



## A new user-generated weather observations website for the United Kingdom.

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The UK Met Office, with support of the Royal Meteorological Society and the Department for Education, are planning the imminent launch of a new website for the collection of user generated weather observations. The website will provide a range of different facilities for “citizen weather observers”, including options for the submission of regular manual and automatic weather observations, as well as the upload of weather related photos or one-off weather reports such as “it is snowing” or “I have just seen lightning”. Users will be able to view their own data on maps, and in tabular or graphical formats, as well as being able to view data from other sites. Schools are an important target audience, and the website will contain information and tools specifically to help teachers and pupils make the best use of the website in their work.

There are many drivers for increased resolution (spatial and temporal) surface observations, not least being new high resolution numerical weather prediction (NWP) models. Collection of citizen weather observations is one exciting way to meet this demand. The new website will collect detailed site and equipment metadata, which can be used to derive a “quality star rating” for the site. The website will also undertake automatic range checking of submitted data, blocking suspect data and contacting the site operator. Registered users will also be able to flag suspect data and inappropriate content, both of which will trigger automatic actions based on agreed business rules.

The new dataset collected by the website will be used by Met Office forecasters as a valuable extra source of meteorological information, particularly in severe weather events (and their onset), where a high density of albeit more variable quality data than other data sources will be especially useful. For example, in snow events or heavy rain events, having access to high density surface data will give extra confidence in the extent and development of such events, helping provide rapid updated guidance on the evolution of such weather situations.

This talk will provide further background information on the decision to launch the new website, information about the uses that will be made of the data (including research into developing statistical methods based on Bayesian inference to allow for the assessment of data quality, which may lead to the possibility of NWP data assimilation of the dataset in the future), plus a live demonstration of the website itself.