



# Monthly Weather Summary

## The Weather of July 2009

### **Wettest July for over 50 years in many places; near normal temperatures and sunshine**

Apart from a short spell of dry weather between the 7th and 9th, rain or showers were recorded on each day during July, resulting in record high monthly totals at some stations. The weather pattern of the previous two summers was repeated, with Atlantic depressions tracking over or close to Ireland, producing substantial falls of rain at times, with frequent thunderstorms. The north and northwest of the country fared relatively well, however; in these areas the lowest rainfall totals were recorded and both mean temperatures and sunshine amounts were well above normal. Over twice the normal July rainfall totals were recorded over most parts of the country, with more than three times the normal amount in parts of Leinster and Munster. It was the wettest July for over 50 years in many places and the wettest on record at a number of stations, including Valentia Observatory, where records began more than a century ago. Dublin (Phoenix Park)'s total of 122mm was its highest for July since 1936, while Johnstown Castle's total of 222mm represents 389% of its normal July fall. Most stations recorded between 19 and 25 wetdays during the month (days with 1mm or more rainfall), twice the normal range for July of between nine and 13. There was localised flooding in both eastern and western areas on the 2nd following severe thunderstorms; Dublin Airport's value of 42mm on this day was its highest on record for July. Temperatures showed little variation during the month and were near or a little above normal throughout. Many stations recorded their highest values on either the 1st or 2nd, but at a number of stations the temperature did not rise above 20°C on any day. Despite the very high rainfall totals, sunshine amounts were above normal generally, with many days having sunny mornings and early afternoons, before the development of showers. Sunshine totals were highest in the north and northwest of the country, where Belmullet's total of 188 hours was its highest for July since 1982.

**1st to 6th:** A warm and humid southerly airflow over Ireland, later veering westerly, gave spells of thundery rain or showers, which were extremely heavy in places. Up to 50mm was recorded in parts of Dublin early on the 2nd, while later that day around 60mm fell in a five-hour spell at Newport, Co. Mayo. Significant flooding followed both events. Newport's total included a one-hour fall of 42mm; such a fall would be expected in the area once every 150 years.

**7th to 9th:** Pressure rose briefly over Ireland, bringing a short spell of mainly dry weather. A northwesterly airflow brought relatively cool and cloudy conditions.

**10th to 31st:** A return to very unsettled weather, as slow-moving Atlantic depressions passed close to or across the country. Frontal systems brought spells of rain or showers each day, often accompanied by thunder. The heaviest falls generally were on the 11th, 13th, 21st/22nd, 25th/26th and 31st, but locally heavy falls were also recorded on other days. Unusually deep depressions for July also brought strong winds at times, especially on the 11th, 26th and 31st. Temperatures were close to normal, while most sunshine was recorded in western areas.

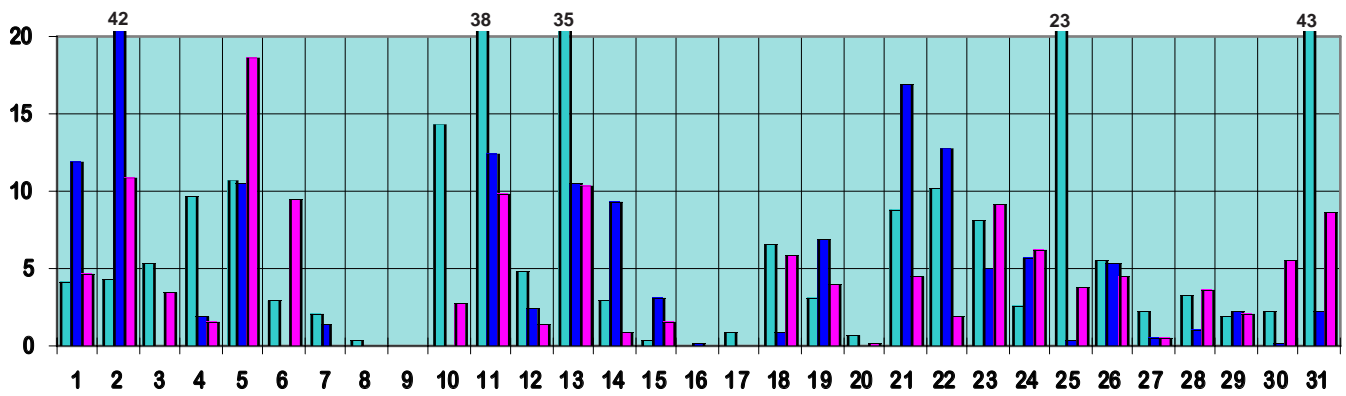
**Wind and elements:** Mean windspeeds for the month of between 6 and 12 knots (*11 and 22km/h*) were above normal everywhere and were the highest for July for between 11 and 28 years at several stations. There were gale gusts in many areas on the 11th, 26th and 31st; the month's highest gust of 51 knots (*94km/h*) was recorded at Belmullet on the 26th. Thunderstorms were very frequent and they were particularly widespread in the periods 2nd to 6th, 12th to 15th and 21st to 24th. Hail was observed at Cork Airport on the 29th. A large funnel cloud/tornado was recorded near Carrick-on-Shannon, Co. Leitrim, on the 14th.

