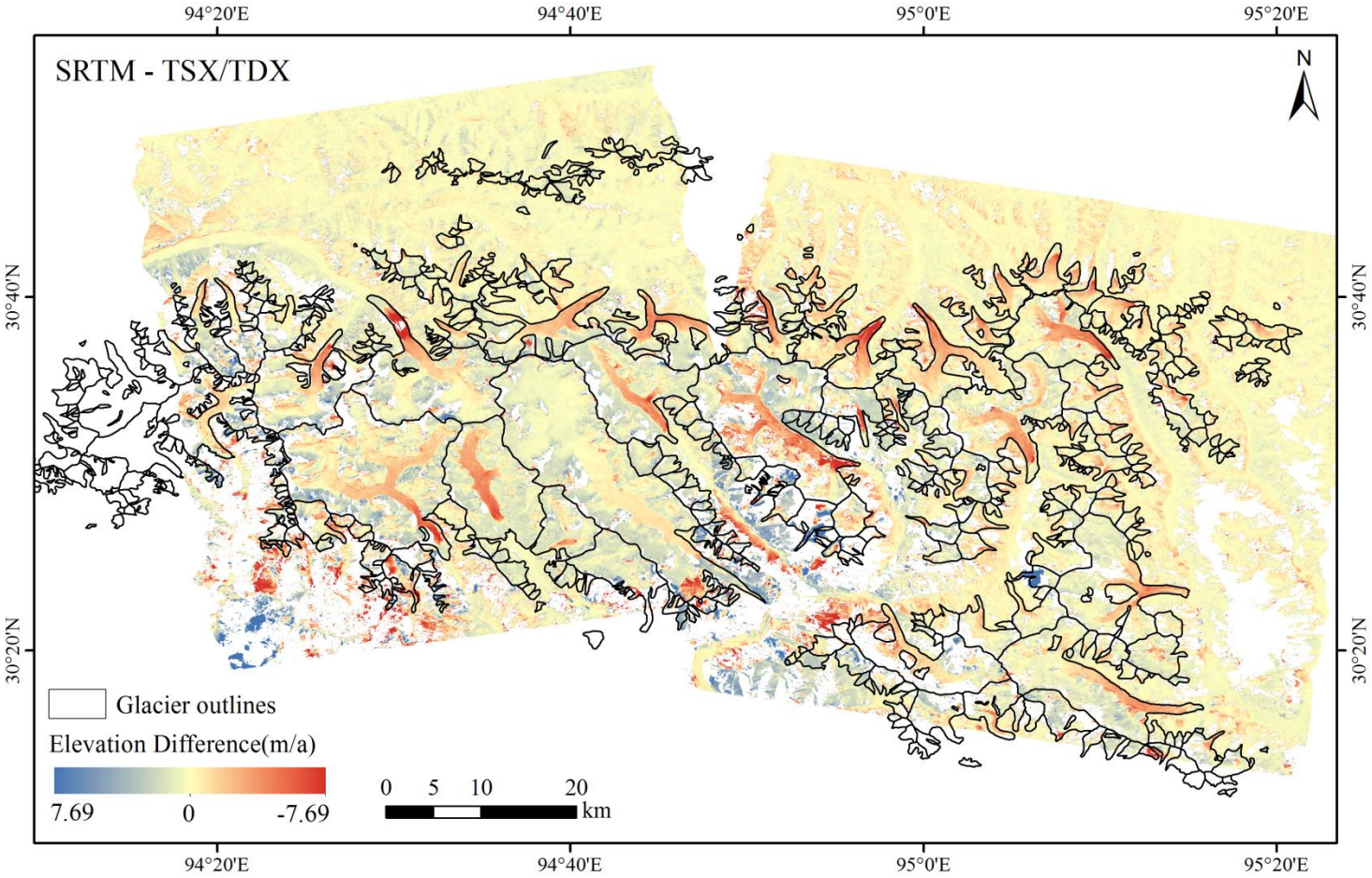
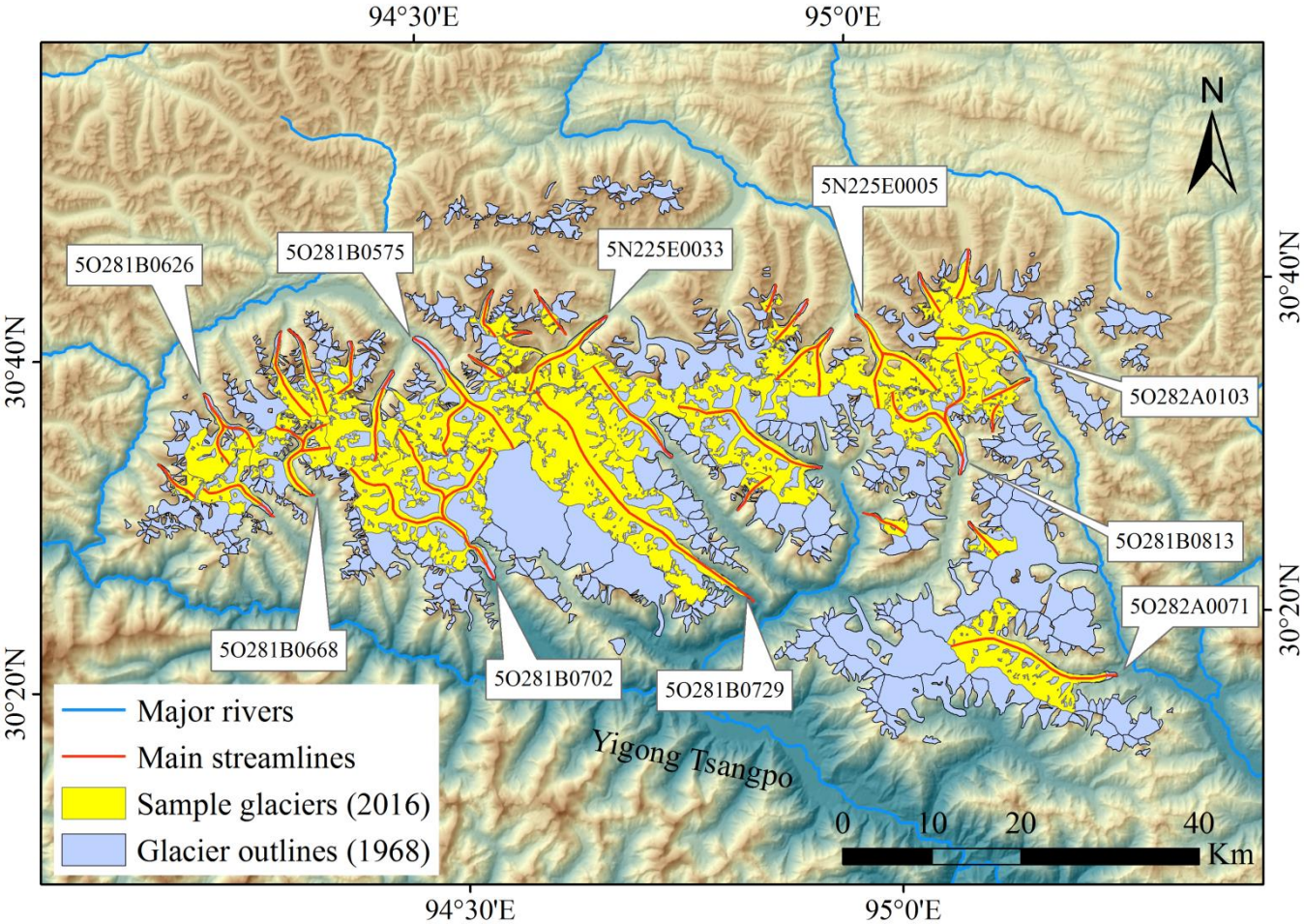
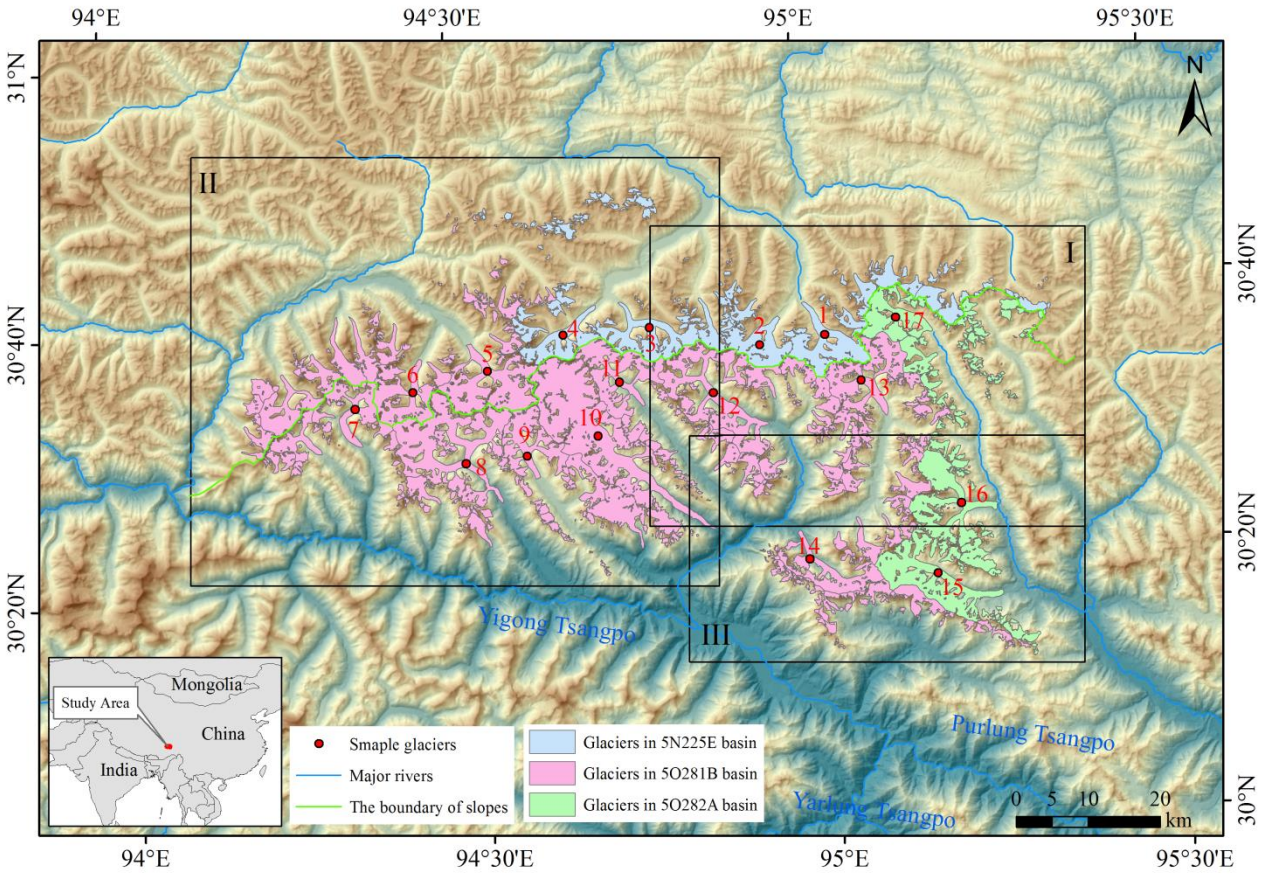
