**Supplementary information for “changes in glacier albedo and the driving factors in the Western Nyainqentanglha Mountains from 2001 to 2020”**

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# Supplementary materials

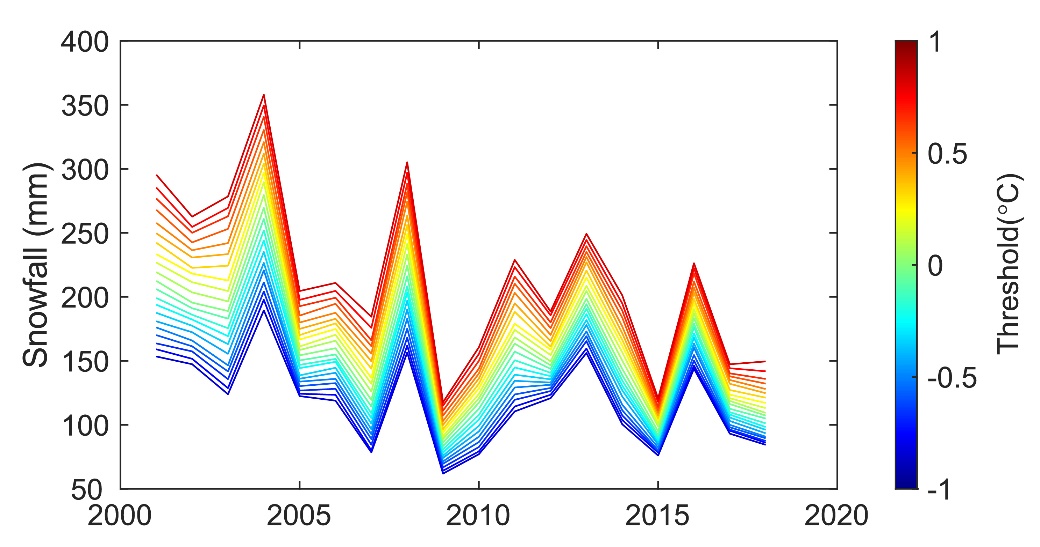


Figure S1. Snowfall estimated by applying different thresholds on air temperature to distinguish solid and liquid precipitation in the WNM of the Tibetan Plateau.

