

Monthly Weather Bulletin

No. 263

MARCH 2008

WETTER BUT SUNNIER THAN NORMAL; MEAN TEMPERATURES NEAR AVERAGE

Unsettled conditions during most of March brought rain or showers on most days, with frequent thunderstorms, especially over the western half of the country. Deep Atlantic depressions gave strong winds at times also, particularly during the period between the 10th and 12th, when a number of stations recorded their highest ever March gusts. Rainfall totals for the month were above normal almost everywhere; more than twice the average rainfall for March was measured in parts of Dublin. It was the wettest March for between 12 and 22 years in many places and the wettest for more than 40 years at both Dublin Airport and Casement Aerodrome. Heaviest falls were recorded during the periods 9th to 11th and 27th to 31st, resulting in localised

- Continued on page 3

Right

A major storm moved across the south of Ireland on the 10th, giving exceptionally low pressure values, together with severe winds and extreme sea conditions to the south and west (see also page 2). Pictured right is the German sail training vessel *Roald Amundsen*, which was caught in the storm on a voyage between Lisbon and Cobh. Eleven of the ship's toughened canvas sails were ripped when it encountered force 12 winds and mountainous seas. (picture Irish Examiner)



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Lowest March pressure on record during storm on 10th - page 2

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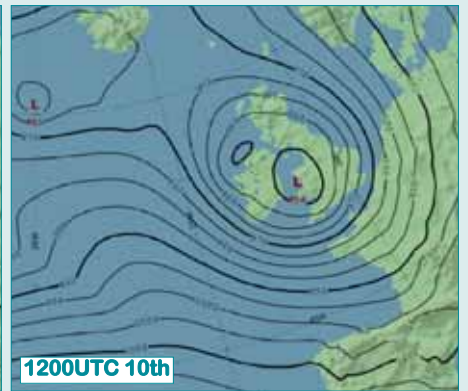
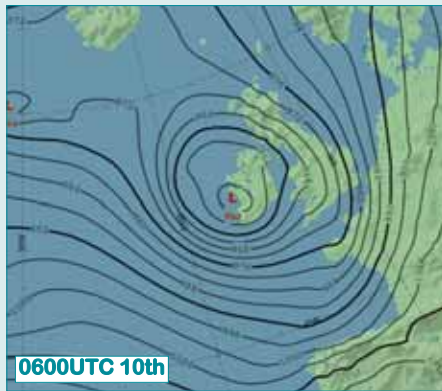
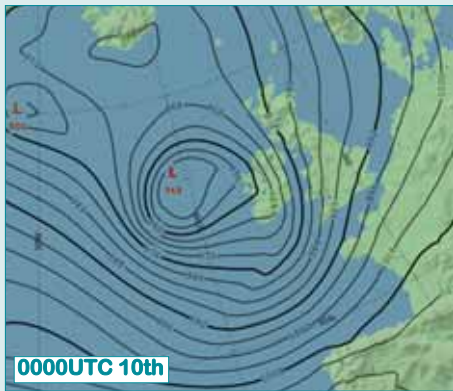
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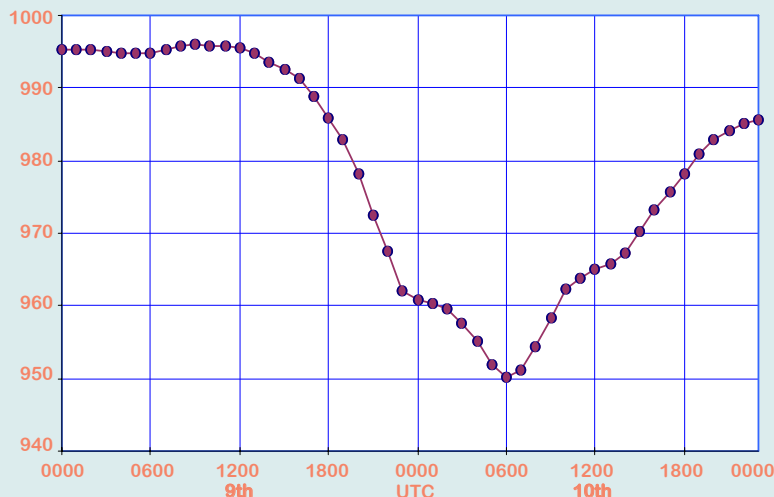
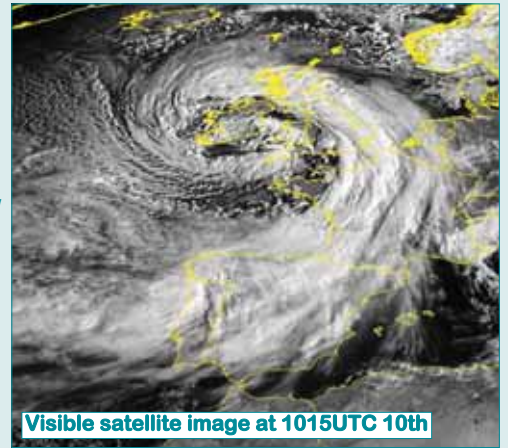
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Notes on the tables and map showing location of stations appear in January issue

LOWEST MARCH PRESSURE ON RECORD FOR IRELAND ON 10TH



An exceptionally deep depression of central pressure 950hPa crossed the southwest of the country early on the 10th. Shannon Airport measured a mean sea level pressure value of 950.1hPa at 0600UTC on this day (see chart below), the lowest pressure value on record for March in Ireland. A band of heavy rain crossed the country overnight, clearing to squally showers for the remainder of the day, some with hail and thunder. Flooding was reported in the south of the country, where 2-day falls of up to 50mm were measured. Coastal defences were reinforced around Dublin Bay in areas liable to flooding (pictured left). As the depression moved across the south of the country, storm force west to northwesterly winds developed near the southwest coast; Valentia Observatory's gust of 73 knots (135km/h) at 1057UTC was its highest on record for March. Further north and east, wind speeds were higher on the 11th, as the depression moved eastwards. At sea, the M3 buoy off the southwest coast recorded a wave of 13.4m at 1100UTC on the 10th, the highest wave on record there for March.



HOURLY MEAN SEA LEVEL PRESSURE (hPa) AT SHANNON AIRPORT

	VALUE	YEAR	DAY	LOCATION
JANUARY	936.6	1884	26 th	MARKREE CASTLE
FEBRUARY	942.3	1951	4 th	MIDLETON
MARCH	950.1	2008	10 th	SHANNON AIRPORT
APRIL	952.9	1948	1 st	MALIN HEAD
MAY	970.3	1983	10 th	BELMULLET
JUNE	975.3	1843	8 th	PHOENIX PARK
JULY	978.0	1988	25 th	BELMULLET
AUGUST	967.7	1959	14 th	BELMULLET
SEPTEMBER	957.1	1953	21 st	CLAREMORRIS
OCTOBER	957.5	2004	28 th	VALENTIA
NOVEMBER	931.2	1838	28 th	LIMERICK
DECEMBER	927.2	1886	8 th	BELFAST

LOWEST MEAN SEA LEVEL PRESSURE (hPa) ON RECORD FOR EACH MONTH IN IRELAND

flooding at the end of the month. Most stations recorded a total of between 16 and 22 wetdays (days with 1mm or more rainfall), compared with the normal range for March of 11 to 17, while around 25 wetdays were recorded at stations in the north and northwest. Temperatures were close to normal values for March throughout almost all of the month, but fell low enough for falls of sleet or snow to develop on a number of days, especially in western areas. There was a total of between 16 and 20 ground frosts at most inland stations compared with between 12 and 14 in an average March; Kilkenny's total of 23 ground frosts during the month was almost twice the average amount for March at the station. Despite being a wet month in most places, it was also a sunnier than normal month everywhere, with sunshine totals around 10% to 25% higher than normal generally.

1st to 16th: Deep depressions passing close to or over Ireland brought very unsettled conditions, with strong winds and spells of rain or showers each day. Heaviest falls were over the western half of the country, with relatively little rain in eastern areas at first. All areas received heavy rain between the 9th and 11th,

however, as an exceptionally deep depression moved across the country (*see opposite page*). Shannon Airport's MSL pressure value of 950hPa on the 10th was the lowest atmospheric pressure for March ever measured in Ireland. The same period produced very strong winds, especially over the south of the country, with very high seas on Atlantic coasts; Valentia Observatory, Rosslare and Knock Airport each recorded their highest gusts for March on either the 10th or 11th.

17th to 19th: A short spell of relatively dry and cold weather, as an anticyclone developed to the northwest. Light winds and generally clear skies allowed widespread severe frost to develop.

20th to 31st: Unsettled weather returned, as low pressure became established to the northeast, bringing a cold northerly airstream across the country and light rain or showers each day. Winds turned to a more westerly direction from the 26th onwards, bringing an increase in daytime temperatures. Active frontal systems gave falls of heavy rain in many areas, occasionally accompanied by thunder. Flooding followed heavy rain in some eastern areas on the 30th and 31st.

Wind and elements: Mean windspeeds for the month of between 9 and 15 knots generally (*17 and 28km/h*) were above normal everywhere and were the highest for March for between 13 and 19 years in many places. The strongest winds were recorded between the 10th and 12th, with the highest gust, 73 knots (*135 km/h*), measured at both Valentia Observatory on the 10th and at Belmullet on the 11th; this was Valentia's highest March gust on record. There was frequent thunderstorm activity, mainly in the periods 7th to 13th and 26th to 30th. Hail showers were recorded in the periods 2nd to 4th, 7th to 13th, 20th to 23rd and 26th to 30th, while snow was observed in the periods 2nd to 4th, 9th to 11th and on the 22nd and 28th. Fog was widespread on the 14th and 15th.

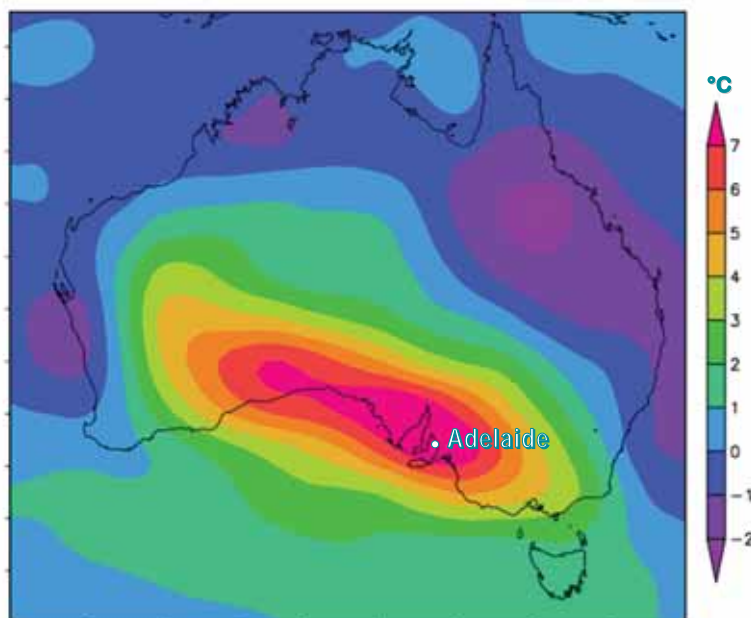
Below

In South Australia, a heatwave during the first half of March saw Adelaide record 15 consecutive days of maximum temperatures above 35°C, its longest-running heatwave on record. Adelaide also set a new high minimum temperature during the night of the 14th, recording a minimum temperature of 30.2°C, breaking the previous record of 29.7°C set in March 1985.

