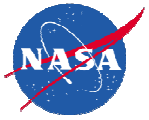
Working Group on Geospatial Information

4th Meeting

Dec. 6-8, 2017

GEO-XIV Plenary Summary

Lawrence Friedl
Argyro Kavvada
Group on Earth Observations
NASA Earth Science



Group on Earth Observations

http://earthobservations.org

An intergovernmental organization working to improve the availability, access, integration, and use of Earth observations to inform decisions and benefit society.

Advocate for importance of Earth observations and for open data sharing globally

Engage with stakeholders communities and foster strategic partnerships to address global and regional challenges

Deliver data, information and knowledge enabling stakeholders to improve decision-making and inform policy

SUSTAINABLE DEVELOPMENT GOALS

SDGs

PARIS2015 UN CLIMATE CHANGE CONFERENCE COP21·CMP11

Climate

UN World Conference on Disaster Risk Reduction 2015 Sendai Japan

Disaster Risk

GEO-XIV Plenary

GEO Plenary

Structured to enable thought-provoking discussions with limited amounts of administrative topics and process.

Discussions of the Sustainable Development Goals were present throughout the GEO-XIV Week

Side Events

Plenary Sessions

Meeting of SDG Initiative Team

EO4SDG

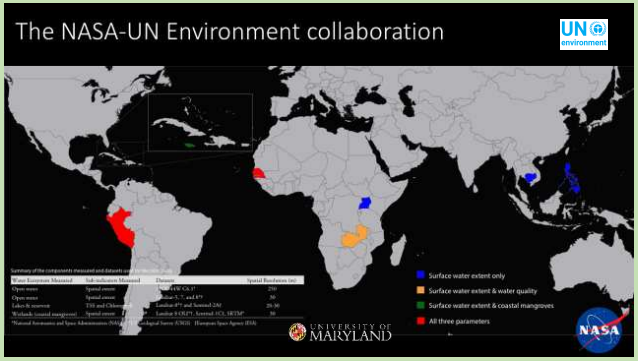
EARTH OBSERVATIONS FOR THE SUSTAINABLE DEVELOPMENT GOALS

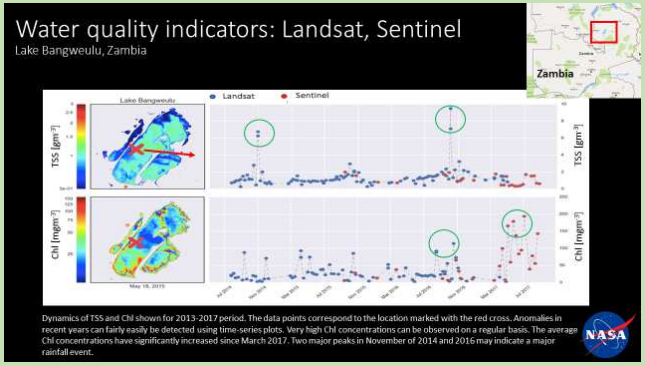
EO4SDG Side Event

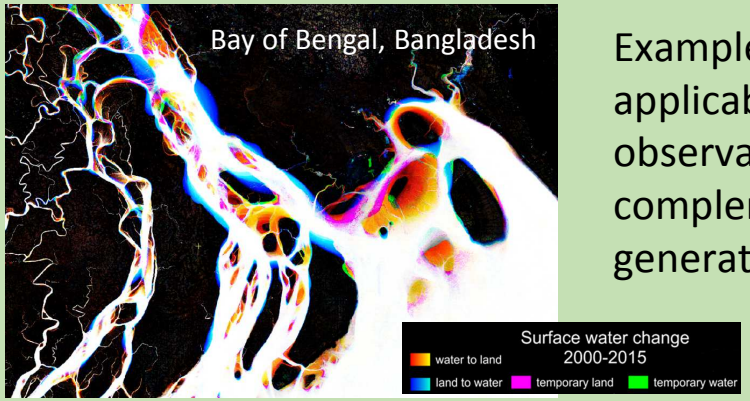
Event focused on identifying concrete lessons – both technical and programmatic – from efforts to use Earth observations to support the SDGs. Four panels:

