

Storm Henk, 2 January 2024

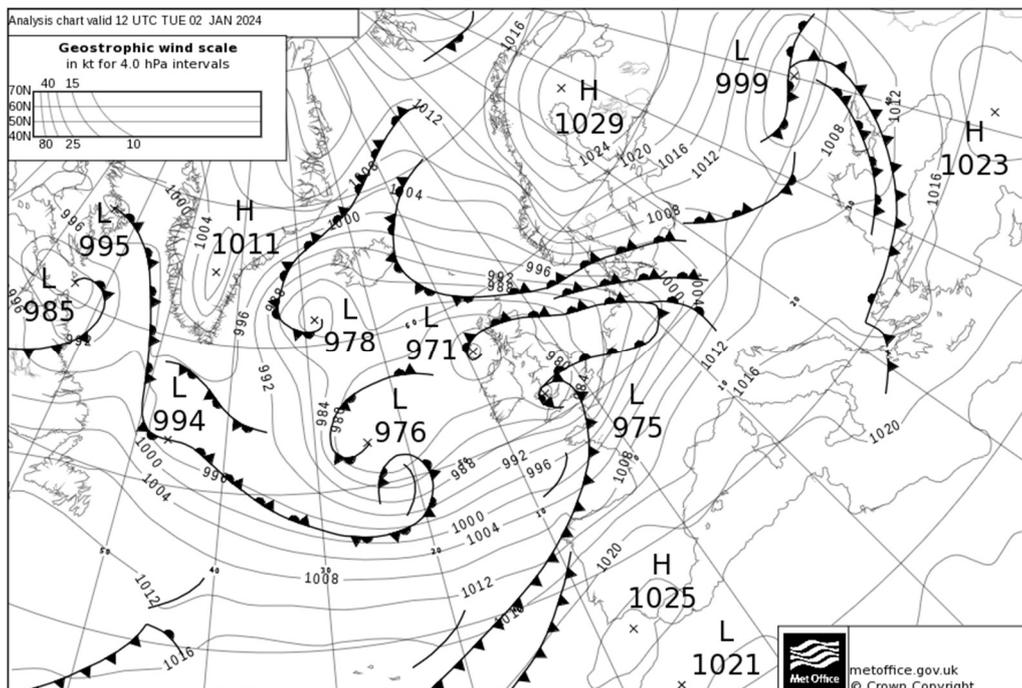
Storm Henk, the eighth storm of the 2023-2024 storm season, brought damaging winds and heavy rain to southern and central parts of England and Wales on 2 January 2024. Winds gusted widely at over 50Kt (58mph), even in inland locations, while Exeter Airport recorded a gust of 70Kt (81mph). Heavy rain from storm Henk contributed to significant flooding problems, following the wet weather during autumn and December 2023. Between 1 October 2023 and 4 January 2024, parts of the East Midlands, north-east England and eastern Scotland received more than 150% of the 1991-2020 long term average rainfall for the four-month period October to January.

