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Knowledge Sharing Workshop Strengthening the Environment Dimensions of the SDGs in Asia and the Pacific

21-22 February 2018
Bangkok, Thailand



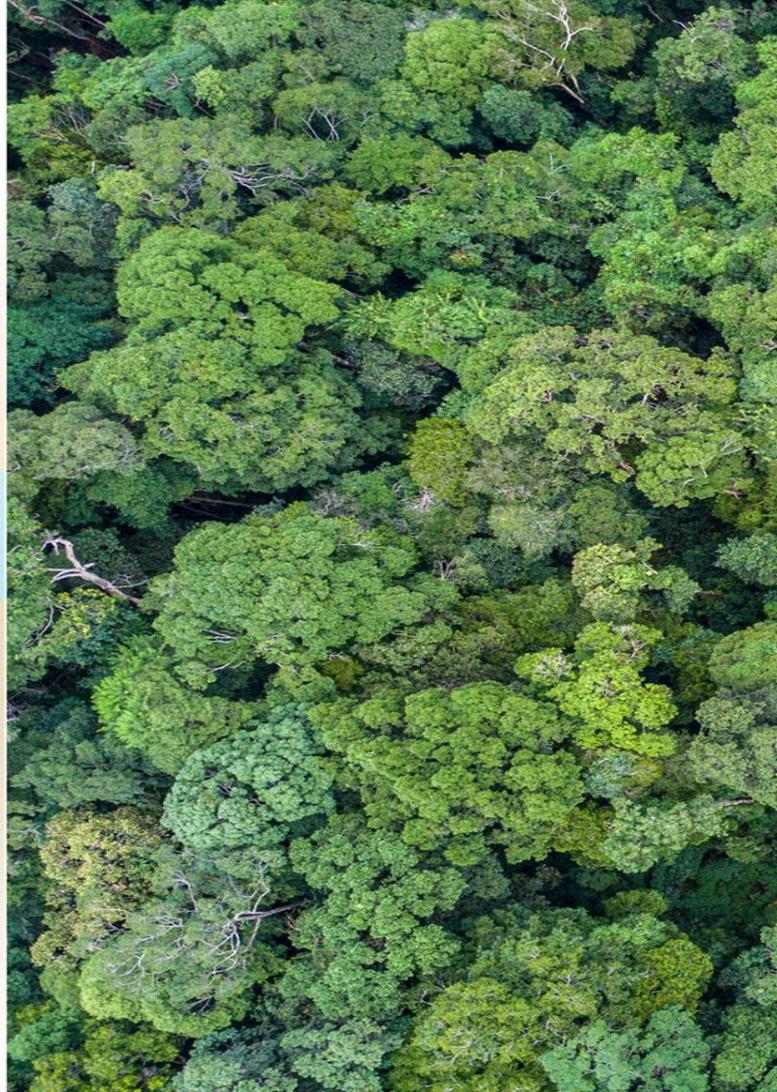
Environment
in SDGs
Asia-Pacific



IN
COLLABORATION
WITH



SUSTAINABLE
DEVELOPMENT
GOALS



Supporting the Implementation of Environment-Related Sustainable Development Goals (SDGs) in Asia and the Pacific



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Asian Development Bank HQ

Directorate of Earth Observation Programmes
European Space Agency (ESA)

Regional Knowledge Sharing Workshop United Nations Conference Centre 21-22 February 2018 /
Bangkok, Thailand

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European Space Agency

EO for SDGs

Earth Observations potential contribution to the SDG (169) Targets and (230) Indicators



