

Interactive comment on “An improved Terra–Aqua MODIS daily cloud-free snow and Randolph Glacier Inventory 6.0 combined product (M*D10A1GL06) for high-mountain Asia between 2002 and 2019” by Sher Muhammad and Amrit Thapa

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We thank the reviewer for reviewing our manuscript. We disagree with the reviewer comment stating that the manuscript is the same as the previous publication (<https://essd.copernicus.org/articles/12/345/2020/essd-12-345-2020.html>). The data in this paper is COMPLETELY DIFFERENT as this manuscript associate DAILY MODIS (TERRA and AQUA) IMPROVED SNOW DATA whereas, the previous paper was about

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8-DAY COMPOSITE MODIS (TERRA and AQUA) IMPROVED SNOW DATA. The previous data (8-day composite) is not useful for understanding and observation of e.g., snow onset, the start of snowmelt time, detailed daily snowmelt simulations. In contrast, the daily MODIS (Terra and Aqua) improved snow product in this manuscript will enable the users to derive daily hydro-glaciological (glacier and snowmelt runoff) simulations, snow onset and the start of snowmelt (useful for hydropower and irrigation purposes), and other water-related studies which (daily observations and simulations) were not possible from the 8-day composite data.

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