

# MONTHLY WEATHER BULLETIN

NO. 312  
APRIL 2012



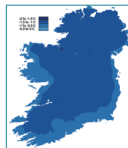



A solar halo, an optical phenomenon created by the passing of light through ice crystals became evident as a warm front approached Mizen Head-Ireland's most southwesterly point during the first few days of the month. (Picture courtesy Tom Mitchell)

## COOL EVERYWHERE; WET AND SUNNY IN PLACES

Rainfall was below average in the West and in parts of the North and South, with many stations in these areas only reporting around three-

quarters of their long-term average (LTA) for the time of year. In contrast, the East, Southeast and some areas in the South reported the highest

	<b>INSIDE</b> <b>Special Feature</b> Hail-Page 3 	DAILY WEATHER..... 8 RAINFALL ..... 10   <b>Temperature</b> -Page 12	Produced by Met Éireann, Glasnevin Hill, Dublin 9. Annual subscription €80 (excluding VAT of 23%)  or free online at <a href="http://www.met.ie">www.met.ie</a> All data is correct at time of publication For more information or for data enquires e-mail: <a href="mailto:climate.enquiries@met.ie">climate.enquiries@met.ie</a> tel: +353-1-8064260 fax: +353-1-8064216
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The view from Templebreedy Church, Crosshaven, Co. Cork taken on April 11th, shows the sun shining on the spot where 100 years before the Titanic stopped to collect passengers from Queenstown (now Cobh,) Co. Cork. The Titanic which anchored just off Roche's Point on April 11th 1912, took on 138 passengers, before heading towards New York (Picture courtesy Tom Mitchell)

rainfall relative to average, with stations in the Kildare area reporting over double their LTA for the month. This month, stations in the Dublin area attributed nearly a quarter of their April rainfall totals to heavy rain on the 25th. Dublin Airport and Casement Aerodrome reported falls of 24.8 mm and 26.5 mm, respectively, their highest daily rainfalls recorded at the sites during April since 1998 (14 years). Mean temperatures for April were all below average and were the lowest in at least 12 to 26 years, countrywide. Most deviations from average ranged between  $-1.0^{\circ}\text{C}$  to  $-1.5^{\circ}\text{C}$ , except in coastal areas where differences from average were smallest. Mean maximum air temperatures were below average, with highest maximums the lowest in a number of years. Casement Aerodrome's highest maximum temperature of  $13.1^{\circ}\text{C}$ , was its lowest April maximum since the station opened in 1964 (48 years). Mean minimum air temperatures were also below average, with many lowest minimums countrywide the lowest in at least six to 11 years. The month's lowest grass minimum temperature was  $-10.4^{\circ}\text{C}$  at Straide, Co. Mayo with the other grass minimum temperatures at Cork Airport and Shannon Airport of  $-5.3^{\circ}\text{C}$  and  $-7.2^{\circ}\text{C}$  the lowest in six and 12 years, respectively. Sunshine totals were above average everywhere except the Southeast with highest percentage of average

values recorded in the West and Northwest. Belmullet reported around 205 hours of sunshine, 128% of its LTA and its sunniest April since 1974 (38 years) while stations in the Dublin area reported their dullest April since 2005 (7 years).

**1st to 7th:** Sunshine in parts but mainly dry, cold and clear, with a few nights of air and ground frost. Intermittent periods of rain, drizzle and scattered showers across the country. Some showers contained hail and in the East, sleet. Winds were mainly light to moderate, sometimes fresh, northwest to northeast in direction with gale gusts recorded in most places.

**8th to 15th:** Few days with milder weather. Unsettled weather at times with rain, drizzle and showers. Showers, some heavy and persistent with thunder and hail especially in the East. Dry and clear in between, recording good sunshine with few air and ground frosts. Winds were mainly northwesterly, light to moderate, with a few gale gust along southwest coasts.

**16th to 24th:** More unsettled weather, with rain, drizzle and showers, countrywide. Some thundery downpours in parts with hail. Dry with sunny spells otherwise, with low night-time temperatures recording ground frost in some areas. Winds were variable in direction, mainly moderate to fresh with gale gusts reported everywhere.

**25th to 30th:** Bands of rain with heavy bursts on the 25th and 26th, bringing over 20 mm in parts of the East and Southeast. Light rain and few showers otherwise, cool and cloudy with few sunny spells. Winds were mainly moderate to strong, north to northeast with gale gusts.

**Wind and elements:** Mean windspeeds for the month were between six and 14 knots (*11 and 26 km/h*). Gales were reported on 7 days with gale gusts reported on over a third of the days. The month's highest gust of 57 knots (*103 km/h*) was recorded at Sherkin Island on the 17th. Thunderstorms and/or hail were recorded on at least half the days with reports of snow in the East and West between the 3rd and the 5th. Fog was reported on the 6th, 14th and 16th the West and South. Days with air frost ranged from one at numerous stations mainly in the Midlands to 12 at Glenties Hatchery, Co. Donegal, its highest amount of air frost during April since 1986 (26 years). Number of days with ground frost ranged between two at Valentia Observatory and 24 at Derrygreenagh, Co. Offaly, its highest amount for April since 1991 (21 years).



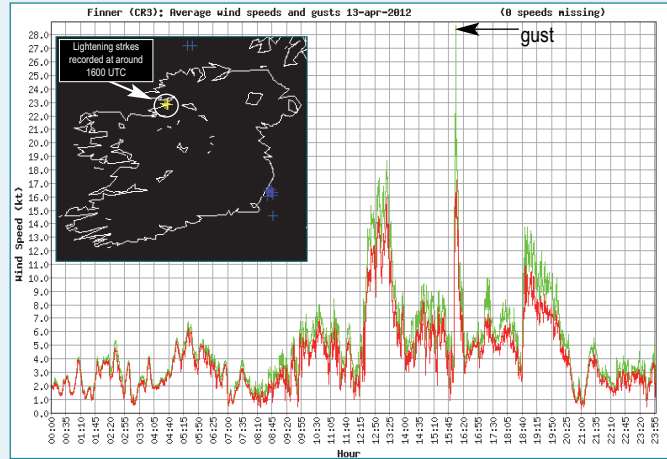
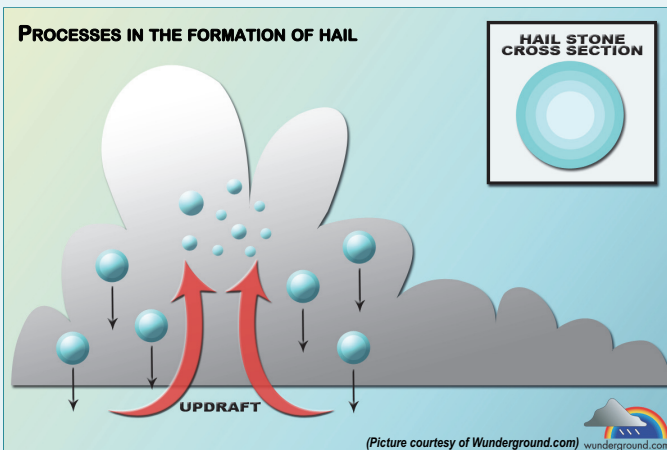
HAIL

Hail is a form of solid precipitation which forms only within cumulonimbus clouds. Cumulonimbus clouds commonly known as the thunderstorm clouds are associated with the weather phenomenon of rain, snow, hail, lightening, thunder, funnel clouds and tornadoes. These clouds which occur at any time of the year, start as cumulus clouds, but grow into towering vertical clouds due to instability in the air. Vertical growth continues until their tops reach the upper altitudes where the cloud is forced to flatten out into an anvil like shape. Vertical movement of air within the cloud due to the rising of relatively warm air from base and sinking of cold air from the top form winds known as updrafts and downdrafts, which are responsible for the formation of hail.



*Pictured above: This image of well developed cumulonimbus cloud was taken at Portlaoise in late April and is characterised by its flat anvil top. These anvils form when the cloud reaches the top of the troposphere, at which point it cannot rise anymore and spreads outwards into the anvil like shape due to wind shear. (Picture courtesy Emily Gleeson)*

Most hailstones form when water droplets within the lower region of the cloud are caught by updrafts and carried to the top. Here, the surrounding temperature is below freezing and the water droplet freezes, before falling towards the base due to downdrafts and gravity. Near the base, the frozen droplet is caught again by updrafts and carried upwards, encountering

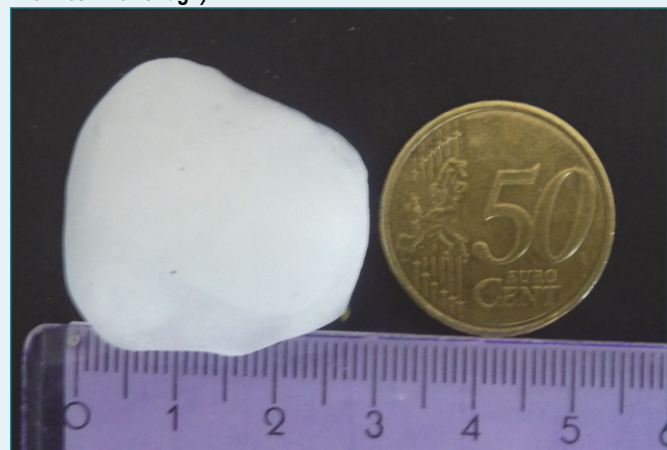


*Average wind speed (red) and gusts (green) graph at Finner showing a high gust at time of the hail shower. Sferics data (black image) show lightening strikes in the area confirming cumulonimbus activity.*

moisture as it travels, which attaches to the droplet and freezes, adding a layer. Each time the frozen droplet or hail is thrown to the top of the cloud another layer of moisture is added and frozen, increasing the size of the hail and giving it a concentric layered appearance. If the updrafts are strong, this repetitive cycle will continue for long periods, until the updrafts are too weak to support the weight of the hail. The hail then falls to earth, bringing with it cold strong downdrafts, causing gusts of wind and drops in air temperature.

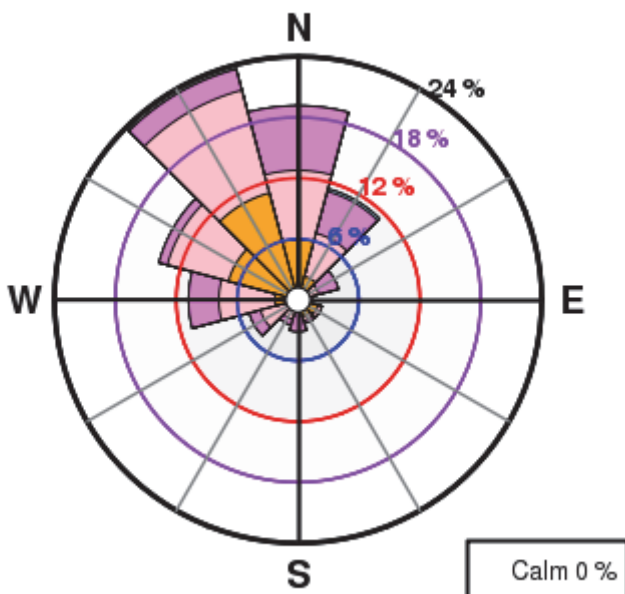
On Friday, April 13th unstable air in the Northwest of Ireland allowed for the formation of cumulonimbus clouds, and for the development of some sizable hail near Ballyshannon, Co. Donegal. The hail which fell during a thunderstorm at around 16:10 UTC, was nearly three centimetres in diameter, bigger than a 50 cent piece and possibly one of the largest pieces of hail recorded in Ireland. The hail shower also recorded a 5°C degree drop in air temperature and a gust of 29 knots at the nearby meteorological station of Finner.

