

# Aligning Data and Technology with Policy

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**GEO** Secretariat

Ninth Plenary Meeting, UN-GGIM: Europe

Earth observations are data and information collected about our planet.

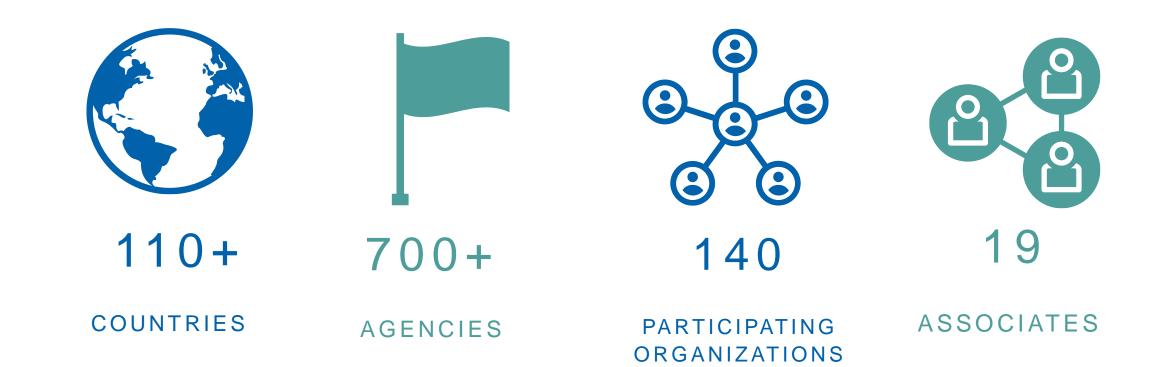
Space-based or remotely-sensed data, in situ data, models and citizen science.

Earth observations are neutral, consistent and enable coherence in policy, governance and decisions.

They monitor change over time providing insights and evidence for decision making.







# **Evidence-based** activities



Convention on Biological Diversity, Paris Agreement, Sendai Framework, UN 2030 Agenda, New Urban Agenda, Ramsar Convention, Minamata Convention



Measurement, Reporting and Verification National Inventories Policy Briefs Spatial Planning Technical Guidance for National Adaptation Plans (NAPs)



#### FINANCE

Biodiversity Finance Climate Finance ESG Reporting Nature Markets Spatial Finance

# Results, impact and value: GWIS



## Result

The European Forest Fire Information System (EFFIS) supports wildfire systems in 43 countries, saving nations hundreds of millions of Euros in reduced losses. EFFIS at the global level was developed into the Global Wildfire Information System (GWIS), a joint initiative of Copernicus and GEO.



### Impact

Every year, 500k hectares of natural areas are burnt across the European Union. GWIS provides prediction of wildfire danger, seasonal fire weather monitoring, updates on ongoing fires daily, wildfire severity, and assessment of wildfire damages.



### Value

Avoiding environmental and economic losses in Europe is estimated at around €390 million per year. A 10% reduction of environmental damage worldwide would avoid about €13 trillion of economic losses.

# GEO Focus Areas

GEO works to improve the availability, access, understanding and use of Earth observations for the benefit of society. Sustainable Development



**3** Disaster Risk Reduction



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**Climate Action** 

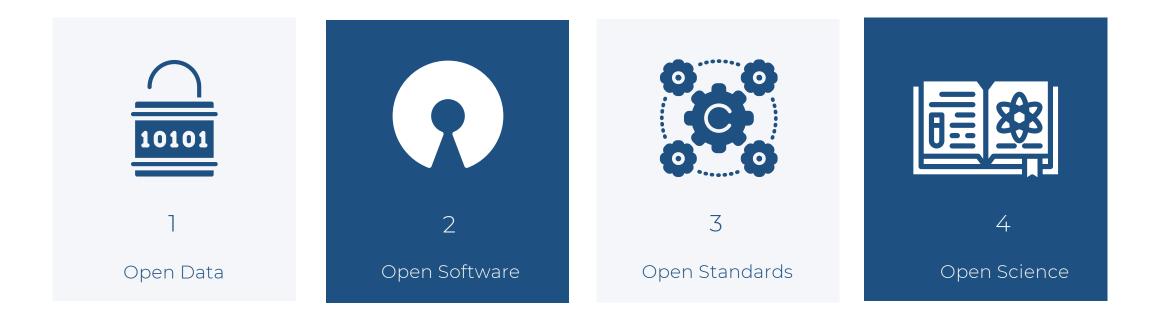


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Urban Resilience (newest work)



