

MONTHLY WEATHER BULLETIN

NO. 350
JULY 2015



A border collie completes the obstacle course in dry conditions at Pawfest, Show Grounds, Curraheen, Co Cork on the 18th. This event raised funds for the Cork Society for the Prevention of Cruelty to Animals (CSPCA) and Munster Lost and Found Pets. An unstable southwesterly airstream covered Ireland on the 18th with embedded troughs. There were good dry spells throughout the day in the South, before persistent rain spread from the Southwest to all areas by nightfall. Cork Airport reported 8.8 mm of rain, with five hours of sunshine. (Picture Courtesy Irish Examiner. Photographer: Eddie O'Hare)

COOL, WET AND WINDY EVERYWHERE

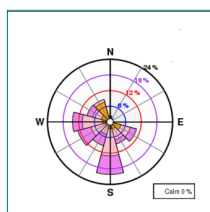
All monthly mean air temperatures were below their LTA (Long-Term Average) with most stations reporting deviations from normal of -1.0°C or more. Differences from LTA were as much as -2.0°C at Markree (mean temperature of 13.3°C) its coolest July in seven years.

Claremorris had a monthly mean temperature of

13.4°C (-1.7°C from LTA), equalling its coldest July since 1965. Nearly all highest maxima were at the start of the month between the 1st and 3rd, with the month's highest temperature of 25.6°C recorded at Castleconnell, Co Limerick on the 1st. The majority of lowest minima were between the 24th and 30th, with the month's lowest air



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GUSTS - PAGE 4

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Data analysis based on all
available data and is correct at
time of publication.
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A rainbow formed over Pairc Ui Rinn, Ballinlough, Cork after a shower during the Junior B Hurling Championship final between Shanballymore and Bantry Blue's on the 23rd. Countrywide, showers dominated the day, dying out in most places by late afternoon. Southern coastal counties were the exception where outbreaks of light rain and showers continued after nightfall. (Picture Courtesy Irish Examiner. Photographer: Eddie O'Hare)

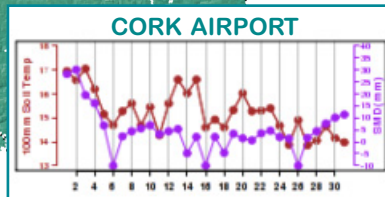
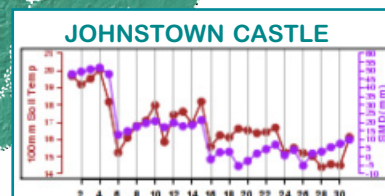
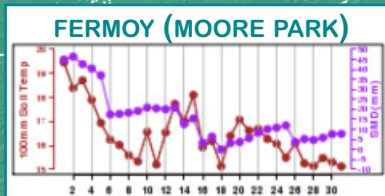
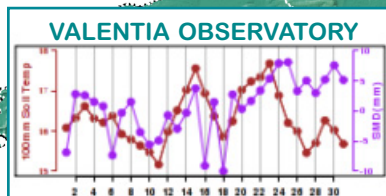
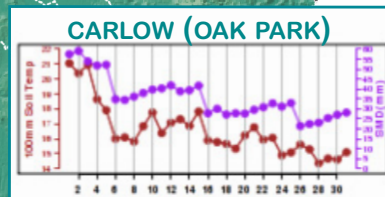
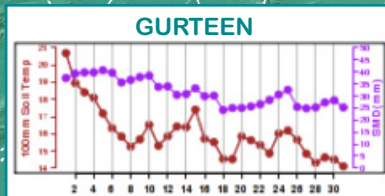
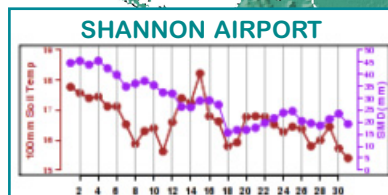
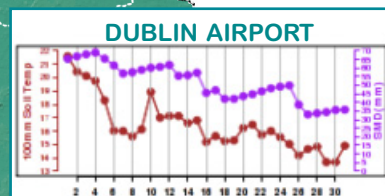
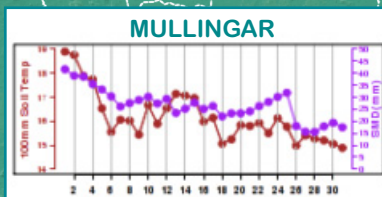
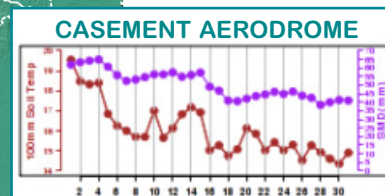
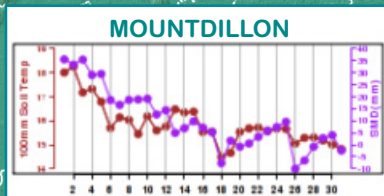
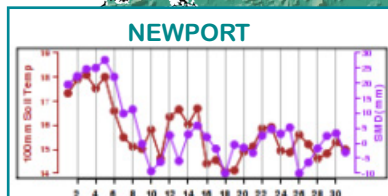
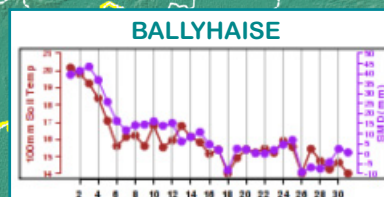
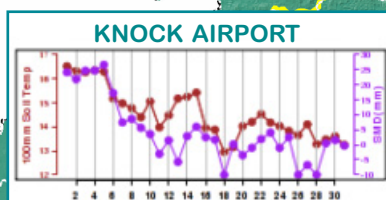
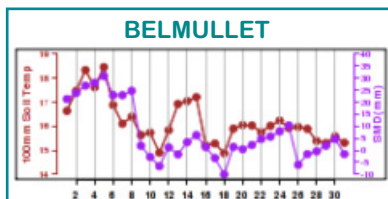
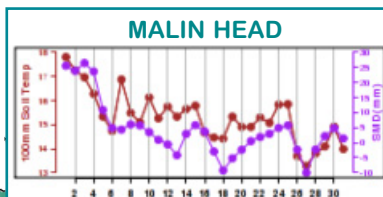
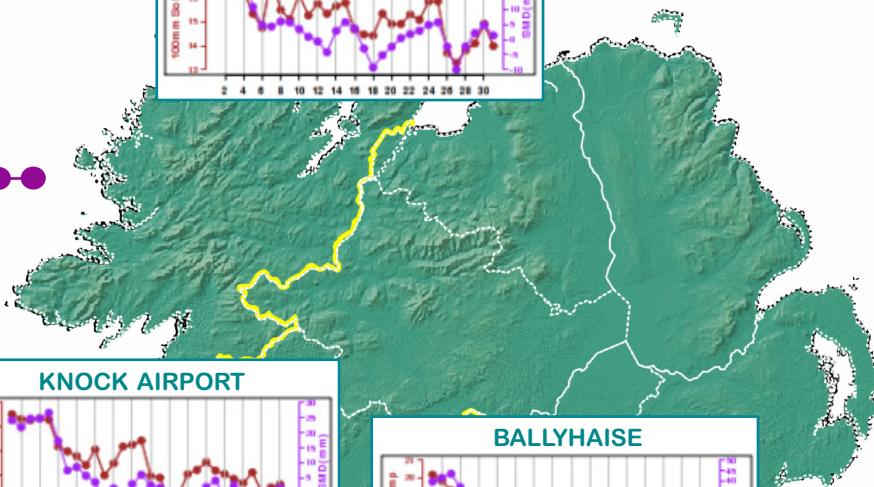
temperature also reported at Castleconnell with 3.0°C on the 30th. Dublin Airport's lowest minimum of 3.9°C recorded on the 15th, was its lowest July temperature on record since the station opened in 1942. The month's lowest grass minimum was recorded at Cloosh on the 25th with -2.7°C .

Nearly all stations reported above average rainfall for July. Below LTA values were reported in parts (mainly the Midlands and Southwest) with the lowest percentage of LTA value of 72% reported at Tullaroan (Ballybeagh), Co Kilkenny with 53.7 mm. Percentage of LTA values were highest in parts of Roscommon, Cork and Mayo with the highest LTA of 225% reported at Roscommon (Vocational School) with 159.0 mm. Monthly rainfall totals were lowest in Kildare, with Celbridge (Ardrass House) recording 42.8 mm (79% of its LTA). The month's highest rainfall total in a low-lying region (area below 200 m) was at Derrypark, Co Mayo with 251.9 mm, double its normal July rainfall, while the overall highest rainfall accumulation was in the Cumberagh Mountains, Co Kerry with 342.0 mm (147% of its LTA). The month's wettest day was the 5th at Ballineen (Caherkirky), Co Cork with 47.2 mm, a quarter of its monthly total of 188.9 mm (194 % of its LTA).

Nearly all sunshine totals were on or below their LTAs for July. Percentage of LTA values ranged from 62% at Knock Airport, Co Mayo (lowest monthly sunshine total of 81.6 hours) to 101% at Sherkin Island, Co Cork (highest monthly sunshine total of 186.0 hours). The month's sunniest day was at Sherkin Island on the 17th with 14.1 hours. The number of dull days were up to nine at stations in the Kerry region.

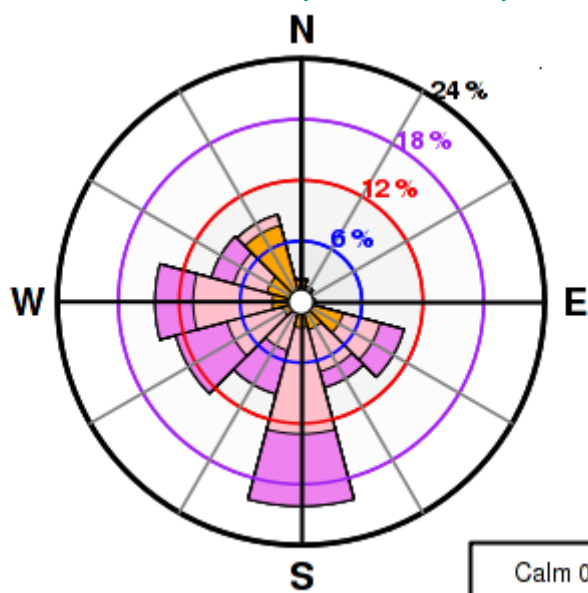
Wind and Elements: Monthly mean wind speeds ranged from 5.9 knots (10.9 km/h) at Ballyhaise, Co Cavan to 14.7 knots (27.2 km/h) at Mace Head, Co Galway. The majority of monthly mean wind speeds were the highest for July in five to 27 years with Shannon Airport, Co Clare reporting a monthly mean wind speed of 10.3 knots (19.1 km/h), equalling its highest for July since 1981. Gale force winds were reported on the 17th, 18th and 26th in the North and West. Both the month's highest 10-minute mean wind speed and month's highest gust were reported at Malin Head on the 17th with 42 knots (78 km/h) and 57 knots (106 km/h) respectively. This was its highest gust for July in five years with its 10-minute wind speed the highest recorded during July since 1988. Seventeen days reported fog, with Cloosh, Co Galway reporting the most days with fog with 13.

