



# July 2019

## **Warm overall , drier and sunnier in the South and East**

The first week of July was mostly dry with high pressure sitting to the West of Ireland. There was a mixture of cloud and sunny spells with light winds mainly from the north or northwest. At the beginning of the second week a south-westerly airflow became established, which brought some weak bands of rain or showers across the country from time to time. High pressure developed again over the country between the 13th and 16th, giving some warm settled weather. The rest of the third week was unsettled in a westerly airflow with some heavy falls of rain in places, especially on the 19th and 21st due to active frontal rain bands and summer thunderstorms. During the fourth week a hot plume of air originating from North Africa and Spain moved northwards over most of Western Europe giving record high temperatures in several countries. Ireland was between this hot continental air and a low pressure system off the West coast, which kept our weather mixed. It was warm with sunny spells at times, especially in the East of the country, and the nights were especially mild in a southerly airflow. The month finished changeable with a low-pressure system moving up across the UK on the 30th, giving some heavy thundery downpours and some flash flooding, in the Eastern half of Ireland.

## **Rainfall: Below average for most, driest in the South and East**

The majority of monthly rainfall totals across the country were below their Long-Term Average (LTA). Percentage of monthly rainfall values ranged from 43% (monthly rainfall total of 33.9 mm) at Sherkin Island, Co Cork (*its driest July since 1989*) to 162% (the month's highest monthly rainfall total of 120.2 mm) at Claremorris, Co Mayo. Monthly rainfall totals for the month were lowest at Roche's Point, Co Cork with 32.5 mm (52% of its LTA) (*its driest July since 2014*). The month's wettest day was also recorded at Claremorris, Co Mayo with 49.5 mm on the 19th (*its wettest July day since 2010*). The number of rain days ranged from 11 days at both Dublin Airport and Dunsany, Co Meath to 20 days at Belmullet, Co Mayo. The number of wet days<sup>1</sup> ranged from 6 days at both Johnstown Castle, Co Wexford and Mount Dillon, Co Roscommon to 18 days at Belmullet, Co Mayo. The number of very wet days<sup>3</sup> ranged from no days at Fermoy (Moore Park), Co Cork to 4 days at a few stations.

## **Temperature: Above average for all**

All mean air temperatures across the country were above their Long-Term Average (LTA) for the month. Deviations from mean air temperature for the month ranged from 0.3 °C (15.4 °C mean temperature) at Markree, Co Sligo to 1.2 °C (16.8 °C the month's highest mean temperature) at Dublin (Phoenix Park). Mean temperatures for the month ranged from 14.9 °C (1.0 °C above its LTA) at Knock Airport, Co Mayo to 16.8 °C at both Dublin (Phoenix Park) and Oak Park, Co Carlow (1.2 and 1.1 respectively above their LTA). The month's highest temperature was reported at Dublin (Phoenix Park) on the 22nd with a temperature of 26.6 °C. Both the month's lowest air and grass minimum temperature were recorded on the 3rd at Markree, Co Sligo. The lowest air minimum was 3.6 °C while the lowest grass minimum was -0.3 °C (*its lowest July grass minimum since 1975*). There was no air frost reported this month. Less than half of stations reported ground frost. The number of days with ground frost ranged from zero days at most stations to 2 days at Markree, Co Sligo.

## **Sunshine: Sunniest in the South and East**

Sunshine values were variable across the country, highest in the South and East. Percentage of monthly sunshine values ranged from 80% (the month's lowest monthly sunshine total of 105.9 hours) at Knock Airport, Co Mayo to 119% (monthly sunshine total of 183.2 hours) at Casement Aerodrome, Co Dublin. Monthly sunshine totals were as much as 198.4 hours (118% of its LTA) at Johnstown Castle\*, Co Wexford. The highest number of daily sunshine hours recorded this month was 15.7 hours at Belmullet\*, Co Mayo on the 14th. The number of dull days<sup>2</sup> ranged from 2 days at Dublin Airport to 9 days at Knock Airport, Co Mayo.