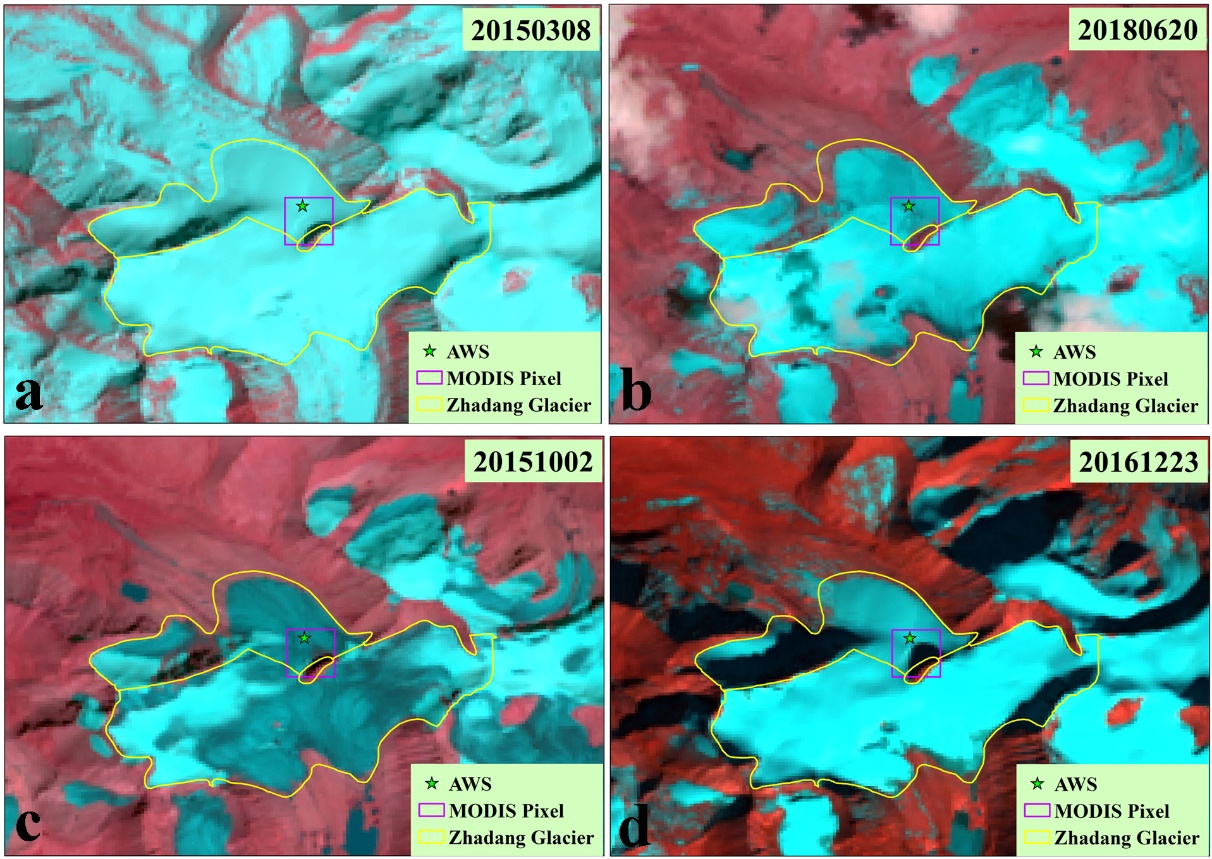


Figure S2. Position of Net Radiometers at Automatic Weather Station (AWS) and footprint of MODIS pixel in the Zhadang Glacier in four seasons represented by four days (a-d). Background map is Landsat-8 OLI images and acquired date is given in upper right corner in each panel.

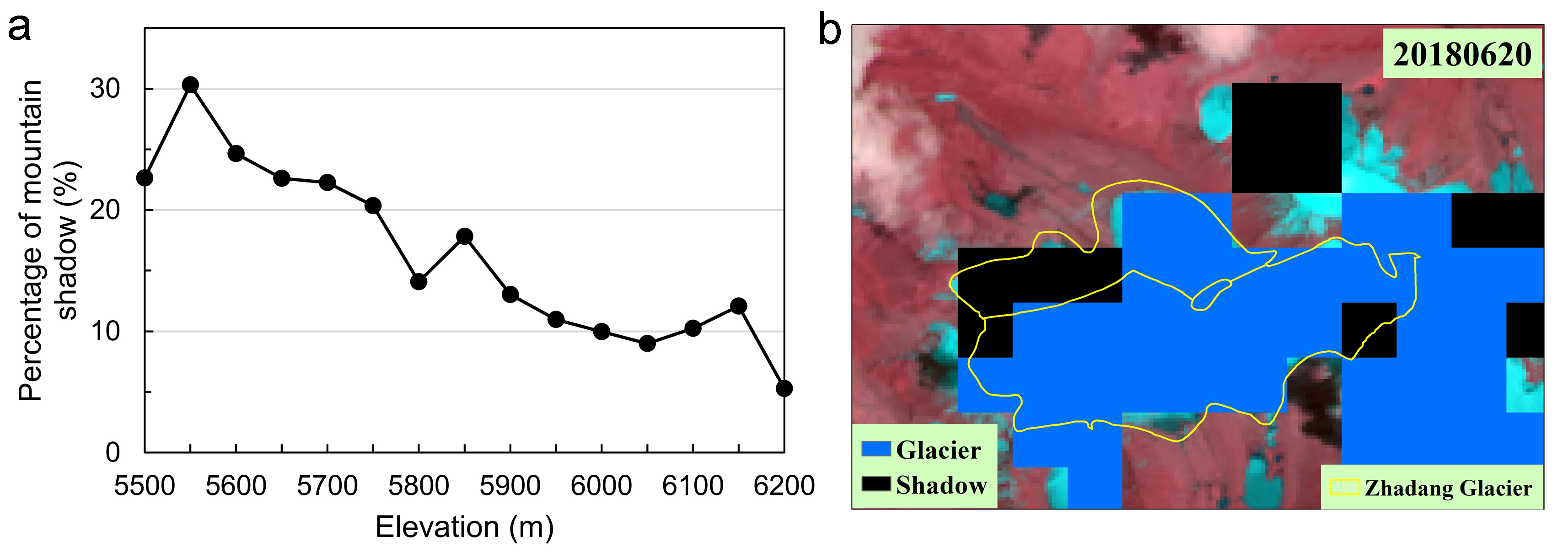


Figure S3. Mountain shadows on the glaciers in the WNM of Tibetan Plateau. a. Percentage of mountain shadow in each glacier elevation bin. b. MODIS image classification of glacier and shadow in Zhadang Glacier. Background map is Landsat OLI images and acquired date is given in upper right corner.