



# October 2024

## Mild and dry overall

October 2024 was a mild month everywhere. It was relatively dry for most of the country, apart from the Southwest, which saw above average rainfall. The weather patterns fluctuated between periods of high pressure dominance and Atlantic low pressure dominance. The first week began mostly dry with high pressure to the north in control. As the week progressed high pressure slowly pulled away to the east allowing low pressure to encroach from the west. This brought up a warm moist tropical maritime air mass from the south, along with some pulses of intense thundery rainfall, particularly affecting the Southwest. The second week began with low pressure to the south pushing bands of rain or showers over the country. As the week progressed the active low pressure systems stayed to the south and pressure rose over Ireland, bringing drier and sunnier conditions in a cooler Polar maritime air mass. The third week saw high pressure pulling away to the east again allowing a more mobile westerly regime to develop. A powerful North Atlantic jet stream steered a rapidly intensifying deep area of low pressure, named storm Ashley by Met Éireann, close to the Northwest of the country on Sunday 20th. This brought the windiest period of the month along with some coastal flooding due to the added factor of high spring tides. A mobile westerly airflow continued for most of the fourth week, bringing bands of rain or showers at times interspersed with dry periods. The rain was heavy at times, especially in the West on Thursday 24th. The month finished mostly dry, cloudy and mild with high pressure in control.

### Rainfall: Driest in the Northwest, Midlands and East. Wettest in the Southwest

The majority of monthly rainfall totals across the country were below their 1981-2010 Long-Term Average (LTA). Percentage of monthly rainfall values ranged from 53% at both Malin Head, Co Donegal (64.3 mm) and Oak Park, Co Carlow (49.7 mm) to 115% (202.8 mm) at Valentia Observatory, Co Kerry. Monthly rainfall totals ranged from 47.8 mm (61% of its LTA) at Dublin Airport to 202.8 mm (115% of its LTA) at Valentia Observatory, Co Kerry. The highest daily rainfall total was 54.2 mm at Sherkin Island, Co Cork on Saturday 5th (*its highest daily fall in October on record (record length 52 years)*). The number of rain days<sup>0</sup> ranged from 16 days at Casement Aerodrome, Co Dublin to 26 days at a few stations. The number of wet days<sup>1</sup> ranged from 10 days at Oak Park, Co Carlow to 21 days at Valentia Observatory, Co Kerry, Knock Airport and Newport, Co Mayo. The number of very wet days<sup>3</sup> ranged from zero days at Dunsany, Co Meath to 6 days at Valentia Observatory, Co Kerry. The majority of stations, away from the Southwest, had their driest October for 6-8 years.

### Temperature: Mild everywhere

All mean air temperatures across the country were above their LTA for the month. Deviations from mean air temperature ranged from 0.6 °C at Markree, Co Sligo (10.3 °C mean temperature), Ballyhaise, Co Cavan (10.7 °C mean temperature) and Shannon Airport, Co Clare (11.7 °C mean temperature) to 1.5 °C (11.7 °C mean temperature) at Phoenix Park, Co Dublin. Mean temperatures for the month ranged from 10.1 °C (1.2 °C above its LTA) at Knock Airport, Co Mayo to 12.8 °C (0.7 °C above its LTA) at Sherkin Island, Co Cork. The month's lowest temperatures were recorded on Friday 11th. The lowest air minimum was reported at Moore Park, Co Cork with a temperature of -1.6 °C and the lowest grass minimum was reported at Mount Dillon, Co Roscommon with -6.3 °C. The highest maximum was reported on Wednesday 16th at Athenry, Co Galway with a temperature of 19.1 °C. More than half of stations reported ground frost. The number of days with ground frost ranged from zero days at a few stations to 11 days at Mount Dillon, Co Roscommon. Six stations reported air frost. The number of days with air frost ranged from zero days at most stations to 4 days at Mount Dillon, Co Roscommon.

### Sunshine: Sunniest in the East

Nearly all available sunshine totals were above their LTA. Percentage of monthly sunshine values ranged from 106% (monthly sunshine total of 96.1 hours) at Shannon Airport, Co Clare to 114% (the month's highest monthly sunshine total of 116.4 hours) at Casement Aerodrome, Co Dublin. Monthly sunshine totals were lowest at Valentia Observatory, Co Kerry with 67.3 hours (No LTA comparison\*). The highest number of daily sunshine hours recorded this month was 10.1 hours at Johnstown Castle, Co Wexford on Friday 11th. The number of dull days<sup>2</sup> ranged from 8 days at both Valentia Observatory, Co Kerry and Casement Aerodrome, Co Dublin to 11 days at both Belmullet, Co Mayo and Cork Airport, Co Cork.

