

## Storm Noa, 12 April 2023

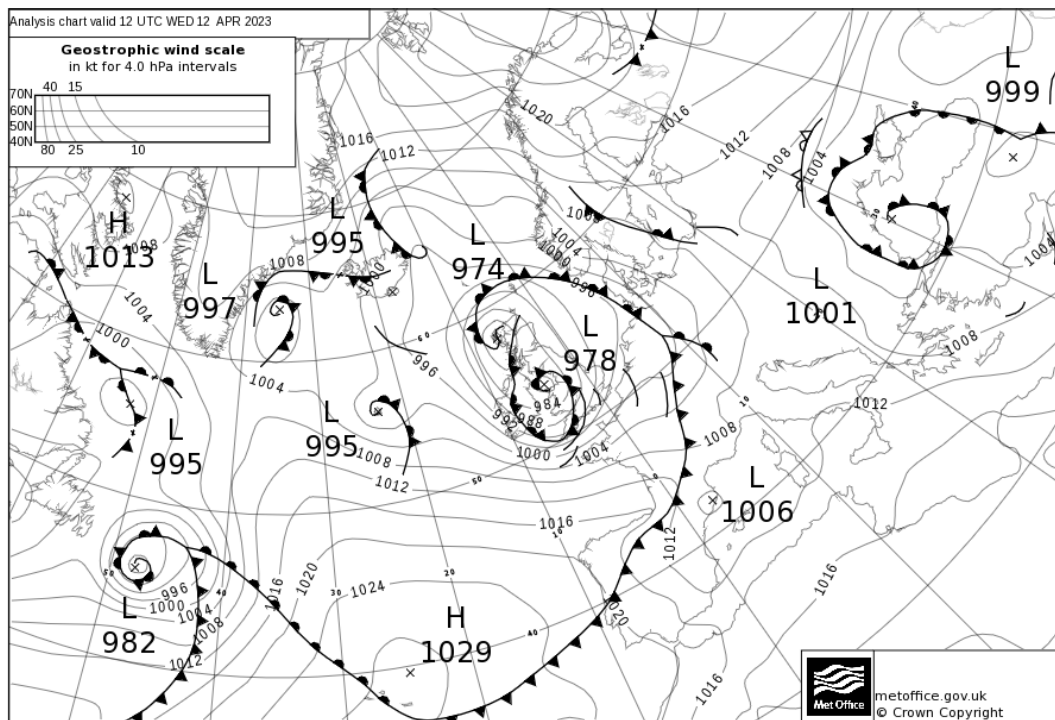
Storm Noa on 12 April 2023 was the second named storm of the 2022/2023 storm season. The storm was named by Meteo-France and brought widespread gusts of over 50Kt around coastlines of England and Wales. This was an unusually severe storm for the time of year; the most significant April wind storm to affect England and Wales since April 2013.

