



# **GODAE OceanView (GOV)**

## **Marine Ecosystem Analysis and Prediction Task Team (MEAP TT)**

**Co-chairs since fall 2014:  
Marion Gehlen & Katja Fennel**



## GOV MEAP TT

**Focus** on developing the underpinning science and tools which will eventually enable full integration of biogeochemistry and (simplified representations) of ecosystems into existing physical operational systems.

**Mission:** contribute to

- improving biogeochemical observing systems,
- improving and developing of assimilation schemes for biogeochemical observations
- skillful simulation of Essential Biogeochemical Variables
- bridging gaps with end-users



# GOV MEAP TT 2015 Halifax workshop June 23-24



> 40 participants, 37 abstracts





## GOV MEAP TT

### Focus areas:

- Assessment of **methods for DA** on biological/biogeochemical predictability
- Assessment of **techniques for downscaling** for one-way or two-way coupling
- Assessment of dependence of model skill on **biological/ biogeochemical model complexity** with emphasis on model portability and predictive skill
- Articulation of biological/biogeochemical operational oceanography products with respect to end-user needs in specific regions

***Cross-cutting activity:*** Identification of metrics for system evaluation in view of transfer to operational services

## Main Activities and Objectives this year:



**Assessment of methods for DA on biological/biogeochemical predictability:** Ongoing in coordination with DA TT: joint workshop, review article being written

Also:

- Organized **outreach session to fisheries and aquaculture sectors** at annual workshop
- Ongoing from previous year (now completed): establish an inventory of biogeochemical/ecological applications based on OO products by running a **dedicated survey**
- **Coordination with IV TT:** participation in their workshop; identified path for collaboration
- **Broader community outreach** through MEAP activities outside GOV



# Joint DA & MEAP TT 2016 University of Santa Cruz July 11-13



> 50 participants, 43 abstracts



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## **Inventory of biogeochemical/ecological OO products that are available or that would be desirable in the future**

Survey got very little feedback.

Potential reasons for the failure as discussed at the MEAP  
TT meeting:

- (i) Key people were not aware of the survey / Survey did not reach the correct audience
- (ii) It was not sufficiently clear to people how they could benefit from participating
- (iii) Too many questions and too complicated questions (people gave up half-way)

It was decided to circulate the survey to the co-chairs, the patrons group and project office for advice.



## Exploring joint Activities with IV TT

1) An **intercomparison of physical metrics** that have relevance for bgc models (e.g. mld, depth/steepness of thermocline, tendencies). This could involve all participants in IV TT.

Action: MEAP TT to suggest metrics.

2) A **"class 4" intercomparison** activity with those groups that have bgc components in their operation or pre-operational models (i.e. UK Met Office, Mercator, Australian Bureau of Meteorology).

Action: Engage with the key people involved in a discussion about metrics and data sets recognizing that timeline for this is longer.



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## MEAP Activities for Broader Community Outreach

- (1) Co-chairs participated in **BioArgo** planning workshop and drafting of the science plan; Katja Fennel is member of the Scientific Steering Committee
- (2) We are providing input on **IOCCP activities around EOVs**; Marion Gehlen will attend the Implementation of Multi-Disciplinary Sustained Ocean Observations (IMS00) Workshop in Miami next February
- (3) Actively pursuing information exchange and potential coordination with **IMBER** (intention to seek information exchange with MEAP was articulated at the last IMBER SSC meeting)
- (4) Informal conversations with Pete Strutton, co-chair of the biogeochemical task team of **TPOS2020**, about overlap in interests and potential activities



## Plans going forward:

- Special Session at 2017 EGU GA “**Recent advances in analysis and prediction of marine biogeochemistry and ecosystems**” (convenors: Gehlen, Fennel, Dutkiewicz (IOCCG)) – Abstract deadline is Jan 11, 2017
- Exploring possibilities for a WS on down-scaling in 2018 to be organized in 2018 as a multi-TT event (liaise with COSS-TT).
- Continue interactions with other TT (esp. DA, IV, COSS)