*Pictured below: The hail at Ballyshannon on the 13th placed beside at 50 cent piece and on a ruler for comparison. (Picture courtesy of Kenneth McDonagh)*

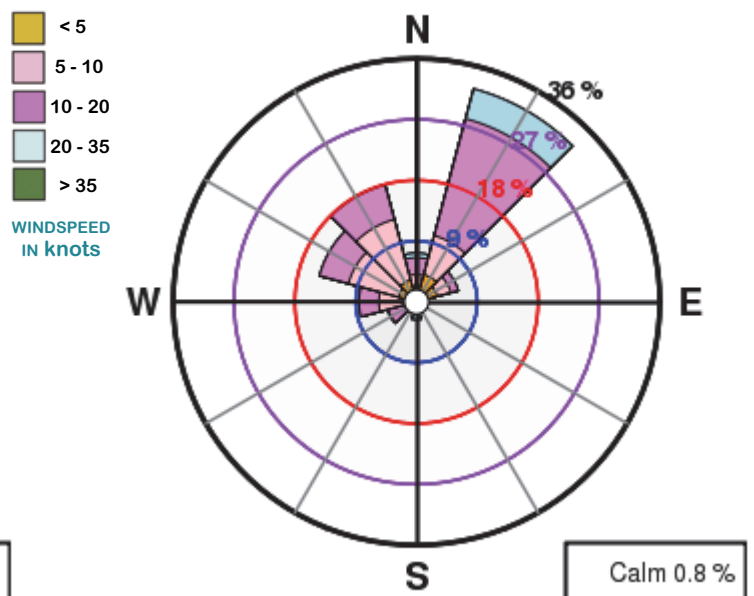


COUNTY / STATION	WIND (knots)						ELEMENTS (no.of days)							
	MEAN SPEED	MAX. DIR.	10-MIN. SPEED	MEAN DATE/HOUR	MAX. DIR.	GUST SPEED DATE/TIME	DAYS WITH GALES	GALE GUSTS	HOURS WITH GALE GUSTS	SNOW	SNOW LYING	HAIL	THUNDER	FOG
<b>CO. CARLOW</b> OAK PARK	7.5	20°	23	4/12	10°	41 29/1236	0	2	9					
		20°	23	29/13										
<b>CO. CAVAN</b> BALLYHAISE	6.5	40°	20	29/14	30°	34 25/1650	0	1	1					
<b>CO. CLARE</b> SHANNON AIRPORT	9.8	230°	31	17/11	220°	45 17/1017	0	7	21	0	0	4	1	0
<b>CO. CORK</b> ROCHE'S POINT	13.5	320°	37	18/01	270°	51 17/1535	2	10	61					
CORK AIRPORT	11.3	20°	33	4/11	260°	45 17/1522	0	10	42	0	0	2	0	2
		260°	33	17/16										
<b>CO. DONEGAL</b> MALIN HEAD	14.4	40°	38	25/19	40°	46 25/2007	3	8	78					
					30°	46 26/0007								
<b>CO. DUBLIN</b> DUBLIN AIRPORT	11.6	60°	31	25/13	60°	45 25/1234	0	7	57	2	0	7	2	0
CASEMENT	9.1	240°	32	17/01	240°	46 17/0035	0	6	31	2	0	8	2	0
<b>CO. KERRY</b> VALENTIA OBSERVATORY	11.2	250°	32	17/18	280°	49 17/2023	0	11	62					
<b>CO. MAYO</b> BELMULLET	10.6	20°	30	25/17	210°	49 16/2052	0	9	89	0	0	9	0	0
		30°	30	26/01										
KNOCK AIRPORT	9.2	10°	23	3/13	360°	37 26/1332	0	4	19	1	0			1
		10°	23	26/12										
<b>CO. MEATH</b> DUNSANY	8.1	50°	27	25/12	40°	40 25/1227	0	2	11					
<b>CO. TIPPERARY</b> GURTEEN (AG. COLLEGE)	8.2	40°	24	29/18	220°	47 16/2311	0	3	7					
<b>CO. WESTMEATH</b> MULLINGAR	5.9	280°	17	7/13	270°	33 7/1333	0	0	0					
<b>CO. WEXFORD</b> JOHNSTOWN CASTLE	6.3	50°	20	25/12	50°	32 25/1246	0	0	0					

CARLOW (OAK PARK)



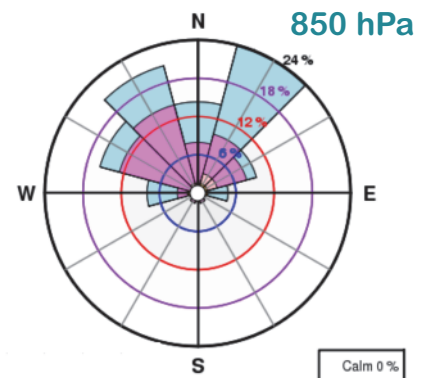
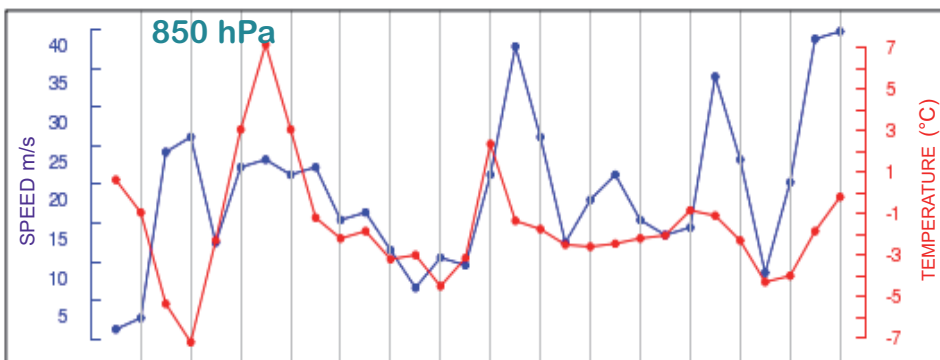
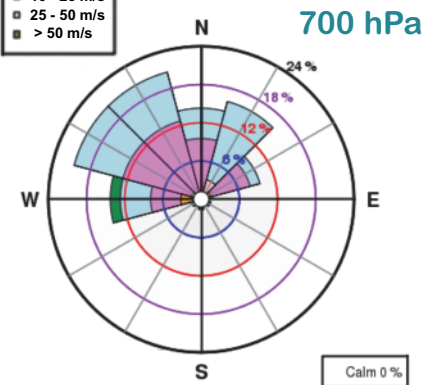
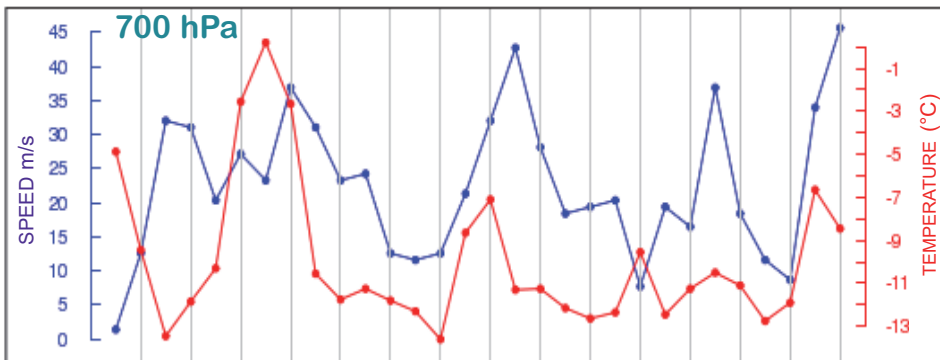
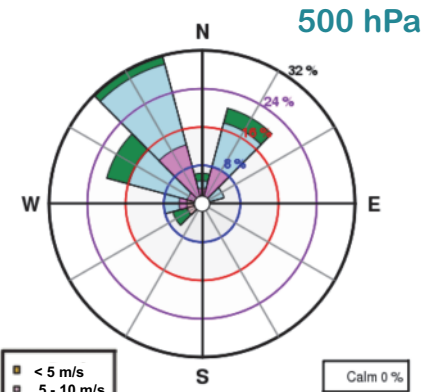
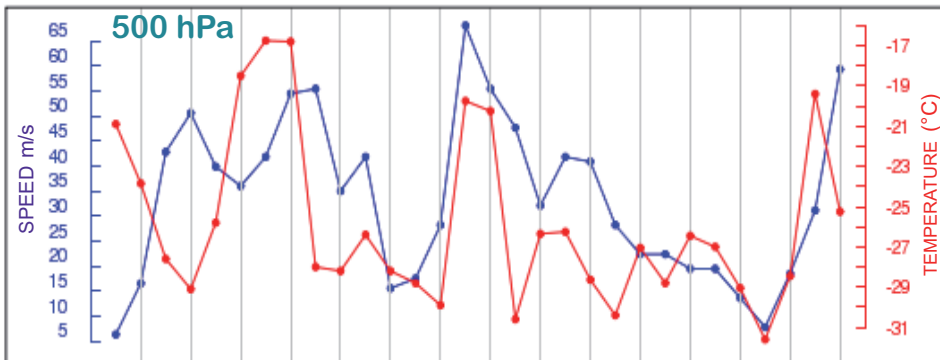
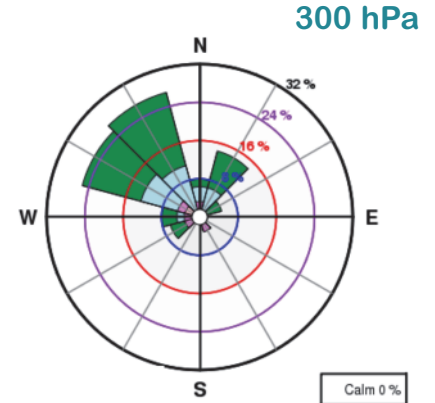
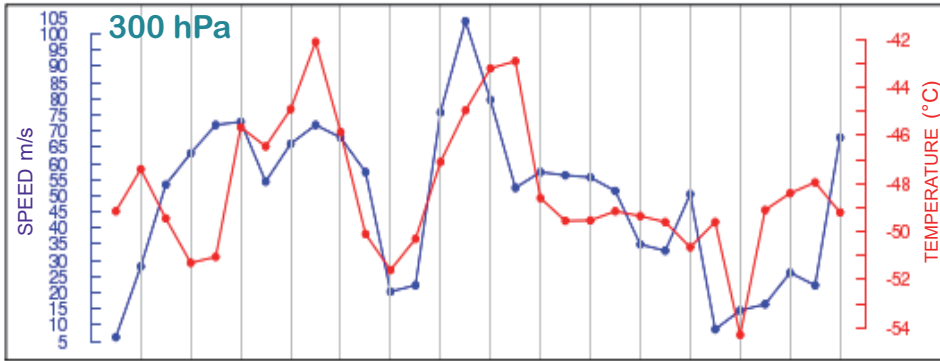
BELMULLET



PERCENTAGE FREQUENCY OF WIND DIRECTION

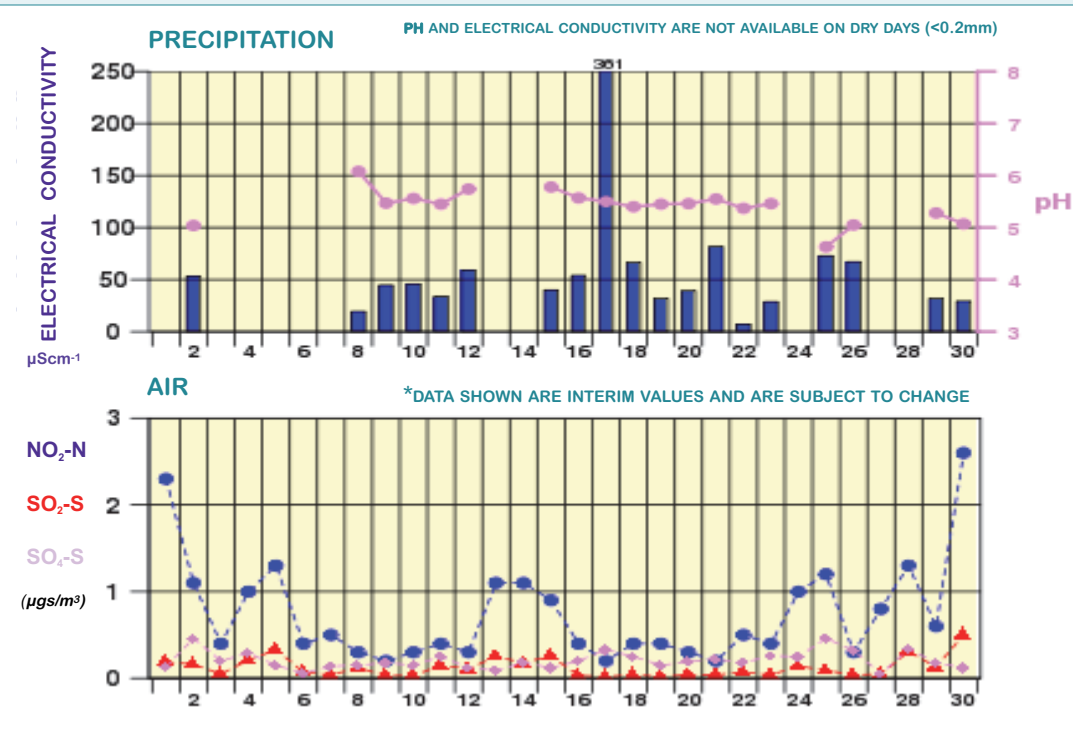
Upper Atmosphere wind and temperature readings are made at Valentia Observatory four times daily by a radiosonde (a balloon with instruments attached). Shown below are daily average windspeeds and temperatures at defined pressure levels, 850, 700, 500 and 300 hPa, corresponding approximately to heights of 1,500, 3,000, 6,000 and 10,000 metres. Monthly windroses are also shown for each pressure level.

