

Interactive comment on “Integration of a relocatable ocean model in the Mediterranean Forecasting System” by A. Russo and A. Coluccelli

Anonymous Referee #2

Received and published: 14 November 2006

The MS tackles a relevant topic of great interest in the field of (operational) oceanography. The impression resulting from its reading is that the focus of the paper is too much on spatial resolution, while other aspects that should be dealt more thoroughly, such as the physical processes actually included within the numerical models, are not adequately discussed. We encourage the authors to improve the MS on that direction and to better express their results with more readable pictures.

page 1611 l. 2. The DA scheme should be cited and discussed with more extension
l. 5. comments on satellite coverage would be extremely welcome l. 19 and following.

Unfortunately, it is not only a matter of high resolution. The right physical processes have to be included as well. Among these, we remind here nearshore processes, availability of meteo fields, wave effects, vertical mixing. Authors should expand this part of the MS with more in depth criticism. I. 25. How often are these fields available? Every 6, 12 hours?

page 1612 I. 1-2. which are the available satellite and in-situ data assimilated? How? I. 10/I.27. How does the monthly mean climatology may impact resulting high resolution numerical simulations? How does the simple one-way nesting?

page 1613 I.27. Is the rigid lid assumption a valid one in the context of the Adriatic sea, where tides are generally needed to be included?

page 1614 I. 5. The vertical diffusion formulation proposed appears not to be state-of-the-art. Comments on this are welcome.

Also, a recent example of coupling HOPS with non-rigid lid model such as POM (Onken et al., 2005. A rapid response nowcast/forecast system using multiply nested ocean models and distributed data systems. Journal of Marine Systems, n.56, 45-66) would be a valuable reference for this work

page 1615 some additional info on how Boundary Conditions are imposed would improve the quality of the paragraph.

page 1616 I. 20. resemble i.o. resembles I. 25. to show i.o. to grant

page 1619 I. 12-13 there are some extra spaces in the text

page 1620 fig.1 Scales of SeaWIFS and HOPS surface salinity and currents are not visible. The quality is not acceptable in the current version.

page 1621 fig.2 Scales and color palette are missing. It would be a great improve if authors could show a zoomed picture of AREG salinity as well.

[Full Screen / Esc](#)[Printer-friendly Version](#)[Interactive Discussion](#)[Discussion Paper](#)

Interactive comment on Ocean Sci. Discuss., 3, 1609, 2006.

OSD

3, S685–S687, 2006

Interactive
Comment

Full Screen / Esc

Printer-friendly Version

Interactive Discussion

Discussion Paper

S687

EGU