STORM DARRAGH

Sustained winds peaked on Friday 6 December 2024

The fourth named storm of the 2024/25 season
Named by Met Office (United Kingdom) on Thursday 5 December 2024

Published Thursday 21 August 2025

Meteorological Overview

Storm Darragh brought widespread severe and damaging winds across Ireland on Friday 6 and early Saturday 7 December 2024. Storm Darragh first developed into a closed low pressure system on Wednesday 4 December off the east coast of the United States and due south of Newfoundland. It developed on the northern side of an intense jet stream, which was traversing the north Atlantic at the time. The storm interacted with the jet stream and intensified as it crossed the Atlantic moving northeast, with the centre of the storm reaching the northwest coast of Ireland by evening of Friday 6th. It reached peak intensity at around 00 UTC on Saturday 7th while moving off the east coast of Northern Ireland over the Irish sea, with a minimum central pressure of around 979 hPa. While it was not an especially deep low, relative to other intense storms that affected Ireland in the past, two factors combined that led to storm Darragh producing stronger winds over Ireland, compared to other similarly deep storms. Firstly, the storm was still intensifying (central pressure still dropping) as it crossed from west to east over the northern half of Ireland late on Friday 6th and secondly, at the same time, high pressure was building behind the storm over the mid north-Atlantic, squeezing the isobars together behind the storm. See figures 1 and 2 on next page. This meant the strongest winds were from the not-typical north-westerly direction. See table 1 for wind directions. The storm brought bands of heavy rain across the country through the day on Friday 6th, with the west and north of the country seeing the heaviest falls. There was further heavy rain overnight, especially in the northeast, as the occluded weather front wrapped around the low centre when it moved over the Irish sea.

Summary of Extremes

During these dates, UTC (Universal Time Coordinated) was the same as local time, that is no hour difference.

- On Friday 6 December, sustained (10-minute mean) wind speeds was a northwest **111 km/h** (violent storm, 60 knots or 69 mph) at Mace Head (coastal), Co Galway at 21 UTC.
- Gust (3-second mean) wind speeds was highest **141 km/h** (76 knots or 87 mph) from the northwest at Mace Head (coastal), Co Galway on Friday at 21:23.
- The lowest hourly mean sea level pressure (MSLP) was **979.9 hPa** on Saturday 7 December 2024 in the hour ending 00 UTC observed at Ballyhaise, Co Cavan.
- The highest daily (09-09 UTC) rainfall total was **73.4 mm** on Friday at Cuilcagh Mountains, Co Cavan (32 % of its LTA).
- The highest 24-hour rainfall total was **66.4 mm** up to 07 UTC Saturday at Ardara WWTP (coastal), Co Donegal of which **39.8 mm** fell in the 6 hours ending at 19 UTC Friday.
- The highest individual wave height was **16.1 m** at Buoy M3 (off Cork coast) around 03 UTC on Saturday 7 December 2024.

