

**CGMS-54-EUMETSAT-WP-10-p**  
29 May 2026

*Prepared by: EUMETSAT*  
*Agenda Item 3*  
*For information to Plenary*

<b>Subject</b>	<b>EUMETSAT updates since CGMS-53 and report on medium to long-term plans</b>
<b>In response to CGMS action/recommendation</b>	
<b>HLPP reference</b>	
<b>Executive Summary</b>	<p>This document summarises the status of EUMETSAT's current and future LEO and GEO satellite systems. The reporting period for current satellite operations is from 1 July to 31 December 2025. For future satellites, progress to date at the time of writing is included.</p> <p>Current satellite reporting covers status of the spacecraft, ground segment, data transmission, projects and services, user statistics.</p> <p>Future satellite reporting covers the mission objectives (spacecraft, payload, instruments, products) and programme status (space, system and ground segments).</p>
<b>Action/Recommendation proposed</b>	CGMS is invited to take note.



## **1 INTRODUCTION**

This paper reports on EUMETSAT's latest status and developments. The reporting period for current satellite operations is 1 July to 31 December 2025. For future satellites, progress to date at the time of writing is included.

## 2 CURRENT SATELLITE SYSTEMS

### 2.1 EUMETSAT Current GEO satellites

Sector	Satellites in orbit P=pre-operational Op=operational B=back-up L=limited availability	Location	Launch date	Details on near real time access to L0/L1 data (links)	Environmental payload and status
East Atlantic (36°W-36°E)	Meteosat-12 (Op)	0°	13 Dec 2022	<a href="#">EUMETSAT User Portal</a>	Full Disc Scanning Service (FDSS)  <b>Platform:</b> Nominal <b>FCI:</b> Nominal with minimised COM movements <b>LI:</b> Nominal <b>SAR:</b> Nominal <b>DCS:</b> Nominal <b>RMU:</b> Nominal
	Meteosat-10 (Op)	0°	5 Jul 2012		Full Earth Scanning (FES) Service  <b>Platform:</b> Nominal <b>SEVIRI:</b> Thermal Heaters Switching anomaly (reduced impact on FES) <b>GERB:</b> ON <b>SAR:</b> OFF <b>DCP:</b> ON (Back-up)
	Meteosat-11 (Op)	9.5°E	15 Jul 2015		Rapid Scan Service (RSS)  <b>Platform:</b> Nominal <b>SEVIRI:</b> Thermal Heaters Switching

					<p>anomaly (reduced impact on RSS)  <b>GERB:</b> SAFE (In orbit storage)  <b>SAR:</b> ON  <b>DCP:</b> OFF</p>
<p><b>Indian Ocean</b>  (36°E-108°E)</p>	Meteosat-9 (Op)	45.5°E	22 Dec 2005		<p>Indian Ocean Data Coverage (IODC)</p> <p><b>Platform:</b> Nominal  <b>SEVIRI:</b> Eclipse-related wobble, reduced performance for water vapour channels  <b>GERB:</b> ON (Prolonged DSM anomaly)  <b>SAR:</b> ON  <b>DCP:</b> ON</p>

*Note that MTG-S1 (Sounding: IRS and UVN) was launched on 1 July 2025. At the time of writing, MTG-S1 was still in commissioning phase.*

2.2 EUMETSAT Current LEO satellites

Orbit type ECT=Equator Crossing Time (for sun-synchronous orbits)	Satellites in orbit P=pre-operational Op=operational B=back-up, secondary L=limited availability	Equator Crossing Time (ECT) Ascending Node	Mean Altitude	Launch date	Details on near real time access to L0/L1 data (links)	Instrument payload and status
Sun-synchronous orbit "Morning"	<b>Metop-B (Primary, Op)</b>	21:30	817 km	17 Sep 2012	<a href="#">EUMETSAT User Portal</a>	<p>Direct Broadcast (AHRPT): Real-time availability of AMSU-A, ASCAT. AVHRR, GOME-2, GRAS, HIRS/4, IASI, MHS DCP messages and SEM/2 (MEDEP - TED). LRPT not available.</p> <p>Near-real-time availability of extended area coverage data by EARS.</p> <p>Near-real time availability of Level 1 data by EUMETCast.</p> <p>Alert messages of S&amp;RSAT to LUT in real time</p> <p>The latency of global data is reduced using the Antarctic Data Acquisition station (ADA) at McMurdo</p>

Sun-synchronous "Morning" orbit	<b>Metop-C (Secondary, Op)</b>	21:30	817 km	7 Nov 2018	<a href="#">EUMETSAT User Portal</a>	<p>Direct Broadcast (AHRPT): Real-time availability of AMSU-A, ASCAT, AVHRR, GOME-2, GRAS, IASI, MHS, DCP messages and SEM/2 (MEDEP + TED). LRPT not available.</p> <p>Near-real-time availability of extended-area coverage data by EARS.</p> <p>Near-real time availability of Level 1 data by EUMETCast.</p> <p>Alert messages of S&amp;RSAT to LUT in real time.</p>
Sun-synchronous "Morning" orbit	<b>Metop-SG (Commissioning – with 1 service Operational)</b>	<b>A1 (RO)</b> 21:30	835 km	13 Aug 2025	<a href="#">EUMETSAT User Portal</a>	<p>Radio Occultation (Op)</p> <p>Commissioning: IASI-NG, MWS, METImage, S5 UVNS, 3MI</p> <p>Near-real time availability by EUMETCast for operational RO data.</p>
Non-sun synchronous (66° inclination)	<b>JASON-3 (Joint Altimetry Satellite Oceanography Network)</b>  (Op)	Not applicable	1336 km	17 Jan 2016	<a href="#">EUMETSAT User Portal</a>	<p><b>Operational:</b></p> <p>AMR CARMEN DORIS LPT LRA (NASA) Poseidon-3B TRSR</p>

66° inclination  Sun-synchronous "afternoon" orbit ECT between 19:00-24:00 and between  07:00-12:00	<b>Sentinel-3A (Op)</b>	22:00	815km	16 Feb 2016	<a href="#">EUMETSAT User Portal</a>	<b>Operational:</b> DORIS GPS (ESA) LRR (ESA) MWR (Sentinel-3) OLCI SLSTR SRAL
66° inclination  Sun-synchronous	<b>Sentinel-3B (Op)</b>	22:00	815km	25 Apr 2018	<a href="#">EUMETSAT User Portal</a>	<b>Operational:</b> DORIS GPS (ESA) LRR (ESA) MWR (Sentinel-3) OLCI SLSTR SRAL
Non sun-synchronous (reference altimetry orbit) (66° inclination)	<b>Sentinel-6A (Op)</b>	Not applicable	1336km	21 Nov 2020		<b>Operational:</b> AMR-C DORIS GNSS-RO (Sentinel-6) GPS (ESA) HRMR LRA (NASA) Poseidon-4 RMU
Non sun-synchronous (66° inclination)	<b>Sentinel-6B (Commissioning)</b>	Not applicable	1336km	17 Nov 2025		<b>Commissioning:</b> AMR-C DORIS GNSS-RO (Sentinel-6) GPS (ESA) HRMR LRA (NASA) Poseidon-4

						RMU
--	--	--	--	--	--	-----

## 2.3 Status of current GEO satellite systems

### 2.3.1 Mission objectives, payload/instruments, products

The Meteosat series of satellites has been providing crucial weather data for weather forecasting since 1977. Building on the decades-long legacy of Meteosat's first and second-generation satellites, Meteosat Third Generation (MTG) will revolutionise storm prediction, enhance weather forecasts, extend climate records, and provide a wide range of essential observations. MTG is also the first geostationary weather satellite system with the capability to detect lightning data over Europe, Africa, the Middle East and parts of South America, and the surrounding waters.

Observations taken by MTG satellites will support the development of products and services that can provide major contributions to firefighting, air quality forecasts, air traffic control, search and rescue missions, disaster risk reduction, agricultural productivity, marine and coastal management, sustainable energy production, and much more. For further information relating to Meteosat Third Generation please visit the [EUMETSAT User Portal](#).

Three Meteosat Second Generation satellites support the 0° Full Earth Scanning (FES) service, Rapid Scanning Service (RSS) and Indian Ocean Data Coverage (IODC) missions. One MTG Imager satellite supports the prime 0° Full Disc Scanning Service (FDSS) mission. MTG-S1 was successfully launched on 1 July 2025 and is currently under commissioning.

The Meteosat system currently comprises three operational satellites of the Meteosat Second Generation (MSG) (Meteosat 9, 10 and 11), as well as one operational Meteosat Third Generation (MTG) satellite (Meteosat-12) providing services over Europe, Africa and over the Indian Ocean. Meteosat-12 is providing Prime FDSS at 0°, Meteosat-10 is providing parallel FES at 0°, Meteosat-11 is providing RSS at 9.5°E and Meteosat-9 is providing IODC FES at 45.5°E.

