

4. Future climate change

4a. Skill of methods for describing regional climate futures

- Forecast and projections - the difference between them.
- Different emission scenarios.
- Downscaling - what it is and why use this method?
- GCMs - RCMs and/or statistical methods? Dynamical and/or empirical - statistical downscaling? How it works on examples.
- Different statistical downscaling methods: linear (multivariate regression models, canonical correlation analysis) and nonlinear (analogs, cluster analysis, neural nets)
- Choosing predictors.
- Reference period and projection period.
- Evaluation techniques
- Gridded contra station data, how to compare them?
- Scenarios of mean climate and climate extremes.
- Ensembles, how to use them, how to assess an error of projection?
- **Regional climate(?) futures based on analysis of driving factors.**

short description what it is for, links to literature explaining details, concentrate on advantages, shortcomings and limitations shown on examples

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