



PSY3V1: The GODAE/Mercator eddy permitting global ocean forecasting system prototype, first results and prospects

M. Drévillon (1,2), N. Ferry (1,3), E. Rémy (1,2), E. Dombrowsky (1,4), N. Verbrugge (1,4), S. Guinehut (1,4), C. Derval (1,2), E. Durand (1,3), G. Garric (1,2), B. Tranchant (1,2), M. Benkiran (1,4), E. Greiner (1,4), J.-M. Lellouche (1,2)

(1) Mercator-Ocean, 8-10 rue Hermès, Ramonville, France, (2) CERFACS, 42 avenue G. Coriolis, Toulouse, France, (3) Météo-France, 42 avenue G. Coriolis, Toulouse, France, (4) CLS, 8-10 rue Hermès, Ramonville, France, (mdrevillon@mercator-ocean.fr)

The preliminary results of the Mercator-Ocean eddy permitting ($1/4^\circ$) global ocean Prototype System (PSY3v1) assimilating satellite altimetry data are analyzed. This system is the french contribution to the GODAE project for the global ocean and should run operationnaly mid 2005.

The PSY3v1 global ocean analysis / forecast system is forced with daily surface fluxes from ECMWF operational analyses, and constrained with JASON, ERS and GFO altimetry measurements for the year 2003. Independant in situ data of the Atlantic, Pacific and Antarctic ocean basins are contrasted with the simulation results in order to provide an estimation of the performances of the system. The results are also compared with the Levitus climatology, and with the 2003 ARMOR weekly products, which optimally combine satellite (SST, SLA) and in-situ (T/S profiles) near real time observations.