DAILY SOIL MOISTURE DEFICITS ●●●●● & SOIL TEMPERATURES ●●●●●

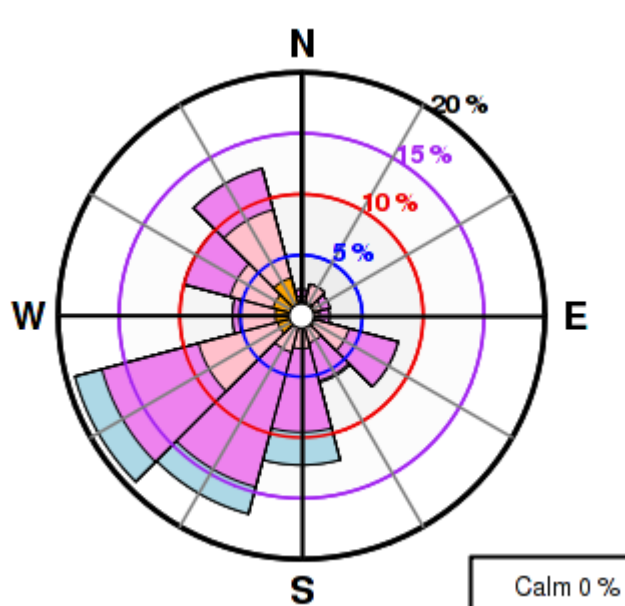


COUNTY / STATION	WIND (knots)										ELEMENTS (no.of days)				
	MEAN SPEED	MAX. 10-MIN. DIR. SPEED	MEAN DATE/HOUR	MAX. GUST DIR. SPEED	GUST DATE/TIME	DAYS WITH		HOURS WITH		SNOW	SNOW LYING	HAIL	THUNDER	FOG	
						GALES	GUST ≥ 34KNOTS	GUST ≥ 34KNOTS							
CO CARLOW															
OAK PARK	7.8	240°	22 17/14	230°	32 17/1624	0	0	0							
CO CAVAN															
BALLYHAISE	5.9	170° 230°	19 6/17 19 17/11	220°	32 17/1427	0	0	0							
CO CLARE															
SHANNON AIRPORT	10.3	240°	28 17/14	280°	38 27/1504	0	4	17	0	0	0	1	0		
CO CORK															
FERMOY (MOORE PARK)	6.4	280°	23 27/15	270°	34 27/1534	0	1	1							
SHERKIN ISLAND	11.8	270°	32 27/10	280°	43 27/1110	0	3	17							
ROCHE'S POINT	12.3	290°	33 27/17	280°	42 27/1434	0	4	13							
CORK AIRPORT	9.7	290°	25 27/16	290°	37 27/1546	0	3	6	0	0	0	0	9		
CO DONEGAL															
MALIN HEAD	13.3	230°	42 17/17	230°	57 17/1757	3	9	49							
FINNER	9.4	210°	29 17/ 8	210°	44 17/ 821	0	1	12							
CO DUBLIN															
DUBLIN AIRPORT	10.5	240°	27 17/19	240°	36 17/1459	0	2	9	0	0	0	1	0		
CASEMENT AERODROME	9.4	170°	28 6/11	170° 230°	38 6/1043 38 17/1520	0	2	8	0	0	1	1	0		
CO GALWAY															
MACE HEAD	14.7	250°	35 17/ 3	240°	46 17/1303	1	9	49							
ATHENRY	7.5	250° 280°	21 17/14 21 27/13	240°	36 17/1341	0	1	3							
CO KERRY															
VALENTIA OBSERVATORY	9.9	100° 270°	26 16/10 26 27/10	90°	38 16/1043	0	6	16							
CO MAYO															
CLAREMORRIS	7.9	240°	21 17/12	240°	31 17/1454	0	0	0							
BELMULLET	11.2	180°	31 10/ 2	240°	43 17/ 642	0	4	24							
NEWPORT	8.9	210° 330°	24 11/15 24 27/15	240°	38 17/ 609	0	3	9							
KNOCK AIRPORT	8.9	240°	27 17/10	240°	40 17/1654	0	1	12	0				8		
CO MEATH															
DUNSANY (GRANGE)	7.7	250°	24 17/15	250°	33 17/1517	0	0	0							
CO ROSCOMMON															
MOUNTDILLON	6.9	230°	18 17/13	250°	30 20/1056	0	0	0							
CO TIPPERARY															
GURTEEN (AG COLLEGE)	8.3	240°	22 17/15	240°	34 17/1657	0	1	1							
CO WESTMEATH															
MULLINGAR	6.1	170° 230°	16 6/16 16 17/11	230°	29 17/1425	0	0	0							
CO WEXFORD															
JOHNSTOWN CASTLE	8.9	300°	24 8/10	260°	37 27/1618	0	2	2							

CARLOW (OAK PARK)



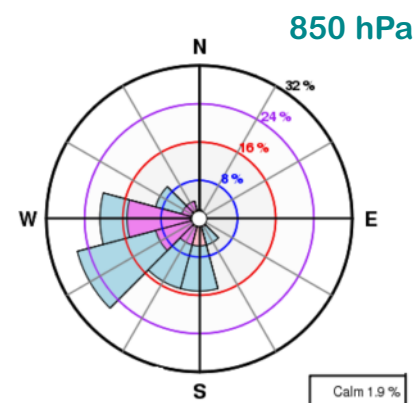
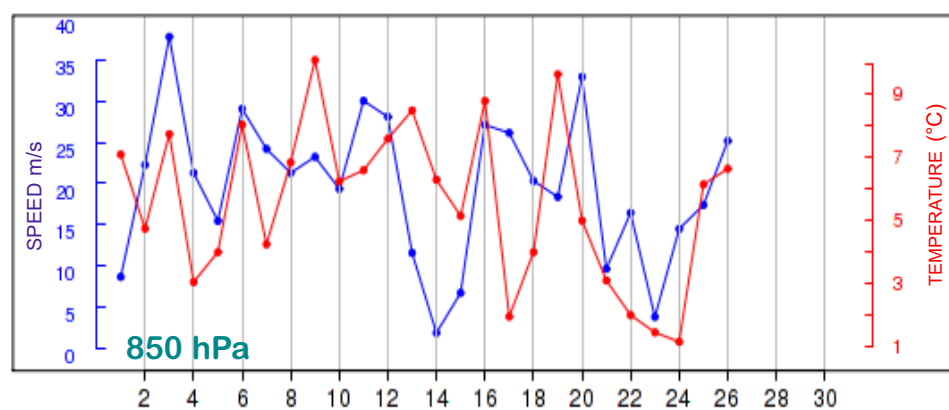
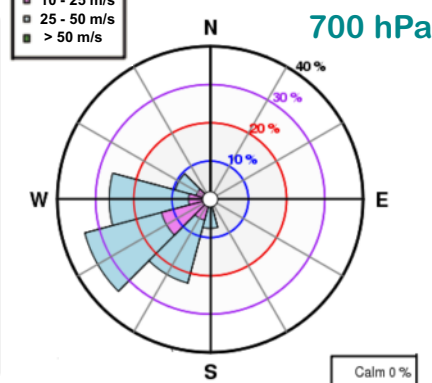
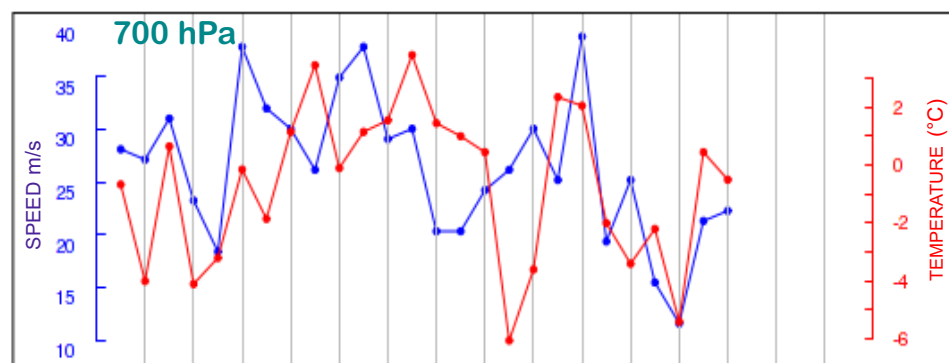
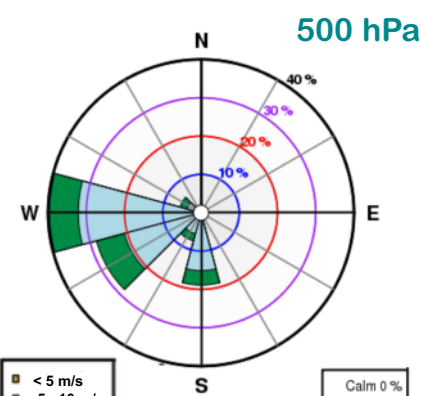
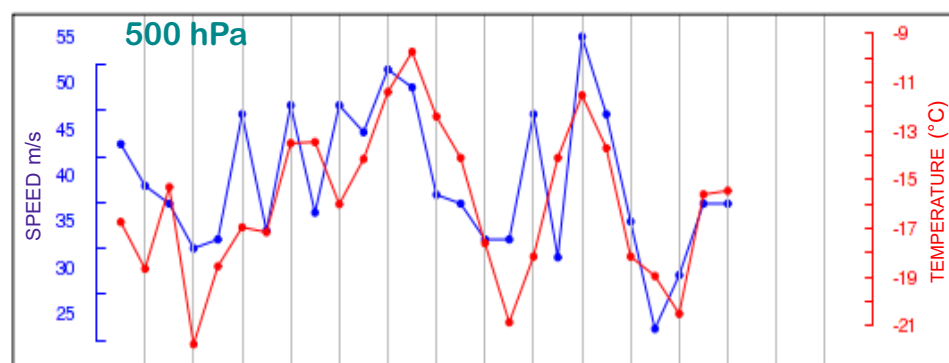
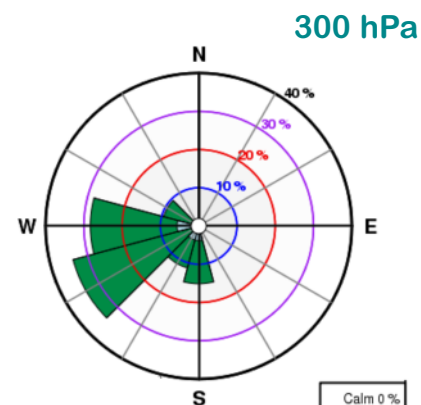
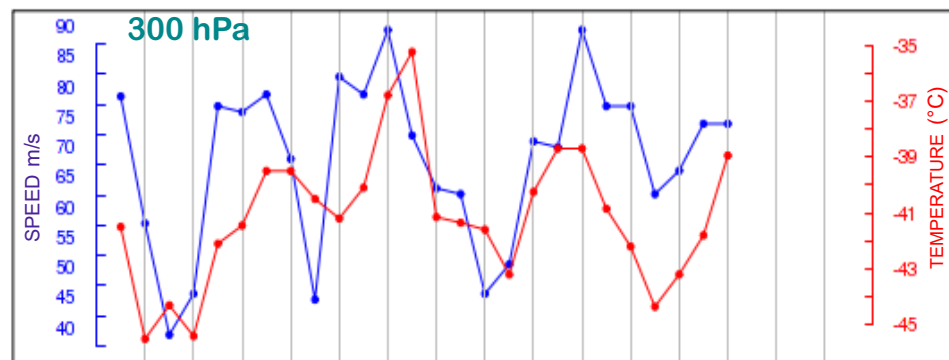
BELMULLET



PERCENTAGE FREQUENCY OF WIND DIRECTION

Upper Atmosphere wind and temperature readings are made at Valentia Observatory twice a day by a radiosonde (a balloon with instruments attached). Shown below are daily average wind speeds and temperatures at defined pressure levels, 850, 700, 500 and 300 hPa, corresponding approximately to heights of 1.5, 3, 6 and 10 km. Monthly wind roses are also shown for each pressure level.

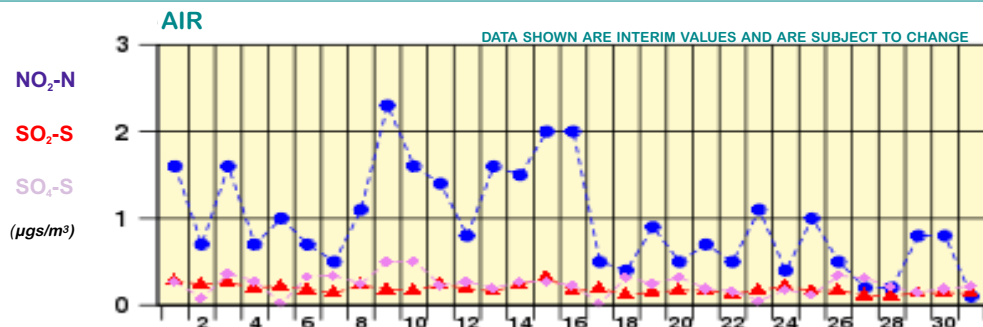
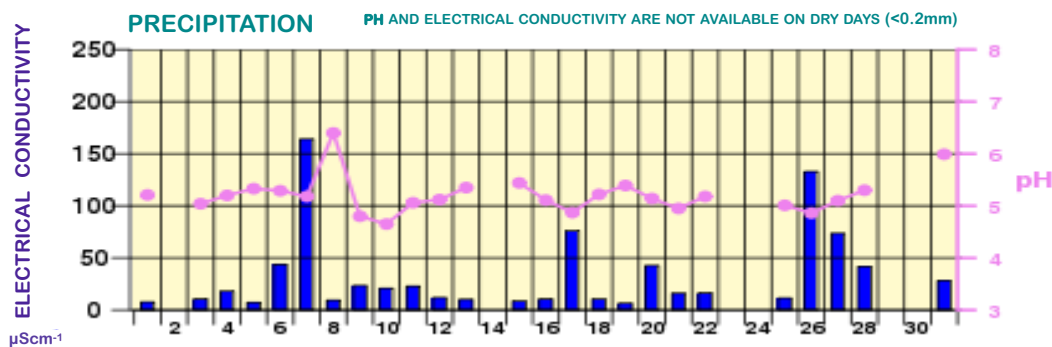
UPPER AIR WIND SPEED AND TEMPERATURE JULY 2015*