Data Collection Services (DCS) are operational from Meteosat-9 and Meteosat-12. The GEOSAR payloads are operational on Meteosat-9, Meteosat-11 and Meteosat-12. The Meteosat-10 GEOSAR payload was switched off after the 0° GEOSAR service transitioned to Meteosat-12 on 7 November 2024.

MTG-S1 (Sounding: IRS and UVN) was launched on 1 July 2025. At the time of writing, MTG-S1 was still in commissioning phase.

The introduction of Meteosat Third Generation (MTG) satellites into the operational Meteosat constellation ensures the continuity and improvement of the geostationary services. The [Flexible Combined Imager](#) (FCI) continues the very successful operation of the Spinning Enhanced Visible and Infrared Imager (SEVIRI) on MSG. Through the [Lightning Imager](#) (LI) instrument, MTG offers the additional capability to detect lightning events across a broad area over Europe, Africa, and the surrounding waters. With start of operations of the first MTG sounding satellite, data from the [Infrared Sounding](#) (IRS) Service will complement the imaging data. Together, these data will provide a major boost to very short-term nowcasting and numerical weather prediction

models. The addition of the Copernicus Sentinel-4 Ultraviolet-Visible-Near Infrared (UVN) spectrometer on the MTG sounding satellite will allow for the monitoring of air quality, trace gases and aerosols over Europe, hourly at high spatial resolution.

When complete, the full operational MTG constellation will consist of three satellites: two imaging satellites and one sounding satellite. Together, these data will provide near real time, 3D snapshots of the thermodynamic structure of the atmosphere.

### **2.3.2 Status of spacecraft**

During the period from 1 July to 31 December 2025, the Meteosat satellites have performed well, with the systems stable.

#### **2.3.2.1 Meteosat-12**

Meteosat-12 was declared primary satellite for the 0° Full Disc Scanning Service (FDSS) on 16 June 2025. There was a slightly reduced service availability level of FCI in July, due to a planned decontamination and an instrument anomaly. Otherwise, the services were nominal.

#### **2.3.2.2 Meteosat-11**

Meteosat-11 provides the Rapid Scanning (RSS) Service from 9.5°E. The following events affected Service Availability:

Monthly (48 hours) RSS breaks with no gap-filling (15-17 July, 12-14 August, 9-11 September, 7-9 October, 4-6 November, 2-4 December, 30 December – 1 January)

Meteosat-11 had to take over the FES Service from Meteosat-10 on 11-12 November, due to the Meteosat-10 Safe mode. This resulted in an outage of 26 hours on the 9.5° RSS service.

#### **2.3.2.3 Meteosat-10**

Meteosat-10 was primary satellite for the 0° Full Earth Scanning (FES) service until succeeded by Meteosat-12 on 16 June 2025. Meteosat-10 is now the secondary satellite providing a parallel FES service.

Generally, Meteosat-10 was nominal through the period, except for November, where there was a slightly reduced service availability and operational performance. This was due to a single event upset on the power conditioning unit, causing a safe mode. This is a re-occurrence of a known limitation. The FES outage was limited to 2.5 hours, as Meteosat-11 took over the FES mission. Total outage of Meteosat-10 FES was 26 hours.

#### 2.3.2.4 Meteosat-9

Meteosat-9 provides the Indian Ocean Data Coverage (IODC) service from 45.5°E.

The following events affected Service Availability:

August-September: 164 Repeat Cycles (RCs) non-nominal (out of 5280 images), due to eclipses and Earth Sensor effects.

GERB1 instrument suffered from frequent mirror sticking events during the reporting period, with limited recovery ongoing. It should be noted this instrument is operating well past the initial lifetime, entering its 20th year of operations in Dec 2025.

#### 2.3.3 Ground segment matters

The Multi-mission ground segment has performed well overall.

The **MSG specific ground segment** has generally performed well, with the following points to note:

- On 25 July 2025, there were 17 missing Repeat Cycles (RCs) for the Meteosat-11 RSS due to an automatic server reboot of the Image Production Facility (IMPF).
- The generation and dissemination of the Multi-mission Precipitation Estimate (MPE) product was discontinued for the IODC mission (on 4 June) and the RSS mission (on 31 July). This followed NOAA's statement that they can no longer guarantee the provision of SSMIS data from its DMSP satellites, which are essential input data for this product. The MPE product was already terminated earlier for the FES (0 degrees) mission, in August 2019.
- On 27 October 2025, there were 9 missing Repeat Cycles (RCs) for the Meteosat-11 RSS and 18 associated RCs for the Level-2 Meteorological Products due to an Image Production Facility (IMPF) server failure.
- From 4 November 2025, parallel dissemination of Meteosat-10 Meteorological Products was being performed in preparation for a change to the VIS and NIR SEVIRI channel calibration on Meteosat-9, Meteosat-10 and Meteosat-11, in March 2026.
- On 16 and 18 November 2025, a total of 12 Meteosat-10 FES Repeat Cycles (RCs) were unavailable due to ground segment anomalies.
- On 20–21 November 2025, Meteosat-11 RSS Level-2 Meteorological Products were unavailable for 3.5 hours due to file transfer problems within the ground segment. On 24 December, a similar issue resulted in slightly more than 1.5 hours of unavailability of Meteosat-11 RSS Level-2 Products.

The **MTG specific ground segment** has generally performed well, with the following points to note:

- April-July 2025: LI Level-2 products occasionally exceeded timeliness. Since end of July this anomaly was mitigated by regulating the lightning event rate from the Level-1 processor (IDPF) and fully addressed with a Level-2 Processing facility (L2PF) update deployed on 8 December.
- On 30 July 2025 and 2 August 2025: LI L2 and FCI L2 production was interrupted for 2-3 hours each day due to Level-2 processing facility (L2PF) anomalies

- On 7-11 October 2025, LI data were unavailable for 81 hours due to an instrument anomaly, with an additional 5 hours required to re-establish nominal LI Level-2 production.
- On 28 October 2025 and 9 December 2025, following planned Met-12 Station-Keeping maneuvers, the data unavailability or degradation window was extended due to a facility anomaly.

The following planned enhancements were implemented during the reporting period:

- On 11 August, the Level-2 processing facility (L2PF) was upgraded to a new version, including stability fixes that reduced missing, partial and scientifically corrupted products, as well as scientific processor improvements enhancing the quality of FCI and LI products.
- On 11 November 2025, the quality status of the following Meteosat-12 FCI Level-2 data was upgraded from pre-operational to operational: CLM, CRM, OCA, ASR, GII and OLR.
- On 8 December 2025, the Level-2 processing facility (L2PF) was upgraded to a new version including a minor revision to the OCA retrieval.

#### **2.3.4 Data Access Services**

EUMETSAT's data dissemination via EUMETCast Satellite was nominal through the period. EUMETCast Terrestrial was also generally good, except for November and December when two network maintenance events brought the measured availability of the service below target; the underlying issues have been recognised and measures put in place to improve service quality in the future.

EUMETView provides functionalities for displaying visualisations and creating maps from across the EUMETSAT product range. EUMETView is an online map service that provides these visualisations through a customisable web user interface and an enhanced set of Open Geospatial Consortium (OGC) standard APIs. The monthly service availability for the online Data Access Services was in general well above targets throughout the reporting period.

The Data Store provides access to EUMETSAT data through a web interface and a suite of APIs, incorporating data tailoring capability. The EUMETSAT Data Access Client (EUMDAC) greatly simplifies access to all capabilities of the Data Store and Data Tailor to enable the automation of downloads. It is made available to users as a Python library and a command-line interface (CLI). The service also met its targets during the period.

EUMETSAT is in the process of moving from GTS to WIS 2.0, and this migration should be complete by the end of 2026, as the GTS will stop from 2030 according to WMO.

