

Dear Dr. Vandecrux,

Thank you for your constructive comments and guidance on our manuscript. We appreciate your dedication to improving the transparency, completeness, and usability of our dataset in accordance with ESSD standards.

We fully agree with your recommendations regarding raw data preservation and code accessibility. Below, we outline point-by-point how we have addressed each of your concerns in both the revised manuscript and the accompanying Zenodo repository.

The comments are in *italic*, our response is in **blue text** and the changes inside the manuscript is in normal **red text**.

Point-by-point response

You write in your response that the SR50 is not part of the distributed data because it did not undergo quality check. I believe the snow height is necessary to interpret wind speed, air temperature and humidity measurements and therefore should be provided, even in its raw form. Just make clear in the text that the SR50 data is part of the provided dataset but has not undergone full QC at this point. I can also see that SR50 data is present in the Phortse data file on Zenodo, so it seems that you are already following this approach. Make sure that the SR50 data from all stations are included.

We agree on the importance of snow depth, where available, for correctly interpreting atmospheric variables. We have updated the manuscript and all the available SR50 data from PH, BC and CII AWSs are now included along with the meteorological data set in Zenodo.

“An optical disdrometer (OTT Parsivel²) and a snow-level sonic sensor (SR50A) were installed to complement the precipitation measurements. These datasets are included in the data archive but are not analysed in the present study because they require specialised quality-control procedures, including the removal of artefacts caused by wind and blowing snow (Table 1; Löffler-Mang and Joss, 2000; Ryan et al., 2008; Pérez-Tello et al., 2026). These datasets will be analysed in future work.”

I now see in your response more details about the Pitot anemometer, and I see on the pictures that there are some cup anemometers and separate wind vanes installed at some stations. I suggest that you provide the data for each instrument separately and that you let the user make their own aggregate. Optionally, you can provide a combined WS, where you make your own mix of the different instruments. This is a matter of transparency and reproducibility.

Thank you for this Suggestion to enhance the data transparency. We have updated Zendo to provide the raw SC, BR dataset and combined wind speed measurements from the different wind sensors (Richards, Young, and Pitot tube) as an optional reference for users. We mentioned that in the data availability section.

Additionally, we want to clear that the Richards anemometer and Pitot tube were installed at SC and BR AWSs only in 2022; before that only two Young anemometers (Table 1) were at SC and Balcony.

The manuscript and metadata files have been updated to describe the instrument-specific attributes and column headers clearly.

“The raw disdrometer and all available wind speed data are available at Zenodo. Additionally, the data processing code is available at https://github.com/arbindrakhadka/AWS_QC”

Although I am less familiar with the disdrometer I would also encourage you to provide the unfiltered data, so that your dataset contains all the data from your observational setup. Please make sure that all the necessary information about that instrument is present in the manuscript and in the ReadMe files.

We appreciate this feedback and fully support ESSD’s editorial line regarding open, unfragmented data. As mentioned in the response to the previous comment, we have now included unfiltered disdrometer data and all wind measurements, ensuring a complete and transparent description of our station setup.

The retention of redundant wind measurements, SR50 and disdrometer data currently appears as a restriction put on the data already measured by your stations and an unnecessary fragmentation of the dataset, which both go against ESSD’s editorial line.

We appreciate this feedback and fully support ESSD’s editorial line regarding open, unfragmented data. As mentioned in the response to the previous comment, we have now included unfiltered disdrometer data and all wind measurements, ensuring a complete and transparent description of our station setup.

There is also an increasing attention at ESSD on making the processing code available. This further enables full transparency on the data that is presented.

Thank you for important suggestion. Now we have updated the code in GitHub and the link is available with data available section.

We believe these additions align our submission completely with ESSD's editorial line on data transparency and accessibility. Thank you once again for your constructive editorial oversight.

Sincerely,

Arbindra Khadka and Co-authors