

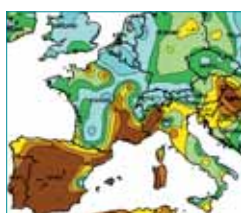
# Monthly Weather Bulletin

No. 180  
APRIL 2001



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**Another dry month  
in southwest  
Europe**

**Feature .....** 16  
**Belmullet whirlwind  
on 29th**

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



After the enforced break due to foot and mouth disease, there was fine weather for the return of horse racing at Mallow on the 17th.  
(picture Evening Echo)

## **WETTER THAN NORMAL IN MOST PLACES; TEMPERATURE AND SUNSHINE NEAR NORMAL**

**Summary:** Rainfall totals for April were above normal except in the extreme north and east. Much of the month's precipitation fell in the form of showers, especially in more western areas. Heavy showers with hail or snow were widespread on the 28th and 29th. Mean monthly temperatures for the month were close to normal everywhere. There was little variation in maximum temperatures from day to day, with few warm days; this month's highest temperature of 16°C at Dublin's

Merrion Square on the 2nd was only barely higher than last month's highest value of 15.3°C. Mean minimum temperatures were also near normal generally, but there were some sharp frosts throughout the month at inland stations; here there was a total of between 14 and 17 ground frosts compared with the normal range for April of 9 to 12. After a mainly dull first half, relatively sunny weather at the end of the month brought sunshine totals close to normal overall at most stations.





There was cool, sunny weather with just a few showers over the Easter weekend; the fine weather was enjoyed here at Funderland in Cork on Easter Sunday, the 15th.  
(picture Evening Echo)

**1st to 9th:** Unsettled with some heavy rain or showers and also generally dull.

Depressions close to or over the country gave some strong winds, mostly between southerly and westerly in direction, especially on the 2nd and 5th. The heaviest rain fell on the 5th, 6th and 8th.

**10th to 20th:** High pressure was the dominant influence, giving mostly dry weather but slow-moving fronts gave some light rain at times, mainly in the period 12th to 15th. Cloudy at first, but clearer skies allowed widespread ground frost to develop between the 16th and 20th. Winds were light variable early in the period, becoming northwesterly to northerly and strengthening from the 15th onwards.

**21st to 30th:** A return to generally disturbed weather, with rain or showers each day except the 26th. Heavy frontal rain in all areas on the 21st, followed by very showery weather as low pressure became almost stationary to the northeast of Ireland. There were also several hours

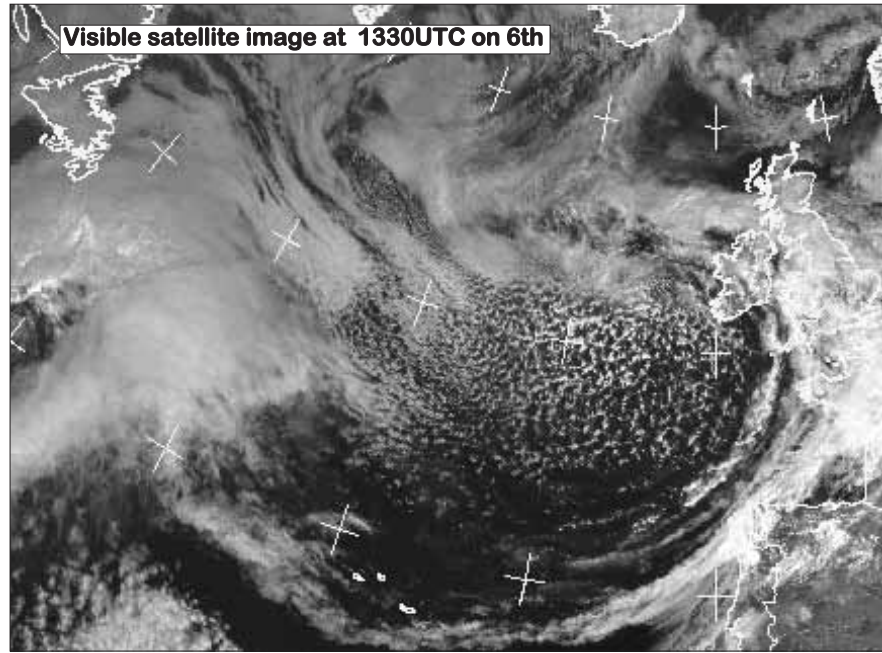
of sunshine between the showers on most days, while clear spells on most nights allowed ground temperatures to fall below freezing at inland stations. Winds were mostly light northerly or northwesterly from the 25th onwards.

Mean windspeeds for the month were close to normal generally, varying between 8 and 11 knots (*9 and 13m.p.h.*) at most stations, up to 14 knots (*16m.p.h.*) at Malin Head. Most stations measured their strongest winds of the month during the first week; a number of stations recorded their highest April gusts for between 5 and 7 years on the 5th. The highest gust of 63 knots (*73m.p.h.*) was measured at Belmullet on the 29th, however, associated with a tornado-like feature (*see back page*). Snow was recorded on the 5th, 18th and in the period 28th to 29th, while hail showers fell between the 2nd and 4th, on the 18th and 22nd and very widely in the period 28th to 29th. Fog was most widespread on the 9th and in the period 12th to 14th.



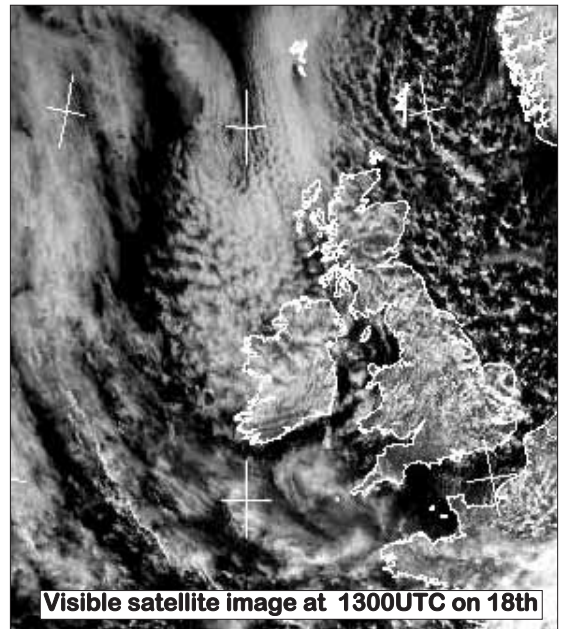
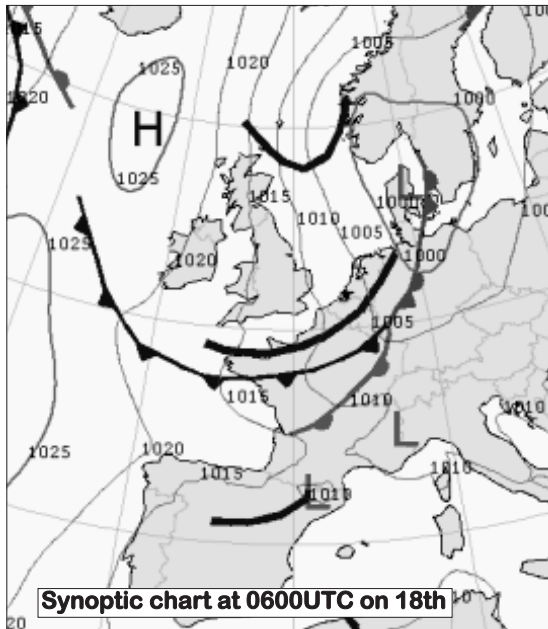
**1st to 9th:**

Atlantic weather systems brought spells of rain or showers, heaviest in the period 5th to 8th. On the 5th and 6th, active frontal systems associated with a depression of 986hPa to the northwest of Ireland brought bands of heavy rain, with strong southwesterly winds in the south and west.



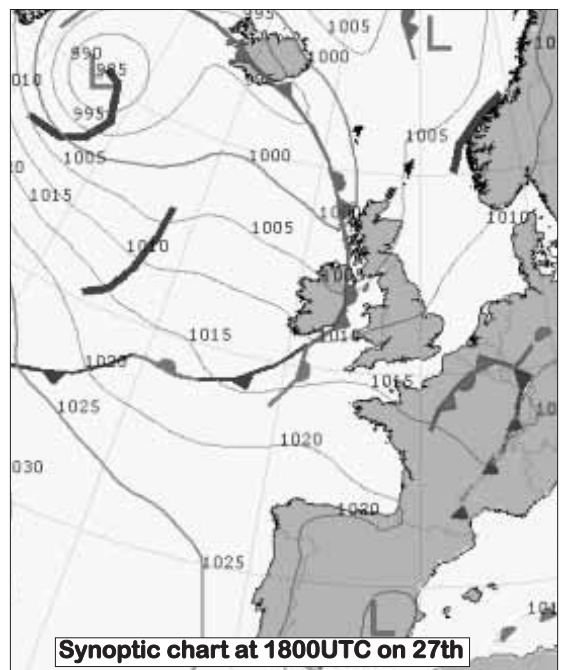
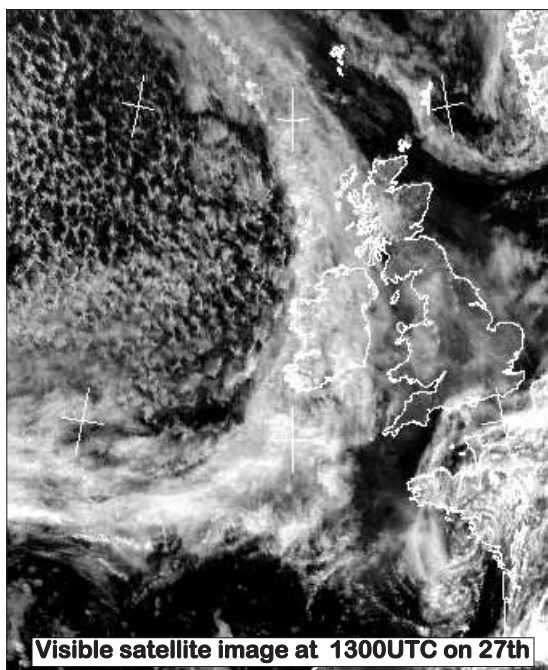
**10th - 20th:**

Mainly dry as high pressure became established to the west of the country, but with light rain or showers at times. Light northerly winds kept temperatures below normal, with widespread ground frost between the 16th and 20th.