### 2.3.5 Third Party Data Services

All Third Party Data Services (GEO data services, LEO data services, other data and products) were nominal during the reporting period, except for the following:

Service	Date and Event during reporting period
<b>Third-Party GEO Data Services</b>	
GOES-18/19	6-21 November 2025 – missing data
SSMIS	1-9 October 2025 – missing data
FY-2G	12-13 August 2025 – missing data 7-18 December 2025 – missing data
INSAT-3DS	5-6 October 2025 – missing data 11-13 October 2025 – missing data 2-3 November 2025 – missing data 6-8 November 2025 – missing data
<b>Third-Party LEO Data Services</b>	
SMAP	28-30 October 2025 – missing data 19-20 November 2025 – missing data
GPM Core	7-8 September 2025 – missing data
GOSAT	8-9 July 2025 – missing GOSAT1/2 data 18-23 September 2025 – missing GOSAT1/2 data 11-14 October 2025 - missing GOSAT1 data 9-10 December 2025 – missing GOSAT1 data 18-31 December 2025 – missing GOSAT1 data
S-NPP	11-12 November 2025 – missing data
Oceansat-3	21-25 August 2025 – missing data
FMI SAMPO	22 July – 6 August 2025 – missing data
EarthCARE	19-21 September 2025 – missing data 22-28 October 2025 – missing data 18-20 November 2025 – missing data

Service	Date and Event during reporting period
HY-2	26 June – 6 July 2025 – missing data 1-21 August 2025 – missing data 26-31 August 2025 – missing data 2-10 November 2025 – missing data
FY-3D & FY-3E	18-19 November 2025 – missing data 6-11 December 2025 – missing data
GCOM-W	22-23 September 2025 – missing data

Note: Reporting is for unplanned outages over a period longer than 24 hours

### 2.3.6 User statistics

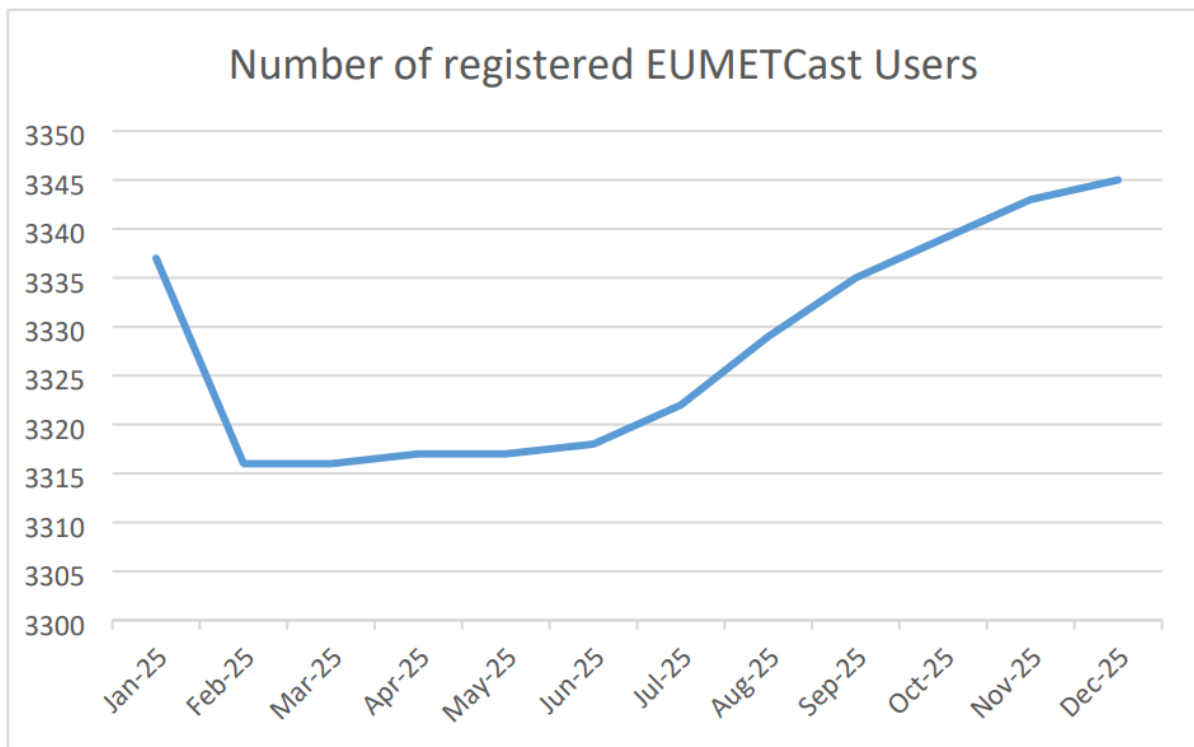
#### EUMETCast

EUMETCast is the primary operational service to push products to users to meet the needs of our users' near-real time operational services.

The status of EUMETCast registrations (total of both Satellite and Terrestrial) on 31 December 2025 was the following (as shown in Figure 1):

- Total number of registered EUMETCast stations (EKUs issued): 5,091
- Total number of registered users (some users have more than one station): 3,345.

The slight drop in the number of EUMETCast users at the beginning of 2025 was due to some 'cleaning' in the user database in preparation for the migration to the user portal.



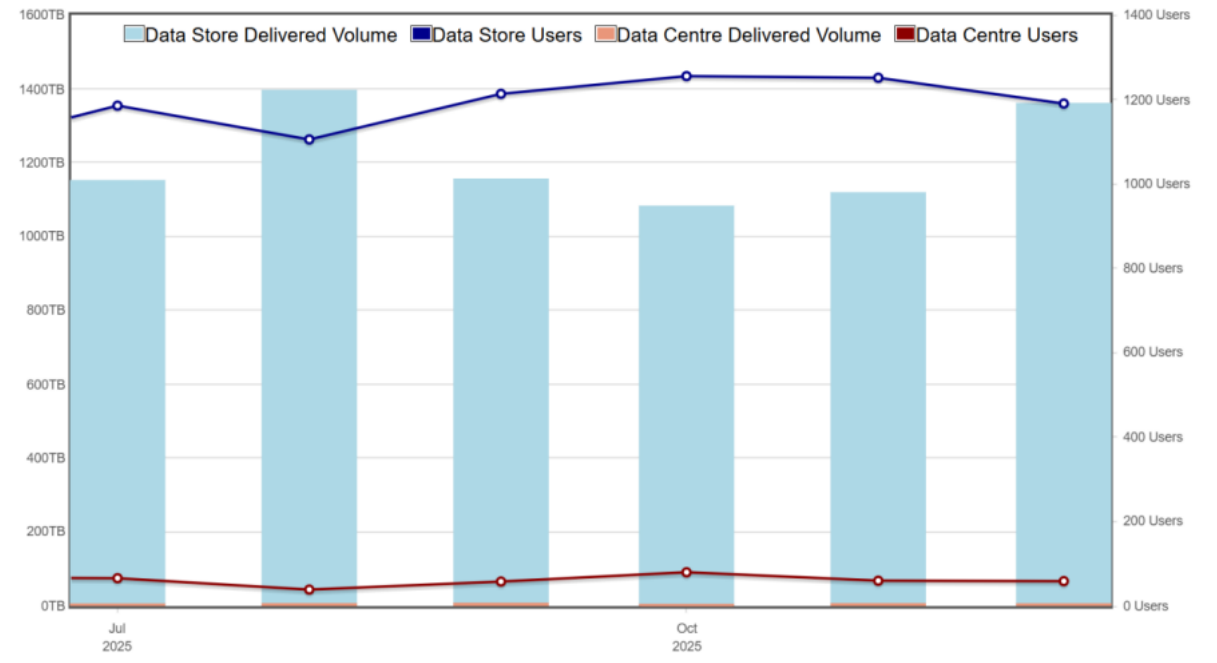
**Figure 1: Number of registered EUMETCast Users**

#### EUMETSAT Data Store

The EUMETSAT Data Store provides pull access to EUMETSAT data through a web interface and a suite of APIs, incorporating data tailoring capability. Service availability of the Data Store and Data Tailor have been above targets through the period.

The number of monthly unique users and the data volume of products downloaded from the Data Store and Data Centre services are shown in the chart below (Figure 2). Enhanced download speeds and throughput of the Data Store were implemented at the end of January.

There has been a trend over the past few years, of users transitioning from the Data Centre to the Data Store. The intention is to completely phase out the direct user access to the Data Centre and implement a new modern Long-Term Archive (LTA) that will interact with the new data services by 2027. As a general transition measure, already now, access to a specific data collection is disabled in the Data Centre once that collection is made available via the Data Store.



**Figure 2: Number of monthly unique users and the data volume of products downloaded from the Data Store and Data Centre services**

## 2.4 Status of current LEO satellite systems

### 2.4.1 Mission objectives, payload/instruments, products

The **EUMETSAT Polar System (EPS)** has been providing global data for both operational meteorology and support to climate monitoring since the first Metop satellite was launched in 2006. The Metop satellites fly in a polar orbit at an altitude of approximately 817 km. The combination of instruments on board the Metop satellites have remote sensing capabilities to observe the Earth by day and night, as well as under cloudy conditions and are a key source of real-time observations for severe weather like the “polar lows” at higher latitudes. Measurements by infrared and microwave radiometers and sounders on board Metop provide NWP models with global three-dimensional information on the temperature and humidity of the atmosphere with a high vertical resolution. The sensors onboard Metop satellites also support other areas like oceanography, hydrology, atmospheric composition, land surface applications and climate monitoring. Further information on the instruments can be found [here](#), with the primary instruments being: the Infrared Atmospheric Sounding Interferometer (IASI), the Advance SCATerometer (ASCAT), the Advanced Microwave Sounding Unit-A (AMSU-A), the Microwave Humidity Sounder (MHS), the Advanced Very High Resolution Radiometer (AVHRR) and the High-resolution Infrared Radiation Sounder (HIRS/4).

