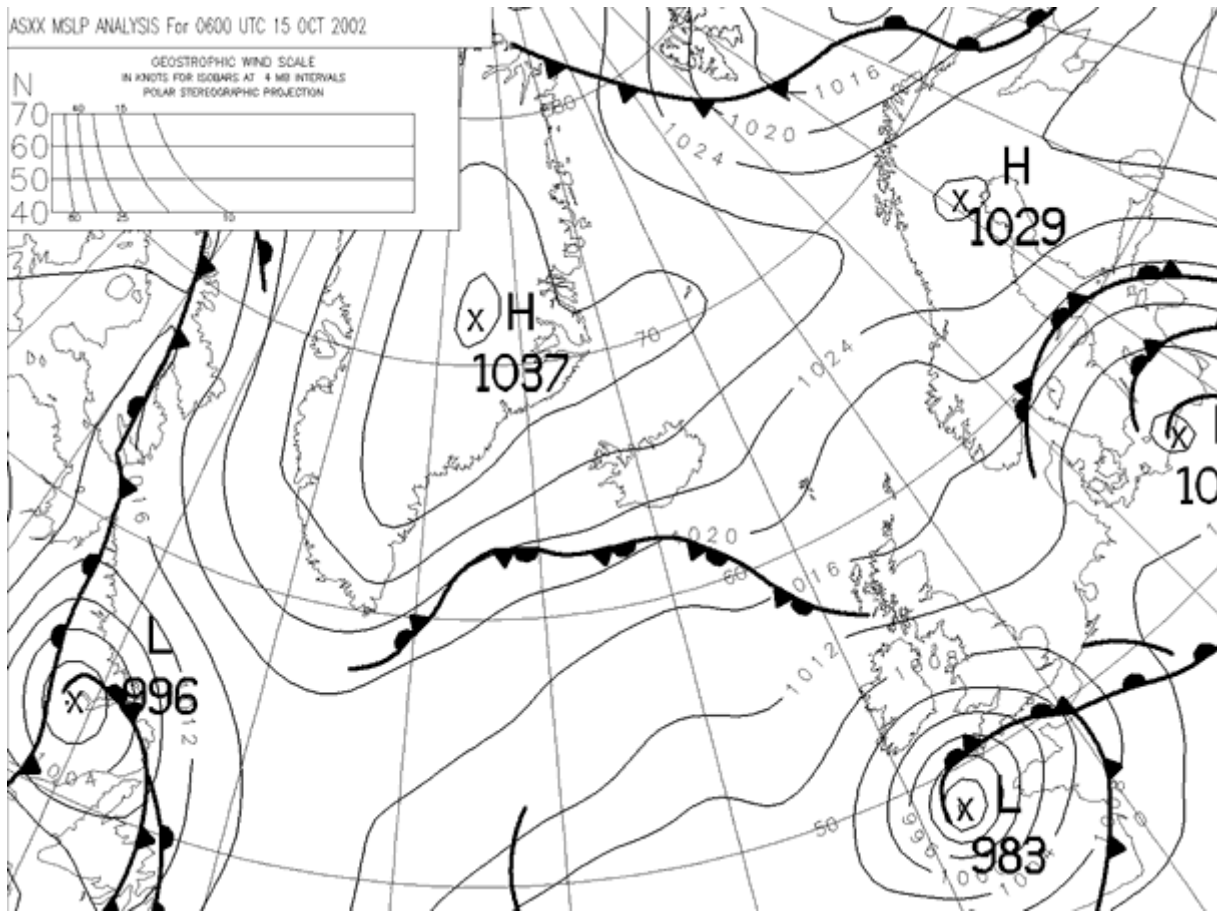


Heavy rainfall/strong winds - 14/15 October 2002

Synoptic situation

Heavy rain fell over much of southern and eastern England on the 14/15 October 2002, with stations around The Wash reporting their normal October rainfall in between 6 and 12 hours.

The synoptic chart shows the situation at 0600 GMT on the 15 October, with a low pressure system and associated fronts moving up from the south-west.