**21th - 30th:**

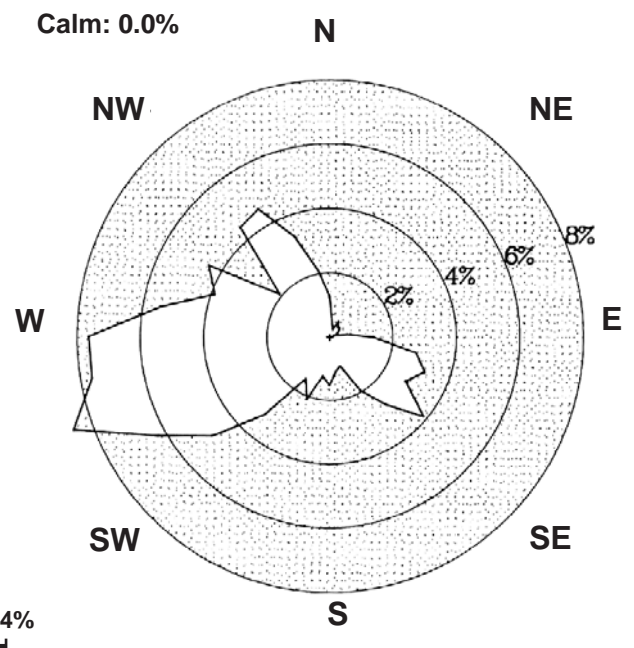
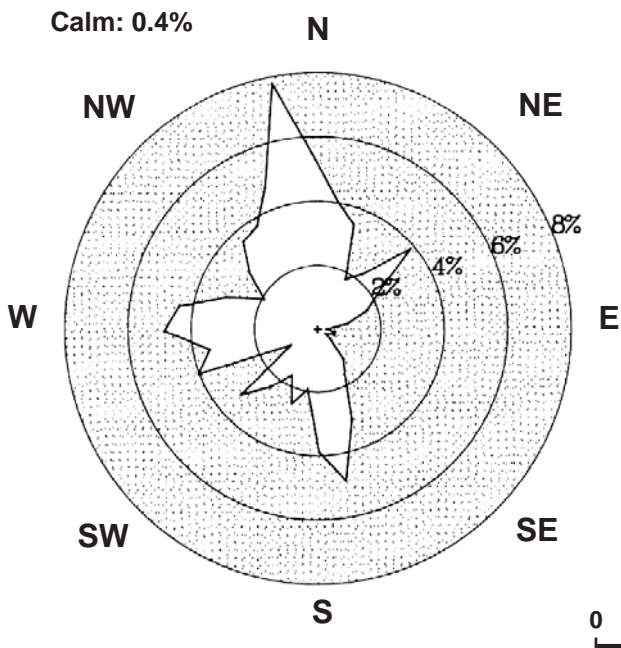
Unsettled with frequent rain or showers. A rapidly moving frontal system brought a spell of rain to all areas on the 27th.



County / Station	WIND (KNOTS)						ELEMENTS								
	Mean speed	Max. 10-min. mean dir.	speed	date/hour	Max. Gust dir.	speed	date/time	Days with gales	gale gusts	Hours with gale gusts	Snow	Snow Lying	Hail	Thunder	Fog
<b>CO. CLARE</b> SHANNON AIRPORT	9.2	240°	34	2/14	240°	47	5/0948	1	6	31	0	0	2	0	1
<b>CO. CORK</b> CORK AIRPORT	9.9	260°	30	5/14	260°	44	5/1253	0	6	33	0	0	2	0	9
<b>CO. DONEGAL</b> MALIN HEAD	13.9	230°	40	2/19	230°	57	2/1805	1	14	71	0	0	6	0	0
<b>CO. DUBLIN</b> CASEMENT AERODROME	9.3	230°	34	2/16	200°	48	2/1319	1	4	33	1	0	2	0	0
					260°	48	9/1457								
DUBLIN AIRPORT	10.1	250°	31	5/17	250°	45	5/1726	0	7	29	0	0	2	0	0
<b>CO. KERRY</b> VALENTIA OBSERVATORY	8.7	260°	28	6/14	190°	43	2/0806	0	5	37	0	0	2	0	2
<b>CO. KILKENNY</b> KILKENNY	7.7	180°	29	2/12	260°	42	5/1444	0	3	13		0			
		250°	29	5/15											
<b>CO. MAYO</b> BELMULLET	10.6	150°	36	2/11	360°	63	29/1935	1	8	49	1	0	6	0	2
CONNAUGHT AIRPORT	9.9	260°	33	5/14	180°	50	2/1105	0	8	43	1	0	2	0	11
<b>CO. MONAGHAN</b> CLONES	7.9	190°	28	2/16	170°	42	2/1131	0	3	11		0			
<b>CO. OFFALY</b> BIRR	7.4	190°	28	2/12	190°	44	2/1059	0	3	13		0			
<b>CO. WESTMEATH</b> MULLINGAR II	7.2	190°	27	2/11	190°	44	2/1026	0	2	10		0			
<b>CO. WEXFORD</b> ROSSLARE	9.9	230°	25	5/12	230°	42	5/1144	0	9	27	0	0	1	0	4
		230°	25	6/16	340°	42	15/1646								

Valentia Observatory

Dublin Airport

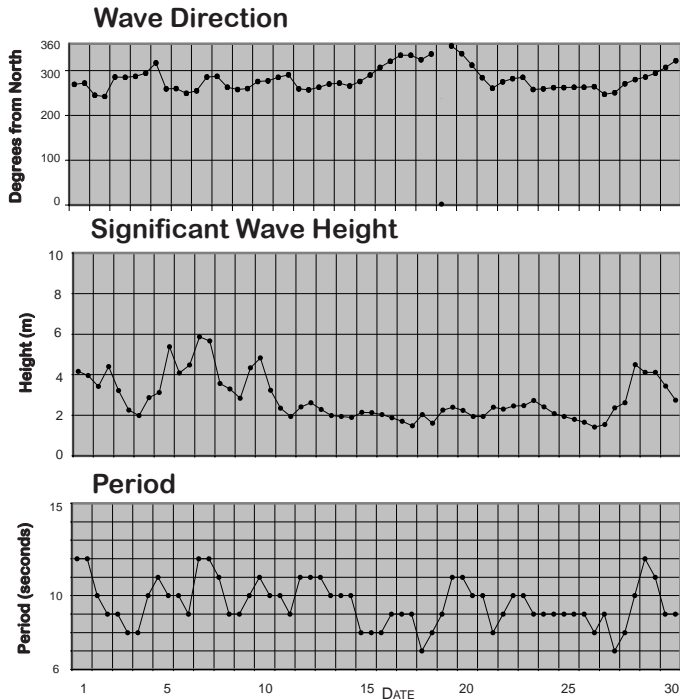


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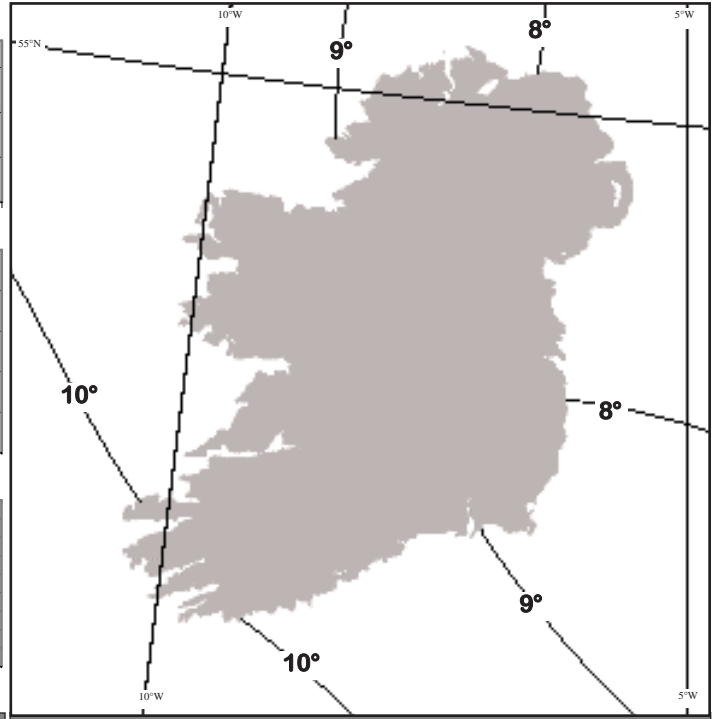
FREQUENCY OF WIND DIRECTION

### SEA TEMPERATURES

Sea temperatures rose by just under a degree in most places during the month, ranging from around 8°C off the north and northeast coast to over 10°C in the southwest during most of the month, close to normal for April. At Malin Head the mean sea temperature for the month was 7.9°C compared with the normal value for April of 8.1°C.



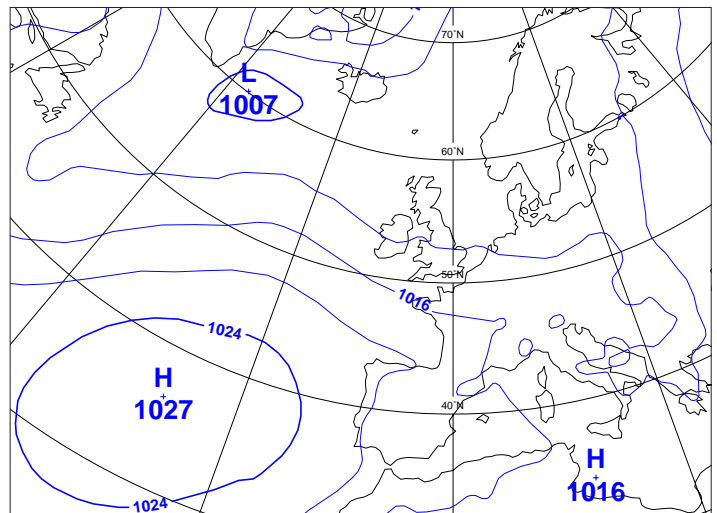
Wave conditions at 52.5°N, 12°W based on WAM model



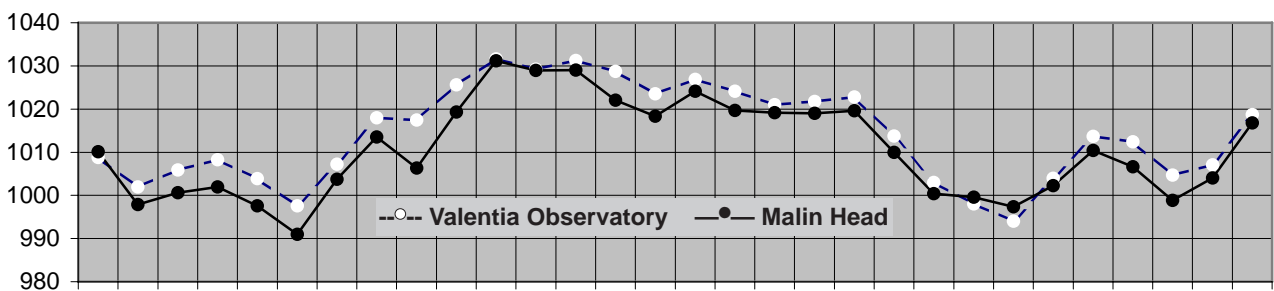
Sea Temperatures (°C) around mid-month

### MEAN ATMOSPHERIC PRESSURE

Mean sea level pressure values for the month were a little below normal everywhere. They ranged from just under 1011hPa in the north to 1014hPa in the southwest, around 3hPa below the normal values for April. A series of Atlantic depressions kept pressure well below normal during the first week and for a period late in the month, but high pressure was the dominant feature around mid-April. Belmullet measured the lowest pressure of the month, 987.0hPa on the 6th, as a depression passed close to the northwest coast. The highest pressure of the month, 1033.3hPa, was measured at both Birr and Malin Head on the 11th.



