



Short-range variability of soil pH in a regional geochemical survey, communicating uncertainty to the data user

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The north of Ireland is well-furnished with geochemical data after completion of the Tellus survey of Northern Ireland and the Tellus Border survey of six northern counties of the Republic of Ireland. These data are of considerable interest to the agricultural sector, in particular the data on soil pH. However, a geochemical survey at regional scale cannot resolve significant variation of soil pH, in particular effects of soil management and fine-scale variation of superficial material. This leads to uncertainties in the mapped soil pH which must be accounted for when making decisions about management interventions, including more detailed local sampling. In this poster we show how uncertainty of predicted soil pH, relative to established threshold values, can be quantified by disjunctive kriging. The uncertainty is expressed in terms of probabilities. We show how this can be communicated to the data user by means of the calibrated phrases of the IPCC, using results from recent research on its efficacy to modify its presentation.