Rainfall was below average in most parts of the northern half of the country and Midlands, with percentage of average values ranging from 49% at Bloody Foreland, Co. Donegal to 303% at Rathdrum, Co. Wicklow, its wettest August since 1964 (48 years). Stations in parts of Munster and south and east Leinster had the highest percentage above average, with over double or triple their long-term averages (LTA) in parts. Some stations reported it was the wettest August since the mid-1980s, with the majority of places reporting wetter conditions in August 2008/2009. Most days measuring highest daily falls (HDF) occurred mid-month, with the highest August daily fall recorded at Ballina (Attymass), Co. Mayo of 74.4 mm on the 12th, its highest for August in 25 years, while Roundwood, Co. Wicklow reported the longest length of record exceeded for HDFs with 58.6 mm on the 5th, its highest during August since 1986 (26 years). Mean temperatures were above average nearly everywhere, with differences above average as

In a month where unsettled conditions dominated, a calm, clear scene was captured at Newport, Co. Mayo on August 9th. The automatic weather station in Newport recorded the 8th to 11th as its longest dry period during August, with four consecutive days without rainfall. It also recorded its warmest weather on the 10th, with a highest maximum temperature of 26.0°C, its highest during August since 2003. (Picture courtesy Gerry Dunne)
much by as +1.5°C at Glenties Hatchery, Co. Donegal, its warmest August since 1997 (15 years). Most stations reported it was warmer in August 2008 and 2009. Almost all maximum temperatures were recorded on the 10th, with the highest August maximum of 27.0°C recorded at Glenties Hatchery, Co. Donegal, its highest for August since 1995 (17 years). The month's lowest air minima and grass minima were recorded mainly on the 26th, with the lowest air minimum of 4.9°C recorded at Cloosh, Co. Galway and the lowest grass minimum of -0.1°C recorded at Castleconnell, Co. Limerick. Sunshine hours were below average in parts of the South and East, with LTA values ranging from 75% at Valentia Observatory to 132% at Belmullet. The month's highest daily sunshine was at Dublin Airport on the 10th with 14.5 hours, equalling its highest August daily sunshine since it opened in 1942 (70 years).

1st to 7th: Mainly showers and rain, heavy and persistent at times, some showers with thunder. Isolated patches of light drizzle. Mostly dry in between, with good sunny spells. Winds were light to moderate, occasionally fresh with gale gusts in the East and along western and northern coasts.

8th to 11th: Mostly dry, with light showers and patches of rain and drizzle. Morning low cloud and fog in places, but some good sunshine recorded in parts. Winds were light.

12th to 18th: Unsettled weather with widespread bands of heavy thundery showers and rain. Dry and sunny between unsettled periods. Winds were mainly light with occasional strong to gale force winds, with gale gusts nearly everywhere.

19th to 24th: Mainly showery with some bands of rain and drizzle. Rainfall heavy in places, with some showers turning thundery. Winds were mainly moderate, with gale gusts along eastern coasts.

25th to 31st: Outbreaks of rain and drizzle, heavy and persistent at times. Showers, turning thundery in parts. Some intermittent bright sunny spells thoughout. Winds were mainly light to moderate, but up to gale force at times, with gale gusts on most days.

Wind and Elements: Mean windspeeds for the month were between six and 13 knots (11 and 24 km/h). Most highest gusts were recorded on the 15th, with the month’s highest gust of 50 knots (92 km/h) measured at Roche’s point. Gale force winds were reported on the 15th and 16th along Atlantic coasts, and on the 28th in parts of the West and South. Thunderstorms were observed on numerous days with the highest thunderstorm activity on the 3rd, 4th, 13th, 21st and 29th. No days with air frost were recorded during the month, with only one instance of ground frost reported on the 26th at Castleconnell, Co. Limerick.
COOL, WET AND DULL IN MOST PARTS

