Making the invisible visible – blending data with film, CGI and intuitive apps in environmental education and public engagement

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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 (e.g. the increase of greenhouse gases in the atmosphere), and the timeframes over which impacts are felt, exacerbate the difficulty of both understanding and communicating about the challenge. By unleashing real environmental data and imagery in a form easily usable by educators and non-technical audiences, it is possible to greatly address this problem, whilst also engaging potential new contributors in solution-finding. The combination of real data, innovative data visualisation techniques, film, animation and apps can help to connect with the public, empower teachers and learners, and create new business opportunities.

This presentation will look at these opportunities principally through two current case-study initiatives: a) New methods of presenting and enabling access to earth observation data through art, film and apps (including work led by Imperative Space); and b) The use of high-end animation to enable more intuitive understanding of climate change related data (including work led by Carbon Visuals).

Through this work, we will consider the importance of 'emotional engagement' and personal impact of environmental imagery and data when presented appropriately. Our aim should be to ensure the next generation of policy and decision-makers have grown up with a routine, embedded, and day-to-day exposure to environmental data and imagery, so that they are equipped with a deep-seated understanding of the majesty, vulnerability and fragility of our environment. Emotional engagement can be derived from clear communication about the context of the imagery and data, but also through high 'production values', the quality of apps and tools, the way in which stories are told through animation and video, and the way in which imagery and data is interpreted through high quality infographics and data visualisation.