The [Metop Global Data Service \(GDS\)](#) Metop Global Data Service (GDS) provides near real-time and historical level 1 and level 2 global data to the user community. The Regional Data Service delivers level 1 and level 2 near real-time data with a reduced spatial coverage, mostly covering Europe and North Atlantic regions. This service is provided by the [EUMETSAT Advanced Retransmission Service \(EARS\)](#), a network of Advanced High Resolution Picture Transmission (AHRPT) reception stations. Metop satellites broadcast direct readout data from their instruments to [local user stations](#) around the world.

The Metop satellites and the ground segment collectively form the EUMETSAT Polar System (EPS), which is Europe’s contribution to the Initial Joint Polar System shared with [NOAA](#).

The current operational Metop satellite system comprises two operational satellites of the Metop first generation series, phased approximately half an orbit apart: Metop-B (launched 17 Sep 2012) is the Prime satellite, and Metop-C (launched 07 Nov 2018) is the secondary satellite. The prime satellite (Metop B) is supported by NOAA provided Antarctic Data Acquisition to deliver enhanced timeliness.

**EPS Second Generation (EPS-SG)** is EUMETSAT's next generation of polar-orbiting satellites, following on from earlier successful Metop missions. There will be two series of spacecraft, Metop-SG-A and B, flying on the same mid-morning orbit as the current Metop satellites. The orbit height will be in the range 823-848km (dependent on latitudes). The first satellite of this new series (Metop-SG A1) was launched on 13 Aug 2025, and at the time of writing, is still in commissioning phase, although one of the services (Radio Occultation) has already been declared operational.

Metop-SG satellites have three new instruments ([3MI](#), [MWI](#) and [ICI](#)), two of which have never been flown before on an operational satellite, which will provide observations of precipitation, [aerosols](#) and ice clouds. Numerical weather prediction at regional and global scales will benefit from the EPS-SG enhanced infrared, microwave (from instruments such as [MWS](#)), and [GRAS-2](#) soundings of temperature and humidity, polar atmospheric motion vectors extracted from optical imagery, novel precipitation and cloud measurements of imagers in the optical, sub-millimetre and microwave spectra, and high-resolution ocean surface wind-vector and soil moisture measurements extracted from [scatterometer \(SCA\)](#) observations.

Metop-SG A also carries the [Copernicus Sentinel-5 spectrometer \(UVNS\)](#) for measurements of trace gases which, in combinations with those of [IASI-NG](#), 3MI and [METImage](#), will improve air quality forecasts produced by the [Copernicus Atmosphere Monitoring Service \(CAMS\)](#).

To free up a slot for Metop-SG A1, Metop-B is now drifting towards Metop-C and will be a quarter orbit phase separated from Summer 2026.

#### 2.4.2 Status of spacecraft

During the reporting period, both Metop-B and -C have performed well, with nominal operations, and above target service availability and operational performance.

Metop-B continues as the primary Metop satellite in view of the inferior performance and outlook of the Metop-C microwave sounders. Metop-B full orbit dumps over Svalbard are routinely complemented by half-orbit dumps acquired over McMurdo to improve data timeliness. Metop-B will continue to be the Primary Metop satellite during its drifting phase until end-of-life, with this status reviewed annually.

Note that the HIRS-4 instrument onboard Metop-B was permanently deactivated in January 2025.

#### 2.4.3 Ground segment matters

The **EPS specific ground segment** has performed nominally through the period.

The **EPS-SG specific ground segment** was declared ready for initial operations during the period, ahead of the launch of Metop-SG A1 and the start of commissioning activities. The EPS-SG ground segment also started to provide Early Operational Support to NOAA's Joint Polar Satellite System (JPSS), via the EPS-SG ground stations.

## 2.4.4 Data Access Services

EUMETSAT's LEO satellites use the same multi-mission dissemination services, as for the GEO satellites: EUMETCast, EUMETView and the Data Store, as described in section 2.3.4.

## 2.4.5 Projects, Services

### Additional Third Party Data Services

Date	Product Name	Information
<b>28 August</b>	NOAA's SAR Tropical Cyclone Winds	Start of distribution on EUMETCast Terrestrial  <a href="https://user.eumetsat.int/news-events/news/noaa-s-sar-tropical-cyclone-winds-on-eumet-cast">https://user.eumetsat.int/news-events/news/noaa-s-sar-tropical-cyclone-winds-on-eumet-cast</a>
<b>17 September</b>	SNPP OMPS Limb Profiler Ozone EDR	Product updated  <a href="https://user.eumetsat.int/news-events/news/update-to-snpp-omps-limb-profiler-ozone-edr">https://user.eumetsat.int/news-events/news/update-to-snpp-omps-limb-profiler-ozone-edr</a>
<b>6 October</b>	NOAA-21 OMPS Limb Profile EDR	Start of distribution on EUMETCast Terrestrial  <a href="https://user.eumetsat.int/news-events/news/noaa-21-omps-limb-profile-edr-on-eumet-cast">https://user.eumetsat.int/news-events/news/noaa-21-omps-limb-profile-edr-on-eumet-cast</a>
<b>12 November</b>	TROPICS mission	End of Life of the TROPICS satellites, TROPICS-03 and TROPICS-05, and the Level-1b data service
<b>11 December</b>	GOES GLM lightning data	Change to the dissemination of GOES GLM lightning data, from 5-minute files to 20-second files  <a href="https://user.eumetsat.int/news-events/news/change-to-the-dissemination-of-goes-glm-lightning-data">https://user.eumetsat.int/news-events/news/change-to-the-dissemination-of-goes-glm-lightning-data</a>
<b>15 December</b>	NOAA's ATMS Sensor Data Records	Product updated, resulting in an improved geolocation accuracy  <a href="https://user.eumetsat.int/news-events/news/update-to-noaa-s-atms-sensor-data-records">https://user.eumetsat.int/news-events/news/update-to-noaa-s-atms-sensor-data-records</a>

## Data Collection Service (DCS)

The DCS is currently supported by Meteosat-12 (0°) and Meteosat-9 (45.5°E) with a reliability over the reporting period greater than 99%. As of the end of 2025, there were 1,859 registered DCPs, belonging to 147 DCP operators, deployed by the 67 countries. Of the total number of registered DCPs, there were 621 units in active operation.

## New, improved and discontinued services

Product services listed below have become operational unless otherwise stated. Where EUMETCast is referenced, this implies full dissemination to all users in Europe unless otherwise stated. Where SAF products are listed, these entries refer only to product releases on EUMETCast. Note that minor version changes are not listed.

## **Meteosat products generated at Headquarters**

<b>Date</b>	<b>Product Name</b>	<b>Information</b>
<b>3 July</b>	Met-12 FCI Clear Sky Reflectance Map (CRM) and Active Fire Monitoring (FIR)	Start of distribution of the netCDF products on EUMETCast, and start of distribution of the FIR CAP product on the Data Store
<b>31 July</b>	RSS Multi-Sensor Precipitation Estimate (MPE)	Discontinued
<b>11 August</b>	Met-12 FCI and LI level-2 products	New version of MTG FCI and LI level-2 processors deployed  <a href="https://user.eumetsat.int/news-events/news/mtg-level-2-product-enhancements">https://user.eumetsat.int/news-events/news/mtg-level-2-product-enhancements</a>
<b>5 November</b>	Met-12 FCI Active Fire Monitoring (FIR) product	Quality status upgraded from demonstrational to pre-operational
<b>11 November</b>	Met-12 FCI CLM, CRM, OCA, ASR, GII and OLR	Quality status upgraded from pre-operational to operational
<b>10 December</b>	Met-12 FCI CT and CTTH products	Start of distribution on EUMETCast and the Data Store

## Metop products generated at Headquarters

Date	Product Name	Information
<b>14 July</b>	Metop ASCAT Soil Moisture products	Discontinued and replaced by new, upgraded soil moisture products generated by the H SAF  <a href="https://user.eumetsat.int/news-events/news/changes-to-ascat-soil-moisture-products">https://user.eumetsat.int/news-events/news/changes-to-ascat-soil-moisture-products</a>
<b>21 August</b>	IASI 3D Winds	Start of distribution on EUMETCast and WIS2.0.  <a href="https://user.eumetsat.int/news-events/news/new-metop-iasi-3-d-winds">https://user.eumetsat.int/news-events/news/new-metop-iasi-3-d-winds</a>
<b>27 August</b>	Metop ASCAT L1	Release of ASCAT L1 Product Processing Facility (PPF) version 11.6, introducing two bug fixes with low to no impact on end users. The first bug fix improves stability and avoids rare cases of data gaps close to midnight and in the case of leap seconds. The second bug fix makes invalid Land Contaminations Ratio (LCR) consistent near data gaps. The release is for both global and regional ASCAT data
<b>6 November</b>	Metop Polar Multi-sensor Aerosol product (PMAp)	Release of a new version, V2.2.8.  <a href="https://user.eumetsat.int/news-events/news/update-to-metop-polar-multi-sensor-aerosol-product">https://user.eumetsat.int/news-events/news/update-to-metop-polar-multi-sensor-aerosol-product</a>

## 2.4.6 User statistics

Overall user statistics applicable to these services are provided in Section 2.3.6.

