

Anonymous Referee #2

The manuscript describes a set of numerical simulations of the Adriatic Sea general circulation under interannually varying forcing conditions. The results are then compared against in situ observations collected during the same period of the simulations.

The paper reads like a report on the simulations carried out and the title is somehow misleading, since at the end of the paper the reader has not (in my opinion) a clear view of the Adriatic Sea Hydrographic conditions from 2000 to 2008, but has some information about the skill of the model to reproduce observations.

This is a valuable effort "per se" and might deserve publication but it has to be stated more clearly rather than proposing to the readers a misleading title.

We disagree with the Anonymous Referee#2 about the title, also Referee#1 states: "The title clearly reflects the contents of the paper". However, if the anonymous Referee#1 proposes a more appropriate title, we can use it in the revised version of the manuscript.

For what concern the inter-annual variability of the hydrographic characteristics of the Adriatic Sea during the period under investigation, we also believe that the manuscript proposes for the first time (to our knowledge) a description of those quantities during the 2000-2008 period and for the entire Adriatic Basin. The results discussed in the manuscript are also in good agreement with an observational study recently published on the Southern Adriatic Sea (Cardin et al., 2011). Model results are used to fill the observational gap (in-situ data). The usage of the data in order to provide a model skill would be misleading due to the poor number (both in space and time) of available data, with the only exception of satellite SST which, however does not provide any significant information on the thermohaline processes investigated. The section on the Dense Water formation, which is a relevant part of the manuscript, describes the Adriatic Sea response to the interannually varying atmospheric forcings. In addition, in the last section "summary and Conclusion" concluding remarks about the modeling of the Adriatic Sea are provided.

Therefore I recommend a major revision aimed to emphasize more the comparison of the model results with the observations and highlight the skill of the model.

The manuscript requires also a formal linguistic check.

We thank the anonymous Referee#2 for this comment, the manuscript has been modified according to suggestions provided by Referee#1 and also reviewed by an English expert.

A new version of the manuscript has been prepared accordingly to the suggestion proposed by the Anonymous Referee#1 and we hope that the revised version better matches Anonymous Referee#2 requirements.