



# Monthly Weather Summary

## The Weather of July 2010

### **Warm and dull; very wet in places**

July was the first month of 2010 which was dominated by weather patterns associated with Atlantic depressions. Slow-moving frontal systems brought significant falls of rain at times, while most days were cloudy but mild, with south to southwesterly winds. Rainfall totals for July were above normal everywhere and were more than twice the average at some stations; it was the fourth successive July with rainfall totals much in excess of normal over most of the country. Unlike previous years, however, the relatively dry weather of the preceding months of 2010 and consequent high soil moisture deficits helped to prevent significant flooding during this month. Claremorris had its wettest July since records began there in 1950, while its daily fall of 56mm on the 10th was also a record for the month at the station. Belmullet's total of 140mm equalled its previous highest July value, recorded in 1988. Heavy falls in the period around the middle of the month were often associated with thunderstorms. Most stations recorded between 15 and 21 wetdays during the month (days with 1mm or more rainfall), compared with the normal range for July of between nine and 13. Mean monthly air temperatures were near normal in the south, but were around half a degree higher than normal at most stations. As shown by the accompanying temperature charts, there was little variation in either daily maximum or minimum values during the month, with few very warm days. Mean maximum temperatures were close to normal, but the generally cloudy conditions kept mean minimum values over a degree higher than normal generally. July sunshine totals were below normal everywhere, the first relatively dull month of 2010. Valentia Observatory's sunshine total of only 85 hours was among the five lowest for July in over a century of records at the station and was also its lowest of any month so far in 2010. The sunniest days of the month were during the first week and on the 22nd.

**1st to 21st:** Rain was recorded during each day of this period and was very heavy at times. This rain was associated with frontal systems moving eastwards over Ireland, as unusually deep depressions for July tracked close to the west coast. The heaviest falls were on the 1st and in the periods 8th to 10th and 13th to 21st, with thunderstorms on several days; funnel clouds (tornadoes not reaching ground level) were observed at Adare, Co. Limerick, on the 12th and at Bettystown, Co. Meath, on the 21st. Gale gusts were recorded on several days, particularly on the 1st and 4th. Temperatures were close to normal throughout, with little diurnal variation. After relatively sunny weather during the first five days, the remainder of the period was dull.

**22nd to 29th:** A weak ridge of high pressure over Ireland during most of this period brought drier conditions, but the weather remained mostly cloudy and humid with light rain at times. Temperatures remained near normal, rising above normal in eastern areas on the 25th and 26th. Winds were generally light, southwest to westerly.

**30th to 31st:** Active fronts associated with a depression to the northwest brought a spell of rain in all areas, heaviest in western areas, clearing to showers. Warm and humid with little sunshine.

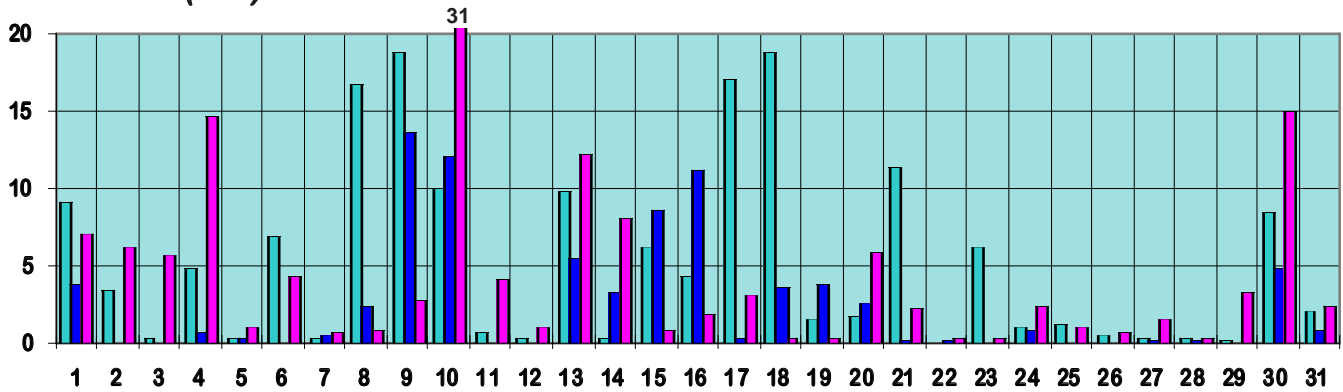
**Wind and elements:** Mean windspeeds for the month of between 7 and 15 knots (*13 and 28 km/h*) were above normal everywhere and were the highest for July since 1998 at most stations. The strongest winds were recorded during the first half of the month, particularly on the 1st and 4th. Belmullet measured the highest gust, 62 knots (*115 km/h*) on the 4th, its highest for July since 1988. Thunderstorms were most widespread in the periods 14th to 15th and 18th to 21st, but there were no reports of hail. Most fog was recorded between the 24th and 26th.