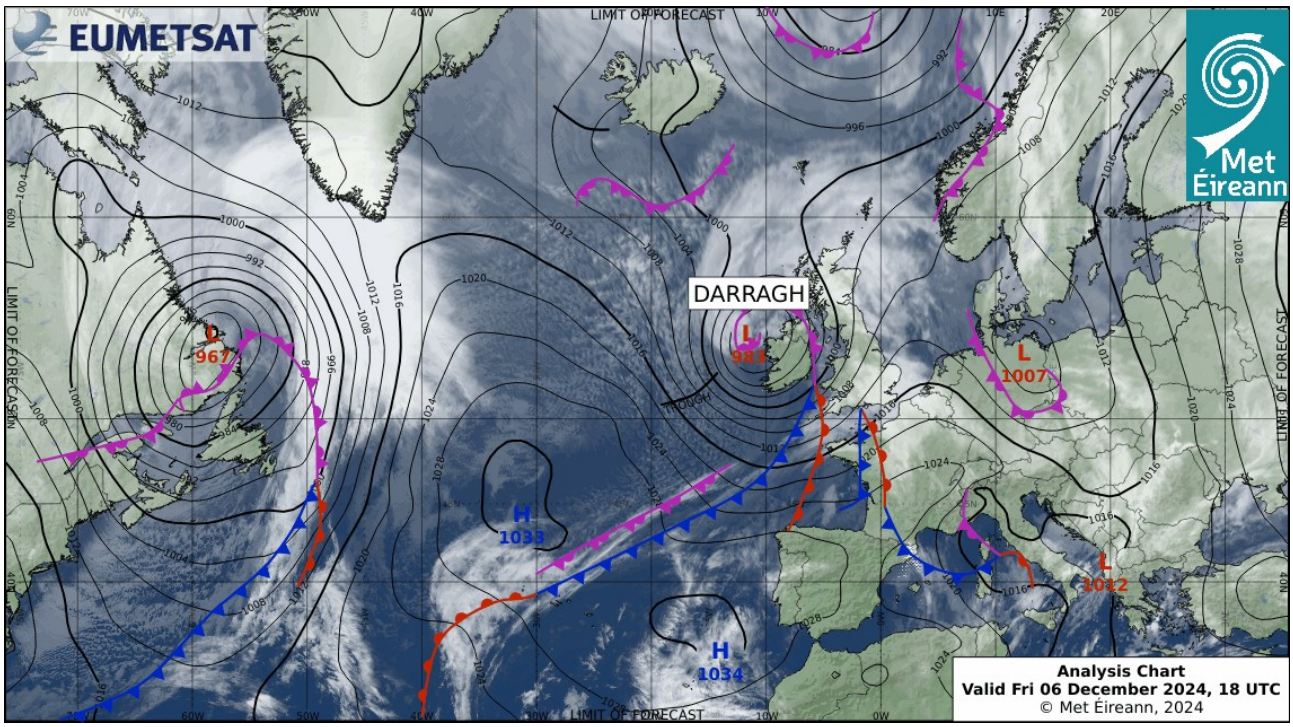


Figure 1. EUMETSAT Analysis Chart at time of highest sustained wind speed Fri 6 Dec 2024 at 18 UTC

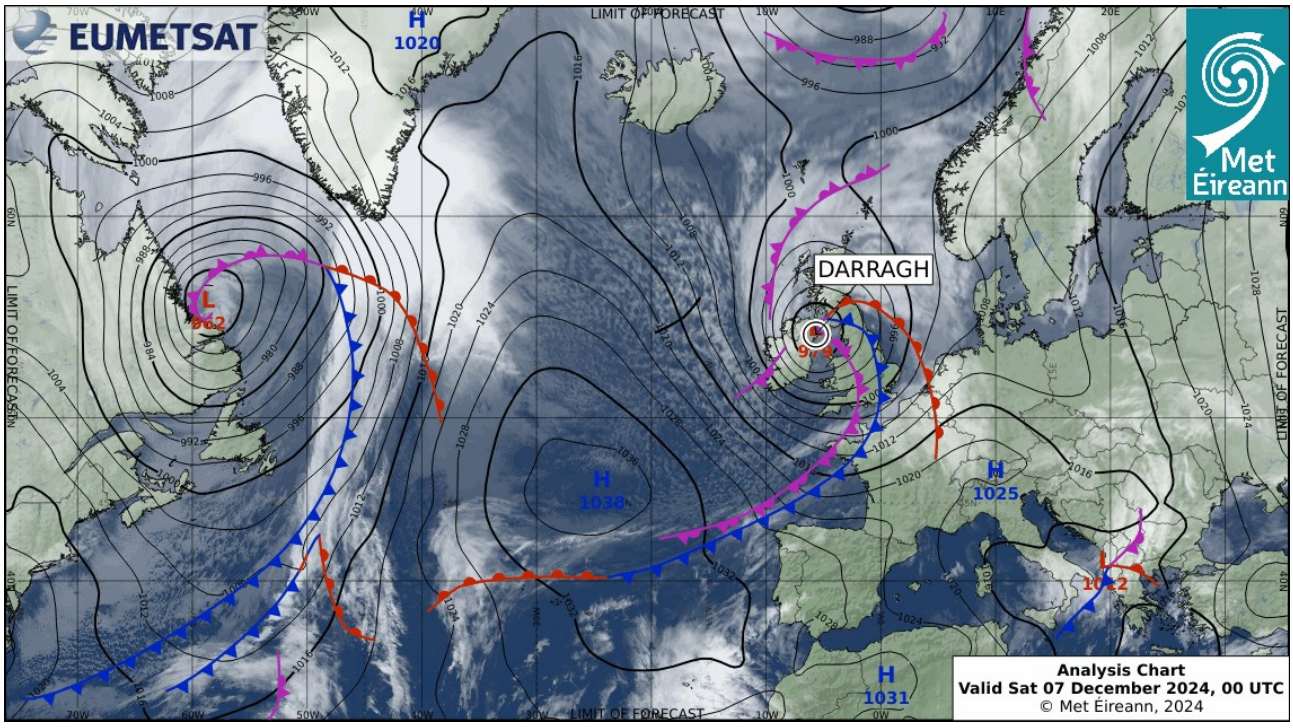
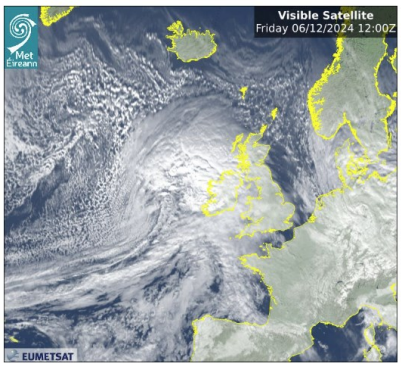


