

HURRICANE FORCE ÉOWYN

Sustained winds peaked on Friday 24 January 2025

The fifth named storm of the 2024/25 season Named by Met Office (United Kingdom) on Tuesday 20 January 2025

Published 29 August 2025

Meteorological Overview

Éowyn formed initially as a low pressure centre just off the Florida coast on the southern side of the jet stream on Wednesday 22 January 2025. It began to move rapidly across the Atlantic in a northeast direction. Midway across the Atlantic, on Thursday 23rd, the storm crossed to the northern side and engaged with the left exit region of the jet stream. At this point the storm underwent explosive cyclogenesis, with the central pressure dropping by around 50 hPa in 24 hours (twice the criteria needed to be considered as explosive cyclogenesis, see Appendix A for air mass charts), reaching peak intensity just as it brushed by the northwest coast of Ireland in the early hours of Friday 24th.

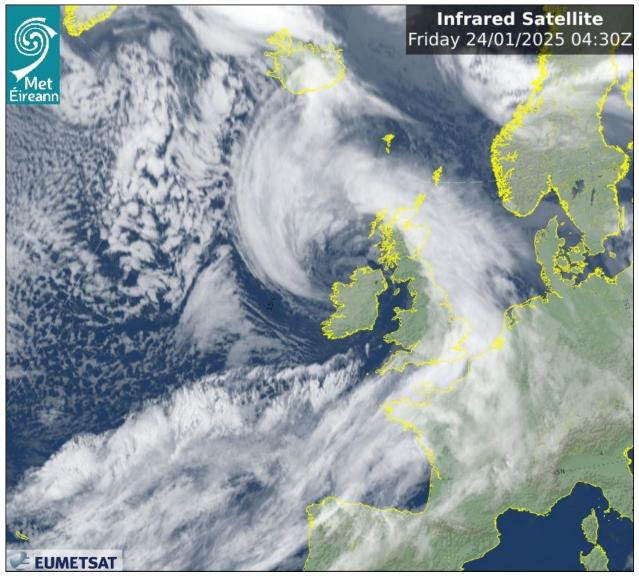


Figure 1. Infra-red EUMETSAT satellite imagery at 04:30 UTC on Fri 24 Jan 2025

As the storm brushed by the northwest coast of Ireland, a sting jet likely developed on the southern side of the storm, enhancing the winds that came onshore just south of the low centre in a swath between Clare and Mayo, which then pushed east-northeastwards well inland across the country.

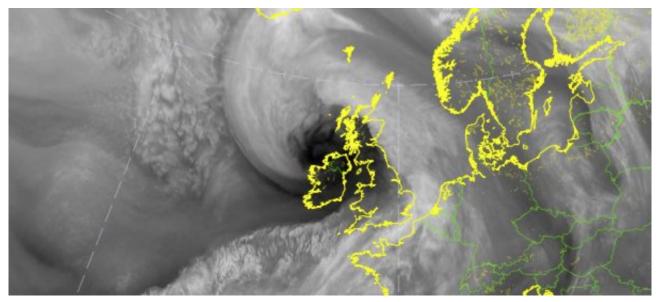


Figure 2. METEOSAT Water Vapour satellite imagery showing the dark, very dry slot wrapping around the cloud head, which is the dry intrusion, by 05 UTC on Fri 24 Jan 2025. The hook-shaped cloud head resembles a scorpion's tail on the satellite image. The sting jet forms high up in the storm's cloud head and rushes down creating a narrow band of damaging gusts at the surface.

The weather fronts associated with the storm brought bands of heavy rain across the country from southwest to northeast late on Thursday 23rd and through the early hours of Friday 24th, preceded by sleet and snow in parts of the northwest. This was followed by squally showers throughout the day on Friday. The winds gradually abated over Ireland during the evening as the storm pulled away. Éowyn was still a powerful storm as it crossed over Scotland during the afternoon on Friday 24th.

Summary of Extremes

Éowyn joins the list of storms that have observed hurricane force 12 wind speeds on land in Ireland, such as the 'Night of the Big Wind' storm in January 1839 (estimated wind speeds of 100 knots), Debbie in September 1961 (gusts up to 181 km/h), and more recently Darwin in February 2014 (gusts up to 159 km/h).

During Éowyn, Ireland observed its highest sustained and gust wind speeds on record. These observations remain provisional and are currently being verified as national wind speed records. **This statement will be updated once this verification process has completed**. The wind speeds were measured at Mace Head, Co Galway, which is an exposed coastal station with a record length of 21 years.

The national wind speed records under review are:

- The highest sustained (10-minute mean wind speed) west-southwest hurricane force 142 km/h (76.5 knots or 88 mph) at Mace Head (coastal), Co Galway in the hour ending 04 UTC on Friday 24 January 2025.
- The highest gust (3-second mean wind speed) west-southwest **184 km/h** (99.5 knots or 115 mph) at Mace Head (coastal), Co Galway at 04:40 UTC Friday 24 January 2025.

