



What kinds of evaluation and quality control tools are needed for users of climate information? – The DECM project story

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Climate is changing rapidly and the change is projected to continue. We need to urge mitigation and improve adaptation to these changes through wise decisions and commitment. Decisions should be made based on the most up-to-date climate information, which also needs to be easily available, traceable, understandable and, most of all, quality assured to allow well-justified decision making.

Currently, there are various sources of climate information. The IPCC reports offer well suited starting points. There is also lots of climate data available for download. But a more user-friendly and detailed guidance on how to use the data is needed. As uncertainty is an integrated part of future projections, one should use climate model ensembles rather than single models when investigating our future climatic conditions and impacts of climate change. An evaluation and quality control tool to support users in picking the most fit-for-purpose sub-ensembles is therefore desirable.

In a Copernicus Climate Change Service (C3S) project called Data Evaluation for Climate Models (DECM), the focus has been the development of an evaluation and quality control framework for multi-model climate ensembles. We first assessed user needs and user types, and made catalogs of data availability based on different user-relevant aspects. We reviewed the major scientific gaps in climate model ensembles and their presentation. We also developed a prototype tool for evaluation and quality control of model ensembles and tested the tool with users in 2018. DECM started in 1.8.2016 and is ending by the end of 2018. Our main achievements are presented at EMS 2018 in Budapest.