UPPER AIR WIND SPEED AND TEMPERATURE APRIL 2012



DAY OF MONTH

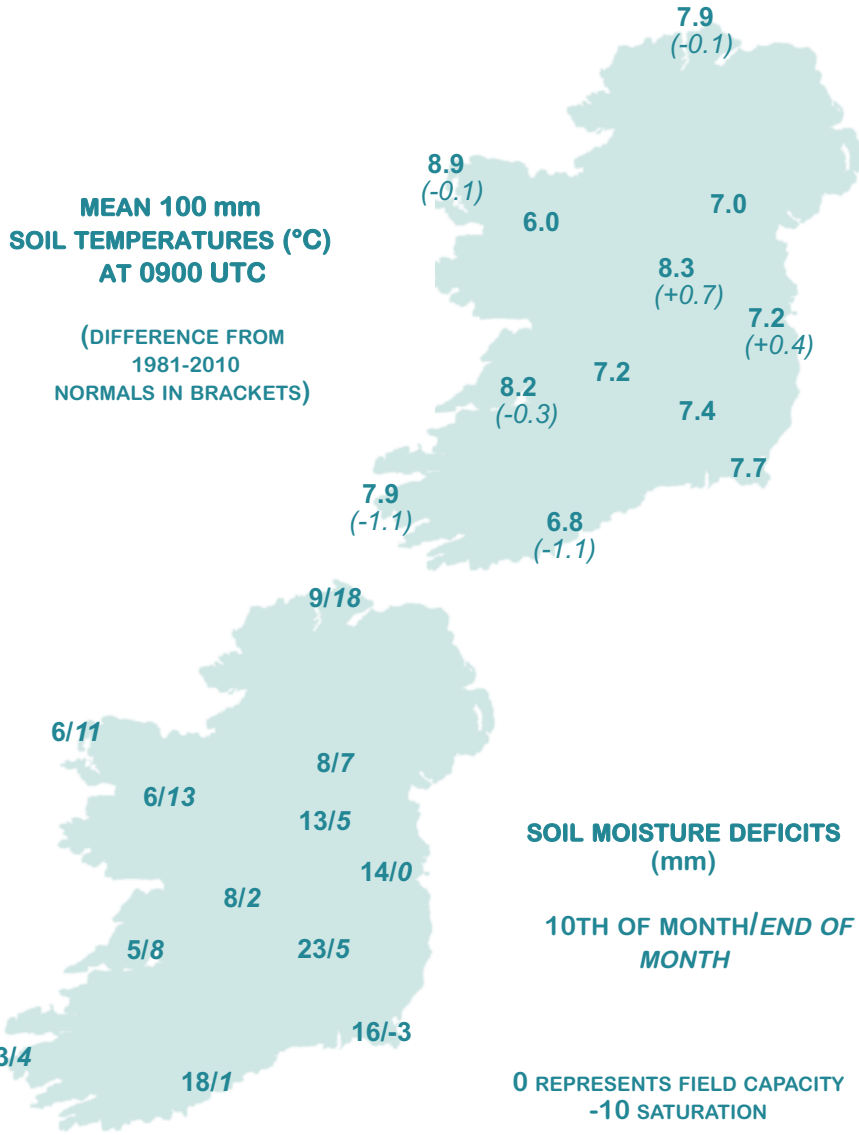
CHEMICAL ANALYSIS OF PRECIPITATION AND AIR SAMPLES AT VALENTIA OBSERVATORY



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.



MEAN SOIL TEMPERATURES (°C) AT 0900 UTC			
COUNTY/STATION	100 mm	200 mm	300
<b>CO. CARLOW</b>			
CARLOW (OAK PARK)	7.4	7.9	
<b>CO. CAVAN</b>			
BALLYHAISE	7.0	7.6	8.6
<b>CO. CLARE</b>			
SHANNON AIRPORT	8.2	8.6	9.7
CARRON	8.3		9.5
<b>CO. CORK</b>			
ROCHE'S POINT	7.6	8.4	8.7
FERMOY (MOOREPARK)	8.0	8.4	9.1
CORK AIRPORT	6.8	7.5	9.1
SHERKIN ISLAND	8.6	9.3	9.8
BALLINCURRIG (PEAFIELD)	6.9	6.9	9.1
<b>CO. DONEGAL</b>			
MALIN HEAD	7.9	8.6	9.2
<b>CO. DUBLIN</b>			
PHOENIX PARK	7.9	8.7	9.2
DUBLIN AIRPORT	6.9	7.5	8.4
CASEMENT AERODROME	7.2	7.4	8.8
<b>CO. KERRY</b>			
VALENTIA OBSERVATORY	7.9	8.6	10.0
<b>CO. LIMERICK</b>			
MOUNTRUSSELL	6.6	7.8	
<b>CO. MAYO</b>			
BELMULLET	8.9	10.2	11.3
STRAIDE	8.3		
KNOCK AIRPORT	6.0	7.0	8.1
<b>CO. TIPPERARY</b>			
GURTEEN (AG.COLLEGE)	7.2	7.7	8.3
FETHARD (PARSONSHILL)	7.0	8.1	
<b>CO. WATERFORD</b>			
DUNGARVAN (CARRIGLEA)		8.3	9.0
<b>CO. WESTMEATH</b>			
MULLINGAR	8.3	9.0	9.7
<b>CO. WEXFORD</b>			
JOHNSTOWN CASTLE	7.7	7.8	8.3
JOHN F. KENNEDY PARK	8.6	9.5	10.9
CLONROCHE (KNOXTOWN)	8.3	9.3	9.6
<b>CO. WICKLOW</b>			
ASHFORD (CRONYKEERY)	9.1	9.4	10.2



10-DAY VALUES FOR SELECTED AGROMETEOROLOGICAL STATIONS		RAINFALL (mm)				TEMPERATURE (°C)										SUNSHINE (hours)					
STATION	PERIOD	AMOUNT	% OF AVERAGE	RAIN DAYS	WET DAYS	MEAN MAX.	MEAN MIN.	MEAN DAILY	DIFF. FROM AVERAGE	LOWEST MIN.	DATE	DAYS WITH AIR FROST	DEGREE DAYS > 4.4°C	DEGREE DAYS > 10.0°C	LOWEST *GRASS-MIN. "	DATE	DAYS WITH GROUND FROST	MEAN 10CM AT 0900H	MEAN 30CM AT 0900H	TOTAL NO. OF HOURS	% OF AVERAGE
BALLINCURRIG	11-20	33.7	-	8	7	12.4	2.4	7.4	-	-1.0	15	1	35	6	-1.3	15	1	6.4	9.0	79.6	-
	21-END	57.9	-	9	8	11.2	3.4	7.3	-	0.0	28	0	32	4	-0.5	28	1	7.3	9.0	41.4	-
	MONTH	103.2	122	22	18	11.9	3.0	7.5	-0.6	-1.1	4	2	106	16	-1.8	4	6	6.9	9.1	169.8	103
CO. DONEGAL	1-10	46.4	-	9	9	10.2	3.5	6.9	-	-1.8	4	2	30	1	-6.5	4	5	-	-	-	-
GLENTIES	11-20	28.5	-	8	3	12.5	0.3	6.4	-	-2.9	14	6	30	6	-6.8	14	9	-	-	-	-
	21-END	20.1	-	6	5	12.3	1.1	6.7	-	-2.5	29	4	32	6	-7.0	29	9	-	-	-	-
	MONTH	95.0	98	23	17	11.7	1.6	6.7	-1.4	-2.9	14	12	92	14	-7.0	29	23	-	-	-	-
CO. KERRY	1-10	37.7	-	7	6	11.7	4.3	8.0	-	-2.6	5	2	40	5	-3.9	5	2	-	-	44.7	-
ARDFERT	11-20	34.7	-	7	6	12.1	3.3	7.7	-	-1.2	15	1	37	5	-2.4	15	2	-	-	61.4	-
	21-END	28.8	-	6	6	12.3	4.0	8.2	-	-1.4	28	2	40	6	-3.1	28	2	-	-	55.7	-
	MONTH	101.2	146	20	18	12.1	3.8	8.0	-1.1	-2.6	5	5	116	16	-3.9	5	6	-	-	161.8	99
CO. MONAGHAN	1-10	12.2	-	5	4	10.6	4.3	7.5	-	-0.8	5	1	34	3	-4.9	5	3	-	-	-	-
CARRICKMACROSS	11-20	24.2	-	7	5	11.4	1.8	6.6	-	-1.5	13	2	29	4	-3.4	15	7	-	-	-	-
	21-END	15.9	-	7	4	11.9	3.5	7.7	-	0.7	29	0	36	5	-1.0	29	2	-	-	-	-
	MONTH	52.3	81	19	13	11.3	3.2	7.3	-0.9	-1.5	13	3	99	11	-4.9	5	12	-	-	-	-
CO. WATERFORD	1-10	15.6	-	4	3	12.5	4.0	8.3	-	-0.5	5	2	43	8	-2.5	6	4	-	9.1	45.7	-
DUNGARVAN	11-20	22.7	-	7	5	12.4	3.4	7.9	-	0.1	15	0	38	6	-2.0	15	2	-	8.9	73.8	-
	21-END	52.6	-	9	7	11.7	4.1	7.9	-	0.9	28	0	37	5	-1.0	28	1	-	8.9	37.9	-
	MONTH	90.9	112	20	15	12.2	3.8	8.0	-1.0	-0.5	5	2	119	19	-2.5	6	7	-	9.0	157.4	96
CO. WEXFORD	1-10	13.5	-	3	3	11.6	4.6	8.1	-	0.8	10	0	40	6	-1.0	10	2	8.7	10.7	43.0	-
J.F.K. PARK	11-20	35.1	-	8	7	11.7	2.9	7.3	-	0.5	11	0	33	4	-0.6	15	2	8.1	10.7	63.3	-
	21-END	47.7	-	7	7	11.2	3.8	7.5	-	1.8	28	0	33	4	2.1	21	0	9.0	11.2	45.8	-
	MONTH	96.3	131	18	17	11.5	3.8	7.7	-0.9	0.5	11	0	106	14	-1.0	10	4	8.6	10.9	152.1	93
CO. WICKLOW	1-10	15.0	-	5	3	11.6	4.9	8.3	-	-0.1	6	1	41	6	-5.9	6	2	8.8	10.0	46.3	-
ASHFORD	11-20	19.6	-	5	2	11.2	3.6	7.4	-	-0.2	16	1	33	3	-6.6	16	5	9.0	10.3	70.5	-
	21-END	57.8	-	8	6	11.4	4.9	8.2	-	2.0	22	0	39	4	-3.6	22	4	9.4	10.4	50.0	-
	MONTH	92.4	132	18	11	11.4	4.4	7.9	-0.7	-0.2	16	2	114	13	-6.6	16	11	9.1	10.2	166.8	107

MEASURED POTENTIAL EVAPOTRANSPIRATION (P.E.) AND SOIL MOISTURE					
STATION	PERIOD	P.E. (mm)		SOIL MOISTURE (mm)	
		AMOUNT	DEFICIT	ACCUM'LTD DEFICIT	SURPLUS
CO. KERRY	1-10	N/A	-	-	-
VALENTIA OBS.	11-20	N/A	-	-	-
	21-END	N/A	-	-	-
	MONTH	N/A	-	-	-

MONTHLY EVAPORATION (mm) FROM CLASS A PAN			
COUNTY	STATION	MONTHLY RAINFALL (mm)	MONTHLY EVAPORATION (mm)
CO. KERRY	VALENTIA OBSERVATORY	119.1	69.6
CO. KERRY	NORTH KERRY LANDFILL	169.5	43.3
CO. MAYO	NEWPORT (FURNACE)	86.5	49.1
CO. OFFALY	DERRYGREENAGH	75.4	50.4
CO. WATERFORD	DUNGARVAN (CARRIGLEA)	90.9	47.2
CO. WEXFORD	J.F.K. PARK	96.3	52.9

P.E. (PENMAN)		GLOBAL SOLAR RADIATION (MJ/sq.m.)			
STATION /COUNTY	TOTAL (mm)	1ST-10TH	11TH-20TH	21ST-END	TOTAL
CO. CARLOW		105.53	138.05	109.34	352.92
CARLOW (OAK PARK) *	47				
CO. CAVAN		90.60	135.20	128.28	354.08
BALLYHAISE*	45				
CO. CLARE		GLOBAL SOLAR RADIATION VALUES FOR STATIONS MARKED * ARE PROVISIONAL			
SHANNON AIRPORT	53				
CO. CORK					
CORK AIRPORT	36				
ROCHE'S POINT*		122.61	150.44	115.98	389.03
CO. DONEGAL					
MALIN HEAD	50	83.06	171.58	168.46	423.10
CO. DUBLIN					
DUBLIN AIRPORT	45	113.92	142.12	117.07	373.11
CASEMENT AERODROME	45				
CO. KERRY					
VALENTIA OBS.	51	127.22	160.07	156.47	443.76
CO. MAYO					
BELMULLET	54	106.22	160.34	188.48	455.04
KNOCK AIRPORT	49				
CO. TIPPERARY					
GURTEEN (AG. COLLEGE) *	48	106.69	142.67	121.09	370.45
CO. WESTMEATH					
MULLINGAR*	48	103.67	135.60	121.29	360.56
CO. WEXFORD					
JOHNSTOWN CASTLE*	50	100.90	145.50	115.12	361.52

**Sunday 1st:** Cold and dry overnight with widespread ground frost away from western coasts. The afternoon saw a few light showers in Northern areas, which spread south during the evening, affecting the Midlands and East. Winds were light, variable in direction.