Figure 2. EUMETSAT Analysis Chart by midnight on Fri 6 Dec 2024

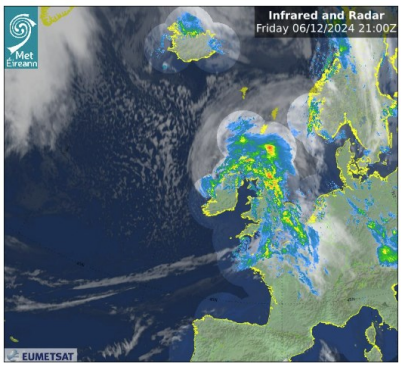
Daily Weather Summaries

Friday 6 December 2024

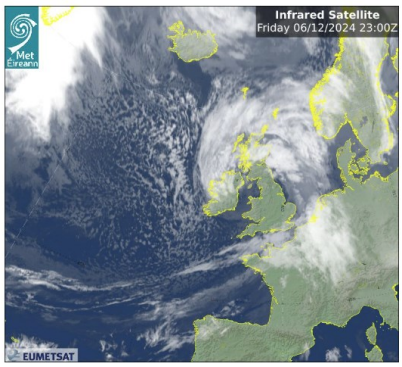
During the day Ireland experienced a fresh to strong westerly airflow, situated between a deepening low-pressure system over the North Sea and a high-pressure ridge to the west. This pattern maintained unsettled conditions, featuring brisk winds and scattered showers in the early hours. **Storm Darragh** which formed over the Atlantic, tracked eastward across the country. As it neared, a band of rain moved in from the west, delivering heavy and persistent downpours, particularly in western and northern regions. Strong winds were observed throughout the day, with notable gusts both inland and along the coast. Into the evening, stormy weather persisted with additional showers and blustery conditions. While winds began to ease slightly in some areas, the overall unsettled pattern remained.



Visible Satellite 12 UTC



Infra-Red Satellite+Radar 21 UTC

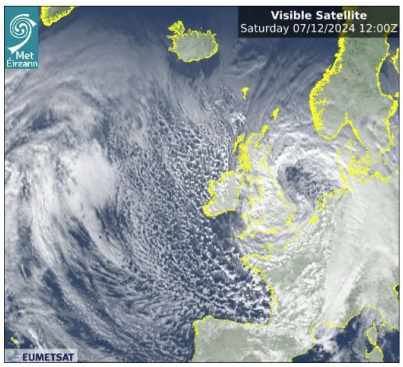


Infra-Red Satellite+Radar at 23 UTC

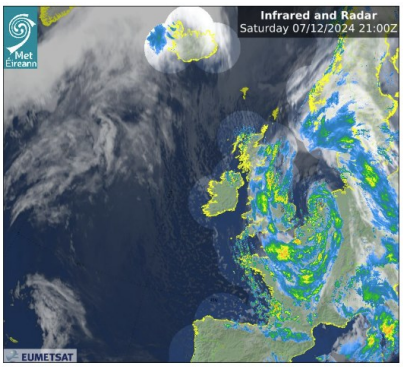
Figure 3. Visible Satellite, Infrared Radar and Infrared Satellite images on Fri 06 Dec 2024 at the hours 12 UTC, 21 UTC and 23 UTC

