

I challenge the value of proposed SST forecast.

In the ocean, the monthly SST, as the predicted variable of this study, has strong seasonality. If we use the SST of, for example, Jan of 2008, as the 'forecast' of Jan of 2009, we will find unexpectedly small differences between them, generally <2 degree. This is called 'persistence' forecast, but using the seasonality information. We may call it 'climatological forecast'. Fig. 1 shows an example of such a climatology forecast.

My point is the proposed method does not exceed such a simple 'forecast', with higher forecast errors, making the forecast operationally useless. When given SST for a deep learning to learn, it only learns the seasonal pattern, not subtle year-to-year SST changes. That is the reason why many studies predict SST anomaly, not SST itself.

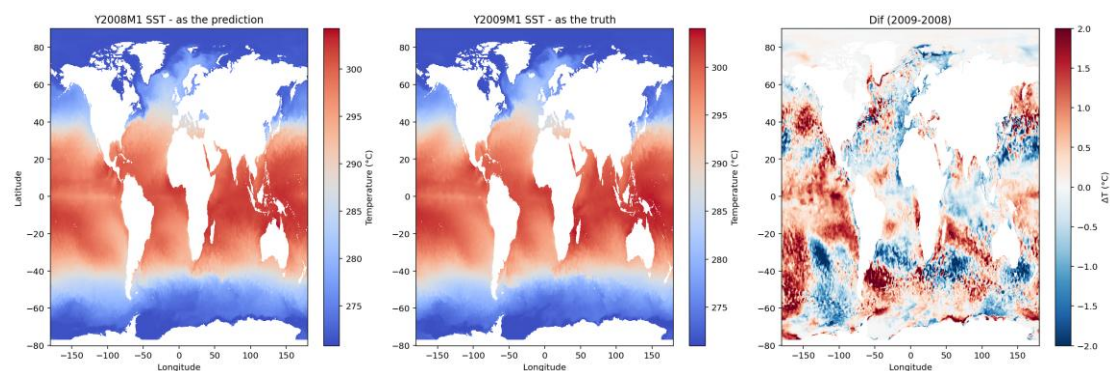


Fig. 1 Example of SST climatological forecast

Besides, the manuscript is poorly written.

- (1) Although in the abstract, the authors claim that 120-month forecast is obtained, but no results were shown in the manuscript.
- (2) Section 3.3.4 is written in a non-informative and verbose way.
- (3) <https://doi.org/10.1080/17538947.2023.2260779> this DOI in the Code and Data Availability is in-accessible.
- (4) The analysis in Section 3 is superficial and pointless.