



UNESCO

**Current Earth Observation educational, capacity building and
awareness raising activity**

Small Islands Developing States (SIDS)

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Using previous expertise



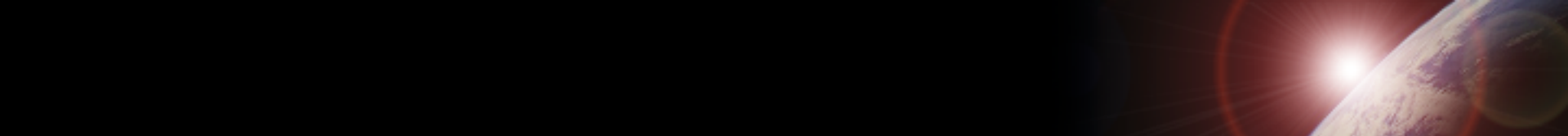
Based on the lessons learnt out of the

**UNESCO – ESA Open Initiative on the use of space technologies to
support World Heritage sites**

Increasing capacity among Government and Universities

**Government
technicians**

Universities



**Government
technicians**

Universities

Capacity building



But also raising awareness among decision makers

Decision makers

**Government
technicians**

Universities

Capacity building



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graph LR; A[Awareness raising] --> B[Decision makers]; C[Capacity building] --> D[Universities]; C --> E[Government technicians];
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Decision makers

