.98	6	0.54

April 1 2018 Time: 13:33 13.5 UTC Magnitude: 0.9 ML
Lat: 49.431N Lon: -2.401W Depth: 4.1 km
Grid Ref: 370.93 kmE -52.01 kmN RMS: 0.20 secs
Locality: GUERNSEY,CHANNEL ISLES
Velocity model: Lownet Xnear: 500.0 Xfar: 1000.0

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES
JSA	HZ	31.7	EP			13:33	19.28			-0.12
JSA	HE	31.7	ES			13:33	23.29			-0.38
JSA	HE	31.7	IAML			13:33	28.63	7	0.58	
JSA	HN	31.7	IAML			13:33	31.30	10	0.50	
JDG	EZ	36.7	EP			13:33	20.45			0.20
JDG	EE	36.7	IAML			13:33	35.01	15	0.60	
JDG	EN	36.7	IAML			13:33	36.29	12	0.54	
JDC	EE	36.7	EP			13:33	20.55			0.30
ROSF	BZ	137.0	EP			13:33	36.11			0.21
DYA	HZ	157.0	EP			13:33	38.49			-0.16
DYA	HN	157.0	ES			13:33	56.92			-0.05
DYA	HN	157.0	IAML			13:33	57.57	8	0.46	
DYA	HE	157.0	IAML			13:33	57.85	3	0.16	

April 2 2018 Time: 09:45 44.6 UTC Magnitude: 1.1 ML
Lat: 57.558N Lon: -5.203W Depth: 7.5 km
Grid Ref: 208.41 kmE 856.48 kmN RMS: 0.20 secs
Locality: KINLOCHEWE,HIGHLAND
Velocity model: Lownet Xnear: 500.0 Xfar: 1000.0
Comment: 7KM SE KINLOCHEWE

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES
KPL	HZ	36.3	EP			09:45	51.05			0.01
KPL	HE	36.3	ES			09:45	55.51			-0.25
KPL	HN	36.3	IAML			09:45	55.68	22	0.26	
KPL	HE	36.3	IAML			09:45	55.74	27	0.12	
LINV	HZ	65.6	EP			09:45	55.59			0.00
LINV	HE	65.6	ES			09:46	03.34			-0.30
LINV	HE	65.6	IAML			09:46	03.68	6	0.18	
LINV	HN	65.6	IAML			09:46	08.02	7	0.10	
MCD	HZ	117.0	EP			09:46	03.63			0.08
MCD	HE	117.0	ES			09:46	17.31			-0.09
LEWI	HZ	119.0	EP			09:46	03.78			-0.06
LEWI	HE	119.0	ES			09:46	17.97			0.06
LEWI	HN	119.0	IAML			09:46	18.51	4	0.40	
LEWI	HE	119.0	IAML			09:46	18.89	3	0.25	
BIGH	HZ	129.0	EP			09:46	05.65			0.28
BIGH	HE	129.0	IAML			09:46	23.51	5	0.41	
BIGH	HN	129.0	IAML			09:46	24.55	4	0.17	
INVG	HZ	144.0	EP			09:46	07.74			0.17
INVG	HE	144.0	ES			09:46	23.89			-0.47
INVG	HN	144.0	IAML			09:46	26.52	4	0.12	
INVG	HE	144.0	IAML			09:46	26.88	2	0.10	
LAWE	HZ	145.0	EP			09:46	08.19			0.55
LAWE	HE	145.0	ES			09:46	24.51			0.02
LAWE	HN	145.0	IAML			09:46	26.72	5	0.16	
LAWE	HE	145.0	IAML			09:46	27.28	6	0.20	

April 3 2018 Time: 03:51 58.2 UTC Magnitude: 1.3 ML
Lat: 56.187N Lon: -4.414W Depth: 7.8 km
Grid Ref: 250.20 kmE 701.99 kmN RMS: 0.30 secs
Locality: ABERFOYLE,STIRLING
Velocity model: Lownet Xnear: 100.0 Xfar: 200.0

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES
INVG	HZ	35.2	IP		D	03:52	04.61			0.07
INVG	HE	35.2	ES			03:52	08.77			-0.41
INVG	HE	35.2	IAML			03:52	09.90	89	0.18	
INVG	HN	35.2	IAML			03:52	09.98	74	0.18	
PGB1	HZ	42.0	IP		D	03:52	05.57			0.01
PGB1	HE	42.0	ES			03:52	10.76			-0.20
PGB1	HN	42.0	IAML			03:52	10.99	19	0.14	
PGB1	HE	42.0	IAML			03:52	11.09	15	0.34	
LAWE	HZ	61.7	IP		C	03:52	08.91			0.31
LAWE	HN	61.7	ES			03:52	15.92			-0.30
LAWE	HN	61.7	IAML			03:52	19.71	36	0.13	
LAWE	HE	61.7	IAML			03:52	19.94	33	0.10	
EDI	HZ	81.8	EP			03:52	11.68			-0.04
EDI	HE	81.8	ES			03:52	21.65			0.04
EDI	HE	81.8	IAML			03:52	24.62	8	0.22	
EDI	HN	81.8	IAML			03:52	25.74	12	0.14	
NEWG	HZ	120.0	EP			03:52	17.63			0.04
ESK	HZ	123.0	EP			03:52	18.44			0.31
DRUM	HZ	143.0	EP			03:52	21.38			0.34
GAL1	HZ	148.0	EP			03:52	21.84			0.15
KPL	HZ	149.0	EP			03:52	22.61			0.81
CLGH	HZ	163.0	EP			03:52	23.38			-0.43
MCD	HZ	171.0	EP			03:52	25.03			0.15
LINV	HZ	223.0	EP			03:52	31.90			0.50

April 7 2018 Time: 21:54 56.2 UTC Magnitude: 1.7 ML
Lat: 51.600N Lon: -1.328W Depth: 13.1 km
Grid Ref: 446.54 kmE 189.28 kmN RMS: 0.30 secs
Locality: EAST HENDRED,OXON
Velocity model: Lownet Xnear: 150.0 Xfar: 1000.0

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES
WOL	BZ	32.7	EP			21:55	02.14			-0.09
WOL	BE	32.7	ES			21:55	06.48			-0.18
WOL	BN	32.7	IAML			21:55	07.89	28	0.30	
WOL	BE	32.7	IAML			21:55	12.62	22	0.25	
SWN1	HZ	34.1	EP			21:55	02.42			-0.03
SWN1	HN	34.1	ES			21:55	07.43			0.40
SWN1	HN	34.1	IAML			21:55	08.44	124	0.24	
SWN1	HE	34.1	IAML			21:55	12.67	48	0.35	
STRD	HZ	60.9	EP			21:55	06.23			-0.32
STRD	HN	60.9	ES			21:55	14.43			0.31
STRD	HN	60.9	IAML			21:55	14.83	68	0.32	
STRD	HE	60.9	IAML			21:55	19.16	67	0.66	
MONM	HZ	105.0	EP			21:55	13.24			-0.02
MONM	HE	105.0	IAML			21:55	26.70	16	0.18	
MONM	HN	105.0	IAML			21:55	26.84	20	0.36	
HLM1	HZ	148.0	EP			21:55	18.88			-0.47
HLM1	HE	148.0	ES			21:55	35.88			-0.39
HLM1	HN	148.0	IAML			21:55	36.44	9	0.24	
HLM1	HE	148.0	IAML			21:55	37.38	13	0.14	
ELMS	HZ	169.0	EP			21:55	22.33			0.23
ELMS	HN	169.0	ES			21:55	41.21			0.18
ELMS	HE	169.0	IAML			21:55	44.79	25	0.26	
ELMS	HN	169.0	IAML			21:55	47.86	27	0.40	
WACR	HZ	183.0	EP			21:55	23.82			-0.07
WACR	HN	183.0	IAML			21:55	45.76	16	0.21	
WACR	HE	183.0	IAML			21:55	46.23	19	0.10	
FOEL	HZ	192.0	EP			21:55	25.69			0.60
DYA	HZ	224.0	EP			21:55	28.91			-0.11

April 8 2018 Time: 14:18 19.6 UTC Magnitude: 1.0 ML
Lat: 57.313N Lon: -5.496W Depth: 9.0 km
Grid Ref: 189.49 kmE 830.10 kmN RMS: 0.20 secs
Locality: SALLACHY,HIGHLAND
Velocity model: Lownet Xnear: 100.0 Xfar: 200.0

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES
KPL	HZ	9.9	IP			14:18	22.20			0.11
KPL	HE	9.9	ES			14:18	23.84			-0.08
KPL	HN	9.9	IAML			14:18	23.89	144	0.10	
KPL	HE	9.9	IAML			14:18	24.00	103	0.18	
LINV	HZ	94.5	EP			14:18	35.25			0.14
LINV	HE	94.5	ES			14:18	46.13			-0.30
LINV	HE	94.5	IAML			14:18	48.42	4	0.16	
LINV	HN	94.5	IAML			14:18	48.43	2	0.16	
LAWE	HZ	117.0	EP			14:18	38.72			0.06
LAWE	HE	117.0	ES			14:18	52.12			-0.45
LAWE	HN	117.0	IAML			14:18	54.90	5	0.28	
LAWE	HE	117.0	IAML			14:18	55.03	4	0.15	
LEWI	HZ	124.0	EP			14:18	39.74			0.18
LEWI	HE	124.0	ES			14:18	54.18			0.06
LEWI	HE	124.0	IAML			14:18	55.36	4	0.10	
LEWI	HN	124.0	IAML			14:18	55.47	5	0.26	
INVG	HZ	133.0	EP			14:18	41.30			0.45
INVG	HE	133.0	ES			14:18	56.46			0.10
INVG	HZ	133.0	IAML			14:18	57.90	4	0.14	
INVG	HE	133.0	IAML			14:18	58.26	4	0.22	
DRUM	HN	188.0	ES			14:19	08.87			-0.35

April 8 2018 Time: 21:39 58.9 UTC Magnitude: 1.6 ML
Lat: 50.997N Lon: -0.047W Depth: 1.0 km
Grid Ref: 537.03 kmE 123.83 kmN RMS: 0.60 secs
Locality: SCAYNES HILL,W SUSSEX
Velocity model: Surrey Xnear: 100.0 Xfar: 300.0

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES
HMNX	HZ	30.5	EP			21:40	04.03			-1.28
HMNX	HN	30.5	ES			21:40	10.92			0.91
HMNX	HN	30.5	IAML			21:40	12.68	124	0.41	
HMNX	HE	30.5	IAML			21:40	15.37	167	0.40	
WOL	BZ	89.5	EP			21:40	14.73			-0.04
WOL	BE	89.5	ES			21:40	25.98			-0.41
WOL	BN	89.5	IAML			21:40	32.08	11	0.50	
WOL	BE	89.5	IAML			21:40	34.93	16	0.50	
SWN1	HZ	135.0	EP			21:40	22.28			0.43

TABLE 2 : PHASE DATA

SWN1	HE	135.0	ES		21:40	39.00			0.36
SWN1	HE	135.0	IAML		21:40	40.18	10	0.66	
SWN1	HN	135.0	IAML		21:40	44.31	14	0.32	
ELMS	HZ	142.0	EP		21:40	22.65			-0.06
ELMS	HE	142.0	ES		21:40	40.11			-0.01
ELMS	HE	142.0	IAML		21:40	42.65	13	0.54	
ELMS	HN	142.0	IAML		21:40	43.10	13	0.42	
STRD	HZ	171.0	EP		21:40	27.18			0.23
STRD	HE	171.0	ES		21:40	47.86			0.40
STRD	HN	171.0	IAML		21:40	50.34	15	0.58	
STRD	HE	171.0	IAML		21:40	52.30	13	0.52	
MONM	HZ	213.0	EP		21:40	32.93			0.64
MONM	HN	213.0	IAML		21:41	02.90	5	0.38	
MONM	HE	213.0	IAML		21:41	05.19	5	0.40	
HLM1	HZ	259.0	EP		21:40	36.93			-1.14
HLM1	HN	259.0	IAML		21:41	06.62	2	0.56	
HLM1	HE	259.0	IAML		21:41	12.70	2	0.36	

April 9 2018 Time: 21:22 35.6 UTC Magnitude: 0.6 ML
Lat: 53.387N Lon: -4.469W Depth: 8.5 km
Grid Ref: 235.82 kmE 390.66 kmN RMS: 0.20 secs
Locality: LLANFECHELL,ANGLESEY
Velocity model: Lleyn Xnear: 150.0 Xfar: 200.0

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES
WPS	HZ	2.5	IP		D	21:22	37.16			0.08
WPS	HE	2.5	ES			21:22	38.25			0.14
WPS	HE	2.5	IAML			21:22	38.28	81	0.10	
WPS	HN	2.5	IAML			21:22	38.36	27	0.22	
WLF1	HZ	11.8	IP		C	21:22	37.95			-0.10
WLF1	HE	11.8	ES			21:22	39.48			-0.26
WLF1	HE	11.8	IAML			21:22	39.52	55	0.10	
WLF1	HN	11.8	IAML			21:22	39.62	26	0.16	
YRC	EZ	16.7	IP		C	21:22	38.75			0.00
YLL	EZ	33.9	EP			21:22	41.45			-0.02
IOMK	HZ	97.5	EP			21:22	51.81			0.08
IOMK	HE	97.5	ES			21:23	02.48			-0.24
FOEL	HZ	101.0	EP			21:22	52.59			0.24
HLM1	HZ	144.0	EP			21:22	58.99			0.08
HLM1	HE	144.0	IAML			21:23	16.71	1	0.58	
HLM1	HN	144.0	IAML			21:23	17.37	1	0.26	

April 13 2018 Time: 17:57 20.4 UTC Magnitude: 2.2 ML
Lat: 57.701N Lon: -5.262W Depth: 9.1 km
Grid Ref: 205.65 kmE 872.56 kmN RMS: 0.30 secs
Locality: KINLOCHEWE,HIGHLAND
Velocity model: Lownet Xnear: 100.0 Xfar: 200.0
Comment: 10KM NNE KINLOCHEWE

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES
KPL	HZ	46.6	IP		D	17:57	28.62			0.19
KPL	HN	46.6	ES			17:57	34.02			-0.30
KPL	HE	46.6	IAML			17:57	34.79	96	0.16	
KPL	HN	46.6	IAML			17:57	39.52	87	0.12	
LEWI	HZ	107.0	IP		C	17:57	38.14			0.25
LEWI	HN	107.0	ES			17:57	50.69			0.01
LEWI	HN	107.0	IAML			17:57	52.08	44	0.06	
LEWI	HE	107.0	IAML			17:57	52.33	42	0.10	
BIGH	HZ	119.0	EP			17:57	39.48			-0.13
MCD	HZ	121.0	IP		C	17:57	39.68			-0.22
INVG	HZ	160.0	EP			17:57	46.34			0.83
INVG	HE	160.0	ES			17:58	04.01			0.14
INVG	HN	160.0	IAML			17:58	06.27	43	0.32	
INVG	HE	160.0	IAML			17:58	06.55	51	0.24	
LAWE	HZ	161.0	EP			17:57	45.37			-0.22
LAWE	HN	161.0	IAML			17:58	07.39	62	0.19	
LAWE	HE	161.0	IAML			17:58	07.57	216	0.16	
DRUM	HZ	189.0	EP			17:57	48.75			-0.44
PGB1	HZ	216.0	EP			17:57	52.73			0.19
ESK	HZ	294.0	EP			17:58	02.29			-0.06

April 14 2018 Time: 14:01 57.6 UTC Magnitude: 1.6 ML
Lat: 56.796N Lon: -5.580W Depth: 7.4 km
Grid Ref: 181.41 kmE 772.86 kmN RMS: 0.30 secs
Locality: LOCH SHIEL,HIGHLAND
Velocity model: Lownet Xnear: 125.0 Xfar: 250.0

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES
KPL	HZ	60.6	EP			14:02	08.15			0.33
KPL	HN	60.6	ES			14:02	15.06			-0.24
KPL	HN	60.6	IAML			14:02	19.25	16	0.12	
KPL	HE	60.6	IAML			14:02	19.99	24	0.26	
LAWE	HZ	60.7	EP			14:02	08.11			0.25
LAWE	HE	60.7	ES			14:02	15.02			-0.35
LAWE	HE	60.7	IAML			14:02	15.29	32	0.14	
LAWE	HN	60.7	IAML			14:02	19.80	58	0.12	
INVG	HZ	103.0	EP			14:02	14.32			-0.10
INVG	HE	103.0	ES			14:02	26.65			-0.08
INVG	HN	103.0	IAML			14:02	29.13	20	0.11	
INVG	HE	103.0	IAML			14:02	29.80	22	0.10	
LINV	HZ	152.0	EP			14:02	21.26			-0.41
MCD	HZ	166.0	EP			14:02	23.94			0.29
LEWI	HZ	169.0	EP			14:02	24.13			0.06
EDI	HE	177.0	ES			14:02	45.72			0.62
EDI	HN	177.0	IAML			14:02	47.10	9	0.32	
EDI	HE	177.0	IAML			14:02	47.55	10	0.38	
DRUM	HZ	189.0	EP			14:02	26.97			0.38
DRUM	HN	189.0	ES			14:02	47.52			-0.26
DRUM	HN	189.0	IAML			14:02	50.84	9	0.20	
DRUM	HE	189.0	IAML			14:02	53.22	8	0.10	
CLGH	HZ	194.0	EP			14:02	27.48			0.33
CLGH	HN	194.0	IAML			14:02	55.13	5	0.16	
CLGH	HE	194.0	IAML			14:02	55.75	7	0.50	
NEWG	HZ	205.0	EP			14:02	28.29			-0.27
ESK	HZ	221.0	EP			14:02	30.89			0.26

April 16 2018 Time: 04:40 03.3 UTC Magnitude: 0.8 ML
Lat: 58.522N Lon: -4.692W Depth: 9.6 km
Grid Ref: 243.24 kmE 962.42 kmN RMS: 0.30 secs
Locality: DURNESS,HIGHLAND
Velocity model: Lownet Xnear: 100.0 Xfar: 200.0
Comment: 6KM SE DURNESS

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES
BIGH	HZ	45.7	IP		C	04:40	11.57			0.29
BIGH	HE	45.7	ES			04:40	16.73			-0.35
BIGH	HN	45.7	IAML			04:40	17.47	11	0.10	
BIGH	HE	45.7	IAML			04:40	17.84	7	0.18	
LINV	HZ	51.2	IP		D	04:40	12.28			0.15
LINV	HN	51.2	ES			04:40	18.40			-0.15
LINV	HE	51.2	IAML			04:40	24.29	3	0.24	
LINV	HN	51.2	IAML			04:40	25.47	4	0.14	
LEWI	HZ	134.0	EP			04:40	24.95			0.16
LEWI	HN	134.0	ES			04:40	39.93			-0.52
LEWI	HN	134.0	IAML			04:40	42.35	4	0.14	
LEWI	HE	134.0	IAML			04:40	42.50	2	0.11	
KPL	HZ	144.0	EP			04:40	26.70			0.65
KPL	HN	144.0	IAML			04:40	46.63	2	0.42	
KPL	HE	144.0	IAML			04:40	48.86	4	0.36	

April 18 2018 Time: 06:54 00.4 UTC Magnitude: 0.6 ML
Lat: 55.884N Lon: -5.446W Depth: 8.8 km
Grid Ref: 184.51 kmE 671.01 kmN RMS: 0.30 secs
Locality: TARBERT,ARGYLL & BUTE
Velocity model: Lownet Xnear: 100.0 Xfar: 300.0

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES
LAWE	HZ	42.0	EP			06:54	07.85			0.09
LAWE	HE	42.0	ES			06:54	12.75			-0.39
LAWE	HE	42.0	IAML			06:54	13.37	4	0.12	
LAWE	HN	42.0	IAML			06:54	15.16	3	0.12	
PGB1	HZ	60.8	EP			06:54	10.98			0.30
CLGH	HZ	98.6	EP			06:54	16.87			0.32
CLGH	HE	98.6	ES			06:54	28.22			-0.13
CLGH	HE	98.6	IAML			06:54	29.88	6	0.56	
CLGH	HN	98.6	IAML			06:54	31.31	3	0.21	
INVG	HZ	106.0	EP			06:54	17.78			0.06
INVG	HE	106.0	ES			06:54	30.54			0.16
NEWG	HE	115.0	ES			06:54	32.20			-0.48

April 18 2018 Time: 12:18 14.1 UTC Magnitude: 1.0 ML
Lat: 56.406N Lon: -5.692W Depth: 2.5 km
Grid Ref: 172.24 kmE 729.86 kmN RMS: 0.20 secs
Locality: MULL,ARGYLL & BUTE
Velocity model: Lownet Xnear: 500.0 Xfar: 1000.0

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES
LAWE	HZ	24.4	EP			12:18	18.48			-0.20
LAWE	HZ	24.4	IP		C	12:18	18.78			0.10
LAWE	HE	24.4	ES			12:18	21.60			-0.46
LAWE	HE	24.4	IAML			12:18	22.32	23	0.18	
LAWE	HN	24.4	IAML			12:18	22.37	35	0.24	
PGB1	HZ	100.0	EP			12:18	31.21			0.39
PGB1	HE	100.0	ES			12:18	43.40			0.34
PGB1	HN	100.0	IAML			12:18	44.02	8	0.16	
PGB1	HE	100.0	IAML			12:18	44.41	8	0.26	
INVG	HZ	102.0	EP			12:18	31.16			0.08
INVG	HE	102.0	ES			12:18	43.52			0.02
INVG	HE	102.0	IAML			12:18	44.55	8	0.10	
INVG	HN	102.0	IAML			12:18	46.67	0	0.54	
KPL	HZ	104.0	EP			12:18	31.35			-0.01
KPL	HN	104.0	ES			12:18	43.85			-0.13
KPL	HN	104.0	IAML			12:18	45.77	5	0.28	
KPL	HE	104.0	IAML			12:18	46.04	7	0.28	
NEWG	HN	170.0	ES			12:19	00.93			-0.13
NEWG	HN	170.0	IAML			12:19	02.14	2	0.10	
NEWG	HE	170.0	IAML			12:19	03.12	3	0.24	

April 20 2018 Time: 14:59 36.4 UTC Magnitude: 2.1 ML
Lat: 51.912N Lon: -2.935W Depth: 20.7 km
Grid Ref: 335.69 kmE 224.18 kmN RMS: 0.20 secs
Locality: PANDY,MONMOUTHSHIRE
Velocity model: Lownet Xnear: 100.0 Xfar: 200.0

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES
MCH1	HZ	10.5	IP		C	14:59	40.20			-0.17
MCH1	HE	10.5	ES			14:59	43.12			-0.14
MCH1	HE	10.5	IAML			14:59	43.27	298	0.21	
MCH1	HN	10.5	IAML			14:59	43.27	721	0.10	
MONM	HZ	12.1	IP		D	14:59	40.50			0.03
MONM	HE	12.1	ES			14:59	43.68			0.24
MONM	HN	12.1	IAML			14:59	43.83	834	0.14	
MONM	HE	12.1	IAML			14:59	43.89	1066	0.18	
STRD	HZ	55.3	IP		C	14:59	46.11			0.09
STRD	HE	55.3	ES			14:59	52.86			-0.18

TABLE 2 : PHASE DATA

STRD	HN	55.3	IAML		14:59	53.83	156	0.21	
STRD	HE	55.3	IAML		14:59	54.08	212	0.16	
HLM1	HZ	67.6	IP	D	14:59	47.68			-0.14
HLM1	HN	67.6	ES		14:59	55.83			-0.32
HLM1	HE	67.6	IAML		14:59	56.69	109	0.23	
HLM1	HN	67.6	IAML		14:59	56.85	47	0.28	
FOEL	HZ	110.0	IP	D	14:59	54.29			0.37
FOEL	HN	110.0	ES		15:00	07.18			0.48
FOEL	HN	110.0	IAML		15:00	09.26	30	0.21	
FOEL	HE	110.0	IAML		15:00	10.60	28	0.50	
RSBS	HE	125.0	ES		15:00	10.07			-0.10
RSBS	HE	125.0	IAML		15:00	11.61	54	0.08	
RSBS	HN	125.0	IAML		15:00	12.27	52	0.13	
HTL	HZ	148.0	IP	C	14:59	59.01			-0.12
DYA	HZ	178.0	EP		15:00	02.52			-0.40
WLF1	HZ	183.0	EP		15:00	03.21			-0.18
LBWR	HZ	185.0	IP	C	15:00	04.29			0.54
YRC	EZ	186.0	EP		15:00	03.77			-0.04
WPS	HZ	197.0	EP		15:00	05.70			0.56
HPK	HZ	244.0	EP		15:00	11.33			0.20
GDLE	HZ	313.0	EP		15:00	19.67			-0.09

April 20 2018 Time: 18:14 04.1 UTC Magnitude: 2.6 ML
Lat: 57.042N Lon: 1.910W Depth: 10.0 km
Grid Ref: 637.16 kmE 801.32 kmN RMS: 0.60 secs
Locality: CENTRAL NORTH SEA
Velocity model: North Sea Xnear: 1000.0 Xfar: 2000.0
Comment: 240KM EAST ABERDEEN

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES
DRUM	HZ	268.0	EP			18:14	42.60			0.68
DRUM	HN	268.0	IAML			18:15	22.43	19	0.40	
DRUM	HE	268.0	IAML			18:15	25.06	12	0.14	
EDMD	HZ	345.0	EP			18:14	51.14			-0.37
AU18	HZ	352.0	EP			18:14	52.91			0.53
AV06	HZ	354.0	EP			18:14	53.48			0.82
AT10	HZ	355.0	EP			18:14	52.81			0.02
AU08	HZ	363.0	EP			18:14	54.38			0.62
AU11	HZ	364.0	EP			18:14	54.33			0.49
AU09	HZ	368.0	EP			18:14	54.86			0.54
AS07	HZ	394.0	EP			18:14	56.64			-0.95
HPK	HZ	409.0	EP			18:14	59.20			-0.33
HPK	HE	409.0	ES			18:15	39.98			0.01
HPK	HE	409.0	IAML			18:15	41.86	29	0.22	
HPK	HN	409.0	IAML			18:15	42.97	31	0.16	
AQ12	HZ	412.0	EP			18:14	58.58			-1.28
AR09	HZ	416.0	EP			18:14	59.37			-1.04
PGB1	HZ	417.0	EP			18:15	00.56			0.03
PGB1	HN	417.0	ES			18:15	41.89			0.21
PGB1	HE	417.0	IAML			18:15	43.12	10	0.20	
PGB1	HN	417.0	IAML			18:15	43.16	8	0.44	
NEWG	HZ	438.0	EP			18:15	03.02			-0.06
NEWG	HN	438.0	ES			18:15	46.47			0.37
NEWG	HE	438.0	IAML			18:15	47.14	5	0.46	
NEWG	HN	438.0	IAML			18:15	47.48	7	0.18	
GAL1	HZ	479.0	EP			18:15	07.98			-0.19
GAL1	HN	479.0	ES			18:15	54.80			-0.10

April 22 2018 Time: 10:49 52.2 UTC Magnitude: 1.0 ML
Lat: 57.587N Lon: -5.576W Depth: 4.5 km
Grid Ref: 186.28 kmE 860.82 kmN RMS: 0.40 secs
Locality: TORRIDON,HIGHLAND
Velocity model: Lownet Xnear: 100.0 Xfar: 200.0
Comment: 6KM NW TORRIDON

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES
KPL	HZ	28.0	EP			10:49	57.45			0.01
KPL	HE	28.0	ES			10:50	00.89			-0.36
KPL	HE	28.0	IAML			10:50	00.97	7	0.14	
KPL	HN	28.0	IAML			10:50	01.86	6	0.15	
LINV	HZ	66.3	EP			10:50	03.39			-0.31
LEWI	HZ	98.7	EP			10:50	08.90			0.13
LEWI	HE	98.7	IAML			10:50	23.82	3	0.22	
LEWI	HN	98.7	IAML			10:50	23.86	2	0.24	
MCD	HZ	139.0	EP			10:50	14.98			0.05
MCD	HN	139.0	IAML			10:50	32.55	7	0.41	
MCD	HE	139.0	IAML			10:50	32.59	8	0.34	
BIGH	HZ	141.0	EP			10:50	15.44			0.26
BIGH	HN	141.0	IAML			10:50	33.04	3	0.11	
BIGH	HE	141.0	IAML			10:50	34.96	4	0.20	
LAWE	HZ	148.0	EP			10:50	17.18			0.95
LAWE	HN	148.0	ES			10:50	34.32			0.57
LAWE	HN	148.0	IAML			10:50	36.24	3	0.14	
LAWE	HE	148.0	IAML			10:50	36.54	6	0.26	
INVG	HZ	159.0	EP			10:50	18.05			0.22
INVG	HE	159.0	ES			10:50	36.41			-0.12
INVG	HZ	159.0	IAML			10:50	37.56	3	0.42	
INVG	HE	159.0	IAML			10:50	38.72	5	0.44	

April 23 2018 Time: 00:39 51.6 UTC Magnitude: 2.1 ML
Lat: 54.216N Lon: -1.581W Depth: 2.6 km
Grid Ref: 427.32 kmE 480.13 kmN RMS: 0.30 secs
Locality: MASHAM,NORTH YORKSHIRE
Velocity model: Lownet Xnear: 100.0 Xfar: 200.0
Comment: 5KM ESE MASHAM

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES
AT08	HZ	22.0	IP		D	00:39	55.84			0.06
AT08	HN	22.0	ES			00:39	58.76			-0.09
AT08	HE	22.0	IAML			00:39	59.21	549	0.13	
AT08	HN	22.0	IAML			00:39	59.40	305	0.20	
AS07	HZ	23.6	IP		C	00:39	56.15			0.02
AS07	HE	23.6	ES			00:39	59.29			-0.16
AS07	HE	23.6	IAML			00:39	59.62	303	0.18	
AS07	HN	23.6	IAML			00:39	59.64	458	0.10	
HPK	HZ	28.9	IP		D	00:39	57.07			0.08
HPK	HE	28.9	ES			00:40	00.96			0.03
HPK	HN	28.9	IAML			00:40	01.23	266	0.20	
HPK	HE	28.9	IAML			00:40	01.27	477	0.21	
AT10	HZ	31.4	IP		C	00:39	57.42			-0.02
AT10	HN	31.4	ES			00:40	01.52			-0.19
AT10	HN	31.4	IAML			00:40	02.14	151	0.31	
AT10	HE	31.4	IAML			00:40	02.42	112	0.22	
AR05	HZ	38.0	EP			00:39	58.23			-0.32
AS10	HZ	40.8	IP		D	00:39	59.14			0.14
AS10	HE	40.8	ES			00:40	04.19			-0.21
GDLE	HZ	54.8	IP		C	00:40	01.30			-0.01
EDMD	HZ	72.7	IP		D	00:40	04.05			0.01
EDMD	HN	72.7	ES			00:40	13.47			0.34
EDMD	HE	72.7	IAML			00:40	15.32	83	0.17	
EDMD	HN	72.7	IAML			00:40	15.62	133	0.14	
AR01	HZ	76.1	EP			00:40	04.66			0.05
AQ12	HZ	80.0	EP			00:40	05.06			-0.18
AQ12	HE	80.0	ES			00:40	14.27			-0.94
AQ10	HZ	88.2	EP			00:40	06.58			0.14
LBWR	HZ	91.2	IP		D	00:40	07.05			0.08
LBWR	HE	91.2	ES			00:40	17.51			-0.69
LBWR	HN	91.2	IAML			00:40	19.03	100	0.20	
LBWR	HE	91.2	IAML			00:40	20.81	160	0.19	
AQ09	HZ	94.2	EP			00:40	07.59			0.22
AQ09	HE	94.2	IAML			00:40	22.28	65	0.18	
AQ09	HN	94.2	IAML			00:40	23.40	86	0.20	
AQ06	HZ	97.4	EP			00:40	08.11			0.23
AQ06	HE	97.4	IAML			00:40	22.31	69	0.30	
AQ06	HN	97.4	IAML			00:40	23.37	70	0.24	
AQ03	HZ	99.6	EP			00:40	08.51			0.29
AQ05	HZ	103.0	EP			00:40	08.77			-0.02
AQ05	HN	103.0	ES			00:40	21.67			0.32
AQ05	HE	103.0	IAML			00:40	23.41	98	0.12	
AQ05	HN	103.0	IAML			00:40	24.96	69	0.16	
AQ04	HZ	103.0	EP			00:40	09.00			0.21
KESW	HZ	107.0	EP			00:40	09.66			0.21
KESW	HE	107.0	ES			00:40	22.44			-0.05
KESW	HE	107.0	IAML			00:40	23.60	20	0.12	
KESW	HN	107.0	IAML			00:40	23.83	35	0.22	
SPK	EZ	126.0	EP			00:40	12.89			0.52
STNC	HZ	132.0	EP			00:40	13.38			0.13
ESK	HZ	161.0	EP			00:40	17.83			0.40
CWF	HZ	165.0	EP			00:40	19.00			0.94

April 25 2018 Time: 19:08 38.6 UTC Magnitude: 1.4 ML
Lat: 53.594N Lon: -4.582W Depth: 6.9 km
Grid Ref: 229.14 kmE 413.95 kmN RMS: 0.40 secs
Locality: IRISH SEA
Velocity model: Lownet Xnear: 100.0 Xfar: 200.0
Comment: 25KM NW AMLWCH

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES
WPS	HZ	22.2	EP			19:08	43.07			0.18
WPS	HN	22.2	ES			19:08	45.94			-0.10
WPS	HE	22.2	IAML			19:08	46.04	101	0.09	
WPS	HN	22.2	IAML			19:08	46.36	36	0.13	
WLF1	HZ	36.1	IP		D	19:08	45.24			0.18
WLF1	HE	36.1	ES			19:08	49.36			-0.44
WLF1	HE	36.1	IAML			19:08	49.67	58	0.24	
WLF1	HN	36.1	IAML			19:08	55.14	22	0.07	
YRC	EZ	38.2	IP		C	19:08	45.71			0.32
YRC	EZ	38.2	ES			19:08	50.08			-0.28
IOMK	HZ	74.2	EP			19:08	51.22			0.22
IOMK	HE	74.2	ES			19:08	59.42			-0.65
IOMK	HE	74.2	IAML			19:09	00.66	29	0.09	
IOMK	HN	74.2	IAML			19:09	01.43	23	0.09	
FOEL	HZ	121.0	EP			19:08	58.86			0.54
FOEL	HE	121.0	ES			19:09	12.70			-0.03
FOEL	HE	121.0	IAML			19:09	14.02	9	0.26	
FOEL	HN	121.0	IAML			19:09	14.09	9	0.21	
GAL1	HZ	142.0	EP			19:09	01.68			0.41
HLM1	HZ	165.0	EP			19:09	05.64			0.96

April 26 2018 Time: 23:27 55.4 UTC Magnitude: 0.6 ML
Lat: 52.450N Lon: -1.830W Depth: 7.8 km
Grid Ref: 411.55 kmE 283.62 kmN RMS: 0.30 secs
Locality: BIRMINGHAM,W MIDLANDS
Velocity model: Lownet Xnear: 100.0 Xfar: 200.0

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES
CWF	HZ	47.8	EP			23:28	03.56			-0.13
CWF	HE	47.8	ES			23:28	09.36			-0.37
HLM1	HZ	71.8	EP			23:28	07.50			0.05
HLM1	HE	71.8	ES			23:28	15.96			-0.29
HLM1	HE	71.8	IAML			23:28	16.12	2	0.14	
HLM1	HN	71.8	IAML			23:28	16.30	2	0.12	
MCH1	HZ	94.4	EP			23:28	10.88			-0.04

TABLE 2 : PHASE DATA

MCH1	HN	94.4	ES		23:28	21.88			-0.37
MCH1	HN	94.4	IAML		23:28	22.33	2	0.14	
MCH1	HE	94.4	IAML		23:28	22.70	2	0.20	
MONM	HZ	95.2	EP		23:28	11.34			0.31
MONM	HE	95.2	ES		23:28	22.73			0.28
LBWR	HZ	106.0	EP		23:28	13.07			0.31
LBWR	HN	106.0	ES		23:28	25.77			0.34
LBWR	HN	106.0	IAML		23:28	26.26	4	0.19	
LBWR	HE	106.0	IAML		23:28	28.02	5	0.32	

April 27 2018 Time: 16:30 16.8 UTC Magnitude: 1.7 ML
Lat: 52.091N Lon: -3.372W Depth: 5.3 km
Grid Ref: 306.01 kmE 244.56 kmN RMS: 0.30 secs
Locality: BUILTH WELLS,POWYS
Velocity model: Lownet Xnear: 500.0 Xfar: 1000.0
Comment: 6KM SSE BUILTH WELLS

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES
MCH1	HZ	27.7	IP		D	16:30	22.03			0.00
MCH1	HN	27.7	ES			16:30	25.70			-0.14
MCH1	HN	27.7	IAML			16:30	25.77	198	0.10	
MCH1	HE	27.7	IAML			16:30	25.80	133	0.07	
MONM	HZ	48.0	IP		D	16:30	25.31			0.03
MONM	HN	48.0	ES			16:30	31.37			-0.09
MONM	HN	48.0	IAML			16:30	31.63	101	0.26	
MONM	HE	48.0	IAML			16:30	32.02	75	0.26	
HLM1	HZ	58.2	EP			16:30	26.78			-0.13
HLM1	HE	58.2	ES			16:30	33.79			-0.49
HLM1	HE	58.2	IAML			16:30	34.66	20	0.17	
HLM1	HN	58.2	IAML			16:30	35.01	18	0.10	
LLW	BZ	86.7	EP			16:30	31.61			0.34
LLW	BN	86.7	ES			16:30	41.77			-0.07
LLW	BN	86.7	IAML			16:30	42.26	15	0.10	
LLW	BE	86.7	IAML			16:30	42.56	10	0.10	
FOEL	HZ	89.6	EP			16:30	32.17			0.39
FOEL	HE	89.6	ES			16:30	42.74			0.02
FOEL	HN	89.6	IAML			16:30	43.09	29	0.17	
FOEL	HE	89.6	IAML			16:30	43.54	37	0.44	
STRD	HZ	90.3	EP			16:30	32.00			0.16
STRD	HN	90.3	ES			16:30	43.02			0.21
STRD	HE	90.3	IAML			16:30	43.71	45	0.20	
STRD	HN	90.3	IAML			16:30	43.94	48	0.22	
RSBS	HZ	95.5	EP			16:30	32.41			-0.24
RSBS	HN	95.5	ES			16:30	43.87			-0.35
RSBS	HE	95.5	IAML			16:30	47.39	26	0.10	
RSBS	HN	95.5	IAML			16:30	47.70	29	0.24	
HTL	HZ	144.0	EP			16:30	40.15			0.16
WLF1	HZ	150.0	EP			16:30	40.42			-0.41
WLF1	HE	150.0	ES			16:30	58.29			-0.09
WLF1	HN	150.0	IAML			16:31	00.44	19	0.29	
WLF1	HE	150.0	IAML			16:31	00.78	20	0.06	
CWF	HZ	158.0	EP			16:30	41.44			-0.51
WPS	HZ	164.0	EP			16:30	43.39			0.55
WPS	HN	164.0	ES			16:31	02.03			0.18
WPS	HN	164.0	IAML			16:31	04.01	6	0.19	
WPS	HE	164.0	IAML			16:31	04.15	8	0.10	
LBWR	HZ	183.0	EP			16:30	45.77			0.39
LBWR	HN	183.0	IAML			16:31	10.82	12	0.18	
LBWR	HE	183.0	IAML			16:31	12.42	15	0.30	
DYA	HZ	188.0	EP			16:30	46.06			0.09

April 27 2018 Time: 23:47 58.1 UTC Magnitude: 0.7 ML
Lat: 52.823N Lon: -2.160W Depth: 8.4 km
Grid Ref: 389.22 kmE 325.10 kmN RMS: 0.20 secs
Locality: SEIGHFORD,STAFFS
Velocity model: Lownet Xnear: 100.0 Xfar: 200.0

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES
STNC	HZ	30.0	EP			23:48	03.63			0.03
STNC	HN	30.0	ES			23:48	07.47			-0.18
STNC	HN	30.0	IAML			23:48	07.67	12	0.14	
STNC	HE	30.0	IAML			23:48	08.00	16	0.14	
CWF	HZ	58.3	EP			23:48	08.00			0.02
CWF	HN	58.3	ES			23:48	14.91			-0.31
CWF	HN	58.3	IAML			23:48	15.08	5	0.32	
CWF	HE	58.3	IAML			23:48	15.43	2	0.20	
HLM1	HZ	59.4	EP			23:48	08.19			-0.01
HLM1	HE	59.4	ES			23:48	15.69			0.10
HLM1	HN	59.4	IAML			23:48	16.42	2	0.25	
HLM1	HE	59.4	IAML			23:48	16.60	1	0.16	
FOEL	HZ	70.4	EP			23:48	10.23			0.32
LBWR	HZ	70.6	EP			23:48	10.18			0.25
LBWR	HE	70.6	ES			23:48	18.69			0.10
LBWR	HN	70.6	IAML			23:48	19.01	5	0.42	
LBWR	HE	70.6	IAML			23:48	20.11	3	0.09	
LLW	BE	101.0	ES			23:48	26.30			-0.49
MCH1	HZ	108.0	EP			23:48	16.00			0.28
MCH1	HE	108.0	ES			23:48	28.51			-0.09
MCH1	HE	108.0	IAML			23:48	28.99	3	0.12	
MCH1	HN	108.0	IAML			23:48	29.11	3	0.11	
HPK	HE	131.0	ES			23:48	34.51			-0.03
HPK	HN	131.0	IAML			23:48	36.01	5	0.15	
HPK	HE	131.0	IAML			23:48	36.43	5	0.16	

April 28 2018 Time: 12:20 47.2 UTC Magnitude: 1.3 ML
Lat: 52.847N Lon: -2.219W Depth: 7.7 km
Grid Ref: 385.25 kmE 327.78 kmN RMS: 0.30 secs
Locality: ECCLESHALL,STAFFS
Velocity model: Lownet Xnear: 100.0 Xfar: 200.0

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES
STNC	HZ	27.2	IP		D	12:20	52.48			0.17
STNC	HN	27.2	ES			12:20	56.26			0.22
STNC	HN	27.2	IAML			12:20	56.43	52	0.09	
STNC	HE	27.2	IAML			12:20	56.63	156	0.11	
HLM1	HZ	57.8	IP		C	12:20	57.10			0.02
HLM1	HE	57.8	ES			12:21	04.27			-0.03
HLM1	HN	57.8	IAML			12:21	04.75	12	0.11	
HLM1	HE	57.8	IAML			12:21	04.99	14	0.16	
CWF	HE	62.6	ES			12:21	05.06			-0.47
CWF	HN	62.6	IAML			12:21	05.49	16	0.25	
CWF	HE	62.6	IAML			12:21	05.93	9	0.08	
FOEL	HZ	66.2	EP			12:20	58.37			-0.03
FOEL	HN	66.2	ES			12:21	05.97			-0.60
FOEL	HE	66.2	IAML			12:21	06.72	9	0.10	
FOEL	HN	66.2	IAML			12:21	07.17	6	0.13	
LBWR	HZ	70.0	IP		D	12:20	59.08			0.11
LBWR	HE	70.0	ES			12:21	07.35			-0.21
LBWR	HN	70.0	IAML			12:21	07.75	28	0.14	
LBWR	HE	70.0	IAML			12:21	07.87	55	0.15	
MCH1	HZ	108.0	IP		D	12:21	05.06			0.17
MCH1	HN	108.0	ES			12:21	17.67			-0.12
MCH1	HE	108.0	IAML			12:21	20.76	14	0.15	
MCH1	HN	108.0	IAML			12:21	20.77	14	0.12	
MONM	HZ	119.0	EP			12:21	07.42			0.90
HPK	HZ	130.0	EP			12:21	08.51			0.37

April 28 2018 Time: 20:38 34.9 UTC Magnitude: 1.5 ML
Lat: 51.161N Lon: -0.241W Depth: 1.0 km
Grid Ref: 522.98 kmE 141.72 kmN RMS: 0.30 secs
Locality: NEWDIGATE,SURREY
Velocity model: Surrey Xnear: 100.0 Xfar: 300.0

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES
HMNX	HZ	52.0	EP			20:38	44.99			0.02
HMNX	HN	52.0	ES			20:38	51.80			-0.53
HMNX	HN	52.0	IAML			20:38	55.26	44	0.60	
HMNX	HE	52.0	IAML			20:38	55.72	42	0.72	
WOL	BZ	70.6	EP			20:38	47.80			-0.13
WOL	BE	70.6	ES			20:38	57.35			-0.10
WOL	BN	70.6	IAML			20:39	03.05	17	0.45	
WOL	BE	70.6	IAML			20:39	04.88	21	0.45	
SWN1	HZ	116.0	EP			20:38	55.35			0.39
STRD	HZ	150.0	EP			20:39	00.35			0.33
STRD	HN	150.0	IAML			20:39	20.60	8	0.18	
STRD	HE	150.0	IAML			20:39	22.18	9	0.48	
WACR	HN	184.0	ES			20:39	26.41			0.19
CWF	HZ	190.0	EP			20:39	05.54			0.13
MONM	HZ	193.0	EP			20:39	05.93			0.16
MONM	HN	193.0	ES			20:39	28.40			0.09
MONM	HN	193.0	IAML			20:39	35.27	8	0.86	
MONM	HE	193.0	IAML			20:39	35.84	5	0.72	
MCH1	HN	213.0	ES			20:39	32.58			0.04
MCH1	HE	213.0	IAML			20:39	36.28	3	0.39	
MCH1	HN	213.0	IAML			20:39	37.30	6	0.36	
HLM1	HZ	236.0	EP			20:39	11.84			0.55
HLM1	HE	236.0	IAML			20:39	40.99	2	0.26	
HLM1	HN	236.0	IAML			20:39	42.96	2	0.47	

