

Ocean Sci. Discuss., author comment AC2
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Reply on RC2

Sandrine Mulet et al.

Author comment on "The new CNES-CLS18 global mean dynamic topography" by Sandrine Mulet et al., Ocean Sci. Discuss., <https://doi.org/10.5194/os-2020-117-AC2>, 2021

Thanks a lot for your comment. I agree that geodetic MDTs computed from combined geoid model could resolve scale smaller than 100km, I should precise that I talk about "satellite only" geoid model. However, to be independent from any apriori MDT, we do not want to use combined geoid models that use a priori MDT to convert altimetric information to gravimetric signal.

I agree that using combined geoid model, geodetic MDTs have valuable signal at scale shorter than 100km especially in main currents but in less energetic area residual noise could be important and dealing with this noise is not trivial.

I also agree that some comparisons with other geodetic MDTs could be useful and this will be considered in the revised manuscript.