Response to Reviewer #2
Reviewer comments shown as “RC:”, author replies as “AR:”.

RC: The author published the one of the very interesting and important AWS data set from different elevation AWSs from the Khumbu region, well researched are in the Himalaya. The work done on Khumbu since 1990s, stablishing the network of stations and maintaining them for long term is one of the challenging and expensive work. These data have been used in many work and insightful results are already published and would be very helpful for the further research in the region. I would like to thanks to the all the hands who have been involved in the work since the beginning to till date for the development, maintaining and collecting data in these works.
AR: We thank the Reviewer for the valuable suggestions to improve and strengthen the paper. All comments have been thoroughly addressed in our responses below.

RC: As there are overlapping 2000-2007 of the AWS data at 5035 elevation, and at that period the temperature data are not similar to each other. Do you have any idea why they are not similar?
AR: The temperature data measured by the two AWSs at 5035m (i.e. AWS0 and AWS1) during their overlapping period appears highly similar (r2=0.93, mean bias =-0.073 °C, figure R4 upper and right panels) but show some scatter mostly during the winter from november to march, despite being the season presenting the lowest bias (figure R4 lower left panel). The reasons for those differences could reasonably come from the lower sampling rate at AWS0 (2 hours). At daily scale, the scatter almost disappears (Fig. R4 upper right panel).

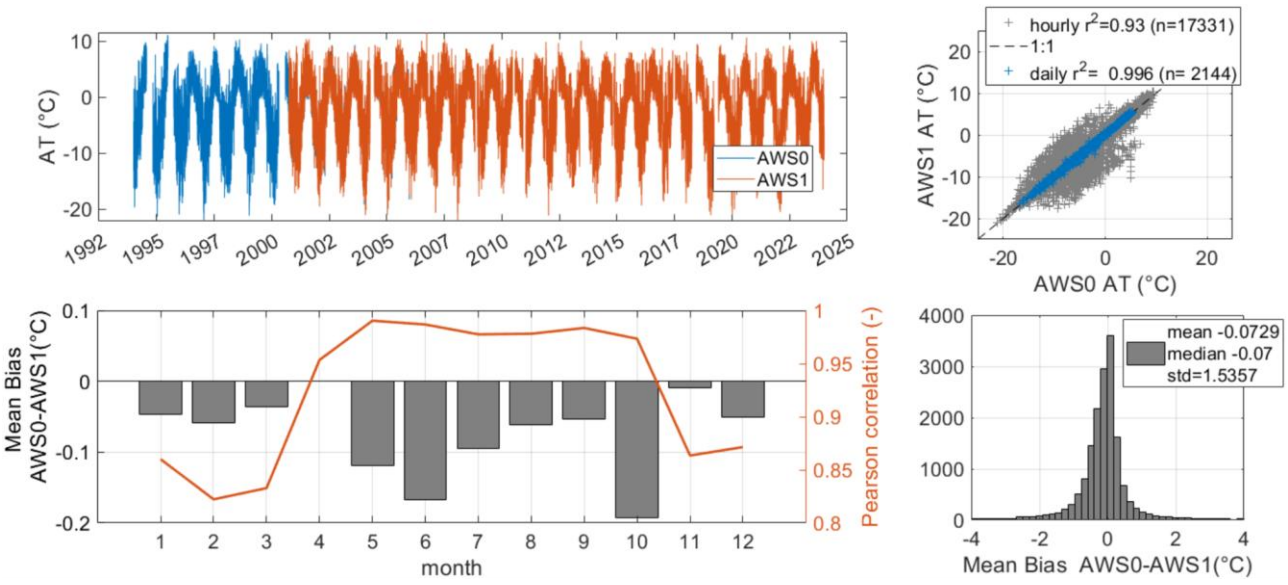

Figure R4 comparison between hourly AT at AWS0 and AWS1

RC: The maximum temperature trend in both here and Salerno et al 2023 is decreasing after 2000, when there is a new station installed at pyramid. This might be because of the new stations. What do you define this?
AR: As reported in figure R4, the two stations AWS0 and AWS1 did not present mean biases in their temperature observations that could explain the decreasing trend (oppositely, AWS0 has been measuring slightly lower temperature than AWS1 during the years of common operation). In any case, those biases have been corrected by a quantile mapping applied at daily scale (as described in details in Salerno et al., 2015, https://tc.copernicus.org/articles/9/1229/2015/tc-9-1229-2015-supplement.pdf) for the reconstructions used in Salerno et al., 2023 and presented here. Moreover, as it can be quantified by the sequential mann kendall (both in fig.1 of Salerno et al 2023 and figure 5 of the current manuscript), the changing point occurs later between 2007 and 2015. The trend uncertainty associated with the reconstruction process has been estimated (method in Salerno et al., 2015) and