### Impacts

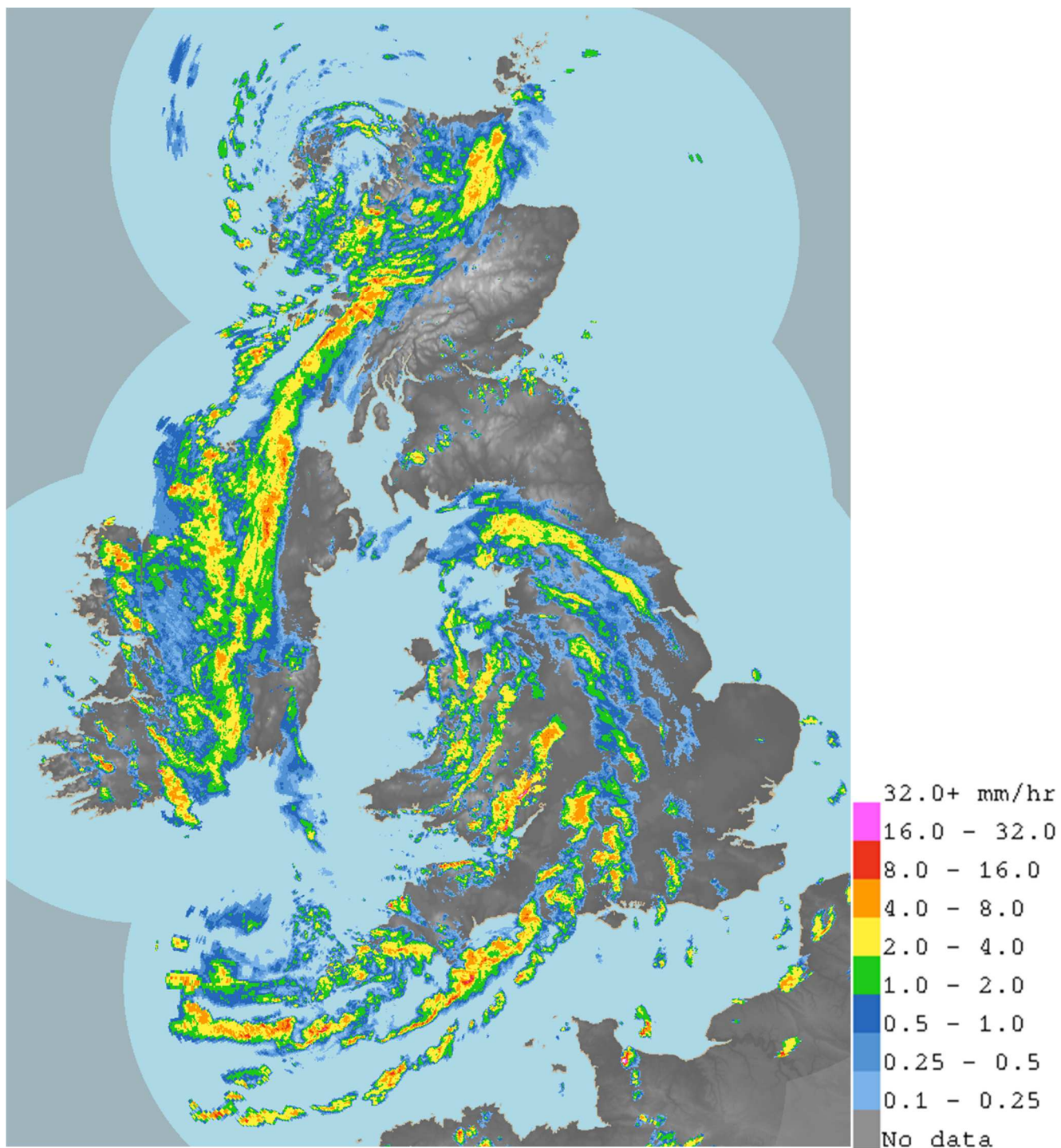
A number of trees and power lines were brought down, with hundreds of homes across south-west England and south Wales left without power. The storm caused some disruption to road and rail travel, with the M48 Severn Bridge closed due to strong winds. A member of the public was seriously injured by falling scaffolding in Fareham, Hampshire. Huge waves from the Atlantic affected exposed western coastlines.

