Article reference: essd-2023-116 Title: Quality-controlled meteorological datasets from SIGMA automatic weather stations in northwest Greenland, 2012–2020 Author(s): Motoshi Nishimura et al. MS type: Data description paper

Thank you for revision comments on the revised manuscript. Some of them were simple careless mistakes, for which we apologize. We have revised our manuscript as shown below. The given comments are written in gothic font. Each comment's responses and correction details are in blue type. Revised sentences and context are highlighted using the text's track changes in MS Word.

During this revision work, the following corrections other than those pointed out were made.

- Correction of misalignment of figure numbers
- Deletion of the description of Figure 5 in the text

We have deleted Fig. 5, showing temporal variation of PDD, in the first revision, but realized that we forgot to correct the figure number at that time. In this revision, the point and the description of the citation of the figure in the text were corrected. In addition, the deleted description of Fig. 5 remained in the text, which was also deleted in this revision. The specific revised parts are L485 and L507 in the main text.

20 Sep. 2023

Editor Comment

I would like to thank the authors for the revisions. I noticed that corrections to the manuscript introduced a few language errors which should be corrected.

All line numbers refer to the track-change manuscript.

I am suggesting the following technical changes to the manuscript language without changing scientific content, but this should be checked by the authors.

L28-29: Therefore, it appears that weather condition differences led to the apparent ... We have corrected it as you indicated.

L184-5: "In addition, reflection and shielding of scattered radiation due to the AWS including solar panels may ..."

We have corrected it as you indicated.

L303-304: "Those statistical values and multipliers can be found in the QC program (archived at Ref).

We have corrected it as you indicated.

In adding the source code reference, we have also added the program citation information in the Reference section.

L343: "If the record is within its

We have corrected it as you indicated.

L358: "datasets that passed"

We have corrected it as you indicated.

L441-443: This threshold value of 20 hPa is based on the assumption that a 20 hPa pressure jump is unlikely to occur in a few hours. This procedure was successful in only masking erroneous data of both sites.

We have corrected it as you indicated.

L620: Tobias Gerken

We have corrected it as you indicated.