The EUMETSAT Satellite Application Facility Network in its 4th Continuous Development and Operations Phase

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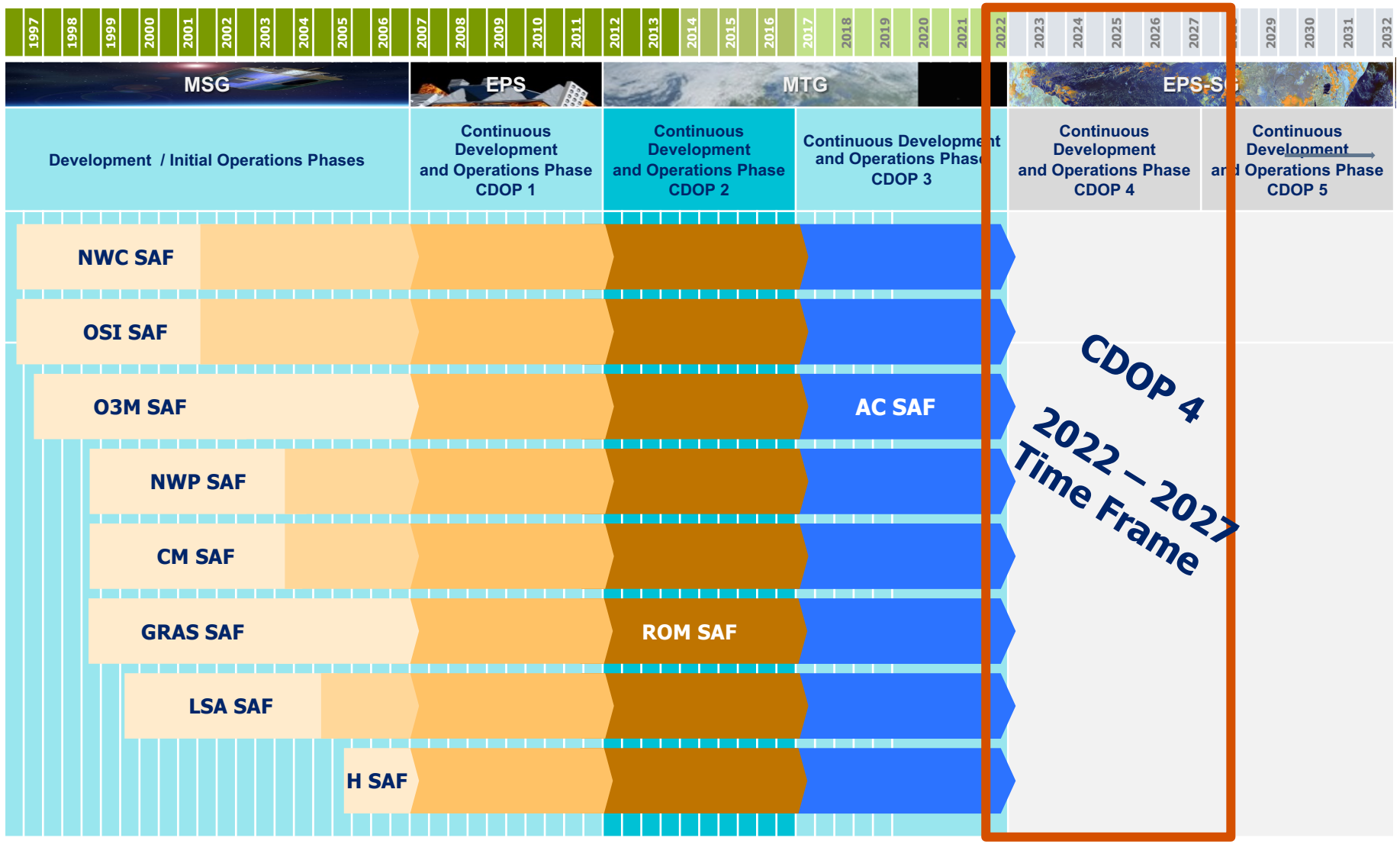
EUMETSAT

