



# Monthly Weather Summary

## The Weather of December 2007

### **Mild, especially in the southwest; wetter but sunnier than normal generally**

December began and ended with unsettled conditions, caused by depressions off the northwest coast, but high pressure near the country around the middle of the month brought mainly fair weather. Strong winds were recorded at most stations during the first week and again between the 26th and 29th, but the period around mid-month was relatively calm. Rainfall totals were highest over the western half of the country, with heavy falls at times between the 1st and 9th, occasionally accompanied by thunder, and also between the 23rd and 28th. Little or no rain was measured at many stations between the 10th and 21st, however, and the total number of wetdays during the month (days with 1mm or more rainfall) was close to the normal range for December of between 13 and 20. Most of the month was mild, especially the first week, but minimum temperatures fell close to or below normal between the 17th and 25th, bringing widespread ground frost. There was no air frost during the month in most coastal locations, while the total number of air frosts recorded at the majority of inland stations of between 4 and 6 was only around half of the normal number for December. An exception was Mullingar, where 10 air frosts were measured. Sunshine totals were above normal in most places, especially in the east; Dublin Airport's total of 71 hours was more than twice the amount recorded in parts of the west and north.

**1st to 9th:** A series of deep Atlantic depressions passed close to the northwest of Ireland, with their associated frontal systems bringing rain or showers each day, accompanied by strong, mainly southwesterly winds. Heaviest falls were recorded on the 1st and 2nd in western areas and more generally on the 6th and 8th; during this 10-day period, close to 100mm of rain was measured in parts of the west and southwest, causing localised flooding. Gales were frequent near Atlantic coasts, generating a huge sea swell. A wave measuring 17.2m was recorded at midnight on the 9th by the M6 weather buoy, located approximately 300km off the west coast; this was the highest wave ever recorded off the Irish coast. Temperatures during this period were well above normal with no air frost.

**10th to 21st:** An anticyclone to the south of Ireland moved slowly northeastwards to become centred over the North Sea. This period was dry apart from some light rain or showers in western areas at first, with heavy rain in the extreme southwest on the 12th. Daytime temperatures fell close to or below normal, while ground frost became more widespread and severe in some midland and eastern areas between the 17th and 21st. Winds backed to a southeasterly direction during the period, becoming light to moderate generally.

**22nd to 31st:** Atlantic depressions again moved close to the northwest coast, bringing a return to wet and windy conditions over Ireland. Heaviest falls were in the period 27th/28th. Frost was widespread early in the period, but milder conditions returned by the end of the month.

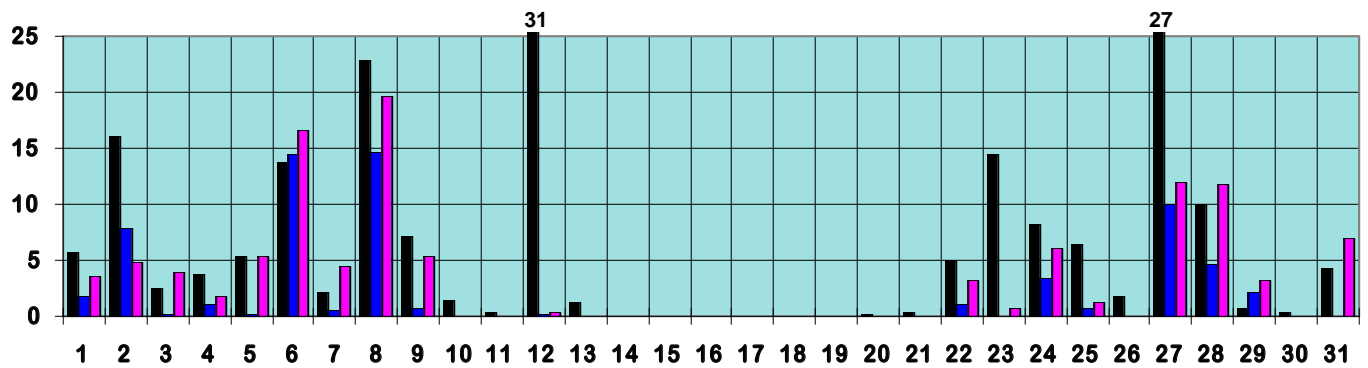
**Wind and elements:** Mean windspeeds for the month of between 9 and 17 knots (*17 and 31km/h*) were above normal everywhere and were the highest for December for between 8 and 24 years in many places. The highest gust, 68 knots (*126km/h*), was measured at Belmullet on the 4th. Thunder was widespread over the western half of the country on the 1st, with isolated thunderstorms also on the 2nd, 5th, 7th, 9th and 28th. Hail was recorded in the periods 1st to 2nd, 7th to 9th, on the 25th and between the 28th to 30th. The only report of snow was from Knock Airport on the 28th. Fog was observed in the periods 4th to 9th, 19th to 21st and 24th to 28th.

