

Wettest April in UK since 1767 according to longest rainfall dataset

May 7 2012



The Radcliffe Meteorological Station has been collecting temperature and rainfall data since 1767.

(Phys.org) -- Last month was the wettest April on record according to data from the UK's longest running rainfall data collection station. Although April 2012 was widely reported to be the wettest drought this century, it is likely to be the wettest April in Oxford for almost 250 years.

That is according to Oxford University's Radcliffe Meteorological Station, which has been collecting temperature and rainfall data almost



continuously since 1767. Situated in the garden of Green Templeton College on Woodstock Road, its data collection goes further back than any other rainfall record in the UK. Its observations are strictly in accordance with the standards laid down by the Meteorological Office.

Its data shows the rainfall measurement in Oxford for April 2012 reached 142mm, compared to a long-term mean of 43.7mm – producing three times more rainfall than usual over the month. April 2012 beat the previous record of April 2000 by about 5mm. Nearly a third of the rain fell in the 48 hours between 0900GMT on April 27 and 0900GMT on April 29 2012. The rainfall observations are made by the Radcliffe Met Station Observer, who observes daily meteorological readings at 0900GMT, the same time for 365 days of the year.

Helen Pearce, Radcliffe Met Station Observer and doctoral student at the University's School of Geography and the Environment, said: 'I empty a rain gauge into a measuring tube at exactly the same time each day of the year and read the temperatures off various thermometers recording the maximum and minimum temperatures in the preceding 24 hours. Our readings go further back than any other data in the UK, including that recently reported by the Met Office.

'We can show that this was in fact the wettest for almost 250 years and not just 100 years as previously reported. However, the mean air temperature in Oxford for April was 8.1 degrees Celsius (measured at 0900UCT) with the long-term mean being 8.3 degrees Celsius. This is very much in line with expected mean temperatures for this time of year.'

Oxford wasn't quite as wet as the average for Wales or southwest England, which means that within those areas there will have been places receiving much more rain than Oxford, according to this data collection.



Richard Washington, Professor of Climate Science at Oxford University, said: 'The floods may have been worse if the rain had fallen earlier in the spring or winter when the evaporation rates are lower. But it is also likely that the weather systems might not have produced as much rain then either, as that is when the air temperatures and the moisture content of the air are generally lower too.'

The Radcliffe Meteorological Station has collected the longest series of temperature and rainfall records for one site in Britain. These records are continuous from January, 1815. Irregular observations of <u>rainfall</u>, cloud and temperature exist from 1767.

Observations of air temperature were taken at observatories to determine astronomical refraction, but other meteorological observations were often made. The building of the Radcliffe Met Station began in 1772 when Dr Thomas Hornsby, then Savilian Professor of Astronomy, approached the Radcliffe Trustees with a request for funds for the erection and equipping of an astronomical observatory.

Hornsby might have had some personal interest in weather for he made numerous but irregular observations from 1767 until his death in 1810. Daily readings were first published from 1853 onwards.

Provided by Oxford University

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