



Winter

(December 2021, January & February 2022)

Very mild, rainfall just above average overall, windy at times

A strong stratospheric polar vortex helped to keep the North Atlantic Oscillation mostly positive during winter 2021/22, apart from a period during the second half of December when high pressure over Greenland pushed the low-pressure systems in the Atlantic further south. This meant that for most of winter, the North Atlantic Jetstream stayed to the north, with Ireland on the warmer southern side. Consequently, the low-pressure storm tracks also stayed mostly to the north and west of Ireland, with high pressure to the south. December was mild with low-pressure dominating the first and final thirds of the month bringing above average rainfall. The middle third of the month saw below average rainfall with high pressure in control. Storm Barra, named by Met Éireann, brought severe winds on Tuesday 7th and Wednesday 8th. January saw high pressure to the south and east of Ireland dominating, which brought mild and dry conditions. Two storms brought strong winds as they passed by to the north of Ireland towards the end of the month. Storm Malik, named by DMI (Denmark), on Saturday 29th and storm Corrie, named Met Office (UK), on Sunday 30th. February was mild and wet with low-pressure to the north in control. Three storms, all named by the Met Office (UK), brought strong to severe winds during February. Storm Dudley on Wednesday 16th, storm Eunice on Friday 18th and storm Franklin on Sunday 20th and Monday 21st.

Rainfall: Just above average overall, lowest in the Southwest

Percentage of Long-Term Average (LTA) rainfall values were variable across the country. Percentage of seasonal rainfall values ranged from 76% (seasonal rainfall total of 276.0 mm) at Sherkin Island, Co Cork to 119% at both Mullingar, Co Westmeath (seasonal rainfall total of 307.4 mm) and Malin Head, Co Donegal (seasonal rainfall total of 385.6 mm). Seasonal rainfall totals for the season ranged from 188.6 mm (102% of its LTA) at Dublin Airport, Co Dublin to 545.8 mm (115% of its LTA) at Newport, Co Mayo. The highest daily rainfall total was 58.9 mm at Johnstown Castle, Co Wexford on Saturday 25th Dec (*its highest daily fall for winter on record (length 80 years)*). The number of rain days ranged from 51 days at a few stations to 77 days at Belmullet, Co Mayo. The number of wet days¹ ranged from 32 days at Dublin Airport, Co Dublin to 62 days at Newport, Co Mayo. The number of very wet days³ ranged from 4 days at Oak Park, Co Carlow to 18 days at Newport, Co Mayo. Nine stations had dry spells⁶ between Saturday 8th and Sunday 30th January.

Temperature: Above average everywhere, unusually mild

All mean air temperatures across the country were above their Long-Term Average (LTA) for the season. Deviations from mean air temperature ranged from 0.8 °C (6.2 °C mean temperature) at Dublin Airport, Co Dublin to 1.8 °C (7.2 °C mean temperature) at Finner, Co Donegal. Mean temperatures for the season ranged from 5.7 °C (1.5 °C above its LTA) at Knock Airport, Co Mayo to 8.9 °C (1.2 °C above its LTA) at Sherkin Island, Co Cork. The season's lowest temperatures were recorded on Monday 17th Jan with the lowest air minimum reported at Mount Dillon, Co Roscommon with a temperature of -4.8 °C and the lowest grass minimum reported at Oak Park, Co Carlow with -9.2 °C. The highest maximum was reported on Wednesday 16th Feb at Moore Park, Co Cork with a temperature of 15.3 °C. All stations reported ground frost during the season. The number of days with ground frost ranged from 7 days at Belmullet, Co Mayo to 55 days at Phoenix Park, Co Dublin. More than half of stations reported air frost. The number of days with air frost ranged from zero days at a few stations to 16 days at Mullingar, Co Westmeath.

Sunshine: Dullest in the Northwest, sunniest in the East and Southeast

Percentage of seasonal sunshine values ranged from 112% (seasonal sunshine total of 181.4 hours) at Shannon Airport, Co Clare to 113% (seasonal sunshine total of 195.5 hours) at Casement Aerodrome, Co Dublin. Seasonal sunshine totals ranged from 103.4 hours (No LTA comparison*) at Malin Head, Co Donegal to 218.4 hours (No LTA comparison*) at Dublin Airport, Co Dublin. The highest number of daily sunshine hours recorded this season was 8.5 hours at Johnstown Castle, Co Wexford on Friday 25th Feb. The number of dull days² ranged from 28 days at Dublin Airport, Co Dublin to 42 days at Belmullet, Co Mayo.