### Wind: Storm force winds reported during storm Ashley

Monthly mean wind speeds ranged from 5.6 knots (10.4 km/h) at Moore Park, Co Cork to 15.5 knots (28.7 km/h) at Malin Head, Co Donegal. Gales were reported on the 5th, 12th, 18th, 19th and 20th with strong gales and storm force winds reported on Sunday 20th during storm Ashley. Gales were reported at fifteen stations and strong gales were reported at six stations on Sunday 20th during storm Ashley. The number of days with gales ranged from zero days at a few stations to 3 days at Roche's Point, Co Cork. Storms force winds were reported at both Mace Head, Co Galway and Belmullet, Co Mayo on Sunday 20th during storm Ashley. The month's highest 10-minute mean wind speed was reported at both Mace Head, Co Galway and Belmullet, Co Mayo on Sunday 20th with 54 knots (100 km/h). The highest gust was 74 knots (137 km/h) reported at Mace Head, Co Galway also on Sunday 20th during storm Ashley. Five stations recorded their highest October gust on record on Sunday 20th during storm Ashley (*record lengths between 13 and 27 years*). These were Mace Head, Co Galway with 74 knots (137 km/h), Newport, Co Mayo with 69 knots (128 km/h), Athenry, Co Galway with 51 knots (95 km/h), Finner, Co Donegal with 59 knots (109 km/h) and Knock Airport, Co Mayo with 65 knots (120 km/h).

## EXTREME VALUES AT SYNOPTIC STATIONS

### Rainfall

Highest monthly total: 202.8 mm at Valentia Observatory, Co Kerry (115% of its LTA)  
Lowest monthly total: 47.8 mm at Dublin Airport, Co Dublin (61% of its LTA)  
Highest daily rainfall: 54.2 mm at Sherkin Island, Co Cork (42% of its monthly LTA) on Sat 5th (*its highest daily fall in October on record (record length 52 years)*)

### Temperature

Highest mean monthly temperature: 12.8°C at Sherkin Island, Co Cork (0.7°C above its LTA)  
Lowest mean monthly temperature: 10.1°C at Knock Airport, Co Mayo (1.2°C above its LTA)  
Highest air temperature: 19.1°C at Athenry, Co Galway (5.2°C above its LTA) on Wed 16th  
Lowest air temperature: -1.6°C at Moore Park, Co Cork (8.0°C below its LTA) on Fri 11th  
Lowest grass minimum: -6.3°C at Mount Dillon, Co Roscommon on Fri 11th