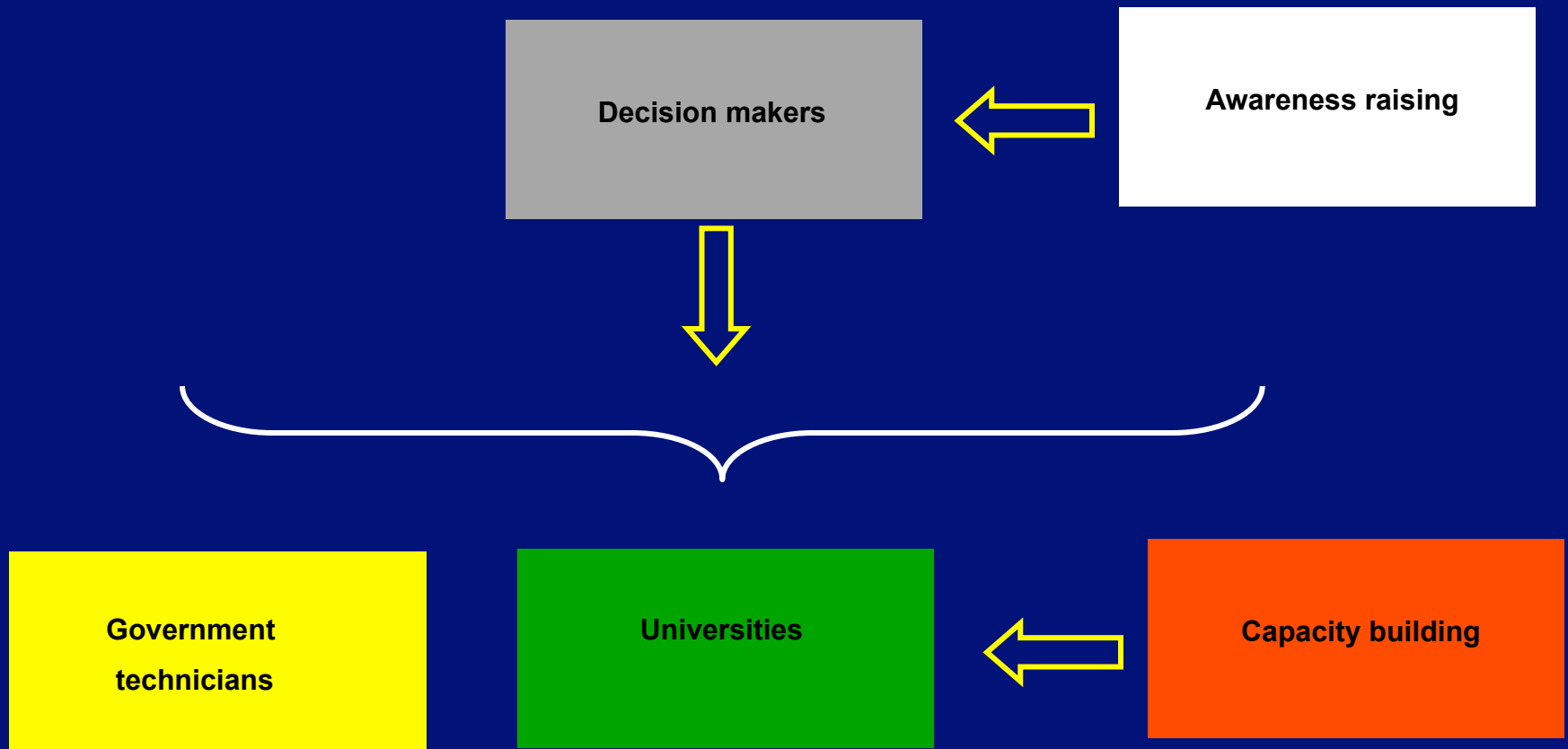
Awareness raising

**Government
technicians**

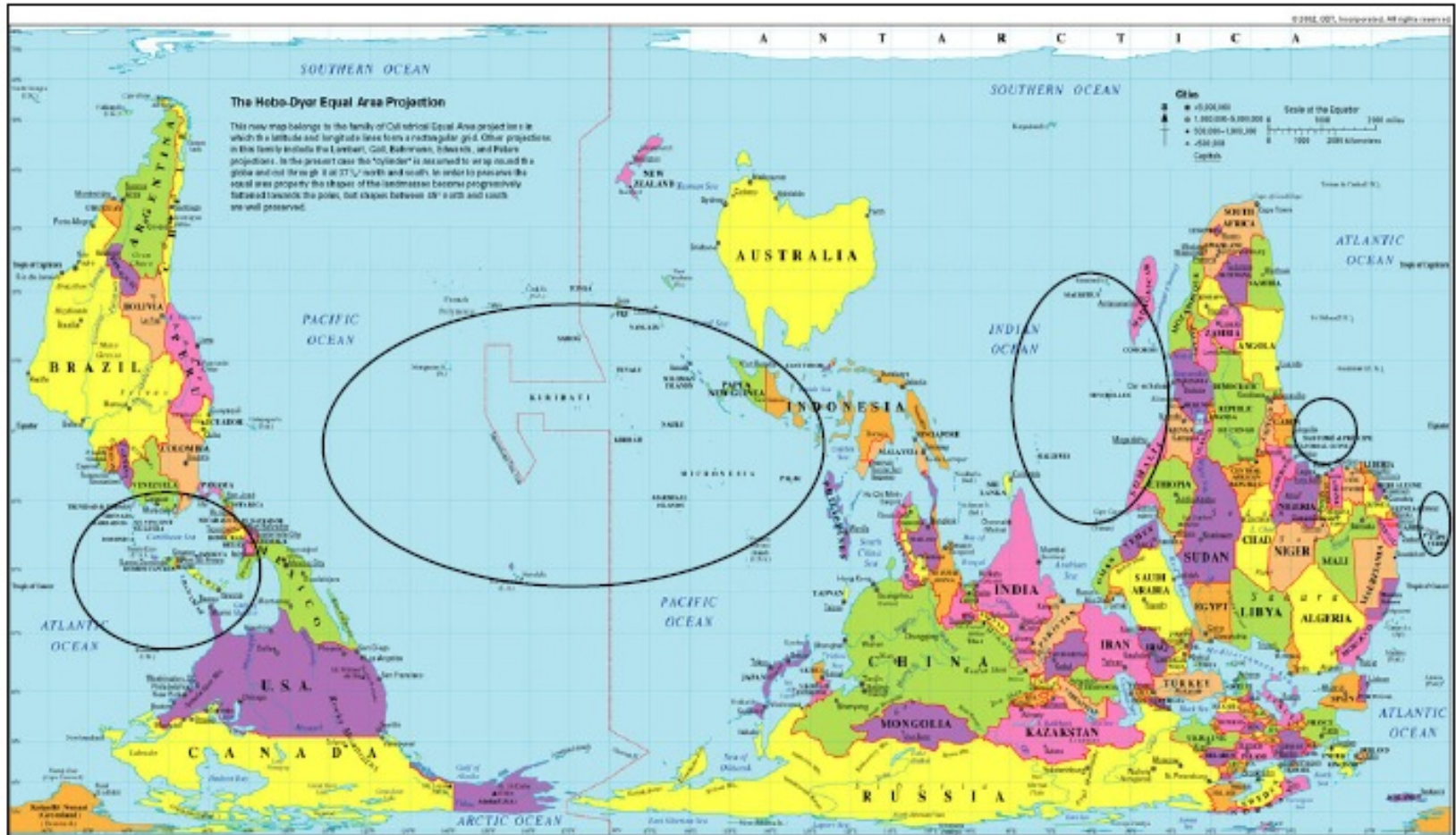
Universities

Capacity building

Purpose: to set up the whole national framework



Map 1: Upside down and Pacific centred world map including the SIDS (circles visualize the SIDS regions) ¹

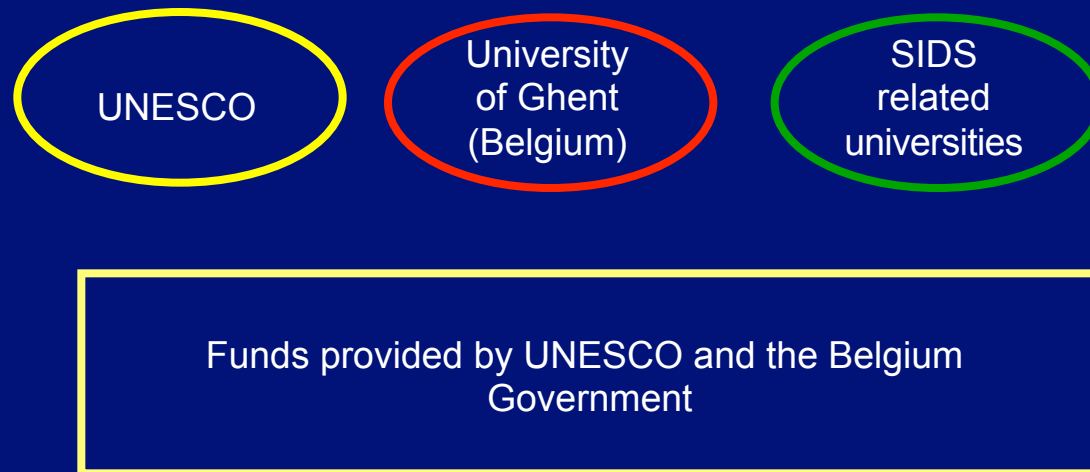


Phase 1: focusing in SIDS Caribbean

Map 4: The Caribbean Islands SIDS region²⁸



Main actors



The main concept



Using satellite data to
derive a series of
'showcases'

Addressing main threats to
SIDS



The main concept



Using satellite data to
derive a series of
'showcases'

Addressing main threats to
SIDS

Targeting teachers,
students

And

showing to decision
makers how EO can
assist them



A web-based (database) system



A web-based (database) system

Enable users to:

- Retrieve all data and information from the SIDS UNESCO-UniGe initiative

- Add their own data:

- Local projects
- Local data
- Documents
- Pictures
- Maps

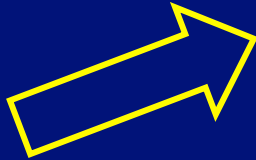


SIDS web (database)

UNESCO - UniGe

A one-point entry for UNESCO + UN activities in SIDS

A web-based (database) system

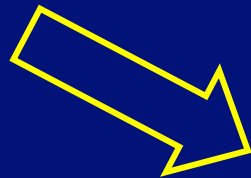
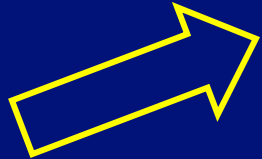


