



# Monthly Weather Summary

## The Weather of January 2010

### **Coldest January for at least 25 years; dry and very sunny**

The first ten days of January continued a spell of exceptionally cold weather that began in mid-December, representing the most extreme cold spell over Ireland since early 1963. It brought significant disruption across the country, leading to school closures and affecting transport and water supplies. Temperatures rose slowly to near-normal values for the remainder of the month, with falls of snow turning increasingly to sleet or rain. This was heavy in places around mid-month, bringing flooding in some southern areas, but overall it was a relatively dry and sunny month. Mean monthly air temperatures were around two or three degrees below normal for January in most places; it was the coldest January since 1985 generally and the coldest since 1963 in the Dublin area. Both maximum and minimum values were around six degrees below normal during the first ten days, when daytime values remained below freezing on some days in midland and eastern areas, while minimum values of below  $-10^{\circ}\text{C}$  were recorded in the same areas between the 7th and 10th. There was a total of between 22 and 28 ground frosts in most places, compared with the normal range for January of between 12 and 18. Rainfall totals were below normal everywhere, with less than half of the January normals recorded at several stations. The heaviest daily falls were on the 12th, 15th and 21st; Valentia Observatory's daily value of 58.5mm on the 12th was its highest for January since records began there over a century ago. This amount was almost twice Shannon Airport's monthly total of just 30mm, which was its lowest for January since 1963. There were between 8 and 13 wetdays at most stations (days with 1mm or more rainfall), but 18 or more wetdays were measured in the west and north. Sunshine totals were above normal everywhere and they were well above normal in the south and west; totals of over 100 hours at both Valentia and Cork Airport were their highest on record for January.

**1st to 10th:** A large area of high pressure centred to the northwest of Ireland, later moving eastwards, directed a bitterly cold northeasterly airflow across the country. Wintry showers affected mainly coastal counties of the northwest, north and east at first, while other areas were fine and dry, but more widespread falls of sleet or snow developed later in the period. Temperatures were near or below freezing for much of the period, with freezing fog also in many places. Compacted snow and ice brought extremely hazardous conditions for both motorists and pedestrians. North to northeasterly winds were strongest on northern and western coasts.

**11th to 21st:** A period of transition, as temperatures rose slowly and the more normal weather pattern of Atlantic depressions over Ireland became re-established. Heavy falls of rain and sleet, in combination with melting snow, brought flooding in southern areas early in the period, while another spell of heavy rain on the 15th/16th eventually cleared most lying snow. Southeasterly winds later veered southwesterly; they were strongest on the 12th.

**22nd to 31st:** Pressure was relatively high over Ireland, bringing mostly dry weather with light winds, but wintry showers developed later in the period. Frost and fog were widespread on many nights, but daytime temperatures were near normal.

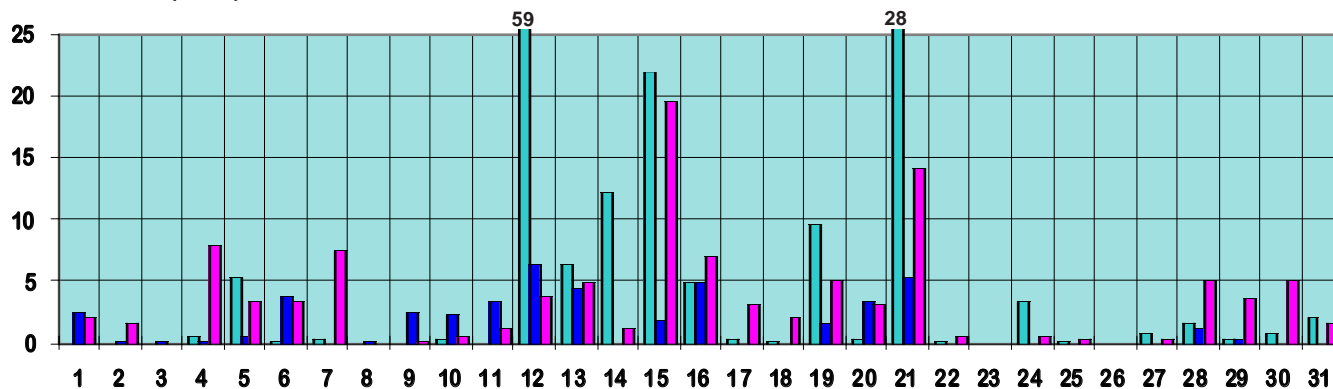
**Wind and elements:** Mean windspeeds for the month were below normal everywhere, varying between 6 and 11 knots generally (*11 and 20 km/h*). The month's strongest winds in most places were on the 12th, when the highest gust of 62 knots (*115 km/h*) was recorded at Valentia Observatory. Snow was recorded on each day between the 1st and 14th and was most widespread on the 5th and between the 9th and 12th; snow depth reached 20cm at Knock Airport on the 13th. Hail was observed, mainly in the north and northwest, in the periods 1st to 7th and 29th to 31st, with isolated thunder in the period 5th/6th and 30th/31st. Fog was most widespread in the periods 13th/14th and 23rd to 26th.