Other extremes observed during the storm:

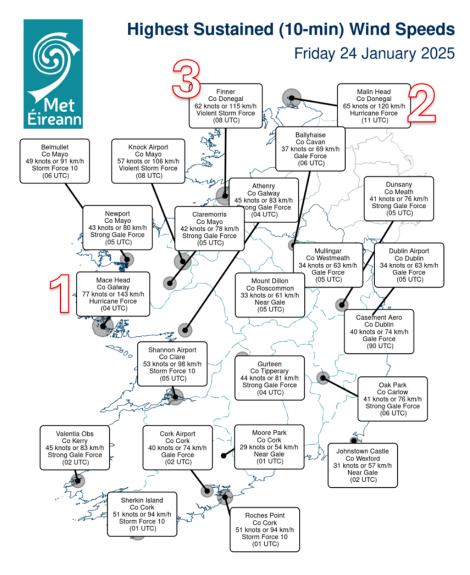
- Highest daily mean wind speeds was 76.9 km/h (41.5 knots or 47.8 mph) at Mace Head,
 Co Galway on Friday 24th.
- Highest daily (00-00 UTC) rainfall total was 28.5 mm on Thursday 23rd at Valentia Observatory (coastal), Co Kerry (15 % of its 1991-2020 Long Term Average (LTA)).
- Highest daily (09-09 UTC) rainfall total was 49.0 mm at Derrypark, Co Mayo (17% of its LTA) on Thursday.
- Nearly 42 mm of rain during a 6-hour rolling total was estimated to have occurred up to the hour ending midnight Thursday 23rd at Cloone Lake, Co Kerry.
- Highest individual wave height was 20.2 m and this was recorded at M3 (off Cork coast) on Friday 24th at around 09 UTC.
- Lowest hourly mean sea level pressure (MSLP) on land was 940.0 hPa on Friday 24th at 04 UTC observed at Belmullet, Co Mayo. While 939.2 hPa was reported at the M4 buoy, off the Donegal coast, on Friday 24th at 05 UTC.

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

The following tables contain observations from all wind stations during Éowyn together with the previous highest wind speed at that station. There are two table available, for sustained and gust wind speeds, together with maps for their locations.

Sustained (10-minute mean) Wind Speeds

- Roches Point, Co Cork was the first meteorological wind station to observe storm force 10 sustained wind speeds due to Storm Éowyn, with 89 km/h in the hour ending 23 UTC on Thursday 23 January 2025.
- The highest sustained (10-minute mean) wind speed was a west-southwest hurricane force 142 km/h (76.5 knots or 88 mph) on Friday 24 January 2025 in the hour ending 04 UTC (4 am local time) observed at Mace Head (coastal)**, Co Galway. A review of this observation is underway, as it was higher than the previous sustained (10-minute mean) wind speeds record of 131 km/h (70 knots) on Thursday 18 January 1945 at Foynes Airport, Co Limerick in the hour ending 13 UTC (1 pm local time).
- Eight stations observed wind speeds on or greater than Storm Force 10 (≥ 48 knots).
 Storm Darwin on Wednesday 12 February 2014 had ten stations observing winds of this strength.



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Figure 3. Map of highest sustained wind speeds on Friday 24 January 2025

The table below gives the extreme wind speed (rounded to whole km/h) during storm Éowyn and compares it to the highest wind speed prior to 2025. The storm was not a localised coastal event, but a nationwide one with damaging gales further inland. Four stations observed their highest ever (any month) sustained wind speeds during Éowyn:

- 1. Mace Head, Co Galway observed 143 km/h (previously 120 km/h on Wed 12 Feb 2014)
- 2. Finner Camp, Co Donegal observed 115 km/h (previously 94 km/h on Tue 3 Jan 2012)
- 3. Athenry, Co Galway observed 83 km/h (previously 70 km/h, 3 days in 2023 and 2024)
- 4. Dunsany, Co Meath observed 76 km/h (previously 70 km/h, 3 days in 2006, 2007 and 2014)

Table 3. Highest Sustained (10-minute mean) Wind Speeds compared to its wind record before 2025

