

Interactive comment on “Temporal evolution of Red Sea temperatures based on insitu observations (1958–2017)” by Miguel Agulles et al.

Anonymous Referee #2

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This study investigates the temperature distribution in the Red Sea from observations collected from 1958 to 2017. The authors combine the data from multiple sources and apply a stringent quality control resulting in a high quality data set which is interpolated to produce a gridded climatology. This allows for an understanding of the Red Sea variability.

As the observational data was collected from CTDs the article could have been greatly improved if the authors had included the analysis of salinity and done the calculations along density isopycnals rather than on depth surfaces. Furthermore the temperature used needs to be either Conservative Temperature or potential temperature not in situ temperature.

I was surprised by the high percentage of the observations data was located incorrectly,

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are the authors sure there is not a salinity compensation to this low temperature water that produces an appropriate density for this region.

Overall I found the paper to be well written and is interesting and I believe it should be published. It is great that the authors made TEMPERSEA freely available.

Interactive comment on Ocean Sci. Discuss., <https://doi.org/10.5194/os-2019-66>, 2019.