

The Weather of 2007

Warmest year on record in places; sunnier than normal everywhere and dry in south

Mean air temperatures for the year were just over one degree above normal for the 1961-90 period, the fourteenth successive year of higher than normal mean annual values. This was despite a relatively cool summer, especially over the eastern half of the country. It was the warmest year on record at the long-term stations of Valentia Observatory and Malin Head, where comparable records began in 1892 and 1885 respectively. It was also the warmest year on record at Belmullet, Rosslare and Kilkenny, where records commenced in the mid-1950s, and the warmest since 1949 at Birr. April was the warmest on record at most stations, while the autumn months between September and November were also exceptionally warm. July was the only month when mean temperatures were below normal over most of the country. The highest temperatures were recorded relatively early in the year: during the period June 9th to 11th in many places and on May 17th near the south and southeast coasts. The lowest air and ground temperatures of the year at almost all stations were recorded during a spell of very cold weather between February 5th and 8th.

Annual rainfall totals were above normal over most of Leinster but were well below normal near southern and southeastern coasts. The distribution of rainfall over the year was very uneven. The summer period of June, July and August was exceptionally wet, especially over the eastern half of the country, where more than twice the normal rainfall for the period was recorded at some stations. In contrast, the subsequent months of autumn were very dry and it was the driest autumn for more than 30 years in many places. April was also a very dry month, with monthly totals of less than 10mm in some eastern areas. The heaviest daily falls of the year at most stations were associated with thunderstorms during the summer months, particularly in June and August. The annual number of wetdays (days with 1mm or more rainfall) was near or below normal generally, varying between 118 at Rosslare and 205 at Knock Airport.

Annual sunshine totals were above normal everywhere and both Malin Head and Belmullet had their sunniest year since 1968. The spring months of March, April and May were the sunniest relative to normal, while both June and November were relatively dull.

Mean windspeeds for the year were exceptionally low and were the lowest on record at Rosslare. Belmullet recorded the highest gust of the year, 81 knots (*150km/h*) on January 20th, while Dublin Airport's gust of 80 knots (*148km/h*) on January 18th was the highest at the station since it opened in 1941.

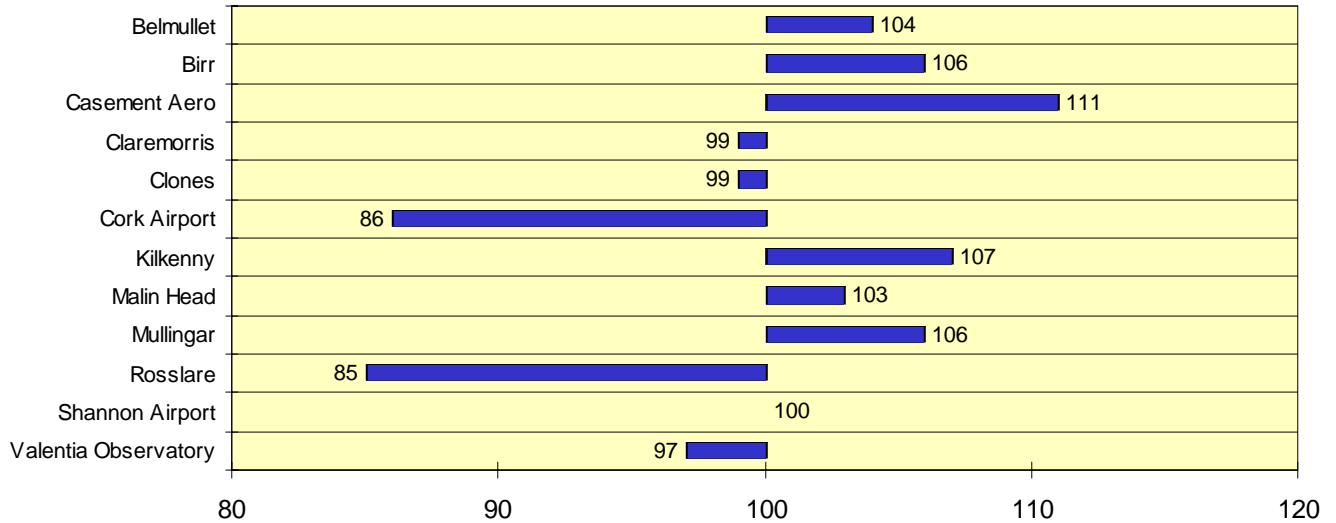
According to provisional figures released by NOAA's Climatic Data Centre, the global mean surface temperature for 2007 is expected to be the fifth highest since comparable records began in 1880. The largest and most widespread warm anomalies were located between eastern Europe and central Asia. Including 2007, seven of the eight warmest years on record have occurred since 2001, while the ten warmest years have all occurred since 1997. The global average surface temperature has risen between 0.6°C and 0.7°C since the start of the twentieth century and the rate of increase since 1976 has been approximately three times faster than the century-scale trend.

