

Monthly Weather Bulletin

No. 204
APRIL 2003



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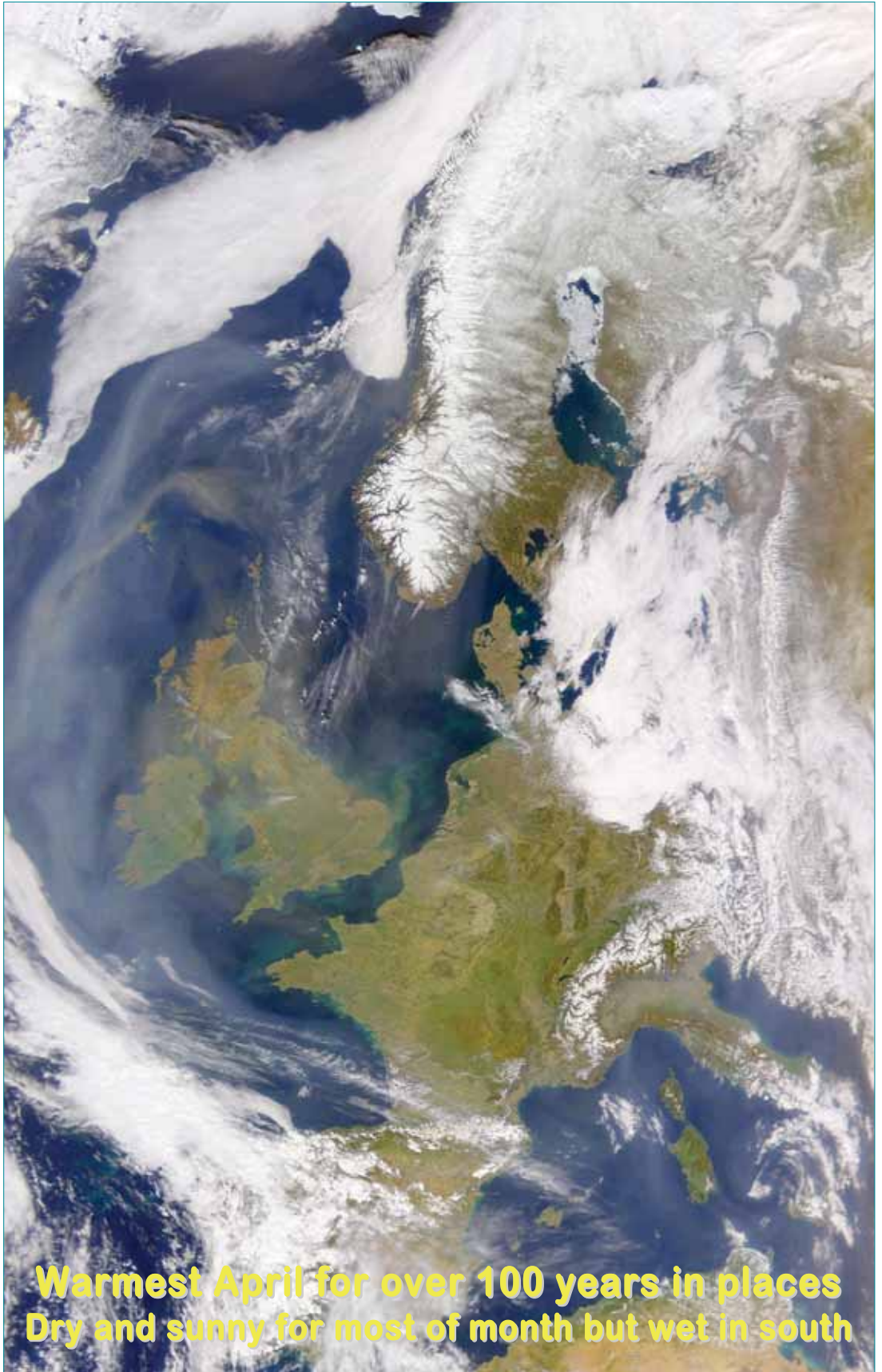
**Latest weather buoy
deployed off the
northwest coast**

Produced by Met Éireann,
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Notes on the tables and map
showing location of stations
appear in each January issue



**Warmest April for over 100 years in places
Dry and sunny for most of month but wet in south**

Cover Picture

An anticyclone over Scandinavia on the 18th directed a warm and dry southeasterly airstream over Ireland. Most stations recorded almost unbroken sunshine, but this was hazy at times due to airborne dust in the upper atmosphere, visible over and to the northwest of Ireland. Temperatures reached over 20°C in the west, but coastal stations in the east and southeast were considerably cooler. (NASA / GSFC Orbimage)

Below

One of the many sunny days during the month was the 4th, with temperatures high enough for a swim at Bantry, Co. Cork. (picture Irish Examiner)

Summary: Like the other months of 2003 so far, it was a warmer and sunnier than normal month everywhere. Mean air temperatures were over two degrees above normal at stations in the west and north, while at the long-term stations of Valentia Observatory and Malin Head it was the warmest April since 1893. Daytime temperatures rose above 20°C in most places around mid-month and new temperature records for April were set at a number of stations between the 16th and 18th. Despite the high temperatures overall, there were also short spells of much cooler weather, with some severe ground frost recorded at inland stations between the 8th and 11th. The sequence of drier than normal months almost everywhere during 2003 continued this month at around half the stations in the country, but rainfall totals for April were well above normal in the south. Little or no

rain fell on most days until the final week, but there were some heavy falls recorded at times during the month over the southernmost third of the country. It was the driest April for between 6 and 8 years at many stations, but in contrast it was the wettest April for 5 years at Cork Airport. It was another very sunny month generally, with between 20% and 30% more sunshine than normal for April in many places. It was the sunniest April since 1974 at many stations and the sunniest at Rosslare since records began there in 1956.

1st to 2nd: A cold front brought a spell of rain to all areas on the 1st, clearing to scattered showers in a cool northwesterly airstream.

3rd to 12th: A large area of high pressure moved eastwards over the country, becoming centred over the North Sea by the 7th, giving settled weather with light



winds. Very little rain was measured overall apart from a heavy fall in the extreme southwest on the 7th. Mist and fog were widespread at first, but there were also long sunny periods on many days. Relatively mild at first, but becoming much cooler with frost becoming widespread inland later in the period.

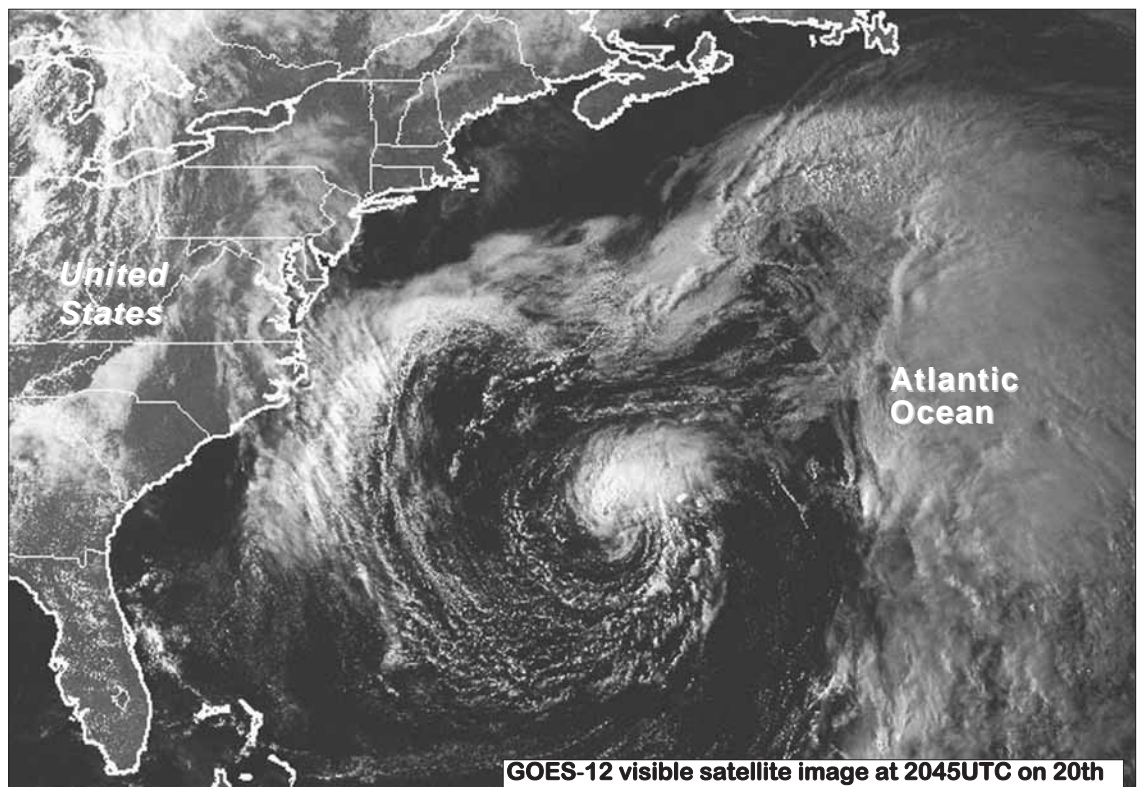
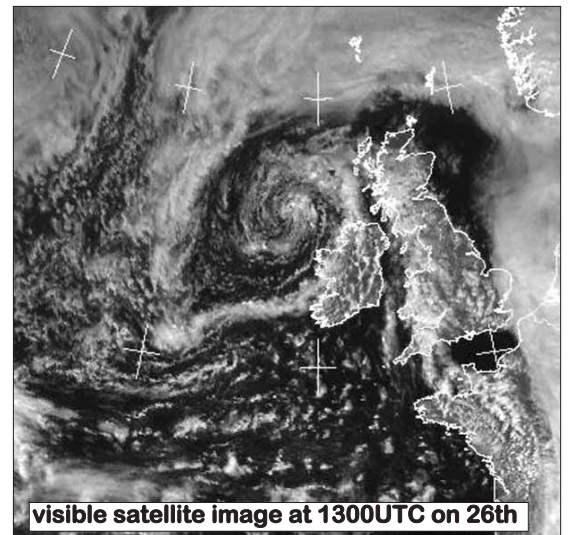
13th to 14th: A slow-moving frontal system moved northwards over Ireland, bringing some heavy falls in the south and west, while eastern and northern areas received very little.

15th to 20th: A return to mostly dry and settled weather. There were long sunny spells each day, with daytime temperatures rising over 20°C in most places; eastern areas were cooler in the moderate easterly winds.

21st to 30th: Areas of low pressure became the dominant influence, bringing widespread rain or showers; some of these showers were heavy with thunderstorms recorded on several days. There were sunny spells also between the showers. Temperatures were near or above normal with mainly southwesterly winds.

Wind and elements: Mean windspeeds

for the month of between 7 and 10 knots generally (8 and 12m.p.h.) were below normal everywhere. They were the lowest for April for 6 years at several stations and the lowest since 1974 at Belmullet. Gale gusts were mostly confined to the 1st, 13th, 25th and 26th, with the highest gust of the month, 54 knots (62m.p.h.), recorded at both Valentia Observatory on the 13th and at Malin Head on the 25th. Thunder was most frequent late in the month, being recorded on the 1st, 21st, 24th to 26th and 28th to 30th. Hail showers fell on the 1st, 27th and 30th but there were no reports of snow. Fog was most widespread in the period 4th to 7th.



