Latest news

Map of social media-generated snow depth data across Birmingham

With all the snow at the weekend, Catherine Muller teamed up with the online local news provider 'Birmingham Updates' (@BhamUpdates) - who has over 70,000 followers on Facebook and Twitter - in order to collect snow depth data within and surrounding Birmingham. Over 170 people responded to the experiment, noting typical snow depth plus the first 3 characters of their post code. After taking the mean of the data for each post code area an interpolated map layer was produced [fig. 1]. Obviously, the accuracy of the measurements could not be verified (e.g. inches may have been reported by some when it should have been centimetres!). However, in most cases there was more than one measurement for each post code area so a basic 'spatial coherency' quality check was conducted before averaging. Furthermore, the data appears to correlate well with the cumulative radar data.

A few US weather companies (e.g. AccuWeather) are beginning to use social media platforms for supplementing weather observations, and in the UK the Met Office's 'Weather Observations Website' (http://wow.metoffice.gov.uk/) collates amateur weather observations, whilst UK Snow Map (www.uksnowmap.com) takes observations of falling snow from Twitter users, who give it a rating out of 10 and report using #uksnowmap. However, this experiment may have been the first its kind to produce an interpolated snow depth map at such a spatial resolution using social media platforms, and certainly engaged a number of people. In fact, Prof Alice Roberts and Prof Iain Stewart both re-tweeted the map as a good example of using public-generated data, and as a result increased the visibility of the Birmingham Urban Climate Laboratory (BUCL). Once BUCL is fully operational, we would like to repeat this experiment during a heat-wave event (perhaps using measurements from car thermometers after sunset) since we would then be able to compare the results with measurements from our network.

**The Journal 'Weather' are running a 1-page feature on this work in their March edition.*

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