Great weather events

Summer hot and summer even hotter in 1976

The long hot summer of 1976 which eventually ended in September of that year, was the culmination of a 16-month dry spell - the longest recorded over England and Wales since 1727.

Why did it happen?

The summer of 1976 had its origins in the weather of the previous year. The dry, warm weather that set in during May 1975 over much of England and Wales was followed by dominant warm, dry, sunny weather throughout that summer and led to the development of
large soil moisture deficits by the end of August.

Summer deficits usually disappear with winter rainfall, but the autumn and winter of 1975 were drier than usual and soil moisture deficits were slower to disappear. Even by mid-February 1976 there were still small areas where the deficits had not been made up and, as a result of a dry March and April, deficits started to increase again so that by the end of April they were already larger than usual for the time of year. During the summer, deficits even larger than in the previous year built up.

Rainfall down by half

Without significant rain it was a very dry scenario and, in the event, only 50 per cent of normal rainfall between June and August fell. There was no rain at all over much of England and Wales for several weeks in the latter part of July and for most of August. In particular it was dry in many parts of south Wales, south-west and southern England for 35-42 days until rain was recorded on 27, 28 or 29 August.

Temperatures were highest in the southern and south-eastern areas of the country - amounting to a whopping 4 °C above average between June and August from Devon across to Cambridgeshire. Heathrow had 16 consecutive days with temperatures over 30 °C from 23 June to 8 July, its longest spell on record.

A hotter spot between 23 June and 7 July

During this spell of hot weather temperatures exceeded 32 °C at one or more stations in the UK every day, and Cheltenham had 11 such days including seven in succession from 1 July - recording 35.9 °C on the 3rd.

Starting over East Anglia the heatwave intensified, peaking over eastern England on 26 June, then extending to Wales, south-west and northern England and north to cover the Scottish mainland by 1 July.

Skies were almost cloudless over much of central and eastern England, parts of East Anglia, Kent and East Sussex having an average of more than 14 hours of bright sunshine each day over the period. On 30 June exceptionally dry air also covered much of East Anglia and southern England.