

MONTHLY WEATHER BULLETIN

NO. 352
SEPTEMBER 2015



An rare moon event appeared in the Irish skies on the 28th of September. Two things happened concurrently; a lunar eclipse where the Earth cast its whole shadow over the moon and a 'supermoon' where the full moon was at its closest point to Earth. These two occurrences together have not been viewable in Ireland since 1982. The total eclipse lasted from 3.11am till 4.23am, with the picture above taken at this time in Cork city with the cross on St. Joseph's SMA Church, Wilton, in the foreground. (Picture courtesy Irish Examiner, Photographer Denis Minihane)

COOL EVERYWHERE; HEAVY RAINFALL AT TIMES IN PLACES

All monthly mean air temperatures were below their LTA (Long-Term Average) with stations reporting deviations from normal of at least -0.2°C . Differences from LTA were as much as -1.4°C at four stations located in the East, with these stations reporting their coolest September

conditions in seven to 29 years. The majority of highest maxima were reported between the 8th and 10th and ranged from 17.3°C at both Dublin Airport and Arklow (Ballyrichard Hse), Co Wicklow their lowest September maxima since the stations opened in 1942 and 1984, respectively



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Around mid-month, flooding occurred in parts of the South as some places recorded at least three consecutive very wet days (rainfall greater than 10.0 mm). Lombardstown, Co Cork was affected with fields flooding (above). Nearby rainfall station located at Lombardstown (Drompeach) recorded four days with heavy rainfall; 10.1 mm on the 10th, 17.0 mm on the 11th, 15.0 mm on the 12th and 25.6 mm on the 14th, leading to over two-thirds of its monthly total of 98.4 mm being recorded (94% of its LTA). (Picture courtesy Irish Examiner, Photographer Des Barry)

to 21.4°C at Glengarriff, Co Cork. The majority of lowest minima were on the 6th, 16th, 25th and 30th and ranged from 0.6°C at Straide, Co Mayo to 8.2°C at Sherkin Island, Co Cork.

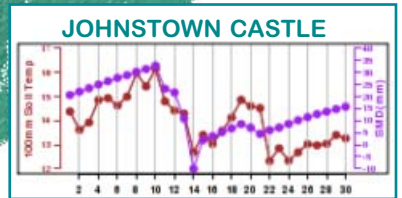
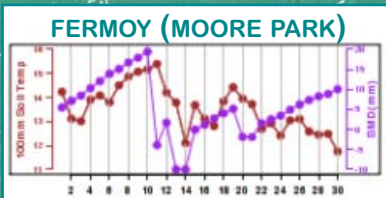
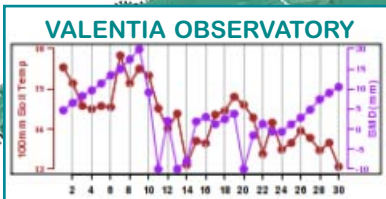
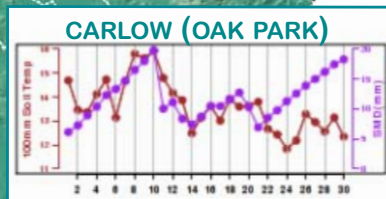
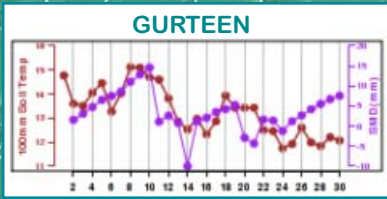
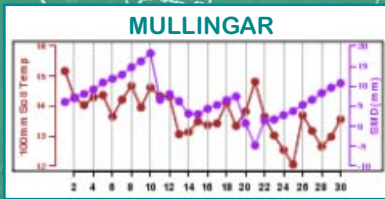
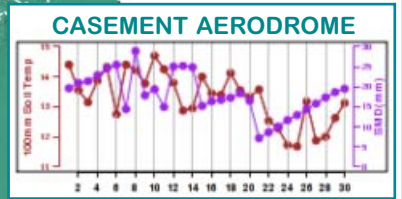
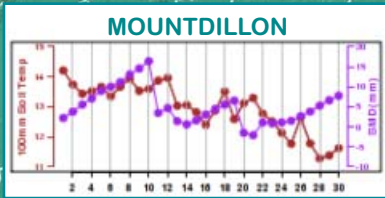
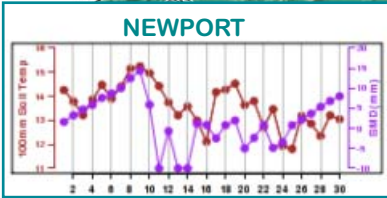
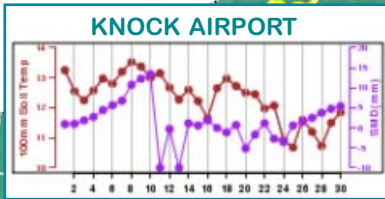
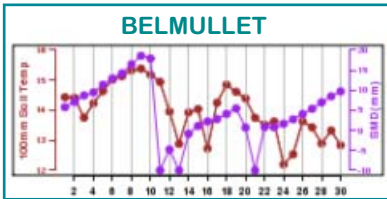
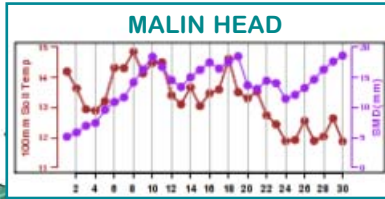
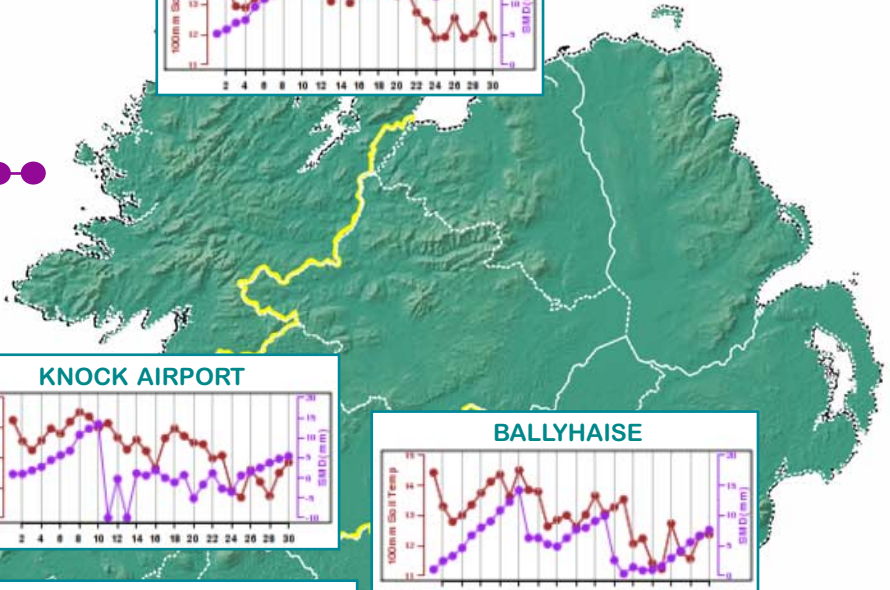
Monthly rainfall comparisons to LTAs were variable, with the majority of stations reporting below average rainfall. Percentage of LTA values ranged from 20% at Ballinatona Mountains, Co Wicklow with a monthly total of 20.0 mm to 200% at Goleen, Co Cork with 228.5 mm. Monthly rainfall totals in low-lying areas (regions below 200 m) were up 259.0 mm at Kylemore Abbey Gardens, Co Galway while the overall highest monthly accumulation was at a gauge in the Cummeragh Mountains, Co Kerry with 304.0 mm (107% of LTA). The wettest days/highest daily rainfall for stations were mainly the 10th, 11th and 13th, with around 75% of stations attributing up to two-thirds of their monthly total to their highest daily rainfall. Glenealy (Kilmacurragh Park), Co Wicklow reported a highest daily fall of 38.6 mm on the 11th, its wettest September day in five years and nearly three-quarters of its monthly total of 52.0 mm (55% of LTA). Camus, Co Galway reported a daily fall of 100.9 mm also on the 11th, over half of its monthly total of 191.4 mm (162% of LTA) and its wettest day on record since the station opened in 2001. The number of very wet

days (*days with 10 mm or more*) ranged from none in parts of the East six in areas in Kerry, Wicklow and Galway.

Percentage of LTA sunshine values were variable and were lowest at Knock Airport, Co Mayo with 66% (lowest monthly sunshine total of 69.7 hours) and highest at Clonroche (Knoxtown), Co Wexford with 108% (monthly sunshine total of 141.8 hours). The month's highest daily sunshine was at Valentia Observatory, Co Kerry on the 6th with 11.8 hours. The number of dull days (*days with less than 0.5 hours of sunshine*) were up to eight at both Knock Airport and Shannon Airport, Co Clare.

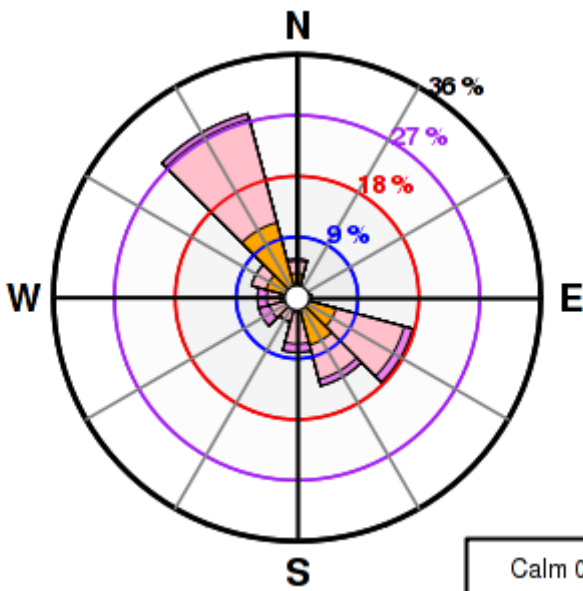
Wind and elements: Monthly mean wind speeds ranged from 5.0 knots (*9.3 km/h*) at both Mullingar, Co Westmeath and Ballyhaise, Co. Cavan to 13.1 knots (*24.3 km/h*) at Malin Head, Co Donegal. No gale-force or stronger winds were recorded during the month with Malin Head recording the highest 10-minute mean wind speeds of 32 knots (*59 km/h*) on the 12th. Gusts greater than 34 knots (*63 km/h*) were reported on eight days mostly mainly along the Atlantic Coast. The month's highest gust was 44 knots (*82 km/h*) at Finner, Co. Sligo also on the 12th. Fog was reported on eight days mainly at a small selection of stations in the Midlands and Northwest.

