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MesoVICT – Mesoscale Verification Inter-Comparison over Complex Terrain

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The increasing number of spatial verification methods raises the question of their properties and information content. Specific questions like - How does each method inform about forecast performance overall? Does the method inform about location errors? If so, how? Which methods yield identical information to each other? Which methods provide complementary information? – have been addressed in a spatial forecast inter-comparison project.

The second phase, called MesoVICT has been recently established to further explore the new methods for more realistic meteorological scenarios. Test cases include more variables in addition to precipitation, such as winds. Further, the cases represent interesting meteorological events that develop over time rather than single snapshots. The cases also include ensembles of forecasts as well as observations, and, as the name suggests, they are provided on a region associated with complex terrain over Europe.

The aims of the project can be summarised as follows:

- To investigate the ability of existing or newly developed spatial verification methods to verify fields other than deterministic precipitation forecasts, e.g., wind forecasts and ensemble forecasts.
- To demonstrate the capability of spatial verification methods over complex terrain, and gain an understanding of the issues that arise from this more challenging situation.
- To encourage community participation in the development and improvement of spatial verification methods, especially for evaluating high resolution numerical forecasts.
- To provide a community test bed where common data sets are available, but also for the sharing of data and code to assist in developing and testing spatial verification methods.

The talk will give some information on the project structure of MesoVICT, data and models used and cases investigated.