

Interactive comment on “Characterising the behaviour of surge and non-surge type glaciers in the Kingata Mountains, Eastern Pamir, from 1999 to 2016” by Mingyang Lv et al.

Anonymous Referee #2

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This is the first report on the characteristics of glaciers in the Kingata Mountains. Because of its remote location and poor accessibility, it is natural for the authors to analyze satellite remote sensing imageries. However, the authors analyzed only optical images with limited period and area, which did not lead to significant scientific novelties. The analyzed location is certainly unique, but the presence of surge-type glaciers in High Mountain Asia is no longer surprising. There exist more glaciers with longer length to the southeast of the studied area in this study. Why did the authors limit the analysis area?

In addition, the velocity profiles with nearly one-year temporal resolution will prevent

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us from examining the seasonal changes, and the authors' conclusion regarding the surge mechanisms cannot be supported from the present data.

The classification map in Figure 2 and terminus changes in Figure 3 are quite similar to Figures 3 and 4 in Yasuda and Furuya (2015), but they employed both optical and radar images with much longer period since 1970s. The criteria of the authors' Figure 2 are not clearly mentioned and uncertain, either.

Figure 10 is overly qualitative and speculative.

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