User Guide - CoralSea products

This document introduces the **experimental products dedicated to the sea around Coral Sea** available via the FTP site at the address:
/donnees/ftpsedr/DUACS/experimental/regional-coralsea

CoralSea products are free and devoted to scientific applications and non-commercial use (as stated in the License agreement you have approved).

These products are processed in Near Real Time **Near Real Time.**

➤ Color data – folder "color"

The chlorophyll-a concentration is measured by satellite optical radiometers (passive remote sensing). It corresponds to the surface phytoplankton concentration and is an indicator of productivity
Color product corresponds to Map of Chlorophyll concentration issued from the Suomi/NPP/VIIRS sensor (http://npp.gsfc.nasa.gov/viirs.html).
It is constructed with a simple weighted data average over the 5 previous days (giving more weight to the most recent data), and has a resolution of 0.02 degrees (2 Km at the Equator) in latitude and longitude. It may have gaps due to the persistence of cloud cover
Each map is centered on day D0 is produced on day D0+2

FPT path: regional-coralsea/near-real-time/color/
Resolution: 1/50°x1/50° (regular grid)
Delivery: daily.
Data period: January-April 2015
File nomenclature: DELAY_PRODUCT_ZONE_DATEMAP_DATEPROD.FORMAT

DELAY	nrt	Near-real time products
PRODUCT	color	chlorophyll-a concentration
ZONE	coralsea	Coral Sea area products
DATEMAP	YYYYMMDD	date of the dataset
DATEPROD	YYYYMMDD	delivery date of the dataset
FORMAT	nc	NetCDF

Note : the chlorophyll-a concentration is registered applying a log function and a scale_factor. To retrieve the true chlorophyll-a concentration in mg/m3, the following formula need to be applied using scale_factor given in the variable attribute of the netcdf files :
Concentration in mg/m3 = exp((Grid_0001value * Grid_0001:scale_factor))

➤ Temperature data – folder "temperature"

The sea surface temperature is measured by satellite infrared radiometers (passive remote sensing).
Temperature product corresponds to Map of Sea Surface Temperature deduced from a combination of several intercalibrated infrared sensors:

- AQUA/MODIS
- TERRA/MODIS
- METOP-A/AVHRR
- METOP-B/AVHRR

It is constructed with a simple weighted data average over the 5 previous days (giving more weight to the most recent data), and has a resolution of 0.02 degrees (2 Km at the Equator) in latitude and longitude. It may have gaps due to the persistence of cloud cover.
Each map is centered on day D0 is produced on day D0+2

FPT path: regional-coralsea/rear-real-time/temperature/
Resolution: 1/50°x1/50° (regular grid)
Delivery: daily
Data period: January-April 2015
File nomenclature: DELAY_PRODUCT_ZONE_DATEMAP_DATEPROD.FORMAT

DELAY	nrt	Near-real time products
PRODUCT	temperature	sea surface temperature
ZONE	coralsea	Coral Sea area products
DATEMAP	YYYYMMDD	date of the dataset
DATEPROD	YYYYMMDD	delivery date of the dataset
FORMAT	nc	NetCDF

Note : the temperature is registered applying a scale_factor. To retrieve the true temperature in °C, the following formula need to be applied using scale_factor given in the variable attribute of the netcdf files :
*temperature in °C = Grid_0001value * Grid_0001:scale_factor*

➢ Contact us

For questions about altimetry, techniques, applications, data, as well as problems concerning the website, contact the [Aviso User Service](#).

For problems of connection, errors and such, please send us the error messages you're getting, and tell us the software you're using. This will help us answer more rapidly.
See also the [FAQs](#)

➢ How to site the CoralSea products ?:

When using the CoralSea experimental products, please cite:
"The color/temperature products were produced by CLS"