



# December 2024

## **Mild, dull and relatively dry**

December 2024 was mild and dry with pressure higher than normal overall. The month began with low pressure pulling away to the northeast followed by a transient area of high pressure giving a few cool days with some sunshine and frosty nights. Atlantic low pressure took control for the second half of the first week. A deepening low pressure system, named storm Darragh by the Met Office (UK), crossed over the northern half of the country late on Friday 6th and early Saturday 7th. This, along with high pressure to the west over the Atlantic pushing the isobars together, led to the windiest period of the month along with widespread rain, heavy in the northwest. The second week was mostly dry and dominated by cool high pressure. Sunny spells early in the week gave way to more cloud as the week progressed. The third week was mild with high pressure to the south initially bringing a few relatively dry days before low pressure approached from the southwest. This brought several weather fronts across the country with rain at times. The week finished windy with a deep area of low pressure to the north and high pressure to the south. The fourth week began cool and windy before a mild airmass moved in from the southwest with high pressure to the south intensifying and pushing north. It stayed mostly mild, relatively dry and cloudy for the remainder of the week, including the Christmas period. The month finished with a slow-moving weather front crossing the country from the northwest giving widespread rain, heavy in places.

## **Rainfall: Driest in the East and South**

All monthly rainfall totals across the country were below their 1981-2010 Long-Term Average (LTA). Percentage of monthly rainfall values ranged from 48% (70.8 mm) at Mace Head, Co Galway to 97% (133.5 mm) at Belmullet, Co Mayo. Monthly rainfall totals ranged from 45.7 mm (63% of its LTA) at Dublin Airport, Co Dublin (*its driest December since 2008*) to 173.7 mm (96% of its LTA) at Newport, Co Mayo. The highest daily rainfall total was 32.6 mm at Belmullet, Co Mayo on Friday 6th during storm Darragh. The number of rain days<sup>0</sup> ranged from 15 days at Dublin Airport, Co Dublin to 26 days at a few stations. The number of wet days<sup>1</sup> ranged from 8 days at a few stations to 23 days at Newport, Co Mayo. The number of very wet days<sup>3</sup> ranged from 1 day at a few stations to 5 days at Valentia Observatory, Co Kerry. Dunsany, Co Meath had its driest December since 2001. Three stations, Mace Head, Co Galway, Mullingar, Co Westmeath and Gurteen, Co Tipperary had their driest December since 2010. Six stations in the South had their driest December since 2014.

## **Temperature: Significantly above average everywhere**

All mean air temperatures across the country were above their LTA for the month. Deviations from mean air temperature ranged from 1.2 °C (8.6 °C mean temperature) at Roche's Point, Co Cork to 2.3 °C (7.8 °C mean temperature) at Finner, Co Donegal. Mean temperatures for the month ranged from 6.3 °C (2.0 °C above its LTA) at Knock Airport, Co Mayo to 9.4 °C (1.4 °C above its LTA) at Sherkin Island, Co Cork. The month's highest temperature was reported at Shannon Airport, Co Clare on Tuesday 17th with a temperature of 15.0 °C. Both the month's lowest air and grass minimum temperatures were recorded on Tuesday 10th at Markree, Co Sligo. The lowest air minimum was -5.8 °C while the lowest grass minimum was -11.4 °C. More than half of stations reported ground frost. The number of days with ground frost ranged from zero days at Roche's Point, Co Cork to 14 days at both Ballyhaise, Co Cavan and Mullingar, Co Westmeath. More than half of stations reported air frost. The number of days with air frost ranged from zero days at Mace Head, Co Galway to 5 days at a few stations.

## **Sunshine: Dull everywhere**

All available monthly sunshine totals were below their LTA. Percentage of monthly sunshine values ranged from 73% (monthly sunshine total of 34.9 hours) at Casement Aerodrome, Co Dublin to 77% (monthly sunshine total of 34.7 hours) at Shannon Airport, Co Clare. Monthly sunshine totals ranged from 12.7 hours (no LTA comparison\*) at Malin Head, Co Donegal (*its dulliest December since 2011*) to 47.3 hours (no LTA comparison\*) at Johnstown Castle, Co Wexford. The highest number of daily sunshine hours recorded this month was 7.2 hours at Cork Airport, Co Cork on Monday 9th. The number of dull days<sup>2</sup> ranged from 17 days at a few stations to 21 days at Malin Head, Co Donegal.