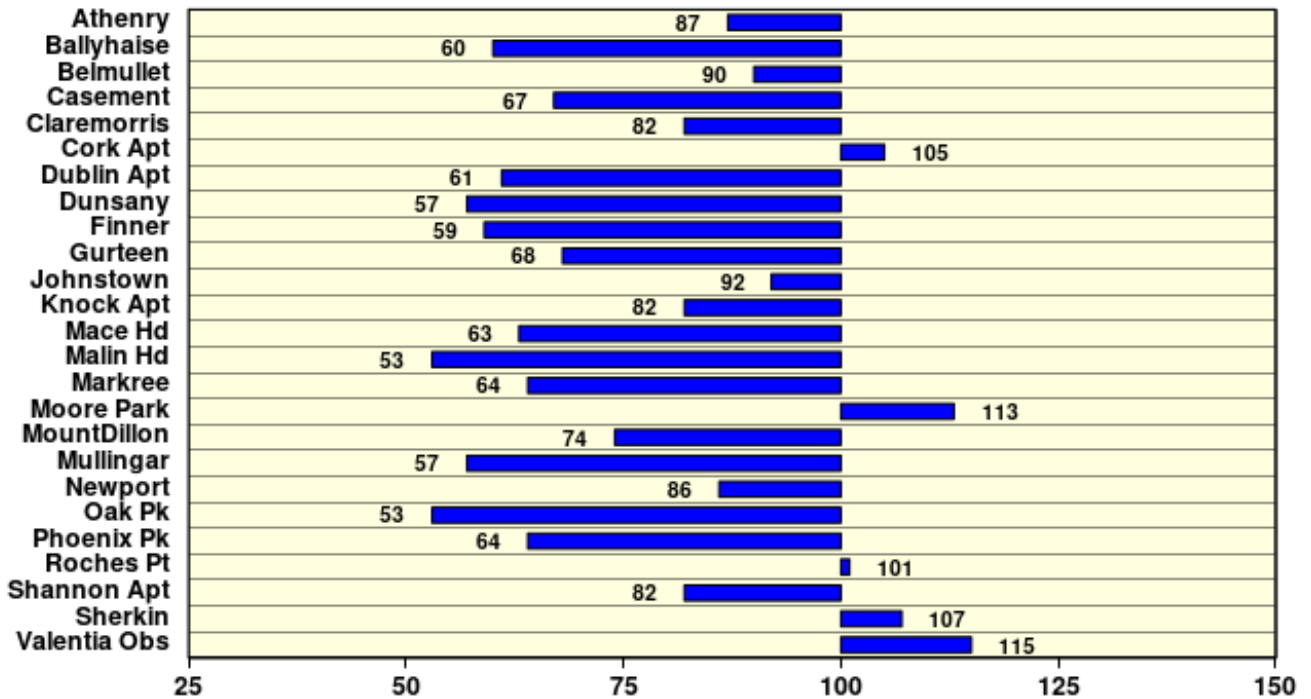
### Sunshine

Highest monthly total: 116.4 hrs (daily mean 3.75 hrs/day) at Casement Aerodrome, Co Dublin  
Lowest monthly total: 67.3 hrs (daily mean 2.17 hrs/day) at Valentia Observatory, Co Kerry  
Highest daily sunshine: 10.1 hours at Johnstown Castle, Co Wexford on Fri 11th

