

# eDeposit Ireland

## Monthly Weather Bulletin March 2004

Item Type	report
Publisher	Met Éireann
Rights	Y
Download date	2026-04-21 06:46:07
Link to Item	<a href="https://hdl.handle.net/20.500.14765/70056">https://hdl.handle.net/20.500.14765/70056</a>

# Monthly Weather Bulletin

No. 215  
MARCH 2004



After several nights of severe frost during late February and early March, ice formed on the Grand Canal near Dublin's Baggot Street (picture Peter Lennon)

## MILD AND VERY SUNNY; WET AND WINDY AT TIMES

**Summary:** The weather of March combined periods of relatively calm, dry and settled conditions with spells of heavy rain and strong winds. Rainfall totals for the month were above normal in the southwest, but they were below normal at most stations, especially in the north. Heavy falls were measured at all stations around mid-month, some of which was in the form of sleet or snow between the 11th and 13th; there were also some heavy showers with thunder, especially in the period 18th to 21st. This same period produced very strong winds, with damaging gusts over many parts of the country on the 20th. There were between 12 and 15 wetdays during the month at most stations (*days with 1mm or more of rainfall*), close to normal for March. After spells of cold weather during the first half of the month, including some severe frost at first, the weather became milder during the second half. Mean air temperatures overall were between half a degree and one degree higher than normal generally. The early part of the month continued the spell of very frosty

### INSIDE

**First recorded South Atlantic hurricane- page 2**



Wind & Elements ..... 4  
Marine & Pressure ..... 5

Agmet / Lab ..... 6  
Diary ..... 8  
Rainfall ..... 10  
Temperature ..... 12  
Sunshine ..... 14

**Sunniest March on record at Belmullet**

World Weather ..... 15  
Feature ..... 16

**World records of extreme temperatures**

Produced by Met Éireann,  
Glasnevin Hill, Dublin 9.  
Annual subscription € 80



For more information-  
tel: +353-1-8064260  
fax: +353-1-8064216  
climate.enquiries@met.ie  
www.met.ie/climate

Notes on the tables and map showing location of stations appear in each January issue



weather which had developed in late February, with air temperatures falling below  $-5^{\circ}\text{C}$  and ground temperatures below  $-10^{\circ}\text{C}$  in places on the 1st and 2nd. In contrast, no air frost was recorded from the 10th onwards except at a few inland stations. It was a very

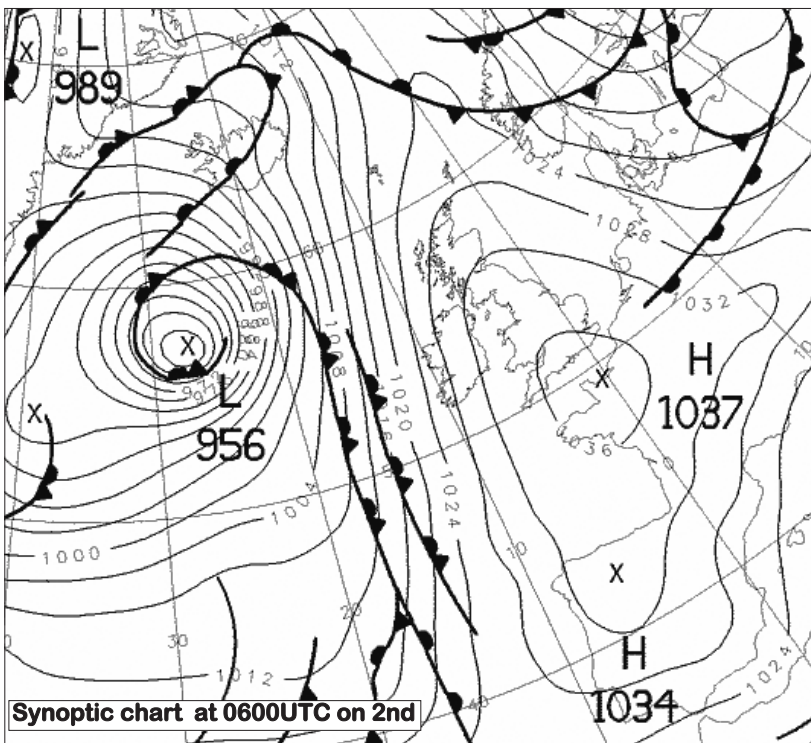
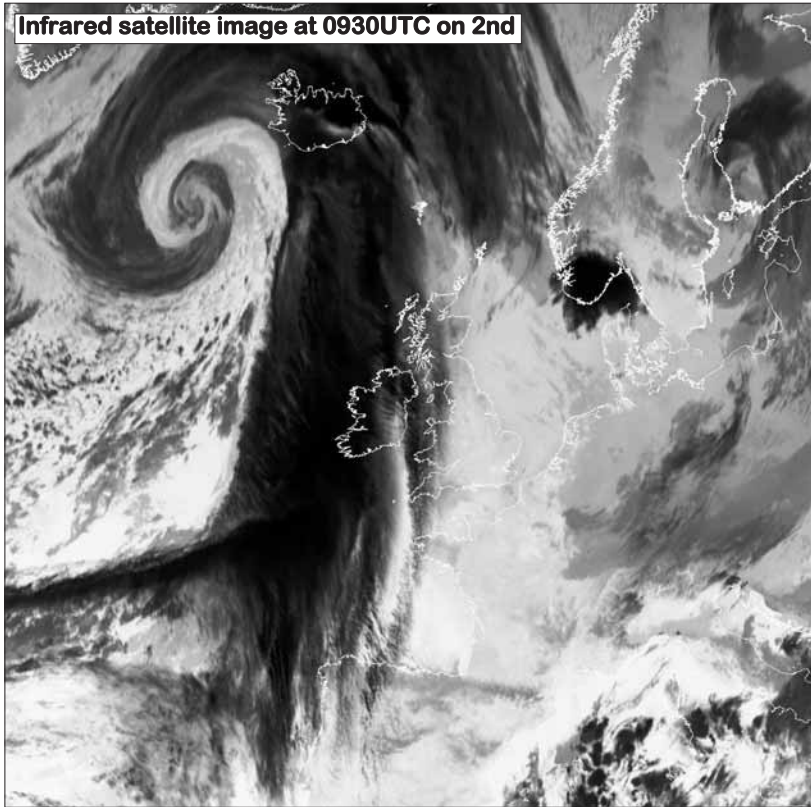
sunny month everywhere, especially in the west of the country where sunshine totals were around 50% higher than normal. It was the sunniest March at Valentia Observatory since 1972 and the sunniest at Belmullet since records began there in 1956.

## First recorded hurricane in southern Atlantic



During its daytime overpass of the southeast coast of Brazil on the 26th, the Moderate Resolution Imaging Spectroradiometer (*MODIS*) on the Terra satellite captured a surprising image, shown above: the first recorded example of a hurricane over the waters of the South Atlantic since geostationary satellite records began in 1966. In contrast to the normal development of many summertime hurricanes over the North Atlantic and Caribbean, the relatively low water temperatures and strong vertical wind shear in this area means that it is generally not thought of by meteorologists as a location where tropical cyclones can form. Although there have been some reports in the past of storms with tropical characteristics, the area has been so devoid of tropical storm activity that no government agency has an official warning system for storms there, which is why this storm is unnamed. The hurricane developed from an extratropical cyclone that emerged off the coast of Brazil on the 20th; this almost stationary non-tropical low pressure system acquired tropical characteristics and developed into a hurricane by the 26th. It then made landfall along the southern coast of Brazil in the state of Santa Catarina, just south of the resort town of Laguna early on the 28th. Maximum sustained winds were estimated between 65 and 70 knots (75 to 80 mph), with gusts to 85 knots (95 mph). The storm left at least 3 people dead and injured 38, while more than 2,000 were rendered homeless .

(text and picture courtesy NOAA, US Department of Commerce)



*Above*  
A ridge of high pressure over the country gave a fine start to the month, but bands of rain associated with a deep Atlantic depression affected all areas by the 3rd.

**1st to 2nd:** An anticyclone over Ireland on the 1st moved away eastwards. Clear, calm and frosty weather gave way to cloudier conditions with strengthening southerly winds late on the 2nd.

**3rd to 4th:** A band of rain on the 3rd, heavy and thundery in places, cleared to showery weather on the 4th. Mild.

**5th to 10th:** High pressure developed

again over the country, bringing a return to fair weather with clear, frosty nights and cool, sunny days. Dry apart from some isolated showers. Winds were light at first, but strengthened from a southeasterly direction late in the period.

**11th to 22nd:** A spell of very disturbed weather as a series of deep Atlantic depressions passed close to the north of the country. Rainfall amounts for the period were high, particularly in the southwest and west; thunder was also frequent. Strong to gale force winds were recorded on several days, particularly on the 11th and 20th. A cold southeasterly airstream at first, producing snow in many places on the 11th, veered to a milder southwesterly direction by the 13th.

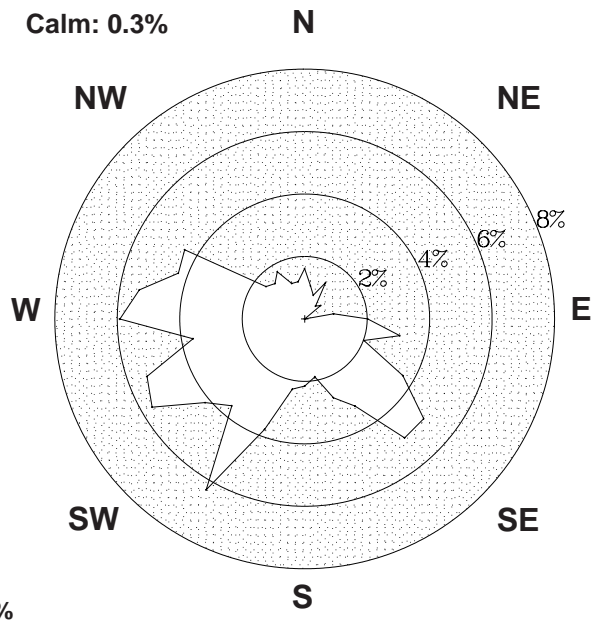
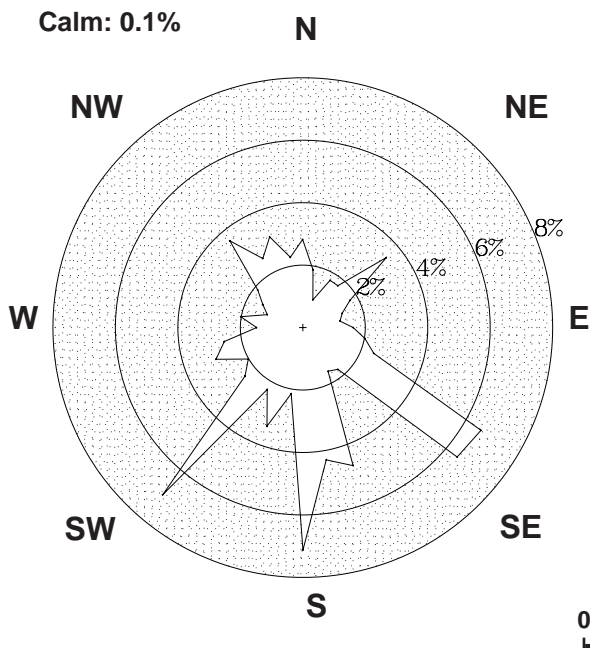
**23rd to 31st:** Ireland was once again under the influence of high pressure, as a ridge extending from an anticyclone to the west declined gradually. The weather became dry apart from isolated light showers, with light winds and temperatures near or above normal. Very sunny at first, but becoming cloudier from the 26th onwards.