DAY OF MONTH

* DATA MISSING FROM 26TH TO THE END OF MONTH

CHEMICAL ANALYSIS OF PRECIPITATION AND AIR SAMPLES AT VALENTIA OBSERVATORY



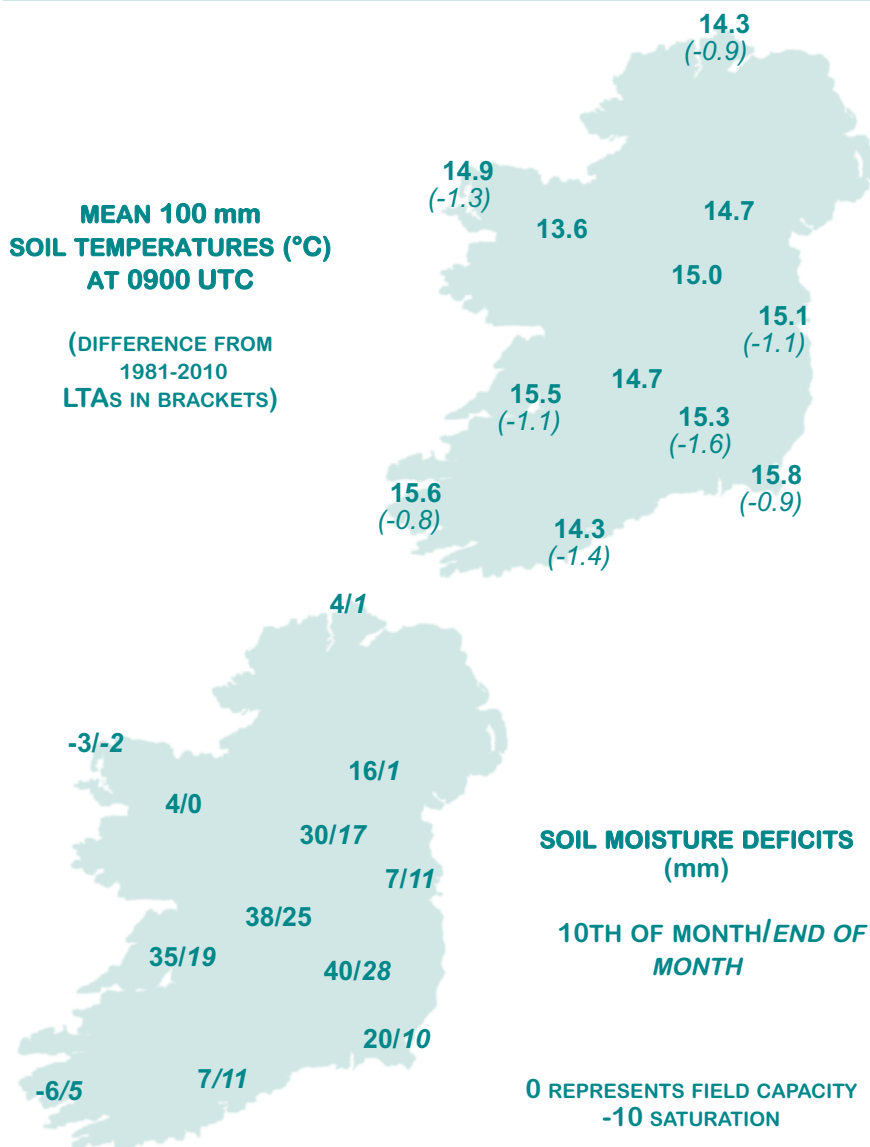
Acid rain occurs when pollutants combine with moisture in the air to form sulphuric or nitric acid. pH is the simplest way of measuring the acidity of precipitation. Usually pH of 7.00 is considered neutral but this is not the case in rainfall samples. Pure water in the atmosphere has an equilibrium 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.

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

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

MEAN 100 mm SOIL TEMPERATURES (°C) AT 0900 UTC

(DIFFERENCE FROM 1981-2010 LTAs IN BRACKETS)



SOIL MOISTURE DEFICITS (mm)

10TH OF MONTH/END OF MONTH

0 REPRESENTS FIELD CAPACITY
-10 SATURATION

MEAN SOIL TEMPERATURES (°C) AT 0900 UTC

COUNTY/STATION	100 mm	200 mm	300 mm
CO CARLOW			
CARLOW (OAK PARK)	15.3	15.3	15.4
CO. CAVAN			
BALLYHAISE	14.7	14.8	15.5
CO CLARE			
SHANNON AIRPORT	15.5	15.8	15.8
CARRON	---not available---		
CO CORK			
ROCHE'S POINT	15.2	15.1	15.4
FERMOY (MOORE PARK)	15.4	15.2	15.6
CORK AIRPORT	14.3	14.5	15.1
SHERKIN ISLAND	14.8	15.0	15.6
BALLINCURRIG (PEAFIELD)	15.1	14.8	15.3
CO DONEGAL			
MALIN HEAD	14.3	14.0	14.2
CO DUBLIN			
PHOENIX PARK	16.9	17.3	16.8
DUBLIN AIRPORT	14.9	15.2	15.7
CASEMENT AERODROME	15.1	15.0	15.2
CO KERRY			
VALENTIA OBSERVATORY	15.6	15.8	15.8
CO LIMERICK			
MOUNTRUSSELL	14.5	15.2	
CO MAYO			
BELMULLET	14.9	15.3	15.7
NEWPORT (FURNACE)	14.5	14.6	15.0
STRAIDE	15.8		
KNOCK AIRPORT	13.6	13.8	13.8
CO MEATH			
WARRENSTOWN	15.3	15.9	17.0
DUNSANY (GRANGE)	14.7	15.3	15.6
CO TIPPERARY			
GURTEEN (AG COLLEGE)	14.7	14.8	15.0
FETHARD (PARSONSHILL)	14.5	15.2	
CO WATERFORD			
DUNGARVAN (CARRIGLEA)		16.3	16.5
CO WESTMEATH			
MULLINGAR	15.0	15.3	15.9
CO. WEXFORD			
JOHNSTOWN CASTLE	15.8	15.4	15.5
JFK PARK	16.5	16.3	17.4
CO WICKLOW			
ASHFORD (CRONYKEERY)	16.5	16.2	16.6

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
CO CORK	1-10	75.8	7	4		17.9	11.6	14.8		9.5	9	0	104	48	9.3	9	0	15.5	15.4	36.9	
BALLINCURRIG	11-20	47.8	10	7		18.3	10.5	14.4		6.6	19	0	100	46	6.4	19	0	15.3	15.3	40.7	
(PEAFIELD)	21-END	30.3	8	4		16.8	9.4	13.1		6.3	30	0	96	37	6.1	30	0	14.7	15.2	43.6	
	MONTH	153.9	175	25	15	17.7	10.4	14.1	-1.0	6.3	30	0	299	130	6.1	30	0	15.1	15.3	121.2	72
CO DONEGAL	1-10	32.0	9	7		19.0	11.8	15.4		7.2	6	0	110	55	5.9	6	0	-	-	-	
GLENTIES HATCHERY	11-20	75.0	8	6		16.4	10.1	13.3		7.4	15	0	89	34	4.1	14	0	-	-	-	
	21-END	75.9	11	9		15.6	9.7	12.7		5.9	25	0	91	31	2.4	25	0	-	-	-	
	MONTH	182.9	163	28	22	17.0	10.5	13.7	-1.1	5.9	25	0	289	120	2.4	25	0	-	-	-	
CO KERRY	1-10	20.2	8	6		18.5	12.3	15.4		10.3	5	0	110	54	9.4	5	0	-	-	32.6	
ARDFERT	11-20	36.2	9	5		18.1	11.5	14.8		8.4	15	0	104	48	7.9	15	0	-	-	30.2	
(LISCAHANE)	21-END	17.3	8	6		16.7	10.0	13.4		5.6	24	0	99	39	5.1	24	0	-	-	43.9	
	MONTH	73.7	101	25	17	17.7	11.2	14.5	-1.1	5.6	24	0	312	142	5.1	24	0	-	-	106.7	76
CO MONAGHAN	1-10	17.1	7	4		19.7	11.2	15.5		4.5	9	0	110	56	-	-	-	-	-	-	
CARRICKMACROSS	11-20	30.8	8	6		17.8	9.6	13.7		4.3	15	0	93	40	-	-	-	-	-	-	
	21-END	46.2	9	6		16.3	9.6	13.0		7.0	23	0	94	34	-	-	-	-	-	-	
	MONTH	94.1	138	24	16	17.8	10.1	14.0	-1.5	4.3	15	0	297	131	-	-	-	-	-	-	
CO WATERFORD	1-10	48.6	5	3		19.5	12.1	15.8		8.2	9	0	114	59	5.0	9	0	-	16.9	53.8	
DUNGARVAN	11-20	47.0	9	7		18.8	11.0	14.9		8.2	16	0	105	50	4.5	19	0	-	16.6	53.2	
(CARRIGLEA)	21-END	31.7	7	5		17.9	9.9	13.9		4.5	30	0	104	46	0.0	30	0	-	15.9	51.4	
	MONTH	127.3	173	21	15	18.7	10.9	14.8	-1.4	4.5	30	0	323	154	0.0	30	0	-	16.5	158.4	95
CO WEXFORD	1-10	64.9	5	5		18.4	12.3	15.4		8.2	9	0	110	54	6.2	9	0	17.3	17.7	40.1	
JFK PARK	11-20	49.4	8	7		17.8	10.7	14.3		7.6	19	0	99	44	4.6	19	0	16.4	17.4	39.3	
	21-END	27.3	8	5		17.0	9.6	13.3		6.5	30	0	98	39	3.2	25	0	15.8	17.2	35.4	
	MONTH	141.6	196	21	17	17.7	10.8	14.3	-1.2	6.5	30	0	307	138	3.2	25	0	16.5	17.4	114.8	71
CO WICKLOW	1-10	24.1	5	3		19.6	11.4	15.5		7.1	6	0	111	57	0.8	9	0	17.6	16.9	52.8	
ASHFORD	11-20	54.8	8	5		19.0	10.5	14.8		5.5	16	0	104	50	0.3	16	0	16.8	16.8	44.6	
(CRONYKEERY)	21-END	15.8	3	2		17.7	10.4	14.1		5.9	23	0	106	47	0.1	23	0	15.3	16.2	25.9	
	MONTH	94.7	197	16	10	18.8	10.8	14.8	-0.8	5.5	16	0	321	153	0.1	23	0	16.5	16.6	123.3	75

P.E. (PENMAN)		GLOBAL SOLAR RADIATION (MJ/m ²)				MONTHLY EVAPORATION (mm) FROM CLASS A PAN		
STATION /COUNTY	TOTAL (mm)	STATION /COUNTY	1ST-10TH	11TH-20TH	21ST-END	TOTAL	COUNTY/ STATION	MONTHLY RAINFALL (mm)
CO CARLOW		CO CARLOW						
CARLOW (OAK PARK)	78	CARLOW (OAK PARK)*	166.36	142.82	151.04	460.22		
CO CAVAN		CO CAVAN						
BALLYHAISE	70	BALLYHAISE*	161.77	136.16	148.73	446.66		
CO CLARE		CO CORK						
SHANNON AIRPORT	77	ROCHE'S POINT*	183.67	168.40	168.29	520.36	CO KERRY	
CO CORK		CO DONEGAL					VALENTIA OBSERVATORY	120.3
CORK AIRPORT	70	MALIN HEAD*	155.83	149.72	177.82	483.37	CO KERRY	
CO DONEGAL		CO DUBLIN					NORTH KERRY LANDFILL	N/A
MALIN HEAD	71	DUBLIN AIRPORT*	179.99	152.15	150.98	483.12	CO MAYO	
CO DUBLIN		CO KERRY					NEWPORT (FURNACE)	152.3
DUBLIN AIRPORT	78	VALENTIA OBS.*	134.21	150.77	177.73	462.71	CO OFFALY	
CASEMENT AERODROME	80	CO MAYO					DERRYGREENAGH	92.9
CO KERRY		BELMULLET*	160.96	154.06	199.16	514.18	CO WATERFORD	
VALENTIA OBS.	73	CO TIPPERARY					DUNGARVAN (CARRIGLEA)	127.3
CO MAYO		GURTEEN (AG.COLLEGE)*	156.72	144.08	167.79	468.59	CO WEXFORD	
BELMULLET	76	CO WESTMEATH					JFK PARK	141.6
KNOCK AIRPORT	63	MULLINGAR*	152.61	146.17	154.12	452.90		
CO TIPPERARY		CO WEXFORD						
GURTEEN (AG.COLLEGE)	75	JOHNSTOWN CASTLE*	186.79	187.57	176.85	551.21		
CO WESTMEATH								
MULLINGAR	73							
CO WEXFORD								
JOHNSTOWN CASTLE	76							

GLOBAL SOLAR RADIATION VALUES FOR STATIONS MARKED

* ARE PROVISIONAL

* ARE FROM AUTOSOL INSTRUMENTS

RAINFALL VALUES MARKED * ARE ESTIMATED.