#### **Extreme values**

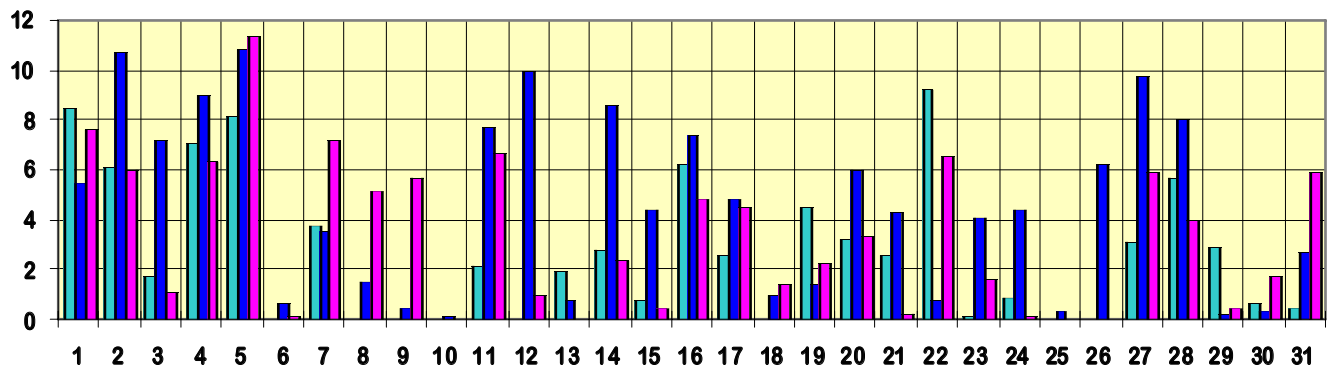
<b>Rainfall</b>	Highest total: 199mm at Claremorris ( <i>its wettest July since records began there in 1950</i> ) Lowest total: 79mm at Dublin Airport Highest daily rainfall: 56mm at Claremorris on 10th ( <i>its highest daily fall on record for July</i> )
<b>Temperature</b>	Highest mean monthly temperature: 16.1°C at Shannon Airport Lowest mean monthly temperature: 13.9°C at Knock Airport Highest temperature: 24.2°C at Carlow (Oak Park) on 26th Lowest air temperature: 6.3°C at Claremorris on 23rd Lowest grass minimum temperature: 2.4°C at Ballyhaise on 23rd
<b>Sunshine</b>	Highest monthly total: 143 hours at Dublin Airport ( <i>its dullest July since 2003</i> ) Lowest monthly total: 85 hours at Valentia Observatory ( <i>its dullest July since 2003</i> ) Highest daily sunshine: 12.5 hours at Knock Airport on 22nd