**Wind and elements:** Mean windspeeds for the month were between 9 and 12 knots generally (10 and 14m.p.h.). They were above normal everywhere, due mainly to the spell of very windy weather during the middle third of the month; mean windspeeds were the highest for March at most stations for 9 or 10 years. Winds gusted over 55 knots (63m.p.h.) across most of the country on the 20th, causing significant disruption; the month's highest gust, 66 knots (76m.p.h.), was measured at Belmullet on this day. Hail showers were most frequent in the period 18th to 23rd, especially on the 21st and 22nd, while snow was widespread on the 11th with isolated falls on the 12th, 13th and 22nd. Thunderstorm activity was recorded in the periods 3rd to 4th, 12th to 13th and 18th to 23rd; it was widespread on both the 18th and 21st. Fog was most widespread in the periods 3rd to 5th and 15th to 16th.

County / Station	WIND (KNOTS)									ELEMENTS					
	Mean speed	Max. 10-min. mean dir.	Max. 10-min. mean speed	Max. 10-min. mean date/hour	Max. Gust dir.	Max. Gust speed	Max. Gust date/time	Days with gales	Days with gale gusts	Hours with gale gusts	Snow	Snow Lying	Hail	Thunder	Fog
CO. CLARE SHANNON AIRPORT	11.1	240°	44	20/10	250°	63	20/0932	3	8	80	1	0	5	1	4
CO. CORK CORK AIRPORT	12.0	140°	38	11/13	140°	56	11/1213	2	11	95	0	0	3	0	6
		240°	38	20/10	260°	56	20/1246								
CO. DONEGAL MALIN HEAD	16.8	130°	43	11/13	140°	61	11/1241	9	17	216	0	0	4	0	0
CO. DUBLIN CASEMENT AERODROME	10.8	250°	42	20/13	230°	64	20/0945	2	10	82	1	0	3	4	0
DUBLIN AIRPORT	11.3	250°	43	20/12	260°	61	20/1107	2	11	85	0	0	4	2	1
CO. KERRY VALENTIA OBSERVATORY	11.4	250°	37	20/11	220°	56	20/0726	2	13	108	0	0	2	0	0
CO. KILKENNY KILKENNY	8.6	240°	39	20/10	250°	58	20/1127	1	9	32	n/a	0	---	n/a	---
CO. MAYO BELMULLET	14.8	240°	40	20/09	230°	66	20/0833	4	15	181	2	0	9	0	0
CONNACHT AIRPORT	11.6	260°	39	20/12	260°	56	20/1142	1	8	83	3	2	4	0	10
CO. MONAGHAN CLONES	9.4	280°	33	20/14	280°	55	20/1313	0	9	40	n/a	0	---	n/a	---
CO. OFFALY BIRR	9.0	130°	32	11/13	250°	52	20/1231	0	6	37	n/a	0	---	n/a	---
CO. WESTMEATH MULLINGAR II	8.3	250°	29	20/11	250°	51	20/0917	0	7	25	n/a	0	---	n/a	---
CO. WEXFORD ROSSLARE	12.1	210°	32	19/06	230°	59	20/1018	0	14	123	0	0	1	0	4
		020°	32	25/12											

Valentia Observatory

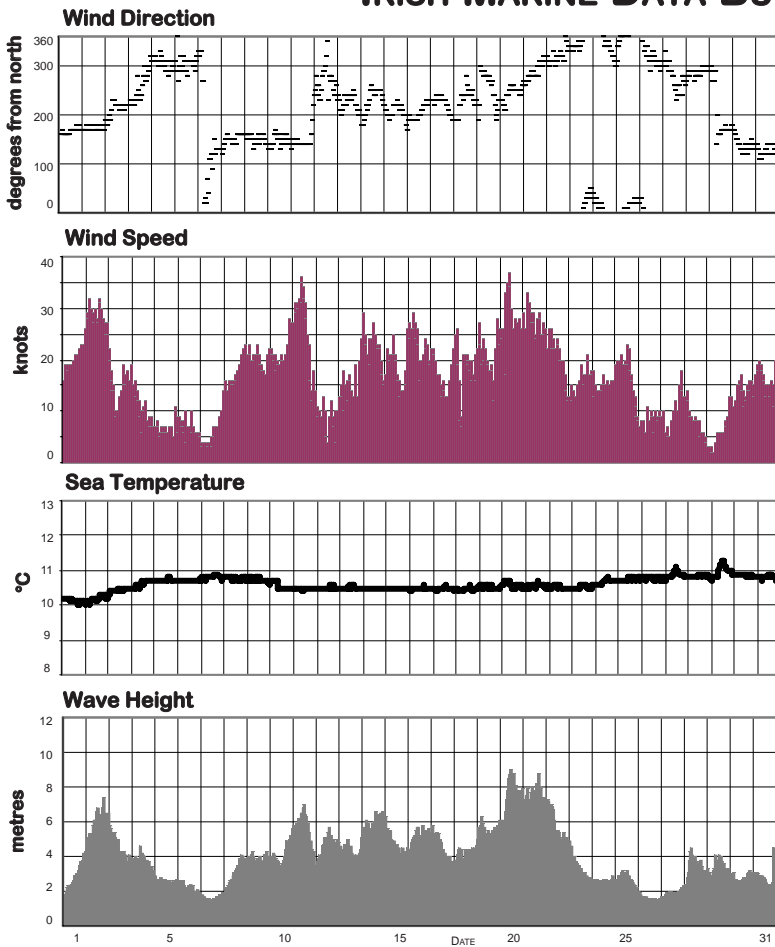
Dublin Airport



0 1 2 3 4%

FREQUENCY OF WIND DIRECTION

## MARINE OBSERVATIONS FROM IRISH MARINE DATA BUOY NETWORK

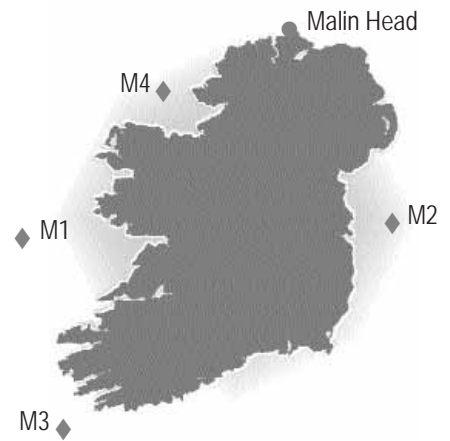


Hourly wind and wave conditions at M1 (53°07'N, 11°12'W)

Buoy	Sea surface temp. (°C)	Mean wind speed (knots)	Max. 10-min wind (knots)	Mean wave height (m.)	Max. wave height (m.)
M1	10.6	15.2	62	4.0	9.0
M2	8.4	15.0	35	1.4	3.7
M3	10.9	n/a	n/a	3.8	14.5
M4*	not available				
Malin Head	8.1 (1.0°C above normal)				

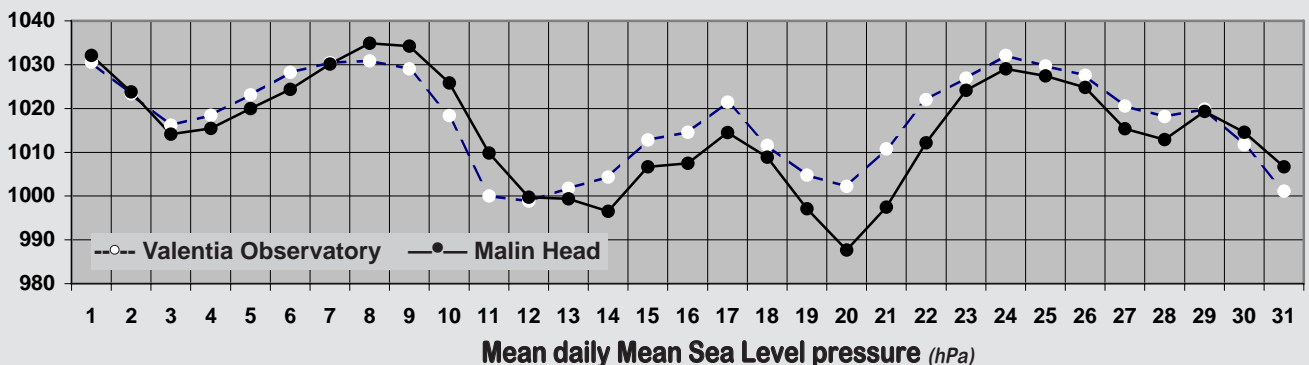
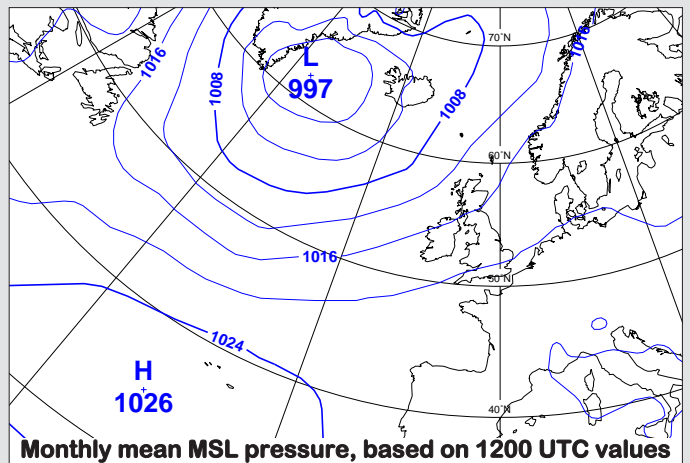
### Summary of Mean Monthly Values

\*- means based on data for 20 days

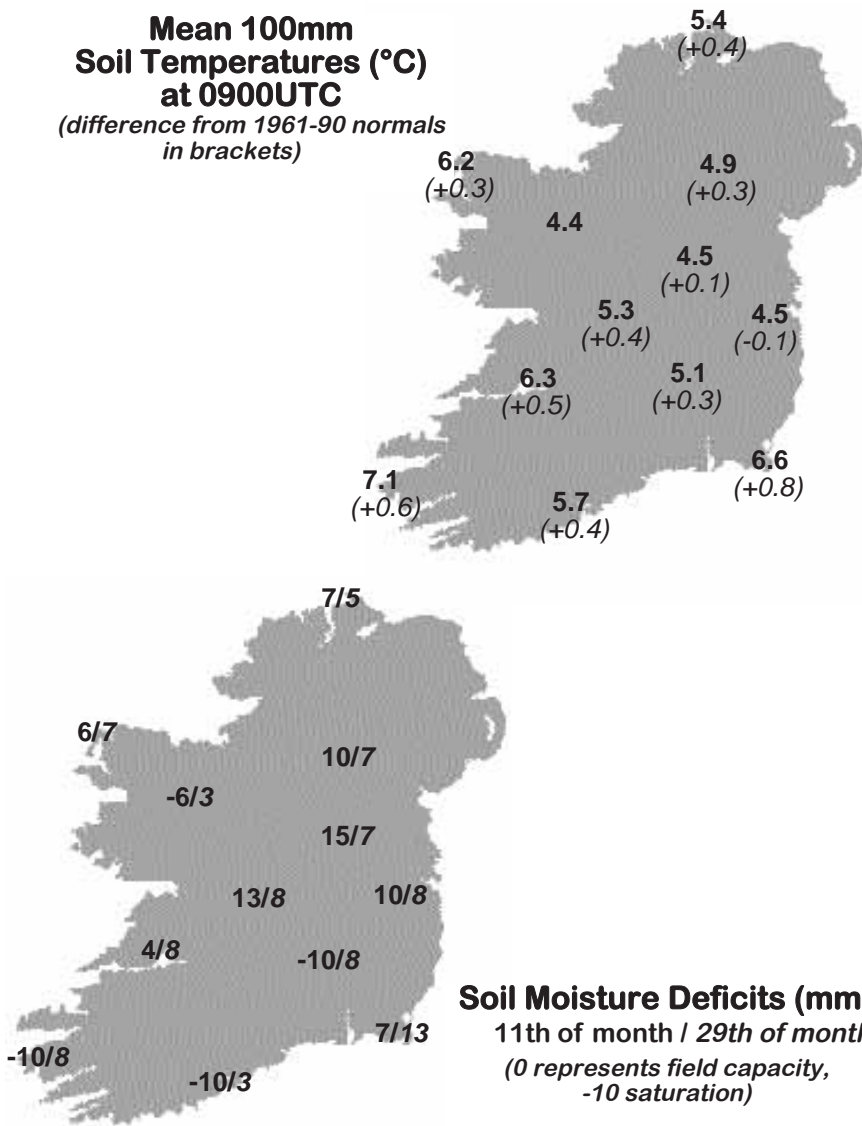


## MEAN ATMOSPHERIC PRESSURE

Mean sea level pressure values for the month ranged from under 1016hPa in the northwest to over 1018hPa in the southeast, around 5hPa above normal for March everywhere. There was considerable fluctuation in pressure values throughout the month, as the chart below indicates. The highest pressure of the month, 1037.7hPa, was measured at both Cork Airport on the 1st and at Dublin Airport on the 9th, while the lowest value, 979.7hPa, was recorded at Malin Head on the 20th.