Mean air temperatures were mainly below average with a few isolated sites above average. Almost all stations recorded below average mean temperatures in June and July, with above average temperatures in most areas in August. Mean temperatures ranged from 12.5°C at Arklow (Ballyrichard Hse.), Co. Wicklow, its coldest Summer since the station opened in 1989 (23 years) to 15.6°C at Dublin (Merrion Square) to +0.3°C at Dooks, Co. Kerry. Dublin (Merrion Square) reported a mean temperature of 14.8°C, -1.2°C below average and the longest record exceeded with the coldest Summer since 1986 (26 years). Most stations reported that it was not as cold as the Summer of 2011. Highest maxima were mainly recorded during August, while almost all lowest minima were recorded in June. Both the Summer highest maximum temperature and lowest minimum temperature were both recorded at the same site, Glenties Hatchery, Co. Donegal. The highest Summer maximum was 27.0°C on August 26th, its highest for the site since 2006 (6 years) while the lowest Summer minimum was 1.1°C on June 10th, equalling its lowest Summer temperature since 1998 (14 years).

Rainfall totals were nearly on or above average almost everywhere. Double or more the Summer LTA was recorded in parts of Munster, south and east Leinster and in isolated parts of Connacht, with lowest Summer accumulations in parts of Kerry, Donegal and Monaghan. Percentage values ranged from 99% at Dungloe, Co. Donegal to 278% at Roundwood, Co. Wicklow, its wettest Summer on record since 1942 (70 years). It was the wettest Summer for over 60 years at some stations in the Midlands, Munster, east and south Leinster. Most stations in other parts of the country reported wetter conditions in 2008 and 2009. Summer rainfall totals (in areas below 200m) ranged from 273.6 mm at Gladree, Co. Mayo to 765.4 mm at Gernapeka, Co. Cork with a gauge in the Cummeragh Mountains, Co. Kerry reporting the highest seasonal total with 1364.2 mm, its wettest Summer on record since 1942 (70 years). The highest daily rainfall of the season was at Lough Glencar on June 8th with 99.5 mm, its highest Summer fall since the station opened 1992 (20 years). Wetdays (days with 1mm or more) ranged from 41 days at Ashford (Cronykeery), Co. Wicklow, its wettest Summer since 2000 (12 years) to 77 at Glencar (Dreenagh), Co. Kerry, its highest number of wetdays since records began in 1982 (30 years).

Percentage of average sunshine values were below average everywhere except in the West and Northwest. Percentage values ranged from 68% at Ballincurgir (Peafield), Co. Cork to 104% at Belmullet, both their dullest summers since 2005 (7 years). Below average sunshine was recorded in June, July and in parts of the South in August. Total Summer sunshine hours ranged from 313.7 hours at Valenta Observatory, its dullest summer since 1980 (32 years) to 442.5 hours at Belmullet. The highest daily Summer sunshine was 15.3 hours, recorded at both Ballyshannon (Cathleen’s Fall) on June 10th and Wexford Wildfowl Reserve on July 7th, its highest daily Summer sunshine since 1995 (17 years).

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<tr>
<th>COUNTY / STATION</th>
<th>WIND (knots)</th>
<th>ELEMENTS (no. of days)</th>
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<td>MAX. 10-MIN. MEAN SPEED</td>
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<td>150° 23 15/17</td>
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<td>OAK PARK</td>
<td>6.2</td>
<td>160° 21 1/09</td>
</tr>
<tr>
<td>CO. CAVAN</td>
<td>7.6</td>
<td>150° 21 15/17</td>
</tr>
<tr>
<td>BALLYHAISE</td>
<td>6.2</td>
<td>160° 21 1/09</td>
</tr>
<tr>
<td>CO. CLARE</td>
<td>9.5</td>
<td>120° 33 15/15</td>
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<td>190° 37 15/21</td>
</tr>
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<td>140° 35 15/15</td>
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<td>CO. DONEGAL</td>
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<td>110° 37 15/09</td>
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<td>MALIN HEAD</td>
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<td>CO. DUBLIN</td>
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<td>9.7</td>
<td>150° 32 15/19</td>
</tr>
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<td>CASEMENT</td>
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<td>140° 29 15/18</td>
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<td>CO. MAYO</td>
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<td>180° 34 16/04</td>
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<td>110° 24 15/17</td>
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<td>MOUNT DILLON</td>
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<td>CO. TIPPERARY</td>
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<td>130° 29 15/15</td>
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<td>GURTEEN (AG. COLLEGE)</td>
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<td>130° 21 15/16</td>
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<td>MULLINGAR</td>
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<td>8.5</td>
<td>160° 27 15/17</td>
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<tr>
<td>JOHNSTOWN CASTLE</td>
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**CARLOW (OAK PARK)**

