



## RAINFALL ANALYSIS FOR SELECTED EASTERN STATIONS AFFECTED BY HEAVY RAINFALL ON AUGUST 1ST AND 2ND

STATION	COUNTY	HDF- HIGHEST DAILY RAINFALL (mm)	DATE OF HIGHEST DAILY RAINFALL	HIGHEST DAILY RAINFALL SINCE AUGUST	PERCENTAGE OF AUGUST MONTHLY TOTAL (%)	RAINFALL RETURN PERIOD (24-HOUR DURATION)	MONTHLY TOTAL (mm)	PERCENTAGE OF AUGUST LTA (%)	HIGHEST MONTHLY RAINFALL SINCE AUGUST	LENGTH OF OBSERVATIONS (YEARS)
BRITTAS (GLENARANEEN)	Dublin	51.4	2	1978	32	2 years	161.9	171	2008	36
DUBLIN (GLASNEVIN)	Dublin	59.3	1	1986	31	10 years	193.4	281	2008	73
DUBLIN (MERRION SQUARE)	Dublin	43.3	2	1999	26	3 years	166.9	259	1948	66
DUBLIN (RINGSSEND)	Dublin	51.5	1	1986	31	5 year	165.7	266	1949	65
DUN LAOGHAIRE	Dublin	54.3	1	1997	32	10 year	169.0		1997	17
GLENASMOLE (SUPT'S LODGE)	Dublin	53.7	2	1986	31	1 year	173.1	187	2008	53
CLONASLEE WATERWORKS	Laois	95.0	1	1985	48	50 - 75 years	197.3	210	2008	29
ARDEE (ST.BRIGID'S HOSP.)	Louth	32.4	2	1984	26	1 year	124.9	192	2008	57
TOGHER (BARMEATH CASTLE)	Louth	45.1	2	1988	34	5 years	133.1	192	2012	26
BELLEWSTOWN (COLLIERSTOWN)	Meath	74.5	2	1997	43	75 years	173.6	218	2008	17
KILSKYRE (ROBINSTOWN)	Meath	69.0	1	1999	40	50 years	171.2	194	2008	15
SLANE (ARDCALF)	Meath	64.3	2	2000	34	20 years	190.5	256	2000	14
CORBETSTOWN	Offaly	51.7	1	1998	36	10 years	145.1		2008	16
BALLIVOR (HILL OF DOWN)	Westmeath	44.9	1	1970	29	4 years	155.2	192	2008	62
GLEN IMAAL	Wicklow	50.1	2	1986	30	6 months	165.4	154	2012	63

*Highest Daily Rainfall (mm) refers to the period 0901-0900 UTC. Years in red are the highest on available record. Rainfall return period is a statistical frequency of heavy rainfall, based on the depth-duration frequency model. All return periods are based on 24-hour duration.*

Mountains, Co Wicklow with 281.0 mm (191% of its LTA). The lowest number of wet days (*days with 1 mm or more of rainfall*) was eight at Little Island, Co Cork which had its lowest number of wet days since 2005, while the highest number of wet days was at Glenbridge Lodge, Co Wicklow with 28 days. Number of very wet days (*days with 10 mm or more*) ranged from zero in parts of the South and Southwest up to nine at Gorey (Garden City), Co Wexford, which recorded seven of its very wet days during the first ten days of the month.

All monthly mean air temperatures were below their Long-Term Average (LTA). Differences from LTA ranged from -1.7°C at Markree, Co Sligo (mean temperature of 13.2°C) to -0.3°C at both Roche's Point, Co Cork (mean temperature of 15.2°C) and Ardtarmon, Co Sligo (mean temperature of 15.1°C). Generally mean temperatures ranged from 12.9°C at Knock Airport, Co Mayo (difference from LTA -0.9°C) to 15.7°C at Dooks, Co Kerry. Highest maximum temperatures were mainly between the 4th and 6th with the month's highest maximum recorded at Arklow (Ballyrichard Hse), Co Wicklow on the 6th with 23.8°C. Lowest air and grass minima were mostly between the 20th and 24th, with lowest air minimum recorded at Mount Dillon, Co Roscommon on the 24th with 1.5°C. Mountrussell, Co Limerick reported an air minimum of 6.1°C its lowest August air temperature since 1990. The month's lowest grass minimum of -2.4°C was recorded on the 24th at both Ballinamore, Co Leitrim and Straide, Co Mayo, their lowest August grass temperature in eight years. Dublin Airport recorded a lowest

grass minimum of -0.3°C also on the 24th, its lowest for August since records began in 1942 (72 years).

Nearly all monthly sunshine totals were near or above LTA. Percentage of LTA sunshine ranged from 88% at Ashford (Cronykeery), Co Wicklow (daily mean sunshine of 4.55 hrs/day) to 173% at Belmullet, Co Mayo (the month's highest daily mean with 7.58 hrs/day). The sunniest day was on the 1st at Belmullet with 12.9 hours, equalling its highest August daily sunshine since 2004. The number of dull days (days with less than 0.5 hours of sunshine) ranged from two at Dungarvan (Carriglea), Co Wexford to eight at Ashford (Cronykeery), Co Wicklow.

### Wind and Elements

Monthly mean wind speeds ranged from 5.7 knots (11 km/h) at Mullingar to 15.3 knots (28 km/h) at Malin Head. Gale force winds were reported on the 2nd, 17th and 27th in the North and on the 28th in the West, with the month's highest 10-minute wind speed reported at Mace Head on the 28th with 36 knots (67 km/h). The month's highest gust of 47 knots (87 km/h) was recorded at Malin Head on the 17th. Thunderstorm activity occurred on most days with most severe activity on the 5th in the North and countrywide on the 9th and 10th, with reports of funnel clouds in the Mayo area on the 3rd and 10th. There was only one report of hail on the 8th at Dungarvan (Carriglea), Co Wexford. Around a fifth of stations reported at least one day with fog, with fog reported on 13 days during the month.

### DRY CONDITIONS IN PARTS; MOSTLY MILD WITH NEAR AVERAGE SUNSHINE

Over two thirds of summer rainfall totals were below their seasonal LTA. All three months reported variable rainfall, with some places reporting a period of absolute drought (*15 or more consecutive days to none of which 0.2 mm or more is credited*) between June 8th and 24th. In contrast, heavy rainfall in eastern areas at the start of August, lead to double or more the normal rainfall for the month at some stations. The driest and wettest conditions (compared to monthly LTA) were reported in Galway in June (lowest percentage of monthly LTA 21%) and in Dublin in August (highest percentage of monthly LTA 281%). Seasonal percentage of LTA values ranged from 50% (seasonal total 316.4 mm) at the Ballaghbeama Gap, Co Kerry to 144% (seasonal total 265.4 mm) at Dublin (Glasnevin). Summer rainfall totals in low-lying areas (regions below 200m) ranged from 116.2 mm (54% of its LTA) at Rathkeale (Duxtown), Co Limerick to 457.6 mm at Leenane (Glanagimla), Co Galway. The overall highest accumulation was at a gauge in the Cumberagh Mountains Co Kerry with 608.7 mm (86% of its LTA). The wettest day of summer August 1st Clonaslee (Waterworks), Co Laois, with 95.0 mm, nearly a third of its seasonal total of 314.8 mm (125% of its LTA) and its wettest summer day since the station opened in 1984. The number of seasonal wet days (*days with 1 mm or more of rainfall*) ranged from 24 days at a small selection of stations in the Southwest to 59 days Dromahair (Market St), Co Leitrim.

All mean air temperatures were near of above their summer LTAs. Monthly mean air temperatures were above their monthly LTAs in June and July, with below LTA mean temperatures recorded in August. Seasonal differences from LTA ranged from -0.3°C at Markree, Co Sligo (mean air temperature of 14.3°C) to 0.9°C at both Ballincurring (Peafield), Co Cork (mean

temperature of 15.3°C) and Waterford (Tycor), which had the seasons highest mean temperature of 16.4 °C. The seasons lowest mean temperature was 14.0°C (0.6°C from its LTA) at Knock Airport, Co Mayo. Seasonal highest maxima were mainly recorded in the last week of July with the highest temperature of the season reported at Durrow, Co Laois on July 25th with 28.8°C. Both the seasons lowest air and grass minima were recorded on June 5th with the lowest air temperature recorded at Castleconnell, Co Limerick with 0.5°C and the lowest grass minimum at Straide, Co Mayo of -2.5°C. There were no days with air frost during summer while ground frost was reported on eight days at scattered stations across the country.

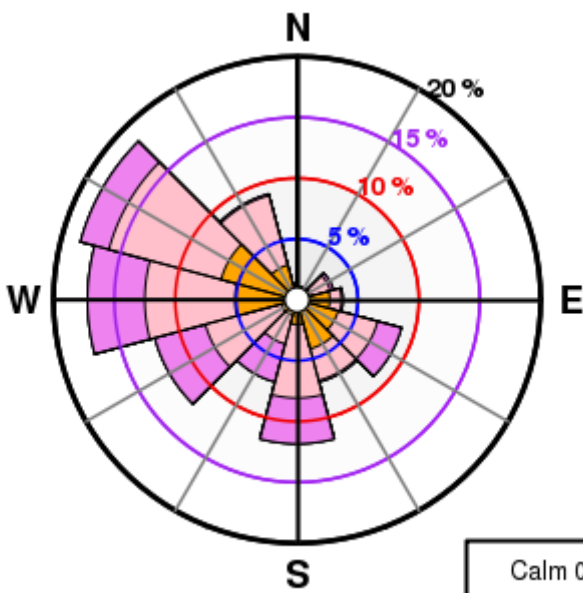
Sunshine totals were near or above their seasonal LTAs in most parts with exception of Knock Airport. Variable sunshine was recorded during all three months with the lowest sunshine (relative to monthly LTAs) recorded in the West in July (just 70%) and the highest in the Southwest in June (above 160%). Lowest percentage of seasonal LTA were at Knock Airport, Co Mayo with 88% (lowest seasonal daily mean sunshine of 3.84 hrs). Percentage of seasonal LTA values were highest at Belmullet Co Mayo with 141% (highest seasonal daily mean sunshine of 6.56 hrs). Belmullet measured summer's sunniest day on June 17th with 15.8 hours, its sunniest June and summer day since 1995. The number of dull days ranged from six days at Dublin Airport to 21 at Knock Airport.

Seasonal mean wind speeds were from 5.1 knots (*9 km/h*) at Mullingar, Co Westmeath to 11.9 knots (*22 km/h*) at Malin Head, Co Donegal. Four days with gale-force winds were reported, all during August on the 2nd, 17th, 27th and 28th in the North and West. Summer's highest 10-minute mean wind speed was at Mace Head on August 28th with 36 knots (*67 km/h*) while the season's highest gust was reported at Malin Head on August 17th with 47 knots (*87 km/h*).

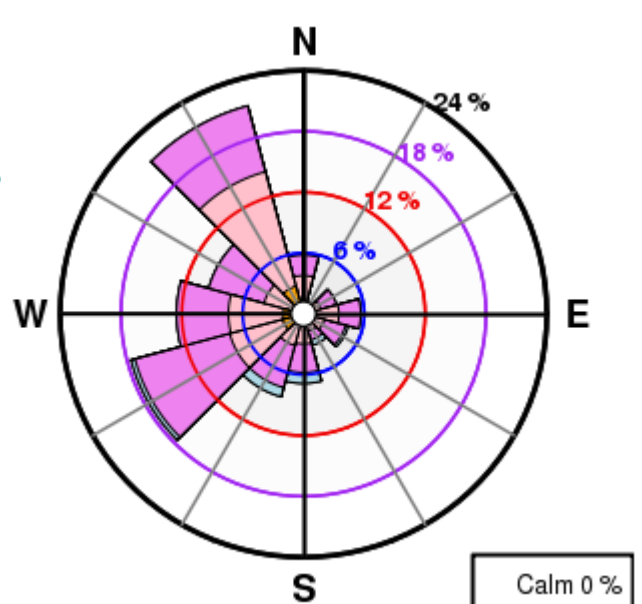
COUNTY/STATION	RAINFALL (mm)					TEMPERATURE (°C)					SUNSHINE (HRS)				WIND				
	TOTAL	% OF LTA	MOST IN A DAY	NO. OF RAIN DAYS	NO. OF WET DAYS	MEAN	DIFFERENCE FROM LTA	EXTREMES MAXIMUM	EXTREMES MINIMUM	NO. OF DAYS GROUND FROST	NO. OF DAYS AIR FROST	TOTAL	% OF AVERAGE	MOST IN A DAY	NO. OF DULL DAYS	HIGHEST GUST (KNOTS)	HIGHEST 10-MIN WIND SPEED (KNOTS)	NO. OF DAYS GALES	NO. OF DAYS GUSTS ≥34 KNOTS
<b>CO CARLOW</b> CARLOW (OAK PARK)	208.7	109	27.6	44	35	15.5	0.2	27.7	5.3	0	0					31	22	0	0
<b>CO CAVAN</b> BALLYHAISE	255.4	110	45.0	54	42	14.7	-0.1	25.2	2.0	1	0					30	17	0	0
<b>CO CLARE</b> SHANNON AIRPORT	166.3	76	15.6	56	37	15.9	0.2	27.4	3.7	1	0	461.7	106	14.5	10	36	26	0	2
<b>CO CORK</b> CORK AIRPORT	217.2	85	24.3	49	34	15.1	0.5	24.4	5.3	1	0	546.4	108	15.5	12	37	24	0	3
ROCHE'S POINT	140.2	66	25.8	40	24	15.7	0.7	24.8	5.4	0	0					38	30	0	7
<b>CO DONEGAL</b> FINNER	220.0	82	31.4	64	46	14.8	0.2	26.7	5.3	2	0					36	26	0	3
MALIN HEAD	228.4	93	12.3	65	46	14.4	0.4	25.6	5.8	0	0					47	34	3	13
<b>CO DUBLIN</b> CASEMENT AERODROME	216.1	114	32.6	50	32	14.9	0.0	24.9	4.5	0	0	498.5	107	15.6	14	34	24	0	1
DUBLIN AIRPORT	244.2	124	50.5	50	26	14.7	-0.2	24.1	3.0	2	0	544.0	110	15.6	6	36	26	0	4
<b>CO KERRY</b> VALENTIA OBSERVATORY	210.6	68	16.8	56	46	15.4	0.5	23.2	4.2	0	0	586.2	134	15.4	11	45	26	0	5
<b>CO MAYO</b> BELMULLET	196.1	78	16.2*	60*	46*	14.9	0.5	22.9	4.8	0	0	603.3	141	15.8	9	41	30	0	4
KNOCK AIRPORT	280.0	95	27.3	71	55	14.0	0.6	25.2	5.5	0	0	353.2	88	15.3	21	38	24	0	3
<b>CO TIPPERARY</b> GURTEEN	213.4	95	27.7	52	37	15.1	0.2	27.0	4.5	1	0					34	21	0	1
<b>CO WESTMEATH</b> MULLINGAR	248.9	108	49.2	60	41	14.7	0.2	26.6	3.7	n/a	0					29	17	0	0
<b>CO WEXFORD</b> JOHNSTOWN CASTLE	198.8	87	32.7	40	26	15.1	0.2	23.3	6.8	0	0					33	20	0	0