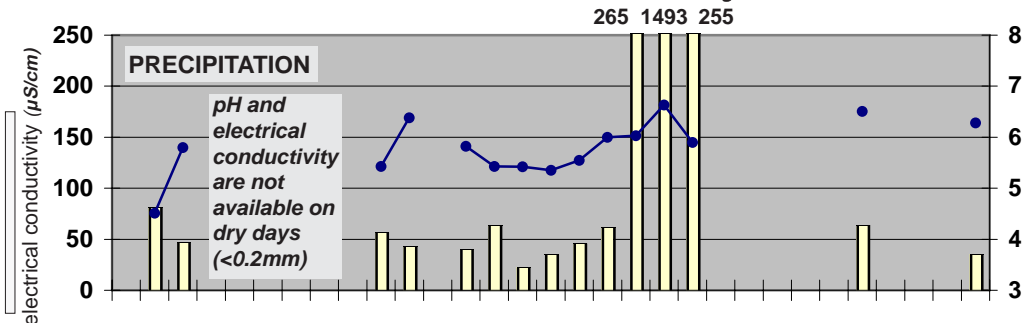
**Mean 100mm Soil Temperatures (°C) at 0900UTC**  
(difference from 1961-90 normals in brackets)



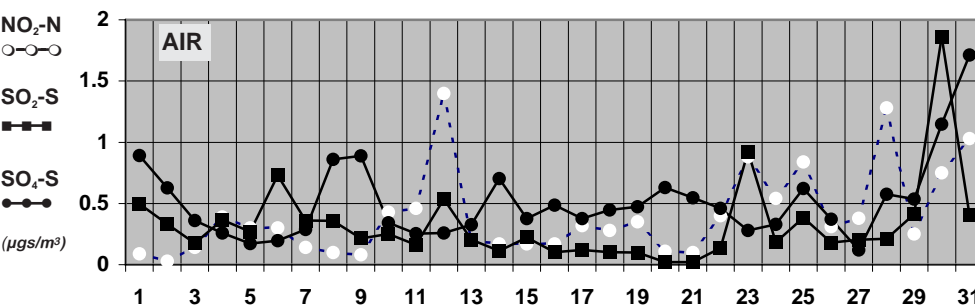
**Soil Temperatures at 0900UTC**

County/ Station	°C		
	100mm	200mm	300mm
<b>CO. CLARE</b>			
SHANNON AIRPORT	6.3	7.0	7.2
CARRON	5.8		6.6
<b>CO. CORK</b>			
PERMOY (MOORE PARK)	6.5	6.4	6.8
CORK AIRPORT	5.7	6.2	7.0
SHERKIN ISLAND	7.7		8.5
BALLINCURRIG (PEAFIELD)	5.5	6.0	6.8
<b>CO. DONEGAL</b>			
MALIN HEAD	5.4	6.1	7.1
<b>CO. DUBLIN</b>			
DUBLIN AIRPORT	4.6	5.1	5.7
CASEMENT AERODROME	4.5	5.3	5.7
<b>CO. KERRY</b>			
VALENTIA OBSERVATORY	7.1	7.6	8.8
<b>CO. KILKENNY</b>			
KILKENNY	5.1	5.8	6.3
<b>CO. LEITRIM</b>			
BALLINAMORE	5.4	5.8	6.0
<b>CO. LIMERICK</b>			
MOUNT RUSSELL	5.1	5.7	
<b>CO. LOUTH</b>			
ARDEE (BOHARNAMOE)	4.9	5.6	5.3
<b>CO. MAYO</b>			
BELMULLET	6.2	7.1	8.1
STRAIDE	5.3		
CONNACHT AIRPORT	4.4	5.1	5.5
<b>CO. MEATH</b>			
WARRENSTOWN	4.4	5.1	5.2
<b>CO. MONAGHAN</b>			
CLONES	4.9	5.2	5.7
<b>CO. OFFALY</b>			
BIRR	5.3	6.1	6.8
<b>CO. TIPPERARY</b>			
FETHARD (PARSONSHILL)	5.0	5.4	
<b>CO. WATERFORD</b>			
DUNGARVAN (CARRIGLEA)		7.0	7.5
<b>CO. WESTMEATH</b>			
MULLINGAR II	4.5	5.0	5.7
<b>CO. WEXFORD</b>			
JOHNSTOWN CASTLE	5.9	6.3	6.6
ROSSLARE	6.6	7.0	8.3
JOHN F. KENNEDY PARK	6.1	6.8	7.8
CLONROCHE (KNOXTOWN)	5.2	5.9	6.2

**Chemical Analysis of Precipitation and Air Samples at Valentia Observatory**



data shown here are interim values and are subject to change



Acid rain occurs when pollutants combine with moisture in the air to form sulphuric or nitric acid. pH is the simplest way of measuring the acidity of precipitation. Usually pH of 7.00 is considered neutral but this is not the case in rainfall samples. Pure water in the atmosphere has an equilibrium pH value of 5.65 at 20°C owing to carbon dioxide in the air dissolving to form carbonic acid. Any value below pH 5.65 is considered acid while any value above is considered alkaline.

Sulphur dioxide and sulphate in air contribute to the formation of sulphuric acid; nitrate in air contributes to the formation of nitric acid.

Conductivity measures the total ion activity in the rainfall, i.e. the higher the conductivity the greater the number of ions present.

10-DAY VALUES FOR SELECTED AGROMETEOROLOGICAL STATIONS		RAINFALL				TEMPERATURE										SUNSHINE		P.E. (Penman) (mm)					
Station	period	amount	% of average	rain days	wet days	mean max.	mean min.	mean daily	diff. from average	lowest min.		degree days > 4.4°C		lowest 'grass-min.'		days with ground frost		mean 10cm at 0900h	mean 30cm at 0900h	total no. of hours	% of average	mean wind speed (m/s) 2m a.g.l.	P.E. (Penman)
										date	days with air frost	degree days > 10.0°C	date	days with ground frost									
Co. Cork Fermoy	1-10	32.5	-	4	3	10.2	0.2	5.2	-	-4.6	1	6	21	3	-7.8	1	9	4.7	5.3	-	-	2.5	-
	11-20	67.8	-	10	8	12.3	4.8	8.6	-	-2.1	13	1	45	8	-4.6	13	5	7.5	7.3	-	-	4.8	-
	21-end	12.1	-	5	4	11.3	3.9	7.6	-	0.9	24	0	38	4	-3.2	24	5	7.4	7.8	-	-	3.6	-
	month	112.4	142	19	15	11.3	3.0	7.2	0.8	-4.6	1	7	104	14	-7.8	1	19	6.5	6.8	-	-	3.7	41
Co. Donegal Glenties	1-10	20.4	-	2	2	10.0	1.2	5.6	-	-1.9	1	4	21	1	-5.5	8	8	-	-	-	-	-	-
	11-20	81.9	-	9	9	10.2	4.2	7.2	-	-0.6	11	1	33	3	-2.5	13	2	-	-	-	-	-	-
	21-end	12.2	-	5	4	11.8	4.1	8.0	-	0.1	24	0	42	5	-2.7	24	3	-	-	-	-	-	-
	month	114.5	87	16	15	10.7	3.2	7.0	1.2	-1.9	1	5	95	10	-5.5	8	13	-	-	-	-	-	-
Co. Kerry Ardfert	1-10	17.0	-	3	3	11.6	2.2	6.9	-	-2.0	1	1	31	4	-7.1	1	8	-	-	68.2	-	-	-
	11-20	51.0	-	10	10	12.3	5.7	9.0	-	1.6	13	0	48	9	-2.6	13	2	-	-	39.1	-	-	-
	21-end	13.2	-	7	3	12.8	3.6	8.2	-	-1.1	24	2	45	8	-5.6	24	6	-	-	58.9	-	-	-
	month	81.2	-	20	16	12.2	3.8	8.0	0.9	-2.0	1	3	124	21	-7.1	1	16	-	-	166.2	-	-	-
Co. Leitrim Ballinamore	1-10	12.0	-	5	3	10.1	-1.1	4.5	-	-6.4	1	6	18	2	-11.4	1	10	3.4	4.6	50.8	-	-	-
	11-20	85.5	-	10	10	10.3	3.7	7.0	-	0.1	13	0	31	4	-3.0	11	3	5.9	6.0	21.9	-	-	-
	21-end	14.6	-	8	3	11.3	4.0	7.7	-	0.5	24	0	38	4	-3.4	24	5	6.6	7.2	44.6	-	-	-
	month	112.1	108	23	16	10.6	2.3	6.5	0.8	-6.4	1	6	87	10	-11.4	1	18	5.4	6.0	117.3	126	-	-
Co. Louth Ardee	1-10	6.3	-	4	2	9.9	-1.1	4.4	-	-7.4	1	7	18	2	-9.4	1	9	2.2	3.3	-	-	-	-
	11-20	33.9	-	10	7	11.3	4.7	8.0	-	0.9	13	0	39	7	-0.7	13	1	6.0	5.7	-	-	-	-
	21-end	6.7	-	6	2	11.5	4.4	8.0	-	-0.4	24	1	41	4	-1.6	24	2	6.3	6.9	-	-	-	-
	month	46.9	74	20	11	10.9	2.7	6.8	1.0	-7.4	1	8	98	14	-9.4	1	12	4.9	5.3	-	-	-	-
Co. Waterford Dungarvan	1-10	32.1	-	3	3	10.6	1.7	6.2	-	-4.0	1	3	26	3	-5.4	1	5	-	6.0	45.3	-	2.1	-
	11-20	77.8	-	10	8	12.4	5.7	9.1	-	-1.0	13	1	49	9	-1.8	13	1	-	8.0	37.3	-	4.7	-
	21-end	5.6	-	5	2	11.9	4.9	8.4	-	1.9	24	0	45	5	0.5	24	0	-	8.4	49.9	-	2.3	-
	month	115.5	-	18	13	11.6	4.1	7.9	1.1	-4.0	1	4	120	18	-5.4	1	6	-	7.5	132.5	140	3.0	29
Co. Wexford Johnstown Castle	1-10	17.6	-	3	2	9.1	2.4	5.8	-	-1.0	1	2	20	1	-5.7	2	7	3.7	4.8	44.1	-	0.7	-
	11-20	48.6	-	10	5	11.4	5.8	8.6	-	2.4	13	0	43	5	0.3	13	0	7.5	7.3	28.0	-	1.9	-
	21-end	5.3	-	5	2	11.2	4.7	8.0	-	1.8	24	0	41	4	-0.1	24	1	6.6	7.4	51.8	-	1.0	-
	month	71.5	91	18	9	10.6	4.3	7.5	1.1	-1.0	1	2	104	10	-5.7	2	8	5.9	6.6	123.9	110	1.2	24

