

Dear Editor,
thank you for your comments. We followed your suggestions and are submitting an accordingly modified new version. We also corrected one typo (L. 91 "rare" -> rate) and added some commas.

L17: sea level rise => sea-level rise

OK

L35: focussing => focusing

OK

L46: T2m <= Consider using subscript "T_2m", or removing italics. I assume this name relates directly to its name in the ECMWF dataset. Check for consistency throughout the manuscript.

OK

L48, Eq. 1: Should the "int" subscript appear here? This is a general equation used for both reanalyses right?

indeed the subscript "int" was referring to "interpolated" here, but it was wrong anyway, as we calculate the emissivity from coarse resolution. Thank you for spotting this.

L55: "ISMIP6 orography H_ice" <= Are temperatures scaled by H_ice or surface elevation, as the latter would be the more relevant variable. On line 60, surface elevation is even mentioned. Usually H = ice thickness and h = surface elevation (or z_srf, for example would be more direct). Please just double check that you are happy with this choice.

good point, we changed H_ice to h_ismip and H_int to h_int

L75: South Eastern margins = > southeastern margins

OK

L80 and rest of section: the term "mean bias" is somewhat confusing in this context, as bias is usually relative to a chosen reference. Here you are comparing ERAI to ERA5 and it is not clear which one you assume then to be the reference. This is also problematic when you refer to the two standard deviations ("The mean bias exceeds two standard deviations") as again the question arises as to which dataset provides the measure of the standard deviation. To solve this, I would add a few sentences to define your methodology more clearly. State explicitly which dataset is considered the reference. Or, if you don't mean to define a reference, then change from "bias" to simply "difference". In this case, it should be made clear how the standard deviation is calculated that is used as the measure of variability. Note that when comparing to the AWS data, I see no problem, as clearly the AWS data would be the reference and the reanalysis is biased relative to that.

we agree and replaced bias with differences and reformulated the respective parts.

L92: comparrison = > comparison

OK

L94: Fig. 2) => Figure 2 [When starting a sentence, the whole word should be used.]

OK

L99: In Fig. 3 height range => In Fig. 3, the elevation range considered

OK

L124: In case => In the case

OK

L124: air temperature => air temperature,

OK