Hands-on training for SDG 6.3.2 on water quality

6 CLEAN WATER AND SANITATION

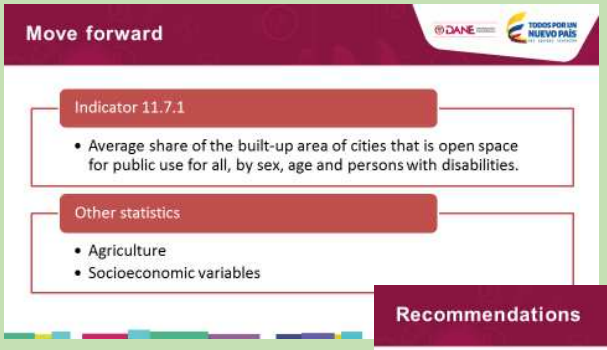


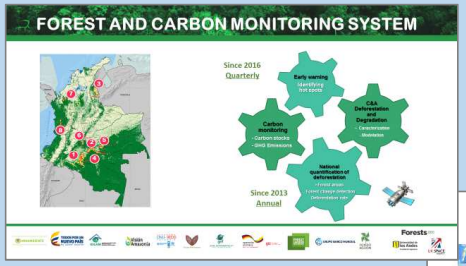


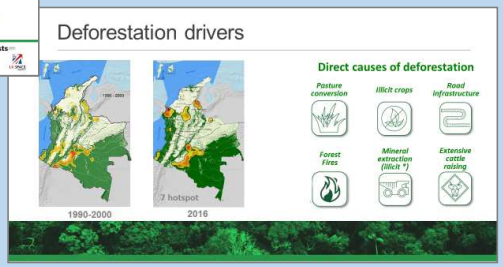


Examples showed applicability of Earth observations data to complement country-generated data.

11 SUSTAINABLE CITIES AND COMMUNITIES







IOC plays a coordinating role in fostering capacity, partnerships, and standards to collect, manage, and analyze ocean data and to provide ocean information.

GEO's Blue Planet Initiative serves as a broker between data providers and users, such as January workshop on SDGs in Small Island States

GEO-XIV Plenary

Panel Sessions

Earth Observations & Public Policy

Earth Observations & Commercial Sector

Earth Observations & International Development

National Earth Observations Portfolios

GEO-XIV Plenary

Key Findings

User-centric over data-centric

Fast-pace of innovations and new uses

Open-data at the core of GEO agenda

Focus on integration rather than "the" portal

Commitment to *2030 Agenda*

Global- and national-level support along with disaggregation

GEO-XIV Plenary

Key Findings

Moving from a data-centric to user-centric approaches – closing gaps among users and data providers. Need to engage in dialogues rather than simply posting data in portals.

Uses of Earth obs. and geospatial info is expanding globally and at a fast pace – significant innovations across public & private sectors.

Open data is still at the core of the GEO agenda. Novel uses and technologies are being brought together to more effectively harness the potential of open geospatial and Earth obs. data.

A focus on having "the" portal for all data needs is mis-guided. Instead, focus on ways to enable better integration of data from disparate sources, even if integration is transparent to users.

Reinforcement of GEO commitment to support the *2030 Agenda* as one of the 3 priority engagement areas

GEO will act at both global and national levels and with a stronger focus to support countries for SDG reporting and adequate use of disaggregated EO data.