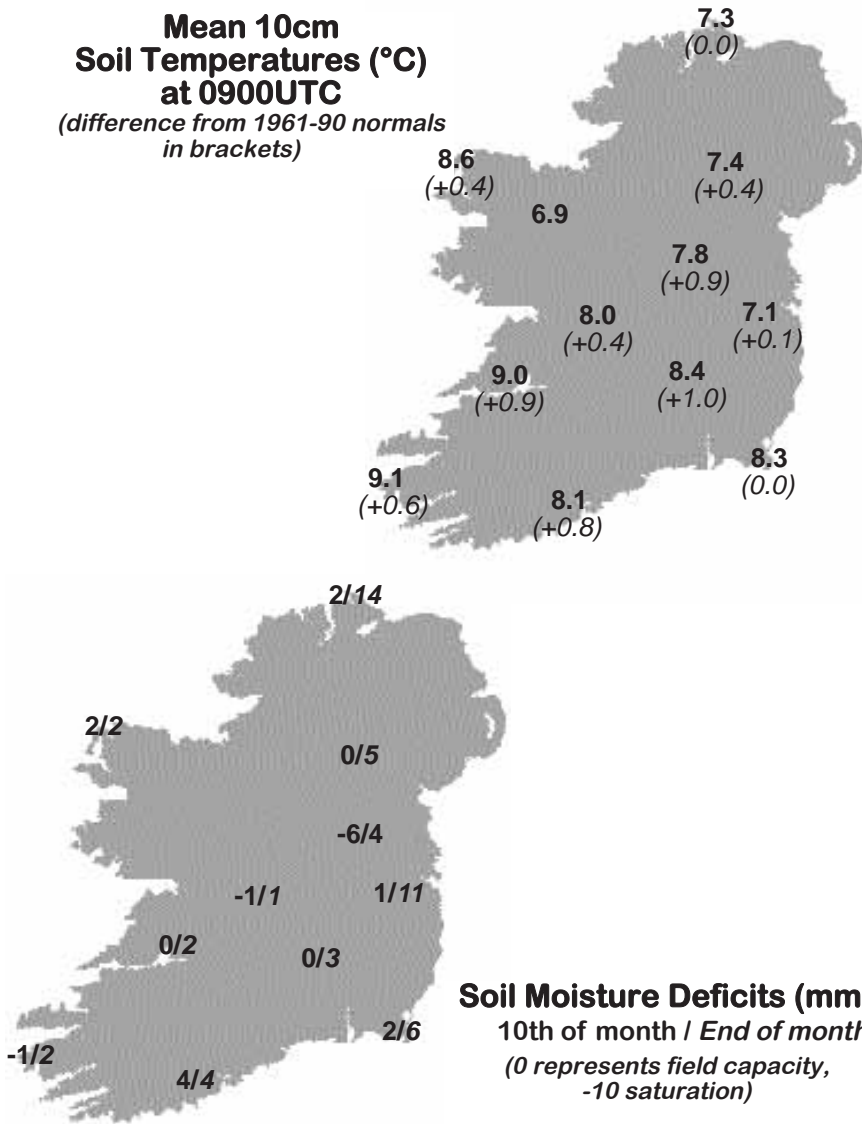
The above map is based on monthly means of 1200 UTC values



Mean daily M.S.L. pressure (hPa)



**Mean 10cm Soil Temperatures (°C) at 0900UTC**  
(difference from 1961-90 normals in brackets)

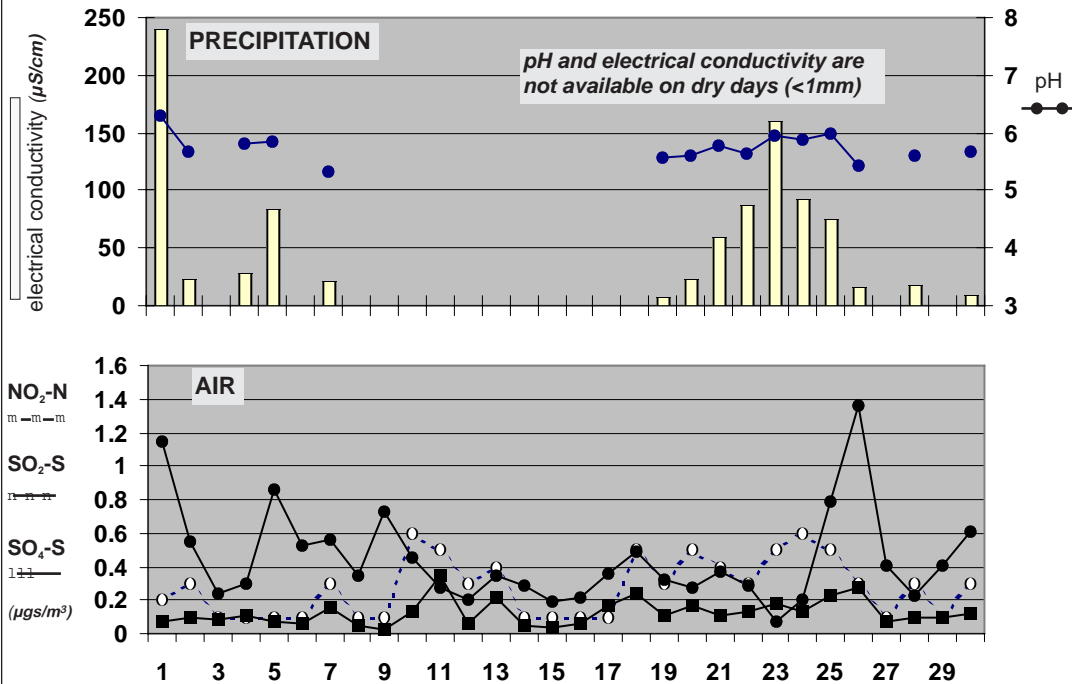


**Soil Temperatures at 0900UTC**

County/Station	10cm °C	20cm °C	30cm °C
CO. CLARE			
SHANNON AIRPORT	9.0	9.6	9.9
CARRON	8.5		9.2
CO. CORK			
FERMOY (MOORE PARK)	8.8	8.7	9.3
CORK AIRPORT	8.1	8.4	10.2
SHERKIN ISLAND	9.7		10.5
BALLINCURRIG (PEAFIELD)	7.7	7.9	8.7
CO. DONEGAL			
MALIN HEAD	7.3	7.7	8.6
CO. DUBLIN			
DUBLIN AIRPORT	6.9	7.4	8.0
CASEMENT AERODROME	7.1	7.7	8.4
CO. KERRY			
VALENTIA OBSERVATORY	9.1	9.4	10.2
CO. KILKENNY			
KILKENNY	8.4	9.0	9.7
CO. LEITRIM			
BALLINAMORE	7.2	7.6	8.3
CO. LIMERICK			
MOUNT RUSSELL	7.2	8.0	
CO. LOUTH			
ARDEE (BOHARNAMOE)	7.8	8.1	8.1
CO. MAYO			
BELMULLET	8.6	9.3	10.4
STRAIDE	7.8		
CONNAUGHT AIRPORT	6.9	6.6	7.5
CO. MEATH			
WARRENSTOWN	7.0	7.5	8.7
CO. MONAGHAN			
CLONES	7.4	7.7	8.3
CO. OFFALY			
BIRR	8.0	8.8	9.8
CO. TIPPERARY			
FETHARD (PARSONSHILL)	7.2	8.0	
CO. WATERFORD			
DUNGARVAN (CARRIGLEA)		9.0	9.6
CO. WESTMEATH			
MULLINGAR II	7.8	8.2	9.1
CO. WEXFORD			
JOHNSTOWN CASTLE	8.0	8.2	8.8
ROSSLARE	8.3	8.7	10.2
CLONROCHE	7.6	8.5	9.3
JOHN F. KENNEDY PARK	8.3	8.7	10.1

**Soil Moisture Deficits (mm)**  
10th of month / End of month  
(0 represents field capacity, -10 saturation)

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



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.	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	mean wind speed (m/s) 2m agl.	P.E. (Penman) (mm)		
																								<b>Co. Cork</b>	1-10
Fermoy	11-20	11.9	-	5	3	12.6	5.1	8.9	-	0.8	11	0	47	10	-0.7	20	2	9.3	9.8	-	-	3.4	-		
	21-end	34.2	-	8	6	12.5	2.4	7.5	-	-1.2	29	2	36	6	-3.1	29	5	8.8	9.6	-	-	2.5	-		
	month	73.0	124	21	16	12.6	4.0	8.3	0.3	-1.2	29	2	127	23	-3.1	29	10	8.8	9.3	-	-	3.3	-		
<b>Co. Donegal</b>	1-10	41.1	-	9	8	11.3	3.5	7.4	-	-1.6	4	1	33	3	-5.7	4	5	-	-	-	-	-	-		
Glenties	11-20	21.2	-	8	6	10.9	4.4	7.7	-	-1.7	11	1	34	4	-6.1	11	4	-	-	-	-	-	-		
	21-end	25.8	-	9	7	12.0	2.3	7.2	-	-1.1	23	2	34	4	-4.0	30	5	-	-	-	-	-	-		
	month	88.1	110	26	21	11.4	3.4	7.4	-0.1	-1.7	11	4	101	11	-6.1	11	14	-	-	-	-	-	-		
<b>Co. Kerry</b>	1-10	35.0	-	8	7	13.0	5.1	9.1	-	1.3	8	0	48	8	-1.5	3	3	-	-	46.6	-	-	-		
Ardfert	11-20	13.7	-	6	5	13.1	5.1	9.1	-	-0.1	20	1	49	10	-2.1	20	2	-	-	32.2	-	-	-		
	21-end	39.9	-	7	6	12.4	3.4	7.9	-	0.9	23	0	38	6	-0.6	23	2	-	-	60.2	-	-	-		
	month	88.6	-	21	18	12.8	4.5	8.7	0.3	-0.1	20	1	135	24	-2.1	20	7	-	-	139.0	-	-	-		
<b>Co. Leitrim</b>	1-10	58.3	-	10	8	11.4	3.6	7.5	-	0.2	4	0	35	4	2.2	10	0	6.8	7.5	-	-	2.8	-		
Ballinamore	11-20	19.3	-	10	6	11.0	3.4	7.2	-	-1.1	20	2	33	3	2.2	20	0	7.6	8.7	-	-	2.0	-		
	21-end	27.5	-	10	7	11.2	2.3	6.8	-	-1.7	29	3	30	4	2.2	30	0	7.3	8.8	-	-	1.3	-		
	month	105.1	157	30	21	11.2	3.1	7.2	-0.5	-1.7	29	5	98	11	2.2	30	0	7.2	8.3	-	-	2.1	24		
<b>Co. Louth</b>	1-10	28.3	-	8	4	13.3	4.6	9.0	-	1.1	4	0	48	10	-2.9	8	4	7.5	7.7	-	-	-	-		
Ardee	11-20	6.3	-	6	5	11.4	2.6	7.0	-	-2.0	20	3	32	4	-5.9	20	6	7.8	8.3	-	-	-	-		
	21-end	21.5	-	8	5	12.3	2.1	7.2	-	-0.9	29	3	34	6	-6.6	29	7	8.1	8.4	-	-	-	-		
	month	56.1	102	22	14	12.3	3.1	7.7	0.2	-2.0	20	6	114	19	-6.6	29	17	7.8	8.1	-	-	-	-		
<b>Co. Waterford</b>	1-10	38.5	-	8	6	13.3	5.1	9.2	-	0.6	3	0	51	11	-0.7	3	1	-	9.0	50.6	-	-	2.8	-	
Dungarvan	11-20	7.5	-	4	3	13.0	5.5	9.3	-	1.5	17	0	51	11	-0.5	20	2	-	10.0	47.2	-	-	1.9	-	
	21-end	47.2	-	7	7	13.0	3.7	8.4	-	-0.2	29	1	43	7	-1.4	29	2	-	9.8	56.4	-	-	2.2	-	
	month	93.2	-	19	16	13.1	4.8	9.0	0.5	-0.2	29	1	144	29	-1.4	29	5	-	9.6	154.2	-	-	2.3	52	
<b>Co. Wexford</b>	1-10	31.9	-	7	6	12.4	5.2	8.8	-	2.7	3	0	46	7	-2.6	3	3	7.8	8.3	30.9	-	-	1.6	-	
Johnstown Castle	11-20	5.6	-	5	3	11.4	4.6	8.0	-	1.3	17	0	39	6	-3.3	20	4	7.9	9.0	52.5	-	-	1.0	-	
	21-end	46.8	-	9	6	11.4	4.3	7.9	-	1.2	29	0	36	3	-2.3	23	3	8.3	9.2	53.1	-	-	1.1	-	
	month	84.3	132	21	15	11.7	4.7	8.2	0.3	1.2	29	0	121	16	-3.3	20	10	8.0	8.8	136.5	83	-	-	1.2	42

