



Interpolation considerations when comparing model and raingauge precipitation. Heavy precipitation cases analysis for Slovenia.

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The aim of this study was to find the highest model resolution for which the model cell averaged interpolated fields of 24 h raingauge precipitation would be independent of the interpolation method. We used heavy precipitation data for Slovenia and three different interpolation methods on 20 cases. Cross-validation results showed that the magnitudes can be as large as 50 % of the measured maxima (in our case 50 mm - 110 mm). Therefore a reliable interpolation to high resolution and into a point is not sensible. We found that results became independent of the interpolation method when model cells are apart at least two times of the average distance to the closest neighbor in the raingauge network. For our cases this occurred at 16 km. At this resolution the absolute maximum difference was in most cases less than 15% of the measured maximum.