April 29 2018 Time: 18:19 00.4 UTC Magnitude: 2.6 ML
Lat: 55.893N Lon: -5.578W Depth: 8.9 km
Grid Ref: 176.31 kmE 672.43 kmN RMS: 0.40 secs
Locality: ORMSARY,ARGYLL & BUTE
Velocity model: Lownet Xnear: 500.0 Xfar: 1000.0
Comment: FELT TARBERT... Intensity: 3

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES
LAWE	HZ	42.3	IP		D	18:19	07.90			0.07
LAWE	HN	42.3	ES			18:19	12.60			-0.65
LAWE	HN	42.3	IAML			18:19	13.42	221	0.34	
LAWE	HE	42.3	IAML			18:19	13.77	373	0.31	
PGB1	HZ	69.1	IP		C	18:19	12.45			0.45
PGB1	HN	69.1	ES			18:19	20.36			-0.11
PGB1	HE	69.1	IAML			18:19	20.70	214	0.15	
PGB1	HN	69.1	IAML			18:19	21.13	288	0.23	
CLGH	HZ	96.3	EP			18:19	16.47			0.25
CLGH	HE	96.3	ES			18:19	27.29			-0.47
CLGH	HE	96.3	IAML			18:19	29.30	217	0.32	
CLGH	HN	96.3	IAML			18:19	29.51	251	0.20	
INVG	HZ	112.0	EP			18:19	19.13			0.42
INVG	HE	112.0	ES			18:19	31.60			-0.48
NEWG	HZ	121.0	EP			18:19	20.22			0.20
NEWG	HE	121.0	ES			18:19	33.87			-0.47
NEWG	HE	121.0	IAML			18:19	36.19	153	0.18	
NEWG	HN	121.0	IAML			18:19	36.61	182	0.26	
GAL1	HZ	127.0	EP			18:19	20.88			0.08
GAL1	HE	127.0	IAML			18:19	37.24	150	0.39	
GAL1	HN	127.0	IAML			18:19	38.05	160	0.16	
EDI	HZ	150.0	EP			18:19	24.86			0.81
KPL	HZ	161.0	EP			18:19	26.22			0.55
KPL	HE	161.0	IAML			18:19	46.80	137	0.26	
KPL	HN	161.0	IAML			18:19	50.44	56	0.40	
ESK	HZ	163.0	EP			18:19	25.90			-0.06

TABLE 2 : PHASE DATA

ESK	HE	163.0	IAML	18:19	46.87	67	0.32	
ESK	HN	163.0	IAML	18:19	48.11	107	0.50	
ESY	EZ	185.0	EP	18:19	29.12			0.29
IOMK	HZ	193.0	EP	18:19	29.61			-0.13
IOMK	HN	193.0	IAML	18:19	56.95	139	0.30	
IOMK	HE	193.0	IAML	18:19	58.21	85	0.26	
KESW	HZ	214.0	EP	18:19	32.56			0.15
MCD	HZ	236.0	EP	18:19	34.31			-0.82
MCD	HN	236.0	IAML	18:20	09.52	62	0.26	
MCD	HE	236.0	IAML	18:20	11.43	56	0.42	
LINV	HZ	252.0	EP	18:19	37.25			0.14
EDMD	HZ	258.0	EP	18:19	37.82			-0.01
LEWI	HZ	263.0	EP	18:19	38.52			0.04
WPS	HZ	286.0	EP	18:19	41.16			-0.19
YRC	EZ	301.0	EP	18:19	43.18			-0.06

May 1 2018 Time: 06:15 59.9 UTC Magnitude: 2.5 ML
Lat: 55.890N Lon: -5.578W Depth: 8.6 km
Grid Ref: 176.29 kmE 672.10 kmN RMS: 0.40 secs
Locality: ORMSARY,ARGYLL & BUTE
Velocity model: Lownet Xnear: 100.0 Xfar: 200.0
Comment: FELT TARBERT... Intensity: 3

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES
LAWE	HZ	42.6	IP		D	06:16	07.43			0.03
LAWE	HE	42.6	ES			06:16	12.21			-0.65
LAWE	HN	42.6	IAML			06:16	12.91	173	0.34	
LAWE	HE	42.6	IAML			06:16	13.24	221	0.17	
PGB1	HZ	69.1	IP		C	06:16	11.95			0.44
PGB1	HN	69.1	ES			06:16	19.95			-0.02
PGB1	HN	69.1	IAML			06:16	20.38	153	0.09	
PGB1	HE	69.1	IAML			06:16	21.78	150	0.25	
CLGH	HZ	96.0	IP		D	06:16	15.92			0.24
CLGH	HE	96.0	ES			06:16	26.99			-0.20
CLGH	HN	96.0	IAML			06:16	29.83	208	0.15	
CLGH	HE	96.0	IAML			06:16	29.87	236	0.14	
NEWG	HZ	121.0	EP			06:16	19.72			0.20
NEWG	HN	121.0	ES			06:16	33.43			-0.40
NEWG	HE	121.0	IAML			06:16	35.66	155	0.14	
NEWG	HN	121.0	IAML			06:16	36.07	174	0.19	
GAL1	HZ	127.0	EP			06:16	20.42			0.13
GAL1	HE	127.0	ES			06:16	34.67			-0.50
GAL1	HE	127.0	IAML			06:16	36.69	109	0.30	
GAL1	HN	127.0	IAML			06:16	37.59	138	0.17	
EDI	HZ	150.0	EP			06:16	24.37			0.79
KPL	HZ	161.0	EP			06:16	25.96			0.71
KPL	HN	161.0	ES			06:16	44.99			1.24
KPL	HE	161.0	IAML			06:16	46.41	97	0.22	
KPL	HN	161.0	IAML			06:16	50.15	46	0.43	
ESK	HZ	163.0	IP		C	06:16	25.40			-0.08
IOMK	HZ	193.0	EP			06:16	29.15			-0.09
KESW	HZ	214.0	EP			06:16	31.89			-0.03
DRUM	HZ	222.0	EP			06:16	32.69			-0.26
LINV	HZ	252.0	EP			06:16	36.65			-0.04

May 2 2018 Time: 22:59 10.5 UTC Magnitude: 2.1 ML
Lat: 56.231N Lon: -5.230W Depth: 4.7 km
Grid Ref: 199.82 kmE 708.96 kmN RMS: 0.30 secs
Locality: EREDINE,ARGYLL & BUTE
Velocity model: Lownet Xnear: 100.0 Xfar: 200.0
Comment: FELT INVERARAY... Intensity: 3

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES
LAWE	HZ	10.9	IP		C	22:59	12.80			-0.05
LAWE	HE	10.9	ES			22:59	14.36			-0.24
LAWE	HN	10.9	IAML			22:59	14.50	486	0.12	
LAWE	HE	10.9	IAML			22:59	14.56	929	0.12	
PGB1	HZ	65.9	IP		C	22:59	22.14			0.38
PGB1	HE	65.9	ES			22:59	29.86			-0.15
PGB1	HE	65.9	IAML			22:59	30.63	70	0.19	
PGB1	HN	65.9	IAML			22:59	32.97	78	0.22	
INVG	HZ	76.6	IP		C	22:59	23.45			0.03
INVG	HN	76.6	ES			22:59	32.44			-0.44
INVG	HN	76.6	IAML			22:59	36.33	182	0.13	
INVG	HE	76.6	IAML			22:59	36.45	146	0.18	
KPL	HZ	126.0	IP		C	22:59	31.63			0.59
KPL	HE	126.0	ES			22:59	46.13			0.06
KPL	HN	126.0	IAML			22:59	48.47	72	0.25	
KPL	HE	126.0	IAML			22:59	48.52	97	0.21	
EDI	HZ	132.0	EP			22:59	32.23			0.33
EDI	HN	132.0	IAML			22:59	49.75	37	0.26	
EDI	HE	132.0	IAML			22:59	50.93	23	0.14	
NEWG	HZ	139.0	EP			22:59	33.24			0.28
CLGH	HZ	139.0	EP			22:59	33.20			0.19
CLGH	HE	139.0	ES			22:59	49.03			-0.45
CLGH	HE	139.0	IAML			22:59	51.95	56	0.29	
CLGH	HN	139.0	IAML			22:59	52.49	46	0.07	
GAL1	HZ	155.0	EP			22:59	35.31			0.02
ESK	HZ	163.0	EP			22:59	36.05			-0.33

May 3 2018 Time: 19:36 06.0 UTC Magnitude: 0.7 ML
Lat: 53.352N Lon: -4.671W Depth: 11.3 km
Grid Ref: 222.25 kmE 387.26 kmN RMS: 0.00 secs
Locality: HOLYHEAD,ANGLESEY
Velocity model: Lleyn Xnear: 80.0 Xfar: 200.0
Comment: 5KM NNW HOLYHEAD

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES
WPS	HZ	12.6	IP		C	19:36	08.88			-0.02
WPS	HE	12.6	ES			19:36	10.89			0.04
WPS	HN	12.6	IAML			19:36	11.00	25	0.10	
WPS	HE	12.6	IAML			19:36	11.01	24	0.13	
YRC	EZ	13.0	EP			19:36	08.94			0.00
WLF1	HZ	19.6	IP		C	19:36	09.83			-0.02
WLF1	HN	19.6	ES			19:36	12.42			-0.03
WLF1	HE	19.6	IAML			19:36	12.48	15	0.10	
WLF1	HN	19.6	IAML			19:36	12.48	31	0.10	
WME	EZ	25.0	IP		C	19:36	10.64			-0.02
YLL	EZ	40.9	EP			19:36	13.23			0.06

May 3 2018 Time: 20:24 59.0 UTC Magnitude: 0.7 ML
Lat: 54.214N Lon: -1.570W Depth: 4.3 km
Grid Ref: 428.04 kmE 479.91 kmN RMS: 0.20 secs
Locality: MASHAM,NORTH YORKSHIRE
Velocity model: Lownet Xnear: 500.0 Xfar: 1000.0
Comment: 6KM ESE MASHAM

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES
AT08	HZ	21.3	EP			20:25	03.12			-0.01
AT08	HE	21.3	ES			20:25	06.15			0.04
AT08	HE	21.3	IAML			20:25	06.45	33	0.14	
AT08	HN	21.3	IAML			20:25	06.69	17	0.20	
HPK	HZ	28.7	EP			20:25	04.37			-0.06
HPK	HE	28.7	ES			20:25	08.28			-0.08
HPK	HN	28.7	IAML			20:25	08.41	19	0.18	
HPK	HE	28.7	IAML			20:25	08.43	29	0.20	
AT10	HZ	30.9	EP			20:25	04.71			-0.11
AT10	HN	30.9	ES			20:25	08.82			-0.22
AT10	HN	30.9	IAML			20:25	09.27	7	0.30	
AT10	HE	30.9	IAML			20:25	09.93	6	0.29	
AU11	HZ	41.6	EP			20:25	06.69			0.12
AU11	HE	41.6	ES			20:25	12.17			0.11
AU11	HE	41.6	IAML			20:25	12.69	5	0.17	
AU11	HN	41.6	IAML			20:25	12.72	3	0.18	
AU20	HZ	51.8	EP			20:25	08.20			0.04
GDLE	HZ	54.2	EP			20:25	08.55			-0.01
LBWR	HZ	91.0	EP			20:25	14.64			0.35
LBWR	HN	91.0	ES			20:25	25.13			-0.29
LBWR	HN	91.0	IAML			20:25	26.32	5	0.23	
LBWR	HE	91.0	IAML			20:25	27.70	6	0.14	
KESW	HZ	108.0	EP			20:25	17.14			0.23
KESW	HE	108.0	ES			20:25	29.83			-0.12
KESW	HE	108.0	IAML			20:25	30.45	3	0.40	
KESW	HN	108.0	IAML			20:25	31.09	2	0.20	

May 8 2018 Time: 07:22 21.8 UTC Magnitude: 0.5 ML
Lat: 52.801N Lon: -3.959W Depth: 21.9 km
Grid Ref: 267.95 kmE 324.44 kmN RMS: 0.10 secs
Locality: GANLLWYD,GYWNEDD
Velocity model: Mid Wales Xnear: 80.0 Xfar: 200.0

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES
LLW	BZ	20.5	EP			07:22	26.90			0.11
LLW	BN	20.5	ES			07:22	30.37			0.02
LLW	BE	20.5	IAML			07:22	30.79	7	0.15	
LLW	BN	20.5	IAML			07:22	30.92	3	0.18	
FOEL	HZ	52.1	EP			07:22	31.08			0.01
FOEL	HE	52.1	ES			07:22	37.47			-0.25
FOEL	HN	52.1	IAML			07:22	37.78	4	0.18	
FOEL	HE	52.1	IAML			07:22	39.26	4	0.32	
HLM1	HZ	79.4	EP			07:22	35.31			0.19
HLM1	HN	79.4	ES			07:22	44.70			0.03
HLM1	HN	79.4	IAML			07:22	45.25	2	0.11	
HLM1	HE	79.4	IAML			07:22	46.81	2	0.16	
RSBS	HZ	108.0	EP			07:22	39.42			-0.02
RSBS	HN	108.0	ES			07:22	51.95			-0.15
RSBS	HE	108.0	IAML			07:22	53.18	2	0.08	
RSBS	HN	108.0	IAML			07:22	53.76	2	0.07	

May 10 2018 Time: 02:44 14.6 UTC Magnitude: 0.8 ML
Lat: 51.999N Lon: -4.386W Depth: 4.8 km
Grid Ref: 236.22 kmE 236.13 kmN RMS: 0.20 secs
Locality: PENBOYR,CARMARTHENSHIRE
Velocity model: Mid Wales Xnear: 100.0 Xfar: 200.0

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES
RSBS	HZ	25.2	EP			02:44	19.12			0.05
RSBS	HE	25.2	ES			02:44	22.11			-0.21
RSBS	HN	25.2	IAML			02:44	22.40	28	0.14	
RSBS	HE	25.2	IAML			02:44	22.62	36	0.22	
MCH1	HZ	95.3	EP			02:44	30.80			0.16
MCH1	HE	95.3	ES			02:44	41.91			-0.31
MCH1	HE	95.3	IAML			02:44	42.32	2	0.10	
MCH1	HN	95.3	IAML			02:44	46.28	3	0.22	
LLW	BZ	107.0	EP			02:44	32.70			0.20
LLW	BN	107.0	ES			02:44	45.30			-0.11
LLW	BE	107.0	IAML			02:44	47.06	1	0.20	
LLW	BN	107.0	IAML			02:44	47.72	2	0.20	
MONM	HZ	110.0	EP			02:44	33.14			0.04
MONM	HE	110.0	IAML			02:44	49.75	6	0.24	
MONM	HN	110.0	IAML			02:44	49.78	5	0.18	
HLM1	HZ	118.0	EP			02:44	34.58			0.30
HLM1	HN	118.0	IAML			02:44	50.72	2	0.26	
HLM1	HE	118.0	IAML			02:44	51.27	2	0.14	

TABLE 2 : PHASE DATA

May 10 2018 Time: 22:08 25.7 UTC Magnitude: 1.6 ML
Lat: 55.884N Lon: -5.421W Depth: 7.5 km
Grid Ref: 186.07 kmE 670.94 kmN RMS: 0.30 secs
Locality: TARBERT,ARGYLL & BUTE
Velocity model: Lownet Xnear: 500.0 Xfar: 1000.0
Comment: FELT TARBERT... Intensity: 3

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES
LAWE	HZ	41.9	IP		D	22:08	32.93			-0.13
LAWE	HE	41.9	ES			22:08	37.92			-0.51
LAWE	HN	41.9	IAML			22:08	38.39	27	0.12	
LAWE	HE	41.9	IAML			22:08	38.75	40	0.11	
PGB1	HZ	59.2	IP		C	22:08	36.02			0.26
PGB1	HE	59.2	ES			22:08	43.27			0.16
PGB1	HN	59.2	IAML			22:08	43.47	21	0.30	
PGB1	HE	59.2	IAML			22:08	44.47	15	0.28	
CLGH	HZ	99.3	EP			22:08	41.97			-0.01
CLGH	HE	99.3	IAML			22:08	56.70	33	0.16	
CLGH	HN	99.3	IAML			22:08	57.52	26	0.15	
INVG	HZ	105.0	EP			22:08	43.00			0.16
INVG	HN	105.0	ES			22:08	55.14			-0.21
INVG	HN	105.0	IAML			22:08	57.95	17	0.34	
INVG	HE	105.0	IAML			22:08	58.44	13	0.24	
NEWG	HZ	114.0	EP			22:08	44.51			0.30
NEWG	HE	114.0	ES			22:08	57.17			-0.56
NEWG	HE	114.0	IAML			22:08	59.64	27	0.28	
NEWG	HN	114.0	IAML			22:09	00.49	25	0.12	
GAL1	HZ	122.0	EP			22:08	45.54			0.08
GAL1	HN	122.0	ES			22:08	59.49			-0.40
GAL1	HE	122.0	IAML			22:09	01.80	20	0.18	
GAL1	HN	122.0	IAML			22:09	02.39	18	0.14	
EDI	HZ	140.0	EP			22:08	48.18			0.15
EDI	HE	140.0	IAML			22:09	06.63	11	0.34	
EDI	HN	140.0	IAML			22:09	06.75	9	0.33	
ESK	HZ	153.0	EP			22:08	50.48			0.49
ESK	HN	153.0	IAML			22:09	09.52	9	0.18	
ESK	HE	153.0	IAML			22:09	10.90	11	0.22	
KPL	HZ	163.0	EP			22:08	51.87			0.59
KPL	HE	163.0	IAML			22:09	14.39	9	0.16	
KPL	HN	163.0	IAML			22:09	14.50	11	0.30	
DRUM	HZ	214.0	EP			22:08	57.89			0.04
DRUM	HE	214.0	IAML			22:09	28.31	6	0.23	
DRUM	HN	214.0	IAML			22:09	29.22	9	0.14	
MCD	HZ	231.0	EP			22:08	59.55			-0.40

May 11 2018 Time: 05:21 17.1 UTC Magnitude: 1.1 ML
Lat: 51.040N Lon: -3.098W Depth: 8.4 km
Grid Ref: 323.03 kmE 127.37 kmN RMS: 0.30 secs
Locality: TAUNTON,SOMERSET
Velocity model: Lownet Xnear: 125.0 Xfar: 250.0

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES
DYA	HZ	89.3	EP			05:21	32.00			0.11
DYA	HN	89.3	ES			05:21	42.27			-0.39
DYA	HN	89.3	IAML			05:21	44.20	7	0.11	
DYA	HE	89.3	IAML			05:21	44.51	3	0.20	
MONM	HE	91.2	ES			05:21	43.30			0.20
MONM	HE	91.2	IAML			05:21	44.14	7	0.18	
MONM	HN	91.2	IAML			05:21	44.68	5	0.23	
HTL	HZ	97.4	EP			05:21	33.05			-0.05
HTL	HE	97.4	ES			05:21	45.16			0.41
HTL	HN	97.4	IAML			05:21	47.68	10	0.50	
HTL	HE	97.4	IAML			05:21	48.29	4	0.21	
MCH1	HZ	107.0	EP			05:21	34.53			-0.04
MCH1	HE	107.0	ES			05:21	47.11			-0.18
MCH1	HN	107.0	IAML			05:21	49.42	7	0.18	
MCH1	HE	107.0	IAML			05:21	49.45	11	0.24	
SBD	BE	124.0	ES			05:21	51.97			0.21
RSBS	HE	153.0	ES			05:21	58.26			-0.72
RSBS	HE	153.0	IAML			05:22	00.14	2	0.09	
RSBS	HN	153.0	IAML			05:22	03.74	3	0.29	
HLM1	HE	165.0	ES			05:22	02.41			0.35
HLM1	HE	165.0	IAML			05:22	04.15	2	0.19	
HLM1	HN	165.0	IAML			05:22	04.48	2	0.22	

May 15 2018 Time: 01:09 41.8 UTC Magnitude: 1.0 ML
Lat: 57.110N Lon: -4.679W Depth: 7.7 km
Grid Ref: 237.78 kmE 805.28 kmN RMS: 0.30 secs
Locality: FORT AUGUSTUS,HIGHLAND
Velocity model: Lownet Xnear: 150.0 Xfar: 300.0

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES
KPL	HZ	64.1	EP			01:09	52.52			-0.03
KPL	HN	64.1	IAML			01:10	07.24	7	0.18	
KPL	HE	64.1	IAML			01:10	07.26	6	0.14	
INVG	HZ	85.3	EP			01:09	55.92			0.04
INVG	HE	85.3	ES			01:10	05.77			-0.42
INVG	HE	85.3	IAML			01:10	10.22	2	0.10	
INVG	HN	85.3	IAML			01:10	11.40	3	0.14	
MCD	HZ	101.0	EP			01:09	58.06			-0.20
MCD	HE	101.0	IAML			01:10	12.03	5	0.70	
MCD	HN	101.0	IAML			01:10	13.61	5	0.17	
LAWE	HZ	104.0	EP			01:09	59.09			0.28
LAWE	HN	104.0	ES			01:10	11.30			0.04
LAWE	HN	104.0	IAML			01:10	14.18	6	0.16	
LAWE	HE	104.0	IAML			01:10	14.45	9	0.27	
LINV	HZ	120.0	EP			01:10	01.26			0.11
DRUM	HZ	135.0	EP			01:10	03.87			0.45
DRUM	HE	135.0	ES			01:10	19.24			0.01
DRUM	HN	135.0	IAML			01:10	22.65	6	0.19	
DRUM	HE	135.0	IAML			01:10	22.80	6	0.18	
LEWI	HZ	174.0	EP			01:10	08.53			-0.39

May 20 2018 Time: 02:24 56.0 UTC Magnitude: 1.2 ML
Lat: 51.206N Lon: -4.731W Depth: 10.2 km
Grid Ref: 209.25 kmE 148.80 kmN RMS: 0.30 secs
Locality: BRISTOL CHANNEL
Velocity model: Lownet Xnear: 500.0 Xfar: 1000.0
Comment: OFF LUNDY ISLAND

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES
HTL	HZ	29.2	IP		D	02:25	01.92			0.46
HTL	HE	29.2	ES			02:25	05.58			0.17
HTL	HE	29.2	IAML			02:25	06.26	18	0.14	
HTL	HN	29.2	IAML			02:25	06.50	26	0.12	
SBD	BZ	71.4	EP			02:25	08.12			0.12
SBD	BN	71.4	ES			02:25	15.97			-0.75
RSBS	HZ	83.1	EP			02:25	09.96			0.14
RSBS	HE	83.1	ES			02:25	19.58			-0.30
RSBS	HN	83.1	IAML			02:25	21.08	7	0.16	
RSBS	HE	83.1	IAML			02:25	21.18	11	0.08	
DYA	HZ	103.0	EP			02:25	13.10			0.25
DYA	HE	103.0	ES			02:25	24.90			-0.22
DYA	HN	103.0	IAML			02:25	25.79	8	0.10	
DYA	HE	103.0	IAML			02:25	26.33	8	0.13	
CCA1	HZ	119.0	EP			02:25	15.44			0.22
CCA1	HE	119.0	IAML			02:25	30.01	9	0.10	
CCA1	HN	119.0	IAML			02:25	30.06	4	0.13	
MCH1	HZ	149.0	EP			02:25	19.35			-0.17
MCH1	HN	149.0	ES			02:25	36.44			-0.23
MCH1	HE	149.0	IAML			02:25	37.78	4	0.28	
MCH1	HN	149.0	IAML			02:25	38.75	5	0.16	
HLM1	HZ	194.0	EP			02:25	25.73			0.31

May 20 2018 Time: 20:40 48.4 UTC Magnitude: 0.9 ML
Lat: 55.769N Lon: -5.722W Depth: 8.8 km
Grid Ref: 166.57 kmE 659.12 kmN RMS: 0.50 secs
Locality: GIGHA,ARGYLL & BUTE
Velocity model: Lownet Xnear: 500.0 Xfar: 1000.0
Comment: OFFSHORE LOCATION

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES
LAWE	HZ	58.2	EP			20:40	58.02			-0.33
LAWE	HE	58.2	ES			20:41	05.39			-0.18
LAWE	HN	58.2	IAML			20:41	07.58	6	0.22	
LAWE	HE	58.2	IAML			20:41	07.73	9	0.13	
PGB1	HZ	77.8	EP			20:41	01.89			0.50
PGB1	HE	77.8	ES			20:41	11.17			0.33
PGB1	HN	77.8	IAML			20:41	11.45	12	0.26	
PGB1	HE	77.8	IAML			20:41	11.73	11	0.22	
CLGH	HZ	80.3	EP			20:41	02.14			0.36
CLGH	HN	80.3	ES			20:41	11.17			-0.34
CLGH	HE	80.3	IAML			20:41	12.44	6	0.30	
CLGH	HN	80.3	IAML			20:41	12.65	6	0.19	
GAL1	HZ	119.0	EP			20:41	07.89			0.12
NEWG	HZ	119.0	EP			20:41	07.46			-0.29
NEWG	HN	119.0	ES			20:41	21.75			-0.09
NEWG	HN	119.0	IAML			20:41	23.37	3	0.34	
NEWG	HE	119.0	IAML			20:41	23.58	2	0.10	
INVG	HZ	128.0	EP			20:41	08.10			-0.89
INVG	HN	128.0	IAML			20:41	26.50	1	0.18	
INVG	HE	128.0	IAML			20:41	27.85	1	0.23	
KPL	HZ	175.0	EP			20:41	16.31			0.80

May 23 2018 Time: 06:09 39.8 UTC Magnitude: 2.5 ML
Lat: 61.583N Lon: 3.196W Depth: 10.1 km
Grid Ref: 675.63 kmE 1311.15 kmN RMS: 0.40 secs
Locality: NORWEGIAN SEA
Velocity model: North Sea Xnear: 400.0 Xfar: 600.0
Comment: 285KM NE LERWICK

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES
FOO	HZ	98.0	EP			06:09	55.26			-0.31
FOO	HN	98.0	ES			06:10	06.54			-0.54
FOO	HN	98.0	IAML			06:10	08.03	60	0.27	
FOO	HE	98.0	IAML			06:10	10.12	44	0.18	
BER	HZ	177.0	EP			06:10	06.75			0.48
BER	HN	177.0	ES			06:10	25.76			0.17
BER	HN	177.0	IAML			06:10	30.82	32	0.36	
BER	HE	177.0	IAML			06:10	32.22	40	0.20	
MOL	HZ	253.0	EP			06:10	16.06			0.36
MOL	HN	253.0	ES			06:10	41.98			0.08
MOL	HE	253.0	IAML			06:10	50.05	22	0.32	
MOL	HN	253.0	IAML			06:10	56.29	36	0.17	
LRW	HZ	287.0	EP			06:10	20.35			0.37
LRW	HE	287.0	ES			06:10	48.86			-0.44
LRW	HE	287.0	IAML			06:10	51.16	18	0.14	
LRW	HN	287.0	IAML			06:10	51.66	10	0.14	
BIGH	HZ	524.0	EP			06:10	49.47			0.04
BIGH	HN	524.0	ES			06:11	39.01			-1.24
BIGH	HN	524.0	IAML			06:11	42.10	8	0.12	
BIGH	HE	524.0	IAML			06:11	43.30	12	0.20	
MCD	HN	575.0	ES			06:11	51.15			-0.07

TABLE 2 : PHASE DATA

MCD	HE	575.0	IAML	06:11	54.68	6	0.42	
MCD	HN	575.0	IAML	06:11	55.86	8	0.32	

May 25 2018 Time: 20:06 43.6 UTC Magnitude: 0.8 ML
Lat: 57.159N Lon: -5.173W Depth: 7.9 km
Grid Ref: 208.13 kmE 812.02 kmN RMS: 0.30 secs
Locality: GLEN MORISTON,HIGHLAND
Velocity model: Lownet Xnear: 100.0 Xfar: 200.0

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES
KPL	HZ	35.2	EP			20:06	50.06			0.14
KPL	HE	35.2	ES			20:06	54.25			-0.28
KPL	HN	35.2	IAML			20:06	54.50	7	0.24	
KPL	HE	35.2	IAML			20:06	54.62	3	0.11	
LAWE	HZ	101.0	EP			20:06	59.93			-0.21
LAWE	HN	101.0	ES			20:07	12.49			0.28
LAWE	HN	101.0	IAML			20:07	14.65	5	0.14	
LAWE	HE	101.0	IAML			20:07	15.79	4	0.12	
INVG	HZ	107.0	EP			20:07	01.16			0.10
INVG	HE	107.0	ES			20:07	13.38			-0.42
INVG	HN	107.0	IAML			20:07	16.38	3	0.16	
INVG	HE	107.0	IAML			20:07	16.53	3	0.14	
LINV	HZ	110.0	EP			20:07	01.78			0.24
LINV	HZ	110.0	ES			20:07	14.48			-0.14
MCD	HZ	125.0	EP			20:07	04.43			0.61
MCD	HE	125.0	ES			20:07	18.41			-0.16
MCD	HN	125.0	IAML			20:07	19.79	5	0.33	
MCD	HE	125.0	IAML			20:07	19.92	4	0.22	
LEWI	HZ	149.0	EP			20:07	07.44			0.11
LEWI	HN	149.0	ES			20:07	24.61			-0.03

May 26 2018 Time: 02:53 26.7 UTC Magnitude: 0.9 ML
Lat: 51.764N Lon: -3.824W Depth: 7.8 km
Grid Ref: 274.14 kmE 208.88 kmN RMS: 0.30 secs
Locality: CWMLLYNFELL,NPT
Velocity model: Lownet Xnear: 500.0 Xfar: 1000.0

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES
MCH1	HZ	62.5	EP			02:53	37.18			-0.11
MCH1	HE	62.5	ES			02:53	44.55			-0.46
MCH1	HN	62.5	IAML			02:53	44.70	4	0.22	
MCH1	HE	62.5	IAML			02:53	44.74	7	0.18	
RSBS	HZ	66.8	EP			02:53	37.81			-0.16
RSBS	HN	66.8	ES			02:53	45.82			-0.37
RSBS	HE	66.8	IAML			02:53	46.83	5	0.13	
RSBS	HN	66.8	IAML			02:53	47.22	5	0.12	
MONM	HZ	70.8	EP			02:53	38.53			-0.04
MONM	HE	70.8	ES			02:53	47.12			-0.11
MONM	HN	70.8	IAML			02:53	47.36	4	0.13	
MONM	HE	70.8	IAML			02:53	47.37	14	0.14	
HTL	HZ	97.2	EP			02:53	43.12			0.47
HTL	HN	97.2	ES			02:53	54.13			-0.15
HTL	HE	97.2	IAML			02:53	54.52	4	0.24	
HTL	HN	97.2	IAML			02:53	55.47	7	0.22	
HLM1	HZ	106.0	EP			02:53	44.41			0.35
HLM1	HN	106.0	ES			02:53	56.85			0.13
HLM1	HE	106.0	IAML			02:53	58.79	2	0.18	
HLM1	HN	106.0	IAML			02:53	59.83	2	0.11	
LLW	BZ	121.0	EP			02:53	46.80			0.41
DYA	HZ	148.0	EP			02:53	50.29			0.04
DYA	HE	148.0	ES			02:54	07.44			0.01
DYA	HE	148.0	IAML			02:54	08.12	3	0.24	
DYA	HN	148.0	IAML			02:54	08.99	2	0.20	

May 28 2018 Time: 02:09 39.8 UTC Magnitude: 0.8 ML
Lat: 54.315N Lon: -3.023W Depth: 10.5 km
Grid Ref: 333.46 kmE 491.55 kmN RMS: 0.30 secs
Locality: SATTERTHWAITE,CUMBRIA
Velocity model: Lownet Xnear: 100.0 Xfar: 200.0

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES
KESW	HZ	30.9	EP			02:09	45.52			0.00
KESW	HE	30.9	ES			02:09	49.61			-0.08
KESW	HN	30.9	IAML			02:09	49.82	10	0.22	
KESW	HE	30.9	IAML			02:09	50.07	8	0.12	
EDMD	HZ	89.5	EP			02:09	54.69			0.18
EDMD	HE	89.5	ES			02:10	05.21			-0.05
EDMD	HN	89.5	IAML			02:10	06.15	6	0.14	
EDMD	HE	89.5	IAML			02:10	06.58	6	0.24	
HPK	HZ	99.7	ES			02:10	07.87			-0.20
IOMK	HZ	101.0	EP			02:09	56.65			0.37
IOMK	HN	101.0	ES			02:10	08.01			-0.31
IOMK	HE	101.0	IAML			02:10	09.50	3	0.14	
IOMK	HN	101.0	IAML			02:10	09.67	3	0.13	
NEWG	HZ	118.0	EP			02:09	59.46			0.55
NEWG	HE	118.0	ES			02:10	12.46			-0.40

May 30 2018 Time: 09:22 44.4 UTC Magnitude: 1.8 ML
Lat: 57.110N Lon: -5.188W Depth: 7.5 km
Grid Ref: 206.97 kmE 806.61 kmN RMS: 0.40 secs
Locality: GLEN SHIEL,HIGHLAND
Velocity model: Lownet Xnear: 500.0 Xfar: 1000.0
Comment: 18KM SSE MORVICH

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES
KPL	HZ	38.0	EP			09:22	51.16			0.00
KPL	HE	38.0	IAML			09:22	56.10	42	0.18	
KPL	HN	38.0	IAML			09:22	56.31	81	0.24	
INVG	HZ	103.0	EP			09:23	00.82			-0.52
INVG	HN	103.0	IAML			09:23	14.92	14	0.12	
INVG	HE	103.0	IAML			09:23	15.76	18	0.16	
LINV	HZ	116.0	EP			09:23	03.33			0.13
LINV	HE	116.0	IAML			09:23	04.66	37	0.68	
LINV	HN	116.0	IAML			09:23	19.43	12	0.14	
MCD	HN	128.0	EP			09:23	05.23			0.13
MCD	HE	128.0	ES			09:23	19.53			-0.65
MCD	HN	128.0	IAML			09:23	21.45	32	0.34	
MCD	HE	128.0	IAML			09:23	24.01	22	0.48	
PGB1	HZ	151.0	EP			09:23	08.70			0.32
PGB1	HE	151.0	ES			09:23	25.73			-0.13
PGB1	HE	151.0	IAML			09:23	26.69	19	0.68	
PGB1	HN	151.0	IAML			09:23	27.10	20	0.30	
LEWI	HZ	153.0	EP			09:23	08.12			-0.55
LEWI	HE	153.0	IAML			09:23	28.53	37	0.22	
LEWI	HN	153.0	IAML			09:23	28.60	29	0.24	
DRUM	HZ	166.0	EP			09:23	11.14			0.66
DRUM	HE	166.0	IAML			09:23	31.78	29	0.22	
DRUM	HN	166.0	IAML			09:23	31.91	30	0.12	
BIGH	HZ	172.0	EP			09:23	11.85			0.61
BIGH	HN	172.0	IAML			09:23	34.08	9	0.58	
BIGH	HE	172.0	IAML			09:23	37.39	17	0.28	

May 30 2018 Time: 09:23 56.2 UTC Magnitude: 2.4 ML
Lat: 57.107N Lon: -5.205W Depth: 7.7 km
Grid Ref: 205.92 kmE 806.32 kmN RMS: 0.50 secs
Locality: GLEN SHIEL,HIGHLAND
Velocity model: Lownet Xnear: 500.0 Xfar: 1000.0
Comment: 18KM SSE MORVICH

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES
KPL	HZ	37.4	EP			09:24	03.04			0.22
KPL	HN	37.4	ES			09:24	07.56			-0.11
KPL	HN	37.4	IAML			09:24	08.24	244	0.22	
KPL	HE	37.4	IAML			09:24	08.35	175	0.20	
INVG	HZ	104.0	EP			09:24	12.74			-0.40
INVG	HN	104.0	IAML			09:24	26.84	52	0.12	
INVG	HE	104.0	IAML			09:24	26.98	77	0.20	
LINV	HZ	116.0	EP			09:24	15.15			0.17
LINV	HN	116.0	IAML			09:24	30.11	54	0.32	
LINV	HE	116.0	IAML			09:24	31.17	161	0.66	
MCD	HZ	129.0	EP			09:24	16.42			-0.54
MCD	HE	129.0	ES			09:24	31.28			-0.86
MCD	HN	129.0	IAML			09:24	33.41	118	0.34	
MCD	HE	129.0	IAML			09:24	36.12	79	0.34	
PGB1	HZ	151.0	EP			09:24	19.95			-0.14
PGB1	HN	151.0	ES			09:24	37.52			-0.04
PGB1	HE	151.0	IAML			09:24	38.61	116	0.44	
PGB1	HN	151.0	IAML			09:24	39.05	110	0.28	
LEWI	HZ	152.0	EP			09:24	20.03			-0.30
LEWI	HN	152.0	IAML			09:24	40.45	88	0.18	
LEWI	HE	152.0	IAML			09:24	40.46	109	0.22	
DRUM	HZ	167.0	EP			09:24	22.94			0.62
DRUM	HN	167.0	ES			09:24	42.12			0.70
DRUM	HN	167.0	IAML			09:24	43.23	94	0.66	
DRUM	HE	167.0	IAML			09:24	43.56	92	0.58	
BIGH	HZ	173.0	EP			09:24	23.74			0.70
BIGH	HE	173.0	IAML			09:24	49.74	36	0.22	
AR09	HN	365.0	IAML			09:24	46.05	18	0.16	

May 30 2018 Time: 09:27 29.6 UTC Magnitude: 1.0 ML
Lat: 57.109N Lon: -5.215W Depth: 7.0 km
Grid Ref: 205.33 kmE 806.57 kmN RMS: 0.20 secs
Locality: GLEN SHIEL,HIGHLAND
Velocity model: Lownet Xnear: 500.0 Xfar: 1000.0
Comment: 18KM SSE MORVICH

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES
KPL	HZ	38.3	EP			09:27	36.83			0.37
KPL	HN	38.3	ES			09:27	41.30			-0.14
KPL	HE	38.3	IAML			09:27	41.83	7	0.13	
KPL	HN	38.3	IAML			09:27	41.97	11	0.22	
LAWE	HZ	93.1	EP			09:27	44.93			-0.04
LAWE	HN	93.1	ES			09:27	56.17			0.01
LAWE	HN	93.1	IAML			09:27	59.32	7	0.09	
LAWE	HE	93.1	IAML			09:27	59.33	8	0.12	
INVG	HZ	103.0	EP			09:27	46.48			-0.02
INVG	HN	103.0	IAML			09:27	59.95	3	0.10	
INVG	HE	103.0	IAML			09:28	00.79	4	0.12	
LEWI	HZ	154.0	EP			09:27	53.82			-0.19
LEWI	HE	154.0	IAML			09:28	14.12	6	0.22	
LEWI	HN	154.0	IAML			09:28	14.27	5	0.24	

May 31 2018 Time: 12:29 41.6 UTC Magnitude: 1.0 ML
Lat: 57.107N Lon: -6.001W Depth: 7.9 km
Grid Ref: 157.75 kmE 808.87 kmN RMS: 0.40 secs
Locality: SKYE,HIGHLAND
Velocity model: Lownet Xnear: 100.0 Xfar: 200.0

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES
KPL	HZ	33.3	EP			12:29	47.74			0.08
KPL	HE	33.3	ES			12:29	51.82			-0.23
LAWE	HZ	101.0	EP			12:29	58.83			0.61
LAWE	HN	101.0	ES			12:30	09.78			-0.53
LAWE	HN	101.0	IAML			12:30	13.43	12	0.12	
LAWE	HE	101.0	IAML			12:30	13.93	10	0.12	

TABLE 2 : PHASE DATA

LINV	HZ	125.0	EP		12:30	02.52		0.63
LINV	HN	125.0	ES		12:30	16.68		0.01
LEWI	HZ	127.0	EP		12:30	01.94		-0.18
LEWI	HN	127.0	ES		12:30	16.70		-0.36
LEWI	HE	127.0	IAML		12:30	17.14	2 0.18	
LEWI	HN	127.0	IAML		12:30	17.93	1 0.20	

June 1 2018 Time: 22:43 36.4 UTC Magnitude: 0.6 ML
Lat: 52.217N Lon: -3.541W Depth: 8.6 km
Grid Ref: 294.74 kmE 258.81 kmN RMS: 0.10 secs
Locality: NEWBRIDGE-ON-WYE,POWYS
Velocity model: Mid Wales Xnear: 1000.0 Xfar: 200.0

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES
MCH1	HZ	44.5	IP		D	22:43	44.35			0.18
MCH1	HN	44.5	ES			22:43	49.80			0.05
MCH1	HN	44.5	IAML			22:43	49.95	17	0.30	
MCH1	HE	44.5	IAML			22:43	49.95	8	0.12	
HLM1	HZ	56.1	EP			22:43	46.06			-0.03
HLM1	HE	56.1	ES			22:43	52.90			-0.15
HLM1	HN	56.1	IAML			22:43	53.25	2	0.07	
HLM1	HE	56.1	IAML			22:43	53.60	2	0.08	
MONM	HZ	65.8	EP			22:43	47.53			-0.13
MONM	HE	65.8	ES			22:43	55.74			-0.02
MONM	HN	65.8	IAML			22:43	56.04	2	0.16	
MONM	HE	65.8	IAML			22:43	56.09	2	0.19	
LLW	BZ	70.8	EP			22:43	48.67			0.18
LLW	BE	70.8	ES			22:43	57.18			0.00
FOEL	HZ	78.3	EP			22:43	49.92			0.17
FOEL	HE	78.3	ES			22:43	59.14			-0.20
RSBS	HZ	87.6	EP			22:43	51.53			0.26
RSBS	HN	87.6	ES			22:44	01.69			-0.27
RSBS	HN	87.6	IAML			22:44	04.23	2	0.10	
RSBS	HE	87.6	IAML			22:44	04.94	2	0.08	
WLF1	HZ	133.0	EP			22:43	57.98			-0.07
WLF1	HE	133.0	ES			22:44	13.66			0.05
WLF1	HE	133.0	IAML			22:44	15.18	2	0.14	
WLF1	HN	133.0	IAML			22:44	15.24	2	0.21	
YRC	EZ	135.0	EP			22:43	58.38			0.03
HTL	HE	151.0	ES			22:44	18.33			-0.05
HTL	HE	151.0	IAML			22:44	19.46	2	0.24	
HTL	HN	151.0	IAML			22:44	19.60	4	0.46	

June 4 2018 Time: 14:07 42.0 UTC Magnitude: 1.2 ML
Lat: 53.127N Lon: -4.537W Depth: 7.7 km
Grid Ref: 230.27 kmE 361.91 kmN RMS: 0.20 secs
Locality: CAERNARFON BAY
Velocity model: Lownet Xnear: 100.0 Xfar: 200.0

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES
YRC	EZ	14.0	EP			14:07	45.18			0.13
YRC	EZ	14.0	ES			14:07	47.13			-0.12
WLF1	HZ	20.3	EP			14:07	46.03			-0.01
WLF1	HE	20.3	ES			14:07	49.12			0.16
WLF1	HE	20.3	IAML			14:07	49.44	93	0.14	
WLF1	HN	20.3	IAML			14:07	49.57	60	0.17	
YLL	EZ	24.6	IP		C	14:07	46.82			0.10
WPS	HZ	30.5	IP		C	14:07	47.71			0.10
WPS	HN	30.5	ES			14:07	51.30			-0.38
WPS	HN	30.5	IAML			14:07	51.87	16	0.07	
WPS	HE	30.5	IAML			14:07	52.17	21	0.10	
WME	EZ	33.8	EP			14:07	48.17			0.03
WME	EZ	33.8	ES			14:07	52.77			0.17
FOEL	HZ	93.6	EP			14:07	57.51			0.04
FOEL	HE	93.6	ES			14:08	08.51			-0.22
FOEL	HN	93.6	IAML			14:08	09.19	10	0.13	
FOEL	HE	93.6	IAML			14:08	09.65	22	0.45	

June 5 2018 Time: 02:15 36.4 UTC Magnitude: 0.7 ML
Lat: 53.491N Lon: -1.163W Depth: 6.8 km
Grid Ref: 455.53 kmE 399.72 kmN RMS: 0.30 secs
Locality: DONCASTER,S YORKSHIRE
Velocity model: Lownet Xnear: 500.0 Xfar: 1000.0

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES
LBWR	HZ	38.6	EP			02:15	43.27			-0.04
LBWR	HN	38.6	ES			02:15	48.51			0.13
LBWR	HN	38.6	IAML			02:15	50.08	5	0.19	
LBWR	HE	38.6	IAML			02:15	50.88	5	0.18	
HPK	HN	60.2	ES			02:15	53.67			-0.47
HPK	HN	60.2	IAML			02:15	56.22	6	0.16	
HPK	HE	60.2	IAML			02:15	56.26	6	0.16	
CWF	HZ	84.3	EP			02:15	50.38			0.02
CWF	HE	84.3	ES			02:16	00.19			-0.39
CWF	HE	84.3	IAML			02:16	01.92	2	0.08	
CWF	HN	84.3	IAML			02:16	01.94	2	0.07	
GDLE	HZ	106.0	EP			02:15	54.03			0.29
GDLE	HN	106.0	ES			02:16	06.54			0.11
HLM1	HE	158.0	ES			02:16	20.11			0.35
HLM1	HN	158.0	IAML			02:16	21.20	1	0.14	
HLM1	HE	158.0	IAML			02:16	21.30	2	0.30	

June 5 2018 Time: 21:19 41.3 UTC Magnitude: 1.9 ML
Lat: 54.055N Lon: -2.540W Depth: 9.1 km
Grid Ref: 364.65 kmE 462.27 kmN RMS: 0.50 secs
Locality: LOWGILL,LANCASHIRE
Velocity model: Lownet Xnear: 100.0 Xfar: 200.0
Comment: FELT CLAPHAM Intensity: 2