#### **Extreme values**

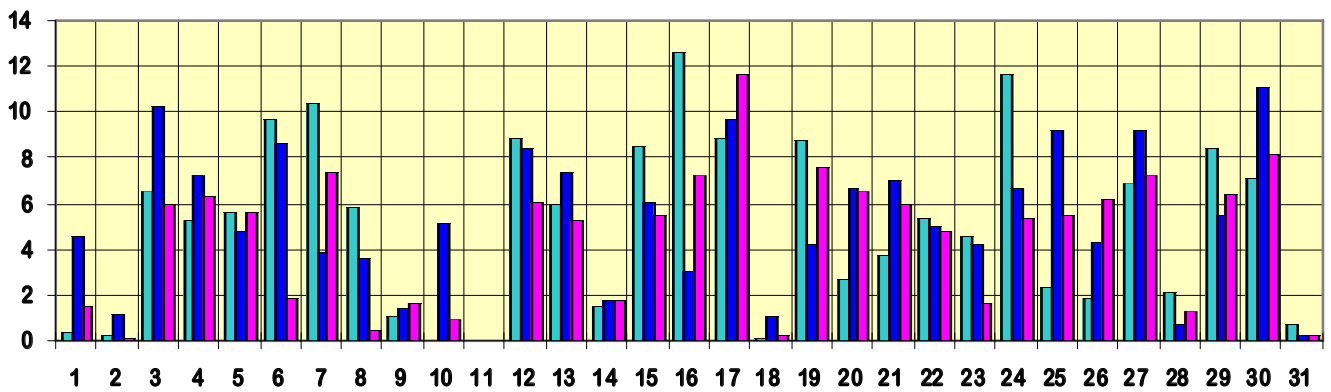
<b>Rainfall</b>	Highest total: 256mm at Valentia Observatory ( <i>its wettest July since records began in the area in 1866</i> ) Lowest total: 72mm at Malin Head Highest daily rainfall: 43mm at Valentia Observatory on 31st ( <i>its highest daily fall for July since 1937</i> )
<b>Temperature</b>	Highest mean monthly temperature: 15.9°C at Shannon Airport Lowest mean monthly temperature: 13.6°C at Knock Airport Highest temperature: 22.6°C at Casement Aerodrome on 1st Lowest air temperature: 5.4°C at Claremorris on 25th Lowest grass minimum temperature: 1.9°C at Knock Airport on 10th ( <i>its lowest such value for July since records began there in 1996</i> )
<b>Sunshine</b>	Highest monthly total: 191 hours at Malin Head Lowest monthly total: 137 hours at Birr Highest daily sunshine: 13.0 hours at Cork Airport on 7th

