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GLASGOW

COP26

IN PARTNERSHIP WITH ITALY



Earth Information for Climate Action – Perspectives from the UK Presidency

COP26 Earth Information Presidency half-day event

DATE: Wednesday, 3 November 2021

TIME: 15:30 – 17:30 (in person), 17:30 – 18:30 (virtual poster session)

LOCATION: The Scottish Event Campus (SEC), Glasgow

ROOM: Pen Y Fan Plenary Room

About this event

The UNFCCC invited the UK Presidency to host an event on Earth Observations (EO). This presidency-led Earth information half day offers the UK an opportunity to illustrate to a global audience how Earth information can be used to tackle climate change and enable climate action.

Introducing this session

The purpose of this event is to:

1. Provide a space to highlight the importance of EO as an **invaluable tool for climate action**. EO is an information source as well as a vehicle for solutions, underpinning much work around climate change, adaptation, mitigation, and mobilising finance.
2. **Support progress on mitigation** by highlighting how EO can be used to improve reporting, tracking and measuring of sectoral, regional, and national GHG emissions and increase accuracy and coverage. This includes international collaboration work that has been done using EO to place mitigation efforts.
3. Support adaptation efforts by highlighting how **EO can be used to measure and track adaptation** progress and support decision making.
4. Showcase how public and private sector collaborations, nationally and internationally are using **EO to deliver solutions** to climate change.

Event Timetable

Time	Activity	Description
15:15 – 15:30	Speakers and audience enter	Arrival
15:35 – 15:40	Introduction from Chair <i>Professor Gideon Henderson (Chief Scientific Advisor, DEFRA)</i>	Brief introduction on the objectives of the presidency-led earth information half day.
15:41 – 16:26	Session 1: Presentations	This session is the science focused session, where attendees will hear from researchers and scientists who will discuss projects/examples of earth observations being used in climate mitigation and/or adaptation.
8 minutes	Presentation 1 <i>Francois-Marie Breon (CEA) and Professor Paul Palmer (University of Edinburgh)</i>	MicroCarb mission: upcoming atmospheric CO2 measurements from a French/UK satellite A look at climate missions for the future and the role of MicroCarb to retain records of carbon through the 2020s.
8 minutes	Presentation 2 <i>Thorsten Fehr (European Space Agency)</i>	TRUTHS – A Future ‘Gold Standard’ in Space to support Climate Action An overview of a climate mission led by the UK Space Agency (UKSA), which will be delivered by the European Space Agency (ESA) to enable in-flight calibration of Earth observation (EO) satellite.
8 minutes	Presentation 3 <i>Professor John Remedios (NCEO)</i>	Earth Observation science for climate mitigation through UK-supported international partnerships An overview on UK Science for mitigation using satellite data.
8 minutes	Presentation 4 <i>Dr Marie Fanny-Racault (Plymouth Marine Laboratory, NCEO)</i>	Opportunities for ocean-related EO in the implementation of the Paris Agreement A two-part presentation on adaptation, focusing on ocean tracking using EO and the role of EO for public health (case study on cholera risk in coastal regions).

8 minutes	<p>Presentation 5 <i>Dr Qingling Wu (UCL) and Professor Phillip Lewis (NCEO, UCL)</i></p>	<p>Adaptation and Mitigation: Applications for Food Security An overview of how EO can be used in land management with case studies looking at using EO data for monitoring and predicting crop yield and sustainable crop management.</p>
16:26 - 16:36	<p>Audience Q&A</p>	<p>The Chair will choose audience members who raise their hand with a question for the panellists.</p>
16:36 – 16:39	<p>Remarks from the Chair <i>Professor Gideon Henderson, Chief Scientific Advisor DEFRA</i></p>	<p>The Chair will give closing remarks for the first session</p>
16:40 – 17:25	<p>Session 2: Panel Discussion <i>Panel Moderator: Professor Paul Monks, Chief Scientific Advisor, BEIS</i></p>	<p>International collaboration & EO applications. This session will move from the first session which looks at the scientific specifics, to focus on the bigger picture, opportunities, and future applications of EO. Each speaker will give a 3-minutes introduction to their work, followed by a series of questions. Panellists:</p> <ul style="list-style-type: none"> • Dr Paul Bate, CEO, UK Space Agency • Professor Iain Woodhouse, University of Edinburgh and Earth Blox • Steven Ramage, Chief Engagement Officer, Group on Earth Observations • Susanne Mecklenburg, Head of the European Space Agency Climate Office • Jacqueline Parker, Project Manager, EO4cultivar, Environment Systems Ltd
17:25 – 17:30	<p>Closing remarks from Chair</p>	
17:30 – 18:30	<p>Virtual Poster Session</p>	<p>Online poster session on GatherTown: https://cop26platform.unfccc.int/cop26/page/postergallery</p>

COP26 Earth Information Presidency VIRTUAL POSTER SESSION

DATE: Wednesday, 3 November 2021

TIME: 17:30 – 18:30

LOCATION: Online poster session on GatherTown:

<https://cop26platform.unfccc.int/cop26/page/postergallery>

Poster Title	Presenter	Organisation
Detecting and quantifying methane leaks from space	Dr Cristina Ruiz Villena	National Centre for Earth Observation University of Leicester
Forest growth across Southern Africa and its contribution to net-zero	Dr Luke Smallman	National Centre for Earth Observation University of Edinburgh
Monitoring landscape change with satellite data to inform climate change adaptation and mitigation measures	Dr Gwawr Jones	Joint Nature Conservation Committee
Natural Capital in the Caribbean UK Overseas Territories: Valuation, Vulnerability and Monitoring Change	Amanda Greogory	Joint Nature Conservation Committee
Building climate resilience in Mongolia and Kyrgyzstan using satellite Earth observation	Nick Walker	eOsphere
Using Earth Observation to monitor soil erosion & wetland ecosystem services in Lesotho	Dr Carlos Doménech Dr Clément Albergel	European Space Agency

Comparing national greenhouse gas budgets reported in UNFCCC inventories against atmospheric inversions	Philippe Ciais	European Space Agency
Satellite Monitoring for Post-storm Beach Recovery –Gold Coast, Australia	Alex Farman, Ryan Bell, Said Kharbouche	Telespazio UK
Sea Level Rise Poses Economic Threat to Coastal Communities	Peter Ryde	National Oceanography Centre
UK greenhouse gas emissions evaluated using atmospheric observations.	Matthew Rigby	DARE UK DECC Network University of Bristol
ESA Digital Twin Earth Precursor: Food Systems	Chandra Taposeea-Fisher	CGI UK
ESA Digital Twin Earth Precursor: Climate Impact Explorer	Louise Mercy Mohamad Nobakht	Telespazio UK