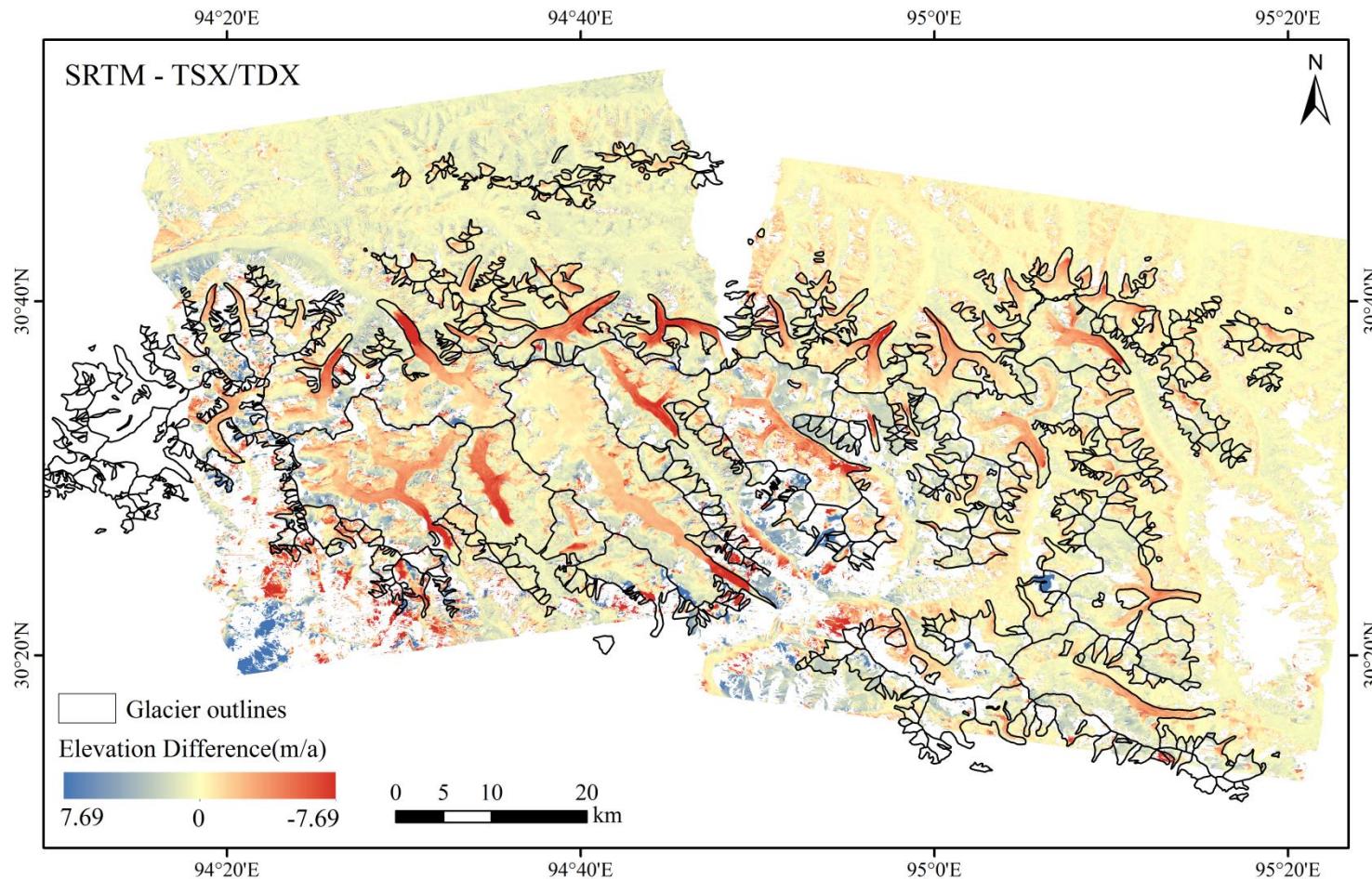
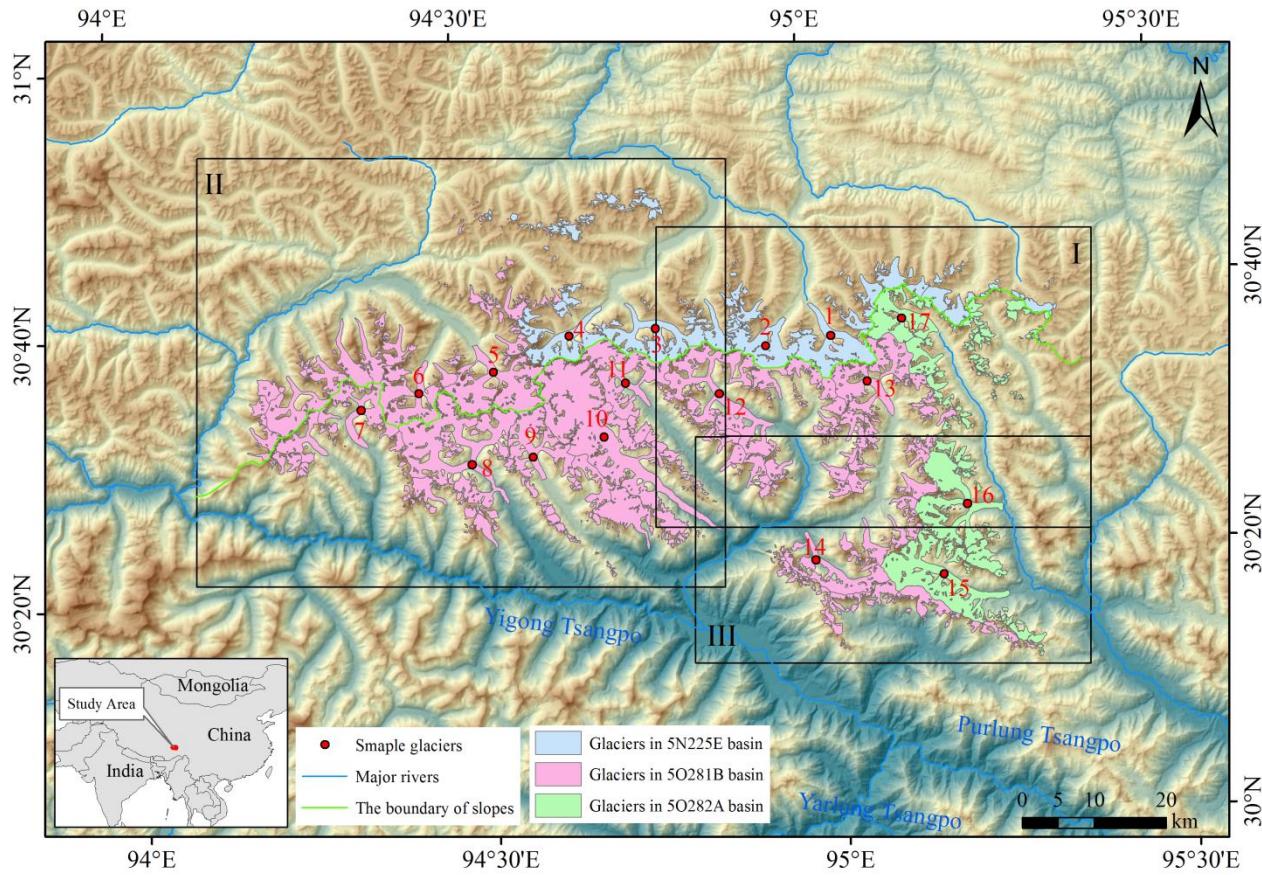


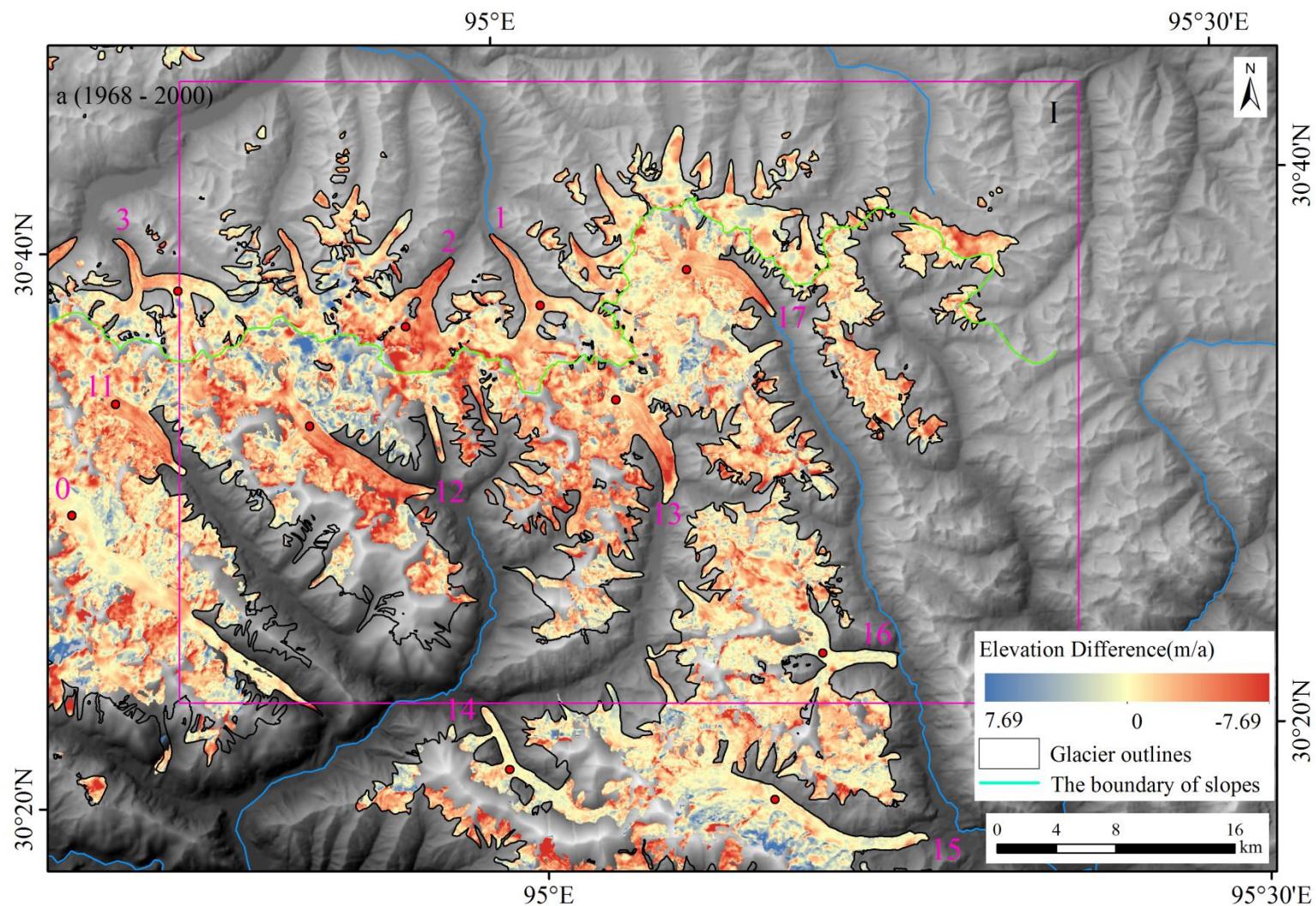
Supplementary Figures