**MEASURED POTENTIAL EVAPOTRANSPIRATION (P.E.) AND SOIL MOISTURE**

SEE BACK PAGE OF MARCH ISSUE FOR NOTES ON THE DATA

County/Station	Period	P.E. (mm) Amount	Soil Moisture (mm)		
			Deficit	Accumulated	Surplus
Co. Dublin Kinsealy	1-10	3.9	-	0	12
	11-20	14.4	-	0	17
	21-end	26.4	5	5	-
	month	44.7			
Co. Kerry Valentia Obs.	1-10	13.7	-	0	14
	11-20	21.3	-	0	107
	21-end	8.5	-	0	4
	month	43.5			
Co. Leitrim Ballinamore	1-10	8.1	-	0	4
	11-20		not available		
	21-end	5.0	-	0	10
	month				
Co. Wexford Johnstown Castle	1-10	7.1	-	0	11
	11-20	18.5	-	0	30
	21-end	11.8	7	7	-
	month	37.4			

County/Station	GLOBAL SOLAR RADIATION (MJ/sq. m)			P.E. (Penman)	
	10-day totals 1-10	11-20	21-end	total for month	total for month(mm)
Co. Donegal Malin Head	89.06	73.93	114.70	277.69	42
Co. Dublin Dublin Airport	86.87	74.69	120.94	282.50	37
Co. Kerry Valentia Obs.	85.99	87.87	136.56	310.42	52
Co. Kilkenny Kilkenny	84.84	82.33	127.27	294.44	36
Co. Mayo Belmullet	101.10	78.26	129.91	309.27	45
Co. Monaghan Clones	84.34	64.07	117.05	265.46	36
Co. Offaly Birr	99.35	84.11	128.72	312.18	37

**Monday 1st:** Very cold overnight with severe frost. Temperatures recovered quickly during the morning. Dry everywhere with light southeasterly winds and mostly clear skies. Temperatures dropped rapidly after dark and frost returned to all areas except Munster, where cloud was on the increase.

**Rainfall:** nil

**Temperature:** max. 6°C to 10°C, min. -6°C to 5°C, ground temperatures below zero at most stations, down to -14°C at Kilkenny

**Sunshine:** 7 to 10 hours, sunniest at Clones and Mullingar

**Tuesday 2nd:** Rain arrived in the west and southwest in the afternoon and pushed slowly eastwards during the evening. The rain was generally light and patchy but became persistent in the southwest in the evening. Sunny breaks in the east, but dull elsewhere. Light southerly winds, occasionally moderate, particularly near southern coasts and in the extreme north.

**Rainfall:** nil to 3mm generally, 10mm at Valentia

**Temperature:** max. 6°C to 10°C, min. -5°C to 7°C, ground temperatures down to -13°C at Dublin Airport

**Sunshine:** nil to 2 hours, sunniest at Dublin Airport

**Wednesday 3rd:** Early rain in the west spread eastwards during the night to give a wet morning in most places. A clearance reached the west and northwest coast by late morning and spread to all parts by mid-afternoon. There were sunny spells in most parts in the afternoon, although further showers spread from the west during the evening. Winds were moderate southerly in direction.

**Rainfall:** 2 to 13mm, heaviest at Rosslare, 2mm at Malin Head

**Temperature:** max. 10°C to 14°C, min. 2°C to 8°C, ground temperatures down to -3°C at Kilkenny and Mullingar

**Sunshine:** trace to 8 hours, sunniest at Belmullet, trace at Rosslare

**Thursday 4th:** Showers countrywide with thunder and lightning in eastern coastal regions at first. The showers continued in the west but it became dry and clear elsewhere with fog in places. Showers became more widespread again during the afternoon, some of them heavy. Fog returned to some eastern areas by evening. Light southwesterly winds throughout.

**Rainfall:** nil to 4mm, heaviest at Valentia, nil at Malin Head

**Temperature:** max. 10°C to 13°C, min. -1°C to 7°C, ground temperatures down to -7°C at Kilkenny

**Sunshine:** 1 to 8 hours, sunniest at Malin Head, 1 hour at Cork Airport

**Friday 5th:** Dry and cool early in the period with occasional showers in the southeast. Widespread frost and some fog also. Showers developed in the west during the morning, with fog persisting in places until around noon. Sunny spells also during the morning. Mostly dry and sunny through the afternoon with just the odd shower in western areas. Dry and clear for the evening and night with frost again becoming widespread. Light winds throughout.

**Rainfall:** nil to 1mm, heaviest at Belmullet

**Temperature:** max. 9°C to 12°C, min. -1°C to 3°C, ground temperatures down to -6°C at Shannon Airport and Birr

**Sunshine:** 4 to 9 hours, sunniest at Valentia, 4 hours at Casement Aerodrome

**Saturday 6th:** It was clear and cold in the early hours with a sharp ground frost. Fog patches also. It was a mostly fine day with sunny spells and a few scattered showers. The showers died out in the evening. Under clear skies it turned cold and frosty. A light to moderate northwesterly breeze prevailed.

**Rainfall:** nil to 4mm, heaviest at Malin Head

**Temperature:** max. 9°C to 12°C, min. -2°C to 5°C, ground temperatures down to -9°C at Birr

**Sunshine:** 6 to 9 hours, sunniest at Rosslare

**Sunday 7th:** There was some frost and fog at first in the morning. It was dry almost everywhere with long sunny spells, particularly in the east. Frost and some patches of mist and fog developed later in the evening, under largely clear skies. Winds were light westerly in direction.

**Rainfall:** nil to trace

**Temperature:** max. 9°C to 13°C, min. -1°C to 4°C, ground temperatures down to -8°C at Kilkenny and Birr

**Sunshine:** 2 to >10 hours, sunniest at Rosslare, 2 hours at Valentia

**Monday 8th:** A cool, dry day generally with long sunny spells and afternoon temperatures slightly below normal. Becoming cold again after dark with ground frost in inland areas. Light southeasterly winds at first became moderate, sometimes fresh and gusty during the day.

**Rainfall:** nil

**Temperature:** max. 8°C to 11°C, min. -2°C to 6°C, ground temperatures down to

-10°C at Kilkenny

**Sunshine:** 3 to 10 hours, sunniest at Mullingar, 3 hours at Cork Airport

**Tuesday 9th:** It was another cool and dry day with patches of mist or haze and sunny spells, particularly in the northern half of the country. Cloudier in the south. Afternoon temperatures were below normal in many places. Becoming cold after dark with ground frost returning to some places. Light variable winds at first, becoming moderate and gusty during the day.

**Rainfall:** nil

**Temperature:** max. 7°C to 11°C, min. -4°C to 7°C, ground temperatures down to -9°C at Dublin Airport

**Sunshine:** trace to 10 hours, sunniest at Malin Head, trace at Cork Airport

**Wednesday 10th:** Mainly dry during the day with just a few spells of rain and hail showers. Long sunny periods in many places. Winds increased in strength during the period, up to gale force at times with stronger gusts, and continued strong, especially along coastal areas for the rest of the period. Sharp to severe frost again after dark. Very cold in the strong southeasterly wind.

**Rainfall:** nil to 1 mm, heaviest at Valentia

**Temperature:** max. 5°C to 9°C, min. 0°C to 6°C, ground temperatures down to -5°C at Mullingar

**Sunshine:** 1 to 9 hours, sunniest at Birr

**Thursday 11th:** Dry initially in the east but rain, sleet, and some snow in western areas moved slowly eastwards throughout the day, reaching most areas by afternoon. Very cold, especially in areas exposed to the southeasterly wind. Rainfall was heaviest in the west, south and midlands, with only light falls in northern areas. No sunshine except for brief periods in the southwest. Southeasterly winds continued at strong gale force in most areas, with gusts of up to 60 knots in places.

**Rainfall:** trace to 42mm, heaviest in the southwest, trace at Malin Head

**Temperature:** max. 2°C to 12°C, min. 0°C to 4°C, ground temperatures down to -1°C at Mullingar and Connacht Airport

**Sunshine:** nil generally, <2 hours at Valentia

**Friday 12th:** Early rain or sleet in all areas except Ulster; the sleet turned to snow on higher ground. By dawn the rain or sleet had spread into Ulster, while a clearance had reached the south and this extended to the east and northeast by mid-afternoon. Sunny spells also in the south and southwest. Winds were light to moderate southeasterly, veering southerly or southwesterly later and falling light.

**Rainfall:** <1 to 10mm, heaviest at Connacht Airport, <1mm at Malin Head

**Temperature:** max. 5°C to 11°C, min. 0°C to 4°C, ground temperatures down to -4°C at Birr

**Sunshine:** nil to 6 hours, sunniest at Cork Airport

**Saturday 13th:** Patchy rain or drizzle in parts of the north overnight, with some showers in the southwest. Cold in the midlands and east with frost. Showers became more widespread through the morning and afternoon, dying out in the evening. By late evening another band of rain moved into the west from the Atlantic. Sunny spells in all areas between showers. Winds were light and variable.

**Rainfall:** <1 to 5mm, heaviest at Belmullet, <1mm at Rosslare

**Temperature:** max. 7°C to 11°C, min. -2°C to 4°C, ground temperatures down to -9°C at Kilkenny

**Sunshine:** 3 to 7 hours, sunniest at Casement Aerodrome

**Sunday 14th:** Very windy during the night with rain and drizzle, heavy at times in all areas. The rain continued during the early morning before turning to showers, some of which were heavy. Sunny spells also between the showers. South to southwesterly winds, gale to strong gale force with severe gusts.

**Rainfall:** 2 to 12mm, heaviest at Valentia, 2mm at Dublin Airport

**Temperature:** max. 10°C to 14°C, min. 3°C to 10°C, virtually no ground frost

**Sunshine:** 3 to 6 hours, sunniest at Belmullet

**Monday 15th:** Rain in the west during the night spread eastwards to reach all areas by morning. Patchy rain continued throughout the afternoon and evening. Some dry periods for a time in the west before rain returned again by evening. Strong and gusty southwesterly winds throughout the period.

**Rainfall:** 1 to 10mm, heaviest at Valentia, 1mm at Malin Head

**Temperature:** max. 11°C to 16°C, min. 6°C to 10°C, ground temperatures down to -2°C at Kilkenny

**Sunshine:** nil to 3 hours, sunniest at Malin Head

**Tuesday 16th:** Early rain in the west spread slowly eastwards during the late morning, with some heavy falls in places. The rain reached eastern areas by late afternoon, with a clearance to showers reaching the west coast during the evening. Very little sunshine. Strong and gusty south to southwesterly winds.

**Rainfall:** 2 to 23mm, heaviest in the west

**Temperature:** max. 11°C to 14°C, min. 6°C to 9°C, no ground frost

**Sunshine:** nil to 1 hour, sunniest at Rosslare

**Wednesday 17th:** The morning was dry and sunny in most places with just the odd shower. Showers became more frequent during the afternoon, with sunny periods also. Dry by evening with ground frost in places. Winds were southwesterly, strong and gusty early in the period, but easing later.