## **Wind: Violent storm force winds reported during storm Darragh**

Monthly mean wind speeds ranged from 6.0 knots (11.1 km/h) at Moore Park, Co Cork to 18.2 knots (33.7 km/h) at Malin Head, Co Donegal. Gales were reported on 13 days during the month with strong gales reported on Friday 6th, Saturday 7th, Thursday 19th, Saturday 21st and Sunday 22nd. Mean wind speeds reached storm force on Friday 6th, Saturday 7th during storm Darragh and on Sunday 22nd. Mean wind speeds reached violent storm force on Friday 6th during storm Darragh. The number of days with gales ranged from zero days at Moore Park, Co Cork to 11 days at Malin Head, Co Donegal. The number of days with up to strong gales ranged from zero at a few stations to 4 days at both Mace Head, Co Galway and Malin Head, Co Donegal. The number of days with storm force winds was 2 days at both Mace Head, Co Galway and Malin Head, Co Donegal. Both the month's highest gust and 10-minute mean wind speed was reported at Mace Head, Co Galway on Friday 6th during storm Darragh. The highest gust was 76 knots (141 km/h) while the month's highest 10-minute mean wind speed was 60 knots (111 km/h). During storm Darragh, both Oak Park, Co Carlow (*record length 20 years*) and Gurteen, Co Tipperary (*length 16 years*) reported their highest December gust on record. Five stations, including Dublin Airport and Shannon Airport, reported their highest December gust since 2013, while Knock Airport reported its highest December gust since 1998. Casement Aerodrome and Mount Dillon reported their highest December gust since 2006.

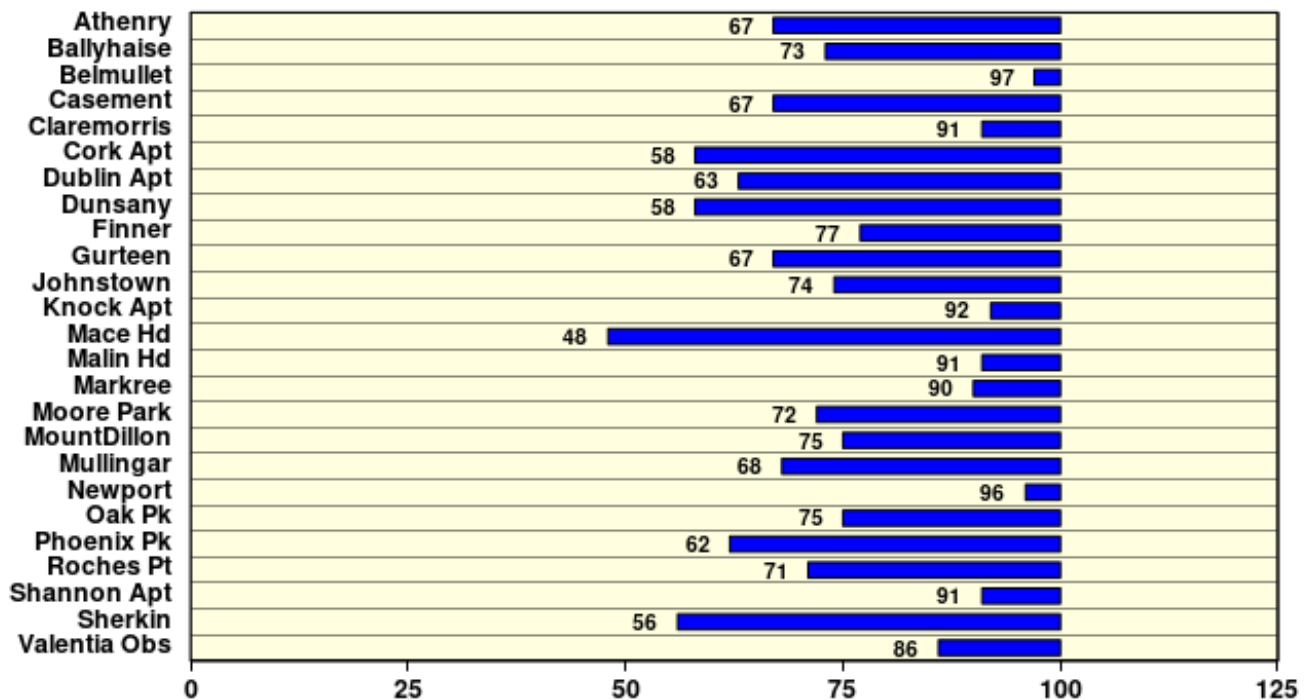
## **EXTREME VALUES AT SYNOPTIC STATIONS**