## **Wind: Many calm days**

Monthly mean wind speeds ranged from 5.3 knots (9.8 km/h) at Mullingar, Co Westmeath to 11.6 knots (21.5 km/h) at Mace Head, Co Galway. There were no days with gales, strong gales or storms reported this month. The month's highest 10-minute mean wind speed was 31 knots (57 km/h) reported at both Mace Head, Co Galway on the 21st and Belmullet, Co Mayo on the 21st and 22nd. The month's highest gust was 41 knots (76 km/h) reported at Belmullet, Co Mayo on the 22nd.

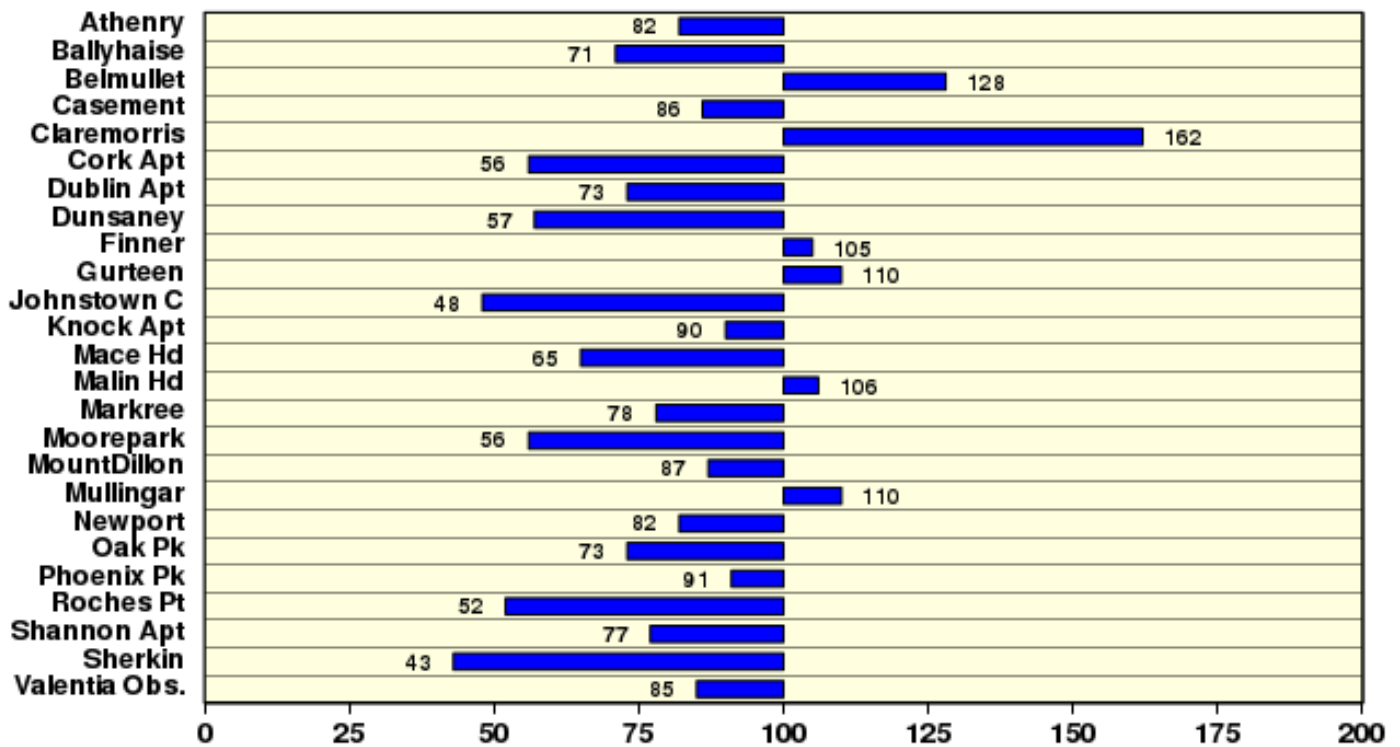
## **EXTREME VALUES AT SYNOPTIC STATIONS**