Weather impacts

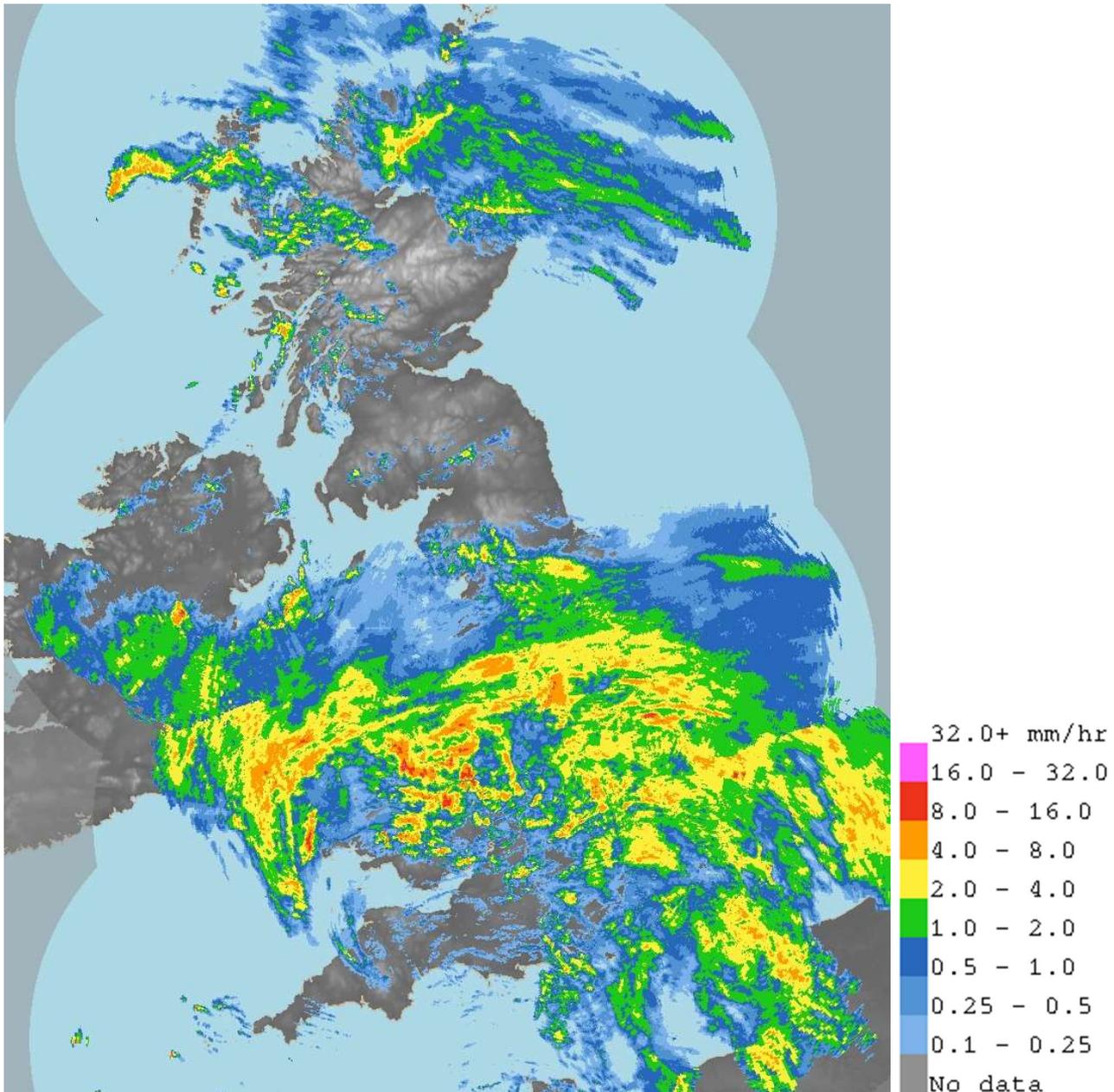
Storm Henk caused power outages, severe disruption to road and rail transport and flooding problems. One man died in Gloucestershire after a tree fell on his car, and a woman in south-east London was also injured by a falling tree. Approximately 38,000 properties were estimated were to have lost power due to fallen trees bringing down lines. The M25 Dartford Crossing was closed due to strong winds and several major roads in England were also closed due to flooding. Many trains were delayed, diverted or cancelled and several rail companies advised people not to travel as fallen trees and power failures affected the network. Almost 300 flood warnings were in place in England, with others in Wales and Scotland. Hundreds of properties located near the River Severn in the West Midlands were flooded, in some cases for the fourth time of the winter. There was also flooding in York as the River Ouse burst its banks, and properties were also flooded in Wales. In London, a roof hatch blew open on the London Eye mid-ride, while in Greenwich, the storm brought down a scaffolding panel, blocking a road. Large waves battered the coastline, particularly the south coast of England. Aircraft struggled to land at Heathrow Airport.