SDGs with most opportunities for Copernicus data and services

Analysis performed by the GEO EO4SDGs initiative

Target	Goal	Indicator
<i>Contribute to progress on the Target yet not the Indicator per se</i>		<i>Direct measure or indirect support</i>
1.5	1	
2.3 2.4 2.c	2	2.4.1
3.3 3.4 3.9 3.d	3	3.9.1
	4	
	5	5.9.1
6.3 6.4 6.5 6.6 6.a 6.b	6	6.3.2 6.4.2 6.5.1 6.6.1
7.2 7.3 7.a 7.b	7	7.1.1
	8	
	8.4	
9.1 9.4 9.5 9.a	9	9.1.1
	10	
11.3 11.4 11.5 11.6 11.7 11.b 11.c	11	11.3.1 11.6.2 11.7.1
	12	
12.2 12.a 12.b	12	
13.1 13.3 13.b	13	13.1.1
14.1 14.2 14.3 14.4 14.6 14.7 14.a	14	14.3.1
15.1 15.2 15.3 15.4 15.5 15.7 15.8 15.9	15	15.1.1 15.2.1 15.3.1 15.4.1 15.4.2
	16	
17.6 17.7 17.9 17.16 17.17	17	

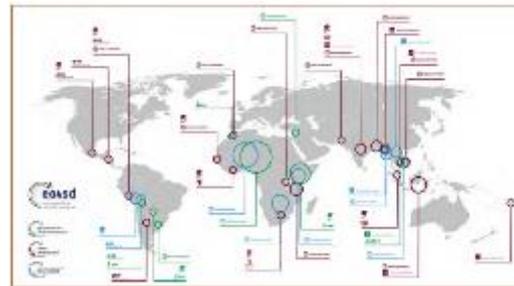
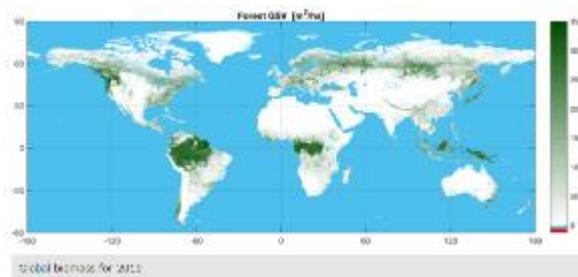


EO Satellite data characteristics

Free and open: The free and open data policy of the European Union's Copernicus programme, prospects for access to the EO data in Asia Pacific have improved considerably.



Scale and coverage: data on all scales from local to national, regional and even global. Indeed, they are likely the only source of global information for many parameters; for areas that are remote or otherwise difficult to reach.

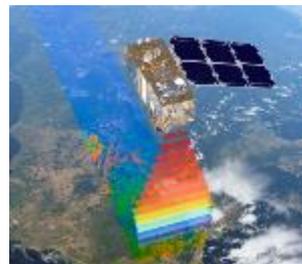


EO Satellite data characteristics

Consistency and comparability: consistency over time and space is an Important feature of a credible Indicator Framework;

Complementarity with traditional statistical methods: to communicate and visualise the geographic dimensions and context of the Indicators as needed.

Diverse measurements: optical cameras, include infra-red sensing (vegetation vigor). Microwave instruments feature increasingly and provide all-weather, day-night capabilities.