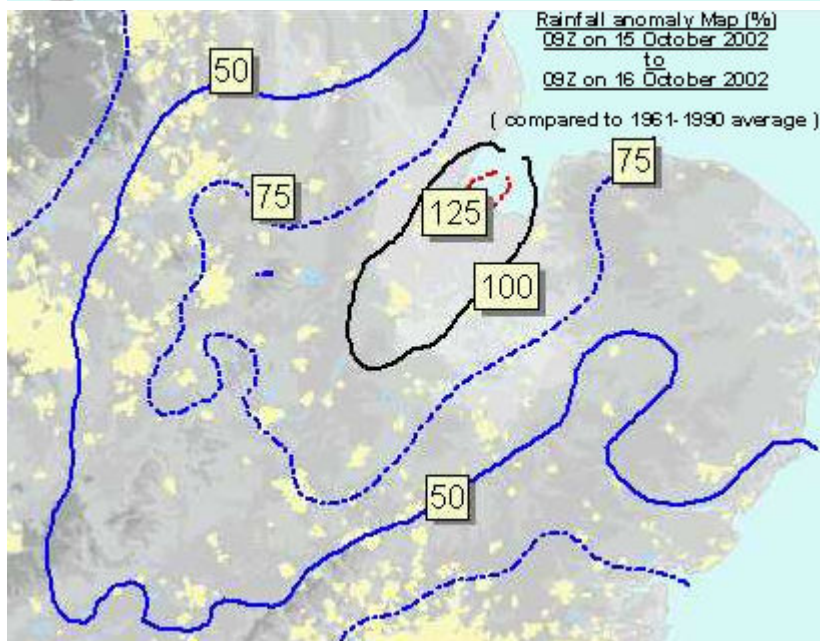
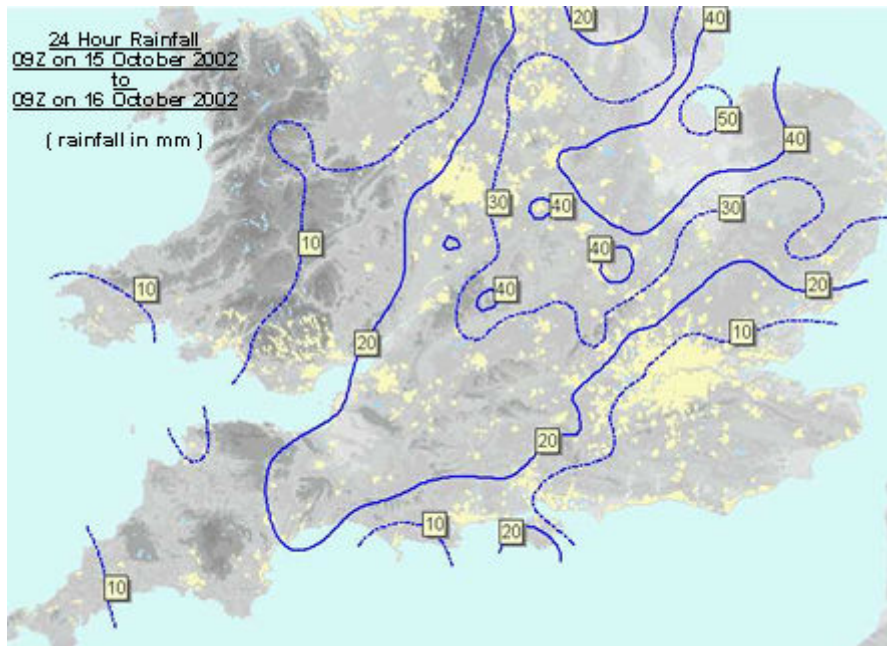


A tornado was reported in Torbay on the morning of the 15th, along with a couple of other separate reports in Essex later on the 15th.