THE GLOBAL GOALS
For Sustainable Development

WGGI
4th Meeting

Strategic Partnerships

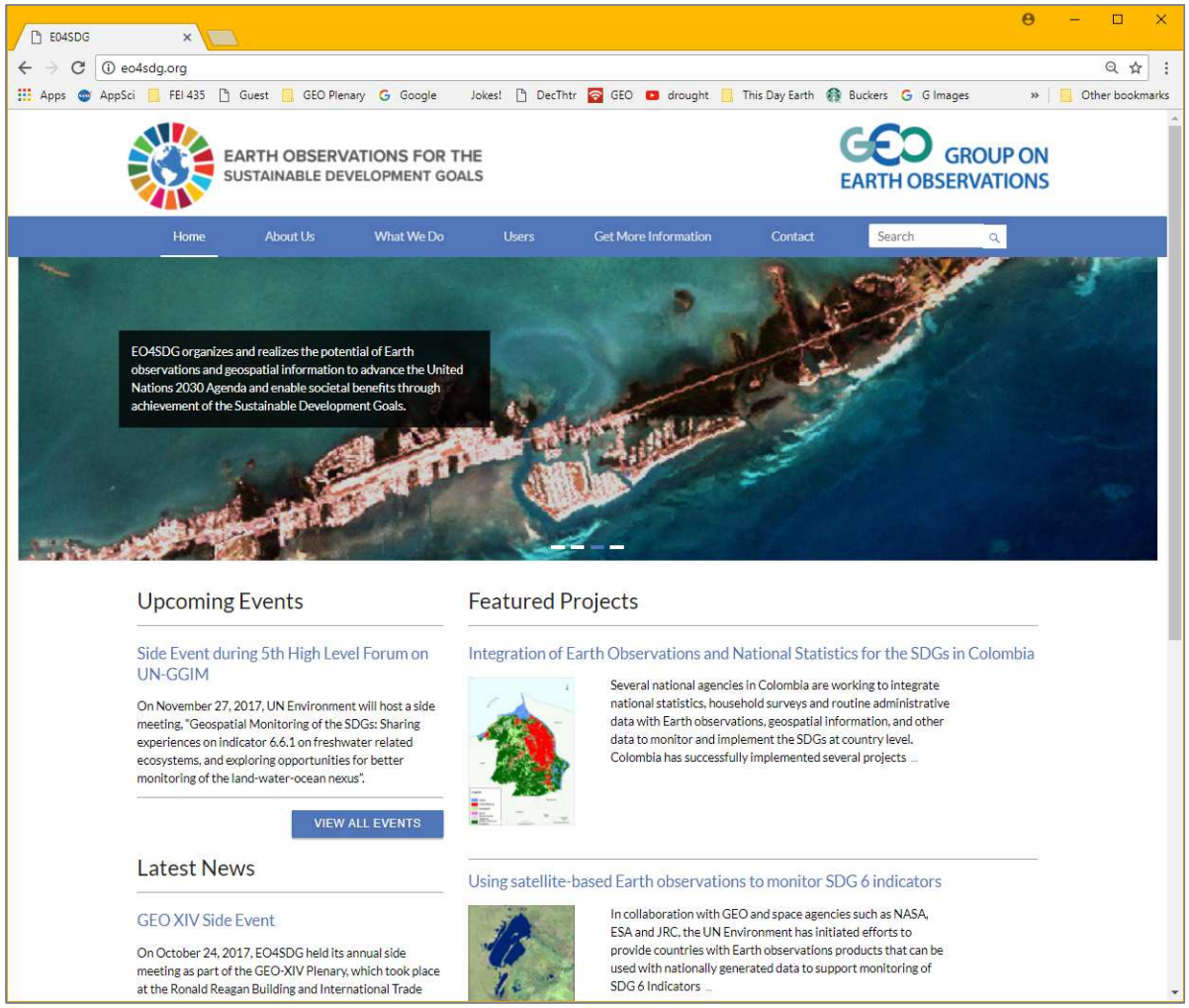
Indicator Tiers

Examples & Case Studies

EO4SDG

EARTH OBSERVATIONS FOR THE
SUSTAINABLE DEVELOPMENT GOALS

http://eo4sdg.org



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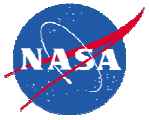
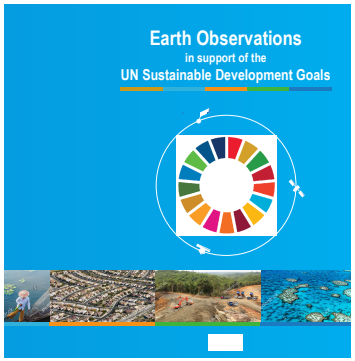
Backup Materials