### Weather data

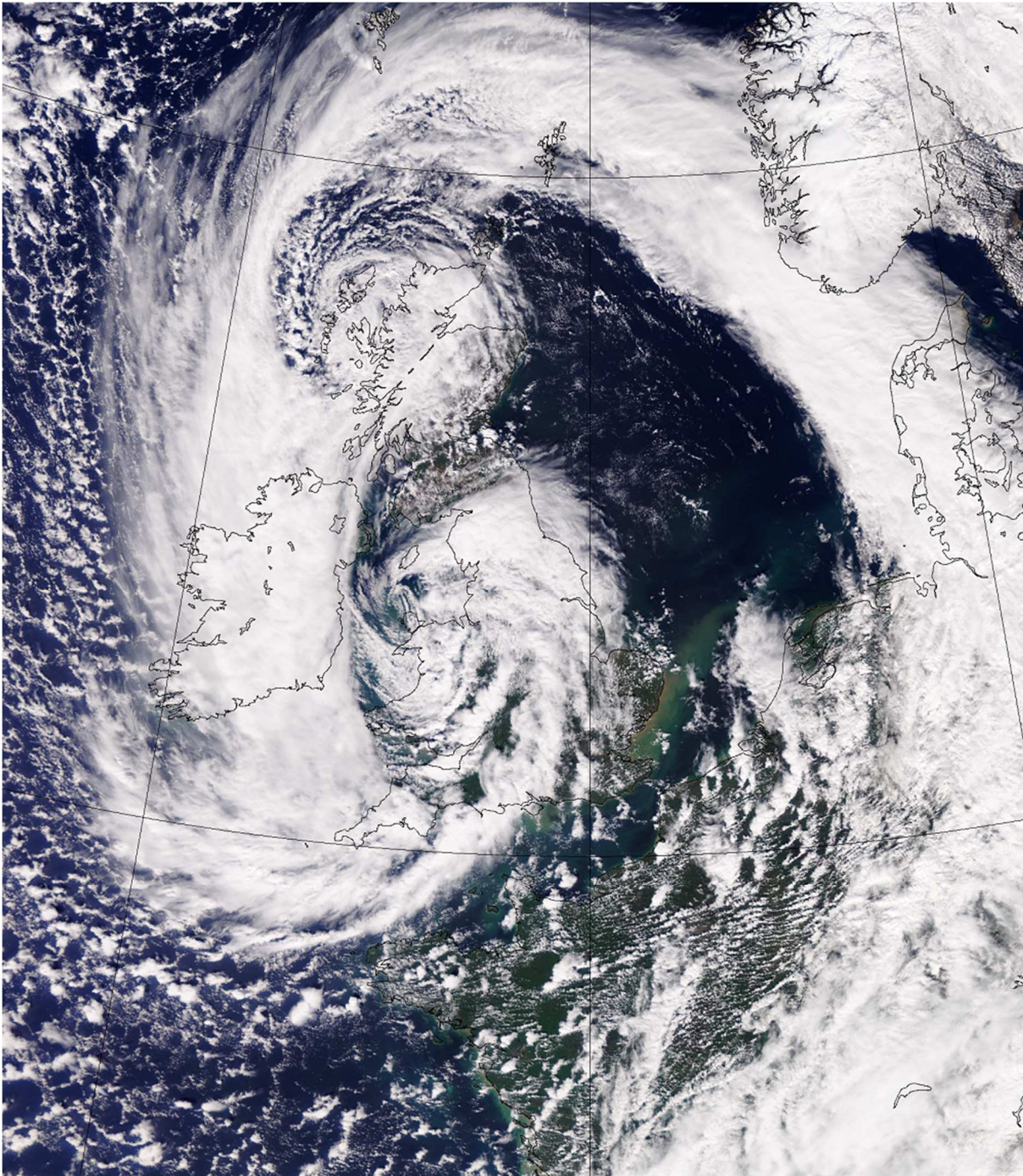
The analysis chart at 1200UTC 12 April 2023 shows storm Noa over the UK.