DAILY SOIL MOISTURE DEFICITS & SOIL TEMPERATURES



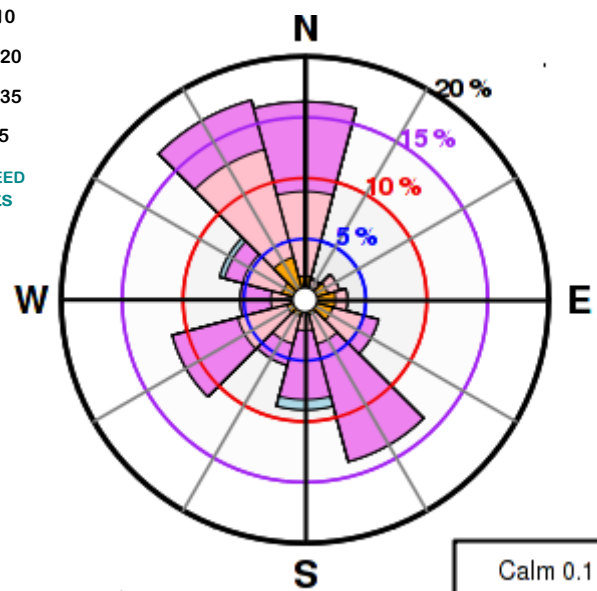
COUNTY / STATION	WIND (knots)										ELEMENTS (no.of days)					
	MEAN SPEED	MAX. 10-MIN. DIR.	MEAN SPEED	DATE/HOUR	MAX. GUST DIR.	GUST SPEED	DATE/TIME	DAYS WITH		HOURS WITH		SNOW	SNOW LYING	HAIL	THUNDER	FOG
								GALES	GUST > 34KNOTS	GUST > 34KNOTS	GUST > 34KNOTS					
CO CARLOW OAK PARK	6.1	260°	20	24/12	260°	30	24/1440	0	0	0						
CO CAVAN BALLYHAISE	5.0	130°	15	10/11	140°	25	10/1151	0	0	0						
CO CLARE SHANNON AIRPORT	7.8	260° 150°	22 22	24/11 28/14	260°	34	24/1048	0	1	1	0	0	0	0	0	1
CO CORK FERMOY (MOORE PARK)	5.3	140°	15	10/14	270°	26	24/1409	0	0	0						
SHERKIN ISLAND	10.7	300°	30	11/14	280°	42	11/1444	0	2	3						
ROCHE'S POINT	10.5	300°	23	14/ 1	200°	32	20/1148	0	0	0						
CORK AIRPORT	8.7	180° 340°	23 23	20/11 4/16	120°	30	11/1549	0	0	0	0	0	0	0	0	3
CO DONEGAL MALIN HEAD	13.1	220°	32	12/11	230°	43	12/1408	0	3	22						
FINNER	8.8	240°	30	12/ 7	250°	44	12/ 708	0	3	10						
CO DUBLIN DUBLIN AIRPORT	9.0	130°	22	12/ 2	130°	30	12/ 51	0	0	0	0	0	0	0	0	1
CASEMENT AERODROME	6.8	260° 250°	20 20	23/13 24/14	260° 240°	30 28	24/1532 11/2236 12/1133	0	0	0	0	0	0	0	0	2
CO GALWAY MACE HEAD	12.5	290° 300°	30 30	12/ 1 21/19	250°	38	23/1737	0	6	16						
ATHENRY	6.1	280°	19	11/23	260°	29	24/1407	0	0	0						
CO KERRY VALENTIA OBSERVATORY	8.1	330° 280°	20 20	13/19 14/18	140°	33	28/1203	0	0	0						
CO MAYO CLAREMORRIS	6.6	280°	18	12/ 2	270°	28	24/ 538	0	0	0						
BELMULLET	9.6	180°	26	20/ 5	350°	36	13/2152	0	3	7						
NEWPORT	8.3	310°	24	12/ 1	320°	37	12/ 110	0	1	1						
KNOCK AIRPORT	8.3	330°	22	4/ 3	270°	33	12/ 233	0	0	0	0					10
CO MEATH DUNSANY (GRANGE)	6.2	230°	18	12/12	230° 240°	26 26	12/1226 23/1401	0	0	0						
CO ROSCOMMON MOUNTDILLON	5.7	130° 260°	17 17	10/ 8 24/13	270°	29	24/1353	0	0	0						
CO TIPPERARY GURTEEN (AG COLLEGE)	6.8	280°	20	24/12	280°	29	24/1224	0	0	0						
CO WESTMEATH MULLINGAR	5.0	150°	15	28/13	280° 150°	22 22	24/1227 28/1001	0	0	0						
CO WEXFORD JOHNSTOWN CASTLE	6.9	280°	19	21/20	300°	27	21/2034	0	0	0						

CARLOW (OAK PARK)



Calm 0 %

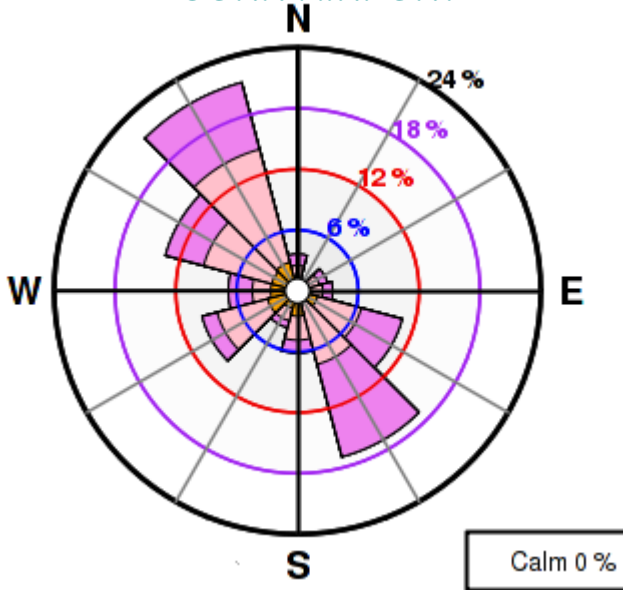
BELMULLET



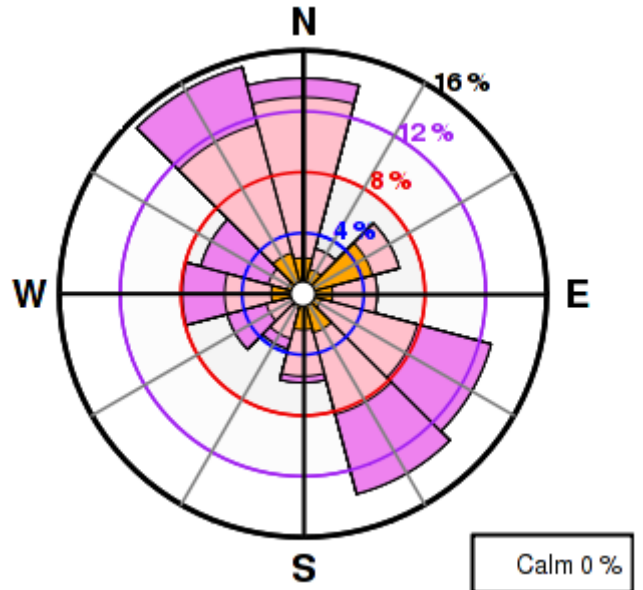
Calm 0.1 %

PERCENTAGE FREQUENCY OF WIND DIRECTION

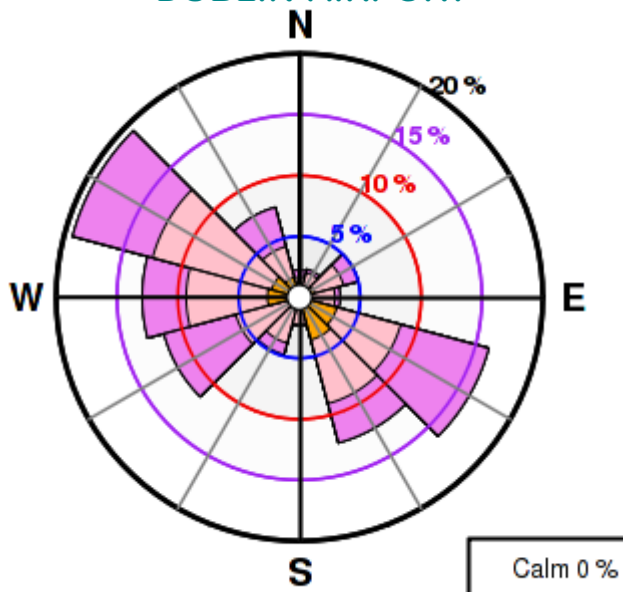
CORK AIRPORT



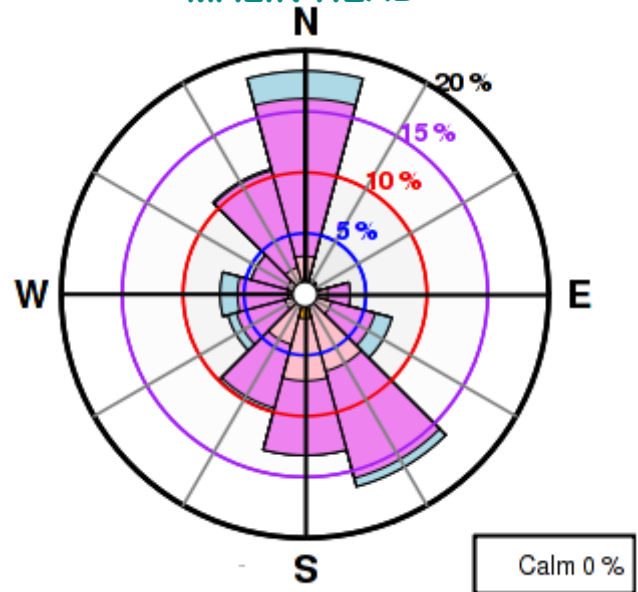
VALENTIA OBSERVATORY



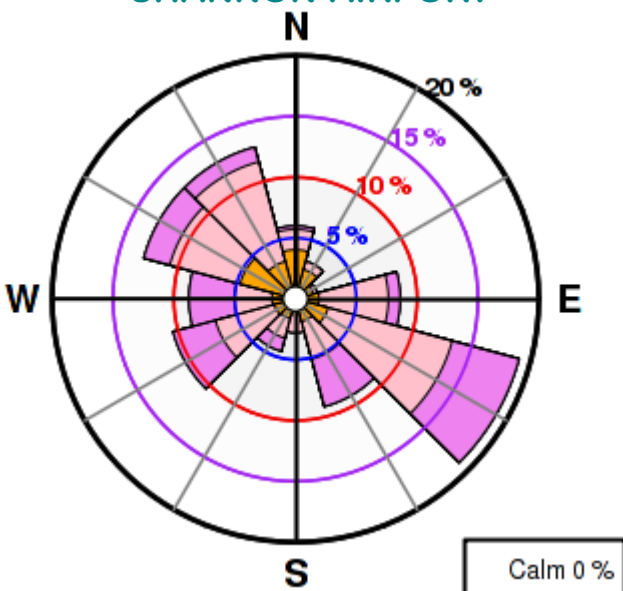
DUBLIN AIRPORT



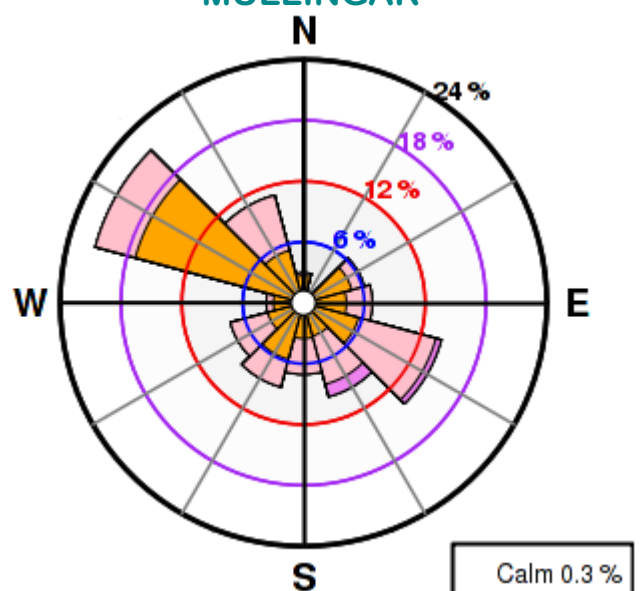
MALIN HEAD



SHANNON AIRPORT



MULLINGAR

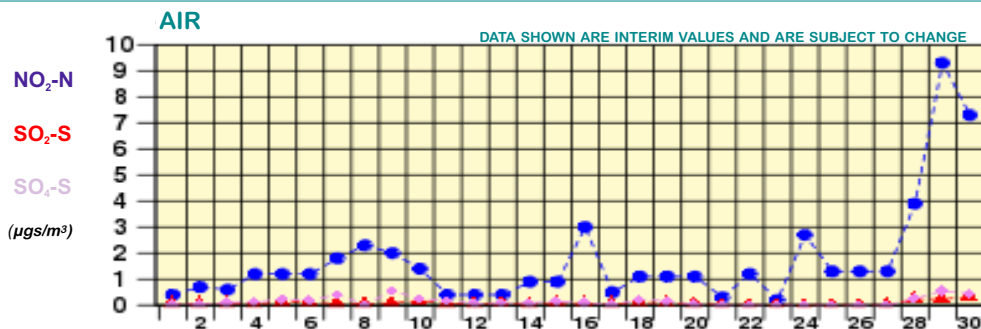
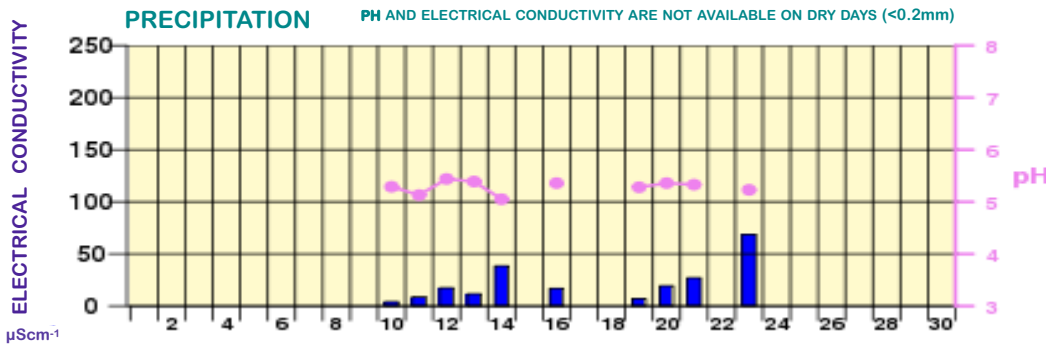


CHEMICAL ANALYSIS OF PRECIPITATION AND AIR SAMPLES AT VALENTIA OBSERVATORY

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.