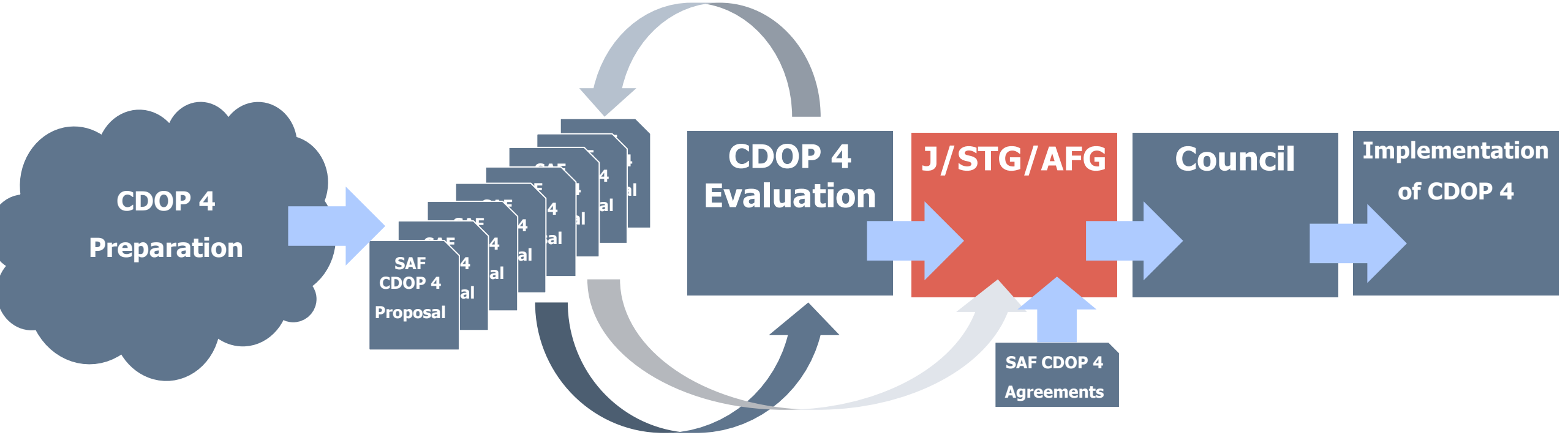
The current status of the EUMETSAT SAF Network

- Increased relevance of SAF products and activities;
- SAF Network in a period of changing generations
  - People;
  - Programmes;
  - Infrastructure;
- Robustness of the SAF concept.

SAF history and perspective



CDOP 4 Preparation and Implementation



2019-2020	October 2020	November December 2020	May 2021	July 2021	March 2022 – February 2027