### **Extreme values**

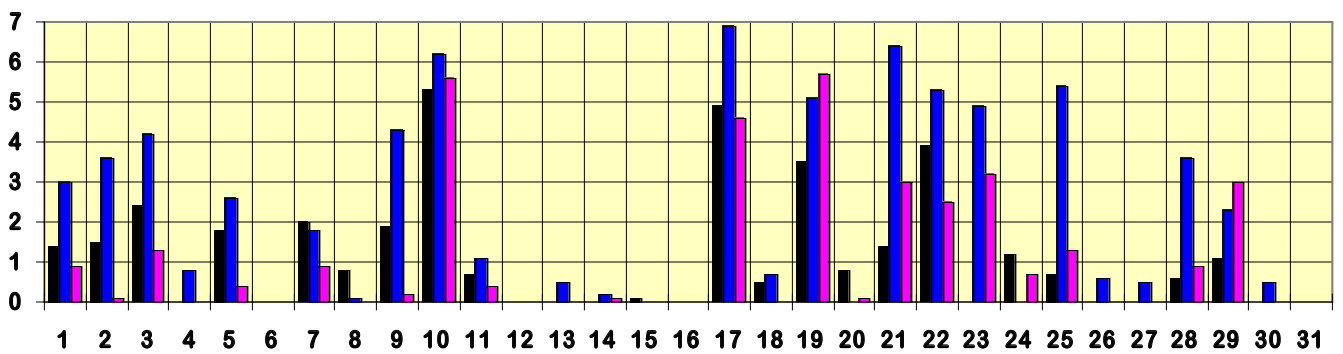
<b>Rainfall</b>	Highest total: 193mm at Valentia Observatory Lowest total: 64mm at Dublin Airport and Rosslare Highest daily rainfall: 33.6mm at Shannon Airport on 6th ( <i>its highest December value since 1975</i> )
<b>Temperature</b>	Highest mean monthly temperature: 9.5°C at Valentia Observatory ( <i>its warmest December since 1988</i> ) Lowest mean monthly temperature: 5.5°C at Knock Airport Highest temperature: 15.3°C at Shannon Airport on 4th ( <i>its highest December value since 1948</i> ) Lowest air temperature: -6.4°C at Casement Aerodrome on 21st ( <i>its lowest December value since 2001</i> ) Lowest grass minimum temperature: -10.2°C at Casement Aerodrome on 21st ( <i>its lowest December value since 2001</i> )
<b>Sunshine</b>	Highest monthly total: 71 hours at Dublin Airport ( <i>its sunniest December since 2001</i> ) Lowest monthly total: 30 hours at Knock Airport Highest daily sunshine: 7.0 hours at Cork Airport on 10th