# July 2009 Daily values at selected synoptic stations

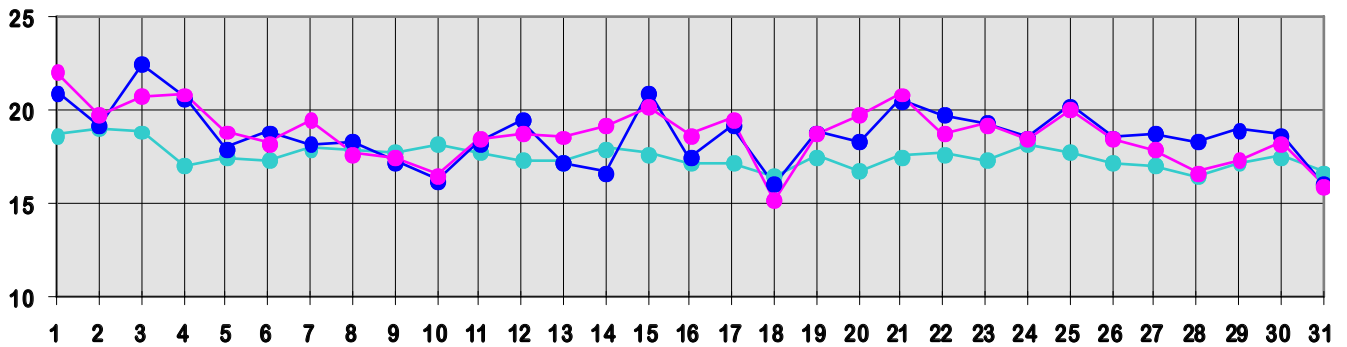
## Rainfall (mm)



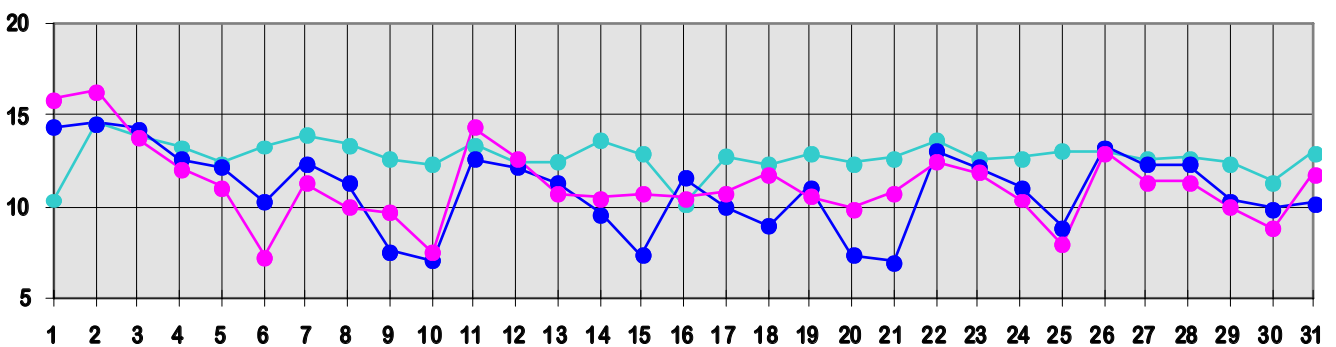
## Sunshine (hours)