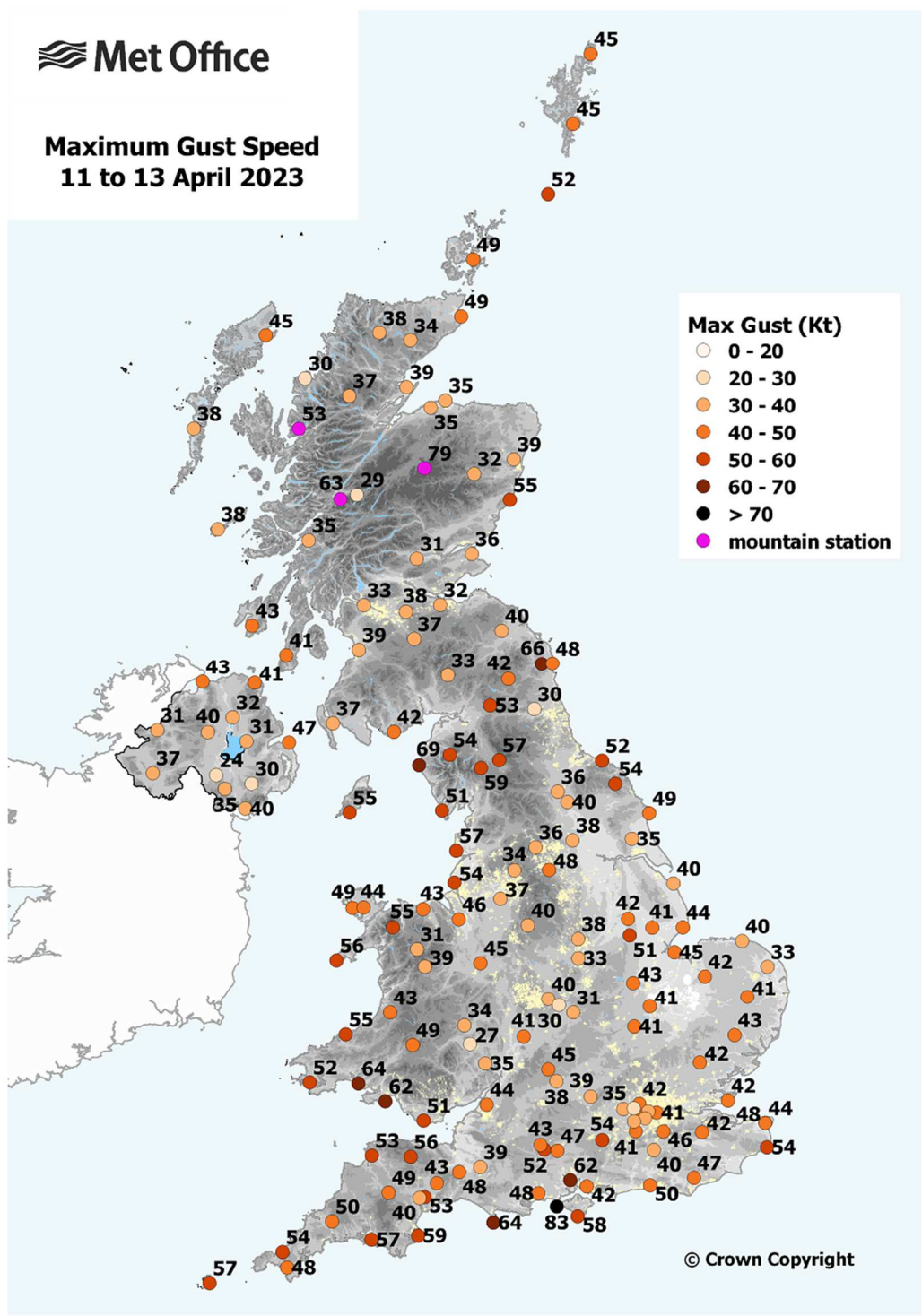
The rain-radar image at 1200UTC 12 April 2023 shows widespread bands of heavy rain across the UK associated with storm Noa.



The satellite image at 1205UTC 12 April 2023 shows storm Noa and associated fronts. The two distinct low centres of 974 hPa (over the Western Isles) and 978 hPa (over the Irish Sea) with wraparound occluded fronts are clearly visible, while the cold front associated with the storm system pushes into the near continent.

