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 → Capacity building
But also raising awareness among decision makers
Government technicians

Universities

Decision makers

Capacity building

Awareness raising
Purpose: to set up the whole national framework

- Decision makers
- Awareness raising
- Government technicians
- Universities
- Capacity building
SIDS are ‘in the middle of the world’
Phase 1: focusing in SIDS Caribbean
Main actors

UNESCO

University of Ghent (Belgium)

SIDS related universities

Funds provided by UNESCO and the Belgium Government
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

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

- Decision makers
- Results to support awareness raising
- Each case being developed by local ‘experts’ with outside assistance
- Government technicians
- Universities

Each case being developed by local ‘experts’ with outside assistance
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
The message should be passed to your Foreign Affairs.

National Foreign Affairs

CEOS

GEO
Foreign Affairs should make proposals to the UN different programmes (suggestion to use CEOS and GEO outputs and synergy)
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That is the best way to include these issues in the UN agendas
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]