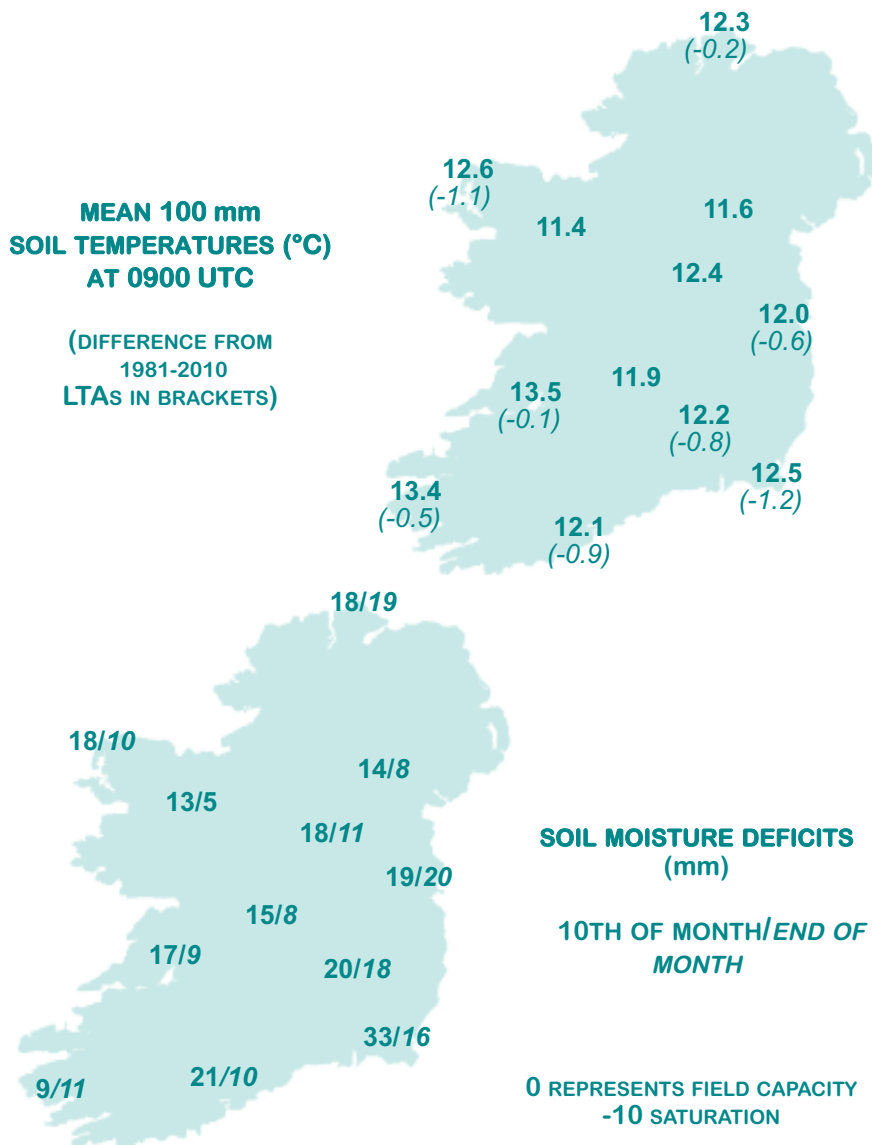
Conductivity measures the total ion activity in the rainfall, i.e. the higher the conductivity the greater the number of ions.

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)



MEAN SOIL TEMPERATURES (°C) AT 0900 UTC

COUNTY/STATION	100 mm	200 mm	300 mm
CO CARLOW			
CARLOW (OAK PARK)	12.2	12.8	13.0
CO. CAVAN			
BALLYHAISE	11.6	12.5	13.6
CO CLARE			
SHANNON AIRPORT	13.5	14.1	14.8
CARRON	12.4		13.3
CO CORK			
ROCHE'S POINT	12.6	13.2	13.6
FERMOY (MOORE PARK)	12.2	12.7	13.4
CORK AIRPORT	12.1	13.1	13.9
SHERKIN ISLAND	13.1	13.5	14.5
BALINCURRIG (PEAFIELD)	12.5	13.0	13.6
CO DONEGAL			
MALIN HEAD	12.3	12.6	13.3
CO DUBLIN			
PHOENIX PARK	12.1	13.5	13.7
DUBLIN AIRPORT	11.6	12.5	13.3
CASEMENT AERODROME	12.0	12.6	13.4
CO KERRY			
VALENTIA OBSERVATORY	13.4	14.1	14.4
CO LIMERICK			
MOUNTRUSSELL	11.9	12.9	
CO MAYO			
BELMULLET	12.6	13.7	14.3
NEWPORT (FURNACE)	12.3	12.8	13.4
STRAIDE	13.2		
KNOCK AIRPORT	11.4	11.9	12.3
CO MEATH			
WARRENSTOWN	12.5	13.6	14.7
DUNSANY (GRANGE)	11.6	13.0	13.6
CO TIPPERARY			
GURTEEN (AG COLLEGE)	11.9	12.5	12.8
FETHARD (PARSONSHILL)	12.7	13.6	
CO WATERFORD			
DUNGARVAN (CARRIGLEA)		14.2	14.5
CO WESTMEATH			
MULLINGAR	12.4	13.3	14.2
CO. WEXFORD			
JOHNSTOWN CASTLE	12.5	12.9	13.3
JFK PARK	13.6	14.2	15.8
CLONROCHE	13.2	13.7	14.2
CO WICKLOW			
ASHFORD (CRONYKEERY)	12.9	13.3	14.6

0 REPRESENTS FIELD CAPACITY
-10 SATURATION

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." °C	DATE	DAYS WITH GROUND FROST	MEAN 10CM AT 0900H	MEAN 30CM AT 0900H	TOTAL NO. OF HOURS	% OF AVERAGE
BALLINCURRIG	11-20	81.6	7	6	15.6	10.2	12.9	7.1	17	0	85	31	4.5	17	0	12.6	13.5	23.8			
(PEAFIELD)	21-END	2.4	3	2	16.2	8.9	12.6	7.0	25	0	82	29	5.0	25	0	11.7	12.9	52.8			
	MONTH	89.0	87	11	9	16.1	9.6	12.8	-0.3	7.0	25	0	253	92	4.5	17	0	12.5	13.6	117.3	89
CO DONEGAL	1-10	9.8	4	4	16.2	9.6	12.9	8.6	2	0	85	31	6.7	6	0	-	-	-	-		
GLENTIES HATCHERY	11-20	29.0	7	7	15.3	9.6	12.5	4.9	16	0	81	28	1.4	16	0	-	-	-	-		
	21-END	27.2	4	4	16.3	7.9	12.1	3.5	30	0	77	26	-0.2	30	1	-	-	-	-		
	MONTH	66.0	48	15	15	15.9	9.1	12.5	-0.3	3.5	30	0	243	85	-0.2	30	1	-	-	-	-
CO KERRY	1-10	23.2	4	1	17.5	8.9	13.2	3.9	6	0	88	35	3.5	6	0	-	-	-	-	50.4	
ARDFERT	11-20	107.7	8	7	15.7	10.1	12.9	7.1	16	0	85	30	6.0	16	0	-	-	-	-	13.4	
(LISCAHANE)	21-END	12.6	3	2	17.1	8.9	13.0	4.9	30	0	86	33	3.5	30	0	-	-	-	-	57.4	
	MONTH	143.5	160	15	10	16.7	9.3	13.0	-0.8	3.9	6	0	259	98	3.5	6	0	-	-	121.2	98
CO MONAGHAN	1-10	0.7	1	0	16.2	9.6	12.9	7.1	6	0	85	31	-	-	-	-	-	-	-	-	
CARRICKMACROSS	11-20	30.7	5	4	16.1	8.2	12.2	2.4	16	0	78	27	-	-	-	-	-	-	-	-	
	21-END	9.1	3	1	16.2	6.8	11.5	3.4	27	0	71	23	-	-	-	-	-	-	-	-	
	MONTH	40.5	56	9	5	16.2	8.2	12.2	-0.6	2.4	16	0	234	81	-	-	-	-	-	-	-
CO WATERFORD	1-10	0.5	1	0	17.7	9.8	13.8	5.5	6	0	94	41	3.0	2	0	-	-	-	15.3	52.5	
DUNGARVAN	11-20	74.9	6	5	17.7	9.9	13.8	8.5	19	0	94	40	4.4	16	0	-	-	-	14.7	27.9	
(CARRIGLEA)	21-END	1.9	2	1	17.1	8.2	12.7	5.5	25	0	82	31	0.9	25	0	-	-	-	13.6	56.9	
	MONTH	77.3	83	9	6	17.5	9.3	13.4	-0.5	5.5	6	0	270	112	0.9	25	0	-	14.5	137.3	102
CO WEXFORD	1-10	0.0	0	0	16.9	9.3	13.1	5.9	2	0	87	34	3.2	6	0	14.5	16.4	40.9			
JFK PARK	11-20	64.6	6	5	16.4	10.0	13.2	5.5	17	0	88	33	4.0	17	0	14.0	15.8	31.0			
	21-END	4.2	1	1	16.7	8.5	12.6	5.5	25	0	82	30	4.3	25	0	12.5	15.3	59.4			
	MONTH	68.8	81	7	6	16.6	9.3	13.0	-0.5	5.5	17	0	257	97	3.2	6	0	13.6	15.8	131.3	100
CO WICKLOW	1-10	2.2	1	1	16.8	9.4	13.1	6.8	6	0	87	33	-0.5	8	1	13.9	15.2	48.3			
ASHFORD	11-20	52.6	5	4	16.6	9.0	12.8	5.9	16	0	84	32	-0.2	16	1	13.6	14.9	26.7			
(CRONYKEERY)	21-END	1.2	1	1	17.0	6.3	11.7	3.7	27	0	73	26	-2.4	25	5	11.1	13.8	66.3			
	MONTH	56.0	74	7	6	16.8	8.2	12.5	-1.1	3.7	27	0	244	91	-2.4	25	7	12.9	14.6	141.3	104

P.E. (PENMAN)		GLOBAL SOLAR RADIATION (MJ/m²)				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)	MONTHLY EVAPORATION (mm)
CO CARLOW		CO CARLOW							
CARLOW (OAK PARK)	47	CARLOW (OAK PARK)*	112.08	79.87	106.03	297.98			
CO CAVAN		CO CAVAN							
BALLYHAISE	42	BALLYHAISE*	108.70	81.57	109.51	299.78			
CO CLARE		CO CORK							
SHANNON AIRPORT	47	ROCHE'S POINT*	127.02	91.76	117.68	336.46	CO KERRY		
CO CORK		CO DONEGAL					VALENTIA OBSERVATORY	148.7	78.3*
CORK AIRPORT	43	MALIN HEAD*	112.88	91.72	92.64	297.24	CO KERRY		
CO DONEGAL		CO DUBLIN					NORTH KERRY LANDFILL	N/A	N/A
MALIN HEAD	50	DUBLIN AIRPORT*	114.08	93.40	115.42	322.9	CO MAYO		
CO DUBLIN		CO KERRY					NEWPORT (FURNACE)	73.2	39.1
DUBLIN AIRPORT	46	VALENTIA OBS.*	137.34	90.46	99.12	326.92	CO OFFALY		
CASEMENT AERODROME	47	CO MAYO					DERRYGREENAGH	36.3	40.4
CO KERRY		BELMULLET*	124.55	79.97	94.5	299.02	CO WATERFORD		
VALENTIA OBS.	54	CO TIPPERARY					DUNGARVAN (CARRIGLEA)	77.3	57.0
CO MAYO		GURTEEN (AG.COLLEGE)*	108.49	73.44	109.33	291.26	CO WEXFORD		
BELMULLET	48	CO WESTMEATH					JFK PARK	68.8	54.5
KNOCK AIRPORT	40	MULLINGAR*	127.02	91.76	117.68	336.46			
CO TIPPERARY		CO WEXFORD							
GURTEEN (AG.COLLEGE)	41	JOHNSTOWN CASTLE*	130.55	108.57	126.55	365.67			
CO WESTMEATH									
MULLINGAR	43								
CO WEXFORD									
JOHNSTOWN CASTLE	49								

GLOBAL SOLAR RADIATION VALUES FOR STATIONS MARKED
* ARE PROVISIONAL
* ARE FROM AUTOSOL INSTRUMENTS
RAINFALL VALUES MARKED * ARE ESTIMATED.