Transport officials ordered the city's trains to slow their speeds, fearing that the extreme heat would buckle the track.

(Image: NOAA Climate Prediction Centre, US Department of Commerce)

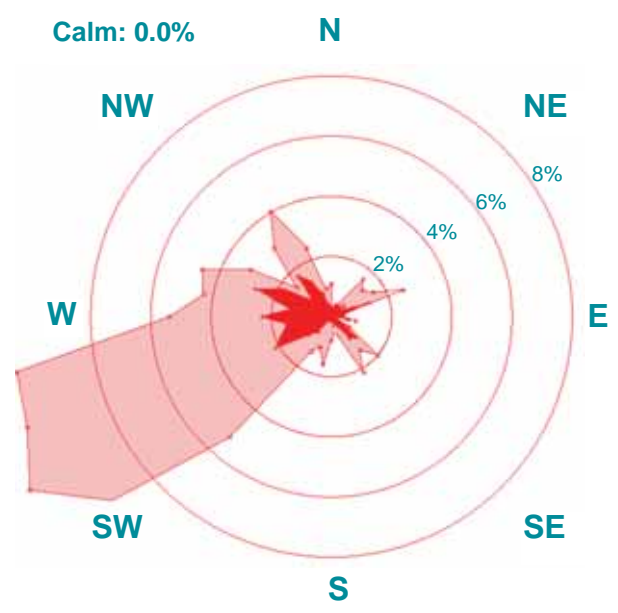
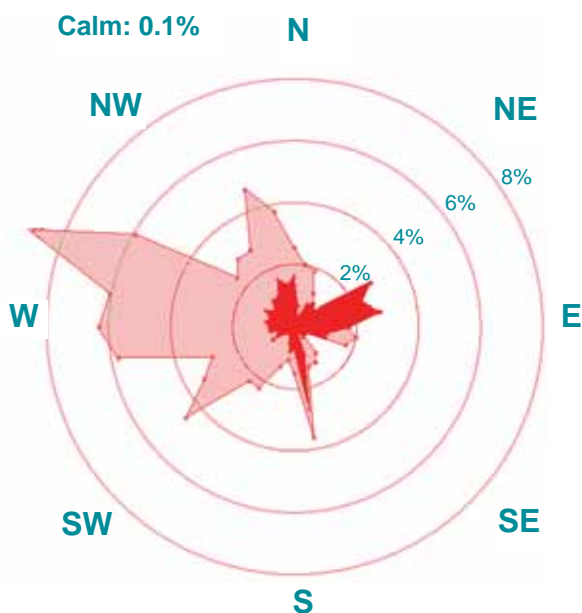
TEMPERATURE DIFFERENCE FROM NORMAL, MARCH 1ST-17TH



County / Station	WIND (KNOTS)										ELEMENTS				
	Mean speed	Max. dir.	10-min. speed	mean date/hour	Max. dir.	Gust speed	date/time	Days with gales	gale gusts	Hours with gale gusts	Snow	Snow Lying	Hail	Thunder	Fog
CO. CLARE SHANNON AIRPORT	12.5	250	40	11/17	280	58	11/1948	4	15	91	2	0	7	1	0
		260	40	12/01											
CO. CORK CORK AIRPORT	12.0	290	42	10/16	290	65	10/1444	2	17	107	1	0	2	0	7
CO. DONEGAL MALIN HEAD	20.4	320	47	21/02	320	66	21/0105	15	25	328	2	0	13	1	0
CO. DUBLIN CASEMENT AERODROME	13.0	260	42	12/03	260	60	12/0222	4	13	99	3	0	3	1	0
DUBLIN AIRPORT	15.0	250	44	12/03	260	60	12/0322	2	15	103	2	0	1	1	2
CO. KERRY VALENTIA OBSERVATORY	13.6	290	44	10/14	290	73	10/1057	3	20	164	0	0	10	1	0
CO. KILKENNY KILKENNY	9.3	270	31	11/15	270	50	11/1723	0	11	46	n/a	1	---	n/a	---
		290	31	12/04											
CO. MAYO BELMULLET	13.6	260	46	11/21	260	73	11/2149	4	20	233	5	0	15	2	0
KNOCK AIRPORT	12.5	270	44	11/24	270	65	11/2346	2	17	125	6	2	8	0	6
CO. MONAGHAN CLONES	9.8	310	31	21/01	310	49	21/0028	0	11	62	n/a	1	---	n/a	---
CO. OFFALY BIRR	9.0	280	29	12/03	270	55	11/1547	0	8	35	n/a	1	---	n/a	---
CO. WESTMEATH MULLINGAR II	8.5	260	28	12/03	260	48	11/1535	0	8	32	n/a	1	---	n/a	---
CO. WEXFORD ROSSLARE	not available														

Valentia Observatory

Dublin Airport

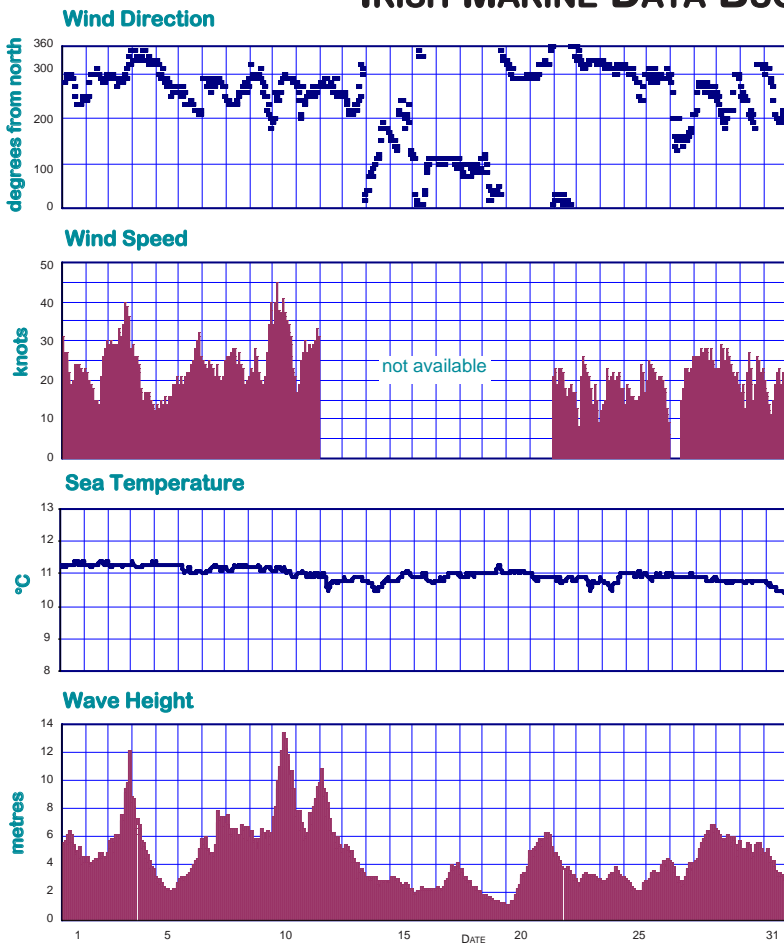


1-10 knots

>10 knots

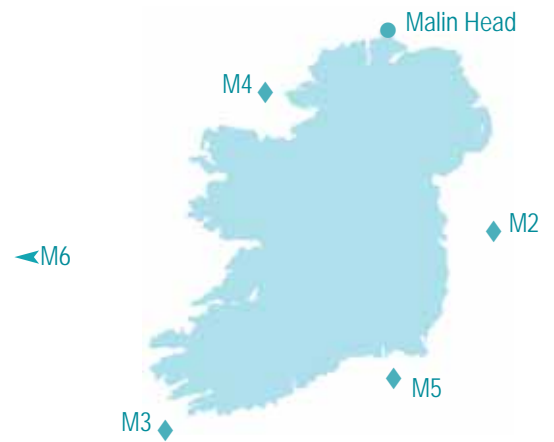
PERCENTAGE FREQUENCY OF WIND DIRECTION

MARINE OBSERVATIONS FROM IRISH MARINE DATA BUOY NETWORK



Buoy	Sea surface temp. (°C)	Mean wind speed (knots)	Max. 10-min wind (knots)	Mean wave height (m.)	Max. wave height (m.)
M2	8.1	20.0	46	1.6	5.1
M3	11.0	n/a	n/a	4.4	13.4
M4	10.3	21.1	49	4.4	13.5
M5	not available				
M6	11.1	19.5	42	5.0	14.8
Malin Head	7.9				

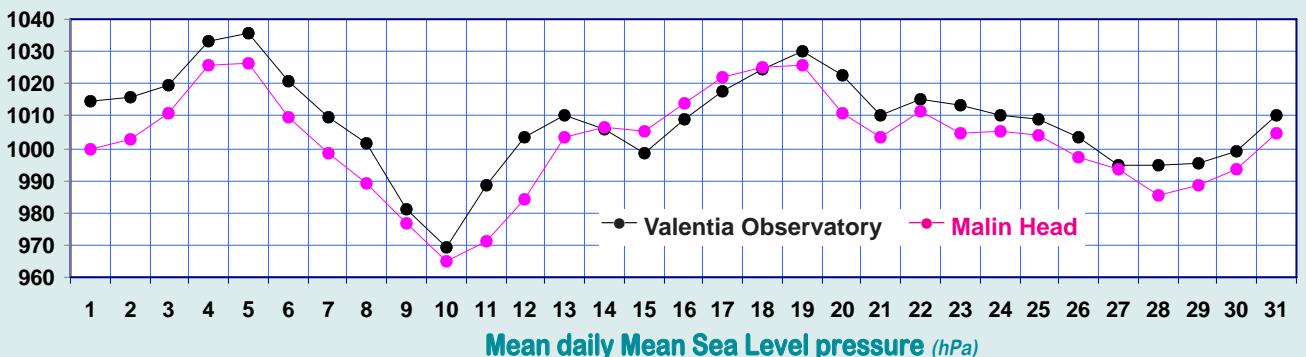
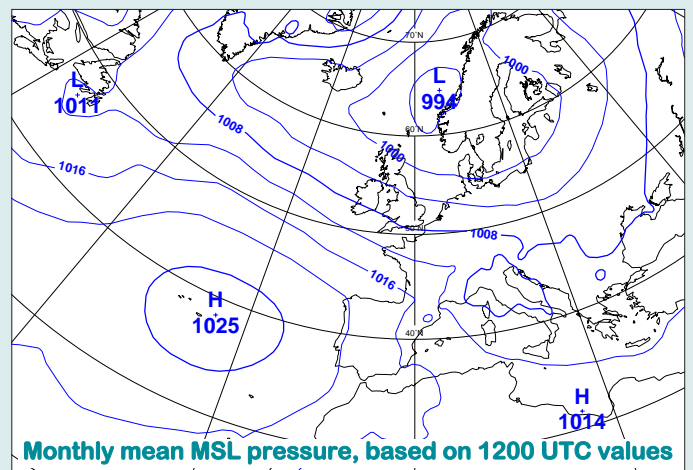
Summary of Mean Monthly Values