Wind: Gales, strong gales, storm force and violent storm force winds reported and six named storms

Seasonal mean wind speeds ranged from 6.6 knots (12.2 km/h) at Moore Park, Co Cork to 18.4 knots (34.1 km/h) at Malin Head, Co Donegal. There were numerous days with gales and strong gales with up to storm force winds on Tuesday 7th Dec and Wednesday 8th Dec during storm Barra, Saturday 1st Jan, Friday 18th Feb during storm Eunice, Sunday 20th Feb and Monday 21st Feb during storm Franklin. There were violent storm force winds recorded on Tuesday 7th December at Mace Head, Co Galway during Storm Barra and on Friday 18th Feb at Roches Point, Co Cork during storm Eunice. The number of days with up to strong gales ranged from zero days at a few stations to 14 days at Mace Head, Co Galway. The number of days with storm force winds were up to 4 days at Mace Head, Co Galway. The season's highest gust was reported at Mace Head, Co Galway on Sunday 20th Feb with 75 knots (138 km/h) during storm Franklin. The season's highest 10-minute mean wind speed was 57 knots (105 km/h) at Roche's Point, Co Cork on Friday 18th Feb during storm Eunice.

EXTREME VALUES FOR WINTER AT SYNOPTIC STATIONS

Rainfall

Highest seasonal total: 545.8 mm at Newport, Co Mayo (115% of its LTA)

Lowest seasonal total: 188.6 mm at Dublin Airport, Co Dublin (102% of its LTA)

Highest daily rainfall: : 58.9 mm at Johnstown Castle, Co Wexford (54% of its monthly LTA) on Sat 25th Dec (*its highest daily fall for winter on record (length 80 years)*)

Temperature

Highest mean seasonal temperature: 8.9°C at Sherkin Island, Co Cork (1.2°C above its LTA)

Lowest mean seasonal temperature: 5.7°C at Knock Airport, Co Mayo (1.5 above its LTA)

Highest air temperature for the season: 15.3°C at Moore Park, Co Cork (6.2°C above its monthly LTA) on Wed 16th Feb

Lowest air temperature for the season: -4.8°C at Mount Dillon, Co Roscommon (6.3°C below its monthly LTA) on Mon 17th Jan

Lowest grass minimum for the season: -9.2°C at Oak Park, Co Carlow on Mon 17th Jan

Sunshine

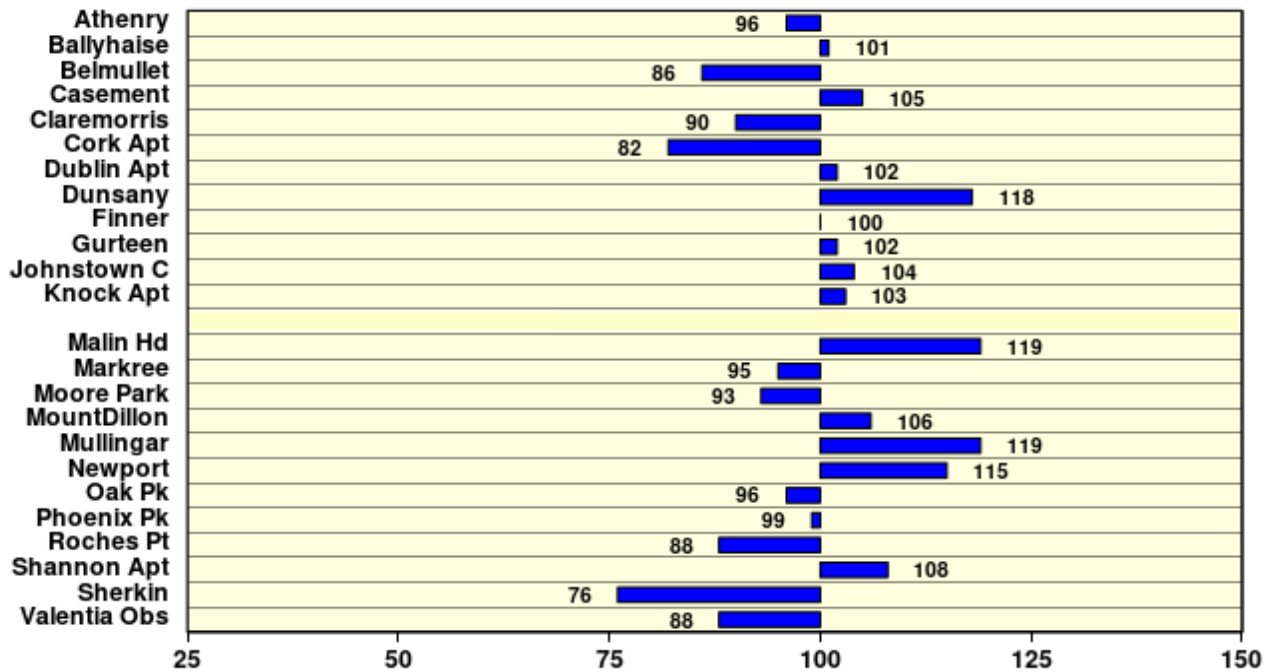
Highest seasonal total: 218.4 hrs (daily mean 2.43 hrs/day) at Dublin Airport, Co Dublin