Station location	Highest Sustained Annual 2025	Date of Sustained Annual 2025	Sustained (10-min mean) Wind Speed before 2025	Date of Highest Sustained Winds before 2025
Mace Head (coastal), Co Galway	143 km/h (hurricane force)	Fri 24 Jan 2025 (Éowyn)	120 km/h (hurricane force)	Wed 12 Feb 2014 (Darwin)
Malin Head* (coastal), Co Donegal	120 km/h (hurricane force)	Fri 24 Jan 2025 (Éowyn)	126 km/h (hurricane force)	Tue 3 Jan 2012
Finner (coastal), Co Donegal	115 km/h (violent storm force)	Fri 24 Jan 2025 (Éowyn)	94 km/h (storm force)	Tue 3 Jan 2012
Knock Airport, Co Mayo	106 km/h (violent storm force)	Fri 24 Jan 2025 (Éowyn)	107 km/h (violent storm force)	Tue 2 Jan 2018
Shannon Airport (coastal), Co Clare	98 km/h (storm force)	Fri 24 Jan 2025 (Éowyn)	113 km/h (violent storm force)	Wed 12 Feb 2014 (Darwin)
Sherkin Island (coastal), Co Cork	94 km/h (storm force)	Fri 24 Jan 2025 (Éowyn)	113 km/h (violent storm force)	Wed 12 Feb 2014 (Darwin)
Roches Point (coastal), Co Cork	94 km/h (storm force)	Fri 24 Jan 2025 (Éowyn)	126 km/h (hurricane force)	Wed 24 Dec 1997 (Yuma)
Belmullet (coastal), Co Mayo	91 km/h (storm force)	Fri 24 Jan 2025 (Éowyn)	122 km/h (hurricane force)	Thu 31 Jan 1957
Athenry, Co Galway	83 km/h (strong gale force)	Fri 24 Jan 2025 (Éowyn)	70 km/h (gale force)	Sun 21 Jan 2024 (Isha), Fri 6 Dec 2024 and Mon 13 Nov 2023 (Debi)
Valentia Observatory (coastal), Co Kerry	83 km/h (strong gale force)	Fri 24 Jan 2025 (Éowyn)	111 km/h (violent storm force)	Wed 24 Dec 1997 (Yuma)
Gurteen, Co Tipperary	81 km/h (strong gale force)	Fri 24 Jan 2025 (Éowyn)	85 km/h (strong gale force)	Wed 12 Feb 2014 (Darwin)
Newport (coastal), Co Mayo	80 km/h (strong gale force)	Fri 24 Jan 2025 (Éowyn)	100 km/h (storm force)	Mon 23 Feb 2015 (Unnamed_20150223)
Claremorris, Co Mayo	78 km/h (strong gale force)	Fri 24 Jan 2025 (Éowyn)	111 km/h (violent storm force)	Sat 16 Sep 1961 (Debbie)
Dunsany, Co Meath	76 km/h (strong gale force)	Fri 24 Jan 2025 (Éowyn)	70 km/h (gale force)	Thu 18 Jan 2007 (Kyrill), Wed 12 Feb 2014 (Darwin) and Sun 3 Dec 2006
Oak Park, Co Carlow	76 km/h (strong gale force)	Fri 24 Jan 2025 (Éowyn)	89 km/h (storm force)	Wed 12 Feb 2014 (Darwin)
Casement Aerodrome, Co Dublin	74 km/h (gale force)	Fri 24 Jan 2025 (Éowyn)	106 km/h (violent storm force)	Sat 16 Jan 1993 and Sun 13 Dec 1981
Cork Airport (coastal), Co Cork	74 km/h (gale force)	Fri 24 Jan 2025 (Éowyn)	107 km/h (violent storm force)	Sat 12 Jan 1974
Ballyhaise, Co Cavan	69 km/h (gale force)	Fri 24 Jan 2025 (Éowyn)	70 km/h (gale force)	Thu 18 Jan 2007 (Kyrill)
Mullingar, Co Westmeath	63 km/h (gale force)	Fri 24 Jan 2025 (Éowyn)	83 km/h (strong gale force)	Thu 1 Dec 1966, Sat 12 Jan 1974, Sun 22 Oct 1961 (Unnamed_19611022), Sat 16 Sep 1961 (Debbie), Mon 4 Feb 1957 and Sun 14 Jan 1968
Dublin Airport (coastal), Co Dublin	63 km/h (gale force)	Fri 24 Jan 2025 (Éowyn)	102 km/h (storm force)	Wed 24 Dec 1997 (Yuma)
Mount Dillon, Co Roscommon	61 km/h (near gale)	Fri 24 Jan 2025 (Éowyn)	74 km/h (gale force)	Sat 8 Jan 2005
Johnstown Castle (coastal), Co Wexford	57 km/h (near gale)	Thu 23 Jan 2025 and Fri 24 Jan 2025 (Éowyn)	74 km/h (gale force)	Wed 12 Feb 2014 (Darwin)
Moore Park, Co Cork	54 km/h (near gale)	Fri 24 Jan 2025 (Éowyn)	70 km/h (gale force)	Wed 12 Feb 2014 (Darwin)

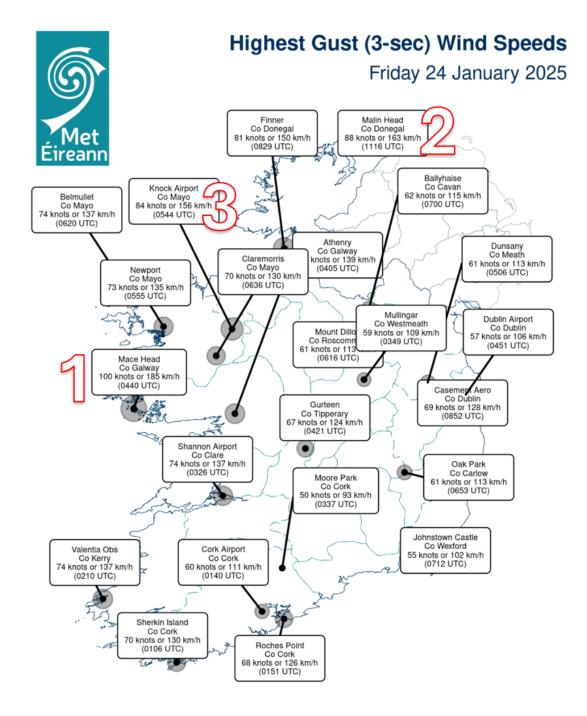
A further four stations observed their highest January sustained wind speeds during Éowyn:

