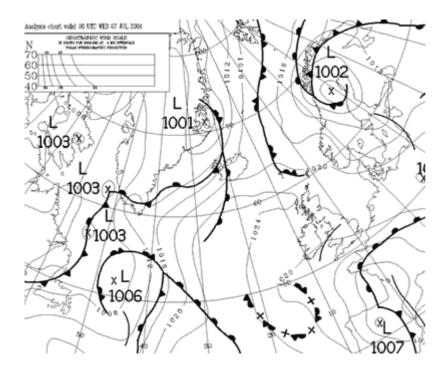


Strong winds/heavy rainfall - 7/8 July 2004

The second half of June and early July 2004 were generally unsettled, with a deep depression passing over England on 23 June. Another depression, coming up from Spain/France, caused high wind speeds and heavy rainfall on 7/8 July. This was followed by heavy showers/thunderstorms over parts of England on 8 July.

Six-hourly animated synoptic charts



This unseasonably bad weather resulted in problems for power supplies, on roads and on the railways. There were also flooding problems near Wittering on 8 July, which recorded over 100 mm in just 18 hours, which is double their July 1961-90 average.

Winds

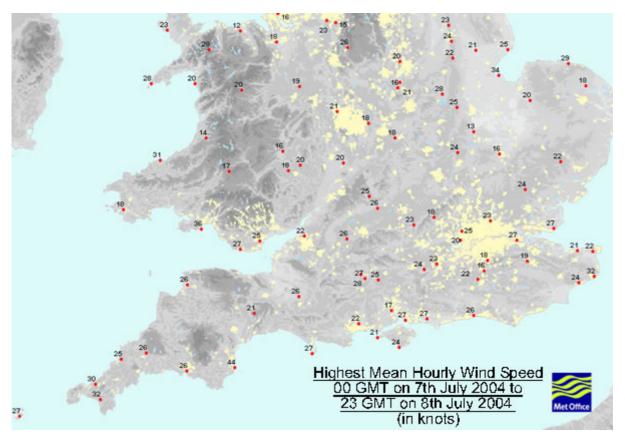
Highest hourly mean wind speeds - 7 and 8 July 2004

Reviewed December 2009.

7 and 8 July 2004 - Highest hourly mean wind speeds

stations (below 200 metres)	Station elevation	Mean hourly wind speed (knots)	Hour ending	Comments
Berry Head, Devon	58 m	44	7 July, 19:00	Previous highest July value was 41 knots on 25 July 2003. Digital data records back to 1994.
Donna Nook, Lincolnshire Mumbles	8 m	37	8 July, 07:00	Previous highest July value was 35 knots on 10 July 2000. Digital data records back to 1995.
Head, near Swansea	32 m	36	7 July, 22:00	Highest July value is 39 knots on 11 July 2001. Digital data records back to 2000.
Holbeach, Lincolnshire	3 m	34	8 July, 02:00	Previous highest July value was 27 knots on 1 July 1992. Digital data records back to 1992.
Langdon Bay Kent	' 117 m	32	7 July, 13:00	Highest July value is 35 knots on 4 July 1990. Digital data records back to 1985.
Culdrose, Cornwall	78 m	32	7 July, 21:00	Highest July value is 38 knots on 23 July 1990. Digital data records back to 1977.

Map of highest hourly mean wind speeds - 7 and 8 July 2004



Highest gust speeds - 7 and 8 July 2004

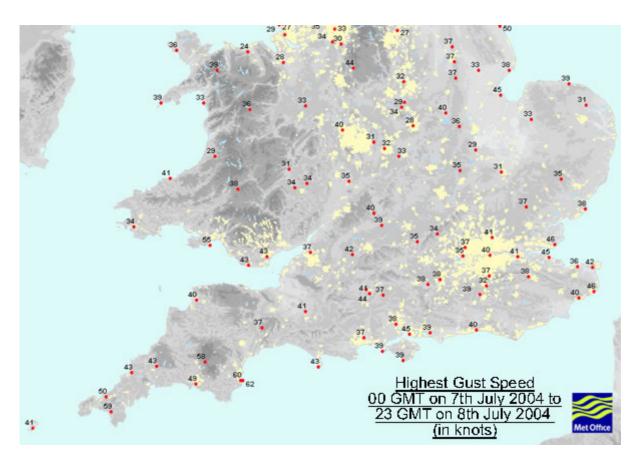
Reviewed December 2009.

The highest known gust speed anywhere in the UK during July is 81 knots (93 m.p.h.) at The Lizard on 29 July 1956.