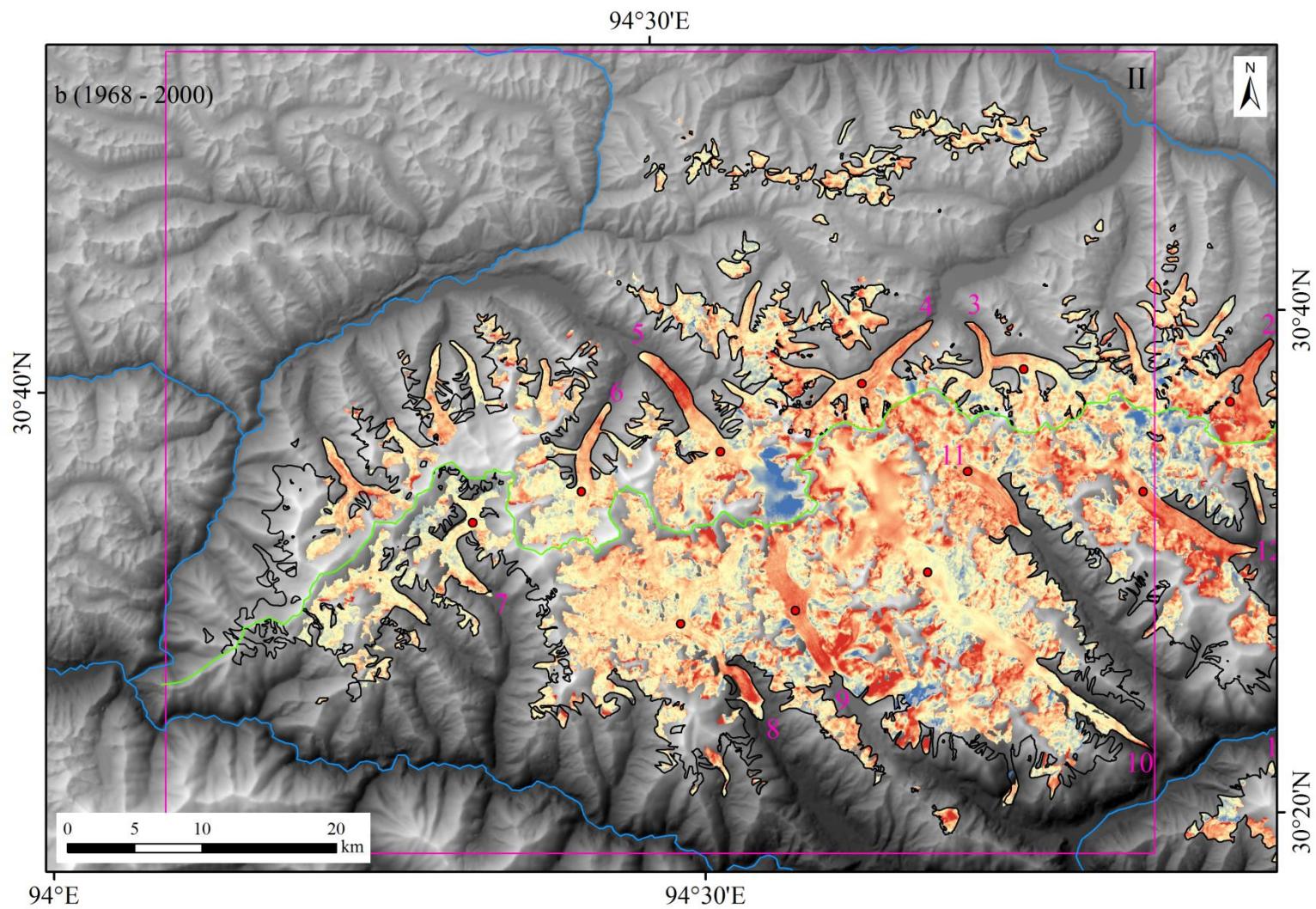


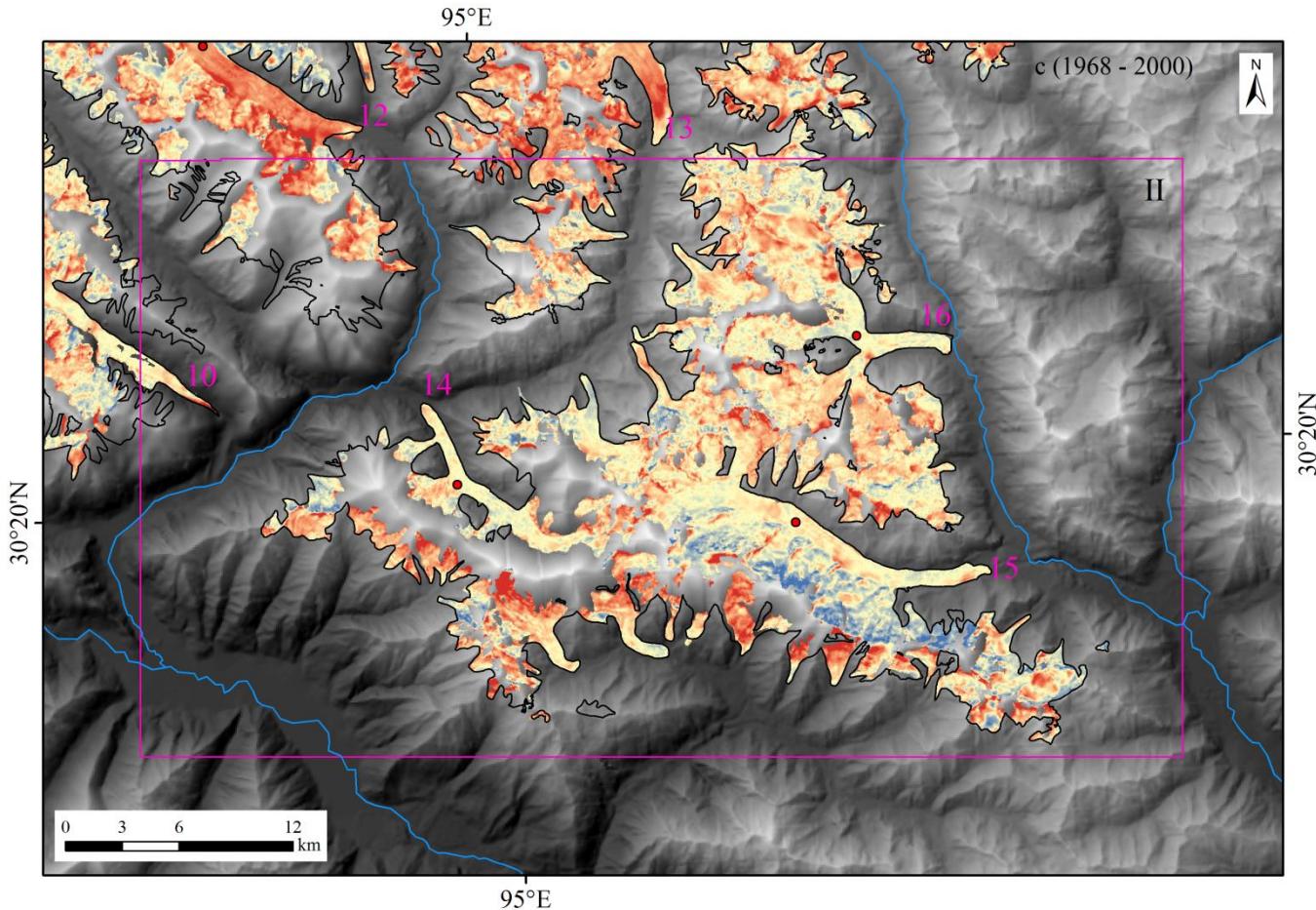
Supplementary Figure S1 Elevation changes of glacier area and off-glacier area in the CNR from 2000 to 2013. The glacier outlines are based on the geometric union of the 1968 and 2016 glacier extents.



