

JULY 2018

Drier and warmer than normal everywhere with drought conditions in many areas.

High temperatures and drought conditions were experienced in most places, most prolonged in the East and South, during July. The first half of the month was characterised by a large area of blocking high pressure stretching from the Azores to Scandinavia pushing the north Atlantic Jet Stream well to the north away from Ireland. This gave dry and very warm conditions with a lot of sunshine and light variable winds, with heatwave conditions continuing for a few days at the beginning of the month. For the second half of the month, up to the 26th, pressure stayed relatively high, but Atlantic weather fronts broke through on some occasions giving somewhat cooler conditions with some rain at times to Western and Northern areas and more generally on the 15th, 20th and 23rd. An area of low pressure to the northwest became dominant from the 26th to the end of the month, with associated frontal troughs bringing wind, rain or heavy thundery showers.

Rainfall: Drought conditions continued

All monthly rainfall totals across the country were below their Long-Term Average (LTA). Percentage of monthly rainfall values ranged from 36% (the month's lowest monthly rainfall total of 24.1 mm) at Gurteen, Co Tipperary to 94% (monthly rainfall total of 69.2 mm) at Ballyhaise, Co Cavan. Monthly rainfall totals were as much as 84.0 mm (percentage of LTA 92%) at Finner, Co Dongeal. The highest daily rainfall total was 27.0 mm at Ballyhaise, Co Cavan on the 28th. The number of rain days ranged from 7 days at three stations in Dublin to 19 days at both Finner, Co Donegal and Belmullet, Co Mayo. The number of wet days1 ranged from 5 days at Dunsany, Co Meath to 11 days at a few stations in the Northwest. The number of very wet days a ranged from zero days at a few stations to 3 days at a few stations in the West and North. Absolute drought conditions continued until the 14th at stations in the East, Midlands, West and South, whilst Partial drought conditions continued in the South until the 25th.

Temperature: Heatwave conditions at start of month

Apart from Markree, Co Sligo, all mean air temperatures were above their Long-Term Average (LTA) for the month. Deviations from mean air temperature for the month ranged from -0.1 °C (15.0 °C mean temperature) at Markree, Co Sligo to 2.2 °C at Cork Airport and Oak Park, Co Carlow (17.4 °C and 17.8 °C mean temperature respectively). Mean temperatures for the month ranged from 14.9 °C (0.9 °C above LTA) at Knock Airport, Co Mayo to 17.8 °C (2.2 °C above LTA) at Oak Park, Co Carlow (its warmest July since 2013). Both the month's highest and lowest air temperature were both recorded at Mount Dillon, Co Roscommon. The lowest minimum was reported on the 10th with a temperature of 4.5 °C while the highest maximum was reported on the 4th with a temperature of 28.1 °C. The lowest grass minimum was reported at Finner, Co Dongeal on the 2nd with 0.1 °C (its lowest July grass min since 2011). There was no air or ground frost reported this month. Heatwave conditions continued until the 4th at Moore Park, Co Cork and Oak Park, Co Carlow.

Sunshine: Most stations had above average Sunshine

Percentage of monthly sunshine values ranged from 95% (monthly sunshine total of 124.3 hours) at Knock Airport, Co Mayo to 136% at Casement Aerodrome, Co Dublin and Shannon Airport, Co Clare (monthly sunshine total of 208.4 hours and 188.4 hours respectively). Monthly sunshine totals were highest at Johnstown Castle*, Co Wexford with 244.3 hours (No LTA comparison). Monthly sunshine totals were lowest at Belmullet*, Co Mayo with 123.0 hours (No LTA comparison). The highest number of daily sunshine hours recorded this month was 16.4 hours at Malin Head*, Co Donegal on the 3rd. The number of dull days² ranged from 2 at Shannon Airport, Co Clare to 7 at both Malin Head*, Co Donegal and Belmullet*, Co Mayo.

Monthly mean wind speeds ranged from 4.6 knots (8.5 km/h) at Mullingar, Co Westmeath to 10.3 knots (19.1 km/h) at Mace Head, Co Galway. Gales were reported at Malin Head on the 28th. This was the only day and station where gales were recorded this month. The month's highest gust was reported at Mace Head, Co Galway on the 31st with 51 knots (94 km/h). The month's highest 10-minute mean wind speed was 34 knots (63 km/h) at Malin Head, Co Donegal on the 28th.

