

June 2025 Thunder events (NB, all times noted are UTC)

Overview: Many places experienced a quiet June for thunder. A rather unusual feature for a summer month was that direct daytime heating overland evidently played a relatively small part in the thundery activity. Indeed, the two main events, on the 13th-14th and 21st-22nd were predominantly overnight episodes associated with 'elevated' convection and/or convective activity embedded in larger areas of rain. It was not generally a month for watching cumulonimbus clouds soaring into areas of clear sky! The main events also eluded many of the UK's more populated areas; indeed, parts of the London area and quite large areas of the Midlands were thunder-free. Likewise, while thunder was quite extensive over Scotland during both main events, activity barely fringed the Glasgow area. Three days of thunder were recorded in parts of Sussex and Kent.

1st: A broad surface trough moved east across Scotland extending south from a depression near the Faroes. The northern UK had an increasingly showery day and some showers turned thundery in Aberdeenshire, especially between Aberdeen and Peterhead. In mid-afternoon lightning struck and set fire to a house in the coastal village of Newburgh, north of Aberdeen.

3rd: An unseasonably deep depression was situated between Scotland and Iceland with showery troughs in its circulation. A sferic indicated isolated thunder on Skye during the evening

4th: The depression was still slow-moving east of Iceland. It was a showery day across the northern UK with isolated thunder over Northern Ireland and Fife.

5th: A small secondary low crossed northern England and sferics indicated isolated thunder in the Manchester and Hull areas.

6th: Minor troughs moved eastwards over Ireland and the UK in a generally westerly airflow. Showers were especially heavy over Ireland with clusters of thunderstorms over some central counties. Lightning struck and killed ten cattle at Butlersbridge in County Cavan. There was also very isolated thunder in northeast Scotland.

7th: Broad surface and upper troughs moved rather slowly east across the UK; within the surface trough a small depression formed over the southern North Sea by early evening.

Pulses of showery rain tended to intensify as they moved ENE with thunder breaking out quite widely across the east Midlands and, especially, East Anglia during the mid to late afternoon. Another lively storm cluster tracked along the south coast from east Dorset to East Sussex. In Hayling Island a lightning strike which set a tree on fire produced thunder which was reported to have been heard 'very loudly' over a huge area including Havant, Waterlooville and Fareham. A tornado (confirmed T2 intensity) caused considerable damage to trees and fences at Pulborough, West Sussex. There was also isolated thunder elsewhere, e.g. over northeastern Scotland and near the southeast coast of Ireland.

8th: A broad westerly airstream covered Ireland and the UK while there was a major upper trough extending across northern areas and southeast to the North Sea. Showers mostly affected northern and eastern areas and some turned thundery near the coasts of Yorkshire and northeast England during the afternoon.

11th: An anticyclone was situated over the North Sea with a warm southeasterly airstream covering most of these islands. During the evening frontal systems drifted north from Biscay to affect southern Ireland and the far southwest of England. Ahead of this, a few thundery showers affected southwest Ireland in the early afternoon with isolated thunder in the showery frontal rain over the same area late in the evening.

12th: A rippling frontal system brought heavy rain to south Wales and southwest England overnight. As the fronts moved northeast into very warm air, with the rain turning more showery, isolated thunder occurred in the Basingstoke and Newbury areas around midday.

13th: A waving frontal zone again straddled the UK and returned westwards for a time as a shallow depression formed over northwest France by 1800. East of the front, temperatures reached over 29°C over eastern England. The depression drifted northwards to be over north Wales by 0600 on the 14th and southern Scotland by 1200 on the 14th. Mid-level winds were SSW ahead of a major upper trough across Ireland.

During the afternoon of the 13th, a small wave further north on the frontal zone gave a thundery outbreak over northwest Scotland. Elsewhere it was quiet until early evening. By 1800 showers were occurring over the English Channel from extensive Altocumulus Castellanus and thunder was heard near Chichester. Further west, the frontal rain band extended south to north across Devon/east Cornwall to Wales and Liverpool Bay. Pulses of heavier rain gave occasional thunder over Devon (especially around Dartmoor) from 1815 to 2015 UTC. This frontal band gave further isolated thunder later in the evening around the Bristol Channel (e.g. west Somerset), Shropshire and the Wrexham area.

Between 1815 and 2045 two active storms affected east Dorset, albeit subsequently petering out further north. The first clipped the coast around Swanage en route to Bournemouth, while the second tracked from east of Weymouth NNE across Purbeck to Poole Harbour. A lightning strike damaged equipment at the Coast watch at St Aldhelm's Head southwest of Swanage, while in Poole a house was struck by lightning, starting a fire which caused considerable damage to one floor.

Meanwhile a large thunderstorm area was developing over Normandy and the eastern Channel and this was to become the 'main' event of the day, commencing across the Hastings and Folkestone areas around 2100 UTC. Over the next three hours to midnight UTC the storm system grew and moved NNE, then more due north to affect East Sussex, Kent, the Thames Estuary and much of Essex, followed by Suffolk and Norfolk. Lightning set fire to the roof of a house in St Leonards, Hastings. In Kent, thunderstorm activity persisted for some 2½ hours. At Dover Water works 60mm of rain fell in less than an hour from 2100 to 2200 UTC and there was significant flooding on Thanet.