Saturday 7 December 2024

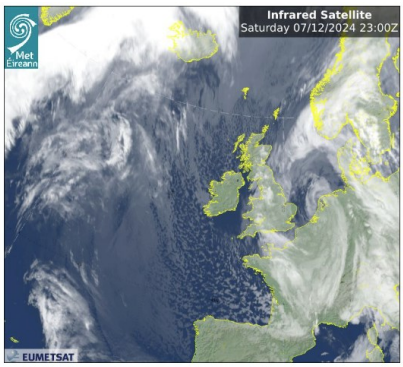
In the early morning, Storm Darragh was a deep depression with a central pressure of 979 hPa centred over the Irish Sea, bringing gale to storm force north-to-northwest winds across Ireland. Overnight, heavy rain swept eastward, leading to intense downpours. By morning, the rain cleared, replaced by heavy, blustery showers, especially in the north and west. Strong winds persisted, with severe gusts in exposed coastal and upland areas. Showers became more scattered through the afternoon, allowing some bright spells in the south and east. By evening, winds gradually eased as the storm moved away.



Visible Satellite 12 UTC



Infra-Red Satellite+Radar 21 UTC



Infra-Red Satellite+Radar at 23 UTC

Figure 4. Visible Satellite, Infrared Radar and Infrared Satellite images on Sat 07 Dec 2024 at the hours 12 UTC, 21 UTC and 23 UTC

Atmospheric Air Pressure

The minimum hourly mean sea level pressure (MSLP) observed in Ireland during the storm was 979.9 hPa at Ballyhaise, Co Cavan around 00 UTC on Saturday 7th. Between Friday 6 December 2024 03 UTC and Friday 6 December 2024 18 UTC the mean sea level pressure dropped by 25.2 hPa over the 16 hours at Sherkin Island (coastal), Co Cork.