# Open knowledge elements

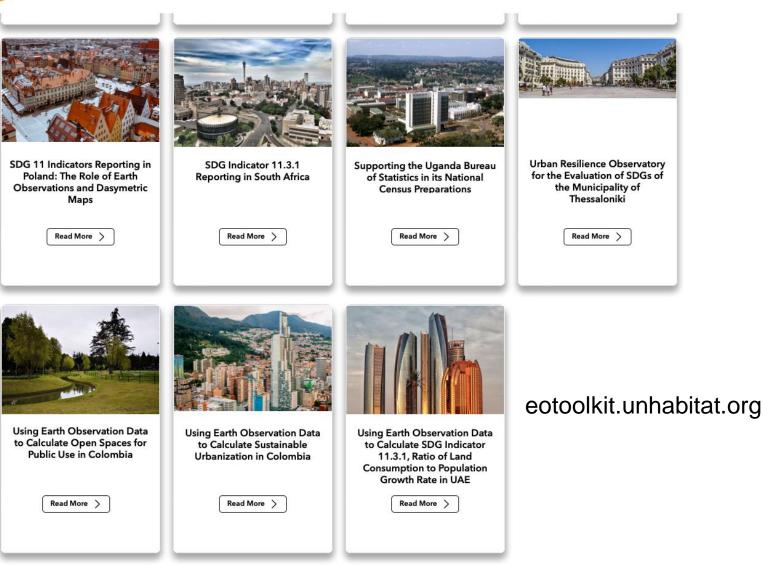






ORGANIZERS

**UN@HABITAT** FOR A BETTER URBAN FUTURE







EARTH OBSERVATIONS FOR THE SUSTAINABLE DEVELOPMENT GOALS



#### **Peatland Monitoring from Space**

Rapid Prototyping Team @ Ordnance Survey 8 October 2021













Monitoring the Fire

Multiple satellite sensors were able to monitor the blaze throughout. Heat sensors on the satellite were able to clearly reveal where the fire was still burning.

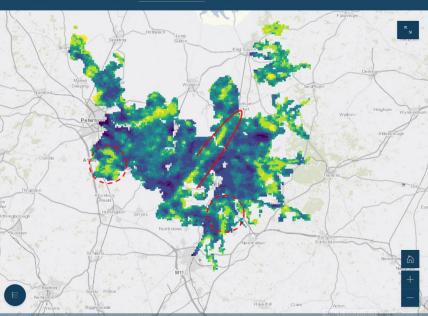
image: False colour image of Saddleworth Moor during the fire.

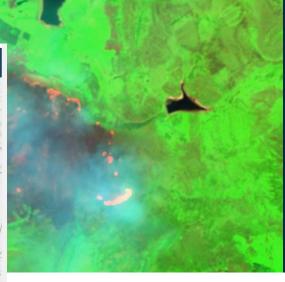
What are Peatlands? Earth Observation Pennines Saddleworth Moor Cambridgeshire Fens The Project

This map shows peat health in the Cambridgeshire Fen region (lighter colours represent healthier peat).

The areas circled in red are either nature reserves or sites of Special Scientific Interest. We can see that the peat in these regions is healthier than in the surrounding farmland.

This highlights the current trade-off between using land for agriculture and as a carbon store. However, this is quickly changing - many farmers now adopt modern farming methods that are more sustainable and better for the environment.











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#### Open and Free Data

- Interoperability
- Privacy and Integrity



#### Digital Earth AFRICA

#### **Operational Service**

- Continental-scale
- Sustainable
- Domain expertise



#### Accountability and transparency

- Responsive to African priorities
- Agile, nimble and actions oriented



#### Diversity and inclusion

- Multi-sector perspectives
- Span data communities
- Foster collaboration

redit: Contains modified Copernicus Sentinel data 2020, processed by Digital Earth Africa.





