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# *Interactive comment on* "Landfast ice growth and displacement in the Mackenzie Delta observed by 3D time-series SAR speckle offset tracking" *by* Byung-Hun Choe et al.

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This is a very interesting paper presenting a new innovative method for the growth and displacement of landfast ice from SAR. The information was well presented and addressed an important issue of landfast ice growth in the Mackenzie Estuary. Field observations would increase the value of this paper but their absence in this case is quite understandable given the extreme remoteness and accessibility of the site.

Air temperature is an important component of the methodology towards the sea thickness model but the authors fail to mention what the trend was during the study period. It would be good to know how this compares with the information presented



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Discussion paper

in the discussion. Is there a threshold of growth once a maximum temperature is reached? Is that why maximum growth takes place between November to January and not after.

Please also note the supplement to this comment:
https://www.the-cryosphere-discuss.net/tc-2020-116/tc-2020-116-RC1-supplement.pdf

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