Weather data

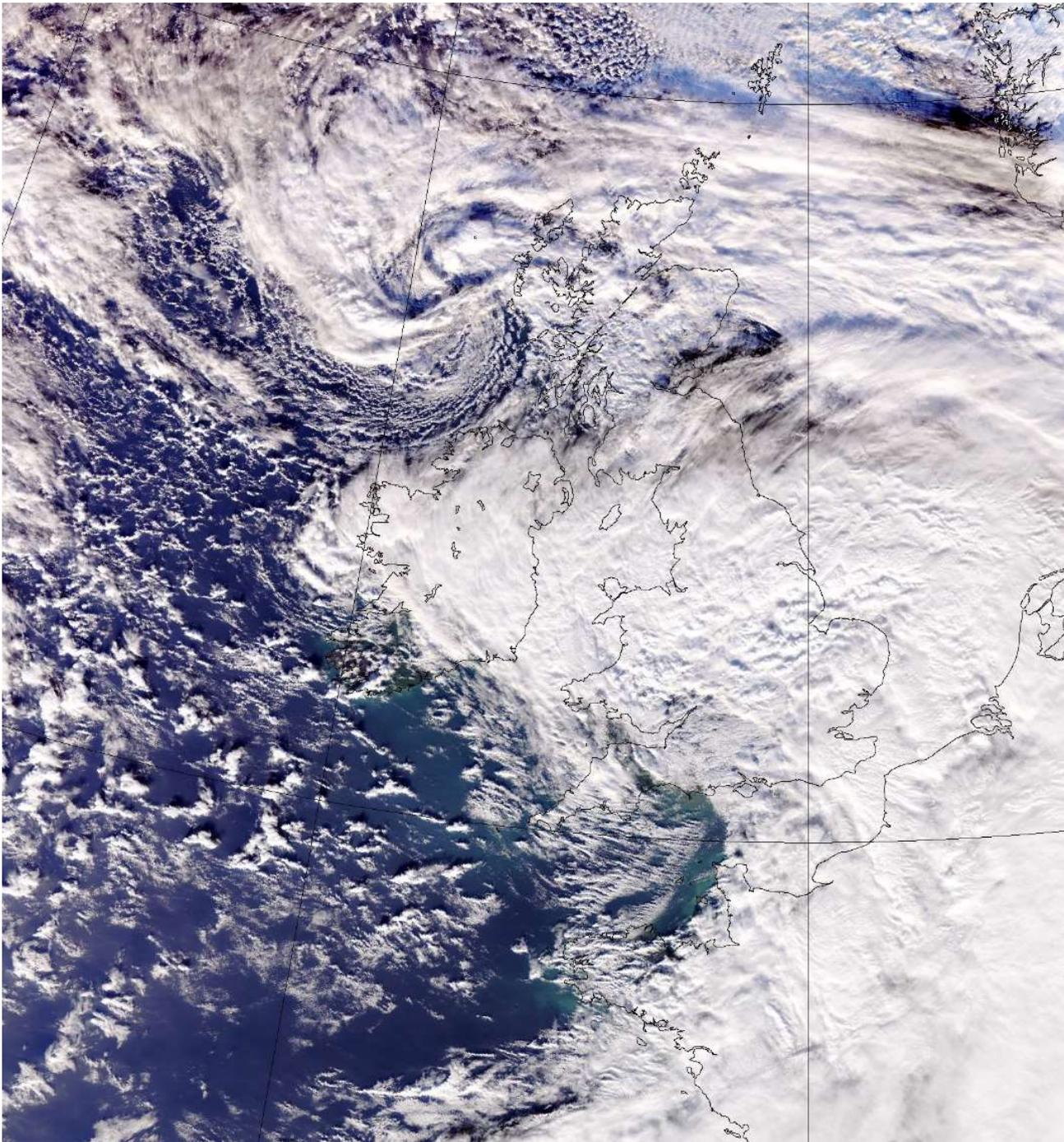
The analysis chart at 1200UTC 2 January 2024 shows storm Henk tracking rapidly eastwards across southern England, with the low centre over South Wales.



