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Developments of rtop – interpolation and simulation of data with a variable spatial support

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The rtop package (Skøien et al., 2014) is an R-package (R Core Team, 2014) which makes it possible to spatially interpolate data which has a variable spatial support, such as runoff data or population health data. The new version of the package includes some new features which have previously not been available for such data in an open source and easy to use program. These include:

- Simulations; it is now possible to simulate values at prediction locations, similar to what has for a long time been possible for point observations through e.g. gstat (Pebesma, 2004)

- Interpolation of time series; the previous version of the package could make a separate interpolation for each time step, the new version derives a temporally averaged variogram which is then used for interpolation of time series.

Additionally, the computational speed has been increased by taking advantage of the possibilities for parallelization in R.

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