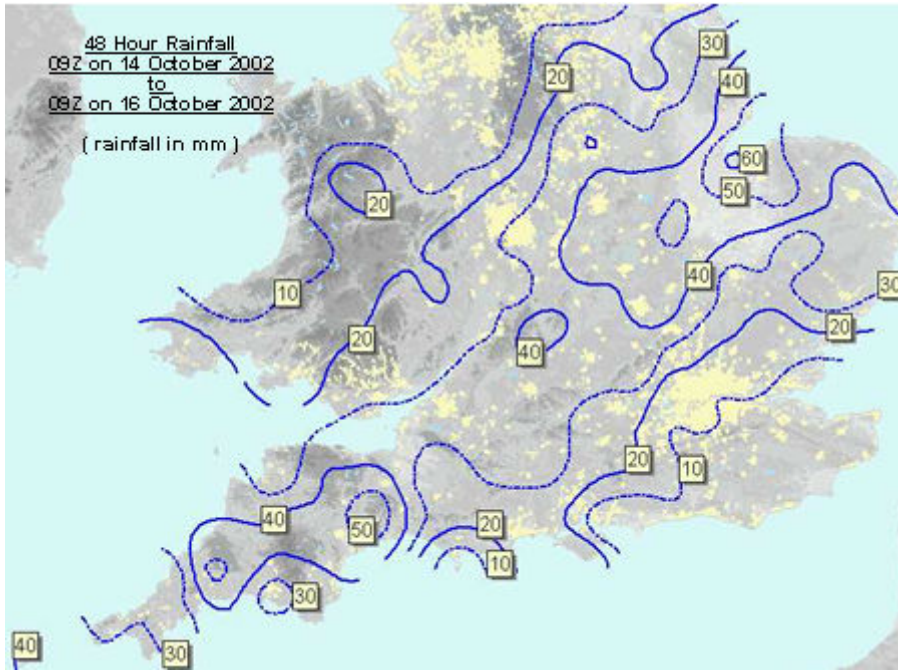
The Needles (Isle Of Wight) reported a highest mean speed of 62 knots (71 m.p.h.) and a highest gust of 78 knots (90 m.p.h.). The Solent MRSC reported a highest mean of 41 knots (47 m.p.h.) and a highest gust of 59 knots (68 m.p.h.).

Rainfall Contour Maps

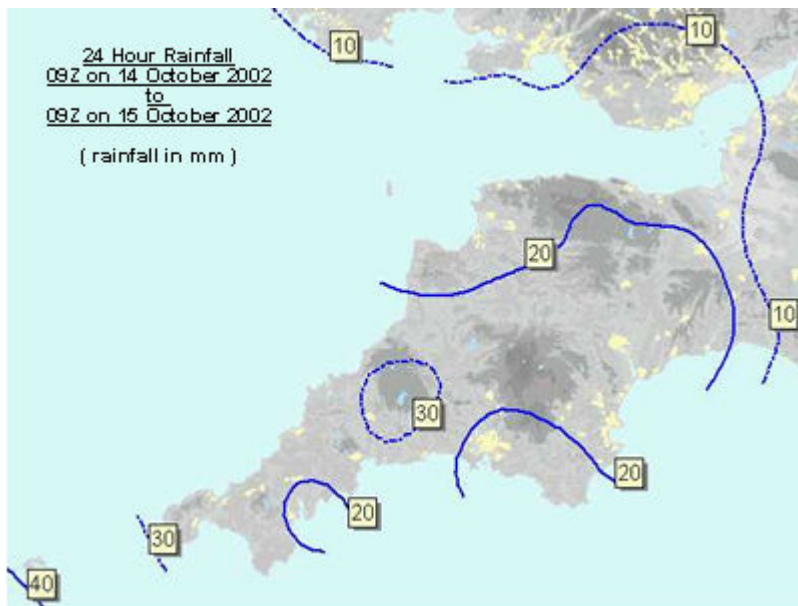
The maps show the amount of rainfall recorded, using gauge data available from the real-time network on 16 October 2002.



