

I thank the authors for their tremendous effort to reply to my comments and to improve their manuscript. It is a reward if also the comments of a non-expert in statistical sea-ice extent forecast are taken serious.

I suggest that the paper is ready for publication pending the comments / technical corrections listed and correction of the typos.

We thank the reviewer for the suggestions/comments/feedback that helped us improve our manuscript throughout the whole review process.

Comments / Technical Corrections

On page 8, lines 11-13, you might want to add that increased cloudiness and humidity are responsible for enhanced melt via enhance longwave radiation. When talking about shortwave radiation budget, the conditions are not as straightforward as it seems (see Perovich, The Cryosphere, <https://doi.org/10.5194/tc-12-2159-2018>) because the efficiency of the impact of clouds on sea-ice melt strongly depends on timing and surface properties.

The text has been modified following the reviewer's suggestion (page 8, lines 13-14).

Same page, lines 34-35: It is correct that the quoted storm possibly brought large amounts of heat and moisture but it might make sense to consider two other aspects which are presented here: Zhang J., R. Lindsay, A. Schweiger, and M. Steele (2013), The impact of an intense summer cyclone on 2012 Arctic sea ice retreat, *Geophys. Res. Lett.*, 40, 720–726, doi:10.1002/grl.50190 --> the sea-ice cover was properly preconditioned already (see also Wang et al., doi:10.1002/2015JD023712) and the storm allowed a large amount of oceanic heat to be mixed up to the surface - which after all might have been more efficient to melt the sea ice than the heat in the atmosphere.

Following the aforementioned suggestion we have modified the text accordingly and we also added new references (page 8, lines 36 – 40).

Page 9, lines 6-9: It is very nice to see how your method captures this change in the overall atmospheric situation and provides an almost perfect prediction. May I nevertheless ask you to provide 1-2 references about the situation and/or the differences in the conditions in 2013 compared to 2012? Possible sources could be again the above-mentioned paper by Wang et al. as well as Liu and Key, *Environmental Research Letters*, doi:10.1088/1748-9326/9/4/044002.

We have modified the text and provided the aforementioned references in the revised version of the manuscript (page 9, line 10 – 14).

Typos:

On page 1:

IPPC --> IPCC

Modified as suggested.

On page 3:

ERSSTv4b --> ERSSTv5

RRSSTv5 --> ERSSTv5 (at least in your reply to the reviewers' comments you did mention that you used version 5 and that version 4 was a typo.)

Modified as suggested.