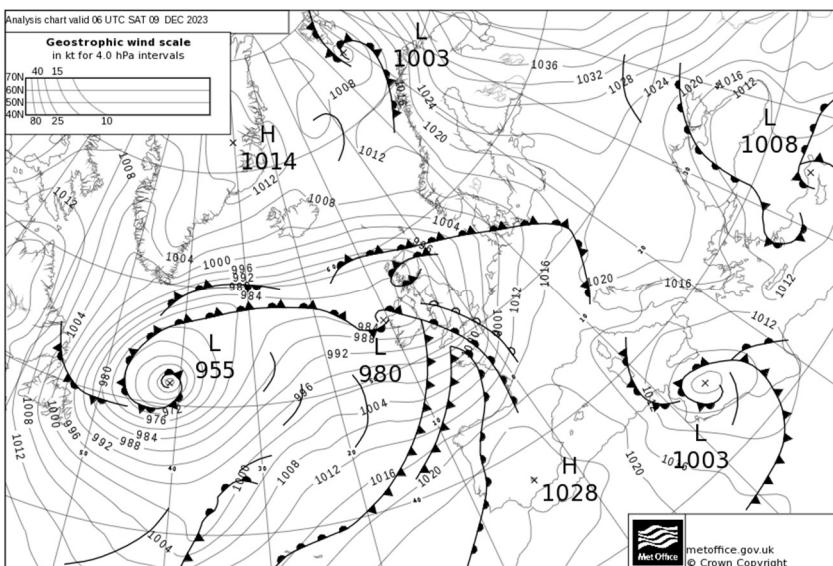


Storms Elin and Fergus, 9 to 10 December 2023

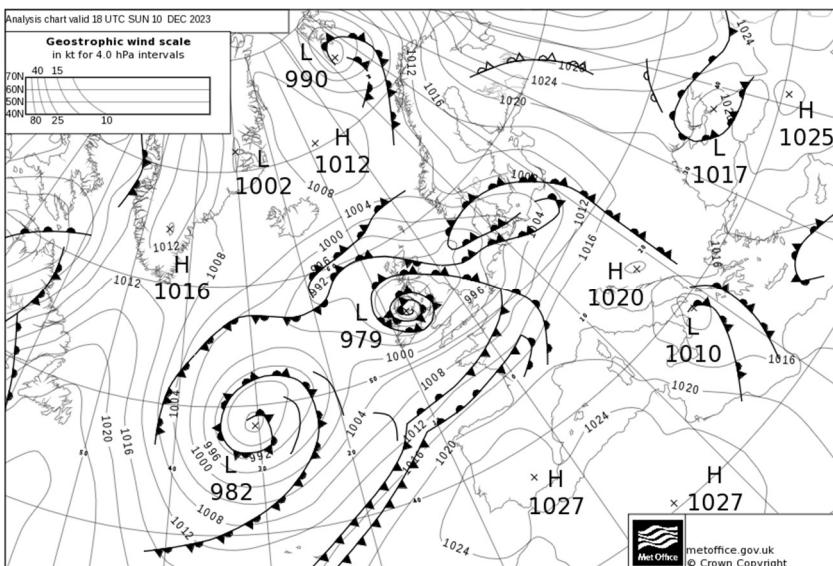
Storms Elin and Fergus, arriving in rapid succession, brought strong winds and heavy rain to the UK over the weekend of 9 to 10 December. These storms formed part of an unsettled, mild, wet and windy spell of weather to affect the UK from a succession of low pressure systems and rain-bearing fronts. Elin and Fergus were named by the Irish National Met Service, Met Éireann, with the worst weather impacts occurring across the Republic of Ireland. The storms also caused localized impacts in the UK, with flooding a particular concern due to the saturated ground following the wet autumn in many areas. Numerous flood warnings were in place for major rivers such as the Severn and Ouse with the ongoing risk of groundwater flooding.

