Interactive comment on “The Mediterranean Sea system: a review and an introduction to the special issue” by T. Tanhua et al.

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Received and published: 9 May 2013

The purpose of the paper in the authors’ words is to “... provide information on the Mediterranean Sea oceanographic situation, and [to] present a short review that will serve as background information for the special issue in Ocean Science on “Physical, chemical and biological oceanography of the Mediterranean Sea”.

After having read the paper I have a few objections on the way they designed it and on its usefulness which, I believe, is the main motivation for writing it.

1. Introductory papers to thematic issues, often based on observational or experimental efforts, provide the rationale for the effort, comparing which were the open issues before the effort and which were approached/resolved after the effort.
There is no synthetic presentation to the contributions of the special issue and the cruises, whose data are apparently at the basis of the analysis, are described in their intrinsic scope, very often different from the scope of the special issue. This does not make too much sense to me, even though I can appreciate the honesty of the authors to fully acknowledge the effort of other colleagues. If observations in a specific cruise were very relevant from question A, but absolutely irrelevant for question B, on which the issue is focused, I believe that mentioning question A will only distract the reader and does not provide any useful contribution. An introductory paper is different from a cruise report. I would then suggest to summarize in one paragraph the commendable efforts made by the authors and the participants to the cruises to extract form three cruises, very wide in scopes, the information to address questions a, b, c, etc.

2. The text providing the “..information on the Mediterranean oceanographic situation..” is too long considering the fact that repeats what has been discusses in tens of reviews on Mediterranean dynamics.

Even a short review should provide some insight deriving from the point of view of the authors. In the paper the authors implicitly postpone their views and the new results to the other contributions in the issue. Then the part on the status-quo can be summarized in a compact list of statements, which serve as an introduction to the new results.

3. Since the authors do not anticipate, besides a couple of charts, what will be the key contributions of the issues, it is not easy to suggest a different way to restructure the paper.

My suggestion is to go back to the main questions raised in the paper, e.g., deep water formation, shallow overturning, oxygen turnover and nutrient ratios, etc. to say which they believe are the most important unsolved questions (better if they are bullets) and anticipate on which of those the special issue is providing a new contribution and with which paper(s). (See point 1 above)
I do not recommend the publication of the paper in its current format. I suggest them to resubmit it taking into consideration the changes suggested above.

Interactive comment on Ocean Sci. Discuss., 10, 581, 2013.