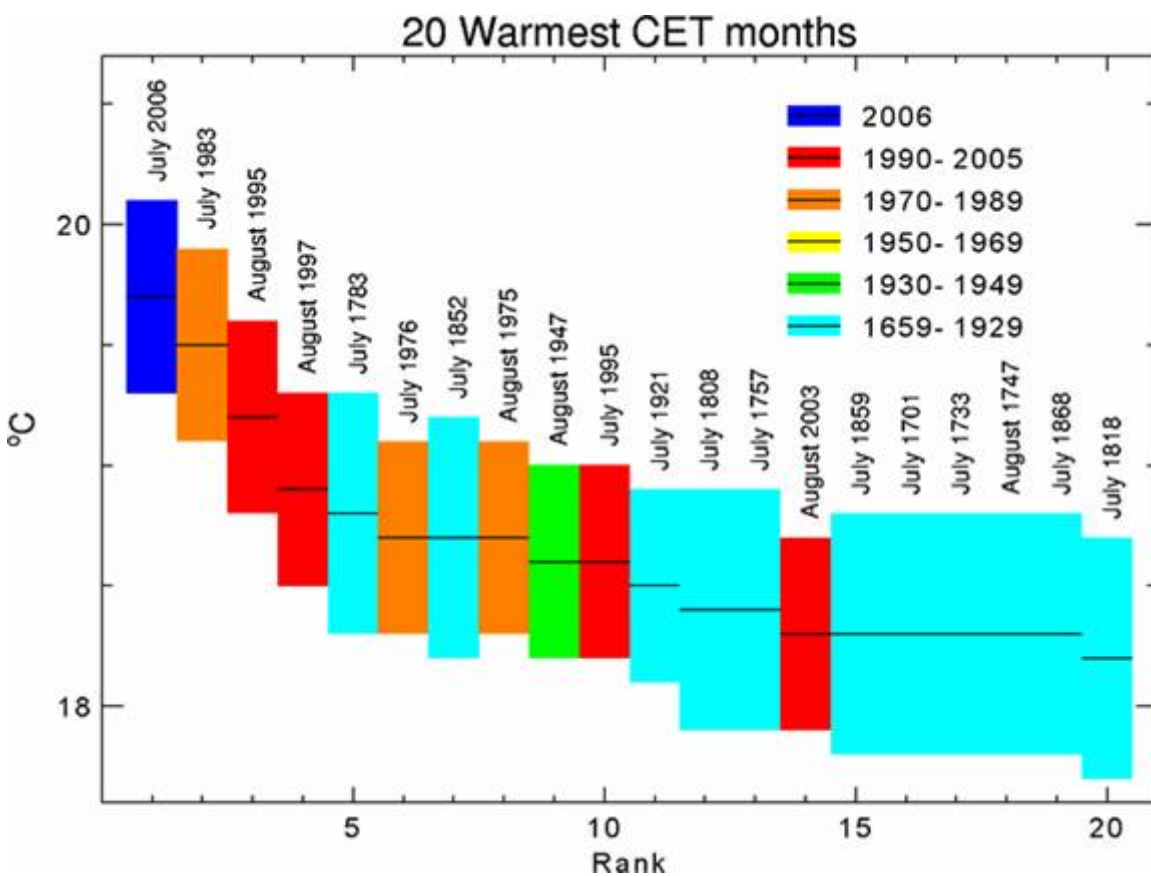


## Record breaking heat and sunshine - July 2006

July 2006 was the warmest month on record over much of the UK and the sunniest over parts of England.

Many station and areal records were broken, mainly for July but some were for any month. Notably, in the monthly [Central England Temperature](#) series which commenced in 1659, it was the warmest calendar month yet recorded. The numerous warm, sunny days were associated with anomalously high pressure over northern Europe and a persistent southerly airstream over the UK.