Weather data

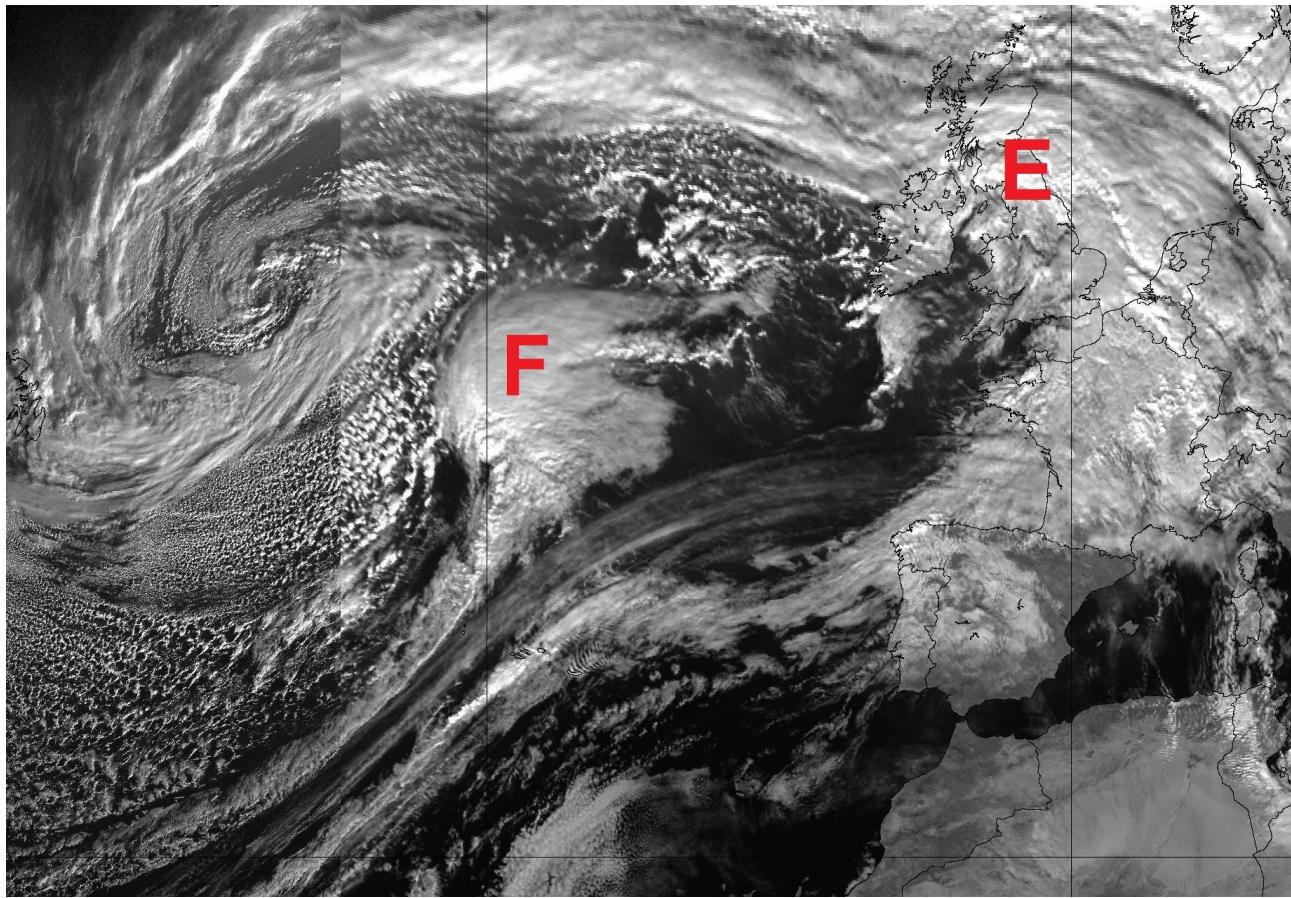
The analysis chart at 0600UTC 9 December 2023 shows fronts associated with storm Elin sweeping north-east across England and Wales.