## 2.5 Status of Copernicus Missions

This section of the report covers activities under the EUMETSAT Third Party Programme on the implementation of the Copernicus component of the space programme of the European Union in the period 2021-2028, referred to as Copernicus 2.0.

Tasks entrusted by the European Commission to EUMETSAT include activities related to Sentinel-3, Jason-3, Sentinel-6, Sentinel-4 and Sentinel-5, as well as Copernicus data access through WEKEO, user uptake, awareness and communication on EUMETSAT's Copernicus activities, and support to future Copernicus missions including CO2M, CIMR, Cristal and Sentinel-3 Next Generation and future altimetry missions. Copernicus funded activities related to the build-up of operations for Sentinel-4 and Sentinel-5 continued towards the launches of MTG-S1 and EPS-SG A1 in July and August, respectively.

The Copernicus data services operated by EUMETSAT serve the Copernicus Services, with a specific focus on the Marine Environment, Emergency Management, Climate and Atmosphere Monitoring services (CMEMS, C3S and CAMS) and the wider Copernicus user community. Further close interactions are taking place with the Copernicus Land Monitoring Service in the context of the Copernicus WEKEO Data Access System.

The European Commission is the programme manager of the Copernicus component of the EU Space Programme and regular reporting and interactions between the Commission and EUMETSAT take place, as per the respective provisions of the Copernicus Contribution Agreement presents the status of the missions operated by EUMETSAT on behalf of the European Commission.

### 2.5.1 Sentinel-3

The Copernicus Sentinel-3A (launched on 16 Feb 2016) and Sentinel-3B (launched on 25 Apr 2018) satellites collect observations of global ocean colour, sea surface temperature and sea surface height. The Sea and Land Surface Temperature Radiometer (SLSTR) also monitors atmospheric aerosols, cloud properties and fires (both over land and for ocean gas flares).

The satellites carry three instrument packages focusing on high-accuracy optical, thermal and altimetry data for marine and land services:

- Optical: OLCI for medium resolution marine and terrestrial optical measurements.
- Thermal: Sea and Land Surface Temperature Radiometer (SLSTR) for marine and terrestrial thermal measurements.
- Altimetry: SAR Radar Altimeter (SRAL) together with the MicroWave Radiometer (MWR) and Precise Orbit Determination (POD) provide measurements for the altimetry mission (S3 altimetry).

Sentinel-3C will be launched later in 2026, to make this a three-satellite constellation. More information on Sentinel-3 can be found [here](#).

### **2.5.2 Jason-3**

Jason-3 (launched on 17 Jan 2016) provides data on the decadal (10-yearly) oscillations in large ocean basins, such as the Atlantic Ocean; mesoscale variability, surface wind and wave conditions. This data is vital to our understanding of weather forecasting and climate change monitoring.

Altimetry data from Jason-3 helps in the creation of detailed decade-long global observations and analyses of El Niño and La Niña, providing insights into ocean circulation and its effects on climate; ocean tides; turbulent ocean eddies, and marine gravity.

Jason-3 has a payload of several instruments: the Poseidon-3B altimeter, the Advanced Microwave Radiometer (AMR), three location systems and two experimental instruments. The primary instrument on Jason-3 is the radar altimeter. The altimeter measures sea-level variations over the global ocean with very high accuracy (1.3in or 3.3cm, with a goal of 1in or 2.5cm).

More information on Jason-3 can be found [here](#).

### **2.5.3 Sentinel-6**

Copernicus Sentinel-6 provides global sea surface height observations for climate monitoring and ocean and seasonal forecasts; measurements of wind speed at the ocean surface and significant wave height, and high-resolution vertical profiles of temperature, to assess temperature changes in the troposphere and stratosphere and to support Numerical Weather Prediction.

Sentinel-6 MF is operational and was launched on 21 November 2020.

Sentinel-6B was successfully launched on 17 November 2025, followed by a successful 3-days LEOP. The Satellite In-Orbit Validation started on 20 November with all instruments switched on and healthy by 25 November. The first image was generated after less than 24 hours. Sentinel-6B reached its final orbit in mid-December. The tandem phase with Sentinel-6 MF (with 30s separation) will continue until the end of the commissioning activities planned for October 2026. The SatIOV check point, led by ESA and hosted by EUMETSAT, took place February 2026.

The satellites carry the following instruments for altimetry and radio occultation purposes: The Poseidon-4 dual frequency (C/Ku-band) nadir-pointing radar altimeter (Poseidon-4), the Multifrequency Advanced Microwave Radiometer for Climate (AMR-C), Precise Orbit Determination (POD) and the GNSS Radio Occultation sensor (GNSS-RO).

More information on Sentinel-6 can be found [here](#).

#### **2.5.4 Sentinel-4**

Copernicus Sentinel-4 will monitor air quality, trace gases and aerosols over Europe at high spatial resolution every hour during the day.

The Sentinel-4 instrument, the Ultraviolet Visible Near-infrared (UVN) spectrometer, is onboard EUMETSAT's Meteosat Third Generation Sounder satellite (MTG-S), which was launched on 1 July 2025.

It will work with the onboard InfraRed Sounder (IRS) to monitor ozone, nitrogen dioxide, sulphur dioxide and other trace gases.

The data will be used by the Copernicus Atmosphere Monitoring Service (CAMS) and will support air quality, pollution and climate monitoring.

Sentinel-4 is currently in commissioning phase.

More information on Sentinel-4 can be found [here](#).

#### **2.5.5 Sentinel-5**

Copernicus Sentinel-5 will monitor air quality, trace gases and aerosols at high spatial resolution with daily global coverage.

The Sentinel-5 instrument, the Ultraviolet Visible Near-infrared Short-wave infrared (UVNS) spectrometer, is onboard EUMETSAT's Metop Second Generation (Metop-SG A) satellites in polar orbit.

The UVNS instrument will work together with the other onboard instruments, which include the Infrared Atmospheric Sounding Interferometer (IASI-NG), the Visible Infrared Imager (METImage) and the Multi-viewing Multi-channel Multi-polarisation Imager (3MI).

The mission will monitor nitrogen dioxide, ozone, sulphur dioxide, methane, carbon monoxide, and other trace gases.

The data will be used by the Copernicus Atmosphere Monitoring Service (CAMS) and will support global air quality and pollution monitoring and climate applications.

Sentinel-5 is currently in commissioning phase.

More information on Sentinel-5 can be found [here](#).

## 2.6 Status of spacecraft

Commented [JR1]: Need this to be numbered 2.6

### 2.6.1 Sentinel-3

Commented [JR2]: This would be 2.6.1 etc

Nominal operations performed for the Sentinel-3A and -B satellites. In parallel, EUMETSAT is progressing with the preparations for the launch of Sentinel-3C later in 2026.

Sentinel-3A and -3B flight operations were generally nominal. No significant satellite anomalies occurred in this reporting period with the overall spacecraft availability of both Sentinel-3 satellites and instruments close to 99.9%.

### 2.6.2 Jason-3

Jason-3 Flight operations have mostly been nominal over the reporting period with the spacecraft and the shared ground segment performing well. In June 2025, Jason-3 transitioned to the final Long Repeat Orbit (LRO) after the end of the tandem phase with Sentinel-6A.

At the Jason-3 Joint Steering Group (JSG) meeting on 18 June, all partners confirmed their support for an extension of mission operations until the end of 2027. The extension was formalised through an amendment of the Memorandum of Understanding in December. Beyond 2027, partners discussed that a major refresh of several components would be needed, increasing costs and risks, making a further extension unlikely with the present information.

### 2.6.3 Sentinel-6

No significant satellite issues were identified with the operational Sentinel-6 MF during the reporting period.

Sentinel 6-B was launched and entered commissioning phase.

## 2.7 Ground Segment Matters

Commented [JR3]: Need this to be 2.7

### 2.7.1 Sentinel-3

Commented [JR4]: This would be 2.7.1 etc

The performance of the Payload Data Processing system was generally good with no significant anomalies to report.

