ESSD Responses

Anonymous Referee #1

RESPONSE:

Thank you for your comment on our discussion paper. We appreciate all of your feedback and address your comments and suggestions in the following response. While we agree that it is unlikely that the people responsible for theft of the equipment would find that information on ESSD, providing that information publicly makes it relatively easy to find online. We are providing rough coordinates for the discharge stations, and we are happy to provide exact locations of weather stations upon request. The map has been updated to show bold lines for each stream to make them more visible to the viewer. We have taken your suggestions of editing the meteorological station names in the data and have removed rating curves from the data, these will now be available upon request. Finally, the uncertainties you are addressing and which are described in this paper are related to the Lascar meteorological data, not the discharge data. The raw pressure values for both water and barometric pressures are provided in the discharge data files. We have added a note about the adjusted water level variable found in the discharge dataset. Thank you again for your comments.

Anonymous Referee #2

RESPONSE:

Thank you for your comment on our discussion paper. We appreciate your feedback and address your general comments and line-by-line suggestions in the following response.

General comment response: We are now including a section to address the data processing and quality control that was performed on the data prior to writing this paper. Many of the quality checks, as you noted, were related to the weather or Lascar logger data, while the discharge data was found to be reliable at the onset. We have addressed the concern of quality control on the weather data and the impacts of changes in instrumentation by including new subsections of section 3. We also include a citation and link to SENAHMI, however this data is not included in our article because this is not data we have collected. We have also added to the tables already included in the paper to address the temporal resolution of the data, and the period of operation for each logger. We have also decided not to include the rating curves in this paper because they are variable by nature, and will be updated with each visit to the field sites. We are happy to provide these to readers upon request. We appreciate the interest in some of the summary statistics for the data, however, as this is a data paper, we are not providing that information in the paper itself. We also are glad that you are interested in further assessments of this data, and additional analyses will be forthcoming based on current ongoing research using this data.

We have gone back through the datasets themselves and made all time information and header information uniform for clarity. We have also removed special characters. As mentioned in our other comment response, we have provided coarse geographic coordinates for the discharge stations, however, we have refrained from providing precise locations (apart from the visual location on the map) for the weather stations because of the high-risk of theft in this region.

We have made corrections based on your line by line comments. Thank you for these helpful suggestions; we have provided more information in certain locations. As far as we are aware of, the SENAHMI precipitation data are of daily temporal resolution. This data was also not collected by us, and thus was not included in this paper. We have added a clarifying sentence for Lascar error adjustment in a following paragraph detailing information about the Lascars. We appreciate your comment on Figure 4, but have retained the images to provide a visual landscape context for the Lascar loggers; not only for readers who are less familiar with the Cordillera Blanca, but in case additional location-specific issues arise as users scrutinize the data. We have also added m3/s in the caption for Figure 6 for clarification. We have provided all information necessary to calculate specific discharge and would encourage readers interested in further analyses to use this information. The updated Lascar sensors were compared to their previous counterparts to ensure data quality continuity, which is also now addressed in section 3.1.2.

Thank you again for your detailed comments and suggestions. We feel that the paper is greatly improved because of the comments you provided.