Tuesday 1st: Shower activity picked up during the morning, firstly in the Northwest and West but spread countrywide by mid-afternoon. The showers gradually died out leaving a mix of sunshine and cloud everywhere, a little cool for early September. Winds were light to moderate, northwesterly.

Rainfall: Nil at numerous locations to 8.8 mm at Creeslough (Brockagh)
Temperature: Lowest max. 13.6°C at Belderrig, highest max. 18.9°C at Dunmoe (Craigs Lane). Lowest min. 6.9°C at Ballymore, highest min. 11.5°C at Dooks
Sunshine: 3.7 hours at Dungarvan (Carriglea) to 8.2 hours at Arklow (Ballyrichard Hse)

Wednesday 2nd: There were a few light showers near western and northern coasts overnight but it was generally dry. A scattering of light showers developed countrywide during the late morning and afternoon, dying out later. Cool for early September. Winds were moderate to fresh, northwesterly.

Rainfall: Nil at numerous locations to 4.4 mm at Termon (Goldrum)
Temperature: Lowest max. 12.5°C at Knock Apt, highest max. 18.2°C at Glengarriff (Innacullin). Lowest min. 5.4°C at Mallow (Hazelwood), Mallow (Spa House), highest min. 11.7°C at Valentia Obs
Sunshine: 0.2 hours at Clonroche (Knoxtown) to 6.5 hours at Dungarvan (Carriglea)

Thursday 3rd: A mostly cloudy day, with showers and patches of drizzle countrywide, but becoming drier by afternoon. Cool as well. Winds were moderate to fresh, north to northwest.

Rainfall: Nil at numerous locations to 2.5 mm at Galtee Mountains (Skeheenarinky)
Temperature: Lowest max. 12.7°C at Knock Apt, highest max. 17.6°C at Dungarvan (Carriglea). Lowest min. 6.9°C at Ballymore, highest min. 10.5°C at Sligo Airport
Sunshine: Nil at Casement to 1.6 hours at Ballyshannon (Cathleen's Fall)

Friday 4th: It was a mostly cool and cloudy day, however there were some bright spells in parts of the South. It was mainly dry everywhere with just light rain and drizzle affecting northern and south western coastal regions. Winds were moderate to fresh, northwesterly.

Rainfall: Nil at numerous locations to 2.5 mm at Illies (Pollan Dam Waterworks)
Temperature: Lowest max. 13.4°C at Malin Head, highest max. 20.0°C at Glengarriff (Innacullin). Lowest min. 8.3°C at Dundalk (Annaskeagh WW), highest min. 12.2°C at Valentia Obs
Sunshine: 0.6 hours at Belmullet to 5.7 hours at Dungarvan (Carriglea)

Saturday 5th: Some patchy overnight rain followed by some patchy fog and mist gave way to a cool dry day with good spells of sunshine for most parts with a cool northerly breeze. Winds were light to moderate, north to northwest.

Rainfall: Nil at numerous locations to 1.4 mm at Eskeragh
Temperature: Lowest max. 12.5°C at Raphoe (Tops), highest max. 20.1°C at Glengarriff (Innacullin). Lowest min. 6.9°C at Dublin Apt, highest min. 11.8°C at Valentia Obs
Sunshine: 6.4 hours at Ballyshannon (Cathleen's Fall) to 10.2 hours at Dungarvan (Carriglea)

Sunday 6th: Mainly dry overnight with some good clear spells, a mainly cool and cloudy day with some sunny spells, best of the sunshine and temperatures in the South. Winds were light, northwesterly.

Rainfall: Nil at numerous locations to 3.5 mm at Falcarragh (Lough Altan)
Temperature: Lowest max. 12.8°C at Belderrig, highest max. 19.2°C at Glengarriff (Innacullin). Lowest min. 2.5°C at Listowel (Bunaghara), highest min. 11.4°C at Belderrig
Sunshine: Nil at numerous locations to 11.2 hours at Cork Apt

Monday 7th: Mainly dry overnight with some good clear spells, giving a cloudy day with little sunshine and cool temperatures, best of the sunshine in the Southwest. Winds were light, variable.

Rainfall: Nil at numerous locations to 1.3 mm at Gweedore Weir
Temperature: Lowest max. 12.2°C at Knock Apt, highest max. 18.0°C at Glengarriff (Innacullin), Killarney (Muckross Hse). Lowest min. 6.0°C at Mallow (Spa House), highest min. 12.0°C at Sherkin Island
Sunshine: Nil at numerous locations to 3.3 hours at Ashford (Cronykeery)

Tuesday 8th: There was little rainfall recorded, mainly dry everywhere with good spells of sunshine also. Temperatures were generally in the high teens and were over 20°C at a few stations but it was a little cooler on exposed southern coasts. Winds were light to moderate, southeasterly.

Rainfall: Nil at numerous locations to 1.1 mm at Bruckless
Temperature: Lowest max. 16.2°C at Arklow (Ballyrichard Hse), highest max. 21.1°C at Listowel (Bunaghara). Lowest min. 4.6°C at Casement, highest min. 12.6°C at Sherkin Island
Sunshine: 0.0 hours at Belmullet to Nil at Belmullet to 11.7 hours at Ardfer (Liscahane)

Wednesday 9th: Dry in most places with sunny spells. Temperatures in mid to high teens everywhere. Winds were light to moderate, southeasterly.

Rainfall: Nil at numerous locations to 1.3 mm at Lomardstown (Drompeach)
Temperature: Lowest max. 16.0°C at Slieve Bloom Mtns (Nealstown), highest max. 21.3°C at Glengarriff (Innacullin). Lowest min. 5.9°C at Ardee (Boharnamoe), highest min. 15.2°C at Valentia Obs
Sunshine: 1.2 hours at Knock Apt to 8.3 hours at Ardfer (Liscahane)

Thursday 10th: Most places were dry with some sunny spells. Later in the evening cloud increased in the West and Southwest and there was light rain in those areas. In the evening it turned heavier and towards nightfall moved slowly eastwards. Winds were moderate, southeasterly.

Rainfall: Nil at numerous locations to 74.7 mm at Ballydesmond
Temperature: Lowest max. 16.1°C at Cork Apt, highest max. 21.4°C at Glengarriff (Innacullin). Lowest min. 8.2°C at Athy (Chanterlands), highest min. 15.3°C at Valentia Obs
Sunshine: Nil at Dungarvan (Carriglea) to 7.0 hours at Dublin Apt

Friday 11th: Heavy rain in West and South overnight, but remained dry further East. The rain continued to move slowly eastwards during the morning, and reached east coasts by mid-afternoon, with some very heavy falls in places. A clearance in the Southwest by later evening, but rain continued over much of the country for the evening and night, again with some heavy falls in places. Winds were moderate, variable in direction.

Rainfall: 3.3 mm at Carrigans-Kildrum to 102.6 mm at Leenane (Glanagimla)
Temperature: Lowest max. 13.5°C at Ballycrocy (Knockmoyleen), highest max. 19.0°C at Dungarvan (Carriglea). Lowest min. 10.7°C at Ashford (Cronykeery), highest min. 15.3°C at Roches Pt
Sunshine: Nil at numerous locations to 1.0 hours at Casement

Saturday 12th: During the late morning scattered showers in the West and Southwest spread across the country and continued throughout the day. In the afternoon there were some spells of good sunshine in places. The showers began to die out after nightfall. Winds were fresh to strong, southwesterly.

Rainfall: Nil at numerous locations to 30.2 mm at Ventry (The Boat Slip)
Temperature: Lowest max. 12.3°C at Belderrig, highest max. 19.0°C at Cahore (Kilmichael Hse), Dungarvan (Carriglea), Mullagh (Carrowlagan). Lowest min. 8.4°C at Cork Apt, Fethard (Parsonshill), highest min. 13.3°C at Malin Head
Sunshine: 0.5 hours at Ballyshannon (Cathleen's Fall) to 8.8 hours at Dungarvan (Carriglea)

Sunday 13th: Overnight scattered rain outbreaks spread gradually northwards through the day with a clearance following in the East, but some heavy and intense rain and flooding continued in the West and Southwest of the country. Winds were light to moderate, variable in direction.

Rainfall: Nil at numerous locations to 125.1 mm at Moyard (Shanbolard)
Temperature: Lowest max. 13.3°C at Carron, highest max. 18.4°C at Glengarriff (Innacullin). Lowest min. 3.8°C at Mt Dillon, highest min. 12.3°C at Sherkin Island
Sunshine: Nil at numerous locations to 4.8 hours at Arklow (Ballyrichard Hse)

Monday 14th: Heavy, thundery overnight rain particularly in the West and Southwest, lingered and spread countrywide by afternoon. Particularly heavy and thundery, through the day in the South of the country, before clearing towards midnight. Winds were light to moderate, north to northwest.

Rainfall: Nil at numerous locations to 30.7 mm at Foulkesmills (Longraigue)
Temperature: Lowest max. 10.7°C at Mt Russell, highest max. 16.9°C at Finner, Ardtarmon. Lowest min. 7.3°C at Markree, Durrow, highest min. 12.1°C at Malin Head
Sunshine: Nil at numerous locations to 3.3 hours at Belmullet

Tuesday 15th: Some patchy light rain overnight giving way to a mainly dry day with scattered showers, some heavy, affecting the South of the country until evening. Some good sunny spells in the South, quite cloudy elsewhere. Winds were light, northwesterly.

Rainfall: Nil at numerous locations to 18.1 mm at Kenmare (Derreen)
Temperature: Lowest max. 12.9°C at Knock Apt, highest max. 18.5°C at Sherkin Island.
 Lowest min. 6.6°C at Mallow (Spa House), highest min. 12.1°C at Ashford (Cronykeery)
Sunshine: 0.5 hours at Straide to 7.6 hours at Dublin (Glasnevin)

Wednesday 16th: Some clear spells overnight with patches of mist, fog and some ground frost giving way to a mainly dry day with good sunny spells. Some light showers on coastal regions of Connacht, Leinster and Munster. Winds were light, southwest to northwest.

Rainfall: Nil at numerous locations to 6.9 mm at Kylemore Abbey Gardens
Temperature: Lowest max. 13.1°C at Ballycroy (Knockmoyleen), highest max. 18.2°C at Glengarriff (Ilnacullin). Lowest min. 0.6°C at Straide, highest min. 11.0°C at Valentia Obs
Sunshine: 0.7 hours at Ballincurrag (Peafield), Belmullet to 6.9 hours at Dublin Apt

Thursday 17th: Some isolated showers overnight mainly in the West and North. Fog patches inland cleared early to isolated showers in the West that becoming more widespread through the day. Some good sunny spells also. Winds were light, southwest to northwest.

Rainfall: Nil at numerous locations to 10.5 mm at Dunmanway (Demesne)
Temperature: Lowest max. 14.2°C at Belderrig, highest max. 19.4°C at Ballincurrag (Peafield).
 Lowest min. 2.8°C at Kilkenny (Greenshill), highest min. 11.1°C at Valentia Obs
Sunshine: 0.4 hours at Knock Apt to 9.3 hours at Sherkin Island

Friday 18th: It was a mainly cloudy day with some small pockets of sunshine in places. It was a mild day everywhere. Winds were light to moderate, northwesterly.

Rainfall: Nil at numerous locations to 6.5 mm at Dooagh (Water Treatment Plant)
Temperature: Lowest max. 14.3°C at Knock Apt, highest max. 18.2°C at Ardee (Boharnamoe).
 Lowest min. 6.5°C at Cashel (Ballydoyle Hse), highest min. 12.8°C at Sherkin Island
Sunshine: Nil at numerous locations to 3.7 hours at Belmullet

Saturday 19th: The day was mainly dry and cloudy, just the odd shower in the Southwest. The evening and night continued mostly dry with clear periods, but some drizzle in parts of South and West. Winds were light, southeast to southwest.