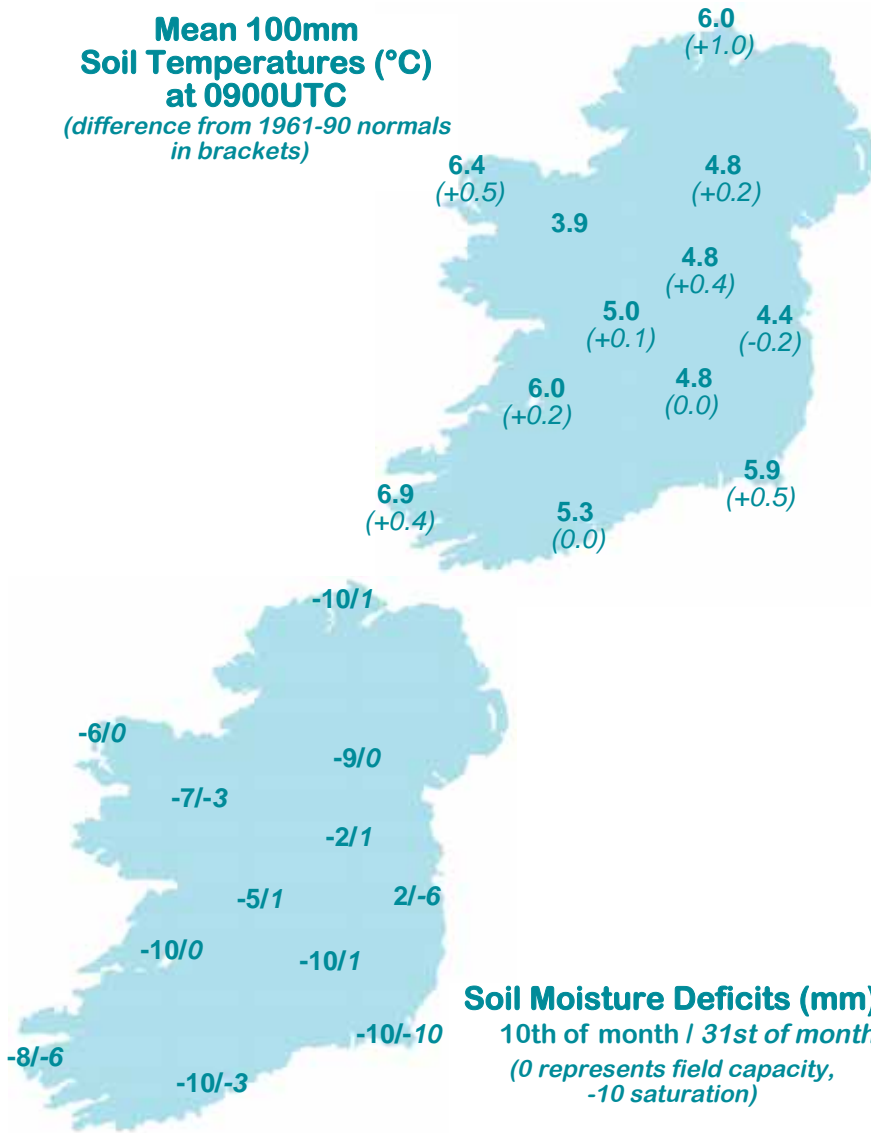
Hourly wind and wave conditions at M3 (51.22°N, 10.55°W)

MEAN ATMOSPHERIC PRESSURE

Mean sea level pressure values for the month varied between 1003hPa in the north and 1009hPa in the southwest. They were below normal everywhere, by around 4hPa in the southwest and 8hPa in the north. Pressure varied widely during the month, falling to very low values on the 10th. The lowest pressure, 950.1hPa, was measured at Shannon Airport on this day, the lowest March value on record in Ireland (see page 2). The month's highest value, 1039.8hPa, was measured at Valentia Observatory on the 4th and 5th.



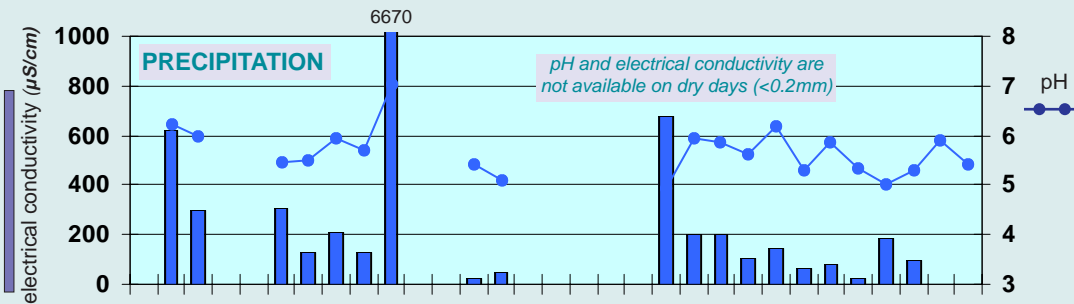
Mean 100mm Soil Temperatures (°C) at 0900UTC
(difference from 1961-90 normals in brackets)



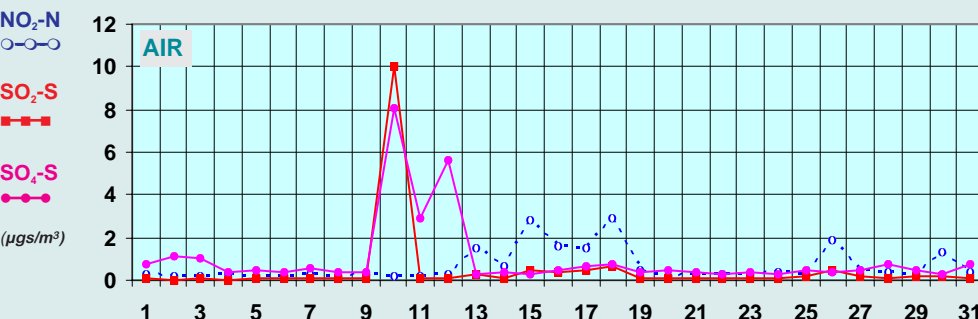
Soil Temperatures at 0900UTC

County/ Station	°C		
	100mm	200mm	300mm
CO. CLARE			
SHANNON AIRPORT	6.0	6.7	7.4
CARRON	6.5		7.0
CO. CORK			
FERMOY (MOORE PARK)	6.2	6.6	6.9
CORK AIRPORT	5.3	6.1	7.3
SHERKIN ISLAND	8.0		8.8
BALLINCURRIG (PEAFIELD)	5.4	6.4	7.0
CO. DONEGAL			
MALIN HEAD	6.0	6.8	7.5
CO. DUBLIN			
DUBLIN AIRPORT	4.6	5.3	5.9
CASEMENT AERODROME	4.4	5.2	6.3
CO. KERRY			
VALENTIA OBSERVATORY	6.9	7.5	8.7
CO. KILKENNY			
KILKENNY	4.8	5.7	6.8
CO. LIMERICK			
MOUNT RUSSELL	4.7	5.7	
CO. LOUTH			
ARDEE (BOHARNAMOE)	5.5	5.6	6.1
CO. MAYO			
BELMULLET	6.4	7.3	8.2
STRAIDE	5.6		
KNOCK AIRPORT	3.9	5.1	5.7
CO. MEATH			
WARRENSTOWN	4.7	5.6	6.4
CO. MONAGHAN			
CLONES	4.8	5.5	6.3
CO. OFFALY			
BIRR	5.0	6.0	7.3
CO. TIPPERARY			
FETHARD (PARSONSHILL)	4.7	5.8	
CO. WATERFORD			
DUNGARVAN (CARRIGLEA)		6.9	7.3
CO. WESTMEATH			
MULLINGAR II	4.8	5.8	6.5
CO. WEXFORD			
JOHNSTOWN CASTLE	5.9	6.4	6.8
ROSSLARE	6.0	6.6	7.5
JOHN F. KENNEDY PARK	5.7	6.6	8.3
CLONROCHE (KNOXTOWN)	5.8	6.3	6.9