COUNTY / STATION	WIND (knots)										ELEMENTS (no.of days)					
	MEAN SPEED	MAX. 10-MIN. DIR.	MEAN		MAX. GUST DIR.	MAX. GUST SPEED	GUST DATE/TIME	DAYS WITH		HOURS WITH		SNOW	SNOW LYING	HAIL	THUNDER	FOG
			DATE/HOUR	DATE/HOUR				GALES	GUST > 34KNOTS	GUST > 34KNOTS	GUST > 34KNOTS					
<b>CO CARLOW</b> OAK PARK	7.5	180°	22	28/13	260°	31	11/1141	0	0	0						
<b>CO CAVAN</b> BALLYHAISE	5.9	120°	17	27/19	320°	30	17/1235	0	0	0						
<b>CO CLARE</b> SHANNON AIRPORT	8.8	220°	26	28/23	220°	36	28/2236	0	2	7	0	0	0	0	0	0
<b>CO CORK</b> FERMOY (MOORE PARK)	5.9	280°	19	10/12	260°	33	29/1303	0	0	0						
SHERKIN ISLAND	10.8	240°	28	28/22	140°	38	27/1409	0	3	10						
ROCHE'S POINT	11.6	290°	30	10/13	290°	38	10/1332	0	6	14						
CORK AIRPORT	9.1	140°	24	27/16	210°	38	28/1610	0	3	5	0	0	0	1	7	
<b>CO DONEGAL</b> MALIN HEAD	15.3	10°	34	2/20	310°	47	17/1310	3	9	74						
FINNER	10.9	310°	34	17/09	230°	36	29/0405	0	3	9						
<b>CO DUBLIN</b> DUBLIN AIRPORT	11.4	230°	26	29/04	270°	36	16/1504	0	4	5	0	0	0	2	1	
CASEMENT AERODROME	9.9	130°	26	27/19	250°	24	11/13	0	1	1	0	0	0	1	1	
<b>CO GALWAY</b> MACE HEAD	14.1	110°	24	27/14	300°	34	17/1647	0	1	1	0	0	0	1	1	
ATHENRY	7.3	230°	21	28/23	230°	36	28/2348	0	2	2						
<b>CO KERRY</b> VALENTIA OBSERVATORY	8.5	230°	21	29/24	100°	40	27/1413	0	3	6						
<b>CO MAYO</b> CLAREMORRIS	7.9	110°	21	27/14	190°	36	28/1734	0	1	3						
BELMULLET	10.2	190°	21	28/17	190°	41	28/1634	0	4	14						
NEWPORT	8.8	160°	30	28/14	200°	43	28/1903	0	2	6						
KNOCK AIRPORT	9.3	200°	26	28/19	190°	38	28/1809	0	3	10	0					6
<b>CO MEATH</b> DUNSANY (GRANGE)	8.0	120°	24	27/16	120°	32	27/1516	0	0	0						
<b>CO ROSCOMMON</b> MOUNTDILLON	10.1	110°	21	27/14	300°	30	17/1234	0	0	0						
<b>CO TIPPERARY</b> GURTEEN (AG COLLEGE)	8.1	290°	19	17/12	130°	34	27/1628	0	1	1						
<b>CO WESTMEATH</b> MULLINGAR	5.7	130°	21	27/18	200°	29	29/0020	0	0	0						
<b>CO WEXFORD</b> JOHNSTOWN CASTLE	8.6	260°	21	29/16	220°	33	28/2331	0	0	0						
		180°	20	29/24												

CARLOW (OAK PARK)



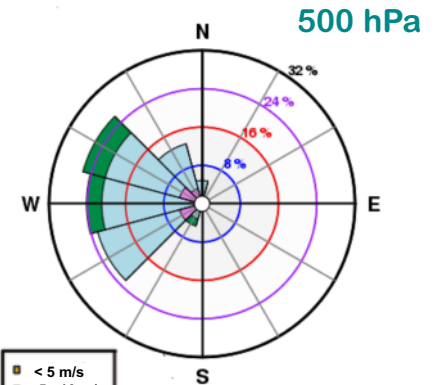
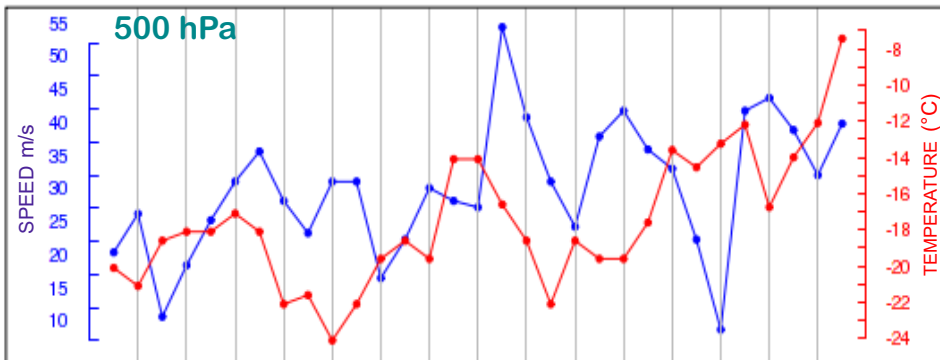
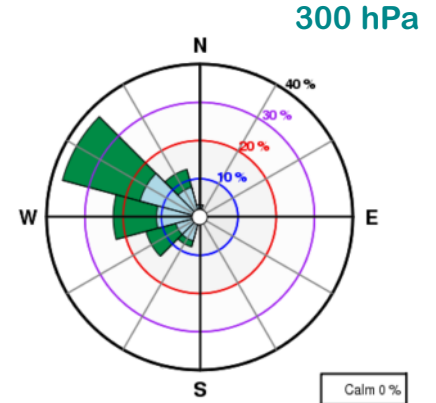
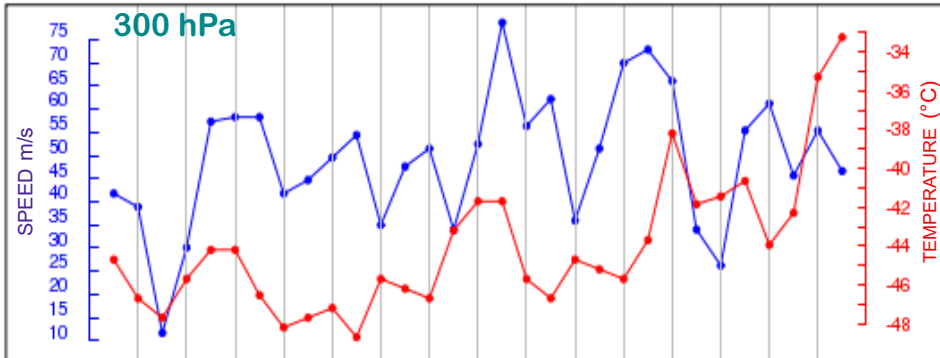
BELMULLET



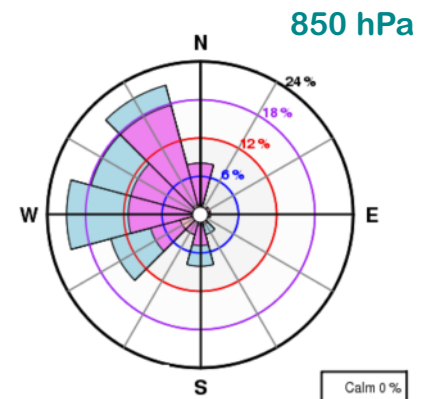
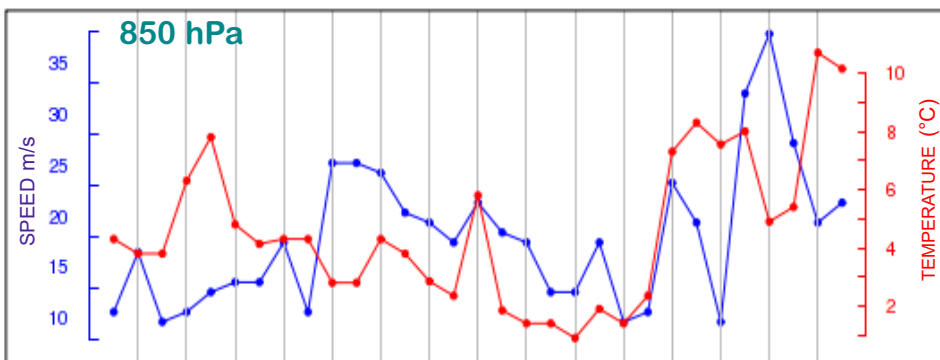
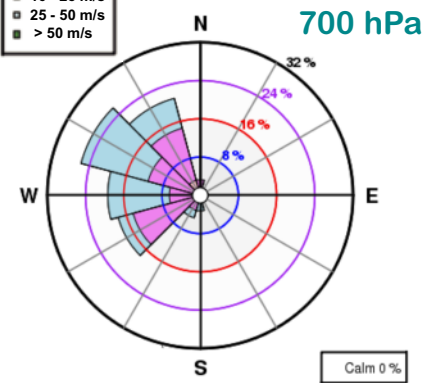
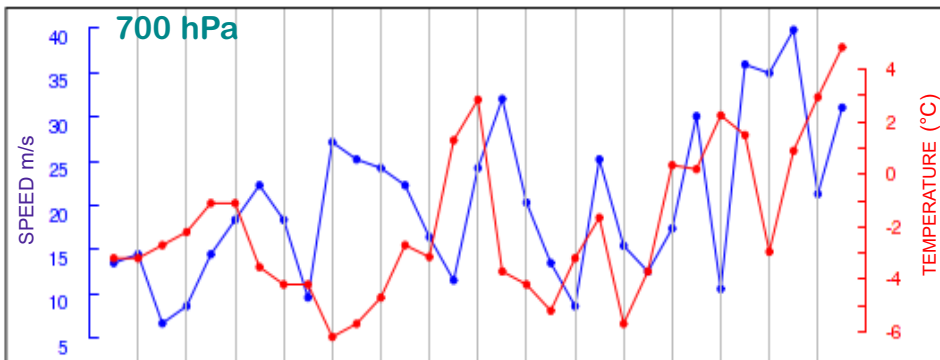
PERCENTAGE FREQUENCY OF WIND DIRECTION

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 AUGUST 2014



- < 5 m/s
- 5 - 10 m/s
- 10 - 25 m/s
- 25 - 50 m/s
- > 50 m/s



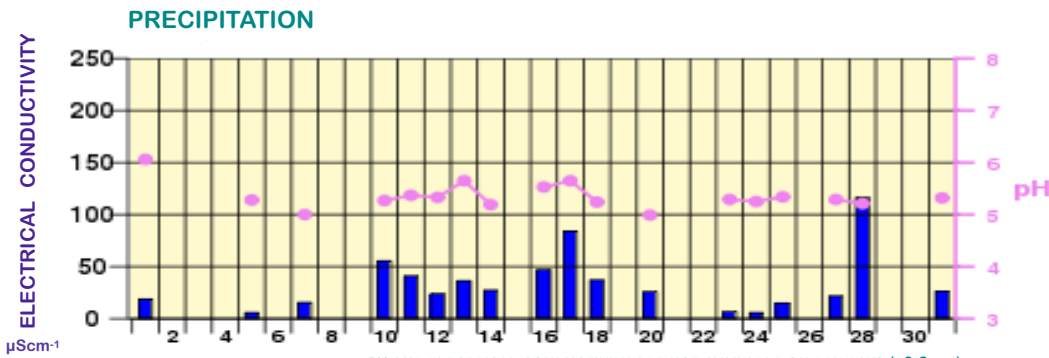
DAY OF MONTH

CHEMICAL ANALYSIS OF PRECIPITATION AND AIR SAMPLES AT VALENTIA OBSERVATORY

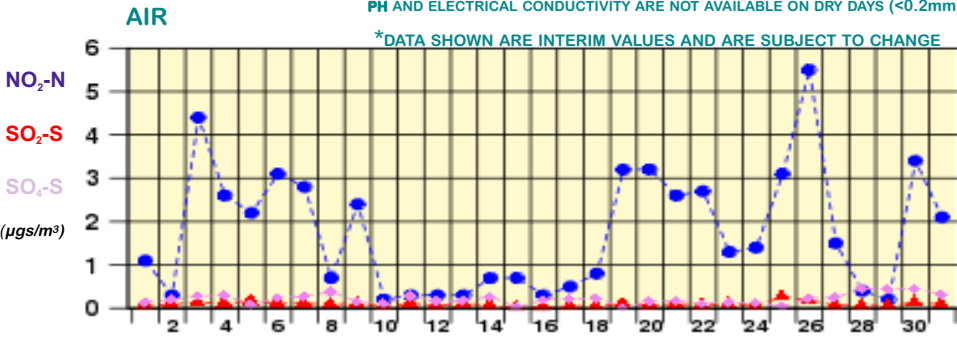
Acid rain occurs when pollutants combine with moisture in the air to form sulphuric or nitric acid. pH is the simplest way of measuring the acidity of precipitation. Usually pH of 7.00 is considered neutral but this is not the case in rainfall samples. Pure water in the atmosphere has an equilibrium pH value of 5.65 at 20°C owing to carbon dioxide in the air dissolving to form carbonic acid. Any value below pH 5.65 is considered acid while any value above is considered alkaline.