**Rainfall:** nil to 3mm, heaviest at Cork Airport

**Temperature:** max. 11°C to 14°C, min. 3°C to 8°C, ground temperatures down to -4°C at Kilkenny

**Sunshine:** 7 to 9 hours, sunniest at Malin Head and Rosslare

**Thursday 18th:** There were sunny periods and showers, many of which were heavy in places. The showers died out in the evening, but heavy rain developed as the night began. Winds were moderate to strong, southwesterly in direction; it became very windy in the south overnight.

**Rainfall:** 2 to 21mm, heaviest at Valentia, 2mm at Malin Head

**Temperature:** max. 8°C to 12°C, min. 4°C to 7°C, ground temperatures down to -1°C at Kilkenny and Mullingar

**Sunshine:** 3 to 6 hours, sunniest at Kilkenny, 3 hours at Malin Head

**Friday 19th:** Early rain in the west moved eastwards across the country and was followed by showers. Some of these showers were heavy, turning wintry with thunder at times. There were sunny spells also. The showers tended to die out by evening. South to southwesterly winds were fresh to strong and gusty.

**Rainfall:** 4 to 18mm, heaviest at Belmullet, 4mm at Dublin Airport

**Temperature:** max. 7°C to 12°C, min. 2°C to 8°C, no ground frost

**Sunshine:** 4 to 6 hours, sunniest at Dublin Airport

**Saturday 20th:** Rain and drizzle swept eastwards across the country during the morning. The rain turned showery in the afternoon; some of these showers were heavy. Becoming milder with sunny spells in the afternoon as temperatures rose to around normal values. Winds were southwesterly, gale to strong gale force with some severe gusts, easing by late afternoon and evening.

**Rainfall:** 1 to 17mm, heaviest at Connacht Airport, 1mm at Valentia

**Temperature:** max. 10°C to 15°C, min. 2°C to 7°C, ground temperatures down to -1°C at Kilkenny

**Sunshine:** 3 to 7 hours, sunniest at Cork Airport, 3 hours at Malin Head

**Sunday 21st:** Cold and breezy overnight with scattered showers, some heavy and wintry and some accompanied by thunder. The showers continued during the day and again some were wintry and thundery. Some sunny spells also. Moderate to fresh and gusty southwesterly winds veered west to northwesterly and increased fresh to strong and very gusty, easing slightly by evening.

**Rainfall:** 1 to 12mm, heaviest at Birr, 1mm at Rosslare

**Temperature:** max. 8°C to 12°C, min. 3°C to 6°C, ground temperatures below zero at Clones

**Sunshine:** 2 to 6 hours, sunniest at Rosslare, 2 hours at Belmullet

**Monday 22nd:** Showers moving across the country from the west affected most parts throughout the day; showers became mainly confined to the west and northwest by evening. There were sunny spells also in all areas. Temperatures a little lower than of late. Winds were west to northwesterly, moderate to strong with gusts.

**Rainfall:** trace to 5mm, heaviest at Valentia and Cork Airport, trace at Rosslare

**Temperature:** max. 7°C to 10°C, min. 2°C to 5°C, ground temperatures down to -2°C at Shannon Airport

**Sunshine:** 4 to 10 hours, sunniest at Rosslare, 4 hours at Malin Head

**Tuesday 23rd:** Mainly dry during the period, but showers developed in parts of the west and northwest. Long sunny periods developed everywhere. The showers died out in most places by evening and it turned cold with sharp to severe frost inland. Winds were mainly northerly in direction, quite light in many areas but stronger in the north where they reached gale force at times and were gusty.

**Rainfall:** nil to 3mm, heaviest at Belmullet

**Temperature:** max. 8°C to 12°C, min. 0°C to 5°C, ground temperatures down to -6°C at Birr

**Sunshine:** 7 to 10 hours, sunniest at Cork Airport

**Wednesday 24th:** Mainly dry overnight with just the odd light shower in the west. Cold and frosty in the midlands and east. A dry, sunny day countrywide. By late evening outbreaks of rain and drizzle began to affect northern areas. Winds were light throughout, north to northwesterly in direction.

**Rainfall:** nil to <1mm generally, 2mm at Malin Head

**Temperature:** max. 8°C to 11°C, min. -3°C to 6°C, ground temperatures below zero at all inland stations, down to -10°C at Birr

**Sunshine:** 3 to 9 hours, sunniest at Rosslare, 3 hours at Malin Head

**Thursday 25th:** A band of rain and drizzle over Connacht and Ulster moved southwards overnight, with a clearance reaching the south around dawn. A dry and mostly sunny day followed. Temperatures below normal. Winds were moderate northwesterly initially, veering northerly and becoming light by evening.

**Rainfall:** nil to 1mm, heaviest at Cork Airport

**Temperature:** max. 9°C to 13°C, min. 4°C to 8°C, no ground frost

**Sunshine:** 5 to 11 hours, sunniest at Mullingar, 5 hours at Valentia

**Friday 26th:** A mainly dry day with just a few spots of drizzle in the west and northwest. Sunny spells in Munster, but mainly overcast elsewhere. Temperatures near normal. Winds were light north or northwesterly.

**Rainfall:** nil generally, <1mm at Connacht Airport and Malin Head

**Temperature:** max. 9°C to 12°C, min. 2°C to 7°C, ground temperatures down to -3°C at Birr and Kilkenny

**Sunshine:** nil to 4 hours, sunniest at Valentia

**Saturday 27th:** A weakening cold front approached the west coast. Some early patches of mist and drizzle cleared to give a dry and mostly sunny day. Daytime temperatures were again below normal. Winds were light to moderate, west to northwesterly.

**Rainfall:** nil to 1mm, heaviest at Belmullet

**Temperature:** max. 10°C to 12°C, min. 5°C to 8°C, no ground frost

**Sunshine:** nil to 7 hours, sunniest at Valentia

**Sunday 28th:** Rain and drizzle along western coasts by early morning, but clearer with sunny spells further east. Becoming mainly dry in all areas during the afternoon with some sunshine, but patches of rain and drizzle persisted in the extreme south of the country. Mostly dry for the evening and night. Light south to southwesterly winds throughout.

**Rainfall:** nil to 3mm, heaviest at Cork Airport

**Temperature:** max. 10°C to 14°C, min. 3°C to 8°C, ground temperatures down to -3°C at Birr

**Sunshine:** 2 to 9 hours, sunniest at Valentia, 2 hours at Casement Aerodrome

**Monday 29th:** Dry during the morning with mist and fog in places, but some sunshine developed in places, especially in the northwest. Clear spells became more extensive during the afternoon, with a few scattered showers appearing along western coasts. Light south to southeasterly winds throughout.

**Rainfall:** nil to trace

**Temperature:** max. 11°C to 14°C, min. 3°C to 8°C, ground temperatures down to -4°C at Kilkenny and Birr

**Sunshine:** trace to 9 hours, sunniest at Belmullet

**Tuesday 30th:** Clear spells at first in the southwest and east, but cloudy conditions in the far west; a sharp ground frost developed where skies were clear. By dawn there was some fog in the east which was slow to clear, gradually thinning to mist. Sunny spells in the east during the afternoon, but it was a mainly dull day in the west. Southeasterly winds were fresh and gusty at times.

**Rainfall:** nil to trace

**Temperature:** max. 10°C to 14°C, min. 2°C to 7°C, ground temperatures down to -4°C at Dublin Airport

**Sunshine:** <1 to 5 hours, sunniest at Rosslare, <1 hour at Belmullet

**Wednesday 31st:** Clear spells at first in the southwest and east, followed by a dry day in most places. Long sunny spells developed in most parts of the country, particularly in the north. Skies in the east clouded up as the evening progressed and heavy showers moved in from the Irish Sea, which gave appreciable amounts of rainfall over parts of Wicklow and Dublin. Winds were easterly, light to moderate with occasional gusts off northern coasts.

**Rainfall:** nil to trace generally, 2mm at Dublin Airport

**Temperature:** max. 10°C to 15°C, min. 3°C to 9°C, ground temperatures down to -3°C at Dublin Airport

**Sunshine:** trace to 10 hours, sunniest at Malin Head, trace at Cork Airport

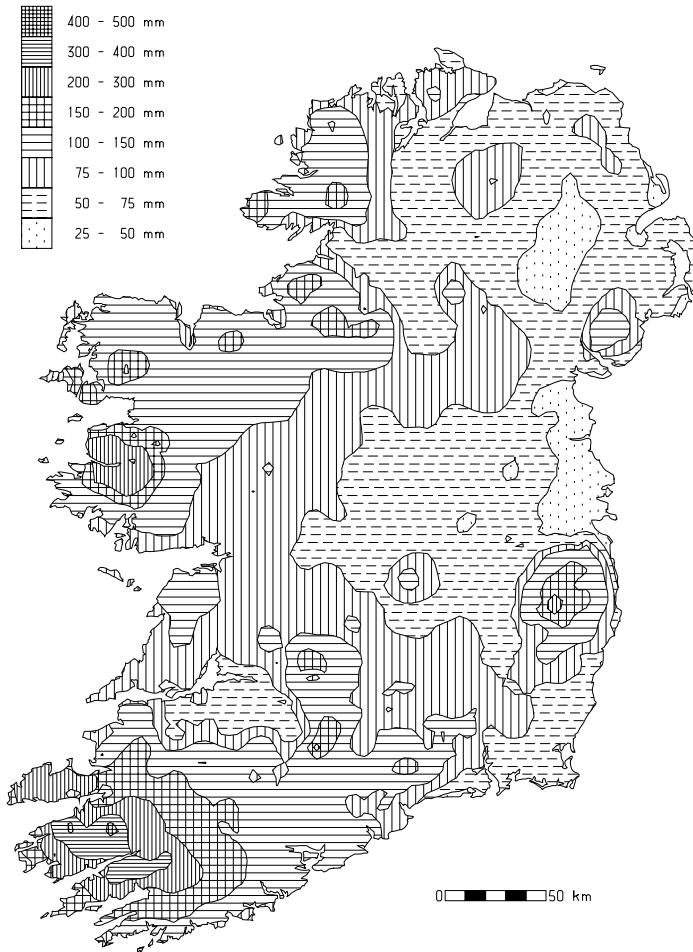
## Near normal rainfall at most stations, wet in parts of south and southwest

Rainfall totals for the month were close to normal generally but it was a relatively wet month in the south and southwest. Totals ranged from 33mm at Dublin (Phoenix Park) to 246mm at Maam Valley, Co. Galway, with percentage of normal values between 58% at Phoenix Park and 142% at Fermoy (Moorepark), Co. Cork, where it was the wettest March since 1996.

