

Splinter 5

Operational Ocean Colour Data in Support of Research, Applications and Services

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1. Redefining "Operational"

2. Scientific and technological innovation

3. Community organization

Science	Advancing Global Ocean Colour Observations	
MORNING SPLINTERS (2 hr 30 min)		
SPLINTER 5	Spectrum A	
Operational ocean colour research, applications and	data in support of services	
09:45 Splinter session int Kwiatkowska, EUM	roduction (Ewa ETSAT)	
Redefining "Operational"		
09:55 Emerging perspecti NOAA)	ive (Cara Wilson,	
10:10 Marine services vie EU MyOcean)	w (Rosalia Santoleri,	
10:20 Diverse application (Stewart Bernard, 0	s and their needs CSIR)	
10:30 Discussion		
Scientific and technologica	al innovation in	
support of evolving applica	ations and user needs	
11:00 Emerging application	ons, modelling/data	
assimilation, coasta	al morphodynamics,	
oil spills (Rosa Barc	iela, Met Office)	
11:10 Data access and to PML)	ols (Steve Groom,	
11:20 Discussion		
Community organization t implementation	o support the	
11:50 International Ocean	n Colour Community	
view and OCR-VC (I	Mark Dowell, JRC)	
12.00 Discussion		



Advancing Global

Redefining "Operational" 1.

Rise of operational ocean colour

Need to change perception of operational services

Operational \equiv sustained long-term, routine and uninterrupted provision of quality satellite data for a variety of diverse and evolving Applications **Applications**

- 1. Science (from PFTs to Earth System Science)
- 2. Climate

3. Services: marine ecosystem monitoring / modelling, water quality, fisheries, aquaculture, HABs, oil spills, marine disasters, eutrophication

- 4. Marine and coastal management
- 5. Modelling, bio-geo-chemical models

How the Agencies and the community can assure success?



1. Redefining "Operational" ≡

<u>Quality of data</u> – operational ocean colour must meet highest quality data *Requirements* to be able to support the diverse *Applications*?

<u>Supporting infrastructure</u> – the operational missions must develop and maintain infrastructure and scientific and technical activities to meet the *Requirements* and downstream user needs?

Requirements

- 1. Accuracy, stability and multi-mission consistency
- 2. Product quality estimates
- 3. Multi-mission data access
- 4. Data continuity, impact of losing or adding missions

5. Means of data distribution and data access timeliness (near-real time, off-line and re-processed)

6. Specifications: geophysical parameters, data formats, product levels, resolution, diurnal frequency (geostationary missions), access to source code, tools, sensitivity to mission reprocessings, availability of data early in the mission



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2. Scientific and technological innovation in support of evolving *Applications* and user needs

- Over half the human population lives and works within 200 km of a coast Ocean is vital to human health, well-being and economy Ocean colour applications and services have a significant potential
- How to increase the use of OC to meet societal needs and challenges?
- How to facilitate improved and new applications and services?
- What are the barriers to proliferation of OC applications and services?
- key areas where the scientific and technological progress is required, technology accelerators? e.g. easy data access, easy data formats, data on mobile devices, apps, crowd sourcing
- need for easy access to data? upgraded IT solutions and tools



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3. Community organization to support the implementation

- How to organize the community to address its broader interests/needs from a wide scientific, technical, and programmatic perspective?
- How to jointly formulate common issues and goals and jointly work on the practical implementation of solutions?
- International Ocean Colour Community team of data users, producers and scientists organized in hands-on working groups
- Working groups calibration, validation, algorithms and products, climate, applications and services, training and outreach
- IOCS meeting International Ocean Colour Community collocation



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International Ocean Colour Science Meeting 2013

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