ESA Earth Observation Programmes

Meeting on Satellite environmental information in support of Development Aid Activities in European Aid Agencies
Frascati, 16 January 2018

Dr. Josef Aschbacher, ESA

Director of Earth Observation Programmes

Head of ESRIN

@AschbacherJosef

ESA ESRIN Establishment

Personnel on Site: 774

50.000 Visitors in 2016

Activities:

- Earth Observation
- Vega Launcher
- Corporate Informatics
- ESA Security Office
- Contracts, Personnel
- Site Management
- Communication

Directorate of Earth Observation Programmes

Personnel

555

234 Contractors

321 Staff

Budget

€ **1.6 bn** in 2017

5 Sites

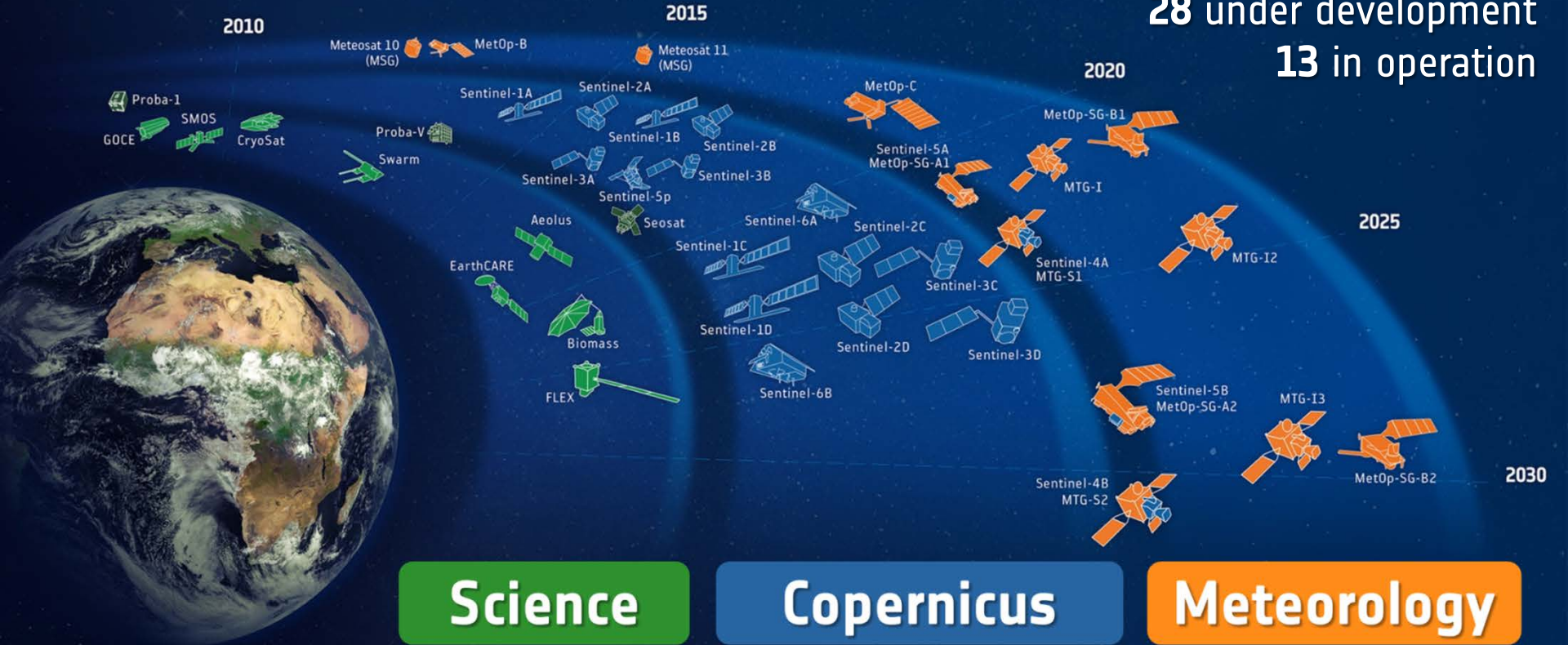
ESRIN ECSAT

HQ

ESTEC EBO

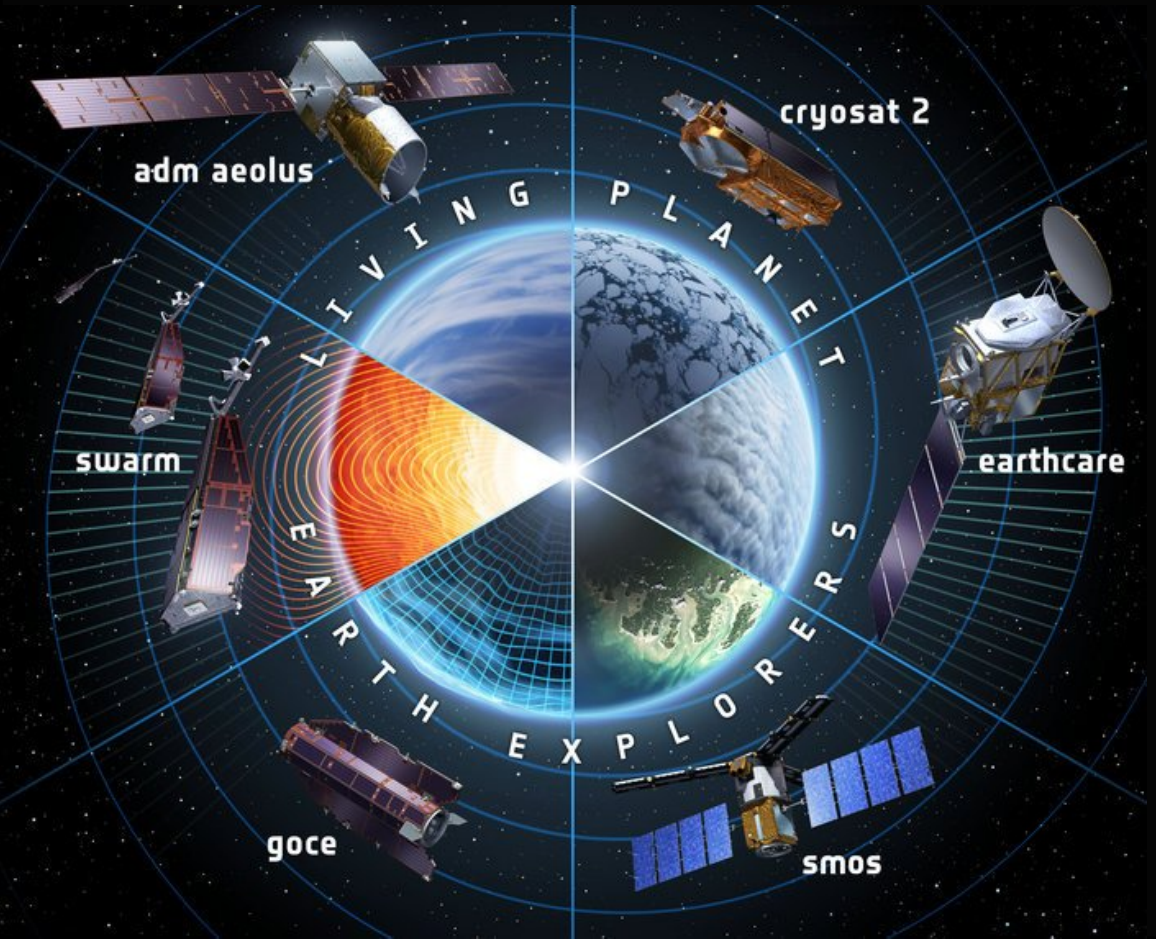
ESA-DEVELOPED EARTH OBSERVATION MISSIONS

Satellites
28 under development