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 (MM)				TEMPERATURE (°C)												SUNSHINE (HOURS)			
Station	period	amount	% of average	rain days	wet days	mean max.	mean min.	mean daily	diff. from average	lowest min.	date	days with air frost	degree days > 4.4°C	degree days > 10.0°C	lowest "grass-min."	date	days with ground frost	mean 10cm at 0900h	mean 30cm at 0900h	total no. of hours	% of average
Cavan (Loreto)	11-20	38.5	-	7	6	9.9	1.3	5.6	-	-4.4	18	3	22	2	-7.6	18	4	-	-	31.1	-
	21-end	33.1	-	10	8	10.9	2.2	6.6	-	-0.5	27	2	30	4	-4.5	27	7	-	-	54.1	-
	month	104.5	-	26	22	10.2	2.0	6.1	-	-4.4	18	6	76	7	-7.6	18	15	-	-	122.0	-
Co. Cork	1-10	47.3	-	8	7	10.5	3.4	7.0	-	0.1	7	0	30	3	-3.3	7	6	6.1	7.0	31.8	-
Fermoy	11-20	14.9	-	5	4	10.5	2.9	6.7	-	-2.4	18	2	28	2	-5.3	18	7	6.1	6.7	34.6	-
	21-end	41.0	-	9	9	10.6	2.3	6.5	-	-2.5	27	2	29	3	-6.1	27	8	6.3	7.0	58.5	-
	month	103.2	131	22	20	10.5	2.8	6.7	0.3	-2.5	27	4	87	7	-6.1	27	21	6.2	6.9	124.9	125
Co. Donegal	1-10	61.7	-	10	10	9.3	2.9	6.1	-	-0.1	4	1	22	1	-1.8	4	3	-	-	-	-
Glenties	11-20	45.0	-	7	5	9.6	1.2	5.4	-	-3.5	18	3	19	0	-5.8	18	5	-	-	-	-
	21-end	97.0	-	11	9	10.6	1.8	6.2	-	-1.0	31	2	27	2	-3.1	31	5	-	-	-	-
	month	203.7	155	28	24	9.8	2.0	5.9	0.1	-3.5	18	6	68	3	-5.8	18	13	-	-	-	-
Co. Kerry	1-10	62.6	-	8	7	10.9	4.5	7.7	-	1.4	3	0	35	3	---	n/a	---	-	-	28.8	-
Ardfert	11-20	9.1	-	5	5	11.7	3.0	7.4	-	-2.5	18	2	34	4	---	n/a	---	-	-	36.7	-
	21-end	37.8	-	11	9	11.5	3.6	7.6	-	-0.3	27	1	38	4	---	n/a	---	-	-	43.7	-
	month	109.5	-	24	21	11.3	3.7	7.5	0.4	-2.5	18	3	107	12	---	n/a	---	-	-	109.2	-
Co. Louth	1-10	14.5	-	6	4	9.9	2.6	6.3	-	-0.2	3	2	24	1	0.2	10	0	5.3	6.2	-	-
Ardee	11-20	16.0	-	6	6	10.3	1.6	6.0	-	-3.5	18	2	23	1	0.2	20	0	5.1	5.7	-	-
	21-end	17.0	-	7	5	10.1	1.2	5.7	-	0.0	25	0	23	2	0.2	31	0	6.0	6.4	-	-
	month	47.5	75	19	15	10.1	1.8	6.0	0.2	-3.5	18	4	70	4	0.2	31	0	5.5	6.1	-	-
Co. Waterford	1-10	51.9	-	7	4	11.3	3.8	7.6	-	1.1	7	0	35	4	-1.5	3	4	-	7.2	38.4	-
Dungarvan	11-20	12.3	-	5	4	11.4	3.7	7.6	-	0.0	18	0	35	4	-3.9	19	3	-	7.2	32.4	-
	21-end	33.7	-	8	7	11.3	2.6	7.0	-	-1.5	27	2	34	4	-4.0	25	6	-	7.3	57.7	-
	month	97.9	-	20	15	11.3	3.3	7.3	0.5	-1.5	27	2	104	11	-4.0	25	13	-	7.3	128.5	122
Co. Wexford	1-10	23.8	-	7	3	10.2	3.7	7.0	-	0.3	3	0	29	2	-2.4	3	5	5.5	6.6	38.4	-
Johnstown Castle	11-20	9.2	-	4	1	10.4	4.1	7.3	-	2.0	19	0	30	2	-0.7	13	1	5.9	6.7	40.2	-
	21-end	57.0	-	10	5	10.4	3.0	6.7	-	-0.3	25	1	30	2	-3.5	27	5	6.3	7.0	59.5	-
	month	90.0	114	21	9	10.3	3.6	7.0	0.6	-0.3	25	1	90	5	-3.5	27	11	5.9	6.8	138.1	122

MEASURED POTENTIAL EVAPOTRANSPIRATION (P.E.) AND SOIL MOISTURE					
County/ Station	Period	P.E. (mm)		Soil Moisture (mm)	
		Amount	Deficit	Accum'td	Surplus
Co. Kerry					
Valentia Obs.	1-10	28.7	-	0	34
	11-20	4.6	-	0	30
	21-end	26.0	-	0	30
	month	59.3			
Co. Wexford					
Johnstown Castle	1-10	18.9	-	0	3
	11-20	4.3	-	0	8
	21-end	36.9	-	0	20
	month	60.1			

MONTHLY EVAPORATION (MM) FROM CLASS A PAN			
County	Station	Monthly Rainfall (mm)	Monthly Evaporation (mm)
Clare	Kilmaley	175.7	30.6
Cork	Fermoy (Moorepark)	103.2	44.8
Kerry	Valentia Observatory	164.1	61.2
Kildare	Poulaphuca	101.1	21.6
Mayo	Newport (Furnace)	230.2	15.9
Offaly	Derrygreenagh	83.5	21.7
Waterford	Dungarvan (Carriglea)	97.9	35.0
Wexford	Johnstown Castle	90.0	63.2

P.E. (Penman)				
County/ Station	total for month(mm)			
Co. Clare	Shannon Airport 38			
Co. Cork	Cork Airport 37			
Co. Donegal	Malin Head 48			
Co. Dublin	Dublin Airport 46			
Co. Kerry	Casement Aerodrome 43			
Co. Kerry	Valentia Obs. 54			
Co. Kilkenny	Kilkenny 38			
Co. Mayo	Belmullet 36			
Co. Monaghan	Knock Airport 34			
Co. Offaly	Clones 35			
Co. Roslindown	Birr 33			
Co. Westmeath	Mullingar 34			
Co. Wexford	Rosslare n/a			

GLOBAL SOLAR RADIATION (MJ/sq. m.)				
County/ Station	10-day totals			Total for month
	1-10	11-20	21-end	
Co. Donegal	60.20	78.36	106.35	244.91
Co. Dublin	80.32	73.59	120.80	274.71
Co. Kerry	66.50	81.81	114.74	263.05
Co. Kilkenny	73.36	76.70	131.63	281.69
Co. Mayo	59.90	81.94	109.61	251.45
Co. Monaghan	66.22	71.04	113.97	251.23
Co. Offaly	69.97	78.59	116.46	265.02

SEE BACK PAGE OF JANUARY ISSUE FOR NOTES ON THE DATA

Saturday 1st: Mild overnight, with some showers in Ulster and north Connacht. Light rain or drizzle moved in from the Atlantic in the afternoon, spreading countrywide. A clearance quickly crossed the country during the evening. Generally cloudy, some sunshine in the east and south. Winds were strong, west or northwesterly, backing southwesterly and decreasing, later veering westerly and becoming strong once more.

Rainfall: nil to 4 mm, heaviest at Belmullet and Knock Airport
Temperature: max. 10°C to 13°C, min. 5°C to 9°C, no ground frost
Sunshine: nil to 4 hours, sunniest at Cork Airport, nil at Belmullet and Valentia

Sunday 2nd: Mainly dry during the night with occasional showers, but very windy. Shower activity increased during the day, becoming heavy at times. A few sunny spells. Showers during the evening became wintry, especially in western and northern regions. Very cold by evening, with snow lying on higher ground. Winds were west to southwesterly, gale to strong gale with severe gusts in places. Winds eased in southern areas by late evening.

Rainfall: nil to 8mm, heaviest at Malin Head, nil at Rosslare
Temperature: max. 8°C to 12°C, min. 0°C to 4°C, ground temperatures down to -2°C at Birr
Sunshine: 2 to 4 hours, sunniest at Dublin Airport, 2 hours at Malin Head

Monday 3rd: Snow and hail showers overnight, mainly over the midlands, west and north, with snow lying in many areas here. The wintry showers continued through the morning, with some sunny spells also. During the afternoon and evening the wintry showers spread across the country, becoming confined to the west by nightfall. Winds were west to northwesterly, moderate to strong and very gusty.

Rainfall: nil to 17mm, heaviest at Knock Airport, nil at Rosslare
Temperature: max. 3°C to 8°C, min. -2°C to 3°C, ground temperatures down to -5°C at Kilkenny
Sunshine: 1 to 6 hours, sunniest at Dublin Airport, 1 hour at Clones

Tuesday 4th: Cold overnight with snow lying in many parts and further light wintry showers for a while. Scattered light showers developed in the west during the morning and spread countrywide by the afternoon, dying out later. Sunny everywhere, particularly in the southeast. Winds were northwesterly, moderate, backing westerly and decreasing during the day.

Rainfall: nil to 1mm, heaviest at Clones
Temperature: max. 9°C to 11°C, min. 0°C to 6°C, ground temperatures down to -4°C at Kilkenny
Sunshine: 4 to 9 hours, sunniest at Rosslare, 4 hours at Belmullet

Wednesday 5th: Patchy rain throughout the day, but dry much of the time. Some breaks in the cloud in places, however mostly cloudy. Mild. Winds were light southwesterly at first, picking up during the late morning and afternoon to become generally moderate, but fresh in the north.

Rainfall: nil to trace generally, 1mm at Knock Airport
Temperature: max. 9°C to 11°C, min. 2°C to 8°C, ground temperatures down to -2°C at Kilkenny
Sunshine: nil to >1 hour, sunniest at Knock Airport

Thursday 6th: It was a dull and windy day with scattered outbreaks of mostly light rain or drizzle. A band of more persistent and heavier rain moved in from the Atlantic early in the evening and spread quickly across the country. Colder weather with scattered wintry showers, some thundery, followed on later in the evening. Winds were southwesterly, moderate to fresh and gusty, veering northwesterly later in the day.

Rainfall: 2 to 10mm, heaviest at Knock Airport, 2mm at Dublin Airport
Temperature: max. 9°C to 11°C, min. 3°C to 8°C, no ground frost
Sunshine: nil to 1 hour, sunniest at Belmullet

Friday 7th: A band of heavy rain crossed the country from west to east during the early hours, giving some heavy falls. Showers continued throughout the day, heaviest in the north. Sunny spells also in all parts, particularly in the southeast and east. Becoming cold after dark with ground frost in parts of the south and midlands. Winds were westerly in direction, moderate to strong and gusty, strongest in the north and northwest.

Rainfall: nil to 12mm, heaviest at Malin Head, nil at Roches Point
Temperature: max. 7°C to 11°C, min. 1°C to 6°C, ground temperatures down to -4°C at Kilkenny
Sunshine: 2 to 9 hours, sunniest at Rosslare, 2 hours at Malin Head

Saturday 8th: Showers during the night. A band of heavy rain crossed the

country from the west during the late morning, giving some heavy falls. Showers followed and continued for most of the day. Sunny between the showers. Winds were westerly, moderate to strong and gusty throughout.

Rainfall: 1 to 10mm, heaviest at Malin Head, 1mm at Rosslare
Temperature: max. 9°C to 12°C, min. 1°C to 6°C, ground temperatures down to -2°C at Kilkenny
Sunshine: 3 to 6 hours, sunniest at Dublin Airport, 3 hours at Clones

Sunday 9th: Early showers in the west continued and extended eastwards, some of these were thundery and of hail. Some sunshine also, particularly in the south and southeast. Heavy rain later in the southwest. Winds were light southerly, veering southwesterly and strengthening, backing southerly by evening, up to strong gale or storm force.

Rainfall: trace to 31mm, heaviest at Valentia, trace at Casement Aerodrome
Temperature: max. 6°C to 10°C, min. 0°C to 4°C, ground temperatures down to -6°C at Kilkenny
Sunshine: 4 to 10 hours, sunniest at Rosslare, 4 hours at Belmullet

Monday 10th: Wet and very windy at first overnight. Some sunny spells during the morning, mainly in the north. Outbreaks of rain in the afternoon. Winds were southeasterly, strong to gale force, easing for a time before veering northwesterly and increasing to strong gale force and gusty later.