# December 2007 Daily values at selected synoptic stations

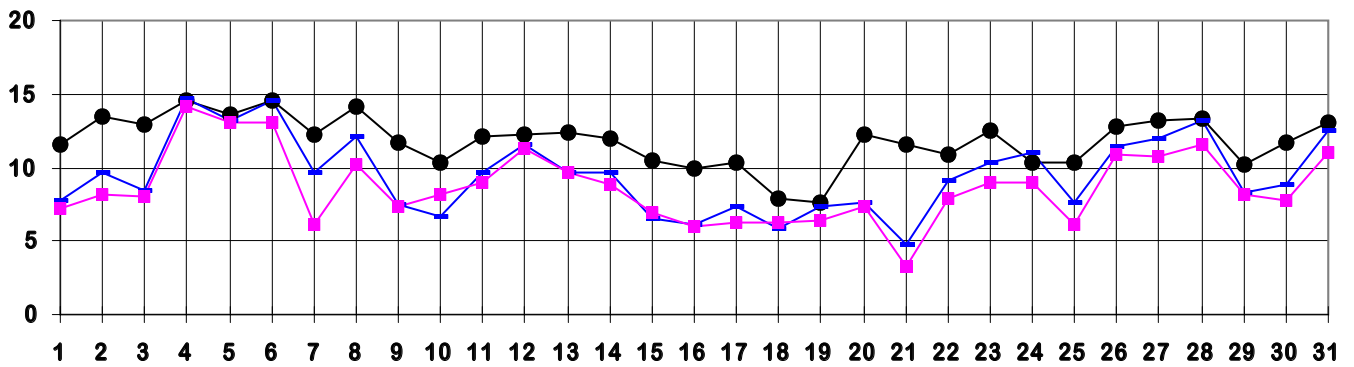
## Rainfall (mm)



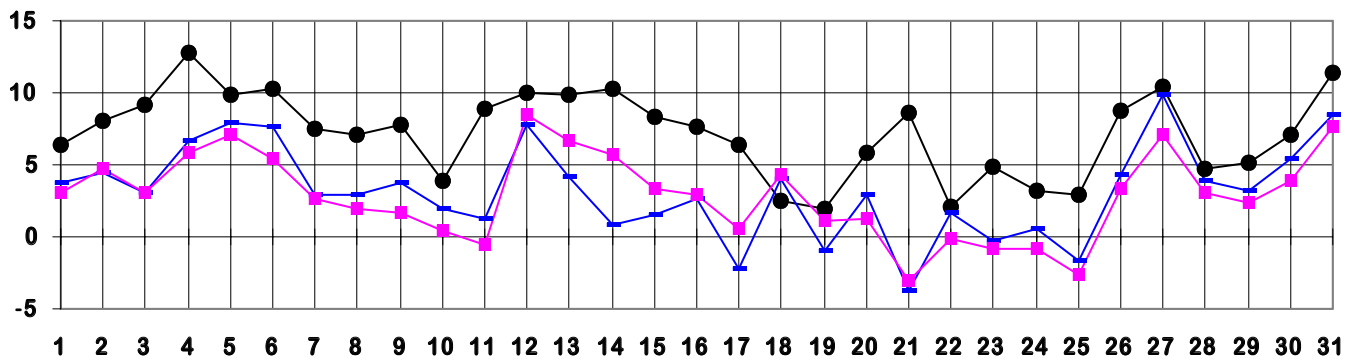
## Sunshine (hours)



