



## **Towards the C3S Roadmap for European Climate Projections**

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

(1) Met Office, International Climate Services, Exeter, United Kingdom (jane.strachan@metoffice.gov.uk), (2) Laboratoire des Sciences du Climat et de l'Environnement, Institut Pierre Simon Laplace, CNRS, Paris, France

The Copernicus Climate Change Service (C3S) Roadmap for European Climate Projections, will guide requirements and resource allocations for the operational phase of the Copernicus Climate Change Service (C3S). The roadmap draws upon cutting-edge climate research and modelling activities, and expertise from across Europe and beyond, including good practices from several precursor FP6, FP7 and H2020 climate service projects. This C3S activity aims to draw together a scientific guidance for climate projections appropriate for informing European policy and adaptation in key socio-economic sectors. The roadmap will be presented in its draft format during a final expert workshop in October 2018, and will be delivered to C3S at the end of 2018. The roadmap will include guidance and 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. Methods used to gather scientific insight include extensive literature reviews, demonstrative analysis, in-depth interviews with expert scientists, and regular consultation with a carefully selected Expert Advisory Board. The roadmap will also signpost upcoming scientific activities relevant to the development of European climate projections. Case studies, examining the ability to simulate processes and phenomena relevant to sector application, have been developed to focus the assessment of the modelling issues, and address the fact that information about regional impacts is crucial to support planning in many socio-economic sectors. We will present the approach taken to develop a thorough and actionable roadmap, including results from the simulation analysis and phenomena assessment.