### Warmest calendar month yet recorded



### Impacts

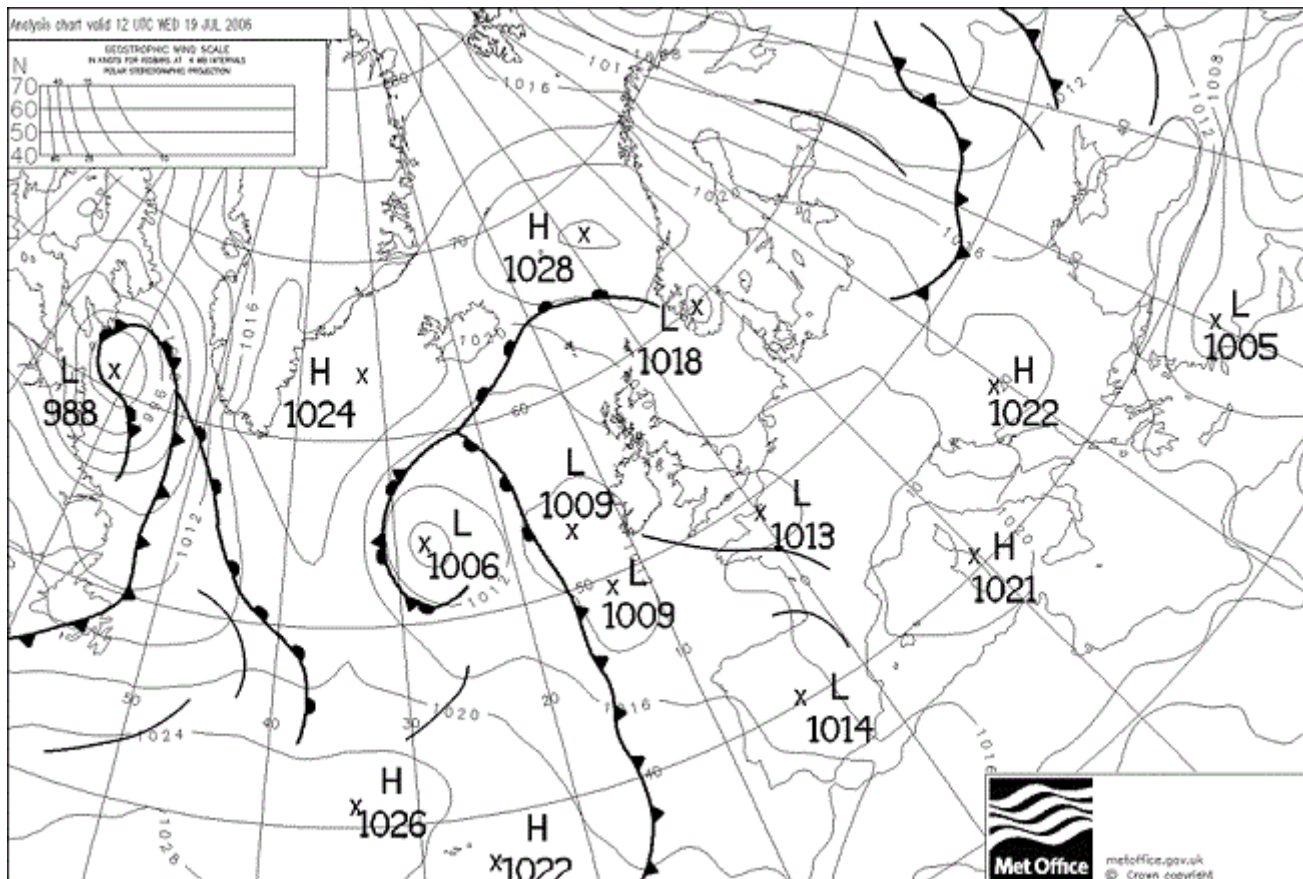
The heat placed strains on water and energy utilities, road and rail transport and the health and fire services. For example, heat damage to road surfaces was reported from Cornwall to Cumbria - the cost of repairs was estimated at £3.6m in Oxfordshire alone. Speed restrictions were introduced on many rail lines, because of the risk of buckling - the west coast main line was particularly affected with delays and cancellations. Heat-Health Watch temperature warnings were in use for England and Wales, with advice to minimise the impacts of the heat - the number of excess deaths (680) was lower than in the August 2003 heatwave (2139). Numerous grassland, moorland and forest fires broke out - restrictions were activated on open access land, mainly in northern England. However, the hot sunny weather also brought benefits to the tourist industry, food and drink retailers and, to some extent, farmers and growers.