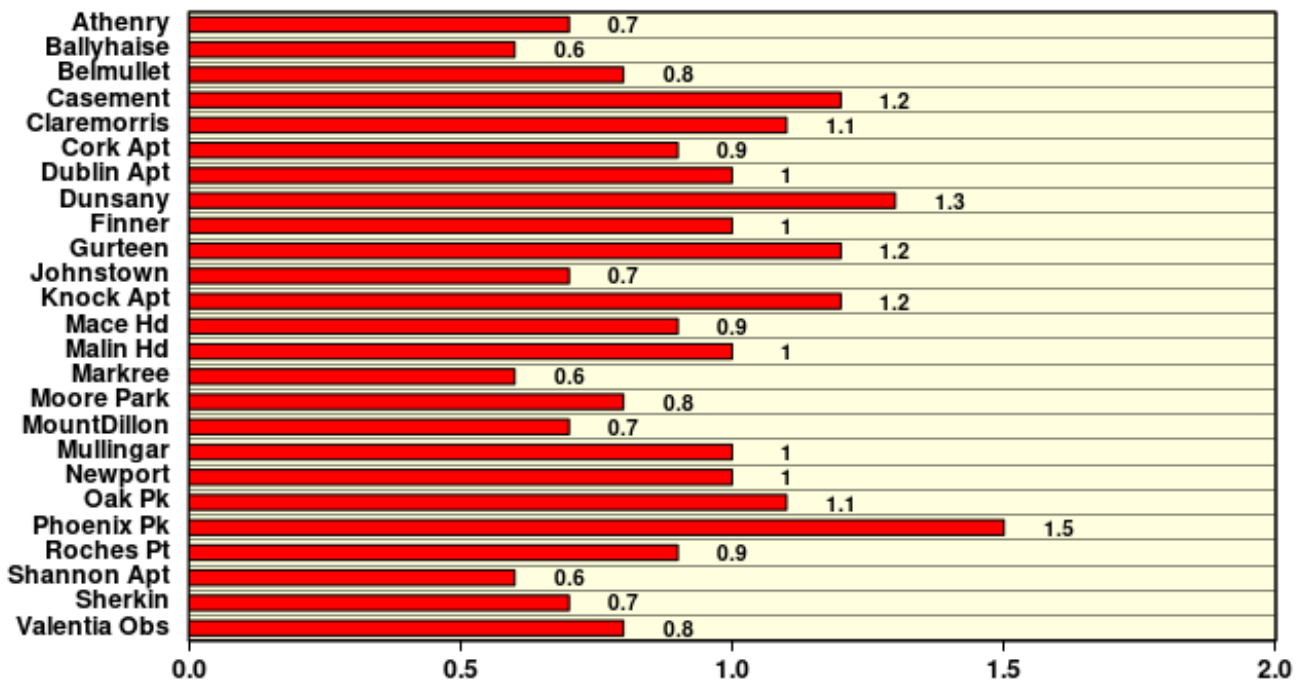
# October 2024

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

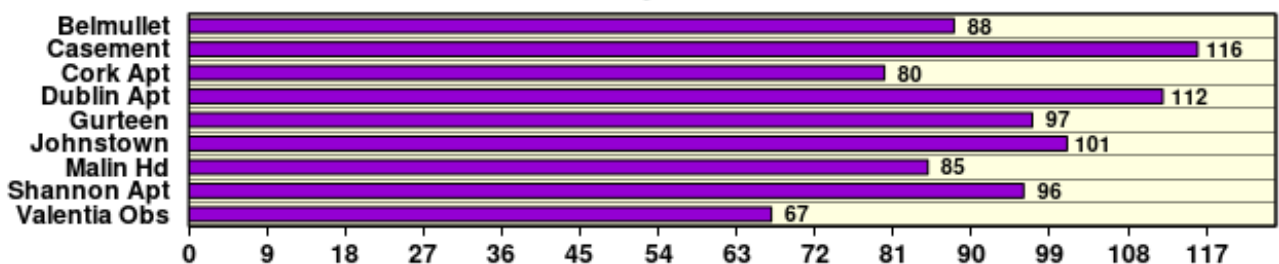
## Rainfall (% of average for period 1981-2010) on whole month basis



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



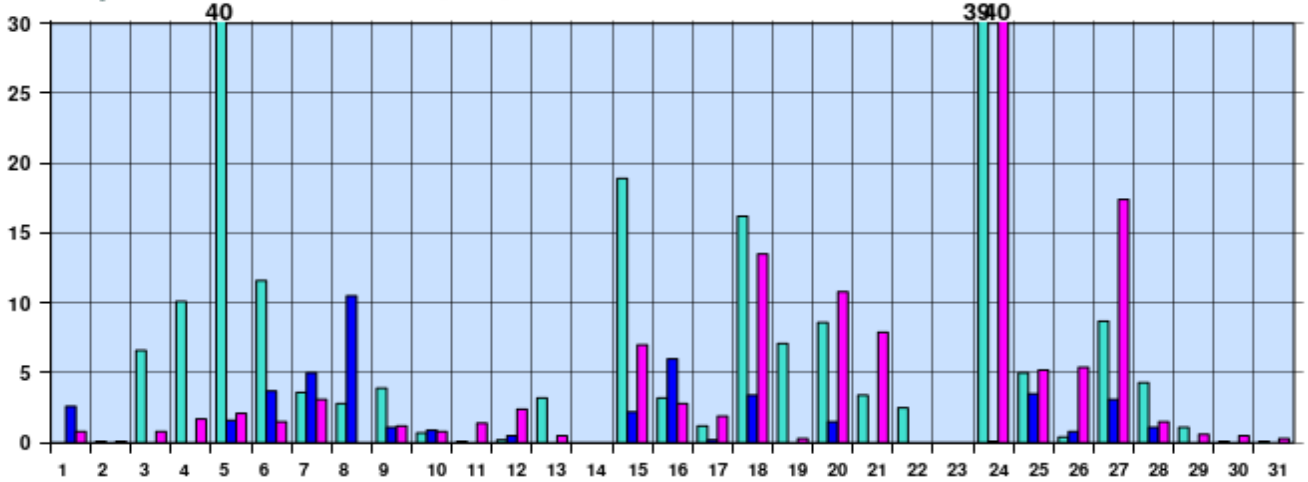
## Sunshine (Number of monthly sunshine hours)