Rainfall: 4 to 13mm, heaviest at Cork Airport, 4mm at Claremorris
Temperature: max. 6°C to 10°C, min. 0°C to 5°C, ground temperatures down to -3°C at Belmullet
Sunshine: 1 to 6 hours, sunniest at Malin Head, 1 hour at Cork Airport

Tuesday 11th: Overnight showers in the west moved quickly across the country in the morning. The afternoon was a mixture of sunny spells and blustery showers, some of which were heavy and wintry. Winds were southwesterly, moderate to fresh and gusty, increasing during the evening, up to strong gale force in some coastal areas with stronger gusts.

Rainfall: 1 to 14mm, heaviest at Valentia, 1mm at Johnstown Castle
Temperature: max. 9°C to 13°C, min. 1°C to 5°C, ground temperatures down to -1°C at Kilkenny
Sunshine: 1 to 6 hours, sunniest at Rosslare, 1 hour at Casement Aerodrome

Wednesday 12th: Very windy during the night. Winds were up to storm force with even higher gusts, causing damage in places. Rain or showers in most areas, some of the showers of hail, sleet or snow on higher ground. The showers became mainly confined to the north by evening. Most areas had sunny periods. Winds were northwesterly and were storm force initially, easing later.

Rainfall: trace to 11mm, heaviest at Knock Airport, trace at Rosslare
Temperature: max. 7°C to 11°C, min. 2°C to 4°C, ground temperatures down to -1°C at Kilkenny
Sunshine: 5 to 9 hours, sunniest at Cork Airport, 5 hours at Shannon Airport

Thursday 13th: A band of rain moved in over the northwest by late morning and gradually crossed over the country during the day. By evening the rain was confined to southern areas. A few sunny spells, mainly in the west. Winds were southwesterly, mainly light to moderate, stronger in northern areas.

Rainfall: nil to 9mm, heaviest at Knock Airport, nil at Rosslare
Temperature: max. 8°C to 14°C, min. 1°C to 7°C, ground temperatures down to -4°C at Claremorris
Sunshine: nil to 4 hours, sunniest at Belmullet, nil at Rosslare and Birr

Friday 14th: A band of rain in the south moved slowly northwards, giving heaviest falls in Connacht and Ulster. Early sunshine in the north, dull generally. Winds were variable, fresh or strong in the north, becoming light throughout.

Rainfall: nil to 17mm, heaviest at Belmullet
Temperature: max. 6°C to 12°C, min. 0°C to 6°C, ground temperatures down to -3°C at Claremorris
Sunshine: nil to trace generally, 3 hours at Malin Head

Saturday 15th: Rain in the north spread quickly to affect all areas, heaviest in the east. Dry in the south by evening with some sunshine. Temperatures around normal. Winds were easterly, generally light, but stronger on northern coasts.

Rainfall: 3 to 18mm, heaviest at Dublin Airport, 3mm at Rosslare
Temperature: max. 8°C to 12°C, min. 5°C to 9°C, no ground frost
Sunshine: nil to trace generally, 1 hour at Valentia

Sunday 16th: Wet weather across Leinster and Connacht moved southeastwards during the early morning. Clear, dry weather followed countrywide with some sunny spells and isolated showers in the southeast. Winds were northeasterly, fresh and gusty, decreasing to moderate.

Rainfall: nil to 7mm, heaviest at Casement Aerodrome

Temperature: max. 8°C to 11°C, min. 2°C to 7°C, ground temperatures down to -3°C at Birr

Sunshine: nil to 8 hours, sunniest at Malin Head, nil at Cork Airport

Monday 17th: Apart from isolated light showers, it was a mostly dry day with long sunny periods. Temperatures were below normal. Becoming very cold after dark with a widespread sharp to severe ground frost. Light to moderate easterly winds were fresh and gusty at times.

Rainfall: nil to trace

Temperature: max. 7°C to 12°C, min. -1°C to 6°C, ground temperatures below zero at most inland stations, down to -9°C at Birr

Sunshine: 4 to 10 hours, sunniest at Clones

Tuesday 18th: A clear start to the day with sunny spells, although it remained cold. Some showers affected northern coasts, but it remained dry in most places. Cloudier in the afternoon, particularly in the east. Very cold again after dark. Winds were light and variable.

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

Temperature: max. 8°C to 12°C, min. -4°C to 6°C, ground temperatures below zero at all inland stations, down to -11°C at Birr

Sunshine: 5 to 10 hours, sunniest at Shannon Airport, 5 hours at Kilkenny

Wednesday 19th: Clear spells in most parts overnight, cloudier in the west and north with occasional light showers. Spells of sunshine, particularly in the southwest, but cloudier further east. Some light showers during the afternoon. Winds were generally light, but fresher along the north coast.

Rainfall: nil to trace generally, 3mm at Malin Head 2mm at Belmullet

Temperature: max. 9°C to 12°C, min. -3°C to 6°C, ground temperatures below zero at all inland stations, down to -11°C at Birr

Sunshine: 1 to 10 hours, sunniest at Valentia, 1 hour at Dublin Airport

Thursday 20th: Damp and windy weather in the north spread quickly southwards over the country during the morning and the remainder of the day was dull, damp and windy with little or no sunshine. Some southern areas remained dry throughout. Winds were light to moderate southwesterly, increasing steadily during the day and by evening were strong to gale force and very gusty, westerly.

Rainfall: nil to 5mm, heaviest at Mullingar, nil at Rosslare

Temperature: max. 10°C to 12°C, min. 3°C to 9°C, ground temperatures down to -2°C at Kilkenny

Sunshine: nil to trace generally, 1 hour at Cork Airport

Friday 21st: The day was a mixture of showers and sunny spells. Some of the showers were of hail and accompanied by strong and gusty winds. There were sunny spells throughout, mainly in the southeast and east. Winds were northerly, moderate to strong and gusty throughout.

Rainfall: <1 to 7mm, heaviest at Valentia, <1mm at Rosslare

Temperature: max. 8°C to 12°C, min. 2°C to 6°C, ground temperatures down to -2°C at Casement Aerodrome

Sunshine: 3 to 9 hours, sunniest at Rosslare, 3 hours at Valentia

Saturday 22nd: Overnight showers, mainly in northern areas. The showers extended southwards during the day, although they were mainly light. Sunny in most parts but feeling cold in the northerly airflow. Winds were northerly, up to gale force at times, backing westerly by evening and becoming light.

Rainfall: nil to 3mm, heaviest at Belmullet

Temperature: max. 7°C to 9°C, min. 1°C to 5°C, ground temperatures down to -3°C at Birr

Sunshine: 2 to 10 hours, sunniest at Valentia, 2 hours at Malin Head

Sunday 23rd: Showers in the west and north overnight continued for most of the day, while it was dry elsewhere. Becoming dry everywhere by nightfall. Winds were northerly in direction, moderate to strong with gusts, becoming light to moderate during the day.

Rainfall: nil to 4mm, heaviest at Knock Airport, nil at Rosslare

Temperature: max. 7°C to 12°C, min. 1°C to 6°C, ground temperatures down to -4°C at Kilkenny

Sunshine: 2 to 7 hours, sunniest at Cork Airport, 2 hours at Malin Head

Monday 24th: Rain and drizzle during the night in many areas, with some heavy outbreaks in places. The rain cleared most of the country by late morning. Some heavy showers in the south during the afternoon. Sunny spells in most parts. Winds were light, variable or northerly in direction.

Rainfall: trace to 4mm, heaviest at Cork Airport, trace at Malin Head

Temperature: max. 7°C to 13°C, min. 0°C to 7°C, ground temperatures down to -6°C at Kilkenny

Sunshine: <1 to 5 hours, sunniest at Malin Head, <1 hour at Valentia

Tuesday 25th: Outbreaks of rain and drizzle in the west during the morning. The front moved slowly eastwards during the day, weakening as it passed. Some sunny spells in the afternoon, mainly in the west. Cold after dark. Winds were light, westerly or variable in direction.

Rainfall: nil to 5mm, heaviest at Knock Airport, nil at Rosslare

Temperature: max. 7°C to 12°C, min. -2°C to 6°C, ground temperatures below zero at all inland stations, down to -8°C at Kilkenny

Sunshine: nil to 4 hours, sunniest at Knock Airport, nil at Malin Head

Wednesday 26th: Early showers in the northwest. The showers continued in the west, with more persistent rain in the far north. Sunshine in the south and east during the morning. Showers became more widespread during the afternoon, some of hail. Winds were light, westerly in direction.

Rainfall: trace to 12mm, heaviest at Belmullet, trace at Dublin Airport

Temperature: max. 8°C to 11°C, min. 1°C to 6°C, ground temperatures down to -5°C at Claremorris

Sunshine: trace to 11 hours, sunniest at Cork Airport, trace at Malin Head

Thursday 27th: The morning was dry with sunny spells everywhere. Rain arrived in the west by early afternoon and spread quickly across the country, giving some heavy falls, mainly in the west. Winds were light westerly, backing southwesterly or southerly and increasing during the evening.

Rainfall: <1 to 12mm, heaviest at Belmullet, <1mm at Casement Aerodrome

Temperature: max. 8°C to 12°C, min. -2°C to 4°C, ground temperatures below zero at all inland stations, down to -9°C at Birr

Sunshine: 4 to 9 hours, sunniest at Casement Aerodrome, 4 hours at Belmullet

Friday 28th: Heavy rain cleared the east coast soon after dawn. Showers continued throughout the day, some of which were very heavy. Sunny spells also, particularly in the south. Very windy, with westerly gale to strong gale gusts in many places, easing a little by late evening.

Rainfall: 4 to 15mm, heaviest at Knock Airport, 4mm at Valentia

Temperature: max. 8°C to 12°C, min. 2°C to 6°C, ground temperatures down to -2°C at Kilkenny

Sunshine: 2 to 8 hours, sunniest at Cork Airport, 2 hours at Dublin Airport

Saturday 29th: Dry in most parts at first, apart from the west where there were some showers. Rain and showers became more widespread during the day, with some heavy falls. Some sunshine between showers, although it was generally overcast. Winds were variable, moderate to strong and gusty, easing during the evening.

Rainfall: 2 to 14mm, heaviest at Valentia, 2mm at Dublin Airport

Temperature: max. 10°C to 13°C, min. 2°C to 7°C, ground temperatures down to -4°C at Kilkenny

Sunshine: 2 to 5 hours, sunniest at Shannon Airport, 2 hours at Rosslare

Sunday 30th: Over the northern half of the country there were scattered showers and sunny spells. Duller in the south with scattered wintry showers. Very heavy rain in the east during the afternoon, with localised flooding. Winds were light to moderate southwesterly with occasional gusts.

