



AUTUMN 2018

Cool and dry overall.

September and October were cool and dry. High pressure in the first week of September gave way to a mainly Atlantic dominated westerly airflow for the middle of the month. Two named storms Ali and Bronagh brought disruptive violent storm force winds and heavy rain during this period. It settled down again for the last week with high pressure dominating. High pressure continued to keep most of the first week of October dry and settled. It became more unsettled during the second week. An exceptionally deep area of low pressure associated with Storm Callum moved north close to the West coast, bringing the windiest spell of the month. The second half of October was mostly cool and settled with high pressure nearby. A northerly airflow towards the end of the month brought the coldest period of the season. November was mild overall with above average rainfall in the South and East for the first time since April 2018. Low pressure dominated the first half of the month with numerous Atlantic weather fronts crossing the country. A continental easterly airflow developed mid-month and lasted for nearly two weeks. The month finished unsettled with Atlantic low-pressure systems, including Storm Diana, bringing heavy rain and strong winds.

Rainfall: Wetter than normal end to the season

The majority of seasonal rainfall totals across the country were below their Long-Term Average (LTA). This is attributed to September and October, as November had above average rainfall in most places. Percentage of seasonal rainfall values ranged from 65% (seasonal rainfall total of 190.3 mm) at Mount Dillon, Co Roscommon to 118% (seasonal rainfall total of 340.5 mm) at Roche's Point, Co Cork. Seasonal rainfall totals ranged from 181.7 mm (65% of LTA) at Ballyhaise, Co Cavan to 486.9 mm (103% of LTA) at Valentia Observatory, Co Kerry. The season's wettest day was also recorded at Valentia Observatory, Co Kerry with 34.1 mm on the 27th Nov. The number of rain days ranged from 49 days at Casement Aerodrome, Co Dublin to 71 days at both Newport, Co Mayo and Malin Head, Co Donegal. The number of wet days¹ ranged from 30 days at Dublin Airport to 57 days at Malin Head, Co Donegal. The number of very wet days³ ranged from 3 days at Mullingar, Co Westmeath to 17 days at Newport, Co Mayo.

Temperature: Milder than normal end to the season

Nearly all mean air temperatures were below their Long-Term Average (LTA) for the season. This is attributed to September and October, as November had above average temperatures in most places. Deviations from mean air temperature for the season ranged from -0.8 °C (9.5 °C mean temperature) at Athenry, Co Galway to 0.3 °C (10.5 °C mean temperature) at Dublin (Phoenix Park). Mean temperatures for the season ranged from 8.7 °C (0.3 °C below LTA) at Knock Airport, Co Mayo to 11.5 °C (0.5 °C below LTA) at Sherkin Island, Co Cork. The season's highest temperature was reported at Dublin (Phoenix Park) on the 2nd Sep with a temperature of 25.1 °C. The season's lowest air minimum was recorded on the 2nd Nov at Mount Dillon, Co Roscommon with -5.0 °C. The lowest grass minimum was -9.2 °C reported at Casement Aerodrome, Co Dublin on the 30th Oct. All stations reported ground frost during the season. The number of days with ground frost ranged from 3 days at Sherkin Island, Co Cork to 44 days at Mount Dillon, Co Roscommon. More than half of stations reported air frost. The number of days with air frost ranged from zero days at nine stations to 19 days at Mount Dillon, Co Roscommon.

Sunshine: Above average overall

Nearly all available sunshine totals were above their Long-Term Average (LTA) for the season. October was sunnier than average, with variable sunshine amounts in September and November. Percentage of seasonal sunshine values ranged from 94% (the season's lowest seasonal sunshine total of 224.9 hours) at Knock Airport, Co Mayo to 112 % (the season's highest seasonal sunshine total of 325.2 hours) at Casement Aerodrome, Co Dublin. The highest number of daily sunshine hours recorded this season was 12.3 hours at Johnstown Castle, Co Wexford on the 4th Sep. The number of dull days² ranged from 22 days at Dublin Airport to 35 days at Knock Airport, Co Mayo.

