

The Cryosphere Discuss., referee comment RC6 https://doi.org/10.5194/tc-2021-35-RC6, 2021 © Author(s) 2021. This work is distributed under the Creative Commons Attribution 4.0 License.

Comment on tc-2021-35

Hajime Yamaguchi (Referee)

Referee comment on "Perspectives on future sea ice and navigability in the Arctic" by Jinlei Chen et al., The Cryosphere Discuss., https://doi.org/10.5194/tc-2021-35-RC6, 2021

This is an interesting analysis, but I question the huge scale difference between model computations and ship navigation. The ensemble mean is expected to improve the overall prediction accuracy but substantially smoothen the spatial resolution. In my experience, ship navigation simulation could not be well made without careful interpolation and sea ice data modification. Do you have any correlation data between model results and real ship navigability? If you have done such processing in your work, please clarify it. Even if you have not done it, I think you should comment on the uncertainty of your assessment.

I also agree with the other reviewers' comments on the web and I think the authors reply properly. Thus I will not repeat the same comments here.