

The Weather of 2010

Colder, drier and much sunnier than normal

The year began and ended with spells of exceptionally cold weather, but the months between April and September were warmer than normal. Mean annual air temperatures were below normal everywhere, by around half a degree generally, and it was the coldest year since 1986 at most stations. The months of January, February and November were the coldest for at least 25 years, while December was the coldest on record. The year's lowest temperatures were measured during November and December, setting new records for both months; air temperatures fell below -15°C in inland areas at times during December. There was a total of between 75 and 100 air frosts at most inland stations during the year, twice the average amount. The warmest months of 2010 relative to normal were June and September, but many stations recorded their highest daily values unusually early in the year, on either May 22nd or 23rd. Despite the relatively low annual air temperatures in Ireland, global temperatures were again above the 1961-1990 annual average, as they have been for each year since 1983. According to data compiled by the World Meteorological Organisation, the year 2010 is almost certain to rank in the top three warmest years since the beginning of instrumental climate records in 1850, with global combined sea surface and land surface air temperatures around 0.5°C above normal.

Rainfall totals for the year in Ireland were below normal almost everywhere. Around 95% of the normal annual amounts were recorded at most stations, but Cork Airport's total of 905mm, representing just 76% of average, was the lowest on record at the station. The months of January, February, May, October and December were all drier than normal, while only July and November were relatively wet. The heaviest daily falls of the year in most areas were in the period September 6th/7th, when two-day falls of between 50 and 80mm were widely recorded; Knock Airport's fall of 86.5mm on September 6th was its highest daily value for any month since rainfall records began there in 1988. Most stations recorded between 130 and 150 wetdays during the year, slightly fewer than normal.

Annual sunshine totals were above normal everywhere and it was a particularly sunny year in the south and southwest. Totals of between 1530 and 1770 hours were the highest on record at most stations, including Valentia Observatory, where records extend back to 1892. The sunniest months relative to normal were between January and March, and also August and October; July was the only relatively dull month. Almost all stations measured their sunniest day of the year in the period around midsummer, between June 19th and 21st.

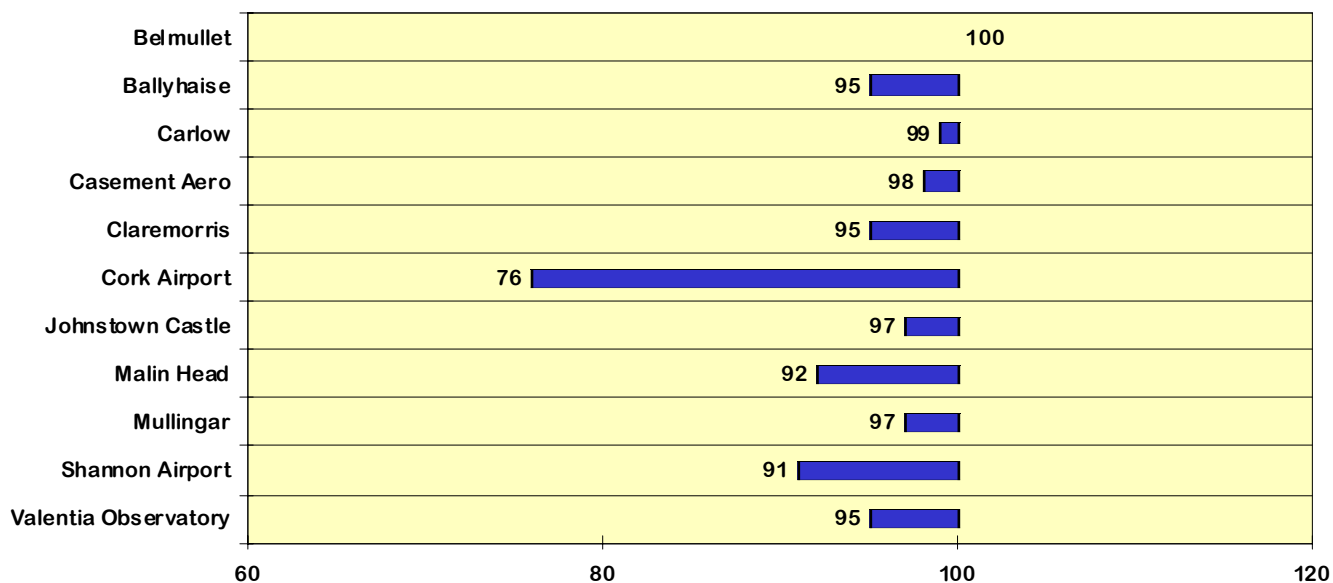
Mean windspeeds for the year of between 6 and 10 knots generally (*11 and 19km/h*) were below normal everywhere and were the lowest annual values on record in many places. Although most stations recorded their strongest winds of the year during mid-November, Belmullet observed the highest gust of the year, 75 knots (*139km/h*), on April 5th.