**BELMULLET**

<table>
<thead>
<tr>
<th>Percentage Frequency of Wind Direction</th>
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<tbody>
<tr>
<td><strong>N</strong></td>
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<tr>
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</tr>
<tr>
<td>18%</td>
</tr>
<tr>
<td>18%</td>
</tr>
<tr>
<td>18%</td>
</tr>
<tr>
<td>18%</td>
</tr>
</tbody>
</table>

**Windspeed in knots**

- < 5
- 5 - 10
- 10 - 20
- 20 - 35
- > 35

**Calm 0 %**

**Calm 2.2 %**
Upper Atmosphere wind and temperature readings are made at Valentia Observatory two times daily by a radiosonde (a balloon with instruments attached). Shown below are daily average windspeeds and temperatures at defined pressure levels, 850, 700, 500 and 300 hPa, corresponding approximately to heights of 1,500, 3,000, 6,000 and 10,000 metres. Monthly windroses are also shown for each pressure level.
Acid rain occurs when pollutants combine with moisture in the air to form sulphuric or nitric acid. pH is the simplest way of measuring the acidity of precipitation. Usually pH of 7.00 is considered neutral but this is not the case in rainfall samples. Pure water in the atmosphere has an equilibrium pH value of 5.65 at 20°C owing to carbon dioxide in the air dissolving to form carbonic acid. Any value below pH 5.65 is considered acid while any value above is considered alkaline.

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

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

**CHEMICAL ANALYSIS OF PRECIPITATION AND AIR SAMPLES AT VALENTIA OBSERVATORY**

<table>
<thead>
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<th>COUNTY/STATION</th>
<th>100 mm</th>
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<th>300 mm</th>
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## 10-Day Values for Selected Agrometeorological Stations

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<tr>
<th>STATION / COUNTY</th>
<th>TOTAL (mm)</th>
<th>1ST-10TH</th>
<th>11TH-20TH</th>
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### Measured Potential Evapotranspiration (P.E.) and Soil Moisture

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<tr>
<th>STATION / COUNTY</th>
<th>P.E. (mm)</th>
<th>SOIL MOISTURE (mm)</th>
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| MONATLY EVAPORATION (mm) FROM CLASS A PAN

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<tr>
<th>COUNTY</th>
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### Sunshine (hours)

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<th>1ST-10TH</th>
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<td>140.61</td>
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<td>138.38</td>
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<tr>
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### Global Solar Radiation (MJ/sq.m.)

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<td>114.37</td>
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<td>388.40</td>
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### Percent of Average

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<th>RAINFALL (mm)</th>
<th>TEMPERATURE (°C)</th>
<th>SUNSHINE (hours)</th>
<th>MEASURED POTENTIAL EVAPOTRANSPIRATION (P.E.) AND SOIL MOISTURE</th>
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### Percentage of Averages

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DAILY WEATHER

Wednesday 1st: Heavy showers spread from the Southwest overnight, bringing rain to all areas. Another band of rain and showers reached western coasts by morning spreading eastwards. It intensified as it moved through the Midlands giving short bursts of heavy rain, clearing by mid-afternoon, leaving some scattered showers, but mainly dry for the remainder of the day. Winds were moderate, westerly.

Rainfall: Nil at numerous locations to 40.6 mm at Creggan
Temperature: Lowest max. 15.5°C at Malin Head, highest max. 23.5°C at Springfield Castle

Wednesday 2nd: Mostly dry overnight, with just the odd shower in the West. The morning was mostly dry, with isolated showers in the West. In the afternoon showers became more widespread in the West, remaining mostly dry over the Midlands and East. The showers spread to all areas during the evening. Winds were fresh to strong, southwesterly.