<b>Rainfall</b>	Highest total: 120.2 mm (162% of its LTA) at Claremorris, Co Mayo Lowest total: 32.5 mm (52% of its LTA) at Roches Point, Co Cork ( <i>its driest July since 2014</i> ) Highest daily rainfall: 49.5 mm at Claremorris, Co Mayo on the 19th ( <i>its wettest July day since 2010</i> )
<b>Temperature</b>	Highest mean monthly temperature: 16.8°C at Dublin (Phoenix Park) and Oak Park, Co Carlow (1.2°C and 1.1°C respectively above LTA) Lowest mean monthly temperature: 15.0°C at Knock Airport, Co Mayo (1.0°C above its LTA) Highest Air temperature: 26.6°C at Dublin (Phoenix Park) on the 22nd Lowest air temperature: 3.6°C at Markree, Co Sligo on the 3rd Lowest grass minimum: -0.3°C at Markree, Co Sligo on the 3rd ( <i>its lowest July grass minimum since 1975</i> )
<b>Sunshine</b>	Highest monthly total: 198.4 hrs (daily mean 6.40 hrs/day) at Johnstown Castle*, Co Wexford Lowest monthly total: 105.9 hrs (daily mean 3.42 hrs/day) at Knock Airport, Co Mayo Highest daily sunshine: 15.7 hrs at Belmullet*, Co Mayo on the 14th