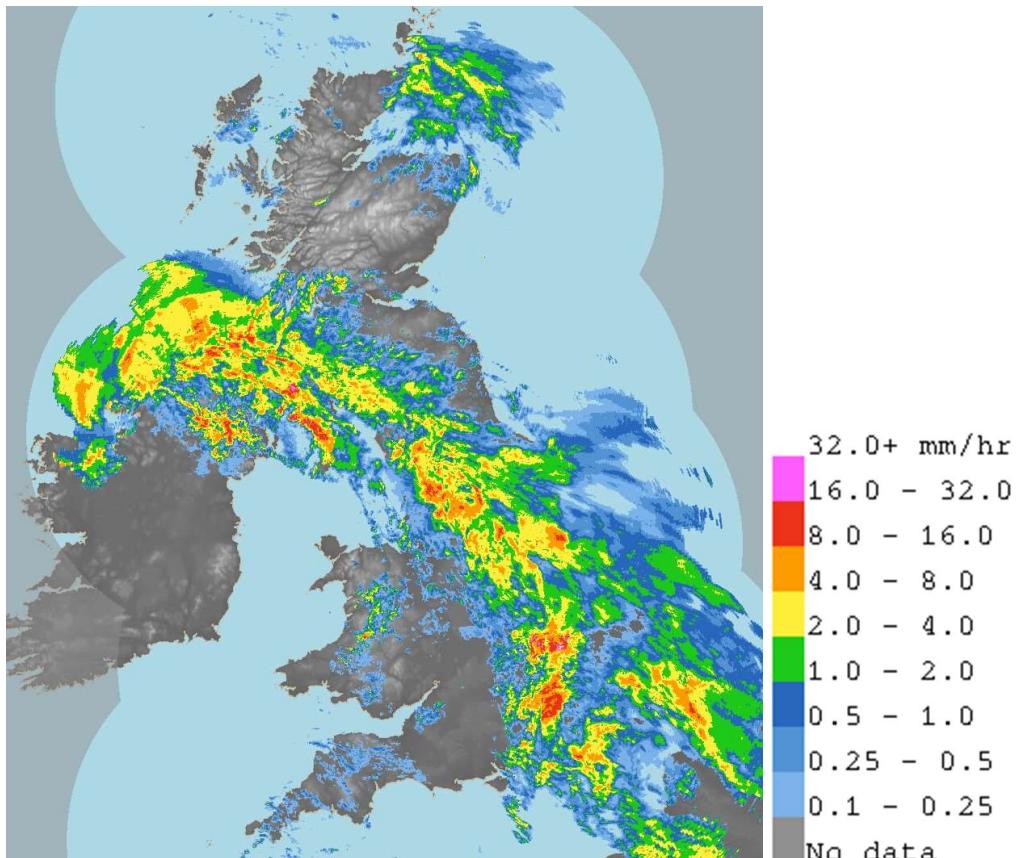
The analysis chart at 1800UTC 10 December 2023 – 36 hours later – shows storm Fergus over Ireland with an occluded front wrapped around the low pressure centre.



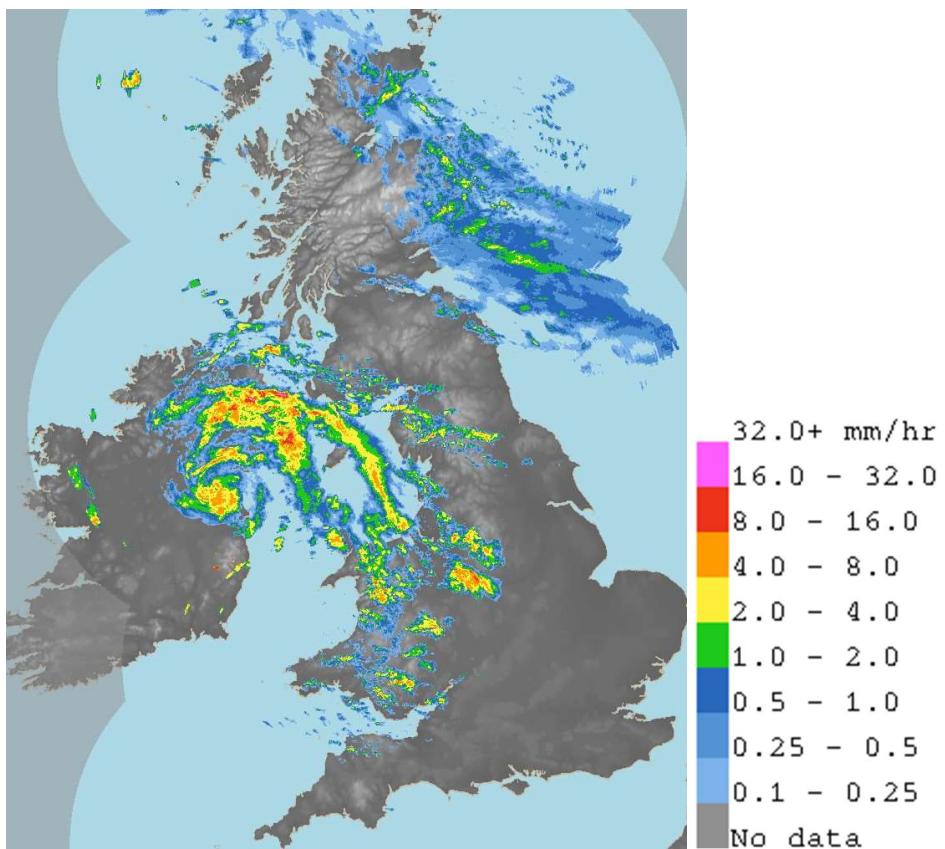
The visible satellite image at 1200UTC 9 December 2023 shows storms Elin (E) and Fergus (F) in a south-westerly airstream bringing mild, unsettled, windy and wet weather to the UK, with clear skies and high pressure to the south across the Iberian peninsula and North Africa.