### Extreme values

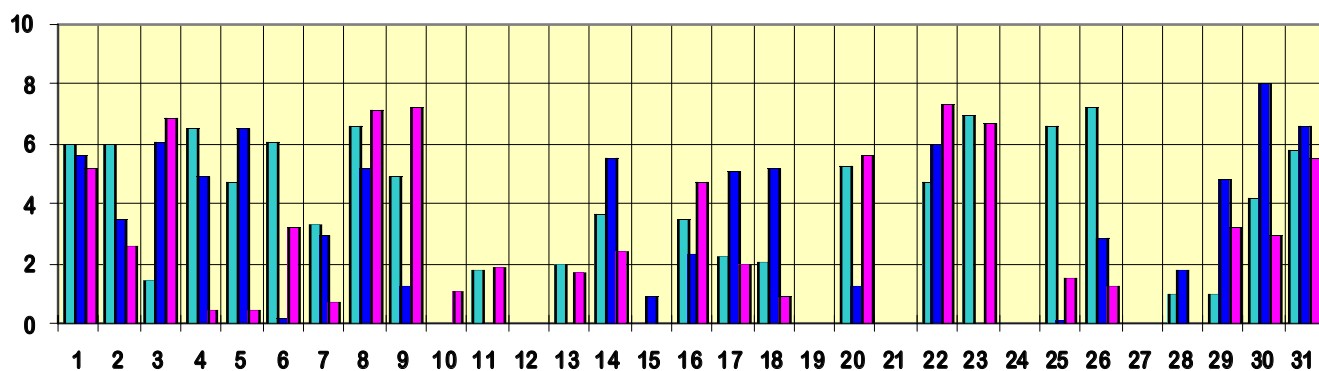
<b>Rainfall</b>	Highest total: 162mm at Valentia Observatory Lowest total: 31mm at Shannon Airport ( <i>its driest January since 1963</i> ) Highest daily rainfall: 58.5mm at Valentia Observatory on 12th ( <i>its highest January daily fall on record</i> )
<b>Temperature</b>	Highest mean monthly temperature: $4.9^{\circ}\text{C}$ at Valentia Observatory ( <i>its coldest January since 1985</i> ) Lowest mean monthly temperature: $1.4^{\circ}\text{C}$ at Ballyhaise Highest temperature: $12.1^{\circ}\text{C}$ at Valentia Observatory on 15th Lowest air temperature: $-12.4^{\circ}\text{C}$ at Casement Aerodrome on 8th ( <i>its lowest value for any month since January 1979</i> ) Lowest grass minimum temperature: $-14.5^{\circ}\text{C}$ at Claremorris on 9th ( <i>its lowest such value for January since 1986</i> )
<b>Sunshine</b>	Highest monthly total: 117 hours at Cork Airport ( <i>the highest January total on record in Ireland</i> ) Lowest monthly total: 64 hours at Casement Aerodrome Highest daily sunshine: 8.0 hours at Dublin Airport on 30th ( <i>its highest January daily value since 1987</i> )