Supplementary Figures



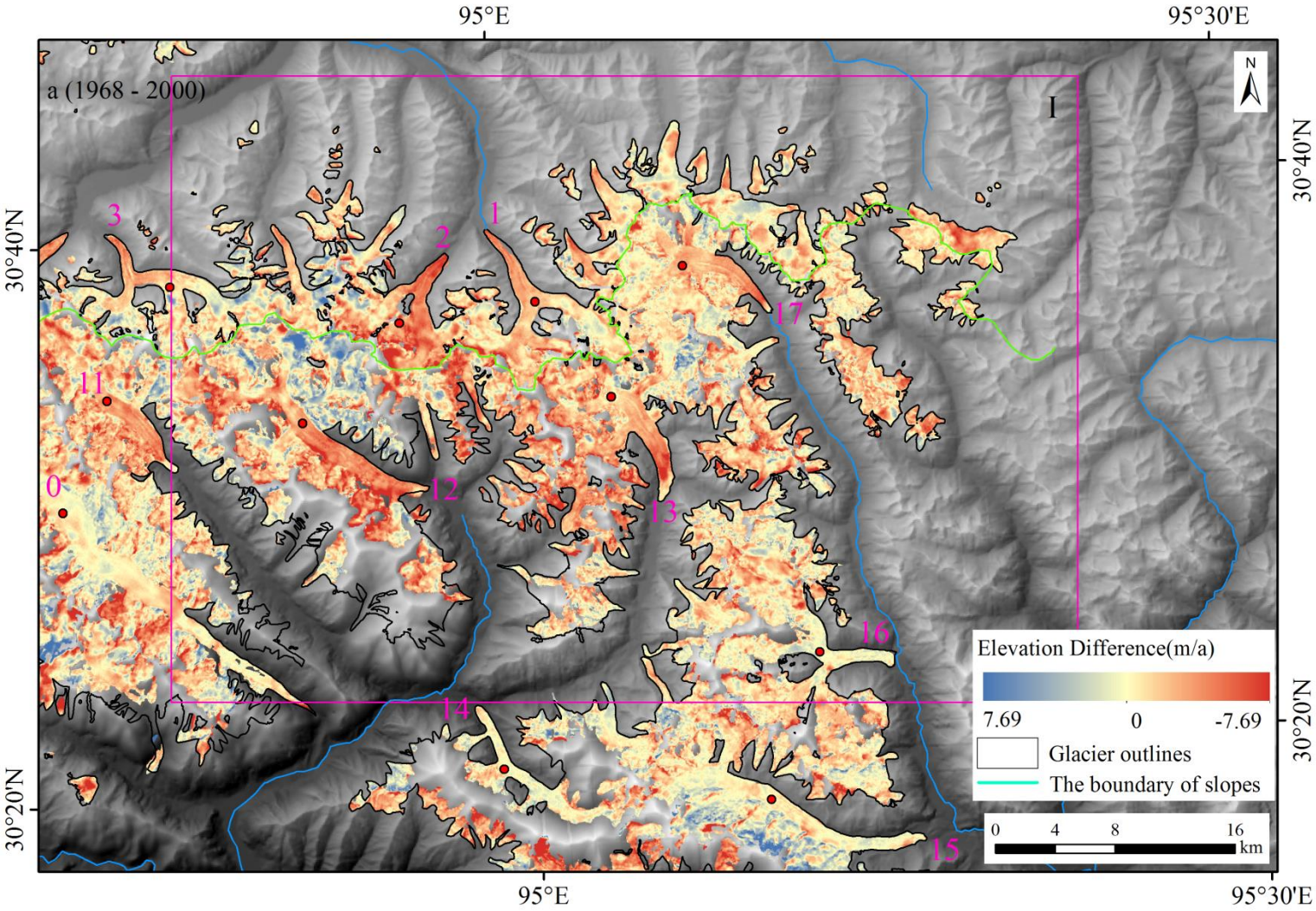
Supplementary Figure S1 Elevation changes of glacier area and off-glacier area in the CNR from 2000 to ~2013. The glacier outlines are based on the geometric union of the 1968 and 2016 glacier extents.