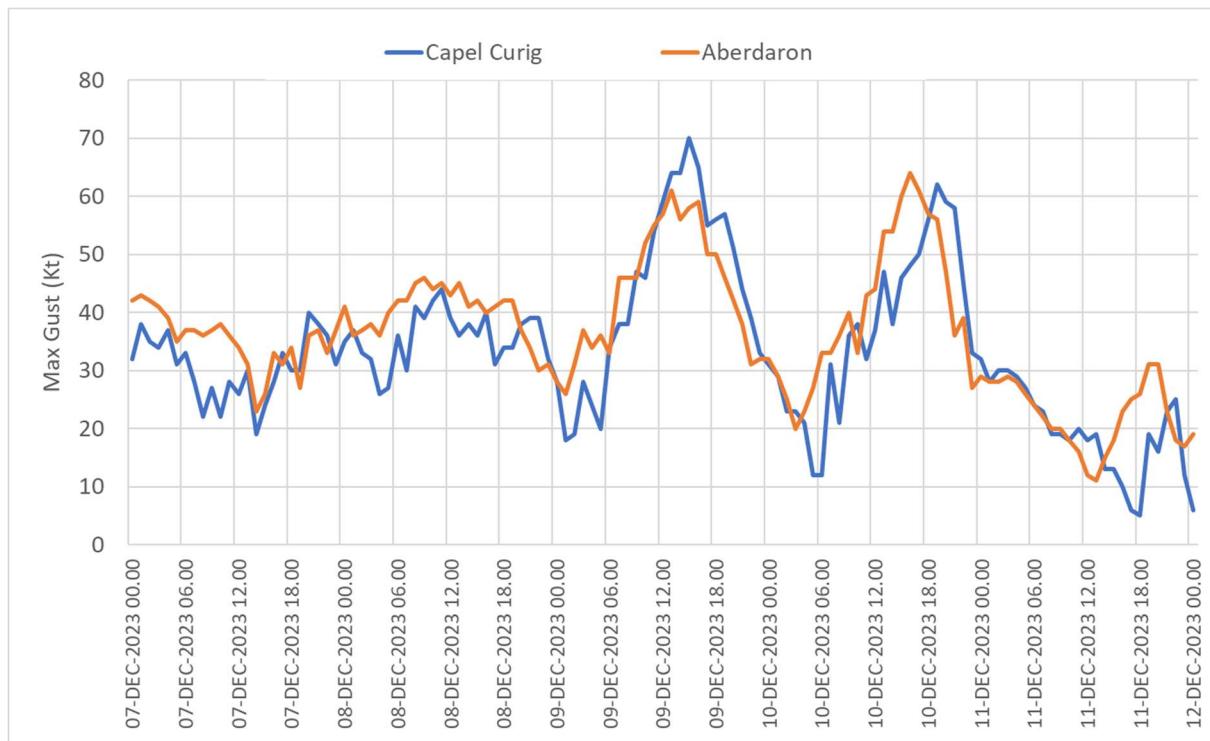
The rain-radar image at 0900UTC 9 December 2023 shows heavy rain from storm Elin stretching from Northern Ireland to south-east England.



