Copernicus Climate Change Service Roadmap for European Climate Projections

Bernd Eggen (1), Jane Strachan (1), Chris Hewitt (1), Natalie Garrett (1), Sylvie Joussaume (2), Robert Vautard (2), and Carley Iles (2)

(1) Met Office, International Climate Services, Exeter, United Kingdom (bernd.eggen@metoffice.gov.uk), (2) CNRS IPSL, Paris, France

The Copernicus Climate Change Service (C3S) Roadmap for European Climate Projections, guides requirements and resource allocations for the operational phase of the Copernicus Climate Change Service (C3S). C3S Roadmap for European Climate Projections is drawing upon climate research and modelling activities, and expertise from across Europe and beyond, including best practices from several precursor FP7 and H2020 climate service projects. This C3S activity will design a scientific plan for climate projections appropriate for informing European policy and adaptation in key socio-economic sectors. The plan, to be delivered at the end of 2018, will include recommendations for a set of minimum standards for climate simulations, based on an assessment of key climate modelling issues, including resolution, ensemble design and initialisation, for their potential benefit in improving climate model predictions and projections. Case studies, examining the ability to simulate processes and phenomena relevant to sector application, will be developed to focus the assessment of the modelling issues, and will address the fact that information about regional impacts is crucial to support planning in many socio-economic sectors. We will present the approach we are taking to develop a thorough and actionable roadmap, including findings from the first scientific experts workshop, the simulation analysis process and phenomena assessment.We will also present highlights of the initial literature review of existing studies assessing the topics of model resolution, ensemble design, and the impact of initialisation.