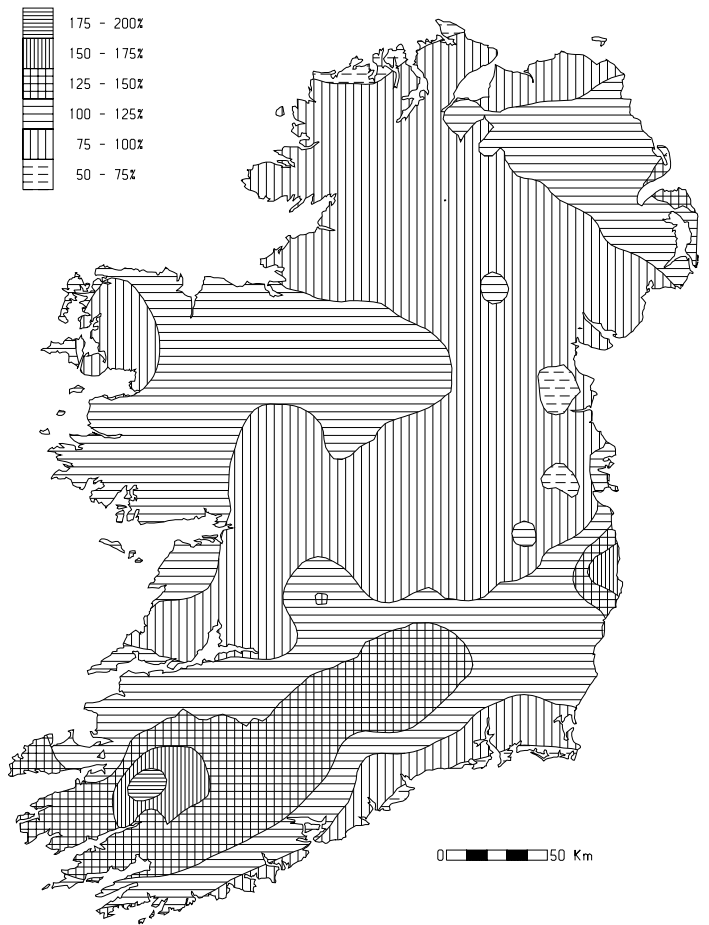
Heavy falls were measured at all stations around mid-month, some of which was in the form of sleet or snow between the 11th and 13th. The highest daily fall of the month, 43.1mm, was measured at Mount Russell, Co. Limerick, on the 11th; Kilkenny's fall of 27.9mm on the same day was the highest daily fall for March at the station since 1984. The month also produced some heavy showers with thunder, especially in the period 18th to 21st. There were only between 7 and 9 wetdays (*days with 1mm or more of rainfall*) during the month at some stations in the east and southeast, but most places had between 12 and 16 wetdays, with up to 19 measured at some stations in the west.

<i>County/ Station</i>	Total Amount (mm)	% of 1961-90 average	Most in a day / date		Number of Raindays (>0.2mm)	Wetdays (≥1mm)
<b>CO. CLARE</b>						
SHANNON AIRPORT	69.0	97	14.3	18	19	12
CARRON	125.5	105	16.4	18	22	18
<b>CO. CORK</b>						
FERMOY (MOORE PARK)	112.4	142	34.2	11	19	15
CORK AIRPORT	119.9	123	21.5	11	20	18
SHERKIN ISLAND	102.9	106	20.6	10	17	14
BALLINCURRIG (PEAFIELD)	146.3		37.5	11	18	16
<b>CO. DONEGAL</b>						
MALIN HEAD	53.8	62	8.7	19	17	13
BALLYSHANNON (CATHLEEN'S FALL)	74.5	85	12.2	19	20	15
GLENTIES	114.5	87	18.1	2	16	15
<b>CO. DUBLIN</b>						
DUBLIN (PHOENIX PARK)	33.1	58	6.2	11	16	9
DUBLIN AIRPORT	44.4		8.4	3	17	13
CASEMENT AERODROME	48.5	97	8.8	18	18	12
DUBLIN (MERRION SQUARE)	40.8	78	16.1	11	12	7
<b>CO. GALWAY</b>						
GALWAY (UNIV. COLL.)	92.7	104	13.6	20	18	14
MAAM VALLEY	246.4		29.0	18	21	19
CONNEMARA NATIONAL PARK	145.7	110	20.7	10	22	19
BALLYGAR	77.3	93	11.2	18	16	14
<b>CO. KERRY</b>						
VALENTIA OBSERVATORY	164.4	135	27.3	10	21	16
ARDFERT (LISCAHANE)	81.2		11.6	18	20	16
<b>CO. KILKENNY</b>						
KILKENNY	87.9	140	27.9	11	16	13
<b>CO. LETTRIM</b>						
BALLINAMORE	112.1	108	23.2	18	23	16
<b>CO. LIMERICK</b>						
MOUNT RUSSELL	134.3		43.1	11	22	19
<b>CO. LOUTH</b>						
ARDEE (BOHARNAMOE)	46.9	74	12.6	11	20	11
<b>CO. MAYO</b>						
BELMULLET	97.9	102	16.7	18	22	16
STRAIDE	108.5	125	13.0	19	21	17
CONNACHT AIRPORT	128.5		16.4	11	23	18
<b>CO. MEATH</b>						
WARRENTOWN	54.0	82	8.3	11	19	15
<b>CO. MONAGHAN</b>						
CLONES	69.9	90	17.4	18	18	15
<b>CO. OFFALY</b>						
BIRR	57.9	95	10.4	18	17	14
DERRYGREENAGH	55.5	83	11.6	18	14	10
<b>CO. SLIGO</b>						
ARDTARMON	77.0		16.5	19	20	17
<b>CO. TIPPERARY</b>						
FETHARD (PARSONSHILL)	63.7		19.8	11	19	11
<b>CO. WATERFORD</b>						
WATERFORD (TYCOR)	77.4	96	19.0	11	19	11
DUNGARVAN (CARRIGLEA)	115.5		31.1	11	17	12
<b>CO. WESTMEATH</b>						
MULLINGAR II	62.9	87	10.7	18	21	16
<b>CO. WEXFORD</b>						
JOHNSTOWN CASTLE	71.5	91	15.4	18	18	9
ROSSLARE	56.2	84	14.2	18	16	8
JOHN F. KENNEDY PARK	71.8	91	16.0	11	15	12
CLONROCHE (KNOXTOWN)	95.2		22.9	11	18	14

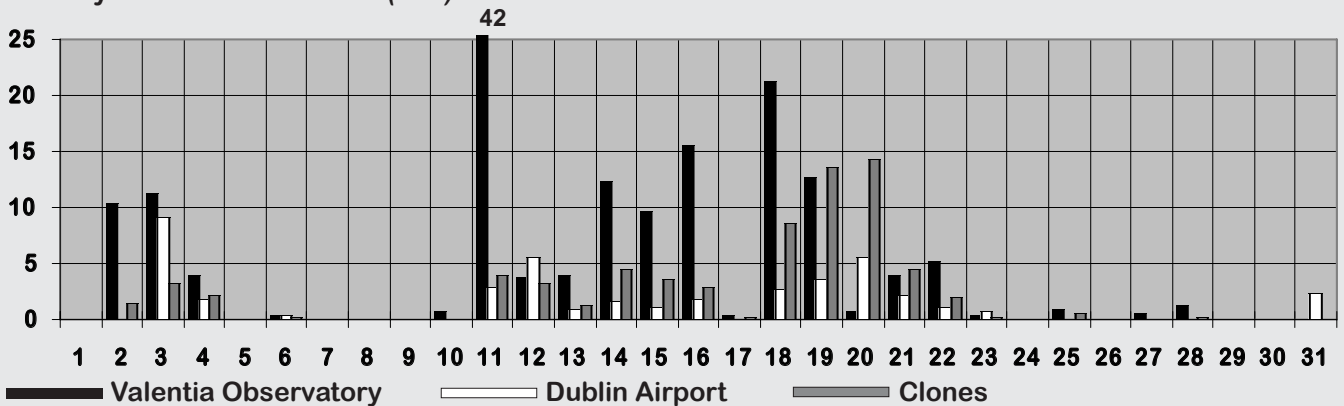
**Total rainfall (mm)**



**Percentage of normal rainfall**



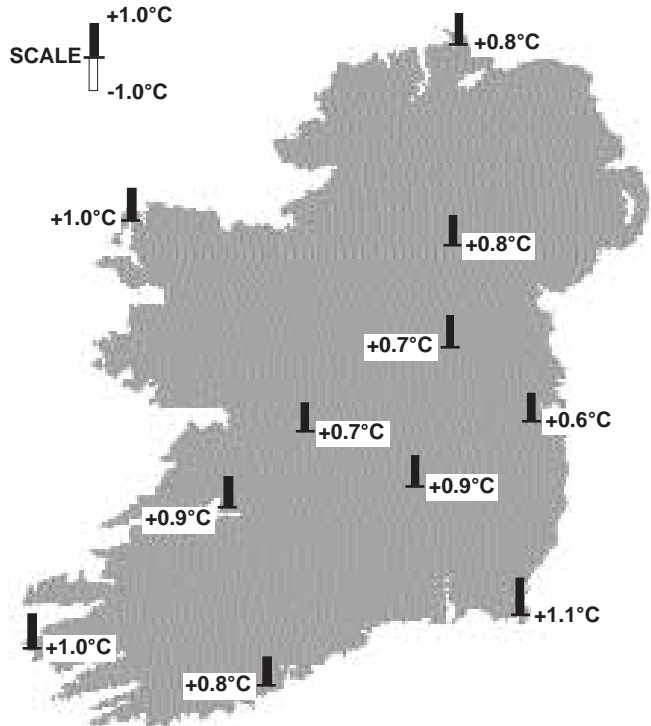
**Daily 0-24h rainfall values (mm)**



# Becoming mild after cold start

Apart from a couple of short spells of cold weather during the first half of the month, much of March was mild with little or no air frost recorded during the second half. Mean air temperatures overall were close to one degree above normal generally, ranging from 5.8°C at Connacht Airport to 8.7°C at Sherkin Island (Co. Cork).

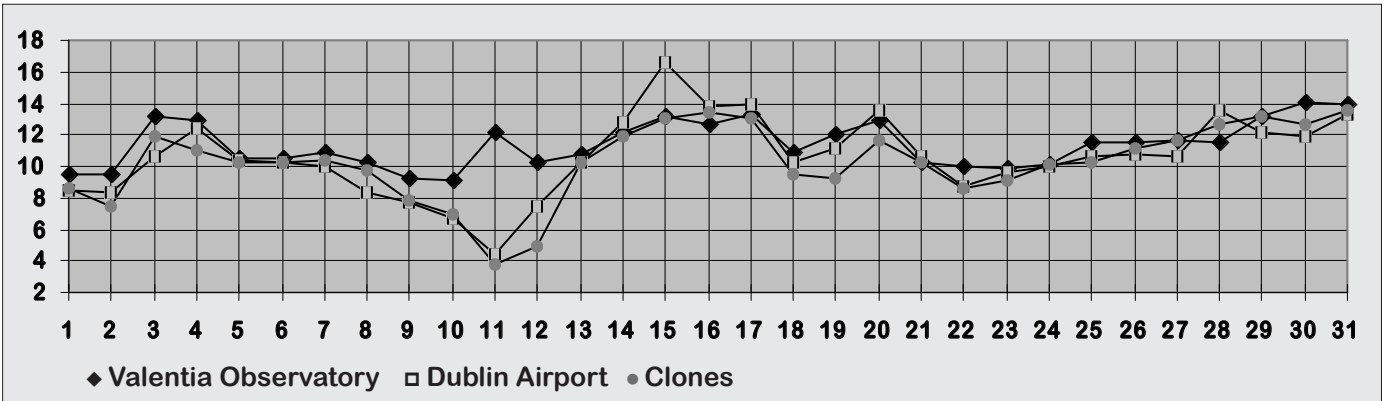
The month began with some severe frost in places, particularly in the midlands and east of the country, setting new low temperature records for March at some stations. The lowest air temperature of the month, -7.4°C, was measured at Ardee (Boharnamoe), Co. Louth, on the 1st, equalling the previous lowest March temperature at the station since it opened in 1968. Dublin Airport's lowest grass minimum value of -12.6°C on the 2nd was the lowest such temperature for March at the station since records commenced there in 1941. Kilkenny measured the lowest grass minimum value of the month, -13.6°C on the 1st. Temperatures rose well above normal around mid-month and again during the final few days. Dublin