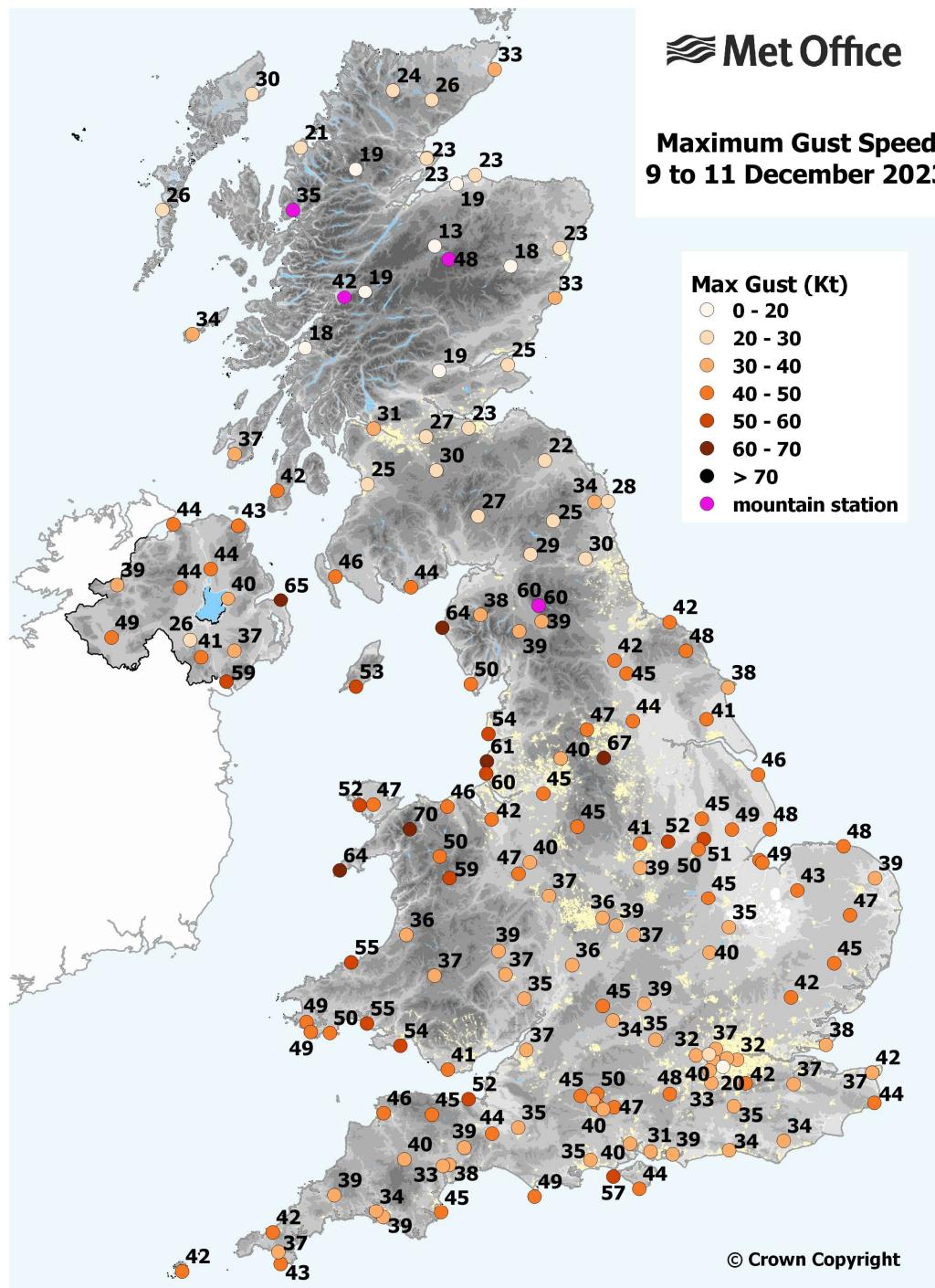
The rain-radar image at 1800UTC 10 December 2023 shows further rain from storm Fergus with the low pressure centre near Dublin.



