

## ***Interactive comment on “Sampling strategies based on the Singular Value Decomposition for ocean analysis and forecast” by Maria Fattorini and Carlo Brandini***

### **Anonymous Referee #2**

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The paper investigates, for the ocean model, a well-known observation sampling strategy thoroughly assessed in the past for atmospheric model. The subject is not innovative and the investigation does not bring any new findings or useful practice for operational ocean forecast. Moreover, the paper is not well organized and poorly written, which makes very difficult to follow and properly interpret. There are also many inaccuracies in the terminology used and in some explanations provided. The twin OSSE technique is used in a simplified model context and with perfect observations (unrealistic assumptions) and without any author's attempt to validate the realism of the NR and of the differences between the NR and the analysis fields. The small impact of the different observation sampling on the analysis and forecast (as expected)

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cannot justify any use or operational implementation of the methodology proposed.

Please also note the supplement to this comment:

<https://www.nonlin-processes-geophys-discuss.net/npg-2018-22/npg-2018-22-RC2-supplement.pdf>

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Interactive comment on Nonlin. Processes Geophys. Discuss., <https://doi.org/10.5194/npg-2018-22>, 2018.

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