

Project:
Projecttitle: ECLISE (EU FP7-ENV-2010.1.1.4-1)
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Enabling Climate Information Services for Europe

Projektbeschreibung:

The central objective of the ECLISE project is to take the first step towards the realisation of a European Climate Service. ECLISE is a European effort in which researchers, in close cooperation with users, develop and demonstrate local climate services to support climate adaption policies. It does so by providing climate services for several climate-vulnerable regions in Europe, organized at a sectorial level: coastal defence, cities, water resources and energy production. Furthermore, ECLISE will define, in conceptual terms, how a pan-European Climate Service could be developed in the future, based on experiences from the aforementioned local services and the involvement of a broader set of European decision makers and stakeholders.

Information on future climate is generated by applying climate models in combination with past observations. Because of the high spatial resolution that is often needed to generate useful-information, current climate models alone may not be able to provide this without recourse to a type of 'downscaling'. A practical approach is to nest a limited-area model, with increased model resolution, into a coarse-grid global climate model. The accuracy of present day climate models (regional and global models combined) in projecting future climate is such that results of different models can vary significantly and combinations of these results are needed to provide a more reliable estimate and a measure of the uncertainty.

Climate models show inaccuracies when compared with observations, while the accuracy of future projections is very difficult to assess. This holds especially for results on the local scale, which are often more complicated to describe. At the same time the demand for local-scale data is greatest. Considering the potential high impact of climate change on society and the considerable dependence of adaptation and mitigation policies on adequate climate information, it is of the utmost importance to increase the performance of climate projection methods.

So far no very high-resolution climate simulation is available for the the case study regions selected in ECLISE. The simulations will therefore add very valuable information for the scientific community and decision makers in local governments and economical sector.