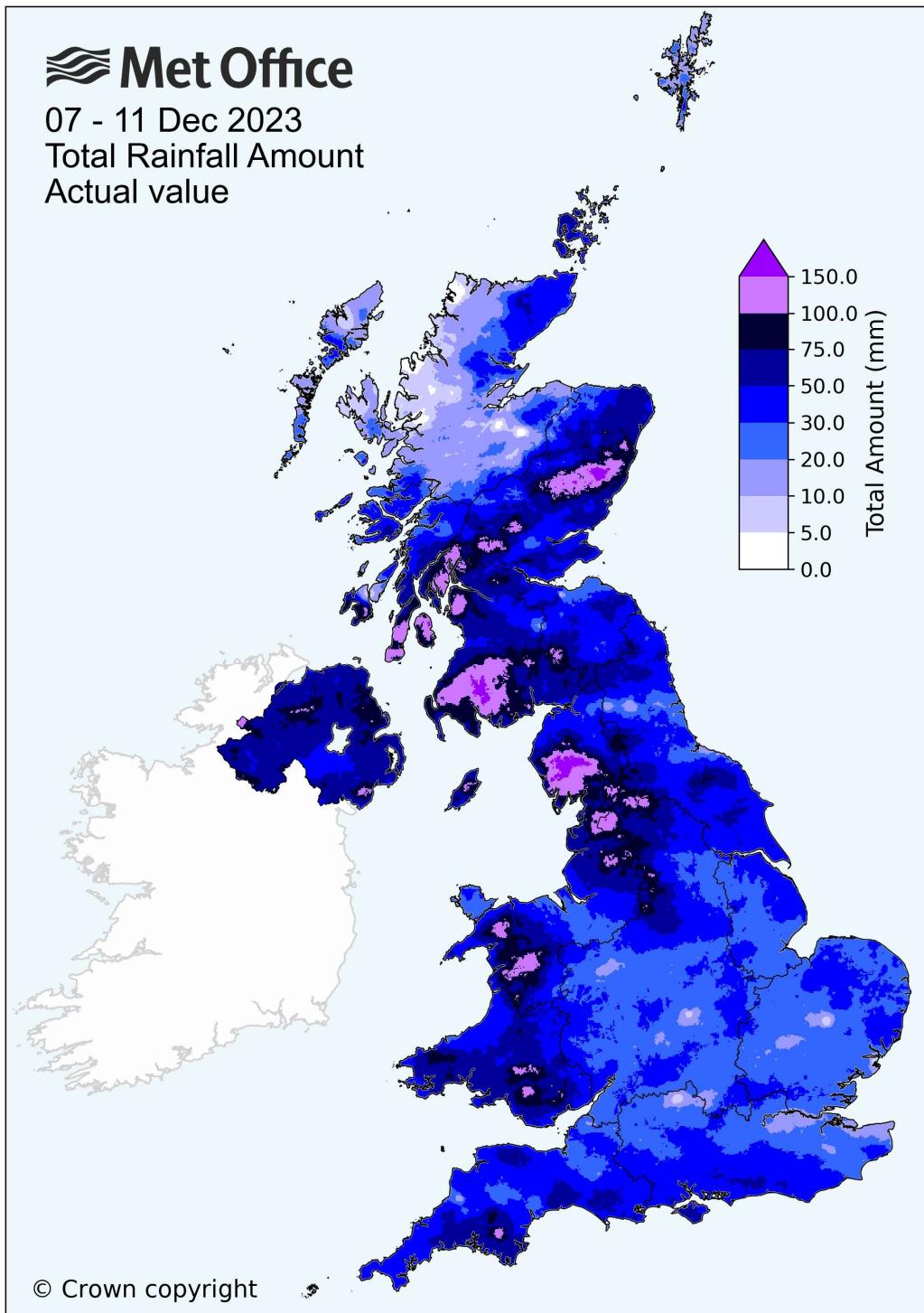
The chart below shows hourly maximum gust speeds at Capel Curig, Conwy and Aberdaron, Gwynedd (on the western tip of the Llŷn Peninsula), from 7 to 12 December 2023. Gusts exceeded 60Kt (69mph) at both of these stations during storms Elin and Fergus.



The chart below shows maximum gust speeds across the UK from storms Elin and Fergus from 9 to 11 December 2023. Gusts reached 40 to 50Kt (46 to 58mph) widely across England, Wales, Northern Ireland and south-west Scotland, and exceeded 60Kt (69mph) around exposed Irish Sea coasts, with 70Kt (81mph) at Capel Curig, Conwy, 67Kt (77mph) at Emley Moor, West Yorkshire, 65Kt (75mph) at Orlock Head, County Down, and 64Kt at St Bees Head, Cumbria and Aberdaron, Gwynedd. During storm Elin, several stations in Lincolnshire, Suffolk, Lancashire, Cheshire, Merseyside and West Yorkshire recorded their highest December gusts since a major winter storm on 5 December 2013.



Storms Elin and Fergus formed part of an ongoing sequence of very wet weather to affect the UK. The map below shows rainfall accumulations from 7 to 11 December 2023, with 30 to 50mm of rain falling widely in many parts of the UK, over 50mm in many western and northern areas, including Northern Ireland, and over 100mm across upland parts of Wales, north-west England, south-west and parts of eastern Scotland, this rain falling on saturated catchments following the very wet autumn.



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