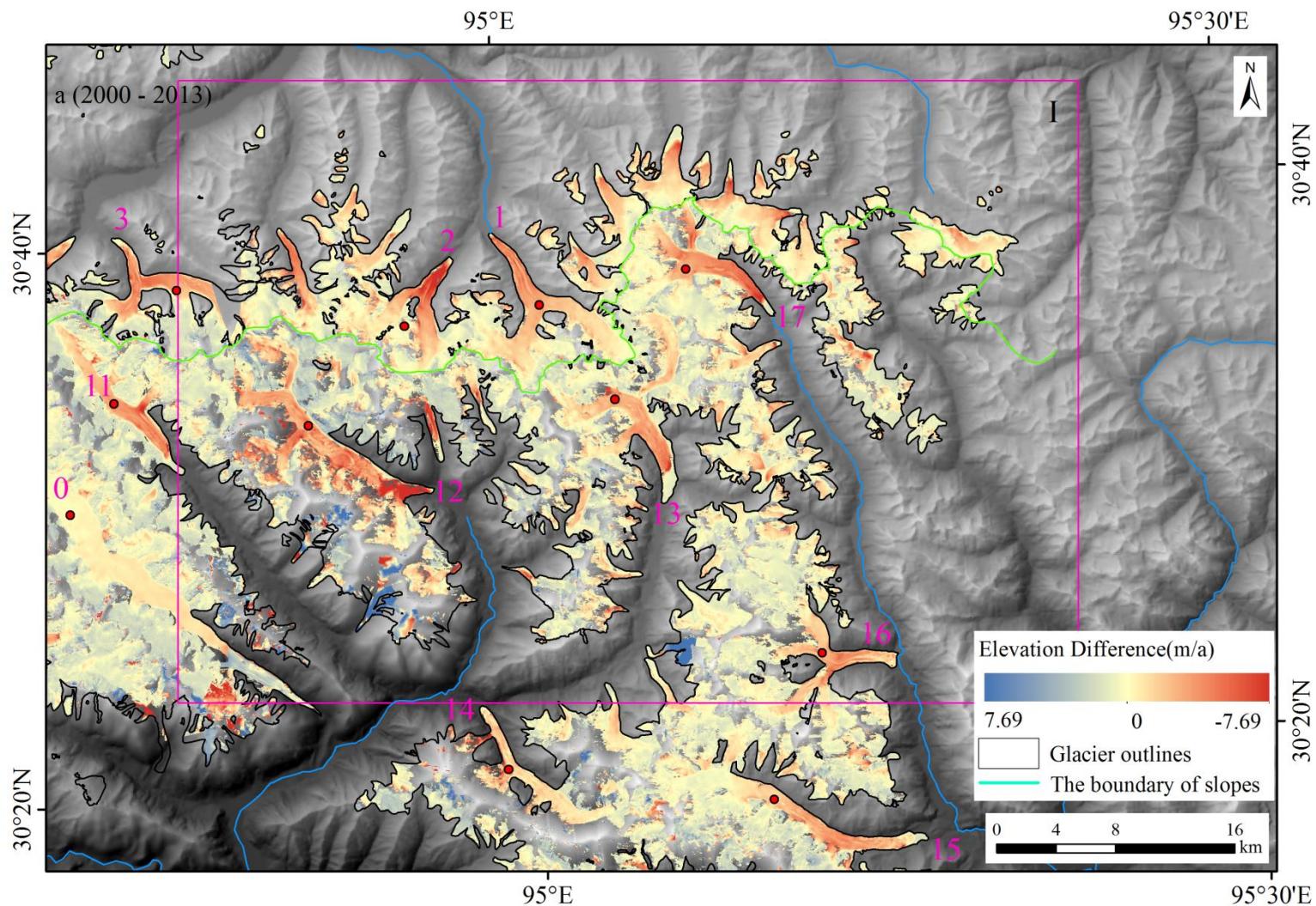
Supplementary Figure S2 Glacier distribution in different drainage basins. Numbers indicate specific sample glaciers chosen for analysis. In order to detect more details in elevation change maps, glaciers in study area are divided into three regions. More details of elevation change were showed in Supplementary Figures S4-S6.