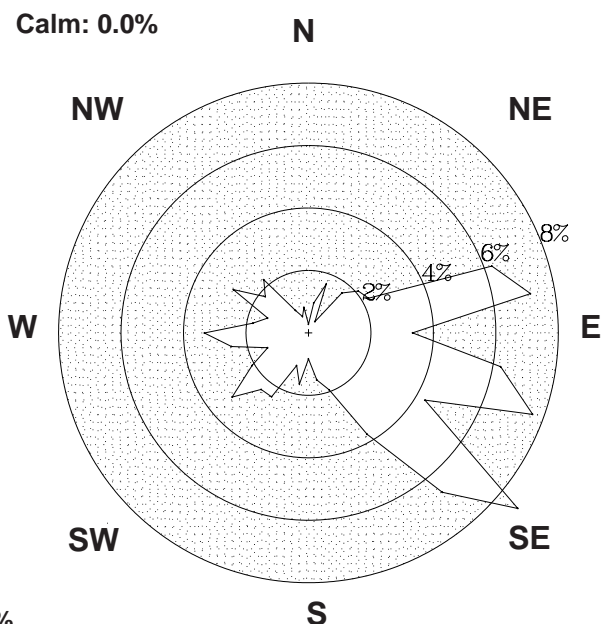
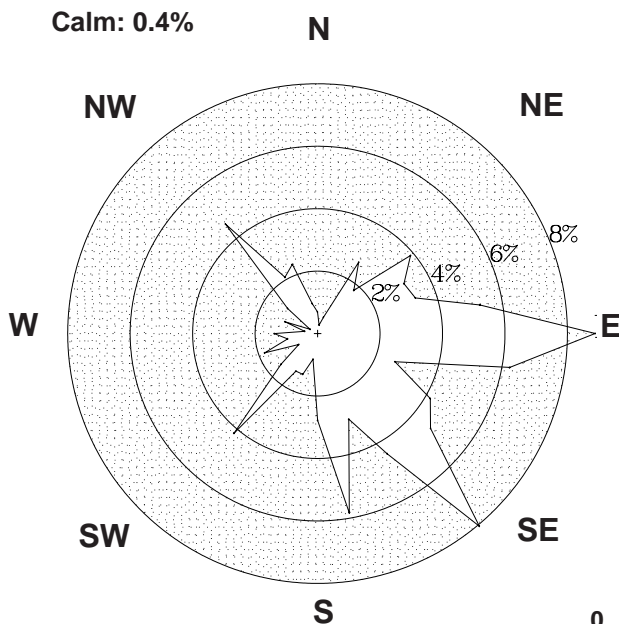
Right:

Tropical Storm Ana became the first Atlantic tropical storm during the month of April since records began in 1871. Maximum sustained winds reached 45 knots (50 m.p.h) on the 20th. The same system could be traced to a deep depression which passed close to the northwest coast of Ireland on the 26th (top picture). (main picture: NOAA, US Dept of Commerce)

County / Station	WIND (KNOTS)						ELEMENTS								
	Mean speed	Max. 10-min. mean dir.	Max. 10-min. mean speed	Max. 10-min. mean date/hour	Max. Gust dir.	Max. Gust speed	Max. Gust date/time	Days with gales	Days with gale gusts	Hours with gale gusts	Snow	No. of Days with Snow Lying	Hail	Thunder	Fog
CO. CLARE SHANNON AIRPORT	9.0	230°	26	1/03	230°	38	1/0207	0	2	12	0	0	0	0	5
		220°	26	26/16											
CO. CORK CORK AIRPORT	10.3	140°	32	25/06	140°	48	25/0503	0	4	22	0	0	1	0	6
CO. DONEGAL MALIN HEAD	13.1	340°	38	1/20	110°	54	25/1110	3	11	82	0	0	1	1	1
		110°	38	25/12											
CO. DUBLIN CASEMENT AERODROME	8.7	220°	29	1/03	290°	43	1/1551	0	4	19	0	0	0	0	3
DUBLIN AIRPORT	9.4	290°	30	1/15	290°	43	1/1412	0	4	22	0	0	0	0	7
CO. KERRY VALENTIA OBSERVATORY	9.0	090°	28	13/06	090°	54	13/0518	0	3	18	0	0	0	0	2
CO. KILKENNY KILKENNY	7.1	290°	22	1/11	310°	36	1/1449	0	3	4	n/a	0	---	n/a	---
		220°	22	26/15											
CO. MAYO BELMULLET	9.0	240°	28	1/01	180°	42	26/0510	0	5	32	0	0	0	1	3
CONNACHT AIRPORT	9.1	260°	27	1/02	300°	42	1/1244	0	6	30	0	0	1	0	7
CO. MONAGHAN CLONES	7.8	300°	28	1/17	280°	45	1/1149	0	2	12	n/a	0	---	n/a	---
CO. OFFALY BIRR	7.4	130°	23	25/10	320°	35	1/1500	0	3	5	n/a	0	---	n/a	---
CO. WESTMEATH MULLINGAR II	7.1	230°	20	1/03	290°	41	1/1259	0	1	1	n/a	0	---	n/a	---
CO. WEXFORD ROSSLARE	10.4	050°	28	20/04	240°	43	1/0634	0	9	53	0	0	0	0	6
					130°	43	25/0935								

Valentia Observatory

Dublin Airport

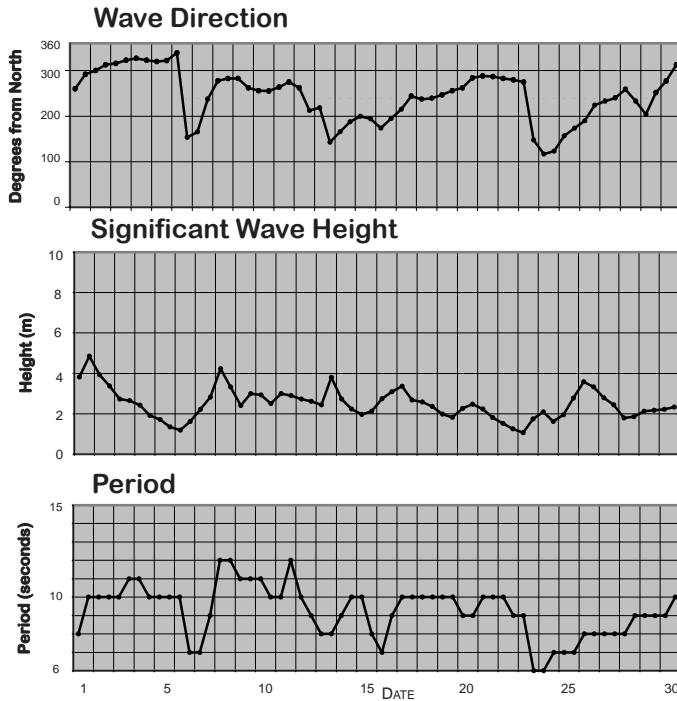


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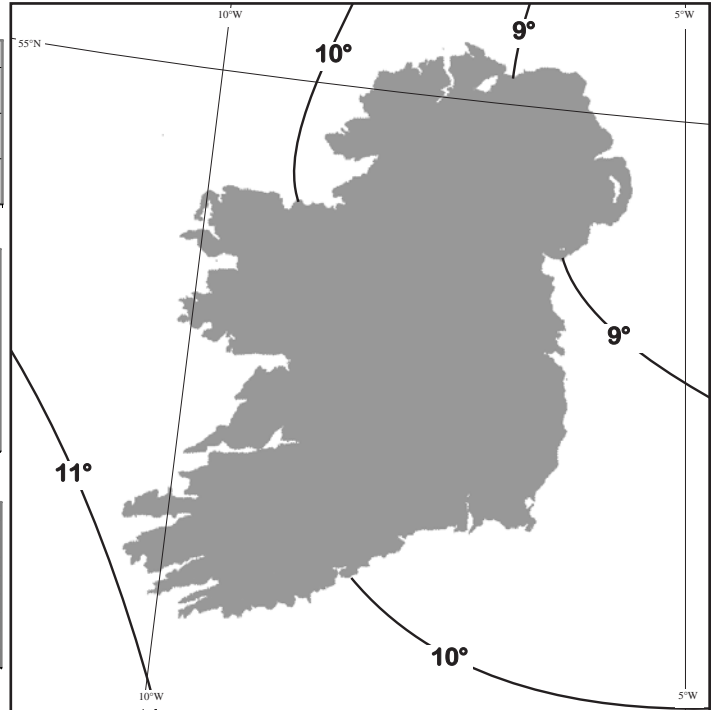
FREQUENCY OF WIND DIRECTION

SEA TEMPERATURES

Sea temperatures rose by more than one degree from their March values. At mid-month they ranged from close to 9°C in the Irish Sea to almost 11°C near the southwest coast. They were a degree or more higher than normal everywhere; at Malin Head the mean sea temperature for the month was 9.3°C compared with its normal for April of 8.1°C.



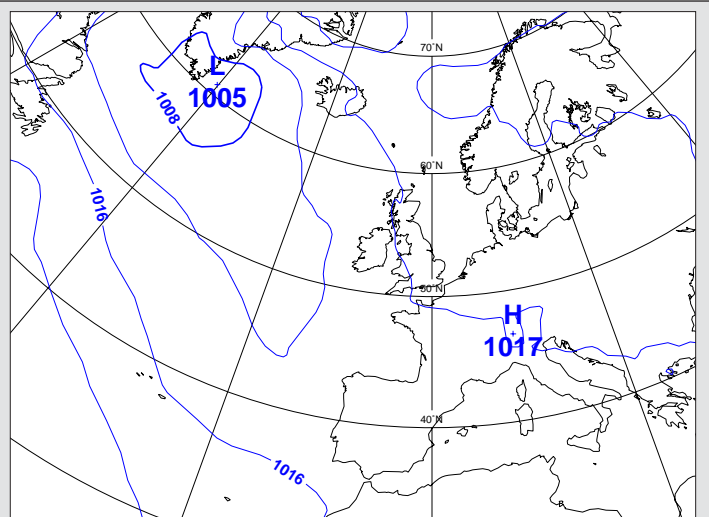
Wave conditions at 52.5°N, 12°W based on WAM model



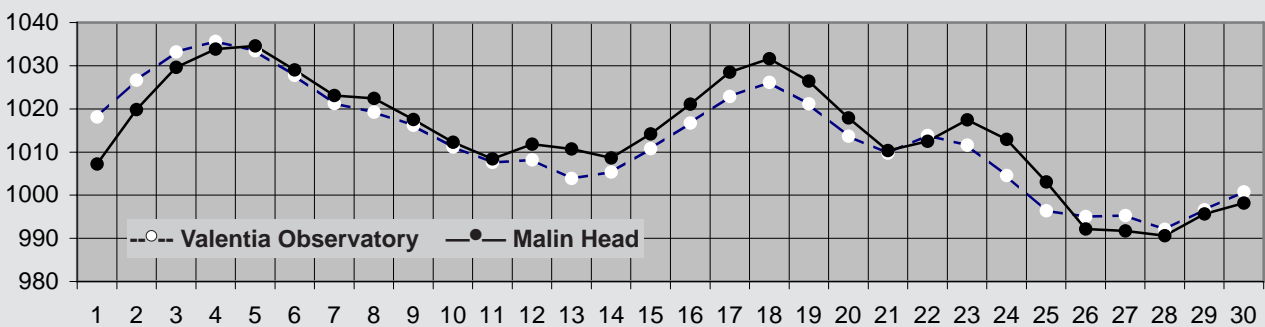
Sea Temperatures (°C) around mid-month

MEAN ATMOSPHERIC PRESSURE

Mean sea level pressure values for the month of between 1013hPa and 1015hPa generally were around 2hPa below normal for April. Pressure was above normal for much of the early part of the month and again for a period after mid-month, but it was well below normal during the last week. Belmullet recorded the highest value of the month, 1037.0hPa on the 4th, when an anticyclone became centred over Ireland. The lowest pressure values were associated with depressions crossing the country during the final week. Rosslare recorded the lowest value, 982.9hPa on the 28th.