### 2.7.2 Jason-3

The main significant issues affecting the availability or timeliness of products to users during the year were:

- During July, several passes from the NOAA Fairbanks ground station were lost due to the major wildfires in Alaska (see Sentinel-6 section below for details) affecting communication lines with the station. Jason-3 passes were rerouted to the alternative Wallops ground station to compensate for the outages.

- Between 9 and 12 August, multiple issues with the Usingen 2 (USG2) ground station resulted in data losses. The root cause was traced to a faulty modulator which has since been replaced. Operations were swapped to the Usingen 1 (USG1) station during the investigation and maintenance period.
- Between 27 and 30 December, some passes suffered from HPA failures in USG2 causing inability to command some passes. HPA has been repaired, and operations are back to nominal.
- L3 SLA production stopped from 23 November to 9 December due to a CNES processor error. Users were informed through the UNS, and production restarted on 10 December. The issue has been fixed.

### 2.7.3 Sentinel-6

Starting from 4 July, large wildfires in Alaska, south of the Fairbanks City along the main highway running toward Anchorage, started to impact the primary and secondary NWAWE communications to EUMETSAT. Operational traffic was moved to the tertiary low-bandwidth circuit path that traverses through Palmer, Alaska. The operational, engineering, and network teams performed load-shedding of large data to ensure satellite health and safety (telemetry / commanding) was minimally impacted by network saturation on the tertiary link. In addition, the NOAA Satellite Operations moved all possible (NOAA) missions out of Fairbanks to other supporting ground stations. From 8 July, the network fiber splicing crews started moving into affected areas to start repairing and/or rerouting connections. Intermittent network link speeds occurred during this time. On 11 July, Alaska Communications secured a temporary backhaul circuit and migrated all traffic to that circuit. This temporary communication link re-established higher bandwidth between Fairbanks and EUMETSAT.

The following operational mitigation activities were executed during this time:

- All Sentinel-6 MF commanding was moved to the Kiruna ground station;
- Sentinel-6 MF On-board Computer Mass memory downlink operations were suppressed over Fairbanks;
- NOAA doubled the storage capacity at Fairbanks to up to 28 days to support backlog recovery.

The final impact was visible in the July NRT KPIs. The STC and NTC KPIs were unaffected.

## 2.8 Data Dissemination

EUMETCast and the Data Store are described in section 2.3.6 for both Mandatory and Copernicus missions.

Specifically for Copernicus, in 2018, the European Commission launched the Copernicus **WEKEO** platform, a groundbreaking initiative providing seamless, unified access to Copernicus data, advanced processing resources and tools, and relevant additional datasets. Jointly developed by leading Copernicus institutions: EUMETSAT, ECMWF, EEA, and Mercator Ocean International, WEKEO delivers comprehensive environmental data, user-friendly processing environments, and dedicated expert user support. Click here for further information: <https://wekeo.copernicus.eu/>.

Commented [JR5]: Need this to be 2.8

### 2.8.1 Sentinel-3

The delivery of operational Sentinel-3 products to all users including the Copernicus Services and other expert users has continued via the EUMETSAT Data Store service (pull – NRT/STC/NTC/Reprocessed) and the EUMETCast-Europe terrestrial/satellite (push – NRT, STC, NTC (terrestrial only)) dissemination services. Sentinel-3 NRT/STC Level 2 marine products and selected land products have continued to be delivered to African users via the EUMETCast-Africa dissemination (push) service, with some issues, which slightly impacted the availability within timeliness. The redistribution of some of the Sentinel-3 Land products, produced by ESA, were also affected by issues at the Land PDGS resulting in the later delivery of the synergy STC products to EUMETSAT impacting their timely delivery to users.

The end-to-end availability for the reporting period (July to December) for Sentinel-3 NRT marine services was 99.5% for EUMETCast and 99.4% for Data Store. For the NRT atmospheric services, the availability was 99.1% and 99%, respectively for the reporting period. The monthly performance figures are shown in the figure below.

**Commented [JR6]:** This would be 2.8.1 etc  
**Commented [JR7R7]:** (These are sub-sections of data dissemination)

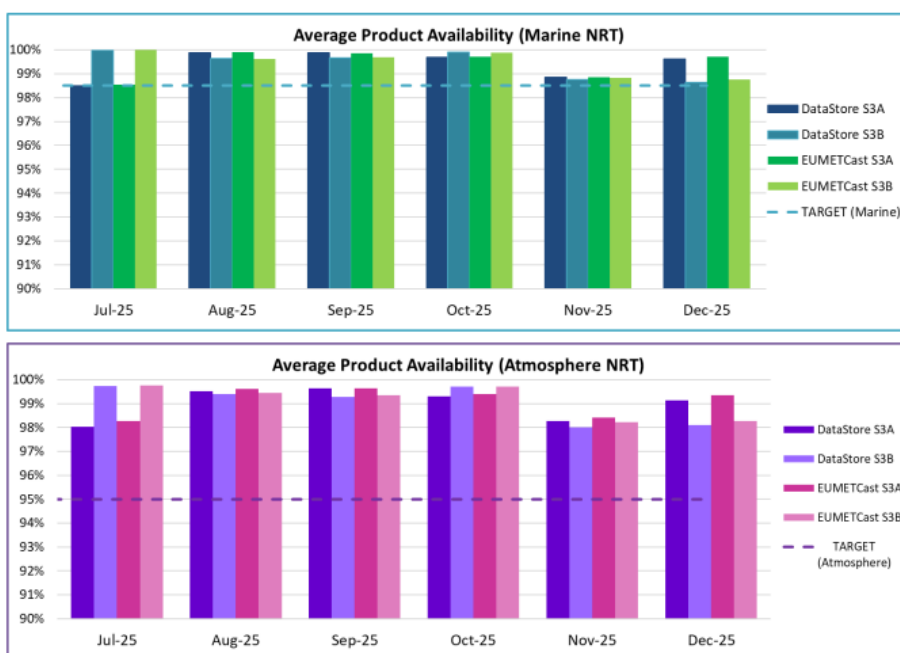


Figure 3: Monthly performance figures for Sentinel-3

### 2.8.2 Jason-3

The Jason-3 products have continued to be delivered to users via the EUMETCast (push) dissemination system and the CNES AVISO online data access services.

### 2.8.3 Sentinel-6

The delivery of operational Sentinel-6 products to all users has continued via the EUMETCast Europe and EUMETCast-Terrestrial (push – NRT, STC, NTC) dissemination service, the Data Store and Data Centre (pull – NRT, STC, NTC) archive services. The end-to-end monthly average availability from July to December for Sentinel-6 POS-4 L2 NRT Altimetry products was 97.4 %, for both the LR and HR products, on EUMETCast and Data Store. The availability is usually largely above targets except in July where the wildfires surrounding the ground station at Fairbanks, reduced the end-to-end availability around 88- 89%. The monthly performance figures are shown in the figure below.

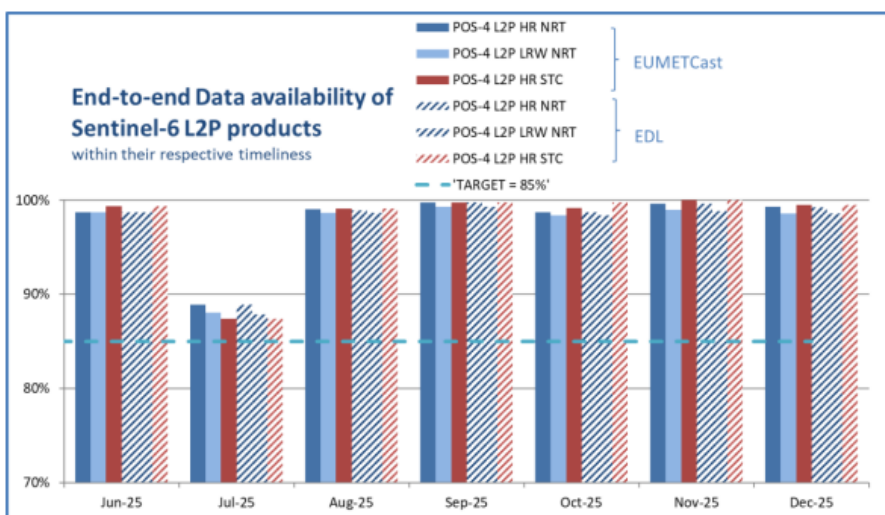


Figure 4: End-to-end availability of Sentinel-6 L2P Products

### 2.9 User Statistics

EUMETCast and the Data Store are multi-mission and include Copernicus, please see section 2.3.6 for information on the User Statistics.

Specifically for Copernicus: **WEKEO** continued operations with now around 41,000 registered users, providing federated access to ~100 PB of Copernicus data.

A first example notebook has been published to showcase the utilisation of an AI foundation model on the new JupyterHub environment providing GPU access. The Model, developed by IBM, has been trained with EUMETSAT’s Sentinel-3 data.