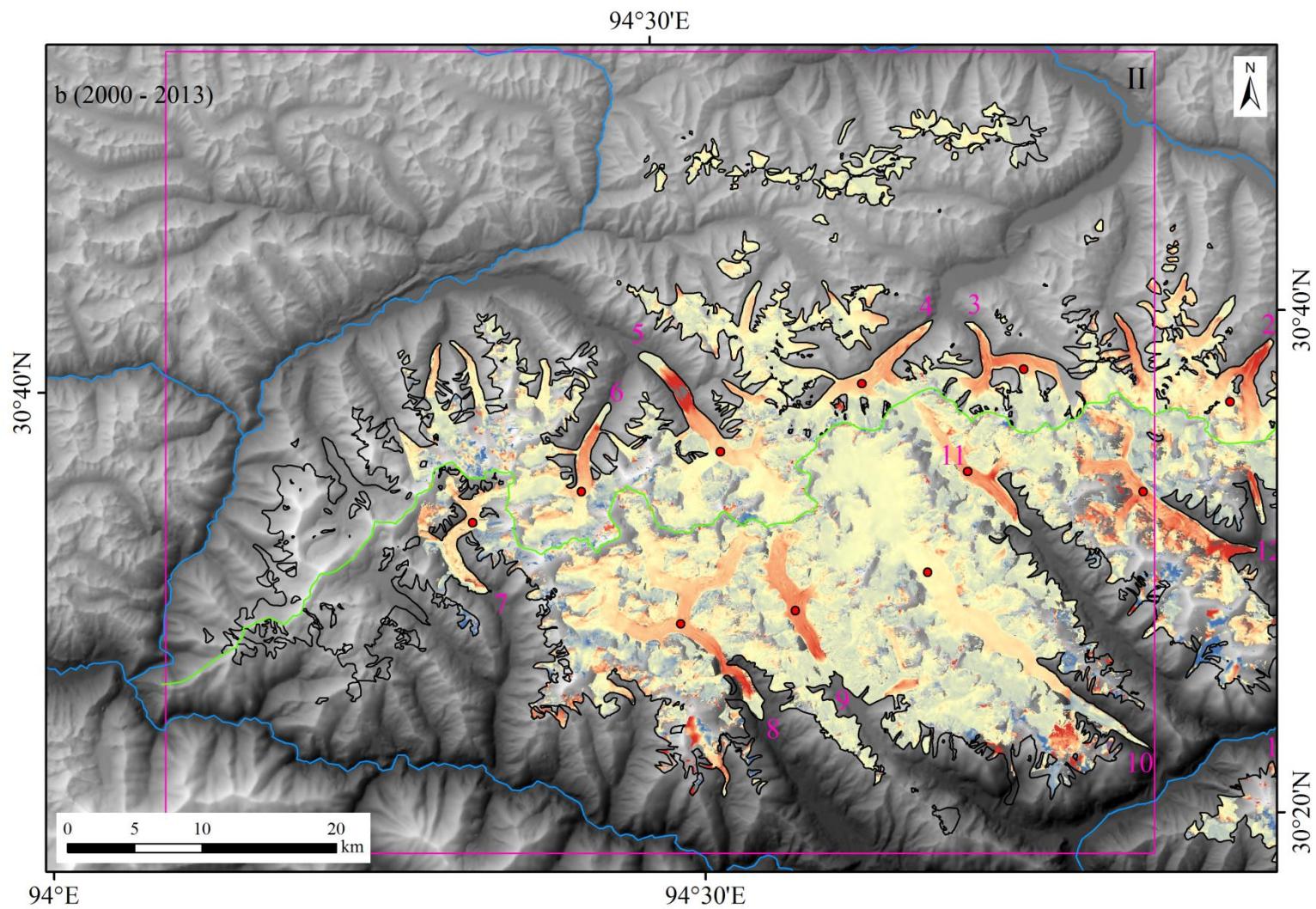


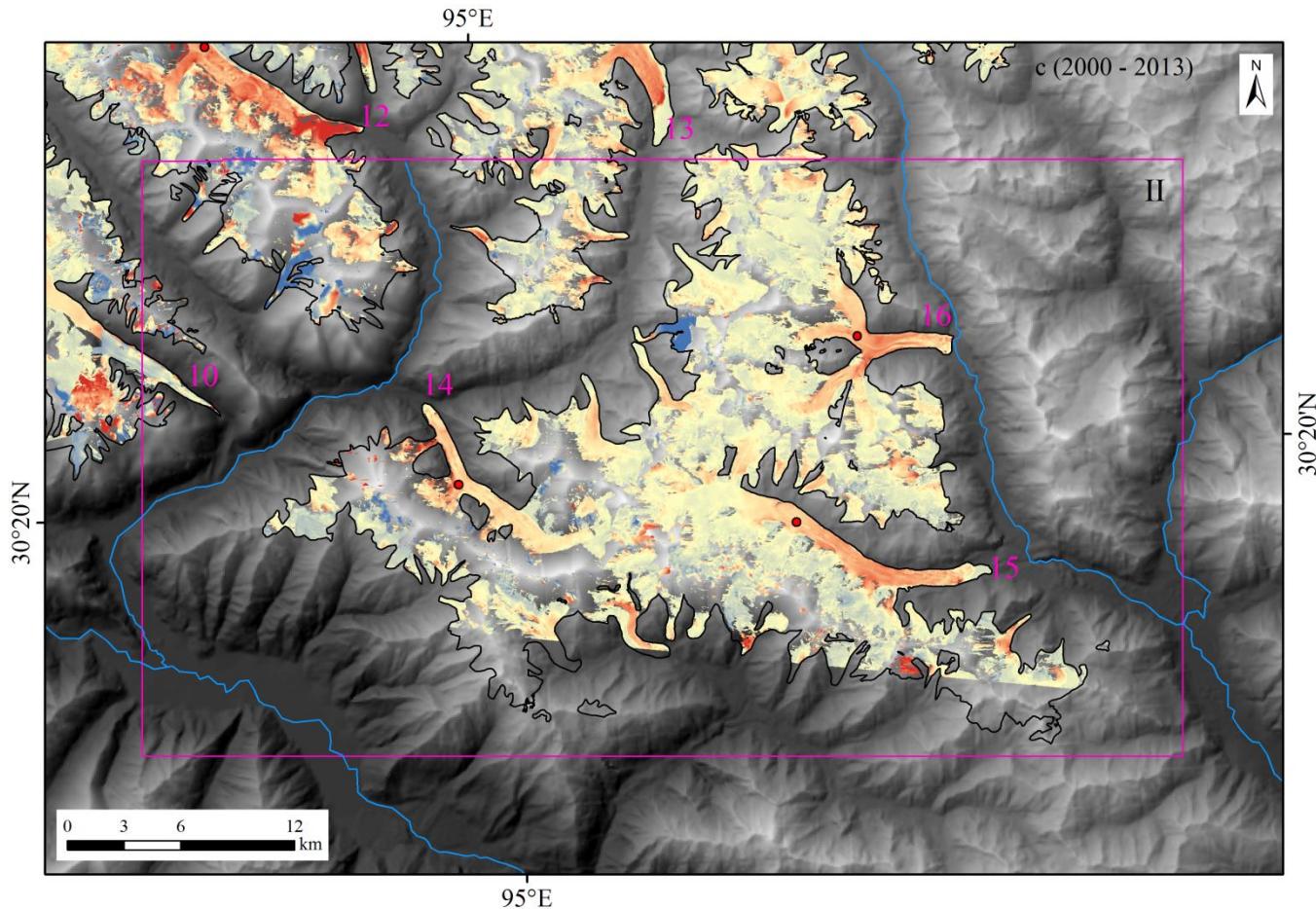




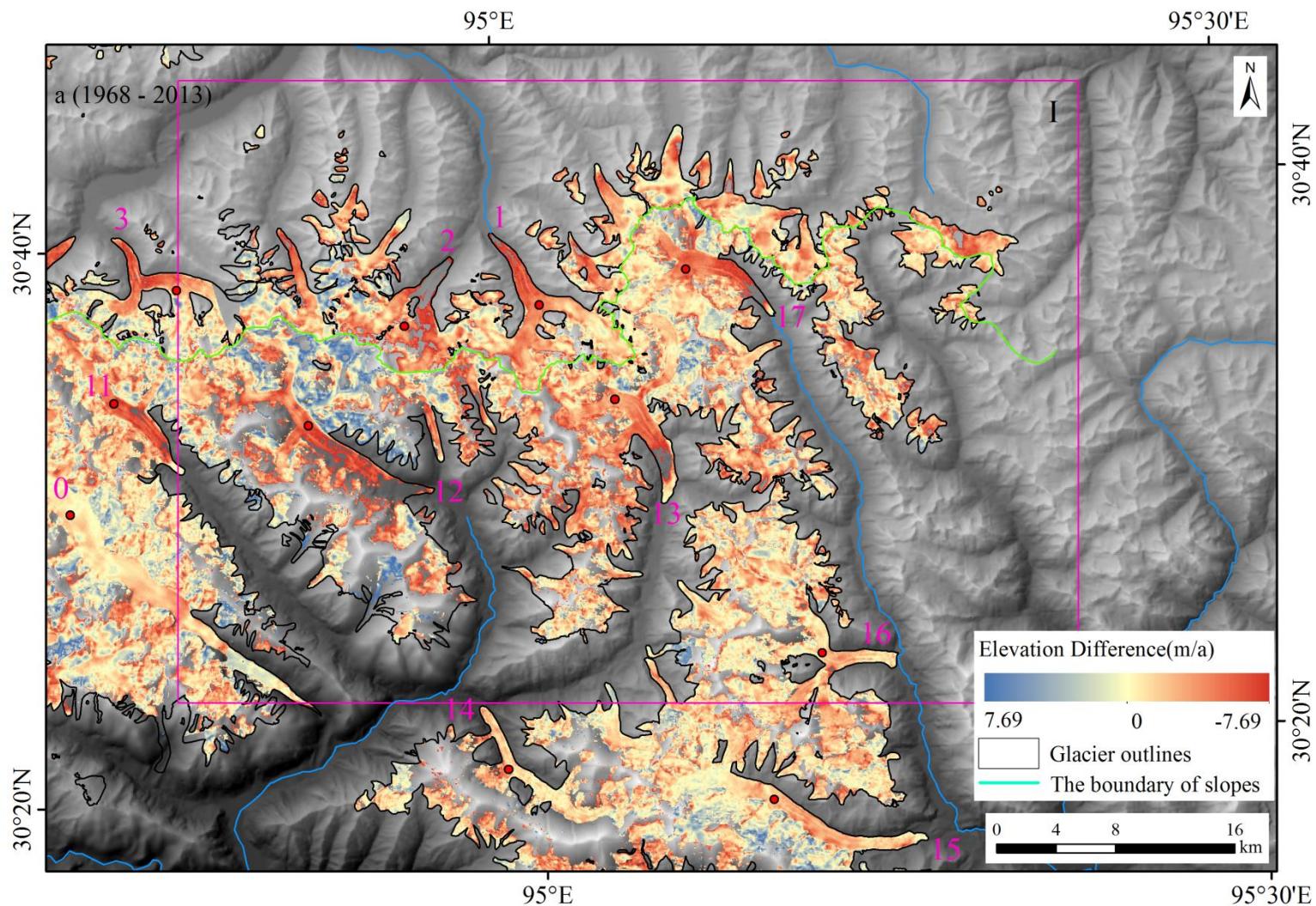
Supplementary Figure S3 Elevation changes in the CNR from 1968 to 2000. The glacier outlines are based on the geometric union of the 1968 and 2016 glacier extents. (a) Elevation change in the region I; (b) Elevation change in the region II; (c) Elevation change III.