<b>Rainfall</b>	Highest monthly total: 173.7 mm at Newport, Co Mayo (96% of its LTA) Lowest monthly total: 45.7 mm at Dublin Airport, Co Dublin (63% of its LTA) ( <i>its driest December since 2008</i> ) Highest daily rainfall: 32.6 mm at Belmullet, Co Mayo (24% of its monthly LTA) on Fri 6th
<b>Temperature</b>	Highest mean monthly temperature: 9.4°C at Sherkin Island, Co Cork (1.4°C above its LTA) Lowest mean monthly temperature: 6.3°C at Knock Airport, Co Mayo (2.0°C above its LTA) Highest air temperature: 15.0°C at Shannon Airport, Co Clare (6.0°C above its LTA) on Tue 17th Lowest air temperature: -5.8°C at Markree, Co Sligo (8.6°C below its LTA) on Tue 10th Lowest grass minimum: -11.4°C at Markree, Co Sligo on Tue 10th
<b>Sunshine</b>	Highest monthly total: 47.3 hrs (daily mean 1.53 hrs/day) at Johnstown Castle, Co Wexford Lowest monthly total: 12.7 hrs (daily mean 0.41 hrs/day) at Malin Head, Co Donegal ( <i>its dulliest December since 2011</i> ) Highest daily sunshine: 7.2 hours at Cork Airport, Co Cork on Mon 9th

