



Research to Operations and Applications Breakout Session #6 Report

VERONICA LANCE, NOAA/NESDIS/STAR AND UNIV. OF MARYLAND

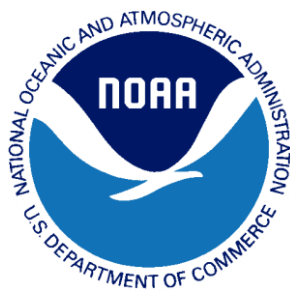
EWA KWIATKOWSKA, EUMETSAT



Advancing Global
Ocean Colour
Observations

Busan, South Korea, 9-12 April 2019

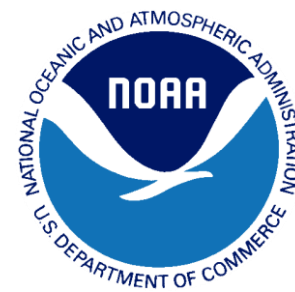
Defined “Operational” Extending the paradigm



- Routine
- Robust
- Well-described
- Consistent
- Includes NRT and high quality delayed-mode and long term consistent time series
- “Fit-for-purpose” (i.e., the right product to do the job)



EUMETSAT



Workshop Objective

Where are the biggest gaps or obstacles in achieving fit-for-purpose OC data that meet the needs of operational users and how can we close these gaps and reduce obstacles?

- data quality
- value-added products
- data availability, access and discovery
- documentation, training and outreach
- ease of use, inter-operability, standardization, tools

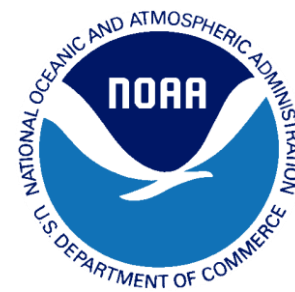
To help to answer this question, requirements and experiences will be discussed based on operational application cases, such as harmful algal bloom forecasting, coral reef and fisheries management, ocean prediction, and various commercial applications.

3 Key Questions

- 1) What are the user requirements for operational OC products and where should the main research and technical efforts be concentrated?
- 2) What developments in approaches, techniques and/or tools are needed to address users at multiple levels of sophistication, how best to supply necessary details while not overwhelming as needed for free and open access to data through multiple outlets and serving distinct and diverse audiences?
- 3) What mechanisms are useful to bring developers and users together at early stages and how best to engage parties to achieve successful implementation?



EUMETSAT



Topics discussed (and not discussed)

- **Need for low latency NRT - within 2-3 hours with data quality adequate for purpose (case-by-case)**
- **Cross-mission continuity datasets**
- **More value-added products, e.g., Primary Productivity, Anomalies (especially for chl and SST)**

- Better inter-parameter viewing, querying, **data access**
- On-the-fly **processing** (vs. “download everything”); provide tools for online analyses
- **The continuity of mission long and fusion datasets (e.g., one daily composite)**
- Serving model results and downstream applications (but see bullet #2)
- ***Metadata** (describe the dataset “well” and “**interoperably**”, i.e. GHRSSST?);
- *Describe the quality the dataset (i.e., **performance, uncertainties**, for what purposes are the data “fit”)
- ***TRAINING, TRAINING, TRAINING (e.g.: weather service approach, product training for commercial users)**



EUMETSAT



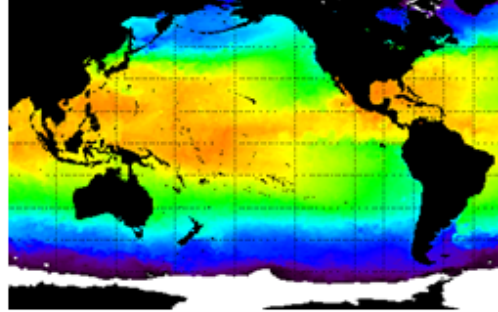
3 Bullets for IOCCG

1. **PRODUCTS:** Users want single consistent and stable product time series, long-term to NRT, merged from multiple instruments which are regionally adjusted to assure the highest quality, as well as anomaly products.
2. **TRAINING:** Need to actively engage with different type of users, provide on-line resources (guide for different applications e.g. fisheries, HABs, aquaculture), workshops, training, also opportunities for the OC community to engage with higher level users.
3. **IOCCG** could extend its tasks to lead the above activities to create a coordinated multi-agency approach and collaboration.

1st International Operational Satellite Oceanography Symposium

OPERATIONAL: Routine and sustained provision of mature, fit for purpose quality data and products in support of both near real time and delayed mode research, applications and services...

REGISTRATION AND ABSTRACT
SUBMISSION
Extended to
Friday 12 April 2019
[OSOS WEBSITE LINK](#)



18 TO 20 JUNE 2019
WASHINGTON, DC AREA
First International
OPERATIONAL SATELLITE
OCEANOGRAPHY
Symposium



EUMETSAT



*And pre-meeting
data workshop
training day
17 June 2019*

[Link to PDF Flyer
available at NOAA
CoastWatch](#)