

Autumn 2024

(September, October & November)

Mild, dry and relatively dull

Autumn 2024 was mild and dry overall with two named storms directly affecting Ireland. The season fluctuated between high and low pressure dominance and between cooler Polar maritime and warmer tropical maritime airmasses. September was the driest of the three months and cooler than average overall. High pressure to the north brought the driest and sunniest conditions to the West and North, while low pressure to the south brought wetter and duller conditions to the East and South at times. October was mild everywhere and dryer than average for most of the country, apart from the Southwest. Low pressure dominated at times, especially at the end of the first week and during the third week when storm Ashley, named by Met Éireann, brought the windiest period of the season. High pressure also brought some dry spells especially during the second week and towards the end of the month. November was mild and relatively dry overall, but dull. The first half of the month was dominated by cloudy high pressure, which brought mostly mild and dry conditions. The second half of the month was much cooler and wetter with low pressure more dominant. There was a brief cold period towards the end of the third week that brought frost, fog and lying snow in some places. This was followed by storm Bert, a deep Atlantic depression named by Met Éireann, which brought the wettest period of the season. Storm Conall, named by the Royal Netherlands Meteorological Institute (KNMI), passed to the south of Ireland on Wednesday 27th November with no impacts for Ireland.

Rainfall: Dry for most, variable in the Southwest

Nearly all rainfall totals were below their 1981-2010 Long-Term Average (LTA) for the season. Percentage of seasonal rainfall values ranged from 52% (213.4 mm) at Mace Head, Co Galway to 109% (385.8 mm) at Cork Airport, Co Cork. Seasonal rainfall totals ranged from 157.8 mm (64% of its LTA) at Dunsany, Co Meath to 483.1 mm (102% of its LTA) at Valentia Observatory, Co Kerry. The highest daily rainfall total was 57.4 mm at Knock Airport, Co Mayo on Saturday 23rd November *(its wettest autumn day since 2010).* The number of rain days⁰ ranged from 45 days at Casement Aerodrome, Co Dublin to 67 days at Knock Airport, Co Mayo. The number of wet days¹ ranged from 29 days at Casement Aerodrome, Co Dublin to 52 days at Valentia Observatory, Co Kerry. The number of very wet days³ ranged from 2 days at Finner, Co Donegal to 16 days at Valentia Observatory, Co Kerry. Two stations had dry spells⁶ between Monday 28th October and Friday 15th November. These were Belmullet, Co Mayo lasting 15 days and Claremorris, Co Mayo lasting 19 days. Finner, Co Donegal had its driest autumn on record with 217 mm (59% of its LTA) *(record length 13 years).* Malin Head, Co Donegal had its driest autumn since 1993 with 208.9 mm (64% of its LTA). Ballyhaise, Co Cavan, Dunsany, Co Meath and Athenry, Co Galway had their driest autumn since 2007.

Temperature: Above average everywhere, warmest in the Southwest

All mean air temperatures across the country were above their LTA for the season. Deviations from mean air temperature for the season ranged from 0.1 °C (10.2 ° C mean temperature) at Ballyhaise, Co Cavan to 0.9 °C (11.0 °C mean temperature) at Phoenix Park, Co Dublin. Mean temperatures for the season ranged from 9.9 °C (0.8 °C above its LTA) at Knock Airport, Co Mayo to 12.7 °C (0.7 °C above its LTA) at Sherkin Island, Co Cork. The season's highest temperature was reported at Claremorris, Co Mayo on Friday 6th September with a temperature of 25.2 °C. Both the season's lowest air and grass minimum temperatures were recorded on Wednesday 27th November at Markree, Co Sligo. The lowest air minimum was -4.8 °C while the lowest grass minimum was -9.7 °C (*its lowest grass min for autumn since 1984*). All stations reported ground frost during the season. The number of days with ground frost ranged from 5 days at Johnstown Castle, Co Wexford to 29 days at both Mullingar, Co Westmeath and Markree, Co Sligo. More than half of stations reported air frost. The number of days with air frost ranged from zero days at a few stations to 12 days at Mount Dillon, Co Roscommon.

Sunshine: Sunniest in the East

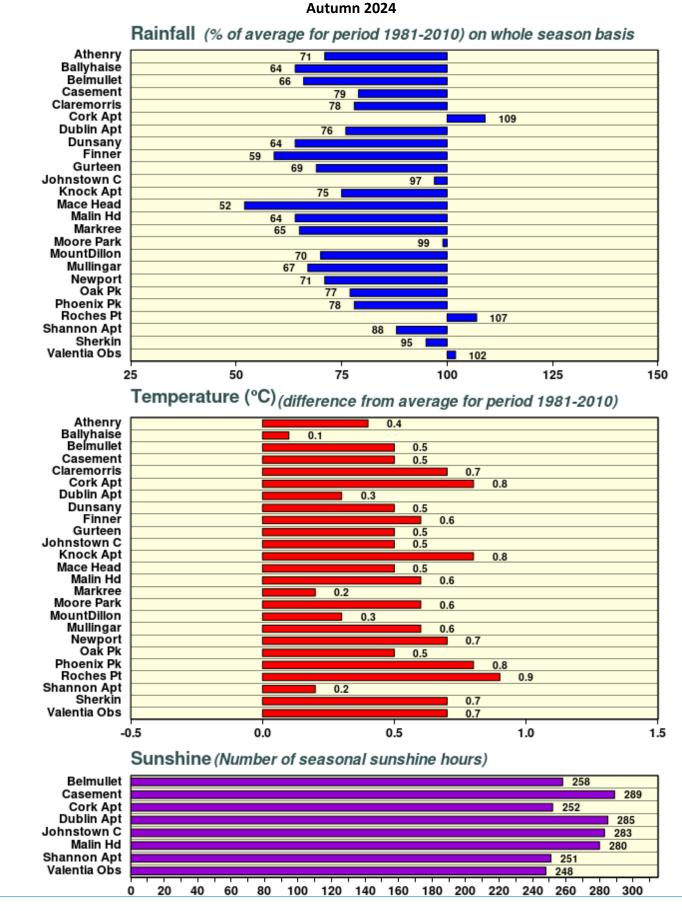
All available monthly sunshine totals were below their LTA for the season. Percentage of seasonal sunshine values ranged from 93% (251.3 hours) at Shannon Airport, Co Clare to 99% (289.2 hours) at Casement Aerodrome, Co Dublin. Seasonal sunshine totals ranged from 241.7 hours (no LTA comparison*) at Gurteen, Co Tipperary to 289.2 hours at Casement Aerodrome, Co Dublin. The highest number of daily sunshine hours recorded this season was 12.7 hours at Belmullet, Co Mayo on Thursday 5th September. The number of dull days² ranged from 29 days at Malin Head, Co Donegal to 37 days at Johnstown Castle, Co Wexford.