Rainfall: Nil at numerous locations to 26.6 mm at Ahlermore
Temperature: Lowest max. 15.9°C at Delphi Lodge, highest max. 21.6°C at Dublin (Glasnevin), lowest min. 7.3°C at Dundalk (Annaskeagh), highest min. 13.4°C at Killarney (Muckross Hse.)

Friday 3rd: Showers and drizzle in places overnight, with patches of mist also. The morning saw heavy bursts of rain in eastern parts with well scattered showers elsewhere. The showers continued through the afternoon, but some good sunny breaks also developed. During the evening and night, plenty of showers over the country, some of which were thundery. Winds were light, variable.

Rainfall: Nil at numerous locations to 43.5 mm at Gernapeka
Temperature: Lowest max. 15.8°C at Belderrig, highest max. 23.0°C at Cavan (Drumconneick), lowest min. 10.0°C at Ashford (Cronykeery), highest min. 15.5°C at Adare Manor

Saturday 4th: Showers were widespread over the southern half of the country for most of the day. The showers were heavy at times, some with thunder. By early afternoon, showers had spread to all areas, but became more scattered as evening approached, dying out by nightfall. Winds were moderate, easterly at first turning northerly later.

Rainfall: Nil at numerous locations to 32.5 mm at Clonee Lake (Caragh River)
Temperature: Lowest max.14.2°C at Malin Head, highest max. 20.3°C at Waterville (Tycor), lowest min. 6.9°C at Slieve Bloom (Neavalton), highest min. 13.4°C at Valentia

Monday 6th: Some light scattered showers overnight in the Southwest. The showers continued throughout the morning but a more organised band of rain moved eastwards across the country during the afternoon. As it was dying out, an active band of rain in the Northeast moved southwards bringing rainfall to the Southwest by midnight. Winds were fresh, variable in direction.

Rainfall: Nil at numerous locations to 5.6 mm at Roundwood (Filter Beds)
Temperature: Lowest max.14.2°C at Malin Head, highest max. 20.0°C at Adarthron, lowest min. 7.5°C at Athy (Chantryers), highest min. 15.4°C at Springfield Castle

Tuesday 7th: The South and Southwest endured a heavy spell of rain early on but mostly clearing by mid-morning. The North saw some light scattered showers through the morning which died out by early afternoon. Some light scattered showers in the South and Southwest during the evening, which passed eastwards overnight. Winds were light to fresh, easterly.

Rainfall: Nil at numerous locations to 11.2 mm at Ownea (Greenans)
Temperature: Lowest max. 15.3°C at Malin Head, highest max. 23.6°C at Cork (Clever Hill), lowest min. 9.0°C at Slieve Bloom (Neavalton), highest min.13.7°C at Dublin (Glasnevin)

Wednesday 8th: Mostly cloudy over Munster and the southern half of Leinster and Connacht, with patchy light rain and drizzle in places. Dry in north Leinster, Ulster and parts of Connacht with bright sunny spells.

Rainfall: Nil at numerous locations to 0.4 mm at Macroom (Renanree)
Thursday 16th: Heavy showers in Connacht died out in the early hours with showers developing in south Munster, some heavy. Showers became widespread in the late morning, dying out as a spell of heavy rain moved up from the Southeast in the late afternoon. This rain moved northwards with a clearance following later. Winds light to fresh, variable in direction.

Rainfall: 0.0 mm at Doonag (Water Treatment) to 41.5 mm at Purteen (Ballyvaughan)
Temperature: Lowest max. 17.1°C at Skerries Island, highest max. 22.0°C at Baldorlag, lowest min. 10.3°C at Sileve Bloom (Neatsown), highest min. 15.4°C at Dublin (Glasnevin)
Sunshine: Nil at Arklow (Ballylarrych) to 10.8 hours at Ballymutt

Friday 17th: Heavy rain in Ulster cleared northwards in the early hours, as an area of heavy rain began to push up into Leinster, spreading quickly through east Leinster before clearing into the Irish Sea. Much of the country then enjoyed a warm, bright day with thundery showers in the Southwest and Midlands in the early afternoon and in northwest Mayo during the evening. Winds were light, variable in direction.