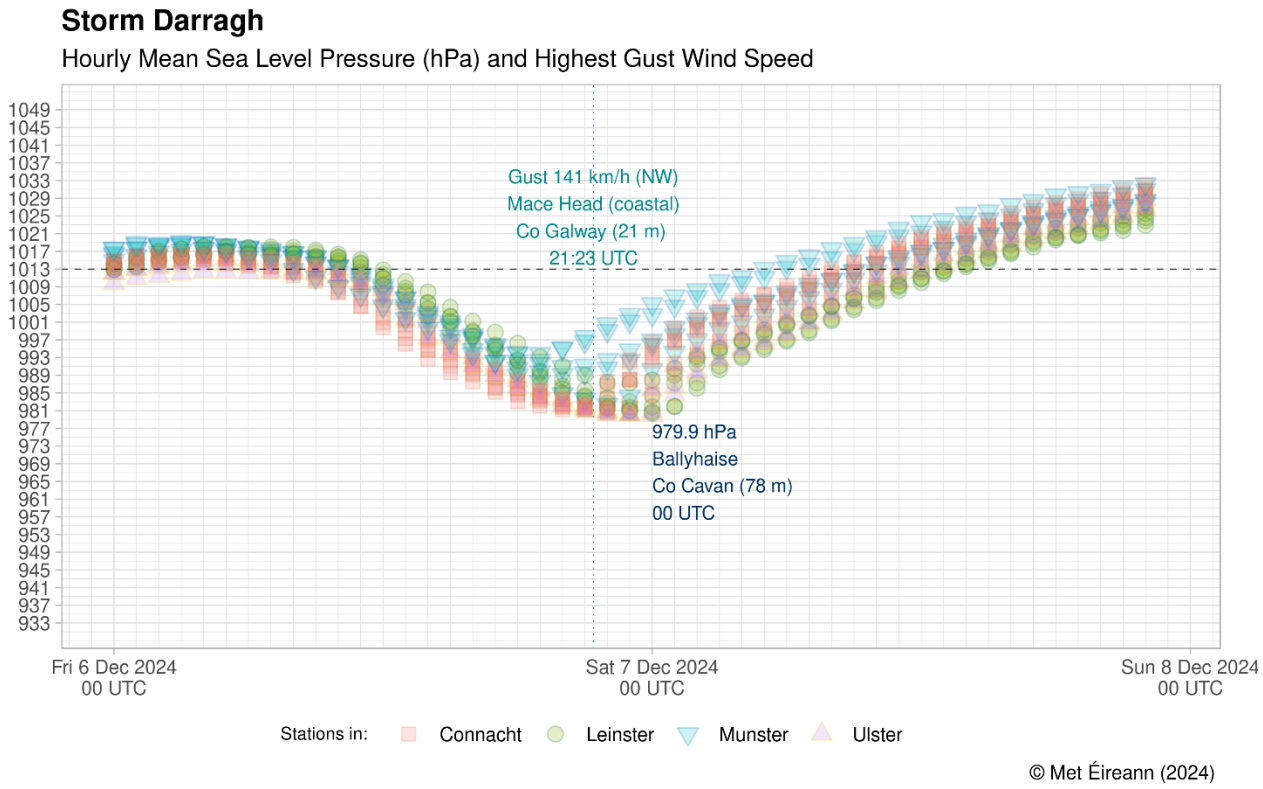


Figure 5. Hourly Mean Sea Level pressure (MSLP) and highest gust wind speed (with stations coloured by province)

For more on how we measure atmospheric pressure, see www.met.ie/climate/what-we-measure/atmospheric-pressure.

Marine Observations

The following table presents extremes from the Irish Marine Data Buoy Observation Network (IMDBON).

Table 1. Extremes of wind speeds and wave heights at buoys from Fri 6 to Sat 7 Dec 2024

Buoy (Location)	Sustained Wind Speeds	Gust Wind Speeds	Significant Wave Height	Individual Wave	MSLP (hPa)
Buoy M2 (in the Irish Sea)	**85 km/h** (46 knots or 53 mph) 03 UTC Sat 7 Dec 2024	**115 km/h** (62 knots or 71 mph) 03 UTC	**5.6 m** 13 UTC Sat 7 Dec 2024	**9.4 m** 12 UTC Sat 7 Dec 2024	**979.4 hPa** 02 UTC Sat 7 Dec
Buoy M3 (off the Cork coast)	**79 km/h** (43 knots or 49 mph) 19 UTC Fri 6 Dec 2024	**110 km/h** (59 knots or 68 mph) 19 UTC	**9.9 m** 04 UTC Sat 7 Dec 2024	**16.1 m** 03 UTC Sat 7 Dec 2024	**994.7 hPa** 18 UTC Fri 6 Dec 2024
Buoy M4 (off the Donegal coast)	**70 km/h** (38 knots or 44 mph) 00 UTC Sat 7 Dec 2024	**109 km/h** (59 knots or 68 mph) 01 UTC	**8.3 m** 04 UTC Sat 7 Dec 2024	**13.7 m** 15 UTC Sat 7 Dec 2024	**980.7 hPa** 20 UTC Fri 6 Dec 202
Buoy M5 (off the south Wexford coast)	**53 km/h** (29 knots or 33 mph) 04 UTC Sat 7 Dec 2024	**93 km/h** (50 knots or 58 mph) 06 UTC	**7.3 m** 00 UTC Sat 7 Dec 2024 and 01 UTC Sat 7 Dec 2024	**14.2 m** 02 UTC Sat 7 Dec 2024 and 05 UTC Sat 7 Dec 2024	**991.5 hPa** 22 UTC Fri 6 Dec 2024
Buoy M6 (in the deep Atlantic)	**78 km/h** (42 knots or 49 mph) 16 UTC Fri 6 Dec 2024	**112 km/h** (60 knots or 70 mph) 16 UTC	**8.3 m** 02 UTC Sat 7 Dec 2024	**13.8 m** 03 UTC Sat 7 Dec 2024	**984.9 hPa** 14 UTC Fri 6 Dec 2024