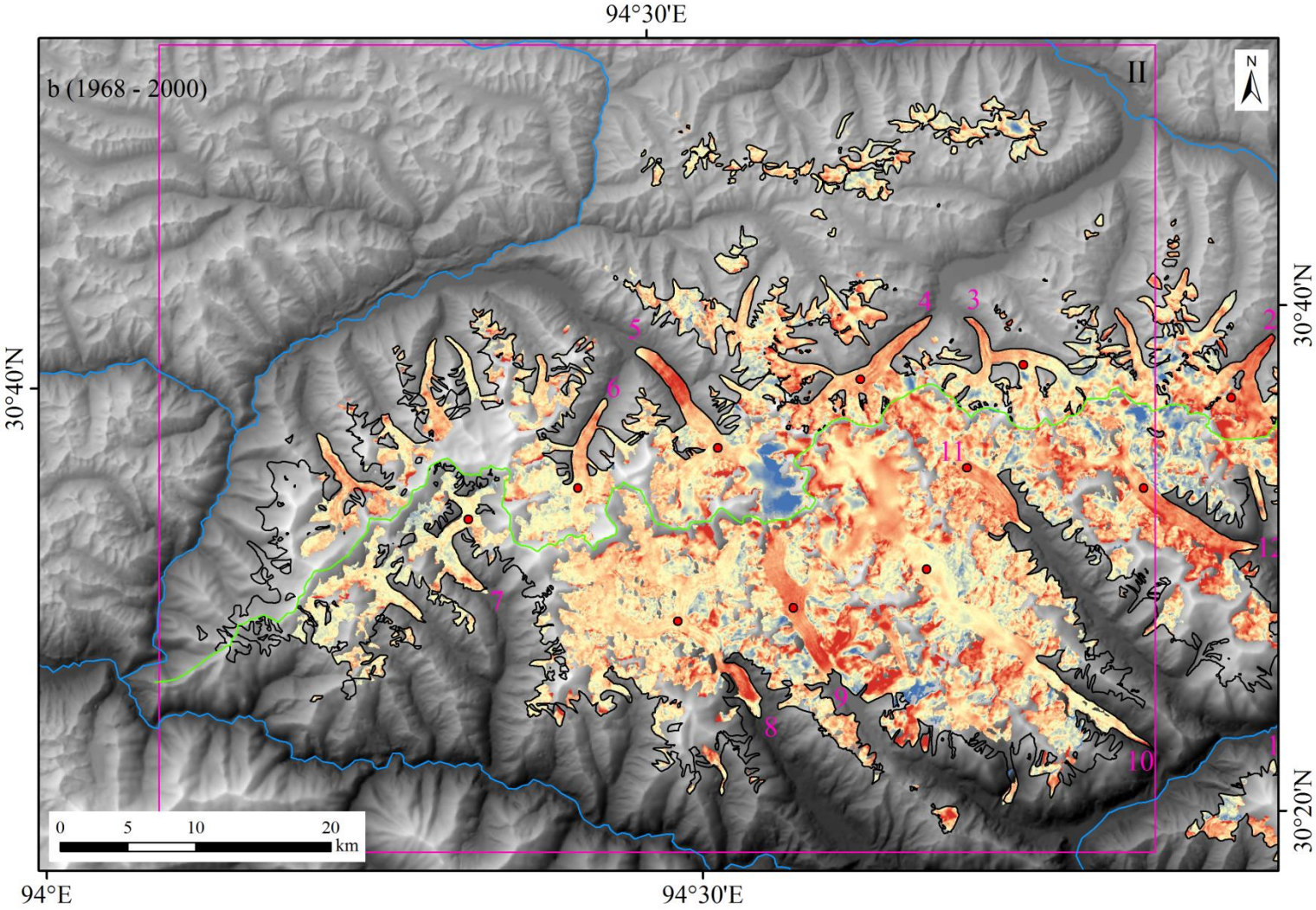


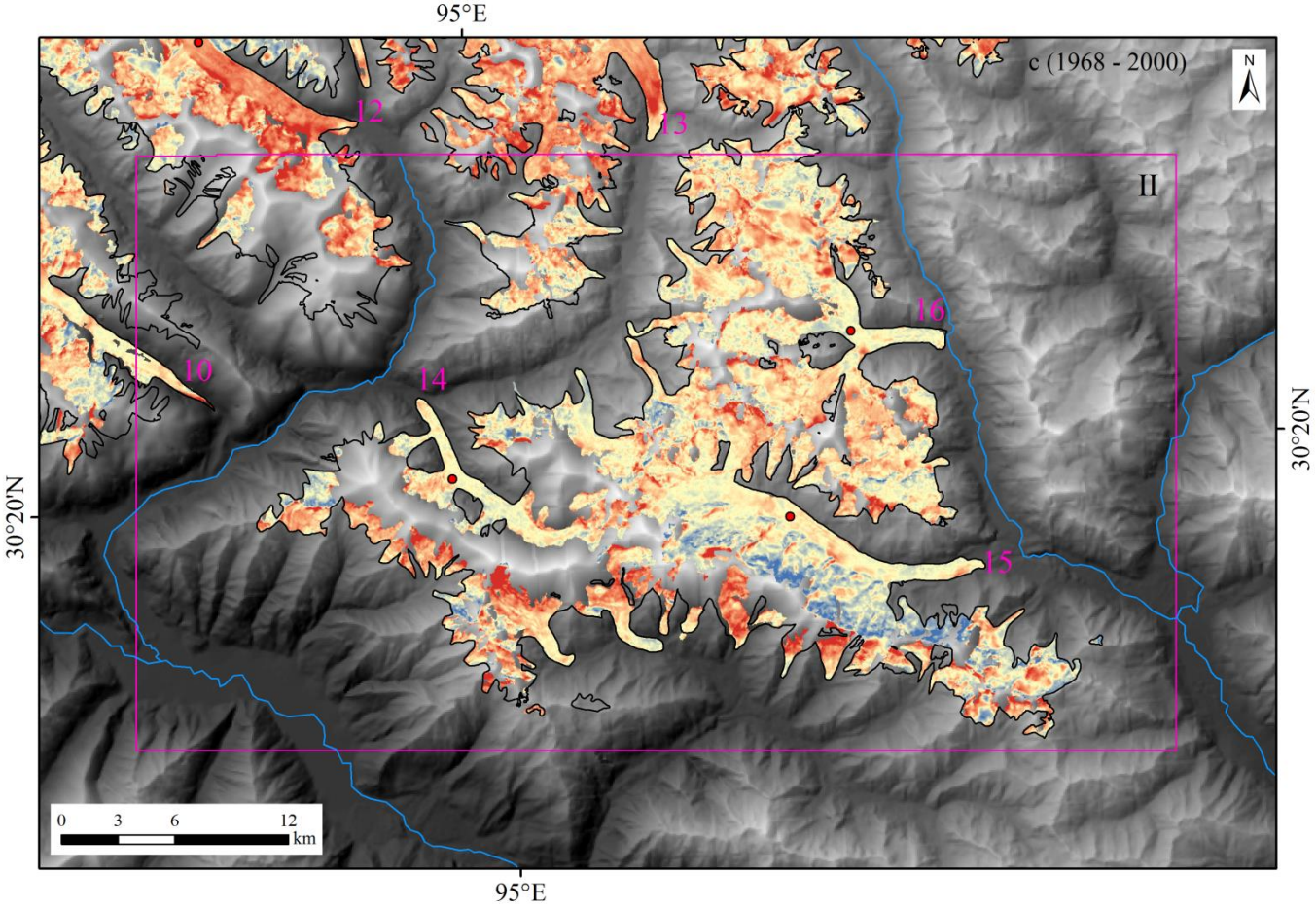
Supplementary Figure S2 The 33 sample glaciers selected for the generation of centrelines and calculation of length change.



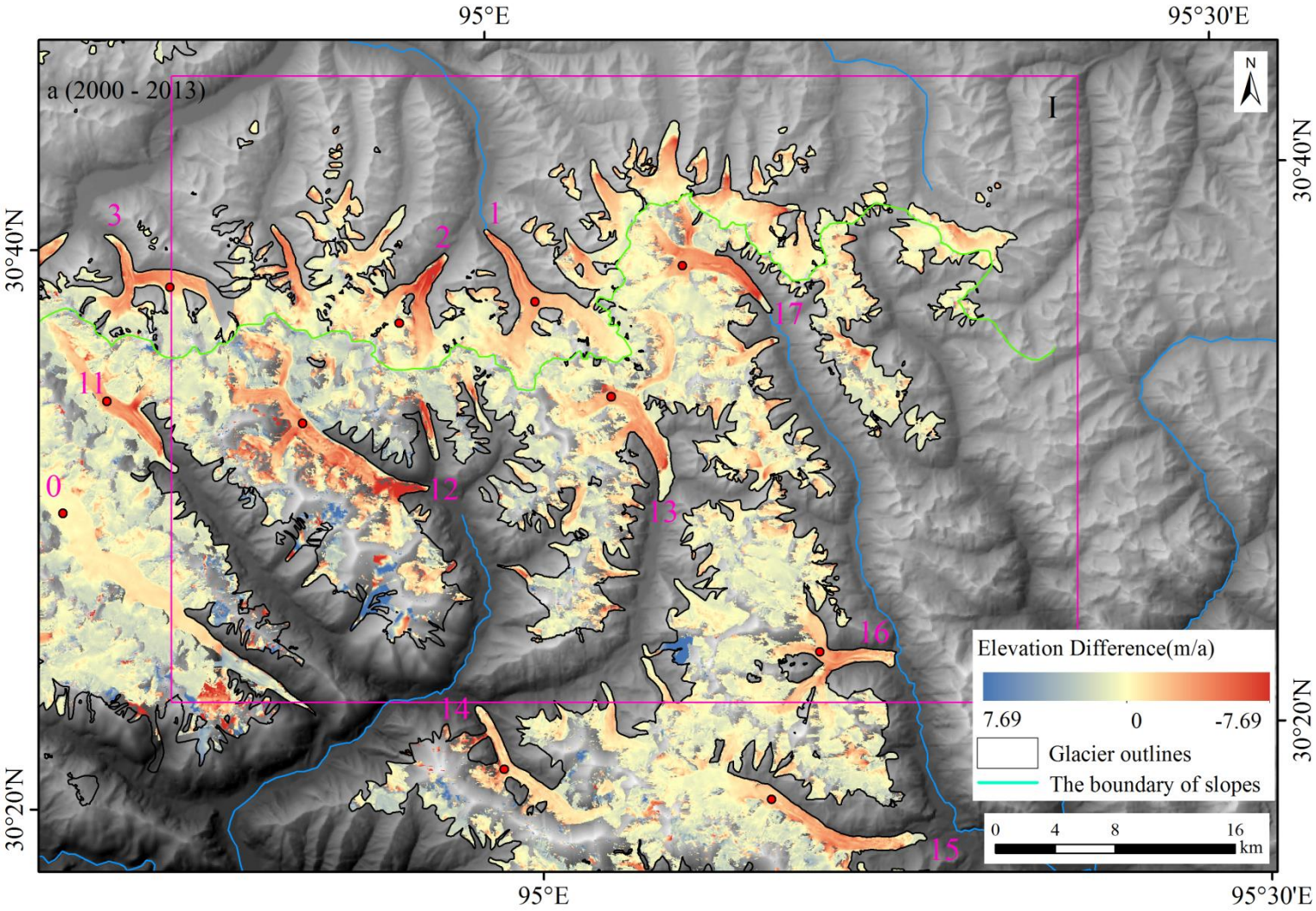