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

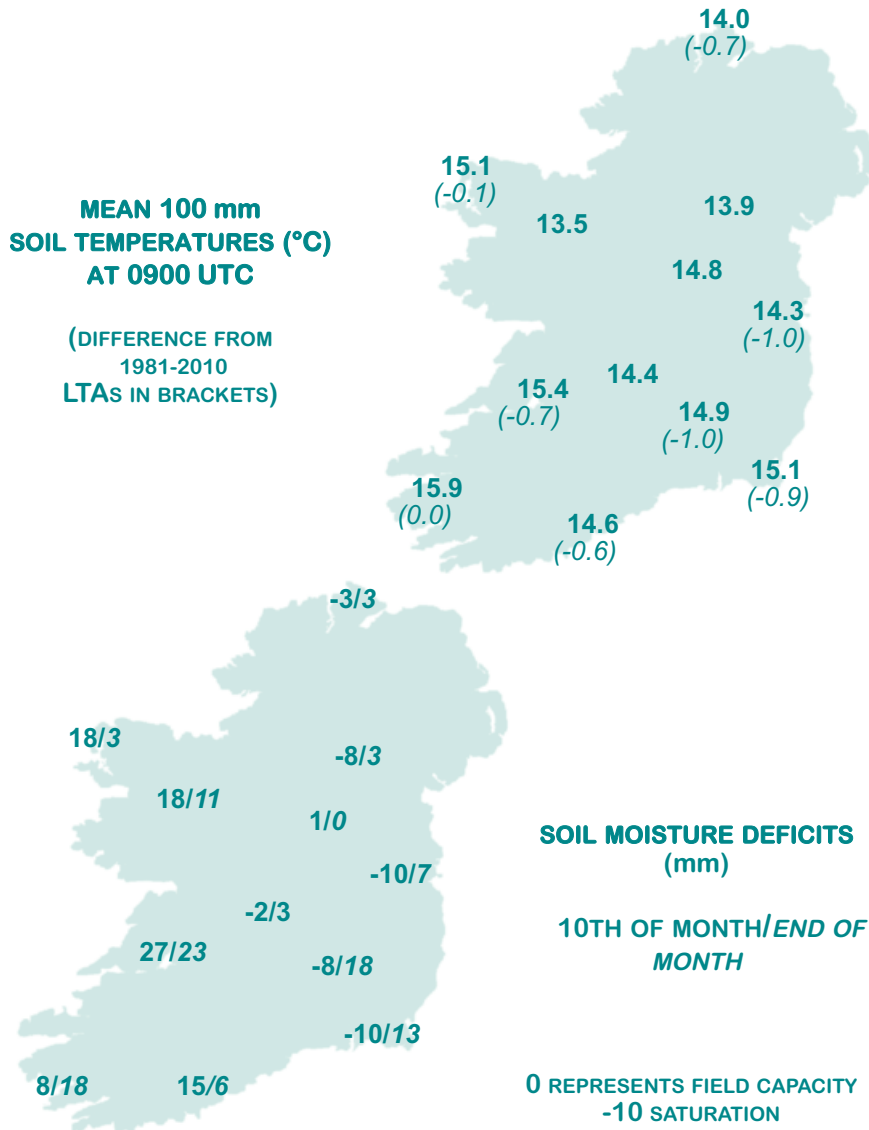
Sulphur dioxide and sulphate in air contribute to the formation of sulphuric acid; nitrate in air contributes to the formation of nitric acid.



PH AND ELECTRICAL CONDUCTIVITY ARE NOT AVAILABLE ON DRY DAYS (<0.2mm)



\*DATA SHOWN ARE INTERIM VALUES AND ARE SUBJECT TO CHANGE



MEAN SOIL TEMPERATURES (°C) AT 0900 UTC

COUNTY/STATION	100 mm	200 mm	300 mm
<b>CO CARLOW</b>			
CARLOW (OAK PARK)	14.9	15.1	15.4
<b>CO. CAVAN</b>			
BALLYHAISE	13.9	14.6	15.8
<b>CO CLARE</b>			
SHANNON AIRPORT	15.4	15.9	16.4
CARRON	15.6		16.9
<b>CO CORK</b>			
ROCHE'S POINT	15.0	15.4	16.0
FERMOY (MOORE PARK)	15.5	15.8	16.3
CORK AIRPORT	14.6	14.7	15.9
SHERKIN ISLAND	15.7	15.7	16.2
BALINCURRIG (PEAFIELD)	14.4	14.8	15.8
<b>CO DONEGAL</b>			
MALIN HEAD	14.0	14.3	14.8
<b>CO DUBLIN</b>			
PHOENIX PARK	15.6	16.4	16.5
DUBLIN AIRPORT	13.8	14.5	15.3
CASEMENT AERODROME	14.3	14.6	15.3
<b>CO KERRY</b>			
VALENTIA OBSERVATORY	15.9	16.3	16.6
<b>CO KILKENNY</b>			
THOMASTOWN (MT JULIET)	16.7	16.9	
<b>CO LIMERICK</b>			
MOUNT RUSSELL	n/a	n/a	n/a
<b>CO MAYO</b>			
BELMULLET	15.1	16.0	16.9
STRAIDE	15.3		
KNOCK AIRPORT	13.5	14.3	14.4
<b>CO MEATH</b>			
WARRENSTOWN	14.3	15.4	16.8
DUNSANY (GRANGE)	14.1	15.3	15.6
<b>CO TIPPERARY</b>			
GURTEEN (AG COLLEGE)	14.4	14.7	15.0
FETHARD (PARSONSHILL)	14.6	15.6	
<b>CO WATERFORD</b>			
DUNGARVAN (CARRIGLEA)	16.0	16.3	
<b>CO WESTMEATH</b>			
MULLINGAR	14.8	15.5	16.3
<b>CO. WEXFORD</b>			
JOHNSTOWN CASTLE	15.1	15.2	15.5
JFK PARK	16.1	16.6	17.7
<b>CO WICKLOW</b>			
ASHFORD (CRONYKEERY)	15.9	16.1	17.0

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."	DATE	DAYS WITH GROUND FROST	MEAN 10CM AT 0900H	MEAN 30CM AT 0900H	TOTAL NO. OF HOURS	% OF AVERAGE
<b>CO CORK</b>	1-10	50.7		5	3	19.9	10.8	15.4		8.2	4	0	110	55	8.0	4	0	15.7	16.8	62.6	
BALLINCURRIG	11-20	6.8		5	3	18.6	9.1	13.9		6.2	20	0	94	42	6.0	20	0	14.0	16.0	78.2	
(PEAFIELD)	21-END	38.1		9	7	18.0	9.4	13.7		5.2	23	0	102	45	5.0	23	0	13.7	14.8	34.3	
	<b>MONTH</b>	<b>95.6</b>	<b>97</b>	<b>19</b>	<b>13</b>	<b>18.8</b>	<b>9.8</b>	<b>14.3</b>	<b>-0.6</b>	<b>5.2</b>	<b>23</b>	<b>0</b>	<b>306</b>	<b>141</b>	<b>5.0</b>	<b>23</b>	<b>0</b>	<b>14.4</b>	<b>15.8</b>	<b>175.1</b>	<b>103</b>
<b>CO DONEGAL</b>	1-10	51.2		10	9	19.0	10.5	14.8		8.4	8	0	103	49	6.5	8	0	-	-	-	
GLENTIES HATCHERY	11-20	34.5		10	8	16.9	9.2	13.1		5.0	19	0	86	34	3.4	19	0	-	-	-	
	21-END	44.7		8	7	17.9	9.6	13.8		2.0	24	0	103	45	1.1	24	0	-	-	-	
	<b>MONTH</b>	<b>130.4</b>	<b>104</b>	<b>28*24*</b>		<b>17.9</b>	<b>9.7</b>	<b>13.8</b>	<b>-0.7</b>	<b>2.0</b>	<b>24</b>	<b>0</b>	<b>292</b>	<b>127</b>	<b>1.1</b>	<b>24</b>	<b>0</b>	-	-	-	-
<b>CO KERRY</b>	1-10	35.9		9	9	19.7	11.5	15.6		9.6	4	0	112	56	9.0	4	0	-	-	64.3	
ARDFERT	11-20	33.2		9	8	18.1	11.1	14.6		7.3	20	0	102	47	6.4	20	0	-	-	62.0	
(LISCAHANE)	21-END	15.2		9	5	18.5	11.1	14.8		6.5	23	0	115	54	5.6	23	0	-	-	38.7	
	<b>MONTH</b>	<b>84.3</b>	<b>94</b>	<b>27</b>	<b>22</b>	<b>18.7</b>	<b>11.3</b>	<b>15.0</b>	<b>-0.5</b>	<b>6.5</b>	<b>23</b>	<b>0</b>	<b>329</b>	<b>157</b>	<b>5.6</b>	<b>23</b>	<b>0</b>	-	-	<b>165.0</b>	<b>112</b>
<b>CO MONAGHAN</b>	1-10	87.9		8	7	19.0	10.4	14.7		6.2	7	0	103	50	4.1	7	0	-	-	-	
CARRICKMACROSS	11-20	4.5		6	1	17.4	9.7	13.6		6.0	19	0	91	37	3.4	20	0	-	-	-	
	21-END	38.4		7	6	16.8	9.3	13.1		1.9	24	0	96	38	-1.1	24	1	-	-	-	
	<b>MONTH</b>	<b>130.8</b>	<b>161</b>	<b>21*14*</b>		<b>17.7</b>	<b>9.8</b>	<b>13.7</b>	<b>-1.4</b>	<b>1.9</b>	<b>24</b>	<b>0</b>	<b>290</b>	<b>125</b>	<b>-1.1</b>	<b>24</b>	<b>1</b>	-	-	-	-
<b>CO WATERFORD</b>	1-10	65.9		8	5	20.7	11.3	16.0		7.0	4	0	116	62	3.0	4	0	-	17.4	62.3	
DUNGARVAN	11-20	10.0		6	2	19.1	9.6	14.4		6.1	20	0	99	46	2.5	20	0	-	16.0	72.5	
(CARRIGLEA)	21-END	29.8		7	4	19.1	10.1	14.6		4.1	23	0	113	55	0.1	23	0	-	15.5	41.6	
	<b>MONTH</b>	<b>105.7</b>	<b>114</b>	<b>21</b>	<b>11</b>	<b>19.6</b>	<b>10.3</b>	<b>15.0</b>	<b>-0.9</b>	<b>4.1</b>	<b>23</b>	<b>0</b>	<b>328</b>	<b>162</b>	<b>0.1</b>	<b>23</b>	<b>0</b>	-	<b>16.3</b>	<b>176.4</b>	<b>106</b>
<b>CO WEXFORD</b>	1-10	122.0		8	8	19.5	11.3	15.4		8.0	7	0	110	55	5.0	7	0	17.1	18.5	55.1	
JFK PARK	11-20	5.3		3	3	18.9	9.3	14.1		6.8	20	0	97	44	5.0	20	0	16.2	18.0	74.6	
	21-END	27.3		5	4	17.9	10.3	14.1		6.7	21	0	107	48	4.4	23	0	15.2	16.8	44.1	
	<b>MONTH</b>	<b>154.6</b>	<b>179</b>	<b>16</b>	<b>15</b>	<b>18.7</b>	<b>10.3</b>	<b>14.5</b>	<b>-0.9</b>	<b>6.7</b>	<b>21</b>	<b>0</b>	<b>313</b>	<b>146</b>	<b>4.4</b>	<b>23</b>	<b>0</b>	<b>16.1</b>	<b>17.7</b>	<b>173.8</b>	<b>109</b>
<b>CO WICKLOW</b>	1-10	105.2		8	8	19.9	11.1	15.5		7.4	9	0	111	57	1.7	7	0	17.1	18.1	43.9	
ASHFORD	11-20	6.7		6	3	18.2	10.8	14.5		8.1	11	0	101	46	2.1	20	0	15.6	17.1	62.6	
(CRONYKEERY)	1-END	50.0		7	6	17.8	11.0	14.4		5.5	24	0	110	51	-0.1	24	1	15.0	16.0	34.5	
	<b>MONTH</b>	<b>161.9</b>	<b>227</b>	<b>21</b>	<b>17</b>	<b>18.6</b>	<b>10.9</b>	<b>14.8</b>	<b>-0.7</b>	<b>5.5</b>	<b>24</b>	<b>0</b>	<b>322</b>	<b>154</b>	<b>-0.1</b>	<b>24</b>	<b>1</b>	<b>15.9</b>	<b>17.0</b>	<b>141.0</b>	<b>88</b>

