

Editors comment:

*Please add more discussion on the reviewer #1 to the manuscript.
One example is the reviewer#1's comment on Page 11 row 8. Your replies on some difficulties to simulate freezing process will be useful for readers of your paper.*

Thank you for your suggestion. Following additions were made to the manuscript:

Discussion about freezing process was added to section 3.6: “This may cause too cold surface temperature and too fast ice formation in the simulation. However, the phenomena s accurate modeling is difficult as it would require increasing surface temperature when freezing, which would cause temperature to rise above the freezing limit. This might cause surface temperature to bounce above and below freezing limit during freezing.”

An addition was made to section 4.2 regarding data quality checking process: “This might have caused removal of some real data, but it is not expected affect considerably to the results.”