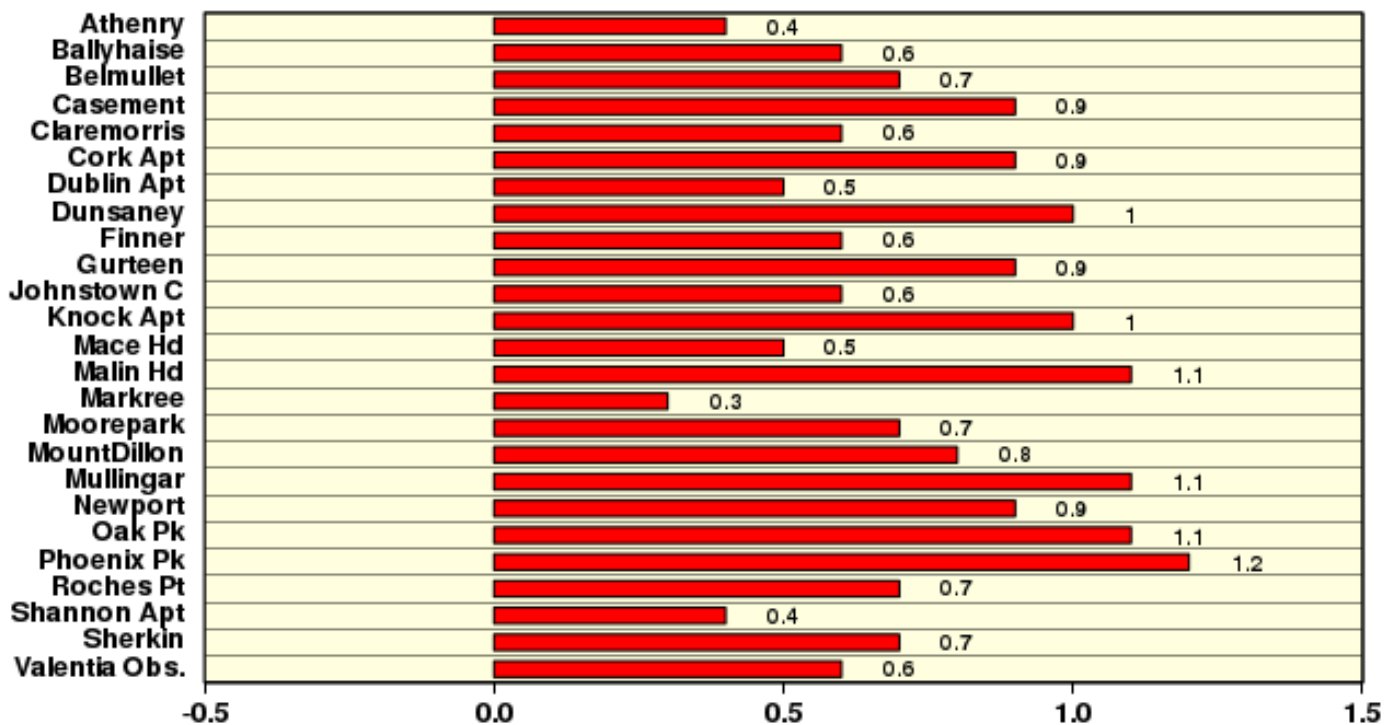
# July 2019

Based on Data from 1-31 July 2019 on whole month basis

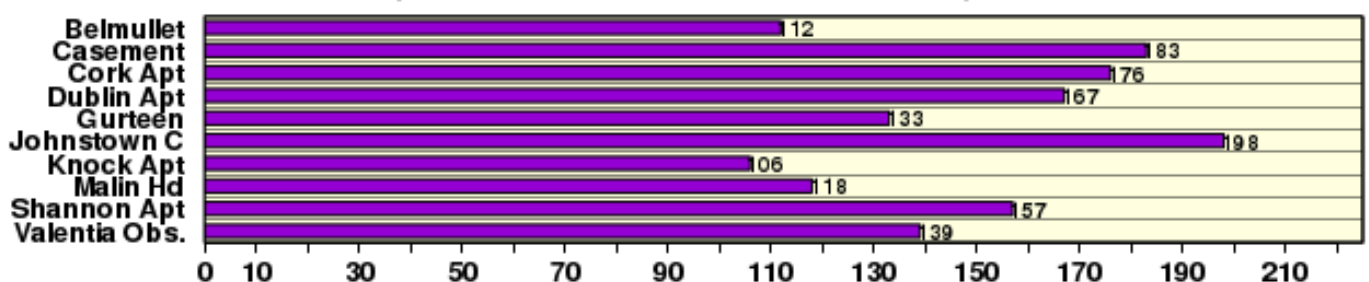
## Rainfall (% of average for period 1981-2010) on whole month basis



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



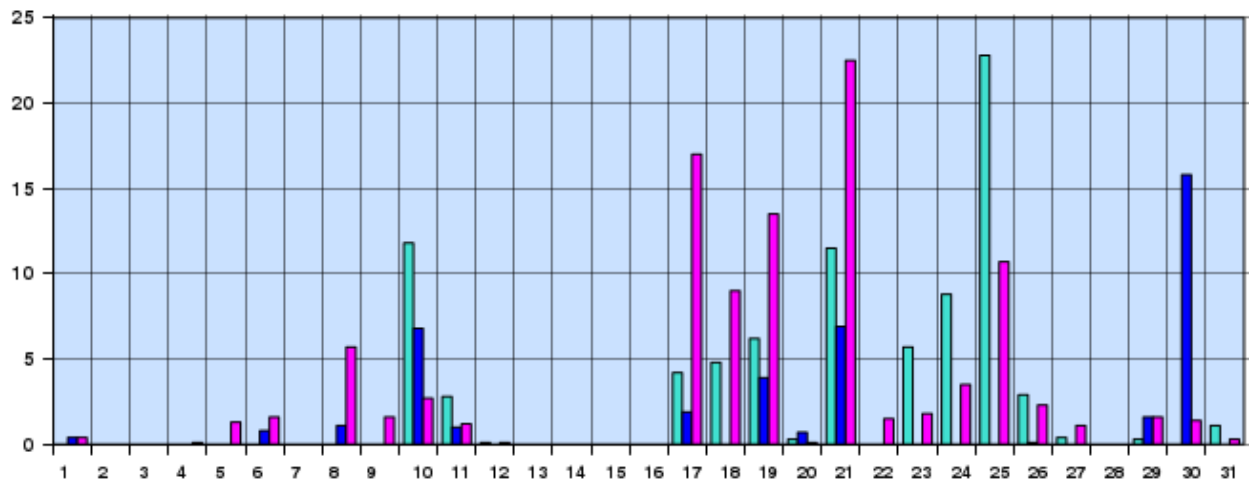
## Sunshine (Number of monthly sunshine hours)