P.E. (PENMAN)		GLOBAL SOLAR RADIATION (MJ/m <sup>2</sup> )				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)
<b>CO CARLOW</b>		<b>CO CARLOW</b>							
CARLOW (OAK PARK)	74	CARLOW (OAK PARK)*	148.89	164.18	127.48	440.55			
<b>CO CAVAN</b>		<b>CO CAVAN</b>							
BALLYHAISE	62	BALLYHAISE*	138.06	149.52	120.36	407.94			
<b>CO CLARE</b>		<b>CO CORK</b>							
SHANNON AIRPORT	75	ROCHE'S POINT*	180.38	170.72	134.35	485.45	<b>CO KERRY</b>		
<b>CO CORK</b>		<b>CO DONEGAL</b>					VALENTIA OBSERVATORY	87.4	80.1
CORK AIRPORT	72	MALIN HEAD*	130.99	135.08	162.14	428.21	<b>CO KERRY</b>		
<b>CO DONEGAL</b>		<b>CO DUBLIN</b>					NORTH KERRY LANDFILL	69.8	46.7
MALIN HEAD	69	DUBLIN AIRPORT*	136.23	156.56	131.40	424.19	<b>CO MAYO</b>		
<b>CO DUBLIN</b>		<b>CO KERRY</b>					NEWPORT (FURNACE)	51.4	52.0
DUBLIN AIRPORT	70	VALENTIA OBS.*	183.96	177.81	128.90	490.67	<b>CO OFFALY</b>		
CASEMENT AERODROME	68	<b>CO MAYO</b>					DERRYGREENAGH	64.6	60.3
<b>CO KERRY</b>		BELMULLET*	188.63	168.57	115.13	472.33	<b>CO WATERFORD</b>		
VALENTIA OBS.	76	<b>CO TIPPERARY</b>					DUNGARVAN (CARRIGLEA)	113.4	84.9
<b>CO MAYO</b>		GURTEEN (AG. COLLEGE)*	150.27	158.28	121.04	429.59	<b>CO WEXFORD</b>		
BELMULLET	74	<b>CO WESTMEATH</b>					JFK PARK	83.8	106.1
KNOCK AIRPORT	54	MULLINGAR*	133.17	159.95	111.86	404.98			
<b>CO TIPPERARY</b>		<b>CO WEXFORD</b>							
GURTEEN (AG. COLLEGE)	68	JOHNSTOWN CASTLE*	179.14	172.78	133.23	485.15			
<b>CO WESTMEATH</b>									
MULLINGAR	64								
<b>CO WEXFORD</b>									
JOHNSTOWN CASTLE	74								

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

**Friday 1st:** Rain spread into the Southwest in the early afternoon, pushing up through the middle of the country and producing some very heavy bursts during the evening. Some sunshine in the North and East, cloudy elsewhere. Winds were light and variable in direction.

**Rainfall:** Nil at numerous locations to 95.0 mm at Clonasee WW  
**Temperature:** Lowest max. 16.5°C at Belderrig, highest max. 22.2°C at Springfield Castle.  
**Lowest min.** 8.5°C at Ballycroy-Knockmoyleen, highest min. 15.8°C at Cloyne (Lisanley)  
**Sunshine:** 0.1 hours at Cork Apt to 12.9 hours at Belmullet

**Saturday 2nd:** During the morning the rain drifted westwards to affect most of Connacht and north Munster. In the afternoon the rain retreated eastwards. Much of Munster and west Connacht had a dry sunny day. Winds were moderate, northwesterly.

**Rainfall:** Nil at numerous locations to 74.5 mm at Bellewstown (Collierstown)  
**Temperature:** Lowest max. 13.7°C at Mullingar 13.7°C at Knock Apt, highest max. 21.5°C at Glengarriff (Inacullin). Lowest min. 7.0°C at Straide, highest min. 13.8°C at Dun Laoghaire  
**Sunshine:** Nil at numerous locations to 11.7 hours at Sherkin Island

**Sunday 3rd:** Rain in the East through the morning, with scattered showers and sunshine elsewhere. Showers and sunny periods in most parts through the afternoon. The evening and night became mainly dry with good sunny spells. Winds were moderate to fresh, northwesterly.

**Rainfall:** Nil at numerous locations to 25.4 mm at Lanesboro (Doire Dharog)  
**Temperature:** Lowest max. 14.7°C at Knock Apt, highest max. 22.4°C at Cloyne (Lisanley).  
**Lowest min.** 8.5°C at Ballina Golf Club, highest min. 14.5°C at Valentia Obs  
**Sunshine:** Nil at Ballyshannon (Cathleen's Fall) to 12.8 hours at Sherkin Island

**Monday 4th:** Mainly clear skies at night gave some mist and fog patches before giving way to a mainly dry day overall. Persistent showers in the Southwest spread northeastwards by evening time, giving some heavy and thundery showers in places. Temperatures were quite high. Winds were light, southerly.

**Rainfall:** Nil at numerous locations to 37.2 mm at Ashford (Glanmore Gardens)  
**Temperature:** Lowest max. 17.6°C at Malin Head, highest max. 23.5°C at Ardee (Boharnamoe). Lowest min. 4.0°C at Straide, highest min. 12.5°C at Ballycroy-Knockmoyleen  
**Sunshine:** 4.8 hours at Sherkin Island to 12.6 hours at Casement

**Tuesday 5th:** Some heavy showery rain in the East cleared to give another fairly warm and humid day, cloudy for the most part. Winds were light and southerly.

**Rainfall:** Nil at numerous locations to 52.0 mm at Termon (Goldrum)  
**Temperature:** Lowest max. 17.6°C at Craggaunowen, highest max. 23.5°C at Cavan (Drumconnick). Lowest min. 10.1°C at Belderrig, highest min. 15.8°C at Johnstown  
**Sunshine:** 0.3 hours at Cork Apt to 8.5 hours at Belmullet

**Wednesday 6th:** Shower activity picked up again in the North through the morning. Some very heavy showers developed in Ulster during the afternoon. Sunshine everywhere. Winds were light to moderate, west to Southwest.

**Rainfall:** Nil at numerous locations to 10.9 mm at Fintown (Kingarrow)  
**Temperature:** Lowest max. 17.7°C at Ballycroy-Knockmoyleen, highest max. 23.8°C at Arklow (Ballyrichard Hse). Lowest min. 10.2°C at Craggaunowen, highest min. 15.5°C at Dublin (Glasnevin) and Cavan (Drumconnick)  
**Sunshine:** 3.5 hours at Knock Apt to 12.8 hours at Sherkin Island

**Thursday 7th:** Heavy showers developed during the day. It was quite cool overnight, but afternoon temperatures were slightly above normal. A mixture of cloud and sunny spells everywhere. Winds were light to moderate, southwesterly.

**Rainfall:** Nil at numerous locations to 37.0 mm at Piltown (Kildalton Agr Col)  
**Temperature:** Lowest max. 17.7°C at Belmullet, highest max. 22.6°C at Springfield Castle.  
**Lowest min.** 5.1°C at Thomastown (Mt Juliet), highest min. 13.6°C at Mace Head  
**Sunshine:** 4.1 hours at Edenderry (Ballinla) to 10.4 hours at Ardfer (Liscahane)

**Friday 8th:** The morning was mainly cloudy with rain in eastern parts, but dry further west with good sunshine. The afternoon and evening saw well scattered showers with good sunny spells. Winds were light, southerly.

**Rainfall:** Nil at numerous locations to 37.6 mm at Mullinavat (Glendonnell)  
**Temperature:** Lowest max. 16.1°C at Dundalk (Annaskeagh WW), highest max. 21.6°C at Cloyne (Lisanley). Lowest min. 8.4°C at Glenties Hatchery, highest min. 15.6°C at Dublin (Glasnevin)  
**Sunshine:** 2.3 hours at Dublin (Glasnevin) to 8.8 hours at Belmullet

**Saturday 9th:** Good sunny periods through the morning with just the odd shower. The day continued to be showery, with some heavy and thundery. Winds were light to moderate, southwesterly.

**Rainfall:** Nil at numerous locations to 73.2 mm at Arklow WW  
**Temperature:** Lowest max. 17.0°C at Ballymore, highest max. 22.9°C at Adare Manor  
**Lowest min.** 6.7°C at Thomastown (Mt Juliet), highest min. 14.3°C at Sherkin Island  
**Sunshine:** 0.1 hours at Sherkin Island to 12.5 hours at Belmullet

**Sunday 10th:** Sunny spells and showers in most areas during the morning. Very heavy showers developed along eastern coasts mainly during the afternoon with some thunder also, but these died away later, and clear periods developed in most places. Winds were moderate, westerly.

**Rainfall:** Nil at numerous locations to 33.5 mm at Pettigo (Belault)  
**Temperature:** Lowest max. 14.7°C at Ballyhaise, highest max. 19.9°C at Arklow (Ballyrichard Hse). Lowest min. 6.0°C at Ballina Golf Club, highest min. 13.1°C at Valentia Obs  
**Sunshine:** 1.5 hours at Edenderry (Ballinla) to 12.7 hours at Sherkin Island

**Monday 11th:** Showers developed countrywide during the morning and afternoon, some were heavy, but with some good sunshine in-between. Shower activity declined during evening and most places became dry. Winds were fresh, westerly.

**Rainfall:** Nil at numerous locations to 26.4 mm at Corrofin (Soheen)  
**Temperature:** Lowest max. 16.3°C at Knock Apt, highest max. 20.3°C at Piltown (Kildalton Agr Col). Lowest min. 7.3°C at Moore Park, highest min. 13.5°C at Dooks  
**Sunshine:** 5.3 hours at Newport (Furnace) to 11.8 hours at Straide

**Tuesday 12th:** Isolated showers mainly in the West and South became more widespread during the day, with some prolonged rain in the North, becoming more isolated as the evening wore on. Some of the showers were heavy and thundery. There were spells of sunshine in many areas. Winds were moderate to fresh, southwesterly.

**Rainfall:** Nil at numerous locations to 19.2 mm at Killarney (Muckross Hse)  
**Temperature:** Lowest max. 15.9°C at Dundalk (Annaskeagh WW), highest max. 21.0°C at Cahore (Kilmichael Hse). Lowest min. 6.7°C at Dundalk (Annaskeagh WW), highest min. 13.3°C at Ballycroy-Knockmoyleen  
**Sunshine:** 2.7 hours at Ballyshannon (Cathleen's Fall) to 11.1 hours at Ballincurry (Peafield)

**Wednesday 13th:** A mainly dry day, some well scattered showers mainly in the South and North, some heavy and thundery, becoming a little more widespread in the afternoon. Winds were moderate to fresh, northwesterly.

**Rainfall:** Nil at numerous locations to 19.2 mm at Listowel (Gurtocloghane)  
**Temperature:** Lowest max. 16.0°C at Knock Apt, highest max. 22.0°C at Cahore (Kilmichael Hse) and Arklow (Ballyrichard Hse). Lowest min. 9.6°C at Ballina Golf Club, highest min. 14.1°C at Ardtarmon  
**Sunshine:** 1.0 hours at Ardfer (Liscahane) to 8.9 hours at Ashford (Cronykeery)

**Thursday 14th:** Widespread heavy showers developed in the southern half of the country earlier in the day but then quickly died out. A mixture of sunny spells and showers. Winds were moderate, northwesterly.

**Rainfall:** Nil at numerous locations to 25.3 mm at Tralee (Lisaboula)  
**Temperature:** Lowest max. 15.7°C at Knock Apt, highest max. 21.8°C at Glengarriff (Inacullin). Lowest min. 7.6°C at Markree, highest min. 13.0°C at Newport (Furnace), Sherkin Island and Dooks  
**Sunshine:** 4.4 hours at Arklow (Ballyrichard Hse) and Ashford (Cronykeery) to 10.7 hours at Sherkin Island

**Friday 15th:** It was a mostly dry day. There was prolonged sunshine in the Southwest, elsewhere there was a mix of sunshine and cloud. Cool for mid August. Winds were moderate, north to northwest.

**Rainfall:** Nil at numerous locations to 4.2 mm at Falcarragh (Lough Altan)  
**Temperature:** Lowest max. 15.6°C at Malin Head, highest max. 21.2°C at Glengarriff (Inacullin). Lowest min. 6.8°C at Thomastown (Mt Juliet), highest min. 13.0°C at Mace Head  
**Sunshine:** 2.4 hours at Edenderry (Ballinla) to 9.7 hours at Valentia Obs

**Saturday 16th:** There was scattered patchy light rain during the early part of the day, more organised bands of light rain moved down over the country in the evening. Cloudy everywhere, cool for mid August. Winds were fresh, southwesterly.