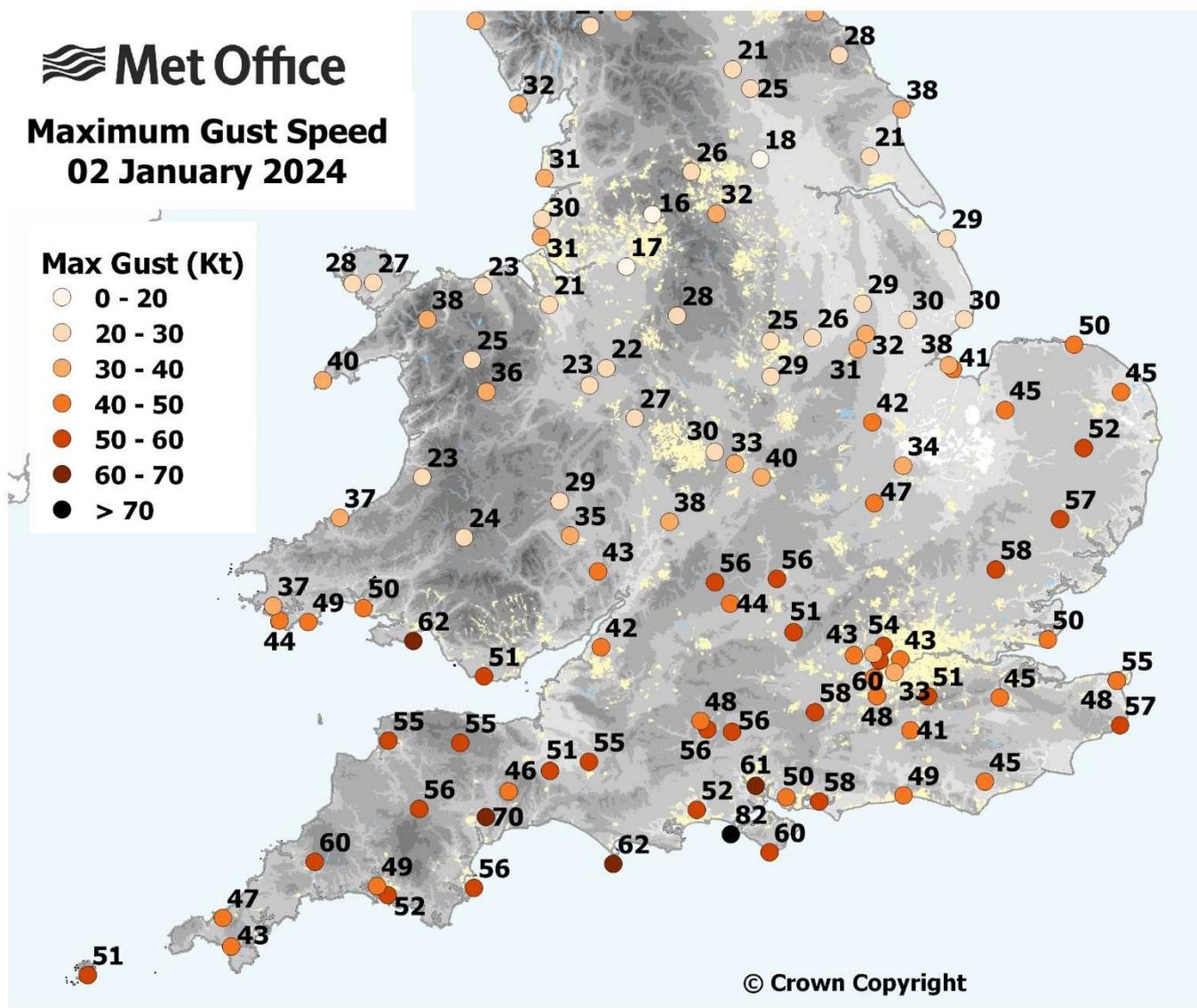
The rain-radar image at 1200UTC 2 January 2024 shows heavy rain across much of Wales and central England from fronts associated with storm Henk.