- 1. Finner, Co Donegal observed 115 km/h (previously 94 km/h on Tue Jan 2012)
- 2. Gurteen, Co Tipperary observed 81 km/h (previously 70 km/h on Sat 17 Jan 2009)
- 3. Oak Park, Co Carlow observed 76 km/h (previously 74 km/h on Thu 18 Jan 2007)
- 4. Ballyhaise, Co Cavan observed 69 km/h (previously 70 km/h on Thu 18 Jan 2007)

Gust (3-second mean) Wind Speeds

The highest gust (3-second mean) wind speed was a west-southwest 184 km/h (99.5 knots or 115 mph) on Friday 24 January 2025 at 04:40 UTC (4:40 am local time) observed at Mace Head, Co Galway. *This value is undergoing review*, as the previous highest gust wind speed record was 182 km/h (98 knots) on Thursday 18 January 1945 at Foynes Airport, Co Limerick.

Gust wind speeds on or above 48 knots were observed for up to 18 hours at Malin Head (coastal), Co. Donegal observed. Moore Park observed the lowest number at 4 hours.



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Figure 4. Map of highest gust wind speeds on Friday 24 January 2025

The table below gives the extreme wind speed (rounded to whole km/h) during storm Éowyn and compares it to its highest gust wind speed before 2025. Six stations matched or observed their highest ever (any month) gust wind speeds:

- 1. Mace Head, Co Galway observed 185 km/h (previously 156 km/h on We 12 Feb 2014)
- 2. Knock Airport, Co Mayo observed 156 km/h (same on Tue 2 Jan 2018)
- 3. Finner, Co Donegal observed 150 km/h (previously 139 km/h on Tue 3 Jan 2012)
- 4. Athenry, Co Galway observed 139 km/h (previously 115 km/h Mon 13 Nov 2023)
- 5. Gurteen, Co Tipperary observed 124 km/h (previously 120 km/h on We 12 Feb 2014)
- 6. Mount Dillon, Co Roscommon observed 113 km/h (same on Thu 11 Jan 2005 and Sat 8 Jan 2005)

Mace Head (coastal), Co Galway Fri 24 Jan 2025 (Éowyn) Fri 24 Jan 2025 (Éowyn) Malin Head* (coastal), Co Donegal Sat 16 Sep 1961 (Debbie) Knock Airport, Co Mayo Fri 24 Jan 2025 (Éowyn) Tue 2 Jan 2018 Finner (coastal), Co Donegal Fri 24 Jan 2025 (Éowyn) Tue 3 Jan 2012 Athenry, Co Galway Fri 24 Jan 2025 (Éowyn) Mon 13 Nov 2023 (Debi) Shannon Airport (coastal), Co Clare Fri 24 Jan 2025 (Éowyn) Sat 16 Sep 1961 (Debbie) Belmullet (coastal), Co Mayo Fri 24 Jan 2025 (Éowyn) Thu 31 Jan 1957 and Sat 17 Jan 2009 Sat 16 Sep 1961 (Debbie) and Wed 24 Dec 1997 (Yuma) Valentia Observatory (coastal), Co Kerry Fri 24 Jan 2025 (Éowyn) Newport (coastal), Co Mayo Fri 24 Jan 2025 (Éowyn) Wed 12 Mar 2008 (Unnamed 20080312) Sherkin Island (coastal). Co Cork Fri 24 Jan 2025 (Éowyn) Wed 12 Feb 2014 (Darwin) Claremorris, Co Mayo Fri 24 Jan 2025 (Éowyn) Sun 27 Jan 1974 Casement Aerodrome, Co Dublin Fri 24 Jan 2025 (Éowyn) Wed 24 Dec 1997 (Yuma) Roches Point (coastal). Co Cork Fri 24 Jan 2025 (Éowyn) Mon 4 Feb 1957 Fri 24 Jan 2025 (Éowyn) Ballyhaise, Co Cavan Fri 24 Jan 2025 (Éowyn) Sat 8 Jan 2005 Dunsany, Co Meath Fri 24 Jan 2025 (Éowyn) Wed 12 Feb 2014 (Darwin Oak Park, Co Carlow Wed 12 Feb 2014 (Darwin) and Tue 17 Nov Fri 24 Jan 2025 (Éowyn) 126 km/h Mount Dillon. Co Roscommon Fri 24 Jan 2025 (Éowyn) Tue 11 Jan 2005 (Gero) and Sat 8 Jan 2005 Cork Airport (coastal), Co Cork 111 km/h 174 km/h Mullingar, Co Westmeath Fri 24 Jan 2025 (Éowyn) Sat 16 Sep 1961 (Debbie) Dublin Airport (coastal), Co Dublin Fri 24 Jan 2025 (Éowyn) Fri 24 Jan 2025 (Éowyn) Johnstown Castle (coastal), Co Wexford 102 km/h Moore Park. Co Cork Fri 24 Jan 2025 (Éowyn) 119 km/h Wed 12 Feb 2014 (Darwin)

Table 4. Highest Gust (3-second mean) January Wind Speeds

A further two stations observed (or matched) their highest January gust wind speeds:

- 1. Dunsany, Co Meath observed 113 km/h (same on Thu 31 Jan 2013)
- 2. Johnstown Castle, Co Wexford observed 102 km/h (previously 98 km/h on Sat 25 Jan 2014)

Daily Weather Summaries

Wednesday 22 January 2025

Ireland was under a light to moderate northwest or variable airflow, with weak showers in the flow. It was mostly cloudy, with mist and fog in the midlands and northwest, which cleared by the afternoon and evening. There were scattered showers throughout the day. Mist and fog cleared from most areas, but it remained in parts of the north and northeast. Overnight, fog and frost re-turned. Later in the night, southerly winds picked up, clearing the fog and frost as rain moved in along the west coast.