13 in operation



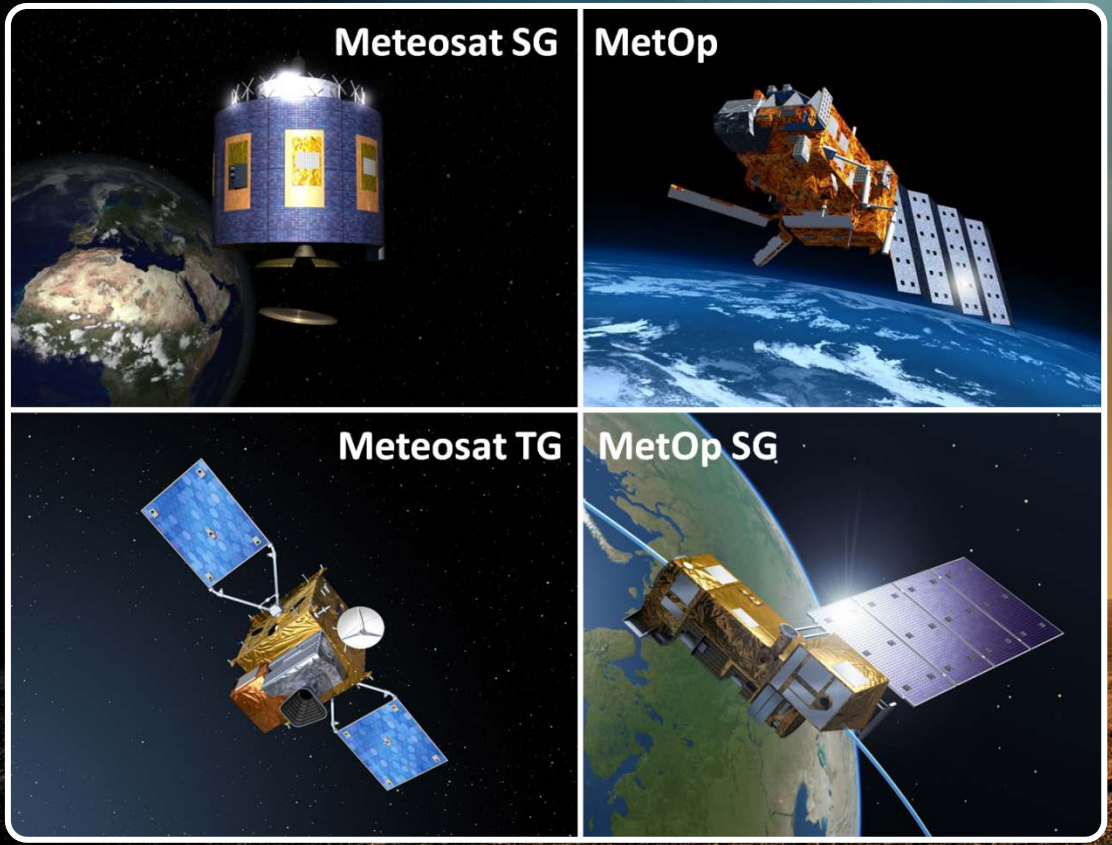
Science **Copernicus** **Meteorology**

Science: Earth Explorers



GOCE	2009 – 2013
SMOS	2009 – Present
Cryosat	2010 – Present
SWARM	2013 – Present
Aeolus	2018
EarthCARE	2019
Biomass	2021
FLEX	2022

Meteorological Missions

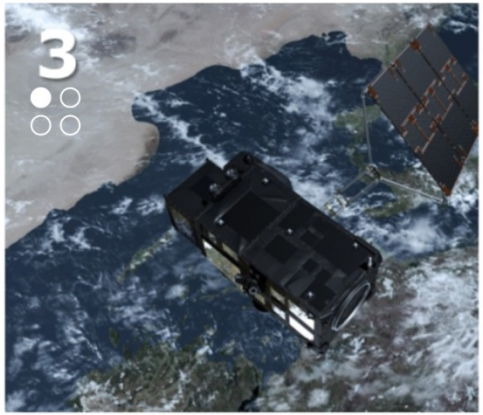


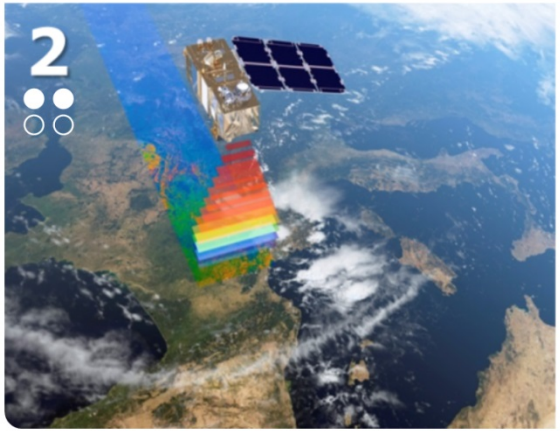
ESA develops & procures satellites for EUMETSAT