Supplementary Figure S3 Glacier distribution in different drainage basins. Numbers indicate specific sample glaciers chosen for analysis. In order to detect more details in elevation change maps, glaciers in study area are divided into three regions. More details of elevation change were showed in Supplementary Figures S4-S6.

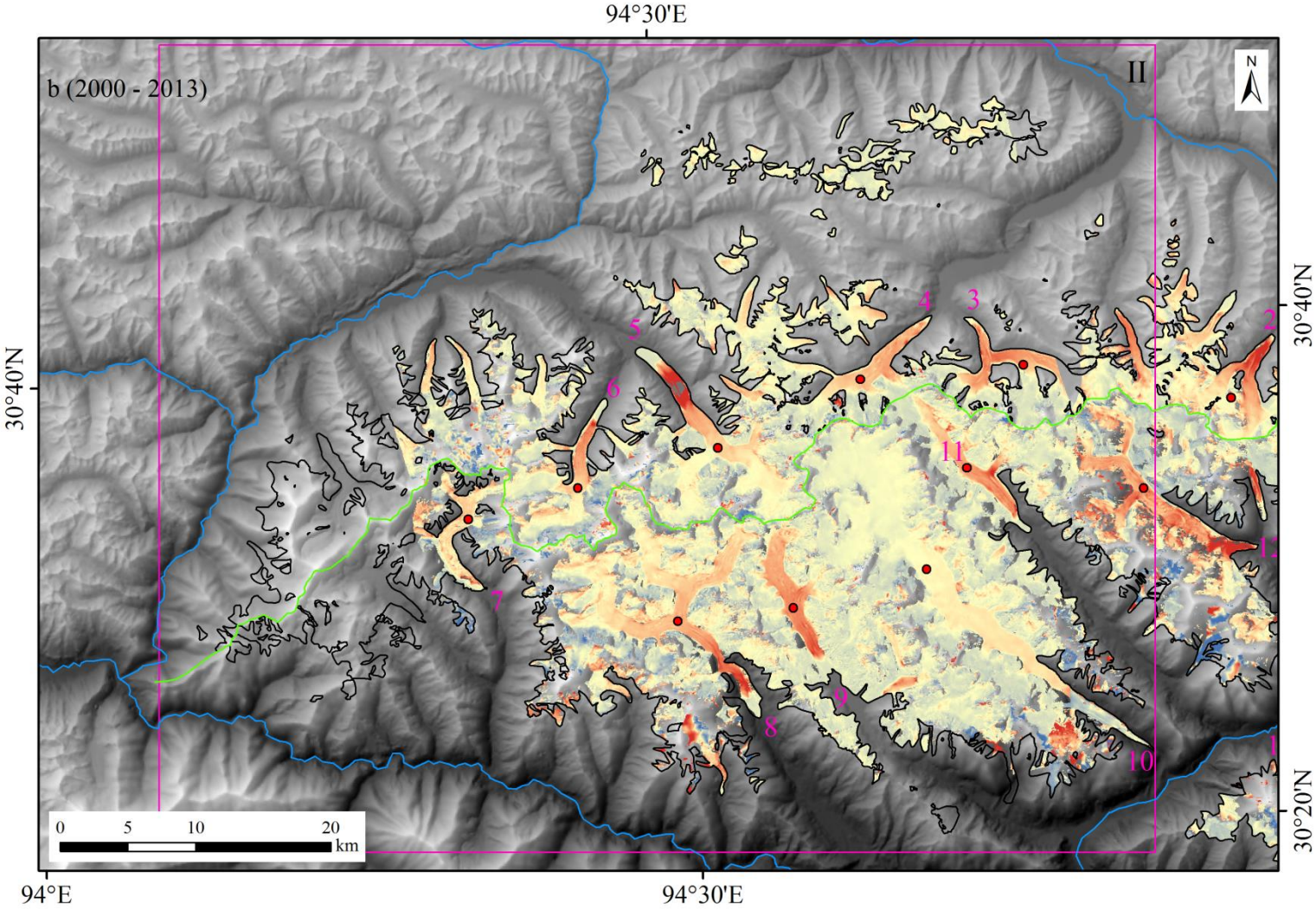

95°E
95°30'E
30°40'N
30°20'N
a (1968 - 2000)
I
N
0
1
2
3
11
12
13
14
15
16
17
Elevation Difference(m/a)
7.69
0
-7.69
Glacier outlines