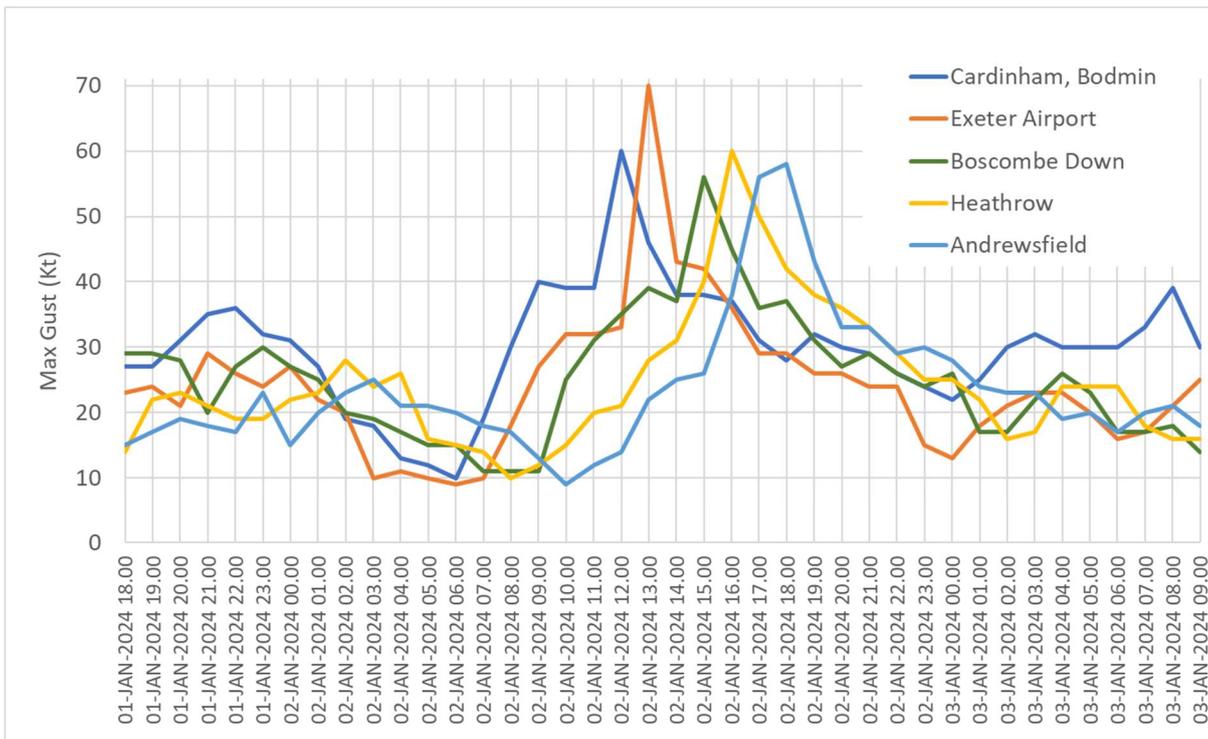
The chart below at 1237UTC 2 January 2024 shows the UK and near-continent almost entirely obscured by cloud from the weather fronts associated with storm Henk. Image copyright Met Office / NOAA / NASA.



