SatSchool: Observing Earth from Space *in the classroom*

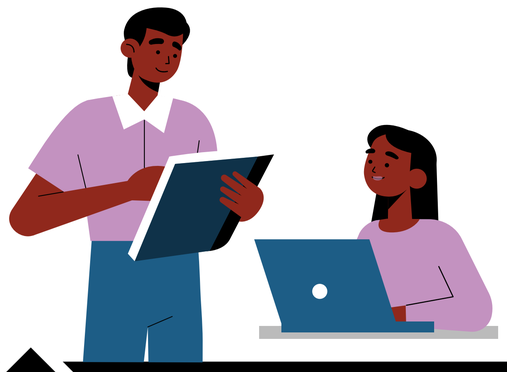
SatSchool is a high quality school outreach program which aims to introduce Earth Observation (EO) concepts and future career pathways to 11-15 year olds. Our EO Ambassadors have developed 12+ hours of engaging resources in collaboration with teachers to ensure they are closely tied to the school curriculum. Pupils will have the chance to learn about satellites and how we use them to study the Earth from space, as well as getting hands on with some EO data! SatSchool has established a network of EO Ambassadors who can visit schools, acting as role models to inspire the next generation of EO experts, introducing pupils to a range of careers and enriching their studies across six STEM subjects:

Physics · Geography · Chemistry · Computer Science · Biology · Mathematics

For EO Experts

Calling all students, researchers and industry experts!
Join our expanding network of SatSchool EO ambassadors and gain access to ready-to-use resources to take into schools, tailored to the lower secondary school curriculum (age 11-15). Develop invaluable outreach skills, without the time pressure of creating your own activities.

For Teachers

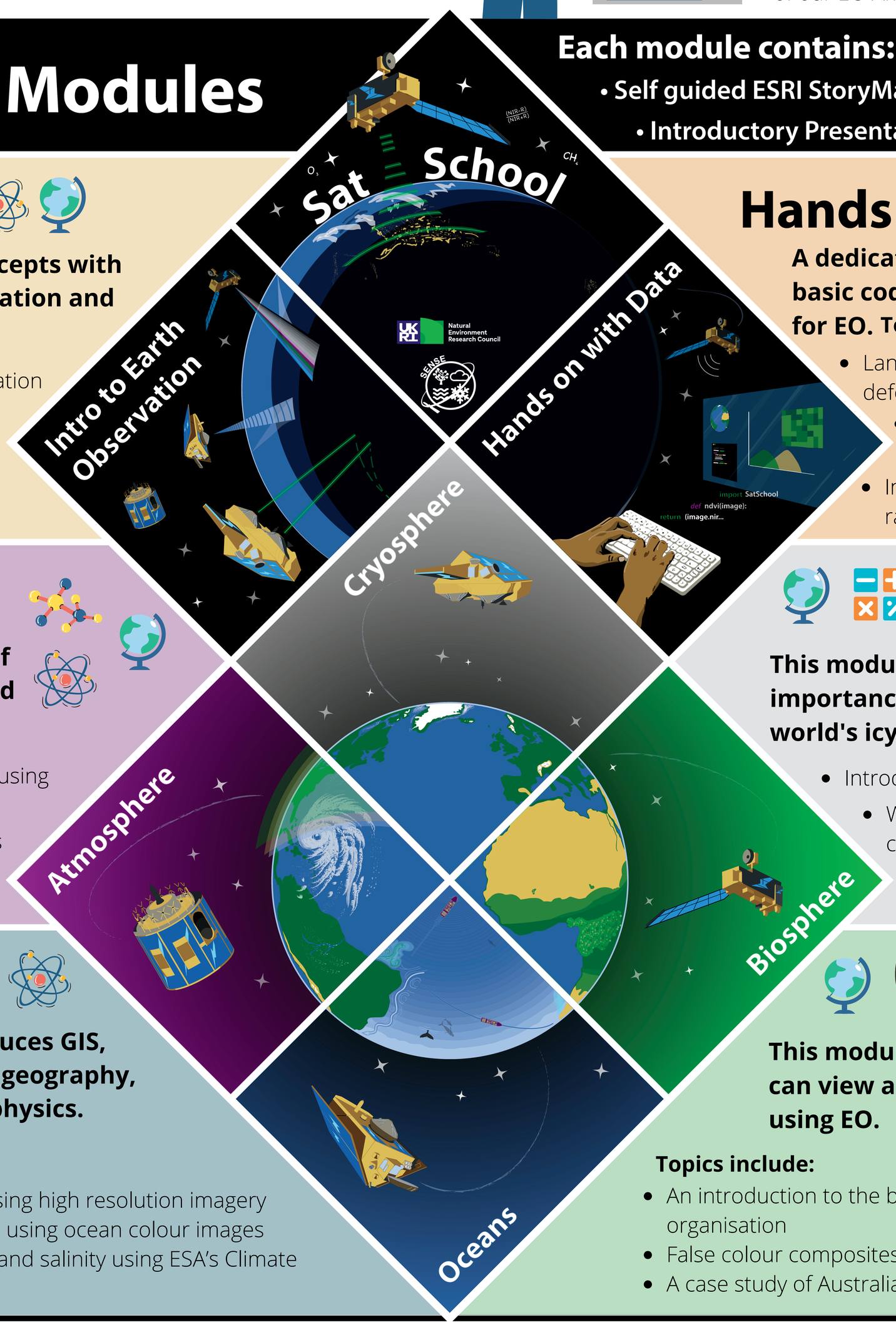


Calling all teachers and educators!
SatSchool provides engaging cross-curricular resources and lesson plans that are freely-available online for teachers to use in their own classrooms or STEM clubs. Contact us if you'd like to arrange a school visit from one of our EO Ambassadors!

SatSchool Modules

Each module contains:

- Self guided ESRI StoryMaps
- Introductory Presentation
- Worksheets
- Presenter Guides



Intro to EO

An introduction to EO concepts with an assembly style presentation and StoryMaps. Topics include:

- Introduction to Earth Observation
- Satellites and Orbits
- Satellite Sensors: Active vs Passive
- Image Resolution

Hands on with Data

A dedicated website introduces basic coding and machine learning for EO. Topics include:

- Land classification of deforestation in Brazil
  - Analysis of sea surface temperature time series
- Introduction to coding using radar images over Antarctica

Atmosphere

This module explores EO of atmospheric chemistry and weather. Activities include:

- Exploring total column ozone using ESA's Climate from Space app
- Interpreting weather forecasts which use a variety of in situ and satellite data

Cryosphere

This module highlights the importance of EO for observing the world's icy regions. Topics include:

- Introduction to the Cryosphere
  - What type of information satellites can gather about snow and ice
    - Two case studies: the Arctic and Antarctic

Oceans

The ocean modules introduces GIS, environmental and ocean geography, ocean biology and ocean physics.

Activities include:

- Spotting whales from space using high resolution imagery
- Investigating chlorophyll levels using ocean colour images
- Exploring ocean temperature and salinity using ESA's Climate from Space app

Biosphere

This module highlights the ways we can view and measure living things using EO.

Topics include:

- An introduction to the biosphere and levels of ecological organisation
- False colour composites and vegetation indices
- A case study of Australian wildfires using EO data

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Contact us

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