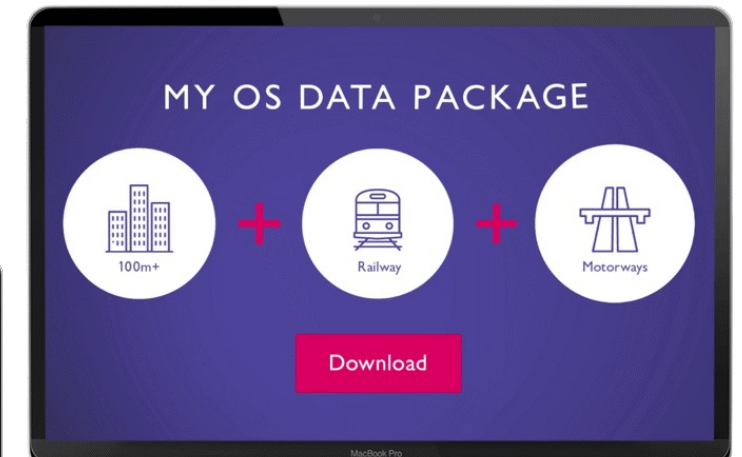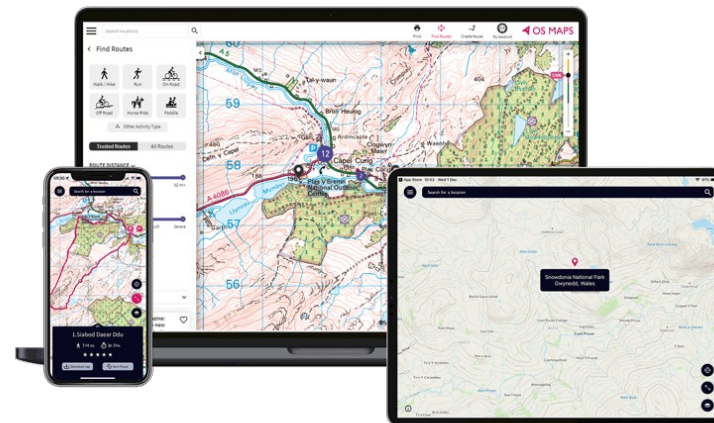# Using geospatial information to unlock value from Earth observation.

Donna Lyndsay, Strategic Market Lead – environment and sustainability

Ordnance Survey

SEE ➤ BETTER PLACE

OS: What we do

- 20,000 updates daily to our database of every landscape feature in England, Scotland and Wales
- 230 surveyors use distance measures and hand-held Global Navigation satellite signal (GNSS) receivers
- Two planes, 120,000 aerial images every year
- OS Net – a network of 110 GNSS receivers means we can capture to an accuracy greater than anyone else in Britain
- We also use unmanned aerial vehicles
- Select + Build – National Geospatial Database making data accessible
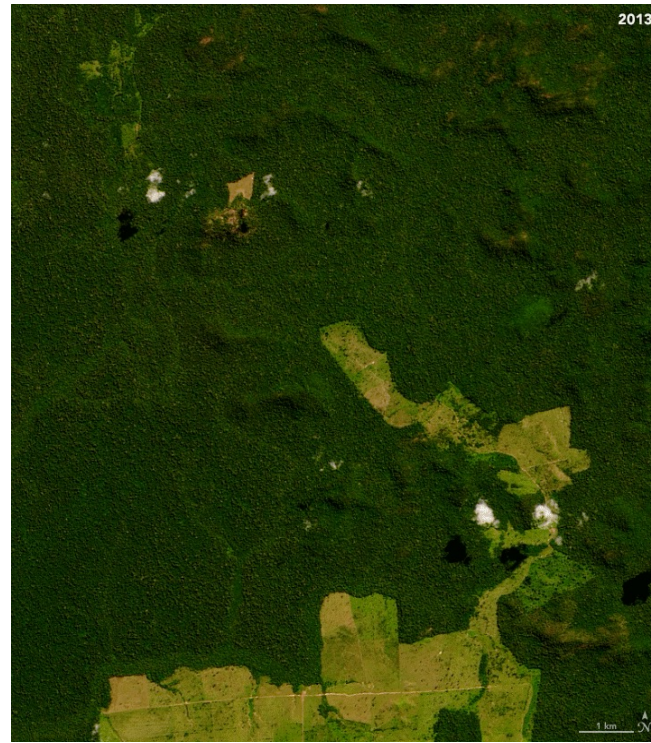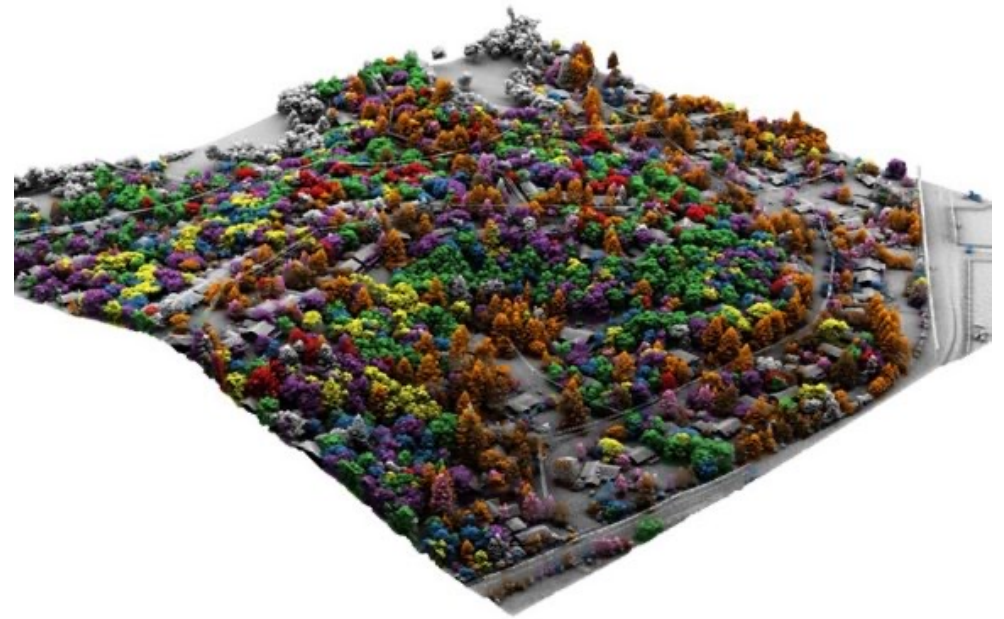- Consumer maps