# January 2010 Daily values at selected synoptic stations

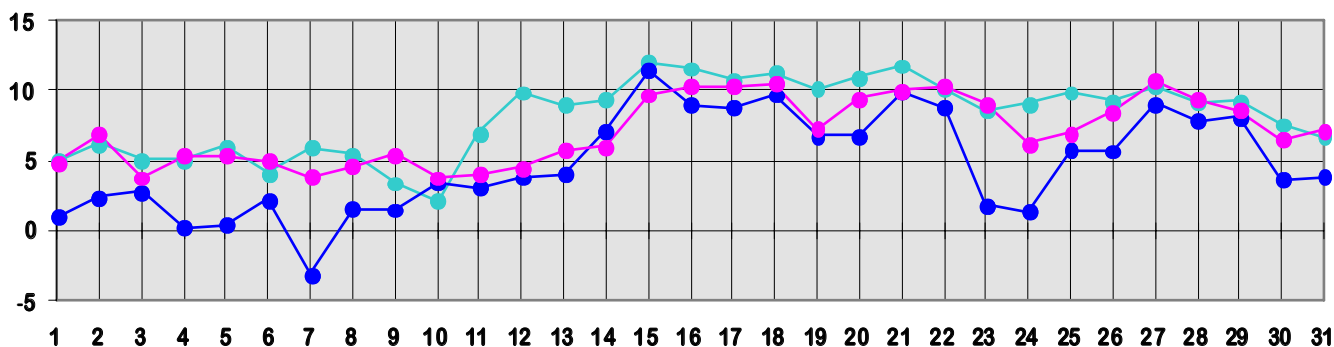
## Rainfall (mm)



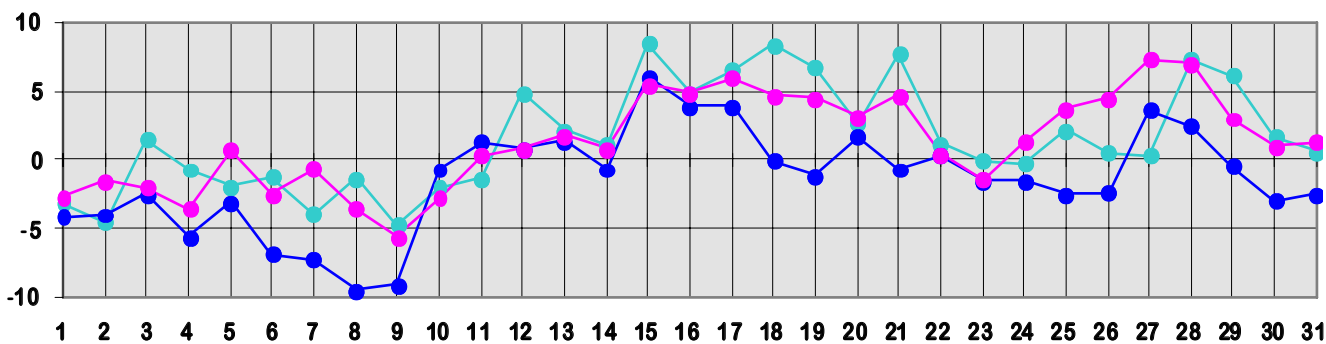
## Sunshine (hours)



