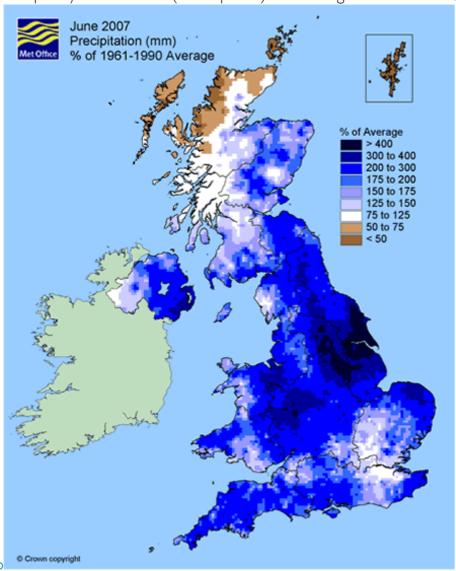


Heavy rainfall/flooding - June 2007

Record June totals and heavy rainfall on 12/15 June (N Ireland & N England) and 24/25 June (Yorkshire and the Humber), resulted in widespread flooding and disruption...

In excess of 150 mm of rain fell over much of Wales, the Midlands, Northern England, Northern Ireland and parts of Scotland and South-west England, with over 250 mm locally. This represents over three times the average June rainfall over much of the West Midlands, Lincolnshire, Yorkshire and the Humber, and over four times the June average in places, as can be seen in the June 2007 per cent of average map below. The estimated average frequency of occurrence (return period) of these high totals is over 200 years (June 2007 -



return period map

Many weather stations in Lincolnshire, Yorkshire and the Humber, had their wettest June on record. The following table provides examples of stations which recorded their wettest June and have long series lengths. Some places also had their wettest any month on record, including the following long-running stations: Hull, Bradford and Sheffield.

June 2007 - station precipitation values

Station	June 2007	% of 1961-1990) Series length
Station	precipitation (mm	Series terigeri	
Harlow Hill Reservoir (North Yorkshire	e)289.9	497	88 years
Hull	256.3	487	137 years (*)
Dalton Holme (East Yorkshire)	263.5	485	127 years (*)
Sheffield (South Yorkshire)	285.6	463	125 years
Bradford (West Yorkshire)	261.4	411	97 years

(*) a few years missing

Areal values for June 2007 for the UK, countries and regions that have experienced high precipitation are shown in the table below. These values are final and are based on the full network of stations. These areal series begin in 1914.

Many counties also set records for June in the areal series back to 1914, and the values for Lincolnshire, Nottinghamshire, Staffordshire and Yorkshire were also the highest for any calendar month.

June 2007 - areal precipitation values

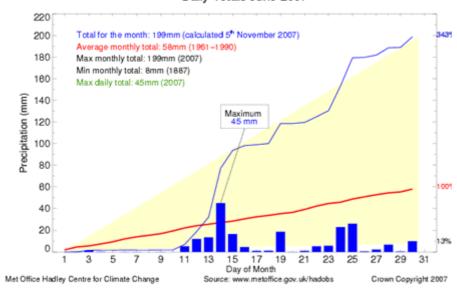
Area	June 2007	% of 1961-1990 Ranking in June seriesHighest or previo		
(Regions map ☑ Districts	precipitation	average	high since 1914	
map ᡌ)	(mm)	average	from 1914	111611311100 1311
UK	136.0	190	1	121.2 mm - 1980
England	145.9	241	1	121.2 mm - 1997
Wales	168.2	202	2	183.1 mm - 1998
Scotland	108.9	127	Not significant	153.9 mm - 1938
N Ireland	148.3	202	1	147.0 mm - 1931
England & Wales (*)	149.0	234	1	124.3 mm - 1998
England N	188.1	277	1	134.8 mm - 1980
England S	123.7	218	1	119.1 mm - 1997
England E & NE	181.8	314	1	144.2 mm - 1997
England NW & Wales N	172.3	209	2	173.2 mm - 1928
Midlands	167.5	278	1	133.1 mm - 1982
East Anglia	99.5	194	4	129.6 mm - 1997
England SW & Wales S	146.3	202	2	155.6 mm - 1998
England SE & central S	102.2	186	5	136.1 mm - 1971

(*) There is also an historic monthly rainfall series for England and Wales, from 1766, which is an homogenous series based on selected station data. In this series, the total for June 2007 of 154.7 mm is ranked second wettest for June. The wettest June in this series was June 1860 with 157.1 mm.

The June 2007 rainfall was most significant over north-east England (map showing area), and a daily precipitation plot is shown in the following image, with the wettest three days of the month being the 14th, 24th and 25th. The total of 45 mm for the 14th was a new June daily record for this area (daily series from 1931 onwards), and was the fourth wettest day for any month.



North East England Precipitation Daily Totals June 2007



Hydrological information for June 2007 can be found from the following link, Water Watch - UK Hydrological Summaries (published jointly by the Centre for Ecology and Hydrology, Wallingford and the British Geological Survey).