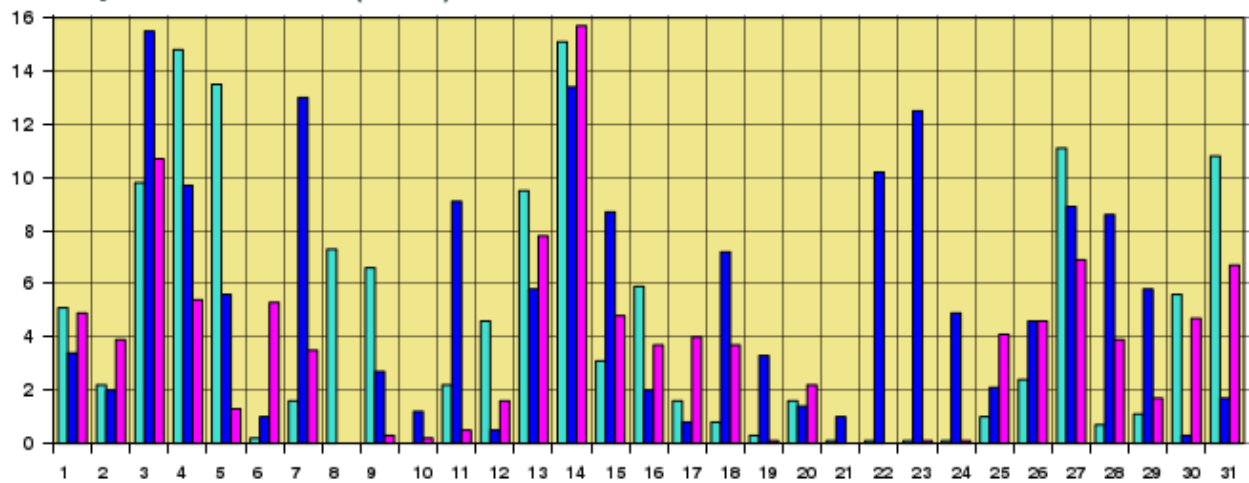
# July 2019 Daily Values at selected synoptic stations

Based on data from 1-31 July 2019 on a pro rata basis

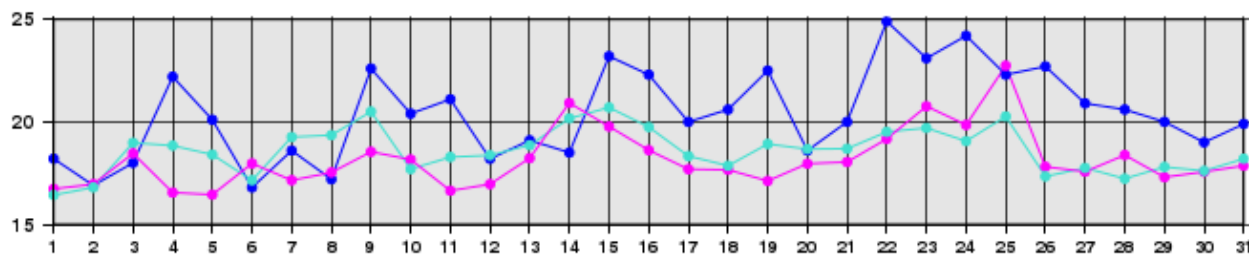
## Daily 00-24h rainfall values(mm)



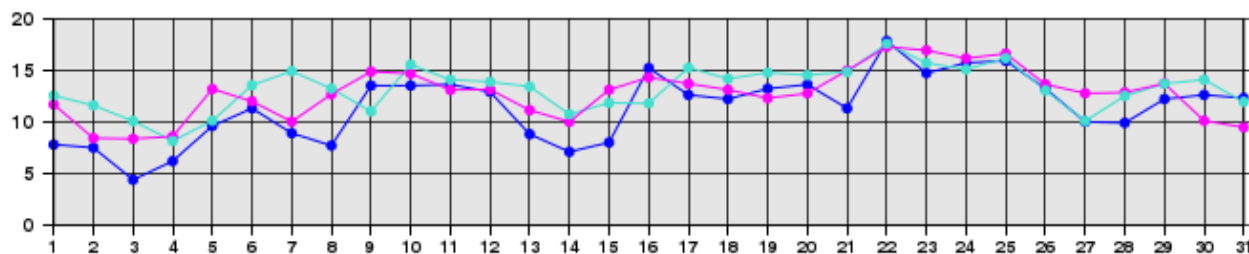
## Daily sunshine values(hours)



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



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



- Valentia Observatory - Dublin Airport - Belmullet

Issued by the Climatology and Observations Division of Met Éireann on Friday August 2nd 2019. 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. <sup>1</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>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. \*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