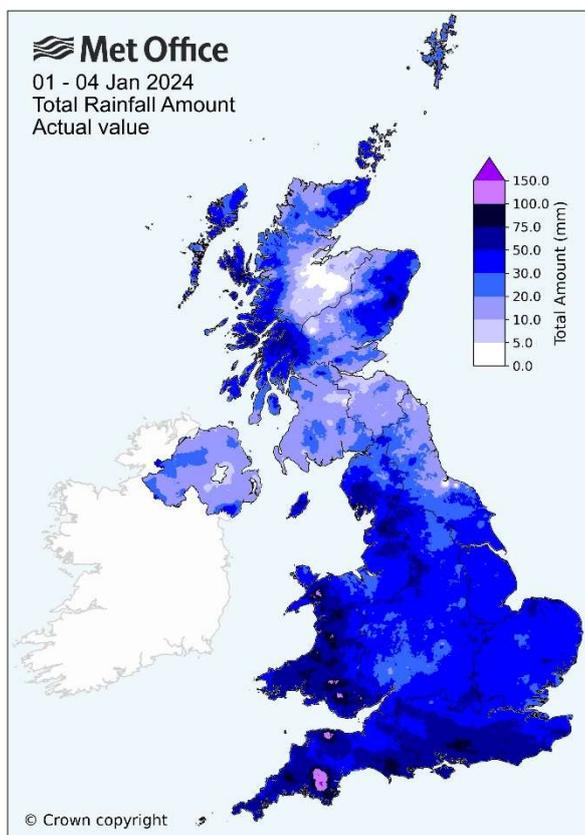
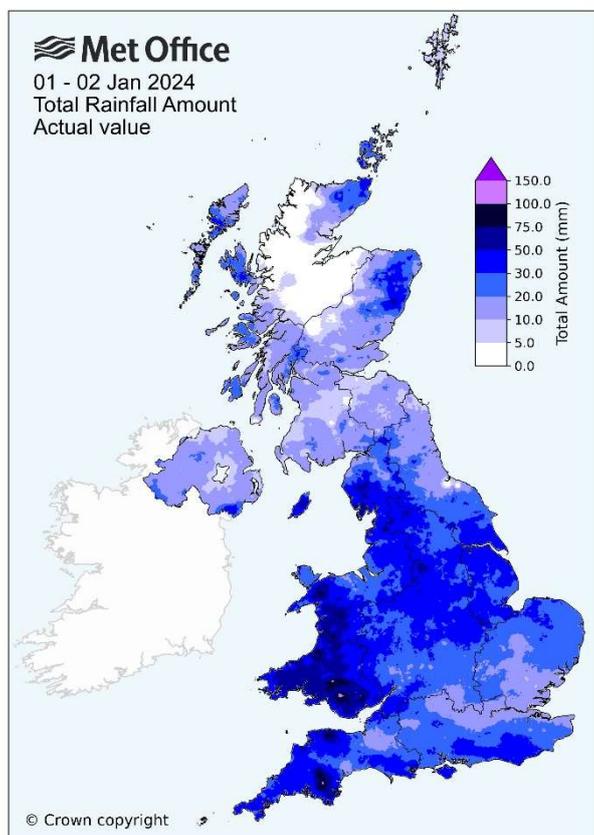
The chart below shows maximum gust speeds across the southern half of the UK from storm Henk on 2 January 2024. Winds gusted widely at well over 50Kt (58mph) at many inland locations across southern England. The highest gusts included 82Kt (94mph) at Needles Old Battery (Isle of Wight), 70Kt (81mph) at Exeter Airport (Devon), 62Kt (71mph) at Isle of Portland (Dorset) and Mumbles Head (Swansea) and 60Kt (69mph) at Cardinham, Bodmin (Cornwall) and Heathrow (Greater London). The 70Kt gust at Exeter Airport was unusually strong for this inland location: Exeter Airport previously recorded a gust of 72Kt (83mph) on 28 February 1990.



