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Evaluation of the Mercator-Ocean global high resolution model (1/12°), comparison to the altimetric data.

O. Le Galloudec (1), R. Bourdallé-Badie (2), C. Bricaud (1), C. Derval (2), Y. Drillet (1), E. Durand (3), and G. Garric (4)

(1) Mercator-Ocean, Physical Oceanography, Ramonville St Agne, France (olegallou@mercator-ocean.fr), (2) CERFACS, Toulouse, France, (3) Météo-France, Toulouse, France, (4) MGC, Toulouse, France

In the framework of the GODAE project, Mercator-Ocean has developed a new global ocean configuration at high resolution (1/12°) based on the NEMO OGCM. To evaluate this model, an interannual experiment of 8 years (1999-2006), driven by atmospheric ECMWF analyses, has been performed. A comparison with altimetric data is presented. The Gulf Stream trajectory, and especially its separation at Cap Hatteras, is very well simulated. Areas with high level of energy like in the Aghulas Current, or in the Zapiola anticyclone or in the circumpolar current compare well with satellite altimetric data. A special study on the meso-scale activity characteristics has been performed. The results are in very good agreement compare to the data.