Interactive comment on “Pre-operational short-term forecasts for the Mediterranean Sea biogeochemistry” by P. Lazzari et al.

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We thank the Anonymous Referee for its useful suggestions and comments. We here present how we intend to proceed in order to review the manuscript, following what explained by Ref.#1.

1. We agree to better clarify the focus point of the manuscript. Briefly, our scope is to describe the system developed for the operational implementation of the short-term forecasts of Mediterranean Sea biogeochemistry within MERSEA project. Moreover, we present a corroboration of the model skills in the frame of the main objectives of operational oceanography highlighted within MERSEA and MyOcean projects. The model validation is not the prevailing focus of the present contribute, but following what advised by Ref.#1 we will enrich the section devoted to model corroboration (see point C639).
3).

2. A detailed description of the model adopted, including parameters setting and values, formulations and governing equations will be added as electronic appendage. We will also describe the implementation of the current model version and the differences with the default one.

3. A more informative discussion of the corroboration of the results will be added, in particular showing where/when the model performs well by means of skill diagrams, which summarize multiple aspects of model performance (Jolliff et al., 2008), following what suggested by Ref.#1. It is noteworthy to stress that, according to the specific focus of the manuscript (point 1), the corroboration of the model results is based on the available data in the operational framework, i.e. satellite chlorophyll. This variable has enough spatial/temporal coverage to be compared with outcomes from our Mediterranean basin-scale model. In addition, chlorophyll has been defined as the service product of our operational forecasting system requested by the zero-version of the MyOcean catalogue.

4. In view of the general clarification of the main goal of the manuscript, which is the description of the implementation of the operational forecasting system (point 1.), we consistently choose to address the corroboration to the comparison with the operational biogeochemical data available for the short and recent simulation period here considered (i.e. satellite surface chlorophyll concentration). A wide discussion of the model capability to estimate key features of the biogeochemical dynamic of the Mediterranean Sea is certainly important but it is beyond the focus of the present manuscript. A manuscript specifically addressed to this aim is in preparation considering a longer simulation period (1998-2004).

5. We agree to add more bibliographic references concerning the Mediterranean Sea biogeochemistry, according to the intended focus of the work.

6. Editorial and language/grammar improvements will be considered.
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