# Weather data

## Daily variation

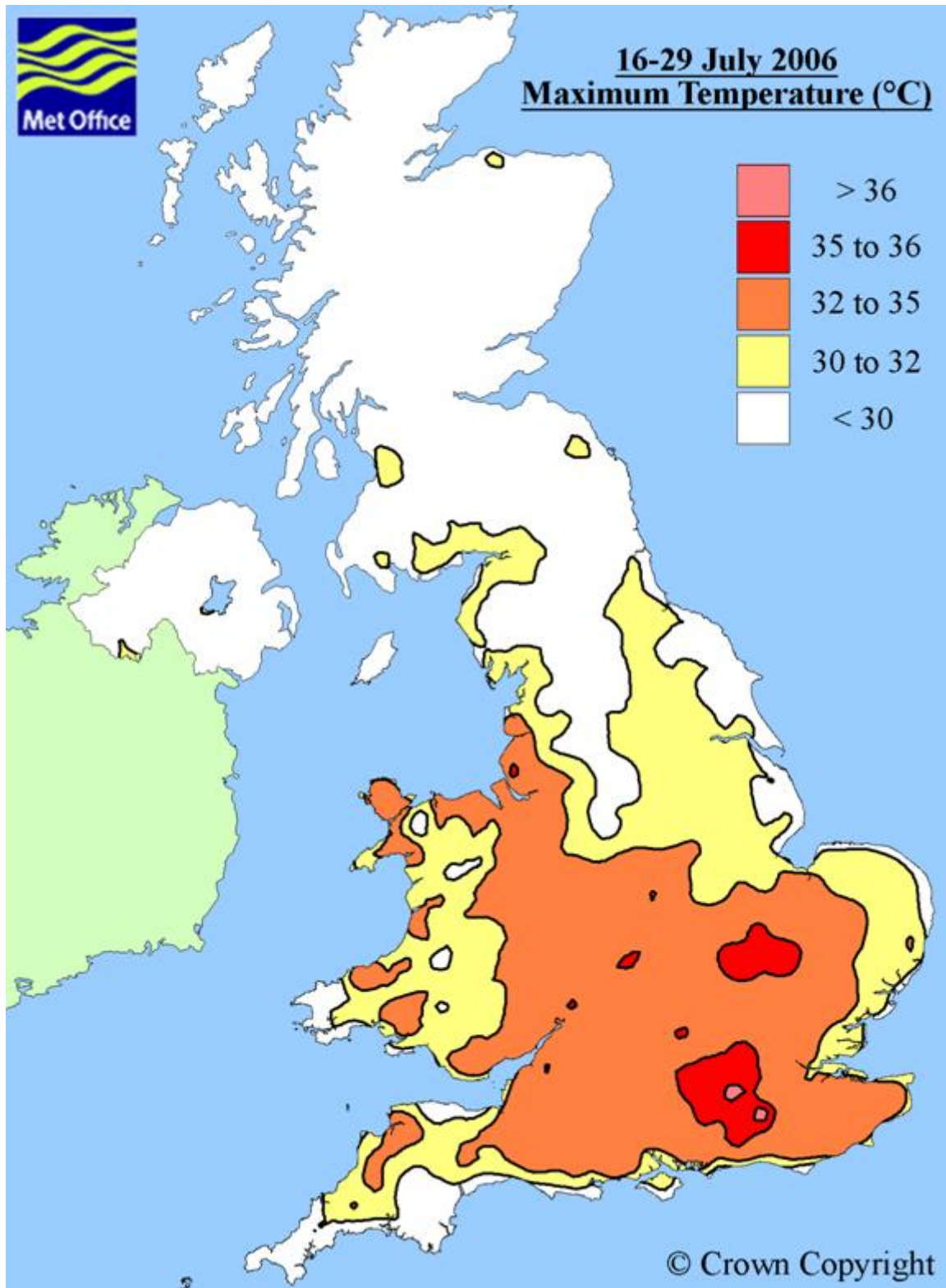
The first four days of the month saw weather that was to recur on many days later in the month, especially over England and Wales. Each day maximum temperatures exceeded 28 °C widely across England and Wales, with 30-32 °C in southern England and the Midlands, and over 10 hours of bright sunshine was recorded, with 12-14 hours in some eastern and southern areas of England. On the 5th and 6th, as thundery rain affected the southern half of the UK, it was the turn of the north to experience warm weather with temperatures over 26 °C widely. The next few days saw more-changeable conditions with near normal temperatures, before England again turned warmer and sunnier on 11th and 12th. Anticyclonic weather became firmly established over the UK and the North Sea from the 13th, bringing increasingly warm air from the east or south-east with little or no cloud. This middle part of the month saw the sunniest and warmest weather. Sunshine totals of 14-15 hours were recorded widely each day from the 11th to 19th, especially over England and Wales. By the 16th, temperatures were approaching 30 °C over much of England and Wales and continued to climb across the UK each day, exceeding 35 °C in places on the 19th when new UK and Welsh temperature records for July were set. The value of 36.5 °C recorded at Wisley, Surrey on 19th overturned the UK record for July of 35.9 °C set on 3 July 1976 at Cheltenham, Glos. Hot weather persisted for much of the following week, particularly over England and Wales. On the 25th, temperatures reached 33° C in the London area, with 34.1 °C at Charlwood, Surrey making this the second-hottest day of July. The 26th saw similar heat in south-east England. As the month drew to a close temperatures declined as Atlantic fronts advanced eastwards.

