

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

Müjdat Aydın and Şükrü Turan Beşiktepe

Author comment on "Mechanism of generation and propagation characteristics of coastal trapped waves in the Black Sea" by Müjdat Aydın and Şükrü Turan Beşiktepe, Ocean Sci. Discuss., <https://doi.org/10.5194/os-2022-1-AC2>, 2022

Dear Emil

Thank you very much for your effort and time to review our manuscript. Your comments are very valuable and will be very helpful to improve our manuscript.

We would like to clarify the three points mentioned in your review.

1. Thank you for reminding Stanev and Beckers (1999). I was aware of this work and I can not still understand how I missed it. It is a big mistake on our part not to have referenced it. In our 2001 JMR paper, we indicated it as a key reference for future studies on the CTWs in the Black Sea, but for some reason in our library, we classified it as a basin modes study. When we looked at it again, it contains what we needed to dynamically justify our observations with the independent model. We will benefit from it in the revised form. We are glad you reviewed our manuscript and brought this to our attention.

2. Your recommendation on the deeper analysis with model results seems reasonable. However, we could not do it even we also thought before;

i. The model outputs from CMEMS was available one snapshot per day and hence the time resolution was not enough.

ii. We did not want to go into the deeper analysis of the model which we do not have full control over it. This can be done in collaboration with CMEMS model developers as follow-up work. We wanted to focus on observations and demonstrate the existence of the phenomena in the Black Sea and its role in the Black Sea dynamics in a descriptive manner.

3. The beauty of the scientific history of the developments of the CTW theory was attracted us and we wanted to share this with readers at the beginning of the manuscript. We do not want to remove it. But we will try to make it more concise if we can.