**Rainfall:** Nil at numerous locations to 7.1 mm at Dunfanaghy (Murroe)  
**Temperature:** Lowest max. 9.8°C at Malin Head, highest max. 14.7°C at Oughterard (Ardnasillagh); Lowest min. -2.2°C at Markree, highest min. 8.6°C at Valentia Observatory  
**Sunshine:** 0.1 hours at Valentia Observatory to 6.8 hours at Dublin Airport

**Monday 2nd:** Scattered outbreaks of rain or showers continued in Ulster overnight. Showers developed countrywide by the afternoon, but had abated by late evening. Some of the showers were heavy and contained hail. Winds were northwesterly, generally light but moderate on north and western coasts.

**Rainfall:** Nil at numerous locations to 14.0 mm at Markree  
**Temperature:** Lowest max. 9.6°C at Casement Aerodrome, highest max. 13.7°C at Oughterard (Ardnasillagh); Lowest min. 3.1°C at Dundalk (Annaskeagh), highest min. 8.8°C at Sherkin Island  
**Sunshine:** Nil at numerous locations to 4.4 hours at Belmullet

**Tuesday 3rd:** Rain spread into the Northwest and moved southeastwards overnight, clearing the southeast coast by early afternoon. Afternoon saw scattered heavy showers develop countrywide, these were heavier and more prolonged in Ulster, but had all died out by late evening. Winds were north to northeasterly; generally moderate or fresh, strongest in the North.

**Rainfall:** Nil at numerous locations to 35.9 mm at Oldbridge (Oakview)  
**Temperature:** Lowest max. 5.7°C at Ballyhaise, highest max. 11.5°C at Sherkin Island; Lowest min. 1.4°C at Aherlow (Mackeenagh), highest min. 6.9°C at Mace Head  
**Sunshine:** 3.0 hours at Dublin Airport to 10.3 hours at Belmullet

**Wednesday 4th:** A dry bright morning in many places, with just the odd shower. The afternoon saw some showers again, some of these with hail, but some good dry bright spells also. The evening and night was mainly dry, with just the odd shower along eastern coasts. Winds were strong, northeasterly.

**Rainfall:** Nil at numerous locations to 5.1 mm at Owenea (Greenans)  
**Temperature:** Lowest max. 6.5°C at Johnstown II, highest max. 10.6°C at Oughterard (Ardnasillagh); Lowest min. -2.4°C at Mount Russell, highest min. 3.8°C at Belmullet  
**Sunshine:** 2.9 hours at Belmullet to 10.2 hours at Galway (Univ. College)

**Thursday 5th:** Cold and clear overnight with just the odd shower along western coasts. The morning was dry and sunny, with some cloud over northwestern areas. Afternoon remained mostly dry apart from some patchy drizzle along the northwest coast, which cleared to leave a dry evening. Winds were light, variable in direction.

**Rainfall:** Nil at numerous locations to 7.6 mm at Illies (Pollan Dam)  
**Temperature:** Lowest max. 7.9°C at Dublin Airport, highest max. 13.3°C at Mallow (Spa House); Lowest min. -2.8°C at Mount Dillon, highest min. 5.0°C at Cahore (Kilmichael House)  
**Sunshine:** 2.1 hours at Ballyshannon (Cathleen's Fall) to 11.8 hours at Dublin Airport

**Friday 6th:** Overnight a band of patchy rain or drizzle moved southeastward over the South of the country, dying out as it approached the south coast. Morning saw another band of rain approached the North, slowly moving south over the country during the day, the showers were mainly light, with some heavier falls in the West and Northwest. Winds were moderate to fresh, northwesterly in direction.

**Rainfall:** Nil at numerous locations to 11.1 mm at Dunlewy Lough  
**Temperature:** Lowest max. 9.3°C at Knock Airport, highest max. 14.0°C at Cahore (Kilmichael House); Lowest min. -2.2°C at Castleconnell, highest min. 6.6°C at Mace Head  
**Sunshine:** Nil at numerous locations to 5.6 hours at Cork Airport

**Saturday 7th:** Scattered outbreaks of rain or drizzle to start, clearer in the West. These showers continued over much of the country throughout the day, with only intermittent clearances over the Midlands and South. Winds were moderate, north to northwesterly.

**Rainfall:** Nil at numerous locations to 7.3 mm at Termon (Goldrum)  
**Temperature:** Lowest max. 10.7°C at Malin Head, highest max. 16.0°C at Cloyne (Lisanley); Lowest min. 2.5°C at Elphin, highest min. 9.2°C at Cloyne (Lisanley)  
**Sunshine:** 0.2 hours at Knock Airport to 6.1 hours at Clonroche (Knoxtown)

**Sunday 8th:** Mostly dry and cloudy overnight with just the odd spot of scattered rain. The rain and drizzle became more widespread during the afternoon. By the evening the showers were confined to the South. Winds were light, west to southwesterly.

**Rainfall:** 0.1mm at Ballybofey Navenny to 46.6mm at Cloghane  
**Temperature:** Lowest max. 8.8°C at Knock Airport, highest max. 14.2°C at John F. Kennedy Park; Lowest min. 5.8°C at Slieve Bloom Mtns. (Nealstown), highest min. 9.5°C at Cahore (Kilmichael House)  
**Sunshine:** Nil at numerous locations to 1.7 hours at Galway (Univ. College)

**Monday 9th:** Rain and drizzle were widespread across the country overnight, the rainfall persisted through the morning. The rain turned

showery everywhere during the afternoon and evening, with some thunderstorms, whilst only the Southeast remained relatively dry. Winds were moderate to fresh with some strong gusts, west to northwesterly.

**Rainfall:** 0.3 mm at Tullaroan (Ballybeagh) to 24.4 mm at Cloghane  
**Temperature:** Lowest max. 8.4°C at Knock Airport, highest max. 13.5°C at Cahore (Kilmichael House); Lowest min. 4.6°C at Slieve Bloom Mtns. (Nealstown), highest min. 9.5°C at Cloyne (Lisanley)  
**Sunshine:** 0.5 hours at Ardfer (Lisachane) to 3.2 hours at Cork Airport

**Tuesday 10th:** Showery in the West and North overnight. A sunny morning in the East but the showers in the West became widespread later with hail in places. The showers continued during the afternoon with some thunderstorms also in the East and South. The showers persisted into the evening but became well scattered by nightfall. Winds were light; west to northwesterly.

**Rainfall:** Nil at numerous locations to 11.8 mm at Glencar (Dreenagh)  
**Temperature:** Lowest max. 8.7°C at Knock Airport, highest max. 13.2°C at Ballincurrig (Peafield); lowest min. -1.0°C at Castleconnell, highest min. 5.9°C at Sherkin Island  
**Sunshine:** 6.6 hours at Knock Airport to 10.3 hours at Dublin Airport

**Wednesday 11th:** Cool, with sunny spells and widespread showers of rain or hail. Many of the showers were heavy and prolonged in places, especially in the West and South. Winds were light to moderate, northwesterly in direction.

**Rainfall:** Nil at numerous locations to 10.9mm at Kylemore Abbey Gardens  
**Temperature:** Lowest max. 10.1°C at Aherlow (Mackeenagh), highest max. 14.8°C at Oughterard (Ardnasillagh); lowest min. -1.9°C at Slieve Bloom Mtns. (Nealstown), highest min. 7.0°C at Sherkin Island  
**Sunshine:** 6.8 hours at Ashford (Cronykeery) to 11.5 hours at Galway (Univ. College)

**Thursday 12th:** Cool overnight with some showers along western coasts. Morning saw some showers again along northwest coasts, but elsewhere it remained dry. The afternoon was mostly dry with sunny periods, with only the odd shower along western coasts. The showers remained in the West during the evening and early night. Winds were moderate; northwesterly.

**Rainfall:** Nil at numerous locations to 16.2 mm at Arklow W.W.  
**Temperature:** Lowest max. 9.3°C at Knock Airport, highest max. 14.0°C at Dungarvan (Carriglea); lowest min. -0.5°C at Cavan (Drummcconnick), highest min. 7.4°C at Sherkin Island  
**Sunshine:** 3.0 hours at Newport Furnace to 10.3 hours at Ballyshannon (Cathleen's Fall)

**Friday 13th:** Dry and clear for much of the day, with some good sunny spells experienced over much of the country. The afternoon saw some isolated showers along the south coast for a time but by early evening they had abated, to leave a dry night countrywide. Winds were light, north to northwesterly.

**Rainfall:** Nil at numerous locations to 12.5 at Ballynahinch  
**Temperature:** Lowest max. 8.8°C at Belderrig, highest max. 14.0°C at Piltown (Kildalton Agr. College); lowest min. -2.7°C at Markree, highest min. 6.2°C at Ashford (Cronykeery)  
**Sunshine:** 0.3 hours at John F. Kennedy Park to 11.4 hours at Belmullet

**Saturday 14th:** Overnight a heavy band of rain moved southward and died out, with a small group of heavy showers affecting the east and southeast coasts. Showers during the afternoon affected many parts but the falls recorded were negligible except in the North and West. The showers died out by the late evening. Winds were light, north to northeasterly.

**Rainfall:** Nil at numerous locations to 5.2 mm at Waterville Octive No.9  
**Temperature:** Lowest max. 8.4°C at Glenealy (Kilmacurragh Park), highest max. 13.5°C at Ballincurrig (Peafield), lowest min. -2.9°C at Glenties Hatchery, highest min. 5.8°C at Dun Laoghaire  
**Sunshine:** 5.6 hours at John F. Kennedy Park to 11.7 hours at Ballincurrig (Peafield)

**Sunday 15th:** A mainly dry morning saw some good periods of sunshine though temperatures remained cool. Some showers occurred along the east coast. These quickly died out to leave a mainly dry afternoon countrywide, though rain developed late in the evening over the west coast. Winds were light to moderate, northerly in direction.

**Rainfall:** Nil at numerous locations to 7.0 mm at Clones (Dunseark)  
**Temperature:** Lowest max. 8.3°C at Dun Laoghaire, highest max. 12.5°C at Ardfer (Lisachane); lowest min. -4.0°C at Thomastown (Mount Juliet), highest min. 4.4°C at Malin Head  
**Sunshine:** 5.9 Hours at Ballyshannon (Cathleen's Fall) to 10.3 hours at Ballincurrig (Peafield)

**Monday 16th:** Mainly dry during the night, but the West and South experienced some rain, though recorded falls were minor. Intermittent rain affected much of the country during the afternoon, but by evening a band of showers moved across the country which brought heavy falls of rain.

Winds were light to fresh, with some strong gusting; south to southwesterly.  
**Rainfall:** 3.4mm at Newmarket-On-Fergus Langough to 34.0 mm at Delphi Lodge II  
**Temperature:** Lowest max. 8.9°C at Knock Airport, highest max. 15.0°C at Dooks; lowest min. -0.2°C at Ashford (Cronykeery), highest min. 7.3°C at Sherkin Island



**Sunshine:** Nil at numerous locations to 0.6 hours at Ballyshannon (Cathleen's Fall)

**Tuesday 17th:** Very wet overnight through the eastern half of the country, with only well scattered showers in the West. By morning the showers in the East were well scattered and light, whilst those in the West became more widespread and heavier. The afternoon saw heavier showers spread to all places, with some hail also. Winds were fresh to moderate, with strong gusts along southwestern coasts, west to southwesterly in direction.

**Rainfall:** 0.1 mm at Monaghan (Castleshane) to 34.9 mm at Newmarket Ballinatonah  
**Temperature:** Lowest max. 7.8°C at Knock Airport, highest max. 13.0°C at Cahore (Kilmichael House); lowest min. 1.6°C at Dundalk (Annaskeagh), highest min. 6.8°C at Sherkin Island  
**Sunshine:** 2.0 hours at Valentia Observatory to 9.5 hours at Dublin (Glasnevin)

**Wednesday 18th:** Light and well scattered showers overnight affected the South and East, with the rain in the East persisting until midday. The afternoon and evening saw heavier bursts in the Midlands and East, some with hail and thunder. By late evening the showers were confined to western areas. Winds were light to fresh; north to northwesterly in direction.

**Rainfall:** Nil at numerous locations to 13.8 mm at Freemount Pumping Station  
**Temperature:** Lowest max. 9.6°C at Malin Head, highest max. 14.0°C at Straide; lowest min. -0.3°C at Glenties Hatchery, highest min. 6.8°C at Sherkin Island  
**Sunshine:** 4.8 hours Casement Aerodrome to 10.2 hours at Ballyshannon (Cathleen's Fall)

**Thursday 19th:** A bright start for much of the country with showers confined to the West initially. They gradually spread further inland during the day and by afternoon it had become thundery in many parts of the East. It remained showery during the evening with the heaviest falls in the Midlands and East. Winds were light to moderate; northwest to northerly.

