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Space Culture: New Processes of Public Engagement in Space through Culture and Art (9)

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FROM OBSERVATION TO ACTION: INTEGRATING SPACE AND SATELLITE DATA IN AN  
AMBULATORY EXPERIENCE OF CLIMATE CHANGE

**Abstract**

In 2021, at the height of COVID-19 pandemic, global climate summit COP26 was held in Glasgow, Scotland. Far away from the corridors of power, many people in Scotland felt disconnected from this prestigious strategic event. This could spread a sense of disempowerment, contrary to the objectives of the Summit, as well as the significant social and political commitments to tackle global warming, both in Scotland and the wider UK and Europe. With the science communication and outreach activities curtailed due to the restrictions to social interaction, science and arts organisations were looking for novel ways to connect to their audiences and contribute to the empowerment of positive change. Out of this desire emerged AWEN - A Walk Encountering Nature - a mobile application for a distributed digitally-mediated experience of the environment, co-developed between The New Real research programme at the University of Edinburgh and Alan Turing Institute; and the Edinburgh International Science Festival. The application design, following the Open Prototyping methodology, combined GPS and Earth Observation data with artistic narratives and soundscapes. This invited the users along a self-guided walk merging poetic prompts to action and encouragement to reflect and connect with participant's surroundings and most up to date climate science. In this paper, we recount the process of developing, testing, launching and evaluating this project. We note technical considerations, challenges and constraints, in addition to tools and practices that enabled interdisciplinary collaboration between geoscience / Earth Observation experts, data scientists, systems engineers and software developers. Alongside sharing the key outputs from the project, we invite readers to experiment and discover the global power of AWEN by embarking on their own walk, anywhere on Earth.