From Space to Place A satellite Atlas for SIDS Caribbean

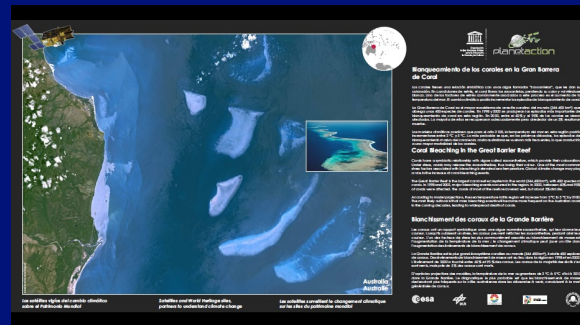


Extracting showcases for an Atlas publication

A web-based (database) system



From Space to Place A satellite Atlas for SIDS Caribbean



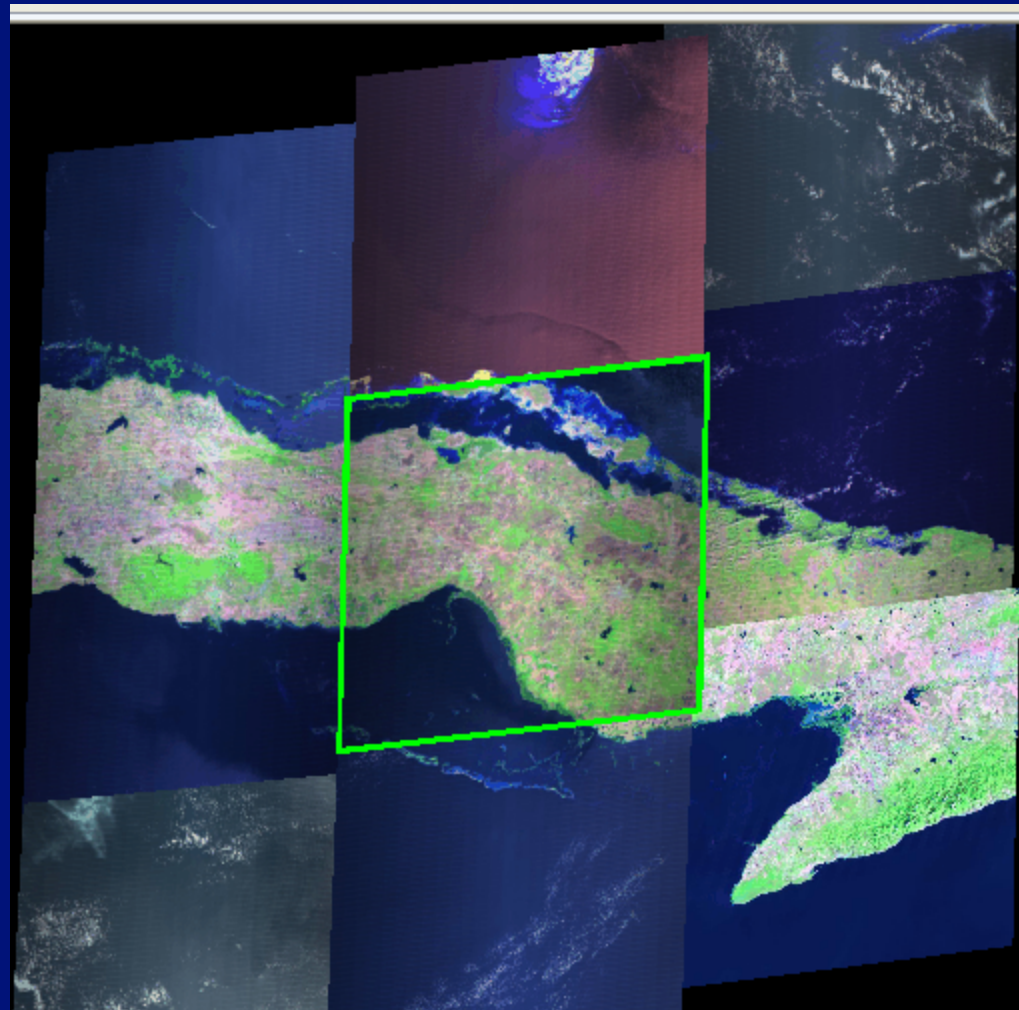
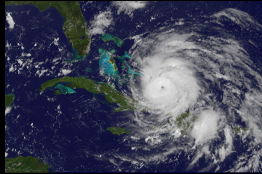
Exhibitions for teachers and
schools

(general public)