**Rainfall:** Nil at numerous locations to 12.5 mm at Lough Gill  
**Temperature:** Lowest max. 10.0°C at Malin Head, highest max. 16.0°C at Lullymore Nature Centre; lowest min. -1.0°C at Glenties Hatchery, highest min. 7.6°C at Sherkin Island.  
**Sunshine:** 6.5 hours at Ardfert (Liscahane) to 12.4 hours at Ballyshannon (Cathleen's Fall)

**Friday 20th:** Some showers along western coasts overnight, otherwise dry and cool with clear spells. Showers became widespread and heavier during the afternoon and continued through the evening and night, many of them with hail and thunder. Winds were light to fresh; northwesterly in direction.

**Rainfall:** Nil at numerous locations to 26.6 mm at Cloghane  
**Temperature:** Lowest max. 10.1°C at Cork Airport, highest max. 14.4°C at Glenties Hatchery; lowest min. -1.3°C at Castleconnell, highest min. 6.0°C at Mace Head  
**Sunshine:** 4.5 hours at Valentia Observatory to 10.8 hours at Straide

**Saturday 21st:** Some showers overnight mainly in western parts, with good clear spells elsewhere. The morning saw good sunshine in many areas with just the odd shower mainly in the West. Intermittant showers throughout the afternoon, some of the showers heavy and with hail. The evening and night had showers again in the West, but dry elsewhere with clear spells. Winds were moderate to fresh, west to northwesterly.

**Rainfall:** Nil at numerous locations to 28.1 mm at Newmarket Ballinatonah  
**Temperature:** Lowest max. 10.5°C at Mount Russell, highest max. 15.4°C at Cavan (Drummcconnick), lowest min. 1.4°C at Thomastown (Mount Juliet), highest min. 7.1°C at Malin Head  
**Sunshine:** 7.5 hours at Ashford (Cronkeery) to 11.7 hours at Sherkin Island

**Sunday 22nd:** Scattered showers overnight mainly in the West and South, mainly dry elsewhere with some clear spells. Some sunny spells by morning, with well scattered showers becoming widespread during the day some of these were heavy with thundery downpours. Cool into the evening and night with some showers mainly in the West, but mainly dry elsewhere. Winds were moderate to fresh, west to northwesterly.

**Rainfall:** Nil at numerous locations to 30.2 mm at Glengarriff (Innacullin)  
**Temperature:** Lowest max. 10.2°C at Malin Head, highest max. 15.0°C at Cahore (Kilmichael House); lowest min. 0.8°C at Glenties Hatchery, highest min. 7.6°C at Malin Head  
**Sunshine:** 4.2 hours at Ardfert (Liscahane) to 8.1 at Galway (Univ. College)

**Monday 23rd:** Scattered showers overnight mainly in the West and South. Some sunny spells by morning, with well scattered showers becoming widespread during the day, some heavy with thundery downpours. Cool into the evening and night with some showers mainly in the West. Winds mostly light, but increased moderate to fresh; variable in direction.

**Rainfall:** Nil at numerous locations to 10.2 mm at Ballyshannon (Cathleen's Fall)  
**Temperature:** Lowest max. 10.1°C at Glenealy (Kilmacurragh Park), highest max. 15.0°C at Straide; lowest min. 0.7°C at Straide, highest min. 6.3°C at Dublin (Merriem Square)  
**Sunshine:** 1.7 hours at Ballyshannon (Cathleen's Fall) to 10.7 hours at Knock Airport

**Tuesday 24th:** Dry over much of the country overnight with just the odd shower in the Midlands and southwestern coastal areas. Showers were mostly confined to the Southwest during early morning but began to affect much of

the country from late morning with hail in places. The showers quickly intensified with thunderstorms affecting many parts of the country during the afternoon and early evening. Toward nightfall the showers and thunderstorms died out and it became dry over much of the country. Winds were light to gentle; easterly in direction.

**Rainfall:** Nil at numerous locations to 33.6 mm at Little Island  
**Temperature:** Lowest max. 10.0°C at Ballincurrig (Peafield), highest max. 15.3°C at Athy (Chanterlands); lowest min. -1.0°C at Glenties Hatchery, highest min. 7.3°C at Sherkin Island  
**Sunshine:** 2.3 hours at Ballincurrig (Peafield) to 13.2 hours at Belmullet

**Wednesday 25th:** Rain on the south coast around midnight brought small amounts of precipitation there. It gradually moved northward during the morning bringing large accumulations in the East, Midlands and along southeast coasts. Much of the northwest and west coasts escaped with no significant rainfall, and experienced good sunshine for much of the day. Winds were fresh, east to northeast.

**Rainfall:** Nil at numerous locations to 78.6 mm at Glenbride Lodge  
**Temperature:** Lowest max. 7.0°C at Glenealy (Kilmacurragh Park), highest max. 11.7°C at Belmullet; lowest min. -0.1°C at Glenties Hatchery, highest min. 7.6°C at Dublin (Glasnevin)  
**Sunshine:** Nil at numerous locations to 6.4 hours at Belmullet

**Thursday 26th:** Rain continued over much of the country into the early hours of the morning. The rain was mostly light but heavy bursts in the East. Light rain or showers persisted in the East and South for much of the day and some of the showers turned heavy during the evening. Winds were north or northeasterly all day, strong in the North and West, fresh elsewhere.

**Rainfall:** Nil at numerous locations to 32.3 mm at Blessington (Hempstown)  
**Temperature:** Lowest max. 8.3°C at Belderrig, highest max. 12.3°C at Cloyne (Lisanley); lowest min. 3.7°C at Sligo Airport, highest min. 8.0°C at Malin Head  
**Sunshine:** Nil at numerous locations to 4.0 hours at Ballyshannon (Cathleen's Fall)

**Friday 27th:** Mostly dry overnight and during the morning with clear spells. The day continued mainly dry with just the odd shower falling in western areas. Those showers gradually died out over the afternoon to leave a dry evening and night. Winds were, fresh to strong; north to northeasterly in direction.

**Rainfall:** Nil at numerous locations to 6.7 mm at Ballynahinch  
**Temperature:** Lowest max. 8.7°C at Casement Aerodrome, highest max. 13.2°C at Oughterard (Ardsallagh); lowest min. 0.6°C at Glenties Hatchery, highest min. 7.9°C at Horseleap  
**Sunshine:** 0.7 hours at Sherkin Island to 13.2 hours at Valentia Observatory

**Saturday 28th:** Mostly dry overnight with clear spells. A dry morning with good sunshine and light winds. The afternoon and evening continued mainly dry with just the odd shower in western areas. The evening saw some sunny spells, whilst the night remained dry everywhere; though a groundfrost developed after dark. Winds were light, north to northeasterly in direction.

**Rainfall:** Nil at numerous locations to 4.6 mm at Dereen  
**Temperature:** Lowest max. 8.4°C at Belderrig, highest max. 14.1°C at Ardfert (Liscahane); lowest min. -3.3°C at Thomastown (Mount Juliet), highest min. 5.6°C at Belmullet  
**Sunshine:** 4.9 hours at Dungarvan (Carriglea) to 13.9 hours at Belmullet

**Sunday 29th:** Dry with clear periods overnight, the morning was cloudy over the East, but good sunny spells further west. There were showers along the east coast by mid-afternoon, but over rest of the country it remained dry with good sunny spells. Rain continued in the East and spread to the Midlands and southern areas during the evening. With only the North and Northwest remaining dry. Winds were moderate to strong; northeasterly in direction.

**Rainfall:** Nil at numerous locations to 42.3 mm at Oldbridge (Oakview)  
**Temperature:** Lowest max. 8.4°C at Cork Airport, highest max. 14.0°C at Glenties Hatchery; lowest min. -2.9°C at Straide, highest min. 6.5°C at Cahore (Kilmichael House)  
**Sunshine:** 0.1 hours Dublin (Glasnevin) to 13.8 hours at Ballyshannon (Cathleen's Fall)

**Monday 30th:** Wet and blustery overnight for much of the country, becoming lighter and patchy towards dawn. Much of the East and south Leinster were dry for a time in the morning but scattered showers developed as the morning progressed. Rain and driving northeast winds through Leinster became widespread by evening, continuing cold, wet and windy into the night. Winds were moderate to fresh; northeasterly in direction.

**Rainfall:** Nil at numerous locations to 26.2 mm at Conna (Castlevue)  
**Temperature:** Lowest max. 9.5°C at Ballincurrig (Peafield), highest max. 16.4°C at Glenties Hatchery; lowest min. 1.0°C at Lullymore Nature Centre, highest min. 7.8°C at Clonroche (Knoxtown)  
**Sunshine:** Nil at numerous locations to 7.4 hours at Belmullet

## RELATIVELY DRY IN THE WEST; WETTEST IN THE EAST AND SOUTHEAST

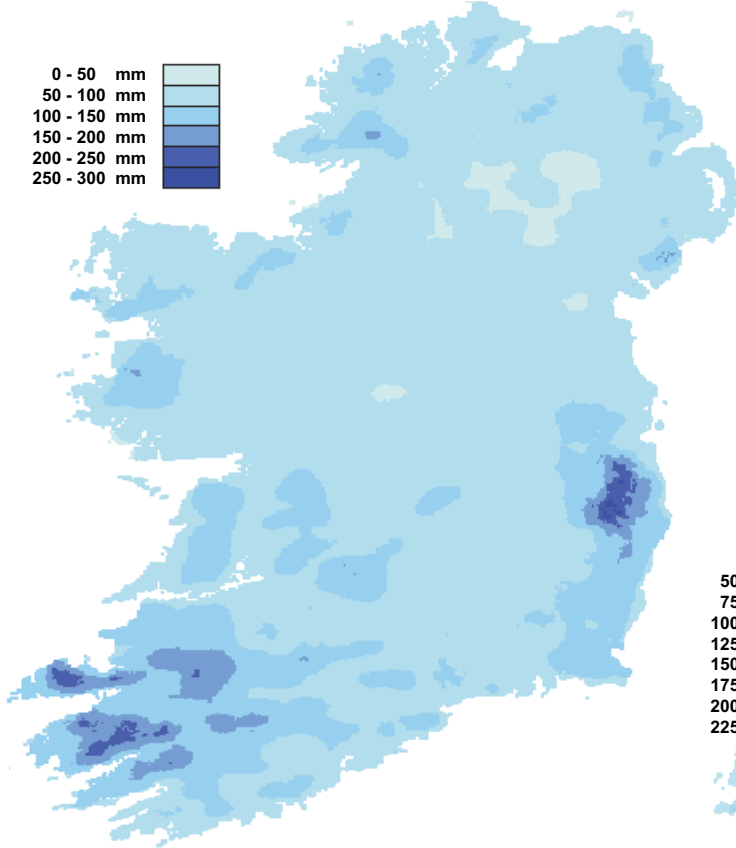
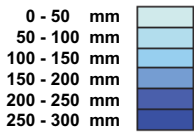
Rainfall was below average in the West and in parts of the North and South, with above average rainfall elsewhere. The highest percentages of average values were recorded in the Kildare, Wicklow, Wexford and Cork regions ranging from 56% at Mace Head, Co. Galway to 230% to Naas (C.B.S), Co. Kildare, it's wettest April since 1956 (56 years). Monthly accumulations in low-lying regions ranged from 42.8 mm at Mace Head to 245.7 mm at Glenbride Lodge, Co. Wicklow, its wettest April since 1998 (14 years). Glenbride Lodge also recording the months highest daily fall of 78.6 mm on the 25th, its highest daily rainfall during April since 1943 (69 years). The month's highest rainfall total was at the mountain gauge of Moanbane, Co. Wicklow with 291.0 mm, reporting its wettest April since 1943 (69 years).

Number of wetdays (*days with 1mm or more of rainfall*) were below average in parts of the Northwest, West, Midlands and Southwest, and above average elsewhere. Wetdays ranged between nine at numerous locations and 24 at Glenbride Lodge, Co. Wicklow. Sneem, Co. Kerry reported the second highest amount of wetdays with 23, measuring 188 mm of rainfall and its wettest April since 1992 (20 years).