Extreme values

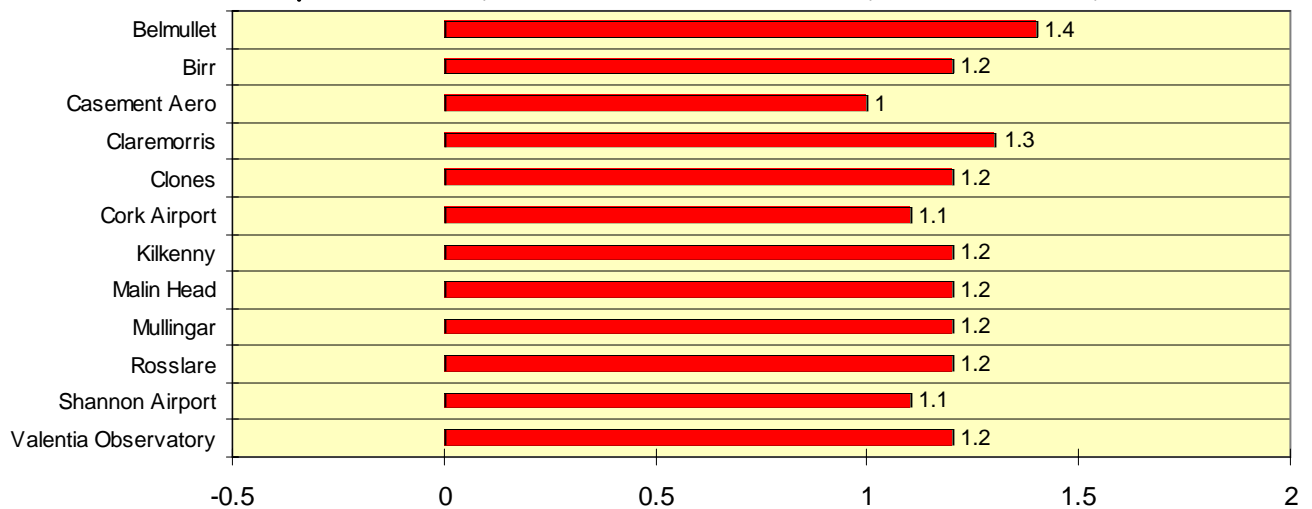
Rainfall	Highest annual total: 1351mm at Valentia Observatory Lowest annual total: 755mm at Rosslare (<i>its driest year since 1999</i>) Highest daily rainfall: 53.3mm at Dublin (Phoenix Park) on June 22nd
Temperature	Highest mean annual temperature: 11.7°C at Valentia Observatory (<i>its warmest year since records began there in 1892</i>) Lowest mean annual temperature: 9.5°C at Knock Airport Highest temperature: 25.9°C at Clones on June 11th Lowest air temperature: -6.5°C at Clones on February 7th Lowest grass minimum temperature: -13.1°C at Birr on February 7th
Sunshine	Highest annual total: 1789 hours at Rosslare Lowest annual total: 1330 hours at Knock Airport Highest daily sunshine: 15.6 hours at both Knock Airport on June 4th and at Malin Head on June 6th

Year 2007 Percentage / Difference from 1961-90 monthly normals

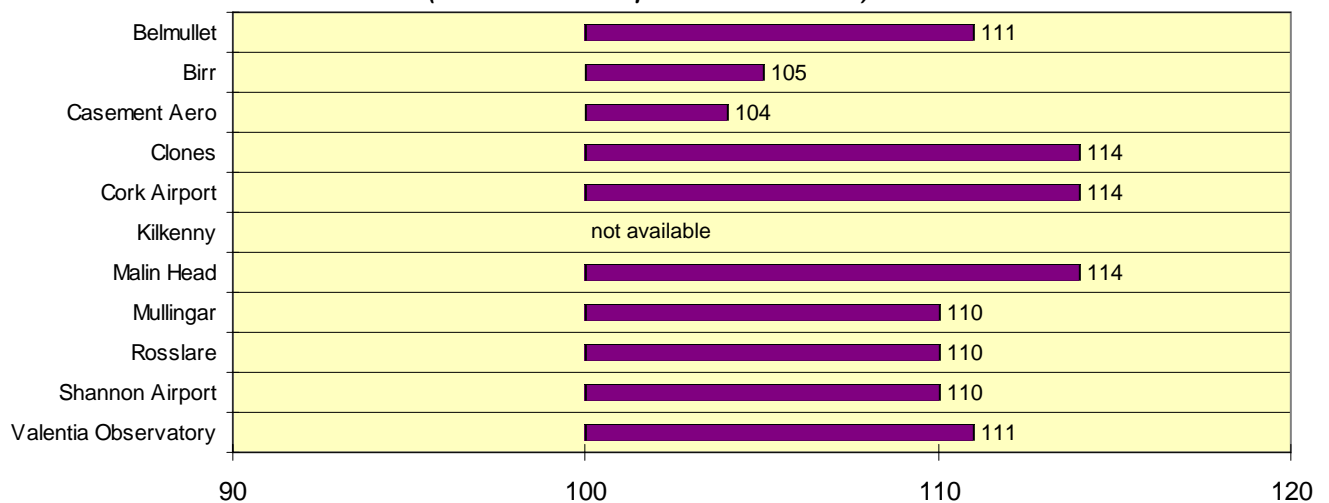
Rainfall (% of normal for period 1961-1990)



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**

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