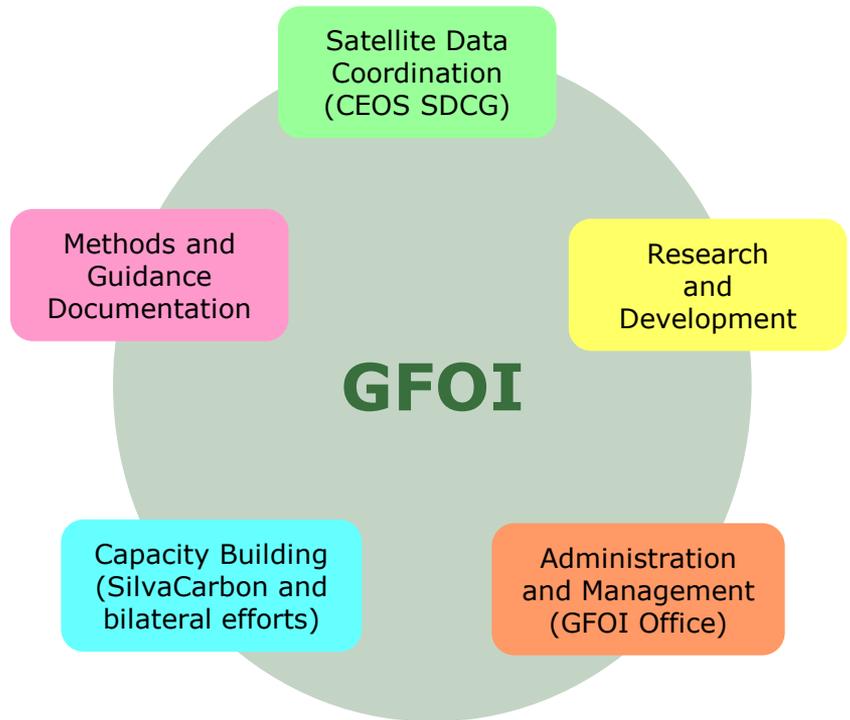
Slide 5

“SD Goal 15.2 By 2020, promote the implementation of sustainable management of all types of forests”

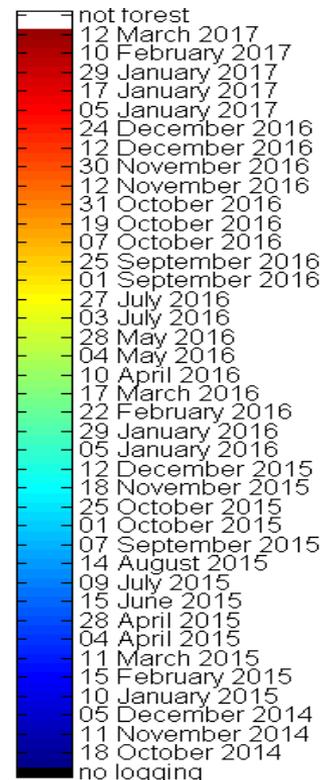
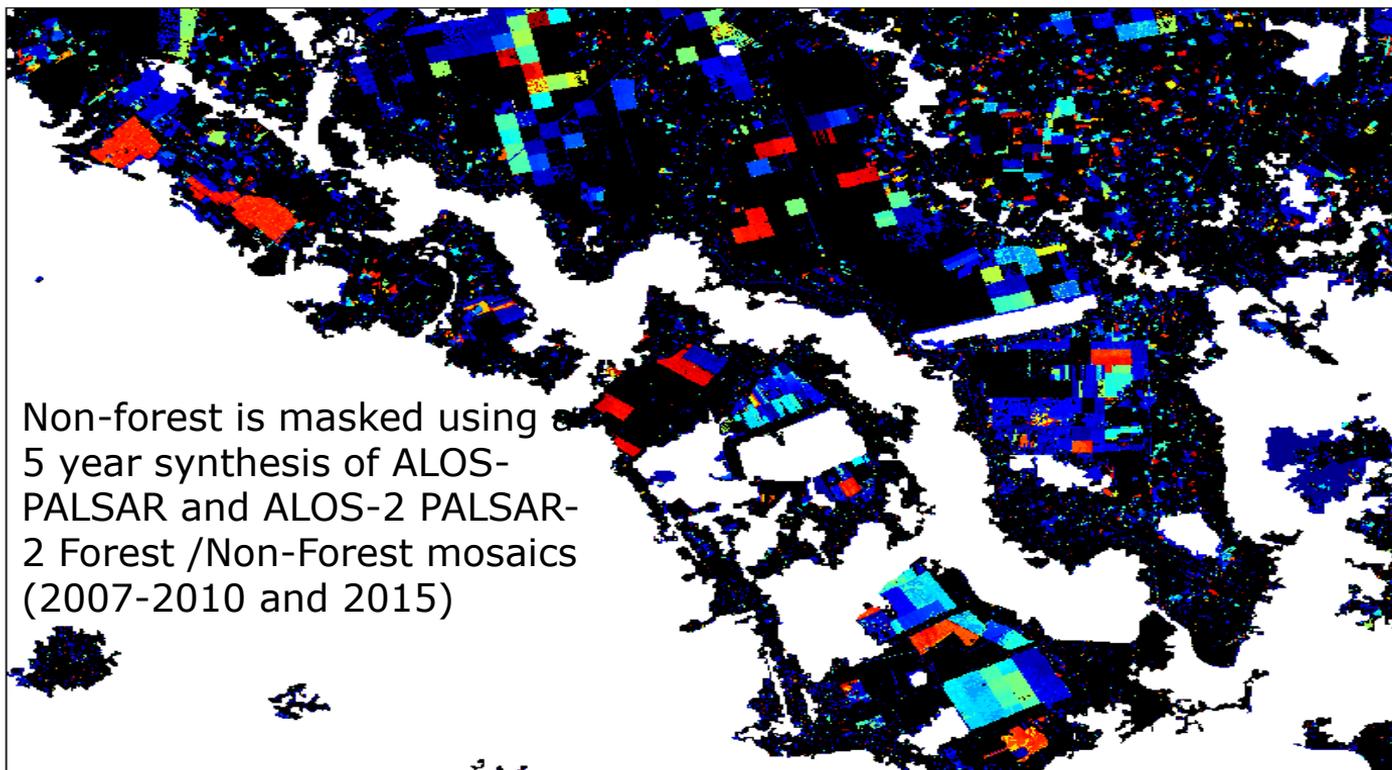
“Goal 15.2 By 2020, promote the implementation of sustainable management of all types of forests”