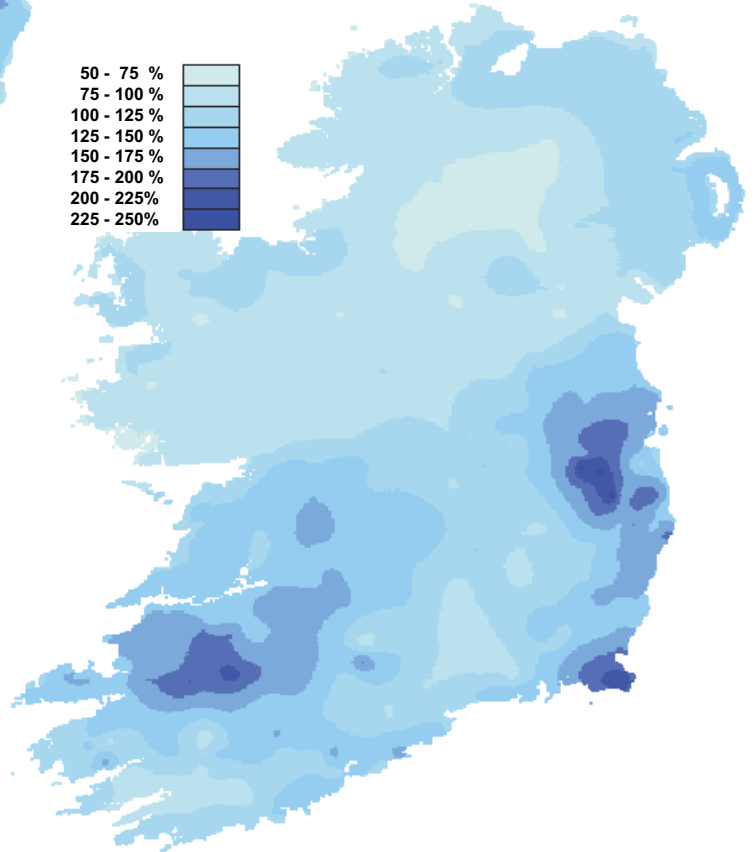
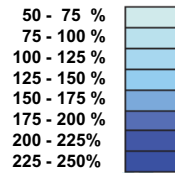
COUNTY/ STATION*	TOTAL AMOUNT (mm)	% OF 1981-2010 AVERAGE	MOST IN A DAY / DATE		NUMBER OF RAINDAYS (≥0.2mm)	NUMBER OF WETDAYS (≥1mm)
<b>CO. CARLOW</b>						
CARLOW (OAK PARK)	61.4	110	8.1	16	20	15
<b>CO. CAVAN</b>						
BALLYHAISE	65.7	113	11.4	9	20	12
<b>CO. CLARE</b>						
SHANNON AIRPORT	79.6	134	13.8	8	20	16
CARRON	113.7	127	23.3	17	25	17
<b>CO. CORK</b>						
ROCHE'S POINT	75.7	128	13.1	30	22	17
FERMOY (MOOREPARK)	80.6	123	13.5	30	22	19
CORK AIRPORT	94.8	124	22.8	24	22	17
SHERKIN ISLAND	87.3	118	20.5	22	18	15
BALLINCURRIG (PEAFIELD)	103.2	122	19.5	24	22	18
<b>CO. DONEGAL</b>						
MALIN HEAD	46.3	72	10.2	16	16	12
GLENTIES HATCHERY	95.0	98	18.2	16	23	17
BALLYSHANNON (CATHLEEN'S FALL)	69.8	99	12.0	16	18	13
<b>CO. DUBLIN</b>						
DUBLIN (PHOENIX PARK)	96.8	184	26.2	25	18	15
DUBLIN AIRPORT	93.1	172	24.8	25	20	16
CASEMENT AERODROME	99.7	192	26.5	25	20	16
DUBLIN (MERRION SQUARE)	75.0	152	17.3	25	21	14
<b>CO. GALWAY</b>						
MAAM VALLEY	118.6	76	30.7	16	22	13
<b>CO. KERRY</b>						
VALENTIA OBSERVATORY	119.1	123	18.6	9	22	16
ARDFERT (LISCAHANE)	101.2	146	13.7	8	20	18
<b>CO. LIMERICK</b>						
MOUNTRUSSELL	140.3	165	21.2	17	24	20
<b>CO. MAYO</b>						
BELMULLET	79.7	111	12.1	16	23	19
STRAIDE	70.7	94	14.5	16	19	14
KNOCK AIRPORT	62.4	76	13.9	16	20	13
DELPHI LODGE	161.4		34.0	16	24	19
<b>CO. MEATH</b>						
WARRENTOWN	87.2	146	19.4	25	17	14
<b>CO. MONAGHAN</b>						
CARRICKMACROSS (DUNOGE)	52.3	81	12.3	16	19	13
<b>CO. OFFALY</b>						
DERRYGREENAGH	75.4	121	11.0	17 25	19	14
<b>CO. ROSCOMMON</b>						
MOUNTDILLON	56.5	85	13.6	16	20	14
<b>CO. SLIGO</b>						
ARDTARMON	61.4	95	13.1	16	17	9
<b>CO. TIPPERARY</b>						
GURTEEN (AG. COLLEGE)	81.4	136	12.3	16	21	15
FETHARD (PARSONSHILL)	64.0	101	12.4	30	21	14
<b>CO. WATERFORD</b>						
WATERFORD (TYCOR)	63.9	91	13.9	16	20	14
DUNGARVAN (CARRIGLEA)	90.9	112	22.0	30	20	15
<b>CO. WESTMEATH</b>						
MULLINGAR	75.4	114	13.3	22	23	16
<b>CO. WEXFORD</b>						
JOHNSTOWN CASTLE	93.7	133	16.9	25	22	16
JOHN F. KENNEDY PARK	96.3	131	20.5	30	18	17
CLONROCHE (KNOXTOWN)	87.1		17.3	30	20	14
<b>CO. WICKLOW</b>						
ASHFORD (CRONYKEERY)	92.4	132	20.5	29	18	11

\* TABLE REPRESENTS DATA FROM ONLY A SMALL SELECTION OF RAINFALL STATIONS. ALL DATA IS 09-09 HR

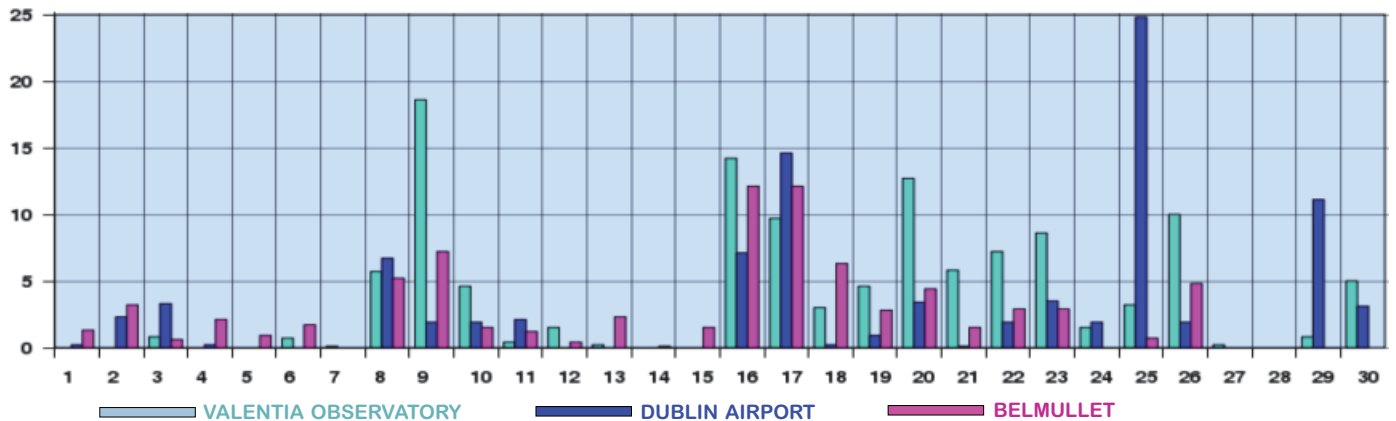
TOTAL RAINFALL (mm)



PERCENTAGE OF NORMAL RAINFALL  
(1981-2010 NORMALS)



DAILY 09-09hr RAINFALL VALUES (mm)

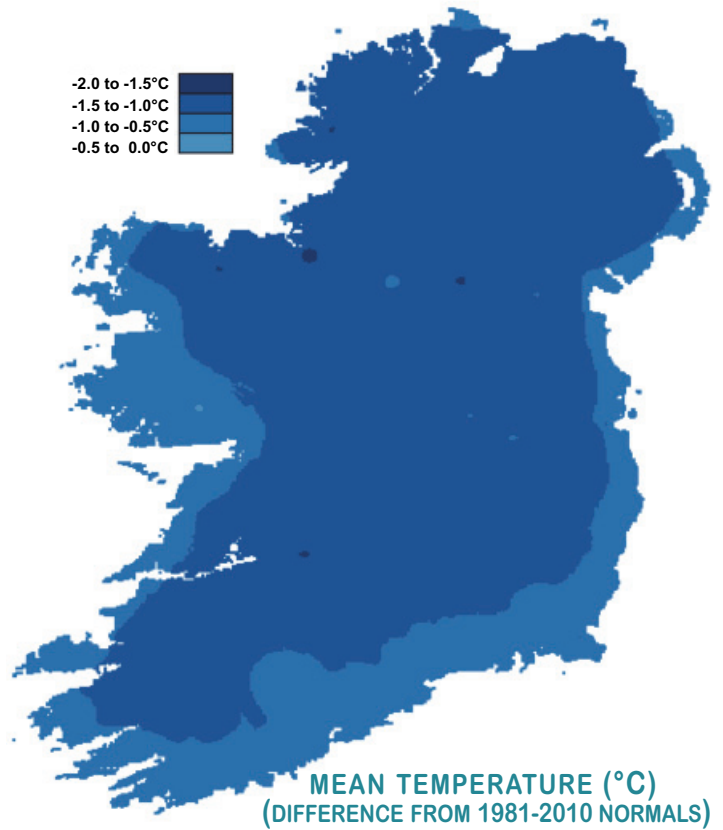




**COLDER THAN AVERAGE EVERYWHERE**

Mean air temperatures were below average with differences from average as much as  $-2.0^{\circ}\text{C}$  at Sligo Airport. Mean temperatures varied between  $6.5^{\circ}\text{C}$  at Dunsany, Co. Meath it's lowest for April since 1989 (23 years) and  $8.8^{\circ}\text{C}$  at Sherkin Island. Warrenstown, Co. Meath reported a mean temperature of  $7.2^{\circ}\text{C}$ , its coolest April since 1986 (26 years) and other sites in the Northwest, Southwest and South and Dublin reported their lowest means since the late 1980's. Most remaining stations were the lowest since 2000 (12 years).

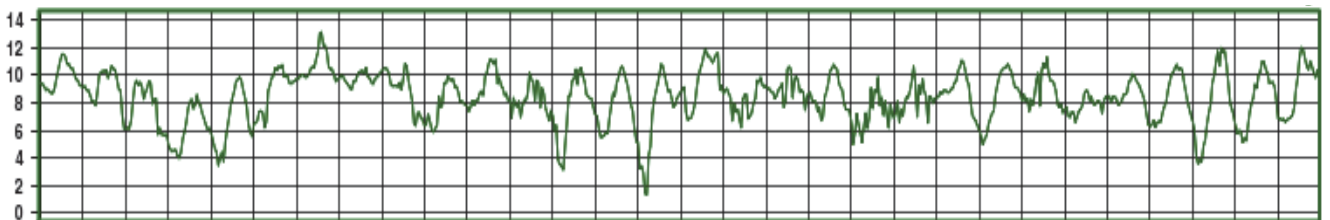
Both maximum and minimum temperatures were below average for April. Most highest maximums were recorded on the 7th, 21st and 30th, varying between  $11.6^{\circ}\text{C}$  at Malin Head it's lowest absolute maximum recorded during April since 1983 (29 years) to  $16.4^{\circ}\text{C}$  at Glenties Hatchery, Co. Donegal. The highest maximum recorded at Casement Aerodrome of  $13.1^{\circ}\text{C}$  set a new record as the lowest absolute maximum since it opened 48 years ago. Most highest maximas recorded in the Southwest, West, Kilkenny, Galway and Dublin areas were the lowest in at least 20 years. Lowest minimum temperatures were recorded at various times, ranging from  $-4.0^{\circ}\text{C}$  at Thomastown (Mt. Juliet), Co.



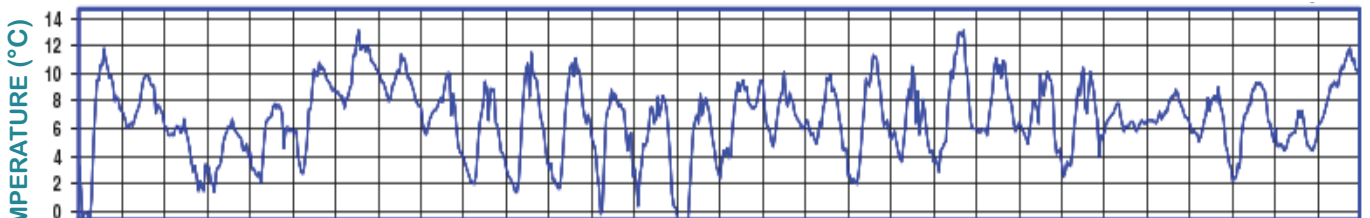
Kilkenny, its lowest since 2006 (6 years) to  $2.7^{\circ}\text{C}$  at Sherkin Island. Mountrussell, Co. Limerick reported its lowest April minimum since 1998 (14 years) with  $-2.4^{\circ}\text{C}$ , the longest period of record exceeded for minima's at stations this month.