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES
AQ10	HZ	24.4	IP		C	21:19	46.12			0.17
AQ10	HE	24.4	ES			21:19	49.58			0.24
AQ10	HE	24.4	IAML			21:19	50.04	202	0.21	
AQ10	HN	24.4	IAML			21:19	50.46	157	0.19	
AR05	HZ	34.9	IP		C	21:19	47.27			-0.35
AR05	HE	34.9	ES			21:19	51.58			-0.65
AR05	HE	34.9	IAML			21:19	51.97	158	0.12	
AR05	HN	34.9	IAML			21:19	52.06	213	0.26	
AR01	HZ	41.3	IP		D	21:19	48.81			0.21
AR01	HE	41.3	ES			21:19	53.99			0.06
AR01	HN	41.3	IAML			21:19	54.33	77	0.18	
AR01	HE	41.3	IAML			21:19	54.77	60	0.13	
AQ04	HZ	41.9	IP		C	21:19	48.71			0.06
AQ04	HE	41.9	ES			21:19	54.22			0.21
AQ04	HE	41.9	IAML			21:19	55.99	171	0.18	
AQ04	HN	41.9	IAML			21:19	55.79	110	0.18	
HPK	HZ	61.0	IP		C	21:19	51.40			-0.26
HPK	HN	61.0	ES			21:19	58.65			-0.56
HPK	HE	61.0	IAML			21:19	59.45	50	0.23	
HPK	HN	61.0	IAML			21:19	59.51	50	0.23	
KESW	HZ	69.9	IP		C	21:19	53.28			0.24
KESW	HE	69.9	ES			21:20	01.63			0.02
KESW	HE	69.9	IAML			21:20	02.22	52	0.22	
KESW	HN	69.9	IAML			21:20	02.34	32	0.22	
AT08	HZ	80.6	IP		C	21:19	54.39			-0.26
LBWR	HZ	90.4	EP			21:19	56.42			0.18
LBWR	HE	90.4	ES			21:20	06.73			-0.41
LBWR	HE	90.4	IAML			21:20	09.73	88	0.19	
LBWR	HN	90.4	IAML			21:20	10.29	93	0.21	
EDMD	HZ	94.2	IP		C	21:19	56.80			0.04
EDMD	HN	94.2	ES			21:20	07.37			-0.67
EDMD	HN	94.2	IAML			21:20	08.83	55	0.14	
EDMD	HE	94.2	IAML			21:20	10.01	54	0.13	
AT10	HZ	95.7	EP			21:19	57.21			0.16
AU07	HZ	104.0	EP			21:19	58.73			0.49
AU11	HZ	106.0	EP			21:19	59.12			0.48
AU09	HZ	108.0	IP		D	21:19	59.55			0.58
GDLE	HZ	120.0	EP			21:20	01.09			0.40
AU18	HZ	122.0	EP			21:20	01.56			0.62
AU08	HZ	123.0	EP			21:20	02.25			1.06
IOMK	HZ	134.0	EP			21:20	02.20			-0.58
FOEL	HZ	137.0	EP			21:20	03.17			-0.03
WME	EZ	137.0	EP			21:20	02.45			-0.77
WPS	HZ	148.0	EP			21:20	03.83			-0.92
WLF1	HZ	149.0	EP			21:20	03.92			-0.98

June 6 2018 Time: 17:58 23.4 UTC Magnitude: 1.8 ML
Lat: 54.610N Lon: -1.526W Depth: 17.0 km
Grid Ref: 430.61 kmE 523.99 kmN RMS: 0.20 secs
Locality: NEWTON AYCLIFFE,DURHAM
Velocity model: Lownet Xnear: 100.0 Xfar: 200.0

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES
AT10	HZ	35.0	IP		D	17:58	30.10			0.12
AT10	HN	35.0	ES			17:58	34.80			-0.02
AT10	HE	35.0	IAML			17:58	35.49	77	0.24	
AT10	HN	35.0	IAML			17:58	35.67	165	0.36	
EDMD	HZ	37.4	IP		D	17:58	30.39			0.13
EDMD	HE	37.4	ES			17:58	35.39			0.10
EDMD	HN	37.4	IAML			17:58	35.65	135	0.16	
EDMD	HE	37.4	IAML			17:58	35.69	173	0.12	
AS07	HZ	47.9	EP			17:58	31.89			-0.01
AS07	HN	47.9	ES			17:58	38.07			-0.07
AS07	HE	47.9	IAML			17:58	38.78	71	0.07	
AS07	HN	47.9	IAML			17:58	39.88	48	0.08	
GDLE	HZ	50.5	IP		C	17:58	32.05			-0.21
GDLE	HE	50.5	ES			17:58	38.32			-0.44
GDLE	HN	50.5	IAML			17:58	38.62	25	0.19	
GDLE	HE	50.5	IAML			17:58	40.31	74	0.22	
AT08	HZ	58.6	IP		D	17:58	33.44			-0.01
AT08	HE	58.6	ES			17:58	40.90			0.09
AT08	HN	58.6	IAML			17:58	43.66	88	0.15	
AT08	HE	58.6	IAML			17:58	43.96	131	0.14	
AU20	HZ	59.6	IP		D	17:58	33.62			-0.01
AU15	HZ	59.7	IP		D	17:58	33.71			0.09
AU11	HZ	59.9	EP			17:58	33.78			0.13
AU14	EZ	63.9	EP			17:58	34.37			0.12
AU09	HZ	66.1	IP		D	17:58	34.81			0.20
AU18	HZ	66.5	EP			17:58	34.74			0.08
HPK	HZ	72.8	EP			17:58	35.58			-0.01
HPK	HE	72.8	ES			17:58	44.60			0.08
HPK	HE	72.8	IAML			17:58	45.83	53	0.10	
HPK	HN	72.8	IAML			17:58	46.10	61	0.16	
AR09	HZ	73.2	IP		C	17:58	35.52			-0.18
AR05	HZ	76.0	IP		D	17:58	36.35			0.30
AU08	HZ	78.0	IP		D	17:58	36.63			0.31
AQ12	HZ	81.7	EP			17:58	36.56			-0.33
AV06	HZ	84.1	EP			17:58	37.08			-0.10
AS02	HZ	121.0	EP			17:58	41.95			-0.58

June 8 2018 Time: 06:30 52.6 UTC Magnitude: 1.1 ML
Lat: 54.611N Lon: -1.540W Depth: 14.2 km
Grid Ref: 429.71 kmE 524.09 kmN RMS: 0.30 secs

TABLE 2 : PHASE DATA

Locality: NEWTON AYCLIFFE,DURHAM
Velocity model: Lownet Xnear: 100.0 Xfar: 200.0

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES
AT10	HZ	35.7	EP			06:30	59.93			0.80
AT10	HN	35.7	ES			06:31	03.89			-0.05
AT10	HE	35.7	IAML			06:31	04.34	15	0.24	
AT10	HN	35.7	IAML			06:31	04.48	33	0.36	
EDMD	HZ	36.6	EP			06:30	59.34			0.13
EDMD	HN	36.6	ES			06:31	04.42			0.35
EDMD	HN	36.6	IAML			06:31	04.57	28	0.16	
EDMD	HE	36.6	IAML			06:31	04.63	36	0.12	
AS07	HZ	47.5	EP			06:31	01.01			0.08
AS07	HE	47.5	ES			06:31	07.06			0.01
AS07	HE	47.5	IAML			06:31	07.75	12	0.20	
AS07	HN	47.5	IAML			06:31	08.84	8	0.28	
GDLE	HZ	51.4	EP			06:31	01.08			-0.41
GDLE	HN	51.4	ES			06:31	07.20			-0.82
GDLE	HN	51.4	IAML			06:31	07.91	4	0.23	
GDLE	HE	51.4	IAML			06:31	09.05	13	0.28	
AU15	HZ	60.4	ES			06:31	10.07			-0.28
AU15	HN	60.4	IAML			06:31	10.61	42	0.16	
AU15	HZ	60.4	IAML			06:31	11.75	14	0.20	
AU11	HE	60.6	ES			06:31	10.34			-0.06
AU11	HE	60.6	IAML			06:31	10.57	14	0.20	
AU11	HN	60.6	IAML			06:31	10.62	14	0.24	
AU14	E1	64.6	ES			06:31	11.55			0.10
AU09	HN	66.8	ES			06:31	12.30			0.24
AU09	HN	66.8	IAML			06:31	12.50	22	0.42	
AU09	HE	66.8	IAML			06:31	13.26	14	0.50	
AU07	HN	67.2	ES			06:31	12.58			0.42
AU07	HE	67.2	IAML			06:31	14.37	25	0.40	
AU07	HN	67.2	IAML			06:31	14.96	22	0.32	
AR09	HZ	72.5	EP			06:31	04.45			-0.34
AR09	HN	72.5	ES			06:31	13.58			-0.15
AR09	HN	72.5	IAML			06:31	14.46	25	0.16	
AR09	HE	72.5	IAML			06:31	14.49	19	0.13	
HPK	HZ	72.9	EP			06:31	04.52			-0.27
HPK	HN	72.9	ES			06:31	14.08			0.35
HPK	HN	72.9	IAML			06:31	14.42	7	0.20	
HPK	HE	72.9	IAML			06:31	14.54	11	0.34	
AR05	HE	75.7	ES			06:31	14.46			-0.04
AR05	HN	75.7	IAML			06:31	15.28	11	0.42	
AR05	HE	75.7	IAML			06:31	15.65	8	0.20	
AU08	HN	78.7	ES			06:31	15.58			0.31
AU08	HE	78.7	IAML			06:31	15.89	13	0.32	
AU08	HN	78.7	IAML			06:31	15.94	13	0.20	
AQ12	HZ	80.8	EP			06:31	05.80			-0.25
AQ12	HN	80.8	ES			06:31	15.68			-0.23
AQ12	HE	80.8	IAML			06:31	17.03	4	0.16	
AQ12	HN	80.8	IAML			06:31	17.15	4	0.18	
ESK	HN	132.0	ES			06:31	29.00			0.26
ESK	HE	132.0	IAML			06:31	30.24	1	0.16	
ESK	HN	132.0	IAML			06:31	30.36	2	0.16	

June 9 2018 Time: 22:14 28.9 UTC Magnitude: 3.8 ML
Lat: 53.648N Lon: -0.055W Depth: 19.3 km
Grid Ref: 528.55 kmE 418.62 kmN RMS: 0.40 secs
Locality: GRIMSBY,NE LINCOLNSHIRE
Velocity model: Lownet Xnear: 150.0 Xfar: 500.0
Comment: FELT NE LINCS... Intensity: 4

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES
LMK	HZ	27.8	IP		C	22:14	35.33			-0.11
LMK	HZ	27.8	AMPG			22:14	35.44	4779	0.25	
LMK	HN	27.8	ES			22:14	40.26			0.08
LMK	HE	27.8	IAML			22:14	40.54	21896	0.24	
LMK	HN	27.8	IAML			22:14	40.71	42120	0.30	
LMK	HT	27.8	AMSG			22:14	40.80	51046	0.30	
AU05	HZ	59.0	IP		C	22:14	39.13			-0.17
AU05	HZ	59.0	AMPG			22:14	39.28	855	0.26	
AU05	HT	59.0	AMSG			22:14	46.92	16208	0.43	
AV06	HZ	63.9	IP		D	22:14	39.59			-0.42
AV06	HZ	63.9	AMPG			22:14	39.79	1226	0.35	
AV06	HT	63.9	AMSG			22:14	48.24	1075	0.19	
AV06	HN	63.9	IAML			22:14	48.65	1985	0.40	
AV06	HE	63.9	IAML			22:14	48.74	1370	0.16	
AU08	HZ	66.3	IP		D	22:14	40.10			-0.24
AU08	HE	66.3	ES			22:14	48.46			-0.20
AU09	HZ	78.0	IP		D	22:14	41.96			0.01
AU09	HN	78.0	ES			22:14	51.58			0.14
AU09	HE	78.0	IAML			22:14	52.22	7319	0.18	
AU09	HN	78.0	IAML			22:14	52.28	7964	0.18	
AU13	HZ	78.3	IP		D	22:14	41.91			-0.05
AU13	H2	78.3	ES			22:14	51.42			-0.05
AU13	H2	78.3	IAML			22:14	52.45	3045	0.34	
AU13	H1	78.3	IAML			22:14	52.61	3742	0.46	
AU07	HZ	78.8	IP		D	22:14	42.16			0.11
AU07	HE	78.8	ES			22:14	52.03			0.42
AU07	HE	78.8	IAML			22:14	52.68	18876	0.28	
AU07	HN	78.8	IAML			22:14	52.98	13228	0.26	
AU10	EZ	79.0	IP		D	22:14	42.03			-0.03
AU10	E2	79.0	ES			22:14	51.82			0.19
AU18	HZ	79.5	IP		D	22:14	41.99			-0.15
AU18	HE	79.5	IAML			22:14	52.21	2435	0.30	
AU18	HN	79.5	IAML			22:14	52.25	5004	0.36	
AU14	EZ	80.2	IP		D	22:14	42.22			-0.01
AU16	EZ	82.4	EP			22:14	42.51			-0.04
AU11	HZ	84.1	IP		D	22:14	42.94			0.17
AU15	HZ	84.3	IP		D	22:14	42.97			0.15
AU15	HN	84.3	ES			22:14	53.20			0.26
AU15	HE	84.3	IAML			22:14	54.33	7578	0.46	
AU15	HN	84.3	IAML			22:14	54.50	6851	0.46	
AU20	HZ	86.2	IP		D	22:14	43.08			-0.02
AU20	HN	86.2	ES			22:14	53.48			0.05
AU20	HN	86.2	IAML			22:14	54.89	5066	0.28	
AU20	HE	86.2	IAML			22:14	55.07	3507	0.20	
AT08	HZ	96.6	IP		D	22:14	44.48			-0.06
GDLE	HZ	99.5	IP		D	22:14	44.88			-0.11
GDLE	HE	99.5	ES			22:14	57.45			0.75
GDLE	HE	99.5	IAML			22:14	58.09	4441	0.32	
GDLE	HN	99.5	IAML			22:14	59.77	1027	0.24	
HPK	HZ	109.0	EP		D	22:14	46.23			0.06
HPK	HE	109.0	ES			22:14	59.13			0.38
HPK	HE	109.0	IAML			22:15	00.83	7019	0.24	
HPK	HN	109.0	IAML			22:15	01.15	6859	0.46	
AT10	HZ	109.0	IP		D	22:14	46.03			-0.16
AT10	HN	109.0	ES			22:14	59.61			0.83
AT10	HN	109.0	IAML			22:15	00.16	6383	0.26	
AT10	HE	109.0	IAML			22:15	00.19	4363	0.50	
WACR	HZ	112.0	IP		D	22:14	47.10			0.53
WACR	HE	112.0	IAML			22:15	03.22	1703	0.17	
WACR	HN	112.0	IAML			22:15	03.96	1678	0.22	
LBWR	HZ	114.0	IP		C	22:14	46.78			-0.05
LBWR	HN	114.0	ES			22:15	00.14			0.25
LBWR	HN	114.0	IAML			22:15	03.05	3408	0.44	
LBWR	HE	114.0	IAML			22:15	03.15	3183	0.40	
AS02	HZ	128.0	IP		C	22:14	48.35			-0.24
CWF	HZ	131.0	EP			22:14	48.92			-0.04
CWF	HE	131.0	IAML			22:15	07.36	958	0.18	
CWF	HN	131.0	IAML			22:15	09.76	710	0.36	
AR05	HZ	135.0	EP			22:14	49.40			-0.01
AS07	HZ	141.0	IP		D	22:14	49.47			-0.72
AS07	HE	141.0	IAML			22:15	08.56	1150	0.30	
AS07	HN	141.0	IAML			22:15	11.29	1630	0.44	
STNC	HZ	156.0	EP			22:14	52.28			0.23
STNC	HN	156.0	IAML			22:15	14.57	1086	0.28	
STNC	HE	156.0	IAML			22:15	17.40	1084	0.44	
EDMD	HZ	181.0	IP		D	22:14	54.51			-0.63
EDMD	HN	181.0	IAML			22:15	20.25	1447	0.20	
EDMD	HE	181.0	IAML			22:15	21.12	1368	0.30	
ELMS	HZ	187.0	EP			22:14	56.38			0.53
ELMS	HN	187.0	IAML			22:15	25.26	1350	0.48	
ELMS	HE	187.0	IAML			22:15	25.39	1484	0.22	
KESW	HZ	225.0	EP			22:15	01.43			0.72
KESW	HE	225.0	IAML			22:15	33.22	711	0.42	
KESW	HN	225.0	IAML			22:15	33.49	810	0.42	
FOEL	HZ	226.0	EP		C	22:15	00.76			-0.10
FOEL	HE	226.0	IAML			22:15	37.93	606	0.52	
FOEL	HN	226.0	IAML			22:15	39.21	509	0.76	
HLM1	HZ	227.0	EP		C	22:15	01.07			0.08
HLM1	HN	227.0	IAML			22:15	38.37	370	0.40	
HLM1	HE	227.0	IAML			22:15	38.62	628	0.56	
STRD	HZ	252.0	EP			22:15	04.65			0.57
LLW	BZ	257.0	EP			22:15	04.27			-0.36
MCH1	HZ	270.0	EP			22:15	06.42			0.08
MCH1	HE	270.0	IAML			22:15	49.60	510	0.28	
MCH1	HN	270.0	IAML			22:15	49.62	512	0.34	
MONM	HZ	274.0	EP			22:15	06.98			0.23
MONM	HE	274.0	IAML			22:15	46.75	404	0.22	
MONM	HN	274.0	IAML			22:15	50.13	554	0.58	
ESK	HZ	276.0	EP			22:15	06.32			-0.74
ESK	HE	276.0	IAML			22:15	48.14	221	0.26	
ESK	HN	276.0	IAML			22:15	49.47	200	0.32	
OLDB	HZ	278.0	EP			22:15	07.52			0.25
YLL	EZ	279.0	EP			22:15	06.90			-0.57
ELSH	HZ	290.0	EP			22:15	09.11			0.38
ELSH	HE	290.0	IAML			22:15	56.31	379	0.34	
ELSH	HN	290.0	IAML			22:15	57.30	416	0.38	
WLF1	HZ	291.0	EP			22:15	08.00			-0.89
WLF1	HE	291.0	IAML			22:15	49.64	193	0.26	
WLF1	HN	291.0	IAML			22:15	52.25	284	0.38	
WPS	HZ	296.0	EP			22:15	08.70			-0.80
ESY	EZ	302.0	EP			22:15	09.34			-0.93
IOMK	HZ	304.0	EP			22:15	09.61			-0.91
YRC	EZ	304.0	EP			22:15	09.69			-0.75
IOMK	HN	304.0	IAML			22:16	01.24	352	0.56	
IOMK	HE	304.0	IAML			22:16	01.35	180	0.66	
WIM	EZ	309.0	EP			22:15	10.55			-0.61
EDI	HZ	324.0	EP			22:15	12.77			-0.21
GAL1	HZ	332.0	EP			22:15	13.32			-0.75
RSBS	HZ	368.0	EP			22:15	17.90			-0.68
RSBS	HN	368.0	IAML			22:16	16.72	81	0.26	
RSBS	HE	368.0	IAML			22:16	26.82	70	0.36	
PGB1	HZ	373.0	EP			22:15	18.72			-0.48
PGB1	HE	373.0	IAML			22:16	18.79	174	0.64	
PGB1	HN	373.0	IAML			22:16	22.20	158	0.46	
HTL	HZ	422.0	EP			22:15	24.96			-0.33
HTL	HE	422.0	IAML			22:16	28.37	92	0.38	
HTL	HN	422.0	IAML			22:16	29.39	86	0.64	

TABLE 2 : PHASE DATA

June 10 2018 Time: 18:48 49.4 UTC Magnitude: 0.5 ML
Lat: 53.176N Lon: -4.753W Depth: 7.1 km
Grid Ref: 216.03 kmE 367.89 kmN RMS: 0.20 secs
Locality: CAERNARFON BAY
Velocity model: Lleyn Xnear: 80.0 Xfar: 200.0
Comment: 12KM SW RHOSCOLYN

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES
WLF1	HZ	26.9	EP			18:48	54.16			0.01
WLF1	HE	26.9	ES			18:48	57.76			0.40
WLF1	HN	26.9	IAML			18:48	57.89	11	0.10	
WLF1	HE	26.9	IAML			18:48	57.92	6	0.08	
WPS	HZ	30.2	EP			18:48	54.66			-0.02
WPS	HE	30.2	ES			18:48	58.16			-0.08
WPS	HE	30.2	IAML			18:48	58.54	3	0.11	
WPS	HN	30.2	IAML			18:48	58.83	4	0.06	
WME	EZ	38.7	EP			18:48	55.99			-0.10
LLW	BZ	81.6	EP			18:49	03.01			-0.13
LLW	BE	81.6	ES			18:49	12.23			-0.22
IOMK	HE	121.0	ES			18:49	22.78			-0.12
IOMK	HE	121.0	IAML			18:49	23.76	3	0.20	
IOMK	HN	121.0	IAML			18:49	24.49	2	0.11	
RSBS	HE	136.0	ES			18:49	27.34			0.60
RSBS	HE	136.0	IAML			18:49	28.87	1	0.09	
RSBS	HN	136.0	IAML			18:49	29.00	1	0.62	

June 12 2018 Time: 00:51 30.2 UTC Magnitude: 0.8 ML
Lat: 52.725N Lon: -3.044W Depth: 9.9 km
Grid Ref: 329.50 kmE 314.70 kmN RMS: 0.10 secs
Locality: MIDDLETOWN,POWYS
Velocity model: Mid Wales Xnear: 80.0 Xfar: 200.0

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES
FOEL	HZ	21.2	IP		D	00:51	34.32			0.03
FOEL	HE	21.2	IAML			00:51	34.59	14	0.07	
FOEL	HN	21.2	IAML			00:51	34.66	15	0.09	
HLM1	HZ	25.5	IP		D	00:51	35.02			0.07
HLM1	HN	25.5	ES			00:51	38.30			-0.06
HLM1	HE	25.5	IAML			00:51	38.53	37	0.14	
HLM1	HN	25.5	IAML			00:51	38.60	22	0.09	
STNC	HZ	69.6	EP			00:51	42.06			-0.05
MONM	HZ	99.8	EP			00:51	46.86			0.01
WLF1	HZ	110.0	EP			00:51	48.27			-0.17
WME	EZ	113.0	EP			00:51	48.90			0.10
CWF	HZ	117.0	EP			00:51	49.55			0.07

June 12 2018 Time: 04:26 33.8 UTC Magnitude: 1.0 ML
Lat: 52.964N Lon: -1.923W Depth: 11.0 km
Grid Ref: 405.17 kmE 340.77 kmN RMS: 0.20 secs
Locality: CROXDEN,STAFFORDSHIRE
Velocity model: Lownet Xnear: 500.0 Xfar: 1000.0

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES
STNC	HZ	23.7	IP		D	04:26	38.96			0.01
STNC	HE	23.7	ES			04:26	42.70			-0.04
STNC	HN	23.7	IAML			04:26	42.87	69	0.14	
STNC	HE	23.7	IAML			04:26	42.98	120	0.14	
CWF	HZ	48.4	EP			04:26	42.56			0.17
CWF	HE	48.4	ES			04:26	48.48			-0.20
CWF	HE	48.4	IAML			04:26	49.50	4	0.08	
CWF	HN	48.4	IAML			04:26	49.71	6	0.12	
LBWR	HZ	50.4	EP			04:26	42.94			0.23
LBWR	HE	50.4	ES			04:26	49.28			0.05
LBWR	HN	50.4	IAML			04:26	50.32	10	0.21	
LBWR	HE	50.4	IAML			04:26	50.36	13	0.24	
AS02	HE	65.8	ES			04:26	52.68			-0.32
HLM1	HZ	81.5	EP			04:26	47.18			0.02
HLM1	HN	81.5	ES			04:26	56.71			-0.22
HLM1	HN	81.5	IAML			04:26	57.74	3	0.16	
HLM1	HE	81.5	IAML			04:26	58.08	4	0.16	
FOEL	HZ	86.3	EP			04:26	48.15			0.31

June 12 2018 Time: 22:56 29.6 UTC Magnitude: 0.5 ML
Lat: 51.003N Lon: -3.657W Depth: 8.4 km
Grid Ref: 283.75 kmE 123.99 kmN RMS: 0.40 secs
Locality: KNOWSTONE,DEVON
Velocity model: Lownet Xnear: 100.0 Xfar: 200.0

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES
HTL	HZ	58.1	EP			22:56	39.47			-0.04
HTL	HE	58.1	ES			22:56	46.21			-0.50
HTL	HE	58.1	IAML			22:56	50.58	1	0.32	
HTL	HN	58.1	IAML			22:56	51.64	2	0.46	
DYA	HZ	66.0	EP			22:56	40.81			0.03
DYA	HE	66.0	ES			22:56	48.38			-0.52
DYA	HN	66.0	IAML			22:56	51.52	4	0.16	
DYA	HE	66.0	IAML			22:56	51.70	3	0.12	
SBD	BZ	87.3	EP			22:56	44.51			0.44
SBD	BE	87.3	ES			22:56	55.18			0.58
SBD	BE	87.3	IAML			22:56	55.85	2	0.15	
SBD	BN	87.3	IAML			22:56	56.22	2	0.11	
RSBS	HZ	130.0	EP			22:56	50.64			0.09
RSBS	HN	130.0	ES			22:57	05.66			-0.15
RSBS	HN	130.0	IAML			22:57	07.58	1	0.26	
RSBS	HE	130.0	IAML			22:57	08.55	1	0.19	
HLM1	HZ	177.0	EP			22:56	57.59			0.50
HLM1	HE	177.0	ES			22:57	17.20			0.08
HLM1	HE	177.0	IAML			22:57	17.63	1	0.20	
HLM1	HN	177.0	IAML			22:57	17.76	1	0.26	

June 14 2018 Time: 23:53 05.4 UTC Magnitude: 1.5 ML
Lat: 56.515N Lon: -6.248W Depth: 7.8 km
Grid Ref: 138.71 kmE 743.96 kmN RMS: 0.20 secs
Locality: MULL,ARGYLL & BUTE
Velocity model: Lownet Xnear: 150.0 Xfar: 500.0

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES
LAWE	HZ	59.6	IP		C	23:53	15.56			0.02
LAWE	HE	59.6	ES			23:53	22.72			-0.20
LAWE	HN	59.6	IAML			23:53	22.95	32	0.13	
LAWE	HE	59.6	IAML			23:53	23.00	42	0.14	
KPL	HZ	98.7	IP		D	23:53	21.45			-0.13
KPL	HE	98.7	IAML			23:53	33.95	26	0.18	
KPL	HN	98.7	IAML			23:53	34.03	16	0.13	
PGB1	HZ	135.0	EP			23:53	27.46			0.42
PGB1	HE	135.0	IAML			23:53	48.46	7	0.62	
PGB1	HN	135.0	IAML			23:53	50.78	6	0.58	
INVG	HZ	136.0	EP			23:53	27.56			0.29
INVG	HE	136.0	ES			23:53	43.15			-0.06
INVG	HN	136.0	IAML			23:53	43.85	8	0.26	
INVG	HE	136.0	IAML			23:53	44.22	5	0.10	
GAL1	HZ	207.0	EP			23:53	36.40			-0.27
ESK	HZ	232.0	EP			23:53	39.53			-0.29

June 15 2018 Time: 00:45 11.5 UTC Magnitude: 1.1 ML
Lat: 52.568N Lon: -0.902W Depth: 5.2 km
Grid Ref: 474.41 kmE 297.29 kmN RMS: 0.30 secs
Locality: KIBWORTH,LEICESTERSHIRE
Velocity model: Lownet Xnear: 100.0 Xfar: 200.0
Comment: 6KM NE KIBWORTH

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES
CWF	HZ	33.4	EP			00:45	17.78			0.08
CWF	HE	33.4	ES			00:45	21.80			-0.41
CWF	HE	33.4	IAML			00:45	22.09	28	0.10	
CWF	HN	33.4	IAML			00:45	22.17	23	0.14	
WACR	HZ	105.0	EP			00:45	29.19			0.37
WACR	HN	105.0	ES			00:45	40.95			-0.50
WACR	HN	105.0	IAML			00:45	44.28	5	0.29	
WACR	HE	105.0	IAML			00:45	46.61	3	0.19	
STNC	HE	105.0	ES			00:45	41.61			0.00
LBWR	HZ	108.0	EP			00:45	29.74			0.41
LBWR	HZ	108.0	ES			00:45	42.46			0.13
HLM1	HZ	134.0	EP			00:45	33.79			0.43
HLM1	HE	134.0	ES			00:45	48.83			-0.47
HLM1	HE	134.0	IAML			00:45	49.04	5	0.16	
HLM1	HN	134.0	IAML			00:45	51.36	4	0.47	

June 15 2018 Time: 20:30 46.6 UTC Magnitude: 0.6 ML
Lat: 56.112N Lon: -6.222W Depth: 8.3 km
Grid Ref: 137.56 kmE 699.05 kmN RMS: 0.30 secs
Locality: COLONSAY,ARGYLL & BUTE
Velocity model: Lownet Xnear: 150.0 Xfar: 300.0

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES
LAWE	HZ	53.7	EP			20:30	55.44			-0.38
LAWE	HN	53.7	ES			20:31	02.24			-0.30
LAWE	HE	53.7	IAML			20:31	02.54	3	0.22	
LAWE	HN	53.7	IAML			20:31	02.55	4	0.22	
PGB1	HZ	114.0	EP			20:31	05.55			0.43
CLGH	HZ	115.0	EP			20:31	05.12			-0.19
CLGH	HN	115.0	ES			20:31	18.83			-0.11
CLGH	HE	115.0	IAML			20:31	19.99	5	0.39	
CLGH	HN	115.0	IAML			20:31	21.72	4	0.35	
INVG	HZ	139.0	EP			20:31	09.39			0.49
INVG	HN	139.0	ES			20:31	25.18			0.02
INVG	HE	139.0	IAML			20:31	26.93	1	0.21	
INVG	HN	139.0	IAML			20:31	28.24	1	0.36	
IDGL	BZ	142.0	EP			20:31	09.22			0.05

June 25 2018 Time: 20:05 51.5 UTC Magnitude: 1.0 ML
Lat: 55.776N Lon: -6.414W Depth: 5.1 km
Grid Ref: 123.25 kmE 662.45 kmN RMS: 0.30 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
CLGH	HZ	79.5	EP			20:06	05.20			0.32
CLGH	HE	79.5	ES			20:06	14.18			-0.47
CLGH	HE	79.5	IAML			20:06	16.66	12	0.12	
CLGH	HN	79.5	IAML			20:06	17.04	10	0.20	
LAWE	HZ	83.1	EP			20:06	05.09			-0.34
LAWE	HN	83.1	ES			20:06	15.56			-0.04
LAWE	HE	83.1	IAML			20:06	18.87	10	0.20	
LAWE	HN	83.1	IAML			20:06	18.96	7	0.12	
IDGL	BZ	105.0	EP			20:06	08.76			-0.03
IDGL	BN	105.0	ES			20:06	21.59			0.18
PGB1	HE	121.0	ES			20:06	26.31			0.51
PGB1	HN	121.0	IAML			20:06	27.32	3	0.33	
PGB1	HE	121.0	IAML			20:06	28.20	6	0.46	
GAL1	HZ	148.0	EP			20:06	15.38			0.14
GAL1	HN	148.0	ES			20:06	32.44			-0.14
GAL1	HN	148.0	IAML			20:06	34.15	2	0.14	
GAL1	HE	148.0	IAML			20:06	34.83	2	0.14	
NEWG	HZ	156.0	EP			20:06	16.64			0.20

TABLE 2 : PHASE DATA

NEWG	HN	156.0	ES	20:06	34.82			0.17
NEWG	HE	156.0	IAML	20:06	37.49	2	0.14	
NEWG	HN	156.0	IAML	20:06	37.85	2	0.14	

June 27 2018 Time: 12:28 23.6 UTC Magnitude: 2.6 ML
Lat: 51.176N Lon: -0.240W Depth: 0.0 km
Grid Ref: 523.01 kmE 143.39 kmN RMS: 1.00 secs
Locality: NEWDIGATE,SURREY
Velocity model: Surrey Xnear: 100.0 Xfar: 300.0
Comment: FELT SURREY... Intensity: 3

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES
HMNX	HZ	53.0	EP			12:28	33.09			-1.11
HMNX	HE	53.0	ES			12:28	39.99			-1.96
HMNX	HN	53.0	IAML			12:28	46.26	394	0.52	
HMNX	HE	53.0	IAML			12:28	52.14	584	0.42	
WOL	BZ	70.3	EP			12:28	36.43			-0.52
WOL	BE	70.3	ES			12:28	48.45			1.75
ELSH	HZ	96.2	EP			12:28	40.70			-0.29
ELSH	HN	96.2	ES			12:28	55.88			2.19
ELSH	HN	96.2	IAML			12:28	59.88	77	0.36	
ELSH	HE	96.2	IAML			12:29	04.70	142	0.70	
SWN1	HZ	115.0	EP			12:28	43.77			-0.18
ELMS	HZ	133.0	EP			12:28	46.94			0.35
ELMS	HN	133.0	ES			12:29	02.81			-0.57
ELMS	HN	133.0	IAML			12:29	06.07	231	0.34	
ELMS	HE	133.0	IAML			12:29	07.14	235	0.32	
STRD	HZ	149.0	EP			12:28	49.13			0.14
STRD	HE	149.0	ES			12:29	08.32			0.79
STRD	HN	149.0	IAML			12:29	12.86	188	0.48	
STRD	HE	149.0	IAML			12:29	17.46	99	0.44	
WACR	HZ	182.0	EP			12:28	54.15			0.70
WACR	HN	182.0	ES			12:29	15.19			-0.05
WACR	HN	182.0	IAML			12:29	18.35	93	0.48	
WACR	HE	182.0	IAML			12:29	20.56	105	0.32	
MONM	HZ	193.0	EP			12:28	54.39			-0.39
MONM	HN	193.0	ES			12:29	17.42			-0.12
MONM	HN	193.0	IAML			12:29	23.23	75	0.32	
MONM	HE	193.0	IAML			12:29	25.08	76	0.56	
MCH1	HZ	212.0	EP			12:28	56.48			-0.73
MCH1	HN	212.0	ES			12:29	21.45			-0.30
MCH1	HN	212.0	IAML			12:29	26.72	61	0.32	
MCH1	HE	212.0	IAML			12:29	27.13	34	0.70	
HLM1	HZ	235.0	EP			12:28	59.28			-0.96
HLM1	HE	235.0	ES			12:29	26.65			-0.34
HLM1	HE	235.0	IAML			12:29	34.89	41	0.62	
HLM1	HN	235.0	IAML			12:29	36.86	34	0.60	
RSBS	HZ	324.0	EP			12:29	10.13			-1.13
RSBS	HE	324.0	IAML			12:30	00.59	8	0.42	
RSBS	HN	324.0	IAML			12:30	01.94	9	0.42	
EDMD	HZ	423.0	EP			12:29	23.06			-0.43

June 28 2018 Time: 07:38 33.3 UTC Magnitude: 0.9 ML
Lat: 55.861N Lon: -5.679W Depth: 8.3 km
Grid Ref: 169.81 kmE 669.21 kmN RMS: 0.30 secs
Locality: ORMSARY,ARGYLL & BUTE
Velocity model: Lownet Xnear: 500.0 Xfar: 1000.0

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES
LAWE	HZ	47.7	IP		D	07:38	41.46			-0.12
LAWE	HN	47.7	ES			07:38	47.21			-0.41
LAWE	HN	47.7	IAML			07:38	49.20	7	0.32	
LAWE	HE	47.7	IAML			07:38	49.23	9	0.12	
CLGH	HZ	90.8	EP			07:38	48.51			0.23
CLGH	HN	90.8	IAML			07:39	02.40	5	0.17	
CLGH	HE	90.8	IAML			07:39	03.46	4	0.14	
INVG	HZ	120.0	EP			07:38	52.88			0.13
INVG	HN	120.0	ES			07:39	07.35			0.41
INVG	HN	120.0	IAML			07:39	09.92	2	0.24	
INVG	HE	120.0	IAML			07:39	10.02	2	0.25	
NEWG	HZ	123.0	EP			07:38	53.67			0.40
NEWG	HN	123.0	ES			07:39	07.69			-0.15
NEWG	HE	123.0	IAML			07:39	09.63	3	0.30	
NEWG	HN	123.0	IAML			07:39	10.71	4	0.10	
GAL1	HN	127.0	ES			07:39	08.12			-0.48
GAL1	HN	127.0	IAML			07:39	11.29	3	0.24	
GAL1	HE	127.0	IAML			07:39	11.54	5	0.30	

June 28 2018 Time: 21:33 25.2 UTC Magnitude: 0.9 ML
Lat: 53.434N Lon: -1.554W Depth: 2.4 km
Grid Ref: 429.63 kmE 393.15 kmN RMS: 0.50 secs
Locality: SHEFFIELD,S YORKSHIRE
Velocity model: Lownet Xnear: 100.0 Xfar: 200.0
Comment: 8KM NW SHEFFIELD

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES
LBWR	HZ	11.9	IP		C	21:33	27.46			-0.35
LBWR	HE	11.9	ES			21:33	29.39			-0.30
LBWR	HE	11.9	IAML			21:33	29.67	122	0.11	
LBWR	HN	11.9	IAML			21:33	29.72	81	0.09	
HPK	HE	58.6	ES			21:33	42.66			-0.46
HPK	HE	58.6	IAML			21:33	43.03	13	0.27	
HPK	HN	58.6	IAML			21:33	43.52	13	0.12	
CWF	HZ	79.1	EP			21:33	38.75			0.00
CWF	HE	79.1	ES			21:33	47.83			-0.78
CWF	HE	79.1	IAML			21:33	48.48	2	0.17	
CWF	HN	79.1	IAML			21:33	50.56	2	0.36	
LMK	HN	81.6	ES			21:33	49.77			0.50
FOEL	HZ	126.0	EP			21:33	46.54			0.52
FOEL	HE	126.0	ES			21:34	02.02			0.84
FOEL	HE	126.0	IAML			21:34	03.22	2	0.32	
FOEL	HN	126.0	IAML			21:34	03.71	3	0.31	
HLM1	HZ	135.0	EP			21:33	47.94			0.45
HLM1	HE	135.0	ES			21:34	04.40			0.67
HLM1	HE	135.0	IAML			21:34	06.46	2	0.20	
HLM1	HN	135.0	IAML			21:34	07.79	2	0.33	
EDMD	HE	158.0	ES			21:34	09.61			0.47
EDMD	HZ	158.0	IAML			21:34	11.04	1	0.22	
EDMD	HN	158.0	IAML			21:34	12.11	5	0.27	
KESW	HZ	164.0	EP			21:33	52.30			0.76
KESW	HN	164.0	IAML			21:34	13.47	1	0.20	
KESW	HE	164.0	IAML			21:34	14.10	2	0.41	

June 29 2018 Time: 05:54 11.5 UTC Magnitude: 2.4 ML
Lat: 51.167N Lon: -0.252W Depth: 0.1 km
Grid Ref: 522.20 kmE 142.37 kmN RMS: 0.80 secs
Locality: NEWDIGATE,SURREY
Velocity model: Surrey Xnear: 100.0 Xfar: 300.0
Comment: FELT SURREY... Intensity: 3

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES
HMNX	HZ	54.5	EP			05:54	20.74			-1.17
HMNX	HE	54.5	ES			05:54	29.75			0.22
WOL	BZ	68.6	EP			05:54	24.02			-0.14
WOL	BE	68.6	ES			05:54	35.03			1.61
ELSH	HZ	97.9	EP			05:54	28.71			0.03
ELSH	HN	97.9	ES			05:54	42.44			1.19
SWN1	HZ	113.0	EP			05:54	31.05			-0.06
SWN1	HN	113.0	ES			05:54	45.61			0.17
SWN1	HE	113.0	IAML			05:54	51.67	58	0.30	
SWN1	HN	113.0	IAML			05:55	01.67	119	0.54	
ELMS	HZ	134.0	EP			05:54	34.20			-0.01
ELMS	HN	134.0	ES			05:54	51.19			0.39
ELMS	HN	134.0	IAML			05:54	53.94	77	0.40	
ELMS	HE	134.0	IAML			05:54	54.35	87	0.44	
STRD	HZ	148.0	EP			05:54	36.11			-0.15
STRD	HN	148.0	ES			05:54	54.53			0.18
STRD	HN	148.0	IAML			05:54	56.38	61	0.24	
STRD	HE	148.0	IAML			05:55	04.80	76	0.66	
WACR	HZ	183.0	EP			05:54	41.65			0.64
WACR	HN	183.0	ES			05:55	03.40			0.82
WACR	HN	183.0	IAML			05:55	06.96	74	0.36	
WACR	HE	183.0	IAML			05:55	10.33	63	0.32	
MONM	HZ	191.0	EP			05:54	42.18			0.07
MONM	HN	191.0	ES			05:55	04.34			-0.13
MONM	HE	191.0	IAML			05:55	10.30	35	0.34	
MONM	HN	191.0	IAML			05:55	11.08	66	0.42	
MCH1	HZ	210.0	EP			05:54	44.23			-0.31
MCH1	HN	210.0	IAML			05:55	13.45	46	0.34	
MCH1	HE	210.0	IAML			05:55	14.25	31	0.46	
HLM1	HZ	234.0	EP			05:54	46.77			-0.82
HLM1	HE	234.0	ES			05:55	13.98			0.02
HLM1	HN	234.0	IAML			05:55	18.57	21	0.50	
HLM1	HE	234.0	IAML			05:55	20.67	24	0.52	
RSBS	HZ	322.0	EP			05:54	58.09			-0.49
RSBS	HE	322.0	ES			05:55	32.25			-0.72
RSBS	HE	322.0	IAML			05:55	47.68	6	0.64	
RSBS	HN	322.0	IAML			05:55	49.56	9	0.48	

June 29 2018 Time: 18:22 27.6 UTC Magnitude: 0.7 ML
Lat: 56.096N Lon: -5.218W Depth: 10.6 km
Grid Ref: 199.86 kmE 693.91 kmN RMS: 0.20 secs
Locality: BARNACARRY,ARGYLL/BUTE
Velocity model: Lownet Xnear: 100.0 Xfar: 200.0

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES
LAWE	HZ	21.4	IP		C	18:22	31.79			-0.03
LAWE	HN	21.4	ES			18:22	34.82			-0.12
LAWE	HE	21.4	IAML			18:22	35.19	38	0.14	
LAWE	HN	21.4	IAML			18:22	35.26	17	0.09	
PGB1	HZ	55.7	EP			18:22	37.51			0.42
PGB1	HN	55.7	ES			18:22	43.97			-0.09
PGB1	HN	55.7	IAML			18:22	44.64	3	0.22	
PGB1	HE	55.7	IAML			18:22	44.74	4	0.13	
INVG	HZ	81.6	EP			18:22	41.06			-0.05
INVG	HN	81.6	ES			18:22	50.96			-0.04
INVG	HE	81.6	IAML			18:22	52.56	2	0.11	
INVG	HN	81.6	IAML			18:22	52.64	2	0.21	
NEWG	HZ	125.0	EP			18:22	47.67			0.00
NEWG	HE	125.0	ES			18:23	02.08			-0.28
NEWG	HN	125.0	IAML			18:23	02.88	2	0.18	
NEWG	HE	125.0	IAML			18:23	03.15	2	0.11	
CLGH	HZ	126.0	EP			18:22	47.96			0.19
CLGH	HE	126.0	IAML			18:23	03.97	3	0.38	
CLGH	HN	126.0	IAML			18:23	04.73	3	0.17	
GAL1	HE	141.0	ES			18:23	06.00			-0.08
GAL1	HN	141.0	IAML			18:23	07.60	2	0.20	
GAL1	HE	141.0	IAML			18:23	08.06	2	0.10	
KPL	HE	141.0	ES			18:23	06.41			0.27
KPL	HE	141.0	IAML			18:23	07.35	2	0.24	
KPL	HN	141.0	IAML			18:23	08.02	1	0.18	
GAL1	HZ	141.0	EP			18:22	49.54			-0.28

TABLE 2 : PHASE DATA

July 2 2018 Time: 06:45 58.4 UTC Magnitude: 0.9 ML
Lat: 57.457N Lon: -5.652W Depth: 6.3 km
Grid Ref: 180.96 kmE 846.61 kmN RMS: 0.30 secs
Locality: SHIELDAIG,HIGHLAND
Velocity model: Lownet Xnear: 100.0 Xfar: 200.0

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES
KPL	HZ	13.1	IP		D	06:46	01.35			0.12
KPL	HN	13.1	IAML			06:46	01.36	24	0.10	
KPL	HE	13.1	ES			06:46	03.08			-0.19
KPL	HE	13.1	IAML			06:46	03.44	32	0.17	
LINV	HZ	81.5	EP			06:46	11.84			-0.18
LEWI	HZ	105.0	EP			06:46	16.13			0.37
LEWI	HE	105.0	ES			06:46	28.13			-0.27
LEWI	HN	105.0	IAML			06:46	30.01	6	0.22	
LEWI	HE	105.0	IAML			06:46	30.86	5	0.18	
LAWE	HZ	134.0	EP			06:46	20.62			0.53
LAWE	HN	134.0	ES			06:46	35.75			-0.14
LAWE	HN	134.0	IAML			06:46	38.13	3	0.18	
LAWE	HE	134.0	IAML			06:46	38.19	4	0.30	
INVG	HZ	151.0	EP			06:46	22.51			0.02
INVG	HN	151.0	ES			06:46	39.77			-0.27
INVG	HN	151.0	IAML			06:46	40.10	1	0.42	
INVG	HE	151.0	IAML			06:46	40.31	1	0.22	
BIGH	HN	155.0	ES			06:46	41.21			0.25
BIGH	HN	155.0	IAML			06:46	42.71	2	0.14	
BIGH	HE	155.0	IAML			06:46	42.71	3	0.15	