7 and 8 July 2004 - Highest gust speeds

Station elevation	Gust speed (knots)	Hour ending	Comments
58 m	62	7 July,	Previous highest July value was 54 knots on 25 July 2003. Digital
50111	02	21:00	data records back to 1994.
8 m	60	7 July,	Previous highest July value was 49 knots on 25 July 2003. Digital
8 M		21:00	data records back to 1997.
78 m	59	7 July,	Previous highest July value was 51 knots on 7 July 1991. Digital
		22:00	data records back to 1977.
32 m a	55	7 July, 22:00	Previous highest July value was 52 knots on 11 July 2001. Digital data records back to 2000.
87 m 50	F.O.	7 July,	Previous highest July value was 47 knots on 7 July 1991. Digital
	50	23:00	data records back to 1979.
0	50	7 July,	Previous highest July value was 45 knots on 10 July 2000. Digital
0 111		06:00	data records back to 1995.
	elevation 58 m 8 m 78 m 32 m 87 m	Station elevation speed (knots) 58 m 62 8 m 60 78 m 59 32 m 55 a 87 m 50	Station elevation speed (knots) Hour ending 58 m 62 7 July, 21:00 8 m 60 7 July, 21:00 78 m 59 7 July, 22:00 32 m 55 7 July, 22:00 87 m 50 7 July, 23:00 7 July, 23:00 7 July, 23:00 8 m 50 7 July, 23:00 8 m

Map of highest gust speeds - 7 and 8 July 2004



Rainfall

Rainfall information - 7 July 2004

Reviewed December 2009.

fall

Rainfa Rainfall station total (mm)	Approx. End return date/timeperiod (years)	Comments
Guernsey Airport 62.5 (CI)	8 July, 09:00 24 hours	-
Wittering, 56.6 Cambridgeshire	8 July, 09:00 - 16 24 hours	Seventh-wettest day on record (09-09 GMT), and 2nd wettest day for July. Wettest day was 10 July 1968 with 79.0 mm. Digital records back to 1957.
Jersey Airport (CI) 51.9	8 July, 09:00 - - 24 hours	_
Andrewsfield, Essex 43.8	8 July 09:00 - 24 hours Not significan	nt _
Wattisham, Suffolk 36.0	8 July, 09:00 - 24 hours	nt _
Wittering, 52.6 Cambridgeshire	8 July, 09:00 - 22 12 hours	Fifth-highest standard 12-hour value recorded in any month (fourth-highest in following 12-hour period), and third-wettest for July. Wettest standard 12-hour period recorded in any month is 65 mm on 9 August 2004. Digital 12-hour records back to 1957.
Wittering, 55.2 Cambridgeshire	8 July, 04:00 - 8 24 hours	-

Twelve-hour standard period is defined as 09-21 GMT or 21-09 GMT.

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. Return periods less than 10 years have been noted as insignificant in the above table.

Rainfall information - 8 July 2004

Reviewed December 2009.

8 July 2004 - Rainfall

Rainf Rainfall station total (mm)	. period	Comments
Wittering, 52.9 Cambridgeshire	8 July, 21:00 - 23 12 hours	Fourth-highest standard 12-hour value recorded in any month, and second wettest for July. Wettest standard 12-hour period recorded in any month was 64.1 mm on 10 July 1968. Digital 12-hour records back to 1957.
Wittering, 51.0 Cambridgeshire	8 July, 15:00 - 2 80 hours	Highest 2-hour total since hourly digital records began in 1980.
Wittering, 31.0 Cambridgeshire	8 July, 15:00 - 1 35 hour	Wettest hourly value since hourly digital records began in 1980. Previous highest hourly total was 27.5 mm on 7 August 2002.
Wittering, 20.0 Cambridgeshire	8 July, 14:00 - 1 hour	nt _

Twelve-hour standard period is defined as 09-21 GMT or 21-09 GMT.

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. Return periods less than 10 years have been noted as insignificant in the above table.

Extra information on Wittering

Wittering recorded 107.4 mm in 19 hours on 7/8 July 2004, which has an approximate return period of 150 years. This amount of rain has not been previously recorded over such a short time frame at Wittering for any month.

Over the first eight days of July, Wittering recorded 121.5 mm, which is 246% of their 1961-1990 July average rainfall.

A short account, from the Senior Met. Officer at Wittering, gives further insight into the event: "The thunderstorm on Thursday afternoon was very localised indeed. I suspect only a few square miles were affected, the area centred on RAF Wittering. The A1 road is adjacent to our entrance and was closed for a while.

"The whole base was flooded with several buildings affected. Ground stroke lightning was also a feature with several 'hits' on the base resulting in damage to electronic equipment.

"The thunderstorm was not advected from elsewhere but appeared to develop over Wittering in a short space of time and then hardly move. Some hail was observed but nothing too intense. The rain was just like standing under a waterfall."

This unseasonably bad weather resulted in problems for power supplies, on roads and on the railways. There were also flooding problems near Wittering on 8 July, which recorded over 100 mm in just 18 hours, which is double their July 1961-90 average.