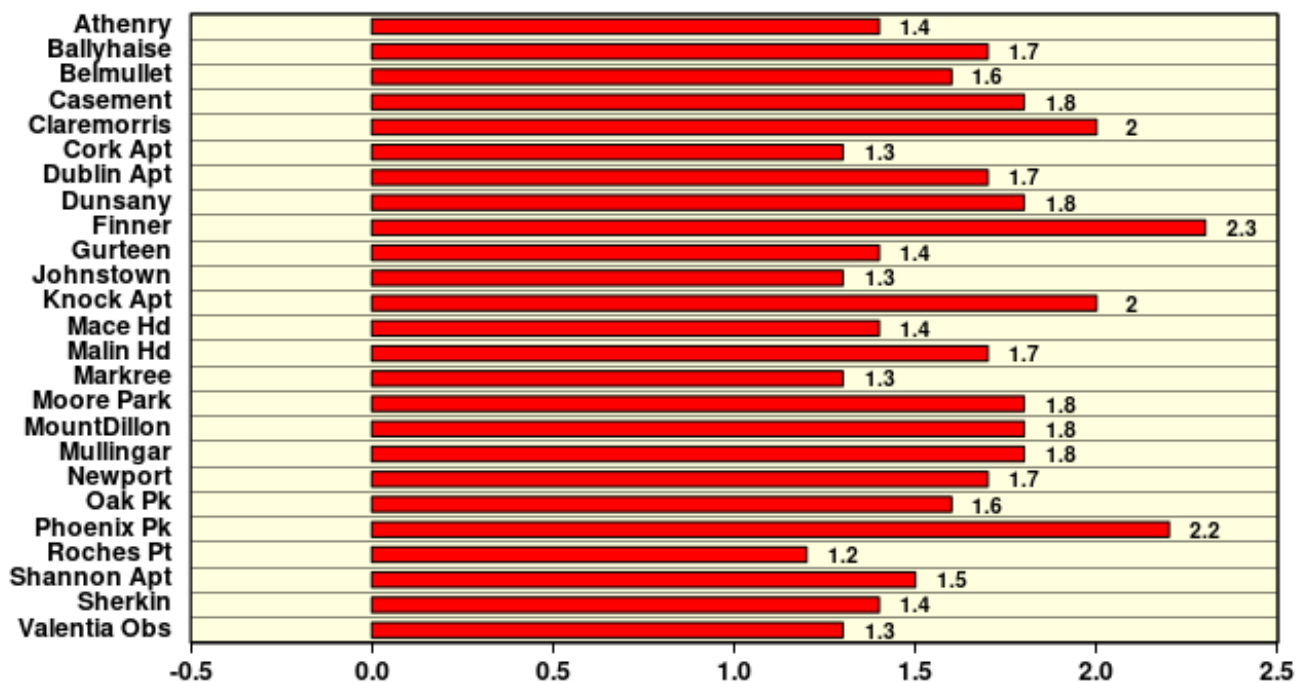
# December 2024

Based on Data from 1-31 December 2024 on whole month basis

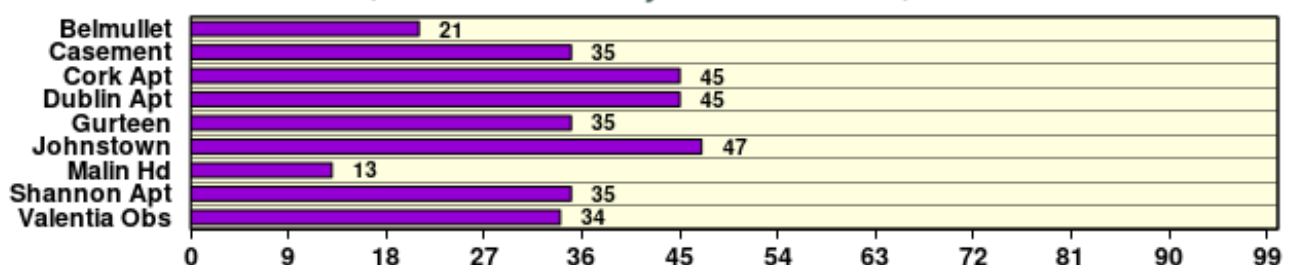
## Rainfall (% of average for period 1981-2010) on whole month basis



## Temperature (°C) (difference from average for period 1981-2010)



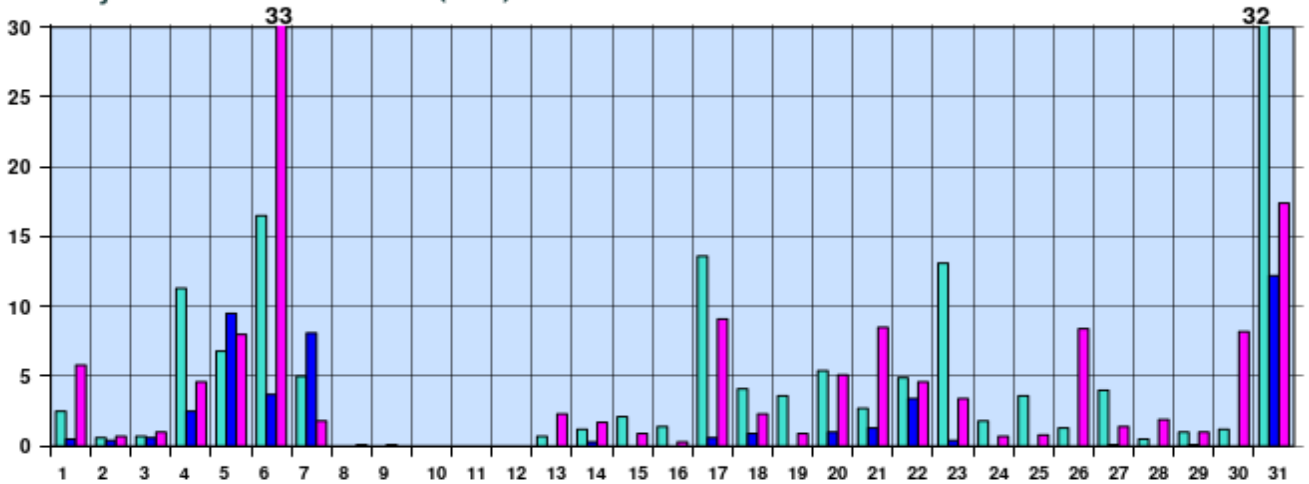
## Sunshine (Number of monthly sunshine hours)