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

SEE BACK PAGE OF JANUARY ISSUE FOR NOTES ON THE DATA

County/ Station	Period	P.E. (mm)		Soil Moisture (mm)		
		Amount	Deficit	Deficit	Accumulated	Surplus
<b>Co. Dublin</b>	1-10	10.3	-	0	15	-
Kinsealy	11-20	12.1	2	2	-	-
	21-end	10.9	-	0	15	-
	month	33.3	-	-	-	-
<b>Co. Kerry</b>	1-10	9.6	-	0	49	-
Valentia Obs.	11-20	13.4	-	0	2	-
	21-end	15.8	-	0	24	-
	month	38.8	-	-	-	-
<b>Co. Leitrim</b>	1-10	not available				
Ballinamore	11-20	10.3	-	0	9	-
	21-end	11.3	-	0	16	-
	month	-	-	-	-	-
<b>Co. Wexford</b>	1-10	4.3	-	0	28	-
Johnstown Castle	11-20	13.7	8	8	-	-
	21-end	30.2	-	0	17	-
	month	48.2	-	-	-	-

County/ Station	GLOBAL SOLAR RADIATION (MJ/sq. m)				P.E. (Penman) total for
	10-day totals 1-10	11-20	21-end	total for month	
<b>Co. Donegal</b>					
Malin Head	114.49	132.60	153.74	400.83	57
<b>Co. Dublin</b>					
Dublin Airport	103.74	134.14	121.83	359.71	54
<b>Co. Kerry</b>					
Valentia Obs.	117.85	121.76	144.92	384.53	51
<b>Co. Kilkenny</b>					
Kilkenny	115.75	136.33	140.29	392.37	57
<b>Co. Mayo</b>					
Belmullet	113.69	120.30	159.26	393.25	50
<b>Co. Monaghan</b>					
Clones	105.98	112.04	128.11	346.13	51
<b>Co. Offaly</b>					
Birr	105.73	122.68	132.76	361.17	50

**Sunday 1st:** A depression approached from the southwest, its associated warm front reaching southern counties during the morning, moving northeastwards over the country during the day. Cool overnight with a touch of ground frost in the south midlands. Some bright or sunny spells at first but generally dull with scattered outbreaks of light rain. Light to moderate mainly southerly winds.

**Rainfall:** less than 1mm generally, 7mm at Belmullet

**Temperature:** max: 10°C to 16°C, warmest in east, min. 3°C to 7°C; ground temperatures down to -3°C in Kilkenny

**Sunshine:** less than 1 hour generally; 3 hours in east

**Monday 2nd:** The depression to the southwest tracked steadily northwards along the west and north coast during the day with its associated cold front crossing the country overnight and during the early morning. The southerly airflow increased fresh to strong or near gale and very gusty during the day and veered westerly before decreasing light to moderate in all but northern areas by evening. Rain or drizzle overnight, clearing to scattered showers. Turning cool during the evening with ground frost in midland areas late in the day.

**Rainfall:** less than 1mm generally, 4mm in west and southwest

**Temperature:** max. 10°C to 15°C, min. 3°C to 6°C; ground temperatures 0°C to -5°C inland

**Sunshine:** 4 to 9 hours but 2 hours at Connaught Airport

**Tuesday 3rd:** A fresh to strong southwest airflow covered Ireland. A depression of 976 hPa in the North Sea continued to move away northwards. Apart from some showers, a few of which were heavy, it was a fine dry day in most places. Early frost in midland areas cleared quickly. Fresh to strong southwesterly winds over the northern half of the country moderated slowly.

**Rainfall:** 1 to 7mm generally

**Temperature:** max. 9°C to 13°C, min. 1°C to 5°C inland; ground temperatures -6°C to 1°C

**Sunshine:** 6 to 10 hours generally, less than 4 hours in south and southeast

**Wednesday 4th:** A depression over Wales moved northeastwards into the North Sea. Cold overnight with scattered showers and a fairly widespread ground frost. Generally it was a bright sunny day with scattered showers, some of which were heavy with hail. Showers largely died out after dark and a slight ground frost began to set in. Winds, light westerly at first, became moderate to fresh and gusty northwesterly during the day before easing again by evening.

**Rainfall:** trace to 3mm

**Temperature:** max. 9°C to 12°C, min. 0°C to 4°C; ground temperatures down to -5°C in Kilkenny

**Sunshine:** 8 to 11 hours

**Thursday 5th:** A vigorous depression with associated rainbelt crossed eastwards over the north of Ireland. Cold but mostly dry overnight with ground frost in places. Rain moved into the southwest early in the night and pushed northeastwards during the day; rain was heavy at times with over 10mm in many places. Milder, drier weather with just the odd shower followed later. Winds light southerly at first, becoming fresh to strong and gusty cyclonic variable as the front moved over the country.

**Rainfall:** 5mm in north, 10 to 16mm in southern half

**Temperature:** max. 7°C in north, 11° to 14°C generally, min. 2°C to 6°C; ground temperatures -1°C to -3°C inland

**Sunshine:** nil to 2 hours generally, 7 hours at Cork Airport

**Friday 6th:** A depression with associated rainbelt was slow-moving off the northwest. Mild and misty with scattered showers and some heavier rain for a time in the southwest. Moderate to fresh and gusty southwesterly winds.

**Rainfall:** 3 to 8mm in most places, up to 15mm at Valentia

**Temperature:** max. 8°C in north, 12° to 14°C generally, min. 3°C to 7°C; ground temperatures -2°C to 5°C

**Sunshine:** 1 to 4 hours generally, 6 hours at Cork Airport

**Saturday 7th:** Low pressure over the northeast of the country drifted slowly eastwards. Some slight to sharp frost during the night cleared slowly. Rain or showers in many areas, but amounts were generally small. Some spells of sunshine particularly in coastal regions. Cool. Winds light variable initially but strengthening from a north to northwesterly direction during the day.

**Rainfall:** trace to 2mm

**Temperature:** max. 9°C to 12°C, min. 2°C to 5°C; ground temperatures down to -5°C in Kilkenny

**Sunshine:** 2 to 7 hours, sunniest in southwest

**Sunday 8th:** Active frontal systems passed eastwards over the country. Cold overnight with widespread ground frost inland. It remained cold in northern areas during the day but the south became milder. Dry at first but wet weather moved into the west and southwest during the morning, spreading across the country during the day. Winds were moderate to fresh and gusty for a time during the day, mainly southerly in direction, becoming lighter after dark.

**Rainfall:** less than 2mm in north, 10 to 19mm in parts of south and midlands

**Temperature:** max. 6°C to 8°C in north and east, 11° to 13°C elsewhere, min. 1°C to 5°C; ground temperatures -4°C to 3°C

**Sunshine:** nil to 1 hour

**Monday 9th:** Ireland lay between an area of low pressure to the north and high pressure to the south. Mild overnight with mist and fog patches and patches of rain or drizzle, followed by a mild, breezy day with scattered showers and sunny spells. Winds strengthened during the day, veering northwesterly during the evening.

**Rainfall:** 1 to 4mm

**Temperature:** max. 11°C to 14°C, min. 6°C to 9°C; ground temperatures 2°C to 7°C

**Sunshine:** 2 to 8 hours, sunniest in southeast

**Tuesday 10th:** High pressure to the southwest maintained a light northwest airflow. Some frost early and late. Showery at first in places but becoming dry with long sunny spells, especially in the west, with near normal temperatures.

**Rainfall:** trace to 2mm

**Temperature:** max. 9°C to 14°C, min. 2°C to 8°C; ground temperatures between 0°C and -3°C inland

**Sunshine:** 3 to 10 hours, dullest in east and southeast

**Wednesday 11th:** A weak ridge of high pressure covered the area, while a weak warm front off the west coast moved slowly eastwards during the evening. After early frost inland with some patchy fog, it was a mainly dry, sunny day almost everywhere. Winds were mainly light southerly.

**Rainfall:** dry most places, 1mm near Atlantic coasts

**Temperature:** max. 9°C to 14°C, min. -1°C to 6°C; ground temperatures down to -6°C inland

**Sunshine:** 1 hour near Atlantic coasts, 7 to 10 hours generally

**Thursday 12th:** An anticyclone of 1032hPa to the south of Ireland remained stationary, while weak fronts drifted slowly southeastwards. Rain and drizzle along the west coast soon became widespread and persistent in almost all areas with fog in some places for a time. Winds light and variable.

**Rainfall:** 2 to 7mm generally, 14mm at Valentia

**Temperature:** max. 9°C to 15°C, min. 6°C to 9°C; ground temperatures above 4°C everywhere

**Sunshine:** nil most places, 4 hours in Mullingar

**Friday 13th:** Weak fronts moved slowly over the country during the day and winds were generally light variable throughout. Overnight and during the morning it was dull and overcast in most places with outbreaks of rain and drizzle, with widespread mist and fog. Becoming mostly dry during the afternoon but mist, fog and drizzle returned to many parts during the evening.

**Rainfall:** dry in north and west, 1 to 3mm in eastern half

**Temperature:** max. 9°C to 15°C, min. 7°C to 10°C; ground temperatures 4° to 10°C

**Sunshine:** nil or trace most places, 3 hours in Shannon Airport

**Saturday 14th:** A light to moderate westerly airflow developed over the country as a cold front moved southwards during the evening. Mild and cloudy at first with patchy rain or drizzle. Some sunny spells developed in the south during the day but it was generally dull with light rain returning to all areas by evening.

**Rainfall:** dry in south and southeast, 1 to 5mm elsewhere

**Temperature:** max. 11°C to 15°C, min. 8°C to 10°C; ground temperatures above 6°C everywhere

**Sunshine:** nil to 5 hours, sunniest in southeast

**Sunday 15th:** A band of rain moved southwards over the country, clearing to scattered showers. Mild at first but cooler northerly winds developed behind the front. Showers died out after dark with slight frost in places.

**Rainfall:** 1 to 4mm

**Temperature:** max. 9°C to 13°C, min. 4°C to 8°C; ground temperatures down to -2°C in Mullingar

**Sunshine:** 7 to 10 hours but 4 hours at Valentia



**Monday 16th:** Ireland lay in a slack, stable northerly airflow. The day started with clear spells almost everywhere but there were also some showers in the west, dying out soon after dawn. Sunny spells away from Atlantic coasts. Cool in the northerly breeze but by midnight the winds veered northwest, still light. Clear spells after dark and some ground frost, sharp in north Leinster.

**Rainfall:** dry most places, 2mm at Belmullet

**Temperature:** max. 8°C to 12°C, min. 1°C to 7°C; ground temperatures down to -5°C in Clones

**Sunshine:** 8 to 11 hours generally, 1 hour in Valentia Observatory

**Tuesday 17th:** An anticyclone of 1032hPa about 500 miles to the west drifted southwards. A cold front moved down over the country in the afternoon and evening. Very cold overnight away from Atlantic coasts with ground frost in places early on. Rain and drizzle in the northwest by morning, spreading slowly southwards during the afternoon. A cool, cloudy day with outbreaks of rain or showers and some short sunny spells. Light variable winds at first, becoming moderate to fresh and gusty northwesterly.

**Rainfall:** dry in south, 1 to 3mm generally

**Temperature:** max. 10°C to 13°C, min. 1°C to 6°C; ground temperatures between -1°C and -4°C inland

**Sunshine:** 1 to 3 hours generally, 5 hours in Rosslare

**Wednesday 18th:** Ireland lay in a cold, unstable northerly airflow. Very cold overnight where skies cleared with ground frost in places. Temperatures were slow to rise and it turned out to be a cold, breezy day with scattered wintry showers and good sunny spells. Temperatures generally were 3 or 4 degrees below normal. Northerly winds were moderate to fresh and gusty at times.

