Questions

How can we assess the degree of stationarity in empirical relations?

- Tests?
- In the past observations?
- In the GCMs results representing the future?
- In the physical processes (model)?
- In the parameterisation schemes?
  - Also a problem for GCMs/RCMs?

Session 1: Predictands/predictors, methods & domains

Choice of predictors

- **Views on optimal choice of predictors for downscaling of local scenarios of a).Temperature b).Precipitation c).Wind d).Snow cover /depth e).Other variables**
- **Is it better to choose variables from the free atmosphere rather than from the surface?**
- **How sensitive are the results to domain size?**
- **Is there an optimal choice for domain size?**
- **Choice of predictor type determined by an established set of rules (relevance, reproducibility, capture), but are these sufficient?**
- **Fundamental difference between GCM & ESD results: important? What does it imply?**

Session 1: Predictands/predictors, methods & domains

"Skilful scale"

- **What is it really – most recent update.**
- **Systematic investigation for state-of-the art GCM.**
- **Does skilful scale vary geographically, with season, or over time?**
- **How does skilful scale depend on the predictand?**
- **Is a new survey needed?**

Session 2: Extremes/distributions/internal consistency of downscaled scenarios

*H*ow can we improve the description of extreme events?

- Are some indicators better/more robust than others?
- Indices? Ł Suggestions?
- pdfs?
- Extrapolation of trends based on a number of less severe events?
- Sampling fluctuations?
- Severe weather versus rare events?
- Complex events?

Session 2: Extremes/distributions/internal consistency of downscaled scenarios

Do empirical-statistical downscaling not represent physical processes?

- **Reflect well-known physical links?**
- **Just statistics & just a number?**
- **Part of wider analysis and improved understanding?**
- **Views on the impression that RCMs are ‘more physical’ true?**

Session 3: Uncertainty and applicability of downscaled scenarios

How can statistical downscaling be used for uncertainty considerations?

- **Ensembles: Should all members be given equal weight?**
- **Experiences with use of statistical downscaling for showing local scenarios from several GCMs?**

Session 3: Uncertainty and applicability of downscaled scenarios

Applications of statistical downscaling

- **Examples of use of stat. downscaling for various impact assessments?**
- **How to get internal consistency between predictors (e.g. daily temperature and precipitation for water balance assessments)?**

Session 4: What do we need to know and how do we get there?

Possible future colaboration

- **SMIP?**
- **Other projects, e.g. projects including impact assessment?**
- **Project or network?**