

Interactive comment on “NEMO on the shelf: assessment of the Iberia-Biscay-Ireland configuration” by C. Maraldi et al.

Anonymous Referee #1

Received and published: 20 February 2013

General comments: The manuscript describes the design of the Iberia-Biscay-Ireland (IBI) ocean forecasting model and includes a detailed evaluation of model outputs with numerous components of the regional ocean observing system. Although some sections of the article are fairly technical (and therefore perhaps not of key interest to the reader) I applaud the authors for linking these technical details to a thorough model-data intercomparison with published tidal, transport, SST, in-situ temperature, salinity and velocity measurements. I recommend publications once my comments have been addressed.

Details: 1. Page 94, Eqn. 7: the right-hand side of the equation is hard to understand/read. For instance, maximum of two quantities is not specified, e.g. $H_{\max} = \max(a, b)$. Please improve the display style.

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2. Page 98, lines 8-16: Do you use a vertical mixing scheme which parameterizes internal wave mixing and, if so, did you reduce/eliminate the mixing coefficient in this scheme because you explicitly resolve internal tides?

3. Page 104, line 1: Figure 7 ==> Figure 7a. Add label (a) to Figure 7a.

4. Page 104, line 27: Figure 7 ==> Figure 7b. Add label (b) to Figure 7b.

5. Page 104, line 16, 17: "... SST data assimilation leads to realistic SST simulated fields in PSYV3." The word "realistic" is non-scientific. Please be more specific what you mean, e.g. closer agreement with observations.

6. Page 104, lines 26 to page 105, line 2: Something seems to be wrong here and/or does not match the figures shown. I cannot see the three Dsst amplitudes in the box plots of Fig. 7(b), only two are shown. Please adjust text and figure accordingly.

7. Page 116, line 18: In surface ==> At the surface.

8. Page 127, line 1: manuel ==> manual.

9. Page 131, Table 2: explain table heading acronyms SEMA, SEM, Inc and Pha in table caption.

10. Page 133, Table 4: Figure heading: Organism ==> Organisation???

11. Page 138, Fig. 5: explain acronyms TOV, TMV and TMS in figure caption.

12. Page 140, Fig. 7: crosses are invisible or very hard to see. Please use bold font for crosses.

Interactive comment on Ocean Sci. Discuss., 10, 83, 2013.

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