**Rainfall:** Nil at numerous locations to 9.7 mm at Illies (Pollan Dam WW)  
**Temperature:** Lowest max. 14.8°C at Belderrig, highest max. 19.9°C at Mallow (Spa Hse)  
**Lowest min.** 7.6°C at Mallow (Spa Hse), highest min. 13.6°C at Dooks  
**Sunshine:** Nil at Ballyshannon (Cathleen's Fall) to 2.2 hours at Ashford (Cronykeery)



**Sunday 17th:** Lines of showers moved southwards over the country, they were mostly light. A good deal of sunshine everywhere, somewhat cloudier in the North, cool for mid August with the fresh winds adding a further chill. Winds were fresh to strong, northwesterly.

*Rainfall: Nil at numerous locations to 20.3 mm at Leenane-Glanagimla*  
*Temperature: Lowest max. 14.6°C at Knock Apt, highest max. 21.0°C at Cahore (Kilmichael Hse). Lowest min. 7.0°C at Ballina Golf Club, highest min. 13.8°C at Sherkin Island*  
*Sunshine: 7.0 hours at Edenderry (Ballinla) to 11.9 hours at JFK Park*

**Monday 18th:** Showers in the morning, heavy in the Southwest, became more scattered giving plenty of bright and sunny spells for most places. Later cloud in the North brought more showers and rain. A mild day, warmest in the South and Southwest. Winds were moderate to fresh, northwesterly.

*Rainfall: Nil at numerous locations to 15.3 mm at Markree*  
*Temperature: Lowest max. 13.9°C at Malin Head, highest max. 19.9°C at Cahore (Kilmichael Hse). Lowest min. 7.8°C at Craggaunowen, highest min. 12.4°C at Ardtarmon and Oughterard (Arnasillagh)*  
*Sunshine: 4.5 hours at Ballyshannon (Cathleen's Fall) to 11.1 hours at Cork Apt*

**Tuesday 19th:** Light rain and drizzle early in the day but it cleared away. It was followed by sunny spells and a good scattering of light showers. There were good levels of sunshine recorded but temperatures remained a few degrees below normal. Winds were light to moderate, northwesterly.

*Rainfall: Nil at numerous locations to 12.7 mm at Castle Dargan Golf Club*  
*Temperature: Lowest max. 14.0°C at Malin Head, highest max. 20.0°C at Glengarriff (Ilnacullin) Lowest min. 5.0°C at Glenties Hatchery, highest min. 11.8°C at Sherkin Island*  
*Sunshine: 6.4 hours at Newport (Furnace) to 11.3 hours at Straide*

**Wednesday 20th:** Mostly dry and clear overnight with isolated showers in the West, becoming scattered and isolated towards evening before dying out completely. Winds were light to moderate, northwesterly.

*Rainfall: Nil at numerous locations to 10.8 mm at Belderrig*  
*Temperature: Lowest max. 14.6°C at Malin Head, highest max. 18.5°C at Oughterard (Ardnasillagh). Lowest min. 2.9°C at Thomastown (Mt Juliet), highest min. 10.8°C at Mace Head and Ballycroy-Knockmoyleen*  
*Sunshine: 0.4 hours at Ashford (Cronykeery) to 10.6 hours at Belmullet*

**Thursday 21st:** A mainly cloudy day with rain and drizzle in the North spreading southeastwards during the morning becoming more widespread in the afternoon with heavier and more persistent spells of rain. Some clear and sunny spells between the rain. Winds were moderate to fresh, westerly.

*Rainfall: Nil at numerous locations to 14.8 mm at Pettigo (Lough Derg)*  
*Temperature: Lowest max. 14.3°C at Belderrig, highest max. 19.5°C at Cahore (Kilmichael Hse). Lowest min. 4.7°C at Mallow (Spa Hse), highest min. 11.7°C at Ardtarmon*  
*Sunshine: 2.6 hours at Ashford (Cronykeery) and JFK Park to 8.0 hours at Belmullet*

**Friday 22nd:** Light showers continued overnight in the North and on Atlantic coasts. The showers spread to most of the country during the morning and afternoon and died out by evening. There was a mix of sunshine and cloud. Winds were moderate, northwesterly.

*Rainfall: Nil at numerous locations to 9.3 mm at Crolly (Filter-Works)*  
*Temperature: Lowest max. 13.8°C at Knock Apt, highest max. 19.2°C at Cloyne (Lisanley). Lowest min. 5.0°C at Mallow (Spa Hse), highest min. 11.7°C at Ardtarmon*  
*Sunshine: 5.1 hours at Dungarvan (Carriglea) to 11.6 hours at Valentia Obs*

**Saturday 23rd:** Light showers continued overnight in the North, but it was dry elsewhere. The showers spread inland through Ulster and North Leinster during the morning, but died out by late afternoon. There were good spells of sunshine everywhere. Winds were light to moderate, northwesterly.

*Rainfall: Nil at numerous locations to 21.5 mm at Waterville Octive No.9*  
*Temperature: Lowest max. 14.0°C at Malin Head, highest max. 19.7°C at Adare Manor*  
*Lowest min. 2.2°C at Castleconnell, highest min. 11.1°C at Belderrig*  
*Sunshine: 5.7 hours at Clonroche (Knoxton) to 11.7 hours at Belmullet*

**Sunday 24th:** Dry overnight with some clear spells. Rain spread into southern areas during the morning and afternoon, but dry further north with some sunny breaks. Rain cleared southern parts during the evening and fog developed in parts, it remained wet in the East through evening. Winds were light to moderate, southeasterly.

*Rainfall: Nil at numerous locations to 31.2 mm at Kenmare (Derreen)*  
*Temperature: Lowest max. 13.7°C at Knock Apt, highest max. 19.7°C at Waterford (Tycor)*  
*Lowest min. 1.5°C at Mt Dillon, highest min. 13.1°C at Valentia Obs*  
*Sunshine: Nil at numerous locations to 3.3 hours at Dublin Apt*

**Monday 25th:** Rain in many places overnight. A wet morning and afternoon over most of the country, with widespread rain and drizzle. It became dry in western parts during the evening, but the rain and drizzle continued in eastern and northeastern parts. Winds were moderate, south to southeast.

*Rainfall: Nil at numerous locations to 31.4 mm at Lanesboro (Cloonadra)*  
*Temperature: Lowest max. 14.5°C at Carrickmacross (Dunoge), highest max. 22.5°C at Castleconnell. Lowest min. 8.2°C at Derrygreenagh, highest min. 14.7°C at Valentia Obs*  
*Sunshine: Nil at numerous locations to 2.8 hours at Wexford Wildfowl Reserve*

**Tuesday 26th:** Cloudy overnight with patchy rain and drizzle in places, with some fog in places also. Some rain and drizzle in the East during the morning, but dry over the rest of the country with some sunny spells. The afternoon and evening became dry in all areas with good sunshine also. Winds were fresh to strong, northeasterly.

*Rainfall: Nil at numerous locations to 18.5 mm at Newtownmountkennedy Forest Lab*  
*Temperature: Lowest max. 14.7°C at Knock Apt, highest max. 22.5°C at Dooks. Lowest min. 11.4°C at Glenties Hatchery, highest min. 15.1°C at Cloyne (Lisanley)*  
*Sunshine: Nil at numerous locations to 4.1 hours at Cork Apt*

**Wednesday 27th:** Mainly dry overnight, rain developed in the Southwest and South during the early morning, but stayed dry over the rest of the country. Rain spread northeastwards and affected most areas during the day, but drier weather developed in the Southwest. Winds were fresh to strong, south to southeast.

*Rainfall: Nil at numerous locations to 24.4 mm at Loughglinn*  
*Temperature: Lowest max. 14.6°C at Knock Apt, highest max. 21.5°C at Dooks*  
*Lowest min. 7.3°C at Ardee (Boharnamoe), highest min. 15.9°C at Valentia Obs*  
*Sunshine: Nil at numerous locations to 2.9 hours at Ardferit (Lisahaney)*

**Thursday 28th:** It was a blustery day. An area of heavier rain reached the west coast in the early afternoon and rapidly spread across the country. Conditions were mild and most areas had good spells of sunshine. Winds were fresh to strong, southerly.

*Rainfall: Nil at numerous locations to 86.6 mm at Leenane-Glanagimla*  
*Temperature: Lowest max. 15.5°C at Delphi Lodge, highest max. 20.3°C at Dublin (Glasnevin). Lowest min. 8.2°C at Springfield Castle, highest min. 13.8°C at Sherkin Island*  
*Sunshine: 1.6 hours at Newport (Furnace) to 9.9 hours at Wexford Wildfowl Reserve and Casement*

**Friday 29th:** Bands of rain crossed the country through the day. The rain was mostly light but there were some heavy pockets, particularly in North Ulster and Midlands. The rain became progressively patchy and mostly died out by evening. Winds were fresh to strong, southwesterly.

*Rainfall: Nil at numerous locations to 52.4 mm at Delphi Lodge*  
*Temperature: Lowest max. 15.4°C at Malin Head, highest max. 19.8°C at Cloyne (Lisanley). Lowest min. 9.6°C at Craggaunowen, highest min. 14.7°C at Waterford (Tycor) and Wexford Wildfowl Reserve*  
*Sunshine: 0.3 hours at Ashford (Cronykeery) to 5.6 hours at Belmullet*

**Saturday 30th:** There was patchy light rain overnight and through to the afternoon, it became mostly dry after that. There was prolonged sunshine in the Southwest, West and Northwest, but it was cloudy in the Midlands and East. Winds were moderate to fresh, west to southwest.

*Rainfall: Nil at numerous locations to 19.4 mm at Delphi Lodge*  
*Temperature: Lowest max. 14.9°C at Knock Apt, highest max. 21.0°C at Cahore (Kilmichael Hse). Lowest min. 9.5°C at JFK Park 9.5°C at Littleton, highest min. 14.1°C at Mace Head*  
*Sunshine: Nil at numerous locations to 10.1 hours at Valentia Obs*

**Sunday 31st:** Dry for the first half of the day. Bands of light rain crossed the country during the afternoon and evening. Cloudy in the Southwest, some sunshine further north and east. Winds were moderate, south to southwest.

*Rainfall: Nil at numerous locations to 19.3 mm at Gap Of Dunloe*  
*Temperature: Lowest max. 16.0°C at Knock Apt, highest max. 22.0°C at Cahore (Kilmichael Hse). Lowest min. 7.0°C at Straide, highest min. 13.6°C at Mace Head*  
*Sunshine: 0.1 hours at Valentia Observatory to 9.9 hours at Wexford Wildfowl Reserve*

## DOUBLE THE AVERAGE

## RAINFALL IN EASTERN AREAS

The majority of rainfall totals were above their Long-Term Average (LTA), with below average totals mainly in areas in the South, Southwest, West and Northwest. Percentage of LTA values were highest in areas along the east coast, where double or more the August LTA rainfall was recorded. Many of these stations attributed their high monthly totals to heavy rainfall events at the start of the month. Stations in parts of Dublin and Meath reported over 250% of their LTA, with the month's highest percentage of 281% recorded at Dublin (Glasnevin), with a monthly total of 193.4 mm, its wettest August in six years. Other Dublin stations at Merrion Square and Ringsend had their wettest August on available record (observations of over 65 years) with respectively, 166.9mm (259% of LTA) and 165.7 mm (266% of LTA). Scattered stations in eastern parts had their wettest August since 1986.

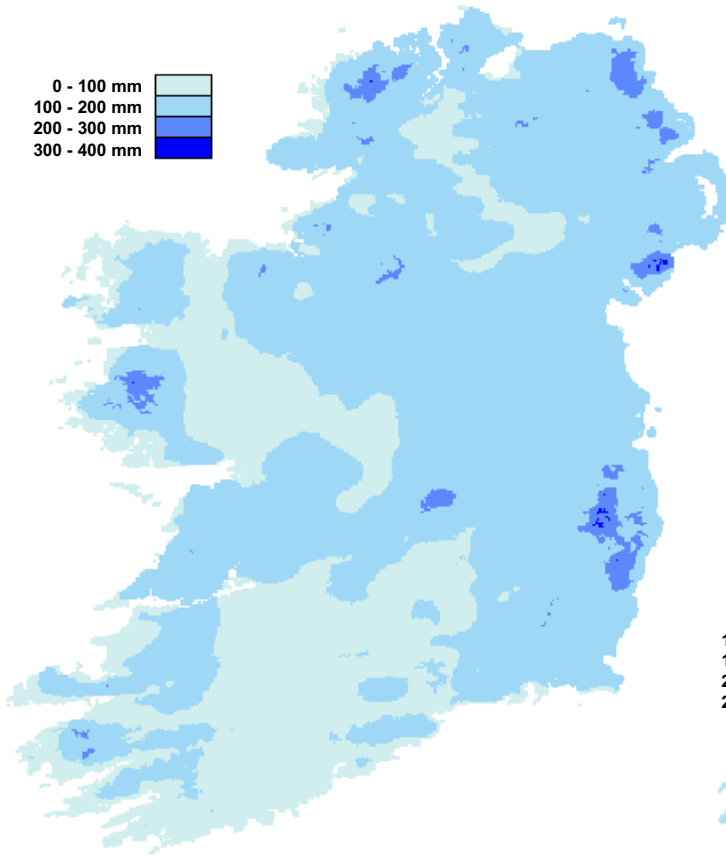
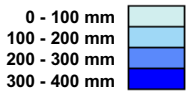
Percentage of monthly LTA values were lowest in areas in Kerry, Cork and Tipperary where percentage values were half of normal. Despite low totals no periods of drought or dry spells were reported. The month's lowest percentage of LTA was 39% (86.2 mm of rain) at a gauge in the Cumberagh Mtns, Co Kerry, its driest August in 11 years. The month's lowest rainfall was at Kanturk, Co Cork with 36.4 mm (49% of its LTA). The month's highest accumulation in a low-lying area (area below 200 m) was at Leenanae (Glanagimla), Co Galway with 260.4 mm, while the overall highest accumulation was in the Mullaghcleevaun Mtns, Co Wicklow with 281.0 mm (191% of its LTA)

The month's wettest day was on the 1st at Clonaslee (Waterworks), Co Laois with 95.0 mm, its wettest day on record since the station opened in 1986.