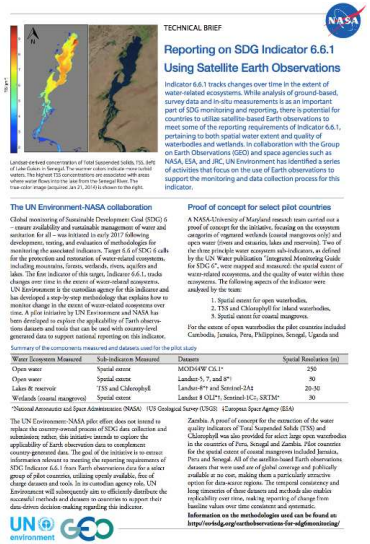


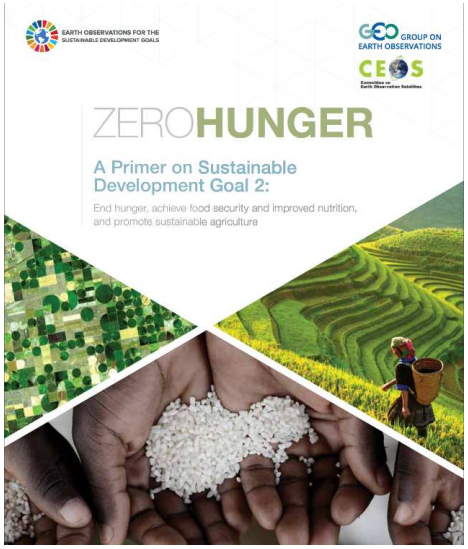
EARTH OBSERVATIONS FOR THE SUSTAINABLE DEVELOPMENT GOALS



EO Case Studies for the 2030 Agenda

UN Environment-GEO-NASA -UMD Collaboration on SDG 6





A Primer on SDG 2, Zero Hunger

Toolbox: Data for Action

EO4SDG-GPSDD-DANE Workshop at DANE HQ, Colombia

In person trainings & webinars

Pilot Activities

Outreach & Engagement

Capacity Building

Information Products

UN Environment-GEO Collaboration on SDG Indicator 6.6.1

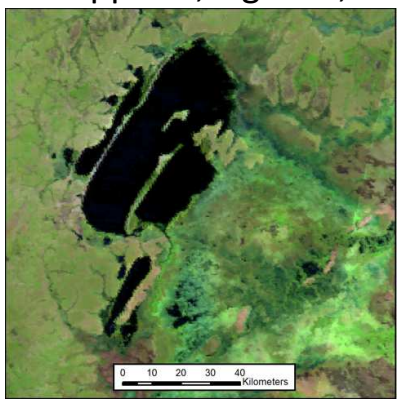
Using satellite-based Earth observations to support monitoring of SDG 6 indicators

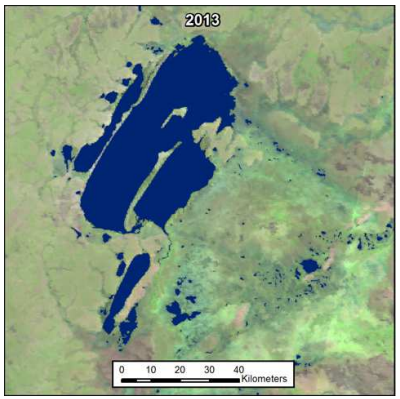
» UN Environment-GEO-Space Agencies Collaboration

» NASA-University of Maryland Pilot Study:

- Spatial extent for open waterbodies
- TSS and Chlorophyll for inland waterbodies
- Spatial extent for coastal mangroves

for one or more of the following countries: Senegal, Peru, Jamaica, Nepal, Cambodia, Philippines, Uganda, and Zambia





Left: False color composite MODIS surface reflectance image of several lakes, the largest of which is Lake Bangweulu, and associated swamps in Zambia. Imagery is an 8-day composite collected from a period beginning on 7/12/13.

Right The annual water dataset, MOD44W C6.1 (Carroll et al., 2017), overlain in blue, showing measured spatial extent of open water for the year 2013.

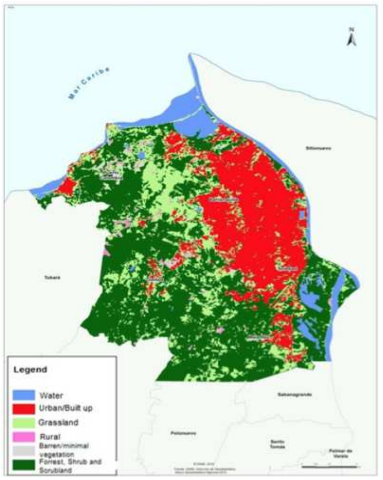
Vermote, E., et al., 2015

EARTH OBSERVATIONS FOR THE SUSTAINABLE DEVELOPMENT GOALS

Integration of EO and National Statistics for the SDGs in Colombia

Colombia has successfully implemented several projects that demonstrate the value of using EO to monitor SDGs

- 11.3.1 (land consumption over population growth) – DANE
- A complete country-level Landsat Data Cube (25,000 scenes back to year 2000) was completed in Dec 2016 – IDEAM & Univ. of Andes



Land cover areas for the Barranquilla M etropolitan Area: year 2015.

Milestones, Partnerships & Future Plans

March 30, 2017: Workshop in Bogota, Colombia

July 12, 2017: Learning, Training, and Practice Session, High Level Political Forum, 2017:

July 13, 2017: Brown Bag Talk at NASA HQ: Earth Observations in Service of the SDGs: Country Experiences

Ongoing: EO4SDG, DANE, & GPSDD are working to devise a work plan to assist with EO methods and data to help address gaps & achieve the SDGs

GEO-CEOS: Submitted joined proposal to GPSDD WB TFSCB Call on the development of SDG products from Data Cube technologies & their testing and validation by national statistics offices & line ministries

EO4SDG

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http://eo4sdg.org