**Rainfall:** nil to 1mm

**Temperature:** max. 7°C to 9°C, min. 1°C to 5°C; ground temperatures down to -2°C inland

**Sunshine:** 1 to 7 hours, dullest in west

**Thursday 19th:** A cold northerly airflow over Ireland. Cold overnight with sharp to severe frost in many inland areas, followed by a very cold day with temperatures well below normal for the time of year. A few light wintry showers but generally dry with long sunny spells. North to northwesterly winds were light to moderate but fresher along the north coast at times. Slight to sharp frost set in again in some areas during the late evening.

**Rainfall:** nil to 1mm

**Temperature:** max. 8°C to 11°C, min. -2°C to 5°C; ground temperatures down to -6°C in Mullingar

**Sunshine:** 6 to 11 hours generally, 3 hours in Birr and Shannon Airport

**Friday 20th:** An anticyclone to the west of Ireland maintained a northwest airflow. Sharp to severe frost at first with isolated showers of rain, mainly in the west. Frost clearing during the morning to give a cold bright day with plenty of sunshine in many areas. Mainly light to moderate north to northwest winds, backing more westerly by late evening, still remaining light.

**Rainfall:** nil to 1mm

**Temperature:** max. 10°C to 13°C, min. -2°C to 5°C; ground temperatures zero to -4°C generally inland, -9°C in Clones

**Sunshine:** 6 to 12 hours

**Saturday 21st:** A frontal system crossed eastwards over Ireland during the day. Cold and dry overnight with ground frost in places and some mist also. Cloudy, wet weather moved into the west and northwest in the morning and spread eastwards during the day, with some heavy rain at times. Clearer, showery weather followed into the northwest by evening. Winds were mostly light and variable or southwesterly in direction, stronger on northwest coasts.

**Rainfall:** 3 to 5mm in north and northwest, 6 to 10mm generally, 17mm in Valentia Observatory

**Temperature:** max. 9°C to 12°C, min. 3°C to 6°C; ground temperatures down to -3°C at Clones

**Sunshine:** nil to 1 hour

**Sunday 22nd:** Low pressure in the Irish Sea drifted slowly eastwards. Slight to sharp frost in many inland areas at first. Rain in the south and east of the country persisted during the night and morning, clearing slowly to scattered heavy showers. Sunny periods developing with near-normal temperatures. Light to moderate northwesterly winds.

**Rainfall:** nil to 2mm in northwestern half, 18mm in Rosslare

**Temperature:** max. 9°C to 13°C, min. 2°C to 6°C, ground temperatures zero to -3°C inland

**Sunshine:** 6 to 12 hours, sunniest in southwest

**Monday 23rd:** A southeasterly airflow developed over Ireland as a frontal trough to the southwest moved over the country during the evening. After a dry night, a rainbelt in the southwest around midday gradually moved across the country, followed by showers. Winds were mainly light variable at first but settled into a south-southeasterly direction and increased moderate to fresh.

**Rainfall:** less than 1mm generally, up to 12mm in south and southwest

**Temperature:** max. 9°C to 14°C, min. zero to 3°C; ground temperatures -2°C to -5°C generally, -7°C in Clones

**Sunshine:** 6 to 12 hours many places, 2 hours in southwest

**Tuesday 24th:** A complex area of low pressure to the west gradually moved in over Ireland. All areas had outbreaks of rain or showers throughout the day, heavy at times in places, but also some brief sunny spells. Winds were generally light to moderate southeasterly but became cyclonic variable later.

**Rainfall:** 1 to 2mm in north and east, up to 14mm in Rosslare

**Temperature:** max. 9°C to 13°C, min. 4°C to 8°C; ground temps. -1°C to 6°C

**Sunshine:** less than 1 hour generally, 3 hours in Shannon Airport

**Wednesday 25th:** A slack area of low pressure over Ireland and Britain drifted eastwards, followed by a moderate northwesterly airflow. Heavy rain in the east for a short time, followed by some showers. Sunny spells developed in many areas, especially in the north and south. Winds were mostly light variable. Frost set in after dark in midland and eastern areas.

**Rainfall:** nil to 1mm generally, 12mm at Dublin Airport

**Temperature:** max. 10°C to 14°C, min 4°C to 7°C; ground temperatures zero to -3°C inland

**Sunshine:** 1 to 6 hours generally, 11 or 12 hours in south and southeast

**Thursday 26th:** A slack and generally west to northwest airflow covered the area throughout the day. Misty overnight with the mist turning to fog in many places and there was a touch of ground frost in the midlands and east. Mist or fog cleared during the morning to give a dry bright sunny day in all areas.

**Rainfall:** nil or trace

**Temperature:** max. 13°C to 15°C, min 2°C to 6°C; ground temperatures zero to -4°C inland

**Sunshine:** 7 to 13 hours

**Friday 27th:** A fresh and gusty south to southwest airflow covered Ireland as an occluding frontal system moved eastwards over the country. The day started dry with some clear spells but rain soon reached western counties. This rain became widespread by afternoon, heaviest in parts of Ulster. The rain cleared the west coast soon after noon but there were showers in its wake.

**Rainfall:** 1 to 7mm

**Temperature:** max. 10°C to 12°C, min. 2°C to 7°C; ground temperatures down to -1°C in Clones

**Sunshine:** less than 1 hour generally, 4 hours in Belmullet

**Saturday 28th:** A fresh to strong, mainly westerly airflow covered the area. Widespread showers in the west at first but elsewhere there were clear or sunny spells. Showers became widespread by noon, however, with some sunny spells between showers; some of the showers were thundery. Winds were fresh to strong and gusty. Some ground frost after dark, severe in places.

**Rainfall:** 1 to 7mm

**Temperature:** max. 8°C to 11°C, min. zero to 4°C; ground temperatures between -1°C and -5°C inland

**Sunshine:** 5 to 10 hours

**Sunday 29th:** An unstable north to northwest airflow developed over Ireland. Very cold overnight with air frost in many places inland and a sharp to severe ground frost. Scattered wintry showers at first on Atlantic coasts became more frequent and widespread during the day, some heavy and of hail, sleet or snow. North to northwesterly winds were strong and very gusty near showers.

**Rainfall:** 1 to 5mm generally, 13mm at Malin Head

**Temperature:** max. 9°C to 12°C, min. -1°C to 3°C; ground temperatures between -2°C and -6°C inland

**Sunshine:** 4 to 11 hours, sunniest in southwest

**Monday 30th:** A northerly airflow covered Ireland as high pressure approached from the Atlantic. Sharp to severe ground frost at first with scattered wintry showers also. A fine, sunny day almost everywhere with just the odd shower. Ground frost set in again late in the evening.

**Rainfall:** nil to 2mm

**Temperature:** max. 10°C to 15°C, min. -1°C to 6°C, highest in southwest; ground temperatures down to -6°C at Clones and Kilkenny

**Sunshine:** 7 to 12 hours everywhere

## Wetter than normal almost everywhere

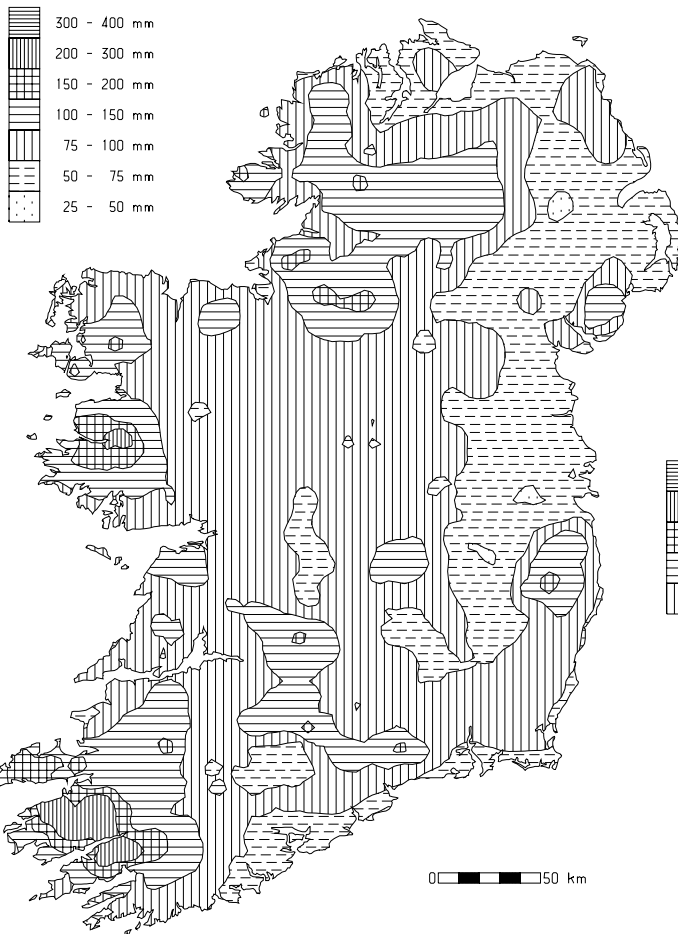
**Rainfall totals for April were above normal except in some coastal areas of the north, east and south. Totals ranged from 47mm at Casement Aerodrome to 161mm at Maam Valley, Co. Galway, with percentage of normal values between 92% at Casement and 172% at Shannon Airport.**

Rainfall was fairly evenly distributed through the month, although there was a relatively dry week between the 13th and 20th. There were between 14 and 18 wetdays (*days with 1.0mm or more of rainfall*) during the month at most stations; this compares with the normal range for April of 10 to 13 wetdays. In parts of the west and northwest there were between 20 and 22 such days compared with the typical range here of 13 to 16. The wettest days were in the periods 3rd to 8th and particularly the 21st to 23rd; between 10 and 25 millimetres was widely recorded on the 21st. The highest daily fall of the month was measured on the 5th, however, when Maam Valley recorded 28.6mm.

