



## **Do location specific forecasts pose a new challenge for communicating uncertainty?**

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In the last decade, the growth of local, site-specific weather forecasts delivered by mobile phone or website represents arguably the fastest change in forecast consumption since the beginning of Television weather forecasts 60 years ago. In this study, a street-interception survey of 274 members of the public a clear first preference for narrow weather forecasts above traditional broad weather forecasts is shown for the first time, with a clear bias towards this preference for users under 40. The impact of this change on the understanding of forecast probability and intensity information is explored. While the correct interpretation of the statement 'There is a 30% chance of rain tomorrow' is still low in the cohort, in common with previous studies, a clear impact of age and educational attainment on understanding is shown, with those under 40 and educated to degree level or above more likely to correctly interpret it. The interpretation of rainfall intensity descriptors ('Light', 'Moderate', 'Heavy') by the cohort is shown to be significantly different to official and expert assessment of the same descriptors and to have large variance amongst the cohort. However, despite these key uncertainties, members of the cohort generally seem to make appropriate decisions about rainfall forecasts. There is some evidence that the decisions made are different depending on the communication format used, and the cohort expressed a clear preference for tabular over graphical weather forecast presentation.