# July 2010 Daily values at selected synoptic stations

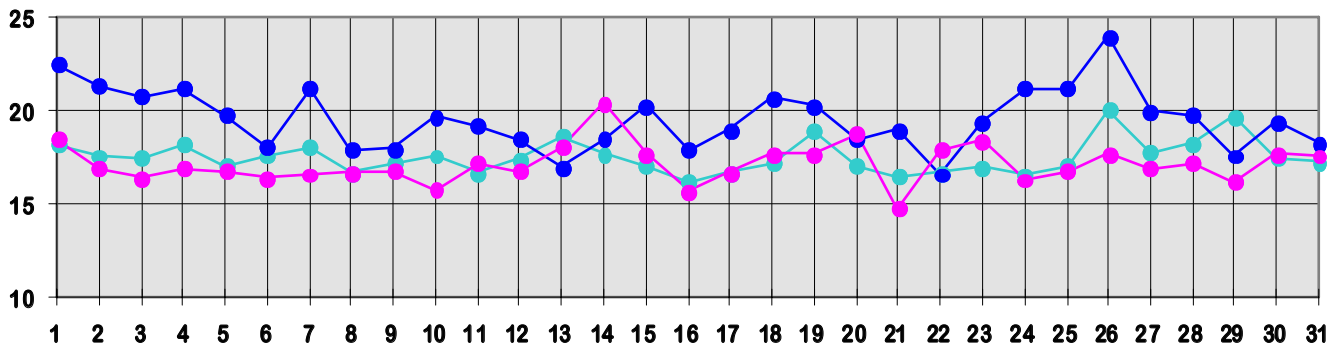
## Rainfall (mm)



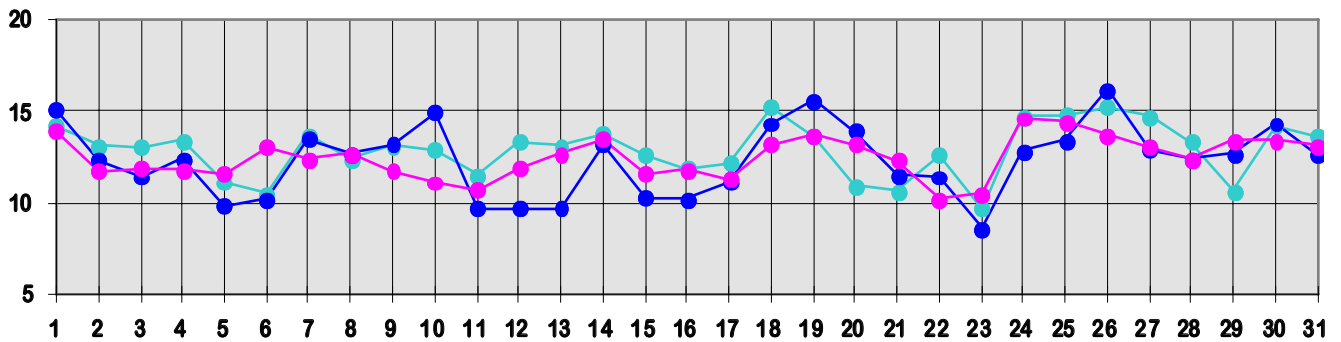
## Sunshine (hours)