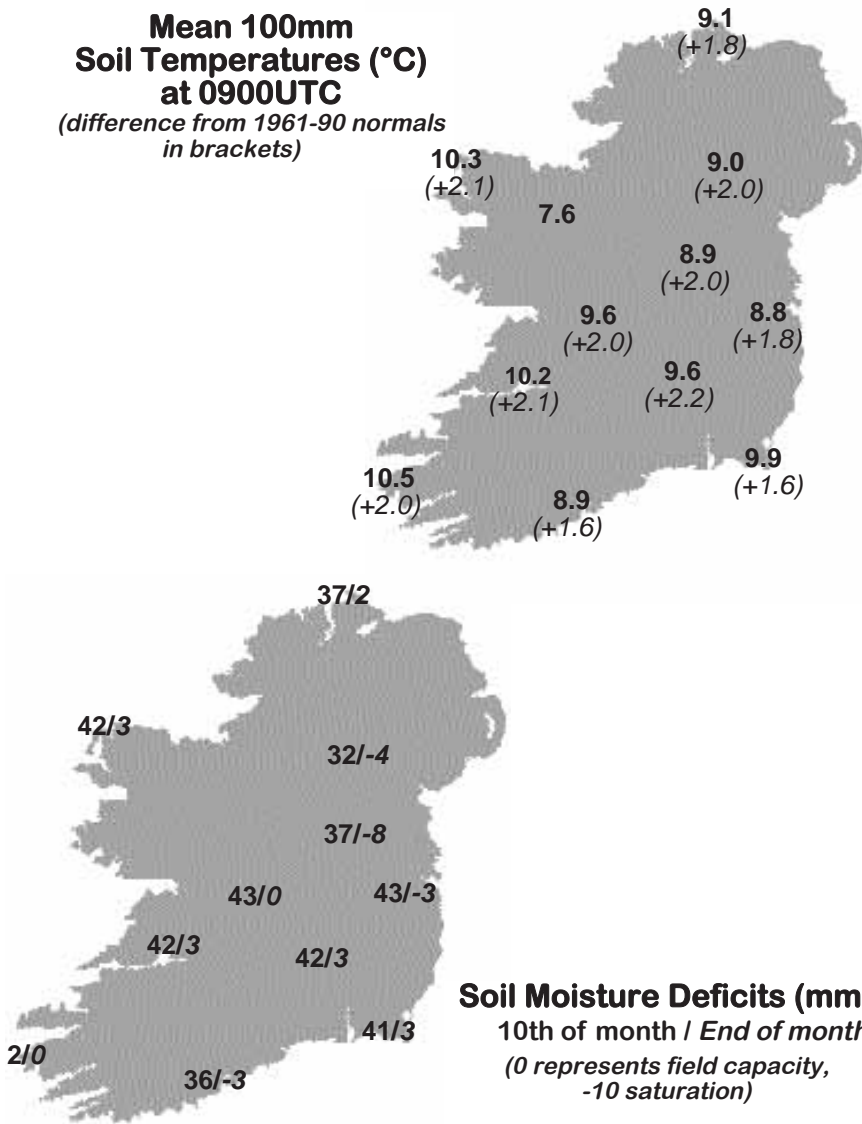


The above map is based on monthly means of 1200 UTC values



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

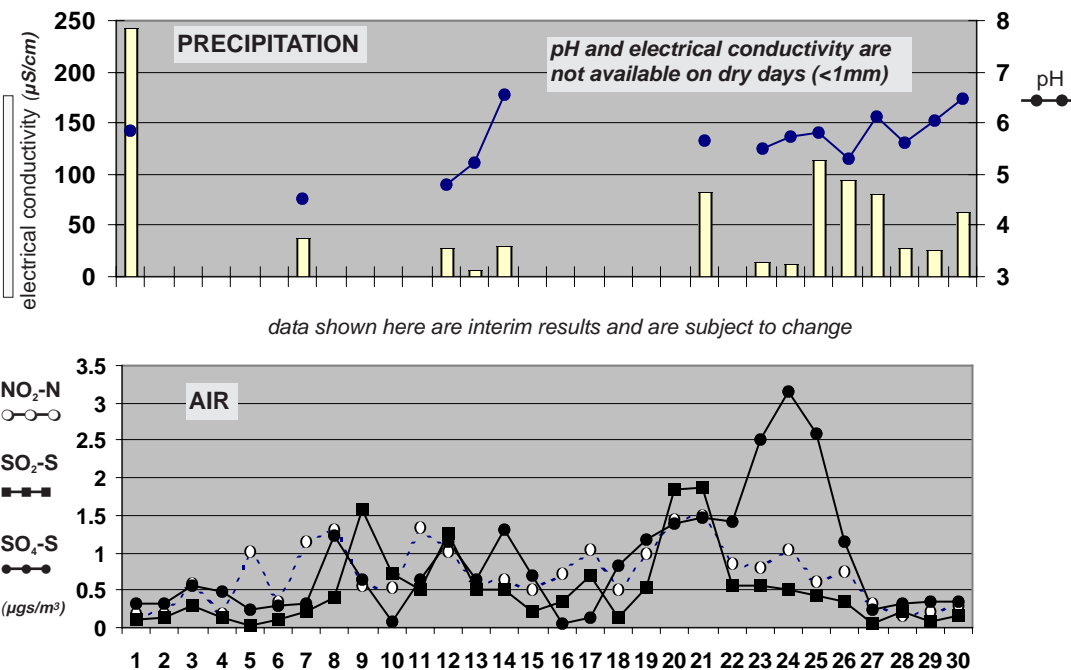
Mean 100mm Soil Temperatures (°C) at 0900UTC
(difference from 1961-90 normals in brackets)



Soil Temperatures at 0900UTC

County/ Station	°C		
	100mm	200mm	300mm
CO. CLARE			
SHANNON AIRPORT	10.2	10.8	11.0
CARRON	9.4		10.1
CO. CORK			
FERMOY (MOORE PARK)	9.8	9.6	10.1
CORK AIRPORT	8.9	9.1	9.9
SHERKIN ISLAND	10.6		11.2
BALLINCURRIG (PEAFIELD)	8.7	8.8	9.3
CO. DONEGAL			
MALIN HEAD	9.1	9.5	10.2
CO. DUBLIN			
DUBLIN AIRPORT	8.6	9.1	9.5
CASEMENT AERODROME	8.8	9.6	9.9
CO. KERRY			
VALENTIA OBSERVATORY	10.5	10.8	12.1
CO. KILKENNY			
KILKENNY	9.6	10.1	10.6
CO. LEITRIM			
BALLINAMORE	8.8	9.0	9.6
CO. LIMERICK			
MOUNT RUSSELL	8.6	9.1	
CO. LOUTH			
ARDEE (BOHARNAMOE)	9.0		9.7
CO. MAYO			
BELMULLET	10.3	11.2	12.3
STRAIDE	9.5		
CONNACHT AIRPORT	7.6	8.0	9.3
CO. MEATH			
WARRENSTOWN	8.7	9.5	9.8
CO. MONAGHAN			
CLONES	9.0	9.3	9.7
CO. OFFALY			
BIRR	9.6	10.3	10.9
CO. TIPPERARY			
FETHARD (PARSONSHILL)	8.5	8.9	
CO. WATERFORD			
DUNGARVAN (CARRIGLEA)		10.0	10.5
CO. WESTMEATH			
MULLINGAR II	8.9	9.3	10.4
CO. WEXFORD			
JOHNSTOWN CASTLE	9.8	9.8	10.2
ROSSLARE	9.9	10.6	11.7
CLONROCHE	8.5	9.6	10.2
JOHN F. KENNEDY PARK	10.0	10.1	11.0

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) 2magl.	P.E. (Penman)
Fermoy	11-20	31.7	-	3	2	14.6	5.2	9.9	-	-2.8	11	1	57	18	-5.8	11	2	9.8	9.9	-	-	3.0	-
	21-end	68.5	-	8	7	14.0	6.3	10.2	-	-1.1	22	1	59	14	-2.6	22	1	10.6	10.8	-	-	3.7	-
	month	101.0	171	13	9	13.8	5.2	9.5	1.3	-2.8	11	5	161	40	-5.8	11	6	9.8	10.2	-	-	3.1	83
Co. Donegal	1-10	3.7	-	4	2	13.3	4.7	9.0	-	1.1	9	0	48	9	-3.3	9	3	-	-	-	-	-	-
Glenties	11-20	16.0	-	1	1	17.4	6.0	11.7	-	-2.2	11	1	75	32	-6.1	11	3	-	-	-	-	-	-
	21-end	29.1	-	9	8	13.4	5.2	9.3	-	0.5	23	0	51	10	-2.2	23	3	-	-	-	-	-	-
	month	48.8	61	14	11	14.7	5.3	10.0	2.5	-2.2	11	1	174	51	-6.1	11	9	-	-	-	-	-	-
Co. Kerry	1-10	1.6	-	2	0	14.5	4.9	9.7	-	0.4	9	0	55	13	-4.1	9	3	-	-	50.4	-	-	-
Ardfert	11-20	40.5	-	3	1	16.9	6.1	11.5	-	0.5	11	0	73	28	-4.7	11	3	-	-	59.6	-	-	-
	21-end	44.0	-	8	8	15.5	6.2	10.9	-	2.1	21	0	65	19	-1.7	21	2	-	-	59.4	-	-	-
	month	86.1	-	13	9	15.6	5.7	10.7	2.3	0.4	9	0	193	61	-4.7	11	8	-	-	169.4	-	-	-
Co. Leitrim	1-10	2.9	-	2	1	12.6	4.0	8.3	-	-2.1	9	1	43	9	-5.1	9	4	8.1	8.9	55.2	-	-	-
Ballinamore	11-20	6.3	-	2	1	16.4	5.1	10.8	-	-3.5	11	1	66	26	-4.0	11	2	8.7	9.5	69.4	-	-	-
	21-end	36.8	-	8	6	14.0	5.4	9.7	-	-0.5	23	1	54	12	-2.6	23	4	9.5	10.2	35.7	-	-	-
	month	46.0	69	12	8	14.3	4.8	9.6	1.9	-3.5	11	3	163	47	-5.1	9	10	8.8	9.6	160.3	117	-	-
Co. Louth	1-10	0.6	-	1	0	13.5	3.5	8.5	-	-2.8	9	2	45	10	-4.4	9	3	8.2	9.0	-	-	-	-
Ardee	11-20	6.9	-	2	1	15.7	4.3	10.0	-	-5.3	11	1	59	20	-6.8	11	2	9.0	9.6	-	-	-	-
	21-end	57.6	-	9	8	14.6	5.1	9.9	-	-0.8	23	1	56	14	-2.3	23	1	9.8	10.4	-	-	-	-
	month	65.1	118	12	9	14.6	4.3	9.5	2.0	-5.3	11	4	161	45	-6.8	11	6	9.0	9.7	-	-	-	-
Co. Waterford	1-10	1.9	-	2	1	12.8	4.7	8.8	-	-2.0	10	2	48	10	-3.3	10	3	-	9.9	56.6	-	1.5	-
Dungarvan	11-20	46.0	-	5	4	14.4	6.3	10.4	-	-2.5	11	1	62	18	-3.9	11	1	-	10.2	54.5	-	2.1	-
	21-end	102.8	-	9	9	14.1	7.0	10.6	-	2.1	22	0	63	15	1.0	22	0	-	11.4	72.3	-	3.2	-
	month	150.7	-	16	14	13.8	6.0	9.9	1.5	-2.5	11	3	172	42	-3.9	11	4	-	10.5	183.4	122	2.3	54
Co. Wexford	1-10	1.7	-	2	1	12.0	4.7	8.4	-	-0.8	10	1	42	7	-1.0	10	1	8.5	9.2	50.1	-	0.6	-
Johnstown Castle	11-20	17.8	-	5	2	13.9	6.9	10.4	-	0.3	11	0	61	16	0.8	11	0	10.0	10.2	68.6	-	0.8	-
	21-end	68.4	-	10	7	13.6	7.3	10.5	-	4.2	23	0	61	12	2.2	22	0	10.9	11.1	57.4	-	1.4	-
	month	87.9	137	17	10	13.2	6.3	9.8	1.9	-0.8	10	1	164	36	-1.0	10	1	9.8	10.2	176.1	109	0.9	51

