

Sentinel - 3 Marine Service. File name conventions and product folder description for OLCI and SLSTR

OLCI:

File naming

The file naming is based on a sequence of fields:

MMM_SS_L_TTTTTT_YYYYMMDDTHHMMSS_YYYYMMDDTHHMMSS_YYYYMMDDTHHMMSS_
S_<instance ID>_GGG_<class ID>.<extension>

Which for Sentinel-3 OLCI marine data would be, for example:

S3A_OL_1_EFR_____20160509T103945_20160509T104245_20160509T12490
7_0180_004_051_1979_MAR_O_NR_001.SEN3

- **MMM** – Mission id, e.g. S3A
- **SS** - Data source/consumer, e.g. OL is for OLCI
- **L** - Processing level, e.g. 1 for L1 and 2 for L2
- **TTTTTT** - Data Type ID, e.g.
 - “EFR_____” = L1B product at FR
 - “ERR_____” = L1B product at RR
 - “WFR_____” = L2 FR water (marine) product
 - “WRR_____” = L2 RR water (marine) product
- **YYYYMMDDTHHMMSS** - 15 character date and time (date plus “T” plus time) for (1) **Data Start** (2) **Data Stop** time, and (3) **Creation Date**
- **<instance id >** - 17 characters e.g. 0180_004_051_1979 is duration (sensing time interval in seconds), cycle number, relative orbit number, and frame along track coordinate (elapsed time in seconds from the ascending node indicating the frame start time)
- **GGG** – Product Generating Centre e.g., MAR = MARINE (EUMETSAT)
- **<class ID>** - 8 characters to indicate the processing system e.g., O_NR_001 is (1) the software platform (O for operational, F for reference, D for development and R for reprocessing), (2) the processing workflow (NR for NRT, ST for STC and NT for NTC) and (3) 3 letters/digits indicating the baseline collection
- **<extension>** - Filename extension, SEN3

Data format

The data format is a Standard Archive Format for Europe (SAFE) product package containing a collection of files, see Figure 1. The manifest file (xfdumanifest.xml) explains the contents of the package at an overarching level. Each of the measurement and annotation data files are stored in netCDF (version 4) format. The product package can exist as a directory in a filesystem, zipped folder or tarball.

OLCI RR data is provided as whole orbits, while the FR data is provided as 3 minute granules as it is much larger in file size than the RR data.

SLSTR:

File naming

The file naming is based on a sequence of fields:

MMM_SS_L_TTTTTT_YYYYMMDDTHHMMSS_YYYYMMDDTHHMMSS_YYYYMMDDTHHMMSS_
<instance ID>_GGG_<class ID>.<extension>

Which for Sentinel-3 SLSTR data would be, for example:

**S3A_SL_1_RBT_____20160509T103945_20160509T104245_20160509T124907_
0180_004_051_1979_SVL_O_NR_001.SEN3**

- **MMM** – Mission id, e.g. S3A
- **SS** - Data source/consumer, e.g. SL is for SLSTR
- **L** - Processing level, e.g. 1 for L1 and 2 for L2
- **TTTTTT** - Data Type ID, e.g.
 - “RBT_____” = TOA radiances and brightness temperatures
 - “WCT_____” = Retrieved SST for all algorithms
 - “WST_____” = Best SST in GHRSSST L2P format
- **YYYYMMDDTHHMMSS** - 15 character **Data Start** time, then **Data Stop** time then **Creation Date**
- **<instance id>** - 17 characters e.g. 0180_004_051_1979 is duration, cycle number, relative orbit number and frame along track coordinate
- **GGG** – Product Generating Centre e.g., EUM = EUMETSAT and SVL = Svalbard Satellite Core Ground Station
- **<class ID>** - 8 characters to indicate the processing system e.g., O_NR_001 is the software platform (O for operational, F for reference, D for development and R for reprocessing), processing workflow (NR for NRT, ST for STC and NT for NTC) and 3 letters/digits indicating the baseline collection.
- **<extension>** - Filename extension, SEN3

Data format

The SLSTR data format follows the format defined for each Sentinel-3 product, i.e. the PDGS product specification, and is based on Sentinel-SAFE. Each product package includes:

- A manifest file containing a metadata section and a data object section (in XML format).
- At least one measurement or annotation data files (in NetCDF-4 format).

The manifest file - xfdumanifest.xml - explains the contents of the package at an overarching level.

