



## Scott's Antarctic Expedition

Robert Falcon Scott's expedition to the South Pole is most well known for its tragic conclusion, but what a lot of people don't know is that it was primarily a scientific expedition. The extensive records that Scott's team made are kept at the National Meteorological Archive in Exeter, as well as other archives across the country, and allow scientists to use the detailed data to gain a better understanding of the polar regions and the climate there. But what did Scott and his team discover on this expedition and why is this data so useful?

Many civilisations from the ancient Greeks onwards believed in the existence of a great undiscovered southern land, the terra australis incognita, or more communally known as Antarctica, but it was not until the nineteenth century that people actually set foot there. The later years of the nineteenth century and early twentieth century saw the great heroic age of Antarctic exploration, most famously the expeditions led by Ernest Shackleton and Robert Falcon Scott. In June 1910, Captain Scott and his team set off on the long voyage from Britain to Antarctica. The main aim of the expedition was "to reach the South Pole, and to secure for The British Empire the honour of the achievement." But Scott also had another aim for the expedition. He hoped to conduct important investigations into the biology, zoology, geology, glaciology and oceanography of the continent on a scale not seen before. One aim was to conduct regular meteorological observations for the entire duration of the expedition and the Met Office provided many of the instrumentation used. For this purpose Scott appointed a select team of meteorologists, including George Simpson who later served as the Director of the Met office from 1920 to 1938. The expedition had an ominous start, with the ship being struck by a terrific storm after leaving Port Chalmers, New Zealand. This storm produced 35 foot waves and is dramatically captured in the Terra Nova ship logs stored in the National Meteorological Archive.

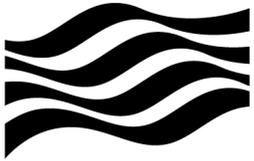
Shortly after arriving at Ross Island, Antarctica, George Simpson constructed one of the continent's first weather stations. Here, regular weather observations were made and recorded. Shortly after, three additional outlying screens were erected to help record the micro-climate of



the area during the Antarctic winter. Weather observations were also taken while out on sledging journeys. Alongside these observations are numerous other records, such as letters, photographs and diagrams. These records provide an important source of baseline meteorological data and are amongst the most historically significant records we have in our collection.

Despite the difficulties and set backs they faced, Scott and his companions did reach the pole on 18<sup>th</sup> January 1912 only to find that the Norwegian explorer Roald Amundsen had beaten them by 33 days. The team were now faced with a treacherous return journey to main base at Cape Evans, during which they experienced unusually cold temperatures and severe blizzards. Sadly, by 29 March 1912 all five members of the Polar Party had died. The observations they recorded in the notebook register indicate that the men encountered sustained minimum temperatures that were more than 10°C lower than average. These conditions would have no doubt contributed to the frostbite and extreme fatigue the men experienced.

As the news of their deaths filtered through in early 1913, Simpson began work on his account of the weather and climate using data he and his colleagues had gathered. In 1919 his pioneering three volume treatise on Antarctic meteorology was published to great acclaim. In this, Simpson concludes that Captain Scott met with exceptionally low temperatures on his return from the Pole. He also discovered that the transition from Antarctic summer to winter was much more rapid than previously thought. In memory of Captain Scott and his colleagues, the Scott Polar Research Institute in Cambridge University was set up in 1920. This institute provides a single point at which material of polar interest can be collected and made accessible for future research. The Amundsen-Scott South Pole Scientific Station has been inhabited by a community of international scientists since its foundation in 1956. It's unique position has resulted in a long and distinguished history of scientific research, in particular the discovery by the British Antarctic Survey of the depletion of the ozone layer and its impact on global temperatures. The Met Office has a close working relationship with the British Antarctic Survey and some of our forecasters are seconded to their main base at Rothera on the Antarctic Peninsula every summer to engage in collaborative research.



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Captain Scott's extraordinary adventure still compels, fascinates and inspires people today. But the real legacy of the expedition lies in Scott's recognition of Antarctica as a place of special scientific interest. The expedition established a long tradition of detailed scientific research on the continent which continues to this day and has enabled a greater understanding of the climate and world around us.