July 5 2018 Time: 02:16 39.0 UTC Magnitude: 0.7 ML
Lat: 55.258N Lon: -3.520W Depth: 4.1 km
Grid Ref: 303.41 kmE 597.04 kmN RMS: 0.20 secs
Locality: JOHNSTONEBRIDGE,D & G
Velocity model: Borders Xnear: 50.0 Xfar: 100.0

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES
ESK	HZ	21.0	IP		C	02:16	43.26			0.19
ESK	HN	21.0	ES			02:16	45.75			-0.22
ESK	HN	21.0	IAML			02:16	45.85	15	0.08	
ESK	HE	21.0	IAML			02:16	45.93	25	0.09	
NEWG	HZ	47.8	EP			02:16	47.63			0.22
NEWG	HN	47.8	ES			02:16	53.17			-0.23
NEWG	HE	47.8	IAML			02:16	53.90	3	0.09	
NEWG	HN	47.8	IAML			02:16	54.16	4	0.16	
KESW	HZ	79.1	EP			02:16	52.67			0.15
KESW	HE	79.1	ES			02:17	02.10			-0.04
KESW	HE	79.1	IAML			02:17	03.69	2	0.14	
KESW	HN	79.1	IAML			02:17	04.16	2	0.08	
ESY	EZ	93.0	EP			02:16	55.47			0.69
AQ12	HZ	104.0	EP			02:16	56.60			0.04
EDMD	HZ	110.0	EP			02:16	58.06			0.52
EDMD	HE	110.0	ES			02:17	10.83			0.10
IOMK	HZ	130.0	EP			02:17	00.77			0.02
IOMK	HN	130.0	ES			02:17	15.78			-0.43
IOMK	HN	130.0	IAML			02:17	17.37	4	0.06	
IOMK	HE	130.0	IAML			02:17	17.74	4	0.08	

July 5 2018 Time: 10:53 25.1 UTC Magnitude: 3.0 ML
Lat: 51.161N Lon: -0.249W Depth: 0.2 km
Grid Ref: 522.43 kmE 141.71 kmN RMS: 1.00 secs
Locality: NEWDIGATE,SURREY
Comment: FELT SURREY... Intensity: 5

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES
HMNX	HZ	52.5	EP			10:53	34.78			-0.48
HMNX	HN	52.5	ES			10:53	42.27			-0.39
HMNX	HN	52.5	IAML			10:53	50.29	1450	0.56	
HMNX	HE	52.5	IAML			10:53	53.76	2110	0.47	
WOL	BZ	70.2	EP			10:53	37.17			-0.90
WOL	BE	70.2	ES			10:53	49.88			2.37
WOL	BE	70.2	IAML			10:53	52.03	646	0.45	
WOL	BN	70.2	IAML			10:53	53.49	642	0.65	
BUW	HZ	73.5	EP			10:53	37.76			-0.82
ELSH	HZ	96.6	EP			10:53	42.09			-0.06
ELSH	HN	96.6	ES			10:53	57.19			2.62
SWN1	HZ	115.0	EP			10:53	45.14			0.10
SWN1	HN	115.0	ES			10:54	00.19			0.61
SWN1	HN	115.0	IAML			10:54	07.56	366	0.40	
SWN1	HE	115.0	IAML			10:54	11.68	327	0.45	
ELMS	HZ	134.0	EP			10:53	48.36			0.42
STRD	HN	150.0	EP			10:53	50.51			0.32
OLDB	HZ	170.0	EP			10:53	53.58			0.62
WACR	HZ	184.0	EP			10:53	55.24			0.42
WACR	HN	184.0	ES			10:54	17.81			1.31
WACR	HN	184.0	IAML			10:54	19.99	194	0.23	
WACR	HE	184.0	IAML			10:54	22.12	289	0.31	
CWF	HZ	190.0	EP			10:53	55.46			-0.18
CWF	HN	190.0	ES			10:54	17.47			-0.44
CWF	HN	190.0	IAML			10:54	23.85	74	0.27	
CWF	HE	190.0	IAML			10:54	24.10	93	0.41	
MONM	HZ	193.0	EP			10:53	56.01			0.01
MONM	HN	193.0	ES			10:54	19.00			0.48
MONM	HN	193.0	IAML			10:54	25.84	246	0.51	
MONM	HE	193.0	IAML			10:54	26.77	234	0.58	
MCH1	HZ	212.0	EP			10:53	57.81			-0.63
MCH1	HE	212.0	ES			10:54	22.74			-0.01
MCH1	HN	212.0	IAML			10:54	28.31	180	0.34	
MCH1	HE	212.0	IAML			10:54	28.89	128	0.63	
HLM1	HZ	236.0	EP			10:54	00.67			-0.84
JSA	HZ	259.0	EP			10:54	03.05			-1.19
LBWR	HZ	269.0	EP			10:54	04.87			-0.70
DYA	HZ	272.0	EP			10:54	04.83			-1.13
FOEL	HZ	279.0	EP			10:54	06.29			-0.63
HTL	HZ	298.0	EP			10:54	08.11			-0.95
CCA1	HZ	368.0	EP			10:54	16.14			-1.83
EDMD	HZ	424.0	EP			10:54	23.70			-1.14
IOMK	HZ	452.0	EP			10:54	27.04			-1.31

July 10 2018 Time: 02:48 57.8 UTC Magnitude: 0.5 ML
Lat: 54.147N Lon: -4.282W Depth: 1.9 km
Grid Ref: 250.97 kmE 474.78 kmN RMS: 0.20 secs
Locality: IRISH SEA
Velocity model: Lownet Xnear: 100.0 Xfar: 200.0
Comment: 13KM OFF ISLE OF MAN

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES
IOMK	HZ	22.4	IP		D	02:49	02.11			-0.13
IOMK	HE	22.4	ES			02:49	05.18			-0.29
IOMK	HN	22.4	IAML			02:49	05.60	6	0.06	
IOMK	HE	22.4	IAML			02:49	06.03	7	0.17	
WME	EZ	83.5	EP			02:49	11.91			-0.19
WPS	HZ	84.3	EP			02:49	12.16			-0.04
WPS	HE	84.3	ES			02:49	22.84			0.14
WPS	HE	84.3	IAML			02:49	22.90	3	0.42	
GAL1	HZ	84.8	EP			02:49	12.50			0.20
GAL1	HE	84.8	ES			02:49	23.12			0.25
GAL1	HE	84.8	IAML			02:49	25.28	2	0.20	
GAL1	HN	84.8	IAML			02:49	26.08	1	0.19	
KESW	HZ	91.0	EP			02:49	13.05			-0.24
KESW	HE	91.0	ES			02:49	24.47			-0.11
KESW	HE	91.0	IAML			02:49	26.00	2	0.11	
KESW	HN	91.0	IAML			02:49	26.10	2	0.19	
WLF1	HZ	95.7	EP			02:49	14.15			0.16
NEWG	HZ	108.0	EP			02:49	16.28			0.36
NEWG	HE	108.0	ES			02:49	29.00			-0.13
NEWG	HE	108.0	IAML			02:49	30.59	2	0.22	
NEWG	HN	108.0	IAML			02:49	30.76	1	0.14	
ESK	HE	148.0	ES			02:49	39.67			0.22
ESK	HN	148.0	IAML			02:49	40.11	1	0.22	
ESK	HE	148.0	IAML			02:49	40.54	1	0.26	

July 10 2018 Time: 16:03 10.3 UTC Magnitude: 1.9 ML
Lat: 51.172N Lon: -0.234W Depth: 0.0 km
Grid Ref: 523.44 kmE 142.96 kmN RMS: 0.70 secs
Locality: NEWDIGATE,SURREY
Comment: FELT NEWDIGATE... Intensity: 3

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES
HMNX	HZ	52.3	EP			16:03	20.34			-0.10
HMNX	HN	52.3	ES			16:03	27.87			0.06
HMNX	HE	52.3	IAML			16:03	33.79	149	0.30	
HMNX	HN	52.3	IAML			16:03	35.11	83	0.27	
WOL	BZ	70.9	EP			16:03	24.03			0.65
WOL	BE	70.9	ES			16:03	33.79			0.89
ELMS	HZ	133.0	EP			16:03	33.19			0.22
ELMS	HN	133.0	ES			16:03	49.68			0.20
STRD	HZ	150.0	EP			16:03	35.58			0.13
STRD	HN	150.0	ES			16:03	53.96			0.18
STRD	HN	150.0	IAML			16:03	55.12	20	0.30	
STRD	HE	150.0	IAML			16:03	58.78	16	0.24	
WACR	HE	183.0	ES			16:04	02.33			0.87
WACR	HN	183.0	IAML			16:04	05.95	25	0.64	
WACR	HE	183.0	IAML			16:04	06.64	18	0.36	
MCH1	HN	213.0	ES			16:04	07.41			-0.63
MCH1	HE	213.0	IAML			16:04	10.91	6	0.42	
MCH1	HN	213.0	IAML			16:04	12.13	9	0.34	
HLM1	HZ	236.0	EP			16:03	47.00			0.27
HLM1	HN	236.0	ES			16:04	12.60			-0.69
HLM1	HN	236.0	IAML			16:04	17.31	6	0.52	
HLM1	HE	236.0	IAML			16:04	22.46	6	0.38	

July 11 2018 Time: 10:11 26.9 UTC Magnitude: 2.3 ML
Lat: 54.686N Lon: -1.250W Depth: 8.2 km
Grid Ref: 448.35 kmE 532.60 kmN RMS: 0.30 secs
Locality: HARTLEPOOL,CO DURHAM
Velocity model: Lownet Xnear: 500.0 Xfar: 1000.0

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES
AT12	HZ	17.6	IP		C	10:11	30.48			0.00
AT12	HE	17.6	ES			10:11	33.35			0.26
AT12	HE	17.6	IAML			10:11	33.44	2415	0.14	
AT12	HN	17.6	IAML			10:11	33.57	2468	0.26	
AT10	HZ	35.4	EP			10:11	33.04			-0.25
AT10	HN	35.4	IAML			10:11	33.63	253	0.14	
AT10	HE	35.4	IAML			10:11	38.09	244	0.18	
GDLE	HZ	40.6	IP		D	10:11	33.72			-0.35
GDLE	HN	40.6	ES			10:11	38.94			-0.38
GDLE	HN	40.6	IAML			10:11	39.22	211	0.18	
GDLE	HE	40.6	IAML			10:11	39.50	524	0.28	
EDMD	HZ	48.6	IP		C	10:11	35.08			-0.19
EDMD	HN	48.6	ES			10:11	40.96			-0.43
EDMD	HN	48.6	IAML			10:11	41.22	382	0.25	
EDMD	HE	48.6	IAML			10:11	41.36	442	0.16	
AU20	HZ	53.2	EP			10:11	35.81			-0.20
AU15	HZ	56.2	EP			10:11	36.39			-0.07

TABLE 2 : PHASE DATA

AU11	HZ	58.1	IP	D	10:11	36.70			-0.05
AU18	HZ	60.0	EP		10:11	36.97			-0.07
AU09	HZ	64.5	EP		10:11	37.85			0.11
AU07	HZ	66.6	EP		10:11	38.07			0.00
AU07	HN	66.6	IAML		10:11	53.36	150	0.30	
AU07	HE	66.6	IAML		10:11	54.01	135	0.20	
AU08	HZ	73.3	EP		10:11	39.32			0.20
AU08	HE	73.3	IAML		10:11	51.03	84	0.50	
AU08	HN	73.3	IAML		10:12	04.94	28	0.44	
AV06	HZ	76.5	EP		10:11	40.29			0.66
AV06	HN	76.5	ES		10:11	49.21			0.28
AV06	HN	76.5	IAML		10:11	51.52	74	0.14	
AV06	HE	76.5	IAML		10:11	51.69	127	0.18	
HPK	HZ	84.5	IP	D	10:11	41.16			0.28
HPK	HN	84.5	ES		10:11	50.99			-0.11
HPK	HE	84.5	IAML		10:11	53.24	253	0.17	
HPK	HN	84.5	IAML		10:11	53.76	257	0.10	
AR09	HZ	92.7	EP		10:11	42.23			0.04
AR09	HN	92.7	IAML		10:11	55.74	583	0.36	
AR09	HE	92.7	IAML		10:11	55.87	465	0.26	
AQ12	HZ	101.0	EP		10:11	43.20			-0.27
AQ12	HN	101.0	IAML		10:11	57.66	116	0.18	
AQ12	HE	101.0	IAML		10:11	58.25	124	0.18	
KESW	HZ	120.0	EP		10:11	46.83			0.40
KESW	HN	120.0	ES		10:12	00.53			-0.17
KESW	HN	120.0	IAML		10:12	01.96	22	0.14	
KESW	HE	120.0	IAML		10:12	03.09	36	0.20	
AS02	HZ	135.0	EP		10:11	49.09			0.58
AS02	HE	135.0	IAML		10:12	06.38	182	0.20	
AS02	HN	135.0	IAML		10:12	07.44	108	0.38	
AP12	HZ	137.0	EP		10:11	48.94			0.10
ESK	HZ	144.0	EP		10:11	50.11			0.37
ESK	HE	144.0	IAML		10:12	08.07	41	0.22	
ESK	HN	144.0	IAML		10:12	08.56	44	0.22	
LBWR	HZ	146.0	EP		10:11	49.64			-0.52
LBWR	HE	146.0	IAML		10:12	09.99	372	0.30	
LBWR	HN	146.0	IAML		10:12	10.01	207	0.30	
SPK	EZ	148.0	EP		10:11	50.73			0.45
LMK	HZ	150.0	EP		10:11	50.26			-0.32
LMK	HN	150.0	IAML		10:12	11.00	84	0.20	
LMK	HE	150.0	IAML		10:12	13.85	118	0.74	
ESY	EZ	162.0	EP		10:11	52.87			0.43
NEWG	HZ	197.0	EP		10:11	56.06			-0.76
NEWG	HE	197.0	IAML		10:12	22.86	16	0.20	
NEWG	HN	197.0	IAML		10:12	23.94	20	0.35	

July 12 2018 Time: 03:18 56.6 UTC Magnitude: 1.0 ML
Lat: 55.234N Lon: -3.514W Depth: 4.1 km
Grid Ref: 303.73 kmE 594.36 kmN RMS: 0.40 secs
Locality: JOHNSTONEBRIDGE,D & G
Velocity model: Borders Xnear: 80.0 Xfar: 200.0

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES
ESK	HZ	21.7	IP		C	03:19	00.54			-0.26
ESK	HN	21.7	ES			03:19	02.99			-0.80
ESK	HE	21.7	IAML			03:19	03.24	51	0.10	
ESK	HN	21.7	IAML			03:19	04.25	38	0.12	
NEWG	HZ	47.4	EP			03:19	04.86			-0.11
NEWG	HE	47.4	ES			03:19	10.43			-0.48
NEWG	HE	47.4	IAML			03:19	11.06	6	0.15	
NEWG	HN	47.4	IAML			03:19	11.40	10	0.13	
KESW	HZ	76.5	EP			03:19	09.81			0.08
KESW	HE	76.5	ES			03:19	19.39			0.35
KESW	HE	76.5	IAML			03:19	21.03	6	0.18	
KESW	HN	76.5	IAML			03:19	21.14	4	0.10	
EDI	HZ	79.4	EP			03:19	10.50			0.33
EDI	HE	79.4	ES			03:19	20.19			0.39
EDI	HE	79.4	IAML			03:19	21.06	12	0.18	
EDI	HN	79.4	IAML			03:19	21.17	18	0.27	
GAL1	HZ	86.8	IP		C	03:19	11.18			-0.18
PGB1	HZ	88.7	EP			03:19	12.07			0.37
ESY	EZ	94.9	EP			03:19	12.64			-0.09
AQ12	HZ	101.0	EP			03:19	13.91			0.12
EDMD	HZ	109.0	EP			03:19	15.26			0.32
IOMK	HZ	128.0	EP			03:19	18.09			0.04
AR09	HZ	132.0	EP			03:19	18.90			0.14
INVG	HZ	137.0	EP			03:19	19.54			0.08
LAWE	HZ	164.0	EP			03:19	23.64			0.77

July 15 2018 Time: 04:04 07.0 UTC Magnitude: 0.2 ML
Lat: 55.134N Lon: -2.957W Depth: 2.5 km
Grid Ref: 338.99 kmE 582.61 kmN RMS: 0.30 secs
Locality: LANGHOLM,D & G
Velocity model: Lownet Xnear: 500.0 Xfar: 1000.0

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES
ESK	HZ	25.7	IP		D	04:04	11.63			-0.28
ESK	HE	25.7	ES			04:04	15.01			-0.46
ESK	HN	25.7	IAML			04:04	15.38	1	0.17	
ESK	HE	25.7	IAML			04:04	15.66	1	0.08	
EDMD	HN	72.1	ES			04:04	28.87			0.45
AQ12	HN	78.7	ES			04:04	29.93			-0.41
AQ12	HE	78.7	IAML			04:04	31.53	2	0.16	
AQ12	HN	78.7	IAML			04:04	32.07	2	0.08	
NEWG	HZ	81.2	EP			04:04	21.01			0.16
NEWG	HE	81.2	ES			04:04	30.93			0.00
NEWG	HE	81.2	IAML			04:04	32.27	1	0.16	
NEWG	HN	81.2	IAML			04:04	32.56	2	0.11	
GAL1	HZ	116.0	EP			04:04	26.50			0.24
GAL1	HN	116.0	ES			04:04	40.41			0.12
AS07	HE	118.0	ES			04:04	40.69			-0.19
AS07	HN	118.0	IAML			04:04	41.08	2	0.11	
AS07	HE	118.0	IAML			04:04	41.22	1	0.16	
PGB1	HN	123.0	ES			04:04	42.38			0.37

July 18 2018 Time: 02:26 07.9 UTC Magnitude: 0.2 ML
Lat: 55.094N Lon: -4.167W Depth: 10.2 km
Grid Ref: 261.73 kmE 579.88 kmN RMS: 0.20 secs
Locality: DALRY,D & G
Velocity model: Lownet Xnear: 100.0 Xfar: 200.0

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES
NEWG	HZ	4.8	EP			02:26	10.10			0.08
NEWG	HN	4.8	ES			02:26	11.56			-0.01
NEWG	HN	4.8	IAML			02:26	11.62	12	0.10	
NEWG	HE	4.8	IAML			02:26	11.64	13	0.10	
GAL1	HZ	43.1	EP			02:26	15.34			-0.12
GAL1	HN	43.1	ES			02:26	20.50			-0.48
GAL1	HN	43.1	IAML			02:26	20.96	1	0.08	
GAL1	HE	43.1	IAML			02:26	20.99	1	0.17	
ESK	HZ	66.1	EP			02:26	18.93			-0.11
ESK	HN	66.1	ES			02:26	26.93			-0.24
ESK	HN	66.1	IAML			02:26	28.09	1	0.22	
ESK	HE	66.1	IAML			02:26	28.09	1	0.14	
PGB1	HZ	82.3	EP			02:26	21.84			0.29
PGB1	HE	82.3	ES			02:26	31.55			0.04
PGB1	HN	82.3	IAML			02:26	34.05	2	0.20	
PGB1	HE	82.3	IAML			02:26	34.08	2	0.23	
IOMK	HZ	96.3	EP			02:26	24.03			0.32
IOMK	HN	96.3	ES			02:26	35.49			0.24
IOMK	HN	96.3	IAML			02:26	36.39	1	0.14	
IOMK	HE	96.3	IAML			02:26	37.17	4	0.44	
CLGH	HN	124.0	ES			02:26	42.37			-0.04
CLGH	HE	124.0	IAML			02:26	43.09	2	0.48	
CLGH	HN	124.0	IAML			02:26	43.31	1	0.33	

July 18 2018 Time: 03:59 56.8 UTC Magnitude: 1.9 ML
Lat: 51.173N Lon: -0.261W Depth: 0.2 km
Grid Ref: 521.55 kmE 143.02 kmN RMS: 0.90 secs
Locality: NEWDIGATE,SURREY
Comment: FELT NEWDIGATE... Intensity: 3

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES
RUSH	HZ	2.0	IP		C	03:59	57.26			-0.48
RUSH	HE	2.0	ES			03:59	57.85			-0.57
RUSH	HN	2.0	IAML			03:59	58.11	11719	0.30	
RUSH	HE	2.0	IAML			03:59	58.16	15264	0.20	
HORS	HZ	3.2	IP		C	03:59	57.70			-0.49
HORS	HE	3.2	ES			03:59	58.74			-0.45
HORS	HN	3.2	IAML			03:59	58.95	7024	0.22	
HORS	HE	3.2	IAML			03:59	59.06	3439	0.21	
HMNX	HZ	52.6	EP			04:00	06.89			-0.07
HMNX	HN	52.6	ES			04:00	14.79			0.43
HMNX	HE	52.6	IAML			04:00	18.33	137	0.60	
HMNX	HN	52.6	IAML			04:00	24.28	124	0.31	
WOL	BZ	70.0	EP			04:00	09.76			0.05
WOL	BN	70.0	ES			04:00	21.25			2.12
ELSH	HZ	96.9	EP			04:00	14.75			0.88
ELSH	HN	96.9	ES			04:00	28.37			2.05
ELSH	HN	96.9	IAML			04:00	29.64	22	0.42	
ELSH	HE	96.9	IAML			04:00	34.70	27	0.45	
ELMS	HZ	135.0	EP			04:00	20.44			0.78
ELMS	HN	135.0	ES			04:00	37.29			0.95
WACR	HZ	184.0	EP		9	04:00	28.26			1.73
WACR	HE	184.0	ES			04:00	50.00			0.05
WACR	HN	184.0	IAML			04:00	52.25	34	0.30	
WACR	HE	184.0	IAML			04:00	56.69	24	0.27	
MONM	HZ	193.0	EP			04:00	28.17			0.52
MONM	HN	193.0	ES			04:00	50.94			0.78
MCH1	HN	212.0	ES			04:00	55.96			1.58
HLM1	HZ	236.0	EP			04:00	32.83			-0.34
HLM1	HE	236.0	ES			04:01	02.76			3.05

July 18 2018 Time: 04:00 09.7 UTC Magnitude: 0.2 ML
Lat: 51.173N Lon: -0.261W Depth: 0.2 km
Grid Ref: 521.55 kmE 143.02 kmN RMS: 0.30 secs
Locality: NEWDIGATE,SURREY
Velocity model: Lownet Xnear: 500.0 Xfar: 1000.0

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES
RUSH	HZ	2.0	EP			04:00	10.00			-0.31
RUSH	HE	2.0	ES			04:00	10.69			-0.03
RUSH	HE	2.0	IAML			04:00	10.97	422	0.25	
RUSH	HN	2.0	IAML			04:00	11.00	871	0.34	
HORS	HZ	3.2	EP			04:00	10.45			-0.14
HORS	HE	3.2	ES			04:00	11.69			0.48
HORS	HN	3.2	IAML			04:00	11.76	202	0.19	
HORS	HE	3.2	IAML			04:00	11.78	141	0.24	

July 18 2018 Time: 13:33 18.8 UTC Magnitude: 2.4 ML
Lat: 51.158N Lon: -0.243W Depth: 0.0 km
Grid Ref: 522.85 kmE 141.39 kmN RMS: 0.80 secs
Locality: NEWDIGATE,SURREY

TABLE 2 : PHASE DATA

Comment: FELT SURREY... Intensity: 3

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES
RUSH	HZ	2.3	IP		C	13:33	19.10			-0.71
RUSH	HN	2.3	ES			13:33	19.72			-0.85
RUSH	HN	2.3	IAML			13:33	19.93	26053	0.29	
RUSH	HE	2.3	IAML			13:33	20.11	37150	0.29	
HORS	HZ	2.9	IP		C	13:33	19.58			-0.46
HORS	HE	2.9	ES			13:33	20.39			-0.56
HORS	HN	2.9	IAML			13:33	20.85	26518	0.20	
HORS	HE	2.9	IAML			13:33	20.95	11551	0.22	
HMNX	HZ	51.7	EP			13:33	28.44			-0.35
HMNX	HN	51.7	ES			13:33	36.43			0.33
HMNX	HN	51.7	IAML			13:33	38.10	332	0.37	
HMNX	HE	51.7	IAML			13:33	40.20	500	0.56	
WOL	BZ	70.8	EP			13:33	32.09			0.28
WOL	BE	70.8	ES			13:33	43.11			1.79
ELSH	HZ	96.1	EP			13:33	36.64			0.92
ELSH	HN	96.1	IAML			13:33	54.15	88	0.49	
ELSH	HE	96.1	IAML			13:34	00.57	166	0.59	
SWN1	HZ	116.0	EP			13:33	39.94			1.15
SWN1	HE	116.0	ES			13:33	53.58			0.18
SWN1	HE	116.0	IAML			13:33	57.78	99	0.36	
SWN1	HN	116.0	IAML			13:34	10.04	180	0.51	
ELMS	HZ	134.0	EP			13:33	42.29			0.68
ELMS	HE	134.0	ES			13:33	57.90			-0.38
ELMS	HN	134.0	IAML			13:34	00.23	145	0.40	
ELMS	HE	134.0	IAML			13:34	00.72	142	0.33	
WACR	HZ	184.0	EP			13:33	49.68			1.16
WACR	HN	184.0	ES			13:34	11.25			1.02
WACR	HN	184.0	IAML			13:34	14.10	116	0.26	
WACR	HE	184.0	IAML			13:34	18.59	98	0.33	
MONM	HZ	194.0	EP			13:33	50.09			0.36
MONM	HN	194.0	ES			13:34	12.46			0.14
MCH1	HZ	213.0	EP			13:33	52.85			0.68
MCH1	HN	213.0	ES			13:34	16.75			0.21
HLM1	HZ	237.0	EP			13:33	54.52			-0.73
HLM1	HN	237.0	ES			13:34	23.00			1.13
FOEL	HZ	280.0	EP			13:34	00.50			-0.16

July 18 2018 Time: 13:33 38.4 UTC Magnitude: 0.9 ML
Lat: 51.158N Lon: -0.243W Depth: 0.0 km
Grid Ref: 522.85 kmE 141.39 kmN RMS: 0.30 secs
Locality: NEWDIGATE,SURREY

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES
RUSH	HZ	1.8	IP		C	13:33	39.42			0.21
RUSH	HN	1.8	ES			13:33	40.05			0.22
RUSH	HE	1.8	IAML			13:33	40.23	2671	0.10	
RUSH	HN	1.8	IAML			13:33	40.37	1622	0.32	
HORS	HZ	3.4	EP			13:33	39.92			0.13
HORS	HE	3.4	ES			13:33	40.72			-0.11
HORS	HE	3.4	IAML			13:33	41.17	1034	0.22	
HORS	HN	3.4	IAML			13:33	41.21	1641	0.16	

July 18 2018 Time: 21:59 08.5 UTC Magnitude: 1.1 ML
Lat: 53.133N Lon: -4.396W Depth: 12.8 km
Grid Ref: 239.73 kmE 362.25 kmN RMS: 0.10 secs
Locality: CAERNARFON BAY
Velocity model: Lleyn Xnear: 100.0 Xfar: 200.0
Comment: FELT CAERNARFON... Intensity: 3

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES
YLL	EZ	15.1	IP		C	21:59	11.92			0.02
WLF1	HZ	17.4	IP		C	21:59	12.13			-0.05
WLF1	HN	17.4	ES			21:59	14.65			0.00
WLF1	HE	17.4	IAML			21:59	14.92	110	0.05	
WLF1	HN	17.4	IAML			21:59	15.07	83	0.08	
YRC	EZ	17.7	IP		D	21:59	12.19			-0.03
YRC	EZ	17.7	ES			21:59	14.69			-0.04
WME	EZ	30.0	IP		C	21:59	13.93			-0.10
WME	EZ	30.0	ES			21:59	17.98			0.22
WPS	HZ	30.5	EP			21:59	14.13			0.03
WPS	HE	30.5	ES			21:59	17.88			0.00
WPS	HE	30.5	IAML			21:59	18.71	28	0.19	
WPS	HN	30.5	IAML			21:59	18.82	16	0.23	
FOEL	HZ	84.7	EP			21:59	22.28			-0.23
FOEL	HE	84.7	ES			21:59	32.04			0.03
FOEL	HN	84.7	IAML			21:59	33.12	10	0.15	
FOEL	HE	84.7	IAML			21:59	33.35	11	0.16	
HLM1	HZ	123.0	EP			21:59	28.38			-0.01
HLM1	HE	123.0	ES			21:59	41.98			0.10
HLM1	HN	123.0	IAML			21:59	44.79	3	0.17	
HLM1	HE	123.0	IAML			21:59	45.72	2	0.12	
RSBS	HZ	133.0	EP			21:59	29.90			-0.09
RSBS	HE	133.0	ES			21:59	44.88			0.31
RSBS	HN	133.0	IAML			21:59	47.70	3	0.08	
RSBS	HE	133.0	IAML			21:59	48.77	3	0.10	

July 21 2018 Time: 04:53 27.1 UTC Magnitude: 0.6 ML
Lat: 56.988N Lon: -5.456W Depth: 7.5 km
Grid Ref: 190.06 kmE 793.83 kmN RMS: 0.20 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	40.8	IP		C	04:53	34.41			0.11
KPL	HE	40.8	ES			04:53	39.37			-0.17
KPL	HE	40.8	IAML			04:53	39.54	6	0.22	
KPL	HN	40.8	IAML			04:53	39.60	3	0.16	
LAWE	HZ	81.2	EP			04:53	40.89			0.31
LAWE	HE	81.2	ES			04:53	50.14			-0.26
LAWE	HN	81.2	IAML			04:53	53.63	5	0.14	
LAWE	HE	81.2	IAML			04:53	53.67	6	0.24	
INVG	HZ	107.0	EP			04:53	44.64			0.08
INVG	HE	107.0	ES			04:53	57.21			-0.08
INVG	HN	107.0	IAML			04:53	58.73	1	0.10	
INVG	HE	107.0	IAML			04:53	59.73	1	0.11	
LEWI	HZ	154.0	EP			04:53	51.55			0.02
LEWI	HE	154.0	IAML			04:54	10.40	2	0.24	
LEWI	HN	154.0	IAML			04:54	10.91	2	0.64	

July 25 2018 Time: 03:26 33.4 UTC Magnitude: 2.2 ML
Lat: 59.135N Lon: -11.510W Depth: 10.0 km
Grid Ref: -142.99 kmE 1066.34 kmN RMS: 0.50 secs
Locality: NORTH ATLANTIC
Velocity model: Lownet Xnear: 500.0 Xfar: 1000.0
Comment: ROSEMARY BANK

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES
LEWI	HZ	291.0	EP			03:27	14.52			-0.38
LEWI	HE	291.0	ES			03:27	44.69			-0.53
LEWI	HN	291.0	IAML			03:27	53.67	8	0.24	
LEWI	HE	291.0	IAML			03:27	56.25	7	0.30	
LINV	HZ	383.0	EP			03:27	25.88			-0.40
KPL	HZ	398.0	EP			03:27	27.75			-0.42
KPL	HE	398.0	ES			03:28	08.66			0.48
KPL	HN	398.0	IAML			03:28	18.21	2	0.45	
KPL	HE	398.0	IAML			03:28	21.98	4	0.44	
SOFL	HZ	411.0	EP			03:27	30.20			0.41
BIGH	HZ	445.0	EP			03:27	34.30			0.26
BIGH	HE	445.0	ES			03:28	18.16			-0.19
BIGH	HN	445.0	IAML			03:28	20.29	4	0.69	
BIGH	HE	445.0	IAML			03:28	22.85	4	0.44	
IDGL	BZ	513.0	EP			03:27	42.33			-0.29
IDGL	BZ	513.0	ES			03:28	33.68			0.50
INVG	HZ	536.0	EP			03:27	45.92			0.37
CLGH	HZ	557.0	EP			03:27	47.26			-0.85
CLGH	HN	557.0	ES			03:28	43.33			0.65
CLGH	HN	557.0	IAML			03:28	46.66	3	0.24	
CLGH	HE	557.0	IAML			03:28	47.60	4	0.42	
LRW	HZ	593.0	EP			03:27	53.17			0.60

July 26 2018 Time: 09:35 43.9 UTC Magnitude: 1.0 ML
Lat: 57.568N Lon: -5.588W Depth: 4.0 km
Grid Ref: 185.45 kmE 858.75 kmN RMS: 0.20 secs
Locality: TORRIDON,HIGHLAND
Velocity model: Lownet Xnear: 100.0 Xfar: 200.0

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES
KPL	HZ	25.8	EP			09:35	48.88			0.17
KPL	HE	25.8	ES			09:35	51.98			-0.27
KPL	HN	25.8	IAML			09:35	52.24	12	0.12	
KPL	HE	25.8	IAML			09:35	52.31	42	0.22	
LEWI	HZ	99.5	EP			09:36	00.59			0.16
LEWI	HN	99.5	ES			09:36	12.41			-0.12
LEWI	HN	99.5	IAML			09:36	14.29	4	0.17	
LEWI	HE	99.5	IAML			09:36	14.35	3	0.28	
BIGH	HZ	143.0	EP			09:36	07.04			0.07
BIGH	HN	143.0	ES			09:36	23.43			-0.40
BIGH	HN	143.0	IAML			09:36	25.09	5	0.22	
BIGH	HE	143.0	IAML			09:36	25.19	5	0.10	
LAWE	HZ	146.0	EP			09:36	07.72			0.28
LAWE	HE	146.0	ES			09:36	24.72			0.08
LAWE	HN	146.0	IAML			09:36	27.08	5	0.14	
LAWE	HE	146.0	IAML			09:36	27.40	6	0.27	
INVG	HZ	158.0	EP			09:36	09.59			0.44
INVG	HN	158.0	ES			09:36	27.56			-0.05
INVG	HN	158.0	IAML			09:36	27.83	1	0.52	
INVG	HE	158.0	IAML			09:36	29.57	1	0.19	

July 27 2018 Time: 03:58 38.3 UTC Magnitude: 1.5 ML
Lat: 52.171N Lon: -2.411W Depth: 7.5 km
Grid Ref: 371.90 kmE 252.65 kmN RMS: 0.40 secs
Locality: SUCKLEY,WORCESTERSHIRE
Velocity model: Lownet Xnear: 100.0 Xfar: 200.0

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES
MCH1	HZ	44.6	IP		C	03:58	46.01			-0.11
MCH1	HE	44.6	ES			03:58	51.39			-0.43
MCH1	HE	44.6	IAML			03:58	51.69	26	0.16	
MCH1	HN	44.6	IAML			03:58	52.00	26	0.12	
MONM	HZ	45.7	IP		C	03:58	46.32			0.05
MONM	HE	45.7	ES			03:58	51.75			-0.33
MONM	HN	45.7	IAML			03:58	52.29	73	0.17	
MONM	HE	45.7	IAML			03:58	52.34	50	0.10	
STRD	HZ	47.1	IP		D	03:58	46.64			0.14
STRD	HN	47.1	ES			03:58	52.99			0.51
STRD	HE	47.1	IAML			03:58	53.70	52	0.09	
STRD	HN	47.1	IAML			03:58	53.72	56	0.14	
HLM1	HZ	50.2	IP		D	03:58	47.04			0.01
HLM1	HN	50.2	ES			03:58	53.41			0.02
HLM1	HN	50.2	IAML			03:58	56.32	22	0.05	
HLM1	HE	50.2	IAML			03:58	56.41	27	0.10	
OLDB	HZ	57.6	IP		D	03:58	48.00			-0.08

TABLE 2 : PHASE DATA

FOEL	HZ	96.2	EP	03:58	54.55			0.38
FOEL	HE	96.2	ES	03:59	06.06			0.32
FOEL	HN	96.2	IAML	03:59	07.01	20	0.45	
FOEL	HE	96.2	IAML	03:59	07.55	18	0.44	
CWF	HZ	98.1	EP	03:58	54.62			0.22
CWF	HE	98.1	ES	03:59	05.19			-0.95
CWF	HE	98.1	IAML	03:59	07.83	16	0.12	
CWF	HN	98.1	IAML	03:59	09.34	13	0.11	
LBWR	HZ	145.0	EP	03:59	02.28			0.89
RSBS	HZ	162.0	EP	03:59	03.76			-0.08
WME	EZ	187.0	EP	03:59	07.21			0.19
HTL	HZ	194.0	EP	03:59	08.26			0.31
WPS	HZ	196.0	EP	03:59	08.67			0.48
DYA	HZ	220.0	EP	03:59	10.60			-0.63

July 28 2018 Time: 05:39 35.7 UTC Magnitude: 1.0 ML
Lat: 52.229N Lon: -4.163W Depth: 6.5 km
Grid Ref: 252.29 kmE 261.23 kmN RMS: 0.20 secs
Locality: CILCENNIN,CEREDIGION
Velocity model: Mid Wales Xnear: 80.0 Xfar: 200.0

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES
RSBS	HZ	50.4	EP			05:39	44.23			-0.16
RSBS	HE	50.4	ES			05:39	50.74			0.10
RSBS	HE	50.4	IAML			05:39	51.76	10	0.07	
RSBS	HN	50.4	IAML			05:39	52.13	12	0.11	
LLW	BZ	76.8	EP			05:39	48.84			0.10
LLW	BN	76.8	ES			05:39	57.86			-0.26
LLW	BE	76.8	IAML			05:39	59.16	4	0.25	
LLW	BN	76.8	IAML			05:39	59.71	2	0.17	
MCH1	HE	83.8	ES			05:39	59.93			-0.20
MCH1	HN	83.8	IAML			05:40	00.04	4	0.44	
MCH1	HE	83.8	IAML			05:40	00.62	5	0.20	
HLM1	HZ	93.0	EP			05:39	51.56			0.11
HLM1	HE	93.0	ES			05:40	03.02			0.24
HLM1	HN	93.0	IAML			05:40	03.20	6	0.16	
HLM1	HE	93.0	IAML			05:40	06.20	4	0.10	
FOEL	HZ	98.3	EP			05:39	52.48			0.17
WLF1	HZ	119.0	EP			05:39	55.53			0.09
WLF1	HE	119.0	ES			05:40	09.40			-0.25
WLF1	HE	119.0	IAML			05:40	10.03	18	0.30	
WLF1	HN	119.0	IAML			05:40	10.09	7	0.46	
WPS	HN	132.0	ES			05:40	13.33			0.25

July 28 2018 Time: 22:18 02.5 UTC Magnitude: 0.5 ML
Lat: 52.310N Lon: -2.420W Depth: 12.9 km
Grid Ref: 371.37 kmE 268.11 kmN RMS: 0.10 secs
Locality: EARDISTON,WORCS
Velocity model: Mid Wales Xnear: 80.0 Xfar: 200.0

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES
HLM1	HZ	39.0	EP			22:18	09.33			-0.14
HLM1	HN	39.0	ES			22:18	14.68			0.16
HLM1	HN	39.0	IAML			22:18	14.84	8	0.13	
HLM1	HE	39.0	IAML			22:18	14.89	8	0.12	
MCH1	HZ	52.7	EP			22:18	11.47			-0.18
MCH1	HE	52.7	ES			22:18	18.09			-0.17
MCH1	HN	52.7	IAML			22:18	18.76	2	0.17	
MCH1	HE	52.7	IAML			22:18	20.07	2	0.09	
MONM	HZ	58.6	EP			22:18	12.62			0.02
MONM	HE	58.6	ES			22:18	20.18			0.27
MONM	HN	58.6	IAML			22:18	20.37	4	0.30	
MONM	HE	58.6	IAML			22:18	20.42	3	0.13	
FOEL	HZ	83.4	EP			22:18	16.49			0.05
FOEL	HN	83.4	ES			22:18	26.52			0.01
CWF	HZ	89.3	EP			22:18	17.30			-0.01
CWF	HN	89.3	IAML			22:18	28.28	2	0.15	
CWF	HE	89.3	IAML			22:18	28.38	1	0.17	

July 29 2018 Time: 00:03 08.5 UTC Magnitude: 1.7 ML
Lat: 55.797N Lon: -6.373W Depth: 4.4 km
Grid Ref: 125.96 kmE 664.62 kmN RMS: 0.80 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	79.6	EP			00:03	21.34			-0.57
LAWE	HN	79.6	ES			00:03	31.41			-0.31
LAWE	HE	79.6	IAML			00:03	34.43	35	0.14	
LAWE	HN	79.6	IAML			00:03	34.85	23	0.11	
CLGH	HZ	81.2	EP			00:03	22.20			0.02
CLGH	HN	81.2	ES			00:03	31.09			-1.09
CLGH	HE	81.2	IAML			00:03	33.37	38	0.16	
CLGH	HN	81.2	IAML			00:03	33.80	54	0.18	
PGB1	HZ	118.0	EP			00:03	28.02			0.08
PGB1	HN	118.0	ES			00:03	41.77			-0.38
PGB1	HN	118.0	IAML			00:03	42.74	14	0.36	
PGB1	HE	118.0	IAML			00:03	43.12	12	0.18	
GAL1	HZ	148.0	EP			00:03	33.31			1.06
NEWG	HZ	155.0	EP			00:03	32.90			-0.42
KPL	HZ	177.0	EP			00:03	36.03			-0.30
ESK	HZ	207.0	EP			00:03	41.99			1.91

August 2 2018 Time: 17:42 51.9 UTC Magnitude: 2.7 ML
Lat: 52.607N Lon: 0.451W Depth: 4.4 km
Grid Ref: 565.95 kmE 303.88 kmN RMS: 0.40 secs
Locality: DOWNHAM MARKET,NORFOLK
Velocity model: Lownet Xnear: 500.0 Xfar: 1000.0
Comment: FELT NORFOLK Intensity: 3

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES
WACR	HZ	17.7	IP		C	17:42	55.23			-0.13
WACR	HE	17.7	ES			17:42	57.67			-0.25
WACR	HE	17.7	IAML			17:42	58.12	2725	0.14	
WACR	HN	17.7	IAML			17:42	58.13	1430	0.18	
LMK	HZ	108.0	EP			17:43	10.69			0.85
LMK	HN	108.0	ES			17:43	23.66			0.69
LMK	HE	108.0	IAML			17:43	26.12	242	0.26	
LMK	HN	108.0	IAML			17:43	28.69	306	0.28	
CWF	HZ	120.0	EP			17:43	11.76			0.06
CWF	HN	120.0	ES			17:43	25.41			-0.77
CWF	HN	120.0	IAML			17:43	26.53	105	0.16	
CWF	HE	120.0	IAML			17:43	29.85	73	0.20	
BRDL	HZ	165.0	EP			17:43	18.76			0.42
ELSH	HZ	169.0	EP			17:43	18.53			-0.33
ELSH	HN	169.0	ES			17:43	38.69			0.11
ELSH	HE	169.0	IAML			17:43	40.10	133	0.28	
ELSH	HN	169.0	IAML			17:43	41.16	105	0.24	
RUSH	HZ	170.0	EP			17:43	19.31			0.36
RUSH	HE	170.0	IAML			17:43	46.02	217	0.60	
RUSH	HN	170.0	IAML			17:43	48.51	172	0.53	
LBWR	HZ	171.0	EP			17:43	18.90			-0.25
LBWR	HE	171.0	IAML			17:43	42.12	73	0.56	
LBWR	HN	171.0	IAML			17:43	44.30	59	0.22	
GDLE	HZ	219.0	EP			17:43	24.57			-0.60
GDLE	HN	219.0	IAML			17:43	59.51	139	0.32	
GDLE	HE	219.0	IAML			17:44	02.25	107	0.30	
HLM1	HZ	226.0	EP			17:43	26.04			-0.10
HLM1	HN	226.0	ES			17:43	51.39			0.22
HLM1	HN	226.0	IAML			17:43	54.35	49	0.32	
HLM1	HE	226.0	IAML			17:43	57.33	45	0.25	
FOEL	HZ	249.0	EP			17:43	28.67			-0.27
FOEL	HE	249.0	IAML			17:44	02.31	41	0.48	
FOEL	HN	249.0	IAML			17:44	06.51	26	0.55	

August 4 2018 Time: 02:56 24.1 UTC Magnitude: 1.8 ML
Lat: 52.697N Lon: -0.715W Depth: 2.7 km
Grid Ref: 486.83 kmE 311.85 kmN RMS: 0.40 secs
Locality: OAKHAM,RUTLAND
Velocity model: Lownet Xnear: 100.0 Xfar: 200.0
Comment: FELT OAKHAM... Intensity: 3