reported. The authors are confident in the fact that the summer maximum temperature trend is not a result of the new station AWS1. It is worth noting that similar decreasing Tmax summer trends have also been observed by independent dataset in other Himalayan high elevation AWSs close to glacier masses (Salerno et al., 2023, Fig. S5). Moreover, our findings are corroborated by the trend observed for the last 20 years even at Pheriche station (Fig. S4 in Salerno et al., 2023).

RC: Also different international groups has installed the AWS at Pyramid since many years, have tried to compare the data from EvK2CNR networks data to other stations from the same place?
AR: Lines 132-138 report the other meteorological networks located in the same valley. However, there is not an overlap in the same place, so the comparison has not been performed.

RC: There was big/typhoon events in October 2013 and 2014 (Shea et al 2015), around 80 and 40 mm of precipitation. In the data from pyramid I think its not visible. I believe these kind of big events and precipitation would play important role for climate analysis and modeling. How do other user would incorporate such problem in data? Or how the public can identify such error in future? Any suggestion or comments page for the public users?
AR: We are aware of the October 2023 extreme event (some of the authors were actually there during the event). Unfortunately, the precipitation gauge is not heated, and during those events the precipitation was solid. Nevertheless, looking at lvl1 AWS1 hourly data (figure R5), the event of October 2013 can be seen, and it was also captured by snow level observations, which are still under validation and will hopefully be released in the coming years.

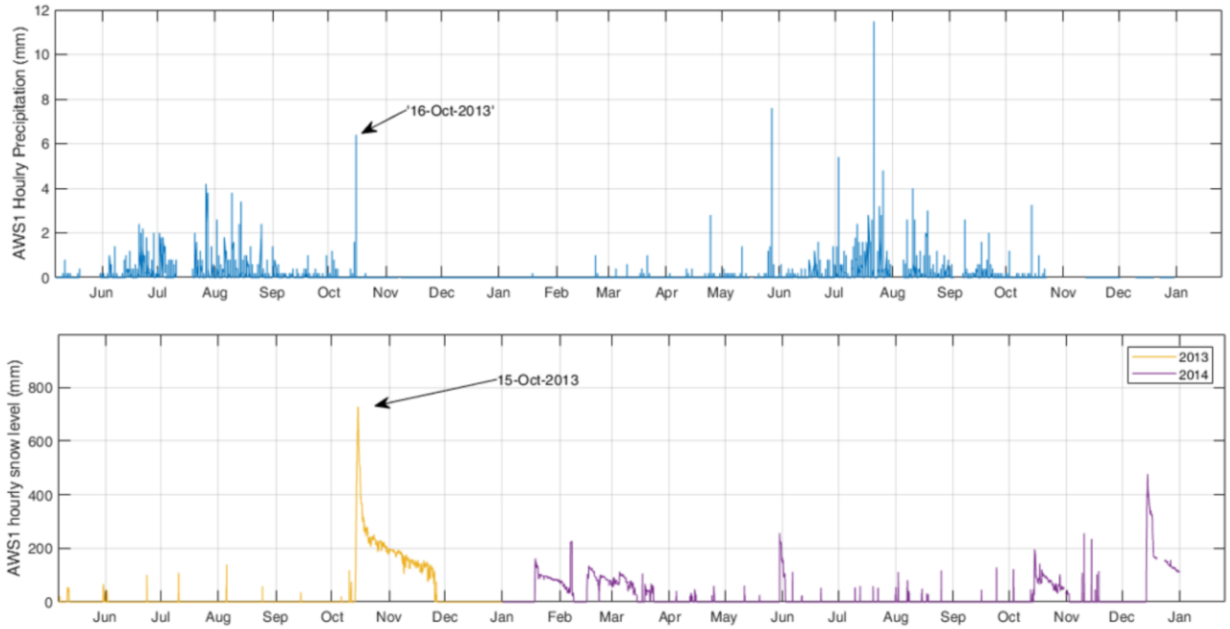

Figure R5 Pyramid hourly precipitation and snow level (not shown in this paper nor currently present in the portal) during 2013 and 2014.