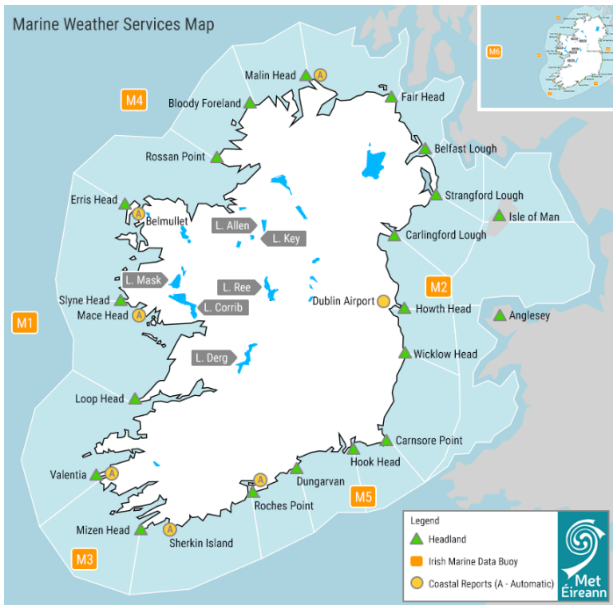


Figure 6. Marine Weather Services Map

Synoptic stations - extremes of wind speeds and rainfall totals

The table below contains wind speeds and rainfall observations for the primary (synoptic) meteorological stations during Storm Darragh. Newport, Co Mayo and Belmullet, Co Mayo saw over 30 mm of daily rainfall on Friday 6th. Twelve out of the 25 primary stations recorded over 10 mm on Friday.

Table 2. Extremes of wind and rainfall at synoptic stations

Station Location	Sustained (10-min mean) Wind Speed	Date highest mean	Wind Direction Highest sustained	Gust (3-sec mean) Wind Speed	Date Highest Gust	Wind Direction Highest Gust	Highest Daily Rain (mm)	4-day Total Rain (mm)
Mace Head** (coastal) Co Galway	**111 km/h** Violent Storm Force (60 knots or 69 mph)	Fri 6 Dec 2024 21 UTC	310° (NW)	**141 km/h** (76 knots or 87 mph)	Fri 6 Dec 2024 2123 UTC	310° (NW)	**17.1 mm** Fri 6 Dec 2024	**18.5 mm**
Malin Head* (coastal) Co Donegal	**98 km/h** Storm Force (53 knots or 61 mph)	Sat 7 Dec 2024 02 UTC	330° (NNW)	**122 km/h** (66 knots or 76 mph)	Sat 7 Dec 2024 0231 UTC	330° (NNW)	**18.4 mm** Fri 6 Dec 2024	**27.4 mm**
Sherkin Island (coastal) Co Cork	**93 km/h** Storm Force (50 knots or 58 mph)	Fri 6 Dec 2024 20 UTC	270° (W)	**122 km/h** (66 knots or 76 mph)	Fri 6 Dec 2024 1956 UTC	270° (W)	**5.7 mm** Fri 6 Dec 2024	**9.8 mm**
Roches Point (coastal) Co Cork	**89 km/h** Storm Force (48 knots or 55 mph)	Fri 6 Dec 2024 23 UTC	280° (W)	**122 km/h** (66 knots or 76 mph)	Sat 7 Dec 2024 0116 UTC	290° (WNW)	**9.8 mm** Fri 6 Dec 2024	**11.4 mm**
Dublin Airport (coastal) Co Dublin	**83 km/h** Strong Gale Force (45 knots or 52 mph)	Sat 7 Dec 2024 03 UTC	300° (WNW)	**113 km/h** (61 knots or 70 mph)	Sat 7 Dec 2024 0225 UTC	290° (WNW)	**8.1 mm** Sat 7 Dec 2024	**11.8 mm**
Finner (coastal) Co Donegal	**83 km/h** Strong Gale Force (45 knots or 52 mph)	Sat 7 Dec 2024 23 UTC	330° (NNW)	**113 km/h** (61 knots or 70 mph)	Sat 7 Dec 2024 2316 UTC	340° (NNW)	**12.2 mm** Fri 6 Dec 2024	**22.9 mm**
Newport (coastal) Co Mayo	**81 km/h** Strong Gale Force (44 knots or 51 mph)	Fri 6 Dec 2024 22 UTC	320° (NW)	**126 km/h** (68 knots or 78 mph)	Fri 6 Dec 2024 2244 UTC	320° (NW)	**30.8 mm** Fri 6 Dec 2024	**36.1 mm**
Knock Airport Co Mayo	**78 km/h** Strong Gale Force (42 knots or 48 mph)	Fri 6 Dec 2024 24 UTC	320° (NW)	**124 km/h** (67 knots or 77 mph)	Fri 6 Dec 2024 2310 UTC	320° (NW)	**25.5 mm** Fri 6 Dec 2024	**39.5 mm**
Shannon Airport (coastal) Co Clare	**78 km/h** Strong Gale Force (42 knots or 48 mph)	Fri 6 Dec 2024 22 UTC	280° (W)	**120 km/h** (65 knots or 75 mph)	Fri 6 Dec 2024 2217 UTC	290° (WNW)	**7.9 mm** Fri 6 Dec 2024	**8.8 mm**
Casement Aerodrome Co Dublin	**78 km/h** Strong Gale Force (42 knots or 48 mph)	Sat 7 Dec 2024 02 UTC	280° (W)	**115 km/h** (62 knots or 71 mph)	Sat 7 Dec 2024 0149 UTC	280° (W)	**7.1 mm** Sat 7 Dec 2024	**10.3 mm**