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES
LMK	HZ	88.5	EP			02:56	39.16			0.12
LMK	HE	88.5	ES			02:56	49.77			-0.17
LMK	HE	88.5	IAML			02:56	51.56	27	0.48	
LMK	HN	88.5	IAML			02:56	52.50	33	0.22	
WACR	HZ	90.8	EP			02:56	39.30			-0.08
WACR	HE	90.8	IAML			02:56	51.55	13	0.15	
WACR	HN	90.8	IAML			02:56	52.74	23	0.22	
LBWR	HZ	104.0	EP			02:56	41.11			-0.32
LBWR	HE	104.0	IAML			02:56	57.07	24	0.32	
LBWR	HN	104.0	IAML			02:56	57.53	29	0.24	
STNC	HZ	110.0	EP			02:56	42.25			-0.07
STNC	HN	110.0	ES			02:56	55.83			0.22
STNC	HE	110.0	IAML			02:56	59.49	25	0.22	
STNC	HN	110.0	IAML			02:56	59.55	19	0.36	
AS02	HZ	128.0	EP			02:56	45.02			-0.15
AS02	HN	128.0	ES			02:57	00.08			-0.45
AS02	HE	128.0	IAML			02:57	04.73	13	0.68	
AS02	HN	128.0	IAML			02:57	05.10	9	0.26	
HLM1	HZ	148.0	EP			02:56	48.20			0.06
HLM1	HN	148.0	ES			02:57	05.00			-0.68
HLM1	HE	148.0	IAML			02:57	07.64	9	0.20	
HLM1	HN	148.0	IAML			02:57	08.37	12	0.32	
HPK	HZ	153.0	EP			02:56	49.58			0.79
HPK	HE	153.0	ES			02:57	07.70			0.89
HPK	HE	153.0	IAML			02:57	07.93	25	0.24	
HPK	HN	153.0	IAML			02:57	07.99	30	0.18	
AR01	HZ	156.0	EP			02:56	49.66			0.40
AT08	HZ	161.0	EP			02:56	50.45			0.55
AT08	HN	161.0	IAML			02:57	10.78	19	0.14	
AT08	HE	161.0	IAML			02:57	11.14	32	0.28	
AU09	HZ	162.0	EP			02:56	50.21			0.19
AR05	HZ	168.0	EP			02:56	51.53			0.55
AR05	HN	168.0	ES			02:57	10.71			0.12
AR05	HE	168.0	IAML			02:57	14.14	14	0.24	
AR05	HN	168.0	IAML			02:57	14.56	8	0.22	
FOEL	HZ	169.0	EP			02:56	51.86			0.72
MONM	HZ	172.0	EP			02:56	52.21			0.77
MONM	HN	172.0	IAML			02:57	12.82	23	0.14	
MONM	HE	172.0	IAML			02:57	13.50	16	0.28	
MCH1	HZ	174.0	EP			02:56	52.15			0.37
MCH1	HN	174.0	IAML			02:57	12.65	9	0.22	
MCH1	HE	174.0	IAML			02:57	15.17	7	0.32	

August 4 2018 Time: 12:00 56.3 UTC Magnitude: 0.0 ML
Lat: 54.862N Lon: -3.259W Depth: 4.2 km
Grid Ref: 319.20 kmE 552.65 kmN RMS: 0.30 secs
Locality: ABBEYTOWN,CUMBRIA
Velocity model: Borders Xnear: 50.0 Xfar: 100.0

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES
KESW	HZ	32.0	EP			12:01	02.28			0.06

TABLE 2 : PHASE DATA

KESW	HE	32.0	ES		12:01	06.48			0.07
KESW	HN	32.0	IAML		12:01	06.67	2	0.18	
KESW	HE	32.0	IAML		12:01	07.11	1	0.13	
ESK	HZ	50.7	EP		12:01	05.69			0.44
ESK	HE	50.7	ES		12:01	11.15			-0.43
ESK	HE	50.7	IAML		12:01	11.82	1	0.18	
ESK	HN	50.7	IAML		12:01	11.91	1	0.12	
AP12	HZ	61.5	EP		12:01	07.11			0.11
AP12	HE	61.5	ES		12:01	14.14			-0.43
AP12	HE	61.5	IAML		12:01	15.85	2	0.10	
AP12	HN	61.5	IAML		12:01	15.94	2	0.22	
NEWG	HZ	68.3	EP		12:01	08.33			0.23
NEWG	HE	68.3	ES		12:01	16.37			-0.08
NEWG	HN	68.3	IAML		12:01	17.23	1	0.24	
NEWG	HE	68.3	IAML		12:01	17.85	1	0.23	
GAL1	HZ	93.2	EP		12:01	12.27			0.13
GAL1	HE	93.2	ES		12:01	23.09			-0.28

August 5 2018 Time: 10:29 52.6 UTC Magnitude: 1.0 ML
Lat: 53.727N Lon: -2.343W Depth: 9.7 km
Grid Ref: 377.37 kmE 425.70 kmN RMS: 0.20 secs
Locality: BAXENDEN,LANCASHIRE
Velocity model: Lownet Xnear: 100.0 Xfar: 200.0

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES
AR01	HZ	2.8	IP		D	10:29	54.57			-0.03
AR01	HN	2.8	ES			10:29	56.04			0.01
AR01	HN	2.8	IAML			10:29	56.51	44	0.14	
AR01	HE	2.8	IAML			10:29	56.78	56	0.15	
AS02	HZ	30.5	EP			10:29	58.39			0.10
AS02	HN	30.5	ES			10:30	02.34			-0.07
AS02	HN	30.5	IAML			10:30	02.73	36	0.24	
AS02	HE	30.5	IAML			10:30	02.73	23	0.19	
AR05	HZ	36.3	EP			10:29	59.07			-0.11
AR05	HE	36.3	ES			10:30	03.99			0.05
AR05	HN	36.3	IAML			10:30	04.45	12	0.22	
AR05	HE	36.3	IAML			10:30	04.81	12	0.21	
HPK	HZ	53.8	EP			10:30	01.75			-0.14
HPK	HE	53.8	ES			10:30	08.53			-0.10
HPK	HE	53.8	IAML			10:30	08.78	14	0.14	
HPK	HN	53.8	IAML			10:30	10.36	12	0.16	
LBWR	HZ	54.7	EP			10:30	02.12			0.07
LBWR	HE	54.7	ES			10:30	08.93			0.02
LBWR	HE	54.7	IAML			10:30	09.57	22	0.26	
LBWR	HN	54.7	IAML			10:30	09.83	25	0.19	
KESW	HZ	108.0	EP			10:30	10.55			0.26
KESW	HE	108.0	ES			10:30	23.20			0.03
KESW	HE	108.0	IAML			10:30	24.35	7	0.35	
KESW	HN	108.0	IAML			10:30	24.50	3	0.38	
FOEL	HZ	109.0	EP			10:30	10.72			0.19
FOEL	HN	109.0	ES			10:30	23.39			-0.20
FOEL	HN	109.0	IAML			10:30	25.35	4	0.32	
FOEL	HE	109.0	IAML			10:30	25.77	5	0.42	
CWF	HE	130.0	ES			10:30	28.79			0.13
CWF	HE	130.0	IAML			10:30	29.95	2	0.29	
CWF	HN	130.0	IAML			10:30	31.53	2	0.07	
HLM1	HE	139.0	ES			10:30	31.28			0.23
HLM1	HN	139.0	IAML			10:30	32.95	3	0.29	
HLM1	HE	139.0	IAML			10:30	33.00	2	0.17	
WLF1	HZ	145.0	EP			10:30	15.63			0.09
WLF1	HE	145.0	ES			10:30	31.61			-0.65
WLF1	HN	145.0	IAML			10:30	32.73	4	0.41	
WLF1	HE	145.0	IAML			10:30	32.78	3	0.24	

August 7 2018 Time: 12:26 31.8 UTC Magnitude: 1.4 ML
Lat: 59.099N Lon: -2.563W Depth: 10.3 km
Grid Ref: 367.75 kmE 1023.66 kmN RMS: 0.10 secs
Locality: ORKNEY ISLANDS
Velocity model: Lownet Xnear: 100.0 Xfar: 200.0

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES
BIGH	HZ	103.0	EP			12:26	48.73			0.11
BIGH	HE	103.0	ES			12:27	00.82			-0.08
BIGH	HN	103.0	IAML			12:27	02.19	16	0.10	
BIGH	HE	103.0	IAML			12:27	02.35	14	0.18	
LRW	HZ	140.0	EP			12:26	53.73			-0.18
LRW	HN	140.0	ES			12:27	10.14			0.08
LRW	HE	140.0	IAML			12:27	11.16	4	0.20	
LRW	HN	140.0	IAML			12:27	11.75	4	0.21	
MCD	HE	174.0	ES			12:27	18.16			-0.02
LINV	HZ	186.0	EP			12:27	00.43			0.31
LINV	HN	186.0	ES			12:27	21.10			0.29
LINV	HN	186.0	IAML			12:27	22.68	4	0.16	
LINV	HZ	186.0	IAML			12:27	22.76	5	0.28	
INVG	HZ	310.0	EP			12:27	15.81			0.13
INVG	HN	310.0	ES			12:27	48.31			0.58

August 8 2018 Time: 00:01 08.8 UTC Magnitude: 0.9 ML
Lat: 53.262N Lon: -2.633W Depth: 15.4 km
Grid Ref: 357.78 kmE 374.11 kmN RMS: 0.20 secs
Locality: CROWTON,CHESHIRE
Velocity model: Lownet Xnear: 500.0 Xfar: 1000.0

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES
FOEL	HZ	56.2	EP			00:01	18.38			-0.13
FOEL	HE	56.2	ES			00:01	25.65			0.02
FOEL	HE	56.2	IAML			00:01	28.15	5	0.29	
FOEL	HN	56.2	IAML			00:01	28.20	4	0.33	
LBWR	HZ	62.5	EP			00:01	19.21			-0.24
LBWR	HE	62.5	IAML			00:01	27.70	5	0.22	
LBWR	HN	62.5	IAML			00:01	28.82	7	0.19	
LLW	BZ	83.0	EP			00:01	22.60			0.08
LLW	BE	83.0	ES			00:01	32.13			-0.44
HLM1	HZ	84.4	EP			00:01	22.77			0.00
HLM1	HE	84.4	ES			00:01	32.84			-0.16
HLM1	HN	84.4	IAML			00:01	33.60	4	0.20	
HLM1	HE	84.4	IAML			00:01	34.02	4	0.20	
HPK	HZ	102.0	EP			00:01	25.32			0.03
HPK	HE	102.0	ES			00:01	37.10			-0.26
HPK	HN	102.0	IAML			00:01	38.29	7	0.12	
HPK	HE	102.0	IAML			00:01	39.27	7	0.19	
CWF	HZ	106.0	EP			00:01	26.42			0.56
CWF	HN	106.0	ES			00:01	38.38			0.03
CWF	HN	106.0	IAML			00:01	41.36	3	0.10	
CWF	HE	106.0	IAML			00:01	41.41	2	0.17	
WME	EZ	112.0	EP			00:01	27.01			0.32
WLF1	HN	118.0	ES			00:01	41.16			0.06
WLF1	HE	118.0	IAML			00:01	41.82	4	0.15	
WLF1	HN	118.0	IAML			00:01	41.91	5	0.29	
WPS	HZ	125.0	EP			00:01	28.63			0.11
WPS	HN	125.0	ES			00:01	43.06			0.11
WPS	HN	125.0	IAML			00:01	43.92	4	0.24	
WPS	HE	125.0	IAML			00:01	44.13	2	0.17	
KESW	HZ	151.0	EP			00:01	32.15			-0.09

August 12 2018 Time: 21:14 00.6 UTC Magnitude: 0.6 ML
Lat: 53.072N Lon: -3.020W Depth: 3.8 km
Grid Ref: 331.67 kmE 353.27 kmN RMS: 0.10 secs
Locality: GWERSYLLT,WREXHAM
Velocity model: Lownet Xnear: 100.0 Xfar: 200.0

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES
FOEL	HZ	23.7	IP		C	21:14	05.12			0.00
FOEL	HE	23.7	ES			21:14	08.45			0.00
FOEL	HN	23.7	IAML			21:14	08.64	12	0.20	
FOEL	HE	23.7	IAML			21:14	08.66	19	0.18	
HLM1	HZ	62.4	EP			21:14	11.54			0.13
HLM1	HE	62.4	ES			21:14	19.24			-0.09
HLM1	HE	62.4	IAML			21:14	19.47	1	0.33	
HLM1	HN	62.4	IAML			21:14	19.94	1	0.16	
WLF1	HZ	95.1	EP			21:14	16.28			-0.14
WLF1	HE	95.1	ES			21:14	28.06			0.06
WLF1	HE	95.1	IAML			21:14	30.82	2	0.39	
WLF1	HN	95.1	IAML			21:14	32.47	3	0.45	
RSBS	HZ	171.0	EP			21:14	28.29			0.57
RSBS	HE	171.0	ES			21:14	47.56			0.01
RSBS	HN	171.0	IAML			21:14	50.87	1	0.24	
RSBS	HE	171.0	IAML			21:14	51.55	1	0.17	

August 16 2018 Time: 19:51 02.5 UTC Magnitude: 1.2 ML
Lat: 51.181N Lon: -4.744W Depth: 16.6 km
Grid Ref: 208.24 kmE 146.06 kmN RMS: 0.30 secs
Locality: BRISTOL CHANNEL
Velocity model: Lownet Xnear: 500.0 Xfar: 1000.0
Comment: OFF LUNDY ISLAND

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES
HTL	HZ	27.6	IP		D	19:51	08.41			0.38
HTL	HE	27.6	ES			19:51	12.05			0.01
HTL	HE	27.6	IAML			19:51	12.69	20	0.18	
HTL	HN	27.6	IAML			19:51	12.95	10	0.15	
SBD	BZ	68.6	EP			19:51	14.02			-0.16
SBD	BE	68.6	ES			19:51	22.26			-0.41
SBD	BN	68.6	IAML			19:51	23.09	23	0.10	
SBD	BE	68.6	IAML			19:51	23.46	38	0.10	
RSBS	HZ	85.9	EP			19:51	16.49			-0.17
RSBS	HE	85.9	ES			19:51	26.68			-0.29
RSBS	HE	85.9	IAML			19:51	27.34	14	0.24	
RSBS	HN	85.9	IAML			19:51	28.04	10	0.26	
DYA	HZ	101.0	EP			19:51	18.80			0.00
DYA	HE	101.0	ES			19:51	30.40			-0.27
DYA	HN	101.0	IAML			19:51	30.91	7	0.38	
DYA	HE	101.0	IAML			19:51	30.95	6	0.17	
CCA1	HZ	116.0	EP			19:51	21.27			0.35
CCA1	HN	116.0	ES			19:51	34.49			0.15
CCA1	HE	116.0	IAML			19:51	35.31	5	0.06	
CCA1	HN	116.0	IAML			19:51	36.04	5	0.09	
MCH1	HE	151.0	ES			19:51	42.79			-0.30
MCH1	HE	151.0	IAML			19:51	44.15	3	0.18	
MCH1	HN	151.0	IAML			19:51	45.05	3	0.16	
MONM	HE	153.0	ES			19:51	43.77			0.27
HLM1	HZ	197.0	EP			19:51	32.12			0.44

August 18 2018 Time: 03:21 58.2 UTC Magnitude: -0.2 ML
Lat: 51.158N Lon: -0.253W Depth: 2.1 km
Grid Ref: 522.15 kmE 141.37 kmN RMS: 0.00 secs
Locality: NEWDIGATE,SURREY
Velocity model: Surrey Xnear: 500.0 Xfar: 1000.0

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES
STAN	HZ	1.3	IP			03:21	59.07			-0.00
STAN	HE	1.3	ES			03:21	59.70			-0.00
STAN	HN	1.3	IAML			03:21	59.91	100	0.15	
STAN	HE	1.3	IAML			03:21	59.94	92	0.16	

TABLE 2 : PHASE DATA

RUSH	HZ	1.7	IP	C	03:21	59.10			-0.02
RUSH	HN	1.7	ES		03:21	59.80			0.01
RUSH	HE	1.7	IAML		03:21	59.92	126	0.08	
RUSH	HN	1.7	IAML		03:21	59.93	216	0.09	
GATW	HZ	2.6	EP		03:21	59.29			-0.02
GATW	HE	2.6	ES		03:22	00.17			0.05
GATW	HE	2.6	IAML		03:22	00.30	62	0.10	
GATW	HN	2.6	IAML		03:22	00.33	33	0.07	
BRDL	HZ	3.5	EP		03:21	59.44			-0.06
BRDL	HE	3.5	ES		03:22	00.51			0.07
BRDL	HN	3.5	IAML		03:22	00.64	71	0.10	
BRDL	HE	3.5	IAML		03:22	00.65	94	0.14	
HORS	HE	3.5	ES		03:22	00.43			-0.02
HORS	HE	3.5	IAML		03:22	00.55	33	0.13	
HORS	HN	3.5	IAML		03:22	00.67	47	0.28	

August 19 2018 Time: 14:42 31.4 UTC Magnitude: 0.6 ML
Lat: 55.697N Lon: -6.185W Depth: 6.8 km
Grid Ref: 137.06 kmE 652.77 kmN RMS: 0.50 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
CLGH	HZ	68.6	EP			14:42	43.09			0.12
CLGH	HN	68.6	ES			14:42	50.65			-0.77
CLGH	HN	68.6	IAML			14:42	51.54	3	0.21	
CLGH	HE	68.6	IAML			14:42	52.35	3	0.39	
LAWE	HZ	79.6	EP			14:42	44.05			-0.61
LAWE	HE	79.6	ES			14:42	54.18			-0.15
LAWE	HN	79.6	IAML			14:42	57.91	1	0.25	
LAWE	HE	79.6	IAML			14:42	58.07	3	0.13	
PGB1	HE	108.0	ES			14:43	02.37			0.51
IDGL	BZ	109.0	EP			14:42	49.91			0.66
IDGL	BE	109.0	ES			14:43	02.37			0.09
GAL1	HZ	132.0	EP			14:42	53.04			0.40
GAL1	HE	132.0	IAML			14:43	10.89	1	0.17	
GAL1	HN	132.0	IAML			14:43	13.28	2	0.33	
NEWG	HE	140.0	ES			14:43	10.56			0.42
NEWG	HE	140.0	IAML			14:43	11.61	2	0.38	
NEWG	HN	140.0	IAML			14:43	13.56	2	0.21	
INVG	HE	156.0	ES			14:43	14.42			0.15

August 19 2018 Time: 20:00 19.9 UTC Magnitude: 0.6 ML
Lat: 53.989N Lon: -3.468W Depth: 9.6 km
Grid Ref: 303.76 kmE 455.79 kmN RMS: 0.30 secs
Locality: IRISH SEA
Velocity model: Lownet Xnear: 100.0 Xfar: 200.0
Comment: 30KM WNW FLEETWOOD

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES
KESW	HZ	70.8	EP			20:00	32.00			0.20
KESW	HN	70.8	ES			20:00	40.40			-0.07
KESW	HN	70.8	IAML			20:00	41.17	1	0.13	
KESW	HE	70.8	IAML			20:00	43.41	1	0.07	
IOMK	HZ	77.9	EP			20:00	33.16			0.28
IOMK	HN	77.9	ES			20:00	41.96			-0.38
IOMK	HN	77.9	IAML			20:00	42.29	2	0.40	
IOMK	HE	77.9	IAML			20:00	44.16	1	0.18	
WLF1	HZ	99.1	EP			20:00	36.41			0.27
WLF1	HE	99.1	ES			20:00	47.78			-0.21
WLF1	HE	99.1	IAML			20:00	48.91	2	0.19	
WLF1	HN	99.1	IAML			20:00	50.56	3	0.73	
GAL1	HZ	127.0	EP			20:00	40.06			-0.20
GAL1	HE	127.0	ES			20:00	55.59			0.48
EDMD	HZ	135.0	EP			20:00	41.37			-0.12
EDMD	HE	135.0	ES			20:00	56.80			-0.44
EDMD	HN	135.0	IAML			20:00	59.47	5	0.20	
EDMD	HE	135.0	IAML			20:00	59.86	4	0.31	

August 19 2018 Time: 22:06 22.1 UTC Magnitude: 1.2 ML
Lat: 53.534N Lon: -3.533W Depth: 13.3 km
Grid Ref: 298.41 kmE 405.27 kmN RMS: 0.20 secs
Locality: IRISH SEA
Velocity model: Lownet Xnear: 100.0 Xfar: 200.0
Comment: 30KM WEST FORMBY

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES
WME	EZ	53.4	EP			22:06	31.37			0.05
YLL	EZ	61.0	EP			22:06	32.71			0.21
WLF1	HZ	63.5	EP			22:06	32.82			-0.05
WLF1	HN	63.5	ES			22:06	40.52			-0.20
WLF1	HE	63.5	IAML			22:06	40.96	9	0.12	
WLF1	HN	63.5	IAML			22:06	41.15	14	0.19	
WPS	HZ	65.8	EP			22:06	33.32			0.11
WPS	HN	65.8	ES			22:06	41.45			0.14
WPS	HN	65.8	IAML			22:06	41.79	9	0.30	
WPS	HE	65.8	IAML			22:06	42.08	4	0.10	
FOEL	HZ	75.1	EP			22:06	34.44			-0.30
FOEL	HN	75.1	ES			22:06	43.76			-0.19
FOEL	HE	75.1	IAML			22:06	43.95	11	0.38	
FOEL	HN	75.1	IAML			22:06	46.26	12	0.21	
YRC	EZ	76.2	EP			22:06	34.85			0.04
LLW	BZ	76.8	EP			22:06	34.82			-0.11
LLW	BN	76.8	ES			22:06	44.28			-0.01
WIM	EZ	101.0	EP			22:06	38.94			0.26
IOMK	HZ	106.0	EP			22:06	39.62			0.39
IOMK	HN	106.0	ES			22:06	51.29			-0.43
IOMK	HE	106.0	IAML			22:06	52.71	16	0.30	
IOMK	HN	106.0	IAML			22:06	53.28	14	0.22	
HLM1	HZ	121.0	EP			22:06	41.89			0.37
HLM1	HE	121.0	ES			22:06	55.60			-0.09
HLM1	HE	121.0	IAML			22:06	56.16	9	0.20	
HLM1	HN	121.0	IAML			22:06	56.35	5	0.24	
LBWR	HE	121.0	IAML			22:06	58.11	8	0.26	
KESW	HZ	121.0	EP			22:06	41.20			-0.20
KESW	HE	121.0	ES			22:06	55.16			-0.32
KESW	HN	121.0	IAML			22:06	58.05	4	0.24	
LBWR	HZ	121.0	EP			22:06	41.78			0.31
LBWR	HN	121.0	IAML			22:06	58.03	6	0.25	
KESW	HE	121.0	IAML			22:06	55.71	6	0.28	
HPK	HN	135.0	ES			22:06	59.21			0.32
GAL1	HZ	167.0	EP			22:06	47.15			-0.65

August 26 2018 Time: 21:59 51.8 UTC Magnitude: 2.3 ML
Lat: 58.237N Lon: 1.194W Depth: 8.2 km
Grid Ref: 587.48 kmE 932.00 kmN RMS: 0.30 secs
Locality: CENTRAL NORTH SEA
Velocity model: North Sea Xnear: 400.0 Xfar: 600.0
Comment: 230KM NE ABERDEEN

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES
LRW	HZ	251.0	EP			22:00	28.37			0.68
LRW	HE	251.0	ES			22:00	53.94			0.04
LRW	HN	251.0	IAML			22:01	03.68	15	0.21	
LRW	HE	251.0	IAML			22:01	05.86	20	0.18	
DRUM	HZ	265.0	EP			22:00	29.84			0.43
DRUM	HE	265.0	ES			22:00	57.13			0.26
DRUM	HN	265.0	IAML			22:01	06.59	19	0.12	
DRUM	HE	265.0	IAML			22:01	08.13	19	0.20	
MCD	HZ	274.0	EP			22:00	30.39			-0.09
MCD	HE	274.0	IAML			22:01	10.50	36	0.34	
MCD	HN	274.0	IAML			22:01	13.13	23	0.26	
BIGH	HZ	300.0	EP			22:00	33.58			-0.17
BIGH	HN	300.0	IAML			22:01	04.15	14	0.16	
BIGH	HE	300.0	IAML			22:01	05.07	15	0.16	
BER	HZ	336.0	EP			22:00	38.39			0.20
BER	HN	336.0	ES			22:01	11.84			-0.23
BER	HN	336.0	IAML			22:01	14.16	3	0.10	
BER	HE	336.0	IAML			22:01	14.52	3	0.20	
LINV	HZ	376.0	EP			22:00	42.75			-0.42
KPL	HZ	419.0	EP			22:00	48.18			-0.36
EDMD	HZ	426.0	EP			22:00	49.43			0.05
FOO	HZ	432.0	EP			22:00	50.24			0.14
FOO	HN	432.0	ES			22:01	32.46			-0.22
FOO	HE	432.0	IAML			22:01	33.83	3	0.12	
FOO	HN	432.0	IAML			22:01	35.12	3	0.18	
LAWE	HZ	455.0	EP			22:00	52.67			-0.28
LAWE	HN	455.0	IAML			22:01	38.40	7	0.12	
LAWE	HE	455.0	IAML			22:01	39.07	7	0.10	
LEWI	HZ	474.0	EP			22:00	54.76			-0.63

August 28 2018 Time: 04:59 21.2 UTC Magnitude: 2.8 ML
Lat: 54.423N Lon: -0.881W Depth: 31.6 km
Grid Ref: 472.60 kmE 503.66 kmN RMS: 0.20 secs
Locality: FRYUP,NORTH YORKSHIRE
Velocity model: Lownet Xnear: 150.0 Xfar: 300.0

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES
GDLE	HZ	4.2	IP		C	04:59	26.36			-0.08
GDLE	HN	4.2	ES			04:59	30.09			-0.22
GDLE	HE	4.2	IAML			04:59	30.39	528	0.12	
GDLE	HN	4.2	IAML			04:59	30.55	1175	0.28	
AU20	HZ	15.9	IP		D	04:59	26.95			0.00
AU20	HN	15.9	ES			04:59	30.78			-0.41
AU20	HE	15.9	IAML			04:59	31.39	3346	0.34	
AU20	HN	15.9	IAML			04:59	31.41	1790	0.13	
AT10	HZ	20.1	IP		C	04:59	27.57			0.26
AT10	HE	20.1	ES			04:59	31.72			-0.08
AT10	HE	20.1	IAML			04:59	32.38	2774	0.14	
AT10	HN	20.1	IAML			04:59	32.39	4654	0.12	
AU16	EZ	21.0	IP		D	04:59	27.38			0.07
AU15	HZ	21.6	IP		C	04:59	27.52			0.14
AU18	HZ	22.4	IP		D	04:59	27.46			0.01
AU14	EZ	24.7	EP			04:59	27.72			0.08
AU14	E1	24.7	ES			04:59	31.85			-0.53
AU14	E2	24.7	IAML			04:59	32.61	820	0.18	
AU14	E1	24.7	IAML			04:59	33.04	1078	0.20	
AU11	HZ	25.3	IP		C	04:59	27.87			0.17
AU13	HZ	25.5	IP		D	04:59	27.74			0.02
AU13	H1	25.5	IAML			04:59	32.85	2092	0.17	
AU13	H2	25.5	IAML			04:59	33.03	1376	0.23	
AU10	EZ	25.6	EP			04:59	27.77			0.05
AU07	HZ	35.0	IP		C	04:59	29.01			0.29
AU08	HZ	36.2	IP		D	04:59	29.05			0.17
AT12	HZ	40.5	IP		D	04:59	29.81			0.45
AT08	HZ	45.7	IP		C	04:59	30.22			0.24
AU05	HZ	62.7	EP			04:59	32.31			0.15
HPK	HZ	70.9	IP		C	04:59	33.46			0.14
HPK	HN	70.9	ES			04:59	42.16			-0.05
HPK	HE	70.9	IAML			04:59	42.47	312	0.11	
HPK	HN	70.9	IAML			04:59	43.13	238	0.18	
AS07	HZ	71.3	IP		C	04:59	33.50			0.09
EDMD	HZ	83.3	IP		D	04:59	35.05			0.16

TABLE 2 : PHASE DATA

EDMD	HN	83.3	ES		04:59	44.75		-0.17
EDMD	HN	83.3	IAML		04:59	45.46	224	0.17
EDMD	HE	83.3	IAML		04:59	46.74	263	0.23
AR05	HZ	88.4	IP	C	04:59	35.70		0.11
AR09	HZ	104.0	IP	C	04:59	37.41		-0.15
AR07	HZ	113.0	IP	C	04:59	38.69		-0.01
LMK	HZ	114.0	IP	D	04:59	38.71		0.01
AS02	HZ	121.0	IP	C	04:59	39.58		-0.06
AQ12	HZ	121.0	IP	D	04:59	39.64		-0.10
AR01	HZ	125.0	EP		04:59	40.05		-0.11
LBWR	HZ	126.0	IP	C	04:59	40.30		-0.06
AQ10	HZ	139.0	EP		04:59	41.89		0.02
KESW	HZ	145.0	EP		04:59	42.62		-0.07
AQ04	HZ	154.0	EP		04:59	43.67		-0.11
STNC	HZ	172.0	IP	D	04:59	46.36		0.33
ESK	HZ	179.0	EP		04:59	46.63		-0.32
EDI	HZ	222.0	EP		04:59	52.57		0.26
NEWG	HZ	229.0	EP		04:59	53.07		-0.06
IOMK	HZ	240.0	EP		04:59	53.98		-0.58
WIM	EZ	249.0	EP		04:59	55.10		-0.57
HLM1	HZ	250.0	EP		04:59	55.57		-0.26
WME	EZ	252.0	IP	D	04:59	55.15		-0.88
GAL1	HZ	252.0	EP		04:59	55.77		-0.25
WLF1	HZ	263.0	EP		04:59	56.52		-0.90
WPS	HZ	264.0	IP	C	04:59	56.63		-0.79
YRC	EZ	276.0	IP	C	04:59	58.52		-0.45
PGB1	HZ	277.0	EP		04:59	59.21		0.07
ELMS	HZ	288.0	EP		04:59	59.86		-0.60
DRUM	HZ	295.0	EP		05:00	01.27		-0.13
INVG	HZ	300.0	EP		05:00	01.96		-0.05
MCH1	HZ	305.0	EP		05:00	02.37		-0.24
STRD	HZ	307.0	EP		05:00	02.89		0.02
MONM	HZ	315.0	EP		05:00	03.86		-0.02
LAWE	HZ	352.0	EP		05:00	08.58		0.07
MCD	HZ	382.0	EP		05:00	11.75		-0.50
FOEL	HZ	229.0	EP		04:59	52.93		-0.32

August 30 2018 Time: 22:34 48.9 UTC Magnitude: 2.4 ML
Lat: 55.969N Lon: -4.773W Depth: 11.8 km
Grid Ref: 226.96 kmE 678.58 kmN RMS: 0.30 secs
Locality: GREENOCK,INVERCLYDE
Velocity model: Lownet Xnear: 500.0 Xfar: 1000.0
Comment: FELT GREENOCK... Intensity: 3

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES
PGB1	HZ	25.2	IP		C	22:34	53.98			0.17
PGB1	HN	25.2	ES			22:34	57.24			-0.14
PGB1	HN	25.2	IAML			22:34	57.42	925	0.14	
PGB1	HE	25.2	IAML			22:34	57.99	669	0.20	
LAWE	HZ	50.6	IP		C	22:34	58.09			0.42
LAWE	HN	50.6	ES			22:35	03.84			-0.22
LAWE	HN	50.6	IAML			22:35	04.13	484	0.32	
LAWE	HE	50.6	IAML			22:35	04.23	434	0.27	
INVG	HZ	68.2	EP			22:35	00.43			0.02
INVG	HN	68.2	ES			22:35	08.37			-0.43
INVG	HN	68.2	IAML			22:35	09.93	81	0.36	
INVG	HE	68.2	IAML			22:35	10.68	106	0.20	
EDI	HZ	99.2	EP			22:35	04.95			-0.22
EDI	HE	99.2	IAML			22:35	17.53	29	0.31	
EDI	HN	99.2	IAML			22:35	19.59	52	0.21	
NEWG	HZ	101.0	EP			22:35	05.59			0.16
NEWG	HE	101.0	ES			22:35	17.00			-0.49
NEWG	HE	101.0	IAML			22:35	19.02	338	0.30	
NEWG	HN	101.0	IAML			22:35	19.74	204	0.12	
GAL1	HZ	123.0	EP			22:35	08.75			0.19
GAL1	HN	123.0	IAML			22:35	09.77	44	0.18	
GAL1	HE	123.0	IAML			22:35	24.29	134	0.28	
ESK	HZ	123.0	EP			22:35	09.05			0.49
ESK	HN	123.0	ES			22:35	22.96			0.06
ESK	HN	123.0	IAML			22:35	24.37	153	0.30	
ESK	HE	123.0	IAML			22:35	24.63	82	0.22	
CLGH	HZ	130.0	EP			22:35	09.87			0.28
ESY	EZ	135.0	EP			22:35	10.65			0.30
KPL	HZ	162.0	EP			22:35	14.36			0.30
DRUM	HZ	176.0	EP			22:35	16.28			0.42
DRUM	HE	176.0	IAML			22:35	39.85	70	0.13	
DRUM	HN	176.0	IAML			22:35	40.80	73	0.23	
IOMK	HZ	191.0	EP			22:35	17.29			-0.41
IDGL	BZ	200.0	EP			22:35	18.41			-0.41
MCD	HZ	202.0	EP			22:35	19.05			-0.13
MCD	HE	202.0	IAML			22:35	48.83	80	0.38	
MCD	HN	202.0	IAML			22:35	50.13	81	0.24	
LINV	HZ	244.0	EP			22:35	24.00			-0.33
LEWI	HZ	274.0	EP			22:35	28.07			-0.02

September 6 2018 Time: 08:23 32.7 UTC Magnitude: 1.2 ML
Lat: 55.233N Lon: -3.510W Depth: 4.1 km
Grid Ref: 303.98 kmE 594.24 kmN RMS: 0.40 secs
Locality: JOHNSTONEBRIDGE,D & G
Velocity model: Borders Xnear: 75.0 Xfar: 150.0

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES
ESK	HZ	21.5	IP		C	08:23	36.61			-0.26
ESK	HN	21.5	ES			08:23	39.13			-0.70
ESK	HN	21.5	IAML			08:23	39.24	32	0.08	
ESK	HE	21.5	IAML			08:23	39.32	58	0.09	
NEWG	HZ	47.6	EP			08:23	40.94			-0.15
NEWG	HN	47.6	ES			08:23	46.54			-0.51
NEWG	HN	47.6	IAML			08:23	47.47	8	0.11	
NEWG	HE	47.6	IAML			08:23	50.95	7	0.12	
KESW	HZ	76.3	EP			08:23	45.99			0.22
KESW	HE	76.3	ES			08:23	55.43			0.37
KESW	HE	76.3	IAML			08:23	57.14	6	0.26	
KESW	HN	76.3	IAML			08:23	58.58	4	0.27	
EDI	HE	79.5	ES			08:23	56.33			0.41
EDI	HE	79.5	IAML			08:23	57.14	13	0.19	
EDI	HN	79.5	IAML			08:23	57.28	21	0.30	
GAL1	HZ	86.9	EP			08:23	47.33			-0.14
GAL1	HN	86.9	ES			08:23	58.00			0.03
GAL1	HN	86.9	IAML			08:24	00.76	15	0.13	
GAL1	HE	86.9	IAML			08:24	00.76	7	0.08	
PGB1	HZ	89.0	EP			08:23	48.42			0.58
PGB1	HE	89.0	ES			08:23	58.88			0.29
PGB1	HN	89.0	IAML			08:24	01.59	14	0.16	
PGB1	HE	89.0	IAML			08:24	01.72	21	0.23	
AQ12	HZ	101.0	EP			08:23	49.84			0.01
EDMD	HZ	109.0	EP			08:23	51.45			0.47
EDMD	HE	109.0	ES			08:24	04.26			0.29
IOMK	HE	128.0	ES			08:24	08.91			-0.45
IOMK	HN	128.0	IAML			08:24	10.56	10	0.19	
IOMK	HE	128.0	IAML			08:24	11.13	9	0.10	

September 6 2018 Time: 19:40 06.7 UTC Magnitude: 0.6 ML
Lat: 55.268N Lon: -3.537W Depth: 4.0 km
Grid Ref: 302.35 kmE 598.17 kmN RMS: 0.30 secs
Locality: JOHNSTONEBRIDGE,D & G
Velocity model: Lownet Xnear: 100.0 Xfar: 200.0

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES
ESK	HZ	21.7	IP		C	19:40	11.07			0.21
ESK	HN	21.7	ES			19:40	13.54			-0.39
ESK	HE	21.7	IAML			19:40	13.72	8	0.10	
ESK	HN	21.7	IAML			19:40	14.77	6	0.13	
NEWG	HZ	47.2	EP			19:40	15.51			0.41
NEWG	HN	47.2	ES			19:40	20.86			-0.40
NEWG	HE	47.2	IAML			19:40	21.72	1	0.11	
NEWG	HN	47.2	IAML			19:40	21.79	1	0.18	
AQ12	HZ	105.0	EP			19:40	24.36			0.20
AQ12	HE	105.0	ES			19:40	36.69			-0.24
AQ12	HE	105.0	IAML			19:40	37.53	3	0.07	
AQ12	HN	105.0	IAML			19:40	37.55	3	0.18	
EDMD	HN	112.0	ES			19:40	38.78			0.27
EDMD	HE	112.0	IAML			19:40	40.18	5	0.16	
EDMD	HN	112.0	IAML			19:40	40.48	6	0.20	

September 7 2018 Time: 19:00 13.7 UTC Magnitude: 1.5 ML
Lat: 52.935N Lon: -2.023W Depth: 7.5 km
Grid Ref: 398.45 kmE 337.55 kmN RMS: 0.30 secs
Locality: CRESSWELL,STAFFORDSHIRE
Velocity model: Lownet Xnear: 100.0 Xfar: 200.0

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES
STNC	HZ	21.3	IP		D	19:00	18.05			0.18
STNC	HE	21.3	ES			19:00	21.15			0.22
STNC	HN	21.3	IAML			19:00	21.50	224	0.22	
STNC	HE	21.3	IAML			19:00	21.65	264	0.19	
CWF	HZ	52.9	IP		D	19:00	22.83			0.07
CWF	HE	52.9	ES			19:00	29.15			-0.24
CWF	HN	52.9	IAML			19:00	29.69	31	0.09	
CWF	HE	52.9	IAML			19:00	29.70	20	0.14	
LBWR	HZ	55.6	EP			19:00	23.43			0.22
LBWR	HE	55.6	ES			19:00	29.98			-0.19
LBWR	HN	55.6	IAML			19:00	31.09	63	0.22	
LBWR	HE	55.6	IAML			19:00	31.38	75	0.11	
AS02	HZ	69.0	EP			19:00	25.37			0.10
AS02	HE	69.0	ES			19:00	33.44			-0.29
AS02	HE	69.0	IAML			19:00	33.79	30	0.27	
AS02	HN	69.0	IAML			19:00	33.97	27	0.09	
HLM1	HZ	74.2	IP		C	19:00	25.77			-0.33
HLM1	HN	74.2	ES			19:00	34.97			-0.20
HLM1	HE	74.2	IAML			19:00	38.03	14	0.13	
HLM1	HN	74.2	IAML			19:00	38.47	12	0.16	
FOEL	HZ	79.3	EP			19:00	26.96			0.06
FOEL	HN	79.3	ES			19:00	36.28			-0.28
FOEL	HE	79.3	IAML			19:00	38.33	11	0.22	
FOEL	HN	79.3	IAML			19:00	41.09	15	0.28	
MCH1	HZ	124.0	EP			19:00	34.00			0.28
MONM	HZ	133.0	EP			19:00	36.24			1.20
WLF1	HZ	164.0	EP			19:00	39.22			-0.21
WPS	HZ	174.0	EP			19:00	41.17			0.49
WPS	HE	174.0	ES			19:00	59.90			-0.49
WPS	HN	174.0	IAML			19:01	03.22	8	0.27	
WPS	HE	174.0	IAML			19:01	03.57	7	0.43	
YRC	EZ	175.0	EP			19:00	41.06			0.24
KESW	HZ	197.0	EP			19:00	44.17			0.44
RSBS	HZ	215.0	EP			19:00	45.81			-0.10

September 9 2018 Time: 03:48 29.8 UTC Magnitude: 0.3 ML
Lat: 53.313N Lon: -3.801W Depth: 6.8 km
Grid Ref: 280.03 kmE 381.11 kmN RMS: 0.30 secs
Locality: LLANDUDNO,CONWY
Velocity model: Lleyn Xnear: 100.0 Xfar: 200.0

TABLE 2 : PHASE DATA

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES
WLF1	HZ	39.8	EP			03:48	36.43			-0.16
WLF1	HE	39.8	ES			03:48	41.37			0.16
WLF1	HE	39.8	IAML			03:48	42.05	4	0.06	
WLF1	HN	39.8	IAML			03:48	42.05	6	0.09	
WPS	HZ	47.4	EP			03:48	38.11			0.26
WPS	HN	47.4	ES			03:48	43.25			-0.08
WPS	HN	47.4	IAML			03:48	43.75	2	0.07	
WPS	HE	47.4	IAML			03:48	44.02	2	0.14	
LLW	BE	52.4	ES			03:48	44.52			-0.20
FOEL	HZ	62.0	EP			03:48	40.06			-0.22
FOEL	HN	62.0	ES			03:48	47.77			0.36
HLM1	HZ	108.0	EP			03:48	47.20			-0.49
HLM1	HE	108.0	ES			03:49	00.21			0.35

September 14 2018 Time: 00:03 36.0 UTC Magnitude: 0.9 ML
Lat: 50.176N Lon: -5.114W Depth: 1.0 km
Grid Ref: 177.69 kmE 35.37 kmN RMS: 0.30 secs
Locality: PENRYN,CORNWALL
Velocity model: Cornwall Xnear: 100.0 Xfar: 500.0

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES
CCA1	HZ	8.2	IP		C	00:03	37.08			-0.33
CCA1	HE	8.2	ES			00:03	38.61			0.08
CCA1	HE	8.2	IAML			00:03	38.68	144	0.06	
CCA1	HN	8.2	IAML			00:03	38.69	118	0.10	
SBD	BZ	52.9	EP			00:03	45.35			0.17
SBD	BE	52.9	ES			00:03	52.25			-0.03
SBD	BE	52.9	IAML			00:03	52.75	6	0.09	
SBD	BN	52.9	IAML			00:03	53.53	5	0.10	
DYA	HZ	89.1	EP			00:03	51.53			0.08
DYA	HN	89.1	ES			00:04	03.18			-0.21
DYA	HN	89.1	IAML			00:04	04.19	7	0.16	
DYA	HE	89.1	IAML			00:04	04.24	6	0.20	
HTL	HZ	101.0	EP			00:03	53.94			0.51
HTL	HE	101.0	ES			00:04	06.61			-0.27
HTL	HE	101.0	IAML			00:04	07.20	5	0.19	
HTL	HN	101.0	IAML			00:04	07.42	6	0.11	

September 14 2018 Time: 00:19 48.1 UTC Magnitude: 0.3 ML
Lat: 50.174N Lon: -5.115W Depth: 1.0 km
Grid Ref: 177.60 kmE 35.15 kmN RMS: 0.20 secs
Locality: PENRYN,CORNWALL
Velocity model: Cornwall Xnear: 100.0 Xfar: 500.0

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES
CCA1	HZ	8.2	IP		C	00:19	49.32			-0.28
CCA1	HE	8.2	ES			00:19	50.83			0.11
CCA1	HE	8.2	IAML			00:19	50.91	48	0.06	
CCA1	HN	8.2	IAML			00:19	50.91	40	0.07	
SBD	BZ	53.2	EP			00:19	57.60			0.18
SBD	BE	53.2	ES			00:20	04.49			-0.06
SBD	BE	53.2	IAML			00:20	04.75	2	0.15	
SBD	BN	53.2	IAML			00:20	05.82	1	0.10	
DYA	HZ	89.2	EP			00:20	03.95			0.27
DYA	HN	89.2	ES			00:20	15.41			-0.22
DYA	HN	89.2	IAML			00:20	16.40	2	0.24	
DYA	HE	89.2	IAML			00:20	16.58	2	0.24	

September 14 2018 Time: 03:05 05.9 UTC Magnitude: 1.1 ML
Lat: 50.165N Lon: -5.108W Depth: 1.0 km
Grid Ref: 178.06 kmE 34.13 kmN RMS: 0.30 secs
Locality: PENRYN,CORNWALL
Velocity model: Cornwall Xnear: 200.0 Xfar: 500.0
Comment: FELT PORKELLIS Intensity: 2

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES
CCA1	HZ	8.8	IP		C	03:05	07.14			-0.31
CCA1	HE	8.8	ES			03:05	08.67			0.01
CCA1	HN	8.8	IAML			03:05	08.73	244	0.07	
CCA1	HE	8.8	IAML			03:05	08.73	190	0.08	
SBD	BZ	53.7	EP			03:05	15.38			0.14
SBD	BE	53.7	ES			03:05	22.31			-0.13
SBD	BE	53.7	IAML			03:05	22.81	6	0.08	
SBD	BN	53.7	IAML			03:05	24.79	7	0.10	
DYA	HZ	89.1	EP			03:05	21.67			0.29
DYA	HN	89.1	ES			03:05	32.94			-0.38
DYA	HN	89.1	IAML			03:05	34.27	14	0.16	
DYA	HE	89.1	IAML			03:05	34.31	14	0.20	
HTL	HZ	102.0	EP			03:05	23.87			0.38
HTL	HE	102.0	IAML			03:05	37.53	10	0.20	
HTL	HN	102.0	IAML			03:05	37.55	8	0.12	

September 15 2018 Time: 02:01 50.3 UTC Magnitude: 1.6 ML
Lat: 59.065N Lon: -7.887W Depth: 12.6 km
Grid Ref: 62.73 kmE 1034.62 kmN RMS: 0.30 secs
Locality: NW ISLE OF LEWIS
Velocity model: North Sea Xnear: 400.0 Xfar: 600.0
Comment: 100KM NW LEWIS