#### Countries are empowered

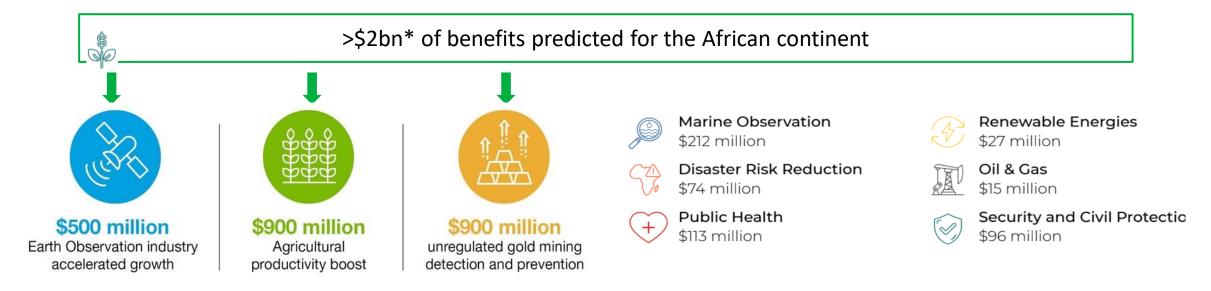


Lives are improved





Digital transformation is advanced









### Welcome to the Inter-American Academy of Geosciences & Applications

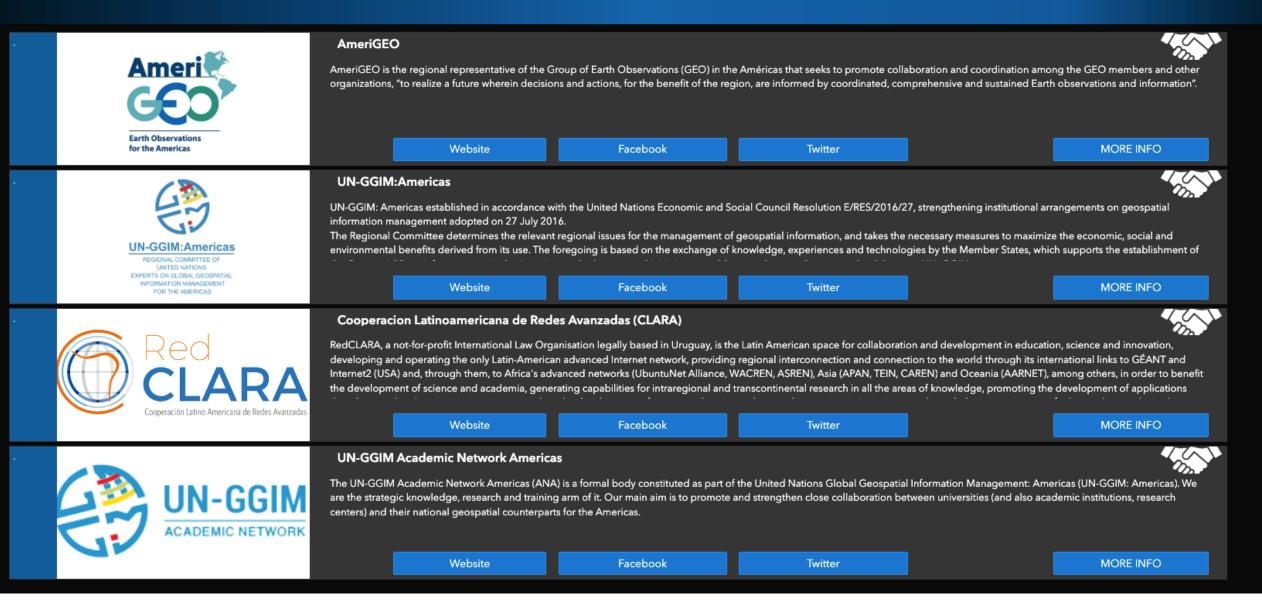
Partners in the Inter-American community are working to build capacity to advance the use of Statistical, Earth Observation, Geospatial and other Data to improve understanding and promote data-driven decision-making.



AmeriGEO is proud to host the Inter-American Academy of Geosciences & Applications on behalf of a growing network of public and private institutions, academia, and commercial partners.

**Our Partners** 

### THE INTER-AMERICAN ACADEMY STRATEGIC PARTNERS



## Towards Post-2025 GEO



Multidisplinary work producing solutions for integrated issues



Inclusive approach across communities



Results-driven portfolio with measurable impact



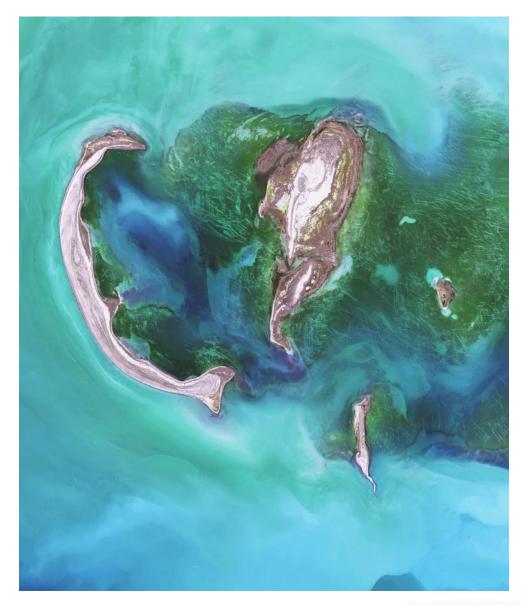
Digital Public Good Open innovation, tools and services



@GEOSEC2025 www.earthobservations.org

# Talk to me: comms, policy work and private sector

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