Rainfall: Nil at numerous locations to 24.2 mm at Roads
Temperature: Lowest max. 13.5°C at Knock Apt, highest max. 19.3°C at Waterford (Tycor).
 Lowest min. 2.9°C at Mt Dillon, highest min. 13.0°C at Sherkin Island
Sunshine: Nil at Ardferf (Liscahane) to 5.8 hours at JFK Park

Sunday 20th: A band of rain moved into the West during the early morning and moved eastwards as the day progressed, bringing some heavy falls of rain to all parts of the country. It was a dull and overcast day with little or no sunshine. Winds were light to moderate, south to southwest.

Rainfall: Nil at numerous locations to 26.2 mm at Goleen
Temperature: Lowest max. 13.5°C at Slieve Bloom Mtns (Nealstown), highest max. 19.0°C at Dungarvan (Carriglea). Lowest min. 6.5°C at Edenderry (Ballinla), highest min. 13.7°C at Sherkin Island
Sunshine: Nil at numerous locations to 0.8 hours at Dublin (Glasnevin)

Monday 21st: There were some good spells of sunshine during the late morning and into the afternoon. An organised band of showers moved into the West and tracked eastwards, bringing with it some heavy falls. Winds were light to moderate, southwest to west.

Rainfall: 0.0 mm at Glencairn (Tourtane House) to 26.3 mm at Naas (C.B.S.)
Temperature: Lowest max. 14.0°C at Glenties Hatchery, Slieve Bloom Mtns (Nealstown), highest max. 18.0°C at Waterford (Tycor). Lowest min. 7.5°C at Dundalk (Annaskeagh WW), Raphoe (Tops), highest min. 12.1°C at Sherkin Island
Sunshine: 1.8 hours at Ardferf (Liscahane) to 6.3 hours at Ballincurrag (Peafield)

Tuesday 22nd: A mainly dry day with some overnight scattered heavy showers dying out by the afternoon to give a cool but blustery day with some good spells of sunshine. Winds were light to moderate, northwesterly.

Rainfall: Nil at numerous locations to 5.3 mm at Knocknagoshel (Meinleirim)
Temperature: Lowest max. 13.7°C at Knock Apt, highest max. 17.8°C at Glengarriff (Ilnacullin). Lowest min. 5.9°C at Claremorris, highest min. 11.2°C at Sherkin Island
Sunshine: 5.9 hours at JFK Park to 9.3 hours at Arklow (Ballyrichard Hse)

Wednesday 23rd: Some overnight rain and drizzle in the Northwest spreading to all parts by morning before clearing eastwards. Another cool and blustery day, particularly on western coasts. Some scattered occasionally heavy showers moving in from the Northwest by late evening. Winds were moderate to fresh, southwesterly.

Rainfall: Nil at numerous locations to 16.4 mm at Ardnawark Barnesmore
Temperature: Lowest max. 14.2°C at Knock Apt, highest max. 20.0°C at Cloyne (Lisanley).
 Lowest min. 5.2°C at Dundalk (Annaskeagh WW), highest min. 12.4°C at Sherkin Island
Sunshine: 0.5 hours at Sherkin Island to 5.4 hours at Ardferf (Liscahane)

Thursday 24th: A showery and a breezy day. Most places had some showers but they passed through quickly dying out in the evening. Temperatures were a little low, but most areas had good spells of sunshine between the showers. Winds were fresh to strong, southwesterly.

Rainfall: Nil at numerous locations to 10.8 mm at Carndonagh (Rockmount II)
Temperature: Lowest max. 12.6°C at Knock Apt, highest max. 17.3°C at Waterford (Tycor).
 Lowest min. 4.9°C at Dundalk (Annaskeagh WW), highest min. 11.4°C at Sherkin Island
Sunshine: 3.3 hours at Shannon Airport to 9.0 hours at Dublin Apt

Friday 25th: In the morning any patches of mist quickly cleared to a bright start with sunny spells. Cloud increased as the day went on but it remained mostly dry with just the odd light shower mainly in the West and North. Winds were light to moderate, southwesterly.

Rainfall: Nil at numerous locations to 4.6 mm at Derryhenny Doochary
Temperature: Lowest max. 13.1°C at Knock Apt, highest max. 18.0°C at Cahore (Kilmichael Hse), Dungarvan (Carriglea), Sherkin Island, Ballincurrag (Peafield). Lowest min. 2.9°C at Dundalk (Annaskeagh WW), highest min. 11.4°C at Mace Head
Sunshine: 0.3 hours at Newport (Furnace), Belmullet to 7.4 hours at Ballincurrag (Peafield)

Saturday 26th: It was a misty start to the day but the mist cleared quickly to give a dry mild day everywhere. There were good sunny spells mainly in the East and South with further west being rather cloudy. Winds were light, southeasterly.

Rainfall: Nil at numerous locations to 2.0 mm at Derryhenny Doochary
Temperature: Lowest max. 13.8°C at Knock Apt, highest max. 18.7°C at Dunmoe (Craigs Lane). Lowest min. 5.5°C at Ardee (Boharnamoe), highest min. 12.7°C at Valentia Obs
Sunshine: 0.1 hours at Straide, Belmullet, Knock Apt to 11.1 hours at Dublin Apt

Sunday 27th: A dry day, with good sunshine in places after mist and fog lifted, but a bit more cloud over western areas. The evening and night continued dry with sunny/clear periods. Winds were light, southeasterly.

Rainfall: Nil at numerous locations to 0.4 mm at Moore Park
Temperature: Lowest max. 15.5°C at Cork Apt, Slieve Bloom Mtns (Nealstown), highest max. 19.2°C at Ardee (Boharnamoe). Lowest min. 2.3°C at Mt Dillon, highest min. 13.5°C at Valentia Obs
Sunshine: 0.5 hours at Belmullet to 9.2 hours at Dublin Apt

Monday 28th: The day was dry with good sunshine countrywide. The evening and night continued dry with sunny/clear periods with some mist developing in places. Winds were light to moderate, southeasterly.

Rainfall: Nil at numerous locations to 2.0 mm at Little Island,
Temperature: Lowest max. 13.5°C at Sligo Airport, highest max. 19.8°C at Glengarriff (Ilnacullin). Lowest min. 1.1°C at Mt Dillon, highest min. 13.9°C at Sherkin Island
Sunshine: 5.1 hours at Newport (Furnace) to 9.9 hours at Dublin Apt

Tuesday 29th: Overnight mist and fog patches cleared during the morning. It was another bright dry day, with good spells of sunshine for much of the country, but cloudier in the South and Southwest. Conditions remained unchanged into the night. Winds were light, southeasterly.

Rainfall: Nil at numerous locations to 0.7 mm at Macroom (Renaniree)
Temperature: Lowest max. 14.4°C at Cork Apt, highest max. 20.7°C at Ardatmon. Lowest min. 1.7°C at Mt Dillon, highest min. 14.1°C at Sherkin Island
Sunshine: Nil at Ballincurrag (Peafield) to 10.9 hours at Belmullet

Wednesday 30th: Early fog and mist lifted, leaving a dry day with good sunshine, especially in the West, a bit cloudier further East. The evening and night continued dry, with sunny/clear periods and mist returned. Winds were light, northeasterly.

Rainfall: Nil at numerous locations to 0.3 mm at Mullingar, Knock Apt
Temperature: Lowest max. 13.5°C at Belderrig, highest max. 19.8°C at Sligo Airport. Lowest min. 1.4°C at Markree, highest min. 10.7°C at Roches Pt, Waterford (Tycor)
Sunshine: 4.1 hours at Dublin Apt to 11.0 hours at Belmullet

BELOW AVERAGE RAINFALL IN MOST PLACES

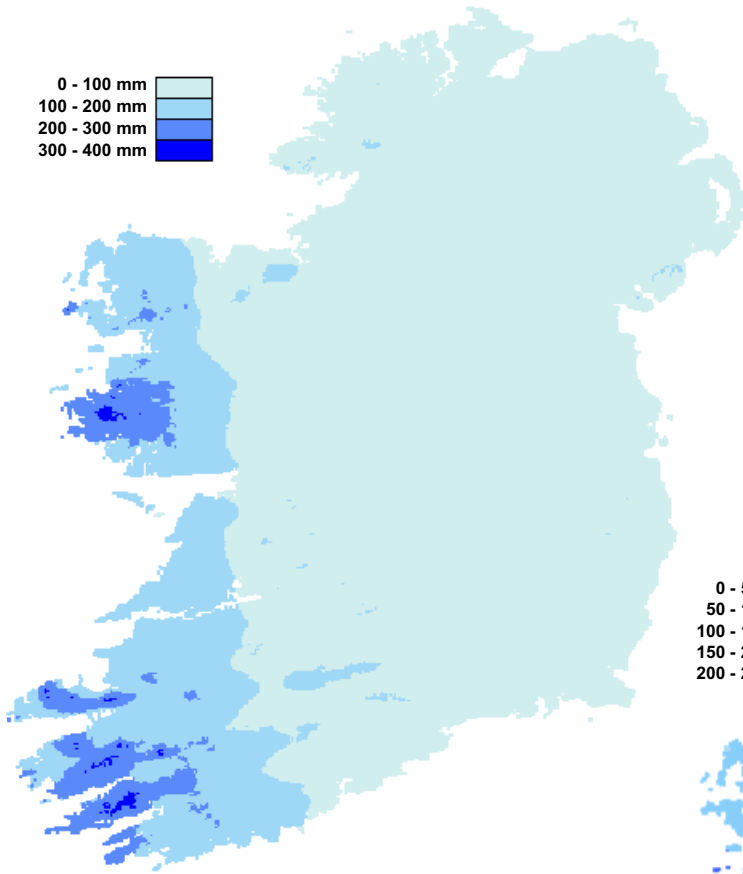
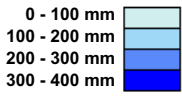
Around three quarters of stations reported below Long-Term Average (LTA) rainfall for September, with the lowest percentage of LTAs values reported in Donegal, Wicklow and Monaghan. Lowest percentage of LTA and monthly total was recorded at a gauge in the Ballinaton Mountains, Co Wicklow which reported 20% of its monthly LTA with a monthly total of 20 mm. Despite this low rainfall total and other low monthly totals across the majority of the country, it was drier in September 2014. Percentage of LTA totals were highest in Mayo, Galway, Clare, Kerry and Cork with the highest percentage of LTA reported at Goleen, Co Cork with 200% of LTA with 228.5 mm of rain. Clifton, Co Galway reported percentage of monthly LTA value of 199% with 229.1 mm, its highest September rainfall at the station since it opened in 1985. Most stations reporting above LTA rainfall reported higher rainfall in either 2006 or 2011. The month's highest rainfall in a low-lying area (area below 200 m) was at Kylemore Abbey Gardens, Co Galway with 259.0 mm, while the overall highest monthly total was at a gauge in the Cumberagh Mountains, Co Kerry with 304.0 mm (107% of LTA). The month's wettest days were 10th, 11th and 13th with daily falls of over 100 mm in parts of Galway and Mayo and some reporting their wettest September day in up to 55 years. The month's wettest day was reported at Moyard (Shanbolard), Co Galway on the 13th with 125.1 mm, its wettest day since the station opened in 1997.

The number of wet days (*days with 1 mm or more*) ranged from four from places in the East to 18 at Dooagh (Water Treatment Plant), Co Mayo.