The **Global Forest Observations Initiative GFOI** → www.gfoi.org:

- fosters sustained availability of satellite and ground observation in support of national forest information systems
- supports countries in the use of observations for their national forest information systems



Vietnam: Logging Date Map between Oct. 2014 - Mar. 2017 based on Sentinel-1



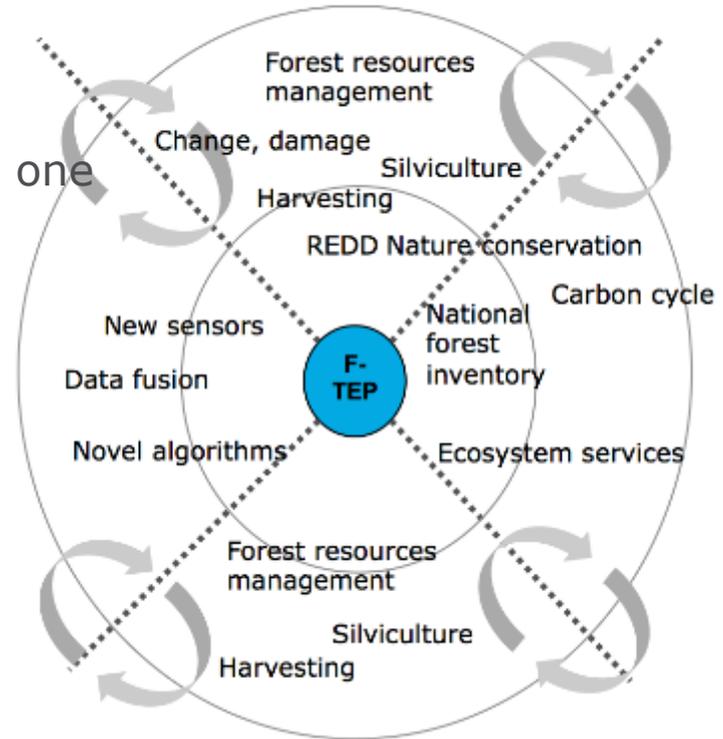
Non-forest is masked using a 5 year synthesis of ALOS-PALSAR and ALOS-2 PALSAR-2 Forest /Non-Forest mosaics (2007-2010 and 2015)

(25km x 35km)

“One-stop shop for forestry remote sensing services for the academic, public and commercial sectors”

