

Winter

(December 2023, January & February 2024)

Mild and wet overall with six named storms, cooler and drier January

The winter of 2023/2024 was the eleventh consecutive season with above average temperatures. December and February were mild and wet while January was cool and dry overall. December started dry and cool before Atlantic low pressure took control and dominated for the rest of the month. Storm Elin and storm Fergus, both named by Met Éireann, crossed directly over the country on Saturday 9th and Sunday 10th. Storm Gerrit, named by the UK Met Office, and storm Geraldine, named by Météo-France, brought periods of wet and windy weather during the final week of the month. The first two thirds of January were cold and relatively dry with high pressure to the north in charge. The final third of the month saw Atlantic low pressure take control. An intense North Atlantic jet stream steered two named storms, Isha named by the Met Office (UK) and Jocelyn named by Met Éireann, close to the north of the country between the 21st and 24th, which brought the windiest period of the season. February was an Atlantic dominated month with low pressure in control. Numerous bands of rain or showers crossed the country in a mostly mild west to south-westerly airflow. This brought record high monthly mean temperatures to the Southwest of the country with above average rainfall for most.

Rainfall: Above average in most places, wettest in the West

Nearly all rainfall totals were above their Long-Term Average 1981-2010 (LTA) for the season. Percentage of rainfall values ranged from 96% (seasonal rainfall total of 348.3 mm) at Sherkin Island, Co Cork to 139% (seasonal rainfall total of 454.5 mm) at Athenry, Co Galway. Seasonal rainfall totals ranged from 200.5 mm (104% of its LTA) at Phoenix Park, Co Dublin to 617.0 mm (130% of its LTA) at Newport, Co Mayo. The highest daily rainfall total was 36.4 mm at Johnstown Castle, Co Wexford on Thursday 8th February. The number of rain days ranged from 52 days at Dublin Airport, Co Dublin to 82 days at both Newport, Co Mayo and Belmullet, Co Mayo. The number of wet days¹ ranged from 35 days at Phoenix Park. Co Dublin to 68 days at Belmullet, Co Mayo. The number of very wet days³ ranged from 4 days at both Dublin Airport and Casement Aerodrome, Co Dublin to 27 days at Newport, Co Mayo. In January nine stations in the Midlands, South and East had dry spells⁰ lasting between 16 and 17 days and one station had an absolute drought⁴ lasting 16 consecutive days (see January climate statement for more details).

Temperature: Above average everywhere

All mean air temperatures across the country were above their LTA for the season. Deviations from mean air temperature ranged from 0.7 °C (6.2 °C mean temperature) at Markree, Co Sligo to 1.7 °C (6.9 °C mean temperature) at Phoenix Park, Co Dublin. Mean temperatures for the season ranged from 5.5 °C (1.4 °C above its LTA) at Knock Airport, Co Mayo to 8.5 °C (0.8 °C above its LTA) at Sherkin Island, Co Cork. The season's lowest temperatures were recorded on Thursday 18th January with the lowest air minimum reported at Athenry, Co Galway with a temperature of -7.3 °C and the lowest grass minimum reported at Oak Park, Co Carlow with -13.3 °C. The highest maximum was reported on Sunday 28th January at Belmullet, Co Mayo with a temperature of 15.4 °C. All stations reported air and ground frost during the season. The number of days with ground frost ranged from 19 days at both Roche's Point, Co Cork and Malin Head, Co Donegal to 50 days at Mount Dillon, Co Roscommon. The number of days with a mean temperature of 6.6 °C (1.2 °C above its LTA).

Sunshine: Above average, sunniest in the South

All available sunshine totals were above their LTA for the season. Percentage of seasonal sunshine values ranged from 101% (seasonal sunshine total of 175.0 hours) at Casement Aerodrome, Co Dublin to 118% (seasonal sunshine total of 191.5 hours) at Shannon Airport, Co Clare. Seasonal sunshine totals ranged from 138.4 hours (No LTA comparison*) at Belmullet, Co Mayo to 231.2 hours (No LTA comparison*) at Cork Airport, Co Cork. The highest number of daily sunshine hours recorded this season was 9.5 hours at Johnstown Castle, Co Wexford on Monday 26th February (its highest daily sunshine for winter on record (length 15 years)). The number of dull days² ranged from 33 days at Shannon Airport, Co Clare to 41 days at Valentia Observatory, Belmullet and Casement Aerodrome, Co Dublin.

Wind: Violent storm force winds reported, with six named storms directly affecting Ireland

Seasonal mean wind speeds ranged from 6.4 knots (11.9 km/h) at Moore Park, Co Cork to 17.4 knots (32.2 km/h) at Malin Head, Co Donegal. Storm force winds were reported on Sunday 10th December during storm Fergus, Sunday 21st January and Monday 22nd January during storm Isha and Tuesday 23rd January during storm Jocelyn. Up to violent storm force winds were reported on Sunday 21st January at Mace Head, Co Galway during storm Isha. There were numerous days with gales and strong gales (see individual monthly statements for more details). The number of days with up to strong gales ranged from zero days at most stations to 9 days at Malin Head, Co Donegal. The number of days with storm force winds were up to 3 days at Mace Head, Co Galway. Both the season's highest gust and 10-minute mean wind speed was reported at Mace Head, Co Galway on Sunday 21st January during storm Isha. The highest gust was 74 knots (137 km/h) while the season's highest 10-minute mean wind speed was 57 knots (105 km/h).