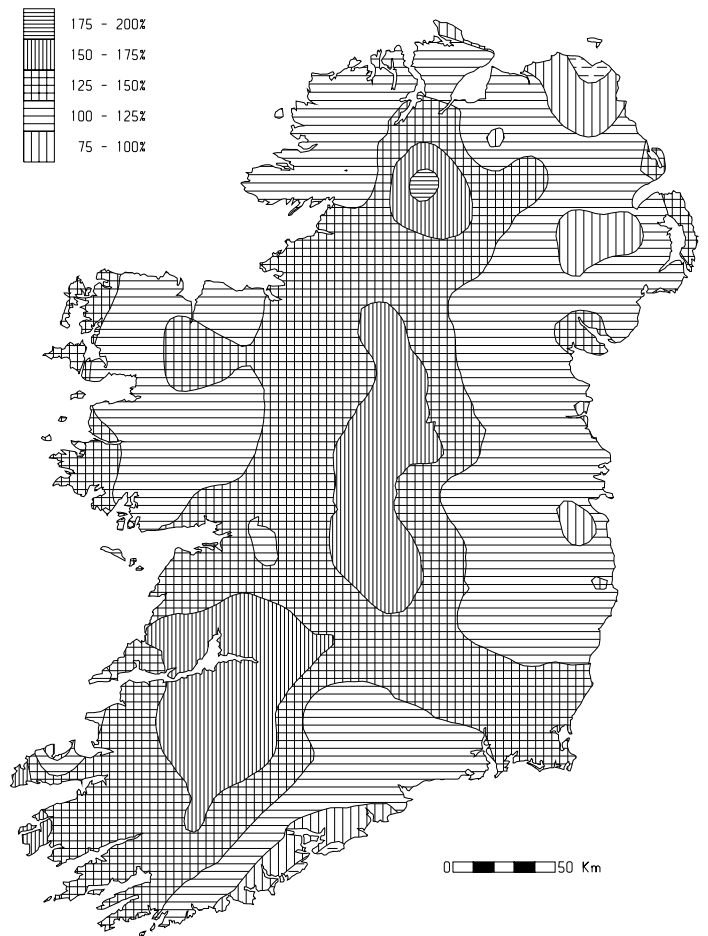
<i>County/ Station</i>	Total Amount (mm)	% of 1961-90 average	Most in a day / date		Number of Raindays (>0.2mm)	Wetdays (>1mm)
<b>CO. CLARE</b>						
SHANNON AIRPORT	96.7	172	11.8	23	21	16
CARRON	111.0	129	15.9	8	24	20
<b>CO. CORK</b>						
FERMOY (MOORE PARK)	73.0	124	19.1	21	21	16
CORK AIRPORT	70.5	101	13.9	21	20	14
SHERKIN ISLAND	81.4	125	16.4	21	18	15
BALLINCURRIG (PEAFIELD)	85.9		19.5	21	21	14
<b>CO. DONEGAL</b>						
MALIN HEAD	54.2	93	16.1	28	17	10
BALLYSHANNON (CATHLEEN'S FALL)	84.2	148	12.5	6	24	17
GLENTIES	88.1	110	12.2	6	26	21
<b>CO. DUBLIN</b>						
DUBLIN (PHOENIX PARK)	56.5	107	10.5	8	20	12
DUBLIN AIRPORT	77.5		13.9	21	22	16
CASEMENT AERODROME	47.2	92	8.0	4	17	12
DUBLIN (MERRION SQUARE)	51.3	105	11.6	21	21	15
<b>CO. GALWAY</b>						
GALWAY (UNIV. COLL.)	90.1	134	11.5	4	18	18
MAAM VALLEY	161.1		28.6	5	26	20
CONNEMARA NATIONAL PARK	101.4		17.5	4	23	18
BALLYGAR	87.9	144	12.4	4	24	17
<b>CO. KERRY</b>						
VALENTIA OBSERVATORY	117.6	152	17.7	21	21	17
ARDFERT (LISCAHANE)	88.6		13.6	21	21	18
<b>CO. KILKENNY</b>						
KILKENNY	76.1	146	12.1	21	19	14
<b>CO. LETRIM</b>						
BALLINAMORE	105.1	157	16.3	5	30	21
<b>CO. LIMERICK</b>						
MOUNT RUSSELL	110.6		15.1	8	23	20
<b>CO. LOUTH</b>						
ARDEE (BOHARNAMOE)	56.1	102	9.4	4	22	14
<b>CO. MAYO</b>						
BELMULLET	78.1	136	10.5	4	25	20
STRAIDE	94.3	147	12.6	4	26	22
CONNAUGHT AIRPORT	92.9		10.8	4	25	22
<b>CO. MEATH</b>						
WARRENSTOWN	64.0	110	9.0	21	19	15
<b>CO. MONAGHAN</b>						
CLONES	69.3	123	9.9	6	22	14
<b>CO. OFFALY</b>						
BIRR	86.0	162	19.0	21	22	17
DERRYGREENAGH	68.3	120	10.5	8	20	13
<b>CO. SLIGO</b>						
ARDTARMON	71.3		10.1	14	26	18
<b>CO. TIPPERARY</b>						
FETHARD (PARSONSHILL)	77.3		16.7	21	18	14
<b>CO. WATERFORD</b>						
WATERFORD (TYCOR)	74.3	122	16.7	21	21	14
DUNGARVAN (CARRIGLEA)	93.2		24.1	21	19	16
<b>CO. WESTMEATH</b>						
MULLINGAR II	90.0	152	10.6	8	21	16
<b>CO. WEXFORD</b>						
JOHNSTOWN CASTLE	84.3	132	21.5	21	21	15
ROSSLARE	77.0	137	23.5	21	20	12
CLONROCHE	90.0	127	18.3	23	19	17
JOHN F. KENNEDY PARK	81.2	127	17.6	21	20	17



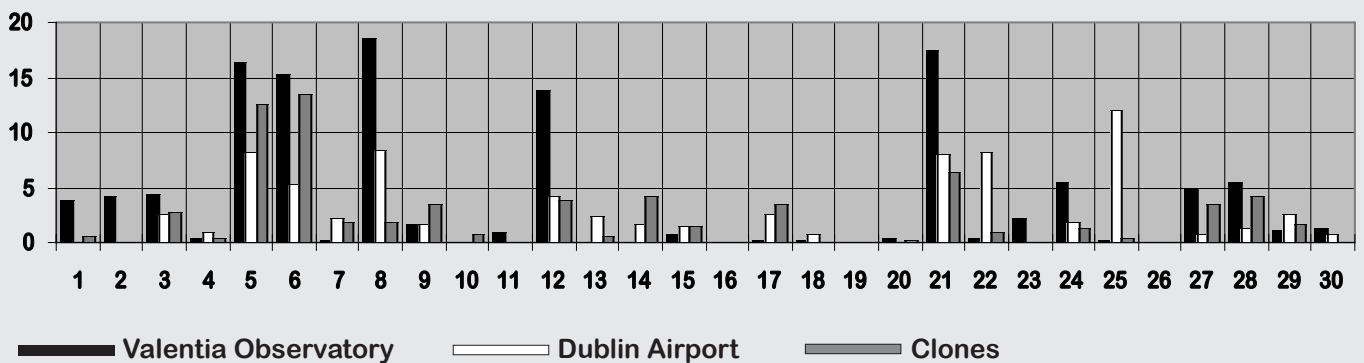
## Total rainfall (mm)



## Percentage of normal rainfall



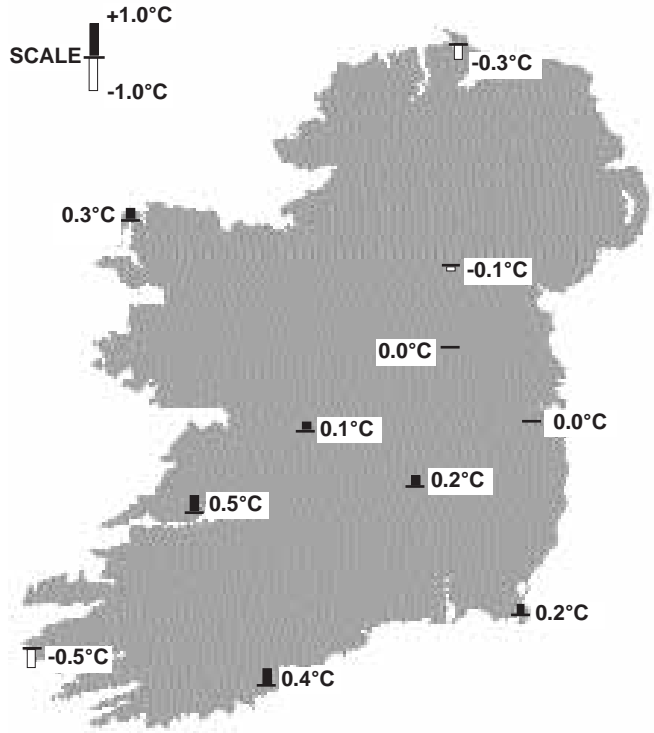
## Daily 0-24h rainfall values (mm)



# More frosts than usual but mean temperature near normal everywhere

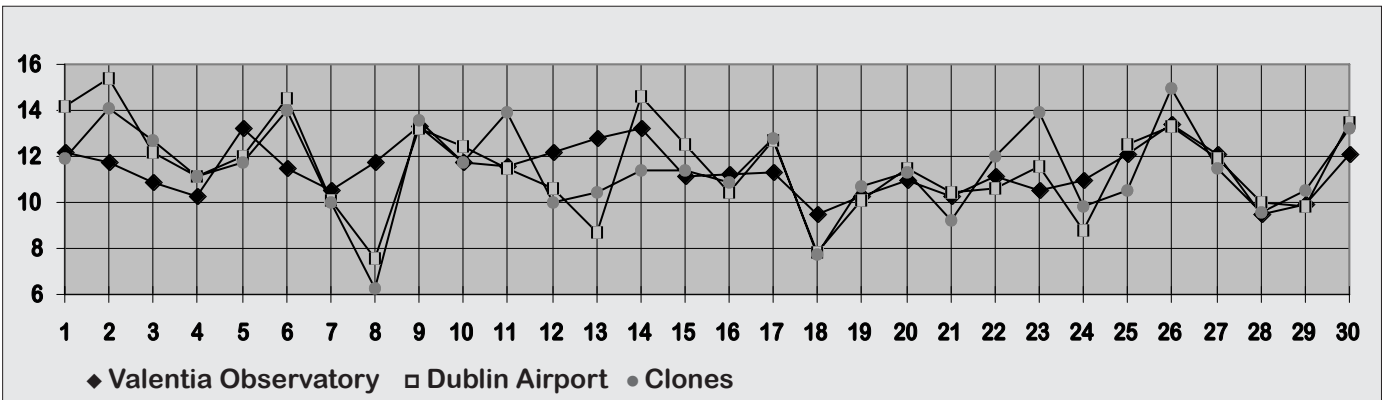
Mean air temperatures for the month were within half a degree of normal everywhere; they ranged from 6.9°C at Connaught Airport to 9.4°C at Shannon Airport. While mean maximum temperatures were a little above normal, mean minima were below normal almost everywhere, reflecting the higher than normal number of frosts during the month. Mean minimum values were the lowest for April for between 7 and 12 years at some stations.

There were between 3 and 6 air frosts during the month at inland stations, around twice the normal number, but none at coastal stations. The lowest air temperature, -2.0°C, was recorded at both Casement Aerodrome and Ardee (Boharnamoe), Co. Louth, on the 20th. Mullingar measured the lowest grass minimum temperature, -9.8°C on the 26th. Maximum temperatures were close to normal throughout the month, with no very warm days. The highest temperature, 16.0°C, was recorded at Dublin (Merrion Square) on the 2nd.

