

GHRST XVI

CMEMS (ex-MyOcean) RDAC Component Report

Met Norway, Met Office, DMI, Ifremer, CNR, Météo-France

Introduction (1)

- CMEMS : Copernicus Marine Environment Monitoring Service (started on 01/05/15)
 - European Commission core service, operated by Mercator Ocean (Delegation Agreement)
 - Overall objective : delivering regular and systematic reference information on the physical state and dynamics of the ocean and marine ecosystems
 - Some CMEMS services (incl. OSI TAC for satellite SST, Sea Ice and wind observation products) are sub-contracted by Mercator Ocean
 - OSI TAC 3-year contract awarded to a consortium led by Met Norway (same partners as MyOcean OSI TAC)

Introduction (2)

- CMEMS satellite SST production :
 - Global and regional NRT and reprocessed multi-sensor (L3 and L4) SST products (no L2 processing)
 - Same products and same Production Units at Day 1 as MyOcean OSI TAC
 - Transition towards a single Distribution Unit (instead of 3 currently) for all OSI TAC SST products, hosted by CNR in Roma
 - Reprocessing activities : focus on high resolution regional re-analyses

Main activities since GHRSSST-XV

- Since GHRSSST-XV, new OSI TAC SST products have been added in the official MyOcean / CMEMS portfolio :
 - NRT : global hourly skin SST analysis based on OSTIA foundation SST (see J. While's presentation on Tuesday); Arctic daily Sea + Sea Ice Surface Temperature analysis
 - Reprocessing : high resolution re-analysis (1981-2012) over Mediterranean Sea and Black Sea (see A. Pisano's presentation on Friday)

Data availability

- OSI TAC SST products distribution :
 - Normal distribution route : via the central CMEMS web portal (<http://marine.copernicus.eu>), and THREDDS servers implemented in each Distribution Unit
 - Some OSI TAC L4 SST products are also currently ingested and redistributed by GDAC (daily global OSTIA SST analysis, daily North Sea + Baltic Sea SST analysis)
 - Transition to GDSV2 almost complete
 - But all official CMEMS products have still to be delivered to final users in netCDF3 (even if they can be stored at Distribution Unit in netCDF4)

Issues to be raised at GHRSSST-XVI

- SSES/uncertainties : all OSI TAC L4 producers need reliable observation error variance estimates (ideally uncorrelated and correlated parts) associated with the input satellite SST which they use in their analysis. Most of them currently use SSES bias estimates only. Current SSES error standard deviation estimates are very difficult to use in analysis schemes (little consistency between different satellite SST products, stepwise variations etc...)
- GDAC/PODAAC : for NRT operational services in Europe, is it the right way to access non-European input satellite SST products ?