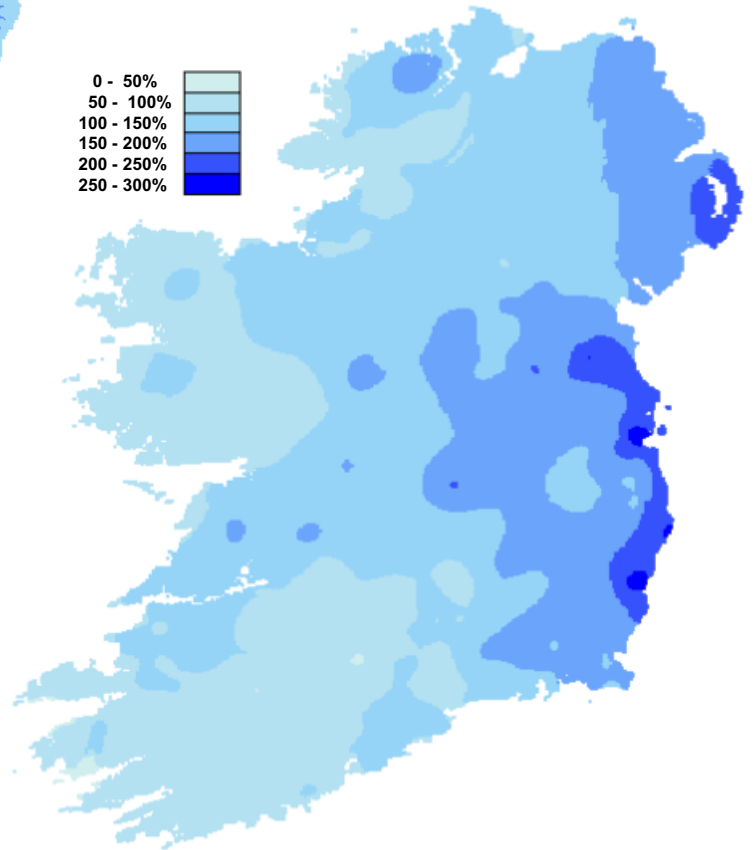
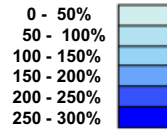
COUNTY/ STATION	TOTAL AMOUNT (mm)	% OF 1981-2010 AVERAGE	MOST IN A DAY / DATE		NUMBER OF RAINDAYS (>0.2mm)	NUMBER OF WETDAYS (>1mm)
<b>CO CARLOW</b>						
CARLOW (OAK PARK)	117.6	164	27.6	2	19	15
<b>CO CAVAN</b>						
BALLYHAISE	105.0	116	21.7	2	22	19
<b>CO CLARE</b>						
CARRON	184.5	131	33.9	28	28	21
SHANNON AIRPORT	86.5	105	15.6	1	23	15
<b>CO CORK</b>						
BALLINCURRIG (PEAFIELD)	95.6	97	31.9	9	19	13
CORK AIRPORT	83.3	86	24.3	9	19	15
FERMOY (MOORE PARK)	60.3	72	14.0	9	22	14
ROCHE'S POINT	72.8	86	25.8	9	16	9
SHERKIN ISLAND	64.3	73	11.9	5	17	9
<b>CO DONEGAL</b>						
BALLYSHANNON (CATHLEEN'S FALL)	111.3	109	27.4	5	26	19
GLENTIES HATCHERY	130.4	104	26.4*	2	28*	24*
MALIN HEAD	93.2	98	12.3*	2	27*	18*
<b>CO DUBLIN</b>						
CASEMENT AERODROME	140.7	195	32.6	2	23	14
DUBLIN (MERRION SQUARE)	166.9	259	43.3*	2	23*	13*
DUBLIN AIRPORT	171.4	234	50.5	1	19	13
DUBLIN (PHOENIX PARK)	145.7	199	37.7	2	22	13
<b>CO GALWAY</b>						
MAAM VALLEY	199.2	98	60.8	28	26	19
<b>CO KERRY</b>						
ARDFERT (LISCAHANE)	84.3	94	13.1	9	27	22
VALENTIA OBSERVATORY	72.0	63	13.2	25	24	17
<b>CO KILKENNY</b>						
THOMASTOWN (MT. JULIET)	112.8	145	28.5	9	19	14
<b>CO LIMERICK</b>						
MOUNT RUSSELL	70.7	66	8.6*	27	24*	20*
<b>CO MAYO</b>						
BELMULLET	90.6	89	16.2	7	25	20
DELPHI LODGE	213.0		52.4	29	27	24
KNOCK AIRPORT	140.1	130	27.3	28	29	22
STRAIDE	83.6	88	17.8	28	25	19
<b>CO MEATH</b>						
WARRENTOWN	124.2	159	35.2	2	20	13
<b>CO MONAGHAN</b>						
CARRICKMACROSS (DUNOGE)	130.8	161	22.1*	2	21*	14*
<b>CO OFFALY</b>						
DERRYGREENAGH	141.0	169	41.9	1	21	16
<b>CO ROSCOMMON</b>						
MOUNTDILLON	103.0	117	23.1*	2	23*	17*
<b>CO SLIGO</b>						
ARDTARMON	84.2	93	13.1	2	25	19
<b>CO TIPPERARY</b>						
FETHARD (PARSONSHILL)	81.8	98	17.3	5	20	16
GURTEEN (AG.COLLEGE)	113.1	133	27.7	28	19	16
<b>CO WATERFORD</b>						
DUNGARVAN (CARRIGLEA)	105.7	114	32.2	9	21	11
WATERFORD (TYCOR)	119.3	142	35.1	9	19	11
<b>CO WESTMEATH</b>						
MULLINGAR	150.3	175	49.2	1	24	17
<b>CO WEXFORD</b>						
CLONROCHE (KNOXTOWN)	154.6		38.5	9	20	15
JOHNSTOWN CASTLE	124.8	149	32.7	9	19	13
<b>CO WICKLOW</b>						
ASHFORD (CRONYKEERY)	161.9	227	42.0	9	21	17

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

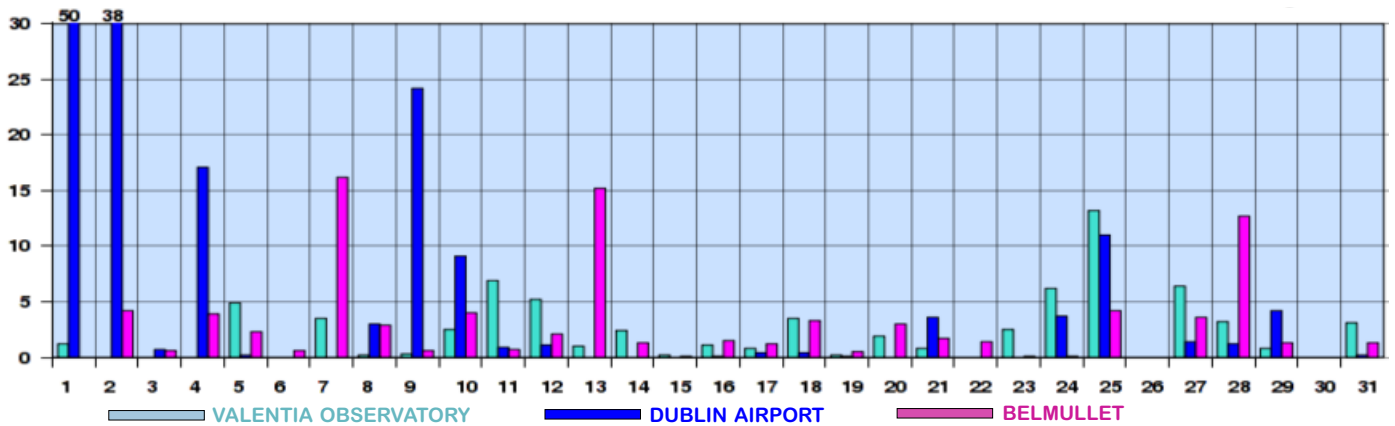
TOTAL RAINFALL (mm)



PERCENTAGE OF NORMAL RAINFALL  
(1981-2010 NORMALS)



DAILY 0901-0900hr RAINFALL VALUES (mm)

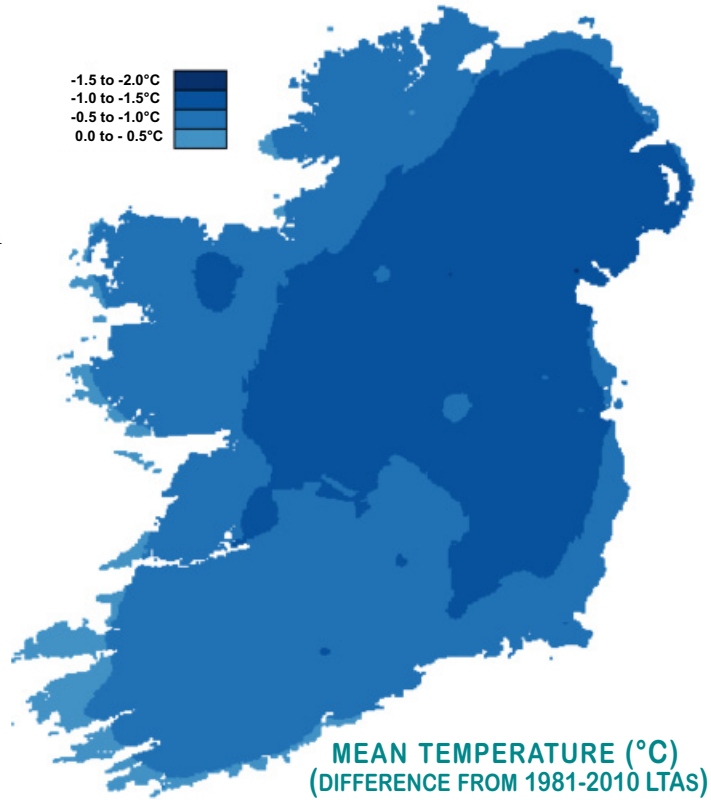
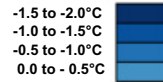


COOL AUGUST CONDITIONS WITH GROUND

FROST IN PLACES

All monthly mean air temperatures were below their Long-Term Average (LTA). Both mean maximum temperatures (monthly average of daily maxima) and mean minimum temperatures (monthly average of daily maxima) were all on or below average resulting in monthly mean temperature deviations of more than  $-1.5^{\circ}\text{C}$  in isolated parts of the Northwest, Midlands and East. The largest difference from LTA was at Markree, Co Sligo with  $-1.7^{\circ}\text{C}$  with a August mean temperature of  $13.2^{\circ}\text{C}$ . Both Roche's Point, Co Cork and Ardtarmon, Co Sligo had mean temperatures nearest to their August LTAs, both  $-0.3^{\circ}\text{C}$  from average, with mean temperatures of  $15.2^{\circ}\text{C}$  and  $15.1^{\circ}\text{C}$ , respectively. Generally, mean temperatures ranged from  $13.0^{\circ}\text{C}$  at Knock Airport, Co Mayo (difference from LTA  $-0.9^{\circ}\text{C}$ ) to  $15.7^{\circ}\text{C}$  at Dooks, Co Kerry. The majority of stations reported cooler conditions in August 2014 with some stations in the East reporting their coolest August since 1986.