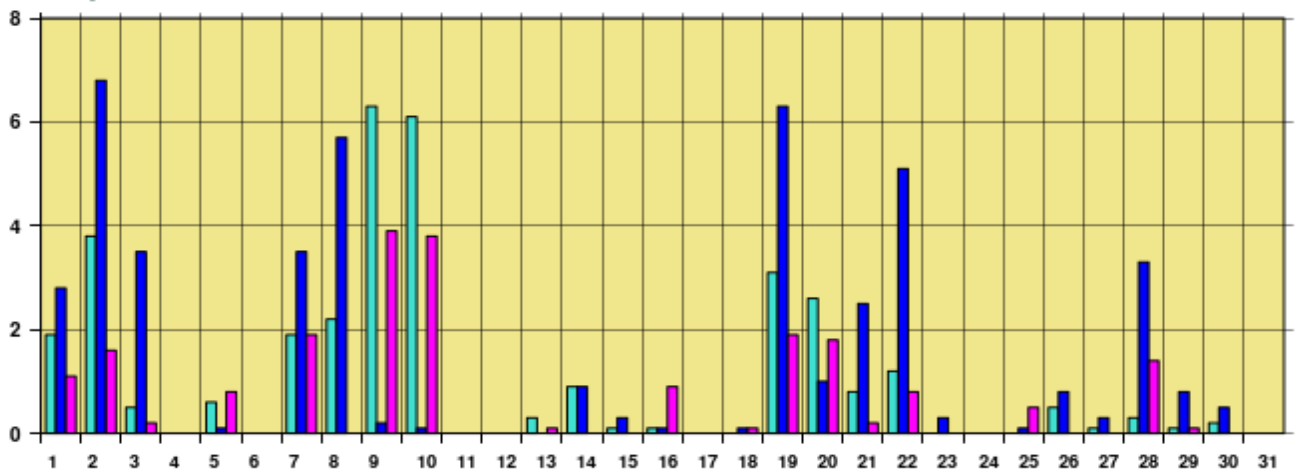
# December 2024 Daily Values at selected synoptic stations

Based on data from 1-31 December 2024 on a pro rata basis

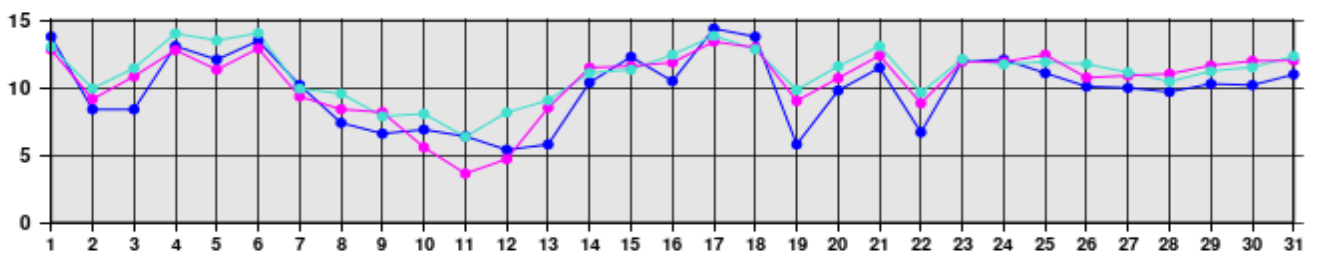
## Daily 00-24h rainfall values(mm)



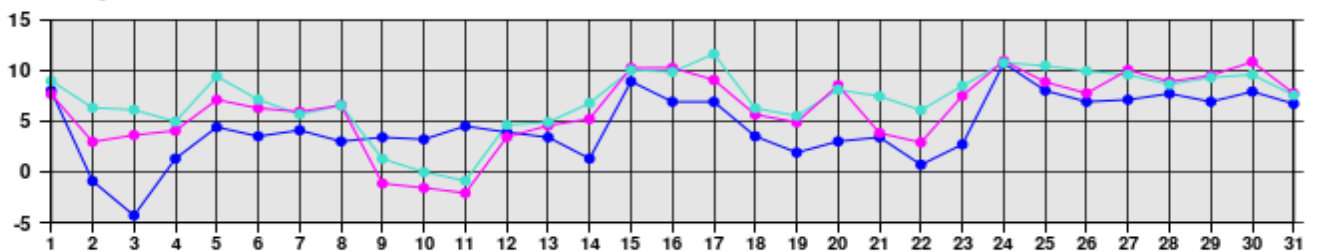
## Daily sunshine values(hours)



## Daily 00-24h maximum temperature (°C)



## Daily 00-24h minimum temperature (°C)



- Valentia Observatory - Dublin Airport - Belmullet

Issued by Met Éireann on Friday 3rd January 2025. 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 to midnight UTC. Long-Term Averages (LTAs) and "average" refer to the period 1981-2010. <sup>1</sup> A rain day is a day with 0.2 mm or more of rainfall. <sup>2</sup> A wet day is a day with 1.0 mm or more of rainfall. <sup>3</sup> A dull day is a day with less than 0.5 hours of sunshine. <sup>4</sup> A very wet day is a day with 10.0 mm or more of rainfall. <sup>5</sup> 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. <sup>6</sup> A partial drought is a period of at least 29 consecutive days, the mean daily rainfall of which does not exceed 0.2 mm. <sup>7</sup> 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). <sup>8</sup> 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). <sup>9</sup> 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