## The synoptic chart for 1200 GMT 19 July 2006

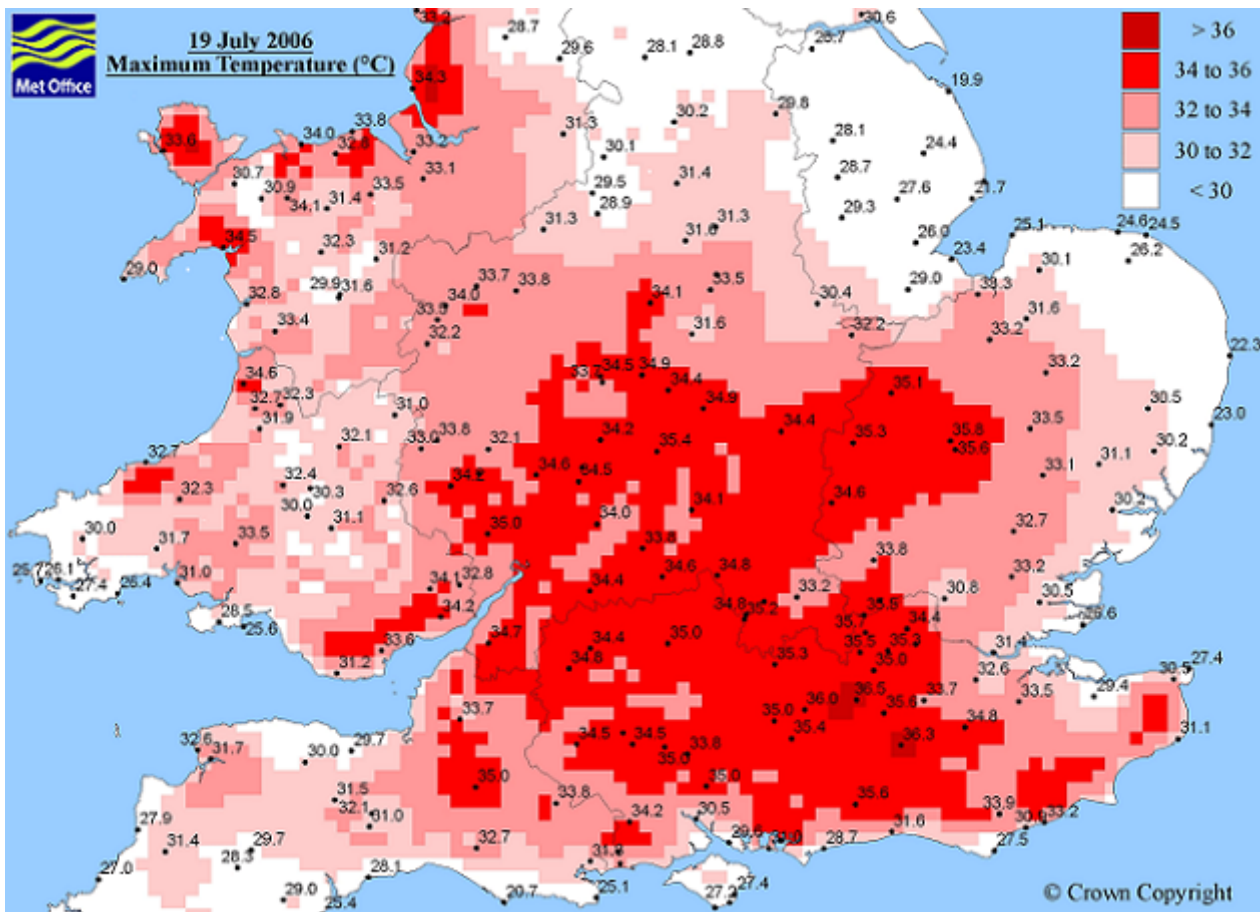


## Highest temperatures

The highest temperatures recorded in the period 16th-29th are shown on this map.



The highest temperatures recorded on 19 July are shown in this map.

