

## ***Interactive comment on “Wave climate and storm activity in the Kara sea” by Stanislav Myslenkov et al.***

**Stanislav Myslenkov et al.**

stasocean@gmail.com

Received and published: 11 August 2020

The authors are grateful to the referee for the hard work with manuscript and significant comments. The article is a very large, so a lot of technical information was not included in the text. Here I will try to comment on the main claims: This work was started at 2016, and at that time we used the newest version of WW3. We made sensitivity tests with all available parametrization, including the interaction of ice and waves. Model results was compared with several buoy stations in the North Atlantic, the Norwegian Sea, the Barents Sea. But the ST1 scheme was the best choice based on Bias, RMSE and R. The IC0 ice scheme provide the best results. In the Kara Sea the direct wave measurements practically absent, and we use all with is available for us. We can include in the paper the comparison of model results with Saral and Sentinel satellites

C1

directly for the Kara Sea. We can include some sensitivity tests with different configuration from 6.07 WW3 but I believe that the storm statistics will not changed. The interaction between ice and waves is a very hard task and needs a separate study. In our paper the focus is on the extreme storm events (with SWH 5-7 m) and this events possible in case wide open water without ice. Thus, the using different ice schemes has no influence on the climate statistics and trends. We agree with all comments on the English language and inaccurate using of terms and will fix it in the next version of manuscript.

---

Interactive comment on Nat. Hazards Earth Syst. Sci. Discuss., <https://doi.org/10.5194/nhess-2020-198>, 2020.

C2