The Sentinel-3 Marine Products are available through the Copernicus Online Data Access (CODA) service.

CODA is an online rolling archive with https access to Sentinel-3 Level 1 and Level 2 (Marine) global data in different latency modes, as shown in the following table:

LATENCY MODES	DESCRIPTION	
Near Real-Time (NRT)	Products available to users within three hours after sensing	1 month
Short time critical (STC)	Products available to users within within 48 hours after sensing. (Only for SRAL products)	
Non time critical (NTC)	Products available to users within one month after sensing	1 year



HOW TO ACCESS CODA

If you already have an Earth Observation Portal (EO Portal) account, use your account credentials to log into CODA. Go to <https://codarep.eumetsat.int> (please use Chrome or Firefox). Click 'OK' to be redirected to the EO Portal login screen.

Alternatively go to <https://eoportal.eumetsat.int/userMgmt/login.faces>, log in and follow the link 'Access CODA'..

If you do not have an EO Portal account, simply create one and follow the link 'Access CODA'.

REPROCESSED DATA

Sentinel-3A SRAL non time critical (NTC) data has been reprocessed to the latest standards (Processing Baseline 2.15) to allow users to access a consistent dataset from 15 June 2016 to 15 April 2017.

The reprocessed dataset is available via this link: <https://codarep.eumetsat.int> To access it, use your **Earth Observation Portal (EOP)** credentials or set up an EOP account.

To get the complete and consistent dataset users should access both the Reprocessed NTC dataset, which spans from 15 June 2016–15 April 2017, from CODAREP and the NTC dataset, processed with the same baseline after 15 April 2017, from CODA.

The Sentinel-3 Marine Products are available through EUMETCast

Sentinel-3 will support the monitoring of the Marine Environment with products, including altimetry, sea surface temperature and ocean colour.

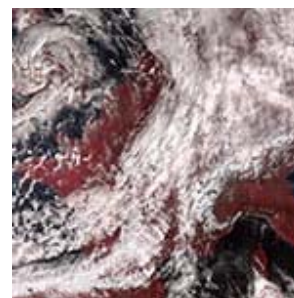
The marine data and products are primarily developed to support the maritime safety services that need:

- ocean-surface wave information, surface temperature and data to improve ocean current forecasting systems;
- sea-water quality and pollution monitoring, requiring advanced ocean colour products in both open ocean and coastal oceanographic application areas;
- sea surface topography measurements;
- sea-ice charting services, requiring sea-ice extent and iceberg detection.

[Altimetry Services](#)

[Ocean Colour Services](#)

[Sea Surface Temperature Services](#)



TIMELINESS OF PRODUCTS

- Near-Real-Time (NRT): products shall be available to the users within three hours after sensing.
- Short-Time-Critical (STC): products available to the users within 48 hours after sensing.
- Non-Time-Critical (NTC): products available to the users within one month after sensing.
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Our suite of Ocean Products.

EUMETSAT will be responsible for marine data and products, while ESA will be responsible for land data and products.

ACCESS COPERNICUS DATA

EUMETSAT provides access to the Sentinel-3 marine products - and, in future, products from Sentinel-4, Sentinel-5 and Sentinel-6 - via [EUMETCast](#) satellite/terrestrial, via the [Copernicus Online Data Access](#) (online rolling archive with http access) or through the EUMETSAT Data Centre.

EARTH OBSERVATION PORTAL (EOP)

The Earth Observation Portal is the main entry point to EUMETSAT's Earth Observation data, including data provided via EUMETCast from our many partner organisations. Register and subscribe here to receive data.

PRODUCT NAVIGATOR

The Product Navigator is the central catalogue for all EUMETSAT data and products, including third-party product disseminated on EUMETCast. To discover our data [go to the Product Navigator](#).

EUMETCAST

[EUMETCast](#) is EUMETSAT's primary dissemination mechanism, providing access to near real-time data through DVB satellite or terrestrial network, with a guaranteed service level.

COPERNICUS ONLINE DATA ACCESS

The Sentinel-3 Marine and Atmosphere Products are available through the [Copernicus Online Data Access](#) (CODA). The CODA is an online rolling archive with http access and 14 days of data online.

DATA CENTRE

Ordering and delivery service for historical and long-term archive data from the EUMETSAT contributing missions and Sentinel-3 marine and atmosphere products.