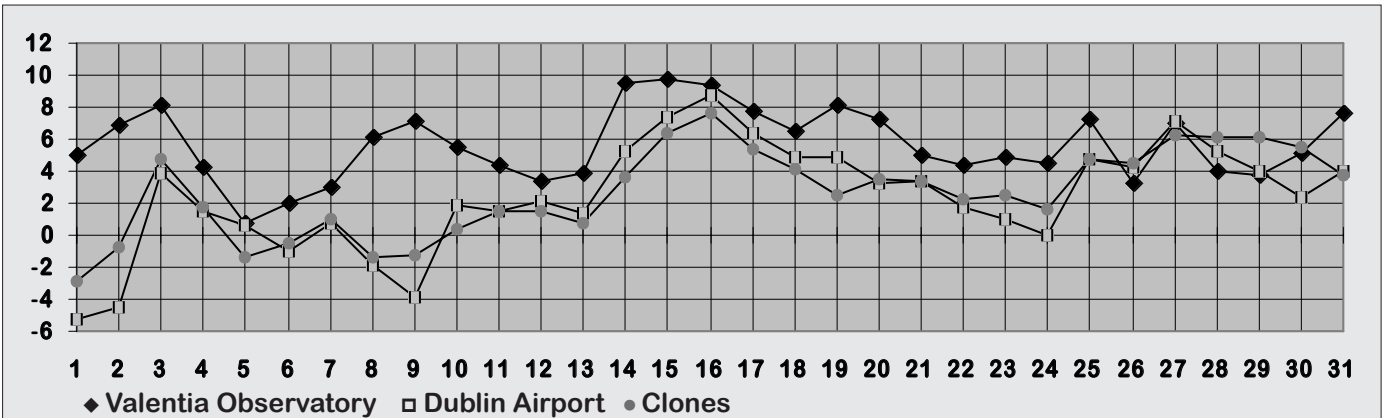
**Mean Temperature**  
(difference from 1961-90 normals)

(Phoenix Park) recorded the highest temperature of the month on the 15th, 16.9°C.

## Daily 0-24h maximum temperatures (°C)



## Daily 0-24h minimum temperatures (°C)



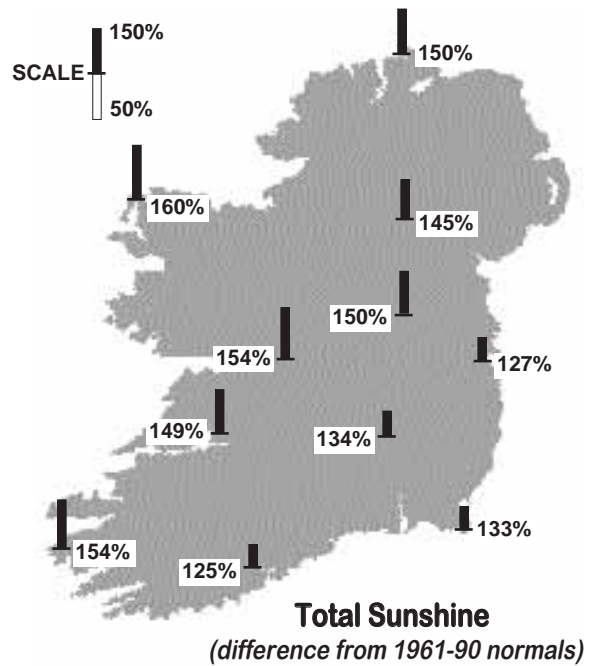
County/ Station	°C											
	Mean max.	Mean min.	Mean/ deviation from 1961-90 average		Highest max./date		Lowest min./date		Lowest grass min./date		Days with air frost ground frost	
<b>CO. CLARE</b>												
SHANNON AIRPORT	11.8	4.1	8.0	0.9	14.3	16	-2.0	1	-11.0	1	3	14
CARRON	10.7	2.9	6.8	1.0	14.4	31	-3.0	2	-6.9	1	4	15
<b>CO. CORK</b>												
FERMOY (MOORE PARK)	11.3	3.0	7.2	0.8	14.4	19	-4.6	1	-7.8	1	7	19
CORK AIRPORT	10.1	4.1	7.1	0.8	13.4	3	-0.1	1	-2.4	8	1	6
SHERKIN ISLAND	11.5	5.9	8.7	1.1	13.3	17	1.2	8	-3.7	7	0	7
BALLINCURRIG (PEAFIELD)	10.8	3.1	7.0		14.0	3 29	-2.0	1	-4.0	1	4	10
<b>CO. DONEGAL</b>												
MALIN HEAD	9.6	4.6	7.1	0.8	14.0	16	-0.5	1	-3.1	9	1	5
BALLYSHANNON (CATHLEEN'S FALL)	10.2	4.0	7.1	1.0	13.7	15	-0.7	1			1	
GLENTIES	10.7	3.2	7.0	1.2	14.5	29	-1.9	1	-5.5	8	5	13
<b>CO. DUBLIN</b>												
DUBLIN (PHOENIX PARK)	11.1	2.8	7.0	0.8	16.9	15	-5.0	1	-9.2	2	5	17
DUBLIN AIRPORT	10.7	2.6	6.7		16.6	15	-5.3	1	-12.6	2	4	15
CASEMENT AERODROME	10.7	2.7	6.7	0.6	15.7	15	-4.2	2	-8.4	2	6	14
DUBLIN (MERRION SQUARE)	10.6	4.9	7.8	0.5	15.2	15	-1.3	1			2	
<b>CO. GALWAY</b>												
GALWAY (UNIV. COLL.)	11.7	3.8	7.8	0.9	15.4	31	-3.0	1	-9.6	1	4	16
MAAM VALLEY	11.5	4.7	8.1		14.8	29	0.7	8	-3.4	8	0	9
CONNEMARA NATIONAL PARK	11.4	4.2	7.8	1.2	15.3	31	1.0	1			0	
BALLYGAR	11.4	2.5	7.0		15.1	28	-4.0	1	-7.5	1	7	15
<b>CO. KERRY</b>												
VALENTIA OBSERVATORY	11.5	5.7	8.6	1.0	14.1	30	0.7	5	-3.5	5	0	6
ARDFERT (LISCAHANE)	12.2	3.8	8.0	0.9	15.6	29	-2.0	1	-7.1	1	3	16
<b>CO. KILKENNY</b>												
KILKENNY	11.4	2.7	7.1	0.9	15.0	15	-6.2	1	-13.6	1	6	23
<b>CO. LEITRIM</b>												
BALLINAMORE	10.6	2.3	6.5	0.8	13.8	31	-6.4	1	-11.4	1	6	18
<b>CO. LIMERICK</b>												
MOUNT RUSSELL	10.5	3.7	7.1		14.8	3	-1.0	1	-7.5	1	2	12
<b>CO. LOUTH</b>												
ARDEE (BOHARNAMOE)	10.9	2.7	6.8	1.0	15.4	15	-7.4	1	-9.4	1	8	12
<b>CO. MAYO</b>												
BELMULLET	11.2	4.6	7.9	1.0	14.7	31	0.2	1	-3.1	1	0	7
STRAIDE	11.0	2.9	7.0	0.7	14.0	3 31	-4.5	1	-8.5	1	9	14
CONNACHT AIRPORT	9.1	2.4	5.8		12.4	31	-3.3	1	-4.7	1	5	12
<b>CO. MEATH</b>												
WARRENTOWN	10.8	2.6	6.7	0.8	15.5	15	-6.9	1	-9.1	1	6	15
<b>CO. MONAGHAN</b>												
CLONES	10.3	2.7	6.5	0.8	13.5	31	-2.9	1	-8.9	1	6	14
<b>CO. OFFALY</b>												
BIRR	11.2	2.8	7.0	0.7	14.2	15 31	-3.3	1	-11.9	1	5	16
DERRYGREENAGH	11.0	2.4	6.7	1.1	15.3	31	-5.4	1	-11.9	1	8	23
<b>CO. SLIGO</b>												
ARDTARMON	10.7	4.1	7.4		13.6	17	-0.9	1	-4.0	1	1	12
<b>CO. TIPPERARY</b>												
FETHARD (PARSONSHILL)	10.5	2.0	6.3		13.8	15	-2.7	1	-5.7	1	6	11
<b>CO. WATERFORD</b>												
WATERFORD (TYCOR)	11.7	4.0	7.9	1.3	15.1	19	-3.4	2			1	
DUNGARVAN (CARRIGLEA)	11.6	4.1	7.9	1.1	14.9	20	-4.0	1	-5.4	1	4	6
<b>CO. WESTMEATH</b>												
MULLINGAR II	10.6	2.2	6.4	0.7	14.3	31	-6.2	1	-11.1	1	5	17
<b>CO. WEXFORD</b>												
JOHNSTOWN CASTLE	10.6	4.3	7.5	1.1	14.7	20	-1.0	1	-5.7	2	2	8
ROSSLARE	10.5	5.4	8.0	1.1	14.7	20	0.9	1	-2.8	2	0	1
JOHN F. KENNEDY PARK	10.8	4.0	7.4	1.0	14.2	20	-0.1	1	-5.3	1	1	15
CLONROCHE (KNOXTOWN)	10.5	3.2	6.9		14.5	20	-4.0	1	-8.2	1	3	11

County/ Station	Daily mean (hours/day)	% of average	% of possible	Most in a day/date	
<b>CO. CLARE</b>					
SHANNON AIRPORT	4.99	149	42	9.3	25
<b>CO. CORK</b>					
CORK AIRPORT	4.38	125	37	9.7	23
SHERKIN ISLAND	5.18	147	44	10.8	22
BALLINCURRIG (PEAFIELD)	4.55		39	9.7	7 24
<b>CO. DONEGAL</b>					
MALIN HEAD	4.61	150	39	10.1	31
BALLYSHANNON (CATHLEEN'S FALL)	4.80	150	41	10.3	8
<b>CO. DUBLIN</b>					
DUBLIN AIRPORT	4.53	127	38	10.2	7
CASEMENT AERODROME	4.21	128	35	9.4	8
<b>CO. GALWAY</b>					
GALWAY (UNIV. COLL.)	5.25	155	44	9.4	1
<b>CO. KERRY</b>					
VALENTIA OBSERVATORY	4.69	154	40	9.0	5 28
ARDFERT (LISCAHANE)	5.36		45	9.7	1 5
<b>CO. KILKENNY</b>					
KILKENNY	4.41	134	37	9.2	22
<b>CO. LEITRIM</b>					
BALLINAMORE	3.78	126	32	10.3	25
<b>CO. MAYO</b>					
BELMULLET	5.27	160	45	9.8	8
STRAIDE	4.57			9.2	8
CONNAUGHT AIRPORT	4.67		39	10.5	25
<b>CO. MONAGHAN</b>					
CLONES	4.38	145	37	10.4	25
<b>CO. OFFALY</b>					
BIRR	4.88	154	41	9.5	23
<b>CO. WATERFORD</b>					
DUNGARVAN (CARRIGLEA)	4.27	140	45	9.8	25
<b>CO. WESTMEATH</b>					
MULLINGAR II	4.95	150	42	10.6	25
<b>CO. WEXFORD</b>					
JOHNSTOWN CASTLE	4.00	110	34	9.4	7
ROSSLARE	5.15	133	43	10.4	7
JOHN F. KENNEDY PARK	4.37	129	37	9.2	7
CLONROCHE (KNOXTOWN)	4.25		39	9.6	24