**HOURLY TEMPERATURES APRIL 2012**

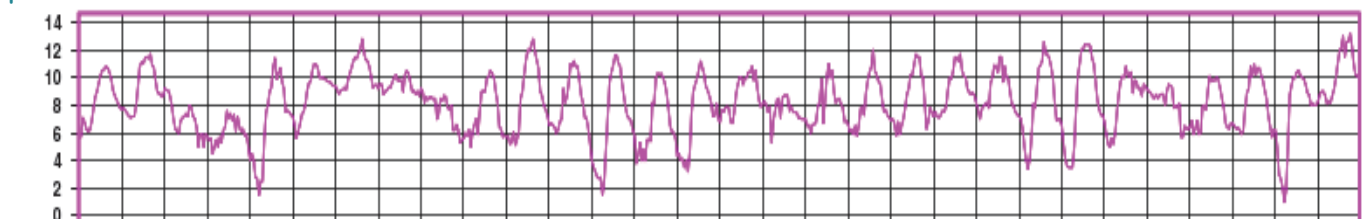
VALENTIA OBSERVATORY



DUBLIN AIRPORT



BELMULLET



DAY OF MONTH

COUNTY/ STATION*	MEAN MAX.	MEAN MIN.	DIFFERENCE FROM 1981-2010		HIGHEST MAX./DATE	LOWEST MIN./DATE	LOWEST GRASS MIN./DATE		DAYS WITH FROST	
			MEAN	AVERAGE					AIR	GROUND
<b>CO. CARLOW</b>										
CARLOW (OAK PARK)	11.0	3.6	7.3	-1.6	13.5 7	-0.7 15	-5.4 15	2	16	
<b>CO. CAVAN</b>										
BALLYHAISE	10.7	2.7	6.7	-1.6	14.7 30	-2.2 5	-6.5 13	5	17	
<b>CO. CLARE</b>										
SHANNON AIRPORT	11.9	4.1	8.0	-1.5	14.9 7	-1.7 5	-7.2 5	3	15	
CARRON	11.1	3.7	7.4	-0.8	13.2 7	0.2 5 15	-5.4 5	0	18	
<b>CO. CORK</b>										
ROCHE'S POINT	11.3	5.2	8.3	-0.8	14.9 7	2.1 4	-1.9 6	0	2	
FERMOY (MOOREPARK)	11.3	3.4	7.4	-1.0	14.3 7	-1.8 6	-3.9 6	3	10	
CORK AIRPORT	10.6	3.9	7.3	-1.2	14.3 7	-0.3 4	-5.3 6	1	11	
SHERKIN ISLAND	11.3	6.2	8.8	-0.7	14.5 7	2.7 4	-2.1 6	0	2	
BALLINCURRIG (PEAFIELD)	11.9	3.0	7.5	-0.6	14.4 7	-1.1 4	-1.8 4	2	6	
<b>CO. DONEGAL</b>										
MALIN HEAD	10.0	5.0	7.5	-0.8	11.6 30	1.6 20	-2.5 20	0	7	
GLENTIES HATCHERY	11.7	1.6	6.7	-1.4	16.4 30	-2.9 14	-7.0 29	12	23	
BALLYSHANNON (CATHLEEN'S FALL)	10.9	3.1	7.0	-1.4	15.0 30	-1.5 13		2		
<b>CO. DUBLIN</b>										
DUBLIN (PHOENIX PARK)	11.1	3.7	7.4	-0.8	14.1 21	-0.7 15	-5.7 15	2	14	
DUBLIN AIRPORT	10.5	3.1	6.8	-1.5	13.8 7	-1.5 15	-4.9 15	3	9	
CASEMENT AERODROME	10.5	3.0	6.8	-1.4	13.1 7	-3.0 15	-5.9 15	3	14	
DUBLIN (MERRION SQUARE)	10.5	4.9	7.7	-1.7	13.6 21	1.5 15		0		
<b>CO. GALWAY</b>										
MAAM VALLEY	12.0	4.5	8.3	-0.6	15.2 7	0.5 15	-4.1 15	0	7	
<b>CO. KERRY</b>										
VALENTIA OBSERVATORY	11.0	5.6	8.3	-1.1	13.8 7	0.9 15	-3.6 15	0	2	
ARDFERT (LISCAHANE)	12.1	3.8	8.0	-1.1	14.7 7	-2.6 5	-3.9 5	5	6	
<b>CO. LIMERICK</b>										
MOUNTRUSSELL	10.3	3.3	6.8	-1.4	12.4 7	-2.4 4	-5.4 5	5	10	
<b>CO. MAYO</b>										
BELMULLET	11.4	5.1	8.3	-0.7	13.6 30	0.7 29	-2.6 29	0	5	
STRAIDE	12.5	2.4	7.5	-1.1	15.0 23 24	-2.9 29	-10.4 29	8	22	
KNOCK AIRPORT	9.8	3.1	6.5	-1.0	13.0 30	-0.1 4	-2.7 13	1	9	
DELPHI LODGE	11.5	4.8	8.2	-0.9	13.8 24	0.5 13	-6.0 24	0	8	
<b>CO. MEATH</b>										
WARRENSTOWN	11.0	3.3	7.2	-1.2	13.8 21 30	-1.1 1 15	-4.0 15	2	11	
<b>CO. MONAGHAN</b>										
CARRICKMACROSS (DUNOGE)	11.3	3.2	7.3	-0.9	14.9 30	-1.5 13	-4.9 5	3	12	
<b>CO. OFFALY</b>										
DERRYGREENAGH	11.4	3.0	7.2	-0.9	13.9 7	-0.9 5	-8.4 15	2	24	
<b>CO. ROSCOMMON</b>										
MOUNT DILLON	11.4	2.9	7.1	-1.3	14.7 7	-2.8 5				
<b>CO. SLIGO</b>										
ARDTARMON	12.0	4.2	8.1	-0.9	15.8 30	1.2 13	-4.7 14	0	17	
<b>CO. TIPPERARY</b>										
GURTEEN (AG. COLLEGE)	10.9	2.6	6.8	-1.4	14.0 7	-3.0 15	-8.1 5	5	17	
FETHARD (PARSONSHILL)	10.8	3.2	7.0	-1.0	13.6 19	-0.7 4	-2.0 15	2	6	
<b>CO. WATERFORD</b>										
WATERFORD (TYCOR)	12.0	4.9	8.5	-0.6	15.2 7	1.6 4		0		
DUNGARVAN (CARRIGLEA)	12.2	3.8	8.0	-1.0	15.8 7	-0.5 5	-2.5 6	2	7	
<b>CO. WESTMEATH</b>										
MULLINGAR	10.8	3.0	6.9	-1.3	13.6 21	-0.5 5	-5.2 15	1	16	
<b>CO. WEXFORD</b>										
JOHNSTOWN CASTLE	10.5	4.4	7.5	-1.0	13.7 7	0.7 4	-2.4 5	0	8	
JOHN F. KENNEDY PARK	11.5	3.8	7.7	-0.9	15.5 7	0.5 11	-1.0 10	0	4	
CLONROCHE (KNOXTOWN)	11.2	3.7	7.5	-0.5	15.1 7	-1.9 6	-4.4 6	2	5	
<b>CO. WICKLOW</b>										
ASHFORD (CRONYKEERY)	11.4	4.4	7.9	-0.7	14.8 7	-0.2 16	-6.6 16	2	11	

\* TABLE REPRESENTS DATA FROM ONLY A SELECTION OF CLIMATOLOGICAL STATIONS. ALL DATA IS 09-09 HR

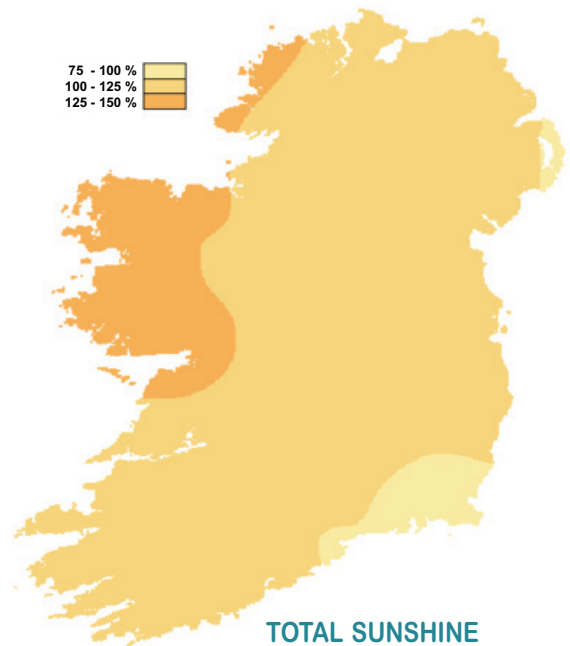
COUNTY/ STATION*	DAILY MEAN (HOURS/DAY)	% OF 1981-2010 AVERAGE	% OF POSSIBLE	MOST IN A DAY/DATE	
<b>CO. CLARE</b>					
SHANNON AIRPORT	6.19	107	45	11.9	19
<b>CO. CORK</b>					
CORK AIRPORT	5.44	99	39	11.1	21 5
SHERKIN ISLAND	5.99	99	43	11.7	21
BALLINCURRIG (PEAFIELD)	5.66	103		11.7	5 14
<b>CO. DONEGAL</b>					
BALLYSHANNON (CATHLEEN'S FALL)	5.84	114	41	13.8	29
<b>CO. DUBLIN</b>					
DUBLIN AIRPORT	5.49	101	39	11.8	5
CASEMENT AERODROME	5.21	100	37	11.8	5
<b>CO. GALWAY</b>					
GALWAY (UNIV.COLLEGE)	6.96	134	50	12.7	29
<b>CO. KERRY</b>					
VALENTIA OBSERVATORY	5.68	107	41	13.2	27
ARDFERT (LISCAHANE)	5.39	99	39	10.6	14
<b>CO. MAYO</b>					
BELMULLET	6.82	128	49	13.9	28
STRAIDE	6.24	125		13.0	29
KNOCK AIRPORT	5.87	121		13.3	29
<b>CO. WATERFORD</b>					
DUNGARVAN (CARRIGLEA)	5.25	96	38	11.8	5
<b>CO. WEXFORD</b>					
JOHN F. KENNEDY PARK	5.07	93	36	11.0	11
CLONROCHE (KNOXTOWN)	5.20	95		11.2	21
<b>CO. WICKLOW</b>					
ASHFORD (CRONYKEERY)	5.56	107		11.3	5

\* TABLE REPRESENTS SUNSHINE DATA FROM A SELECTION OF CLIMATOLOGICAL STATIONS.

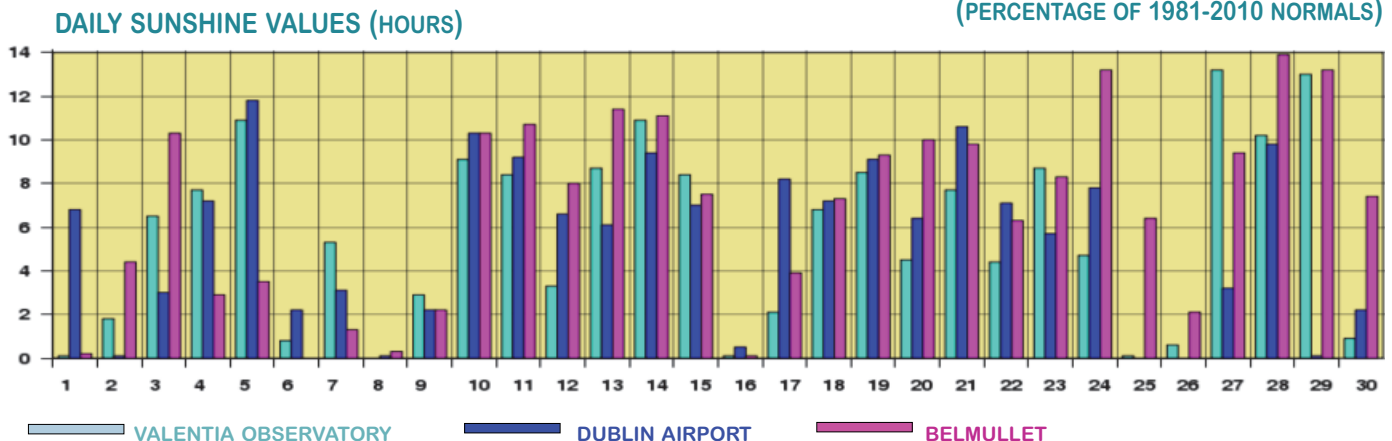
**RELATIVELY DULL IN THE SOUTHEAST; SUNNY ELSEWHERE**

Sunshine totals were above average except in the Southeast. Total hours and percentage of average values ranged from 93% and 152 hours at John F. Kennedy Park, its dullest April since 2004 (8 years) to 134% and 209 hours at Galway (Univ. College), its sunniest April in 5 years. Belmullet reported its sunniest April since 1974 (38 years) and the month's highest daily sunshine of 13.9 hours on the 28th. The second highest daily sunshine of 13.8 hours at Ballyshannon (Cathleen's Fall) on the 29th was the highest recorded at the site since 1967 (55 years).