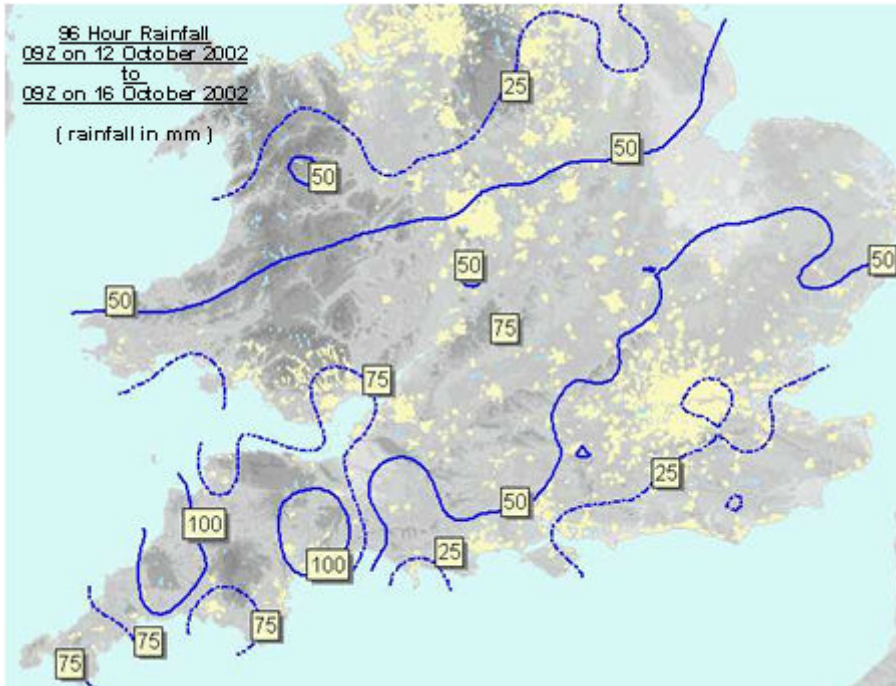
Rainfall map of the 14 October 2002



Accumulated rainfall map of the period 14-15 October 2002



Accumulated rainfall map of the period 12-15 October 2002



Rain Gauge Information

The table consists of the data available from our real time network, and shows the highest rainfall totals for various periods on the 15 October 2002.

There was also an unofficial report from Lowestoft of 64.9 mm in the 24 hours beginning 18:00 GMT on the 15 October 2002, a return period of 30 years.

