Interactive comment on “Black Sea coastal forecasting systems” by A. I. Kubryakov et al.

Anonymous Referee #1

Received and published: 1 July 2011

The paper gives a review of recent developments and status of the Black Sea coastal forecasting systems. Such a review is important and also interesting, having in mind similar developments in other sea areas.

The paper lacks in my mind some important details and includes some unclear parts. Therefore I recommend revision before final publication.

I give some critical comments below.

1) Introduction lacks any description of Black Sea and/or its coastal regions. Although it is mentioned that coastal regions cover regions of big ports, river influence areas and recreational areas, oceanographic/environmental background is not presented. For example, term “Rim Current” used later should be introduced here with proper references.

2) The names appearing in the text (like Crimea, Danube etc) are not presented in the figures.

3) Figure 1 is not necessary, since the “pilot system” has been published earlier and the result from this system are not presented in the paper.

4) Physical part of the models is somehow described (POM is a well-known model), but principles of the ecosystem model are not given. It is not enough say that “model extends to 200m depth with 26 z-levels, compressed to the sea surface. It includes 15 state variables...”.

5) Subtitle 3.2 “System products” does not agree with the following text: it presents some examples of products together with oceanographic interpretation. If interpretation will be kept in the final text, then I would like to see references how these findings agree with earlier results.

6) Fig. 3 and explaining text should be moved into subchapter 3.2, together with examples from physics. Labels in Fig. 3 are not visible.

7) Statement “This narrow jet of the cold water along the western coast of the Black Sea is often observed on the satellite infrared imagery in winter time” (p. 1061) requires reference.

8) Sentence “Four days forecast demonstrate complex mixing..” (p 1061): where the “four days” come from, the system produces three days forecast?

9) Fig. 6 is split now into a and b, but the text refers to one composite figure.

10) Page 1062 presents information about Bulgarian measurements, but I was not able to find where these measurements are analyzed and presented. Figs. 8 and 9, giving locations of non-used measurements, should be deleted.

Abbreviations like ECOOP, EuroMISS, OpenDAP etc are not explained and/or referenced. Abbreviation of participating institutions are not explained sequentially.

Interactive comment on Ocean Sci. Discuss., 8, 1055, 2011.