For each SIDS: a complete satellite mosaic

From Space to Place

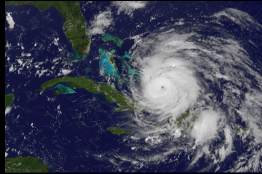
A satellite Atlas for SIDS Caribbean



For each SIDS: a complete DEM derived from satellite data

From Space to Place

A satellite Atlas for SIDS Caribbean



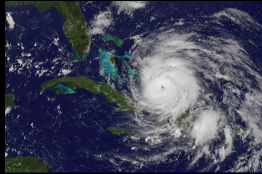
DEM using ASTER + ASTER topographic data



For each SIDS: one high-res image showing the capital city

From Space to Place

A satellite Atlas for SIDS Caribbean



For selected SIDS relevant showcases



- Elaboration of accurate cartography

- Digital Elevation Models

- Deforestation

- Climate change

 - Sea level raise

 - Coral bleaching

 - Etc

- Natural disasters

 - Hurricanes

 - Volcanoes

- Uncontrolled urban development

- Uncontrolled tourism infrastructure development

- Severe land use changes:

 - deforestation

 - Mangrove destruction (and consequences with hurricanes)

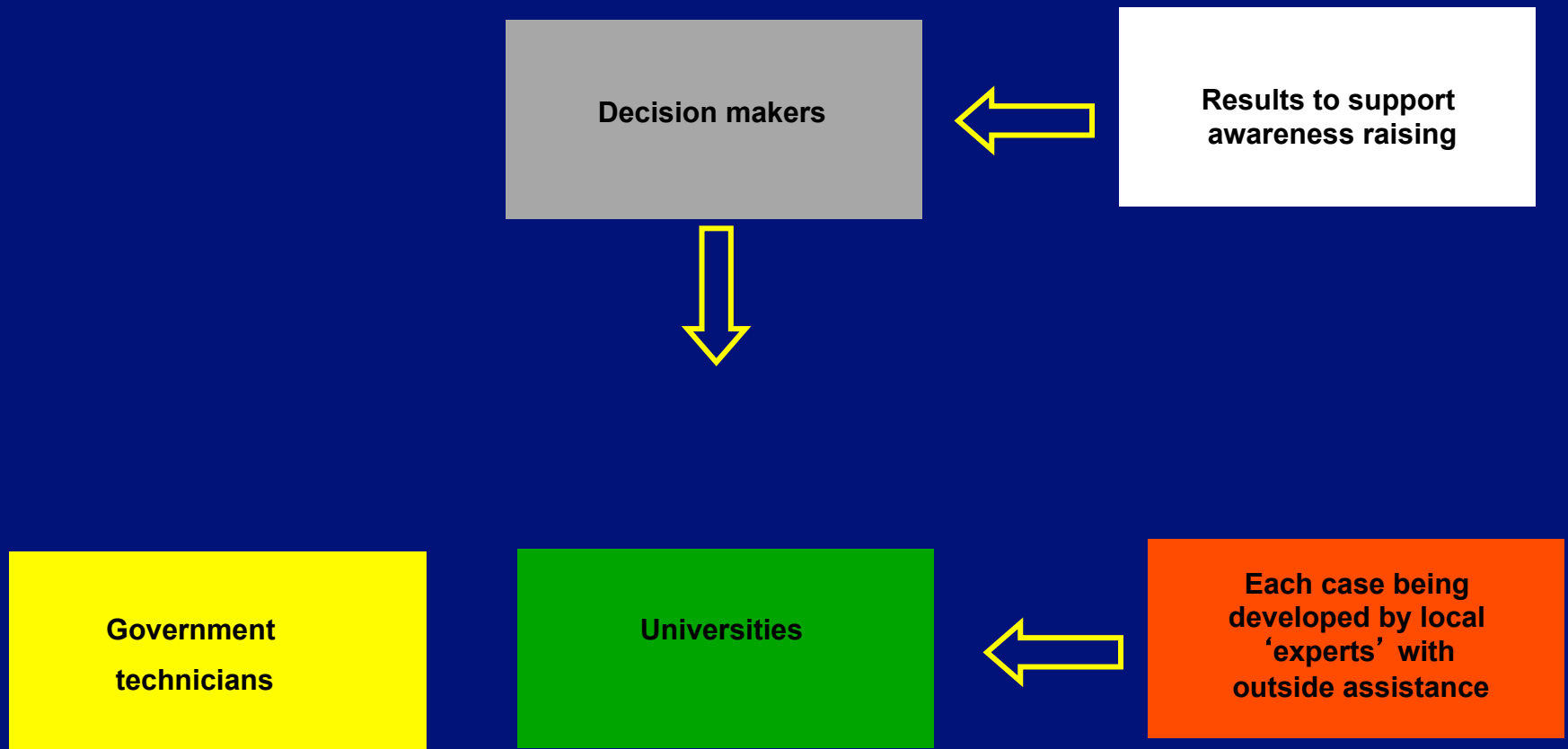
Illustrating the contribution of EO to UNESCO sites