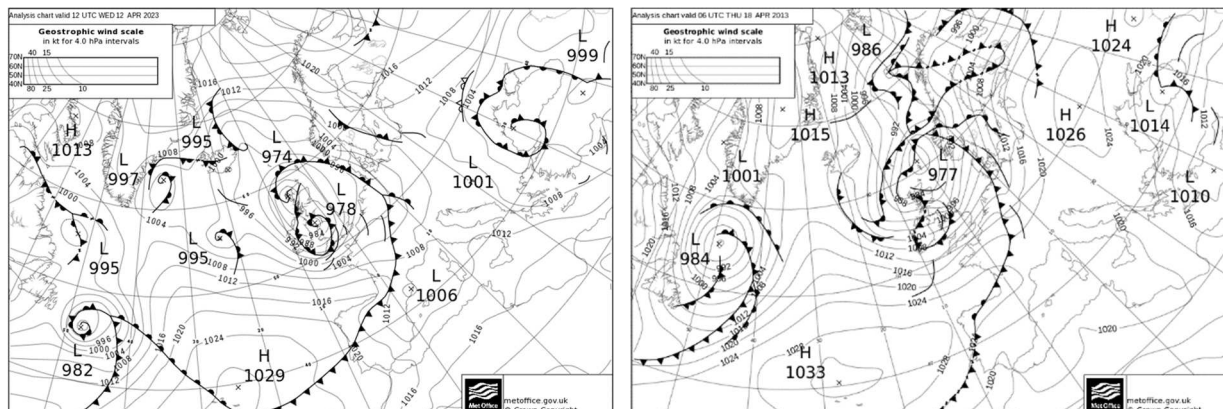


The map below shows maximum gust speeds from storm Noa from 11 to 13 April 2023. The strongest gusts were around exposed coastal locations, with many stations across England and Wales recording gusts of over 50Kt (58mph). Gusts at several stations exceeded 60Kt (69mph) including 69Kt (79mph) at St Bees Head, Cumbria, 66Kt (76mph) at Brizlee Wood, Northumberland, and 64Kt (74mph) at Isle of Portland, Dorset and Pembrey Sands, Carmarthenshire. The highest gust was 83Kt (96mph) at Needles Old Battery, Isle of Wight, which set a new England April gust speed record, exceeding 78Kt (90mph) at Avonmouth, Bristol on 1 April 1994. Needles Old Battery is located at the western end of the Isle of Wight, at 80 metres above mean sea level at the top of a cliff and is fully exposed to westerly winds blowing up the English Channel.