## Maximum temperature (°C)



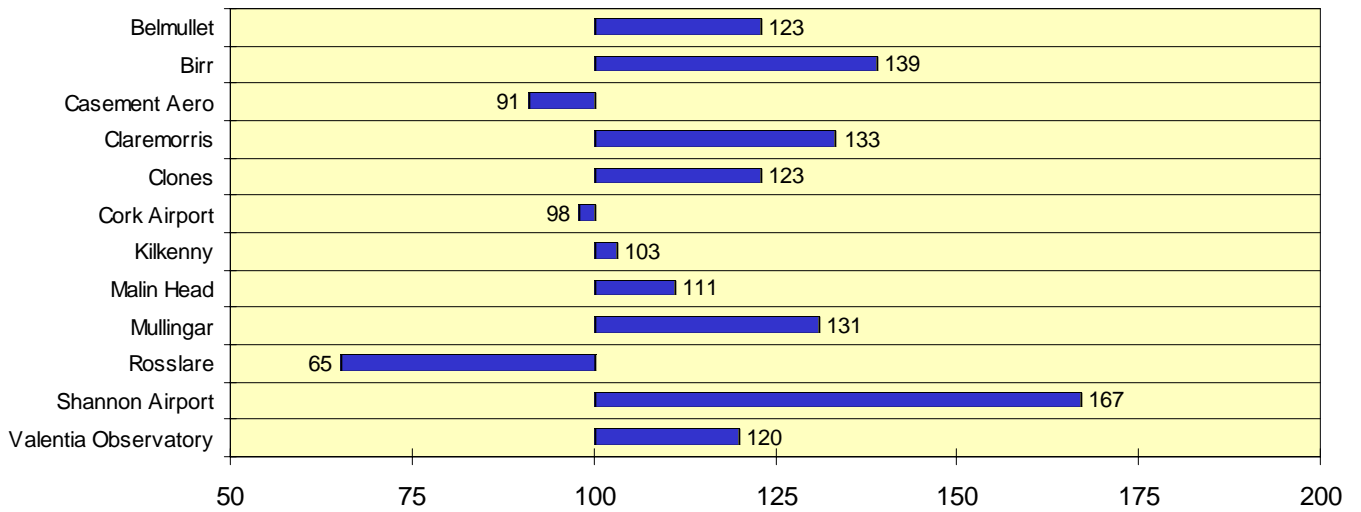
## Minimum temperature (°C)



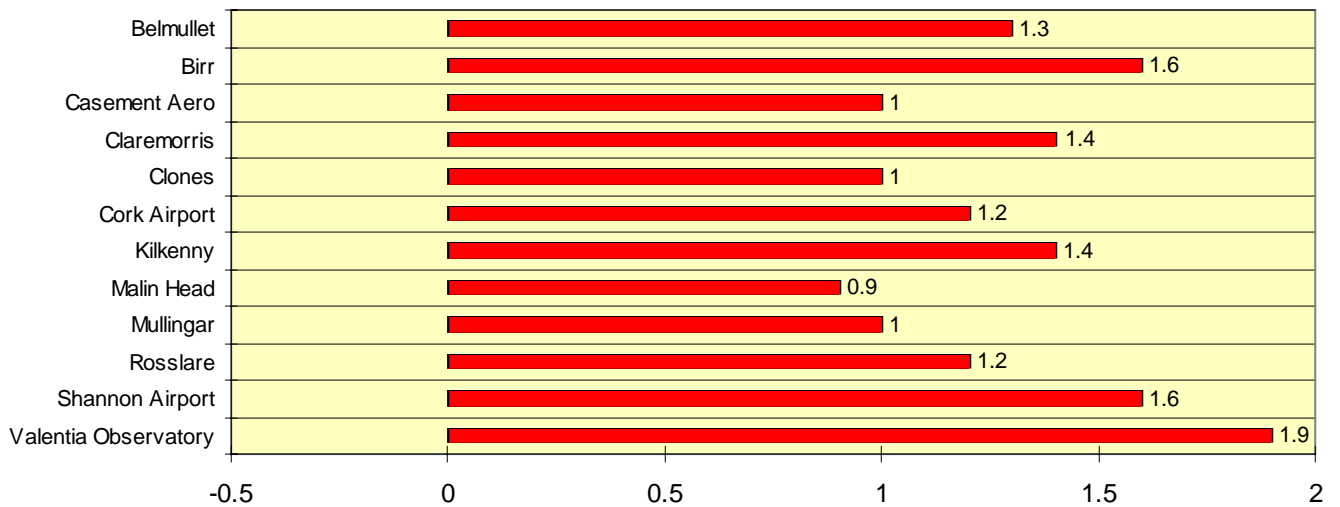
● Valentia Observatory      - Dublin Airport      ■ Clones

# December 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*)

