

Making the invisible visible - blending data, film, CGI and intuitive apps for training, education and public engagement

As the techniques, platforms and data available to EO science continue to rapidly evolve and diversify, new tools and methodologies will be required to support training, capacity building and communications. In this multi-disciplinary field, there will be a growing need to efficiently find, share and discover new ideas and information, and to quickly learn new processes and ways of working.

Alongside these 'internal' professional challenges, new approaches to external engagement to explain the role of EO will also be required. Comprehending the scale of our current environmental challenges and the possible impacts of alternative policy pathways and decisions, is a very human problem, at all levels of society. For everyone from policy negotiators to school children, the invisibility of the processes of environmental change, and the timeframes over which impacts are felt, exacerbate the difficulty of both understanding and communicating about the challenge. This presentation will look at these 'internal' and 'external' challenges (and opportunities) in parallel through various case-studies and initiatives, including current ESA projects using techniques such as MOOCs (Massive Open Online Courses) and citizen science. Through these case studies we will look at the value of utilising real data and imagery in a form easily usable by professional trainers, educators and non-technical audiences alike. We will also explore how the combination of real data, innovative visualisation techniques, film, animation and apps can help to connect with the public, empower teachers and learners, and create new business opportunities. And we will also consider the importance of 'emotional engagement' and the personal impact of environmental imagery and data when presented appropriately.