< Current Systems

< Post-2020 Systems

Copernicus – European Leadership in EO





Sentinel Launches

S-1

Radar

- A — 3 Apr. 2014
- B — 25 Apr. 2016
- C — 2022/23
- D — > 2022/23

S-2

High Resolution Optical

- A — 23 Jun. 2015
- B — 6 Mar. 2017
- C — 2022/23
- D — > 2022/23

S-3

Medium Resolution Optical & Altimetry

- A — 16 Feb. 2016
- B — 2018
- C — 2023
- D — > 2023

S-4

Atmospheric Chemistry (GEO)

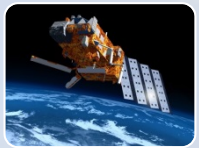
- A — 2021
- B — 2027

S-5P

Atmospheric Chemistry (LEO)

- A — 13 Oct. 2017

S-5



Atmospheric Chemistry (LEO)

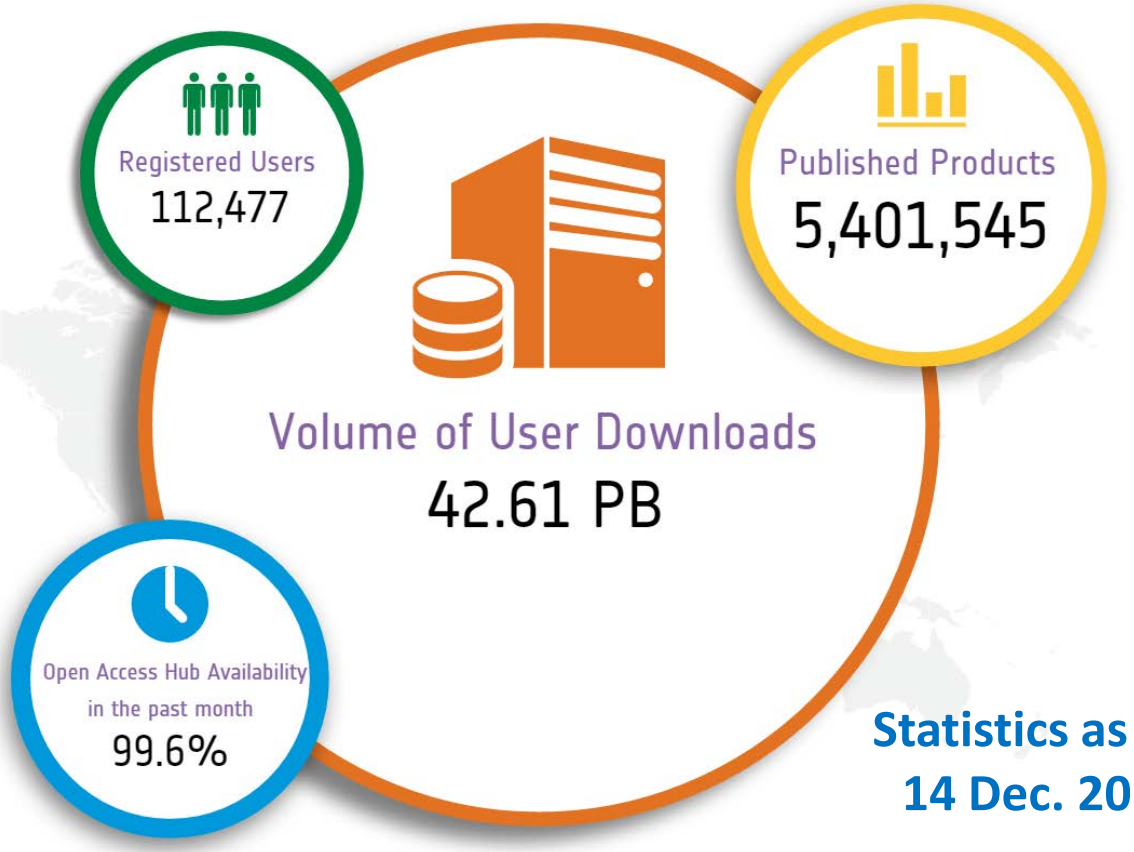
- A — 2021
- B — 2027
- C — > 2027

S-6

