



Ocean Model Analysis and Prediction System

Science and Technical Implementation Plan Workshop

26th-27th October 2005

Bureau of Meteorology Research Centre

6th Floor Conference rooms 1&2

Coordinator:

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BLUElink>

Ocean Forecasting Australia



The science and technical implementation plan (STIP) workshop is an opportunity to review and refine the plan for the trial Ocean Model Analysis and Prediction System (OceanMAPS) being developed under the BLUElink contract. The STIP is intended to be a detailed plan for each of the system components including the namelist/parameter configuration, I/O, diagnostics and supporting scientific and technical documentation. The STIP also includes a plan for the operational infrastructure. The STIP was first initiated in June 2005 and covers the period from configuration through to the scheduled operational implementation in December 2006.

The draft STIP is under development. A small portion of the plan is available online for all contributors to review at <http://www.bom.gov.au/bmrc/ocean/BLUElink/OceanMAPS/>. The online document will be regularly updated leading up to the workshop. All contributions to the document and during the workshop are restricted to topics relevant to OceanMAPS.

OceanMAPS will make use of several components being developed and tested by scientists from BMRC and CSIRO as part of the BLUElink project. These components include: (a) Ocean Forecast Australia Model (OFAM), (b) BLUElink Ocean Data Assimilation System (BODAS), (c) NWP forecast fluxes, (d) Quality control system, (e) Data management system, (f) near real-time satellite observations, (g) near real-time profile observations and (h) SST analyses. OceanMAPS will integrate these components into a single system and prepare the schedule for operational forecasting.

The implementation of the trial system will consist of three phases each of approximately 6 months duration:

Phase 1 Infrastructure: Implement the trial system configuration as defined by the STIP. The implementation is further divided into two sub-systems each of 3 months duration:

1. Analysis cycle
2. Forecast cycle

The conclusion of the first three-month period coincides with this workshop. The analysis cycle will be demonstrated at the workshop and the forecast cycle plan reviewed.

Phase 2 Tuning: At the conclusion of Phase 1 a complete operational configuration will be available for trials. Phase 2 will conduct and report on the trial schedule defined by the STIP. This phase is also divided into two sub-components of 3 months:

1. Robust configuration
2. Extended configuration

The robust configuration will form the backbone of the forecast system and will include only those components tested and likely to be robust. The robust configuration might include the GASP fluxes only and an "aggressive" QC system. The extended configuration will include features that are potentially less robust and need to be tested within the robust configuration. Extensions might include blended GASP/LAPS fluxes, optimised QC and symmetric and asymmetric analysis cycles.

Phase 3 Monitoring: Based on the results of the operational trials in Phase 2 the "best" configuration for operational implementation in December 2006 will be adopted. The "best" configuration of the system will be "static" and assessed for robust delivery of forecasts throughout the monitoring period.

The specific goals for the monitoring period will include: (a) Monitoring, (b) Routine diagnostics, (c) Validation and skill assessment, (d) Ocean briefings and (e) Documentation complete.

Workshop timetable (draft)

Wednesday, 26th October 2005

- 09.00 Introductory BLUElink address
- 09.15 Services/user community
- 09.30 Procedural introduction
- 09.45 Ocean Forecast Australia Model (OFAM)
- 10.45 BLUElink Ocean Data Assimilation System (BODAS)
- 11.45 OceanMAPS configuration
- 13.00 Lunch
- 14.00 Operational infrastructure
- 15:30 Operational trial schedule
- 17.00 Close

Workshop dinner, venue to be announced

Thursday, 27th October 2005

- 09.00 Satellite observations
- 10.00 Profile observations
- 11.00 Quality control
- 12.00 Lunch
- 13.00 NWP fluxes
- 14.00 SST
- 15.00 Monitoring/evaluation
- 16.00 Review workshop outcomes
- 17:00 Close of workshop