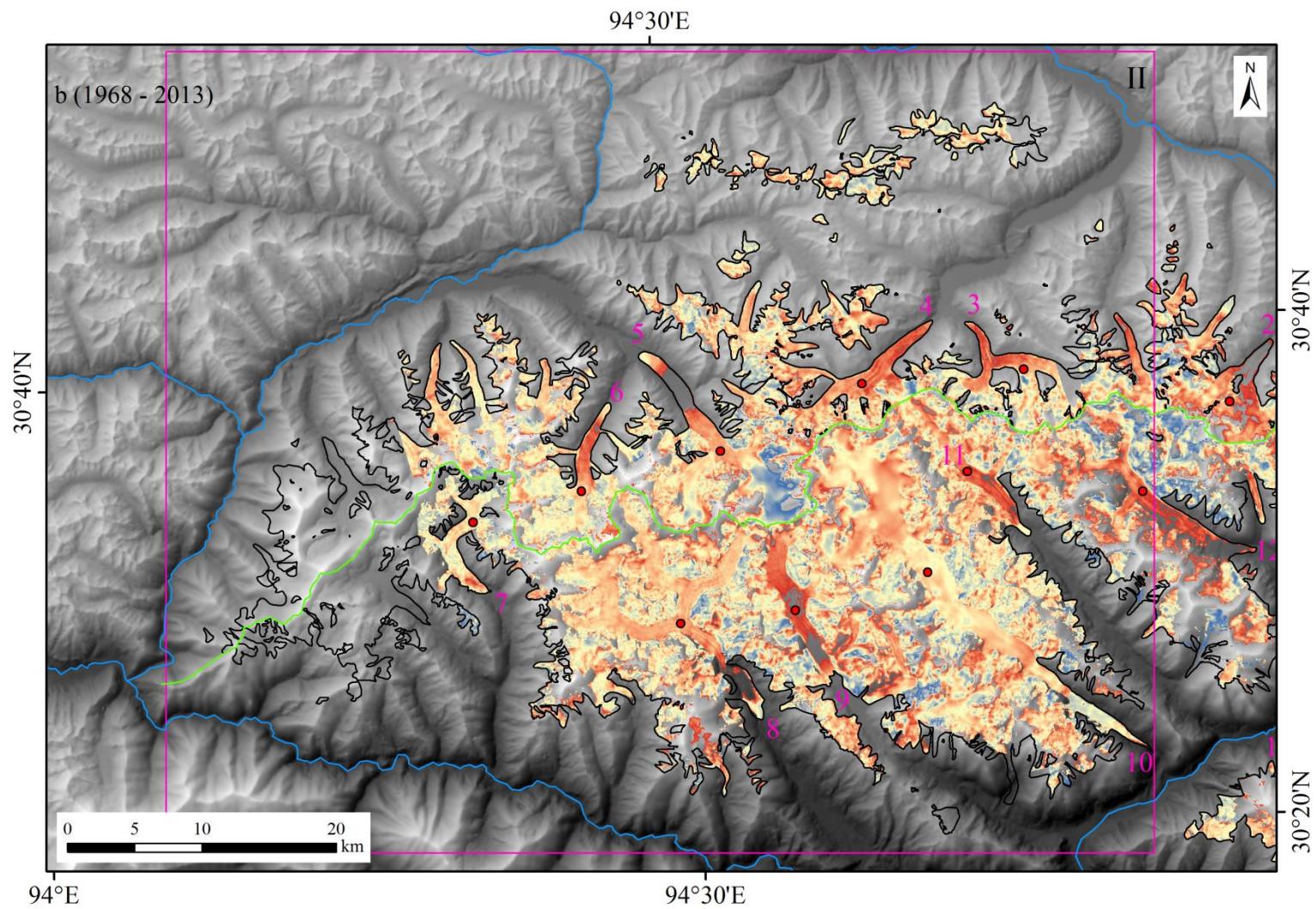


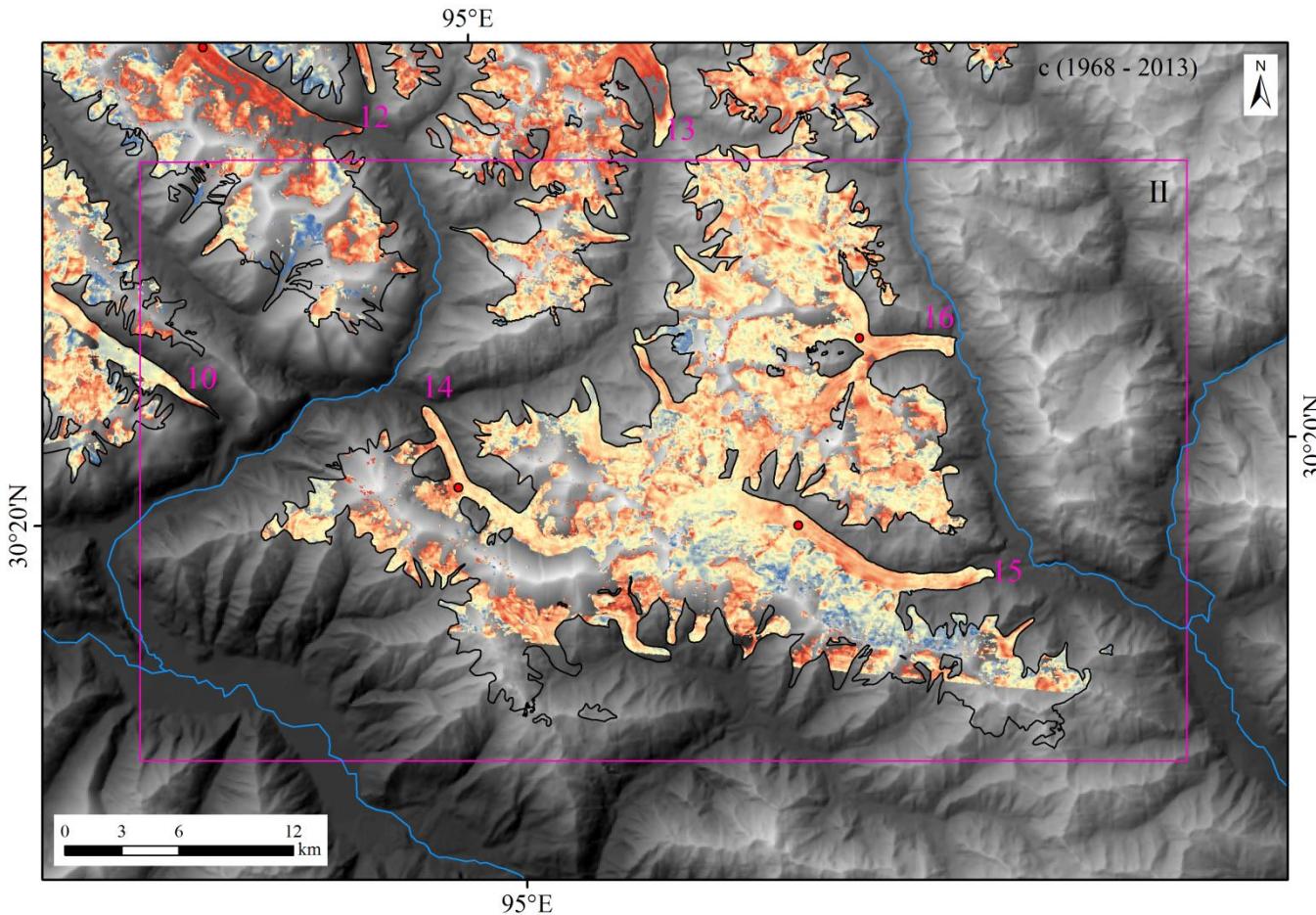




Supplementary Figure S4 Elevation changes in the CNR from 2000 to 2013. The glacier outlines are based on the geometric union of the 1968 and 2016 glacier extents. (a) Elevation change in the region I; (b) Elevation change in the region II; (c) Elevation change III.