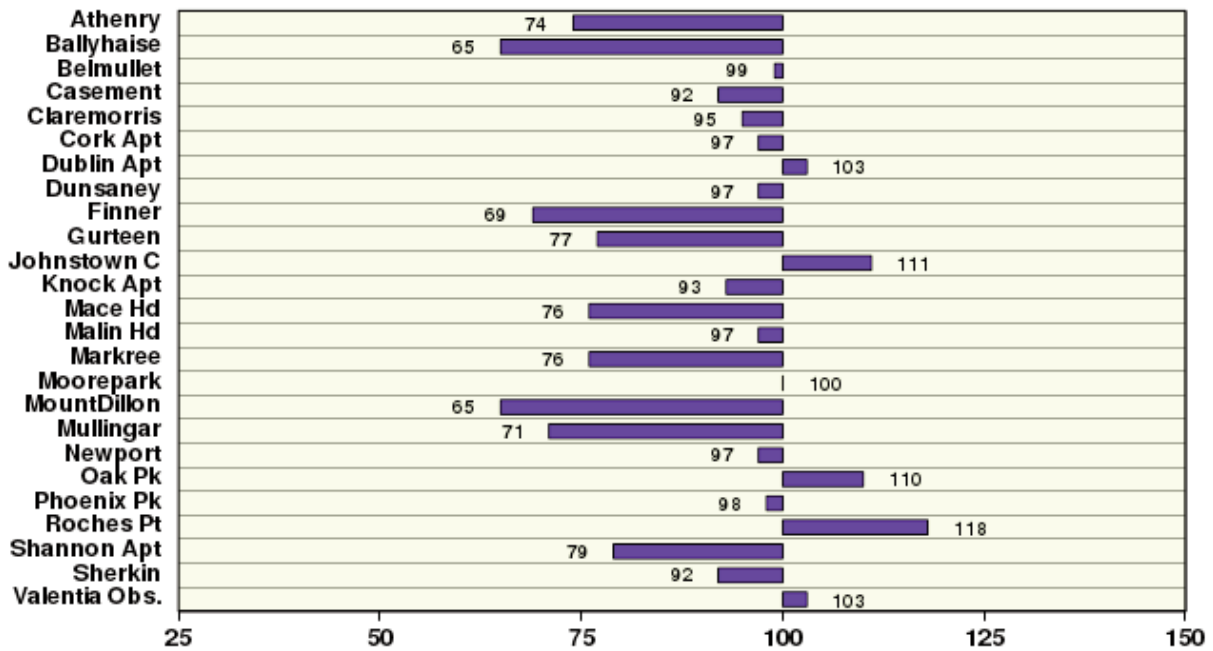
Wind: Storms Ali, Callum and Diana brought strong winds

Seasonal mean wind speeds ranged from 6.0 knots (11.1 km/h) at Moore Park, Co Cork to 16.8 knots (31.1 km/h) at Malin Head, Co Donegal. On the 19th September, Storm Ali brought violent storm force winds to Western coastal areas. On the 11th and 12th October, Storm Callum brought storm force winds to the South and West. On the 28th November, Storm Diana brought strong gales to the South and West. Both the season's highest gust and 10-minute mean wind speed were reported at Mace Head, Co Galway on the 19th Sep. The highest gust was 79 knots (146 km/h) while the season's highest 10-minute mean wind speed was 62 knots (115 km/h).