Altimetry

- A — 2020
- B — 2025

Sentinel Open Access Data Hub



Statistics as of 14 Dec. 2017

EO for the Global Agendas

Sustainable Development

UN SDGs

Supporting Smart Decision-Making

Climate Action

Paris Agreement

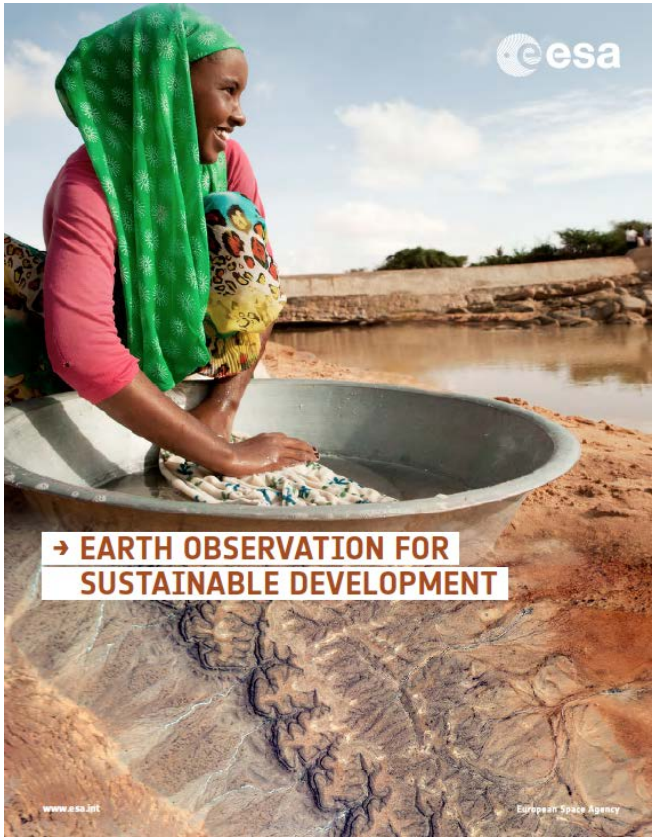
Monitoring & Understanding

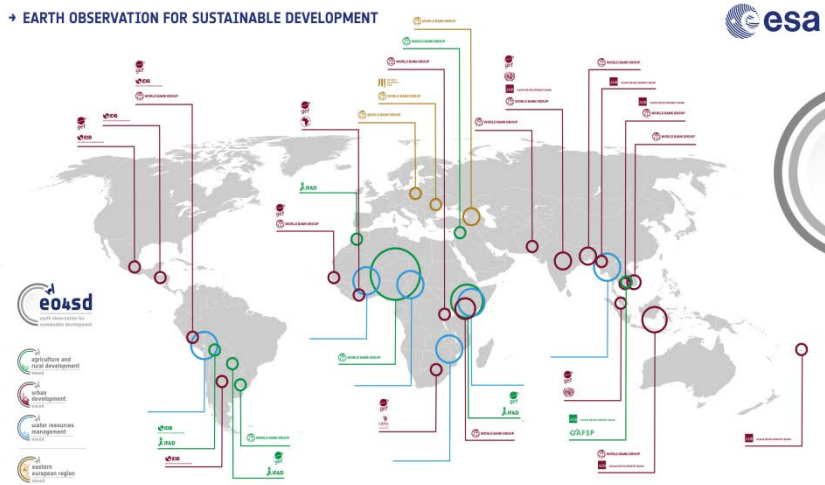
Disaster Risk Reduction

Sendai Framework

Providing Key Infrastructure

EO4SD : EO for Sustainable Development





eo4sd
earth observation for sustainable development

***World Bank**, Dec 2015, COP-21 Paris*

***Asian Development Bank**, Nov 2016, ESRIN*

esa
Thank you for your attention!
www.esa.int
European Space Agency