

Weather Eye  
Paul Simons



**I**n the middle of southern England is a place that can turn incredibly cold. RAF Benson, near Wallingford, Oxfordshire, was the coldest place in Britain on Monday night, at minus 5.5C (22.1F). Even more astonishing temperatures have been recorded there in the past, including minus 18C (0.4F) on January 6, 2010 — almost as cold as the South Pole that day. Benson is often much cooler than nearby weather stations, especially in summer, and its temperatures can swing wildly over 24 hours from extreme cold in the night to warm during the day.

This is partly the result of a soil full of gravel and sand, which allows the ground to cool rapidly at night. It is also sheltered near the River Thames and, on clear nights, cold air can slip down the slopes of the Chiltern hills and collect around the airfield. As the ground grows cold it cools the air just above it, often creating fog and frost. Fog forming near the Thames can also roll across the airfield.

Times Newspaper  
25th November 2015

Benson is one of the most important weather stations in the UK. Apart from its unusual microclimate, it is also one of the longest-established observatories of the Met Office. The pioneering meteorologist William Henry Dines began observations from his home at Benson in 1915, studying the air high up using instruments attached to kites and balloons — the forerunner of today's weather balloons. This provided vital information for the Royal Flying Corps, predecessor to the RAF, during the First World War. It was important for forecasting fog, as pilots went to search for German zeppelin raids over England. The high-altitude work also gave insights into how storms developed a few miles up in the atmosphere.

The RAF airfield was built in 1937, even though it is a cold, foggy site. It became an important base for photographic reconnaissance flights during the Second World War, including the famous photographs taken of the Mohne and Sorpe dams after the Dambuster raids on May 17, 1943.