Extreme values at synoptic stations

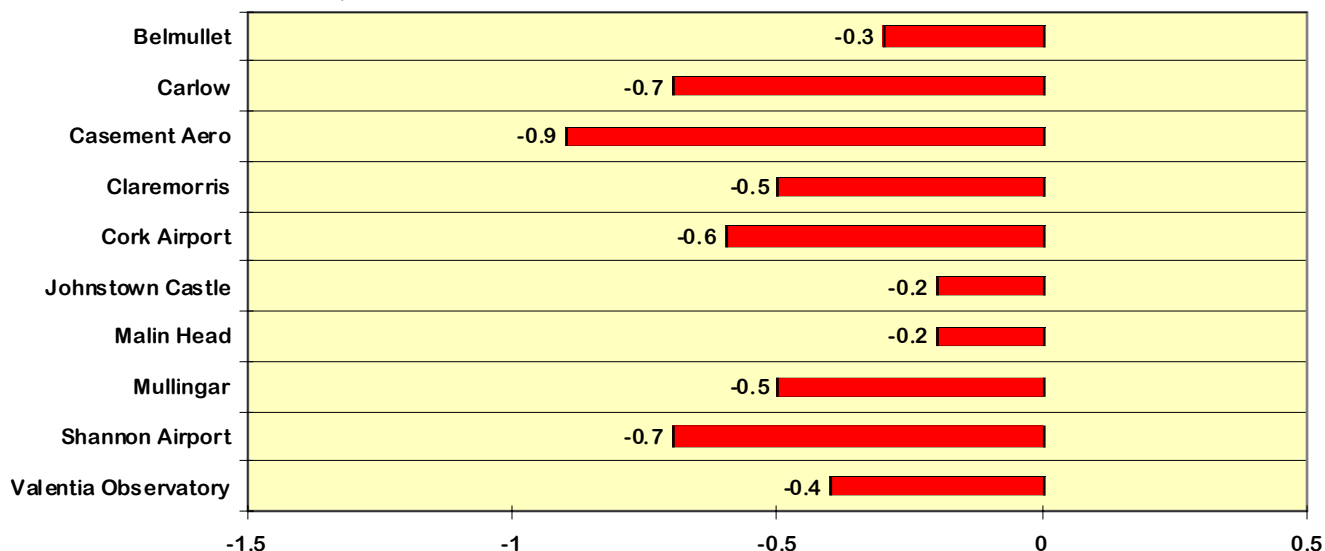
Rainfall	Highest annual total: 1332mm at Valentia Observatory (<i>its driest year since 2001</i>) Lowest annual total: 671mm at Dublin Airport (<i>its driest year since 2003</i>) Highest daily rainfall: 86.5mm at Knock Airport on September 6th (<i>its highest daily value since rainfall records began there in 1988</i>)
Temperature	Highest mean annual temperature: 10.1°C at Valentia Observatory (<i>its coldest year since 1986</i>) Lowest mean annual temperature: 7.9°C at Knock Airport (<i>its coldest year since records began there in 1996</i>) Highest temperature: 25.6°C at Carlow (Oak Park) on May 23rd Lowest air temperature: -15.7°C at Casement Aerodrome on December 25th (<i>its lowest value since temperature records began there in 1958</i>) Lowest grass minimum temperature: -17.3°C at Gurteen on December 21st
Sunshine	Highest annual total: 1771 hours at Cork Airport (<i>its sunniest year since records began there in 1962</i>) Lowest annual total: 1530 hours at Knock Airport (<i>its sunniest year since records began there in 1996</i>) Highest daily sunshine: 16.0 hours at Casement Aerodrome on June 20th (<i>equalling its joint highest daily value in 1988 and 2009</i>)

Year 2010 Percentage / Difference from 1961-90 monthly normals

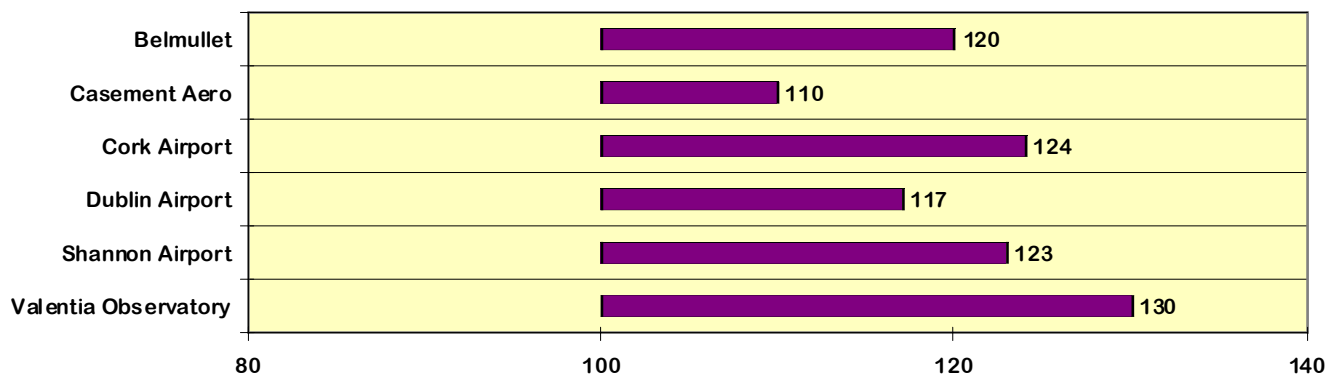
Rainfall (% of normal for period 1961-1990)



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



Sunshine (% of normal for period 1961-1990)



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This report is based on preliminary data from the synoptic weather stations operated by Met Éireann

A detailed summary is available in the **Monthly Weather Bulletin**

For more information, contact Met Éireann at 01-8064200 or e-mail: climate.enquiries@met.ie website: www.met.ie/climate