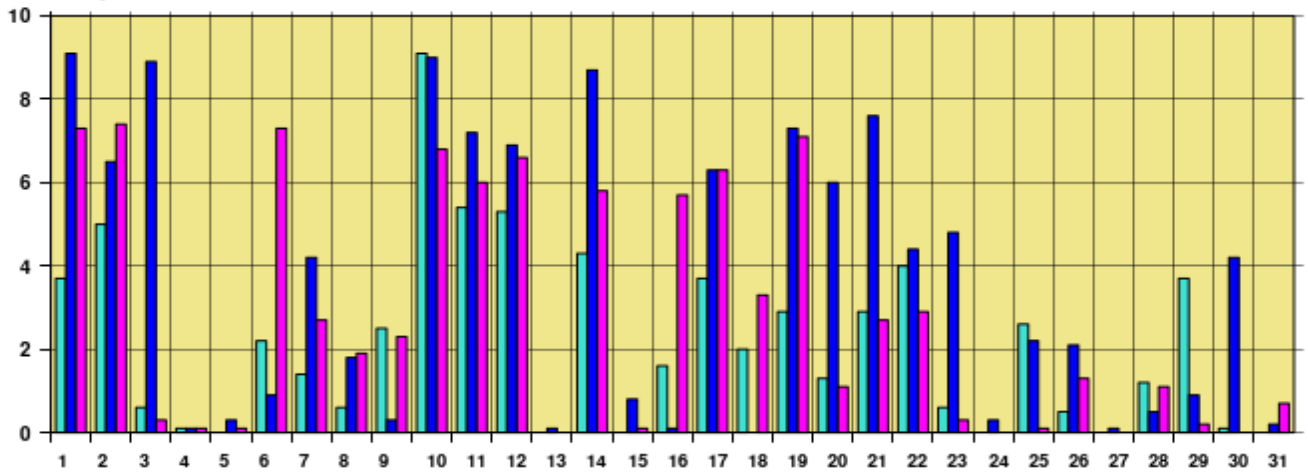
# October 2024 Daily Values at selected synoptic stations

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

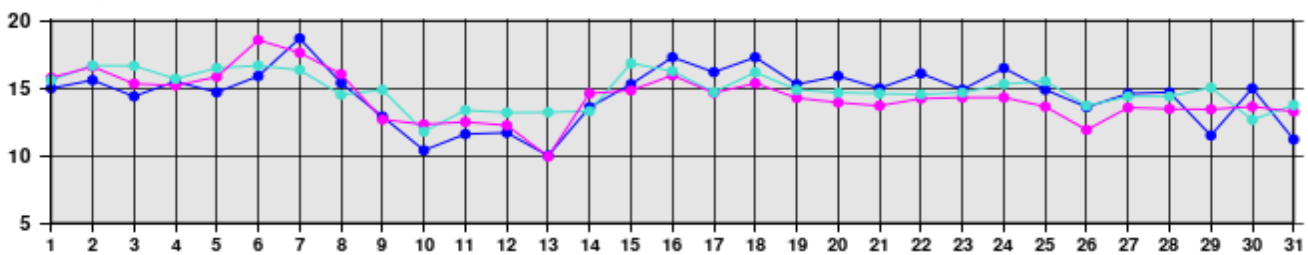
## Daily 00-24h rainfall values(mm)



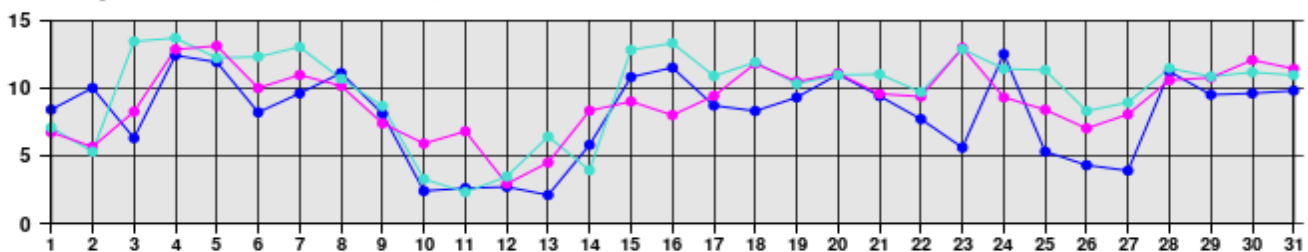
## Daily sunshine values(hours)



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



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



- Valentia Observatory - Dublin Airport - Belmullet

Issued by Met Éireann on Monday 4th November 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 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