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES
LEWI	HZ	118.0	EP			02:02	09.13			0.01
LEWI	HE	118.0	ES			02:02	22.85			0.01
LEWI	HE	118.0	IAML			02:02	23.12	23	0.20	
LEWI	HN	118.0	IAML			02:02	23.93	17	0.18	
LINV	HZ	187.0	EP			02:02	17.35			-0.42
LINV	HE	187.0	ES			02:02	37.33			-0.48
LINV	HN	187.0	IAML			02:02	37.52	8	0.28	
LINV	HE	187.0	IAML			02:02	37.53	5	0.12	
KPL	HZ	233.0	EP			02:02	23.89			0.42
KPL	HN	233.0	ES			02:02	47.56			-0.12
KPL	HE	233.0	IAML			02:02	48.25	4	0.48	
KPL	HN	233.0	IAML			02:02	48.46	2	0.18	
BIGH	HZ	239.0	EP			02:02	24.16			-0.05
BIGH	HE	239.0	ES			02:02	49.09			0.14
MCD	HN	318.0	ES			02:03	06.44			0.48

September 15 2018 Time: 18:15 13.7 UTC Magnitude: 0.9 ML
Lat: 56.110N Lon: -5.912W Depth: 6.7 km
Grid Ref: 156.81 kmE 697.69 kmN RMS: 0.20 secs
Locality: JURA,ARGYLL & BUTE
Velocity model: Lownet Xnear: 150.0 Xfar: 300.0
Comment: OFFSHORE JURA

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES
LAWE	HZ	36.0	IP		C	18:15	19.95			-0.28
LAWE	HE	36.0	ES			18:15	24.63			-0.35
LAWE	HE	36.0	IAML			18:15	24.83	15	0.18	
LAWE	HN	36.0	IAML			18:15	24.84	17	0.16	
PGB1	HZ	95.2	EP			18:15	29.72			0.30
PGB1	HN	95.2	ES			18:15	41.16			0.28
CLGH	HE	115.0	ES			18:15	46.10			-0.11
CLGH	HN	115.0	IAML			18:15	47.94	4	0.10	
CLGH	HE	115.0	IAML			18:15	48.39	5	0.40	
KPL	HZ	138.0	EP			18:15	35.92			0.08
KPL	HE	138.0	ES			18:15	52.14			0.16
NEWG	HE	153.0	ES			18:15	55.95			0.15
NEWG	HZ	153.0	IAML			18:15	57.70	1	0.22	
NEWG	HE	153.0	IAML			18:15	57.78	2	0.18	
GAL1	HE	158.0	ES			18:15	56.72			-0.25

September 15 2018 Time: 18:39 09.0 UTC Magnitude: 3.1 ML
Lat: 54.568N Lon: -1.639W Depth: 23.7 km
Grid Ref: 423.34 kmE 519.27 kmN RMS: 0.30 secs
Locality: NEWTON AYCLIFFE,DURHAM
Velocity model: Borders Xnear: 50.0 Xfar: 100.0

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES
AT12	HZ	12.4	IP		C	18:39	13.54			-0.06
AT12	HE	12.4	ES			18:39	16.62			-0.22
AT12	HN	12.4	IAML			18:39	16.94	5263	0.22	
AT12	HE	12.4	IAML			18:39	16.95	10208	0.20	
AS10	HZ	12.6	IP		C	18:39	13.91			0.27
AS10	HE	12.6	ES			18:39	17.38			0.48
AS10	HE	12.6	IAML			18:39	17.59	10176	0.18	
AS10	HN	12.6	IAML			18:39	17.66	6767	0.18	
EDMD	HZ	36.0	IP		D	18:39	16.28			0.02
EDMD	HN	36.0	ES			18:39	21.17			-0.23
EDMD	HN	36.0	IAML			18:39	21.36	4209	0.14	
EDMD	HE	36.0	IAML			18:39	21.39	3831	0.22	
AT10	HZ	37.2	IP		D	18:39	16.51			0.02
AT10	HN	37.2	ES			18:39	21.63			-0.16
AT10	HE	37.2	IAML			18:39	21.99	3483	0.38	
AT10	HN	37.2	IAML			18:39	22.14	4246	0.36	
AS07	HZ	40.0	IP		C	18:39	16.84			-0.06
AS07	HE	40.0	ES			18:39	22.15			-0.33
AS07	HN	40.0	IAML			18:39	22.39	1956	0.16	
AS07	HE	40.0	IAML			18:39	22.58	2026	0.10	
GDLE	HZ	55.7	IP		C	18:39	19.04			-0.07
GDLE	HN	55.7	ES			18:39	25.87			-0.40
GDLE	HE	55.7	IAML			18:39	26.20	2279	0.24	
GDLE	HN	55.7	IAML			18:39	27.22	4448	0.22	
AT08	HZ	56.4	IP		D	18:39	19.15			-0.02
AU11	HZ	61.7	EP			18:39	20.13			0.18
AU11	HE	61.7	ES			18:39	27.78			0.08
AU11	HE	61.7	IAML			18:39	28.60	1963	0.27	
AU11	HN	61.7	IAML			18:39	28.85	1493	0.20	
AU15	HZ	62.1	EP			18:39	20.16			0.14
AU15	HN	62.1	ES			18:39	27.46			-0.35
AU15	HE	62.1	IAML			18:39	28.93	2518	0.46	
AU15	HN	62.1	IAML			18:39	29.73	2175	0.22	
AU20	HZ	63.3	EP			18:39	20.38			0.17
AU20	HN	63.3	ES			18:39	28.11			-0.03
AU20	HN	63.3	IAML			18:39	28.69	2177	0.32	
AU20	HE	63.3	IAML			18:39	28.92	2153	0.32	
AR09	HZ	64.5	IP		C	18:39	20.30			-0.16
AR09	HN	64.5	ES			18:39	28.35			-0.22
AU16	EZ	65.0	EP			18:39	20.70			0.27
AU16	E2	65.0	IAML			18:39	29.39	1144	0.14	
AU16	E1	65.0	IAML			18:39	29.48	1120	0.18	
AU14	EZ	66.3	IP		D	18:39	20.93			0.30
AU14	E2	66.3	ES			18:39	29.11			0.25
AU14	E2	66.3	IAML			18:39	29.90	1805	0.20	
AU14	E1	66.3	IAML			18:39	30.24	1022	0.19	
AU07	HZ	67.3	EP			18:39	20.96			0.17
AU07	HN	67.3	IAML			18:39	31.36	1332	0.16	
AU07	HE	67.3	IAML			18:39	32.57	2539	0.30	
AU10	EZ	67.5	EP			18:39	21.13			0.32
AU09	HZ	67.6	EP			18:39	21.02			0.18
AU09	HN	67.6	ES			18:39	29.81			0.59
AU09	HN	67.6	IAML			18:39	30.38	2882	0.38	
AU09	HE	67.6	IAML			18:39	30.93	2694	0.26	
HPK	HZ	67.8	IP		D	18:39	20.93			0.03
HPK	HE	67.8	ES			18:39	29.31			-0.02

TABLE 2 : PHASE DATA

HPK	HE	67.8	IAML	18:39	29.97	2509	0.28	
HPK	HN	67.8	IAML	18:39	31.18	978	0.18	
AU13	HZ	68.5	EP	18:39	21.15			0.19
AU13	H2	68.5	IAML	18:39	30.45	1255	0.25	
AU13	H1	68.5	IAML	18:39	30.58	774	0.28	
AU18	HZ	70.0	EP	18:39	21.43			0.23
AU18	HN	70.0	ES	18:39	29.24			-0.59
AU18	HN	70.0	IAML	18:39	30.40	2248	0.18	
AU18	HE	70.0	IAML	18:39	30.63	2132	0.26	
AQ12	HZ	73.6	EP	18:39	21.41			-0.38
AU08	HZ	80.5	EP	18:39	22.83			0.05
AU08	HN	80.5	IAML	18:39	33.71	1029	0.18	
AU08	HE	80.5	IAML	18:39	34.50	733	0.14	
AR07	HZ	83.1	EP	18:39	23.14			-0.04
AR07	HN	83.1	ES	18:39	33.03			-0.19
AR07	HE	83.1	IAML	18:39	34.14	1606	0.18	
AR07	HN	83.1	IAML	18:39	34.29	1752	0.24	
AV06	HZ	87.6	EP	18:39	23.78			-0.01
AU05	HZ	93.2	EP	18:39	24.42			-0.03
KESW	HZ	94.8	EP	18:39	24.39			-0.32
KESW	HN	94.8	ES	18:39	35.31			-0.53
KESW	HN	94.8	IAML	18:39	36.74	215	0.40	
KESW	HE	94.8	IAML	18:39	36.97	164	0.34	
AP12	HZ	109.0	EP	18:39	26.65			0.12
AQ09	HZ	112.0	EP	18:39	27.43			0.60
AS02	HZ	115.0	EP	18:39	26.98			-0.26
SPK	EZ	121.0	EP	18:39	28.59			0.68
SPK	EN	121.0	ES	18:39	42.39			1.09
SPK	EN	121.0	IAML	18:39	43.46	438	0.28	
SPK	EE	121.0	IAML	18:39	43.90	498	0.24	
ESK	HZ	130.0	EP	18:39	29.27			0.10
LBWR	HZ	130.0	EP	18:39	28.85			-0.26
LBWR	HN	130.0	ES	18:39	43.33			-0.03
LBWR	HE	130.0	IAML	18:39	47.43	587	0.20	
LBWR	HN	130.0	IAML	18:39	47.54	548	0.18	
LMK	HZ	151.0	EP	18:39	31.67			0.01
LMK	HN	151.0	IAML	18:39	55.20	328	0.26	
LMK	HE	151.0	IAML	18:39	58.93	273	0.28	
STNC	HZ	168.0	EP	18:39	34.00			0.09
STNC	HE	168.0	IAML	18:40	02.08	129	0.36	
STNC	HN	168.0	IAML	18:40	03.08	124	0.52	
NEWG	HZ	177.0	EP	18:39	35.00			0.00
NEWG	HE	177.0	IAML	18:39	57.73	38	0.18	
NEWG	HN	177.0	IAML	18:40	05.00	49	0.32	
IOMK	HZ	193.0	EP	18:39	36.25			-0.73
GAL1	HZ	201.0	EP	18:39	37.64			-0.28
CWF	HZ	205.0	EP	18:39	37.89			-0.54
FOEL	HZ	213.0	EP	18:39	39.05			-0.50
FOEL	HE	213.0	IAML	18:40	12.94	114	0.46	
FOEL	HN	213.0	IAML	18:40	14.15	171	0.52	
WPS	HZ	228.0	EP	18:39	40.28			-1.04
WPS	HE	228.0	IAML	18:40	15.06	20	0.39	
WPS	HN	228.0	IAML	18:40	18.68	30	0.26	
WLF1	HZ	230.0	EP	18:39	40.54			-1.06
WLF1	HE	230.0	IAML	18:40	15.77	59	0.56	
WLF1	HN	230.0	IAML	18:40	18.58	49	0.38	
YLL	EZ	230.0	EP	18:39	41.08			-0.52
HLM1	HZ	242.0	EP	18:39	42.79			-0.41
HLM1	HN	242.0	IAML	18:40	19.63	29	0.48	
HLM1	HE	242.0	IAML	18:40	20.34	59	0.36	
WACR	HZ	254.0	EP	18:39	44.38			-0.19
DRUM	HZ	266.0	EP	18:39	46.40			0.25
CLGH	HZ	293.0	EP	18:39	49.38			-0.10
KPL	HZ	398.0	EP	18:40	02.49			0.00

September 16 2018 Time: 07:32 03.4 UTC Magnitude: 2.0 ML
Lat: 50.653N Lon: -3.235W Depth: 6.2 km
Grid Ref: 312.71 kmE 84.49 kmN RMS: 0.50 secs
Locality: SIDMOUTH,DEVON
Velocity model: Lownet Xnear: 500.0 Xfar: 1000.0
Comment: OFFSHORE LOCATION

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES
DYA	HZ	54.9	EP			07:32	12.66			-0.28
DYA	HE	54.9	ES			07:32	19.37			-0.51
DYA	HE	54.9	IAML			07:32	23.95	57	0.12	
DYA	HN	54.9	IAML			07:32	24.08	40	0.10	
HTL	HZ	95.9	EP			07:32	19.40			0.15
HTL	HN	95.9	IAML			07:32	35.39	93	0.17	
HTL	HE	95.9	IAML			07:32	35.49	83	0.26	
SBD	BZ	103.0	EP			07:32	21.00			0.60
SBD	BN	103.0	ES			07:32	33.72			0.94
SBD	BN	103.0	IAML			07:32	35.33	43	0.07	
SBD	BE	103.0	IAML			07:32	36.18	40	0.14	
MONM	HZ	135.0	EP			07:32	25.17			-0.10
MONM	HE	135.0	ES			07:32	40.82			-0.39
MONM	HN	135.0	IAML			07:32	42.96	45	0.20	
MONM	HE	135.0	IAML			07:32	43.02	64	0.20	
SWN1	HZ	139.0	EP			07:32	25.86			0.09
SWN1	HE	139.0	ES			07:32	42.75			0.67
SWN1	HN	139.0	IAML			07:32	43.21	36	0.36	
SWN1	HE	139.0	IAML			07:32	43.32	19	0.32	
MCH1	HZ	150.0	EP			07:32	27.12			-0.33
MCH1	HE	150.0	ES			07:32	44.75			-0.22
MCH1	HN	150.0	IAML			07:32	46.33	45	0.17	
MCH1	HE	150.0	IAML			07:32	46.40	39	0.25	
CCA1	HZ	151.0	EP			07:32	27.09			-0.39
CCA1	HE	151.0	IAML			07:32	49.82	10	0.20	
CCA1	HN	151.0	IAML			07:32	50.51	14	0.12	
RSBS	HZ	179.0	EP			07:32	30.61			-0.72
JSA	HZ	180.0	EP			07:32	31.33			-0.08
HLM1	HZ	209.0	EP			07:32	35.70			0.58

September 16 2018 Time: 10:26 46.7 UTC Magnitude: 0.9 ML
Lat: 55.660N Lon: -5.407W Depth: 9.4 km
Grid Ref: 185.72 kmE 645.98 kmN RMS: 0.20 secs
Locality: ARRAN,NORTH AYRSHIRE
Velocity model: Lownet Xnear: 500.0 Xfar: 1000.0

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES
PGB1	HZ	60.4	EP			10:26	57.07			0.12
PGB1	HN	60.4	ES			10:27	04.59			0.16
PGB1	HN	60.4	IAML			10:27	04.74	5	0.11	
PGB1	HE	60.4	IAML			10:27	05.03	9	0.24	
LAWE	HZ	66.8	EP			10:26	58.23			0.29
LAWE	HE	66.8	ES			10:27	05.78			-0.36
LAWE	HE	66.8	IAML			10:27	06.66	6	0.12	
LAWE	HN	66.8	IAML			10:27	07.51	5	0.11	
CLGH	HZ	78.2	EP			10:26	59.71			-0.01
CLGH	HE	78.2	ES			10:27	09.29			0.06
CLGH	HN	78.2	IAML			10:27	10.85	11	0.16	
CLGH	HE	78.2	IAML			10:27	10.93	13	0.16	
NEWG	HZ	95.9	EP			10:27	02.47			0.01
NEWG	HN	95.9	ES			10:27	13.75			-0.20
NEWG	HN	95.9	IAML			10:27	13.94	4	0.19	
NEWG	HE	95.9	IAML			10:27	15.78	3	0.09	
GAL1	HZ	98.8	EP			10:27	02.86			-0.03
GAL1	HN	98.8	ES			10:27	14.66			-0.04
GAL1	HE	98.8	IAML			10:27	16.20	4	0.18	
GAL1	HN	98.8	IAML			10:27	16.96	2	0.10	
ESK	HN	144.0	ES			10:27	26.32			0.00

September 17 2018 Time: 16:56 37.5 UTC Magnitude: 1.4 ML
Lat: 55.113N Lon: -2.783W Depth: 13.0 km
Grid Ref: 350.06 kmE 580.13 kmN RMS: 0.40 secs
Locality: CATLOWDY,CUMBRIA
Velocity model: Lownet Xnear: 100.0 Xfar: 200.0

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES
ESK	HZ	35.1	IP		D	16:56	43.89			-0.01
ESK	HN	35.1	ES			16:56	48.24			-0.36
ESK	HN	35.1	IAML			16:56	49.10	22	0.06	
ESK	HE	35.1	IAML			16:56	50.61	17	0.07	
EDMD	HZ	61.2	IP		C	16:56	47.85			0.01
EDMD	HN	61.2	ES			16:56	55.14			-0.28
EDMD	HE	61.2	IAML			16:56	57.46	80	0.18	
EDMD	HN	61.2	IAML			16:56	57.64	59	0.11	
KESW	HZ	61.9	EP			16:56	48.11			0.10
KESW	HE	61.9	ES			16:56	55.99			0.29
KESW	HN	61.9	IAML			16:56	57.60	13	0.21	
KESW	HE	61.9	IAML			16:56	58.12	28	0.14	
NEWG	HZ	92.3	EP			16:56	52.72			0.05
EDI	HZ	93.7	EP			16:56	53.50			0.61
GAL1	HZ	126.0	EP			16:56	57.25			-0.31
IOMK	HZ	149.0	EP			16:56	59.86			-0.95

September 19 2018 Time: 00:59 43.8 UTC Magnitude: 0.4 ML
Lat: 53.107N Lon: -1.928W Depth: 13.9 km
Grid Ref: 404.82 kmE 356.68 kmN RMS: 0.20 secs
Locality: LEEK,STAFFODSHIRE
Velocity model: Lownet Xnear: 500.0 Xfar: 1000.0
Comment: 6KM EAST LEEK

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES
STNC	HZ	18.7	EP			00:59	47.83			-0.07
STNC	HE	18.7	ES			00:59	50.96			0.06
STNC	HE	18.7	IAML			00:59	51.10	5	0.17	
STNC	HN	18.7	IAML			00:59	51.12	15	0.30	
LBWR	HZ	35.5	EP			00:59	50.47			0.13
LBWR	HE	35.5	ES			00:59	55.08			-0.04
LBWR	HN	35.5	ES			00:59	55.10			
LBWR	HN	35.5	IAML			00:59	55.66	5	0.23	
LBWR	HE	35.5	IAML			00:59	55.69	5	0.10	
FOEL	HZ	88.7	EP			00:59	58.51			-0.01
FOEL	HE	88.7	ES			01:00	09.44			0.17
HLM1	HZ	91.7	EP			00:59	58.68			-0.26
HLM1	HE	91.7	ES			01:00	09.61			-0.39
MCH1	HE	143.0	ES			01:00	23.08			0.43

September 21 2018 Time: 05:42 03.8 UTC Magnitude: 0.7 ML
Lat: 52.430N Lon: -2.798W Depth: 6.6 km
Grid Ref: 345.75 kmE 281.68 kmN RMS: 0.20 secs
Locality: CRAVEN ARMS,SHROPSHIRE
Velocity model: Lownet Xnear: 100.0 Xfar: 200.0

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES
HLM1	HZ	11.3	IP		D	05:42	06.39			-0.05
HLM1	HE	11.3	ES			05:42	08.29			-0.05
HLM1	HN	11.3	IAML			05:42	08.49	26	0.14	
HLM1	HE	11.3	IAML			05:42	08.67	27	0.19	
MCH1	HZ	50.1	EP			05:42	12.63			0.09
MCH1	HE	50.1	ES			05:42	18.68			-0.22
MCH1	HN	50.1	IAML			05:42	18.74	6	0.09	

TABLE 2 : PHASE DATA

MCH1	HE	50.1	IAML	05:42	18.78	10	0.26	
FOEL	HN	57.9	ES	05:42	21.04			-0.04
MONM	HZ	65.7	EP	05:42	14.97			0.01
MONM	HE	65.7	ES	05:42	23.17			0.09
MONM	HE	65.7	IAML	05:42	23.30	8	0.16	
MONM	HN	65.7	IAML	05:42	23.36	4	0.24	
RSBS	HZ	143.0	EP	05:42	27.29			0.50

September 24 2018 Time: 01:34 57.1 UTC Magnitude: 0.4 ML
Lat: 54.651N Lon: -3.672W Depth: 4.2 km
Grid Ref: 292.13 kmE 529.73 kmN RMS: 0.30 secs
Locality: WORKINGTON,CUMBRIA
Velocity model: Borders Xnear: 100.0 Xfar: 200.0
Comment: OFFSHORE WORKINGTON

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES
KESW	HZ	37.3	EP			01:35	03.80			-0.05
KESW	HE	37.3	ES			01:35	08.50			-0.14
NEWG	HZ	63.1	EP			01:35	08.17			0.15
NEWG	HE	63.1	ES			01:35	15.90			0.14
GAL1	HE	71.1	ES			01:35	17.28			-0.70
IOMK	HZ	72.5	EP			01:35	09.64			0.08
IOMK	HE	72.5	ES			01:35	18.72			0.33
ESK	HZ	79.9	EP			01:35	10.75			-0.02
ESK	HE	79.9	ES			01:35	20.79			0.32
ESK	HN	79.9	IAML			01:35	22.33	2	0.20	
ESK	HE	79.9	IAML			01:35	22.60	2	0.23	
EDMD	HZ	112.0	EP			01:35	16.15			0.21
EDMD	HN	112.0	ES			01:35	28.95			-0.35
EDMD	HN	112.0	IAML			01:35	29.92	1	0.26	
EDMD	HE	112.0	IAML			01:35	30.65	1	0.20	

September 25 2018 Time: 13:42 18.9 UTC Magnitude: 1.4 ML
Lat: 50.187N Lon: -5.083W Depth: 1.0 km
Grid Ref: 179.95 kmE 36.50 kmN RMS: 0.30 secs
Locality: PENRYN,CORNWALL
Velocity model: Cornwall Xnear: 200.0 Xfar: 500.0
Comment: FELT PENCOYS... Intensity: 3

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES
CCA1	HZ	10.3	EP			13:42	20.58			-0.19
CCA1	HE	10.3	ES			13:42	22.31			0.14
CCA1	HN	10.3	IAML			13:42	22.47	228	0.10	
CCA1	HE	10.3	IAML			13:42	22.47	276	0.10	
SBD	BZ	50.7	EP			13:42	28.21			0.43
SBD	BE	50.7	ES			13:42	34.97			0.39
SBD	BE	50.7	IAML			13:42	35.27	62	0.17	
SBD	BN	50.7	IAML			13:42	35.37	44	0.07	
DYA	HZ	86.6	EP			13:42	33.96			-0.06
DYA	HE	86.6	ES			13:42	45.56			-0.06
DYA	HE	86.6	IAML			13:42	46.56	12	0.13	
DYA	HN	86.6	IAML			13:42	46.76	11	0.10	
HTL	HE	99.3	ES			13:42	48.70			-0.65
HTL	HE	99.3	IAML			13:42	49.39	14	0.26	
HTL	HN	99.3	IAML			13:42	49.63	21	0.34	

September 25 2018 Time: 17:54 32.1 UTC Magnitude: 2.3 ML
Lat: 53.537N Lon: 1.640W Depth: 13.9 km
Grid Ref: 641.17 kmE 410.67 kmN RMS: 0.40 secs
Locality: SOUTHERN NORTH SEA
Velocity model: North Sea Xnear: 300.0 Xfar: 600.0
Comment: 110KM EAST GRIMSBY

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES
WACR	HZ	113.0	EP			17:54	49.77			-0.27
WACR	HE	113.0	ES			17:55	03.40			0.24
WACR	HN	113.0	IAML			17:55	06.77	78	0.09	
WACR	HE	113.0	IAML			17:55	07.22	86	0.22	
LMK	HZ	131.0	EP			17:54	53.11			0.65
LMK	HN	131.0	ES			17:55	07.57			0.23
LMK	HN	131.0	IAML			17:55	10.25	101	0.24	
LMK	HE	131.0	IAML			17:55	10.62	85	0.32	
ELMS	HE	166.0	ES			17:55	15.19			0.19
LBWR	HZ	224.0	EP			17:55	04.00			-0.05
LBWR	HE	224.0	IAML			17:55	39.29	29	0.30	
LBWR	HN	224.0	IAML			17:55	43.60	54	0.32	
HLM1	HZ	324.0	EP			17:55	15.81			-0.65
HLM1	HE	324.0	IAML			17:56	02.75	7	0.40	
HLM1	HN	324.0	IAML			17:56	10.46	7	0.28	
MCH1	HE	357.0	ES			17:55	55.26			-0.66
MCH1	HE	357.0	IAML			17:55	57.92	5	0.12	
MCH1	HN	357.0	IAML			17:55	58.63	6	0.10	

September 26 2018 Time: 13:02 07.8 UTC Magnitude: 2.8 ML
Lat: 58.969N Lon: 1.426W Depth: 23.3 km
Grid Ref: 596.93 kmE 1014.09 kmN RMS: 0.40 secs
Locality: CENTRAL NORTH SEA
Velocity model: North Sea Xnear: 400.0 Xfar: 600.0
Comment: 190KM SE LERWICK

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES
LRW	HZ	196.0	EP			13:02	36.06			0.56
LRW	HN	196.0	IAML			13:03	03.96	98	0.22	
LRW	HE	196.0	IAML			13:03	04.19	72	0.32	
BER	HZ	271.0	EP			13:02	44.93			0.19
BER	HE	271.0	ES			13:03	11.20			-0.49
BER	HE	271.0	IAML			13:03	11.60	27	0.31	
BER	HN	271.0	IAML			13:03	12.46	21	0.34	
BIGH	HZ	314.0	EP			13:02	50.10			0.06
BIGH	HE	314.0	ES			13:03	20.47			-0.40
BIGH	HE	314.0	IAML			13:03	39.63	39	0.32	
BIGH	HN	314.0	IAML			13:03	41.60	52	0.40	
MCD	HZ	315.0	EP			13:02	50.27			0.03
MCD	HE	315.0	IAML			13:03	49.84	59	0.54	
MCD	HN	315.0	IAML			13:03	51.55	82	0.60	
DRUM	HZ	326.0	EP			13:02	51.59			0.03
DRUM	HE	326.0	ES			13:03	24.08			0.57
DRUM	HE	326.0	IAML			13:03	40.68	42	0.48	
DRUM	HN	326.0	IAML			13:03	48.22	43	0.72	
FOO	HE	355.0	ES			13:03	29.99			0.30
FOO	HN	355.0	IAML			13:03	30.66	12	0.22	
FOO	HE	355.0	IAML			13:03	31.12	14	0.18	
LINV	HZ	396.0	EP			13:02	59.68			-0.61
LEWI	HZ	491.0	EP			13:03	11.76			-0.37
ESK	HZ	494.0	EP			13:03	12.28			-0.16
LAWE	HZ	507.0	EP			13:03	13.64			-0.43

September 27 2018 Time: 05:34 13.8 UTC Magnitude: 0.4 ML
Lat: 54.610N Lon: -3.661W Depth: 4.4 km
Grid Ref: 292.74 kmE 525.15 kmN RMS: 0.20 secs
Locality: WORKINGTON,CUMBRIA
Velocity model: Borders Xnear: 100.0 Xfar: 200.0
Comment: OFFSHORE WORKINGTON

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES
KESW	HZ	36.0	EP			05:34	20.40			0.10
KESW	HE	36.0	ES			05:34	24.89			-0.05
KESW	HN	36.0	IAML			05:34	25.10	2	0.18	
KESW	HE	36.0	IAML			05:34	25.14	2	0.20	
NEWG	HZ	67.2	EP			05:34	25.50			0.14
NEWG	HE	67.2	ES			05:34	33.93			0.34
NEWG	HE	67.2	IAML			05:34	34.75	2	0.09	
NEWG	HN	67.2	IAML			05:34	36.16	1	0.10	
IOMK	HZ	70.5	EP			05:34	25.98			0.08
IOMK	HN	70.5	ES			05:34	34.54			0.03
IOMK	HN	70.5	IAML			05:34	35.64	5	0.24	
IOMK	HE	70.5	IAML			05:34	37.13	4	0.37	
GAL1	HZ	73.4	EP			05:34	26.24			-0.12
GAL1	HN	73.4	ES			05:34	34.99			-0.31
GAL1	HN	73.4	IAML			05:34	35.99	2	0.36	
GAL1	HE	73.4	IAML			05:34	36.12	2	0.43	
ESK	HZ	83.8	EP			05:34	27.99			-0.09
ESK	HN	83.8	ES			05:34	38.12			-0.12
ESK	HN	83.8	IAML			05:34	39.31	2	0.19	
ESK	HE	83.8	IAML			05:34	39.66	4	0.32	

September 28 2018 Time: 08:28 24.2 UTC Magnitude: 1.7 ML
Lat: 57.023N Lon: -4.949W Depth: 14.3 km
Grid Ref: 221.01 kmE 796.28 kmN RMS: 0.30 secs
Locality: INVERGARRY,HIGHLAND
Velocity model: Lownet Xnear: 500.0 Xfar: 1000.0
Comment: 10KM SW INVERGARRY

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES
KPL	HZ	55.2	EP			08:28	33.31			-0.39
KPL	HN	55.2	ES			08:28	40.89			0.27
KPL	HN	55.2	IAML			08:28	45.00	31	0.12	
KPL	HE	55.2	IAML			08:28	45.18	47	0.18	
LAWE	HZ	89.3	EP			08:28	38.84			-0.09
LAWE	HE	89.3	ES			08:28	49.59			-0.09
LAWE	HE	89.3	IAML			08:28	51.82	22	0.26	
LAWE	HN	89.3	IAML			08:28	52.71	18	0.10	
MCD	HZ	120.0	EP			08:28	43.19			-0.10
MCD	HE	120.0	ES			08:28	56.87			-0.36
MCD	HE	120.0	IAML			08:28	58.84	17	0.14	
MCD	HN	120.0	IAML			08:29	01.38	14	0.21	
DRUM	HZ	150.0	EP			08:28	48.02			0.37
DRUM	HN	150.0	ES			08:29	04.96			0.20
DRUM	HN	150.0	IAML			08:29	06.97	23	0.36	
DRUM	HE	150.0	IAML			08:29	07.08	14	0.10	
LEWI	HZ	170.0	EP			08:28	50.37			0.20

September 28 2018 Time: 22:55 00.1 UTC Magnitude: -0.4 ML
Lat: 51.177N Lon: -0.226W Depth: 2.4 km
Grid Ref: 523.99 kmE 143.53 kmN RMS: 0.00 secs
Locality: NEWDIGATE,SURREY
Velocity model: Surrey Xnear: 500.0 Xfar: 1000.0

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES
HORS	HZ	1.2	EP			22:55	01.03			0.00
HORS	HE	1.2	ES			22:55	01.66			-0.02
HORS	HN	1.2	IAML			22:55	01.73	23	0.07	
HORS	HE	1.2	IAML			22:55	01.77	26	0.05	
STAN	HZ	1.8	IP		D	22:55	01.16			0.04
STAN	HE	1.8	ES			22:55	01.83			-0.01
STAN	HE	1.8	IAML			22:55	02.00	36	0.17	
STAN	HN	1.8	IAML			22:55	02.07	26	0.24	
BRDL	HZ	2.9	IP		D	22:55	01.35			0.03
BRDL	HN	2.9	ES			22:55	02.16			-0.03
BRDL	HN	2.9	IAML			22:55	02.29	103	0.08	
BRDL	HE	2.9	IAML			22:55	02.29	127	0.08	
RUSH	HZ	4.4	IP		D	22:55	01.61			0.04
RUSH	HN	4.4	ES			22:55	02.58			-0.04
RUSH	HN	4.4	IAML			22:55	02.67	31	0.09	
RUSH	HE	4.4	IAML			22:55	02.68	108	0.08	

TABLE 2 : PHASE DATA

September 29 2018 Time: 11:16 15.8 UTC Magnitude: 1.4 ML
Lat: 57.400N Lon: -4.342W Depth: 7.7 km
Grid Ref: 259.29 kmE 836.80 kmN RMS: 0.30 secs
Locality: LOCHEND,HIGHLAND
Velocity model: Lownet Xnear: 100.0 Xfar: 200.0

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES
MCD	HZ	68.4	EP			11:16	27.51			0.22
MCD	HN	68.4	ES			11:16	35.30			-0.38
MCD	HN	68.4	IAML			11:16	39.10	18	0.12	
MCD	HE	68.4	IAML			11:16	39.45	18	0.16	
KPL	HZ	79.1	EP			11:16	29.03			0.13
KPL	HN	79.1	ES			11:16	38.30			-0.17
KPL	HE	79.1	IAML			11:16	39.80	5	0.18	
KPL	HN	79.1	IAML			11:16	40.13	12	0.44	
LINV	HZ	97.5	EP			11:16	32.37			0.61
LINV	HE	97.5	ES			11:16	43.06			-0.37
LINV	HN	97.5	IAML			11:16	45.21	10	0.34	
LINV	HE	97.5	IAML			11:16	45.61	12	0.46	
BIGH	HZ	124.0	EP			11:16	36.00			0.08
BIGH	HE	124.0	ES			11:16	50.52			-0.09
BIGH	HE	124.0	IAML			11:16	53.04	8	0.26	
BIGH	HN	124.0	IAML			11:16	54.54	6	0.33	
DRUM	HZ	125.0	EP			11:16	35.85			-0.13
DRUM	HN	125.0	ES			11:16	51.01			0.29
DRUM	HN	125.0	IAML			11:16	53.53	14	0.20	
DRUM	HE	125.0	IAML			11:16	53.78	13	0.22	
LAWE	HZ	142.0	EP			11:16	38.27			-0.22
LAWE	HN	142.0	ES			11:16	54.68			-0.37
LAWE	HN	142.0	IAML			11:16	57.45	10	0.25	
LAWE	HE	142.0	IAML			11:16	57.54	11	0.32	
LEWI	HZ	172.0	EP			11:16	43.49			0.88

October 4 2018 Time: 17:35 05.8 UTC Magnitude: 0.9 ML
Lat: 52.030N Lon: -3.067W Depth: 16.1 km
Grid Ref: 326.81 kmE 237.43 kmN RMS: 0.20 secs
Locality: CRASWELL,HEREFORDSHIRE
Velocity model: Lownet Xnear: 100.0 Xfar: 200.0

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES
MCH1	HZ	6.0	IP		D	17:35	08.88			-0.01
MCH1	HN	6.0	ES			17:35	11.37			0.25
MCH1	HN	6.0	IAML			17:35	11.49	27	0.08	
MCH1	HE	6.0	IAML			17:35	11.60	41	0.14	
MONM	HZ	27.9	IP		D	17:35	11.19			-0.17
MONM	HE	27.9	ES			17:35	15.37			-0.01
MONM	HE	27.9	IAML			17:35	15.49	12	0.13	
MONM	HN	27.9	IAML			17:35	15.94	13	0.20	
HLM1	HZ	55.8	EP			17:35	15.34			-0.21
HLM1	HN	55.8	ES			17:35	22.35			-0.29
HLM1	HE	55.8	IAML			17:35	22.66	10	0.13	
HLM1	HN	55.8	IAML			17:35	22.92	8	0.11	
FOEL	HZ	96.0	EP			17:35	21.95			0.47
FOEL	HE	96.0	ES			17:35	33.02			0.12
FOEL	HN	96.0	IAML			17:35	33.18	4	0.57	
FOEL	HE	96.0	IAML			17:35	33.37	5	0.40	
RSBS	HZ	116.0	IP		C	17:35	24.13			-0.10
RSBS	HE	116.0	ES			17:35	37.54			-0.12
RSBS	HN	116.0	IAML			17:35	38.96	4	0.10	
RSBS	HE	116.0	IAML			17:35	39.25	5	0.08	

October 5 2018 Time: 23:26 47.3 UTC Magnitude: 0.5 ML
Lat: 55.888N Lon: -5.422W Depth: 8.3 km
Grid Ref: 186.03 kmE 671.38 kmN RMS: 0.60 secs
Locality: TARBERT,ARGYLL & BUTE
Velocity model: Lownet Xnear: 100.0 Xfar: 200.0

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES
LAWE	HZ	41.5	IP		D	23:26	54.74			0.13
LAWE	HE	41.5	ES			23:26	59.55			-0.39
LAWE	HE	41.5	IAML			23:27	00.55	4	0.09	
LAWE	HN	41.5	IAML			23:27	00.75	2	0.09	
CLGH	HZ	99.6	EP			23:27	04.09			0.45
CLGH	HE	99.6	ES			23:27	15.08			-0.48
CLGH	HN	99.6	IAML			23:27	18.23	3	0.23	
CLGH	HE	99.6	IAML			23:27	18.46	2	0.15	
NEWG	HZ	114.0	EP			23:27	06.30			0.43
NEWG	HE	114.0	ES			23:27	19.02			-0.40
NEWG	HE	114.0	IAML			23:27	21.38	2	0.24	
NEWG	HN	114.0	IAML			23:27	21.97	2	0.14	
GAL1	HZ	122.0	EP			23:27	08.31			1.21
GAL1	HE	122.0	ES			23:27	20.80			-0.74
GAL1	HE	122.0	IAML			23:27	23.61	2	0.18	
GAL1	HN	122.0	IAML			23:27	24.14	1	0.15	

October 6 2018 Time: 06:15 34.3 UTC Magnitude: 1.0 ML
Lat: 52.425N Lon: -0.753W Depth: 5.6 km
Grid Ref: 484.78 kmE 281.55 kmN RMS: 0.40 secs
Locality: KETTERING,NORTHANTS
Velocity model: Lownet Xnear: 100.0 Xfar: 200.0

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES
CWF	HZ	51.3	IP		D	06:15	43.07			-0.15
CWF	HE	51.3	ES			06:15	49.25			-0.51
CWF	HN	51.3	IAML			06:15	43.20	7	0.11	
CWF	HE	51.3	IAML			06:15	49.68	4	0.03	
WACR	HZ	99.4	EP			06:15	50.82			0.17
WACR	HE	99.4	ES			06:16	02.46			-0.16
WACR	HE	99.4	IAML			06:16	03.15	3	0.18	
WACR	HN	99.4	IAML			06:16	03.63	7	0.15	
LBWR	HE	127.0	ES			06:16	11.00			0.93
LBWR	HE	127.0	IAML			06:16	13.65	4	0.14	
LBWR	HN	127.0	IAML			06:16	14.09	4	0.20	
HLM1	HZ	145.0	EP			06:15	57.99			0.42
HLM1	HE	145.0	ES			06:16	14.71			0.13
HLM1	HE	145.0	IAML			06:16	15.47	3	0.17	
HLM1	HN	145.0	IAML			06:16	16.01	6	0.19	
MCH1	HE	161.0	ES			06:16	18.35			-0.04
MCH1	HE	161.0	IAML			06:16	18.75	3	0.17	
MCH1	HN	161.0	IAML			06:16	19.80	2	0.10	

October 6 2018 Time: 16:29 26.6 UTC Magnitude: 0.6 ML
Lat: 50.296N Lon: -4.858W Depth: 1.0 km
Grid Ref: 196.47 kmE 47.98 kmN RMS: 0.30 secs
Locality: GRAMPOUND,CORNWALL
Velocity model: Cornwall Xnear: 200.0 Xfar: 500.0

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES
GEL04	HZ	23.6	EP			16:29	30.81			0.06
GEL02	HZ	23.7	EP			16:29	30.98			0.21
GEL01	HZ	25.8	EP			16:29	31.26			0.13
CCA1	HZ	29.0	IP		C	16:29	31.76			0.07
CCA1	HN	29.0	ES			16:29	35.05			-0.55
CCA1	HN	29.0	IAML			16:29	35.25	17	0.07	
CCA1	HE	29.0	IAML			16:29	35.27	10	0.09	
GEL05	HZ	29.0	EP			16:29	31.74			0.05
SBD	BZ	32.3	EP			16:29	32.30			0.03
SBD	BE	32.3	ES			16:29	36.38			-0.23
SBD	BE	32.3	IAML			16:29	36.50	9	0.15	
SBD	BN	32.3	IAML			16:29	37.17	6	0.11	
DYA	HZ	67.8	EP			16:29	38.83			0.41
DYA	HN	67.8	ES			16:29	47.07			-0.43
DYA	HE	67.8	IAML			16:29	47.53	3	0.10	
DYA	HN	67.8	IAML			16:29	47.91	3	0.05	
HTL	HZ	82.0	EP			16:29	41.14			0.26

October 7 2018 Time: 06:48 04.4 UTC Magnitude: 1.4 ML
Lat: 52.821N Lon: -1.057W Depth: 6.0 km
Grid Ref: 463.54 kmE 325.28 kmN RMS: 0.30 secs
Locality: KEYWORTH,NOTTS
Velocity model: Lownet Xnear: 100.0 Xfar: 200.0
Comment: 6KM SSE KEYWORTH

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES
CWF	HZ	19.2	IP		C	06:48	08.17			-0.04
CWF	HE	19.2	ES			06:48	10.98			-0.02
CWF	HE	19.2	IAML			06:48	11.09	69	0.11	
CWF	HN	19.2	IAML			06:48	11.16	118	0.08	
LBWR	HZ	78.6	EP			06:48	17.67			0.08
LBWR	HE	78.6	ES			06:48	27.06			-0.17
LBWR	HE	78.6	IAML			06:48	28.15	25	0.20	
LBWR	HN	78.6	IAML			06:48	30.21	22	0.10	
WACR	HZ	114.0	EP			06:48	23.06			-0.01
STRD	HZ	139.0	EP			06:48	26.76			0.05
FOEL	HZ	145.0	EP			06:48	28.32			0.70
FOEL	HE	145.0	ES			06:48	44.92			0.35
FOEL	HE	145.0	IAML			06:48	45.09	6	0.42	
FOEL	HN	145.0	IAML			06:48	46.12	16	0.34	
MCH1	HZ	161.0	EP			06:48	29.55			-0.34
MCH1	HN	161.0	ES			06:48	47.56			-0.93
MCH1	HE	161.0	IAML			06:48	48.45	4	0.14	
MCH1	HN	161.0	IAML			06:48	48.53	4	0.39	
MONM	HZ	162.0	EP			06:48	29.89			-0.10
MONM	HE	162.0	ES			06:48	48.86			0.19
MONM	HN	162.0	IAML			06:48	49.03	6	0.22	
MONM	HE	162.0	IAML			06:48	49.20	7	0.28	

October 10 2018 Time: 12:04 56.9 UTC Magnitude: 0.8 ML
Lat: 50.170N Lon: -5.147W Depth: 1.0 km
Grid Ref: 175.30 kmE 34.81 kmN RMS: 0.00 secs
Locality: PENRYN,CORNWALL
Velocity model: Cornwall Xnear: 200.0 Xfar: 500.0

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES
GEL01	HZ	3.1	IP			12:04	57.48			-0.04
GEL02	HZ	3.8	EP			12:04	57.60			-0.03
GEL05	HZ	6.1	EP			12:04	58.03			0.00
GEL05	HN	6.1	ES			12:04	58.88			0.01
CCA1	HZ	6.1	EP			12:04	58.04			0.01
CCA1	HN	6.1	ES			12:04	58.85			-0.01
CCA1	HN	6.1	IAML			12:04	59.39	260	0.40	
CCA1	HE	6.1	IAML			12:04	59.51	182	0.38	
GEL03	HZ	6.8	EP			12:04	58.14			0.00
GEL04	HZ	9.5	EP			12:04	58.66			0.05

October 12 2018 Time: 14:21 25.4 UTC Magnitude: 2.4 ML
Lat: 51.658N Lon: -3.118W Depth: 6.8 km
Grid Ref: 322.67 kmE 196.11 kmN RMS: 0.30 secs
Locality: NEWBRIDGE,CAERPHILLY
Velocity model: Lownet Xnear: 100.0 Xfar: 200.0

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES
MONM	HZ	29.6	EP			14:21	31.06			0.11
MONM	HN	29.6	ES			14:21	35.27			0.30
MONM	HE	29.6	IAML			14:21	35.70	323	0.21	

TABLE 2 : PHASE DATA

MONM	HN	29.6	IAML		14:21	35.70	604	0.22
MCH1	HZ	38.7	IP	D	14:21	32.34		-0.02
MCH1	HN	38.7	ES		14:21	37.65		0.22
MCH1	HE	38.7	IAML		14:21	37.82	354	0.12
MCH1	HN	38.7	IAML		14:21	37.83	1088	0.08
OLDB	HZ	39.3	EP		14:21	32.15		-0.27
OLDB	HN	39.3	ES		14:21	37.29		-0.23
OLDB	HE	39.3	IAML		14:21	37.65	1096	0.54
OLDB	HN	39.3	IAML		14:21	37.85	821	0.38
STRD	HZ	67.3	IP	C	14:21	36.55		-0.25
STRD	HN	67.3	ES		14:21	44.92		-0.19
STRD	HN	67.3	IAML		14:21	45.31	316	0.12
STRD	HE	67.3	IAML		14:21	45.38	213	0.18
SWN1	HZ	92.7	IP	D	14:21	41.13		0.39
SWN1	HN	92.7	ES		14:21	52.24		0.32
SWN1	HN	92.7	IAML		14:21	53.07	245	0.24
SWN1	HE	92.7	IAML		14:21	53.17	129	0.38
HLM1	HZ	97.1	EP		14:21	41.22		-0.25
HLM1	HE	97.1	ES		14:21	52.85		-0.33
HLM1	HN	97.1	IAML		14:21	53.66	43	0.17
HLM1	HE	97.1	IAML		14:21	53.76	75	0.24
RSBS	HZ	117.0	EP		14:21	44.68		0.18
RSBS	HE	117.0	IAML		14:22	00.07	65	0.08
RSBS	HN	117.0	IAML		14:22	00.47	49	0.10
HTL	HZ	120.0	EP		14:21	45.16		0.14
HTL	HE	120.0	IAML		14:22	00.09	91	0.18
HTL	HN	120.0	IAML		14:22	00.31	90	0.18
FOEL	HZ	137.0	EP		14:21	47.81		0.28
FOEL	HN	137.0	ES		14:22	03.82		0.15
FOEL	HE	137.0	IAML		14:22	04.74	81	0.48
FOEL	HN	137.0	IAML		14:22	06.11	61	0.16
DYA	HZ	147.0	EP		14:21	48.56		-0.40
DYA	HN	147.0	IAML		14:22	06.54	83	0.12
DYA	HE	147.0	IAML		14:22	06.99	124	0.14
CWF	HZ	173.0	EP		14:21	51.54		-0.91