EEA has published a QGIS plugin which connects QGIS to the WEKEO harmonised data access, making available all WEKEO data to QGIS users. EUMETSAT published the first version of the Copernicus STAC catalogue on WEKEO, utilising the WEKEO harmonised metadata from the different data providers.

Commented [JR8]: Need this to be 2.9

Dedicated WEkEO cloud computing resources have been procured to implement:

- Three projects illustrating cloud optimised use cases on WEkEO,
- The Sentinel-4/-5 cal/val teams who will be able to access the instrument data for their validation activities on a dedicated cloud environment,
- An Innovation lab project, aiming at the identification of green wildlife crossings, using Sentinel-2 and other data available through WEkEO,
- An Ocean Hackathon which takes place from 17 to 19 October.

### 3 FUTURE SATELLITE SYSTEMS

#### EUMETSAT Future GEO Satellites

Sector	Satellites in orbit P=pre-operational Op=operational B=back-up L=limited availability	Location	Launch date	Environmental payload and status
East Atlantic(36°W-36°E)	<a href="#">MTG I2</a>	9.5°E	2026	Meteosat Third Generation/ Imaging (FCI, LI)
	<a href="#">MTG I3</a>	9.5°E	2033	Meteosat Third Generation/ Imaging (FCI, LI)
	<a href="#">MTG S2</a>	0°	2035	Meteosat Third Generation/ Sounding (IRS, UVN)
	<a href="#">MTG I4</a>	9.5°E	2036	Meteosat Third Generation/ Imaging (FCI, LI)

#### EUMETSAT Future LEO Satellites

Orbit type ECT=Equator Crossing Time (for sun-synchronous orbits)	Satellites in orbit P=pre-operational Op=operational B=back-up, secondary L=limited availability	Equator Crossing Time (ECT) Ascending Node	Mean Altitude	Launch date	Instrument payload and status
Sun-synchronous "Morning" orbit	Metop-SG-1B	21:30	837	2026	SCA, MWI, ICI, RO, ARGOS-4
	Metop-SG 2A	21:30	837	2033	METimage, IASI-NG, MWS, Sentinel-5, 3MI, RO
ECT between 19:00-24:00 and 07:00-12:00	Metop-SG-2B	21:30	837	2033	SCA, MWI, ICI, RO, ARGOS-4
	Metop-SG 3A	21:30	837	2039	METimage, IASI-NG, MWS, Sentinel-5, 3MI, RO
	Metop-SG-3B	21:30	837	2039	SCA, MWI, ICI, RO
Constellation across multiple orbital planes	EPS-Sterna (6 satellites in the initial constellation)	Multi-plane constellation, with no single ECT	595	From 2029	Microwave sounder



## **3.1 Status of future GEO satellite systems**

### **3.1.1 MTG Mission objectives, spacecraft, payload/instruments, products**

Meteosat Third Generation is the next generation of EUMETSAT's geostationary satellite systems, ensuring continuity and improvement of the geostationary services.

MTG-I1 (now called Meteosat-12) and MTG-S1 have already been described in section 2.3. For further information relating to Meteosat Third Generation please visit the [EUMETSAT User Portal](#).

#### **3.1.1.1 Programme status**

##### **3.1.1.2.1 Overall status, and space segment**

Meteosat-12 and MTG-S1, will be joined by MTG-I2, as it launches later in 2026. This will complete the 3-satellite constellation of MTG. This will also be complemented by the remaining MSG satellites, for as long as they are still approved to be operational.

The future, recurrent Meteosat Third Generation satellites (S2, I3 and I4) are all progressing well and are already built, with work now focused on preparing them for long-term storage until their future launches. Reviews are underway or planned to confirm that each satellite can be safely stored, maintained, and later reactivated without issues. The second sounder satellite (S2) is close to completing this process, while the next imager satellites (I3 and I4) are following behind on a similar timeline through the coming years. Overall, the programme is in a strong position, with these future satellites secured and ready to ensure continuity once they are needed in orbit.

##### **3.1.1.2.2 Ground Segment and scientific activities**

The ground segment for MTG had a major upgrade through 2025, to be able to operate 3 MTG satellites simultaneously (two MTG Imagers, and one MTG sounder). This was completed by the end for 2025, in preparation for the launch of MTG-I2, later in 2026.

## 3.2 Status of future LEO satellite systems

### 3.2.1 EPS-SG

#### 3.2.1.1 Mission objectives, spacecraft, payload/instruments, products

EPS-SG is the next generation of EUMETSAT's polar-orbiting satellite systems, ensuring continuity and improvement of the Low Earth Orbit services. EPS-SG A1 has already been described in section 2.4. For further information relating to EPS-SG please visit the [EUMETSAT User Portal](#)

#### 3.2.1.2 Programme status

##### 3.2.1.2.1 Overall status, and space segment

The first satellite of this new series (Metop-SG A1) was launched on 13 Aug 2025, and as time of writing, is still in commissioning phase, although one of the services (Radio Occultation) has already been declared operational. Metop-SG B1 will be launched later in 2026, which will complete the new generation's 2-satellite constellation of EPS-SG. This will also be complemented by the remaining first-generation EPS satellites, for as long as they are still approved to be operational.

The future, recurrent EPS-SG satellites are progressing steadily, with the next units already built and moving through integration, testing, or storage phases. Follow-on satellites for both series are either in long-term storage or continuing their assembly and testing activities, ensuring they can be launched when needed. Instruments for these satellites have largely been delivered and integrated, with ongoing work focused on maintaining readiness, completing remaining tests, and resolving minor performance issues. Overall, the programme is in a strong position to guarantee long-term continuity, with future satellites secured and advancing in line with expectations.

##### 3.2.1.1.2 Ground Segment and scientific activities

The ground segment for EPS-SG was already designed to have capacity for both EPS-SG A1 and EPS-SG B1 satellites. The data processing facilities for EPS-SG and the monitoring are quite complex, with a temporary data processing facility in use currently to support commissioning activities, with a transition planned for the longer-term operational facility (PDAP) for the full suite of operational services.

Commented [JR9]: @Sean to check this is ok to say

## 3.2.2 EPS-Sterna

### 3.2.2.1 Mission objectives, spacecraft, payload/instruments, products

The EUMETSAT Polar System – Sterna (EPS-Sterna) is a new programme fully funded by EUMETSAT that will deploy a constellation of microsatellites. Each microsatellite will carry a state-of-the-art microwave sounder designed to deliver high-quality observational data in support of operational meteorology and climate monitoring.

The initial constellation is composed of six satellites in sun-synchronous polar orbits. In only five hours or less, the microwave sounders on these satellites will make observations covering 90% of the globe.

The microwave sounder will measure energy reflected off the Earth's surface in the microwave range of frequencies. Because it makes measurements beyond the visible range, it can provide temperature and humidity observations even when it is overcast, raining, or snowing.

EPS-Sterna will significantly improve the accuracy of numerical weather prediction models by providing data globally with unprecedented coverage and revisit time. In addition, the mission will have a large impact over the poles, where geostationary satellites have little visibility and Metop polar-orbiting satellites need longer to achieve global coverage.

#### 3.2.1.2 Programme status

##### 3.2.1.2.1 Overall status, and space segment

The EPS-Sterna programme is progressing well overall, having recently moved into full development following formal approval, with design activities advancing as planned across both system and ground elements. For the space segment, development has now started in earnest after the main contract was awarded, with early procurement and design work underway and building on the successful pathfinder mission already in orbit (the Arctic Weather Satellite (AWS)). Technical work is progressing steadily and early results are positive, with the first launch planned for 2029.

##### 3.2.1.2.1.1 Ground Segment and scientific activities

The ground segment for EPS-Sterna is progressing well and largely in line with plan, with design activities completed and detailed development now underway across all main components. Key systems for data processing and mission control have already started development, with also both northern and southern ground stations advancing well. Integration work is being prepared in parallel, and overall readiness is building steadily to support future operations. EPS-Sterna is seeking to re-use multi-mission elements and learning from what has worked well for other missions, to have an accelerated timeline from programme approval to launch and operations.

Commented [JR10]: Formatting has gone wrong here with indent not needed

### 3.2.3 EPS-Aeolus

#### 3.2.3.1 Mission objectives, spacecraft, payload/instruments, products

The Aeolus mission is designed to provide global wind measurements, helping to improve weather forecasting and climate understanding by filling a key gap in atmospheric observations. It will use a single satellite carrying an advanced laser-based instrument that measures wind profiles from space, supported by a robust and proven spacecraft platform adapted from recent Earth observation missions. The payload is centred on this wind-measuring instrument, enhanced compared to the original ESA Aeolus mission to improve reliability and performance, and complemented by an additional navigation-based sensor to support atmospheric observations. The mission will deliver high-quality wind data, along with related atmospheric information, which will be processed into products for weather centres and other users to strengthen forecasting accuracy and environmental monitoring.