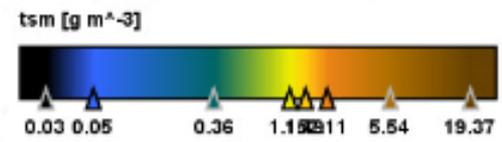
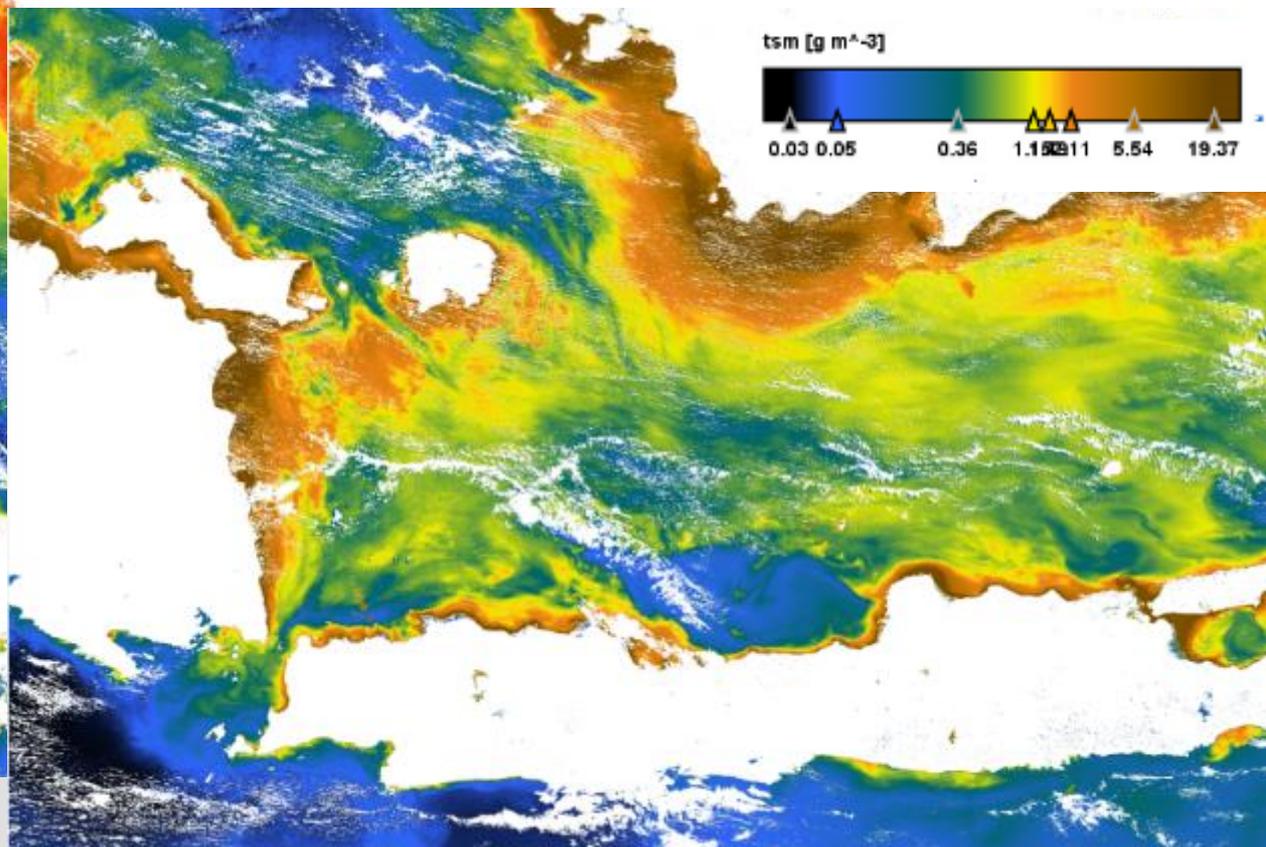
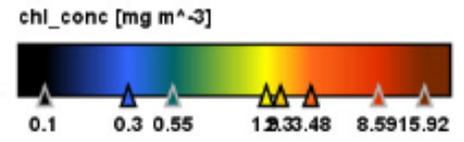
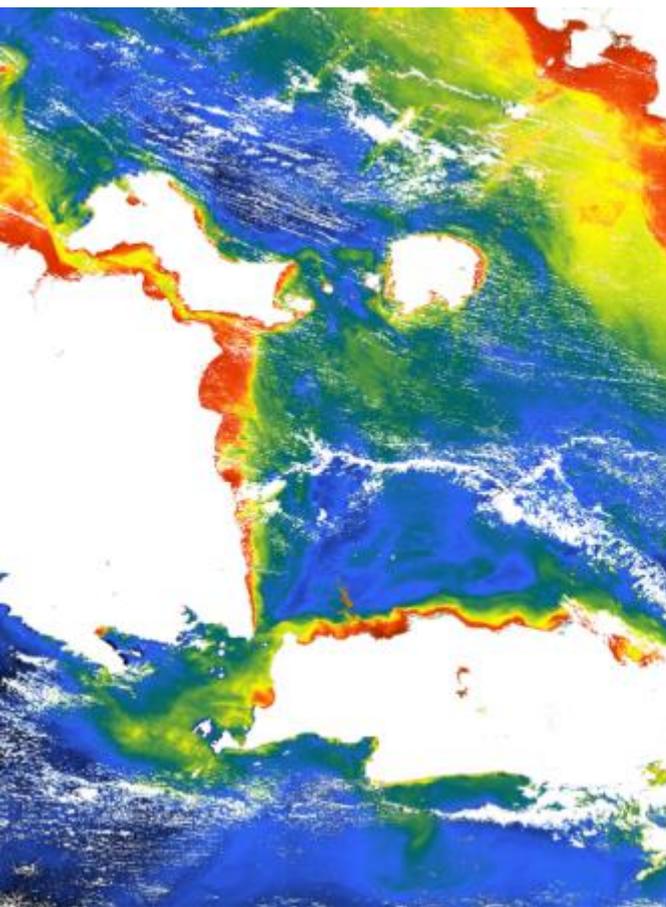
- Terabytes of raw data and final products all in one place
- Community centric work environment
- Reduce the costs of data acquisition from miscellaneous sources
- Self-service environment with support