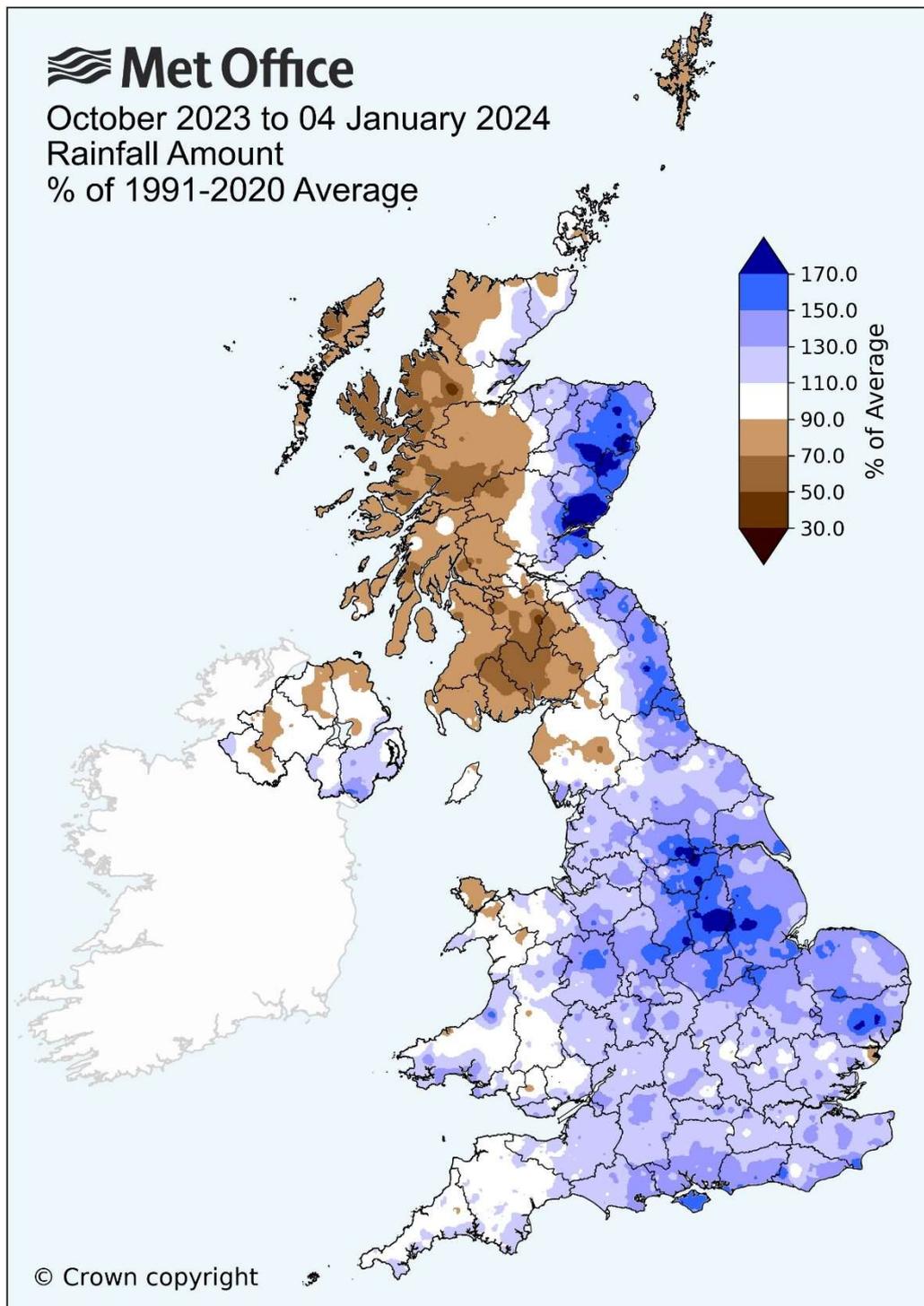
The chart below shows hourly maximum gust speeds at stations across southern England from west to east: Cardinham, Bodmin (Cornwall), Exeter Airport (Devon), Boscombe Down (Wiltshire), Heathrow (Greater London) and Andrewsfield (Essex), with the spike showing the peak of the strongest winds tracking west to east.



The charts below show rainfall totals for the first two days of 2024 (left) and the first four days (right). 2024 started on a very wet and unsettled note, with over 30mm of rain falling widely in the first two days of January across south-west and parts of southern England, most of Wales and much of the Midlands and parts of eastern and northern England, with over 50mm across some upland areas. In the first four days, most of England and Wales and parts of eastern Scotland received 30 to 50mm, with over 50mm across much of Wales and parts of southern England. The high ground of the south-west and South Wales received 50 to 100mm, more in some places.



The chart below shows rainfall totals from October 2023 to 4 January 2024 as a percentage of the four-month long-term average for October to January inclusive. Remarkably, only for days into January, parts of the East Midlands, north-east England and Eastern Scotland received over 150% of the four-month average rainfall, and in some locations over 170%.