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
Co. Dublin	1-10	16.2	16	38	-	-
Kinsealy	11-20	17.1	15	53	-	-
	21-end	14.3	-	33	20	-
	month	47.6				
Co. Kerry	1-10	27.8	-	17	4	-
Valentia Obs.	11-20	18.8	-	0	42	-
	21-end	33.3	-	0	20	-
	month	79.9				
Co. Leitrim	1-10	6.5	4	12	-	-
Ballinamore	11-20	15.6	9	21	-	-
	21-end	22.1	-	6	15	-
	month	44.2				
Co. Wexford	1-10	8.0	6	13	-	-
Johnstown Castle	11-20	27.6	10	23	-	-
	21-end	37.8	-	0	31	-
	month	73.4				

GLOBAL SOLAR RADIATION (MJ/sq. m)

P.E. (Penman)

County/ Station	10-day totals				total for month(mm)
	1-10	11-20	21-end	total for month	
Co. Donegal					
Malin Head	141.72	144.53	121.77	408.02	74
Co. Dublin					
Dublin Airport	136.28	156.34	128.12	420.74	66
Co. Kerry					
Valentia Obs.	137.12	137.70	185.74	460.56	78
Co. Kilkenny					
Kilkenny	134.20	140.41	144.31	418.92	67
Co. Mayo					
Belmullet	142.02	138.12	160.64	440.78	69
Co. Monaghan					
Clones	115.63	151.19	111.42	378.24	64
Co. Offaly					
Birr	133.30	143.34	134.57	411.21	66

Tuesday 1st: Early rain in the west and northwest, spreading southeastwards across the country as the morning progressed, followed by scattered blustery showers in the afternoon, some with hail. Sunny spells in all areas. Strong west to northwest winds throughout the day, with gale gusts in most places. Showers dying out away from the west coast during the evening and night with winds becoming light northwesterly.

Rainfall: 4 to 8mm, heaviest in the west

Temperature: max. 9°C to 12°C, min. 3°C to 8°C, ground temperature above zero at all stations except Clones at -1°C

Sunshine: 3 to 9 hours, sunniest at Clones, 3 hours at Cork Airport

Wednesday 2nd: Cool during the night with slight to sharp frost in some places. Generally dry, with just the odd light shower. Sunny spells in all areas, although temperatures a little below normal. Some light rain or drizzle in places during the evening. Moderate north to northwesterly winds, up to gale force at times with stronger gusts.

Rainfall: nil to 2mm, heaviest at Mullingar and Malin Head

Temperature: max. 10°C to 14°C, min. 4°C to 8°C, ground temperature above zero at all stations except Clones at -1°C

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

Thursday 3rd: Cloudy with patchy rain and drizzle during the early part of the day, becoming dry everywhere by mid-afternoon with some sunshine. A mainly dry evening with mist in places, with fog developing late in the night in many parts. Winds light northwesterly.

Rainfall: nil to 1 mm

Temperature: max. 11°C to 15°C, min. 6°C to 9°C, ground temperature down to -1°C at Birr and Kilkenny

Sunshine: nil to 4 hours generally, 9 hours at Valentia

Friday 4th: Early rain and drizzle along the west coast with some mist, turning to fog in many parts. The fog persisted into the late morning before eventually lifting to give a dry and sunny afternoon in most places, the exception being parts of the northwest, where drizzle persisted. Mist developed again during the evening, turning to fog in places later in the night. Winds were light, west to northwesterly throughout.

Rainfall: nil to <1mm

Temperature: max. 10°C to 19°C, min. 3°C to 8°C, ground temperatures down to -3°C at Kilkenny

Sunshine: trace to 12 hours, sunniest in the south, <1 hour in the north

Saturday 5th: Light rain and drizzle along the west and northwest coast with fog in places to begin. The rain and drizzle cleared later in the morning but fog still persisted, eventually clearing by early afternoon. Mist and fog developed again along the west coast in the late afternoon and continued into the evening and night. Clear spells elsewhere with ground frost setting in after dark in midland and eastern areas. Light variable winds throughout.

Rainfall: nil generally, <1mm at Connacht Airport

Temperature: max. 10°C to 16°C, min. 3°C to 7°C, ground temperatures down to -3°C at Kilkenny

Sunshine: 5 to 11 hours, sunniest at Rosslare

Sunday 6th: Cold overnight with ground frost in many inland areas. Widespread mist and fog also. The fog cleared slowly and the western half of the country had a dry, warm and sunny day. However it remained cloudy in eastern areas with little or no sunshine. Afternoon temperatures were well above normal in the sunshine but it remained cooler where the cloud persisted. Fog returned to many places after dark. Winds were light east to southeasterly.

Rainfall: nil to trace

Temperature: max. 9°C to 20°C, min. 1°C to 6°C, ground temperatures below zero at inland and eastern stations

Sunshine: nil to 12 hours, sunniest in the west, nil at Rosslare and Dublin Airport

Monday 7th: Dry with mist and fog in places during the night. Sunny spells during the morning, especially along the west and northwest coast, but cloudier elsewhere with only the odd sunny spell. Cloudy and misty during the afternoon with spots of drizzle in places. Rain along the south and southwest coast, becoming heavy by mid-afternoon. The rain continued in the southwest for the evening, but remained mainly dry elsewhere. Winds light southeasterly.

Rainfall: nil to 1mm generally, 23mm at Valentia

Temperature: max. 9°C to 14°C, min. 3°C to 7°C, no ground frost

Sunshine: nil to 5 hours, sunniest at Belmullet

Tuesday 8th: Early rain along the extreme southwest coast, clearing by late morning. Dry elsewhere. A sunny afternoon in most places, but the odd shower developed along the southwest coast by late evening. Remaining dry elsewhere through the late evening and night with ground frost becoming widespread. Light, mainly southeasterly, winds throughout.

Rainfall: nil generally, 2mm at Valentia

Temperature: max. 9°C to 14°C, min. 0°C to 7°C, ground temperatures down to -8° at Kilkenny

Sunshine: 7 to 11 hours generally, 1 to 3 hours in the southwest

Wednesday 9th: Cold during the night with sharp to severe frost in many parts. Mist and fog in many inland areas, dense in places. Dry during the day with good sunshine but continuing quite cool in the southeasterly winds. Winds were easterly during the night but backed southeasterly for the rest of the period, generally light in strength.

Rainfall: nil to trace

Temperature: max. 10°C to 13°C, min. -3°C to 5°C, ground temperatures down to -10°C inland

Sunshine: 4 to 12 hours, sunniest at Rosslare

Thursday 10th: Very cold during the night and early morning with sharp to severe frost in inland areas. Continuing dry during the rest of the period. Long sunny periods in many areas, although cloudy in parts of the south. Very cold again after dark with sharp to severe frost. Light east to southeasterly winds.

Rainfall: nil

Temperature: max. 8°C to 13°C, min. -4°C to 5°C, ground temperatures down to -11°C at Kilkenny

Sunshine: 9 to 12 hours generally, nil at Cork Airport, 3 hours at Shannon

Friday 11th: Very cold but dry during the night and early morning with sharp to severe frost. A dry day with temperatures below normal. Long periods of sunshine in many areas. Cold again after dark with slight to sharp frost in places. Light southeasterly winds throughout.

Rainfall: nil

Temperature: max. 9°C to 12°C, min. -3°C to 5°C, ground temperatures below zero at all stations except Valentia, -9°C at Kilkenny

Sunshine: 3 to 9 hours, sunniest at Rosslare

Saturday 12th: A dry day except for some light showers along southern coasts. Some sunny spells, mainly in the southern half of the country, although duller elsewhere. Cool. Easterly winds were generally light, increasing a little in the south during the evening.

Rainfall: nil generally, <1mm at Cork Airport

Temperature: max. 8°C to 14°C, min. 2°C to 7°C ground temperatures down to -3°C at Dublin Airport

Sunshine: nil to 7 hours, sunniest at Rosslare

Sunday 13th: Dry during the night with slight to sharp frost. Early rain in the southwest pushed northwards during the day bringing rain to all areas, with parts of the south receiving over 50mm. Virtually no sunshine. Temperatures near or below normal. Southeasterly winds strengthened during the day to reach gale or strong gale force at times.

Rainfall: trace to 12mm generally, 52mm at Valentia, 43mm at Cork Airport

Temperature: max. 9°C to 13°C, min. 2°C to 9°C, ground temperatures down to -4°C at Dublin Airport

Sunshine: <1 hour everywhere

Monday 14th: A cloudy start with rain in many places during the early part of the period. The rain turned to showers, before dying out in the afternoon. Sunny spells in the morning, more widespread by afternoon. Some mist forming in places by evening. Light east to southeasterly winds.

Rainfall: <1 to 6mm, heaviest at Valentia

Temperature: max. 13°C to 18°C, min. 7°C to 10°C, no ground frost

Sunshine: 2 to 7 hours generally, nil at Valentia

Tuesday 15th: Patchy rain or showers along the southwest coast to begin, but dry elsewhere with mist forming in places. Becoming mainly dry by late morning. Sunny in the northern half of the country during the morning and generally by afternoon. Warm. South to southeasterly winds throughout, moderate to strong.

Rainfall: nil generally, <1mm at Valentia and Cork Airport

Temperature: max. 13°C to 21°C, min. 7°C to 11°C, no ground frost

Sunshine: 2 to 11 hours, sunniest in the east and north-midlands

Wednesday 16th: Dry with some mist and fog patches to begin. The fog cleared by early morning to give a dry, warm and sunny day in all places. The odd shower in the northwest during the early afternoon, but remaining dry and sunny over most of the country, with some haze in places. Winds were light to moderate, from a southeasterly direction.