## Maximum temperature (°C)



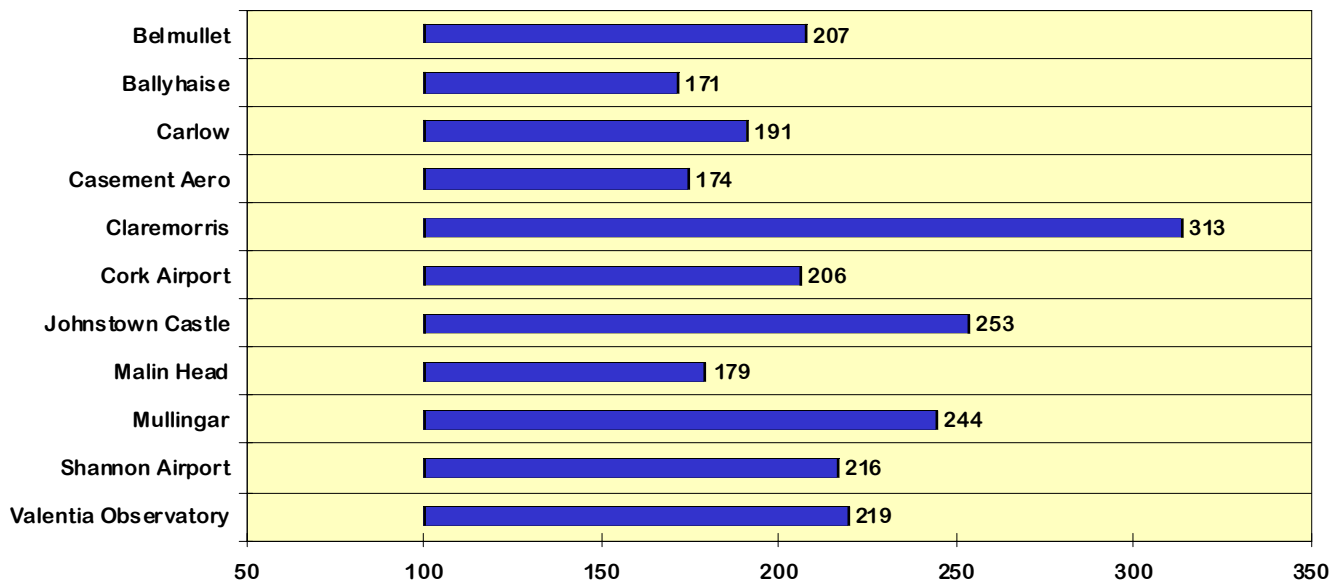
## Minimum temperature (°C)



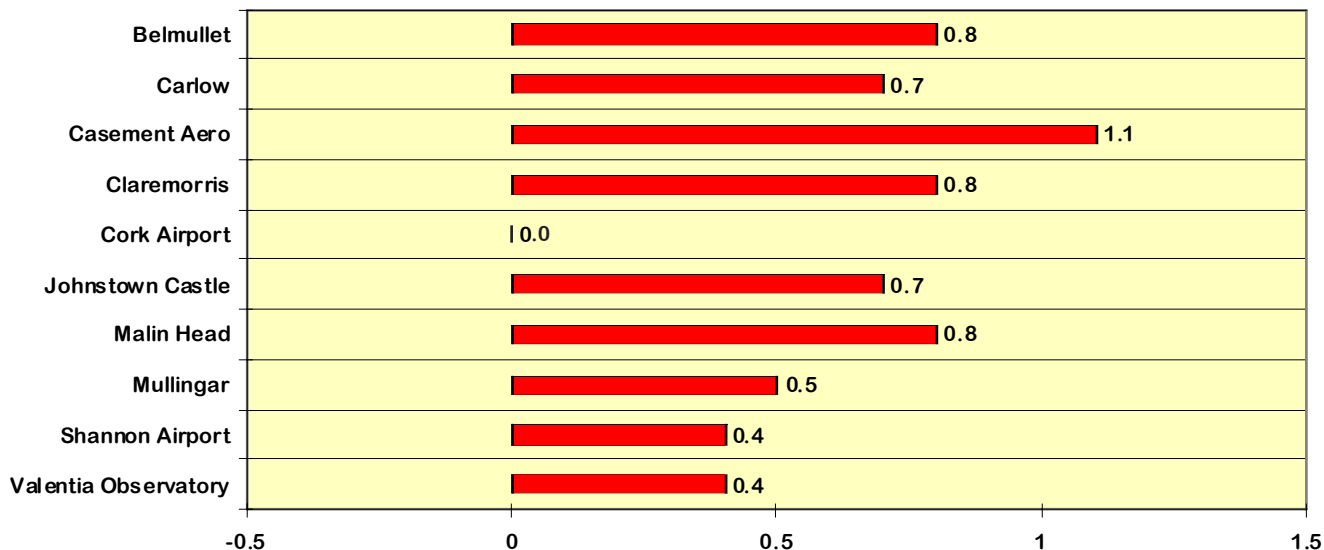
● Valentia Observatory      ● Dublin Airport      ● Belmullet

# July 2010 Percentage / Difference from 1961-90 monthly normals

## Rainfall (% of normal for period 1961-1990)



## Temperature (°C difference from normal for period 1961-1990)



## Sunshine (% of normal for period 1961-1990)

