Geosci. Model Dev. Discuss., https://doi.org/10.5194/gmd-2020-326-RC2, 2020 © Author(s) 2020. This work is distributed under the Creative Commons Attribution 4.0 License.



Interactive comment on "Development of an atmosphere—ocean coupled operational forecast model for the Maritime Continent: Part 1 — Evaluation of ocean forecasts" by Bijoy Thompson et al.

Anonymous Referee #2

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This paper is an important contribution in the area of regional coupled model development. Authors have analyzed the ocean forecasts from a regional coupled suite which is under development. Team of Scientists/researches from different part of the world are working to develop a suitable regional coupled model which can be used to zoom-in (run at a very high resolution) for any extreme event or case such as depression/front or tropical cyclone forecasting. SST Bias and RMSD and correlations are very promising from this model over the oceanic part of the domain of interest. Times series of the domain averaged SST drifts shown by authors over the period of a year is

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an interesting result as well, however, this needs further work and probably beyond the scope of this paper. I suggest authors to also look in to the atmospheric part (which I am sure they must be planning) and try to find answer for this SST drift. Hindcast SST's are in agreement with those of RAMA moorings, tide-gauge also is very close to the observation. SST bias of less than 0.2 in 6 day lead forecast is a significant result for such a high resolution forecast. Mean correlation of 0.5 for 6 day lead forecast is also a very good number which is 0.85 for Java Sea. Vertical thermal structure of the forecasted ocean looks very promising up to day 3. SSH results are also in well agreement with observation. Overall this is a great work and should get publish. I have been reading some suggested typos correction by other reviewer which I don't want to repeat and believe that if those typing mistakes are corrected this manuscript is worthy for publication.

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