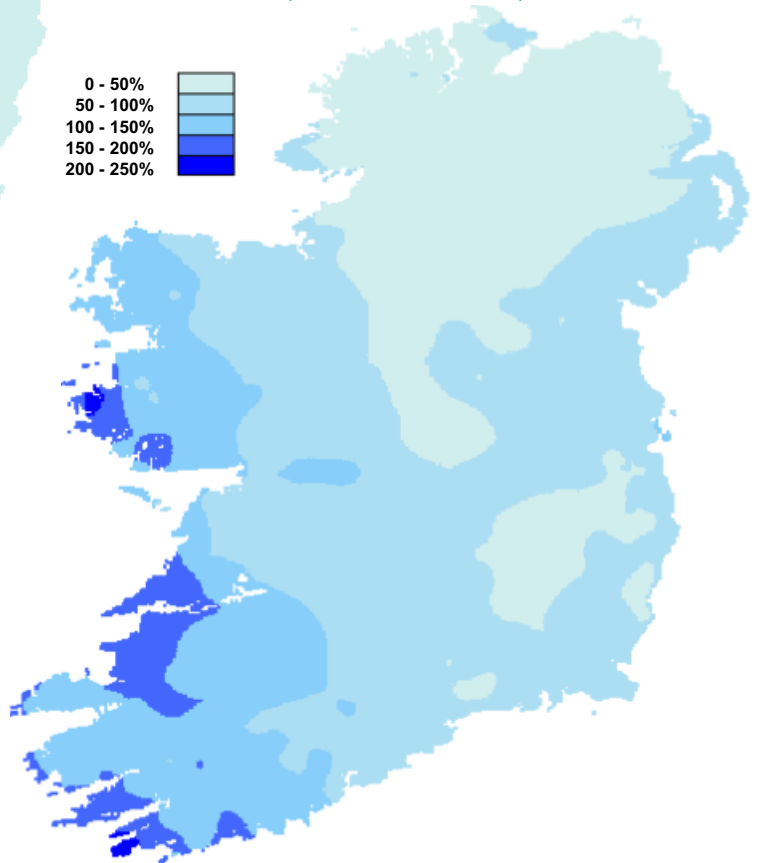
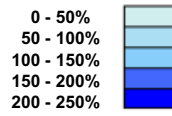
COUNTY/ STATION	TOTAL AMOUNT (mm)	% OF 1981-2010 AVERAGE	MOST IN A DAY / DATE		NUMBER OF RAINDAYS (>0.2mm)	NUMBER OF WETDAYS (>1mm)
CO CARLOW						
CARLOW (OAK PARK)	27.8	40	10.6	11	12	7
CO CAVAN						
BALLYHAISE	35.4	45	10.2	11	16	8
CO CLARE						
CARRON	100.8	74	29.6	11	16	12
SHANNON AIRPORT	87.9	116	22.2	11	16	9
CO CORK						
BALLINCURRIG (PEAFIELD)	89.0	87	28.7	11	11	9
CORK AIRPORT	97.7	103	27.4	13	16	9
FERMOY (MOORE PARK)	92.3	116	39.1	13	13	8
ROCHE'S POINT	64.5	76	21.4	11	11	8
SHERKIN ISLAND	121.4	131	43.3	10	14	9
CO DONEGAL						
BALLYSHANNON (CATHLEEN'S FALL)	38.9	39	12.6	11	12	9
GLENTIES HATCHERY	66.0	48	16.8	11	15	15
MALIN HEAD	29.4	30	6.8	11	15	8
CO DUBLIN						
CASEMENT AERODROME	26.2	43	9.0	21	8	6
DUBLIN (MERRION SQUARE)	48.4	83	18.6	11	8	8
DUBLIN AIRPORT	56.7	95	22.1	11	13	6
DUBLIN (PHOENIX PARK)	36.9	62	11.8	11	10	8
CO GALWAY						
MAAM VALLEY	210.1	99	85.9	11	16	13
CO KERRY						
ARDFERT (LISCAHANE)	143.5	160	51.3	13	15	10
VALENTIA OBSERVATORY	148.7	119	39.6	13	14	12
CO KILKENNY						
THOMASTOWN	126.7	125	37.3	13	15	13
CO LIMERICK						
MOUNT RUSSELL	-----		not available		-----	-----
CO MAYO						
BELMULLET	118.2	116	36.8	11	18	9
DELPHI LODGE	199.1		73.9	11	18	16
KNOCK AIRPORT	90.1	81	29.1	11	25	13
STRAIDE	75.4	75	28.3	11	17	10
CO MEATH						
WARRENTOWN	48.6	67	22.8*	11	9*	4*
CO MONAGHAN						
CARRICKMACROSS (DUNOGE)	40.5	56	16.8	11	9	5
CO OFFALY						
DERRYGREENAGH	36.3	49	15.8	11	12	6
CO ROSCOMMON						
MOUNTDILLON	37.0	47	14.1	11	10	6
CO SLIGO						
ARDTARMON	64.3	73	28.1	11	13	9
CO TIPPERARY						
FETHARD (PARSONSHILL)	53.8	69	13.1	11	9	7
GURTEEN (AG.COLLEGE)	52.5	70	10.7*	11	15*	8*
CO WATERFORD						
DUNGARVAN (CARRIGLEA)	77.3	83	32.8	13	9	6
WATERFORD (TYCOR)	54.8	65	14.6	14	7	6
CO WESTMEATH						
MULLINGAR	39.5	50	12.8*	11	13*	7*
CO WEXFORD						
CLONROCHE (KNOXTOWN)	71.7		20.0	14	8	6
JOHNSTOWN CASTLE	59.9	68	17.7	13	10	6
CO WICKLOW						
ASHFORD (CRONYKEERY)	56.0	74	36.1	11	7	6

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

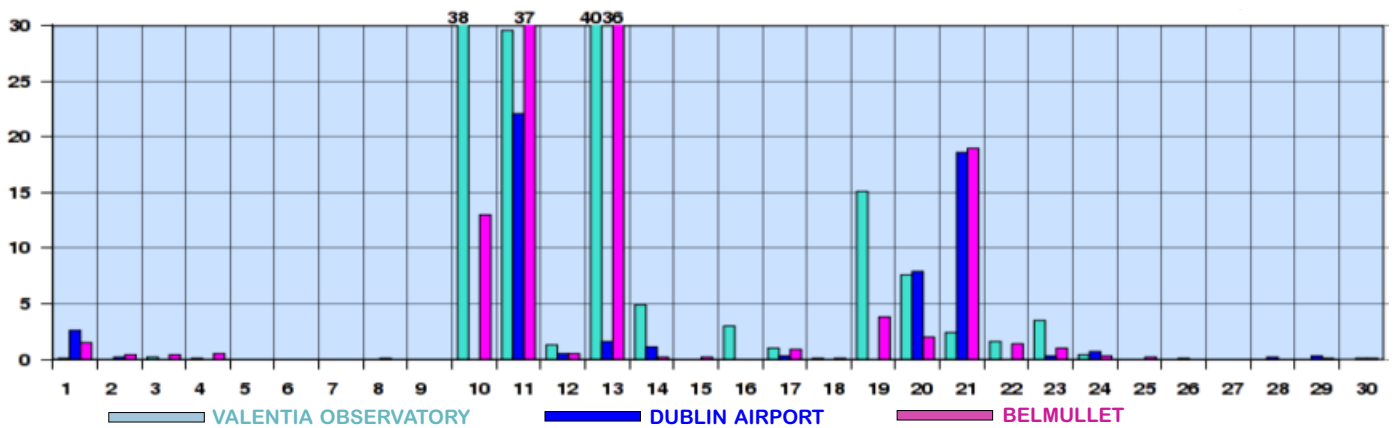
TOTAL RAINFALL (mm)



PERCENTAGE OF NORMAL RAINFALL
(1981-2010 NORMALS)



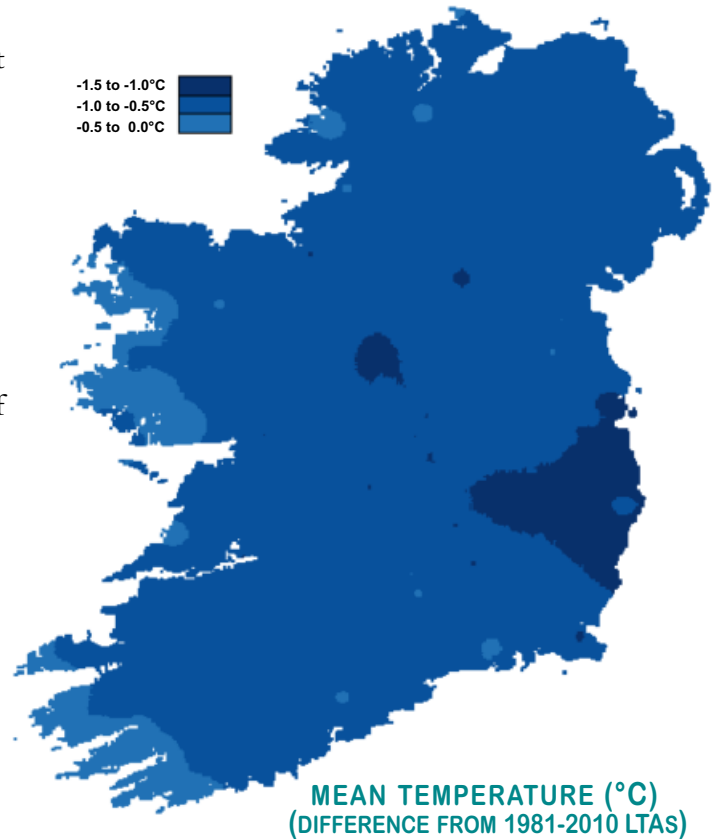
DAILY 0901-0900hr RAINFALL VALUES (mm)



BELOW LTA MEAN TEMPERATURES

Monthly mean air temperatures ranged from 11.4°C at Knock Airport, Co Mayo to 14.0°C at Sherkin Island, Co Cork. All monthly means were below their Long-Term Average (LTA) with around a quarter of stations reporting differences from LTA of over 1°C, mainly in parts of the East and Midlands. The largest difference from LTA was -1.4°C, reported at four locations; Dublin Airport, which had its coolest September since 1986 with a mean temperature of 12.0°C, Dublin (Merrion Square) and Athy (Chanterlands), Co Kildare with mean temperatures of 12.9°C and 12.2°C respectively, both reporting their coolest September since 1993 and finally at Ballyhaise, Co Cavan reporting its coolest September since the station opened in 2008 with a mean temperature of 11.8°C. Monthly mean temperatures were nearest to normal at both Waterford (Tycor) and Cloosh, Co Galway which were just -0.2°C below their September LTA with mean temperatures of 10.1°C and 8.9°C, respectively.

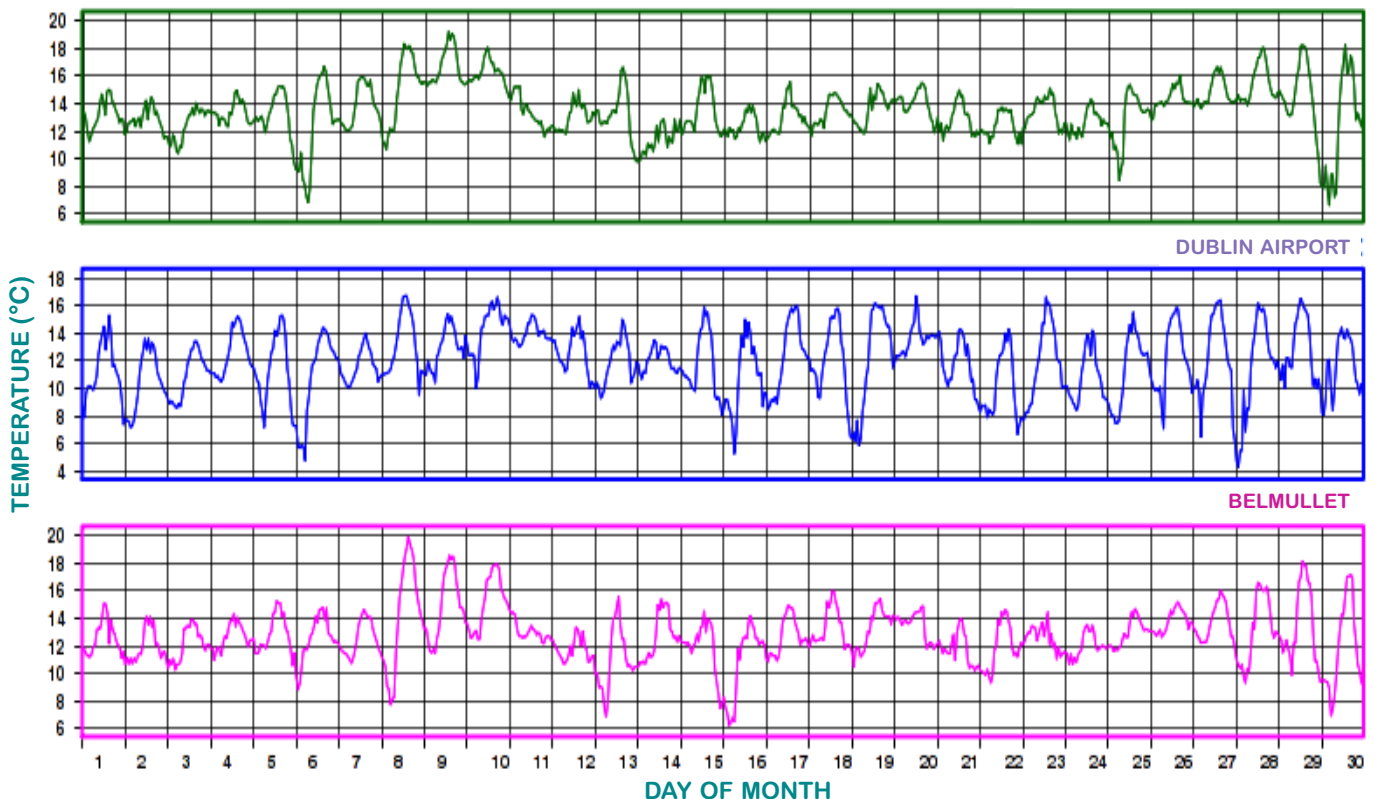
The majority of highest maxima were reported between the 8th and 10th and ranged from 17.3°C at both Dublin Airport (on the 20th) and Arklow (Ballyrichard Hse), Co Wicklow (on the 15th and 23rd) their lowest September maxima since the stations opened in 1942 and 1984, respectively to 21.4°C at Glengarriff, Co Cork (on the 10th). The majority of lowest minima were on the 6th, 16th, 25th and 30th and ranged from 0.6°C at Straide, Co Mayo



(on the 16th) to 8.2°C at Sherkin Island, Co Cork (on the 6th). There were no reports of air frost with the highest number of days with ground frost reported at Athleague, Co Roscommon, with 10 days and with the station also reporting the month's lowest grass minimum with -3.5°C on the 25th.