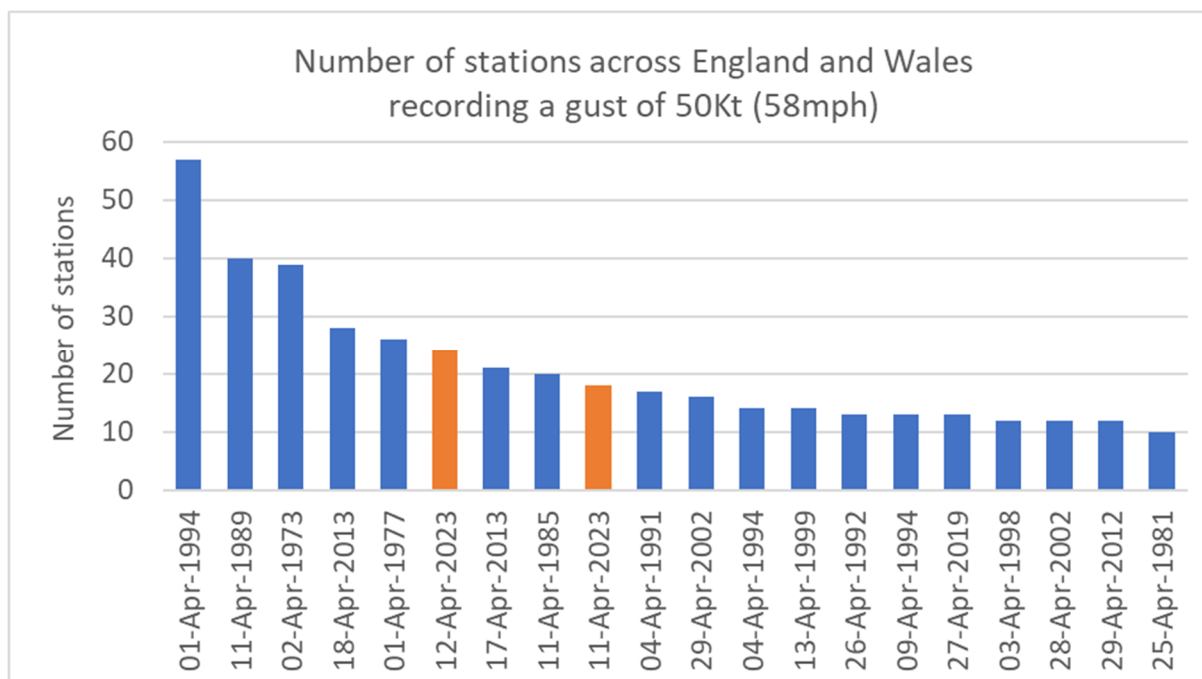


## Historical context

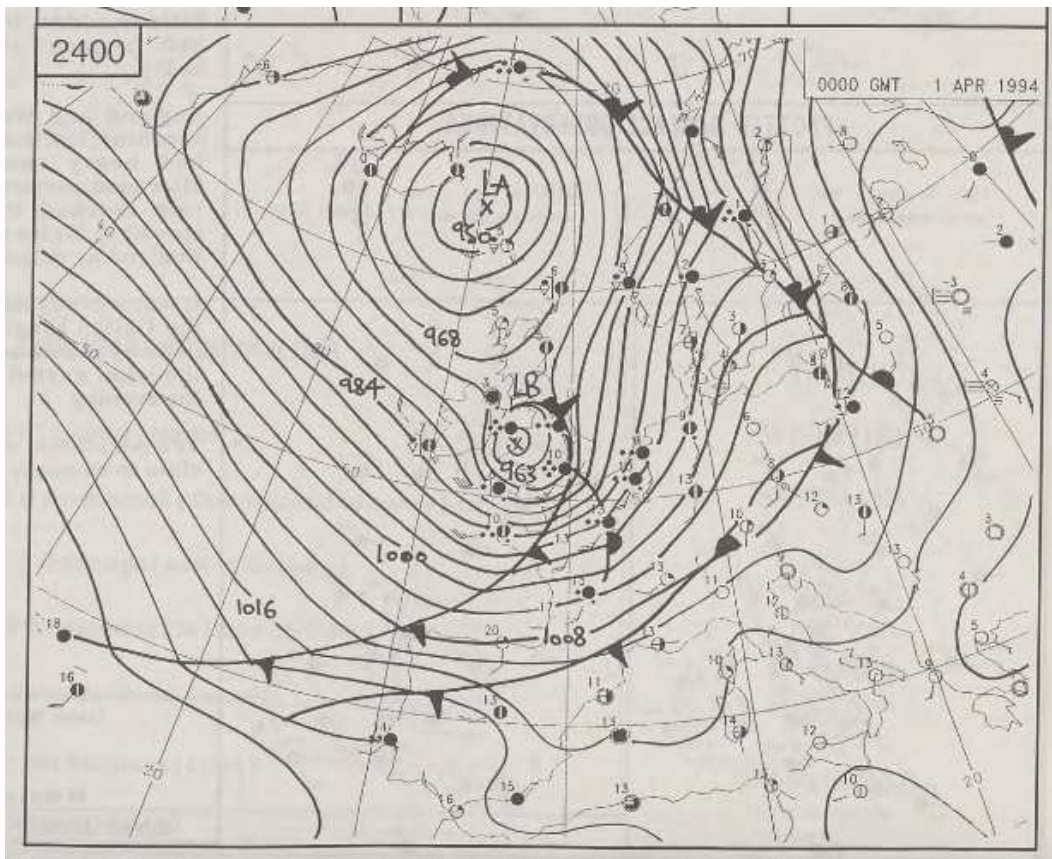
In terms of widespread gusts across England exceeding 50Kt (58mph), this was the most notable April storm across England and Wales since 17 to 18 April 2013. The analysis charts below compare (left) 1200UTC 12 April 2023 and (right) 0600UTC 18 April 2013.