Rainfall: nil to 26mm, heaviest at Dublin Airport, nil at Belmullet

Temperature: max. 9°C to 12°C, min. 1°C to 5°C, ground temperatures down to -5°C at Kilkenny

Sunshine: 1 to 7 hours, sunniest at Malin Head, 1 hour at Valentia

Monday 31st: Early rain in the east, but dry elsewhere. Cloud gradually increased during the morning and the afternoon was cloudy with rain spreading from the Atlantic to reach all parts of the country during the afternoon and evening. Sunny spells in most parts, the southwest being the exception. Light, variable winds increased gradually during the afternoon and were fresh and gusty southwesterly by evening.

Rainfall: <1 to 19mm, heaviest at Johnstown Castle, <1mm at Birr

Temperature: max. 9°C to 12°C, min. 0°C to 5°C, ground temperatures down to -6°C at Claremorris

Sunshine: trace to 7 hours, sunniest at Rosslare, trace at Valentia

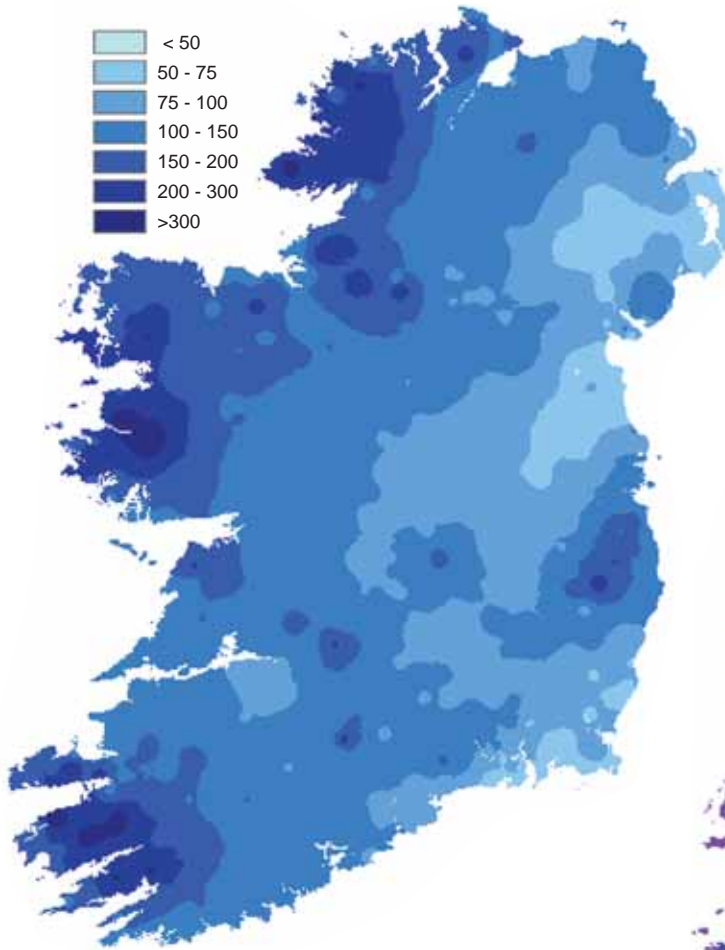
Wetter than normal almost everywhere

Apart from some coastal locations of the northeast and south, March rainfall totals were above normal everywhere and were around twice the normal in parts of the east and northwest. Totals ranged from 48mm at Ardee (Boharnamoe), Co. Louth, to 304mm at Maam Valley, Co. Galway, with percentage of normal values between 75% at Ardee and 225% at Dublin (Merrion Square), where it was the wettest March since observations began there in 1948. At many stations it was the wettest March for between 12 and 22 years, while at Dublin Airport it was the wettest since 1964.

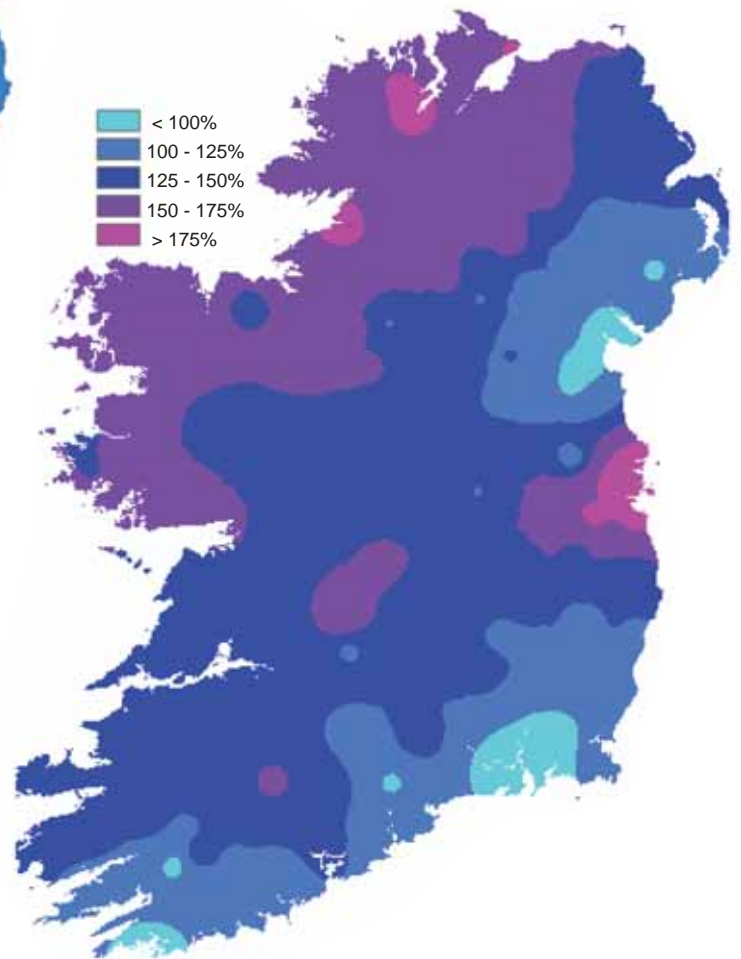
Apart from a short dry spell between the 17th and 19th, rain was recorded on every day of the month, with heaviest falls on the 9th, 14th/15th and 30th. Thunderstorms were frequent, particularly over the western half of the contry. The highest daily fall, 40.1mm, was measured at Dublin (Merrion Square) on the 30th; this was another March record at the station and its highest daily fall for any month since November 2002. There was a wide variation in the amount of wetdays recorded during the month (*days with 1mm or more of rainfall*), with only 8 or 9 wetdays measured at some stations in the extreme southeast, but more than 25 wetdays recorded in parts of 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)
CO. CAVAN						
CAVAN (LORETO COLLEGE)	104.5		14.5	11	26	22
CO. CLARE						
SHANNON AIRPORT	102.9	145	17.8	30	24	20
CARRON	173.0	145	17.8	27	30	24
CO. CORK						
FERMOY (MOORE PARK)	103.2	131	25.3	9	22	20
CORK AIRPORT	113.5	117	30.3	9	24	20
SHERKIN ISLAND	86.5	89	20.3	9	19	16
BALLINCURRIG (PEAFIELD)	114.4		26.0	9	24	19
CO. DONEGAL						
MALIN HEAD	142.7	164	15.2	9	29	22
BALLYSHANNON (CATHLEEN'S FALL)	170.4	194	17.2	14	28	24
GLENTIES	203.7	155	33.3	27	28	24
CO. DUBLIN						
DUBLIN (PHOENIX PARK)	100.7	177	33.1	30	24	16
DUBLIN AIRPORT	102.4		35.8	30	22	14
CASEMENT AERODROME	99.5	199	31.1	30	24	16
DUBLIN (MERRION SQUARE)	116.9	225	40.1	30	21	13
CO. GALWAY						
GALWAY (UNIV. COLL.)	140.6	158	18.9	27	25	21
MAAM VALLEY	304.1		39.5	27	28	26
CONNEMARA NATIONAL PARK	181.6	138	26.7	9	27	26
BALLYGAR	117.0	141	12.4	9 27	27	22
CO. KERRY						
VALENTIA OBSERVATORY	164.1	135	33.4	9	25	24
ARDFERT (LISCAHANE)	109.5		22.9	9	24	21
CO. KILKENNY						
KILKENNY	89.1	141	24.7	30	23	16
CO. LIMERICK						
MOUNT RUSSELL	144.1		26.1	9	27	22
CO. LOUTH						
ARDEE (BOHARNAMOE)	47.5	75	8.3	9	18	15
CO. MAYO						
BELMULLET	157.4	164	19.2	14	28	24
STRAIDE	169.1	174	16.5	27	26	23
KNOCK AIRPORT	171.5		15.6	3	27	26
CO. MEATH						
WARRENTOWN	72.9	110	11.8	30	23	17
CO. MONAGHAN						
CLONES	96.8	124	11.2	9	23	19
CO. OFFALY						
BIRR	97.3	160	20.3	30	24	19
DERRYGREENAGH	83.5	125	12.4	15	25	19
CO. SLIGO						
ARDTARMON	123.4		15.7	14	25	21
CO. TIPPERARY						
FETHARD (PARSONSHILL)	94.9		26.2	30	24	17
CO. WATERFORD						
WATERFORD (TYCOR)	70.0	86	19.9	9	19	16
DUNGARVAN (CARRIGLEA)	97.9		26.0	9	20	15
CO. WESTMEATH						
MULLINGAR II	96.8	133	9.6	11	25	20
CO. WEXFORD						
JOHNSTOWN CASTLE	90.0	114	27.7	30	21	9
ROSSLARE	69.0	103	18.1	30	15	8
JOHN F. KENNEDY PARK	75.4	95	19.5	9	20	12
CLONROCHE (KNOXTOWN)	93.7		21.1	9	24	17

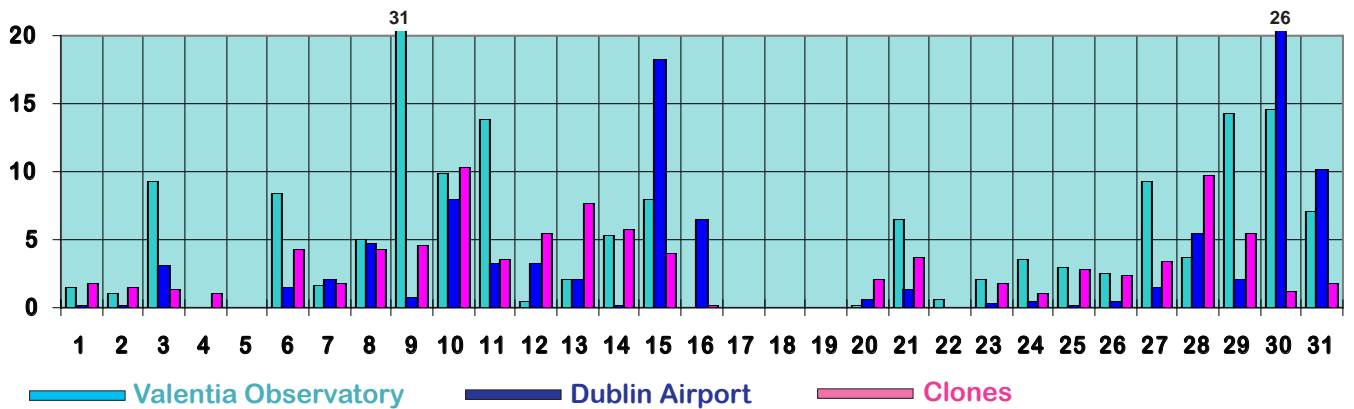
Total rainfall (mm)