Thursday 23 January 2025

A strengthening westerly airflow spread across the country as a frontal trough moved eastward. Storm Eowyn approached from the southwest. The day was generally cloudy, with brief clearing in parts of the west and southwest around midday, but it quickly became cloudy again by evening. Rain began to approach the southwest and west coasts, moving across the country during the early hours of the morning and easing by midday. Later, southeasterly winds associated with Storm Eowyn strengthened, bringing heavy, persistent rain that became widespread.







Figure 5. Visible Satellite, Infrared Radar and Infrared Satellite images on Thu 23 Jan 2025 at the hours 12 UTC, 21 UTC and 23 UTC

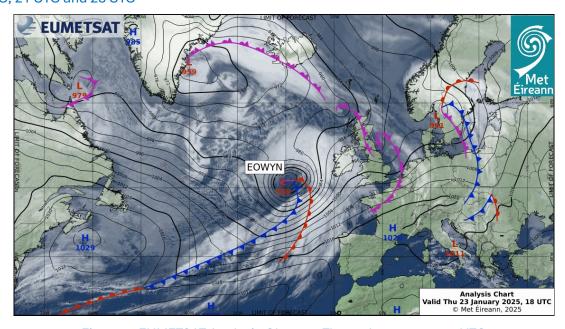


Figure 6. EUMETSAT Analysis Chart on Thu 23 Jan 2025 at 18 UTC

Friday 24 January 2025

Ireland lay in a strong gale-force to hurricane-force cyclonic variable airflow, generated by Storm Eowyn, which reached a central pressure of 940.0 hPa. The storm continued to bring gale- to storm-force southwest to west winds for a time, accompanied by destructive and damaging gusts. Violent storm-force to hurricane-force winds occurred in some western coastal areas and coastal areas of the north. The winds gradually eased from the south throughout the day, though it remained very windy in northern areas until the evening. Scattered squally showers and longer spells of rain affected the northern part of the country.







Figure 7. Infrared Satellite, Infrared Radar and Visible Satellite images on Fri 24 Jan 2025 at the hours 04:30 UTC, 06:30 UTC and 11:30 UTC

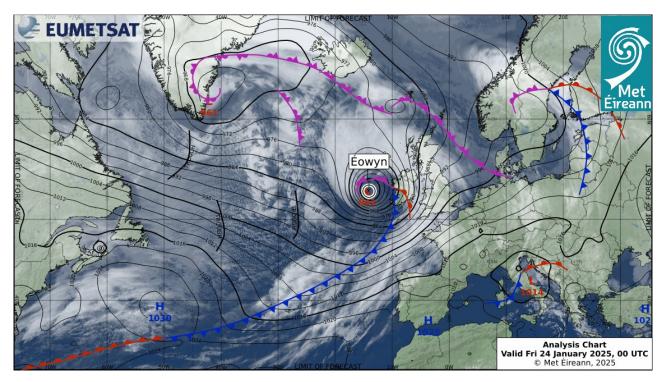


Figure 8. EUMETSAT Analysis Chart on Fri 24 Jan 2025 at 00 UTC

Saturday 25 January 2025

Ireland remained under a strong to near gale-force westerly airflow, generated by Storm Eowyn, which was centred north of the Shetland Islands by Saturday morning. The storm continued to track northeastwards. There were sunny spells in places during the afternoon, but it turned cloudier for a time as showery rain moved eastwards across the country through the afternoon and early evening.

Atmospheric Air Pressure

Named Storm EOWYN

Hourly Mean Sea Level Pressure (hPa) and Highest Gust Wind Speed

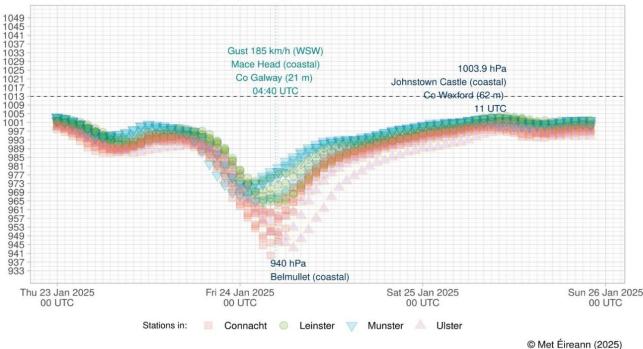


Figure 9. Hourly Mean Sea Level pressure and highest gust wind speed (stations coloured by province)

The lowest hourly mean sea level pressure recorded in Ireland during Storm Éowyn was estimated to have been 940.0 hPa at Belmullet, Co. Mayo on Friday 24 January 2025 at 04 UTC (4 am local time).