HOURLY TEMPERATURES SEPTEMBER 2015

VALENTIA OBSERVATORY



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)	16.5	8.9	12.7	-1.0	19.4 10	3.8 30	-1.7 30	0	4	
CO CAVAN BALLYHAISE	15.5	8.2	11.8	-1.4	19.1 8	2.6 16	0.2 16	0	0	
CO CLARE CARRON	15.2	9.3	12.2	-0.7	18.6 8	6.5 30	3.4 6	0	0	
SHANNON AIRPORT	16.4	9.8	13.1	-1.1	20.2 8	4.7 30	1.5 30	0	0	
CO CORK BALLINCURRIG (PEAFIELD)	16.1	9.6	12.8	-0.3	19.4 17	7.0 25	4.5 17	0	0	
CORK AIRPORT	15.5	9.5	12.5	-0.8	18.1 23	7.1 6	2.8 26	0	0	
FERMOY (MOORE PARK)	16.1	8.8	12.5	-0.8	18.7 10	2.6 30	1.2 17	0	0	
ROCHE'S POINT	15.9	11.0	13.5	-0.6	18.2 23	8.0 17	2.0 17	0	0	
SHERKIN ISLAND	16.2	11.8	14.0	-0.3	17.9 9	8.2 6	4.6 25	0	0	
CO DONEGAL BALLYSHANNON (CATHLEEN'S FALL)	15.8	9.9	12.9	-0.3	20.3 8	7.3 22		0		
GLENTIES HATCHERY	15.9	9.1	12.5	-0.3	20.2 29	3.5 30	-0.2 30	0	1	
MALIN HEAD	15.2	10.5	12.9	-0.4	19.4 8	7.9 30	0.1 30	0	0	
CO DUBLIN CASEMENT AERODROME	16.3	8.2	12.2	-1.1	19.3 8	4.2 6	-0.2 27	0	1	
DUBLIN (MERRION SQUARE)	16.0	9.8	12.9	-1.4	18.3 8	6.5 6		0		
DUBLIN AIRPORT	15.7	8.3	12.0	-1.4	17.3 20	3.9 28	0.1 28	0	0	
DUBLIN (PHOENIX PARK)	16.7	8.5	12.6	-0.8	18.9 8	5.4 6 25	-0.2 6	0	1	
CO GALWAY MAAM VALLEY	16.4	9.8	13.1	-0.3	20.7 9	4.0 16	1.8 16	0	0	
CO KERRY ARDFERT (LISCAHANE)	16.7	9.3	13.0	-0.8	20.6 8	3.9 6	3.5 6,30	0	0	
VALENTIA OBSERVATORY	16.1	11.4	13.7	-0.4	19.5 9	6.6 30	2.1 30	0	0	
CO LIMERICK MOUNTRUSSELL	15.4	9.1	12.3	-0.9	18.4 8	5.8 6	2.3 6	0	0	
CO MAYO BELMULLET	15.7	10.2	13.0	-0.6	20.1 8	6.2 16	3.0 16	0	0	
DELPHI LODGE	15.9	10.3	13.1	-0.6	20.5 8	3.6 16	-3.1 16	0	2	
KNOCK AIRPORT	14.4	8.4	11.4	-0.7	19.0 8	5.7 16	1.8 16	0	0	
STRAIDE	16.3	8.8	12.5	-0.4	20.2 8	0.6 16	-2.7 16	0	2	
CO MEATH WARRENSTOWN	16.8	8.4	12.6	-0.6	20.1 8	2.8 29	1.4 27,29	0	0	
CO MONAGHAN CARRICKMACROSS (DUNOGE)	16.2	8.2	12.2	-0.6	19.4 8	2.4 16		0		
CO OFFALY DERRYGREENAGH	16.4	8.0	12.2	-0.6	20.2 10	5.3 27	0.3 25	0	0	
CO ROSCOMMON MOUNTDILLON	16.3	7.3	11.8	-1.2	20.0 8,10	0.8 16	-2.2 28	0	5	
CO SLIGO ARDTARMON	16.6	9.9	13.3	-0.5	20.7 29	6.5 16		0		
CO TIPPERARY FETHARD (PARSONSHILL)	16.0	8.7	12.4	-0.3	20.0 10	6.2 17	3.6 25	0	0	
GURTEEN (AG.COLLEGE)	15.8	8.6	12.2	-1.0	19.4 8	3.7 16	-0.5 30	0	1	
CO WATERFORD DUNGARVAN (CARRIGLEA)	17.5	9.3	13.4	-0.5	19.5 10	5.5 6,25	0.9 25	0	0	
WATERFORD (TYCOR)	17.3	10.1	13.7	-0.2	19.6 23	6.2 25		0		
CO WESTMEATH MULLINGAR	15.9	7.9	11.9	-0.9	20.3 10	3.6 25	-0.9 25	0	2	
CO WEXFORD CLONROCHE (KNOXTOWN)	16.5	n/a	n/a	n/a	19.9 10	n/a n/a	n/a n/a	n/a	n/a	
JOHNSTOWN CASTLE	15.8	9.8	12.8	-1.0	18.8 10	7.0 6	2.6 26	0	0	
CO WICKLOW ASHFORD (CRONYKEERY)	16.8	8.2	12.5	-1.1	18.9 23	3.7 27	-2.4 25	0	7	

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

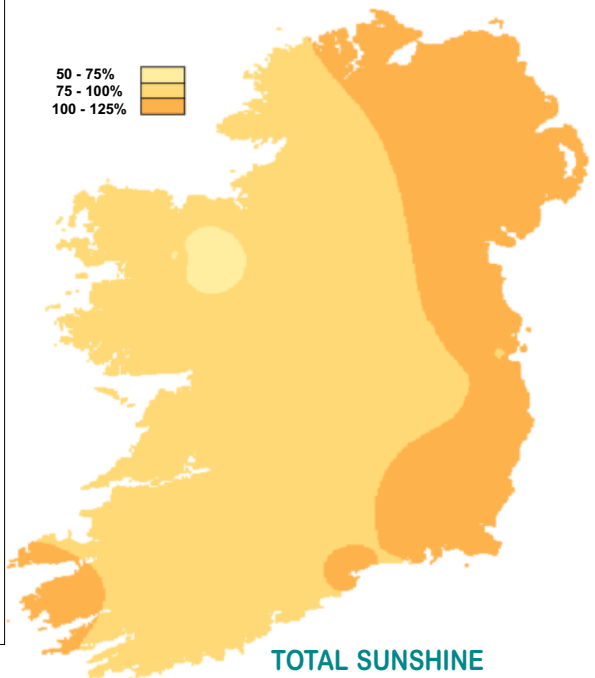
COUNTY/ STATION	DAILY MEAN (HOURS/DAY)	% OF 1981-2010 LTA	DULL DAYS (<0.5 HRS)	MOST IN A DAY/DATE	
CO CLARE					
SHANNON AIRPORT	3.26	82	8	9.3	28
CO CORK					
BALLINCURRIG (PEAFIELD)	3.91	89	6	9.6	6
CORK AIRPORT	3.85	88	7	11.2	6
SHERKIN ISLAND	4.15	89	5	9.6	6
CO DONEGAL					
BALLYSHANNON (CATHLEEN'S FALL)	3.15	85	4	9.7	8
CO DUBLIN					
CASEMENT AERODROME	4.17	101	6	10.5	26
DUBLIN (GLASNEVIN)	4.12	99	6	9.0	29
DUBLIN AIRPORT	4.55	106	4	11.1	26
CO KERRY					
ARDFERT (LISCAHANE)	4.04	98	6	11.7	8
VALENTIA OBSERVATORY*	4.29		3	11.8	6
CO MAYO					
BELMULLET*	3.16		6	11.0	30
KNOCK AIRPORT	2.32	66	8	7.7	8
NEWPORT (FURNACE)	2.91	88	6	7.6	8
STRAIDE	2.86	75	6	8.3	8
CO WATERFORD					
DUNGARVAN (CARRIGLEA)	4.58	102	5	10.2	5
CO WEXFORD					
CLONROCHE (KNOXTOWN)	4.73	108	5	10.4	30
JFK PARK	4.38	100	7	10.0	30
WEXFORD WILDFOWL RESERVE	-----	not available	-----	-----	-----
CO WICKLOW					
ARKLOW (BALLYRICHARD HSE)	5.03		3	9.9	30
ASHFORD (CRONYKEERY)	4.71	104	2	9.7	30

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

**VARIABLE PERCENTAGE OF LTA;
 SUNNIEST DAY IN THE SOUTHWEST**

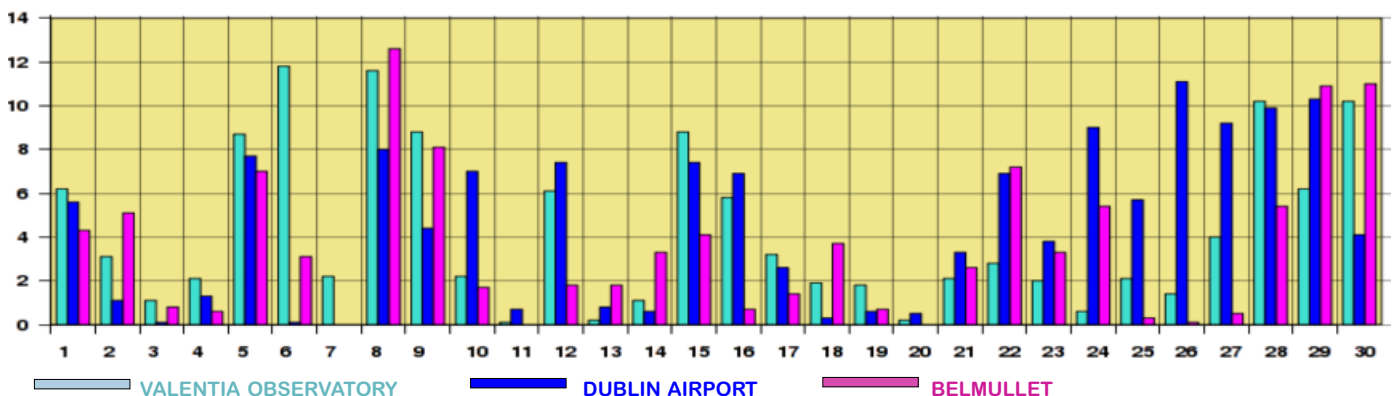
Variable percentage of Long-Term Average (LTA) sunshine was reported across the country. Percentage of LTAs were lowest at Knock Airport, Co Mayo with 66% (lowest monthly sunshine total of 69.7 hours) while the highest percentage of LTA was reported at Clonroche (Knoxtown), Co Wexford with 108% (monthly sunshine total of 141.8 hours). The month's highest sunshine total was 150.8 hours reported at Arklow (Ballyrichard Hse), Co Wicklow. The month's sunniest day was on the 6th at Valentia Observatory, Co Kerry with 11.8 hours. The number of dull days (*days with less than 0.5 hours of sunshine*) were up to eight at both Knock Airport and Shannon Airport Co Clare.