14th: Severe thunderstorms continued to affect Norfolk and Suffolk until around 0200 UTC. The electrical activity, albeit violent, mostly lasted around one to 1½ hours at individual locations here. A house in Lowestoft was severely damaged by fire after being struck by lightning. Power supplies around Framlingham and Halesworth, also in Suffolk, were disrupted following lightning strikes. In the same county heavy rain in Saxmundham resulted in damage to a supermarket roof, the closure of a shop, and floods affecting the Market Hall. A community radio station in Rendlesham was also closed after flood damage. Lightning

damage to overhead cables caused power cuts in the Rockland All Saints and Attleborough areas of Norfolk where hundreds of homes were blacked out.

Meanwhile, further west, as the frontal wave developed into a (closed circulation) depression, thundery activity became more extensive in the heavy pulses of rain, especially over west Wales and northwest England, but also for a time over southeast Wales, Herefordshire and Shropshire. Lightning struck and damaged a church in Caernarfon. The Isle of Man and Cumbria were affected soon after daybreak before activity moved into south and then eastern Scotland from 0800 to 1200, continuing here locally to mid-afternoon. Meanwhile, in the post-frontal westerly airstream a few thundery showers occurred over southeast Ireland in the afternoon.

20th: An anticyclone over the southern North Sea was drifting very slowly eastwards with a slow fall of pressure over the UK and Ireland. Temperatures exceeded 30°C in various sites in England and Wales and locally around 29°C in Scotland and Ireland. During the early hours, a trough moving northwards gave some thunder over southern Ireland (especially Counties Cork and Co Limerick) and the Irish Midlands, with very isolated thunder over the west of Northern Ireland. The Scilly Isles were also affected and a few discharges over the Celtic Sea were probably heard near the coast of north Cornwall.

21st: The anticyclone was now over central Europe and continued to slowly decline, with the UK in a hot, rather slack southeasterly airflow. A surface trough over the Irish Sea and Biscay drifted slowly north-eastwards ahead of an Atlantic cold front while a major upper trough moved slowly eastwards, the axis over Ireland by midnight. Temperatures exceeded 32°C in southeast England.

The first discrete thundery episode affected Cornwall (including Scilly) during the morning (approximately 0630 to 1100 UTC), tending to slowly drift northwards before petering out over the Celtic Sea. Hail fell in places and in the Pendeen and St Just area, the local Fire station's metal tower was hit by lightning and a telecommunications pole struck and damaged. Homes and businesses suffered disrupted communications and TV boxes were 'fried.' Lightning also struck a cottage in White Cross near Newquay.

Despite patches of unstable mid-level clouds drifting northeastwards, accompanied by brief showers, it was 'quiet' for some two hours after 1100 UTC. During the afternoon period (1300-1800), a few thundery showers broke out and drifted northeast over Wales; there was also an isolated discharge in a shower near the Yorkshire coast.

The day's major episode began after 1800 UTC associated with generally falling pressure and with the aforementioned trough sharpening over northern England. Major storms developed, one moving into south Cumbria, another tracking from near Preston to the northern Pennines (and on to Teesside, Durham and Tyneside for a while), with a few offshoots towards West Yorkshire. The storm area extended into the Scottish Borders area and by 2200 there was a large storm area stretching from Lancashire to just east of Edinburgh- embracing large areas of north Lancashire, Cumbria, the Scottish Borders, Northumberland and (on opposite flanks) parts of Tyneside and Dumfries-shire. Two to three hours of thunder with spells of near constant lightning were observed. Hail 20mm diameter fell at Eyemouth around midnight (flash flooding also hit the town), by which time thunderstorm activity had extended north to some other east coast areas of Scotland.

22nd: The large area of storms continued to drift NNE after midnight, affecting eastern coastal areas of Scotland. Hailstones 20-22mm diameter fell in Montrose around 0030. Meanwhile, just before midnight a new thundery outbreak appeared over Rutland and developed into a larger cluster of activity over Lincolnshire and around The Wash before moving out into the North Sea. Much further west, a new outbreak of thundery activity broke out on the cold front as it moved across the North Channel and the southern Hebridean islands; thunder subsequently becoming more extensive across Scotland's western Highlands and Great Glen as a wave developed on the front. The storms moved on across Caithness to Orkney after 0600 (Orkney's second episode of the night), reaching Shetland in mid morning. At the opposite end of the UK a new cluster of storms, originating across the Channel near Cherbourg an hour or so earlier, were approaching the Sussex coast by daybreak with a thundery shower ahead over Kent. East Sussex, Kent and south Essex were subsequently affected by storms from about 0400 to 0700 UTC.

Later in the day, in a general polar maritime westerly airstream, isolated thunder accompanied showers over northeast Ireland and southwest Scotland.

30th: High pressure was situated over the North Sea with a frontal wave moving northwards over Ireland where a sferic indicated thunder near Galway in the early afternoon.

These reports are based on observations and sferics with supportive evidence from radar. Sincere thanks are due to members of COL and TORRO for observations, and to the Met Office/Net Weather for radar and sferics data.

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