Earth Observation – key advantages

Currency

Time series analysis

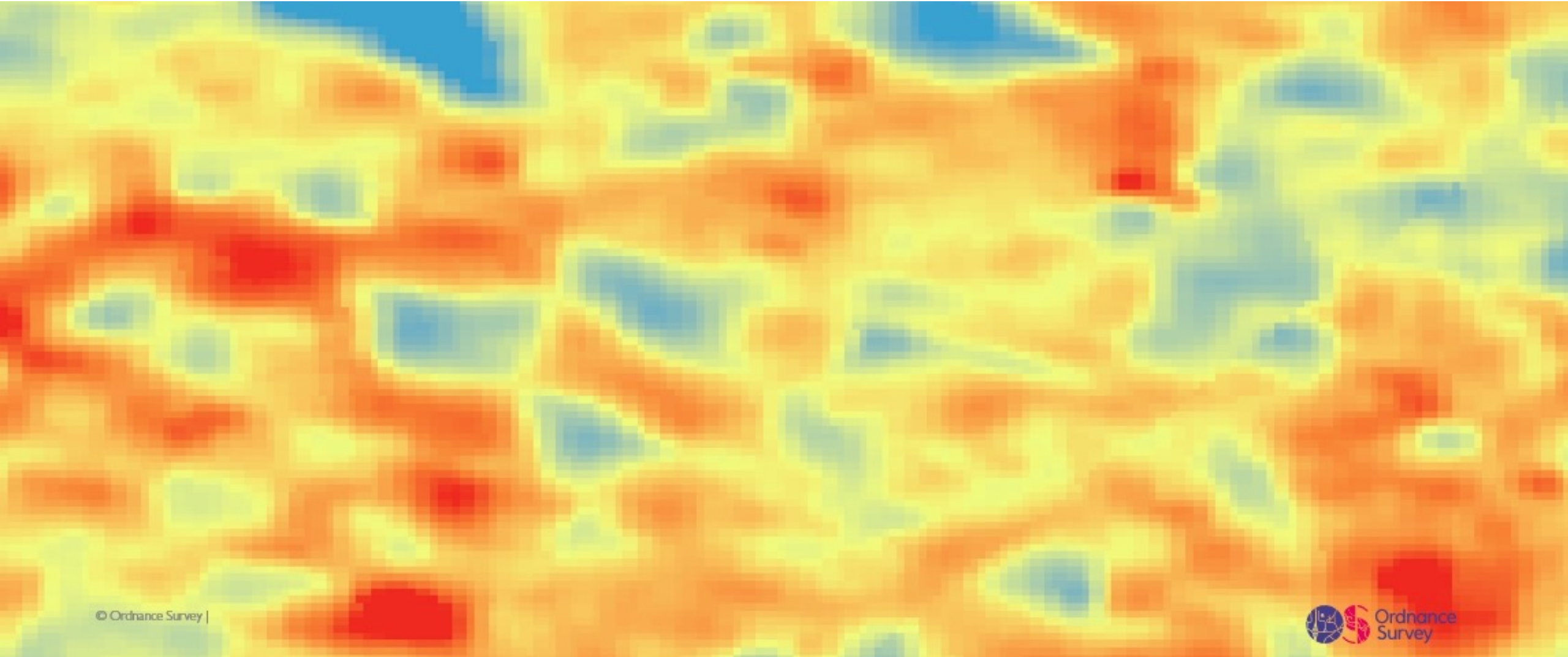Multispectral analysis (optical)