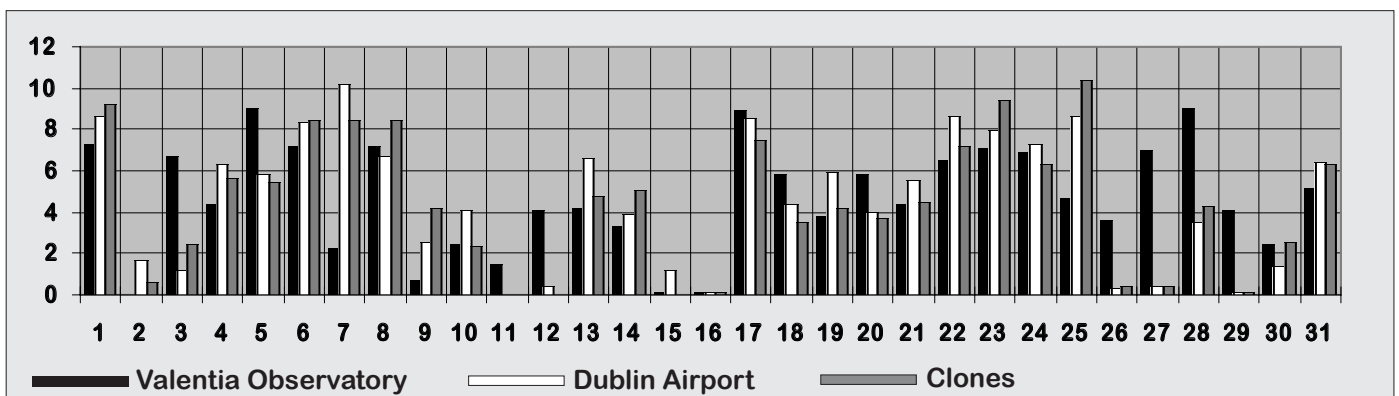
## Sunniest March on record at Belmullet

March sunshine totals were well above normal everywhere. Daily mean values of between 4 and 5 hours generally are close to what would normally be expected in a typical April. Totals ranged from 117 hours at Ballinamore, Co. Leitrim, to 166 hours at Ardfert (Liscahane), Co. Kerry. Percentage of normal values were between 110% at Johnstown Castle, Co. Wexford and 160% of normal at Belmullet, where it was the sunniest March since records began there in 1956.

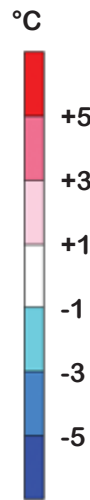
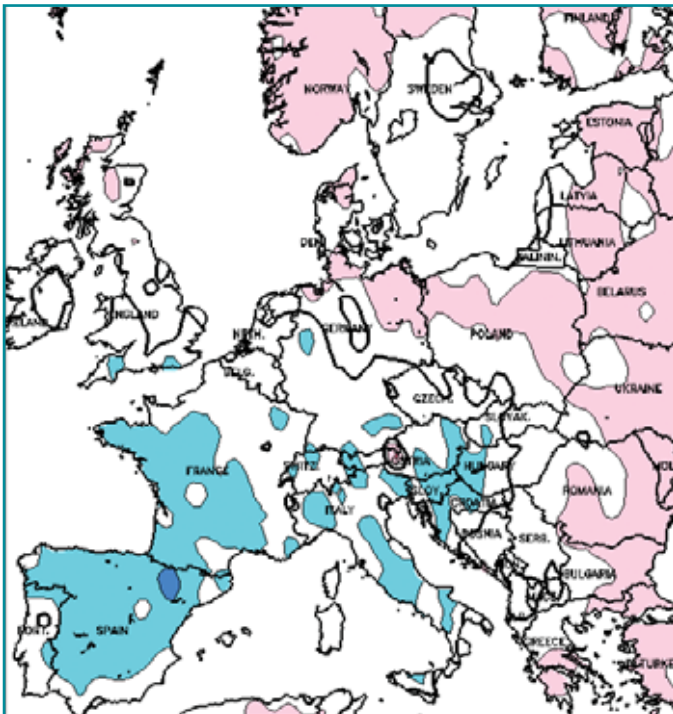
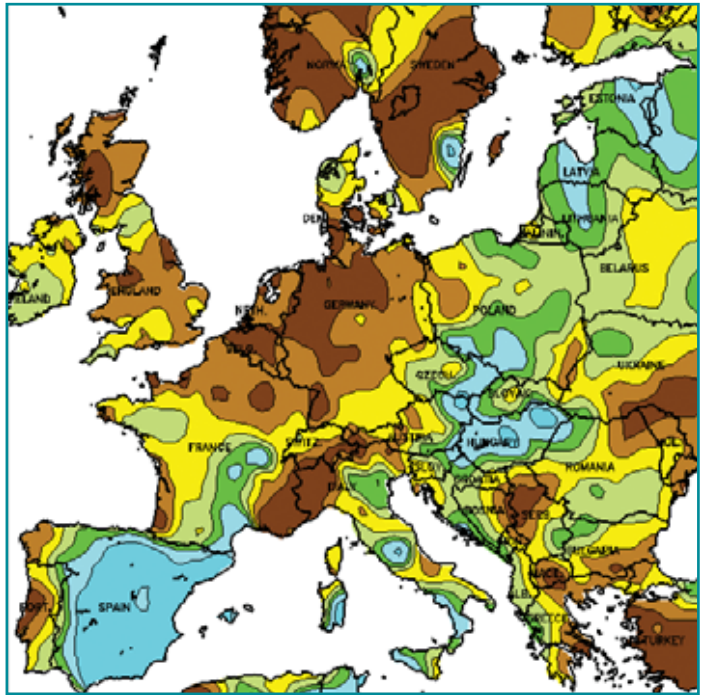
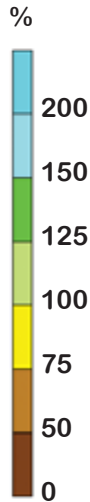
The sunniest period of the month at many stations was between the 23rd and 25th, with the highest daily value, 10.6 hours, recorded at Mullingar on the 25th. Global solar radiation totals were also well above normal everywhere, ranging from 114% of normal at Kilkenny to 131% at Belmullet.



### Daily sunshine values (hours)



**MARCH RAINFALL**  
(Percentage of 1961-1990 normal)



**MARCH MEAN TEMPERATURES**  
(difference from 1961-1990 normal)

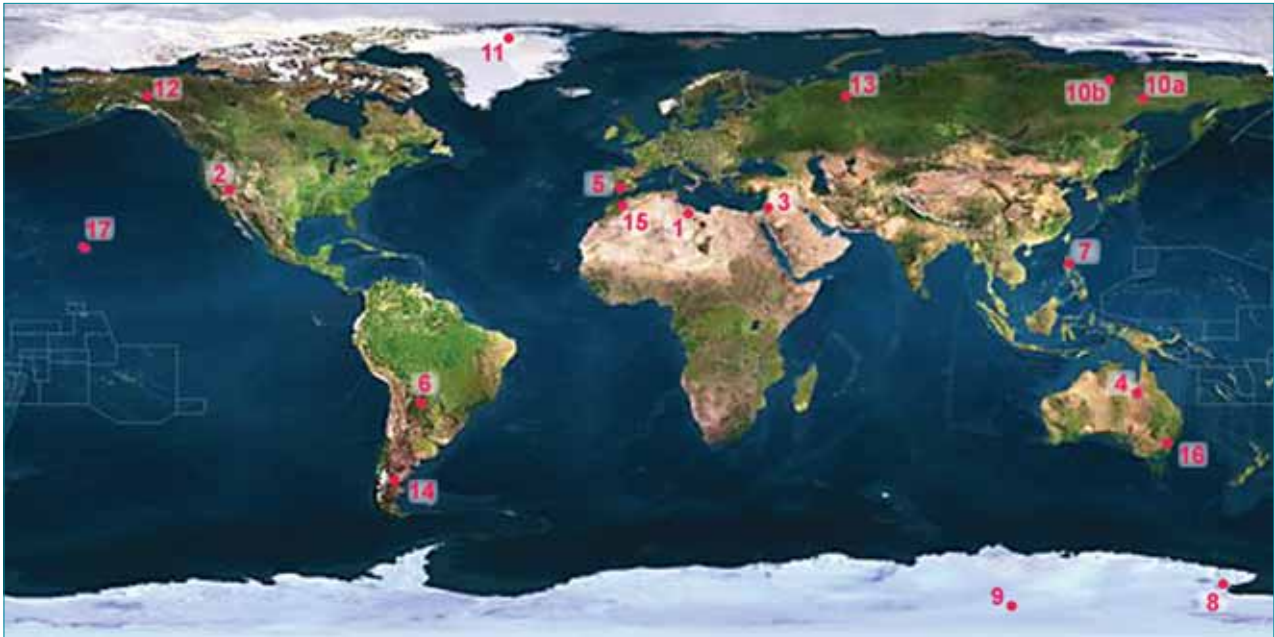
Data supplied by NOAA  
Climate Prediction Centre,  
US Department of Commerce

A world map with color-coded regions and text boxes highlighting major weather events from March 2004.

**Global weather highlights of the month**

- Maryland:** In Maryland, winds gusting to 50 knots (55 mph) caused a water taxi with 25 people aboard to capsize in Baltimore's inner harbour. The winds were associated with a band of thunderstorms moving through the region. Five people died as a result of the accident.
- Turkey:** Severe winter weather was blamed for 11 deaths during the period 6th/7th in Turkey. Avalanches and landslides were blamed for 8 deaths, while another 3 individuals were killed when an ice floe in floodwaters destroyed a bridge.
- Madagascar:** Tropical Cyclone *Gaflo* was the strongest tropical cyclone to hit Madagascar for ten years. Maximum sustained winds of 140 knots (160 mph), in combination with torrential rain across much of the island, caused a total of 237 confirmed fatalities, while 300,000 were rendered homeless.
- South Korea:** A heavy snowstorm affected South Korea between the 4th and 6th, leaving around 4,000 motorists stranded on motorways. The central province of Chungcheong received a daily fall of nearly 60cm, the heaviest such fall since records began in 1904.
- Australia:** A heatwave in eastern Australia that began in February continued during the first three weeks of March. It was the most extreme March heatwave on record in eastern Australia, with temperatures only slightly lower than the record means of January 1939.

## World records of extreme air temperatures



Geographic Area	Extreme Air Temperature (°C)	Location	Height (m)	Date	Map reference
<b>Maximum Temperatures</b>					
Africa	58	El Azizia, Libya	112	13/9/1922	1
North America	57	Death Valley, California	-54	10/7/1913	2
Asia	54	Tirat Tsvi, Israel	-220	21/6/1942	3
Australia	53	Cloncurry, Queensland	190	16/1/1889	4
Europe	50	Seville, Spain	8	4/8/1881	5
South America	49	Rivadavia, Argentina	206	11/12/1905	6
Oceania	42	Tuguegarao, Philippines	22	29/4/1912	7
Antarctica	15	Vanda Station	15	05/1/1974	8
<b>Minimum Temperatures</b>					
Antarctica	-89	Vostok	3421	21/7/1983	9
Asia	-68	Oimekon, Russia	800	6/2/1933	10a
Asia	-68	Verkhoyansk, Russia	107	7/2/1892	10b
Greenland	-66	Northice	2344	9/1/1954	11
North America	-63	Snag, Yukon	646	3/2/1947	13
Europe	-55	Ust'Shchugor, Russia	85	<i>exact date unknown</i>	13
South America	-33	Sarmiento, Argentina	268	1/6/1907	14
Africa	-24	Ifrane, Morocco	1635	11/2/1935	15
Australia	-23	Charlotte Pass, N.S.W.	1755	29/1/1994	16
Oceania	-10	Haleakala Summit, Hawaii	2973	2/1/1961	17

map and table courtesy NOAA / National Climatic Data Centre, US Department of Commerce