Station Location	Sustained (10-min mean) Wind Speed	Date highest mean	Wind Direction Highest sustained	Gust (3-sec mean) Wind Speed	Date Highest Gust	Wind Direction Highest Gust	Highest Daily Rain (mm)	4-day Total Rain (mm)
Valentia Observatory (coastal) Co Kerry	**74 km/h** Gale Force 8 (40 knots or 46 mph)	Fri 6 Dec 2024 19 UTC	260° (W)	**111 km/h** (60 knots or 69 mph)	Sat 7 Dec 2024 0101 UTC	310° (NW)	**16.5 mm** Fri 6 Dec 2024	**21.5 mm**
Gurteen Co Tipperary	**72 km/h** Gale Force 8 (39 knots or 45 mph)	Fri 6 Dec 2024 23 UTC	280° (W)	**111 km/h** (60 knots or 69 mph)	Fri 6 Dec 2024 2314 UTC	280° (W)	**4.7 mm** Sat 7 Dec 2024	**8.3 mm**
Athenry Co Galway	**70 km/h** Gale Force 8 (38 knots or 44 mph)	Fri 6 Dec 2024 22 UTC	300° (WNW)	**102 km/h** (55 knots or 63 mph)	Sat 7 Dec 2024 0009 UTC	310° (NW)	**10.0 mm** Fri 6 Dec 2024	**14.0 mm**
Mount Dillon Co Roscommon	**70 km/h** Gale Force 8 (38 knots or 44 mph)	Sat 7 Dec 2024 00 UTC	310° (NW)	**100 km/h** (54 knots or 62 mph)	Sat 7 Dec 2024 0114 UTC	310° (NW)	**13.9 mm** Fri 6 Dec 2024	**24.4 mm**
Oak Park Co Carlow	**69 km/h** Gale Force 8 (37 knots or 43 mph)	Sat 7 Dec 2024 00 UTC	270° (W)	**109 km/h** (59 knots or 68 mph)	Sat 7 Dec 2024 0015 UTC	270° (W)	**9.1 mm** Fri 6 Dec 2024	**16.7 mm**
Belmullet (coastal) Co Mayo	**69 km/h** Gale Force 8 (37 knots or 43 mph)	Fri 6 Dec 2024 21 UTC	320° (NW)	**104 km/h** (56 knots or 64 mph)	Fri 6 Dec 2024 2152 UTC	330° (NNW)	**32.6 mm** Fri 6 Dec 2024	**34.4 mm**
Johnstown Castle (coastal) Co Wexford	**67 km/h** Gale Force 8 (36 knots or 41 mph)	Sat 7 Dec 2024 00 UTC	270° (W)	**104 km/h** (56 knots or 64 mph)	Sat 7 Dec 2024 2335 UTC	270° (W)	**12.7 mm** Fri 6 Dec 2024	**14.0 mm**
Claremorris Co Mayo	**63 km/h** Gale Force 8 (34 knots or 39 mph)	Fri 6 Dec 2024 23 UTC	310° (NW)	**106 km/h** (57 knots or 66 mph)	Sat 7 Dec 2024 0004 UTC	320° (NW)	**27.2 mm** Fri 6 Dec 2024	**32.0 mm**
Moore Park Co Cork	**59 km/h** Near Gale (32 knots or 37 mph)	Fri 6 Dec 2024 22 UTC	280° (W)	**94 km/h** (51 knots or 59 mph)	Sat 7 Dec 2024 0025 UTC	280° (W)	**8.4 mm** Fri 6 Dec 2024	**9.4 mm**
Dunsany Co Meath	**56 km/h** Near Gale (30 knots or 35 mph)	Sat 7 Dec 2024 02 UTC	290° (WNW)	**94 km/h** (51 knots or 59 mph)	Sat 7 Dec 2024 0101 UTC	280° (W)	**3.7 mm** Sat 7 Dec 2024	**7.4 mm**
Ballyhaise Co Cavan	**44 km/h** Strong Breeze (24 knots or 28 mph)	Sat 7 Dec 2024 13 UTC	320° (NW)	**89 km/h** (48 knots or 55 mph)	Sat 7 Dec 2024 0154 UTC	320° (NW)	**14.1 mm** Fri 6 Dec 2024	**24.5 mm**
Mullingar Co Westmeath	**44 km/h** Strong Breeze (24 knots or 28 mph)	Sat 7 Dec 2024 00 UTC	300° (WNW)	**80 km/h** (43 knots or 49 mph)	Sat 7 Dec 2024 0302 UTC	300° (WNW)	**9.6 mm** Sat 7 Dec 2024	**17.6 mm**
Markree Castle Co Sligo	-	-	-	-	-	-	**21.4 mm** Fri 6 Dec 2024	**32.0 mm**
Phoenix Park Co Dublin	-	-	-	-	-	-	**7.8 mm** Sat 7 Dec 2024	**10.7 mm**