➔ <https://forestry-tep.eo.esa.int/>



“SD Goal 14.1 By 2025, prevent and significantly reduce marine pollution of all kinds, in particular from land-based activities, including marine debris and nutrient pollution”

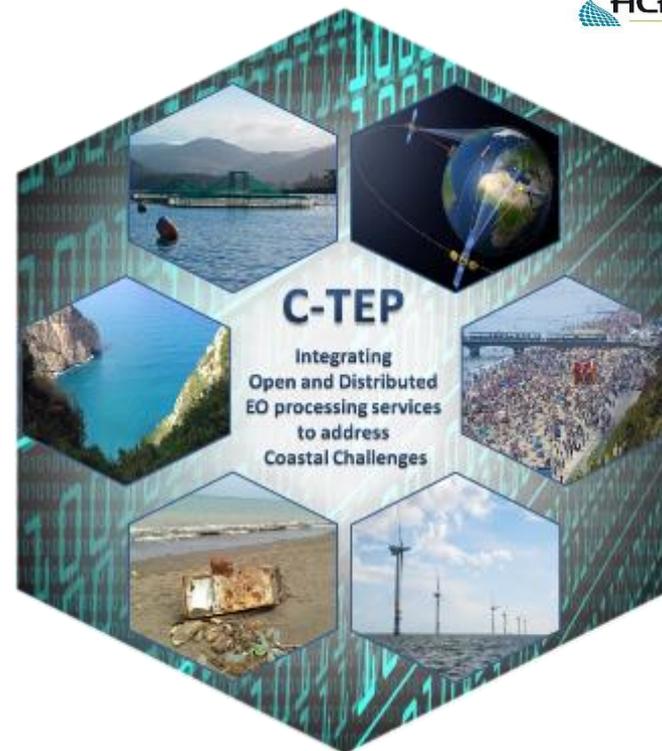
Indonesia - Suspended particulate matter (more than 8 mg.dm⁻³) and chlorophyll values higher than 2.5 mg.m⁻³.



“ A single platform to online Explore, Process, Develop and Exchange EO derived information ”

- Bringing users to the data
- Easy and rapid access to a broad range of data sources
- Synergistic scientific research and application development
- Increased accessibility to data, processing frameworks and meta data for non Earth Observation experts

➔ <https://coastal-tep.eo.esa.int>



Thank You for participation !