EXTREME VALUES AT SYNOPTIC STATIONS

Highest total: 84.0 mm (92% of LTA) at Finner, Co Donegal Rainfall

> Lowest total: 24.1 mm (36% of LTA) at Gurteen, Co Tipperary Highest daily rainfall: 27.0 mm at Ballyhaise, Co Cavan on the 28th

Highest mean monthly temperature: 17.8°C at Oak Park, Co Carlow (2.2°C above LTA) (its warmest July since 2013) Temperature

Lowest mean monthly temperature: 14.9°C at Knock Airport, Co Mayo (0.9°C above LTA)

Highest air temperature: 28.1°C at Mount Dillon, Co Roscommon on the 4th Lowest air temperature: 4.5°C at Mount Dillon, Co Roscommon on the 10th

Lowest grass minimum: 0.1°C at Finner, Co Donegal on the 2nd (its lowest July grass min since 2011)

Sunshine Highest monthly total: 245.3 hrs (daily mean 7.9 hrs/day) at Johnstown Castle*, Co Wexford

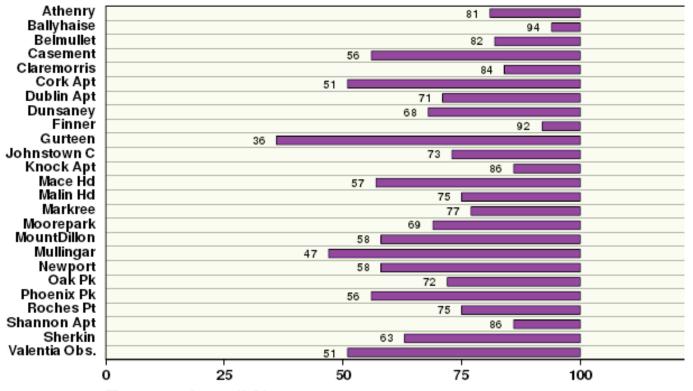
Lowest monthly total: 123.0 hrs (daily mean 4.0 hrs/day) at Belmullet*, Co Mayo

Highest daily sunshine: 16.4 hrs at Malin Head*, Co Donegal on the 3rd

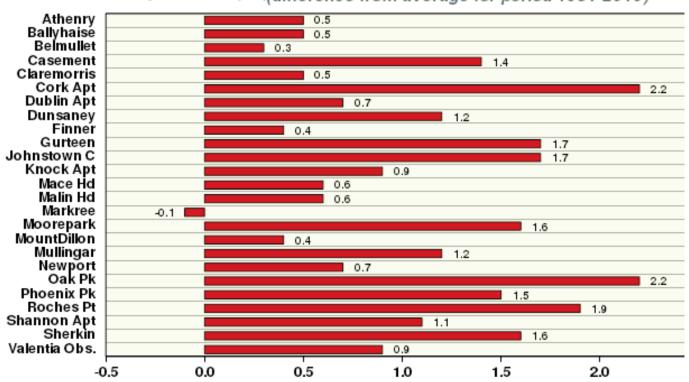
July 2018

Based on Data from 1-31 July 2018 on whole month basis

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



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



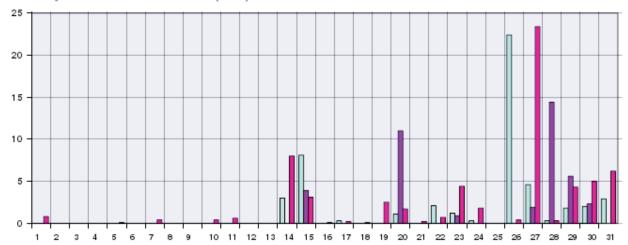
Sunshine (Number of monthly sunshine hours)



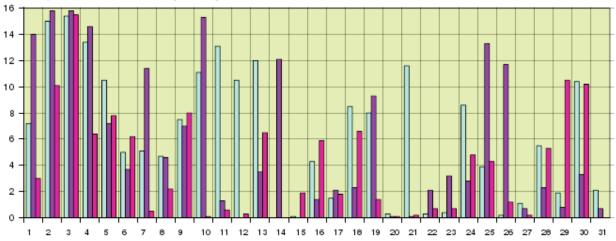
July2018 Daily Values at selected synoptic stations

Based on data from 1-31 July 2018 on a pro rata basis

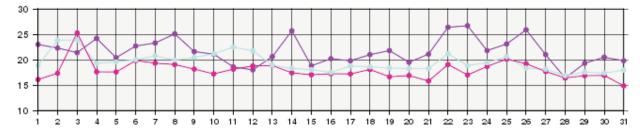
Daily 00-24h rainfall values(mm)



Daily sunshine values(hours)



Daily 00-24h maximum temperature (°C)



Daily 00-24h minimum temperature (°C)



- Valentia Observatory - Dublin Airport - Belmullet

Source:newR/WXBULL/CurrentMonthlyTemp.R Plotted Wed Aug 1 11:41:17 2018

Issued by the Climatology and Observations Division of Met Éireann on Wednesday July 1st 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.

'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).

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.

*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: eng@met.ie

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**Table 1.0.0 mm or more of rainfall.

**Table 2.0.0 mm or more of rainfall.

**Table 3.0.0 mm or more of rain