

Interactive comment on “Physical forcing and physical/biochemical variability of the Mediterranean Sea: a review of unresolved issues and directions for future research” by P. Malanotte-Rizzoli et al.

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Answers to comments of reviewer 2 – Reviewer’s comments in quotes

Most of reviewer’s 2 comments follow those of reviewer 1, and our answers are given in response to reviewer 1.

1)“I recommend ungrouping the subsections in section 2 (Differences and similarities between...) and sections 3 (relative importance of external forcing...) into individual sections. I think also that sub-section 2.2 (Circulation, forcing and water

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masses...) should be merged with section 3.1 (Major forcing of the Mediterranean circulation...) and that sub-section 3.2 (Interactions between the shelf slope circulation and open sea...) should be absorbed into section 4 (Shelf/deep sea interactions and exchanges...)”

The major division between section 2 and 3 has been maintained as it reflects the collective opinion of the contributors to the paper. However, the sub-sections have been fully restructured. The old sub-section 3.1 has been eliminated and sub-section 2.2 now includes the relevant parts of 3.1. Sub-section 3.2 has been moved to section 4 as also recommended by reviewer 1.

2)“I recommend removing “ Levantine basin” from the title of 4.1.3 (Eastern Mediterranean and Levantine Basin). This sub-section can benefit from additional description of quasi-permanent features like Central Ionian Current, Mid Mediterranean Jet, Cyprus Eddy and Shikmona Eddy. Long term scientific discussion regarding these features was summarized recently in papers of Gerin et al., 2009, Mena et al. 2013; and Poulain et al., 2013.”

The internal division of sub-section 4.1 into the different basins have been eliminated also following the recommendation of reviewer 1. The revised sub-section 2.2 now has a rather extensive discussion of the above Eastern Mediterranean features under “ Present knowledge”. Discussion of these features is also presented in the new sub-section 4.3, albeit in a different context. The quoted papers are also referred to.

3)“I think also that some figure (Mediterranean map, overturning scheme, circulation, T/S diagrams etc. ...) will improve readability of the paper”

Several figures have been added by the lead authors in most of the sub-sections as they deemed appropriate.

Interactive comment on Ocean Sci. Discuss., 10, 1205, 2013.