EXTREME VALUES FOR WINTER AT SYNOPTIC STATIONS

Rainfall Highest seasonal total: 617.0 mm at Newport, Co Mayo (130% of its LTA)

Lowest seasonal total: 200.5 mm at Phoenix Park, Co Dublin (104% of its LTA)

 $Highest\ daily\ rainfall:\ 36.4\ mm\ at\ Johnstown\ Castle,\ Co\ Wexford\ (48\%\ of\ its\ monthly\ LTA)\ on\ Thu\ 8th\ Feb$

Temperature Highest mean seasonal temperature: 8.5°C at Sherkin Island, Co Cork (0.8°C above its LTA)

Lowest mean seasonal temperature: 5.6°C at Knock Airport, Co Mayo (1.4 above its LTA)

Highest air temperature for the season: 15.4°C at Belmullet, Co Mayo (6.6°C above its monthly LTA) on Sun 28th Jan Lowest air temperature for the season: -7.3°C at Athenry, Co Galway (9.9°C below its monthly LTA) on Thu 18th Jan

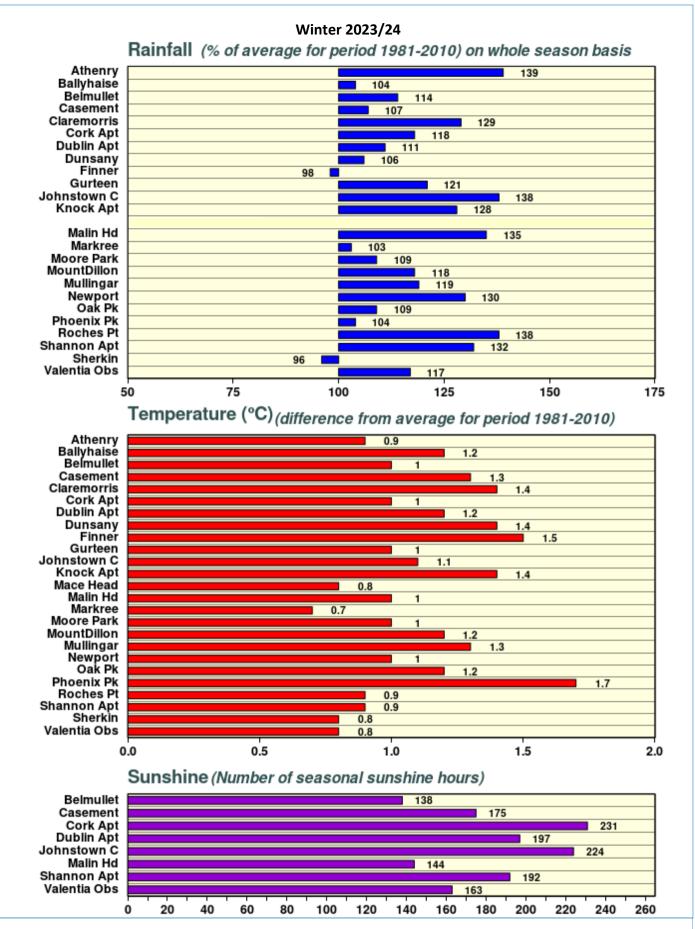
Lowest grass minimum for the season: -13.3°C at Oak Park, Co Carlow on Thu 18th Jan

Sunshine Highest seasonal total: 231.2 hrs (daily mean 2.54 hrs/day) at Cork Airport, Co Cork

Lowest seasonal total: 138.4 hrs (daily mean 1.52 hrs/day) at Belmullet, Co Mayo

Highest daily sunshine for the season: 9.5 hours at Johnstown Castle, Co Wexford on Mon 26th Feb (its highest daily sunshine for winter on record

(length 15 years))



Issued by the Climatology and Observations Division of Met Éireann on Tuesday 5th March 2024. This report is based on available preliminary data from 25 principal weather stations operated by Met Éireann. Synoptic station data is midnight to midnight UTC. Long-Term Averages (LTAs) and "average" refer to the period 1981-2010. ¹A wet day is a day with 1.0 mm or more of rainfall. ² A dull day is a day with less than 0.5 hours of sunshine. ³ 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. ⁵ A partial drought is a period of at least 29 consecutive days, the mean daily rainfall of which does not exceed 0.2 mm. ⁶ 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). ⁷ A heatwave occurs at a Met Éireann station when the daily maximum shaded air temperature is greater than twenty-five degrees Celsius (> 25.0°C) for five or more consecutive days. *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