Wednesday 1st: Warm and humid overnight. The morning was cloudy with some rain developing near east and west coasts. The afternoon was warm and humid with just a few sunny breaks. Rain in the West during the evening. Winds were light, variable in direction.

Rainfall: Nil at numerous locations to 16.1 mm at Belcarra (Carrajes) **Temperature:** Lowest max. 16.1°C at Mace Head, Valentia Obs, highest max. 25.6°C at Castleconnell. Lowest min. 10.1°C at Delphi Lodge, highest min. 16.4°C at Dublin (Glasnevin)

Sunshine: Nil at numerous locations to 5.0 hours at Dungarvan (Carriglea)

Thursday 2nd: Some heavy thundery showers in the West overnight cleared to give another warm day with some good sunny spells. Isolated showers spread from the Southwest, some heavy and thundery mainly in the Midlands and West. The East remained mainly dry until evening. Some mist / sea fog on southern coasts. Winds were light, variable in direction.

Rainfall: Nil at numerous locations to 12.2 mm at Strokestown (Carrowclogher) **Temperature:** Lowest max. 17.1°C at Roches Pt, highest max. 21.8°C at Craggaunowen. Lowest min. 8.1°C at Springfield Castle, highest min. 16.2°C at Dublin (Glasnevin) **Sunshine:** 1.2 hours at Ballyshannon (Cathleen's Fall) to 13.6 hours at Belmullet

Friday 3rd: A dry start to the day with some bright sunny spells. Cloudy in the South and West with some light drizzle. Good sunny spells in other parts, before showers arrived in the South spreading northwards towards evening. Showers were thundery and heavy in parts. Winds were moderate, southeasterly.

Rainfall: Nil at numerous locations to 24.2 mm at Musheru **Temperature:** Lowest max. 17.7°C at Roches Pt, highest max. 24.0°C at Cavan (Drumconnick). Lowest min. 8.2°C at Dublin Apt, Dundalk (Annaskeagh WW), highest min. 11.4°C at Raphoe (Tops) **Sunshine:** 1.6 hours at Ardfert (Liscahane) to 11.1 hours at Dublin Apt

Saturday 4th: Widespread rain in the very early hours with some heavy bursts in places. This quickly cleared into the Northeast and was followed by some light showers with many areas staying dry for the afternoon and evening. Some heavier showers did develop in the South later in the day. There were good spells of sunshine. Winds were moderate, southwesterly.

Rainfall: Nil at numerous locations to 20.4 mm at Cork Montenotte **Temperature:** Lowest max. 16.6°C at Mace Head, highest max. 22.7°C at Dublin (Glasnevin). Lowest min. 10.8°C at Craggaunowen, highest min. 15.7°C at Waterford (Tycor) **Sunshine:** 4.2 hours at Newport (Furnace) to 10.7 hours at Dublin (Glasnevin)

Sunday 5th: Heavy showers developed in Munster overnight, gradually spreading to all areas by late morning. A clearance spread from the West by afternoon, reaching all areas in the evening. Some of the showers were very heavy and with thunder. Many parts had significant spells of sunshine between the showers and it was somewhat cloudier in the East. Winds were light to moderate, southeast to southwest.

Rainfall: Nil at numerous locations to 47.2 mm at Ballineen (Cahirkirky) **Temperature:** Lowest max. 15.9°C at Sherkin Island, highest max. 21.4°C at Castleconnell. Lowest min. 7.5°C at Mt Dillon, highest min. 14.6°C at Dublin (Glasnevin) **Sunshine:** 2.7 hours at Casement to 14.0 hours at Belmullet

Monday 6th: Heavy rain spread into the Southwest early on in the night, moving northeastwards through the morning. Parts of the South and Southeast had steady rain, some very heavy and prolonged resulting in significant totals. Clearer weather with bands of heavy showers followed in the afternoon. Winds were moderate, southeast to southwest.

Rainfall: 0.4 mm at Skreen to 43.5 mm at Wexford (Newtown WW) **Temperature:** Lowest max. 15.6°C at Roches Pt, highest max. 22.2°C at Mt Dillon. Lowest min. 5.6°C at Mt Dillon, highest min. 13.4°C at Glengarriff (Inacullin) **Sunshine:** Nil at numerous locations to 5.9 hours at Straide

Tuesday 7th: The day started with some light showers before a band of heavier rain spread from the West which cleared the east coast later in the day. The south coast had the best of the weather with good spells of sunshine and the least amount of rainfall. Winds were moderate to fresh, southwesterly.

Rainfall: Nil at numerous locations to 24.0 mm at Drummin (Tawnyard) **Temperature:** Lowest max. 13.3°C at Knock Apt, highest max. 20.6°C at Dun Laoghaire. Lowest min. 9.3°C at Castleconnell, highest min. 14.1°C at Dublin (Glasnevin) **Sunshine:** 0.1 hours at Newport (Furnace), Knock Apt to 8.4 hours at Cork Apt

Wednesday 8th: Some showers and patchy drizzle in places overnight. The day was mostly dry with some good sunshine. Winds were moderate, northwesterly.

Rainfall: Nil at numerous locations to 8.2 mm at Mulrany (Doughbeg) **Temperature:** Lowest max. 14.0°C at Malin Head, highest max. 19.8°C at Glengarriff (Inacullin). Lowest min. 8.4°C at Craggaunowen, highest min. 13.4°C at Dublin (Glasnevin) **Sunshine:** 0.1 hours at Ardfert (Liscahane) to 11.2 hours at Ashford (Cronykeery)

Thursday 9th: There was some light drizzle in the South and Southwest during the early morning. It was dry in the East with good sunny spells but during the late afternoon patches of rain and drizzle moved in from the Atlantic. This precipitation became more persistent in the West and North during the late evening and night. Winds were light to moderate, variable in direction.

Rainfall: Nil at numerous locations to 26.3 mm at Gladree **Temperature:** Lowest max. 14.8°C at Sherkin Island, highest max. 20.7°C at Listowel (Bunaghara). Lowest min. 3.6°C at Dundalk (Annaskeagh WW), Warrenstown, highest min. 12.6°C at Valentia Obs, Sherkin Island, Dooks **Sunshine:** Nil at numerous locations to 8.8 hours at Dublin Apt

Friday 10th: Rain overnight in the North and Northwest with some patchy drizzle and fog on western and southern coasts. Dry with some sunny spells in the East until the afternoon, before rain from the West became more persistent and spread countrywide. By evening the rain had turned to showers, some with thunder before clearing. Winds were moderate to fresh, southwesterly.

Rainfall: Nil at numerous locations to 17.7 mm at Leenane (Glanagimla) **Temperature:** Lowest max. 15.7°C at Ballymore, highest max. 23.1°C at Dublin (Glasnevin). Lowest min. 9.3°C at Dundalk (Annaskeagh WW), Ardee (Boharnamoe), highest min. 15.6°C at Dublin (Glasnevin) **Sunshine:** 0.1 hours at Newport (Furnace), Straide, Knock Apt to 6.2 hours at Dublin (Glasnevin)

Saturday 11th: Some patchy rain and drizzle overnight, with some local mist. An overcast and breezy start with rain spreading from the West into all areas. The rain was heavy at times particularly in the West and North, clearing to scattered showers by evening. Winds were moderate to fresh, southwesterly.

Rainfall: Nil at numerous locations to 33.5 mm at Maam Valley **Temperature:** Lowest max. 14.5°C at Knock Apt, highest max. 20.2°C at Dun Laoghaire. Lowest min. 7.9°C at Clonroche (Knoxtown), highest min. 14.0°C at Dooks **Sunshine:** Nil at numerous locations to 3.0 hours at Ashford (Cronykeery)

Sunday 12th: Patchy mist and drizzle cleared early on. Scattered showers with mainly cloudy conditions, with some clear spells in parts. More persistent rain spread from the Southwest towards late evening, and also some local mist and drizzle overnight. Winds were light to moderate, southwesterly.

Rainfall: 0.2 mm at Fota Island (Golf Club) to 17.2 mm at Falcarragh (Lough Altan) **Temperature:** Lowest max. 15.0°C at Knock Apt, highest max. 21.5°C at Mallow (Spa Hse). Lowest min. 9.4°C at Dundalk (Annaskeagh WW), highest min. 14.3°C at Dublin (Glasnevin) **Sunshine:** 0.1 hours at Edenderry (Ballinla) to 7.1 hours at Sherkin Island

Monday 13th: Some mist and cloud overnight with rain spreading from the Southwest to all areas. Rain gradually changed to showers and cleared eastwards by early afternoon. Remaining showers become isolated by evening. Some good sunny spells in the afternoon and evening. Winds were light to moderate, southwest to northwest.

Rainfall: Nil at numerous locations to 12.5 mm at Waterville **Temperature:** Lowest max. 14.7°C at Knock Apt, highest max. 23.0°C at Cahore (Kilmichael Hse). Lowest min. 10.1°C at Craggaunowen, highest min. 15.0°C at Dublin (Glasnevin) **Sunshine:** Nil at numerous locations to 6.4 hours at Belmullet

Tuesday 14th: Rain crossed the southern half of the country overnight, clearing the Southeast before noon. The rest of the day was dry apart from patchy drizzle in Munster. Good sunshine in the North and Northwest, cloudier elsewhere. Winds were light, northwest to northeast.

Rainfall: Nil at numerous locations to 16.0 mm at Ballyhooley (Castleblagh) **Temperature:** Lowest max. 14.4°C at Malin Head, Belderrig, highest max. 19.5°C at Straide. Lowest min. 7.7°C at Glenties Hatchery, highest min. 13.6°C at Cloyne (Lisanley) **Sunshine:** Nil at numerous locations to 5.9 hours at Ballyshannon (Cathleen's Fall)

Wednesday 15th: Apart from a few light showers in the South and in northwest coastal areas, the day was mainly dry with some sunny spells. Winds were light, northerly.

Rainfall: Nil at numerous locations to 4.8 mm at Gorey (Garden-City) **Temperature:** Lowest max. 14.5°C at Belderrig, highest max. 22.2°C at Castleconnell. Lowest min. 3.9°C at Dublin Apt, highest min. 12.7°C at Sherkin Island, Roches Pt **Sunshine:** 4.2 hours at Edenderry (Ballinla) to 12.8 hours at Shannon Apt

Thursday 16th: Rain in the Southwest spread through Munster and south Leinster overnight, becoming patchy as it moved eastwards. Further pulses of rain spread up from the Southwest, through the afternoon and evening. Some sunshine in the West and North, but mostly cloudy. Winds were moderate, easterly.

Rainfall: Nil at numerous locations to 43.9 mm at Kilbride (Togher) **Temperature:** Lowest max. 15.2°C at Knock Apt, Belderrig, highest max. 20.2°C at Listowel (Bunaghara). Lowest min. 5.5°C at Ashford (Cronykeery), Clonroche (Knoxtown), highest min. 12.9°C at Valentia Obs **Sunshine:** Nil at numerous locations to 1.0 hours at Clonroche (Knoxtown)

Friday 17th: Very windy in the West overnight and into the morning, with the strong winds along northern Atlantic coasts during the day. Showers became widespread during the late morning and afternoon, affecting all areas. These showers became isolated to the West and North by evening. Winds were fresh to strong, southwesterly.

Rainfall: Nil at numerous locations to 23.6 mm at Fintown (Kingarow)

Temperature: Lowest max. 13.5°C at Knock Apt, highest max. 20.0°C at Cahore (Kilmichael Hse). Lowest min. 7.9°C at Dundalk (Annaskeagh WW), highest min. 13.0°C at Piltown (Kildalton Agr Col)

Sunshine: 0.4 hours at Ballyshannon (Cathleen's Fall) to 14.1 hours at Sherkin Island

Saturday 18th: A band of showers from the West, particularly heavy in the West and Northwest spread slowly eastwards through the morning before clearing. Some good dry spells and sunshine in East and Southeast, before persistent showery rain spread from the Southwest to all areas, to give heavy thundery downpours. Winds were moderate to fresh, southwesterly.