Rainfall: nil to trace

Temperature: max. 14°C to 23°C, min. 5°C to 11°C, ground temperatures above zero at all stations, except Kilkenny at -1°C

Sunshine: 5 to 12 hours

Thursday 17th: A dry, warm day everywhere with no rain. Slight ground frost in sheltered areas of south Leinster. Clear skies leading to almost maximum amounts of sunshine everywhere except in the southwest. Warm, hazy, dry and sunny, with record high April temperatures in some stations. Light east to southeasterly winds.

Rainfall: nil

Temperature: max. 14°C to 24°C, min. 5°C to 13°C, ground temperatures above zero at all stations except Kilkenny -1°C

Sunshine: 12 to 13 hours at all stations except Valentia with 6 hours

Friday 18th: A large anticyclone of 1043hPa centred over Scandinavia and the Baltic Sea maintained a warm easterly airflow over Ireland. Clear skies everywhere, but with mist also. Another warm, dry and sunny day but temperatures failed to reach the high values of the previous day. Mainly clear skies after dark, but some cloud along eastern and mid-western coasts.

Rainfall: nil

Temperature: max. 13°C to 23°C, min. 6°C to 13°C, no ground frost

Sunshine: 11 to 12 hours

Saturday 19th: Dry and clear overnight with mist and haze. These cleared quickly in the morning to give a warm, breezy, sunny day. Easterly winds kept temperatures slightly below normal along the east coast, but elsewhere they were a few degrees above. Dry everywhere. Light to moderate easterly winds, increasing by the afternoon, with gusts.

Rainfall: nil

Temperature: max. 13°C to 23°C, min. 5°C to 8°C, no ground frost

Sunshine: 11 to 13 hours

Sunday 20th: Cool overnight with the odd patch of mist. The southern half of the country was mostly cloudy with well scattered showers and sunny spells. Further north it remained dry with long sunny spells. Cooler everywhere than of late with afternoon temperatures slightly below normal for the time of year. Winds, northeasterly, moderate with gusts, strongest in the east, easing gradually in the afternoon and evening.

Rainfall: nil generally, <1mm at Cork Airport

Temperature: max. 11°C to 13°C, min. 3°C to 7°C, slight ground frost at Belmullet

Sunshine: 1 to 12 hours, sunniest at Belmullet and Malin Head

Monday 21st: Dry but cool during the night except in the far south, where showers and some light rain tended to occur. The showers and rain moved slowly northwards, becoming heavy and thundery at times. Remaining cool. Some sunny spells also, mainly in the south. Winds from a northeasterly direction backed northwesterly, light to moderate in strength.

Rainfall: nil to 12mm, heaviest at Kilkenny, nil at Valentia and Belmullet

Temperature: max. 8°C to 13°C, min. 4°C to 7°C, slight ground frost at Valentia

Sunshine: nil to 5 hours, sunniest in the south

Tuesday 22nd: Sharp to severe frost in many inland areas during the night, clearing quickly during the morning. Some mist and fog patches also with a little rain in places. Mainly dry during the day with just the odd shower and long periods of sunshine. Warm. Light variable winds, becoming southeasterly to southwesterly in direction.

Rainfall: nil to 1mm

Temperature: max. 11°C to 16°C, min. 1°C to 6°C, ground temperatures down to -4°C at Kilkenny

Sunshine: 4 to 12 hours generally, 1 hour at Malin Head

Wednesday 23rd: Early mist and fog lifted to give a dry, warm and sunny day almost everywhere. Onshore winds kept temperatures down along the east coast, but elsewhere temperatures were a few degrees above normal. Light variable winds, becoming moderate easterly with occasional gusts.

Rainfall: nil to trace

Temperature: max. 12°C to 18°C, min. <1°C to 7°C, ground temperatures down

to -6°C at Kilkenny

Sunshine: 10 to 13 hours generally, 8 hours at Valentia

Thursday 24th: A band of rain moved into the southwest early in the night and pushed slowly northwards, reaching the extreme north by late afternoon. Some of the rain was heavy with thunder. This was followed by brighter weather with scattered showers and some good sunny spells, particularly in the south. More rain in the south by late evening. Winds were east to southeasterly, moderate with gusts, strongest in the north.

Rainfall: <1 to 15mm, heaviest at Valentia, 0.1mm at Belmullet

Temperature: max. 10°C to 16°C, min. 6°C to 10°C, no ground frost

Sunshine: nil to 8 hours, sunniest at Valentia, nil at Clones

Friday 25th: Early rain in the south and southwest spread northwards and became heavy and persistent in places. This was followed by a clearance in the south by mid-morning, spreading northwards through the early afternoon to give sunny spells and showers in most places, with some of the showers becoming heavy. Showers died out in many places by evening except along the west coast. Winds were southeasterly, increasing in strength before backing southerly and easing slightly.

Rainfall: 3 to 23mm, heaviest in the south, 3mm at Dublin Airport

Temperature: max. 12°C to 17°C, min. 6°C to 10°C, no ground frost

Sunshine: <1 to 7 hours, sunniest in the south <1 hour at Malin Head

Saturday 26th: Showers along the west coast early in the period, with patchy rain elsewhere. The showers continued through the morning with some bright spells also. A mixture of sunny spells and showers continued during the afternoon and evening. Winds were moderate southeasterly, veering southwesterly later in the day.

Rainfall: 2 to 8mm, heaviest at Cork Airport

Temperature: max. 11°C to 16°C, min. 7°C to 10°C, no ground frost

Sunshine: 1 to 9 hours, sunniest in the south

Sunday 27th: Heavy rain along the southeast coast in the early morning, dying out, followed by scattered showers, becoming more widespread as the morning went on. Some mist in places also. Sunny spells and scattered showers during the afternoon and evening. Rain along the south coast by evening, spreading slowly northwards. Winds were moderate, southwesterly in direction, with stronger gusts associated with showers.

Rainfall: 1 to 11mm generally, 19mm at Rosslare

Temperature: max. 12°C to 16°C, min. 7°C to 10°C, no ground frost

Sunshine: 3 to 11 hours, sunniest at Malin Head, 3 hours at Valentia

Monday 28th: Rain at the start of the period, heaviest in the east and southeast. The rain continued into the late morning, becoming lighter. Mainly dry by early afternoon except for the odd shower, with some good sunshine in parts. Heavy showers again by late afternoon, becoming well scattered by evening. Light variable winds throughout.

Rainfall: <1 to 20mm, heaviest in the southeast and east, <1mm at Belmullet

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

down to -2°C at Shannon Airport

Sunshine: nil to 7 hours, sunniest at Belmullet

Tuesday 29th: A mainly dry start to the day, but showers began to occur in the south before dawn. During the morning these spread gradually northwards, giving heavy thundery outbreaks in places during the afternoon and evening. Between the showers there were spells of sunshine. Warmer than normal. Winds were moderate, from a southerly direction.

Rainfall: nil to 8mm generally, 13mm at Mullingar

Temperature: max. 13°C to 16°C, min. 4°C to 8°C, ground temperatures down to -2°C at Connacht Airport

Sunshine: 5 to 10 hours, sunniest at Kilkenny

Wednesday 30th: A shallow depression was centred over the north of Ireland. Showers over the north of the country at first died out for a while, but showers again became widespread everywhere by afternoon and were once more heavy and thundery in places with falls of hail. Sunny spells also between the showers, especially in the southeast. Light to moderate south to southwesterly winds.

Rainfall: <1 to 7mm, heaviest at Clones, <1mm at Dublin Airport

Temperature: max. 11°C to 14°C, min. 5°C to 9°C, ground temperatures above zero at all stations except Kilkenny at -1°C

Sunshine: 2 to 10 hours, sunniest at Rosslare

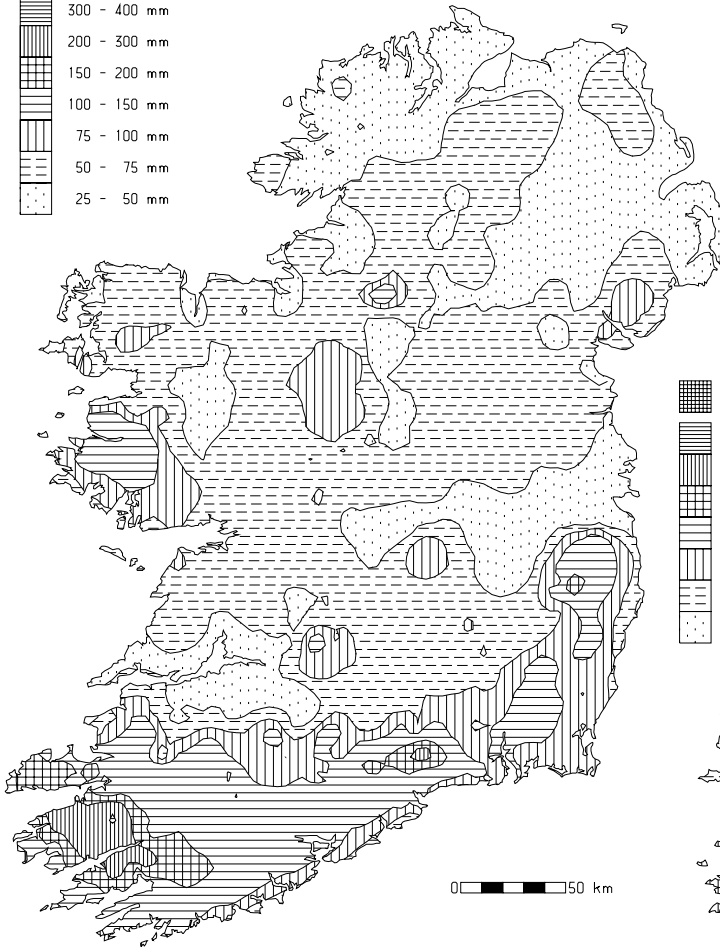
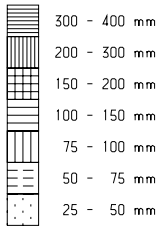
Drier than normal in many places but wet in south

Rainfall totals for April were very variable across the country, with less than 50% of normal rainfall in parts of County Donegal, but over twice the monthly normal over some areas of Munster. The first third of 2003 has been much drier than normal over the northern half of the country, with only 62% of normal rainfall for the 4-month period measured at Malin Head. Totals for this month ranged from 27mm at Casement Aerodrome to 151mm at Dungarvan (Carriglea), Co. Waterford, the highest April fall at the station since records began there in 1983. Percentage of normal values were between 50% at Ballyshannon (Cathleen's Fall), Co. Donegal and 179% at Valentia Observatory. It was the driest April for between 6 and 8 years at many stations, but in contrast it was the wettest April for 5 years at Cork Airport.