RC: The data is easy to visualize in https://geoportal.mountaingenius.org/portal/ but not downloadable form here. So do you have any plans to modify it or you also keep the zenodo links for the download.
AR: Thank you for pointing out these issues, which have been solved. In the updated version of the Geoportal, the download of the csv file is permitted under registration. The link to Zenodo allows access to the section of the portal with these data. Moreover, the link to the metadata file has been changed (https://zenodo.org/records/15211352).

RC: Line by line comments: L41: the reverence should be updated with the recent one

AR: We added The GlaMBIE Team, 2025.

RC: L57: correct the reference
AR: Corrected.

RC: L90: add some old reference from the Japanese researcher
AR: Done.

RC: L101-103: the 90% of precipitation during the monsoon is quite different than the result from Khadka et al 2022 and shea et al 2015, quite surprising.
AR: From the mean climatology at Pyramid (figure 4) , 87.7% of precipitation falls from June to September. The reference "*around 90%*" has been replaced by the actual value (87.7%) in the text L217.

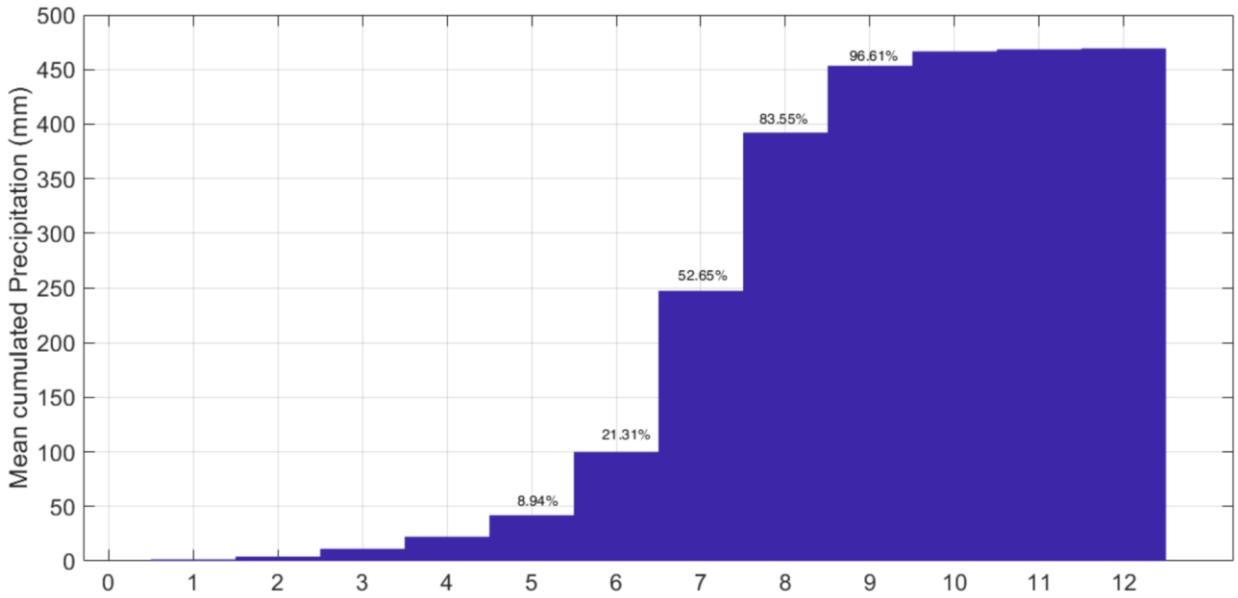

Figure R6 Mean annual cumulated precipitation from pyramid climatology: the cumulated precipitation rises from 8.94% to 96.61% of the total annual between June and September.

RC: L131: new one installed during 2022 at 8810 m?
AR: done

RC: L134: I think its better to modify the reverence as the Wagnon et al 2021 focused only on Mera Glacier.
AR: Done. We added "*e.g.,* "

RC: L441: is that the kala pathhar aws is in the glacier
AR: It was a typo. The error has been corrected.

RC: Table 2: it would be easier to follow if the order of the Awss is same as table 1 and same for the table 3.
AR: We followed the suggestion and the order of Aws in Table 3 has been corrected

RC: Table 3: is the aws4(z5035) is at 5035m?
AR: The error has been corrected