



## **Brief Overview of the ESA Climate Change Initiative (CCI)**

Pierre-Philippe Mathieu (1), Mark Doherty (1), Stephen Briggs (1), and Pascal Lecomte (2)

(1) ESA, Earth Observation Science, Applications & Future Technologies Dpt, ESRIIN, Frascati, Italy  
(pierre.philippe.mathieu@esa.int), (2) ESA Climate Office, Harwell, UK

This talk will provide an overview of the ESA “Climate Change Initiative” (CCI), discussing the elements of the programme, the international context and scientific guidance, the specialized teams and their activities, from the processing of raw satellite data to their exploitation by climate data users. In particular, the talk will address some of the challenges and opportunities related to the generation of long-term consistent Climate Data Records of Essential Climate Variables (ECV), including quantification of errors, assessment of quality and value of climate data within model context, data stewardship and management, engagement of climate users, international cooperation and community building. Earth observation missions supporting the initiative will be summarized (e.g., ERS, Envisat, Explorers from ESA) and some scientific results from CCI teams, will be highlighted showing the value for climate research.