Rainfall: Nil at numerous locations to 19.1 mm at Freemount
Temperature: Lowest max. 17.1°C at Roche’s Point, highest max. 23.0°C at Raphoe (Top), lowest min. 11.3°C at Belmullet, highest min. 15.4°C at Dublin (Glasnevin)
Sunshine: Nil at numerous locations to 10.6 hours at Ballymutt

Friday 24th: Outbreaks of light rain or drizzle overnight, the heaviest falls affecting Munster and south Connacht. The rain moved northeastwards bringing heavy and prolonged spells of rain. It became drier in the southwest, as the rain reached all areas but the far north. Turned showery later, scattered in most parts, with heavy and persistent outbreaks in places. Winds were moderate, variable.

Rainfall: Nil at numerous locations to 44.1 mm at Arklow (Ballylarrych Hse.)
Temperature: Lowest max. 14.0°C at Clonebrock (Knotstown), highest max. 22.0°C at Dooks, lowest min. 10.2°C at Lissfitton 8, highest min. 14.1°C at Dublin (Glasnevin)
Sunshine: Nil at numerous locations to 3.1 hours at Ballyannagh (Cathleen’s Fall)

Saturday 25th: Rain and drizzle overnight affected much of the East, South and Midlands, dying out during the morning with showers then developing in the western half of the country. Showers, some heavy, in the Midlands and Southwestern in the afternoon, moved southeasterly before dying out in the early evening. Winds were light, northwesterly.

Rainfall: Nil at numerous locations to 12.4 mm at Dooeran
Temperature: Lowest max. 15.6°C at Malin Head, highest max. 20.7°C at Castleconnell, lowest min. 10.5°C at Glenbeigh, highest min. 14.4°C at Cahore (Kilmichael Hse.)
Sunshine: Nil at J.F.K Park to 10.0 hours at Ballymutt

Sunday 26th: Rain and showers developed in the Southwest by mid-afternoon, but mostly dry elsewhere. Rain moved northwards after nightfall, with heavy falls in parts of the southwest. Winds were light to moderate, westerly.

Rainfall: Nil at numerous locations to 54.4 mm at Cloone Lake (Caragh River Area)
Temperature: Lowest max. 16.2°C at Mount Russell, highest max. 21.0°C at Siligo Apt., lowest min. 4.9°C at Cloone (Lisanley), highest min. 12.2°C at Malin Head
Sunshine: 0.3 hours at Valentia to 8.4 hours at Dublin Apt.

Monday 27th: Widespread rain and drizzle overnight, with a clearance reaching the West coast by early morning. Heavy rain over the East and Southeast and by early afternoon the rain cleared into the Irish Sea. Heavy thundery showers over the East, but mostly dry further west before dying out later in the evening and night. Winds were light, easterly.

Rainfall: Nil at numerous locations to 34.5 mm at Glen Inal
Temperature: Lowest max. 16.9°C at Sherkin Island, highest max. 20.6°C at Mallow (Spa Hse.), lowest min. 7.5°C at Ardine (Boheranemore), highest min. 15.6°C at Adare Manor
Sunshine: 0.3 hours at Arklow (Ballylarrych) to 8.0 hours at Straide

Tuesday 28th: Showers, heavy at times in the West and Northwest, became lighter and more isolated towards dawn. The showers became more frequent and heavier especially in western counties as the day progressed. By late afternoon the showers were mainly confined to Ulster but a band of rain began to affect the Southwest and it moved quickly eastward bringing very heavy bursts of rain as it passed. Winds were fresh, southerly.

Rainfall: Nil at numerous locations to 40.1 mm at Delphi Lodge
Temperature: Lowest max. 16.5°C at Ballinamore, highest max. 20.1°C at Springfield Castle, lowest min. 7.2°C at Moore Park, highest min. 13.6°C at Mace Head
Sunshine: 1.3 hours at J.F.K Park to 8.0 hours at Ballyannagh (Cathleen’s Fall)

Wednesday 29th: Outbreaks of rain in the East, North and West. The rain quickly cleared the East coast but further bands of rain in the West and Southwest moved eastwards. Successive bands moved across the country with rain clearing into the Irish Sea late in the evening, leaving only a few light showers in the West. Winds were fresh to strong, southerly.