- This was the lowest hourly January MSLP since on Tuesday 17 January 1995 when 943.2 hPa was observed at Belmullet (Manual), Co Mayo at 17 UTC (5 pm local time).
- It was also the lowest hourly MSLP since Sunday 4 February 1951 when Midleton SWS observed 942.3 hPa at 16 UTC.
- Éowyn observed the lowest hourly MSLP since the start of storm naming project in the 2015/16 season.

The lowest January MSLP on record was observed on Saturday 26 January 1884 at Markree, Co Sligo. See www.met.ie/climate/weather-extreme-records for more information on the national records.

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

Marine Observations

The highest individual wave height was **20.2 m** and this was recorded at M3 (off Cork coast) at around 09 UTC (9 am local). The following table presents extremes from the Irish Marine Data Buoy Observation Network (IMDBON).

Table 1. Extremes at Irish Marine Data Buoys on between Thu 23 and Sat 25 Jan 2025

Buoy (Location)	Sustained Wind Speeds	Gust Wind Speeds	Significant Wave Height	Individual Wave	MSLP (hPa)
Buoy M2 (in the Irish Sea)	80 km/h (43 knots or 49 mph) 09 UTC Fri 24 Jan 2025	106 km/h (57 knots or 66 mph) 09 UTC Fri 24 Jan 2025	5.5 m 09 UTC Fri 24 Jan 2025 and 11 UTC Fri 24 Jan 2025	9.5 m 09 UTC Fri 24 Jan 2025	968.3 hPa 04 UTC Fri 24 Jan 2025
Buoy M3 (off the Cork coast)	90 km/h (49 knots or 56 mph) 01 UTC Fri 24 Jan 2025	127 km/h (68 knots or 79 mph) 01 UTC Fri 24 Jan 2025	12.8 m 07 UTC Fri 24 Jan 2025	20.2 m 09 UTC Fri 24 Jan 2025	970.4 hPa 00 UTC Fri 24 Jan 2025
Buoy M4 (off the Donegal coast)	103 km/h (55 knots or 64 mph) 09 UTC Fri 24 Jan 2025	136 km/h (73 knots or 84 mph) 09 UTC Fri 24 Jan 2025	11.5 m 12 UTC Fri 24 Jan 2025	18.8 m 12 UTC Fri 24 Jan 2025	939.2 hPa 05 UTC Fri 24 Jan 2025
Buoy M5 (off the south Wexford coast)	56 km/h (30 knots or 35 mph) 08 UTC Fri 24 Jan 2025	98 km/h (53 knots or 61 mph) 07 UTC Fri 24 Jan 2025	9.5 m 10 UTC Fri 24 Jan 2025	17.7 m 10 UTC Fri 24 Jan 2025	975.6 hPa 02 UTC Fri 24 Jan 2025
Buoy M6 (in the deep Atlantic)	(6) Kiloto di de Ilipii)		9.6 m 02 UTC Fri 24 Jan 2025 and 04 UTC Fri 24 Jan 2025	15.8 m 05 UTC Fri 24 Jan 2025	944.1 hPa 23 UTC Thu 23 Jan 2025

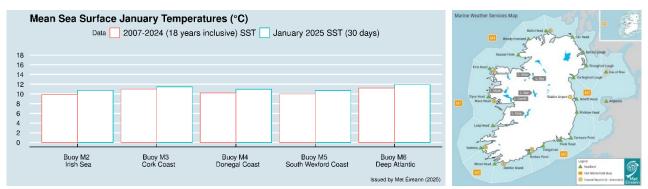


Figure 10. (a) Buoy January Sea Surface Mean Temperatures (b) Marine Weather Services Map

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 6th.