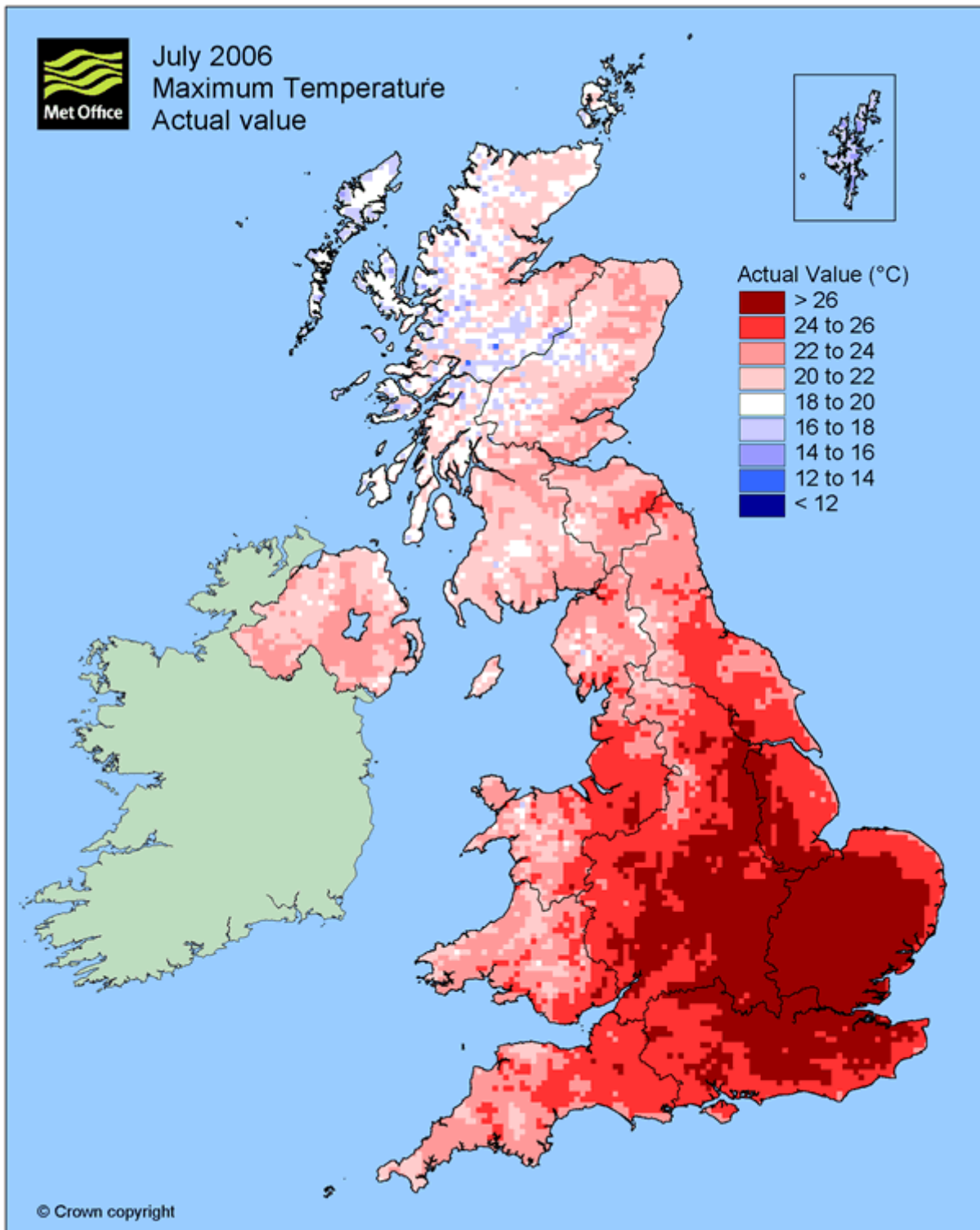


Highest temperatures recorded in July 2006 at a selection of long period stations

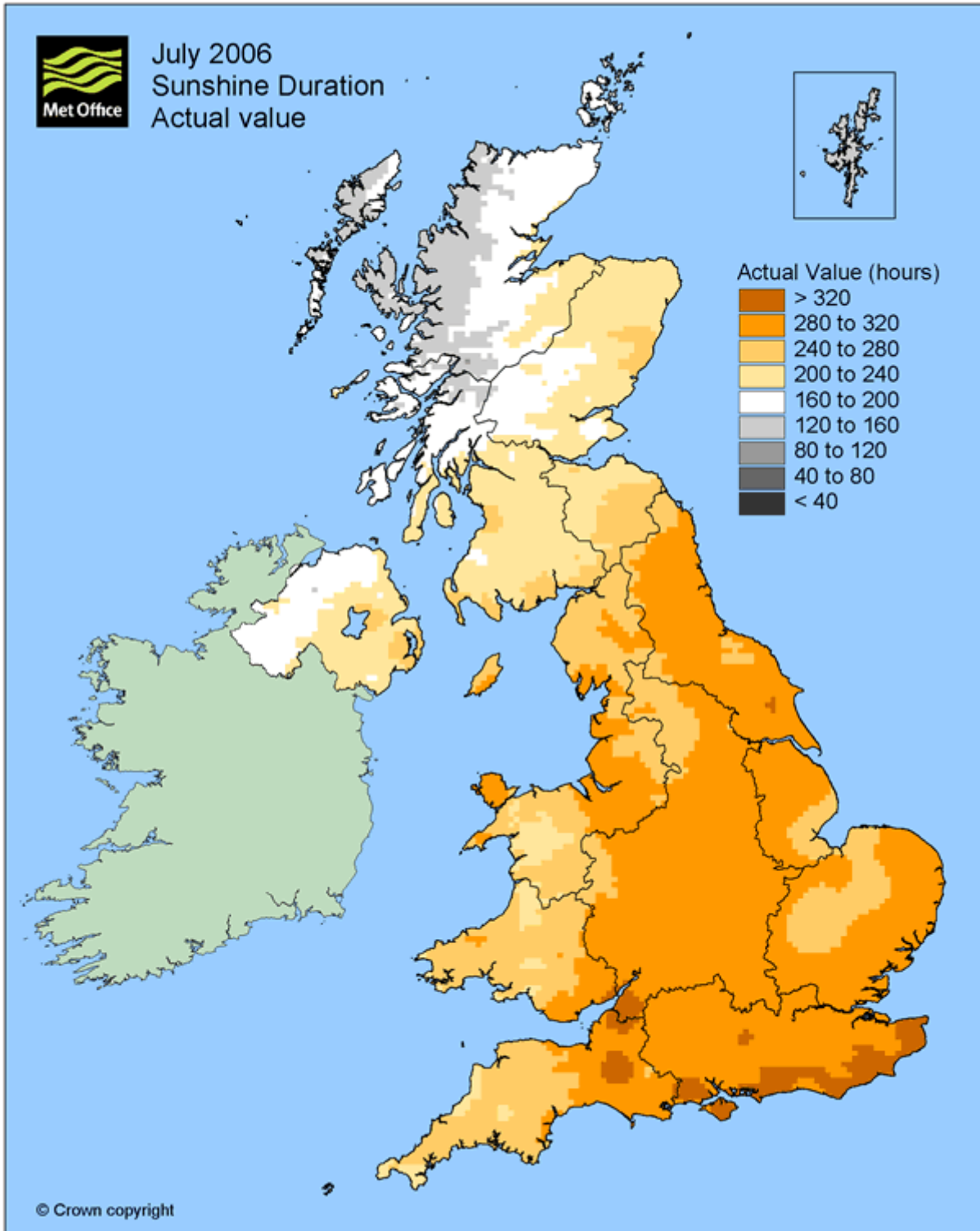
Station	Highest Temperature (°C) / Date	Earliest year for records	Ranking of highest temperature	Current or previous any month record (°C) / Date
Wisley, Surrey	36.5 / 19th	1904	2	37.8 / 10 August 2003
Cambridge Botanic Garden	35.6 / 19th	1904	4	36.9 / 10 August 2003
Heathrow, Greater London	35.5 / 19th	1948	3	37.9 / 10 August 2003
Alice Holt Lodge, Hampshire	35.4 / 19th	1950	1	35.1 / 10 August 2003
Oxford	34.8 / 19th	1881	3	35.1 / 3 August 1990
Gogerddan, Ceredigion	34.6 / 19th	1956	1	32.8 / 2 August 1990
Boscombe Down, Wiltshire	34.5 / 19th	1931	1	34.2 / 3 August 1990
Usk, Monmouthshire	34.1 / 19th	1924	1	33.6 / 3 July 1976
Aberporth, Ceredigion	34.1 / 19th	1942	1	31.8 / 2 August 1995
Valley, Anglesey	33.6 / 19th	1931	1	33.0 / 5 August 2003
Hastings, East Sussex	33.2 / 19th	1931	1	32.3 / 27 June 1976
Auchincruive, Ayrshire	30.7 / 19th	1932	1	30.6 / 29 July 1948
Buxton, Derbyshire	30.1 / 19th	1908 #	4	32.7 / 3 August 1990
Dyce, Aberdeen	29.8 / 17th	1943	1	29.7 / 21 August 1995
Lough Navar Forest, Co. Fermanagh	29.8 / 19th	1962	1	28.8 / 30 June 1976
Kielder Castle, Northumberland	29.7 / 18th	1951	2	30.0 / 9 August 2003
Helens Bay, Co. Down	28.4 / 17th	1961	2	28.8 / 29 June 1995