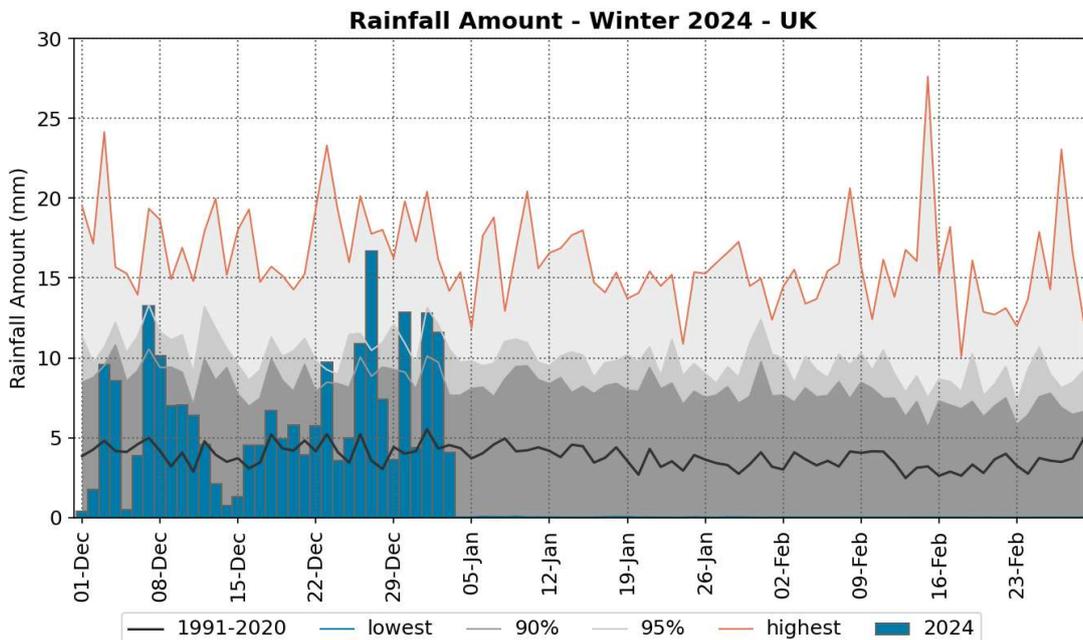


The charts below show daily rainfall totals (top) and accumulations (bottom) for the UK overall from the start of winter. These illustrate the prolonged spell of wet weather, with 10mm falling on average across the UK for five out of the ten days 26 December 2023 to 4 January 2024.



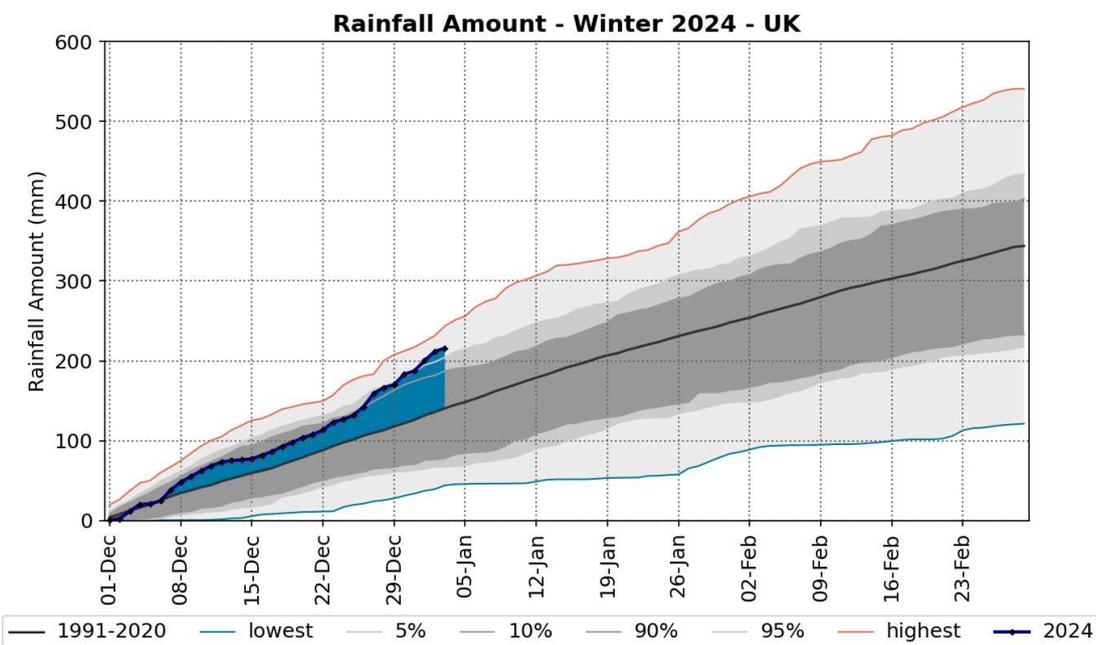
Source: HadUK-Grid 04/01/2024 10:55

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Source: HadUK-Grid 04/01/2024 10:45

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