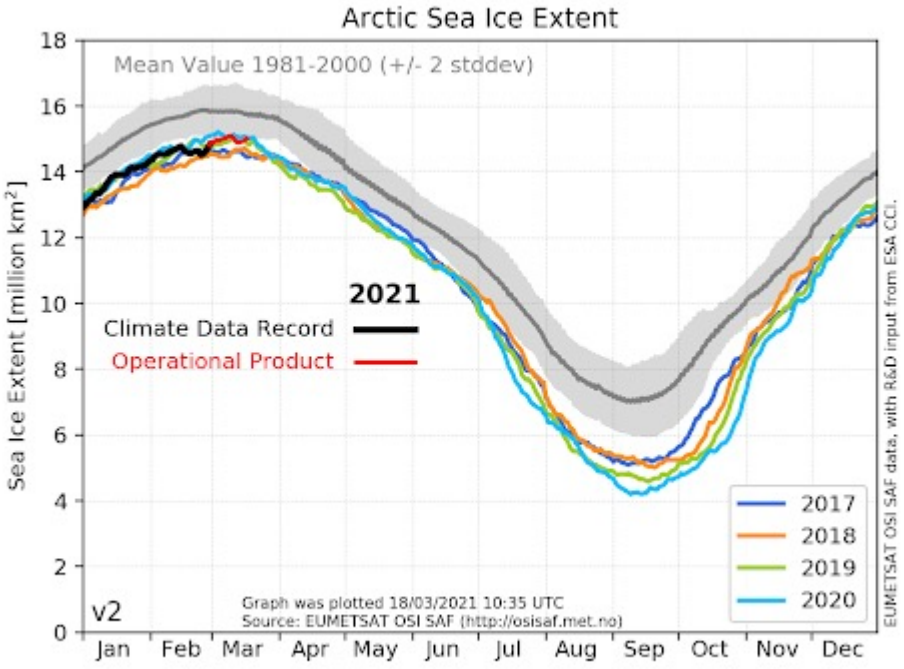
The Evaluation Process

- Relevance
- Usability
- Compliance
- Completeness
- Feasibility
- Affordability
- Complementarity

SAF CDOP 4 Product Statistics

SAF	Total Variables	New Variables	Total products	New products
OSI SAF	11	2	127	43
AC SAF	27	2	292	122
CM SAF	38	0	283	61
ROM SAF	16	0	133	15
LSA SAF	20	0	122	25
NWC SAF	14	1	87	25
NWP SAF	10	1	28	9
H SAF	7	0	89	35
Totals	**143**	**6**	**1161**	**335**

Examples



The Sea Ice Index product will be a new product in CDOP 4. It will give information about how the sea ice conditions change, globally and regionally.

New derived product consisting of NRT surface and root zone liquid soil water content from assimilating the global ASCAT surface soil moisture products. It is available at a 24-hour time step, with a complete global daily coverage at 00:00 UTC. It is provided with a 12-hour latency and a resolution of 10 km.

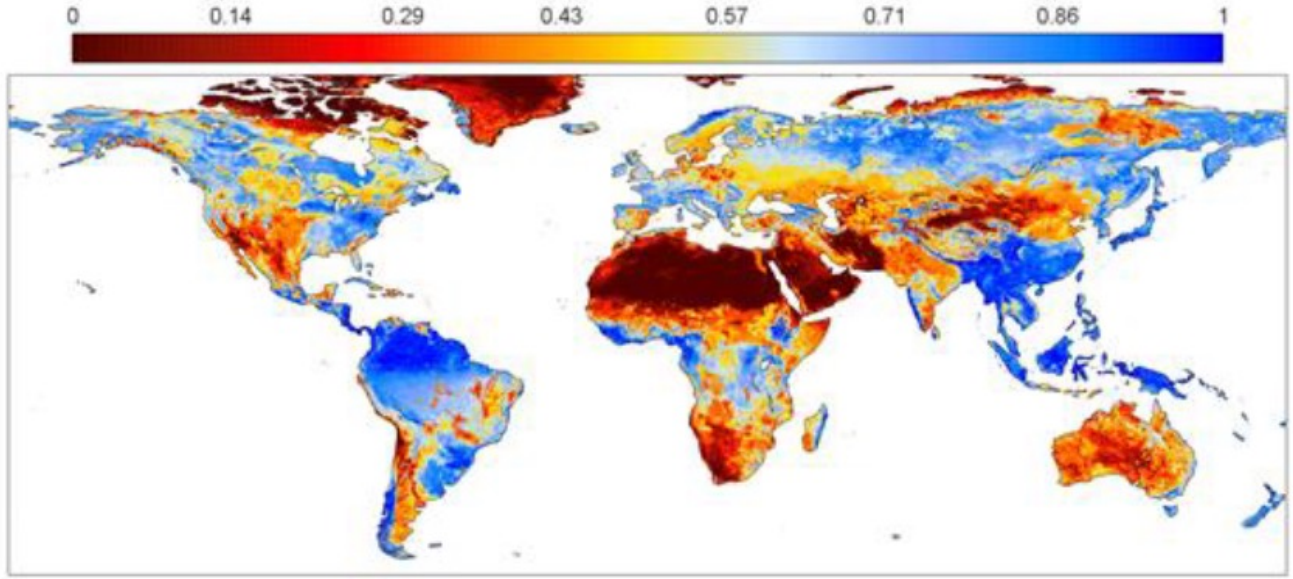


Figure 15 - Example of H26 liquid water index in the second layer (7-28 cm depth) on the 1st June 2018