Rainfall: 2.2 mm at Kilcoole (Treatment Plant) to 41.4 mm at Maam Valley

Temperature: Lowest max. 13.5°C at Knock Apt, highest max. 20.8°C at Casement. Lowest min. 7.0°C at Mallow (Hazelwood), highest min. 12.5°C at Dooks

Sunshine: 0.1 hours at Newport (Furnace), Straide to 12.2 hours at Arklow (Ballyrichard Hse)

Sunday 19th: A mainly dry day in most parts, with only light showers in places. Some good spells of sunshine too, in the far north and south. Towards evening cloud increased in the Southwest as more rain arrived spreading countrywide towards nightfall. Winds were light to moderate, southwest to northwest.

Rainfall: Nil at Parknashown Cullhill to 14.5 mm at Cuilcagh Mtns.

Temperature: Lowest max. 14.7°C at Knock Apt, highest max. 20.4°C at Mallow (Spa Hse).

Lowest min. 5.9°C at Castleconnell, highest min. 11.2°C at Mace Head

Sunshine: 0.7 hours at Newport (Furnace), Edenderry (Ballinla) to 10.3 hours at Dungarvan (Carriglea), Cork Apt

Monday 20th: A damp and dull start to the morning. Cloudy but mild with scattered showers, though some spells of sunshine, best in the South. Some heavy showers in the West later on. Winds were moderate to fresh, southeast to southwest.

Rainfall: Nil at numerous locations to 11.5 mm at Keenagh Beg

Temperature: Lowest max. 16.0°C at Delphi Lodge, Belderrig, highest max. 22.5°C at Castleconnell. Lowest min. 8.4°C at Craggaunowen, highest min. 13.6°C at Waterford (Tycor), Sherkin Island

Sunshine: Nil at Newport (Furnace) to 5.7 hours at Dungarvan (Carriglea)

Tuesday 21st: Some scattered showers overnight, became heavier in places by mid-morning. A clearance from the West gave a mainly cloudy and dry day with some sunny spells, though there was some isolated showers and some rain and drizzle in places. Winds were light to moderate, southwest to northwest.

Rainfall: Nil at numerous locations to 8.0 mm at Milltown

Temperature: Lowest max. 14.3°C at Markree, highest max. 20.0°C at Cahore (Kilmichael Hse), Dun Laoghaire. Lowest min. 10.2°C at Dundalk (Annaskeagh WW), highest min. 15.2°C at Dublin (Glasnevin)

Sunshine: 0.2 hours at Straide to 5.0 hours at Shannon Apt

Wednesday 22nd: Well scattered, mostly light, showers continued overnight and into the morning, mainly in the West and South. The showers became more widespread during the afternoon, retreating back to western coasts by late evening. Winds were light to moderate, southwesterly.

Rainfall: Nil at numerous locations to 6.3 mm at Dromahair (Market St.), Ardnawark (Barnesmore)

Temperature: Lowest max. 15.1°C at Ballyshannon (Cathleen's Fall), Ballycroy (Knockmoyleen), highest max. 21.8°C at Glengarriff (Innacullin). Lowest min. 8.5°C at Slieve Bloom Mtns (Nealstown), highest min. 13.0°C at Cahore (Kilmichael Hse)

Sunshine: 0.9 hours at Edenderry (Ballinla) to 10.8 hours at Belmullet

Thursday 23rd: Showers continued overnight mainly in southern parts with only isolated showers elsewhere. Isolated showers continued through the day with some sunny spells. The showers died out in most areas by late afternoon/early evening. There were further outbreaks of light rain and showers along the south coast after nightfall. Winds were light to moderate, southwesterly.

Rainfall: Nil at numerous locations to 12.9 mm at Sligo Airport

Temperature: Lowest max. 15.1°C at Malin Head, highest max. 19.0°C at Castleconnell.

Lowest min. 5.5°C at Dundalk (Annaskeagh WW), highest min. 12.1°C at Sherkin Island

Sunshine: 0.6 hours at JFK Park to 8.5 hours at Ballyshannon (Cathleen's Fall), Sherkin Island

Friday 24th: Rain along the south coast edged very slowly northwards overnight. Rainfall continued in the Southeast for much of the day, only clearing by mid-afternoon. Elsewhere, after a dry night, showers spread from the West during the morning, some heavy, dying out by evening. Winds were light to moderate, northerly.

Rainfall: Nil at numerous locations to 13.7 mm at Duncannon

Temperature: Lowest max. 14.1°C at Johnstown, highest max. 19.0°C at Glengarriff (Innacullin). Lowest min. 3.1°C at Mt Dillon, highest min. 11.8°C at Dublin (Glasnevin)

Sunshine: Nil at JFK Park to 12.3 hours at Sherkin Island

Saturday 25th: It was dry overnight apart from a few isolated showers. A cool start in most areas but the day was mainly dry with some sunny spells. Rain moved into the West and South late in the evening. By the end of the day more persistent and heavy rain in the Southwest and West moved across the country. Winds were light, variable in direction.

Rainfall: Nil at Ballyboden to 35.2 mm at Derrypark

Temperature: Lowest max. 14.7°C at Malin Head, Belderrig, highest max. 19.9°C at

Castleconnell. Lowest min. 3.1°C at Castleconnell, highest min. 10.4°C at Sherkin Island

Sunshine: 1.5 hours at Newport (Furnace) to 8.1 hours at Dungarvan (Carriglea)

Sunday 26th: Overnight a band of rain spread from the Southwest, with some heavy spells particularly in the West and South. The rain with some drizzle continued heavy, lingering throughout the day, mainly in the North and East. More isolated showers were reported in the South. It remained dull for most of the day. Winds were moderate to fresh, southeasterly.

Rainfall: Nil at numerous locations to 30.0 mm at Virginia

Temperature: Lowest max. 12.8°C at Malin Head, highest max. 21.5°C at Castleconnell.

Lowest min. 7.8°C at Craggaunowen, highest min. 12.4°C at Shannon Apt

Sunshine: Nil at numerous locations to 4.4 hours at Dungarvan (Carriglea)

Monday 27th: The day started with widespread but patchy light rain and drizzle, becoming more persistent with some heavy and thundery downpours in parts by the evening. It was a mainly cloudy day with the best of short sunny spells in the South of the country. Winds were fresh to strong, variable in direction.

Rainfall: Nil at numerous locations to 33.6 mm at Monaghan (Knockroe)

Temperature: Lowest max. 12.5°C at Malin Head, highest max. 19.5°C at Ashford

(Cronykeery). Lowest min. 8.9°C at Dundalk (Annaskeagh WW), highest min. 13.6°C at

Dungarvan (Carriglea)

Sunshine: Nil at numerous locations to 4.6 hours at Arklow (Ballyrichard Hse), Sherkin Island

Tuesday 28th: Overnight had some persistent heavy rain in the North with more showery conditions elsewhere. Showers became widespread by noon, with some heavy and thundery in the afternoon and evening, especially in the Midlands and East. Showers became isolated towards nightfall except in the North where they were more persistent. Winds were moderate, northwesterly.

Rainfall: Nil at numerous locations to 14.9 mm at Knock Apt

Temperature: Lowest max. 13.4°C at Knock Apt, highest max. 19.9°C at Waterford (Tycor).

Lowest min. 7.6°C at Cork Apt, highest min. 12.0°C at Dublin (Glasnevin)

Sunshine: 3.0 hours at Knock Apt to 12.7 hours at Sherkin Island

Wednesday 29th: Showers throughout the day were light in most areas but there were some heavier bursts. Showers had thunder near the east coast in the early afternoon. Good spells of sunshine, especially towards southern and western coasts. Winds were moderate to fresh, northwesterly.

Rainfall: Nil at numerous locations to 6.3 mm at Slane (Ardcalf)

Temperature: Lowest max. 13.5°C at Belderrig, highest max. 19.8°C at Glengarriff (Innacullin).

Lowest min. 5.4°C at Mallow (Hazelwood), highest min. 11.6°C at Dooks

Sunshine: 3.5 hours at Dublin (Glasnevin) to 12.3 hours at Cork Apt

Thursday 30th: Dry and cool overnight. Patches of showery rain crossed the country through the afternoon and evening, gradually retreating to western coasts later on. The best sunshine was in the North and West. Winds were light to moderate, southwest to northwest.

Rainfall: Nil at numerous locations to 12.5 mm at Eskeragh

Temperature: Lowest max. 13.2°C at Cavan (Drumconnick), highest max. 18.4°C at Cahore

(Kilmichael Hse). Lowest min. 3.0°C at Castleconnell, highest min. 10.9°C at Mace Head

Sunshine: 1.0 hours at Edenderry (Ballinla) to 9.7 hours at Sherkin Island

Friday 31st: Patchy rain in the West overnight, a band of more persistent rain spread into the West during the morning, crossing the country. An embedded line of very heavy rain crossed Ulster in the late afternoon. A clearance followed into the West during the afternoon, reaching the east coast after dark. Winds were moderate, southwesterly.

Rainfall: Nil at numerous locations to 29.8 mm at Dunlewy (Lough)

Temperature: Lowest max. 14.3°C at Ballyhaise, Slieve Bloom Mtns (Nealstown), highest

max. 18.6°C at Cahore (Kilmichael Hse). Lowest min. 6.8°C at Craggaunowen, highest min.

