Exceptional weather events

Type of event:

Storm - “Hurricane Debbie”

Date:

September 1961
‘Hurricane Debbie’ winds in September 1961
Still the strongest on record in places

Ireland was hit by winds gusting over 110m.p.h. as the centre of the former hurricane Debbie passed close to the west coast during the morning of Saturday, September 16th 1961. At a number of stations the winds recorded that day were the highest measured either before or since, while the gust of 98 knots (113m.p.h.) at Malin Head is the joint highest gust ever recorded in Ireland - the same value was recorded at Foynes, Co. Limerick on January 18th 1945, before the instrument pen went off the chart. While true hurricanes are technically not found at latitudes as high as Ireland, Debbie retained many hurricane characteristics when it arrived off the southwest coast. Damage to property was extensive over the western half of the country and 11 deaths were attributed to the storm.

Debbie was unusual in developing into a hurricane so far east in the Atlantic. It reached category 1 status on the Saffir-Simpson scale on the 6th, just off the Cape Verde Islands (see chart below) where it caused a plane crash and the deaths of 60 people. After reaching category 3 status in mid-Atlantic on the 11th, with mean windspeeds of over 100 knots (120m.p.h.), it turned northeastwards towards Ireland and lost some of its intensity over the cooler waters of the North Atlantic. Debbie moved on to cause severe gales over Scotland, while the remains of the storm could be traced as far east as Russia towards the end of the month.

<table>
<thead>
<tr>
<th>Station</th>
<th>Max Gust</th>
<th>Max 10 min mean wind</th>
</tr>
</thead>
<tbody>
<tr>
<td>Belmullet</td>
<td>80</td>
<td>57</td>
</tr>
<tr>
<td>Birr</td>
<td>81</td>
<td>39</td>
</tr>
<tr>
<td>Claremorris</td>
<td>91</td>
<td>60*</td>
</tr>
<tr>
<td>Clones</td>
<td>87*</td>
<td>50</td>
</tr>
<tr>
<td>Dublin Airport</td>
<td>64</td>
<td>34</td>
</tr>
<tr>
<td>Kilkenny</td>
<td>65</td>
<td>40</td>
</tr>
<tr>
<td>Malin Head</td>
<td>98*</td>
<td>66</td>
</tr>
<tr>
<td>Mullingar</td>
<td>79*</td>
<td>45*</td>
</tr>
<tr>
<td>Roche’s Point</td>
<td>71</td>
<td>52</td>
</tr>
<tr>
<td>Rosslarre</td>
<td>72</td>
<td>47</td>
</tr>
<tr>
<td>Shannon Airport</td>
<td>93*</td>
<td>60*</td>
</tr>
<tr>
<td>Valentia Observatory</td>
<td>88*</td>
<td>58</td>
</tr>
</tbody>
</table>

* denotes highest value on record  1 knot = 1.15m.p.h.

The lowest MSL value recorded over Ireland on the 16th was 961.4hPa at Belmullet; this remains the lowest September pressure value ever measured at the station.