## Maximum temperature (°C)



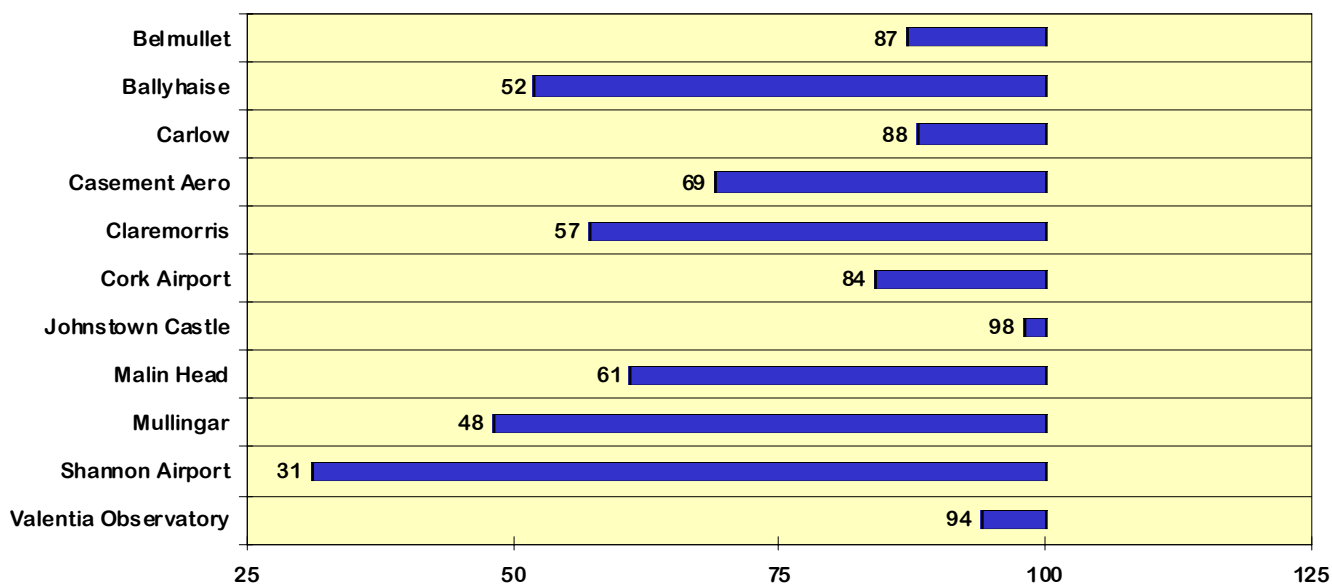
## Minimum temperature (°C)



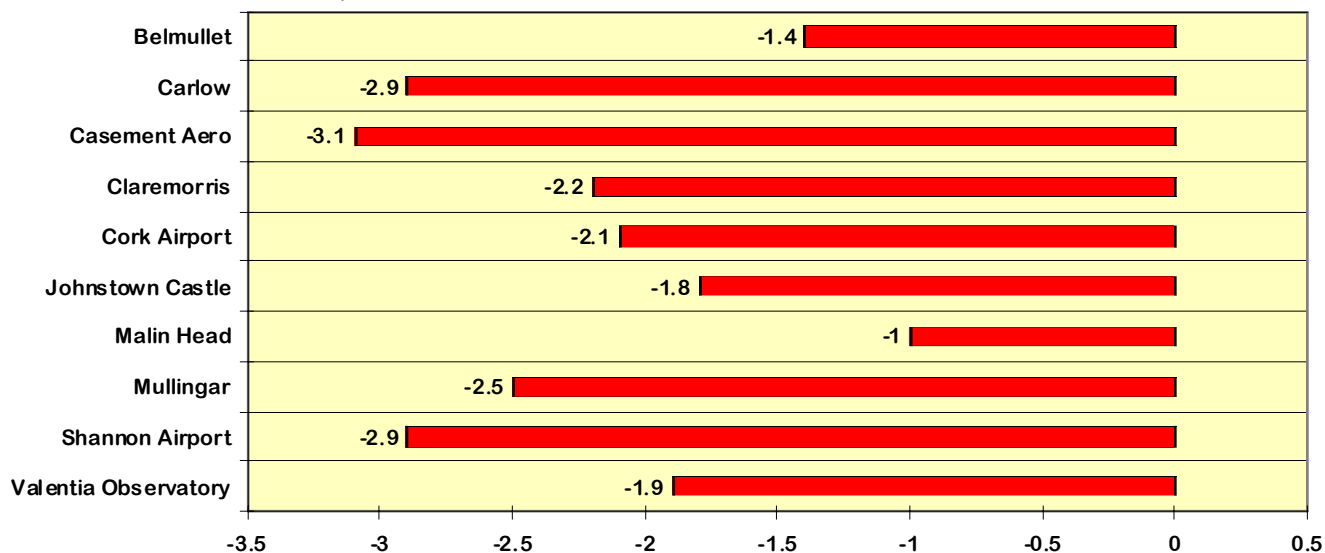
● Valentia Observatory      ● Dublin Airport      ● Belmullet

# January 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)