Highest maximum temperatures were mainly recorded between the 4th and 6th and ranged from  $19.5^{\circ}\text{C}$  at Malin Head, Co Donegal (on the 5th) to  $23.8^{\circ}\text{C}$  at Arklow (Ballyrichard Hse), Co Wicklow (on the 6th). Ardfert (Liscahane) Co Kerry reported its highest maximum of  $21.3^{\circ}\text{C}$  on the 4th, its lowest during August for 22 years. Lowest air and grass minima were mostly recorded between the 20th and 24th with air minima ranging from  $1.5^{\circ}\text{C}$  at Mount Dillon, Co Roscommon (on the 24th) to  $8.8^{\circ}\text{C}$  at Mace Head (on the 24th). Mountrussell, Co Limerick reported an air

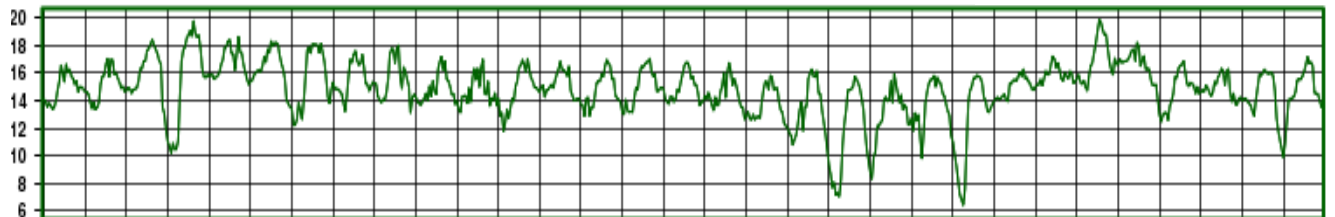


MEAN TEMPERATURE ( $^{\circ}\text{C}$ )  
(DIFFERENCE FROM 1981-2010 LTAs)

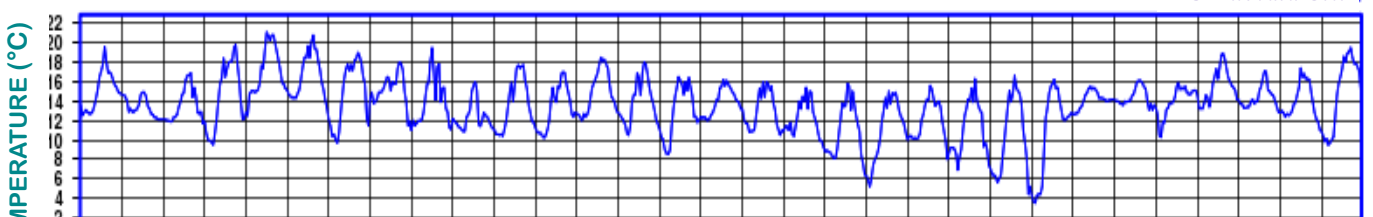
minimum of  $6.1^{\circ}\text{C}$  its lowest for August since 1990. The month's lowest grass minimum was  $-2.4^{\circ}\text{C}$  reported at both Ballinamore, Co Leitrim and Straide, Co Mayo on the 24th, their lowest August grass minimum in eight years. No air frost was reported in August with ground frost reported at isolated stations across the country. The number of days ranged from one at stations in the East, Midlands and Northwest to three at Straide, Co Mayo.

HOURLY TEMPERATURES AUGUST 2014

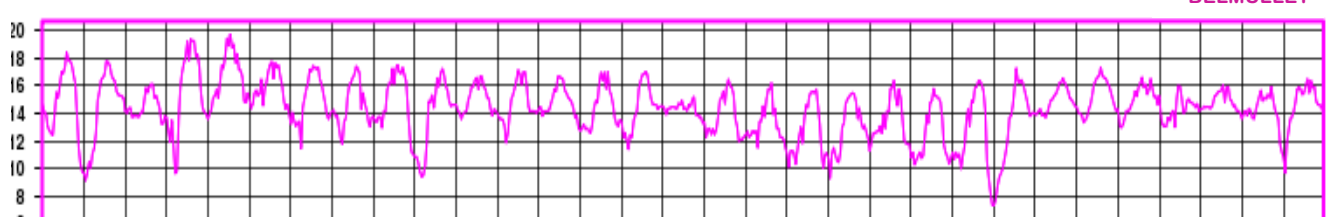
VALENTIA OBSERVATORY



DUBLIN AIRPORT



BELMULLET



DAY OF MONTH

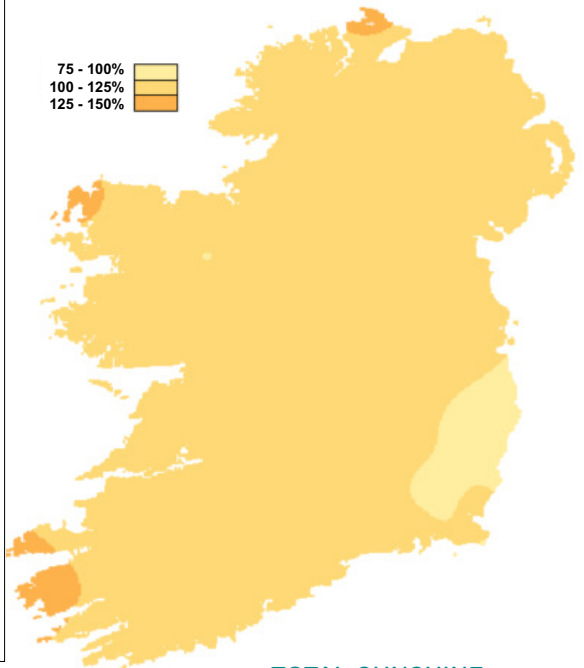
COUNTY/ STATION	MEAN MAX.	MEAN MIN.	DIFFERENCE FROM 1981-2010		HIGHEST MAX./DATE	LOWEST MIN./DATE	LOWEST GRASS MIN./DATE		DAYS WITH FROST	
			MEAN	AVERAGE			AIR	GROUND		
<b>CO CARLOW</b>										
CARLOW (OAK PARK)	18.8	10.8	14.8	-1.0	22.4 6	5.7 20	1.2 20	0	0	
<b>CO CAVAN</b>										
BALLYHAISE	17.1	10.1	13.6	-1.6	22.3 5	2.0 24	-0.5 24	0	1	
<b>CO CLARE</b>										
CARRON	17.5	10.4	14.0	-0.6	20.5 4	6.6 23	0.2 23	0	0	
SHANNON AIRPORT	18.4	11.7	15.1	-1.1	21.9 25	5.8 23	3.4 23	0	0	
<b>CO CORK</b>										
BALLINCURRIG (PEAFIELD)	18.8	9.8	14.3	-0.6	21.7 6	5.2 23	5.0 23	0	0	
CORK AIRPORT	18.0	10.6	14.3	-0.9	20.6 6	6.9 23	1.5 23	0	0	
FERMOY (MOORE PARK)	18.5	10.0	14.3	-1.1	20.9 4	3.7 23	1.9 23	0	0	
ROCHE'S POINT	18.4	12.0	15.2	-0.3	21.7 6	8.0 23	5.6 4	0	0	
SHERKIN ISLAND	17.6	12.7	15.2	-0.5	19.8 4	8.0 23	1.3 20	0	0	
<b>CO DONEGAL</b>										
BALLYSHANNON (CATHLEEN'S FALL)	17.3	11.3	14.3	-0.7	22.3 5	6.2 24		0		
GLENTIES HATCHERY	17.9	9.7	13.8	-0.7	21.6 5	2.0 24	1.1 24	0	0	
MALIN HEAD	16.4*	11.5*	14.0*	-0.7	19.5* 5	6.4* 15	5.4 24	0	0	
<b>CO DUBLIN</b>										
CASEMENT AERODROME	18.0	10.3	14.1	-1.3	21.7 6	4.5 24	0.6 24	0	0	
DUBLIN (MERRION SQUARE)	18.1	11.7	14.9	-1.5	22.3 6	7.7 23		0		
DUBLIN AIRPORT	18.0	10.3	14.1	-1.2	21.6 5	3.3 24	-0.3 24	0	1	
DUBLIN (PHOENIX PARK)	18.6	10.5	14.6	-0.9	22.2 5,6	5.4 24	-0.1 23	0	1	
<b>CO GALWAY</b>										
MAAM VALLEY	18.2	10.7	14.5	-0.6	21.1 4	6.9 4	5.5 4	0	0	
<b>CO KERRY</b>										
ARDFERT (LISCAHANE)	18.7	11.3	15.0	-0.5	21.3 4	6.5 23	5.6 23	0	0	
VALENTIA OBSERVATORY	17.6	12.3	14.9	-0.5	20.5 26	6.3 23	2.1 23	0	0	
<b>CO KILKENNY</b>										
THOMASTOWN (MT. JULIET)	18.9	9.9	14.4	-1.2	21.7 6	2.9 20	0.6 20	0	0	
<b>CO LIMERICK</b>										
MOUNTRUSSELL	17.9	10.4	14.1	-0.9	21.2 7	4.6 23	2.0 23	0	0	
<b>CO MAYO</b>										
BELMULLET	17.2	11.6	14.4	-0.6	19.8 5	6.9 24	4.2 24	0	0	
DELPHI LODGE	17.4	11.4	14.4	-0.8	20.7 4	8.2 4,24	5.1 23	0	0	
KNOCK AIRPORT	16.0	9.9	13.0	-0.9	20.6 5	6.7 24	2.3 24	0	0	
STRAIDE	17.9	9.7	13.8	-1.1	21.7 5	2.3 24	-2.4 24	0	3	
<b>CO MEATH</b>										
WARRENTOWN	18.4	10.6	14.5	-0.8	22.4 5	3.2 24	0.2 24	0	0	
<b>CO MONAGHAN</b>										
CARRICKMACROSS (DUNOGE)	17.7	9.8	13.7	-1.4	22.5 5	1.9 24	-1.1 24	0	1	
<b>CO OFFALY</b>										
DERRYGREENAGH	18.3	10.5	14.4	-0.6	22.2 5	6.1 24	2.6 24	0	0	
<b>CO ROSCOMMON</b>										
MOUNTDILLON	18.0	9.6	13.8	-1.4	21.8 5	1.5 24	0.0 20	0	0	
<b>CO SLIGO</b>										
ARDTARMON	18.2	12.0	15.1	-0.3	22.5 5	6.1 24		0		
<b>CO TIPPERARY</b>										
FETHARD (PARSONSHILL)	18.3	10.4	14.3	-0.6	22.0 4	5.9 23	5.0 23	0	0	
GURTEEN (AG.COLLEGE)	17.9	10.6	14.2	-1.1	21.1 4	5.8 20	1.9 20	0	0	
<b>CO WATERFORD</b>										
DUNGARVAN (CARRIGLEA)	19.6	10.3	15.0	-0.9	22.6 6	4.1 23	0.1 23	0	0	
WATERFORD (TYCOR)	19.2	11.7	15.4	-0.6	23.0 6	8.2 23		0		
<b>CO WESTMEATH</b>										
MULLINGAR	17.5	9.9	13.7	-1.2	22.5 5	3.7 24	1.3 24	0	0	
<b>CO WEXFORD</b>										
CLONROCHE (KNOXTOWN)	18.3	10.0	14.2	-0.7	21.6 6	4.1 20	0.5 20	0	0	
JOHNSTOWN CASTLE	17.8	11.2	14.5	-1.0	21.6 6	7.7 20	4.5 24	0	0	
<b>CO WICKLOW</b>										
ASHFORD (CRONYKEERY)	18.6	10.9	14.8	-0.7	23.2 6	5.5 24	-0.1 24	0	1	

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

**ABOVE AVERAGE SUNSHINE IN MOST PLACES**

Nearly all sunshine totals were near or above their LTAs with exception of isolated stations in the East and Southeast. Percentage of LTA ranged from 88% at Ashford (Cronykeery), Co Wicklow (daily mean of 4.6 hrs/day), its dullest August in five years to 173% at Belmullet, Co Mayo (the month's highest daily mean of 7.6 hrs/day), its sunniest August since 1976 and its second sunniest on record (record length of 57 years). The month's lowest daily mean sunshine was 3.87 hrs/day at Edenderry (Ballinla), Co Offaly. The sunniest day was on the 1st at Belmullet with 12.9 hours, equalling its highest August daily sunshine since 2004. The number of dull days (*days with less than 0.5 hours of sunshine*) ranged from two at Dungarvan (Carriglea), Co Wexford to eight at Ashford (Cronykeery), Co Wicklow.

Percentage of global radiation values were all on or above average, with LTAs values up to 113% at Valentia Observatory and Belmullet.