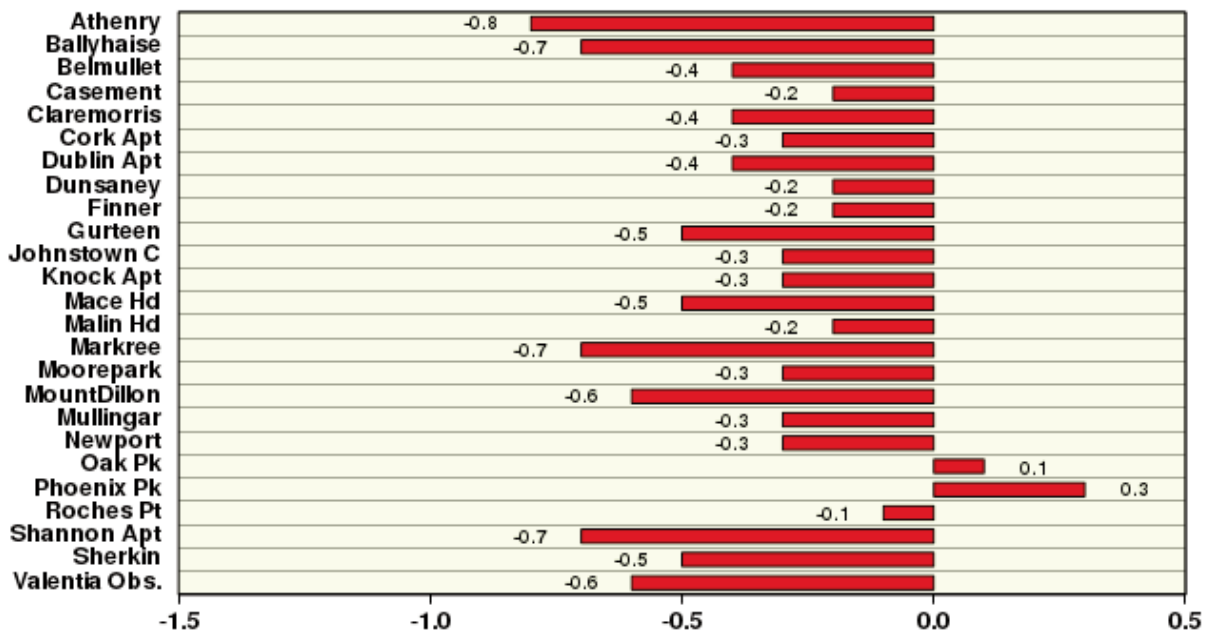
EXTREME VALUES AT SYNOPTIC STATIONS

Rainfall	Highest total: 486.9 mm (103% of LTA) at Valentia Observatory, Co Kerry (<i>its wettest Autumn since 2011</i>) Lowest total: 181.7 mm (65% of LTA) at Ballyhaise, Co Cavan (<i>its driest Autumn since 2007</i>) Highest daily rainfall: 34.1 mm at Valentia Observatory, Co Kerry on the 27th Nov
Temperature	Highest mean temperature: 11.5°C at Sherkin Island, Co Cork (0.5°C below LTA) (<i>its coldest Autumn since 2012</i>) Lowest mean temperature: 8.7°C at Knock Airport, Co Mayo (0.3 °C below LTA) (<i>its coldest Autumn since 2012</i>) Highest air temperature: 25.1°C at Dublin (Phoenix Park) on the 2nd Sep Lowest air temperature: -5.0°C at Mount Dillon, Co Roscommon on the 2nd Nov (<i>its lowest Autumn min since 2010</i>) Lowest grass minimum: -9.2°C at Casement Aerodrome on the 30th Oct (<i>its lowest Autumn grass min since 2010</i>)
Sunshine	Highest total: 326.2 hrs (daily mean 3.6 hrs/day) at Casement Aerodrome, Co Dublin Lowest total: 224.9 hrs (daily mean 2.5 hrs/day) at Knock Airport, Co Mayo Highest daily sunshine: 12.3 hrs at Johnstown Castle*, Co Wexford on the 4th Sep

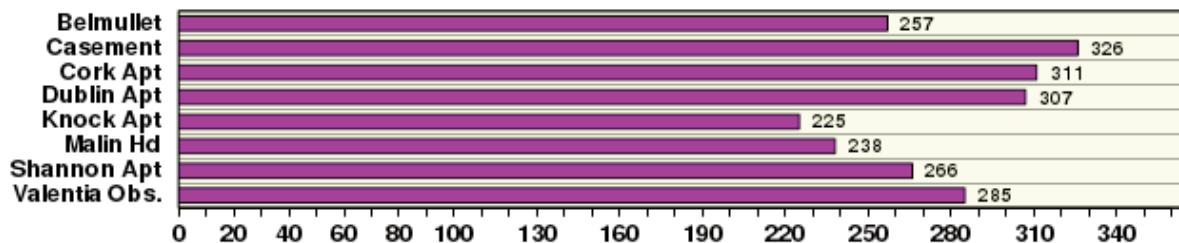
Rainfall¹ (% of average for period 1981-2010) on whole season basis



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 Wednesday December 5th 2018.

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 '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 wet day is a day with 1.0 mm or more of rainfall. ³ A dull day is a day with less than 0.5 hours of sunshine.

⁴ A very wet day is a day with 10.0 mm or more of rainfall.

*Sunshine data is from the Autosol Network. LTAs for these sites are currently not used for comparison purposes.

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