Rainfall Table - 14/15 October 2002

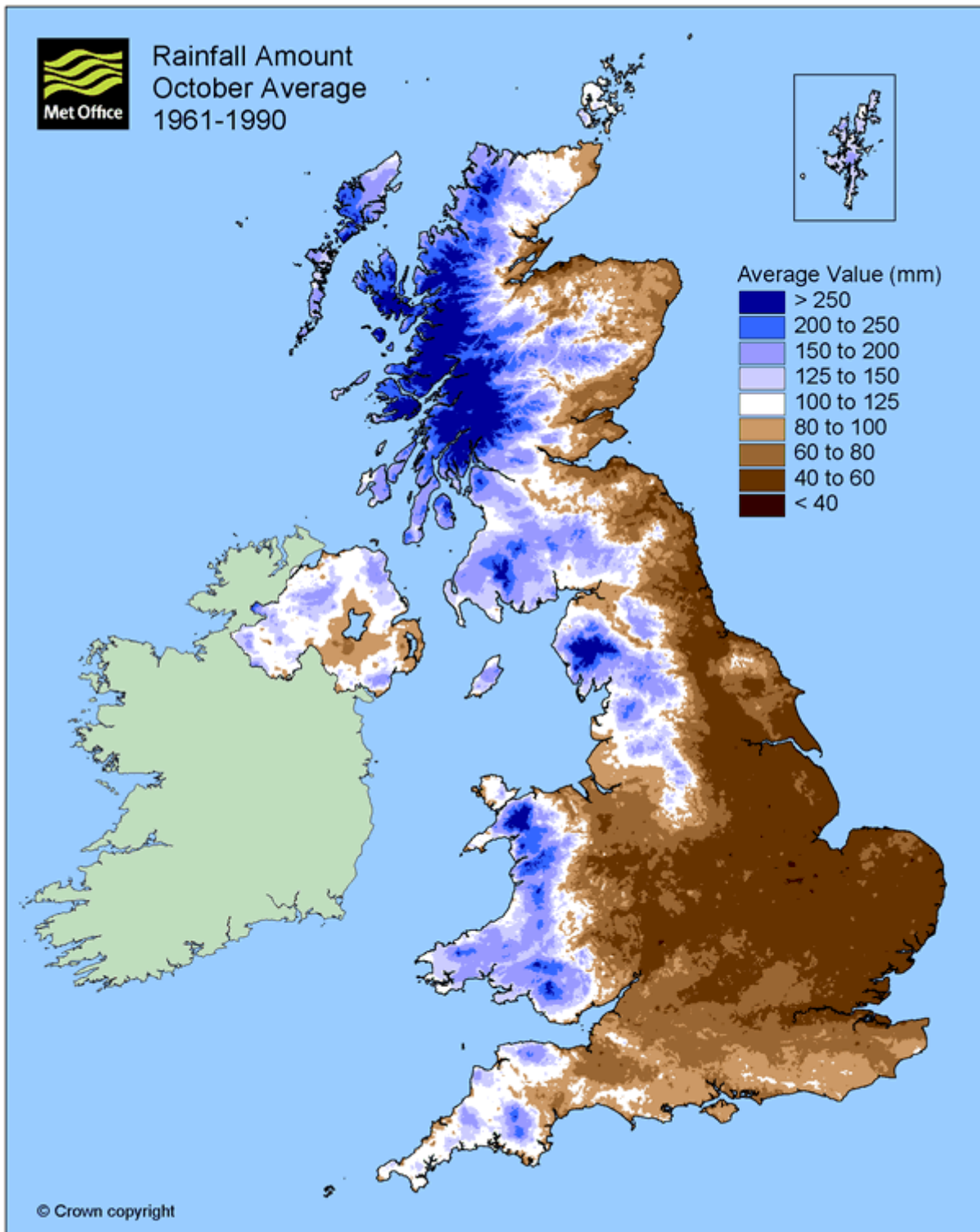
Rainfall Station	Rainfall Total (mm)	Start date/time of Rainfall	Length of duration	Return period (years)
Holbeach, Lincolnshire	56.4	15 October 2002 09:00 GMT	24 hours	19
Woburn, Bedfordshire	46.9	15 October 2002 09:00 GMT	12 hours	11
Monks Wood, Cambridgeshire	46.9	15 October 2002 09:00 GMT	12 hours	9.1
Little Rissington, Gloucestershire	43.4	15 October 2002 09:00 GMT	12 hours	14
Marham, Norfolk	41.4	15 October 2002 09:00 GMT	12 hours	13
Little Rissington, Gloucestershire	39.6	15 October 2002 12:00 GMT	6 hours	12
Marham, Norfolk	36.0	15 October 2002 15:00 GMT	5 hours	11

Please Note: The return periods have been calculated using the Flood Estimation Handbook method. This gives the likelihood of recurrence at any time of year, rather than for the month in question only.

Cottesmore reported 47.8 mm on the 15th, their wettest October day (09-09 GMT) since electronic archives back to 1961 (this is higher than their 1961-1990 monthly total for October, with 44 mm of this falling in 12 hours). The previous highest October daily value was 31.2 mm on 8 October 1997.

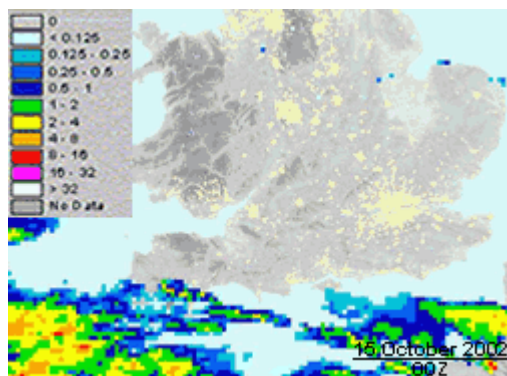
Marham reported 44.2 mm on the 15th, their wettest October day (09-09 GMT) since electronic archives back to 1961. The previous highest October daily value was 38.4 mm on 2 October 1982.

The average October 1961-1990 rainfall



Radar imagery

3-hourly radar imagery from 14/15 October 2002



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.

Last updated: 11 February 2013