



## **A Standardized Evaluation System for Decadal Climate Prediction**

C. Kadow, U. Cubasch, U. Ulbrich, and T. Spanghehl

Freie Universität Berlin, Institute of Meteorology, Germany (christopher.kadow@met.fu-berlin.de)

The evaluation of decadal prediction systems is a scientific challenge as well as a technical challenge in the climate research. The major project MiKlip ([www.fona-miklip.de](http://www.fona-miklip.de)) for medium-term climate prediction is funded by the Federal Ministry of Education and Research in Germany (BMBF) has the aim to create a model system that can provide reliable decadal forecasts on climate and weather. Therefore, a standardized evaluation system will be part of the MiKlip system to validate it – developed by the project INTEGRATION. The presentation gives an overview of the different linkages of such a project, shows the different development stages and gives an outlook for users and possible end users. The technical interface combines all projects inside of MiKlip and invites them to participate in a common evaluation system. The system design and the validation strategy from a standalone tool in the beginning to a user friendly web based system to an integrated part of the operational MiKlip system for industry and society will give the opportunity to enhance the MiKlip strategy. For the first development stage the standalone tool, build in cooperation with VECAP and CLIMVAL projects of MiKlip gives a foretaste of the standardized evaluation system and is the basis for the INTEGRATION project. Based on statistical verifications, metrics, scores and skill scores a first set of possibilities is given to provide an insight for other scientists. The system is built to compare different configurations and achievements of the global and regional model system. Of course, the model development is also based on hindcasts, observations and comparisons to other models handling decadal predictions. The visualizations of these scientific challenges have an important role and should support the scientists for individual tasks. First results of different possibilities of such a system will be shown to present the scientific background through Taylor diagrams, ensemble skill scores and e.g. climatological means to show the usability and possibilities of the INTEGRATION project.