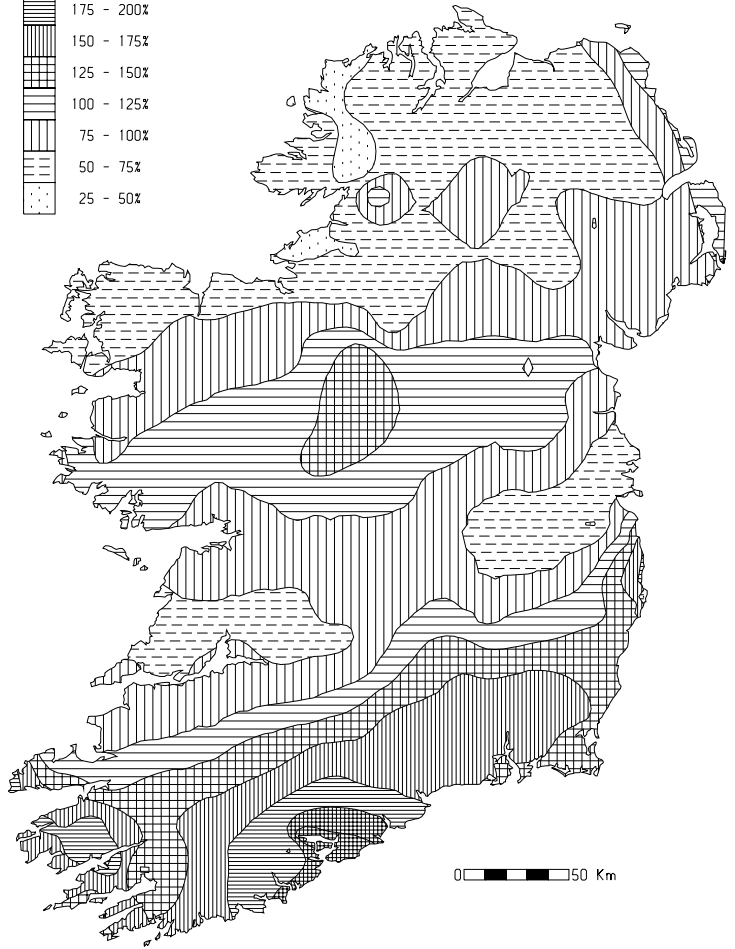
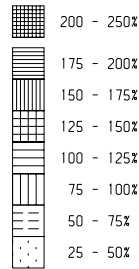
The chart of daily rain opposite shows that dry weather prevailed for most of the month, but the final week was a wet one everywhere. At many stations there was little or no rain recorded in the periods 3rd to 11th and 15th to 20th. Valentia Observatory recorded the highest daily fall of the month, 55.1mm on the 13th, the highest daily fall for April at the station since 1984. The number of wetdays during the month (*days with 1.0mm or more of rainfall*) was between 8 and 11 generally, less than the normal range for April of 10 to 14 wetdays.

County/ Station	Total Amount (mm)	% of 1961-90 average	Most in a day / date		Number of Raindays (>0.2mm)	Number of Wetdays (>1mm)
CO. CLARE						
SHANNON AIRPORT	43.2	77	12.4	13	10	8
CARRON	68.3	79	17.6	13	16	10
CO. CORK						
FERMOY (MOORE PARK)	101.0	171	32.6	24	13	9
CORK AIRPORT	123.1	176	34.2	13	15	12
SHERKIN ISLAND	98.4	151	27.5	13	17	13
BALLINCURRIG (PEAFIELD)	141.1		43.2	13	16	10
CO. DONEGAL						
MALIN HEAD	32.9	57	8.8	21	11	8
BALLYSHANNON (CATHLEEN'S FALL)	28.5	50	6.9	24	10	7
GLENTIES	48.8	61	16.0	13	14	11
CO. DUBLIN						
DUBLIN (PHOENIX PARK)	33.6	63	14.8	27	12	8
DUBLIN AIRPORT	34.0		17.3	27	12	6
CASEMENT AERODROME	27.3	53	10.8	27	12	7
DUBLIN (MERRION SQUARE)	34.2	70	n/a		11	6
CO. GALWAY						
GALWAY (UNIV. COLL.)	62.9	94	14.1	24	13	11
MAM VALLEY	130.0		50.6	13	11	9
CONNEMARA NATIONAL PARK	93.1	112	27.9	13	11	9
BALLYGAR	79.7	131	19.9	24	14	11
CO. KERRY						
VALENTIA OBSERVATORY	138.3	179	55.1	13	15	14
ARDFERT (LISCAHANE)	86.1		39.6	13	13	9
CO. KILKENNY						
KILKENNY	75.3	144	20.7	24	13	9
CO. LETTRIM						
BALLINAMORE	46.0	69	12.3	24	12	8
CO. LIMERICK						
MOUNT RUSSELL	116.3		34.4	13	16	13
CO. LOUTH						
ARDEE (BOHARNAMOE)	65.1	118	13.4	29	12	9
CO. MAYO						
BELMULLET	34.8	61	10.6	13	10	7
STRAIDE	57.7	90	22.9	13	11	9
CONNACHT AIRPORT	64.8		20.5	13	14	10
CO. MEATH						
WARRENSTOWN	55.9	96	13.9	13	11	8
CO. MONAGHAN						
CLONES	47.2	84	10.4	24	11	9
CO. OFFALY						
BIRR	44.6	84	12.3	24	15	9
DERRYGREENAGH	46.8	82	12.2	24	11	8
CO. SLIGO						
ARDTARMON	36.7		6.5	27	12	8
CO. TIPPERARY						
FETHARD (PARSONSHILL)	60.1		16.1	24	11	8
CO. WATERFORD						
WATERFORD (TYCOR)	96.7	159	26.0	13	11	10
DUNGARVAN (CARRIGLEA)	150.7		38.2	13	16	14
CO. WESTMEATH						
MULLINGAR II	63.5	107	14.5	24	11	9
CO. WEXFORD						
JOHNSTOWN CASTLE	87.9	137	24.5	27	17	10
ROSSLARE	82.4	147	22.5	27	11	10
CLONROCHE	124.1	175	24.3	24	12	11
JOHN F. KENNEDY PARK	111.6	174	31.5	13	11	10

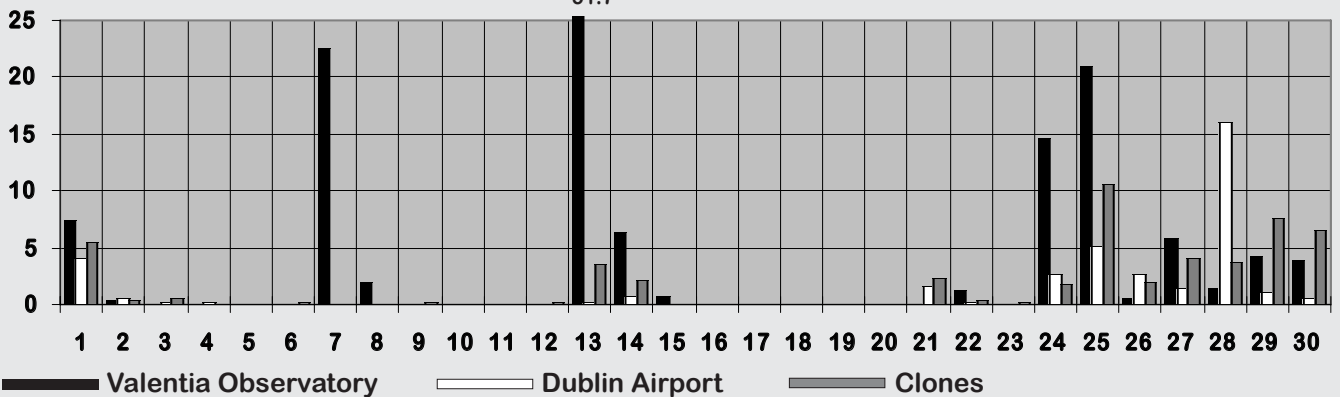
Total rainfall (mm)



Percentage of normal rainfall



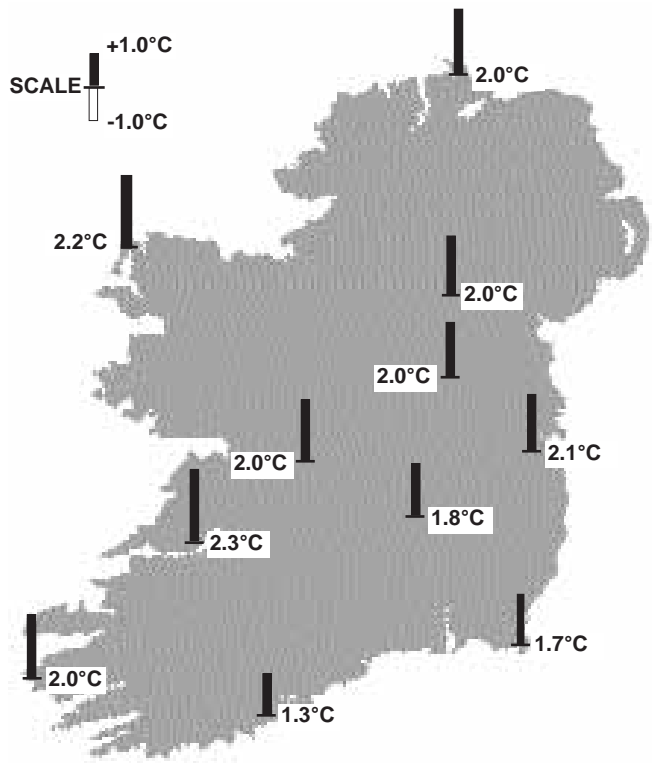
Daily 0-24h rainfall values (mm)



Warmest April on record in places

Mean air temperatures for the month were well above normal everywhere and it was the warmest April on record at a number of stations: **Belmullet, Clones and Casement Aerodrome**, where records date back between 40 and 52 years. At the long-term stations of **Malin Head and Valentia Observatory** it was the warmest April since 1893. Mean monthly values varied between 9.0°C at Connacht Airport and 11.2°C at both Shannon Airport and Dublin (Merrion Square); these values are around two degrees above normal for April.

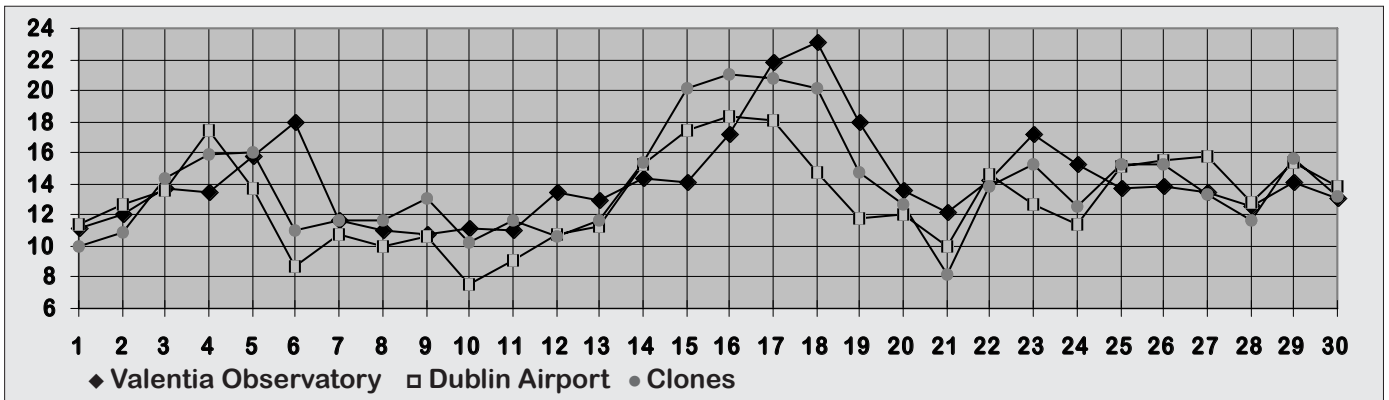
By far the warmest period of the month was between the 15th and 19th, when daytime temperatures were over ten degrees above normal in the west of the country. The highest value, 24.2°C, was measured at Belmullet on the 17th; this was the highest April temperature ever recorded at the station. It was also the warmest day of any month at the station since July 2000. The lowest air temperature of the month, -5.3°C, was recorded at Ardee (Boharnamoe), Co. Louth on the 11th, while