## The month

Maps of daily average maximum temperature sunshine total for July 2006



# Maps of daily average monthly sunshine total for July 2006



## Regional Mean Daily Maximum Temperature

Region	Actual (°C)	Variation from 1961-90 (°C)	Rank - July	Comments - previous July values	Rank - any month	Comments - previous any month values
UK	17.8	3.4	1	17.3 °C in July 1983	1	17.3 °C in July 1983 and August 1995
England	19.3	3.8	1	18.7 °C in July 1983	1	18.7 °C in July 1983
Wales	17.8	3.2	2	18.1 °C in July 1983	3	18.0 °C in August 1995

England & Wales	19.1	3.7	1	18.6 °C in July 1983	1	18.6 °C in July 1983
Scotland	15.6	3.1	1	15.0 °C in July 1983	1	15.4 °C in August 1947
N Ireland	16.7	2.7	1	16.5 °C in July 1983	2	17.1 °C in August 1995

#### Regional Sunshine duration

Region	Actual (hours)	Variation from 1961-90 (%)	Rank - July	Comments - previous July values	Rank - any month	Comments - previous any month values
UK	253.3	152	2	256.1 hr in July 1955	6	-
England	291.8	158	1	262.6 hr in July 1989	1 *	284.3 hr in June 1957
Wales	261.0	149	3	297.5 hr in July 1955 and 268.1 hr in July 1940	7	-
England & Wales	287.6	157	1	265.0 hr in July 1955	1 *	284.6 hr in June 1957
Scotland	195.4	138	4	-	39	-
N Ireland	207.9	149	4	-	34	-

\* The ranking is on the basis of monthly totals but if hours/day is used then the June 1957 values of 9.48 hours/day for England and 9.49 hours/day for England & Wales exceed those for July 2006 (9.41 hours/day and 9.28 hours/day respectively)

## Further information

Reference: 'The record breaking heat and sunshine of July 2006' J. Prior and M. Beswick, Weather magazine published by the Royal Meteorological Society, Vol. 62, 2007, pp. 174-182.

Last updated: 29 October 2012