Global solar radiation totals were below average at Dublin Airport with a percentage of average value of 95%. Others stations reported above average values ranging up to 108% at Valentia Observatory.



**TOTAL SUNSHINE**  
(PERCENTAGE OF 1981-2010 NORMALS)

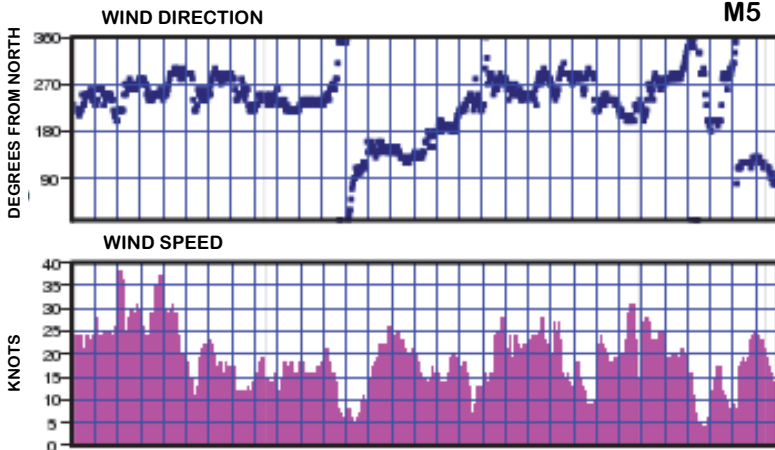


**DAILY SUNSHINE VALUES (HOURS)**

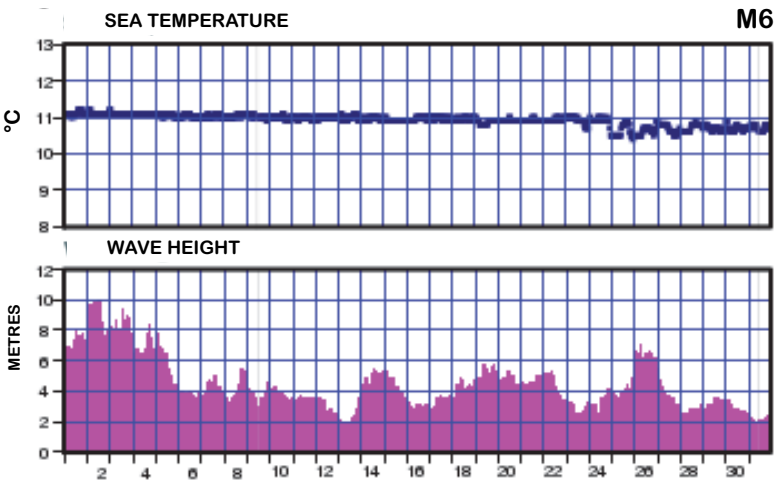
VALENTIA OBSERVATORY      DUBLIN AIRPORT      BELMULLET



MARINE OBSERVATIONS FROM IRISH MARINE DATA BUOY NETWORK



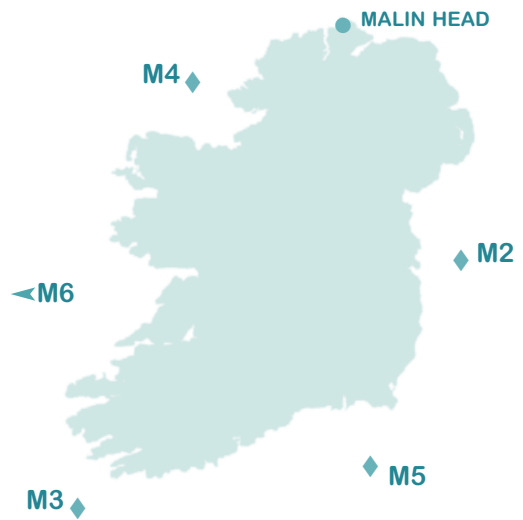
HOURLY WIND CONDITIONS AT M5 (51°41.4'N, 6.°42.3'W)



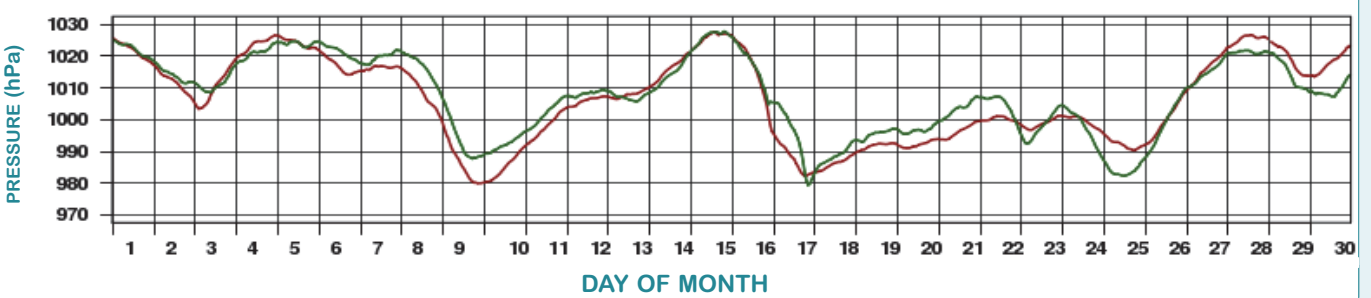
HOURLY SEA TEMPERATURE AND WAVE CONDITIONS AT M6 (53°03.6'N, 15.°55.8'W)

BUOY	SEA SURFACE TEMP. (°C)	MEAN WIND SPEED (knots)	MAX 10-MIN WIND (knots)	MEAN SIGNIFICANT WAVE HEIGHT (m.)	MAX SIGNIFICANT WAVE HEIGHT (m.)
M2*	8.9	13.3	29.5	1.2	4.7
M3	Not Available				
M4*	10.4	14.1	32.3	n/a	n/a
M5*	9.8	15.7	36.4	1.8	5.5
M6*	10.7	n/a	n/a	3.1	12.5
MALIN HEAD	9.6	* MONTHLY MEANS CALCULATED USING AVAILABLE DATA			

SUMMARY OF MEAN MONTHLY VALUES

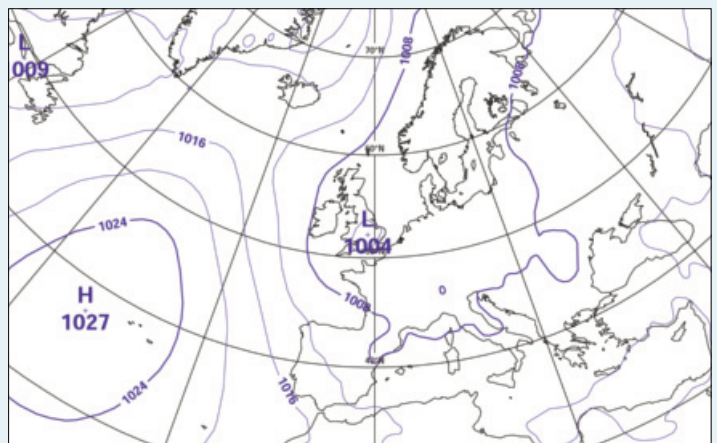


HOURLY MEAN SEA LEVEL PRESSURE APRIL 2012



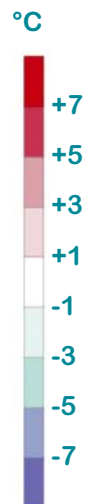
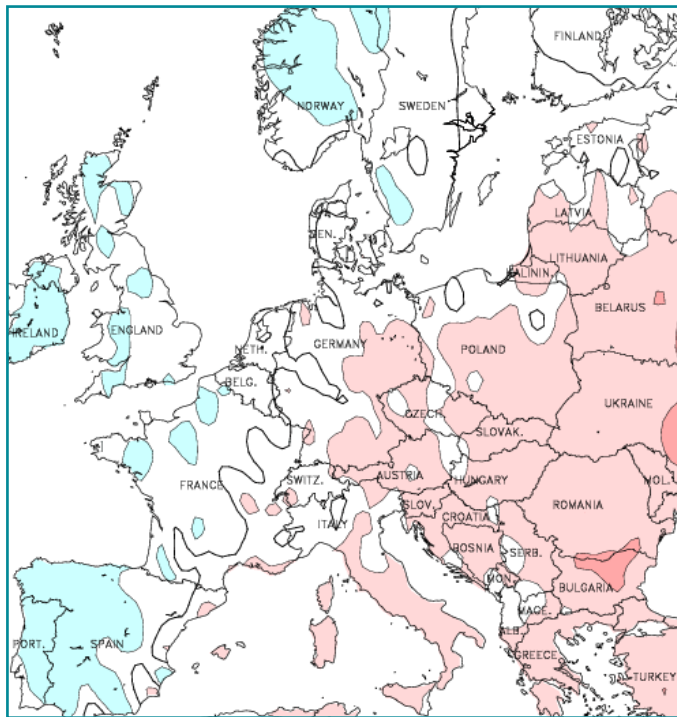
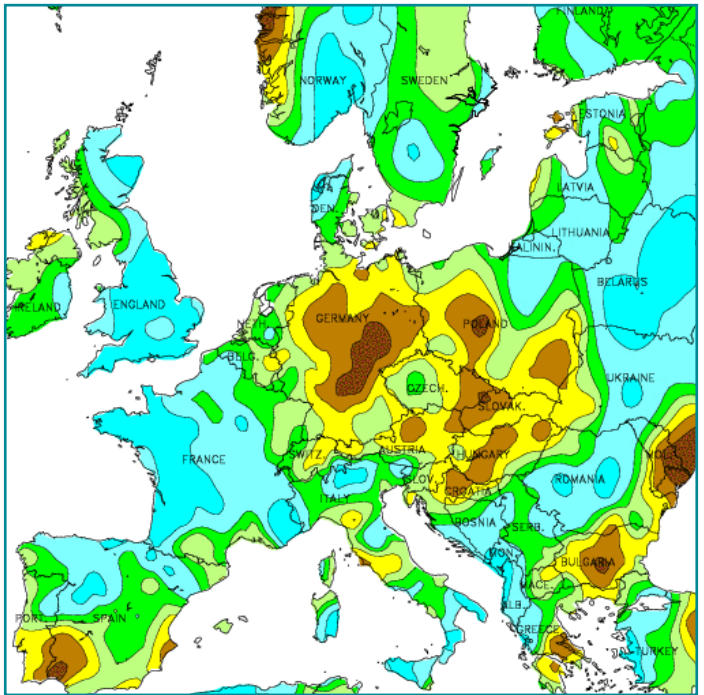
ATMOSPHERIC PRESSURE

April mean sea level pressure values ranged from around 1006 hPa in the East to 1008 hPa along western coasts. The month's highest absolute maximum pressure value of 1028.1 hPa was recorded during periods of high pressure at Valentia Observatory and Cork Airport on the 15th and Belmullet on the 4th. The lowest absolute minimum pressure value of 974.8 hPa was recorded at Mace Head on the 17th when an Atlantic depression moved across the western coastline.



MONTHLY MEAN MSL PRESSURE, BASED ON 1200 UTC VALUES

**APRIL RAINFALL**  
(PERCENTAGE OF 1961-1990 NORMAL)



**APRIL MEAN TEMPERATURE**  
(DIFFERENCE FROM 1961-1990 NORMAL)

DATA SUPPLIED BY NOAA  
CLIMATE PREDICTION CENTRE,  
US DEPARTMENT OF COMMERCE

Drought conditions gripped parts of the contiguous United States during April 2012. As of May 1st, 2012, 32 percent of the contiguous United States experienced moderate to exceptional drought, with 17 percent experiencing severe to exceptional drought, according to the U.S. Drought Monitor (USDM). Exceptional drought affected parts of western Texas, southeastern New Mexico, and across parts of Florida, Georgia, Alabama, and South Carolina. Conditions deteriorated across portions of the Carolinas and Georgia where less than 12.7 mm of precipitation fell.

Rainfall averaged over England and Wales during April was 140.4mm which is 216 percent of the average for the standard reference period 1981-2010, the highest for this month since 2000; since useful rainfall records began in 1727 April has been wetter only in 2000 and 1756. The equivalent figures for Scotland were 90mm and 152 per cent of the normal amount, and for Northern Ireland 63mm and 112 percent. Monthly totals at routinely-available sites varied between 290mm at Liscombe (Somerset) and 31mm at Auchincruive (Ayrshire).

A severe storm brought strong winds and hail to northern provinces in Vietnam on April 20th. The strong winds blew roofs off homes and damaged over 4,500 homes and crops. Two people died when their house collapsed over them.

Copious rain fell across Western Province of Rwanda (located in central Africa) on April 12th, 2012, prompting flash floods. The floods inundated nearly 1,000 hectares of potatoes, maize, bananas, tea, and sugar, leading to food insecurity. Over 700 houses were either destroyed or damaged and nearly 11,000 people were affected.

**GLOBAL WEATHER HIGHLIGHTS OF THE MONTH**

