**Ocean Science
Discussions**

Interactive comment on "Operative forecast of hydrophysical fields in the Georgian Black Sea coastal zone within the ECOOP" *by* A. A. Kordzadze and D. I. Demetrashvili

Anonymous Referee #2

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General comment

This paper presents RM-IG, the forecasting system for the easternmost part of the Black Sea developed at the M. Nodia institute of Tbilissi, Georgia. This system is based on a 3D primitive equation regional model at a quite high resolution (1 km) forced at its boundary by the coarser, but still high, resolution black sea model developed at MHI. The two systems are compared over the area covered by RM-IG, showing some improvement over the MHI lower resolution model.

However, I would like the authors to emphasize more the improvements bring by the higher resolution RM-IG over the MHI model for that area. In some places of the

paper, differences are spotted, but it is not clear that is is an improvement or not (e.g. beginning of p 4).

As mentioned by the other reviewer, this paper lacks comparison with real data that could help to validate the system. There are several sources of observation that could be used, satellite (sea level, sst) and/or possibly profiles. It may be a good idea to check whether the ENSEMBLES dataset includes floats for this part of the Black Sea (available at http://www.metoffice.gov.uk/hadobs/en3/data/EN3_v2a/download_EN3_v2a.html) or not.

There is quite a lot of figures respect to the length of the paper, it may be worth trying to reduce this number, it would help clarifying the message. One way might be to use difference maps for some of the figures.

The english, even though perfectly understandable may need to be smoothed out a little. It would benefit from a re-reading by a native english speaker.

provided the comments above are addressed, I found this paper interesting and clearly in the scoop of that issue and would recommend its publication.

minor issues:

- p1 l26: 'for the our regional . . .' 'the' or 'our' should be removed.

- p1 l27: please spell out BSM.

- p3 l48: 'fresher' instead of 'less salty'

- p3: 'Nesting' is a bit ambiguous since there is no feedback from RM-IG to MHI, 'One-way nesting' may be preferable

- p4 l16: a cyrillic character sneaked in for the unit of time

- p5 - l46: there is a typo in the equation

- p6: In the appendices, italic and regular fonts are used alternatively for the same variables (e.g. p6 l19)

- p6 - l24-25: 'nebulosity' instead of 'cloudiness'