Sakuri et al. present valuable field data revealing insights into glacier hydrology for an area of supraglacial lakes on a glacier in Kyrgyzstan. The data are generally well presented, but could be more ambitiously interrogated to present additional analysis in support of the aim 'to better understand storage in and drainage through supraglacial lakes and englacial conduits'. I have suggested some further analysis to strengthen the results of the paper, and I believe the revised paper would make a valuable contribution to The Cryosphere.

General comments:

- The introduction and study site sections should be refined to better explain why the study is important and relevant, both locally and regionally. For example, the focus is on flood events from supraglacial lakes on other glaciers, but it's not clear if this is a potential hazard for your study site. Also, what is the broader status of this glacier. Give more detail when you state 'many supraglacial lakes have developed…'(L70). Is water storage increasing? Is a proglacial lake likely to develop in the future? Are the water resources important for downstream communities and infrastructure etc?
- Why are temperature data from the Hobo U20 loggers not presented? This could give further insights into the lake drainage, and the ablation associated with the water storage and drainage. There are papers in the literature looking at pond temperature and links with ablation.
- It would be useful to summarise the field data acquisition in a table, showing the number of surveys, number of images for each survey, number of ground control points.
- The volume time series of the lakes are known from the DEM and water level data but are hardly discussed. It would be useful to present the volume changes of each lake, in addition to the water level elevation change (which relates to a different volume increase for each lake). There are also empirical area-volume relationships presented by Cook and Quincey (2015) and more recent papers, which your data could make a valuable contribution to. Presenting time series volumetric change based on the known bathymetry of the pond and the water level could reveal more insights into lake drainage.
- It would be useful to present DEM differences of the study area to reveal topographic change associated with the drainage events e.g. Thompson et al. (2016) and Miles et al. (2018), to look for evidence of topographic change associated with englacial conduits, and to look into evidence of connectivity between the ponds (e.g. your Figure 12).

Specific comments:

L33. Note that in at least one of these examples (Rounce), englacially storage water was also suggested as a source.

L40. Englacial or supraglacial conduit.

L51-53. This paper mainly dealt with longer term changes in supraglacial water. Watson et al. (2017) deal with the seasonal expansion/drainage and thermal regime of ponds.

L87. Specify the number of ground control points in each year. What features were used for the GCPs?

L88. It is not clear what this accuracy refers to. The absolute position accuracy following post-processing, or is it referring to your models.

L89. Provide more detail about the water level setup. What is the stated accuracy and what barometric data were they processed against?

L92. Specify details about the UAV, including make, model, camera specifications and parameters, photo interval.

L94. Clarify this sentence. Do you mean most of the workflow was automatic, but that you manually added the GCPs? Were the location of the images from the UAV used in the processing?

L96. How was the 'standard DSM' chosen? Based on quality?

L98. I assume this is an XY shift in ArcGIS, but what about the Z shift due to the slope of the glacier. What is the slope of the glacier in the survey location and therefore do the ponds lower in elevation as they move downglacier?

Is this the flow speed for your study site, or an average for the whole glacier?

L105. Landset-8. Check throughout.

L114. It is not clear if these values represent some sort of average or range. You should report in a table, all water levels from the UAV models and the corresponding water level logger measurements, i.e. for all days.

L133. It would also be useful to compare with studies that have used empirical relationships for estimating supraglacial lake area-volume e.g. Cook and Quincey (2015), Watson et al. (2017). This could give you a better indication about the overall water storage for all lakes on the glacier, how much your site contributes to the total water storage, and how much seasonal drainage volume there is.

L189. 'Sentinel'.

L199. 'Connection'

L269. '…different increase rate of water-level'. The rates are not directly comparable without considering the different pond bathymetries, i.e. presenting a volume time series.

L270. Quantify the rate of water level increase.

L276. Is there potential for damage caused by drainage from this glacier? It should be mentioned in the introduction or study area section.

L380. Provide more lat/lon grid markers around the edge of figures (check throughout). It seems the distinction between debris-covered and clean ice is an arbitrary abrupt line, rather than including medial moraines etc. I'm not sure this distinction is helpful or necessary.

L485. Add a scale to this figure.

L492. Clarify what you mean by 'water level difference'. Is this relating to the water level change in those lakes compared to lake 8?

References

Cook, S.J. and Quincey, D.J. 2015. Estimating the volume of Alpine glacial lakes. *Earth Surf. Dynam.* **3**, pp.559-575.

Miles, E.S. Watson, C.S. Brun, F. Berthier, E. Esteves, M. Quincey, D.J. Miles, K.E. Hubbard, B. and Wagnon, P. 2018. Glacial and geomorphic effects of a supraglacial lake drainage and outburst event, Everest region, Nepal Himalaya. *The Cryosphere*. **12**(12), pp.3891-3905.

Thompson, S. Benn, D. Mertes, J. and Luckman, A. 2016. Stagnation and mass loss on a Himalayan debris-covered glacier: processes, patterns and rates. *Journal of Glaciology*. **62**(233), pp.467-485.

Watson, C.S. Quincey, D.J. Carrivick, J.L. Smith, M.W. Rowan, A.V. and Richardson, R. 2017. Heterogeneous water storage and thermal regime of supraglacial ponds on debris-covered glaciers. *Earth Surface Processes and Landforms*. pp.229-241.