Lowest seasonal total: 103.4 hrs (daily mean 1.15 hrs/day) at Malin Head, Co Donegal

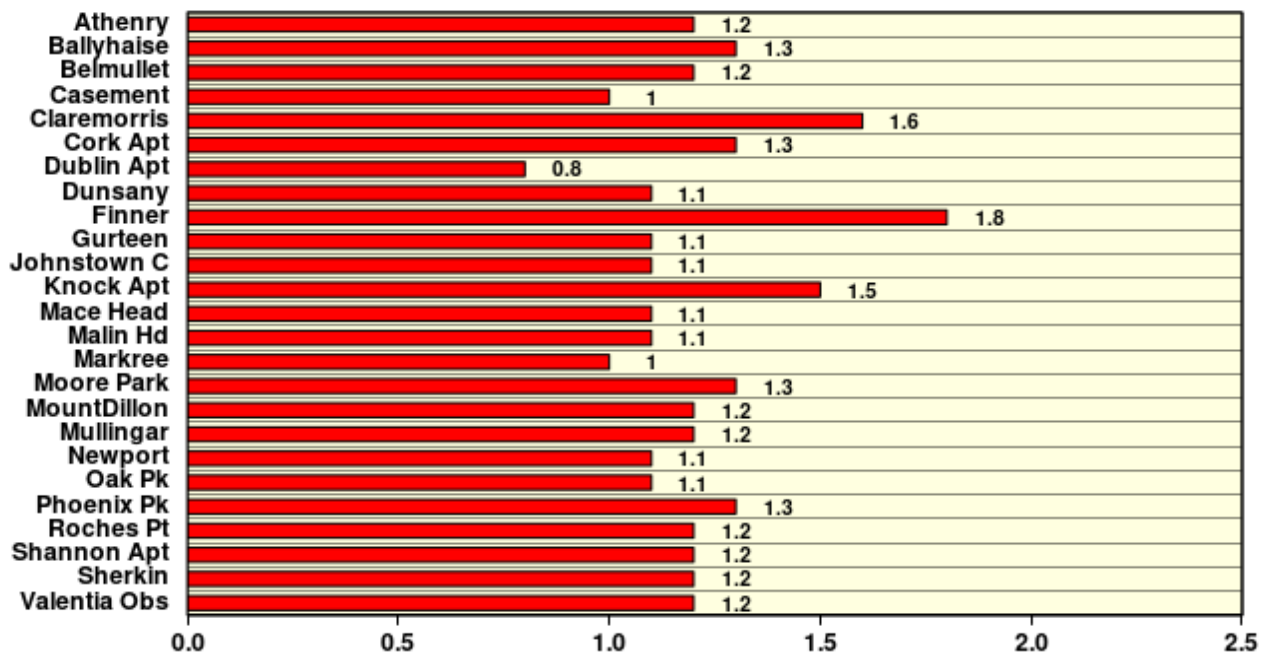
Highest daily sunshine for the season: 8.5 hours at Johnstown Castle, Co Wexford on Fri 25th Feb

Winter 2021/2022

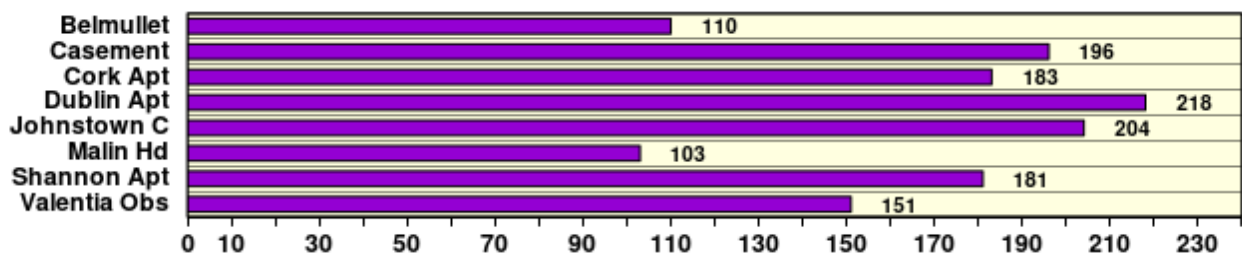
Rainfall (% of average for period 1981-2010) on whole season basis



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



Sunshine (Number of seasonal sunshine hours)



Issued by the Climatology and Observations Division of Met Éireann on Thursday 3rd March 2022. 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. 1 A 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 where there are 5 consecutive days or more with maximum temperature over 25°C (that is, a daily maximum screen air temperature > 25°C). *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