Rainfall: Nil at numerous locations to 20.1 mm at Warrenstown
Temperature: Lowest max. 15.5°C at Markres, highest max. 20.0°C at Cork (Clover Hill), lowest min. 8.8°C at Clonganawen, highest min. 14.4°C at Roche’s Point
Sunshine: Nil at Clones to 5.8 hours at Sherkin Island

Thursday 30th: Some light and isolated showers overnight. A generally dry bright day, with further isolated showers in the Midlands and Northwest as the afternoon as cloud thickened. The cloud had thinned by late afternoon leaving a fine day. Winds were moderate to fresh, north to northwesterly.

Rainfall: Nil at numerous locations to 8.8 mm at Doonag (Water Treatment)
Temperature: Lowest max. 15.1°C at Malin Head, highest max. 19.5°C at Glengarriff (Rathcullen), lowest min. 6.8°C at Glenties, highest min. 13.2°C at Sherkin Island
Sunshine: 4.6 hours at Straide to 11.7 hours at Wexford Wildfowl.

Friday 31st: Light rain affected the Northwest overnight pushing across the country during the morning, heaviest in Ulster with much of Munster remaining dry. The rain and drizzle lingered in eastern areas during the afternoon, but cleared before evening. Winds were moderate to fresh, southwesterly.

Rainfall: Nil at numerous locations to 13.1 mm at Castlebar (Burren)
Temperature: Lowest max. 15.1°C at Mullagh (Cathleen’s Fall), highest max. 21.6°C at Cork (Clover Hill), lowest min. 5.5°C at Dunlalk (Annaskeagh), highest min. 13.0°C at Mace Head
Sunshine: 6.1 hours at numerous locations to 5.7 hours at J.F.K Park
Rainfall was below average in the Midlands and in most parts of the northern half of the country, with highest percentage of average values along southern and southeastern coasts. Parts of Munster, south and east Leinster had double or triple their monthly average, with a small number of stations in the area reporting their wettest August since the mid-1980s. A majority of stations across the country reported wetter conditions in August 2008 and 2009.

Percentage of average values were lowest along northwestern and western coasts with Bloody Foreland, Co. Donegal reporting the month’s lowest percentage of long-term average (LTA) and lowest monthly total with 49% and 55.6 mm, respectively. The highest LTA was 303% at Rathdrum, Co. Wicklow with 316.1 mm, its wettest August since 1964 (48 years). The longest record length exceeded was at Rathduff, Co. Cork with 246.9 mm and 258% of its LTA, its wettest August since 1943 (69 years). Monthly accumulations in non-mountainous regions (areas below 200m) ranged up to 336.0 mm at Cloone Lake, Co. Kerry, its wettest August since 1997 (15 years) with the month’s highest rainfall accumulation at a gauge in the Cummeragh Mountains, Co. Kerry with 508.2 mm.

The number of wetdays (days with 1 mm or more of rainfall) were above average except along northwestern coasts ranging from 12 at Dublin (Ringsend) to 27 at Beenreagh Mountains and Glencar (Dreenagh), Co. Kerry.

<table>
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* Table represents data from only a small selection of rainfall stations. All data is 09-09 Hr
Mean air temperatures were above average nearly everywhere, with a few isolated areas in the South and East recording below average values. Differences from average ranged from -0.2°C at Dublin (Merrion Square) to +1.5°C at Glenties Hatchery, Co. Donegal, its warmest August since 1997 (15 years). Mean air temperatures ranged from 14.7°C at Knock Airport, Co. Mayo, its highest for August since 2003 (9 years) to 16.9°C at Dublin (Glasnevin). Navan (Tara Mines), Co. Meath reported the longest record length exceeded, with a mean air temperature of 16.0°C its highest at the site since 1986 (26 years).

