Interactive comment on “Development of a probabilistic ocean modelling system based on NEMO 3.5: application at eddying resolution” by Laurent Bessières et al.

Anonymous Referee #1

Received and published: 18 October 2016

The authors present the technical implementation of an ensemble version of the NEMO ocean modelling system. Details of the implementation on a parallel architecture are given. Example applications are given consisting of ensemble hindcasts of basin-scale North Atlantic configuration and a global configuration at 1/4 degree. Results are presented from these configurations showing how ensemble statistics generated online can be used to distinguish between forced and intrinsic variability.

Computing power has got to the point where it is becoming feasible to run ensembles of eddying ocean model configurations with a range of possible applications as noted by the authors. I thought this was a very clearly presented description of an ensemble system based on the NEMO model which is likely to be of use to the wider community.
The details of the code availability appear to be complete. The scientific results presented give an enticing prospect of the kind of analysis that will be possible with these new systems.

Minor corrections:

No line for "median" in the legend for Fig 6.

Interactive comment on Geosci. Model Dev. Discuss., doi:10.5194/gmd-2016-174, 2016.