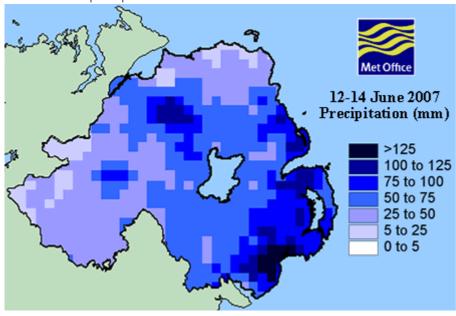
Information on Summer 2007 floods can also be found on the following Enironment Agency web link, Summer 2007 Floods (EA) ☑.

12-15 June 2007 - Heavy rainfall/flooding

A very unsettled spell of weather with slow moving bands of heavy rain/showers affecting Northern Ireland and northern England through this period. This resulted in widespread flooding, affecting homes, businesses, road transport and rail services.

(12-hourly surface animation between 0000 UTC on 12 June 2007 and 0000 UTC on 16 June 2007 2).

The 72-hour precipitation values for 12-14 June 2007 for Northern Ireland can be seen in the map below.

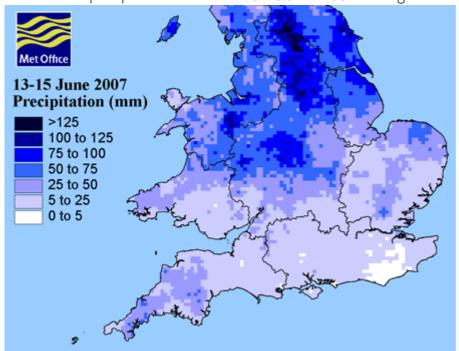


A selection of the stations with the most significant return periods for 12-14 June 2007 can be found in the table below.

12-14 June 2007 - station precipitation values (Northern Ireland)

Station	June 12 2007 precipitation (mm)	June 13 2007 precipitation (mm)	June 14 2007 precipitation (mm)	2007	Return period for n12-14 June 2007 (years)
Trassey Slievenaman (County Down)	56.8	37.3	98.0	192.1	30
Murlough (County Down)	27.0	35.3	65.0	127.3	75
Ballysallagh Reservoir (County Down)	34.8	29.0	55.5	119.3	65
Annalong Valley (County Down)	6.5	36.4	75.8	118.7	20
Conlig, New Works (County Down)	31.7	28.3	57.8	117.8	100
Creightons Green (County Down)	29.8	24.4	58.0	112.2	55

The 72-hour precipitation values for 13-15 June 2007 for England and Wales can be seen in the map below.



A selection of the wettest stations and associated return periods can be found in the table below.

13-15 June 2007 - station precipitation values (Yorkshire)

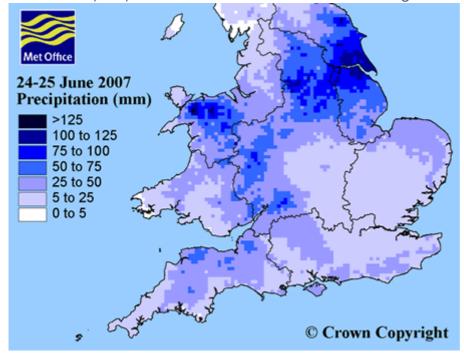
Station	June 13 2007 precipitation (mm)	June 14 2007 precipitation (mm)	June 15 2007 precipitation (mm)	2007	Return period for n13-15 June 2007 (years)
Lumley Moor					
Reservoir (N	35.4	91.0	19.6	146.0	160
Yorkshire)					
Harlow Hill Reservoir	26.7	97.7 (*)	17.7	142.1	>200
(N Yorkshire)	20.7	37.7 ()	±1	1 12.1	7 2 0 0
Birstwith Hall (N	28.4	85.5	23.7	137.6	130
Yorkshire)			-		
Sheffield (S Yorkshire	30.3	88.2	16.9	135.4	110
Thornes Park (W Yorkshire)	20.3	95.7 (*)	14.0	130.0	>200

^(*) The return period for the rainfall total for 14 June 2007 was over 150 years.

24-25 June 2007 - Heavy rainfall/flooding

There was a further significant rainfall event during the month on 24/25 June 2007, affecting Northern England, north Wales and the Midlands, with Yorkshire and the Humber particularly wet on both days. The heavy and prolonged rainfall was caused by a slow moving area of low pressure and associated frontal system. (6-hourly surface animation between 1800 UTC on 24 June 2007 and 0000 UTC on 26 June 2007). The rainfall resulted in thousands of homes and businesses being flooded and disruption to road and rail transport across a wide swathe of northern and western England. Several deaths were attributed to the flooding.

The 48-hour precipitation values for 24/25 June 2007 for England and Wales can be seen in the map below.



A selection of the wettest stations and associated return periods can be found in the table below.

24-25 June 2007 - station precipitation values

Station	June 24 2007	June 25 2007	June 24-25 2007 Return period for	
	precipitation (mr	m)precipitation (mn	n)precipitation (mm	n)24-25 June 2007 (years)
Winestead (East Yorkshire	e) 40.4	80.8	121.2	>200
Keyingham (East Yorkshire	e)42.5	77.0	119.5	>200
Great Culvert (Hull)	50.8	67.5	118.3	>200
Hull	50.2	63.0	113.2	>200
Tickton (East Yorkshire)	44.6	67.0	111.6	>200

Last updated: 30 October 2012