-UNESCO inscribed sites:

- Natural and Cultural heritage
- Biosphere reserves
- Geoparks

The expected 'loop' for SIDS





We are looking for your partnership to assist us with the development
of

Interesting EO based showcases for SIDS



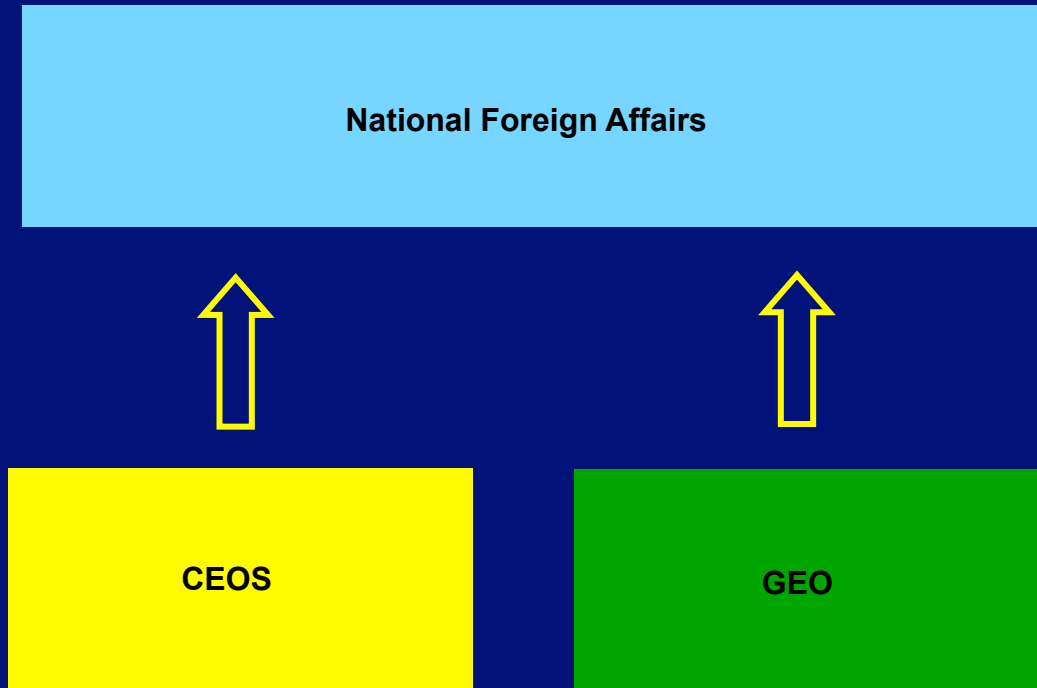
How to strengthen the impact of CEOS and GEOS ?

CEOS and GEO are producing excellent results

CEOS

GEO

The message should be passed to your Foreign Affairs



Foreign Affairs should make proposals to the UN different programmes
(suggestion to use CEOS and GEO outputs and synergy)



National Foreign Affairs



CEOS



GEO

Foreign Affairs should make proposals to the UN different programmes (suggestion to use CEOS and GEO outputs and synergy)



That is the best way to include these issues in the UN agendas



National Foreign Affairs



CEOS



GEO



Finally:

Can we join forces to develop:

-A single site on Earth (e.g. Machu Picchu) as it is seen by all EO satellites?

[That would significantly assist all training events]