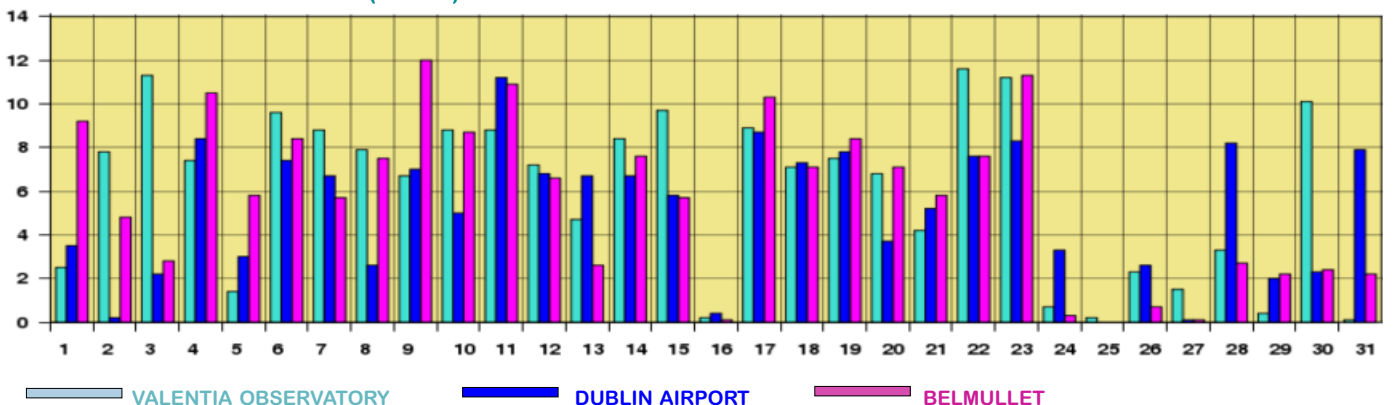


**TOTAL SUNSHINE (PERCENTAGE OF 1981-2010 NORMALS)**

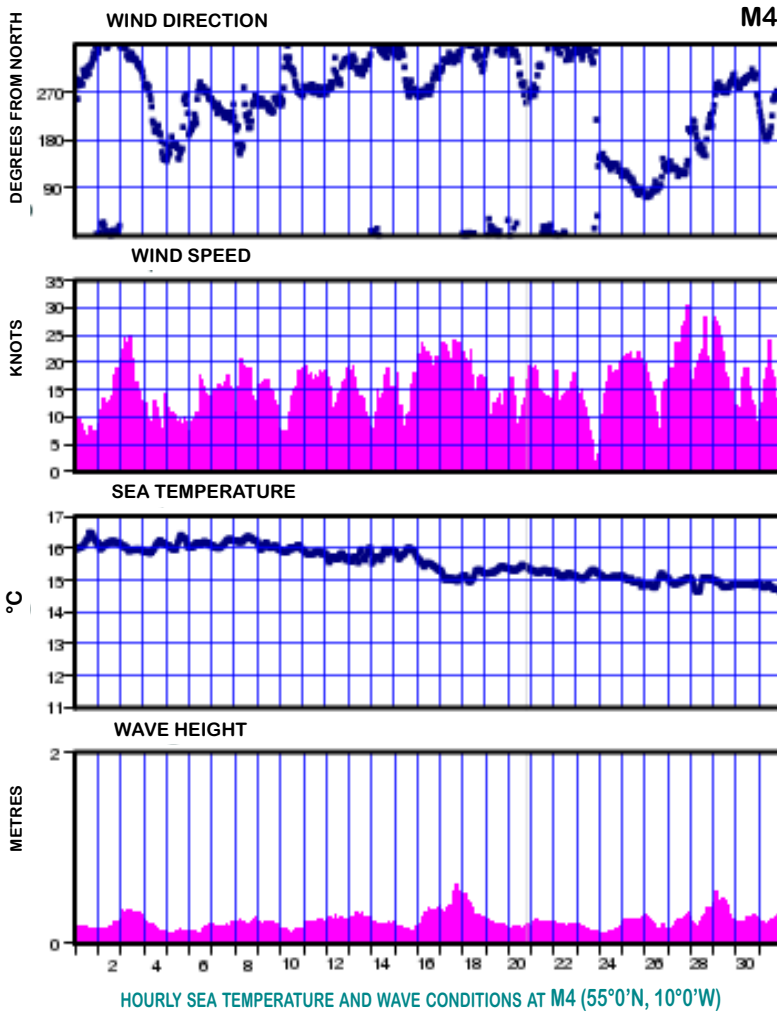
COUNTY/ STATION	DAILY MEAN (HOURS/DAY)	% OF 1981-2010 LTA	DULL DAYS (<0.5 HRS)	MOST IN A DAY/DATE
<b>CO CLARE</b>				
SHANNON AIRPORT	5.03	110	3	11.2 23
<b>CO CORK</b>				
BALLINCURRIG (PEAFIELD)	5.65	103	3	11.9 3
CORK AIRPORT	5.91	113	4	11.1 11,18
SHERKIN ISLAND	6.13	107	3	12.8 3,6
<b>CO DONEGAL</b>				
BALLYSHANNON (CATHLEEN'S FALL)	4.27	104	7	10.6 9
<b>CO DUBLIN</b>				
CASEMENT AERODROME	5.07	104	5	12.6 4
DUBLIN (GLASNEVIN)	5.14	102	3	10.7 11
DUBLIN AIRPORT	5.12	101	4	11.2 11
<b>CO KERRY</b>				
ARDFERT (LISCAHANE)	5.32	112	3	10.4 7
VALENTIA OBSERVATORY	6.04	136	4	11.6 22
<b>CO OFFALY</b>				
EDENDERRY (BALLINLA)	3.87		7	9.0 23
<b>CO MAYO</b>				
BELMULLET	7.58	173	3	12.9 1
KNOCK AIRPORT	3.98	99	7	11.1 19
NEWPORT (FURNACE)	4.42	113	5	10.3 17
STRAIDE	4.79	112	5	11.8 11,17
<b>CO WATERFORD</b>				
DUNGARVAN (CARRIGLEA)	5.69	106	2	11.8 3
<b>CO WEXFORD</b>				
CLONROCHE (KNOXTOWN)	4.96	91	5	11.1 17
JFK PARK	5.61	109	3	11.9 17
WEXFORD WILDFOWL RESERVE	5.67	104	4	11.2 1
<b>CO WICKLOW</b>				
ARKLOW (BALLYRICHARD HSE.)	4.91		5	11.1 4,11
ASHFORD (CRONYKEERY)	4.55	88	8	10.5 17

\* PARTIAL DATA USED IN CALCULATION

**DAILY SUNSHINE VALUES (HOURS)**

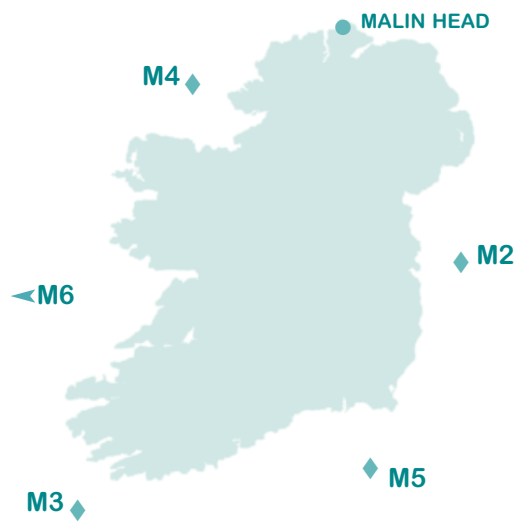


### MARINE OBSERVATIONS FROM IRISH MARINE DATA BUOY NETWORK

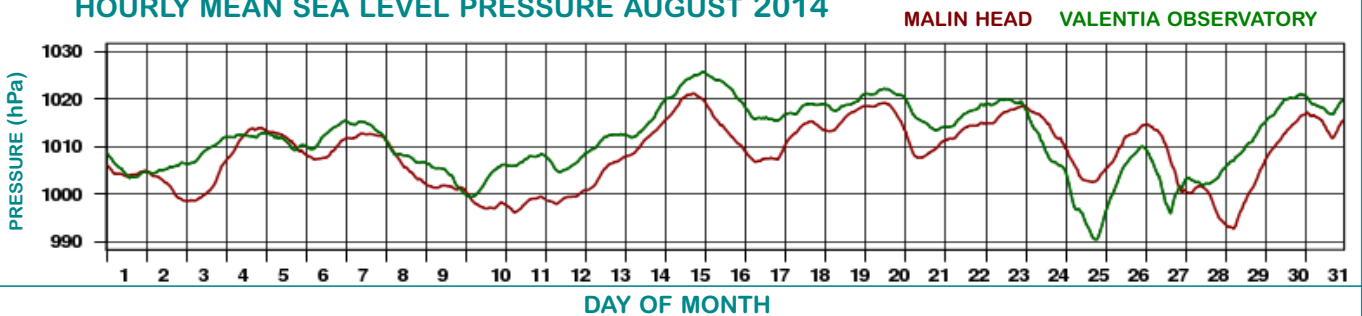


BUOY	SEA SURFACE TEMP. (°C)	MEAN WIND SPEED (knots)	MAX 10-MIN WIND (knots)	MEAN SIGNIFICANT WAVE HEIGHT (m)	MAX SIGNIFICANT WAVE HEIGHT (m)
M2	15.0	n/a	n/a	1.0	2.6
M3	16.5	12.8	27.5	2.0	6.0
M4	15.5	14.8	30.3	2.3	6.3
M5	-----	not available	-----	-----	-----
M6	15.9	n/a	n/a	2.3	6.1
MALIN HEAD	15.2				

#### SUMMARY OF MEAN MONTHLY VALUES

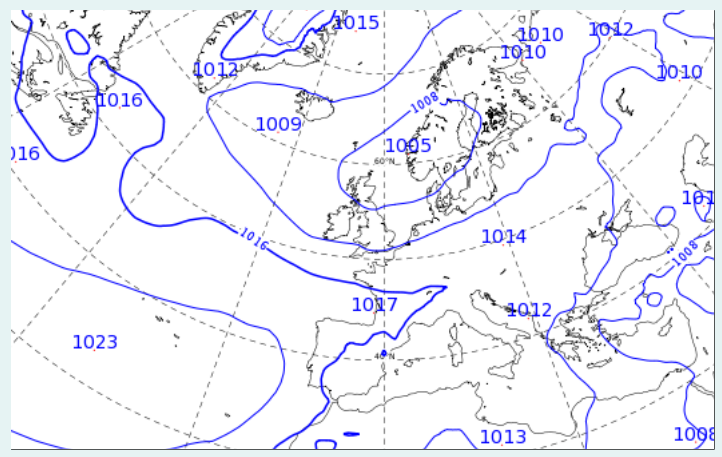


### HOURLY MEAN SEA LEVEL PRESSURE AUGUST 2014



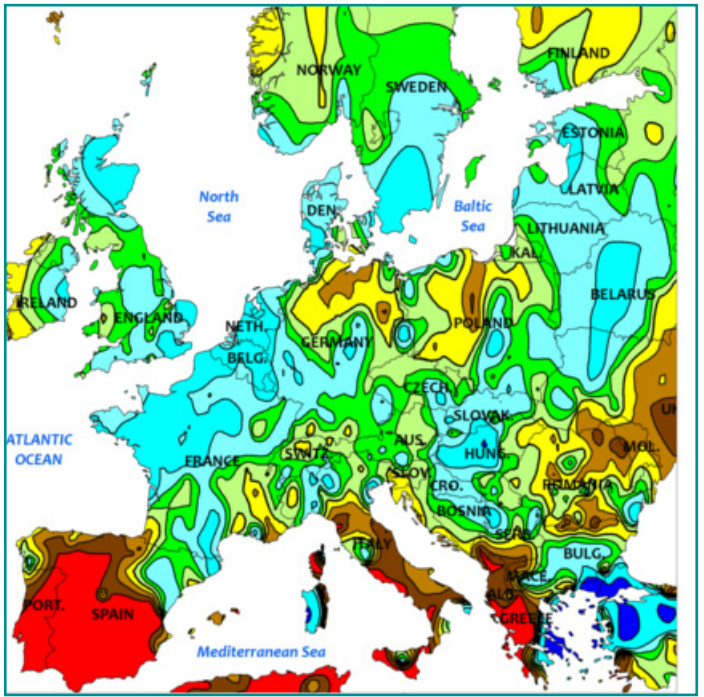
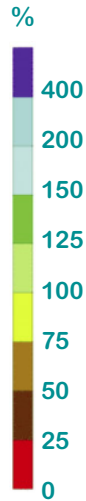
### ATMOSPHERIC PRESSURE

Monthly mean sea level pressure values ranged from just above 1008 hPa in the North to nearly 1012 hPa in the Southwest. The month's lowest pressure value of 990.6 hPa was recorded at Valentia Observatory on the 25th between 1700 UTC and 1900 UTC, as a depression of 987 hPa was located just over the southwest coast of Ireland. The month's highest pressure value of 1025.8 hPa was at both Valentia Observatory and Sherkin Island on the 15th at 2200 UTC and 2300 UTC respectively, as a high pressure system of 1030 hPa was situated over the Azores and north Atlantic ocean.

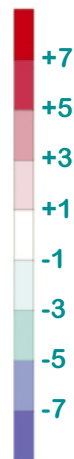


MONTHLY MEAN MSL PRESSURE, BASED ON 1200 UTC VALUES

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



°C



**AUGUST 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

A world map with several text boxes providing weather highlights for August 2014. The map uses a color scale where red indicates areas of significant weather events. Three text boxes are present:

- Top Left:** "Hurricane Iselle made landfall on Hawaii's Big Island on August 8th with sustained wind speeds of 95km/h. This was the strongest tropical cyclone in recorded history in this area. There was substantial flooding in the Midwest, Northeast and Mid-Atlantic between the 11th and 13th of August. Ten of thousands of homes were damaged and infrastructure severely impacted."
- Top Center:** "Flash floods swept through Refrontolo, Italy, killing at least four people. Torrential rains at the end of August caused significant flash flooding across eastern parts of Denmark and southwestern Sweden. Large economical losses were felt in these areas."
- Bottom Center:** "Seasonal rains during the month of August led to widespread flooding through multiple regions of Niger. There was a large loss of life and damage to homes by floodwaters."
- Bottom Right:** "Excessive monsoonal rains led to flooding and landslides that resulted in a large loss of life in India, Nepal, Bangladesh, Cambodia, Pakistan and South Korea. Super Typhoon Halong made landfall in Japan at tropical-storm strength, bringing torrential rains and gusty winds to the region. The reached its maximum intensity as a Category 5 storm. This tropical storm known as Nakri, developed and made landfall in South Korea and the remnants hit parts of Japan in the beginning of the month. Peak wind speeds were recorded at 100km/h."

**GLOBAL WEATHER REVIEW OF THE MONTH**