Flooding in north Cornwall - 16 August 2004

Heavy, thundery downpours developed by midday across south-west England on 16 August 2004.

These showers formed bands which aligned themselves with the wind helping to maintain the heavy rain across certain areas of north Cornwall for several hours. The trigger mechanisms for these storms appeared to be convergence of winds along the coast and the high ground in the local area which also helped to generate showers. It would appear that the serious nature of these floods was exacerbated by the local topography around Boscastle.


More information on climate in south-west England

Other similar serious flooding events that have occurred in the past include:

- July 1955 Martinstown Dorset (279.4 mm in 24 hours)
- June 1917 Bruton, Somerset (242.8 mm in 24 hours)
- August 1924 Cannington, Somerset (238.8 mm in 24 hours)
- August 1952 Lynmouth, Devon (229.5 mm in 24 hours)
- June 1957 Camelford, Cornwall (203.2 mm in 24 hours)
Rainfall information

The following data was obtained from the Environment Agency on 19 August 2004. No quality control has yet been undertaken on the data.

<table>
<thead>
<tr>
<th>NGR</th>
<th>24 hour total (mm)</th>
<th>Main event total (mm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Otterham</td>
<td>SX 169 916200.4</td>
<td>-</td>
</tr>
<tr>
<td>Trevalec, Lesnewth</td>
<td>SX 134 900184.9</td>
<td>181.0 (11:30 to 16:30 GMT)</td>
</tr>
<tr>
<td>Trevalec, Lesnewth TBR</td>
<td>SX 134 900155.8</td>
<td>152.8 (12:15 to 16:19 GMT)</td>
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<tr>
<td>Creddacott</td>
<td>SX 231 956123.0</td>
<td>-</td>
</tr>
<tr>
<td>Slaughterbridge TBR</td>
<td>SX 109 85776.5</td>
<td>-</td>
</tr>
<tr>
<td>Bude</td>
<td>SS 208 06346.7</td>
<td>-</td>
</tr>
</tbody>
</table>

TBR = Tipping Bucket Rain gauge

The 24-hour value from Otterham would give a return period in excess of 200 years (using the Flood Estimation Handbook method).
Lesnewth rainfall graph

Graph below showing 15-minute rainfall totals for Lesnewth TBR (Tipping Bucket Rain gauge).

Radar imagery

The animation below uses 15-minute data between 1030 GMT and 1930 GMT. The images are composites, based on a mixture of the best resolutions available.

Please note: The empirical relationship between radar reflectivity and rainfall rate is fixed whereas in reality this is highly dependent on precipitation type and is very different for rain and hail.

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