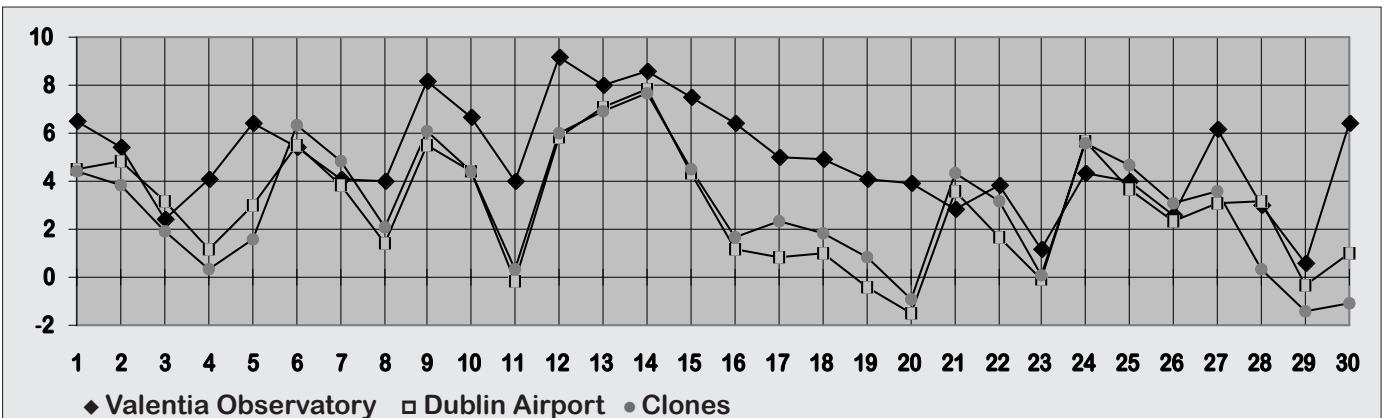


**Mean Temperature**  
(difference from 1961-90 normals)

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



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





# TEMPERATURE

**13**

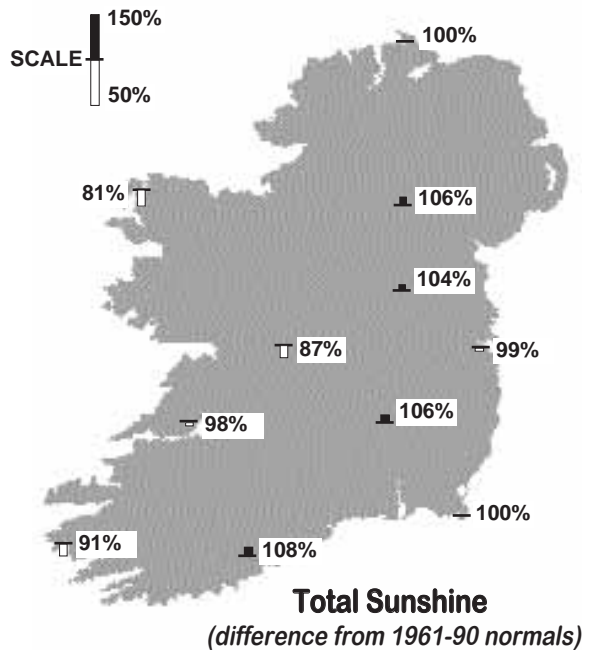
County/ Station	°C											
	Mean max.	Mean min.	Mean/ deviation from 1961-90 average		Highest max./date		Lowest min./date		Lowest grass min./date		Days with air frost ground frost	
<b>CO. CLARE</b>												
SHANNON AIRPORT	12.9	5.8	9.4	0.5	15.4	13	2.3	29	-5.0	23	0	10
CARRON	11.4	4.2	7.8	0.1	14.1	24	-0.4	23	-6.0	23	1	12
<b>CO. CORK</b>												
FERMOY (MOORE PARK)	12.6	4.0	8.3	0.3	15.2	14	-1.2	29	-3.1	29	2	10
CORK AIRPORT	11.8	4.8	8.3	0.4	14.2	14 26	0.6	29	-3.1	8	0	12
SHERKIN ISLAND	11.9	6.1	9.0	0.2	15.3	30	0.4	23	0.1	29	0	0
BALLINCURRIG (PEAFIELD)	12.1	3.5	7.8		14.9	13	0.1	23	-3.3	23	0	9
<b>CO. DONEGAL</b>												
MALIN HEAD	9.7	5.2	7.5	-0.3	14.9	2	2.2	4	-0.2	4	0	1
BALLYSHANNON (CATHLEEN'S FALL)	11.2	4.5	7.9	0.0	14.5	6	0.0	11			0	
GLENTIES	11.4	3.4	7.4	-0.1	14.8	6	-1.7	11	-6.1	11	4	14
<b>CO. DUBLIN</b>												
DUBLIN (PHOENIX PARK)	12.8	3.8	8.3	0.4	15.7	2	-1.0	19 20	-3.5	19 20	3	14
DUBLIN AIRPORT	11.7	3.5	7.6		15.4	2	-1.5	20	-4.3	20	5	14
CASEMENT AERODROME	11.8	3.5	7.7	0.0	15.5	1	-2.0	20	-4.2	20	4	12
DUBLIN (MERRION SQUARE)	12.1	5.8	9.0	0.1	16.0	2	1.4	19			0	
<b>CO. GALWAY</b>												
GALWAY (UNIV. COLL.)					not available							
MAAM VALLEY	12.1	5.4	8.8		15.5	12	0.6	23	-3.7	23	0	3
CONNEMARA NATIONAL PARK	11.8	4.9	8.4	0.0	13.4	13 24	1.2	11			0	
BALLYGAR	12.8	3.9	8.4		15.9	14	-1.1	29	-3.1	4	5	10
<b>CO. KERRY</b>												
VALENTIA OBSERVATORY	11.5	5.4	8.5	-0.5	13.4	26	0.6	29	-2.4	23	0	6
ARDFERT (LISCAHANE)	12.8	4.5	8.7	0.3	15.4	1	-0.1	20	-2.1	20	1	7
<b>CO. KILKENNY</b>												
KILKENNY	12.4	4.1	8.3	0.2	14.8	14	-0.7	29	-6.4	3 29	3	17
<b>CO. LEITRIM</b>												
BALLINAMORE	11.2	3.1	7.2	-0.5	13.5	23 26	-1.7	29			5	
<b>CO. LIMERICK</b>												
MOUNT RUSSELL	11.3	4.4	7.9		13.8	13	0.6	29	-4.6	11	0	11
<b>CO. LOUTH</b>												
ARDEE (BOHARNAMOE)	12.3	3.1	7.7	0.2	15.1	2	-2.0	20	-6.6	29	6	17
<b>CO. MAYO</b>												
BELMULLET	11.7	5.6	8.7	0.3	15.2	24	0.9	11	-2.2	11	0	5
STRAIDE	12.2	4.2	8.2	0.1	15.0	26	-1.8	23	-6.8	23	3	14
CONNAUGHT AIRPORT	10.2	3.6	6.9		12.8	12	-0.3	29	-3.9	11	2	11
<b>CO. MEATH</b>												
WARRENTOWN	11.6	4.1	7.9	0.2	14.4	2	-0.3	23	-2.6	23	1	9
<b>CO. MONAGHAN</b>												
CLONES	11.6	3.3	7.5	-0.1	15.0	26	-1.4	29	-8.7	20	3	17
<b>CO. OFFALY</b>												
BIRR	12.2	3.9	8.1	0.1	14.5	26	-1.3	11	-5.5	11	5	14
DERRYGREENAGH	11.9	3.2	7.6	0.2	14.2	26	-1.3	29	-7.5	20	5	13
<b>CO. SLIGO</b>												
ARDTARMON	11.6	5.1	8.4		13.9	23	2.4	30	-0.6	30	0	3
<b>CO. TIPPERARY</b>												
FETHARD (PARSONSHILL)	11.8	3.1	7.5		14.5	26	-0.7	29	-3.3	30	2	14
<b>CO. WATERFORD</b>												
WATERFORD (TYCOR)	12.8	4.6	8.7	0.3	15.9	26	0.7	29			0	
DUNGARVAN (CARRIGLEA)	13.1	4.8	9.0	0.5	15.8	26	-0.2	29	-1.4	29	1	
<b>CO. WESTMEATH</b>												
MULLINGAR II	11.5	3.7	7.6	0.0	13.7	14 26	-1.1	29	-9.8	26	4	17
<b>CO. WEXFORD</b>												
JOHNSTOWN CASTLE	11.7	4.7	8.2	0.3	15.1	14	1.2	29	-3.3	20	0	10
ROSSLARE	11.5	5.6	8.6	0.2	14.5	14	1.5	29	-2.7	17	0	6
CLONROCHE	11.8	3.6	7.7	0.0	14.4	26	-0.5	20	-5.3	20	1	17
JOHN F. KENNEDY PARK	11.9	4.1	8.0	-0.2	14.6	14	-0.2	29	-2.5	19	1	12

## Sunny end to month

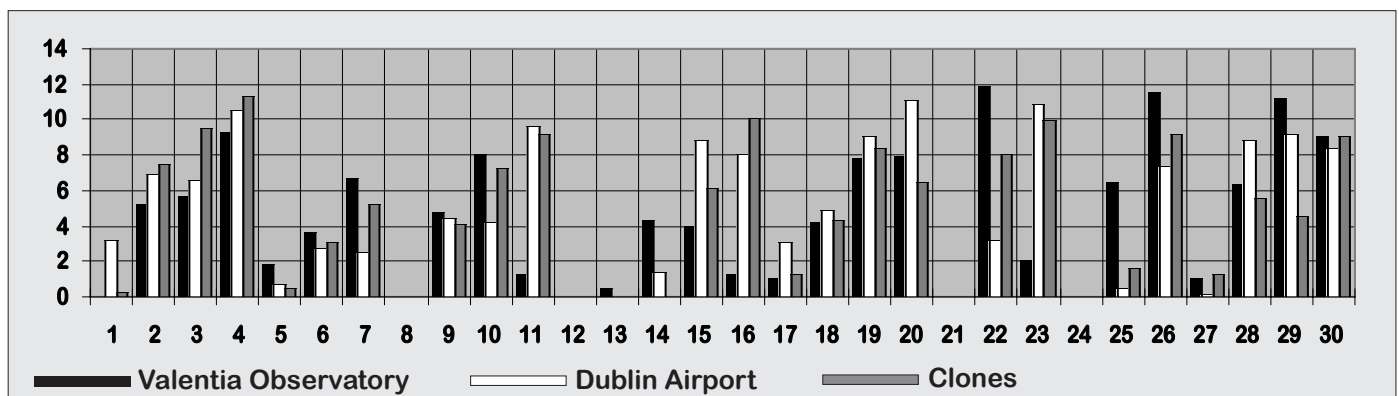
Sunshine totals ranged from 116 hours at Straide, Co. Mayo, to 172 hours at Rosslare. They were within 10% of the normal April values over most of the country, ranging from 81% of normal at Belmullet to 108% at both Cork Airport and John F. Kennedy Park, Co. Wexford.

Although sunshine amounts were spread fairly evenly through the month, the highest daily totals were during the second half of the month. Twelve or more hours sunshine were measured in places on the 22nd, 26th and 30th, with the highest daily value, 13.7 hours, measured at Galway (University College) on the 30th. This was the highest April value at the station since records began there in 1965. Global solar radiation totals were below normal generally, ranging from 91% of normal at both Birr and Valentia Observatory to 103% at Malin Head.

County/ Station	Daily mean (hours/day)	% of average	% of possible	Most in a day/date
<b>CO. CLARE</b>				
SHANNON AIRPORT	4.82	98	35	12.0 22 30
<b>CO. CORK</b>				
CORK AIRPORT	5.63	108	41	12.2 22
SHERKIN ISLAND	5.01	85	36	12.3 29
BALLINCURRIG (PEAFIELD)	5.51		30	11.8 26
<b>CO. DONEGAL</b>				
MALIN HEAD	5.07	100	36	11.5 22
BALLYSHANNON (CATHLEEN'S FALL)	4.86	103	34	12.0 30
<b>CO. DUBLIN</b>				
DUBLIN AIRPORT	4.86	93	35	11.1 20
CASEMENT AERODROME	4.84	99	35	11.0 19
<b>CO. GALWAY</b>				
GALWAY (UNIV.COLL.)	4.76	96	34	13.7 30
<b>CO. KERRY</b>				
VALENTIA OBSERVATORY	4.54	91	33	11.9 22
ARDFERT (LISCAHANE)	4.63		31	11.0 22
<b>CO. KILKENNY</b>				
KILKENNY	5.13	106	37	11.2 4
<b>CO. LEITRIM</b>				
BALLINAMORE	4.43	97	32	9.5 30
<b>CO. MAYO</b>				
BELMULLET	4.27	81	31	11.0 30
STRAIDE	3.86			13.0 30
CONNAUGHT AIRPORT	4.16		30	13.6 30
<b>CO. MONAGHAN</b>				
CLONES	4.80	106	34	11.3 4
<b>CO. OFFALY</b>				
BIRR	4.02	87	29	9.8 16
<b>CO. WATERFORD</b>				
DUNGARVAN (CARRIGLEA)	5.14	103	31	10.7 4
<b>CO. WESTMEATH</b>				
MULLINGAR II	4.89	104	35	11.7 30
<b>CO. WEXFORD</b>				
JOHNSTOWN CASTLE	4.55	85	33	12.0 20
ROSSLARE	5.73	100	41	12.5 26
CLONROCHE	5.31	101	38	10.9 16
JOHN F. KENNEDY PARK	5.32	108	38	10.8 26

