Comment on essd-2021-435
Yubao Qiu


Lake ice is a good indicator for the regional changes of climate or enviromental or even the water and energy exchanges. Author would like to extract the big lake (as we know there are much more records also pulished as dataset for the large lake or even small lakes), the method and imput data are not so much difference with the previous development, so encourage the author articulate the value that this added to the dataset.

Others questions:
1) Why not engage the AMSR2, as this is really a good record for the lake observations?
2) The input brightness temperature was not calibrated at the same basis, so how do you use the threshold (interruptive changes detector), which may induce the errors to your decision of dates.
3) The optical image would be much better for the validation to the ice cover, while compared with Du etc.(2017) result, this is also from the passive microwave remote sensing, this introduce the error to it.
4) The data opened include other parameters of lake ice, or looks only the start and end dates, while the passive microwave remote sensing (for those larger lakes) can contribute starting of freezing dates, and end of freezing dates also.

Highly appreciated to include the last development in this area, or may be compared with existing records, it would be giving more value to this work. Thanks.