Table 2. Extremes of wind and rainfall at synoptic stations

Table 2: Extreme			- cyc p ac					
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	143 km/h Hurricane Force (77 knots or 89 mph)	Fri 24 Jan 2025 04 UTC	250° (WSW)	185 km/h (100 knots or 115 mph)	Fri 24 Jan 2025 0440 UTC	250° (WSW)	16.6 mm Thu 23 Jan 2025	21.0 mm
Malin Head* (coastal) Co Donegal	120 km/h Hurricane Force (65 knots or 75 mph)	Fri 24 Jan 2025 11 UTC	240° (WSW)	163 km/h (88 knots or 101 mph)	Fri 24 Jan 2025 1116 UTC	240° (WSW)	19.6 mm Fri 24 Jan 2025	26.2 mm
Finner (coastal) Co Donegal	115 km/h Violent Storm Force (62 knots or 71 mph)	Fri 24 Jan 2025 08 UTC	250° (WSW)	150 km/h (81 knots or 93 mph)	Fri 24 Jan 2025 0829 UTC	250° (WSW)	16.3 mm Fri 24 Jan 2025	30.4 mm
Knock Airport Co Mayo	106 km/h Violent Storm Force (57 knots or 66 mph)	Fri 24 Jan 2025 08 UTC	260° (W)	156 km/h (84 knots or 97 mph)	Fri 24 Jan 2025 0544 UTC	240° (WSW)	15.5 mm Thu 23 Jan 2025	32.3 mm
Shannon Airport (coastal) Co Clare	98 km/h Storm Force (53 knots or 61 mph)	Fri 24 Jan 2025 05 UTC	240° (WSW)	137 km/h (74 knots or 85 mph)	Fri 24 Jan 2025 0326 UTC	230° (SW)	15.7 mm Thu 23 Jan 2025	26.5 mm
Sherkin Island (coastal) Co Cork	94 km/h Storm Force (51 knots or 59 mph)	Fri 24 Jan 2025 01 UTC	230° (SW)	130 km/h (70 knots or 81 mph)	Fri 24 Jan 2025 0106 UTC	220° (SW)	15.8 mm Thu 23 Jan 2025	19.0 mm
Roches Point (coastal) Co Cork	94 km/h Storm Force (51 knots or 59 mph)	Fri 24 Jan 2025 01 UTC	200° (SSW)	126 km/h (68 knots or 78 mph)	Fri 24 Jan 2025 0151 UTC	220° (SW)	17.8 mm Thu 23 Jan 2025	23.4 mm
Belmullet (coastal) Co Mayo	91 km/h Storm Force (49 knots or 56 mph)	Fri 24 Jan 2025 06 UTC	250° (WSW)	137 km/h (74 knots or 85 mph)	Fri 24 Jan 2025 0620 UTC	250° (WSW)	13.5 mm Thu 23 Jan 2025	27.1 mm
Athenry Co Galway	83 km/h Strong Gale Force (45 knots or 52 mph)	Fri 24 Jan 2025 04 UTC	230° (SW)	139 km/h (75 knots or 86 mph)	Fri 24 Jan 2025 0405 UTC	230° (SW)	13.4 mm Thu 23 Jan 2025	25.3 mm
Valentia Observatory (coastal) Co Kerry	83 km/h Strong Gale Force (45 knots or 52 mph)	Fri 24 Jan 2025 02 UTC	240° (WSW)	137 km/h (74 knots or 85 mph)	Fri 24 Jan 2025 0210 UTC	230° (SW)	28.5 mm Thu 23 Jan 2025	31.6 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)
Gurteen Co Tipperary	81 km/h Strong Gale Force (44 knots or 51 mph)	Fri 24 Jan 2025 04 UTC	220° (SW)	124 km/h (67 knots or 77 mph)	Fri 24 Jan 2025 0421 UTC	210° (SSW)	16.4 mm Thu 23 Jan 2025	24.5 mm
Newport (coastal) Co Mayo	80 km/h Strong Gale Force (43 knots or 49 mph)	Fri 24 Jan 2025 05 UTC	240° (WSW)	135 km/h (73 knots or 84 mph)	Fri 24 Jan 2025 0555 UTC	250° (WSW)	15.4 mm Thu 23 Jan 2025	27.9 mm
Claremorris Co Mayo	78 km/h Strong Gale Force (42 knots or 48 mph)	Fri 24 Jan 2025 05 UTC	230° (SW)	130 km/h (70 knots or 81 mph)	Fri 24 Jan 2025 0636 UTC	240° (WSW)	28.1 mm Thu 23 Jan 2025	43.9 mm
Oak Park Co Carlow	76 km/h Strong Gale Force (41 knots or 47 mph)	Fri 24 Jan 2025 06 UTC	230° (SW)	113 km/h (61 knots or 70 mph)	Fri 24 Jan 2025 0653 UTC	230° (SW)	11.4 mm Thu 23 Jan 2025	19.7 mm
Dunsany Co Meath	76 km/h Strong Gale Force (41 knots or 47 mph)	Fri 24 Jan 2025 05 UTC	220° (SW)	113 km/h (61 knots or 70 mph)	Fri 24 Jan 2025 0506 UTC	210° (SSW)	7.7 mm Thu 23 Jan 2025	13.1 mm
Casement Aerodrome Co Dublin	74 km/h Gale Force 8 (40 knots or 46 mph)	Fri 24 Jan 2025 90 UTC	240° (WSW)	128 km/h (69 knots or 79 mph)	Fri 24 Jan 2025 0852 UTC	240° (WSW)	10.6 mm Thu 23 Jan 2025	14.9 mm
Cork Airport (coastal) Co Cork	74 km/h Gale Force 8 (40 knots or 46 mph)	Fri 24 Jan 2025 02 UTC	220° (SW)	111 km/h (60 knots or 69 mph)	Fri 24 Jan 2025 0140 UTC	230° (SW)	22.2 mm Thu 23 Jan 2025	28.7 mm
Ballyhaise Co Cavan	69 km/h Gale Force 8 (37 knots or 43 mph)	Fri 24 Jan 2025 06 UTC	210° (SSW)	115 km/h (62 knots or 71 mph)	Fri 24 Jan 2025 0700 UTC	220° (SW)	8.8 mm Thu 23 Jan 2025	16.4 mm
Mullingar Co Westmeath	63 km/h Gale Force 8 (34 knots or 39 mph)	Fri 24 Jan 2025 05 UTC	230° (SW)	109 km/h (59 knots or 68 mph)	Fri 24 Jan 2025 0349 UTC	230° (SW)	13.2 mm Thu 23 Jan 2025	19.0 mm
Dublin Airport (coastal) Co Dublin	63 km/h Gale Force 8 (34 knots or 39 mph)	Fri 24 Jan 2025 05 UTC	220° (SW)	106 km/h (57 knots or 66 mph)	Fri 24 Jan 2025 0451 UTC	220° (SW)	7.4 mm Thu 23 Jan 2025	9.9 mm
Mount Dillon Co Roscommon	61 km/h Near Gale (33 knots or 38 mph)	Fri 24 Jan 2025 05 UTC	220° (SW)	113 km/h (61 knots or 70 mph)	Fri 24 Jan 2025 0616 UTC	230° (SW)	16.7 mm Thu 23 Jan 2025	25.8 mm
Johnstown Castle (coastal) Co Wexford	57 km/h Near Gale (31 knots or 36 mph)	Fri 24 Jan 2025 23 UTC	220° (SW)	102 km/h (55 knots or 63 mph)	Fri 24 Jan 2025 0712 UTC	230° (SW)	15.2 mm Thu 23 Jan 2025	27.4 mm
Moore Park Co Cork	54 km/h Near Gale (29 knots or 33 mph)	Fri 24 Jan 2025 01 UTC	220° (SW)	93 km/h (50 knots or 58 mph)	Fri 24 Jan 2025 0337 UTC	220° (SW)	18.2 mm Thu 23 Jan 2025	24.7 mm