Percentage of normal rainfall



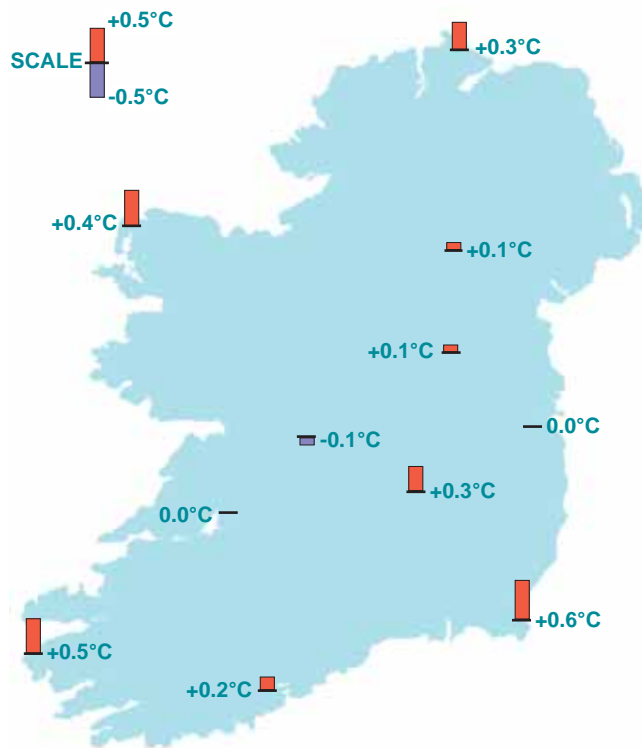
Daily 0-24h rainfall values (mm)



Temperatures a little higher than normal

Temperatures were close to normal values throughout almost all of March, with little variation from day to day. Mean air temperatures for the month varied between 5.2°C at Knock Airport and 8.6°C at Sherkin Island, Co. Cork. They were a little below normal at a few stations in the midlands and east, but in general they were around a half a degree higher than normal.

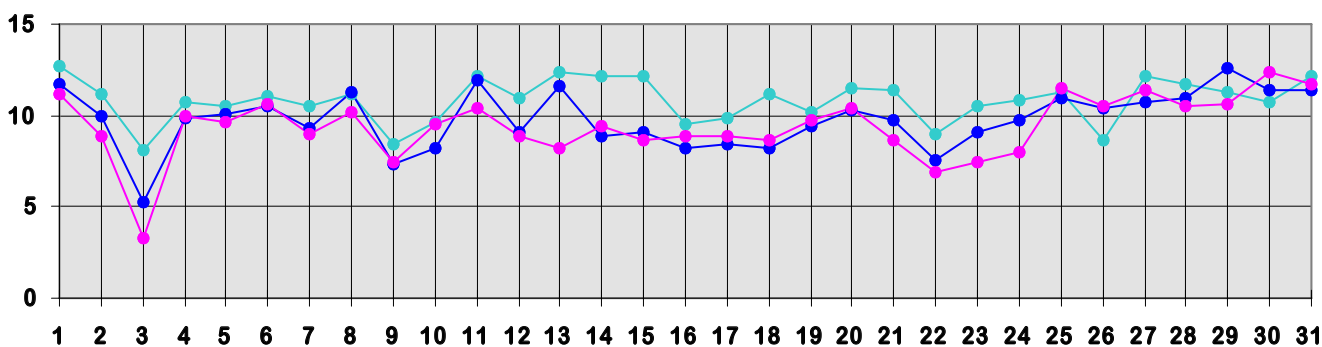
Daytime temperatures were below normal at the beginning of the month, when wintry showers were recorded in many parts of the country, particularly in the west. Air and ground frost were widespread on the 3rd, in the period 17th to 19th and on the 25th and 27th. Most stations recorded their lowest values of the month on the 18th; the lowest air temperature, -4.4°C, was recorded at Cavan (Loreto College), while the lowest grass minimum temperature, -11.7°C, was measured at Birr, Co. Offaly, both on this day. Many inland stations recorded a total of between 16 and 20 ground frosts, well above normal for March, while Kilkenny recorded 23 ground frosts during the month. The



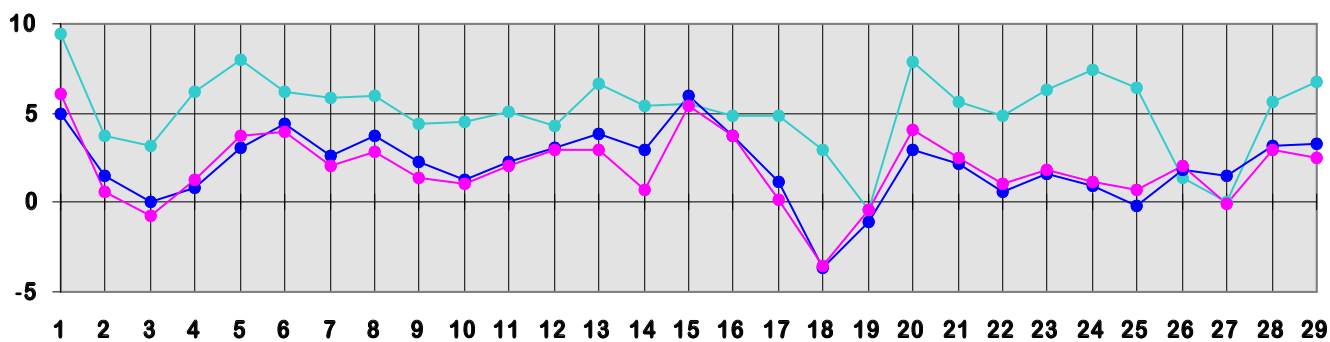
Mean Temperature
(difference from 1961-90 normals)

month's highest air temperature, 14.6°C, was recorded at Sherkin Island on the 15th.

Daily 0-24h maximum temperatures (°C)



Daily 0-24h minimum temperatures (°C)



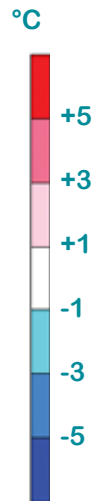
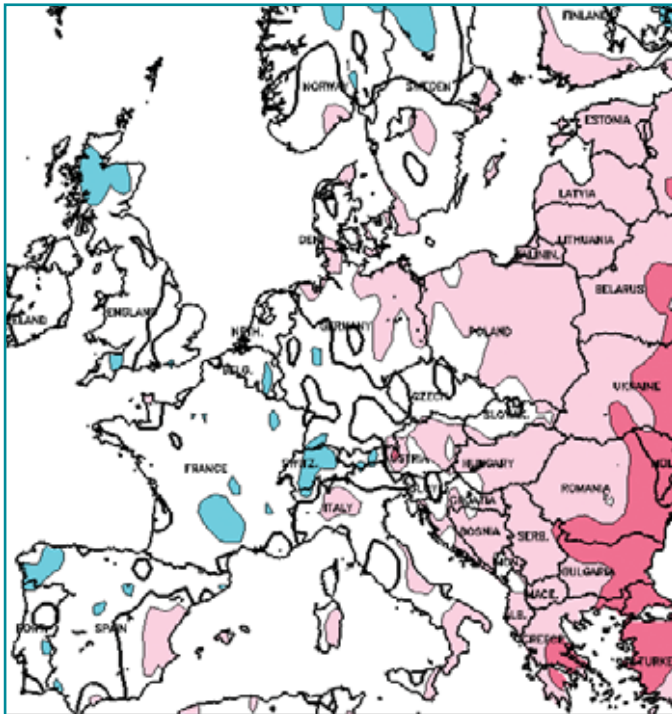
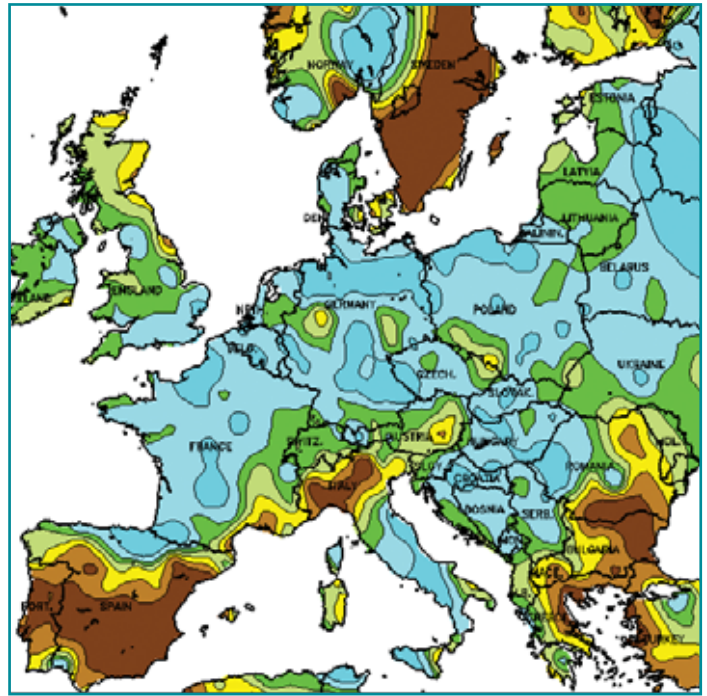
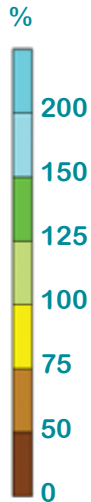
● Valentia Observatory