Impacts

Power Outages:

- Up to 340,000 customers were without electricity following Storm Darragh with widespread and extensive damage to electricity infrastructure across the country. Power loss is similar to what occurred during of Storm Ophelia in 2017 (ESB, 2024).

Water Shortages:

- Storm Darragh resulted in supply disruptions throughout Ireland, primarily due to power outages at water treatment facilities and other weather-related impacts (Uisce Éireann, 2024).

Storm Damage:

- Holyhead port closure resulted in cancellations and rerouting of ferries and parcel/post deliveries (An Post, 2024).

Definitions

- Sustained (or mean) wind speeds are an average of 10-minute wind speeds. Gust wind speeds are an average of 3-second wind speeds. Unless otherwise stated daily means midnight to midnight UTC.
- LTA (Long-Term Average) or Normal refer to the anomalies calculated over the climatological reference period 1991-2020.
- Daily, unless otherwise specified, means 00-00 UTC.
- Beaufort Scale available at www.met.ie/forecasts/marine-inland-lakes/beaufort-scale.
- Marine area buoy maps and definitions available at www.met.ie/forecasts/marine-inland-lakes/sea-area-forecast-terminology.

** Malin Head, Co Donegal's wind speeds are observed (using an anemometer) at a non-standard height of 23 m while all others are at 10 m. This will cause Malin Head's wind speeds to be higher in a strong air flow.*

*** Mace Head, Co Galway's anemometer is situated above exposed rock at the coastline.*

This report is based on the observations from Met Éireann's weather and climate stations and data available up to the publication date.

For more information, please contact Met Éireann's Climate Services Division:
enquiries@met.ie or www.met.ie/about-us/contact-us.