Winds

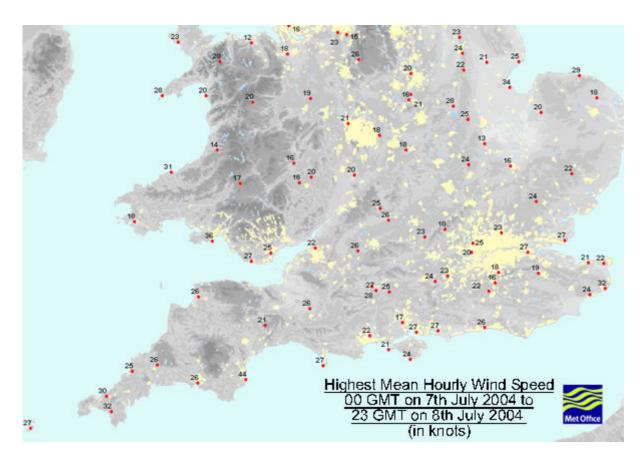
Highest hourly mean wind speeds - 7 and 8 July 2004

Reviewed December 2009.

7 and 8 July 2004 - Highest hourly mean wind speeds

stations (below 200 metres)	Station elevation	Mean hourly wind speed (knots)	Hour ending	Comments
Berry Head, Devon	58 m	44	7 July, 19:00	Previous highest July value was 41 knots on 25 July 2003. Digital data records back to 1994.
Donna Nook, Lincolnshire Mumbles	8 m	37	8 July, 07:00	Previous highest July value was 35 knots on 10 July 2000. Digital data records back to 1995.
Head, near Swansea	32 m	36	7 July, 22:00	Highest July value is 39 knots on 11 July 2001. Digital data records back to 2000.
Holbeach, Lincolnshire	3 m	34	8 July, 02:00	Previous highest July value was 27 knots on 1 July 1992. Digital data records back to 1992.
Langdon Bay Kent	' 117 m	32	7 July, 13:00	Highest July value is 35 knots on 4 July 1990. Digital data records back to 1985.
Culdrose, Cornwall	78 m	32	7 July, 21:00	Highest July value is 38 knots on 23 July 1990. Digital data records back to 1977.

Map of highest hourly mean wind speeds - 7 and 8 July 2004



Highest gust speeds - 7 and 8 July 2004

Reviewed December 2009.

The highest known gust speed anywhere in the UK during July is 81 knots (93 m.p.h.) at The Lizard on 29 July 1956.

7 and 8 July 2004 - Highest gust speeds

			7 and 0	July 2004 - Flightest gust speeds
Low-level stations (below 200 metres)	Station elevation	Gust speed (knots)	Hour ending	Comments
Berry Head, Devon	58 m	62	7 July, 21:00	Previous highest July value was 54 knots on 25 July 2003. Digital data records back to 1994.
Brixham, Devon	8 m	60	7 July, 21:00	Previous highest July value was 49 knots on 25 July 2003. Digital data records back to 1997.
Culdrose, Cornwall	78 m	59	7 July, 22:00	Previous highest July value was 51 knots on 7 July 1991. Digital data records back to 1977.
Mumbles Head, near Swanse	32 m a	55	7 July, 22:00	Previous highest July value was 52 knots on 11 July 2001. Digital data records back to 2000.
Camborne, Cornwall	87 m	50	7 July, 23:00	Previous highest July value was 47 knots on 7 July 1991. Digital data records back to 1979.
Donna Nook, Lincolnshire	8 m	50	7 July, 06:00	Previous highest July value was 45 knots on 10 July 2000. Digital data records back to 1995.

Map of highest gust speeds - 7 and 8 July 2004 ₺

Rainfall

Rainfall information - 7 July 2004

Reviewed December 2009.

7 July 2004 - Rainfall

Rainfall station	Rainfal total (mm)	l End date/time	Approx. return eperiod (years)	Comments
Guernsey Airport (CI)	62.5	8 July, 09:00 - 24 hours	-	-
Wittering, Cambridgeshire	56.6	8 July, 09:00 - 24 hours	16	Seventh-wettest day on record (09-09 GMT), and 2nd wettest day for July. Wettest day was 10 July 1968 with 79.0 mm. Digital records back to 1957.
Jersey Airport (Cl)	51.9	8 July, 09:00 - 24 hours	-	-
Andrewsfield, Essex	43.8	8 July 09:00 - 24 hours	Not significant	
Wattisham, Suffolk	36.0	8 July, 09:00 - 24 hours	Not significant	
Wittering, Cambridgeshire	52.6 e	8 July, 09:00 - 12 hours	22	Fifth-highest standard 12-hour value recorded in any month (fourth-highest in following 12-hour period), and third-wettest for July. Wettest standard 12-hour period recorded in any month is 65 mm on 9 August 2004. Digital 12-hour records back to 1957.
Wittering, Cambridgeshire	55.2 e	8 July, 04:00 - 8 hours	24	-

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Rainfall information - 8 July 2004

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Rainfall station			Approx. return period (years)	Comments
Wittering,	52.9	8 July,	23	Fourth-highest standard 12-hour value recorded in any month, and
Cambridgeshir	е	21:00 -		second wettest for July. Wettest standard 12-hour period
		12 hours		

		hour records back to 1957.
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Wittering, Cambridgeshire 20.0	8 July, 14:00 - 1 hour	t -

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Last updated: 10 May 2013