● Dublin Airport

● Clones

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	
CO. CAVAN												
CAVAN (LORETO COLLEGE)	10.2	2.0	6.1		13.7	31	-4.4	18	-7.6	18	6	16
CO. CLARE												
SHANNON AIRPORT	10.4	3.7	7.1	0.0	13.5	13	-1.5	18	-6.6	19	2	12
CARRON	9.6	2.9	6.3	0.5	11.5	24	-0.8	27	-8.0	19	3	20
CO. CORK												
FERMOY (MOORE PARK)	10.5	2.8	6.7	0.3	13.6	1	-2.5	27	-6.1	27	4	21
CORK AIRPORT	9.8	3.1	6.5	0.2	12.5	1	-1.2	3	-3.9	3	1	10
SHERKIN ISLAND	11.5	5.6	8.6	1.0	14.6	15	0.2	19	-3.0	19 20	0	4
BALLINCURRIG (PEAFIELD)	10.3	2.0	6.2		14.0	1	-2.0	27	-3.0	27	4	12
CO. DONEGAL												
MALIN HEAD	8.9	4.3	6.6	0.3	11.6	31	0.8	4	-0.5	18	0	1
BALLYSHANNON (CATHLEEN'S FALL)	9.5	3.2	6.4	0.3	11.7	6 30	-2.4	18			2	
GLENTIES	9.8	2.0	5.9	0.1	11.8	6	-3.5	18	-5.8	18	6	13
CO. DUBLIN												
DUBLIN (PHOENIX PARK)	10.3	2.8	6.6	0.4	13.4	29	-2.6	18	-4.6	4	2	17
DUBLIN AIRPORT	9.8	2.5	6.2		12.6	29	-3.7	18	-6.3	18	3	10
CASEMENT AERODROME	9.7	2.4	6.1	0.0	12.0	29	-4.1	18	-6.7	18	5	12
DUBLIN (MERRION SQUARE)	9.9	4.4	7.2	-0.1	12.4	1	1.6	18			0	
CO. GALWAY												
GALWAY (UNIV. COLL.)	10.6	3.2	6.9	0.0	12.5	25	-2.5	19	-5.5	19	4	10
MAAM VALLEY	10.4	3.7	7.1		12.5	1	-0.9	18	-4.7	18	2	9
CONNEMARA NATIONAL PARK	10.0	3.8	6.9		11.4	19	0.5	18			0	
BALLYGAR	10.2	2.4	6.3		12.8	25	-2.9	18	-6.4	18	4	17
CO. KERRY												
VALENTIA OBSERVATORY	10.8	5.4	8.1	0.5	12.7	1	-0.4	19	-6.1	19	1	5
ARDFERT (LISCAHANE)	11.3	3.7	7.5	0.4	14.1	15	-2.5	18	n/a		3	n/a
CO. KILKENNY												
KILKENNY	10.5	2.4	6.5	0.3	12.8	1	-2.2	27	-8.1	27	4	23
CO. LIMERICK												
MOUNT RUSSELL	9.4	2.8	6.1		12.8	1	-1.1	22	-4.2	22	2	12
CO. LOUTH												
ARDEE (BOHARNAMOE)	10.1	1.8	6.0	0.2	12.5	31	-3.5	18			4	
CO. MAYO												
BELMULLET	10.3	4.2	7.3	0.4	12.1	19 20	-1.0	18	-4.5	18	1	6
STRAIDE	10.1	2.6	6.4	0.1	12.1	30	-4.0	18	-9.3	18	5	19
KNOCK AIRPORT	8.3	2.1	5.2		10.9	30	-1.6	3	-4.2	3	3	8
CO. MEATH												
WARRENTOWN	9.9	2.7	6.3	0.4	12.3	30	-3.0	18	-6.8	18	3	15
CO. MONAGHAN												
CLONES	9.4	2.2	5.8	0.1	12.4	30	-3.5	18	-8.8	18	4	16
CO. OFFALY												
BIRR	9.9	2.4	6.2	-0.1	12.2	29	-2.6	19	-11.7	18	5	18
DERRYGREENAGH	10.1	0.7	5.4	-0.2	12.2	27	-3.8	18	-5.2	18	11	21
CO. SLIGO												
ARDTARMON	10.3	3.9	7.1		12.4	6	0.1	18	-5.9	18	0	9
CO. TIPPERARY												
FETHARD (PARSONSHILL)	9.4	1.9	5.7		12.3	1	-0.9	18	-2.7	3	5	8
CO. WATERFORD												
WATERFORD (TYCOR)	11.1	4.0	7.6	1.0	14.1	1	1.2	19 27			0	
DUNGARVAN (CARRIGLEA)	11.3	3.3	7.3	0.5	14.0	1	-1.5	27	-4.0	25	2	13
CO. WESTMEATH												
MULLINGAR II	9.5	2.1	5.8	0.1	11.4	29	-2.4	18	-7.0	18	6	18
CO. WEXFORD												
JOHNSTOWN CASTLE	10.3	3.6	7.0	0.6	13.0	11	-0.3	25	-3.5	27	1	11
ROSSLARE	10.1	4.4	7.3	0.4	13.3	11	0.9	27	-1.6	25	0	5
JOHN F. KENNEDY PARK	10.5	2.6	6.6	0.2	13.1	11	-0.9	3	-3.6	3	3	19
CLONROCHE (KNOXTOWN)	9.8	2.3	6.1		13.0	1	-1.9	18	-6.1	18	5	19

MARCH RAINFALL
(percentage of 1961-1990 normal)



MARCH MEAN TEMPERATURE
(difference from 1961-1990 normal)

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

A storm over much of the eastern U.S. between the 7th and 9th left a trail of heavy snowfall. In Columbus, Ohio, over 51cm of snow was recorded, setting a new record of total snowfall in a single storm. More heavy snow fell late in the month; in Concord, New Hampshire, snow that fell on the 28th brought the city's winter total snowfall to 292.6cm, its second snowiest season on record.

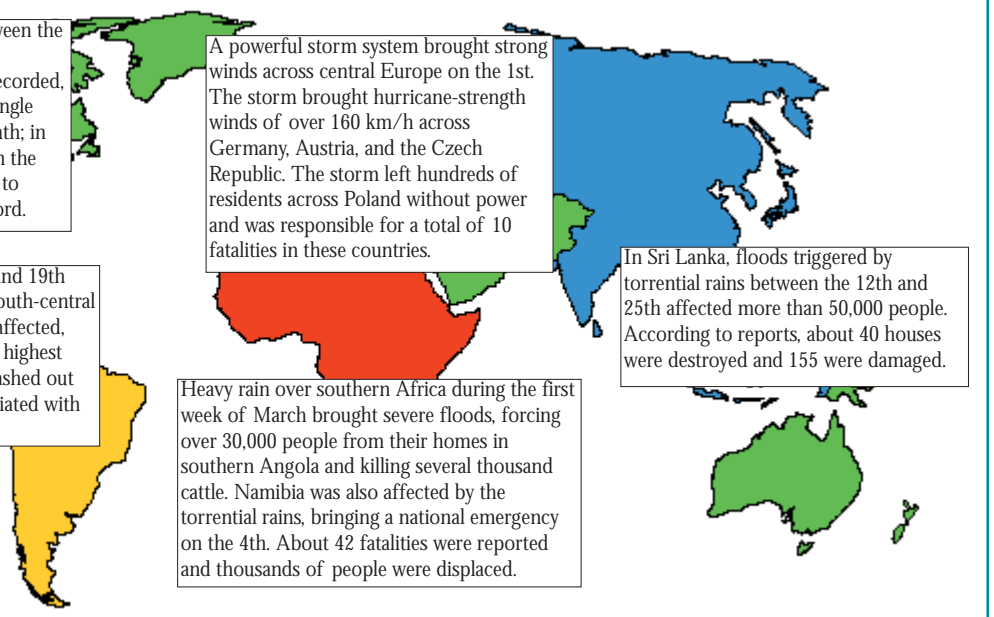
Heavy rain that fell between the 17th and 19th caused exceptional floods across the south-central states of the U.S. Arkansas was worst affected, with several of its rivers reaching their highest levels in nearly 90 years. The floods washed out roads, damaged homes and were associated with 17 fatalities across the affected states.

A powerful storm system brought strong winds across central Europe on the 1st. The storm brought hurricane-strength winds of over 160 km/h across Germany, Austria, and the Czech Republic. The storm left hundreds of residents across Poland without power and was responsible for a total of 10 fatalities in these countries.

Heavy rain over southern Africa during the first week of March brought severe floods, forcing over 30,000 people from their homes in southern Angola and killing several thousand cattle. Namibia was also affected by the torrential rains, bringing a national emergency on the 4th. About 42 fatalities were reported and thousands of people were displaced.

In Sri Lanka, floods triggered by torrential rains between the 12th and 25th affected more than 50,000 people. According to reports, about 40 houses were destroyed and 155 were damaged.

Global weather highlights of the month



IMPACTS OF WEATHER ON ECONOMIC DEVELOPMENT

World Meteorological Day is held on March 23rd every year to commemorate the establishment in 1950 of the World Meteorological Organisation (WMO), which represents the national Meteorological and Hydrological Services of 187 countries worldwide, including Ireland. Each year, a theme is chosen to highlight a current topic in meteorology of global importance. The theme of this year's World Meteorological Day was *Observing our Planet for a Better Future*, focusing on the importance of monitoring meteorological and hydrological phenomena to help countries achieve sustainable economic development.

Virtually all socio-economic sectors and human activities are influenced by weather. Both weather and climate forecasts with higher levels of accuracy and lead-time can radically improve the chances of living in relative safety and protect precious natural resources. Some statistics show the importance of weather in the global economy:

- **Nine out of ten natural disasters worldwide are linked to hydro-meteorological hazards**
- **Between 1980 and 2000, these hazards or individual events killed 1.2 million people and caused more than 570 billion euro in economic losses**
- **Millions of people today are more vulnerable to extreme weather events due to increased urbanisation, large-scale population movements and expansion of communities into arid zones**

State-of-the-art equipment for regular climate, weather and water-related observations and forecasts are often not available in the world's poorest countries, but such nations are often the most prone



to natural hazards and desperately require enhanced information and forecasts to know when to plant crops, how to best use and preserve water and to reduce disaster risks. The importance of monitoring the earth's climate, as well as scientific research and assessment, was endorsed by last year's awarding of the Nobel Peace Prize to the Intergovernmental Panel on Climate Change, co-sponsored by WMO and the United Nations Environment Programme. Next year's WMO-organised 3rd World Climate Conference, to be held in Geneva, will focus on climate prediction for decision-making.

More information is available on the website: www.wmo.ch/pages/wmd/



The Irish Meteorological Society was founded in 1982 to support and develop an interest in meteorology in Ireland. The Society includes members from Ireland and worldwide, who are interested in weather and weather-related topics. The membership is drawn from those who work in meteorology, aviation, marine and agricultural activities, together with teachers, lecturers or anyone who has an interest in meteorology and the environment.

The Society holds a number of lectures in spring and autumn on meteorology or related topics, including an annual guest lecture. A field trip is organised in May to a site of interest; this year's trip was to Armagh Observatory. An annual dinner is held in either January or February and there is also a newsletter produced for members.

For more details or for membership enquiries, see the Irish Meteorological Society website www.irishmetsociety.org or write to :

The Secretary, Irish Meteorological Society, c/o Met Éireann, Glasnevin Hill, Dublin 9.