13.0°C at Dublin (Glasnevin), Dooks

Sunshine: 0.1 hours at Ballincurrig (Peafield) to 5.4 hours at Belmullet

ABOVE AVERAGE RAINFALL IN MOST PLACES

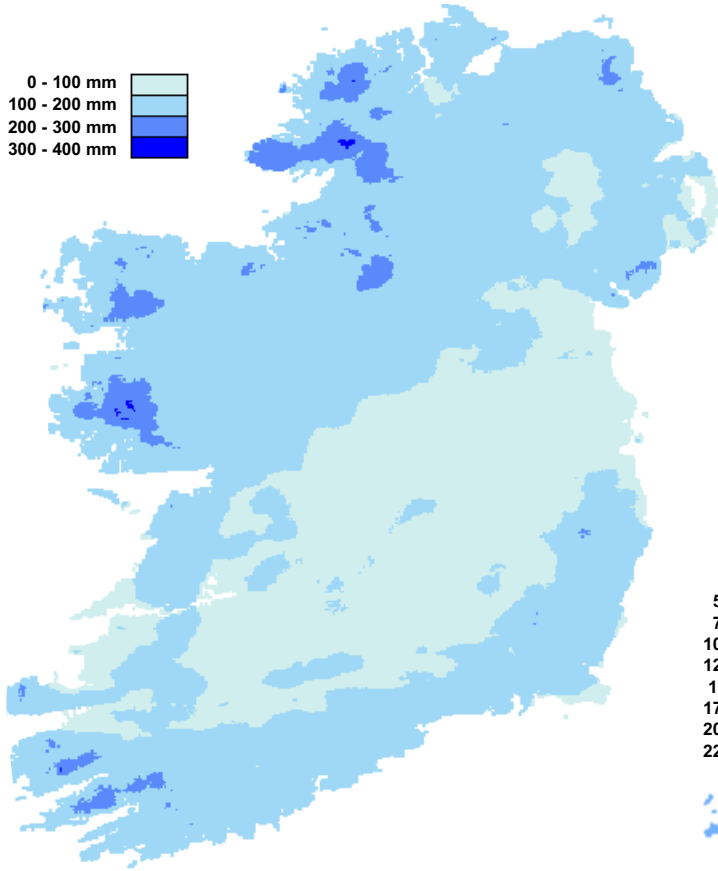
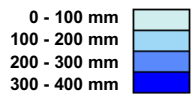
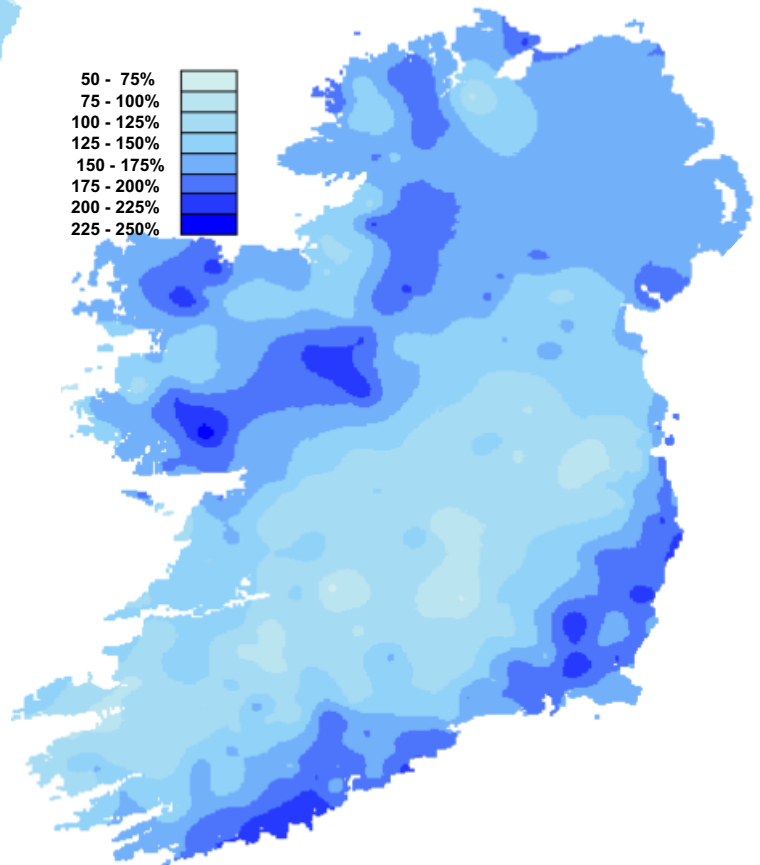
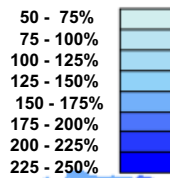
The majority of stations reported above Long-Term Average (LTA) rainfall with double or more the normal July rainfall at some stations in Roscommon, Mayo, Cork, Wexford and Wicklow. Below LTA rainfall values were reported in isolated areas, mainly in the Midlands and Southwest. Percentage of LTA values ranged from 72% at Tullaroan (Ballybeagh), Co Kilkenny with 53.7 mm, its wettest July in five years to 225% at Roscommon (Vocational School) with 159.0 mm, its wettest July since 2009. Greencastle (Craughhauin Mountain), Co Donegal reported its second wettest July on record since 1948 with a total of 149.9 mm (183% of its LTA), its wettest July since 1950. Similarly Claremorris, Co Mayo reported its third wettest July on record since 1943 with 130.9 mm (176% of its LTA) and its highest rainfall total on available record since 1953. Monthly rainfall totals were lowest in Kildare, with Celbridge (Ardrass House) recording 42.8 mm (79% of its LTA). The month's highest rainfall total in a low-lying region (area below 200 m) was at Derrypark, Co Mayo with 251.9 mm, double its normal July rainfall, while the overall highest rainfall accumulation was in the Cummeragh Mountains, Co Kerry with 342.0 mm (147% of its LTA). The wettest days of the month were mainly the 5th, 18th and 25th, with the highest daily rainfall reported at Ballineen (Caherkirky), Co Cork on the 5th with 47.2 mm, a quarter of its monthly total of 188.9 mm (194 % of its LTA) and its wettest July day in 6 years. Foulkesmills (Longraigue), Co Wexford reported its wettest July day in 37 years with 40.8 mm and its second wettest July day on record since the station opened in 1941.

The number of wet days (*days with 1 mm or more*) were up to 28 at Mulrany (Doughbeg), Co Mayo while the number of very wet days (*days with 10 mm or more*) ranged from none at numerous locations to 11 at Keenagh Beg, Co Mayo and Maam Valley, Co Galway.

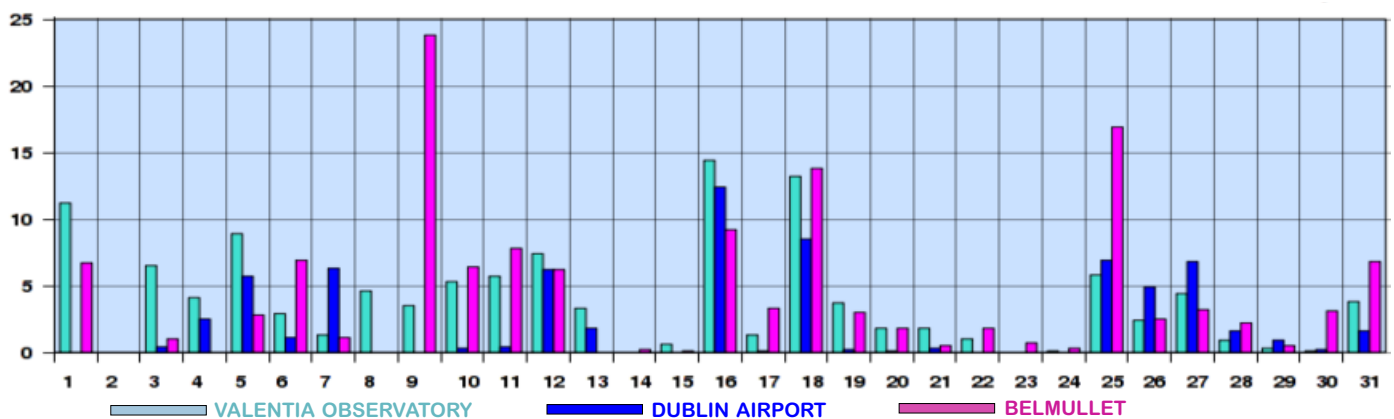
COUNTY/ STATION	TOTAL AMOUNT (mm)	% OF 1981-2010 AVERAGE	MOST IN A DAY / DATE		NUMBER OF RAINDAYS WETDAYS (≥0.2mm) (≥1mm)	
CO CARLOW						
CARLOW (OAK PARK)	79.4	135	14.6*	16	20*	14*
CO CAVAN						
BALLYHAISE	134.6	183	15.2	26	24	20
CO CLARE						
CARRON	158.3	147	18.8	11	26	23
SHANNON AIRPORT	82.8	126	13.2	18	23	20
CO CORK						
BALLINCURRIG (PEAFIELD)	153.9	175	34.7	5	25	15
CORK AIRPORT	159.1	202	33.5	5	24	17
FERMOY (MOORE PARK)	97.0	156	18.8*	5	23*	18*
ROCHE'S POINT	122.9	195	27.3	5	18	16
SHERKIN ISLAND	127.6	164	23.9	5	25	20
CO DONEGAL						
BALLYSHANNON (CATHLEEN'S FALL)	123.1	138	20.7	18	23	21
GLENTIES HATCHERY	182.9	163	22.8	18	28	22
MALIN HEAD	132.7	164	17.4	27	26	21
CO DUBLIN						
CASEMENT AERODROME	62.5	115	9.5	5	20	16
DUBLIN (MERRION SQUARE)	64.8	125	8.1	18	20	14
DUBLIN AIRPORT	69.2	123	12.4	16	20	13
DUBLIN (PHOENIX PARK)	67.1	122	10.4	16	20	14
CO GALWAY						
MAAM VALLEY	284.5	188	41.4	18	27	21
CO KERRY						
ARDFERT (LISCAHANE)	73.7	101	17.2	18	25	17
VALENTIA OBSERVATORY	120.3	122	14.4	16	26	23
CO KILKENNY						
THOMASTOWN	71.6	113	11.4	16	21	18
CO LIMERICK						
MOUNT RUSSELL	116.1	132	17.2	16	26	20
CO MAYO						
BELMULLET	132.6	168	23.8	9	26	21
DELPHI LODGE	170.5	***	18.7	11	27	23
KNOCK AIRPORT	160.9	168	22.0	18	25	22
STRAIDE	118.3	158	20.8*	18	25*	20*
CO MEATH						
WARRENTOWN	78.0	126	11.8	5	22	17
CO MONAGHAN						
CARRICKMACROSS (DUNOGE)	94.1	138	19.3	26	24	16
CO OFFALY						
DERRYGREENAGH	92.9	131	14.2	5	23	16
CO ROSCOMMON						
MOUNTDILLON	125.1	171	16.0	26	25	22
CO SLIGO						
ARDTARMON	111.1	134	15.3*	18	23*	22*
CO TIPPERARY						
FETHARD (PARSONSHILL)	77.9	112	15.0	5	24	17
GURTEEN (AG.COLLEGE)	71.5	107	8.3	1	24	18
CO WATERFORD						
DUNGARVAN (CARRIGLEA)	127.3	173	30.8	5	21	15
WATERFORD (TYCOR)	129.1	185	38.2	6	19	19
CO WESTMEATH						
MULLINGAR	76.5	108	8.1	25	24	18
CO WEXFORD						
CLONROCHE (KNOXTOWN)	-----	-----	not available		-----	-----
JOHNSTOWN CASTLE	118.8	163	23.7	16	22	15
CO WICKLOW						
ASHFORD (CRONYKEERY)	94.7	197	37.7	16	16	10

* ESTIMATED DATA USED IN CALCULATION. TABLE REPRESENTS DATA FROM A SMALL SELECTION OF RAINFALL STATIONS. ALL DATA IS 09-09 HR

TOTAL RAINFALL (mm)

PERCENTAGE OF NORMAL RAINFALL
(1981-2010 NORMALS)

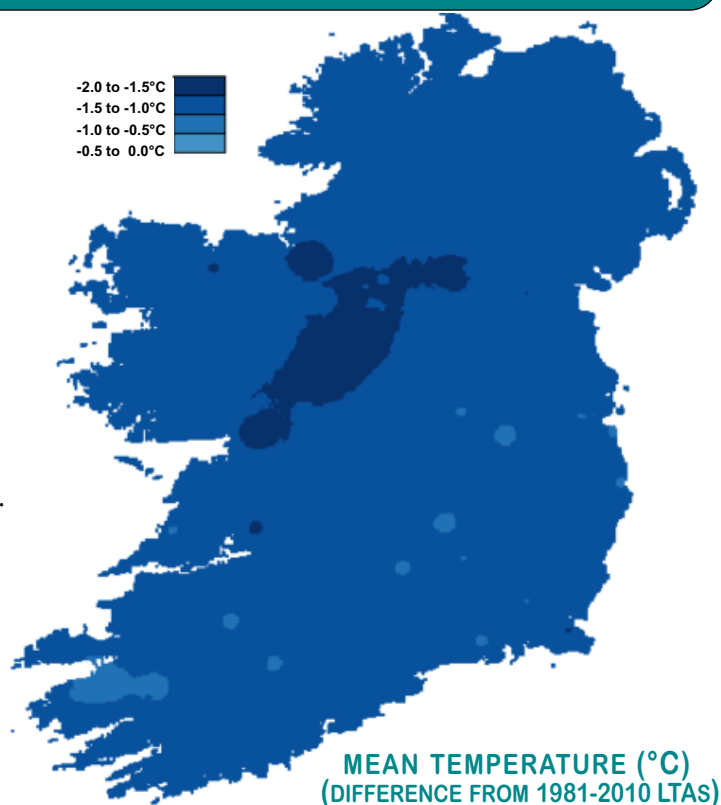
DAILY 0901-0900hr RAINFALL VALUES (mm)



