Teaching weather and climate science in primary schools - a pilot project from the UK Met Office

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Wow Schools is a pilot project from the Met Office with an aim to inspire and educate the next generation of scientists and, uniquely, use the data collected by schools to improve weather forecasts and warnings across the UK. Wow Schools was launched in late 2015 with a competition open to primary schools across the UK. 74 schools entered the draw, all hoping to be picked as one of the ten lucky schools taking part in the pilot scheme.

Each winning school received a fully automatic weather station (AWS), enabling them to transmit real-time local weather observations to the Met Office's Weather Observation Website (WOW - wow.metoffice.gov.uk), an award winning web portal for uploading and sharing a range of environmental observations. They were also given a package of materials designed to get students out of the classroom to observe the weather, get hands-on with the science underpinning weather forecasting, and analyse the data they are collecting. The curriculum-relevant materials were designed with the age group 7 to 11 in mind, but could be extended to support other age groups.

Each school was offered a visit by a Wow Schools Ambassador (a Met Office employee) to bring the students' learning to life, and access to a dedicated forecast for its location generated by our new supercomputer. These forecasts are improved by the school's onsite AWS reinforcing the link between observations and forecast production.

The Wow Schools pilot ran throughout 2016. Here, we present the initial findings of the project, examining the potential benefits and challenges of working with schools across the UK to: enrich students' understanding of the science of weather forecasting; to source an ongoing supply of weather observations and discover how these might be used in the forecasting process; and explore what materials and business model(s) would be most useful and affordable if a wider roll-out of the initiative was undertaken.