Wind: Storm Force winds reported in October during storm Ashley and in November during storm Bert

Seasonal mean wind speeds ranged from 5.3 knots (9.8 km/h) at Ballyhaise, Co Cavan to 14.4 knots (26.7 km/h) at Malin Head, Co Donegal. Gales were reported on numerous days with up to strong gales reported on Sunday 20th October, Saturday 23rd November and Sunday 24th November. Storm force winds were reported at both Mace Head, Co Galway and Belmullet, Co Mayo on Sunday 20th October during storm Ashley and at Malin Head, Co Donegal on Saturday 23rd November during storm Bert. The number of days with gales ranged from zero days at Dublin Airport to 7 days at both Roche's Point, Co Cork and Malin Head, Co Donegal. The number of days with up to strong gales ranged from zero days at most stations to 3 days at Mace Head, Co Galway. The season's highest 10-minute mean wind speed was reported at both Mace Head, Co Galway and Belmullet, Co Mayo on Sunday 20th October with 54 knots (100 km/h) during storm Ashley. The highest gust was 74 knots (137 km/h) reported at Mace Head, Co Galway on Sunday 20th October during storm Ashley.

EXTREME VALUES FOR AUTUMN AT SYNOPTIC STATIONS

Rainfall	Highest seasonal total: 483.1 mm at Valentia Observatory, Co Kerry (102% of its LTA) Lowest seasonal total: 157.8 mm at Dunsany, Co Meath (64% of its LTA) <i>(its driest autumn since 2007)</i> Highest daily rainfall: 57.4 mm at Knock Airport, Co Mayo (43% of its monthly LTA) on Sat 23rd Nov <i>(its wettest autumn day since 2010)</i>
Temperature	Highest mean seasonal temperature: 12.7°C at Sherkin Island, Co Cork (0.7°C above its LTA)
	Lowest seasonal mean air temperature: 9.9°C at Knock Airport, Co Mayo (0.8°C above its LTA)
	Highest air temperature for the season: 25.2°C at Claremorris, Co Mayo (8.4°C above its monthly LTA) on Fri 6th Sep
	Lowest air temperature for the season: -4.8°C at Markree, Co Sligo (8.8°C below its monthly LTA) on Wed 27th Nov
	Lowest grass minimum for the season: -9.7°C at Markree, Co Sligo on Wed 27th Nov (its lowest grass min for autumn since 1984)
Sunshine	Highest seasonal total: 289.2 hrs (daily mean 3.18 hrs/day) at Casement Aerodrome, Co Dublin
	Lowest seasonal total: 241.7 hrs (daily mean 2.66 hrs/day) at Gurteen, Co Tipperary
	Highest daily sunshine for the season: 12.7 hours at Belmullet, Co Mayo on Thu 5th Sep



Issued by Met Éireann on Wednesday 4th December 2024. This report is based on available preliminary data from 25 principal weather stations operated by Met Éireann. Synoptic station data is daily, which is midnight UTC. Long-Term Averages (LTAs) and "average" refer to the period 1981-2010. ^a A rain day is a day with 0.2 mm or more of rainfall. ¹ A wet day is a day with 1.0 mm or more of rainfall. ^a A dull day is a day with less than 0.5 hours of sunshine. ^a A very wet day is a day with 10.0 mm or more of rainfall. ⁴ An absolute drought is a period of 15 or more consecutive days to none of which is credited 0.2 mm or more of precipitation. ^a A partial drought is a period of at least 29 consecutive days, the mean daily rainfall of which does not exceed 0.2 mm. ^a A dry spell is a period of 15 or more consecutive days to none of which is credited 1.0 mm or more of precipitation (i.e. daily tot < 1.0 mm). ² A heatwave occurs where there are 5 consecutive days or more with maximum temperature over 25°C (that is, a daily maximum screen air temperature > 25° C). ^a An icing day is when the daily maximum air temperature stays below 0 °C (measured from 09-09 UTC or 00-00 UTC) *Sunshine data is from the Autosol Network. LTAs for these sites are currently not used for comparison purposes. For more information, contact Met Éireann at 01-8064200 or e-mail: enq@met.ie