Percentage of global solar radiation LTA values were all above average ranging from 101% at Belmullet, Co Mayo to 107% at Dublin Airport.

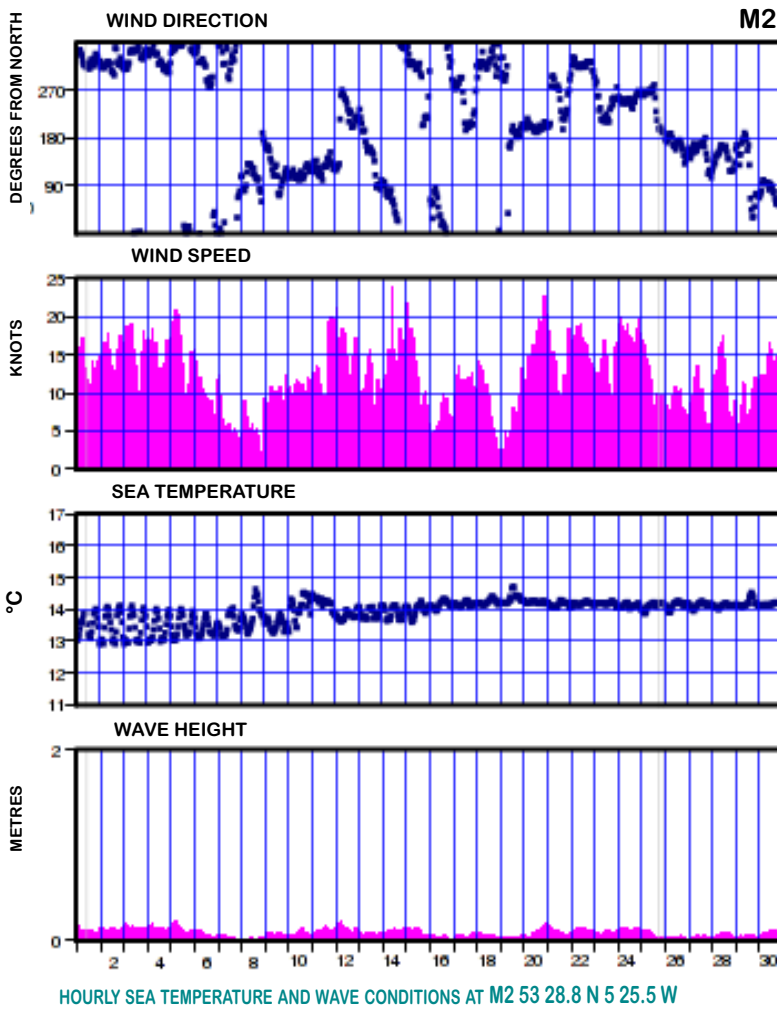


DAILY SUNSHINE VALUES (HOURS)

TOTAL SUNSHINE
 (PERCENTAGE OF 1981-2010 NORMALS)

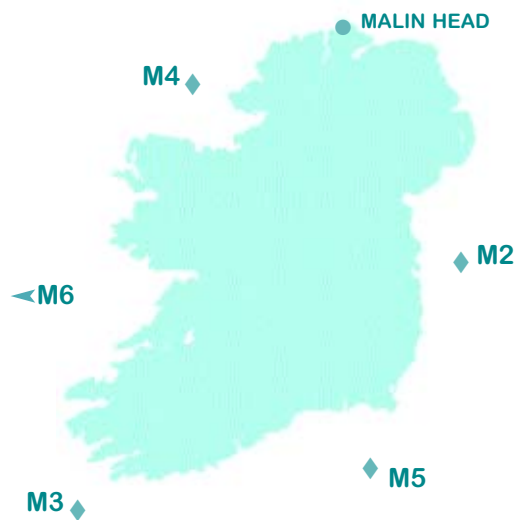


MARINE OBSERVATIONS FROM IRISH MARINE DATA BUOY NETWORK

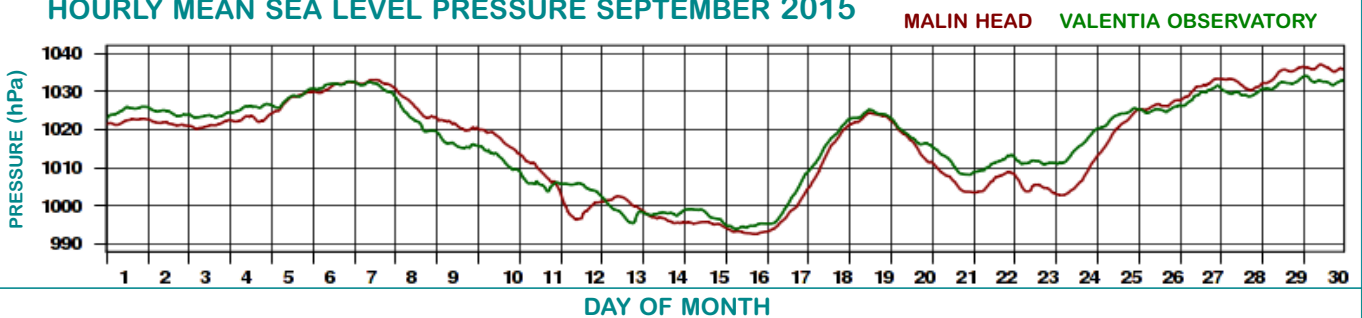


BUOY	SEA SURFACE TEMP. (°C)	MEAN WIND SPEED (knots)	MAX 10-MIN WIND (knots)	MEAN SIGNIFICANT WAVE HEIGHT (m)	MAX SIGNIFICANT WAVE HEIGHT (m)
M2	13.9	11.4	23.7	0.8	2.1
M3	n/a	14.1	26.6	2.0	5.3
M4	13.5	13.1	29.5	n/a	n/a
M5	15.0	11.7	25.8	1.2	3.0
M6	13.9	14.7	29.0	2.5	6.3
MALIN HEAD	14.1	* PARTIAL DATA			

SUMMARY OF MEAN MONTHLY VALUES

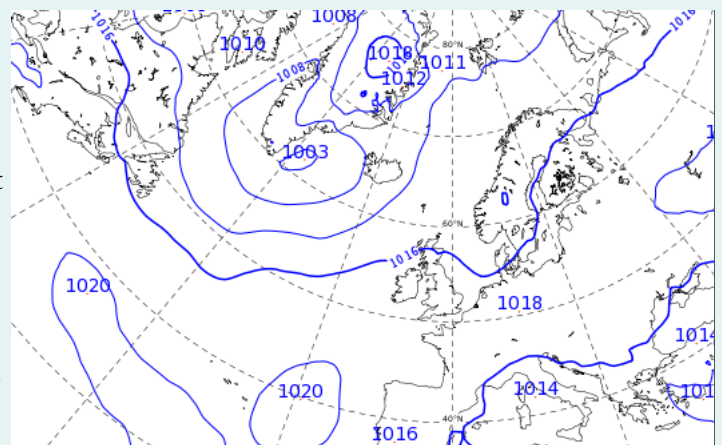


HOURLY MEAN SEA LEVEL PRESSURE SEPTEMBER 2015



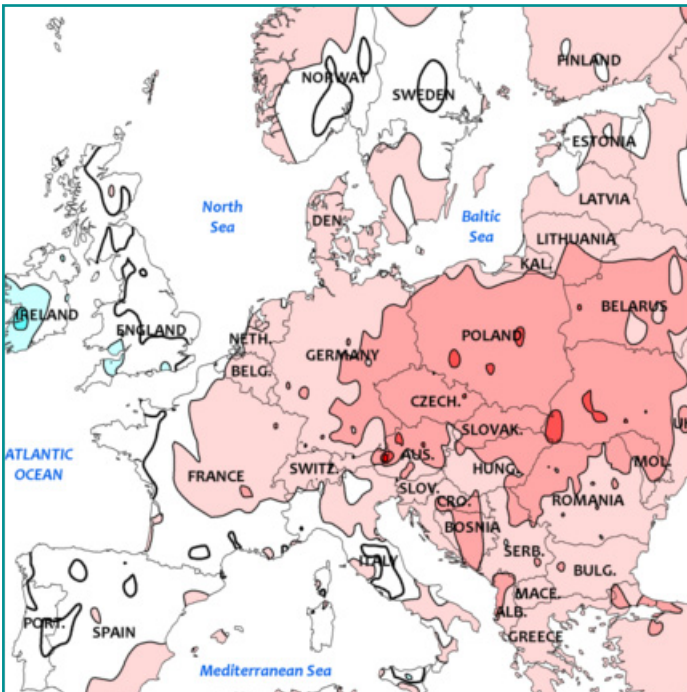
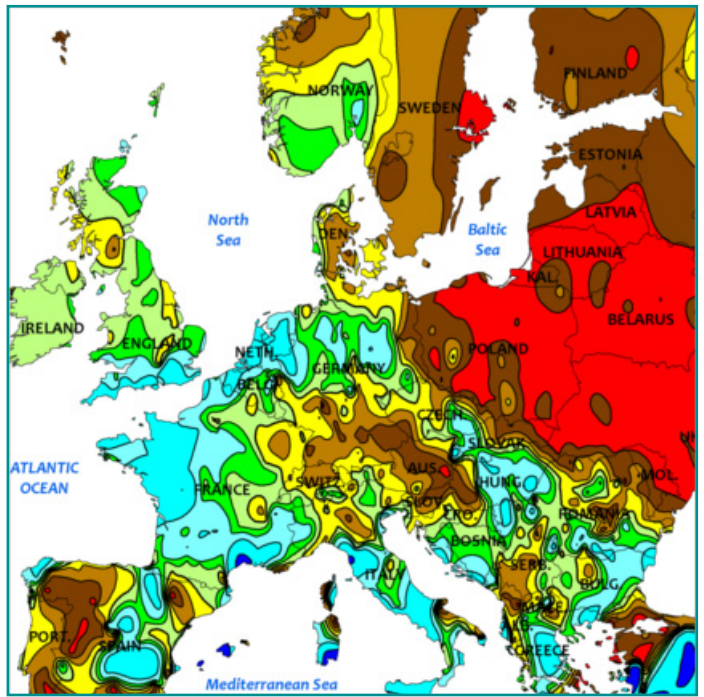
ATMOSPHERIC PRESSURE

Monthly mean sea level pressure values ranged from just below 1017 hPa in the North to just below 1018hPa in the South. The month's lowest pressure value of 991.7 hPa was recorded at Johnstown Castle, Co Wexford on the 16th between 1400 and 1600 UTC as a depression of 984 hPa was located over the southeast UK. The month's highest pressure value was 1037.1 hPa recorded at Malin Head, Co Donegal on the 30th between 0900 UTC and 1100 UTC as a anticyclone of 1039 hPa was located over northern Europe.



MONTHLY MEAN MSL PRESSURE, BASED ON 1200 UTC VALUES

SEPTEMBER RAINFALL
(PERCENTAGE OF 1961-1990 NORMAL)



SEPTEMBER 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

Multiple wildfires, aided by high temperatures, gusty winds, low humidity, dry soil conditions, and plenty of dried vegetation ravaged parts of California for most of September. Two fires; The Valley Fire (northwest of San Francisco) and the Butte Fire (southeast of Sacramento) were the most destructive of the fires. The Valley Fire left four people dead and destroyed nearly 2000 properties, while the Butte fire left two dead and over 800 structures destroyed.

Severe thunderstorms developed parts of Italy on September 5th due to two separate low pressure areas. The storm was brought on by a vigorous southward plunge of the jet stream that carved into western Europe sending a potent upper disturbance into the Italian peninsula. Large baseball sized hail and strong wind gusts were reported in Puzzuoli, near Naples which resulted in widespread damages infrastructure in the area.

Tremendous rainfall, which was enhanced by the remnants of Tropical Storm Eta, led to extensive flooding across parts of Japan from September 8th to 10th. At least eight people were killed and 46 others were injured in central and eastern portions of the country.

Several Nigerian states suffered catastrophic floods between September 5th to 24th as the West African Monsoon started to withdraw from the country. At least 53 people were killed. The floods destroyed as many as 53,000 homes after inundating states of Kano, Katsina, Sokoto, Kebbi, Zamfara, Kaduna, Jigawa, Adamawa, Yobe, Gombe, and Bauchi.

At least 32 individuals were killed by severe thunderstorms and lightning strikes in the eastern Indian states of Odisha (Orissa) and Andhra Pradesh on September 6th. These thunderstorms were triggered by a low pressure area over the Bay of Bengal. Most of the deaths were caused by direct lightning strikes.