BELOW LONG-TERM AVERAGE MEAN TEMPERATURES EVERYWHERE

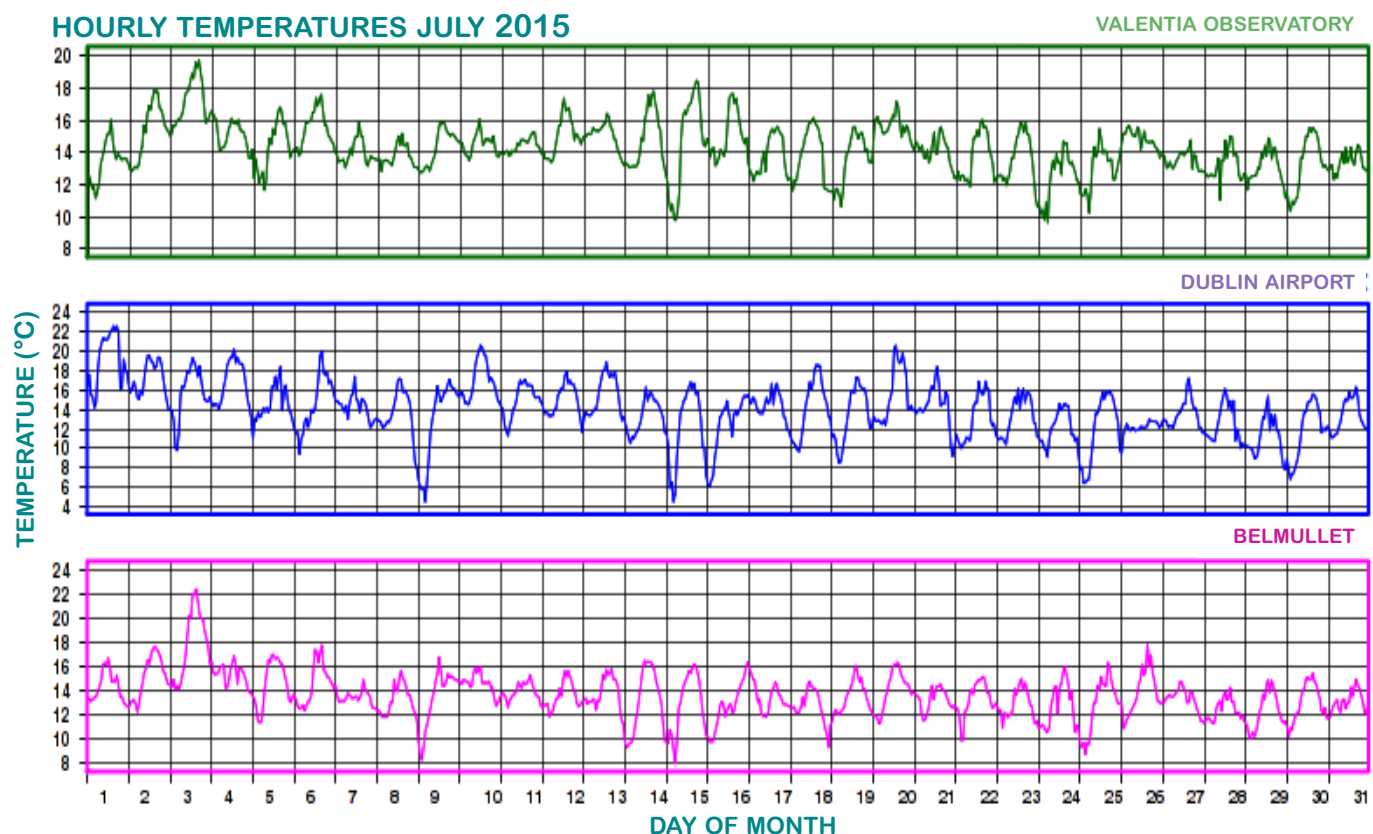
Monthly mean air temperatures were all below Long-Term Average (LTA) with highest deviations from average in parts of the West and Midlands. Differences from LTA were the most in county Sligo at Markree with -2.0°C with a mean temperature of 13.3°C , its coolest July since 2008. Claremorris, Co Mayo reported a mean temperature of 13.4°C (-1.7°C from LTA) equalling its lowest mean temperature for July since 1965 while Craggaunowen, Co Clare reported a mean temperature of 14.0°C (-1.8°C from LTA), its coolest July since the station opened in 1994. Mean air temperatures ranged from 12.7°C (-1.3°C from LTA) at Knock Airport, Co Mayo, equalling its lowest on record since the station opened in 1996 to 15.8°C at Dublin (Glasnevin), (-0.8°C from LTA), with the station reporting cooler conditions in 2012.

The majority of highest maxima were reported between the 1st and 3rd. Highest maxima in July were lowest at both Cloosh, Co Galway and Sherkin Island Co Cork with 18.2°C . Cloosh reported its maximum on three consecutive days the 13th, 14th and 15th, its lowest July maximum since 1988 while Sherkin Island, Co Cork reported its highest temperature on the 3rd, its lowest for July since 1986. The month's highest temperature was reported on the 1st at Castleconnell, Co Limerick with 25.6°C . The majority of lowest



minima were recorded on the 24th, 25th and 30th and ranged from 3.0°C (on the 30th) at Castleconnell, its lowest July temperature since 2004 to 9.2°C (on the 15th) at Valentia Observatory, Co Kerry. There were no instances of air frost but there was ground frost reported in parts of the Midlands and West on the 24th, 25th and 30th with the month's lowest grass minimum reported at Cloosh on the 25th with -2.7°C .

HOURLY TEMPERATURES JULY 2015



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
CO CARLOW										
CARLOW (OAK PARK)	18.5	11.0	14.7	-1.3	23.4 1	6.4 30	0.0 30		0	0
CO CAVAN										
BALLYHAISE	17.0	10.2	13.6	-1.9	22.3 3	4.9 15	1.7 15		0	0
CO CLARE										
CARRON	16.6	10.4	13.5	-1.3	20.6 3	7.1 25	4.3 24		0	0
SHANNON AIRPORT	18.1	11.7	14.9	-1.5	21.6 3, 6	7.1 25 30	3.6 25		0	0
CO CORK										
BALLINCURRIG (PEAFIELD)	17.7	10.4	14.1	-1.0	21.8 1	6.3 30	6.1 30		0	0
CORK AIRPORT	17.0	10.7	13.9	-1.4	20.7 13	7.6 28	2.6 19		0	0
FERMOY (MOORE PARK)	18.0	11.0	14.5	-1.2	22.0 1	5.7 30	3.5 19		0	0
ROCHE'S POINT	16.7	11.8	14.3	-1.3	20.0 13	8.2 30	6.1 30		0	0
SHERKIN ISLAND	16.2	12.3	14.2	-1.3	18.2 3	7.9 30	2.3 30		0	0
CO DONEGAL										
BALLYSHANNON (CATHLEEN'S FALL)	16.8	11.4	14.1	-1.0	23.4 3	8.5 25			0	
GLENTIES HATCHERY	17.0	10.5	13.7	-1.1	22.6 3	5.9 25	2.4 25		0	0
MALIN HEAD	15.9	11.2	13.5	-1.0	21.4 3	8.4 6	5.6 16		0	0
CO DUBLIN										
CASEMENT AERODROME	18.5	10.7	14.6	-1.1	23.3 1	4.5 9	0.3 9		0	0
DUBLIN (MERRION SQUARE)	18.1	12.0	15.0	-1.7	22.1 1	8.3 30			0	
DUBLIN AIRPORT	18.2	10.1	14.1	-1.5	23.4 1	3.9 15	0.8 9		0	0
DUBLIN (PHOENIX PARK)	18.9	10.9	14.9	-0.9	23.6 1	5.5 9	0.1 9		0	0
CO GALWAY										
MAAM VALLEY	17.1	10.9	14.0	-1.2	19.7 1, 2	6.0 25	4.4 25		0	0
CO KERRY										
ARDFERT (LISCAHANE)	17.7	11.2	14.5	-1.1	20.6 6	5.6 24	5.1 24		0	0
VALENTIA OBSERVATORY	16.6	12.2	14.4	-1.0	20.5 3	9.2 15	5.3 30		0	0
CO LIMERICK										
MOUNTRUSSELL	17.2	10.8	14.0	-1.1	21.6 1	7.3 30	2.1 30		0	0
CO MAYO										
BELMULLET	16.4	11.2	13.8	-1.1	22.8 3	7.6 15	5.2 15		0	0
DELPHI LODGE	16.7	11.1	13.9	-1.2	21.6 3	7.5 24	1.1 15		0	0
KNOCK AIRPORT	15.8	9.6	12.7	-1.3	21.3 3	6.7 19	1.8 9		0	0
STRAIDE	17.5	10.2	13.9	-1.2	21.6 3	5.5 25	-1.0 25		0	1
CO MEATH										
WARRENTOWN	18.6	10.7	14.6	-1.0	23.9 1	3.6 9	1.6 9		0	0
CO MONAGHAN										
CARRICKMACROSS (DUNOGE)	17.8	10.1	14.0	-1.5	23.6 1	4.3 15			0	
CO OFFALY										
DERRYGREENAGH	18.4	10.8	14.6	-0.8	24.9 1	6.9 25	4.7 25		0	0
CO ROSCOMMON										
MOUNTDILLON	17.5	9.8	13.7	-1.8	23.8 1	3.1 24	2.5 24		0	0
CO SLIGO										
ARDTARMON	17.5	11.0	14.2	-1.3	23.8 3	8.2 9	3.1 9 30		0	0
CO TIPPERARY										
FETHARD (PARSONSHILL)	17.7	10.5	14.1	-1.2	23.9 1	6.9 25	5.6 30		0	0
GURTEEN (AG.COLLEGE)	17.8	10.7	14.2	-1.3	23.1 1	6.8 30	3.0 25 30		0	0
CO WATERFORD										
DUNGARVAN (CARRIGLEA)	18.7	10.9	14.8	-1.4	23.0 1	4.5 30	0.0 30		0	0
WATERFORD (TYCOR)	18.6	12.2	15.4	-0.8	21.9 1	8.9 30			0	
CO WESTMEATH										
MULLINGAR	17.5	9.9	13.7	-1.5	22.6 1	4.1 9	0.0 9		0	0
CO WEXFORD										
CLONROCHE (KNOXTOWN)	18.0	10.5	14.3	-0.9	22.5 1	5.5 16	1.7 30		0	0
JOHNSTOWN CASTLE	17.0	11.5	14.2	-1.4	20.0 1	6.1 30	0.9 30		0	0
CO WICKLOW										
ASHFORD (CRONYKEERY)	18.8	10.8	14.8	-0.8	22.9 1	5.5 16	0.1 23		0	0

* PARTIAL DATA USED IN CALCULATION. TABLE REPRESENTS DATA FROM A SMALL SELECTION OF STATIONS. ALL DATA IS 09-09 HR

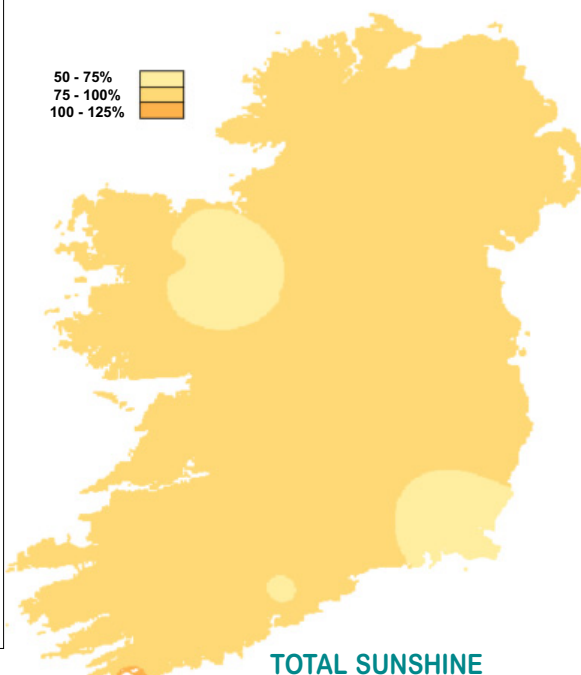
COUNTY/ STATION	DAILY MEAN (HOURS/DAY)	% OF 1981-2010 LTA	DULL DAYS (≤ 0.5 HRS)	MOST IN A DAY/DATE	
CO CLARE					
SHANNON AIRPORT	4.06	91	7	12.8	15
CO CORK					
BALLINCURRIG (PEAFIELD)	3.91	72	6	10.7	17
CORK AIRPORT	4.69	86	5	12.4	17
SHERKIN ISLAND	6.00	101	9	14.1	17
CO DONEGAL					
BALLYSHANNON (CATHLEEN'S FALL)	3.36	80	5	9.0	19
CO DUBLIN					
CASEMENT AERODROME	3.89	78	2	9.9	3
DUBLIN (GLASNEVIN)	4.44	85	1	10.7	4
DUBLIN AIRPORT	4.34	82	2	11.1	3
CO KERRY					
ARDFERT (LISCAHANE)	3.44	76	9	10.3	24
VALENTIA OBSERVATORY*	3.45		9	13.0	15
CO MAYO					
BELMULLET*	4.37		5	14.0	5
KNOCK AIRPORT	2.63	62	7	7.1	3
NEWPORT (FURNACE)	3.05	77	7	10.2	29
STRAIDE	3.28	75	8	10.5	29
CO WATERFORD					
DUNGARVAN (CARRIGLEA)	5.11	95	4	11.5	17
CO WEXFORD					
CLONROCHE (KNOXTOWN)	3.89	69	5	10.0	4
JFK PARK	3.70	71	6	10.8	15
CO WICKLOW					
ARKLOW (BALLYRICHARD HSE.)	4.96		3	12.2	18
ASHFORD (CRONYKEERY)	4.25	75	2	12.7	15
* PARTIAL DATA USED IN CALCULATION * SUNSHINE DURATION DERIVED FROM AUTOSOL INSTRUMENTS. LONG-TERM AVERAGE COMPARISONS ARE NOT USED WITH AUTOSOL READINGS.					

* PARTIAL DATA USED IN CALCULATION
 * SUNSHINE DURATION DERIVED FROM AUTOSOL
 INSTRUMENTS. LONG-TERM AVERAGE
 COMPARISONS ARE NOT USED WITH AUTOSOL
 READINGS.

