



WP2 introduction

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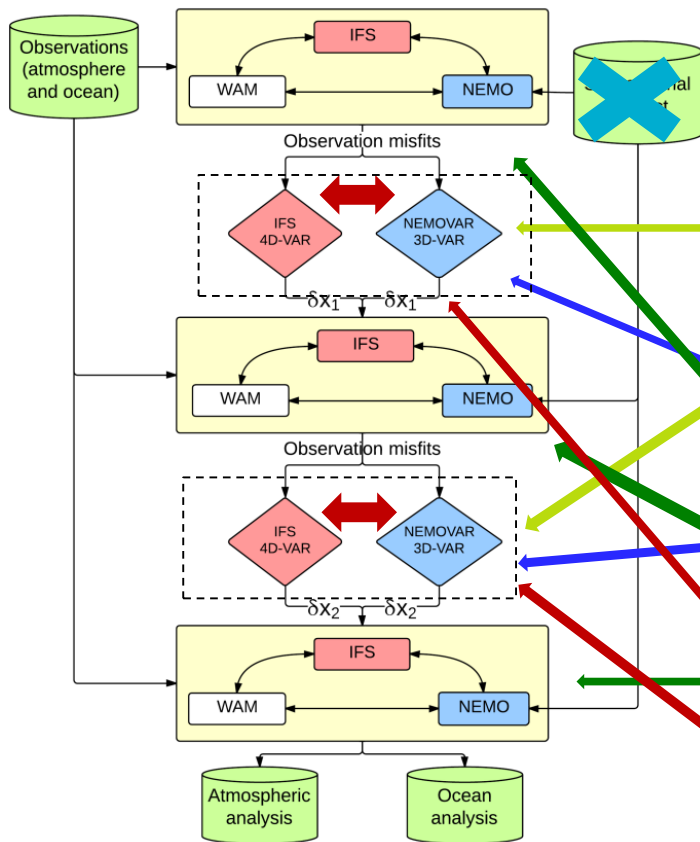


WP2 - Future coupling methods *Overview*

- Research and development in coupled data assimilation for climate reanalysis, and work on development of the carbon component.
- For implementation in the CERA (Coupled ECMWF Reanalysis) framework developed at ECMWF.
- All tasks in this work package will address:
 - the special requirements for the pre-satellite data-sparse era
 - the requirement to maintain a consistent climate signal throughout the entire reanalysis period.
- Early status report produced for August 2014.
- Contains, from each of the partners:
 - Overview and objectives of each task.
 - Plan of work.
 - Progress and status.
- Available on the ERA-CLIM2 wiki
(<https://software.ecmwf.int/wiki/display/ERC/WP2%3A+Future+coupling+methods>)

WP2 - Future coupling methods

Overview of system developments



- Current CERA system

T2.2 to include SST/sea-ice assimilation in NEMOVAR

T2.3 to improve the ocean analysis component including use of ensembles and 4D-VAR

T2.4 Development of the carbon component coupled earth system reanalysis

T2.5 Towards development of fully coupled data assimilation



WP2 plenary presentations

- Introduction to WP2.
- T2.2: Development of assimilation techniques for improved use of surface observations [METO, MERCO].
- T2.3: Development of the ocean analysis component [CERFACS, CMCC, INRIA].
- T2.4: Development of the carbon component coupled earth system reanalysis of the 20th century [UVSQ, MERCO].
- T2.5: Research towards development of fully coupled data assimilation methods [UREAD, METO, INRIA].
- Integration of developments into the CERA framework [ECMWF].





WP2 - Future coupling methods *Coordination*

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- Preliminary results from some partners showed good progress, e.g.:
 - The CERA system has been run for the period agreed at the kick-off meeting (Jan 2009 to Dec 2010)
 - > provides useful data and a benchmark for the developments.
 - Other groups plan to run tests of the developments they are making over the same period.
 - The work to develop a system to generate ensemble information and to make use of that within the NEMOVAR system is well advanced.
 - The integration of the 4D-Var capability within the CERA system is proceeding well.
 - Ocean physical-biogeochemical coupling work is also making good early progress.