

## ***Interactive comment on “Review of regional Antarctic snow accumulation over the past 1000 years” by Elizabeth R. Thomas et al.***

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Thank you for your comment and suggestions. I have addressed your concerns and made sure that all the data produced in this study is publicly archived.

Below we address each issue.

Essential additions for this paper: (1) Update the "Data Availability" section to include an explicit URL address to locate the input datasets and the reconstructions generated in this study. For the input datasets, we suggest creating a landing page for this study that lists the 80 individual datasets.

- The data used in this study is stored at the UK Polar Data centre. I've updated the data section with the DOI for the composite data produced by this study.

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(2) Add Data Citations (in addition to publication citations) for each of the 80 datasets used in this study. For those data not already in a persistent public repository, submit essential metadata (including the name of the Antarctica region to which it was assigned in this study) along with the accumulation time series itself and add the Data Citation/URL in Table 1.

- I've added a supplementary table to the paper. This expands upon table 1, to include the data citation for each record used. Sadly, not all of the data is available in a public archive but was emailed to me on request from the data owner. In those cases I have cited the paper it was published in, made reference to the region of Antarctica, and provided the contact of the data provider. This information is also stored alongside the composite data stored at the UK Polar Data centre.

- Following discussions with data managers at UK PDC I am not in a position to upload and store data owned by other researchers.

3) If any of the cores used in this study were also used in previous PAGES 2k databases (temperature or isotopes), please include cross references to those IDs.

- None of the records were used in the previous 2k database as they only include isotopes and temperature proxies.

(4) Submit the primary outcome of this study, the composite accumulation time series by region (Fig 7), to a public repository and include the Data Citation/URL in "Data Availability".

- Data submitted to UK PDC and a DOI has been issued.

Recommended elements are:

(5) Archive the gridded spatial correlations of snow accumulation data shown in Figs 2 through 5.

- I have not been able to archive the gridded data. The composite records are freely

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available, as are the ECMWF and RACMO data, ensuring that any other researcher can replicate the spatial plots should they wish. I've included a reference to the ECMWF and RACMO data.

(6) Archive the 50- and 100-year trends for each record as shown in Fig 8.

- Again, the original data is available to ensure the trends can be reproduced. I am not sure that uploading a separate document, with just the trends, would be of value. It has taken several weeks to get the DOIs for the UK PDC so I have taken the decision to focus on the essential elements.

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Interactive comment on Clim. Past Discuss., <https://doi.org/10.5194/cp-2017-18>, 2017.