2013

Source: NASA

Field Observations

EO+GEO: Global goals, local impact

Why EO needs Geo

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The map immediately enables non-expert users to clearly identify target areas

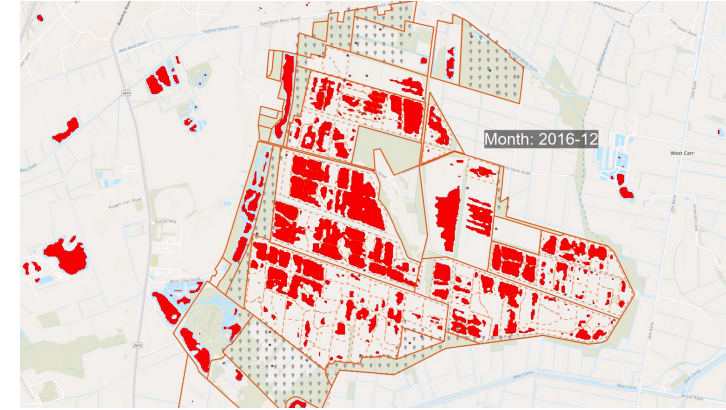Building level data OS MasterMap & high resolution thermal data
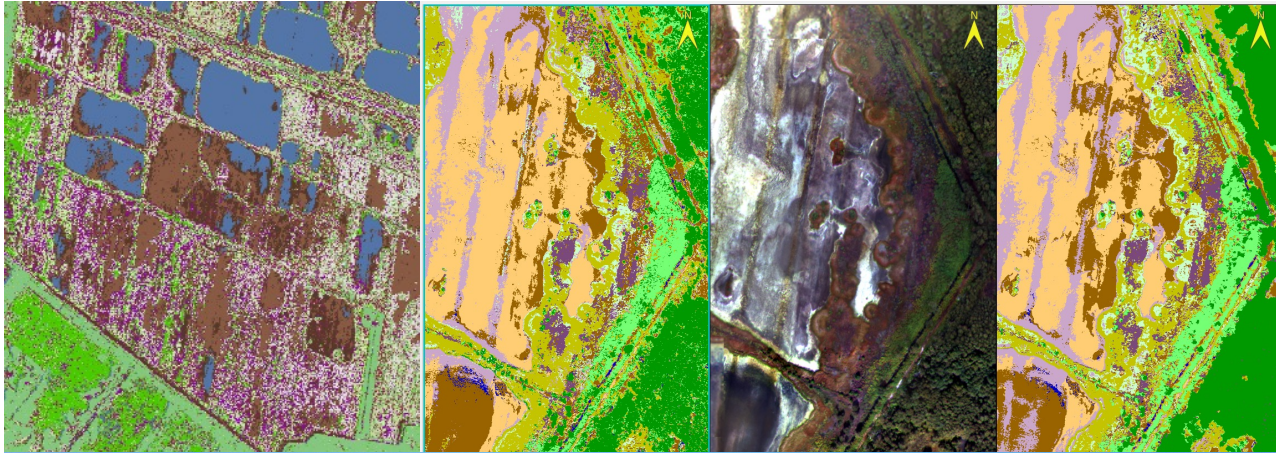
Source: Satellite Vu
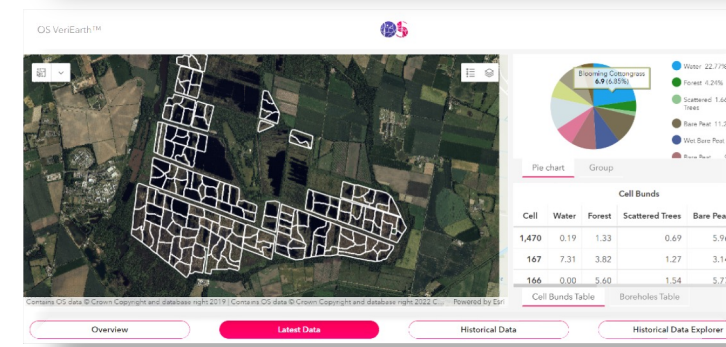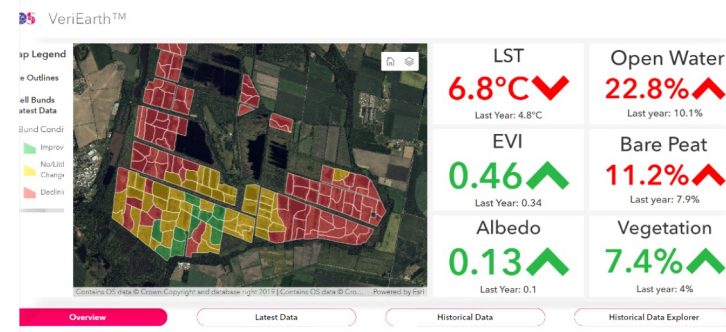
Landscape scale restoration

OS VeriEarth®

The Service ensures visibility of the offset and restoration activity to protect investments and investors from greenwash and reputation damage.

