

Statistical Downscaling / Climate change applications

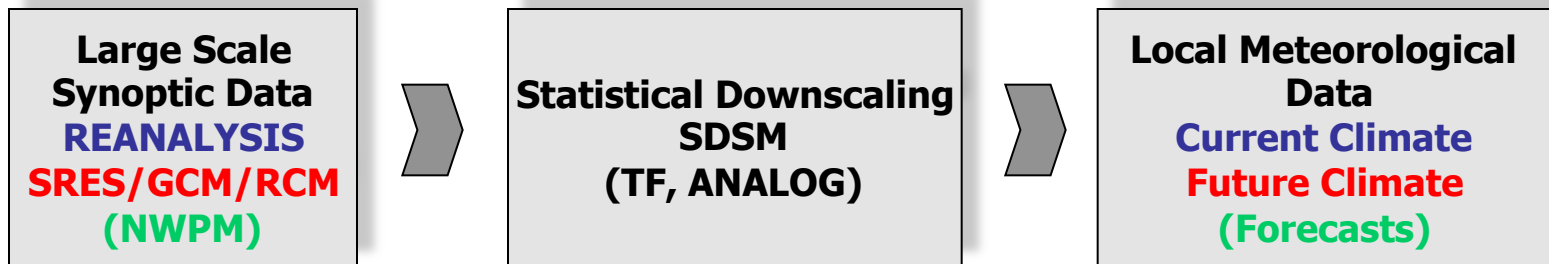
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General question / Impacts

How to generate reliable local weather meteorological scenarios for use in impact studies under present and future climate conditions?



- Statistical downscaling methodological framework
- Statistical evaluation framework
- Addressing uncertainties in climate change impact studies

d2gen : Weather generator for present climate conditions

Mezghani and Hingray, 2009

- ❑ Multivariate scenarios for mesoscale basins
- ❑ Hierarchical strategy: two steps (SDS + Disaggregation)
- ❑ Allows to generate scenarios meeting different constraints
 - Spatial and temporal coherency of the generated variable (Precipitation, ...)
 - Spatial and temporal coherency between generated variables (Temp., Precip., wind , LW radiation, ...)
 - Generation of non-observed scenarios