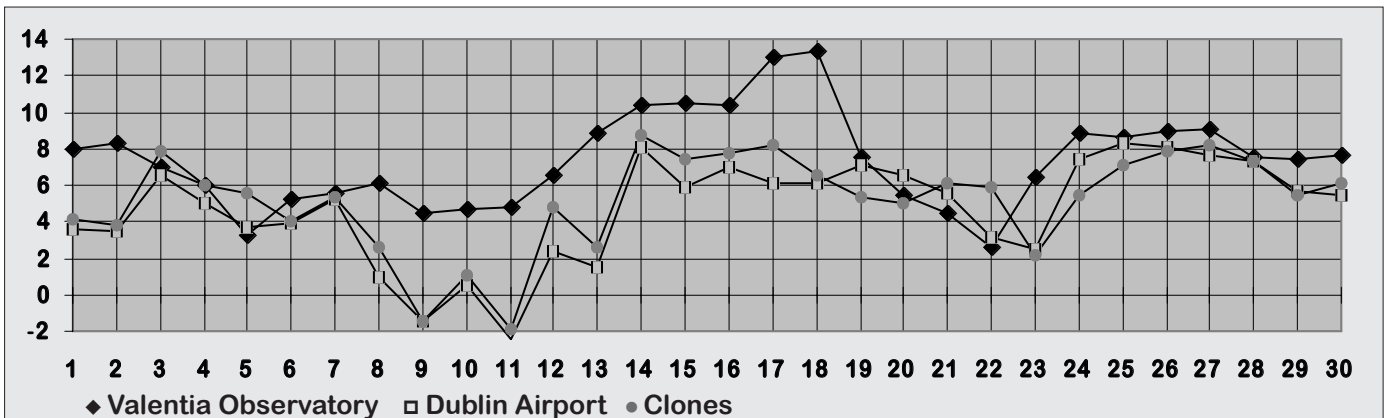
Mean Temperature
(difference from 1961-90 normals)

the lowest grass minimum temperature, -11.3°C, was measured at Kilkenny on the 10th; this was the lowest such April value on record at the station.

Daily 0-24h maximum temperatures (°C)



Daily 0-24h minimum temperatures (°C)



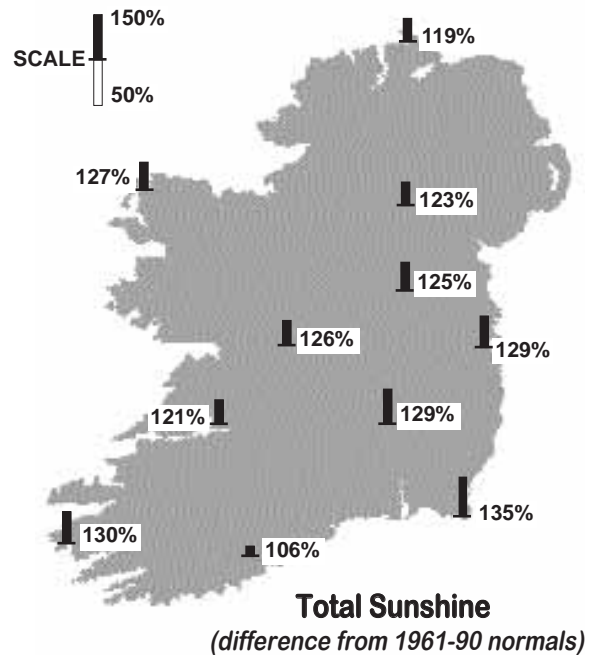
County/ Station	°C											
	Mean max.	Mean min.	Mean/ deviation from 1961-90 average		Highest max./date	Lowest min./date		Lowest grass min./date		Days with air frost ground frost		
CO. CLARE												
SHANNON AIRPORT	15.4	6.9	11.2	2.3	23.5	17	1.9	11	-3.4	11	0	7
CARRON	13.8	5.7	9.8	2.2	22.2	17	-0.2	10	-5.6	10	1	9
CO. CORK												
FERMOY (MOORE PARK)	13.8	5.2	9.5	1.3	20.3	18	-2.8	11	-5.8	11	5	6
CORK AIRPORT	12.3	6.3	9.3	1.3	18.1	18	1.3	10	-4.0	10	0	2
SHERKIN ISLAND	13.4	7.6	10.5	1.7	17.3	18	1.9	10	-2.0	10	0	2
BALLINCURRIG (PEAFIELD)	13.2	5.4	9.3		19.6	18	-1.0	10	-1.4	11	2	2
CO. DONEGAL												
MALIN HEAD	12.5	7.0	9.8	2.0	20.7	16	0.7	11	-0.8	11	0	1
BALLYSHANNON (CATHLEEN'S FALL)	13.8	6.9	10.4	2.5	21.0	16 17	1.1	11			0	
GLENTIES	14.7	5.3	10.0	2.5	23.2	17	-2.2	11	-6.1	11	1	9
CO. DUBLIN												
DUBLIN (PHOENIX PARK)	14.3	5.3	9.8	1.9	22.2	16	-2.7	11	-6.6	11	2	10
DUBLIN AIRPORT	13.2	5.1	9.2		18.4	16	-2.4	11	-6.6	11	3	8
CASEMENT AERODROME	14.1	5.5	9.8	2.1	22.7	16	-2.9	11	-5.6	9	3	6
DUBLIN (MERRION SQUARE)	14.0	8.4	11.2	2.3	20.7	16	2.4	11			0	
CO. GALWAY												
GALWAY (UNIV. COLL.)	15.3	5.6	10.5	1.8	23.4	17	-1.2	9	-6.0	9	1	12
MAAM VALLEY	14.8	6.3	10.6		23.1	17	1.4	11	-2.3	9	0	4
CONNEMARA NATIONAL PARK	14.9	6.7	10.8	2.4	24.2	17	1.9	5			0	
BALLYGAR	14.6	5.2	9.9		23.0	17	-1.5	9	-3.9	9	2	3
CO. KERRY												
VALENTIA OBSERVATORY	14.3	7.7	11.0	2.0	23.1	18	2.6	22	-0.6	22	0	1
ARDFERT (LISCAHANE)	15.6	5.7	10.7	2.3	24.1	18	0.4	9	-4.7	11	0	8
CO. KILKENNY												
KILKENNY	14.6	5.1	9.9	1.8	22.4	17	-4.0	10	-11.3	10	3	14
CO. LEITRIM												
BALLINAMORE	14.3	4.8	9.6	1.9	21.7	17	-3.5	11	-5.1	9	3	10
CO. LIMERICK												
MOUNT RUSSELL	13.3	6.1	9.7		22.1	17	-0.4	10	-4.6	10	1	4
CO. LOUTH												
ARDEE (BOHARNAMOE)	14.6	4.3	9.5	2.0	21.1	15	-5.3	11	-6.8	11	4	6
CO. MAYO												
BELMULLET	14.4	6.7	10.6	2.2	24.4	17	2.7	9	-1.6	9	0	6
STRAIDE	14.4	4.9	9.7	1.6	22.5	17	-0.8	11	-4.1	20	2	10
CONNACHT AIRPORT	12.8	5.1	9.0		21.2	17	-0.6	11	-3.0	11	1	4
CO. MEATH												
WARRENTOWN	13.8	5.4	9.6	1.9	22.6	16	-3.8	11	-5.6	11	3	6
CO. MONAGHAN												
CLONES	13.9	5.3	9.6	2.0	21.1	16	-1.9	11	-6.1	11	2	4
CO. OFFALY												
BIRR	14.5	5.4	10.0	2.0	23.2	17	-2.3	9	-8.9	9	2	8
DERRYGREENAGH	14.4	4.8	9.6	2.4	22.9	17	-3.2	11	-7.8	11	3	9
CO. SLIGO												
ARDTARMON	14.5	6.9	10.7		22.1	17	1.9	11	-1.7	9	0	6
CO. TIPPERARY												
FETHARD (PARSONSHILL)	13.9	4.8	9.4		21.9	17	-0.7	10	-3.7	10	2	5
CO. WATERFORD												
WATERFORD (TYCOR)	14.5	6.2	10.4	2.0	22.0	17	-1.9	10			2	
DUNGARVAN (CARRIGLEA)	13.8	6.0	9.9	1.5	20.0	18	-2.5	11	-3.9	11	3	4
CO. WESTMEATH												
MULLINGAR II	13.9	5.2	9.6	2.0	21.6	17	-3.1	11	-7.7	9	3	8
CO. WEXFORD												
JOHNSTOWN CASTLE	13.2	6.3	9.8	1.9	19.0	4	-0.8	10	-1.0	10	1	1
ROSSLARE	12.7	7.5	10.1	1.7	17.9	4	2.6	10	-4.5	10	0	2
CLONROCHE	13.7	5.3	9.5	1.8	20.5	17	-1.4	10	-9.0	10	2	15
JOHN F. KENNEDY PARK	13.6	6.4	10.0	1.8	20.4	17	-0.5	11	-5.0	11	2	5

County/ Station	Daily mean (hours/day)	% of average	% of possible	Most in a day/date
CO. CLARE				
SHANNON AIRPORT	5.95	121	43	12.4 18
CO. CORK				
CORK AIRPORT	5.57	107	40	12.6 19
SHERKIN ISLAND	6.26	106	45	12.0 22
BALLINCURRIG (PEAFIELD)	5.79		40	12.3 18
CO. DONEGAL				
MALIN HEAD	6.05	119	43	12.4 17
BALLYSHANNON (CATHLEEN'S FALL)	5.69	116	40	12.3 19
CO. DUBLIN				
DUBLIN AIRPORT	6.13	118	44	12.7 17
CASEMENT AERODROME	6.31	129	45	12.5 17 23
CO. GALWAY				
GALWAY (UNIV.COLL.)	5.86	118	42	12.1 18 23
CO. KERRY				
VALENTIA OBSERVATORY	6.51	130	47	12.2 19
ARDFERT (LISCAHANE)	5.65		48	12.4 19
CO. KILKENNY				
KILKENNY	6.27	129	45	12.4 17 18
CO. LEITRIM				
BALLINAMORE	5.34	117	38	12.5 19
CO. MAYO				
BELMULLET	6.68	127	48	12.6 22
STRAIDE	5.56			12.0 19
CONNACHT AIRPORT	5.54		40	12.8 23
CO. MONAGHAN				
CLONES	5.58	123	40	12.2 17
CO. OFFALY				
BIRR	5.83	126	42	12.0 23
CO. WATERFORD				
DUNGARVAN (CARRIGLEA)	6.11	122	48	12.4 17
CO. WESTMEATH				
MULLINGAR II	6.03	125	43	12.2 19 23
CO. WEXFORD				
JOHNSTOWN CASTLE	5.87	109	42	12.3 17
ROSSLARE	7.72	135	56	12.7 17
CLONROCHE	6.34	120	46	12.3 17
JOHN F. KENNEDY PARK	6.91	140	50	11.9 22

