Earth Syst. Sci. Data Discuss., referee comment RC2
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Comment on essd-2022-181

Anonymous Referee #2

Referee comment on "Improved global sea surface height and current maps from remote sensing and in situ observations" by Maxime Ballarotta et al., Earth Syst. Sci. Data Discuss., https://doi.org/10.5194/essd-2022-181-RC2, 2022

This manuscript presents a new gridded sea surface height and current dataset produced by combining observations from nadir altimeters and drifting buoys. The application of the MIOST solution is extended to the simultaneous mapping of equatorial waves and mesoscale circulation from real observations. These results pave the way for the exploration of new types of ocean signals that may eventually be mapped from remote sensing and in situ observations.

In the introduction section, it is better to review and summarize different global gridded sea surface current datasets that already exist. Also, Further highlight the differences and advantages between this data set and other previous data sets.