Uncertainty in high resolution numerical modelling of intense convective events

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Intense convective precipitation events simulated with Lokal Model in simplified configurations (e.g., periodic boundary conditions, simple wind shear, etc) are addressed. The results for high resolution simulations (meso-gamma scale) are presented. The analysis of the spatio-temporal structure of convective precipitation fields is carried out. The uncertainty in assessment of cell properties arising from computational approximation and physical details, such as horizontal and vertical grid spacing and the microphysics scheme, is considered.