Interactive comment on “Forecasting circulation in the Cilician Basin of the Levantine Sea” by E. Özsoy and A. Sözer

Anonymous Referee #1

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The paper presents a high resolution hydrodynamic model for hydro- and thermodynamics in the Cilician Basin. The model was designed for operational application and forecasting circulation. The paper discussed the model set-up and provides details on its implementation which are of interest for further applications of the model. In particular, different implementations of sea surface boundary conditions and air-sea fluxes are performed and the models sensitivity to these is discussed.

General opinion:

The growing population, industry and tourisms in the coastal area of the Eastern Mediterranean and hence an increasing need of managing this coastal (eco-)system clearly demands for high resolution 3-d model(s) and detailed discussions of their im-
plementation. The here presented model implementation and the selection of key problems for further sensitivity evaluation show a high standard. The model implementation was performed by experienced modellers with a clear view about weaknesses in state of the art hydrodynamic models and the discussion of the hydrodynamic and thermodynamic phenomena indicate good knowledge of state of the art in the area. This work is certainly worthwhile to be published, especially since the investigations presented could be of a wider interest for other operational model implementations.

However, the paper suffers from unclear description and clarification of the background of this development and its perspectives and results. This limits the readers understanding of the goal and major achievements of this interesting (!) model development. The paper particularly needs focussing in the introduction on key questions and needs for the model development and planned applications. Furthermore the expansion of the discussion and particularly conclusion section is need before publication, to increase the potential use of the study for a wider auditory.

Overall, I recommend publication after major revision and significant improvement of the presentation of achieved results.

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