Main Changes with CDOP 4

New variables and services covered by SAF product portfolio

- Several geophysical variables to be provided by SAFs the first time (e.g. Iceberg parameter, Sea Ice age, Dust profile);
- Provision of observation operators related to retrievals (sea ice);
- Integrated products (ground-based + satellite);
- Index products (e.g. sea ice, air quality);
- “Georing” based products: quasi global coverage through combination of meteorological satellites in geo orbit;
- More agile approach for software deliverables: more and faster releases in the dynamic phase after commissioning of MTG and EPS-SG.

Main Changes with CDOP 4

The consortia proposed for CDOP 4 are the same as for CDOP 3 with one exception:

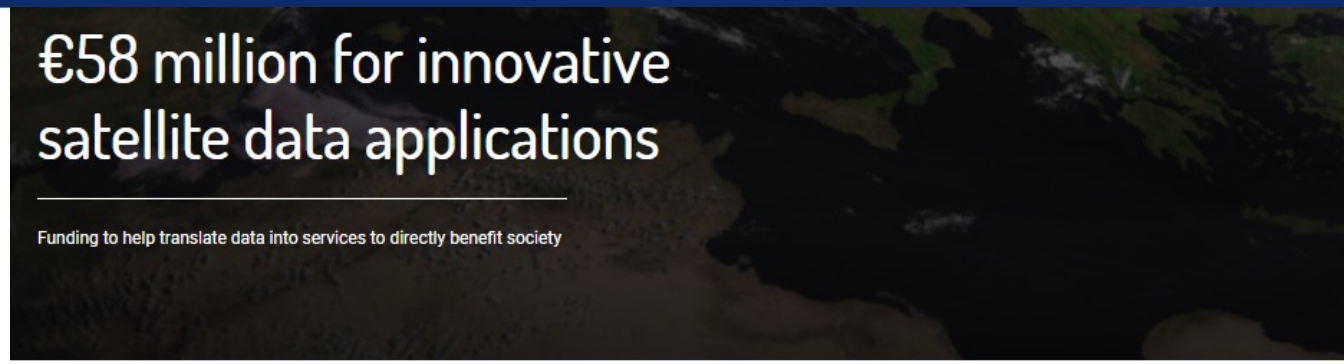
New consortium member:

Wegener Center, University of Graz, Austria joins the ROM SAF

EUMETSAT ROM SAF
RADIO OCCULTATION METEOROLOGY

EUMETSAT Council Approval

EUMETSAT Council approved on 1 July 2021 the framework of a forth CDOP of the SAF Network



Europe's meteorological satellite agency, EUMETSAT, will invest more than €58 million between 2022 and 2027 to develop innovative approaches to translate data from its satellites into services that will provide significant benefits to its users and society.

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The EUMETSAT Council has approved the funding allocation, which will go to EUMETSAT's eight Satellite Application Facilities (SAFs) to continue and expand their activities.

The SAFs are run by consortia headed by national meteorological services in EUMETSAT's Member States, working with experts from other institutions, with each specialising in a specific field, or application area.

EUMETSAT SAF Network Manager Lothar Schüller said the SAFs' services – provision of data, software and information - directly and indirectly impact the lives of citizens in the organisation's member states, and beyond, in ways they may not realise.

"The SAFs' outputs are used operationally, for example, for weather forecasting, disaster management, air traffic control and firefighting - areas that need this critical information on time, reliably and with high quality," Schüller said.

"The decentralised nature of the SAF network, distributed across EUMETSAT member states, allows for the involvement of institutions and experts who can apply their expertise to our satellite data to serve evolving needs. This complements the work done at the EUMETSAT headquarters in Darmstadt.

"The SAFs were established more than 20 years ago but the phase in front of us is very special and full of challenges and opportunities as it covers the deployment of EUMETSAT's next-generation satellite systems.

"These systems will massively increase the quality and quantity of data available and the SAFs are committed to converting this into benefits for society as quickly and effectively as possible."