Global Collaboration

The Supply Chain problem in numbers

70% of international trade today involves global value chains (OECD)

Supply chains generate 60% of global emissions (Accenture)

Up to 90% of an organisation's environmental impact lies in the value chain (Carbon Trust)

7 years left to reduce emissions by almost half by 2030, to limited to 1.5°C (IPCC)

Environmental supply chain risks to cost companies $120 billion by 2026 (CDP)

Less than 21% of companies have complete visibility into sourcing of sustainable products (SAP/Oxford Economics)

The challenge

Current methods for visibility of the supply chain is no longer enough to meet regulatory requirements and customer expectations.

Or to reduce exposure risk.

But companies simply don't know where things are.

Can EO+GEO help?

Solving the problem of where: The **Supply Chain Data Partnership**

Supply chain community still **lacks the location data on commodity facility assets** (e.g., bulking sites, mills, refineries, transport terminals, storage, processing, etc.) to conduct effective **due diligence** and achieve large scale **traceability to commodity origins**.

We are creating a new **verification system for asset location** that **enables** a wide variety of **transparent** monitoring, due diligence and finance to flow where its most needed.

esri

Unilever

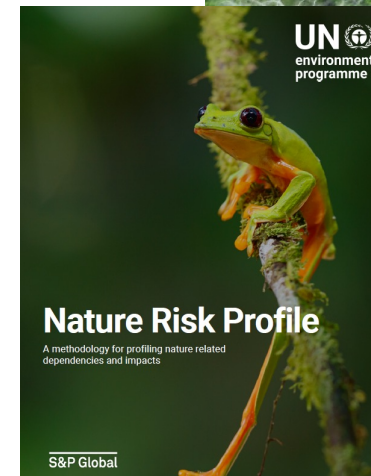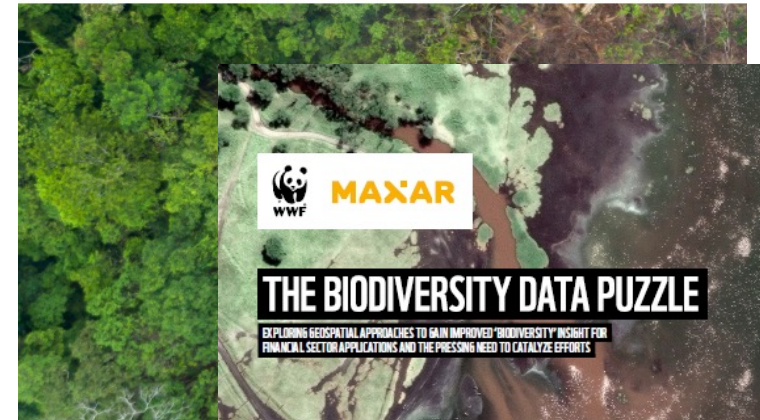Deloitte.

planet.

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SEI

Outcomes

- **Accelerate and amplify** companies' Deforestation Free and Restoration **corporate commitments**, brand claims and compliance with Due Diligence legislation.

- Accelerate a consistent approach to location validation to support **ESG's and green finance** to **remove greenwashing**.

- Enable **trust** to be built into the system to support location intelligence and transparency.

- Shine a light on the darker areas of the supply chain to help buyers and investors **disrupt and intervene**.

- Assist in **reducing** emissions, biodiversity loss and **environmental impact** of supply chains, reduce unsustainable agricultural practices and land degradation through more effective monitoring and smart procurement contracts based on the known asset location.

8 DECENT WORK AND ECONOMIC GROWTH

12 RESPONSIBLE CONSUMPTION AND PRODUCTION

13 CLIMATE ACTION

15 LIFE ON LAND

17 PARTNERSHIPS FOR THE GOALS

Timeline

April –May
PoC created

May-August
PoC testing
ESRI UC

August –Sept
Business case
& socialisation

COP28
UAE

2024
Scale up

Conclusion

You can't solve climate without nature, and you can't solve nature without knowing the **location**.

You can't help people live sustainable lives without seeing **where** are the problems, and opportunities to act.

GEO + EO can provide the insight to help solve these problems and hold entities to account

Thank you

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