



## **Methods of Climate Change Scenarios Projection in Slovakia and selected Results**

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Brief review on the availability of General Circulation Models (GCMs) and Regional Circulation Models (RCMs) outputs for regional downscaling is presented (more in Melo, 2003). Four basic methods of regional climate change scenarios design (1. - Incremental (the simplest - used in Slovakia since 1991), 2. - Analogue (historical - used in Slovakia since 1991, or paleoclimatic - not used in Slovakia), 3. - Weather generator (artificial or based on real climatic statistics - not used in Slovakia), 4. - GCMs (General Circulation Models) based - used in Slovakia since 1995) are discussed more in details. The additional one - a combined method, usually based on GCMs (mean annual/monthly warming and mean annual/monthly change in precipitation totals) and on historical analogue (statistical structure of daily/monthly data series, including physical plausibility among phenomena), has been utilized in Slovakia since 1995. Finally some results of different climate change scenarios for the Hurbanovo Observatory (SW Slovakia, 115 m a.s.l.), partly also for selected stations in Slovakia and possible user problems are listed and discussed. Special scenarios of exceptional weather events are also demanded by users, mainly from the Hydrology (1-day to 30-day weather spells), Agriculture and Forestry sectors (more in Lapin and Melo, 2004). Very concise overview of such scenarios design and examples are presented in the Poster.

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