October 13 2018 Time: 03:05 14.9 UTC Magnitude: 0.8 ML
Lat: 57.659N Lon: -5.576W Depth: 7.7 km
Grid Ref: 186.70 kmE 868.83 kmN RMS: 0.40 secs
Locality: TALLADALE,HIGHLAND
Velocity model: Lownet Xnear: 100.0 Xfar: 200.0

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES
KPL	HZ	35.9	IP		D	03:05	21.37			0.08
KPL	HN	35.9	ES			03:05	25.61			-0.36
KPL	HN	35.9	IAML			03:05	25.96	5	0.08	
KPL	HE	35.9	IAML			03:05	26.10	15	0.25	
LINV	HZ	58.8	IP		D	03:05	25.02			0.19
LINV	HN	58.8	ES			03:05	31.86			-0.25
LINV	HE	58.8	IAML			03:05	32.27	5	0.14	
LINV	HN	58.8	IAML			03:05	32.52	3	0.14	
LEWI	HZ	93.8	IP		D	03:05	30.57			0.27
LEWI	HE	93.8	ES			03:05	41.48			-0.09
LEWI	HE	93.8	IAML			03:05	42.38	4	0.23	
LEWI	HN	93.8	IAML			03:05	43.23	3	0.15	
LAWE	HZ	156.0	EP			03:05	40.24			0.70
LAWE	HE	156.0	ES			03:05	56.99			-0.57
LAWE	HE	156.0	IAML			03:05	59.35	3	0.18	
LAWE	HN	156.0	IAML			03:06	00.12	4	0.16	
INVG	HZ	166.0	EP			03:05	42.11			1.17
INVG	HE	166.0	IAML			03:06	01.95	1	0.17	
INVG	HN	166.0	IAML			03:06	03.35	1	0.11	

October 13 2018 Time: 04:37 20.7 UTC Magnitude: 0.8 ML
Lat: 51.886N Lon: -3.292W Depth: 7.3 km
Grid Ref: 311.09 kmE 221.66 kmN RMS: 0.40 secs
Locality: TALYBONT-ON-USK,POWYS
Velocity model: Lownet Xnear: 100.0 Xfar: 200.0

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES
MCH1	HZ	23.7	IP		C	04:37	25.29			-0.02
MCH1	HN	23.7	ES			04:37	28.48			-0.16
MCH1	HE	23.7	IAML			04:37	28.61	22	0.10	
MCH1	HN	23.7	IAML			04:37	28.75	20	0.19	
HLM1	HZ	75.7	EP			04:37	33.20			-0.22
HLM1	HN	75.7	ES			04:37	42.50			-0.18
HLM1	HE	75.7	IAML			04:37	43.07	2	0.13	
HLM1	HN	75.7	IAML			04:37	43.35	2	0.13	
RSBS	HZ	100.0	EP			04:37	37.76			0.57
RSBS	HN	100.0	ES			04:37	48.63			-0.57
RSBS	HN	100.0	IAML			04:37	50.27	2	0.05	
RSBS	HE	100.0	IAML			04:37	52.65	4	0.09	
FOEL	HZ	112.0	EP			04:37	39.55			0.54
FOEL	HE	112.0	ES			04:37	52.55			0.19
FOEL	HN	112.0	IAML			04:37	52.84	4	0.28	
FOEL	HE	112.0	IAML			04:37	53.48	4	0.45	

October 14 2018 Time: 02:24 40.3 UTC Magnitude: 0.8 ML
Lat: 55.231N Lon: -3.519W Depth: 2.5 km
Grid Ref: 303.40 kmE 594.03 kmN RMS: 0.50 secs
Locality: JOHNSTONEBRIDGE,D & G
Velocity model: Lownet Xnear: 100.0 Xfar: 200.0

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES
ESK	HZ	22.1	IP		C	02:24	44.16			-0.39
ESK	HN	22.1	ES			02:24	46.66			-1.00
ESK	HE	22.1	IAML			02:24	46.84	22	0.09	
ESK	HN	22.1	IAML			02:24	47.46	14	0.24	
NEWG	HZ	47.0	EP			02:24	48.51			-0.24
NEWG	HE	47.0	ES			02:24	53.97			-0.95
NEWG	HE	47.0	IAML			02:24	54.77	3	0.06	
NEWG	HN	47.0	IAML			02:24	54.88	3	0.20	
KESW	HZ	76.2	EP			02:24	53.56			0.21
KESW	HE	76.2	ES			02:25	03.01			0.13
KESW	HE	76.2	IAML			02:25	04.24	2	0.14	
KESW	HN	76.2	IAML			02:25	04.74	1	0.14	
EDI	HZ	79.9	EP			02:24	54.15			0.26
EDI	HE	79.9	ES			02:25	03.85			0.04
EDI	HE	79.9	IAML			02:25	04.67	5	0.20	
EDI	HN	79.9	IAML			02:25	04.81	6	0.32	
GAL1	HZ	86.3	EP			02:24	54.97			0.09
GAL1	HE	86.3	ES			02:25	05.41			-0.12
GAL1	HN	86.3	IAML			02:25	06.56	5	0.37	
GAL1	HE	86.3	IAML			02:25	08.28	3	0.05	
PGB1	HZ	88.8	EP			02:24	56.26			0.97
PGB1	HE	88.8	ES			02:25	06.44			0.21
PGB1	HN	88.8	IAML			02:25	09.11	4	0.15	
PGB1	HE	88.8	IAML			02:25	09.23	7	0.24	
EDMD	HZ	109.0	EP			02:24	58.97			0.59
EDMD	HN	109.0	ES			02:25	11.82			0.24
EDMD	HE	109.0	IAML			02:25	13.35	15	0.19	
EDMD	HN	109.0	IAML			02:25	13.73	14	0.14	
IOMK	HN	127.0	ES			02:25	16.74			0.20
IOMK	HN	127.0	IAML			02:25	17.83	4	0.10	
IOMK	HE	127.0	IAML			02:25	19.32	3	0.36	

October 15 2018 Time: 09:49 19.8 UTC Magnitude: 0.9 ML
Lat: 51.984N Lon: -3.576W Depth: 7.9 km
Grid Ref: 291.78 kmE 232.95 kmN RMS: 0.10 secs
Locality: SENNYBRIDGE,POWYS
Velocity model: Lownet Xnear: 100.0 Xfar: 200.0

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES
MCH1	HZ	39.7	IP		C	09:49	26.85			0.05
MCH1	HN	39.7	ES			09:49	31.92			-0.02
MCH1	HE	39.7	IAML			09:49	32.05	29	0.11	
MCH1	HN	39.7	IAML			09:49	32.12	16	0.08	
HLM1	HZ	76.1	EP			09:49	32.40			-0.08
HLM1	HE	76.1	ES			09:49	41.58			-0.19
HLM1	HN	76.1	IAML			09:49	43.63	4	0.09	
HLM1	HE	76.1	IAML			09:49	43.69	5	0.40	
RSBS	HZ	80.4	IP		C	09:49	33.10			-0.01
RSBS	HE	80.4	ES			09:49	42.80			-0.06
RSBS	HE	80.4	IAML			09:49	45.99	8	0.07	
RSBS	HN	80.4	IAML			09:49	46.14	7	0.07	
LLW	BE	96.4	ES			09:49	47.09			-0.05
LLW	BN	96.4	IAML			09:49	47.77	2	0.04	
LLW	BE	96.4	IAML			09:49	49.55	2	0.12	
FOEL	HZ	104.0	EP			09:49	37.15			0.35
FOEL	HN	104.0	ES			09:49	49.30			0.06
FOEL	HN	104.0	IAML			09:49	50.49	4	0.25	
FOEL	HE	104.0	IAML			09:49	51.86	8	0.55	

October 18 2018 Time: 18:13 10.3 UTC Magnitude: 4.3 ML
Lat: 63.676N Lon: 2.424W Depth: 19.4 km
Grid Ref: 618.74 kmE 1540.88 kmN RMS: 0.40 secs
Locality: NORWEGIAN SEA
Velocity model: North Sea Xnear: 400.0 Xfar: 600.0
Comment: 430KM NNE LERWICK

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES
FOO	HZ	268.0	EP			18:13	47.48			0.32
FOO	HN	268.0	ES			18:14	14.66			0.57
FOO	HN	268.0	IAML			18:14	17.25	315	0.20	
FOO	HE	268.0	IAML			18:14	19.58	302	0.28	
MOL	HZ	286.0	EP			18:13	49.35			-0.14
MOL	HN	286.0	IAML			18:14	27.12	412	0.56	
MOL	HE	286.0	IAML			18:14	29.65	401	0.34	
BER	HZ	397.0	EP			18:14	02.96			-0.29
BER	HN	397.0	ES			18:14	41.35			-0.57
BER	HE	397.0	IAML			18:14	46.47	144	0.42	
BER	HN	397.0	IAML			18:14	47.15	114	0.42	
LRW	HZ	437.0	EP			18:14	08.44			0.19
LRW	HN	437.0	ES			18:14	50.56			-0.01
LRW	HN	437.0	IAML			18:14	52.30	238	0.38	
LRW	HE	437.0	IAML			18:14	54.02	386	0.26	
SOFL	HZ	510.0	EP			18:14	17.15			-0.08
SOFL	HN	510.0	IAML			18:15	10.83	724	0.42	
SOFL	HE	510.0	IAML			18:15	12.44	679	0.40	
LINV	HZ	741.0	EP			18:14	46.00			0.06
LINV	HE	741.0	IAML			18:15	59.00	105	0.36	
LINV	HN	741.0	IAML			18:16	00.56	68	0.32	
MCD	HZ	746.0	EP			18:14	45.52			-1.07
MCD	HN	746.0	ES			18:15	57.44			0.54
MCD	HN	746.0	IAML			18:16	03.22	60	0.24	
MCD	HE	746.0	IAML			18:16	05.43	64	0.22	
LEWI	HZ	795.0	EP			18:14	53.01			0.36
LEWI	HE	795.0	IAML			18:16	13.15	45	0.52	
LEWI	HN	795.0	IAML			18:16	14.30	52	0.70	
DRUM	HZ	800.0	EP			18:14	52.51			-0.83
DRUM	HN	800.0	IAML			18:16	12.10	131	0.14	
DRUM	HE	800.0	IAML			18:16	12.38	151	0.26	
KPL	HZ	832.0	EP			18:14	57.66			0.35

TABLE 2 : PHASE DATA

KPL	HN	832.0	IAML	18:16	18.88	44	0.70	
KPL	HE	832.0	IAML	18:16	28.45	45	0.42	
INVG	HZ	883.0	EP	18:15	02.69			-0.95
INVG	HN	883.0	IAML	18:16	31.86	14	0.66	
INVG	HE	883.0	IAML	18:16	32.05	16	0.34	
LAWE	HZ	933.0	EP	18:15	09.43			-0.38
LAWE	HE	933.0	IAML	18:16	40.73	34	0.20	
LAWE	HN	933.0	IAML	18:16	42.42	37	0.58	
PGB1	HZ	957.0	EP	18:15	11.84			-0.96
PGB1	HN	957.0	IAML	18:16	45.05	24	0.30	
PGB1	HE	957.0	IAML	18:16	47.48	27	0.44	
ESK	HZ	983.0	EP	18:15	15.10			-0.97
ESK	HE	983.0	IAML	18:16	52.58	28	0.42	
ESK	HN	983.0	IAML	18:16	53.52	28	0.46	
EDMD	HZ	1016.0	EP	18:15	18.20			-1.89
EDMD	HN	1016.0	IAML	18:16	59.16	23	0.48	
EDMD	HE	1016.0	IAML	18:17	13.69	24	0.40	
NEWG	HZ	1024.0	EP	18:15	19.66			-1.48
NEWG	HE	1024.0	IAML	18:16	59.37	20	0.38	
NEWG	HN	1024.0	IAML	18:17	00.53	17	0.34	
GAL1	HZ	1061.0	EP	18:15	23.70			-1.97
GAL1	HE	1061.0	IAML	18:17	07.30	15	0.44	
GAL1	HN	1061.0	IAML	18:17	08.07	14	0.58	
WLF1	HZ	1221.0	EP	18:15	43.65			-2.00

October 19 2018 Time: 23:43 44.9 UTC Magnitude: -0.4 ML
Lat: 51.178N Lon: -0.253W Depth: 2.3 km
Grid Ref: 522.10 kmE 143.59 kmN RMS: 0.00 secs
Locality: NEWDIGATE,SURREY
Velocity model: Surrey Xnear: 500.0 Xfar: 1000.0

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES
STAN	HZ	0.9	IP		D	23:43	45.77			-0.01
STAN	HE	0.9	ES			23:43	46.45			-0.01
STAN	HN	0.9	IAML			23:43	46.58	48	0.12	
STAN	HE	0.9	IAML			23:43	46.62	38	0.33	
BRDL	HZ	1.4	IP		C	23:43	45.83			0.00
BRDL	HE	1.4	ES			23:43	46.55			0.01
BRDL	HN	1.4	IAML			23:43	46.68	53	0.07	
BRDL	HE	1.4	IAML			23:43	46.70	86	0.13	
RUSH	HZ	3.5	IP			23:43	46.12			-0.02
RUSH	HE	3.5	ES			23:43	47.08			0.01
RUSH	HE	3.5	IAML			23:43	47.16	30	0.11	
RUSH	HN	3.5	IAML			23:43	47.59	26	0.28	
GATW	HN	4.3	ES			23:43	47.37			0.01
GATW	HE	4.3	IAML			23:43	47.49	24	0.17	
GATW	HN	4.3	IAML			23:43	47.56	22	0.28	

October 20 2018 Time: 03:44 55.1 UTC Magnitude: 1.2 ML
Lat: 51.027N Lon: -2.897W Depth: 2.8 km
Grid Ref: 337.10 kmE 125.74 kmN RMS: 0.20 secs
Locality: CURRY RIVEL,SOMERSET
Velocity model: Lownet Xnear: 100.0 Xfar: 200.0

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES
MONM	HZ	90.6	EP			03:45	10.70			0.18
MONM	HN	90.6	ES			03:45	21.71			-0.10
MONM	HN	90.6	IAML			03:45	22.99	7	0.16	
MONM	HE	90.6	IAML			03:45	23.09	7	0.15	
SWN1	HZ	93.7	EP			03:45	10.98			-0.03
SWN1	HN	93.7	ES			03:45	22.77			0.11
STRD	HZ	97.7	EP			03:45	11.39			-0.25
DYA	HZ	98.3	EP			03:45	11.68			-0.06
DYA	HN	98.3	ES			03:45	23.96			0.04
DYA	HN	98.3	IAML			03:45	24.80	6	0.33	
DYA	HE	98.3	IAML			03:45	25.70	6	0.09	
MCH1	HZ	108.0	EP			03:45	13.56			0.29
MCH1	HE	108.0	ES			03:45	26.50			-0.06
MCH1	HE	108.0	IAML			03:45	26.86	10	0.30	
MCH1	HN	108.0	IAML			03:45	27.13	8	0.24	
HTL	HE	112.0	ES			03:45	27.51			0.11
HTL	HE	112.0	IAML			03:45	29.74	6	0.15	
HTL	HN	112.0	IAML			03:45	30.23	7	0.20	
SBD	BZ	136.0	EP			03:45	17.64			0.07
SBD	BN	136.0	ES			03:45	33.80			-0.20
RSBS	HZ	165.0	EP			03:45	20.77			-0.87
RSBS	HE	165.0	IAML			03:45	42.53	2	0.16	
RSBS	HN	165.0	IAML			03:45	42.53	2	0.13	
HLM1	HZ	166.0	EP			03:45	21.81			-0.06
HLM1	HN	166.0	ES			03:45	41.43			-0.01
HLM1	HE	166.0	IAML			03:45	43.03	5	0.46	
HLM1	HN	166.0	IAML			03:45	43.57	3	0.14	

October 21 2018 Time: 14:45 52.7 UTC Magnitude: 1.0 ML
Lat: 57.196N Lon: -5.252W Depth: 6.2 km
Grid Ref: 203.55 kmE 816.36 kmN RMS: 0.30 secs
Locality: GLEN MORISTON,HIGHLAND
Velocity model: Lownet Xnear: 500.0 Xfar: 1000.0

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES
KPL	HZ	28.9	EP			14:45	58.18			0.05
KPL	HN	28.9	ES			14:46	01.80			-0.29
KPL	HN	28.9	IAML			14:46	02.02	14	0.29	
KPL	HE	28.9	IAML			14:46	02.24	11	0.29	
LAWE	HZ	105.0	EP			14:46	09.76			-0.12
LAWE	HE	105.0	ES			14:46	22.62			0.20
LAWE	HE	105.0	IAML			14:46	25.07	7	0.19	
LAWE	HN	105.0	IAML			14:46	25.59	9	0.19	
LINV	HZ	106.0	EP			14:46	10.20			0.12
LINV	HE	106.0	ES			14:46	22.82			0.05
LINV	HE	106.0	IAML			14:46	25.45	5	0.14	
LINV	HN	106.0	IAML			14:46	25.79	3	0.16	
INVG	HZ	113.0	EP			14:46	11.32			0.11
INVG	HN	113.0	ES			14:46	24.41			-0.31
INVG	HE	113.0	IAML			14:46	27.42	2	0.09	
INVG	HN	113.0	IAML			14:46	27.85	3	0.16	
MCD	HZ	128.0	EP			14:46	14.08			0.61
MCD	HE	128.0	ES			14:46	28.20			-0.42
MCD	HE	128.0	IAML			14:46	30.03	5	0.16	
MCD	HN	128.0	IAML			14:46	30.23	8	0.26	

October 23 2018 Time: 09:44 57.0 UTC Magnitude: 0.9 ML
Lat: 51.971N Lon: -2.432W Depth: 8.8 km
Grid Ref: 370.33 kmE 230.42 kmN RMS: 0.10 secs
Locality: DYMOCK,GLOUCESTERSHIRE
Velocity model: Lownet Xnear: 100.0 Xfar: 200.0

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES
STRD	HZ	28.6	EP			09:45	02.25			-0.10
STRD	HE	28.6	ES			09:45	06.27			0.03
STRD	HN	28.6	IAML			09:45	06.54	67	0.14	
STRD	HE	28.6	IAML			09:45	06.59	49	0.10	
MONM	HZ	29.5	EP			09:45	02.49			0.00
MONM	HE	29.5	ES			09:45	06.56			0.09
MONM	HN	29.5	IAML			09:45	06.69	12	0.18	
MONM	HE	29.5	IAML			09:45	06.82	27	0.12	
MCH1	HN	39.0	ES			09:45	08.93			-0.11
MCH1	HN	39.0	IAML			09:45	09.14	17	0.19	
MCH1	HE	39.0	IAML			09:45	09.17	4	0.11	
HLM1	HZ	68.1	EP			09:45	08.66			0.13
HLM1	HE	68.1	ES			09:45	16.87			-0.04
HLM1	HE	68.1	IAML			09:45	17.02	3	0.12	
HLM1	HN	68.1	IAML			09:45	17.05	5	0.11	

October 24 2018 Time: 20:18 05.6 UTC Magnitude: 1.3 ML
Lat: 52.942N Lon: -3.911W Depth: 9.0 km
Grid Ref: 271.60 kmE 340.03 kmN RMS: 0.20 secs
Locality: FFESTINIOG,GWYNEDD
Velocity model: Lleyn Xnear: 80.0 Xfar: 200.0
Comment: FELT FFESTINIOG... Intensity: 3

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES
LLW	BZ	19.5	EP			20:18	09.27			0.04
LLW	BE	19.5	ES			20:18	11.79			0.08
LLW	BN	19.5	IAML			20:18	12.17	32	0.15	
LLW	BE	19.5	IAML			20:18	12.21	53	0.35	
YLL	EZ	28.1	IP		D	20:18	10.70			0.14
FOEL	HZ	48.2	IP		D	20:18	13.66			-0.18
FOEL	HN	48.2	ES			20:18	19.47			0.01
FOEL	HN	48.2	IAML			20:18	20.10	15	0.12	
FOEL	HE	48.2	IAML			20:18	20.57	22	0.16	
WLF1	HZ	50.5	EP			20:18	14.08			-0.11
WLF1	HN	50.5	ES			20:18	20.20			0.16
WLF1	HN	50.5	IAML			20:18	20.36	40	0.22	
WLF1	HE	50.5	IAML			20:18	20.46	50	0.16	
WME	EZ	57.0	EP			20:18	15.15			-0.10
WPS	HZ	64.4	EP			20:18	16.30			-0.16
WPS	HE	64.4	ES			20:18	24.01			0.15
WPS	HE	64.4	IAML			20:18	24.59	11	0.15	
WPS	HN	64.4	IAML			20:18	26.00	8	0.21	
HLM1	HZ	84.1	IP		D	20:18	19.53			-0.14
HLM1	HN	84.1	ES			20:18	29.41			0.15
HLM1	HE	84.1	IAML			20:18	29.78	6	0.13	
HLM1	HN	84.1	IAML			20:18	29.78	6	0.12	
MCH1	HZ	122.0	EP			20:18	25.34			-0.16
MCH1	HE	122.0	ES			20:18	39.39			0.35
MCH1	HN	122.0	IAML			20:18	41.81	6	0.13	
MCH1	HE	122.0	IAML			20:18	41.89	8	0.16	
RSBS	HZ	124.0	EP			20:18	25.14			-0.64
RSBS	HE	124.0	ES			20:18	39.76			0.25
RSBS	HN	124.0	IAML			20:18	42.18	8	0.17	
RSBS	HE	124.0	IAML			20:18	42.45	8	0.09	
MONM	HZ	144.0	EP			20:18	28.92			0.05
MONM	HE	144.0	IAML			20:18	46.01	7	0.36	
MONM	HN	144.0	IAML			20:18	47.77	8	0.11	
STRD	HZ	176.0	EP			20:18	33.95			0.88
STRD	HE	176.0	IAML			20:18	55.34	9	0.16	
STRD	HN	176.0	IAML			20:18	56.05	9	0.22	

October 29 2018 Time: 21:08 52.2 UTC Magnitude: 2.0 ML
Lat: 57.667N Lon: -6.246W Depth: 12.0 km
Grid Ref: 146.82 kmE 872.03 kmN RMS: 0.30 secs
Locality: SKYE,HIGHLAND
Velocity model: Lownet Xnear: 500.0 Xfar: 1000.0
Comment: FELT SKYE Intensity: 2

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES
KPL	HZ	51.0	IP		C	21:09	01.22			0.20
KPL	HE	51.0	ES			21:09	07.06			-0.38
KPL	HE	51.0	IAML			21:09	08.31	54	0.14	
KPL	HN	51.0	IAML			21:09	11.04	55	0.22	
LEWI	HZ	64.7	IP		C	21:09	03.30			0.11
LEWI	HE	64.7	ES			21:09	10.91			-0.28
LEWI	HN	64.7	IAML			21:09	11.08	126	0.12	

TABLE 2 : PHASE DATA

LEWI	HE	64.7	IAML	21:09	11.19	216	0.11	
LINV	HZ	82.0	EP	21:09	06.27			0.46
LINV	HN	82.0	ES	21:09	15.71			-0.02
LINV	HE	82.0	IAML	21:09	17.17	52	0.08	
LINV	HN	82.0	IAML	21:09	19.01	42	0.15	
LAWE	HZ	165.0	EP	21:09	17.91			0.13
LAWE	HN	165.0	IAML	21:09	39.63	46	0.15	
LAWE	HE	165.0	IAML	21:09	39.64	36	0.37	
MCD	HZ	179.0	EP	21:09	18.92			-0.65
INVG	HZ	192.0	EP	21:09	21.65			0.44
INVG	HE	192.0	IAML	21:09	46.82	14	0.42	
INVG	HN	192.0	IAML	21:09	48.13	8	0.19	
DRUM	HZ	242.0	EP	21:09	27.40			0.01
ESK	HZ	322.0	EP	21:09	37.56			0.15
GAL1	HZ	326.0	EP	21:09	37.75			-0.16

November 2 2018 Time: 00:08 56.3 UTC Magnitude: 1.1 ML
Lat: 52.531N Lon: -2.343W Depth: 10.7 km
Grid Ref: 376.73 kmE 292.67 kmN RMS: 0.50 secs
Locality: BRIDGNORTH,SHROPSHIRE
Velocity model: Lownet Xnear: 100.0 Xfar: 200.0

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES
HLM1	HZ	36.5	IP		C	00:09	03.15			0.22
HLM1	HN	36.5	ES			00:09	07.79			0.03
HLM1	HN	36.5	IAML			00:09	08.11	20	0.10	
HLM1	HE	36.5	IAML			00:09	08.17	28	0.16	
STNC	HE	63.0	ES			00:09	13.83			-0.95
STNC	HE	63.0	IAML			00:09	14.13	13	0.09	
STNC	HN	63.0	IAML			00:09	15.60	13	0.11	
FOEL	HZ	70.3	EP			00:09	08.77			0.61
FOEL	HN	70.3	ES			00:09	16.61			-0.19
CWF	HZ	73.8	IP		D	00:09	08.97			0.32
CWF	HN	73.8	ES			00:09	17.38			-0.27
CWF	HE	73.8	IAML			00:09	18.58	2	0.06	
CWF	HN	73.8	IAML			00:09	20.35	3	0.09	
MCH1	HZ	74.3	IP		D	00:09	08.78			0.04
MCH1	HE	74.3	ES			00:09	17.40			-0.41
MCH1	HN	74.3	IAML			00:09	17.71	14	0.11	
MCH1	HE	74.3	IAML			00:09	17.88	12	0.28	
LBWR	HE	105.0	ES			00:09	26.88			0.71
LBWR	HE	105.0	IAML			00:09	28.89	6	0.19	
LBWR	HN	105.0	IAML			00:09	29.15	7	0.28	
WLF1	HE	162.0	ES			00:09	39.76			-0.28
WLF1	HE	162.0	IAML			00:09	40.82	3	0.21	
WLF1	HN	162.0	IAML			00:09	41.28	5	0.31	
RSBS	HZ	176.0	EP			00:09	23.28			-0.15

November 3 2018 Time: 06:09 33.6 UTC Magnitude: 1.4 ML
Lat: 55.837N Lon: -6.388W Depth: 6.0 km
Grid Ref: 125.31 kmE 669.13 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	77.5	EP			06:09	46.53			-0.09
LAWE	HN	77.5	ES			06:09	56.15			0.04
LAWE	HE	77.5	IAML			06:09	59.59	43	0.12	
LAWE	HN	77.5	IAML			06:10	00.54	27	0.20	
CLGH	HZ	85.8	EP			06:09	47.93			0.00
PGB1	HZ	119.0	EP			06:09	53.29			0.17
PGB1	HN	119.0	ES			06:10	07.29			-0.06
PGB1	HN	119.0	IAML			06:10	07.86	14	0.24	
PGB1	HE	119.0	IAML			06:10	08.27	17	0.40	
NEWG	HZ	158.0	EP			06:09	58.62			-0.13
INVG	HZ	160.0	EP			06:09	58.95			-0.06
INVG	HN	160.0	IAML			06:10	20.44	5	0.29	
INVG	HE	160.0	IAML			06:10	21.67	4	0.16	
KPL	HZ	173.0	EP			06:10	00.96			0.18

November 9 2018 Time: 01:37 13.2 UTC Magnitude: 0.9 ML
Lat: 57.730N Lon: -5.193W Depth: 2.7 km
Grid Ref: 209.91 kmE 875.59 kmN RMS: 0.20 secs
Locality: LOCHBROOM,HIGHLAND
Velocity model: Lownet Xnear: 100.0 Xfar: 200.0
Comment: 11KM SW LOCHBROOM

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES
LINV	HZ	46.5	IP		D	01:37	21.62			0.07
LINV	HE	46.5	ES			01:37	27.43			-0.22
LINV	HE	46.5	IAML			01:37	27.55	28	0.12	
LINV	HN	46.5	IAML			01:37	27.57	10	0.09	
KPL	HZ	51.4	EP			01:37	22.55			0.20
KPL	HN	51.4	ES			01:37	28.68			-0.35
KPL	HN	51.4	IAML			01:37	29.07	7	0.10	
KPL	HE	51.4	IAML			01:37	29.08	13	0.11	
LEWI	HZ	109.0	IP		C	01:37	31.53			0.13
LEWI	HN	109.0	ES			01:37	44.79			0.10
LEWI	HE	109.0	IAML			01:37	45.43	2	0.10	
LEWI	HN	109.0	IAML			01:37	45.92	2	0.08	
INVG	HZ	161.0	EP			01:37	39.35			0.32
INVG	HE	161.0	ES			01:37	57.65			-0.23
INVG	HE	161.0	IAML			01:37	59.06	1	0.12	
INVG	HN	161.0	IAML			01:37	59.29	1	0.20	
LAWE	HZ	164.0	EP			01:37	39.91			0.45
LAWE	HE	164.0	ES			01:37	58.97			0.34
LAWE	HE	164.0	IAML			01:38	00.32	6	0.13	
LAWE	HN	164.0	IAML			01:38	00.82	3	0.16	

November 9 2018 Time: 22:05 24.7 UTC Magnitude: 1.5 ML
Lat: 53.114N Lon: -3.129W Depth: 9.0 km
Grid Ref: 324.44 kmE 358.05 kmN RMS: 0.10 secs
Locality: TREUDDYN,FLINTSHIRE
Velocity model: Lownet Xnear: 100.0 Xfar: 200.0

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES
FOEL	HZ	25.5	EP			22:05	29.66			0.07
FOEL	HN	25.5	ES			22:05	33.08			-0.07
FOEL	HN	25.5	IAML			22:05	33.87	110	0.28	
FOEL	HE	25.5	IAML			22:05	34.06	108	0.38	
HLM1	HZ	68.4	EP			22:05	36.27			0.04
HLM1	HN	68.4	ES			22:05	44.61			-0.03
HLM1	HE	68.4	IAML			22:05	44.96	46	0.28	
HLM1	HN	68.4	IAML			22:05	45.17	27	0.20	
WLF1	HZ	86.9	EP			22:05	38.83			-0.20
WLF1	HE	86.9	IAML			22:05	50.29	18	0.15	
WLF1	HN	86.9	IAML			22:05	52.01	27	0.11	
WPS	HZ	96.8	EP			22:05	40.66			0.11
WPS	HN	96.8	IAML			22:05	53.76	11	0.18	
WPS	HE	96.8	IAML			22:05	54.18	10	0.19	
MCH1	HZ	125.0	EP			22:05	45.11			0.31
MCH1	HN	125.0	ES			22:05	59.39			-0.08
MCH1	HE	125.0	IAML			22:06	02.68	12	0.20	
MCH1	HN	125.0	IAML			22:06	02.85	13	0.10	
CWF	HZ	129.0	EP			22:05	45.57			0.09
CWF	HE	129.0	ES			22:06	00.46			-0.19
CWF	HN	129.0	IAML			22:06	02.22	11	0.16	
CWF	HE	129.0	IAML			22:06	02.69	6	0.15	

November 12 2018 Time: 18:58 06.8 UTC Magnitude: 1.4 ML
Lat: 56.475N Lon: -3.907W Depth: 2.5 km
Grid Ref: 282.55 kmE 733.05 kmN RMS: 0.30 secs
Locality: CRIEFF,PERTH & KINROSS
Velocity model: Lownet Xnear: 100.0 Xfar: 200.0

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES
INVG	HZ	10.0	IP		C	18:58	09.06			0.01
INVG	HE	10.0	ES			18:58	10.51			-0.15
INVG	HN	10.0	IAML			18:58	10.76	126	0.08	
INVG	HE	10.0	IAML			18:58	10.77	80	0.07	
EDI	HZ	75.9	EP			18:58	19.73			-0.09
EDI	HN	75.9	ES			18:58	29.14			-0.16
EDI	HN	75.9	IAML			18:58	29.47	16	0.26	
EDI	HE	75.9	IAML			18:58	29.52	9	0.20	
PGB1	HE	82.1	ES			18:58	30.94			-0.04
PGB1	HE	82.1	IAML			18:58	36.89	9	0.24	
PGB1	HN	82.1	IAML			18:58	37.00	14	0.37	
LAWE	HZ	95.3	EP			18:58	22.74			-0.09
LAWE	HE	95.3	ES			18:58	34.48			-0.02
LAWE	HE	95.3	IAML			18:58	37.82	22	0.19	
LAWE	HN	95.3	IAML			18:58	37.92	25	0.27	
DRUM	HZ	99.8	EP			18:58	23.30			-0.24
DRUM	HN	99.8	IAML			18:58	39.23	28	0.14	
DRUM	HE	99.8	IAML			18:58	39.33	20	0.10	
ESK	HZ	136.0	EP			18:58	30.01			0.85
ESK	HE	136.0	ES			18:58	46.00			0.55
ESK	HE	136.0	IAML			18:58	47.25	7	0.18	
ESK	HN	136.0	IAML			18:58	47.36	7	0.17	
KPL	HZ	143.0	IP		C	18:58	30.73			0.59
KPL	HE	143.0	ES			18:58	47.27			0.12
KPL	HE	143.0	IAML			18:58	48.97	13	0.18	
KPL	HN	143.0	IAML			18:58	48.97	13	0.14	
LINV	HZ	202.0	EP			18:58	39.98			2.00

November 12 2018 Time: 23:05 59.4 UTC Magnitude: 2.3 ML
Lat: 52.229N Lon: -2.717W Depth: 14.6 km
Grid Ref: 351.03 kmE 259.26 kmN RMS: 0.20 secs
Locality: LEOMINSTER,HEREF
Velocity model: Lownet Xnear: 500.0 Xfar: 1000.0
Comment: FELT CHURCH STRETTON Intensity: 2

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES
MCH1	HZ	32.2	IP		C	23:06	05.47			0.01
MCH1	HN	32.2	ES			23:06	09.83			-0.05
MCH1	HN	32.2	IAML			23:06	10.13	1018	0.12	
MCH1	HE	32.2	IAML			23:06	10.22	1024	0.15	
HLM1	HZ	34.1	EP			23:06	05.85			0.06
HLM1	HE	34.1	ES			23:06	10.61			0.16
HLM1	HE	34.1	IAML			23:06	10.78	262	0.10	
HLM1	HN	34.1	IAML			23:06	10.95	313	0.16	
MONM	HZ	43.8	IP		C	23:06	07.23			0.04
MONM	HE	43.8	ES			23:06	13.00			0.14
MONM	HE	43.8	IAML			23:06	13.25	209	0.13	
MONM	HN	43.8	IAML			23:06	13.27	448	0.22	
STRD	HZ	63.2	EP			23:06	09.91			-0.25
STRD	HN	63.2	ES			23:06	18.08			0.07
STRD	HN	63.2	IAML			23:06	18.38	109	0.08	
STRD	HE	63.2	IAML			23:06	19.12	99	0.13	
OLDB	HZ	64.3	EP			23:06	10.23			-0.06
OLDB	HE	64.3	ES			23:06	18.00			-0.23
OLDB	HE	64.3	IAML			23:06	18.89	522	0.42	
OLDB	HN	64.3	IAML			23:06	18.95	248	0.34	
FOEL	HZ	80.5	IP		D	23:06	12.89			0.02
FOEL	HE	80.5	ES			23:06	22.63			-0.07

TABLE 2 : PHASE DATA

FOEL	HE	80.5	IAML		23:06	23.76	79	0.27	
FOEL	HN	80.5	IAML		23:06	24.09	88	0.39	
STNC	HZ	102.0	EP		23:06	15.87			-0.08
STNC	HN	102.0	ES		23:06	28.23			0.20
STNC	HE	102.0	IAML		23:06	29.34	150	0.29	
STNC	HN	102.0	IAML		23:06	29.98	144	0.29	
SWN1	HZ	102.0	EP		23:06	16.50			0.61
CWF	HZ	111.0	EP		23:06	17.00			-0.27
CWF	HN	111.0	ES		23:06	29.98			-0.32
CWF	HE	111.0	IAML		23:06	30.63	43	0.18	
CWF	HN	111.0	IAML		23:06	32.07	52	0.17	
RSBS	HZ	142.0	EP		23:06	21.55			-0.17
LBWR	HZ	147.0	EP		23:06	22.47			0.12
WPS	HZ	177.0	EP		23:06	26.34			0.09
WPS	HE	177.0	IAML		23:06	48.67	18	0.26	
WPS	HN	177.0	IAML		23:06	48.78	18	0.32	
WACR	HZ	234.0	EP		23:06	33.56			0.23
IOMK	HZ	258.0	EP		23:06	36.08			-0.24

November 15 2018 Time: 05:43 28.8 UTC Magnitude: 1.1 ML
Lat: 52.644N Lon: -2.438W Depth: 7.5 km
Grid Ref: 370.37 kmE 305.27 kmN RMS: 0.20 secs
Locality: TELFORD,SHROPSHIRE
Velocity model: Lownet Xnear: 100.0 Xfar: 200.0

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES
HLM1	HZ	33.1	EP			05:43	34.88			0.00
HLM1	HN	33.1	ES			05:43	39.11			-0.19
HLM1	HN	33.1	IAML			05:43	39.54	21	0.20	
HLM1	HE	33.1	IAML			05:43	39.62	15	0.12	
STNC	HZ	52.2	EP			05:43	37.96			0.16
STNC	HN	52.2	ES			05:43	44.45			0.09
STNC	HN	52.2	IAML			05:43	44.62	21	0.19	
STNC	HE	52.2	IAML			05:43	44.64	27	0.09	
FOEL	HZ	58.3	IP		D	05:43	38.94			0.15
FOEL	HE	58.3	ES			05:43	45.70			-0.36
FOEL	HE	58.3	IAML			05:43	45.88	5	0.26	
FOEL	HN	58.3	IAML			05:43	49.26	9	0.55	
CWF	HZ	77.1	EP			05:43	41.66			0.00
CWF	HN	77.1	ES			05:43	50.62			-0.41
CWF	HN	77.1	IAML			05:43	50.95	4	0.11	
CWF	HE	77.1	IAML			05:43	53.74	3	0.25	
MCH1	HZ	81.4	EP			05:43	42.52			0.19
MCH1	HN	81.4	ES			05:43	52.37			0.18
MCH1	HE	81.4	IAML			05:43	52.75	6	0.14	
MCH1	HN	81.4	IAML			05:43	52.93	8	0.09	
LBWR	HE	97.0	ES			05:43	56.55			0.14
LBWR	HE	97.0	IAML			05:43	56.97	7	0.13	
LBWR	HN	97.0	IAML			05:44	00.42	9	0.34	
HPK	HE	156.0	ES			05:44	11.81			0.29
HPK	HE	156.0	IAML			05:44	13.62	15	0.31	
HPK	HN	156.0	IAML			05:44	14.01	13	0.39	

November 15 2018 Time: 16:46 14.4 UTC Magnitude: 0.8 ML
Lat: 56.417N Lon: -5.611W Depth: 2.0 km
Grid Ref: 177.30 kmE 730.81 kmN RMS: 0.40 secs
Locality: MULL,ARGYLL & BUTE
Velocity model: Lownet Xnear: 100.0 Xfar: 200.0

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES
LAWE	HZ	21.9	IP		C	16:46	18.61			-0.07
LAWE	HE	21.9	ES			16:46	21.40			-0.41
LAWE	HE	21.9	IAML			16:46	21.65	61	0.10	
LAWE	HN	21.9	IAML			16:46	21.79	45	0.20	
INVG	HZ	96.7	EP			16:46	31.19			0.47
INVG	HE	96.7	ES			16:46	42.69			0.04
INVG	HE	96.7	IAML			16:46	44.24	2	0.04	
INVG	HN	96.7	IAML			16:46	45.35	2	0.06	
KPL	HZ	103.0	EP			16:46	31.28			-0.30
CLGH	HE	152.0	ES			16:46	58.02			1.00
NEWG	HN	169.0	ES			16:47	01.35			0.19

November 19 2018 Time: 05:23 44.1 UTC Magnitude: 1.7 ML
Lat: 54.562N Lon: -1.892W Depth: 11.9 km
Grid Ref: 406.98 kmE 518.55 kmN RMS: 0.40 secs
Locality: BARNARD CASTLE,DURHAM
Velocity model: Lownet Xnear: 80.0 Xfar: 160.0

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES
AS10	HZ	4.0	IP		D	05:23	46.62			0.23
AS10	HE	4.0	ES			05:23	48.73			0.65
AS10	HN	4.0	IAML			05:23	48.88	165	0.10	
AS10	HE	4.0	IAML			05:23	48.93	267	0.18	
AT12	HZ	28.7	EP			05:23	49.18			-0.30
AT12	HE	28.7	ES			05:23	53.02			-0.40
AT12	HE	28.7	IAML			05:23	53.22	141	0.24	
AT12	HN	28.7	IAML			05:23	53.45	124	0.23	
EDMD	HZ	30.3	IP		D	05:23	49.57			-0.13
EDMD	HE	30.3	ES			05:23	53.36			-0.44
EDMD	HE	30.3	IAML			05:23	53.60	119	0.10	
EDMD	HN	30.3	IAML			05:23	53.66	176	0.12	
AS07	HZ	34.5	IP		D	05:23	50.15			-0.27
AS07	HE	34.5	ES			05:23	54.37			-0.67
AS07	HE	34.5	IAML			05:23	54.58	61	0.10	
AS07	HN	34.5	IAML			05:23	54.66	59	0.14	
AT10	HZ	51.1	EP			05:23	52.88			-0.06
AT10	HE	51.1	IAML			05:24	00.13	27	0.24	
AT10	HN	51.1	IAML			05:24	00.70	31	0.30	
AQ12	HZ	57.4	IP		D	05:23	53.46			-0.48
AT08	HZ	63.9	EP			05:23	54.88			0.01
AT08	HN	63.9	IAML			05:24	05.42	31	0.18	
AT08	HE	63.9	IAML			05:24	05.55	41	0.14	
AR05	HZ	64.1	EP			05:23	54.89			-0.05
AR05	HN	64.1	ES			05:24	02.57			-0.30
AR05	HN	64.1	IAML			05:24	02.87	78	0.26	
AR05	HE	64.1	IAML			05:24	02.95	50	0.13	
GDLE	HZ	71.4	EP			05:23	56.37			0.30
GDLE	HN	71.4	IAML			05:24	06.94	74	0.26	
GDLE	HE	71.4	IAML			05:24	07.43	44	0.14	
AU20	HZ	77.8	EP			05:23	57.63			0.60
KESW	HZ	78.5	EP			05:23	57.30			0.13
KESW	HN	78.5	ES			05:24	06.84			0.12
KESW	HE	78.5	IAML			05:24	07.17	10	0.30	
KESW	HN	78.5	IAML			05:24	07.24	14	0.42	
AQ07	HE	94.7	ES			05:24	11.06			0.05
AQ07	HE	94.7	IAML			05:24	11.88	113	0.18	
AQ07	HN	94.7	IAML			05:24	13.46	102	0.28	
AQ09	HZ	100.0	EP			05:24	01.04			0.56
AQ03	HZ	110.0	EP			05:24	02.40			0.45
AQ03	HE	110.0	IAML			05:24	16.42	55	0.25	
AQ03	HN	110.0	IAML			05:24	16.85	74	0.24	
AQ04	HE	112.0	ES			05:24	16.40			0.97
AQ04	HE	112.0	IAML			05:24	17.31	52	0.26	
AQ04	HN	112.0	IAML			05:24	17.72	32	0.22	
AS02	HZ	112.0	EP			05:24	02.48			0.21
AS02	HN	112.0	ES			05:24	15.48			-0.06
AS02	HN	112.0	IAML			05:24	16.11	18	0.21	
AS02	HE	112.0	IAML			05:24	16.22	38	0.46	
ESK	HZ	119.0	EP			05:24	03.71			0.51

November 20 2018 Time: 22:44 58.5 UTC Magnitude: 0.9 ML
Lat: 56.151N Lon: -4.987W Depth: 2.5 km
Grid Ref: 214.48 kmE 699.38 kmN RMS: 0.50 secs
Locality: STRACHUR,ARGYLL & BUTE
Velocity model: Lownet Xnear: 100.0 Xfar: 200.0

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES
LAWE	HZ	28.3	IP		C	22:45	03.77			-0.03
LAWE	HE	28.3	ES			22:45	07.19			-0.47
LAWE	HN	28.3	IAML			22:45	08.74	9	0.25	
LAWE	HE	28.3	IAML			22:45	09.33	8	0.12	
PGB1	HZ	49.1	EP			22:45	07.49			0.15
PGB1	HE	49.1	ES			22:45	13.29			-0.50
EDI	HZ	115.0	EP			22:45	17.68			0.13
NEWG	HN	125.0	EP			22:45	19.92			0.89
NEWG	HE	125.0	ES			22:45	33.45			-0.57
NEWG	HE	125.0	IAML			22:45	35.53	3	0.09	
NEWG	HZ	125.0	IAML			22:45	36.45	2	0.25	
KPL	HN	138.0	ES			22:45	38.05			0.47
KPL	HN	138.0	IAML			22:45	38.73	2	0.18	
KPL	HE	138.0	IAML			22:45	39.85	3	0.14	
CLGH	HE	138.0	ES			22:45	38.38			0.74
CLGH	HN	138.0	IAML			22:45	39.65	7	0.13	
CLGH	HE	138.0	IAML			22:45	40.56	6	0.36	
GAL1	HZ	144.0	EP			22:45	22.40			0.49
GAL1	HE	144.0	ES			22:45	38.85			-0.15
GAL1	HE	144.0	IAML			22:45	40.55	2	0.09	
GAL1	HN	144.0	IAML			22:45	42.15	3	0.24	
ESK	HN	145.0	ES			22:45	39.43			0.03
ESK	HZ	145.0	IAML			22:45	40.88	2	0.31	
ESK	HE	145.0	IAML			22:45	42.34	2	0.29	