Impacts

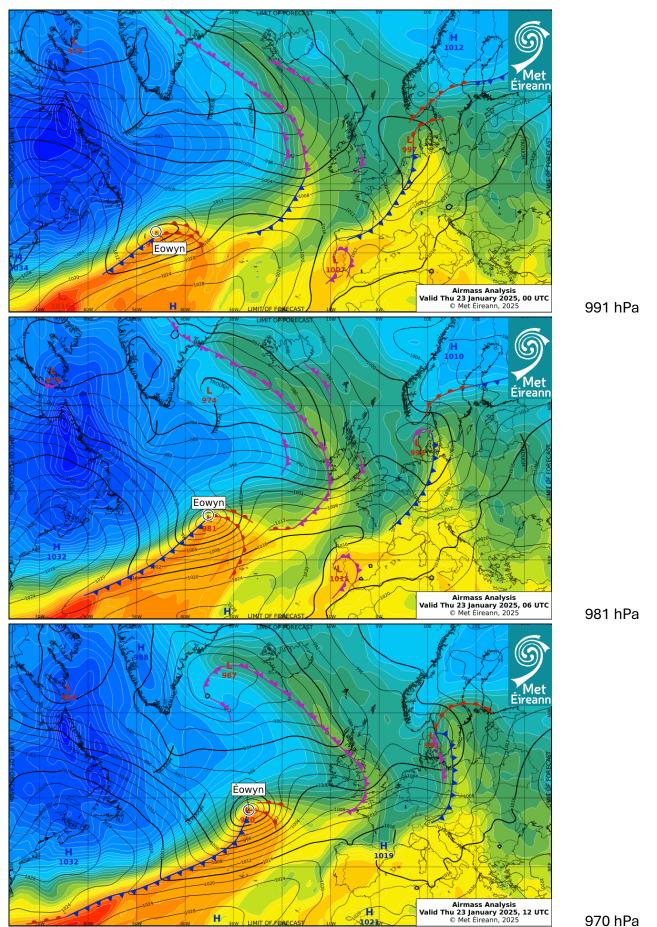
- **Power Outages:** ESB Power Check reported 768,000 homes were without electricity on the day of Friday 24 January 2025 (ESB Networks' Post) with "widespread and extensive damage to the electricity infrastructure nationwide".
- Water Shortages: Uisce Éireann reported 84,000 people without water with 265,000 being supplied by generators on Friday 24 January 2025 (<u>Uisce Éireann, 2025</u>).
- Broadband: Vodafone reported 96,000 customers were without broadband and 10% of mobile sites were out of service (<u>www.gov.ie</u>).
- **Health Services:** A range of Hospital and community healthcare services were cancelled (www.gov.ie).
- Schools: "All primary and post-primary schools, early learning and childcare centres, further education institutions, training centres, and higher education institutions closed" during the storm (www.gov.ie).
- Coillte "estimated that the total area of forest damage is approximately 24,000 hectares with almost 50% of that on the Coillte estate". Following the storm, Coillte closed over 90 forest recreational areas for public safety (Coillte, 2025).
- Violent winds caused damage to a wind turbine in Indreabhán, Co. Galway. Reports of trees
 down country wide. An ice-skating facility in Blanchardstown destroyed after violent winds
 tore the structure apart. Storm Éowyn also damaged the Connacht GAA's multi-millioneuro Air Dome near Ballyhaunis in Co. Mayo. (RTE News, 2025).

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.
- Long-Term Average (LTA) 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 <u>www.met.ie/forecasts/marine-inland-lakes/beaufort-scale.</u>
- 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.

Appendix A: Air Mass Analysis Charts Thursday 23 January 2025



STORM ÉOWYN

