

Review of the revised paper “Contribution of a constellation of two Wide-Swath Altimetry Missions to Global Ocean Analysis and Forecasting” (os-2021-108)

General remarks:

Apart from the specific remarks below, the authors have done an adequate job of revising the paper in response to my remarks. In responding to the reviewers, the authors should have highlighted modified passages with a different color and indicated explicitly in the response to each remark whether they modified the text, giving page and line numbers. This is standard practice for helping the task of the reviewer.

Specific remarks:

1. Abstract. “*Sea Surface Height (SSH) analysis and 7-day forecast error will be globally reduced by about 50%.*” This is speculation. All you can do here is report what you’ve seen in your OSSEs, which are idealized experiments that are likely giving overly optimistic results. Replace “*will be*” by “*are*” and then for clarity add “*in the OSSEs.*” at the end of the sentence. This remark also applies to the first paragraph in the Summary and Conclusions.
2. Response to Remark 3: Section 3.1. The sentence in the paper is unaltered and the explanation still leaves me confused. It may be the choice of wording that’s confusing me. A “Run” usually refers to a simulation, not the model itself. Here, “Free Run” seems to refer to a particular model configuration that’s used for simulations with and without data assimilation. But later on (first paragraph Section 3.4), we’re told that OSSE0 (no assimilation) is the Free Run. Why not just say: “*The second model is used to assimilate synthetic observations from the NR. This model uses...*”. And then explain the Free Run (no data assimilation) when you describe the OSSEs.
3. Response to Remark 7. This is clear now. These equations and explanation should be included in the paper, after equation (1) so it’s completely clear what you’re presenting.