November 21 2018 Time: 20:36 47.2 UTC Magnitude: 0.5 ML
Lat: 55.747N Lon: -5.472W Depth: 7.7 km
Grid Ref: 182.12 kmE 655.86 kmN RMS: 0.30 secs
Locality: CLACHAN,ARGYLL & BUTE
Velocity model: Lownet Xnear: 100.0 Xfar: 200.0

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES
LAWE	HZ	57.3	EP			20:36	57.21			0.24
LAWE	HE	57.3	ES			20:37	03.65			-0.44
LAWE	HN	57.3	ES			20:37	03.66			
LAWE	HN	57.3	IAML			20:37	04.36	2	0.15	
LAWE	HE	57.3	IAML			20:37	04.52	2	0.23	
PGB1	HZ	62.4	EP			20:36	58.24			0.48
PGB1	HE	62.4	ES			20:37	05.43			-0.04
CLGH	HE	84.2	ES			20:37	11.34			0.00
NEWG	HZ	105.0	EP			20:37	04.63			0.23
NEWG	HE	105.0	ES			20:37	16.59			-0.36
NEWG	HN	105.0	IAML			20:37	17.05	2	0.24	
NEWG	HE	105.0	IAML			20:37	17.86	2	0.20	
GAL1	HN	109.0	ES			20:37	17.85			-0.15

November 22 2018 Time: 02:03 02.7 UTC Magnitude: 0.9 ML
Lat: 53.209N Lon: -0.444W Depth: 9.4 km
Grid Ref: 503.91 kmE 369.15 kmN RMS: 0.30 secs
Locality: HEIGHINGTON,LINCS
Velocity model: Lownet Xnear: 500.0 Xfar: 1000.0

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES
LMK	HZ	28.7	EP			02:03	08.68			0.60
LMK	HN	28.7	ES			02:03	12.27			0.30
CWF	HZ	78.1	EP			02:03	15.80			0.07
CWF	HE	78.1	ES			02:03	25.57			0.35

TABLE 2 : PHASE DATA

CWF	HE	78.1	IAML		02:03	26.04	4	0.16
CWF	HN	78.1	IAML		02:03	26.77	4	0.15
LBWR	HN	88.0	ES		02:03	27.86		-0.07
LBWR	HN	88.0	IAML		02:03	28.48	7	0.20
LBWR	HE	88.0	IAML		02:03	29.12	8	0.20
WACR	HZ	90.0	EP		02:03	17.41		-0.13
WACR	HE	90.0	ES		02:03	28.01		-0.34
WACR	HE	90.0	IAML		02:03	29.75	6	0.19
WACR	HN	90.0	IAML		02:03	29.89	8	0.24
HPK	HE	114.0	ES		02:03	34.37		-0.56
HPK	HN	114.0	IAML		02:03	35.65	6	0.14
HPK	HE	114.0	IAML		02:03	35.90	6	0.19
GDLE	HE	137.0	ES		02:03	40.36		-0.23

November 22 2018 Time: 08:43 46.2 UTC Magnitude: 0.8 ML
Lat: 54.771N Lon: -2.607W Depth: 10.8 km
Grid Ref: 360.95 kmE 541.97 kmN RMS: 0.20 secs
Locality: RENWICK,CUMBRIA
Velocity model: Borders Xnear: 100.0 Xfar: 200.0

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES
KESW	HZ	38.0	EP			08:43	53.29			0.10
KESW	HE	38.0	ES			08:43	58.17			0.04
AQ12	HN	38.4	EP			08:43	53.39			0.12
AQ12	HE	38.4	ES			08:43	58.04			-0.23
AQ12	HZ	38.4	IAML			08:43	58.16	5	0.18	
AQ12	HE	38.4	IAML			08:43	58.21	19	0.06	
EDMD	HZ	42.0	EP			08:43	53.95			0.17
EDMD	HN	42.0	ES			08:43	58.88			-0.27
EDMD	HN	42.0	IAML			08:43	59.02	22	0.16	
EDMD	HE	42.0	IAML			08:43	59.87	12	0.22	
AR09	HZ	61.7	EP			08:43	57.10			0.06
AR09	HE	61.7	ES			08:44	04.57			-0.14
AR09	HE	61.7	IAML			08:44	05.20	8	0.15	
AR09	HN	61.7	IAML			08:44	06.45	12	0.07	
ESK	HZ	71.7	EP			08:43	58.77			0.15
ESK	HN	71.7	ES			08:44	07.34			-0.08
ESK	HN	71.7	IAML			08:44	09.05	2	0.12	
ESK	HE	71.7	IAML			08:44	09.07	2	0.18	
AS07	HZ	72.1	EP			08:43	59.00			0.29
AS07	HE	72.1	ES			08:44	07.53			-0.04
NEWG	HN	111.0	ES			08:44	17.77			-0.33
GAL1	HN	136.0	ES			08:44	23.99			0.20

November 22 2018 Time: 18:05 02.8 UTC Magnitude: 2.1 ML
Lat: 54.250N Lon: -0.230W Depth: 1.0 km
Grid Ref: 515.31 kmE 485.28 kmN RMS: 0.30 secs
Locality: FILEY,NORTH YORKSHIRE
Velocity model: Lownet Xnear: 500.0 Xfar: 1000.0
Comment: OFFSHORE FILEY

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES
AV06	HZ	19.0	IP		C	18:05	06.35			-0.48
AV06	HE	19.0	ES			18:05	09.90			0.10
AV06	HN	19.0	IAML			18:05	12.49	299	0.56	
AV06	HE	19.0	IAML			18:05	13.97	427	0.28	
AU18	HZ	31.2	EP			18:05	08.77			-0.11
AU18	HN	31.2	ES			18:05	13.12			-0.23
AU18	HN	31.2	IAML			18:05	13.62	562	0.34	
AU18	HE	31.2	IAML			18:05	15.36	349	0.42	
AU08	HZ	31.4	EP			18:05	08.62			-0.32
AU08	HN	31.4	ES			18:05	13.92			0.48
AU08	HN	31.4	IAML			18:05	14.15	115	0.15	
AU08	HE	31.4	IAML			18:05	16.79	177	0.38	
AU16	EZ	38.0	EP			18:05	09.85			-0.16
AU16	E1	38.0	ES			18:05	15.14			-0.16
AU16	E1	38.0	IAML			18:05	15.74	132	0.56	
AU16	E2	38.0	IAML			18:05	18.92	84	0.51	
AU14	EZ	39.6	EP			18:05	10.13			-0.16
AU15	HZ	42.4	EP			18:05	10.70			-0.07
GDLE	HZ	42.6	EP			18:05	10.81			-0.03
GDLE	HN	42.6	ES			18:05	16.71			-0.02
GDLE	HN	42.6	IAML			18:05	18.91	512	0.53	
GDLE	HE	42.6	IAML			18:05	22.64	406	0.39	
AU09	HZ	44.7	IP		C	18:05	10.96			-0.20
AU11	HZ	46.2	EP			18:05	11.30			-0.11
AU07	HZ	50.0	EP			18:05	12.42			0.35
AT10	HZ	63.0	IP		C	18:05	14.14			-0.01
AT08	HZ	72.6	EP			18:05	15.74			0.17
AT12	HZ	87.0	EP			18:05	18.63			0.81
LMK	HZ	88.5	EP			18:05	18.05			-0.02
LMK	HE	88.5	ES			18:05	28.97			-0.26
LMK	HE	88.5	IAML			18:05	32.87	119	0.30	
LMK	HN	88.5	IAML			18:05	33.18	111	0.38	
HPK	HZ	96.8	EP			18:05	19.60			0.23
AS07	HZ	111.0	EP			18:05	21.48			-0.18
AR05	HZ	120.0	EP			18:05	23.45			0.41
EDMD	HZ	129.0	EP			18:05	24.22			-0.16
LBWR	HZ	136.0	EP			18:05	26.15			0.65
LBWR	HN	136.0	IAML			18:05	43.70	81	0.22	
LBWR	HE	136.0	IAML			18:05	44.10	88	0.19	
AS02	HZ	139.0	EP			18:05	25.89			0.03
AR09	HZ	144.0	EP			18:05	26.09			-0.55
AQ12	HZ	165.0	EP			18:05	29.61			-0.03
ESK	HZ	225.0	EP			18:05	37.30			0.03

November 25 2018 Time: 19:29 19.5 UTC Magnitude: 0.5 ML
Lat: 56.522N Lon: -4.366W Depth: 3.7 km
Grid Ref: 254.46 kmE 739.16 kmN RMS: 0.20 secs
Locality: KILLIN,STIRLING
Velocity model: Lownet Xnear: 100.0 Xfar: 200.0
Comment: 6KM NNW KILLIN

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES
INVG	HZ	22.4	IP		C	19:29	23.95			0.11
INVG	HN	22.4	ES			19:29	26.72			-0.28
INVG	HE	22.4	ES			19:29	26.80			
INVG	HE	22.4	IAML			19:29	26.89	7	0.08	
INVG	HN	22.4	IAML			19:29	26.91	9	0.09	
LAWE	HZ	70.1	EP			19:29	31.76			0.23
LAWE	HN	70.1	ES			19:29	40.14			-0.16
LAWE	HE	70.1	IAML			19:29	42.71	3	0.18	
LAWE	HN	70.1	IAML			19:29	42.94	5	0.12	
KPL	HZ	120.0	EP			19:29	39.34			0.09
KPL	HN	120.0	ES			19:29	53.39			-0.27
DRUM	HZ	123.0	EP			19:29	40.20			0.46
DRUM	HN	123.0	ES			19:29	54.34			-0.16
ESK	HN	153.0	ES			19:30	02.21			0.24
NEWG	HN	157.0	ES			19:30	02.85			-0.08

November 25 2018 Time: 20:14 23.5 UTC Magnitude: 1.0 ML
Lat: 56.187N Lon: -5.156W Depth: 3.5 km
Grid Ref: 204.18 kmE 703.85 kmN RMS: 0.40 secs
Locality: INVERARAY,ARGYLL/BUTE
Velocity model: Lownet Xnear: 100.0 Xfar: 200.0
Comment: 7KM SW INVERARAY

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES
LAWE	HZ	17.1	IP		C	20:14	26.92			-0.01
LAWE	HN	17.1	ES			20:14	29.07			-0.33
LAWE	HE	17.1	IAML			20:14	26.97	20	0.18	
LAWE	HN	17.1	IAML			20:14	29.26	25	0.22	
INVG	HZ	73.8	EP			20:14	35.98			-0.24
INVG	HN	73.8	IAML			20:14	49.24	7	0.12	
INVG	HE	73.8	IAML			20:14	49.81	5	0.12	
KPL	HZ	132.0	EP			20:14	45.94			0.78
KPL	HE	132.0	IAML			20:15	02.83	7	0.26	
KPL	HN	132.0	IAML			20:15	03.31	5	0.52	
NEWG	HZ	133.0	EP			20:14	45.68			0.38
NEWG	HE	133.0	ES			20:15	00.77			-0.42
NEWG	HE	133.0	IAML			20:15	00.90	5	0.22	
NEWG	HN	133.0	IAML			20:15	03.53	4	0.20	
CLGH	HZ	137.0	EP			20:14	46.69			0.76
GAL1	HE	150.0	ES			20:15	05.17			-0.24
GAL1	HE	150.0	IAML			20:15	07.21	4	0.25	
GAL1	HN	150.0	IAML			20:15	07.54	3	0.24	

November 26 2018 Time: 14:06 01.8 UTC Magnitude: 1.3 ML
Lat: 51.020N Lon: -4.644W Depth: 31.2 km
Grid Ref: 214.58 kmE 127.90 kmN RMS: 0.20 secs
Locality: OFF HARTLAND PT,DEVON
Velocity model: Lownet Xnear: 500.0 Xfar: 1000.0
Comment: 7KM OFFSHORE

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES
HTL	HZ	11.5	EP			14:06	07.51			0.39
HTL	HE	11.5	ES			14:06	10.75			-0.27
HTL	HE	11.5	IAML			14:06	11.24	33	0.10	
HTL	HN	11.5	IAML			14:06	11.88	26	0.10	
SBD	BZ	50.6	EP			14:06	11.41			0.23
SBD	BE	50.6	ES			14:06	17.99			-0.05
DYA	HZ	82.2	EP			14:06	15.25			-0.21
DYA	HE	82.2	ES			14:06	25.39			-0.06
DYA	HN	82.2	IAML			14:06	25.99	32	0.18	
DYA	HE	82.2	IAML			14:06	26.01	38	0.18	
CCA1	HZ	101.0	EP			14:06	17.72			-0.21
CCA1	HN	101.0	ES			14:06	29.79			0.08
CCA1	HN	101.0	IAML			14:06	30.88	7	0.10	
CCA1	HE	101.0	IAML			14:06	31.12	7	0.11	
RSBS	HZ	104.0	EP			14:06	18.45			0.18
RSBS	HE	104.0	ES			14:06	29.98			-0.32
RSBS	HN	104.0	IAML			14:06	31.54	7	0.16	
RSBS	HE	104.0	IAML			14:06	32.03	8	0.07	
MONM	HZ	157.0	EP			14:06	25.01			0.14
MONM	HN	157.0	ES			14:06	41.75			0.03
MONM	HN	157.0	IAML			14:06	42.30	4	0.12	
MONM	HE	157.0	IAML			14:06	43.56	5	0.18	
MCH1	HZ	158.0	EP			14:06	25.05			0.09
MCH1	HN	158.0	ES			14:06	41.87			-0.02
MCH1	HN	158.0	IAML			14:06	42.17	5	0.26	
MCH1	HE	158.0	IAML			14:06	42.90	6	0.24	

December 3 2018 Time: 20:13 53.7 UTC Magnitude: 0.8 ML
Lat: 52.904N Lon: -1.270W Depth: 5.7 km
Grid Ref: 449.09 kmE 334.35 kmN RMS: 0.20 secs
Locality: LONG EATON,DERBYSHIRE
Velocity model: Lownet Xnear: 100.0 Xfar: 200.0

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES
CWF	HZ	18.6	IP		C	20:13	57.34			-0.08
CWF	HN	18.6	ES			20:14	00.04			-0.08
CWF	HN	18.6	IAML			20:14	00.25	18	0.08	
CWF	HE	18.6	IAML			20:14	00.35	28	0.09	
LBWR	HZ	63.2	EP			20:14	04.96			0.42

TABLE 2 : PHASE DATA

LBWR	HE	63.2	ES	20:14	12.28			-0.16
LBWR	HE	63.2	IAML	20:14	14.00	4	0.05	
LBWR	HN	63.2	IAML	20:14	14.27	4	0.17	
LMK	HZ	88.1	EP	20:14	08.31			-0.05
HLM1	HZ	117.0	EP	20:14	13.09			0.19
HLM1	HN	117.0	ES	20:14	26.67			-0.24
HLM1	HE	117.0	IAML	20:14	27.92	2	0.18	
HLM1	HN	117.0	IAML	20:14	30.36	2	0.21	
HPK	HE	120.0	ES	20:14	27.30			-0.25
HPK	HN	120.0	IAML	20:14	28.03	15	0.17	
HPK	HE	120.0	IAML	20:14	28.48	8	0.19	
MCH1	HZ	155.0	EP	20:14	18.85			0.47
MCH1	HN	155.0	ES	20:14	36.61			0.21
MCH1	HN	155.0	IAML	20:14	37.93	1	0.14	
MCH1	HE	155.0	IAML	20:14	38.11	1	0.15	

December 5 2018 Time: 19:14 32.6 UTC Magnitude: 1.5 ML
Lat: 51.933N Lon: -0.690W Depth: 6.2 km
Grid Ref: 490.06 kmE 226.91 kmN RMS: 0.20 secs
Locality: SOULBURY,BUCKS
Velocity model: Lownet Xnear: 500.0 Xfar: 1000.0

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES
WOL	BZ	78.2	EP			19:14	45.56			-0.14
WOL	BN	78.2	ES			19:14	55.19			-0.07
WOL	BE	78.2	IAML			19:14	57.19	6	0.27	
WOL	BN	78.2	IAML			19:14	57.26	8	0.32	
SWN1	HZ	89.8	EP			19:14	47.40			-0.11
SWN1	HE	89.8	ES			19:14	58.87			0.49
SWN1	HE	89.8	IAML			19:14	59.18	21	0.14	
SWN1	HN	89.8	IAML			19:14	59.38	31	0.12	
CWF	HZ	99.0	EP			19:14	49.10			0.17
CWF	HN	99.0	ES			19:15	00.71			-0.14
CWF	HE	99.0	IAML			19:15	01.35	9	0.14	
CWF	HN	99.0	IAML			19:15	01.49	9	0.24	
STRD	HZ	103.0	EP			19:14	49.76			0.22
STRD	HN	103.0	ES			19:15	01.77			-0.13
STRD	HN	103.0	IAML			19:15	04.93	23	0.21	
STRD	HE	103.0	IAML			19:15	05.07	18	0.22	
ELMS	HZ	117.0	EP			19:14	51.63			-0.01
ELMS	HE	117.0	ES			19:15	05.27			-0.27
ELMS	HN	117.0	IAML			19:15	05.80	21	0.38	
ELMS	HE	117.0	IAML			19:15	07.50	19	0.34	
WACR	HZ	126.0	EP			19:14	52.89			-0.17
WACR	HE	126.0	ES			19:15	08.46			0.48
MONM	HZ	146.0	EP			19:14	55.98			0.03
MONM	HN	146.0	ES			19:15	12.94			-0.05
MONM	HN	146.0	IAML			19:15	14.10	12	0.18	
MONM	HE	146.0	IAML			19:15	14.26	7	0.14	
MCH1	HZ	159.0	EP			19:14	57.79			-0.02
MCH1	HE	159.0	ES			19:15	16.13			-0.07
MCH1	HN	159.0	IAML			19:15	16.76	6	0.14	
MCH1	HE	159.0	IAML			19:15	16.95	7	0.16	
HLM1	HZ	163.0	EP			19:14	58.50			0.02
HLM1	HN	163.0	ES			19:15	17.14			-0.23
HLM1	HE	163.0	IAML			19:15	17.81	4	0.23	
HLM1	HN	163.0	IAML			19:15	18.07	6	0.15	

December 5 2018 Time: 19:45 31.8 UTC Magnitude: 1.0 ML
Lat: 51.941N Lon: -0.692W Depth: 5.8 km
Grid Ref: 489.90 kmE 227.80 kmN RMS: 0.30 secs
Locality: SOULBURY,BUCKS
Velocity model: Lownet Xnear: 500.0 Xfar: 1000.0

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES
SWN1	HZ	90.2	EP			19:45	46.58			-0.16
SWN1	HN	90.2	ES			19:45	58.07			0.39
SWN1	HN	90.2	IAML			19:45	58.32	8	0.13	
SWN1	HE	90.2	IAML			19:45	58.42	9	0.28	
CWF	HZ	98.2	EP			19:45	48.00			0.01
CWF	HE	98.2	ES			19:45	59.66			-0.16
STRD	HE	103.0	ES			19:46	01.46			0.35
WACR	HZ	125.0	EP			19:45	51.68			-0.48
WACR	HN	125.0	ES			19:46	07.24			0.19
MONM	HN	146.0	ES			19:46	12.28			0.09
MONM	HE	146.0	IAML			19:46	12.85	2	0.22	
MONM	HN	146.0	IAML			19:46	12.97	3	0.17	
MCH1	HN	159.0	ES			19:46	15.17			-0.20
MCH1	HN	159.0	IAML			19:46	15.70	2	0.12	
MCH1	HE	159.0	IAML			19:46	15.83	2	0.18	
HLM1	HE	163.0	ES			19:46	16.45			-0.02
HLM1	HE	163.0	IAML			19:46	16.69	2	0.29	
HLM1	HN	163.0	IAML			19:46	16.94	2	0.11	

December 9 2018 Time: 05:59 15.4 UTC Magnitude: 0.7 ML
Lat: 55.250N Lon: -3.533W Depth: 2.4 km
Grid Ref: 302.56 kmE 596.17 kmN RMS: 0.50 secs
Locality: JOHNSTONEBRIDGE,D & G
Velocity model: Lownet Xnear: 100.0 Xfar: 200.0

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES
ESK	HZ	22.1	IP		C	05:59	19.37			-0.31
ESK	HN	22.1	ES			05:59	21.94			-0.86
ESK	HE	22.1	IAML			05:59	22.14	14	0.12	
ESK	HN	22.1	IAML			05:59	22.83	10	0.21	
NEWG	HZ	46.8	EP			05:59	23.68			-0.15
NEWG	HE	46.8	ES			05:59	29.17			-0.82
NEWG	HE	46.8	IAML			05:59	23.92	10	0.14	
NEWG	HN	46.8	IAML			05:59	31.12	5	0.10	
EDI	HE	78.1	ES			05:59	38.84			0.38
EDI	HE	78.1	IAML			05:59	39.30	5	0.29	
EDI	HN	78.1	IAML			05:59	39.47	4	0.15	
KESW	HZ	78.6	EP			05:59	28.69			-0.15
KESW	HE	78.6	ES			05:59	39.50			0.86
KESW	HE	78.6	IAML			05:59	40.06	3	0.20	
KESW	HN	78.6	IAML			05:59	41.08	4	0.41	
GAL1	HZ	86.5	EP			05:59	30.01			-0.03
PGB1	HZ	86.7	EP			05:59	30.92			0.84
ESY	EZ	94.3	EP			05:59	31.47			0.19
AQ12	HZ	103.0	EP			05:59	32.69			-0.03
AS07	HZ	151.0	EP			05:59	40.20			0.30

December 12 2018 Time: 16:45 46.7 UTC Magnitude: 1.4 ML
Lat: 51.924N Lon: -4.447W Depth: 6.4 km
Grid Ref: 231.76 kmE 227.93 kmN RMS: 0.30 secs
Locality: PEN-Y-BONT,CARMARTHS
Velocity model: Lownet Xnear: 100.0 Xfar: 300.0

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES
RSBS	HZ	20.7	EP			16:45	50.75			-0.05
RSBS	HN	20.7	ES			16:45	53.59			-0.21
RSBS	HN	20.7	IAML			16:45	53.65	121	0.14	
RSBS	HE	20.7	IAML			16:45	53.83	129	0.10	
MCH1	HZ	99.9	EP			16:46	02.97			-0.18
MCH1	HE	99.9	ES			16:46	14.67			-0.49
MCH1	HN	99.9	IAML			16:46	14.93	10	0.22	
MCH1	HE	99.9	IAML			16:46	15.25	8	0.16	
HTL	HZ	103.0	EP			16:46	04.05			0.36
HTL	HN	103.0	ES			16:46	15.83			-0.25
HTL	HN	103.0	IAML			16:46	16.58	17	0.15	
HTL	HE	103.0	IAML			16:46	17.72	14	0.19	
MONM	HZ	113.0	EP			16:46	05.52			0.27
MONM	HE	113.0	ES			16:46	18.80			0.02
MONM	HE	113.0	IAML			16:46	19.68	15	0.14	
MONM	HN	113.0	IAML			16:46	19.76	10	0.12	
LLW	BN	116.0	ES			16:46	19.26			-0.17
LLW	BE	116.0	IAML			16:46	20.86	5	0.25	
LLW	BN	116.0	IAML			16:46	21.19	5	0.15	
HLM1	HZ	126.0	EP			16:46	07.70			0.49
HLM1	HN	126.0	IAML			16:46	24.31	5	0.12	
HLM1	HE	126.0	IAML			16:46	25.15	6	0.13	
FOEL	HZ	137.0	EP			16:46	09.19			0.39
DYA	HZ	170.0	EP			16:46	13.59			0.19
DYA	HE	170.0	IAML			16:46	33.20	6	0.34	
DYA	HN	170.0	IAML			16:46	34.03	5	0.28	

December 14 2018 Time: 05:26 17.3 UTC Magnitude: 0.3 ML
Lat: 52.987N Lon: -3.574W Depth: 10.9 km
Grid Ref: 294.35 kmE 344.49 kmN RMS: 0.00 secs
Locality: LLANGWM,CONWY
Velocity model: Lleyn Xnear: 80.0 Xfar: 200.0

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES
LLW	BZ	16.5	EP			05:26	20.69			0.02
LLW	BE	16.5	ES			05:26	22.94			-0.01
LLW	BE	16.5	IAML			05:26	23.07	4	0.10	
LLW	BN	16.5	IAML			05:26	23.11	4	0.20	
FOEL	HZ	27.4	EP			05:26	22.30			-0.01
FOEL	HN	27.4	ES			05:26	25.74			0.03
FOEL	HE	27.4	IAML			05:26	26.49	7	0.09	
FOEL	HN	27.4	IAML			05:26	26.55	6	0.38	
WLF1	HZ	64.5	EP			05:26	28.18			-0.06
WLF1	HN	64.5	ES			05:26	35.73			0.06
WLF1	HN	64.5	IAML			05:26	36.09	5	0.33	
WLF1	HE	64.5	IAML			05:26	36.60	4	0.46	
HLM1	HZ	70.1	EP			05:26	29.07			-0.07
HLM1	HN	70.1	ES			05:26	37.22			0.04
HLM1	HN	70.1	IAML			05:26	37.53	1	0.09	
HLM1	HE	70.1	IAML			05:26	37.70	1	0.10	

December 16 2018 Time: 20:23 00.0 UTC Magnitude: 0.6 ML
Lat: 52.947N Lon: -4.557W Depth: 10.1 km
Grid Ref: 228.22 kmE 341.94 kmN RMS: 0.10 secs
Locality: LLEYN PENINSULA
Velocity model: Lleyn Xnear: 80.0 Xfar: 200.0

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES
YLL	EZ	33.7	EP			20:23	06.02			0.10
WLF1	HZ	39.5	EP			20:23	06.83			-0.02
WLF1	HN	39.5	ES			20:23	11.57			0.05
WLF1	HE	39.5	IAML			20:23	12.06	14	0.19	
WLF1	HN	39.5	IAML			20:23	12.11	13	0.13	
WPS	HE	50.6	ES			20:23	14.50			-0.02
WPS	HE	50.6	IAML			20:23	15.83	3	0.16	
WPS	HN	50.6	IAML			20:23	16.56	2	0.06	
WME	EZ	52.8	EP			20:23	08.95			-0.07
LLW	BE	61.0	ES			20:23	17.37			-0.04
LLW	BN	61.0	IAML			20:23	17.84	2	0.19	
LLW	BE	61.0	IAML			20:23	18.26	2	0.13	
FOEL	HZ	91.5	EP			20:23	15.04			-0.13
FOEL	HE	91.5	ES			20:23	25.55			0.06
FOEL	HE	91.5	IAML			20:23	26.41	3	0.24	
FOEL	HN	91.5	IAML			20:23	26.64	2	0.34	
RSBS	HE	111.0	ES			20:23	30.64			0.05

TABLE 2 : PHASE DATA

STAT	CO	DIST	PHAS	WT P	HrMn	SECS	AMPL	PERI	RES
RSBS	HN	111.0	IAML		20:23	32.82	2	0.10	
RSBS	HE	111.0	IAML		20:23	33.17	2	0.07	
HLM1	HZ	123.0	EP		20:23	20.05			0.06
HLM1	HE	123.0	IAML		20:23	36.37	2	0.17	
HLM1	HN	123.0	IAML		20:23	36.73	2	0.17	

December 19 2018 Time: 15:47 54.9 UTC Magnitude: 1.0 ML
Lat: 52.963N Lon: -4.389W Depth: 20.3 km
Grid Ref: 239.56 kmE 343.33 kmN RMS: 0.10 secs
Locality: LLEYN PENINSULA
Velocity model: Lleyn Xnear: 80.0 Xfar: 200.0

STAT	CO	DIST	PHAS	WT P	HrMn	SECS	AMPL	PERI	RES
YLL	EZ	24.6	EP		15:48	00.12			0.00
WLF1	HZ	36.3	EP		15:48	01.60			-0.08
WLF1	HE	36.3	ES		15:48	06.31			0.03
WLF1	HE	36.3	IAML		15:48	06.48	93	0.12	
WLF1	HN	36.3	IAML		15:48	06.69	41	0.06	
WME	EZ	48.6	EP		15:48	03.35			-0.11
WPS	HZ	49.2	EP		15:48	03.67			0.13
WPS	HE	49.2	ES		15:48	09.44			0.03
WPS	HN	49.2	IAML		15:48	09.98	8	0.12	
WPS	HE	49.2	IAML		15:48	10.02	8	0.09	
LLW	BZ	50.3	EP		15:48	03.76			0.04
LLW	BE	50.3	ES		15:48	09.63			-0.07
LLW	BE	50.3	IAML		15:48	09.92	3	0.11	
LLW	BN	50.3	IAML		15:48	11.35	4	0.18	
FOEL	HZ	80.4	EP		15:48	08.11			-0.17
FOEL	HE	80.4	ES		15:48	17.41			0.04
FOEL	HE	80.4	IAML		15:48	17.97	6	0.14	
FOEL	HN	80.4	IAML		15:48	18.91	7	0.17	
HLM1	HZ	113.0	EP		15:48	13.33			0.03
HLM1	HN	113.0	ES		15:48	26.04			0.24
HLM1	HE	113.0	IAML		15:48	27.97	3	0.09	
HLM1	HN	113.0	IAML		15:48	28.38	6	0.10	
RSBS	HE	115.0	ES		15:48	26.21			-0.01
RSBS	HE	115.0	IAML		15:48	28.95	7	0.08	
RSBS	HN	115.0	IAML		15:48	29.01	7	0.08	

December 22 2018 Time: 17:13 37.3 UTC Magnitude: 0.7 ML
Lat: 56.704N Lon: -5.886W Depth: 7.7 km
Grid Ref: 162.16 kmE 763.65 kmN RMS: 0.20 secs
Locality: LAGA,HIGHLAND
Velocity model: Lownet Xnear: 100.0 Xfar: 200.0

STAT	CO	DIST	PHAS	WT P	HrMn	SECS	AMPL	PERI	RES
LAWE	HZ	57.8	EP		17:13	47.33			0.23
LAWE	HN	57.8	ES		17:13	53.94			-0.34
LAWE	HN	57.8	IAML		17:13	54.05	5	0.10	
LAWE	HE	57.8	IAML		17:13	54.20	8	0.34	
KPL	HZ	72.1	EP		17:13	49.13			-0.16
KPL	HE	72.1	ES		17:13	57.99			-0.08
KPL	HN	72.1	IAML		17:14	01.91	3	0.36	
KPL	HE	72.1	IAML		17:14	02.38	2	0.14	
INVG	HZ	117.0	EP		17:13	56.77			0.41
INVG	HE	117.0	ES		17:14	10.34			0.04
INVG	HN	117.0	IAML		17:14	12.16	0	0.10	
INVG	HE	117.0	IAML		17:14	12.64	1	0.08	
LINV	HZ	166.0	EP		17:14	03.42			0.11
LINV	HN	166.0	IAML		17:14	24.70	1	0.33	
LINV	HE	166.0	IAML		17:14	25.20	2	0.36	
LEWI	HZ	171.0	EP		17:14	04.38			0.39
LEWI	HE	171.0	IAML		17:14	26.08	2	0.88	
LEWI	HN	171.0	IAML		17:14	27.45	2	0.62	

December 24 2018 Time: 13:36 18.4 UTC Magnitude: 0.8 ML
Lat: 51.886N Lon: -1.075W Depth: 14.1 km
Grid Ref: 463.66 kmE 221.28 kmN RMS: 0.20 secs
Locality: BICESTER,OXFORDSHIRE
Velocity model: Lownet Xnear: 100.0 Xfar: 200.0

STAT	CO	DIST	PHAS	WT P	HrMn	SECS	AMPL	PERI	RES
STRD	HZ	76.0	EP		13:36	31.06			-0.09
STRD	HN	76.0	ES		13:36	40.45			0.02
STRD	HE	76.0	IAML		13:36	40.59	6	0.20	
STRD	HN	76.0	IAML		13:36	40.70	3	0.11	
CWF	HZ	96.2	EP		13:36	34.37			0.21
CWF	HE	96.2	ES		13:36	45.46			-0.18
CWF	HN	96.2	IAML		13:36	45.71	1	0.07	
CWF	HE	96.2	IAML		13:36	45.90	3	0.08	
MONM	HE	119.0	ES		13:36	51.33			0.00
MONM	HE	119.0	IAML		13:36	51.59	2	0.26	
MONM	HN	119.0	IAML		13:36	51.67	4	0.17	
MCH1	HZ	133.0	EP		13:36	39.16			-0.25
MCH1	HN	133.0	ES		13:36	54.69			-0.03
MCH1	HE	133.0	IAML		13:36	55.12	2	0.10	
MCH1	HN	133.0	IAML		13:36	55.19	3	0.12	
HLM1	HZ	142.0	EP		13:36	40.99			0.22
HLM1	HE	142.0	ES		13:36	57.34			0.27
HLM1	HN	142.0	IAML		13:36	58.16	2	0.14	
HLM1	HE	142.0	IAML		13:36	58.16	2	0.13	

December 26 2018 Time: 13:06 01.2 UTC Magnitude: 1.6 ML
Lat: 54.932N Lon: -1.353W Depth: 8.2 km
Grid Ref: 441.45 kmE 559.90 kmN RMS: 0.30 secs
Locality: SEABURN,TYNE & WEAR
Velocity model: Lownet Xnear: 500.0 Xfar: 1000.0

STAT	CO	DIST	PHAS	WT P	HrMn	SECS	AMPL	PERI	RES
EDMD	HZ	40.6	EP		13:06	08.22			-0.15
EDMD	HN	40.6	ES		13:06	13.73			0.13
EDMD	HN	40.6	IAML		13:06	16.10	19	0.18	
EDMD	HE	40.6	IAML		13:06	19.42	25	0.17	
AT10	HZ	63.6	EP		13:06	11.27			-0.71
AT10	HE	63.6	ES		13:06	19.62			-0.23
AT10	HE	63.6	IAML		13:06	20.77	29	0.34	
AT10	HN	63.6	IAML		13:06	24.39	36	0.40	
GDLE	HN	66.5	ES		13:06	20.33			-0.27
GDLE	HE	66.5	IAML		13:06	21.85	19	0.36	
GDLE	HN	66.5	IAML		13:06	23.51	30	0.22	
AU15	HZ	84.1	EP		13:06	15.34			0.23
AU15	HE	84.1	IAML		13:06	28.97	86	0.29	
AU15	HN	84.1	IAML		13:06	29.76	78	0.23	
AS07	HZ	84.4	EP		13:06	15.40			0.17
AU11	HZ	86.2	EP		13:06	15.36			-0.06
AU18	HZ	86.7	EP		13:06	15.63			0.11
AU14	EZ	87.8	EP		13:06	15.74			0.06
AU09	HZ	92.5	EP		13:06	16.55			0.13
AU07	HZ	94.8	EP		13:06	17.20			0.43
AU08	HZ	100.0	EP		13:06	17.99			0.32
AV06	HZ	102.0	EP		13:06	17.82			-0.16
AQ12	HZ	106.0	EP		13:06	18.45			-0.07
HPK	HZ	110.0	EP		13:06	19.43			0.31
ESK	HZ	126.0	EP		13:06	21.17			-0.23

TABLE 3

GEOGRAPHIC COORDINATES OF SEISMOGRAPH STATIONS, 2018

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
AU09	BARTON-LE-STREET	54.1460	-0.8910	472.54	472.81	103	BB
AU10	KIRBY MISPERTON 1	54.1960	-0.8180	477.21	478.45	20	BB
AU11	EAST NESS	54.1974	-0.9325	469.74	478.49	34	BB
AU13	KIRBY MISPERTON 2	54.1993	-0.7941	478.77	478.84	25	BB
AU14	KIRBY MISPERTON 3	54.2030	-0.8320	476.29	479.21	23	BB
AU15	NORMANBY	54.2285	-0.8794	473.15	482.00	60	BB
AU16	KIRBY MISPERTON 4	54.2385	-0.8125	477.49	483.18	21	BB
AU18	THORNTON DALE	54.2482	-0.7095	484.18	484.38	83	BB
AU20	PICKERING	54.2940	-0.7870	479.05	489.39	151	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
EDI	EDINBURGH	55.9233	-3.1875	325.80	670.66	125	BBR
EDMD	EDMUNDBYERS	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	1R
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
GATW	GATWICK	51.1440	-0.2210	524.54	139.81	63	BB
GDLE	GLAISDALE	54.4218	-0.8157	476.94	503.57	228	BBSMR
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
HMNX	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

TABLE 3

GEOGRAPHIC COORDINATES OF SEISMOGRAPH STATIONS, 2018

Code	Name	Lat	Lon	E (km)	N (km)	Ht (m)	Comp
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
JDG	DAM (GALLERY)	49.1947	-2.0469			7	SMR
JLP	LES PLATONS	49.2486	-2.1039			129	1R
JRS	MAISON ST LOUIS	49.1922	-2.0922			56	3R
JSA	ST AUBINS	49.1878	-2.1717			39	BBR
JVM	VALLE DE LA MARE	49.2169	-2.2067			64	1R
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
LEWI	LEWIS	58.1446	-6.8696	113.57	927.65	69	BBR
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
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
TOA	TORNESS A	55.9692	-2.4037	374.80	675.20	5	SM
TOB	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
WME	MYNDD EILIAN	53.3969	-4.3032	246.88	391.40	129	1R
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
YRC	RHOSCOLYN	53.2508	-4.5753	228.21	375.77	22	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

Structural area	Depth to top of layer (km)	P-wave velocity (km/sec)	Vp/Vs
North Sea	0.00	6.20	1.73
	12.00	6.50	
	23.00	7.10	
	31.00	8.05	
Lownet and	0.00	4.00	1.73
general UK	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	0.00	5.40	1.68
(Lleyn)	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

Structural area	Depth to top of layer (km)	P-wave velocity (km/sec)	Vp/Vs
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

D & G	Dumfries & Galloway
Salop	Shropshire
Carmarths	Carmarthenshire
NPT	Neath Port Talbot
Derbys	Derbyshire
E Dunbarton	East Dunbartonshire
S Yorkshire	South Yorkshire
Oxon	Oxfordshire
W Sussex	West Sussex
W Midlands	West Midlands
Staffs	Staffordshire
Lincs	Lincolnshire
NE Lincolnshire	Northeast Lincolnshire
Worcs	Worcestershire
Northants	Northamptonshire
Notts	Nottinghamshire
Hartland Pt	Hartland Point
Bucks	Buckinghamshire
Ind	Induced
…	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, N indicates North.
Lon	Longitude of the event, W indicates West, E indicates East.
Depth	Depth of the hypocentre in kilometres.
Grid Ref	UK National Grid Reference in kilometres east (kmE) and kilometres north (kmN) of grid origin.
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.

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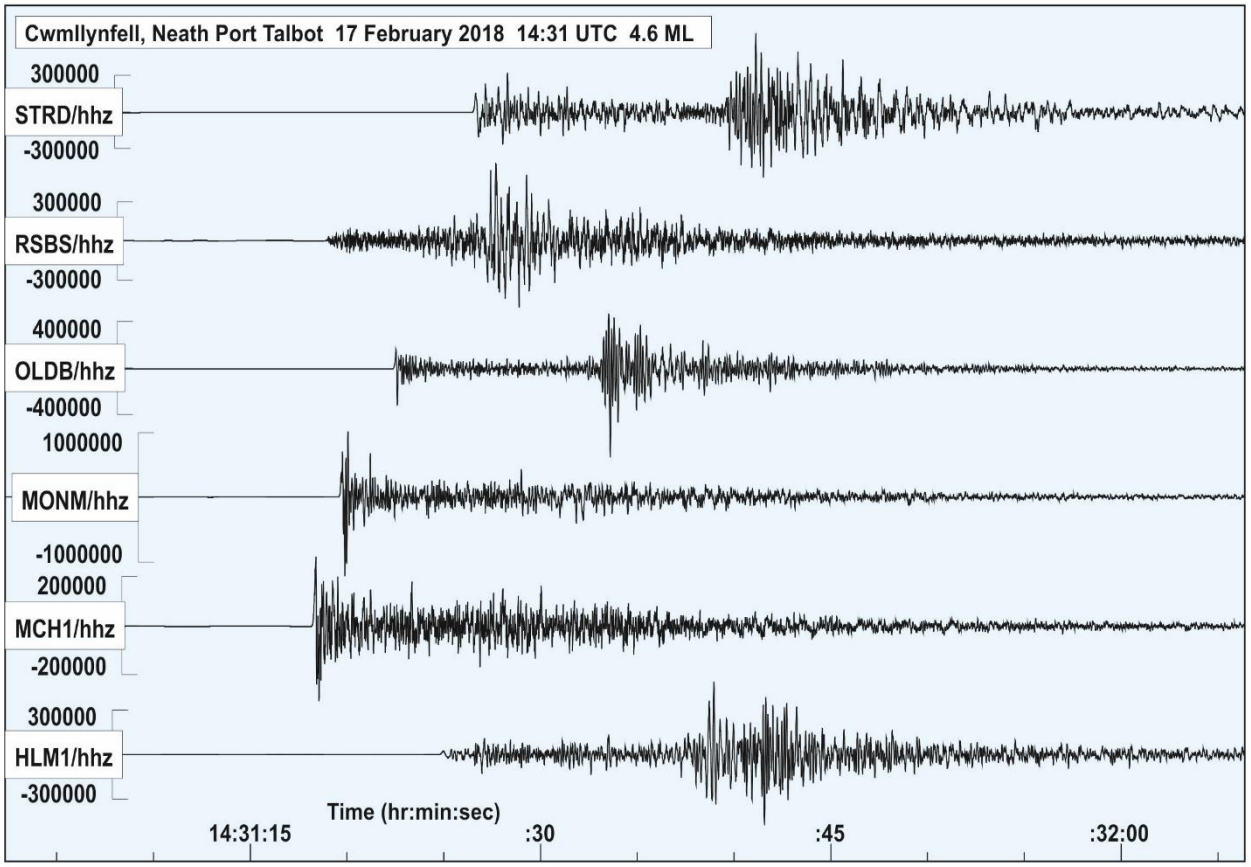
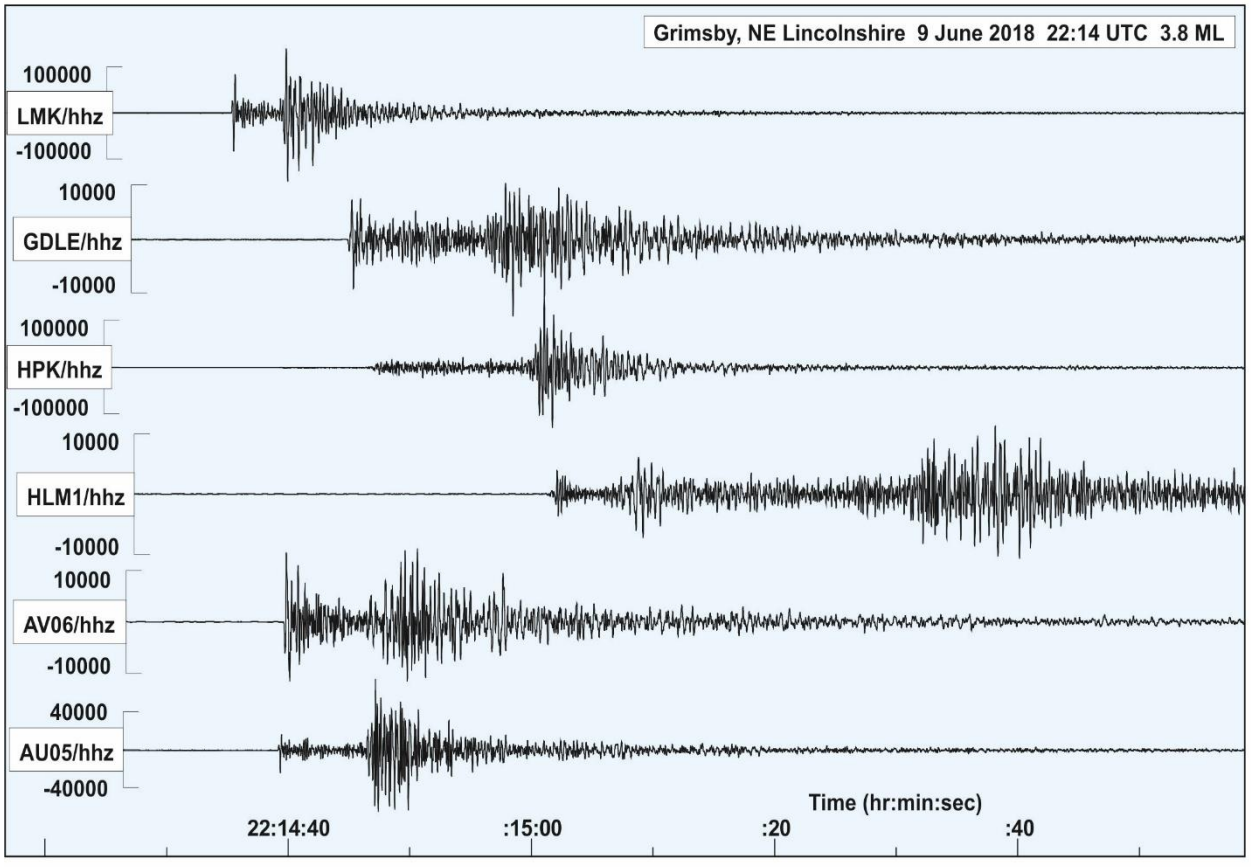


Seismograms of the ground displacement from the magnitude 4.6 ML Cwmllynfell, Neath Port Talbot (South Wales) earthquake on 17 February 2018.



Seismograms of the ground displacement from the magnitude 3.8 ML Grimsby, North East Lincolnshire earthquake on 9 June 2018.