Supplementary Figure S5 Elevation changes in the CNR from 1968 to 2013. The glacier outlines are based on the geometric union of the 1968 and 2016 glacier extents. (a) Elevation change in the region I; (b) Elevation change in the region II; (c) Elevation change III

Supplementary Table S1. Mean surface elevation changes and mass balance for single glaciers and different regions in the CNR from 1968 to 2013. Glacier area is the geometric union of the 1968 and 2016 glacier areas. Mean ΔH is mean surface elevation change and mass balance is the annual mass balance. The glaciers with (*) are lake-terminating glacier

Region	Glacier Code (Glacier Name)	Glacier area (km ²)	1968–2000		2000~2013		1968~2013	
			Mean ΔH (m)	Mass balance (m w.e. a ⁻¹)	Mean ΔH (m)	Mass balance (m w.e. a ⁻¹)	Mean ΔH (m)	Mass balance (m w.e. a ⁻¹)
1	5N225E0005	44.46	-22.99±1.24	-0.61±0.20	-17.54±1.23	-1.15±0.31	-40.20±0.58	-0.76±0.08
2	5N225E0010*	39.05	-29.17±1.24	-0.77±0.20	-18.55±1.23	-1.21±0.31	-43.04±0.58	-0.81±0.08
3	5N225E0031	46.31	-12.10±1.24	-0.32±0.20	-11.49±1.23	-0.75±0.31	-23.43±0.58	-0.44±0.08
4	5N225E0033*	38.18	-29.81±1.24	-0.79±0.20	-10.27±1.23	-0.67±0.31	-39.96±0.58	-0.75±0.08
5N225E basin		353.38	-18.69±1.24	-0.50±0.20	-13.46±1.23	-0.88±0.31	-31.35±0.58	-0.59±0.08
5	5O281B0575 (Jiongla)*	91.53	-7.22±1.15	-0.19±0.19	-9.30±0.68	-0.61±0.17	-14.23±0.65	-0.27±0.09
6	5O281B0583 (Lepu)*	60.78	-11.20±1.15	-0.30±0.19	-8.23±0.68	-0.54±0.17	-19.75±0.65	-0.37±0.09
7	5O281B0668 (Yenong)	47.62	-2.31±1.15	-0.06±0.19	-10.76±0.68	-0.70±0.17	-13.15±0.65	-0.25±0.09
8	5O281B0702 (Xiaqu)	171.17	-14.43±1.15	-0.38±0.19	-9.57±0.68	-0.63±0.17	-23.37±0.65	-0.44±0.09
9	5O281B0714 (Daoge)*	81.67	-18.66±1.15	-0.50±0.19	-10.16±0.68	-0.66±0.17	-27.27±0.65	-0.52±0.09
10	5O281B0729 (Kyaggen)	204.67	-15.78±1.15	-0.42±0.19	-6.04±0.68	-0.40±0.17	-22.01±0.65	-0.42±0.09
11	5O281B0746 (Ruoguo)*	75.06	-23.82±1.15	-0.63±0.19	-8.13±0.68	-0.53±0.17	-31.31±0.65	-0.59±0.09
12	5O281B0768 (Nalong)	122.72	-13.06±1.15	-0.35±0.19	-16.07±0.68	-1.05±0.17	-26.37±0.65	-0.50±0.09
13	5O281B0813 (Maguolong)	75.20	-19.83±1.15	-0.53±0.19	-12.49±0.68	-0.82±0.17	-31.72±0.65	-0.60±0.09
14	5O281B0849 (Yangbiegong)	55.15	-11.84±1.15	-0.31±0.19	-12.78±0.68	-0.84±0.17	-25.86±0.65	-0.49±0.09
5O281B basin		1898.44	-15.77±1.15	-0.42±0.19	-7.78±0.68	-0.51±0.17	-23.15±0.65	-0.44±0.09
15	5O282A0071 (Cape)	77.07	-2.55±1.30	-0.07±0.21	-10.41±1.12	-0.68±0.29	-12.53±0.77	-0.24±0.11
16	5O282A0083 (North Cape)	71.78	-15.66±1.30	-0.42±0.21	-10.80±1.12	-0.71±0.29	-26.53±0.77	-0.50±0.11
17	5O282A0103 (Star)*	47.87	-17.31±1.30	-0.46±0.21	-16.64±1.12	-1.09±0.29	-32.83±0.77	-0.62±0.11
5O282A basin		372.48	-12.33±1.30	-0.33±0.21	-10.93±1.12	-0.71±0.29	-23.05±0.77	-0.44±0.11
Land-terminating glaciers		916.13	-13.92±1.25	-0.37±0.20	-10.59±0.79	-0.69±0.20	-23.95±0.70	-0.45±0.10
Lake-terminating glaciers		434.14	-18.28±1.25	-0.49±0.20	-10.97±0.79	-0.72±0.20	-27.71±0.70	-0.52±0.10
Debris-covered region		203.22	-17.64±1.25	-0.47±0.20	-25.18±0.79	-1.65±0.20	-41.36±0.70	-0.78±0.10
Clean-ice region		2421.08	-15.50±1.25	-0.41±0.20	-7.63±0.79	-0.50±0.20	-22.87±0.70	-0.43±0.10
Region of north slope		727.94	-15.01±1.24	-0.40±0.20	-10.95±1.23	-0.72±0.31	-25.17±0.58	-0.48±0.08
Region of south slope		1896.36	-15.96±1.15	-0.42±0.19	-8.55±0.68	-0.56±0.17	-24.21±0.65	-0.46±0.09
Total		2624.30	-15.69±1.25	-0.42±0.20	-9.24±0.79	-0.60±0.20	-24.48±0.70	-0.46±0.10