Mean maximum temperatures were below average in parts of the East, Munster and south Leinster. Highest maxima ranged between 20.8°C at Sherkin Island (its highest maximum since August 2007) and Wexford Wildfowl Reserve (its lowest maximum since August 1996) to 27.0°C at Glenties Hatchery, its highest August maximum since 1995 (17 years) and the longest length of record exceeded for maxima. The majority of stations across the country reported their highest August maxima in five to 10 years. Nearly all mean minimum temperatures were above average with Mountrussell, Co. Limerick reporting nearly +1.5°C above its mean minimum, its highest for August since 1989 (23 years). Lowest minima ranged from 4.9°C at Cloosh, Co. Galway to 11.6°C at Mace Head. The lowest minimum temperature at Killarney (Muckross Hse.), Co. Kerry, had the longest period of record exceeded for lowest minima, its lowest in 22 years.
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* TABLE REPRESENTS DATA FROM ONLY A SELECTION OF CLIMATOLOGICAL STATIONS. ALL DATA IS 09-09 HR
SUNSHINE
AUGUST 2012

SUNNIEST IN THE NORTH AND WEST; DULL IN PLACES

Sunshine totals were below average in most parts of the South and in areas along the eastern coast. The lowest number of sunshine hours were recorded at Valentia Observatory with 103 hours, the month’s lowest LTA sunshine with 75%. Straide, Co. Mayo recorded 180 sunshine hours and the highest LTA sunshine with 136%. Dungarvan (Carriglea), Co. Wexford measured 182 hours of sunshine, the highest number of August sunshine hours. The longest length of record exceeded was for the highest daily sunshine recorded at Dublin Airport on the 10th with 14.5 hours, its joint highest for August since 1942 (70 years).

Global solar radiation totals were below average in the East and South and above average elsewhere. Percentage values ranged from 91% at Valentia Observatory to 113% at Belmullet.

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

DAILY SUNSHINE VALUES (HOURS)
Mean sea level pressure values for August were between 1007 hPa and 1011 hPa across the country. The lowest minimum pressure value of 978.7 hPa was recorded at Valentia Observatory on the 15th when a deep depression situated west of the Bay of Biscay moved over Ireland’s western coastline. Later in the month, a high pressure system moved across the North Atlantic Ocean on the 31st, recording the month’s highest maximum pressure value of 1032.8 hPa at Sherkin Island.

### Summary of Mean Monthly Values

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<th>MEAN WIND SPEED (knots)</th>
<th>MAX 10-MIN WIND (knots)</th>
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### Hourly Mean Sea Level Pressure August 2012

[Graph showing hourly mean sea level pressure for August 2012 with pressure values ranging from 970 to 1040 hPa and day of month on the x-axis.]
Flooding in a village called Kivalina in northwest Alaska, caused mud and landfill debris to contaminate local drinking water. The area received 210.1 mm of precipitation, more than half its annual rainfall, during the month of August. The Wulik River which flows near the village crested at 4.66 m on August 16th, marking the river’s highest level since measurements began in 1985.

Intense high pressure systems tracking across northern Africa into the Mediterranean countries prolonged the heatwave for Central Europe in August. During the first week of the month, over 180 people in Romania received medical treatment for heatstroke while Serbia experienced temperatures soaring up to 46.0°C. On August 7th the daily maximum temperatures reached 37.0°C in Rome and 44.0°C in Agrigento, Sicily. In late August, the Balkans continued to swelter and temperatures topped 41°C on August 26th at Loznica, Serbia.

China’s eastern and central provinces endured the rampant effects of a succession of typhoons during August. Nine lives were lost and four persons were missing within the northeastern province of Liaoning where heavy flooding caused economic losses worth millions of Euro. The deluge which developed in the aftermath of Typhoon Damrey dropped up to 220 mm during August 3rd and 4th. In the country’s northeastern province of Hebei, an eroded section of the Great Wall collapsed on August 6th as a result of torrential rains.

Above average rainfall across east-central Africa during the first week of the month produced localized flooding causing the displacement of at least 15,000 people throughout Sudan. In west Africa, mid-month torrential rain destroyed homes, displaced several hundred people, and flooded farmlands in Nigeria.