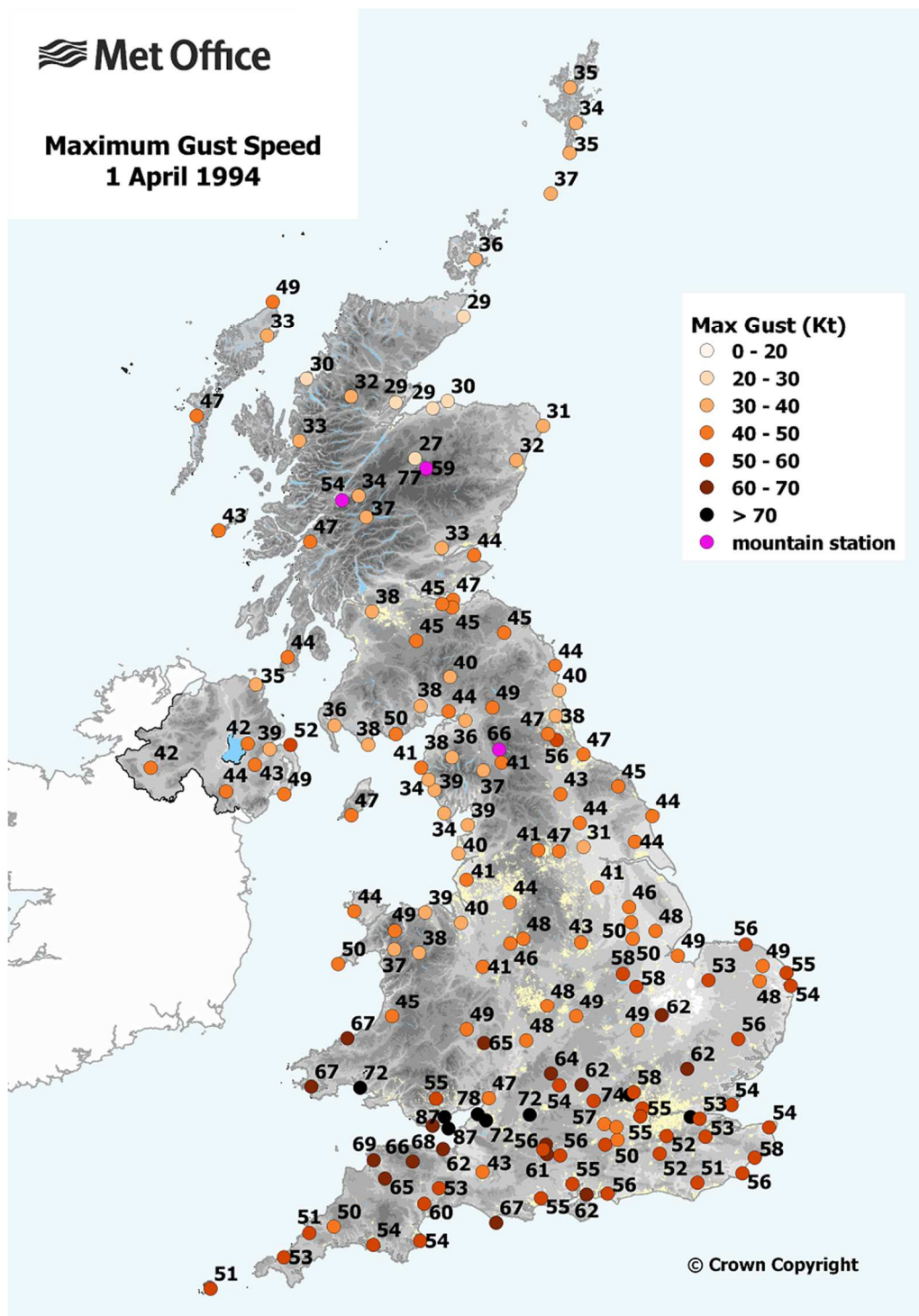
The chart below provides a count by day of the number of stations across England and Wales recording a gust exceeding 50Kt (58mph) during April, based on data from 1970. By this metric storm Noa was one of the ten most significant April storms to affect England and Wales in the last fifty years. However, there are several more powerful April storms in the observational record, including 1 April 1994, 11 April 1989 and 2 April 1973.



The most severe April wind storm on the observational records from 1970 was on 1 April 1994. The analysis chart at 0000UTC 1 April 1994 shows a very deep area of low pressure and fronts associated with this storm across England and Wales.



The map below shows maximum gust speeds on 1 April 1994. In total, 57 stations across England and Wales exceeded 50Kt, of which 22 exceeded 60Kt (69mph), around four times as many as on 18 April 2023. Gusts were particularly strong along the Bristol Channel coastline, with several stations recording 70 to 80Kt (81 to 92mph), and two stations in Wales recording 87Kt (100mph).



Author: Mike Kendon, Met Office National Climate Information Centre

Last updated 19/04/2023