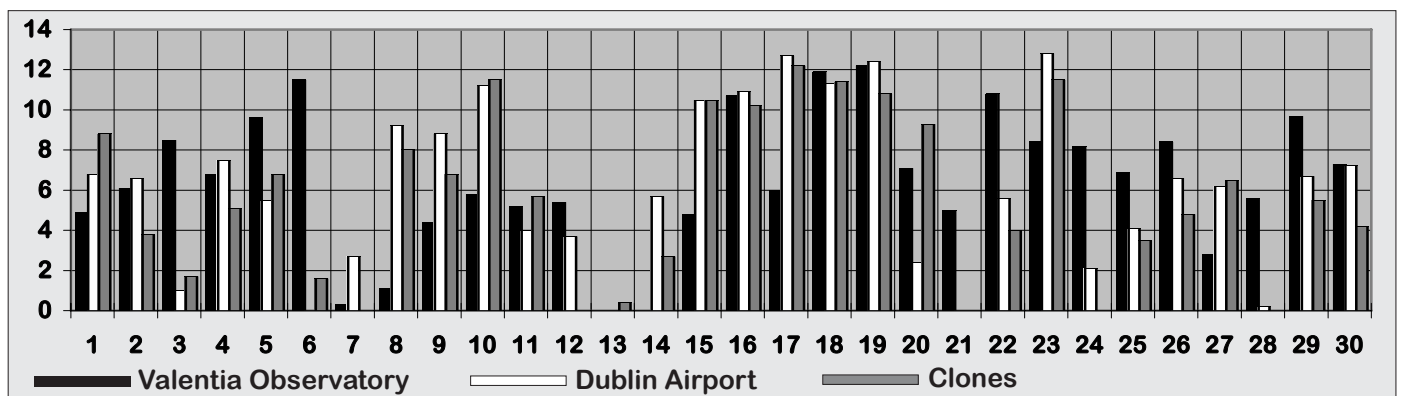
Another sunny month

Sunshine totals were above normal everywhere for the fourth successive month this year. They ranged between 160 hours at Ballinamore, Co. Leitrim and 232 hours at Rosslare, where it was the sunniest April since records began in 1956. At several other stations it was the sunniest April for between 22 and 34 years. Percentage of normal values were between 106% at Sherkin Island, Co. Cork and 140% at John F Kennedy Park, Co Wexford.

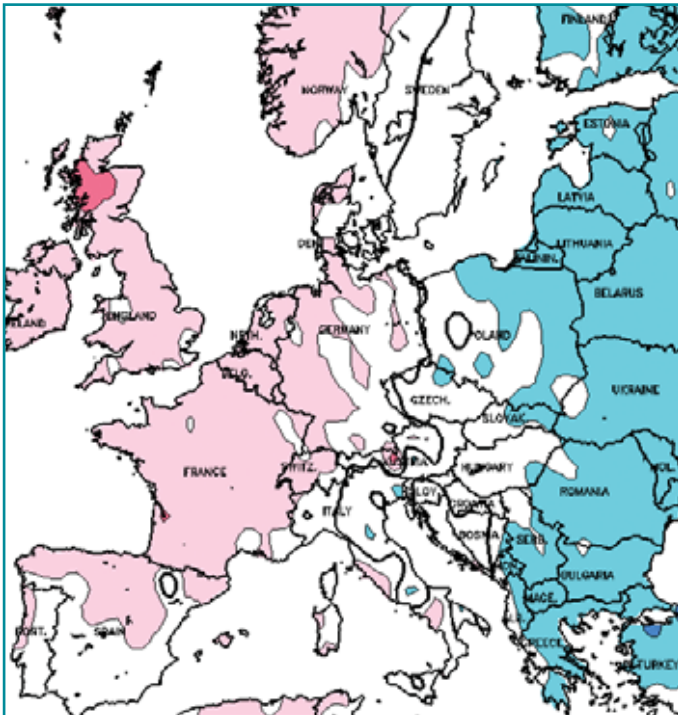
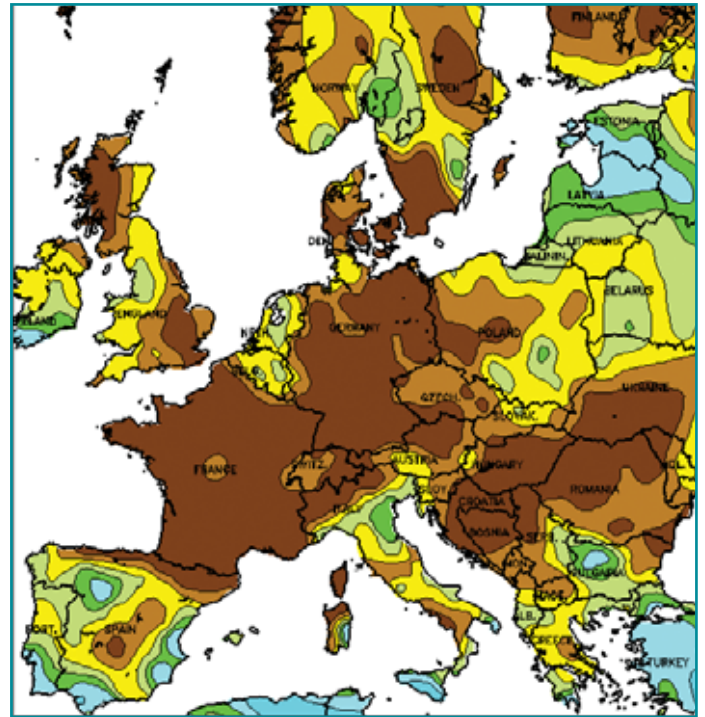
Sunshine was fairly evenly distributed throughout the month, but the period between the 15th and 19th was particularly sunny everywhere. The highest daily value, 12.8 hours, was measured at Connacht Airport on the 23rd. Global solar radiation totals ranged from 101% of normal at Clones to 111% at Belmullet.



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

Severe thunderstorms developed late on the 15th and produced 11 tornadoes in Texas and Oklahoma, along with numerous reports of damaging hail and strong winds.

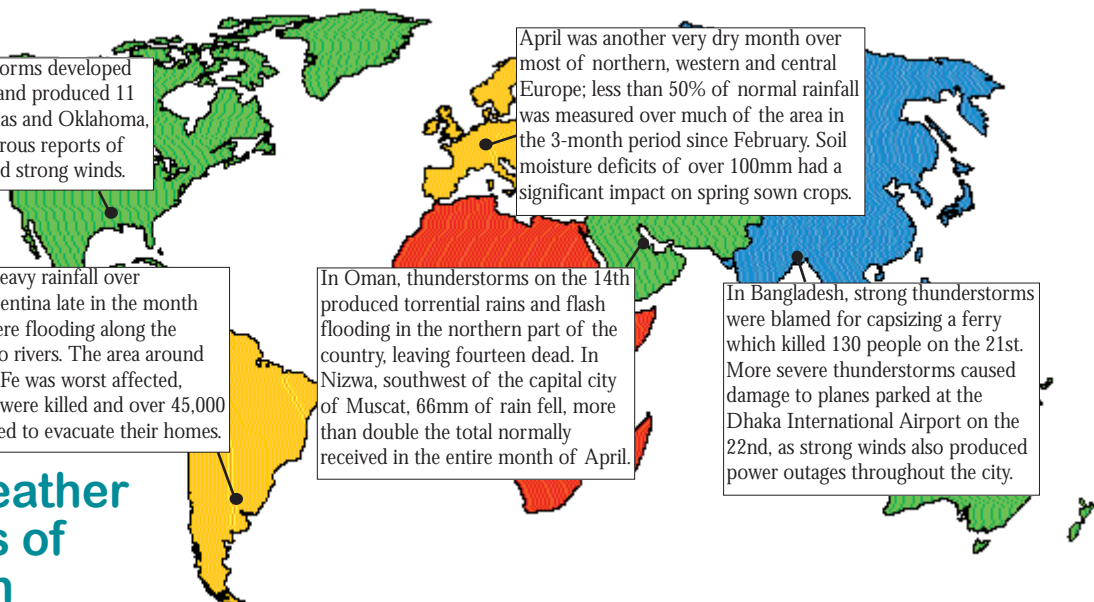
Several days of heavy rainfall over northeastern Argentina late in the month caused some severe flooding along the Parana and Salado rivers. The area around the city of Santa Fe was worst affected, where 23 people were killed and over 45,000 people were forced to evacuate their homes.

In Oman, thunderstorms on the 14th produced torrential rains and flash flooding in the northern part of the country, leaving fourteen dead. In Nizwa, southwest of the capital city of Muscat, 66mm of rain fell, more than double the total normally received in the entire month of April.

April was another very dry month over most of northern, western and central Europe; less than 50% of normal rainfall was measured over much of the area in the 3-month period since February. Soil moisture deficits of over 100mm had a significant impact on spring sown crops.

In Bangladesh, strong thunderstorms were blamed for capsizing a ferry which killed 130 people on the 21st. More severe thunderstorms caused damage to planes parked at the Dhaka International Airport on the 22nd, as strong winds also produced power outages throughout the city.

Global weather highlights of the month



Fourth weather buoy deployed off the northwest coast

There was fine weather during the middle of April for the deployment of the latest in the network of marine weather buoys around the Irish coast. This buoy, the fourth in the series so far, will transmit hourly reports of the main marine weather elements from its position ten miles west of Rossan Point in County Donegal (see map below); values are measured by sensors and sent to Met Éireann headquarters via satellite. The launch was made from the *Celtic Explorer*, the Department of the Marine's new national research vessel, operated by the Marine Institute. The first buoy (M1), located roughly sixty miles west of the Aran Islands, was deployed in November 2000. This was followed by two further buoys, M2 located in the Irish Sea in April 2001 and M3 which was deployed in July 2002, thirty one nautical miles west of Mizen Head. A fifth buoy is planned for the southeast coast within the next couple of years. The parameters reported are shown in the table below; these are updated hourly on Met Éireann's website. Eventually all buoys will have the added capability of measuring oceanographic parameters, such as the speed of ocean currents and the temperature and salinity of the water at various depths. The observations are used in the preparation of Met Éireann's forecasts, in particular the sea area forecast, gale warnings and, for the summer months of April to September, the small craft warning which is a forecast of wind speeds of force 6 or 7 in Irish coastal waters out to ten nautical miles.

See the latest hourly buoy reports on:
www.met.ie/recentweather

See also the Marine Institute website:
www.marine.ie/scientific+services/data+services/data+buoy



Above
 Pictured onboard the *Celtic Explorer* in Galway before the deployment of the new buoy were (left to right) Evelyn Murphy of Met Éireann, Frank O'Brien of the Marine Institute, Dermot Ahern, Minister for Communications, Marine and Natural Resources, Yvonne Shields and Peter Heffernan, both of the Marine Institute. (picture courtesy Marine Institute)



Left
 Map showing location of buoys, together with stations and headlands referred to in the sea area forecasts.

Below
 Sample of hourly marine data from Met Éireann's website

Buoy	Time GMT	Location	Pressure hPa	Wind Direction °	Wind Speed Kts	Temp °C	Dew Point °C	Humidity %	Wave Period sec	Wave Height m	Sea Temp °C
M1	5 Jun 10:00	53.1N 11.20W	1006.4	170	21	12.8	11.0	89	6	2.3	12.5
M2	5 Jun 10:00	53.5N 5.40W	1013.6	190	16	11.5	10.1	91	4	1.1	10.8
M3	5 Jun 10:00	51.2N 10.50W	1009.8	170	21	13.6	11.8	89	6	2.2	13.1
M4	5 Jun 10:00	54.7N 9.10W	1008.0	180	18	12.7	10.3	85	5	1.4	12.2
Marathon	5 Jun 10:00	51.4N 7.90W	1013.9	200	23	13.8	n/a	n/a	4	1.6	n/a