## Maximum temperature (°C)



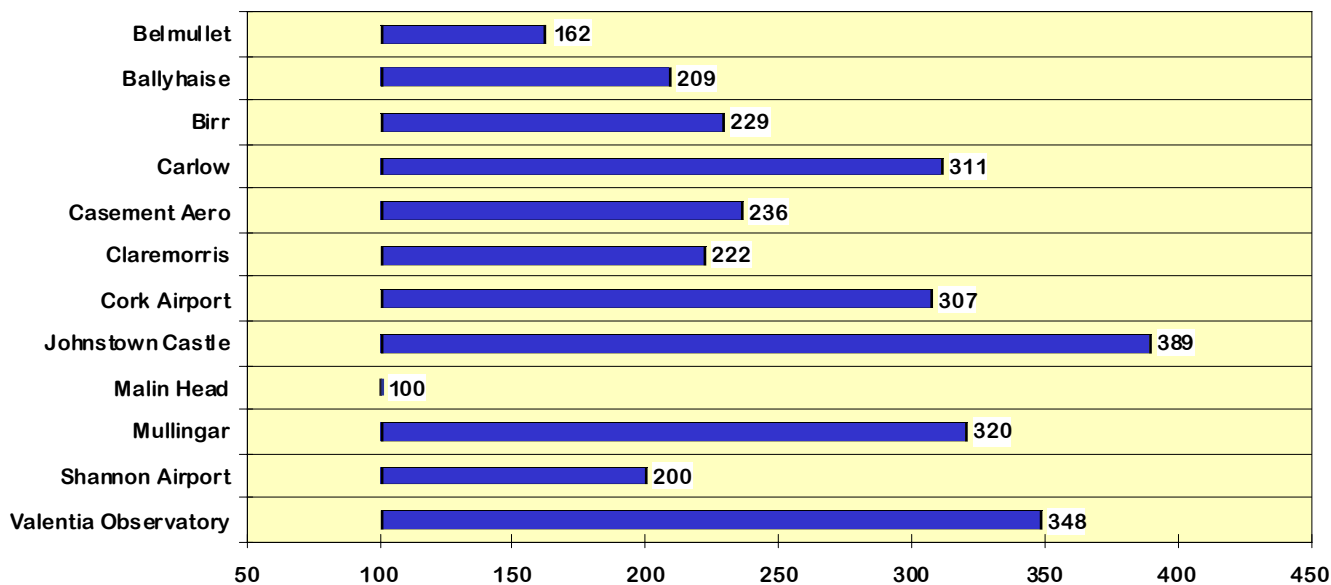
## Minimum temperature (°C)



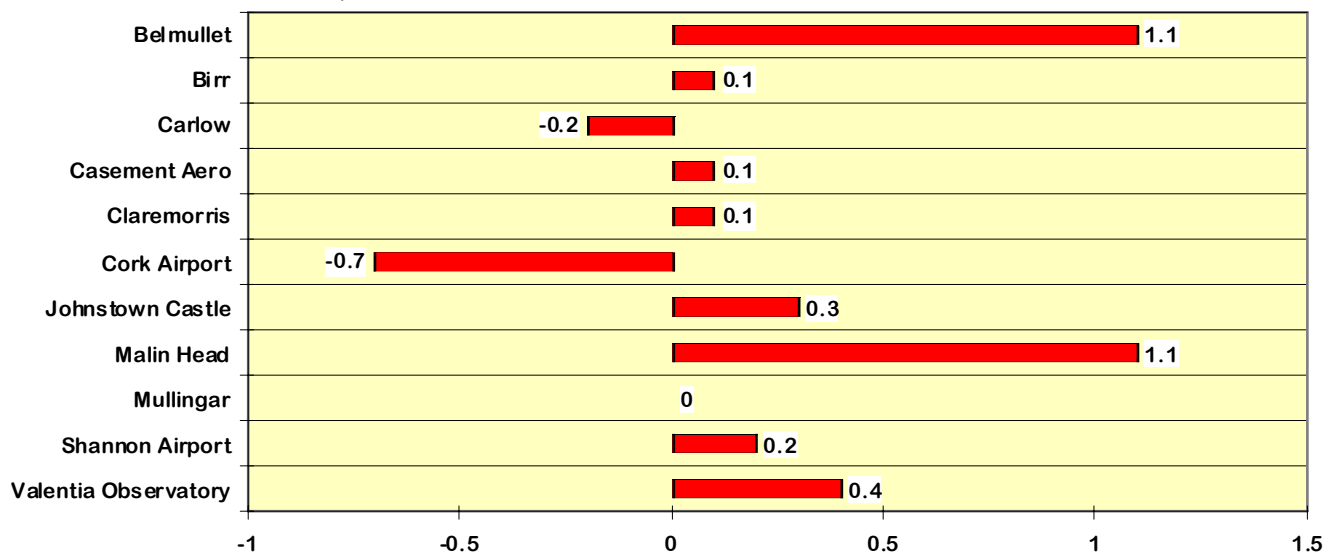
● Valentia Observatory      ● Dublin Airport      ● Birr

# July 2009 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)