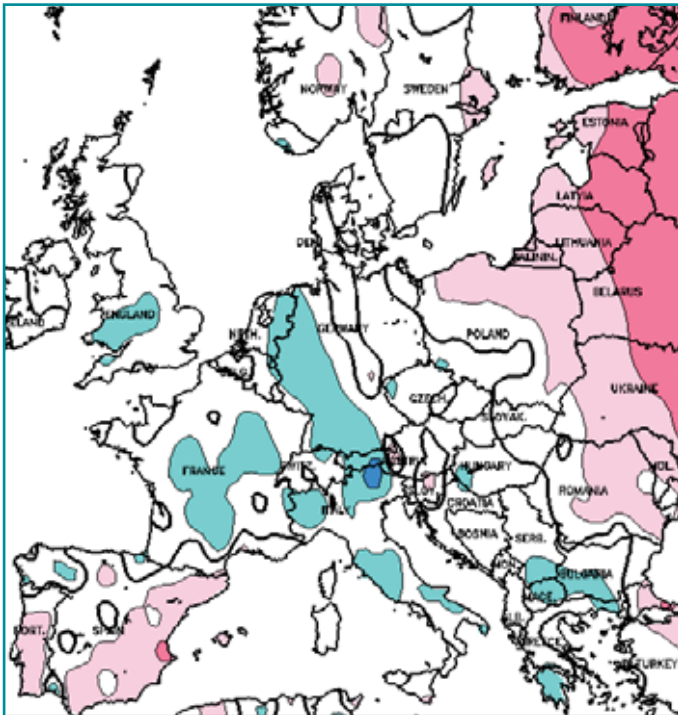
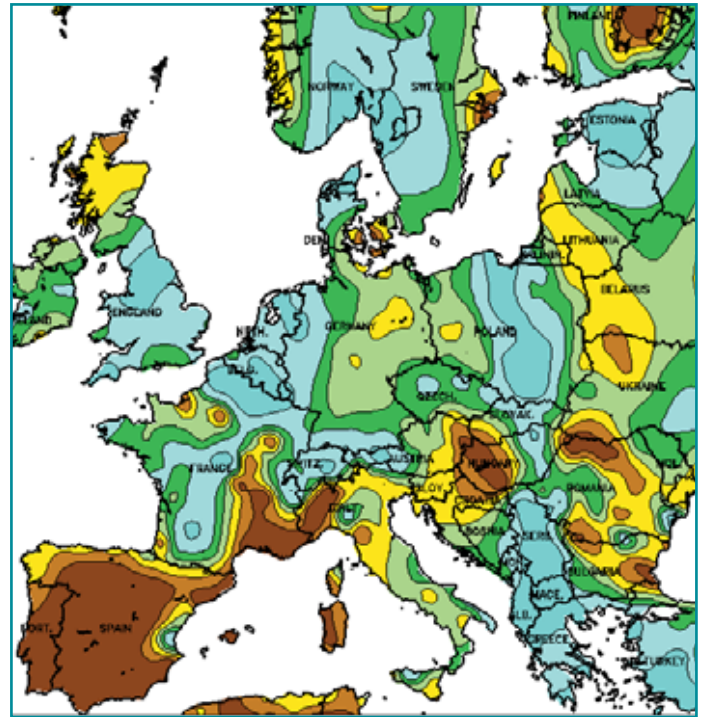
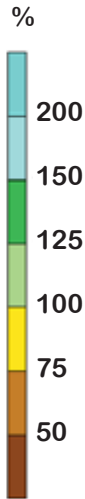


### Daily sunshine values (hours)





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



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



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

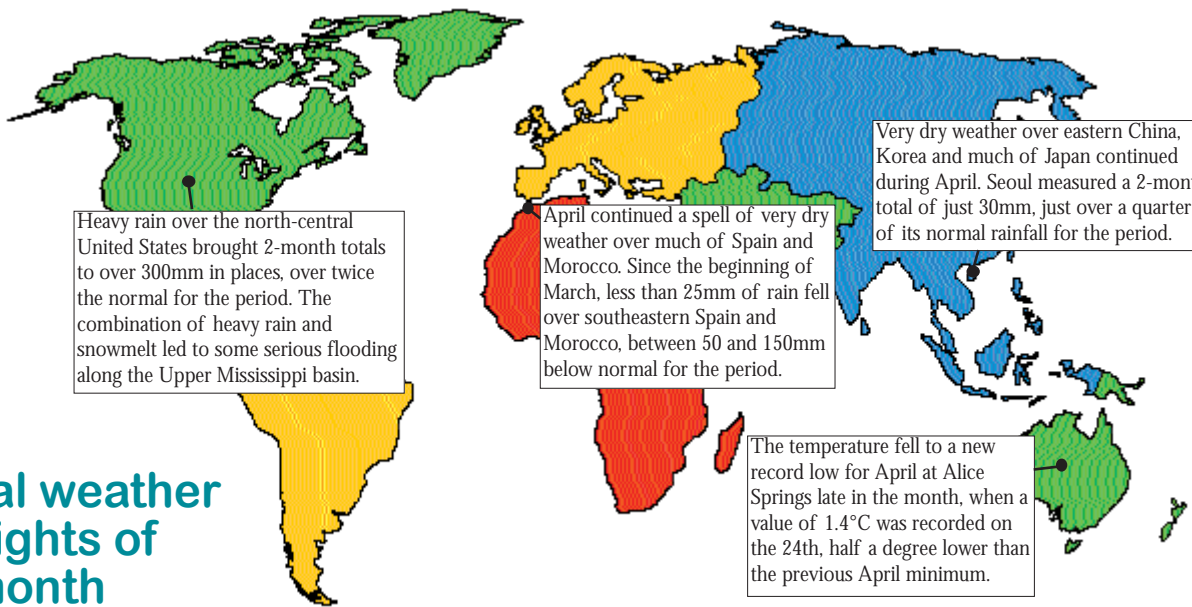
**Global weather highlights of the month**

Heavy rain over the north-central United States brought 2-month totals to over 300mm in places, over twice the normal for the period. The combination of heavy rain and snowmelt led to some serious flooding along the Upper Mississippi basin.

April continued a spell of very dry weather over much of Spain and Morocco. Since the beginning of March, less than 25mm of rain fell over southeastern Spain and Morocco, between 50 and 150mm below normal for the period.

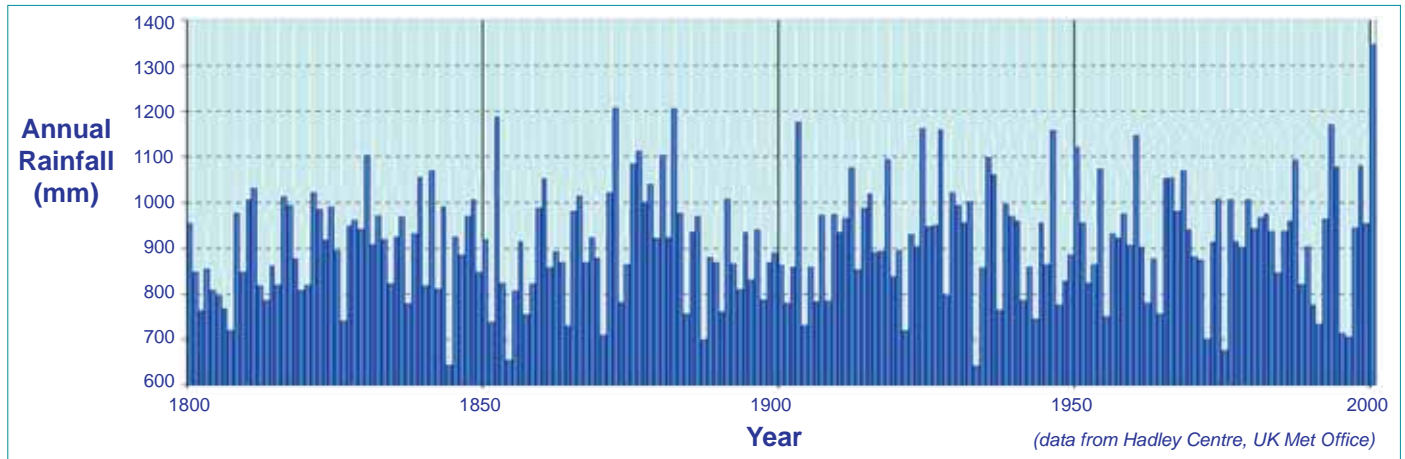
Very dry weather over eastern China, Korea and much of Japan continued during April. Seoul measured a 2-month total of just 30mm, just over a quarter of its normal rainfall for the period.

The temperature fell to a new record low for April at Alice Springs late in the month, when a value of 1.4°C was recorded on the 24th, half a degree lower than the previous April minimum.



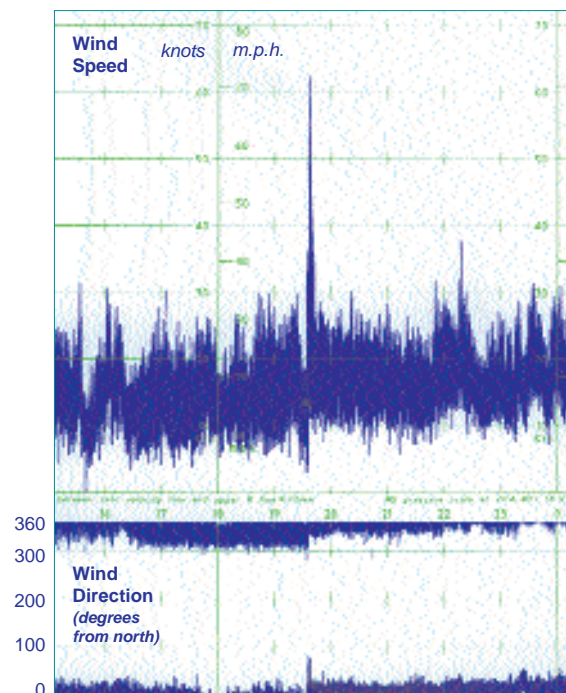
## WETTEST YEAR IN ENGLAND AND WALES SINCE RECORDS BEGAN IN 1766

Long-term rainfall data stretching back to the mid-eighteenth century show that the 12-month period between April 2000 and March 2001 was the wettest year on record over England and Wales. This record of monthly values dates back to 1766 and is now routinely updated by the Hadley Centre, in collaboration with the Climatic Research Unit of the UK Met Office. These monthly precipitation totals are derived from measurements at 35 gauges across the region, representative of the land area of England and Wales. Based on these values, the chart below shows 12-monthly totals for the period April to March for each year since 1800:



The spell of exceptionally wet months began in April 2000, which was the wettest on record at many stations in southern and northeastern Britain, with monthly totals three times higher than normal in places. Summer 2000 totals were only slightly higher than normal, but the Autumn period (*September to November*) was by far the wettest in the series, with a total of 503mm compared with the normal for the 1961-1990 period of 257mm. Severe flooding became widespread in many parts of England and Wales, continuing through the winter and early spring months as further heavy rain caused rivers to overflow; some towns were flooded on two or more occasions between autumn and early spring.

### MINI-TORNADO AT BELMULLET ON 29TH



After a day of rain and hail showers at Belmullet on the 29th, what was described by the observer as a whirlwind passed close to the station during the evening. The anemometer chart above shows that mean windspeeds at the station were between 10 and 20 knots during the afternoon and quite gusty during showers. At 1930UTC the chart shows a short lull in windspeed to about 10 knots, followed by a dramatic increase and gust of 63 knots (73 m.p.h.), the highest gust of the month at any station. At the same time, winds veered abruptly from a northwesterly to a northerly direction.

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