#### 3.2.1.2 Programme status

Commented [JR11]: Formatting has gone wrong here with indent not needed

##### 3.2.1.2.1 Overall status, and space segment

The EPS-Aeolus programme is progressing steadily, currently in its definition phase with the overall mission concept and requirements being consolidated ahead of formal programme approval. The mission has been streamlined to a single satellite while still meeting its objectives, and development activities are aligned between EUMETSAT and ESA, with good progress on design, simulations, and preparation for the next development phase. For the space segment, the satellite and its core wind-measuring instrument design have matured well, building on proven heritage and incorporating improvements to enhance performance and reliability. Industrial contracts and preparatory activities are underway, and the technical design is considered stable and fit for purpose, with no major issues affecting the mission outlook at this stage, although full development will only begin following programme approval.

##### 3.2.3.1.1 Ground Segment and scientific activities

Ground segment and scientific activities for Aeolus are progressing well, with ongoing work focused on refining the overall mission design, developing data processing and simulation tools, and ensuring that the future data products will meet user needs. Close interaction with the scientific community is helping to validate performance and optimise the mission concept, while supporting tools and operational approaches are being matured to ensure smooth transition to operations and effective use of the data once the satellite is launched.

### 3.3 Status of future Copernicus satellite systems

#### 3.3.1 CO2M

##### 3.3.1.1 Mission objectives, spacecraft, payload/instruments, products

The Copernicus CO2M mission is designed to monitor human-generated carbon dioxide emissions by providing precise global measurements of greenhouse gases and related atmospheric properties, supporting climate policy and environmental monitoring. It will use a small constellation of satellites equipped with advanced imaging spectrometers to measure carbon dioxide and nitrogen dioxide, supported by additional instruments that detect aerosols and clouds to improve data accuracy. Together, these sensors produce high-quality data products such as carbon dioxide and methane concentrations, nitrogen dioxide levels, aerosol properties, cloud information, and vegetation signals, which are processed and delivered to users within a short time to support climate services and scientific applications.

##### 3.2.1.2 Programme status

###### 3.2.1.2.1 Overall status, and space segment

The CO2M programme is progressing steadily overall, with development activities advancing across all elements, although the schedule remains tight and closely managed. The space segment is making good progress, with satellite and instrument development moving through key milestones and three satellites planned to form the operational constellation. Current planning foresees the first satellite to be launched in the coming few years, followed by the subsequent units in close succession to build up the full system.

###### 3.3.1.1.1 Ground Segment and scientific activities

The CO2M ground segment and scientific activities are progressing well, with major systems for mission control and data processing already developed and successfully tested end-to-end, demonstrating readiness to handle the full data flow from satellite to users. Work is now focused on final integration, verification, and preparation for operations, with strong progress on processing software, validation tools, and user interfaces. Scientific activities are also advancing steadily, including the development of algorithms, test data, and validation approaches, supported by close collaboration with partners and user communities.

Commented [JR12]: Formatting has gone wrong here with indent not needed

### 3.3.2 CIMR/Cristal

#### 3.3.2.1 Mission objectives, spacecraft, payload/instruments, products

**CIMR:** The Copernicus Imaging Microwave Radiometer (CIMR) mission is designed to monitor the Earth's oceans, ice, and land surfaces, with a strong focus on improving understanding of changes in the Arctic and polar regions. It will use a small constellation of satellites in polar orbit to provide frequent, near-global coverage. Each spacecraft carries a multi-frequency microwave radiometer that can observe the Earth in all weather conditions, measuring surface properties through clouds and darkness. The mission will deliver a wide range of environmental products including sea surface temperature and salinity, sea-ice concentration and type, snow cover, soil moisture, and ocean surface winds, providing essential data for weather forecasting, climate monitoring, and operational services.

**Cristal:** The Copernicus Cristal mission is focused on monitoring the Earth's polar regions, with the primary objective of measuring sea-ice thickness, snow depth, and changes in ice sheets and glaciers to support climate studies and sea-level monitoring. It will consist of two satellites operating in a high-inclination orbit to ensure sustained coverage of the Arctic and Antarctic. Each satellite carries a dual-frequency radar altimeter, complemented by a microwave radiometer, enabling highly accurate measurements of ice and snow properties as well as surface elevation. The mission will generate key products such as sea-ice thickness, snow depth, ice sheet height, and polar ocean topography, supporting climate services, maritime operations, and long-term environmental monitoring.

#### 3.2.1.2 Programme status

**Commented [JR13]:** Formatting has gone wrong here with indent not needed

##### 3.2.1.2.1 Overall status, and space segment

**CIMR:** The CIMR programme is progressing well in full development, with strong coordination across European partners. The space segment is based on a small constellation of satellites carrying a microwave radiometer, with development building on proven heritage. The first launch is currently planned late 2029, with follow-on satellites to ensure regular global coverage, and overall progress remains on track.

**Cristal:** The Cristal programme is advancing steadily, with the first satellite moving into assembly and testing and the overall system based on two satellites for long-term continuity. The space segment centres on a new dual-frequency altimeter and is building on proven designs. The first launch is planned around 2028, followed by a second satellite, with the programme overall progressing in line with expectations.

##### 3.3.2.1.1 Ground Segment and scientific activities

**CIMR:** The CIMR ground segment and scientific activities are progressing in line with the mission development, with a strong focus on preparing data processing chains and calibration approaches for the new microwave observations. Scientific work is well

advanced, particularly on algorithms for sea-ice, ocean, and land parameters, ensuring readiness to deliver high-quality products shortly after launch

**Cristal:** Ground segment and scientific activities for Cristal are developing steadily, with emphasis on processing and validation of the new altimeter data and its integration into existing climate services. Scientific preparation is well established, building on heritage missions and focusing on improving measurements of ice thickness, snow depth, and polar processes to ensure robust operational use.

### 3.3.3 Sentinel-3 Next Generation Topography

**Commented [JR14]:** I won't mention Future of Altimetry, as it's still a lot TBD after S6C was cancelled

#### 3.3.3.1 Mission objectives, spacecraft, payload/instruments, products

Given the success of the Copernicus Sentinel-3 mission, with Sentinel-3A (launched in 2016) and Sentinel-3B (launched in 2018) currently flying and Sentinel-3C and -3D to be launched in 2026 and 2029, ESA has proposed the Sentinel-3 Next Generation Topography (S3NG-T) mission as part of the evolution of the Copernicus Space Component (CSC) capabilities, as described in the CSC Long Term Scenario [LTS] to address the User Requirements expressed by the European Commission.

The S3NG-T mission will provide enhanced continuity of the Copernicus Sentinel-3 altimetry component, with improved performance along the same ground tracks, vastly increased spatiotemporal coverage of ocean and inland water, and provide new wave products. The S3NG-T mission is expected to operate in conjunction with the Sentinel-6 Next Generation (S6NG) mission, where S6NG provides the stable reference and S3NG-T the high spatio-temporal coverage.

Like the Copernicus Sentinel-3 mission, ESA and EUMETSAT will share the ground segment operations and data production and services for the S3NG-T mission, with EUMETSAT focussing on measurements over oceans, coastal areas, inland seas and large lakes, sea ice leads and polynyas. It is to these domains and associated products and services that this End-User Requirements Document (EURD) applies.

#### 3.2.1.2 Programme status

**Commented [JR15]:** Formatting has gone wrong here with indent not needed

##### 3.2.1.2.1 Overall status, and space segment

The Sentinel-3 Next Generation Topography programme is progressing as planned, with the foundational user requirements now defined and aligned between ESA and EUMETSAT, marking an important step toward full mission development. Building on the success of the current Sentinel-3 satellites, the new mission is being prepared to ensure long-term continuity while significantly enhancing performance and coverage. The programme concept is well established, including plans for multiple satellites to operate together in the mid-2030s timeframe, supporting a smooth transition from the current fleet.

### 3.3.3.1.1 Ground Segment and scientific activities

The ground segment will build on the proven Sentinel-3 system, with ESA and EUMETSAT sharing operations and data services, and is being defined to support improved performance and new products. Scientific work is focused on enhancing ocean, climate and coastal applications, ensuring better coverage and higher-value data for users.

## 4 ACTIONS AND/OR RECOMMENDATIONS FOR CONSIDERATION BY CGMS PLENARY SESSION

No actions or recommendations for consideration by CGMS plenary session, this document is for information only.

**Commented [JR16]:** Sean to check and adapt as required

## 5 CONCLUSIONS

This document summarises EUMETSAT's latest status and developments.

CGMS is invited to take note.

**Commented [JR17]:** Sean to check and adapt as required