



The MiKlip project – developing a system for decadal climate predictions

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Political, societal, and economic decision making is usually based on a time-horizon of up to ten years. Therefore climate predictions on shorter time-scales than standard climate projections are in high demand by decision makers.

The MiKlip project – “Mittelfristige Klimaprognose” meaning decadal climate prediction – is a four-year project funded by the German Federal Ministry of Education and Research at a level of over five million euros per year. MiKlip started in late 2011; the ultimate goal of MiKlip is to establish a decadal climate prediction system that can later be run operationally by an agency such as the German national meteorological service DWD.

In order to reach this goal, four broad research challenges need to be tackled by MiKlip. These are: to develop proper procedures for climate model initialisation and for the creation of ensembles of decadal prediction runs; to identify what climate processes are necessary for an appropriate representation of decadal climate variability; to explore predictive skill on a regional scale; and to establish methods to properly evaluate the predictive skill of such a system.

The MiKlip project is structured in modules around these four research challenges, with 33 subprojects pursuing research within one of these research areas. Two further subprojects are responsible for the central prediction system, the central standardized evaluation system as well as the coordination of the entire project.

By iterative inclusion of research results from the four modules into the central prediction system, the performance of the system will be improved by every project development stage. At the end of the third development stage the system will go through a final evaluation, in order to test its suitability for operational use.