BELOW LTA SUNSHINE IN MOST PLACES; SUNNIEST DAY IN THE SOUTH

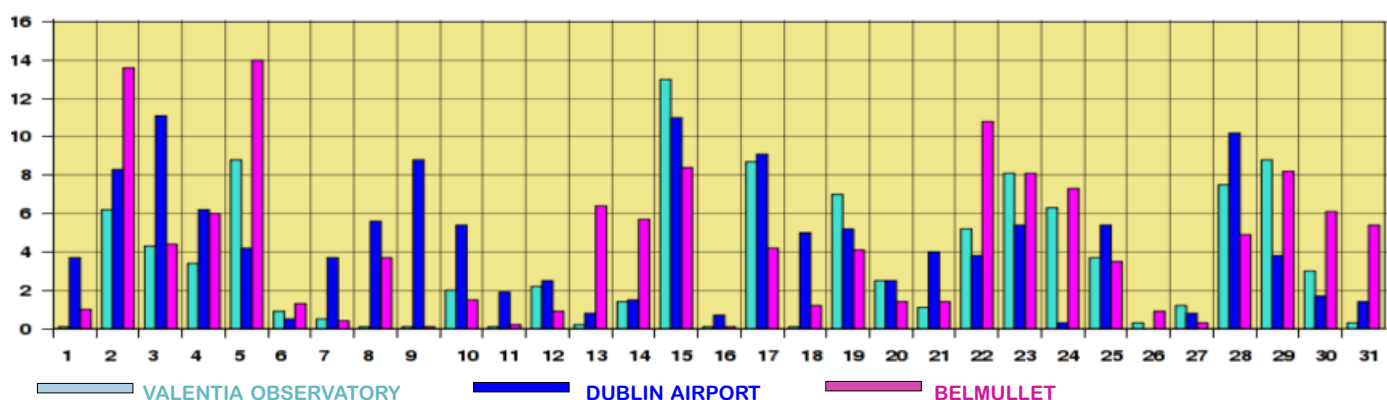
Nearly all sunshine totals were on or below their Long-Term Average (LTA) for July. Percentage of LTA values ranged from 62% at Knock Airport, Co Mayo (lowest monthly sunshine total of 81.6 hours) to 101% at Sherkin Island, Co Cork (highest monthly sunshine total of 186.0 hours). Ballincurrig (Peafield), Co Cork reported a monthly total of 121.2 hours (72% of its LTA) and its dullest July since it opened in 1998. Other stations of Ashford (Cronykeery), Co Wicklow and Clonroche (Knoxtown), Co Wexford also reported their dullest July since 2004. The month's sunniest day was at Sherkin Island on the 17th with 14.1 hours. The number of monthly dull days were up to nine at stations in the Kerry area.

Percentage of global solar radiation LTA values were variable, ranging from 92% at Valentia Observatory, Co Kerry to 104% Belmullet, Co Mayo.

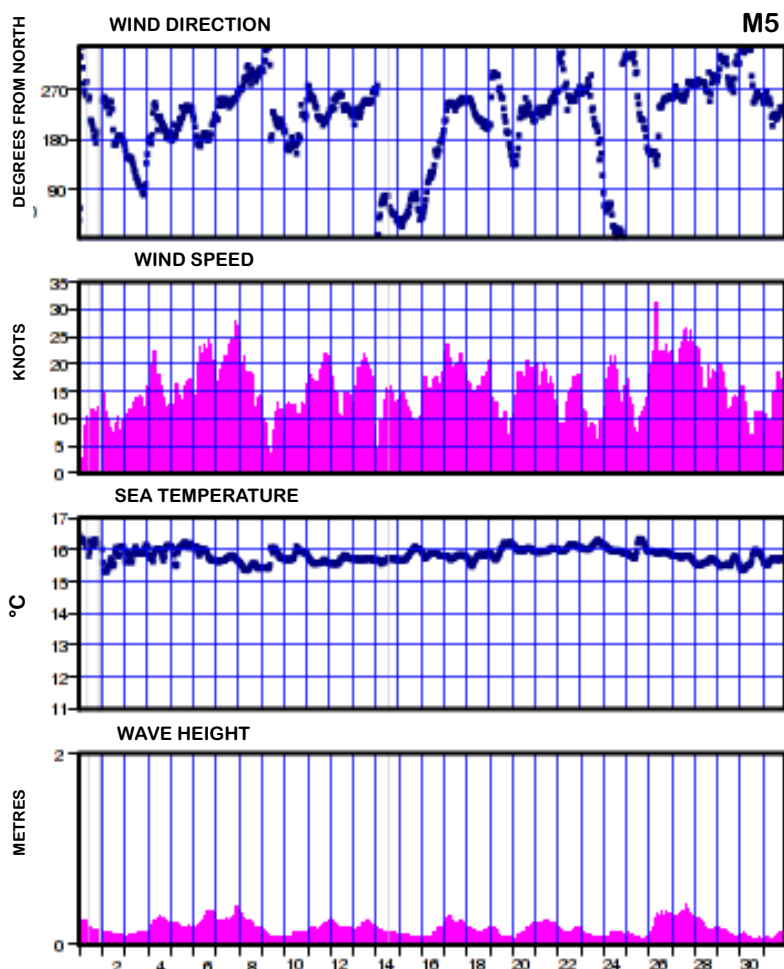


TOTAL SUNSHINE
(PERCENTAGE OF 1981-2010 NORMALS)

DAILY SUNSHINE VALUES (HOURS)



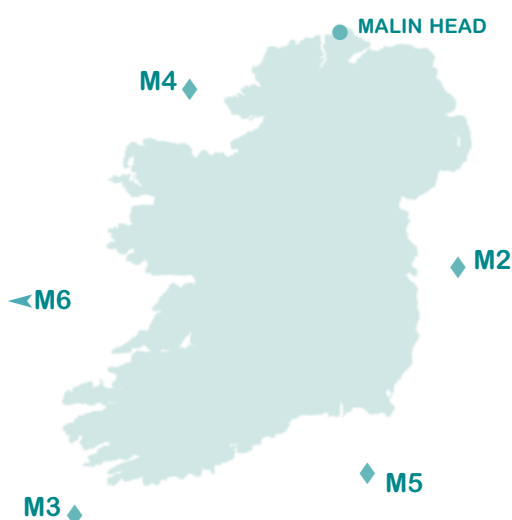
MARINE OBSERVATIONS FROM IRISH MARINE DATA BUOY NETWORK



HOURLY SEA TEMPERATURE AND WAVE CONDITIONS AT M5 (51° 41' 24" N 6° 42' 16" W)

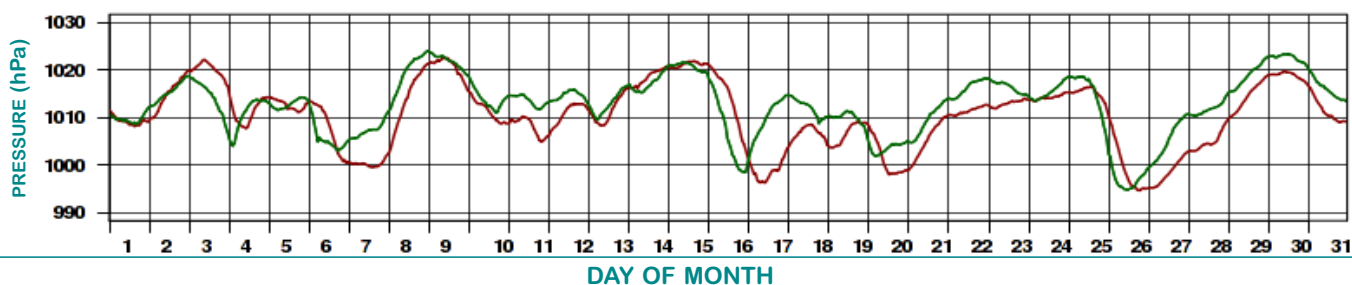
BUOY	SEA SURFACE TEMP. (°C)	MEAN WIND SPEED (knots)	MAX 10-MIN WIND (knots)	MEAN SIGNIFICANT WAVE HEIGHT (m)	MAX SIGNIFICANT WAVE HEIGHT (m)
M2	12.4	11.7	30.0	0.9	2.9
M3	n/a	14.1	26.3	2.2	5.8
M4	13.3	12.5	33.7	n/a	n/a
M5	15.8	14.5	31.0	1.7	4.2
M6	13.5	14.3	30.0	2.2	4.8
MALIN HEAD	13.9	* PARTIAL DATA			

SUMMARY OF MEAN MONTHLY VALUES



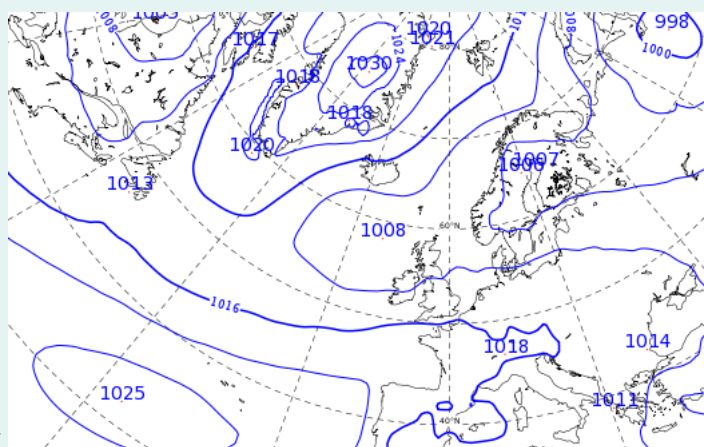
HOURLY MEAN SEA LEVEL PRESSURE JULY 2015

MALIN HEAD VALENTIA OBSERVATORY



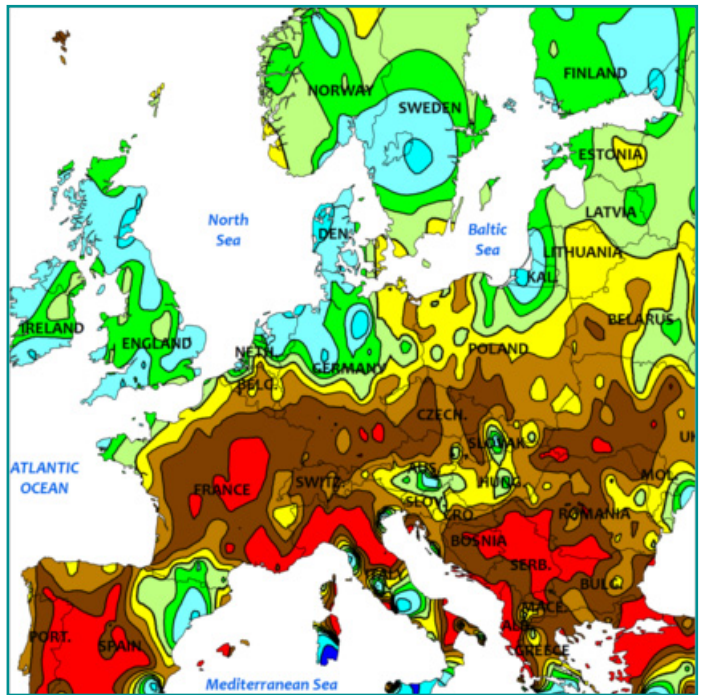
ATMOSPHERIC PRESSURE

Monthly mean sea level pressure values ranged from just below 1011 hPa in the North to just above 1013 hPa in the South. The month's lowest pressure value of 991.5 hPa was recorded at Belmullet, Co Mayo on the 26th between 1400 and 1500 UTC as a depression of 990 hPa was centred near the western coast. The month's highest pressure value was 1024.8 hPa recorded at Cork Airport on the 9th between 0800 UTC and 0900 UTC as a anticyclone of 1026 hPa was located over the northeast of France and the Bay of Biscay.

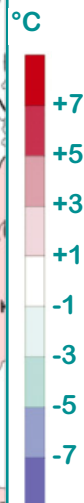


MONTHLY MEAN MSL PRESSURE, BASED ON 1200 UTC VALUES

JULY RAINFALL (PERCENTAGE OF 1961-1990 NORMAL)



JULY MEAN TEMPERATURE (DIFFERENCE FROM 1961-1990 NORMAL)



MAPS SUPPLIED BY NOAA
CLIMATE PREDICTION CENTRE,
US DEPARTMENT OF COMMERCE.
GLOBAL WEATHER HIGHLIGHTS SUPPLIED
BY AON BENFIELD



GLOBAL WEATHER SUMMARY

