

Agenda
iMarNet Workshop 2
Model Skill Assessment
 7th - 8th March 2012, Oakley Court nr Windsor

Background to the workshop: To inform the selection of the baseline OBM for the next UK ESM and to gain a better understanding of the implications of biological model complexity through a coordinated model inter-comparison and the development and use of robust, process-based model metrics. The model assessment process will take account of computational cost, expert assessment of biological fidelity, potential of the models for future development and model skill assessment.

The overall purpose of the workshop is to bring the iMarNet community together to assist the evaluation of the performance of models of differing complexity via:

- Assessing the ability (or potential ability) of the of candidate models to address a range of critical ESM questions and hence inform the selection of the candidate models.
- Suggesting further approaches to model assessment with emphasis on:
 - Quantitative / Qualitative fit in space and time
 - Reproduction of long term trends
 - Biogeochemical Process model validity (biogeochemical).
- Analysis and publication strategy

Thursday 7th March 2013

11.00 Introduction to I-MarNet: Icarus Allen (PML)

11.20 Background to and status of the UKESM & Ocean model resolution Richard Wood (UKMO)

11.40 Links with Atmospheric Chemistry within an Earth System (ACITES) – Tom Anderson

11.50 IMarNet Model Intercomparison experiment: Background to the common forcing A Yool.

12.20 Assessing the models for the next ESM P. Cox, L. Kwiatkowski

12:50 Discussion

13:00 Lunch

14:00 Presentation of the candidate model hindcasts (model owners perspective)

Status of the Hindcast simulations,

Examples of outputs

Suggested approaches to the analysis

- Hadocc / Diat Hadocc
- Medusa
- Planktom

➤ ERSEM

15:30 Coffee

16:00: Summary of iMarNet diagnostics and model performance : L Kwiatkowski

17:00 Discussion: where should we focus our analysis efforts?

- a) Suitability for inclusion in the ESM
- b) The significance of model ecosystem complexity on ocean biogeochemical processes
- c) Assess the process validity of the component part of the models

18:00 Close

19:30 Dinner

Friday 9th March

9.30 Methods for assessing models: short talks and discussion Short talks invited ~ 10 mins max.

- Assessing the fidelity of biogeochemical model response to physical drivers *J Hemmings*
- Basin scale assessment of models and long term trends *J Bruun*
- Why not least squares - the importance of model discrepancy *P Challenor*
- Comparison of phytoplankton phenology from remote sensing and ecosystem models. *M-F Racault*
- Are the models correct and the data incorrect? *K Flynn*

10:45 Coffee

11:15 Discussion: What are the best ways to effectively compare these models and what metrics would be most useful in this regard?

13:00 Lunch

14:00 Discussion: Assessing the candidate models for the UK ESM (P Cox; L Kwiatkowski)

15:00 Discussion Model analysis and publication strategy (I Allen)

16:00 Close + Coffee