The boundary of slopes
0
4
8
16
km

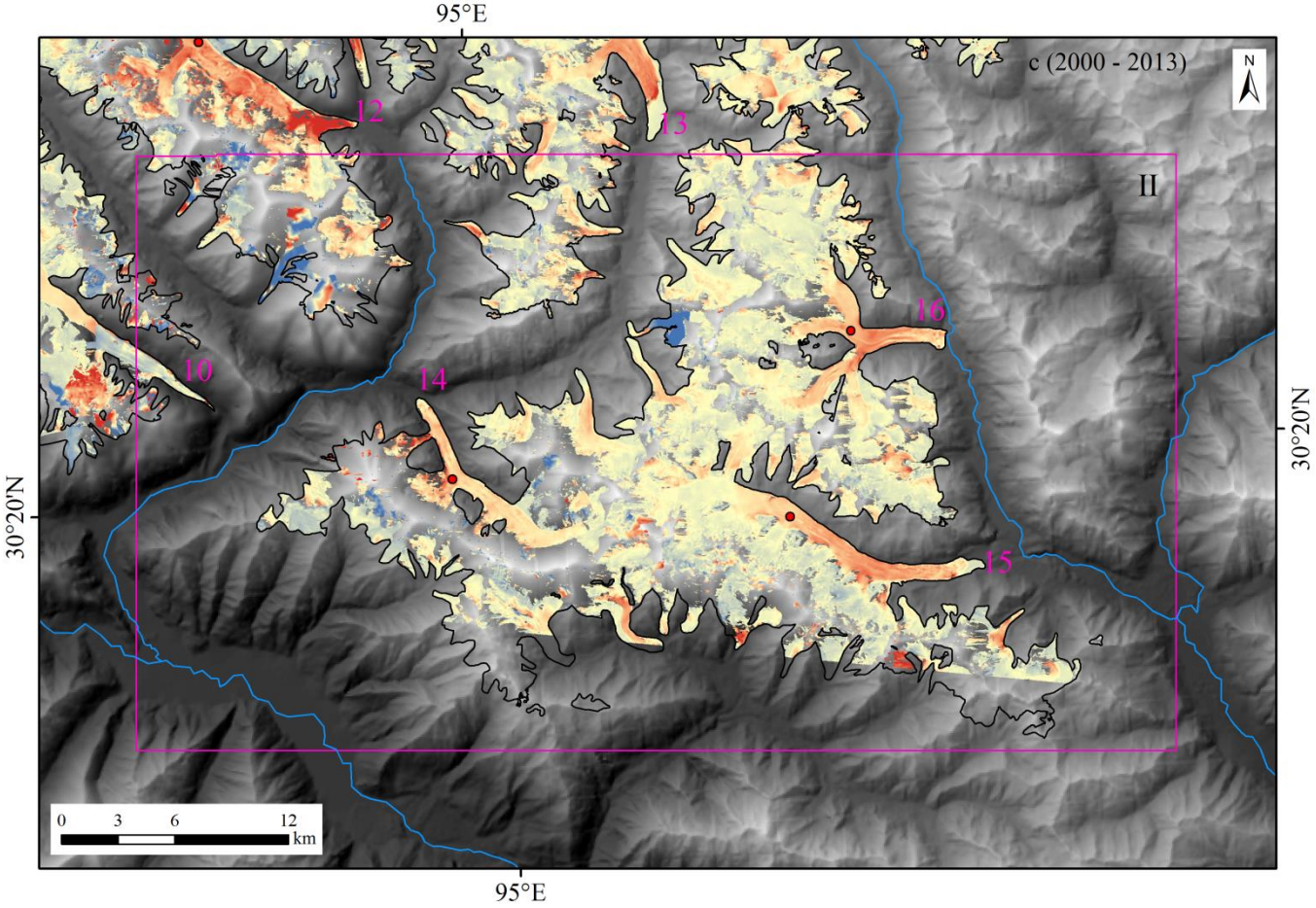

94°30'E
b (1968 - 2000)
II
N
30°40'N
30°40'N
30°20'N
94°E
94°30'E
0 5 10 20
km
1
2
3
4
5
6
7
8
9
10
11
12



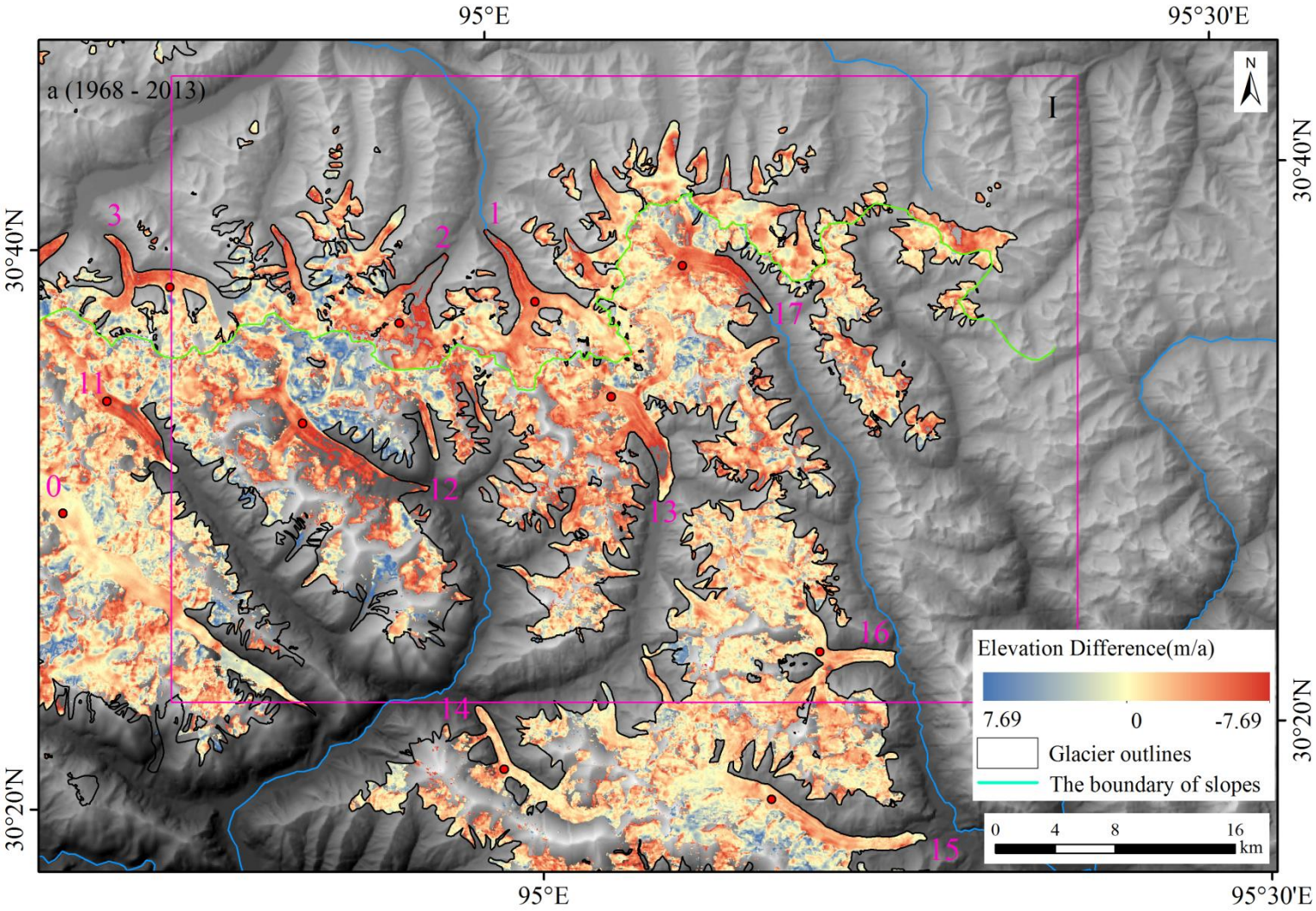
Supplementary Figure S4 Elevation changes in the CNR from 1968 to 2000. The glacier outlines are based on the geometric union of the 1968 and 2016 glacier extents. (a) Elevation change in the region I; (b) Elevation change in the region II; (c) Elevation change III.

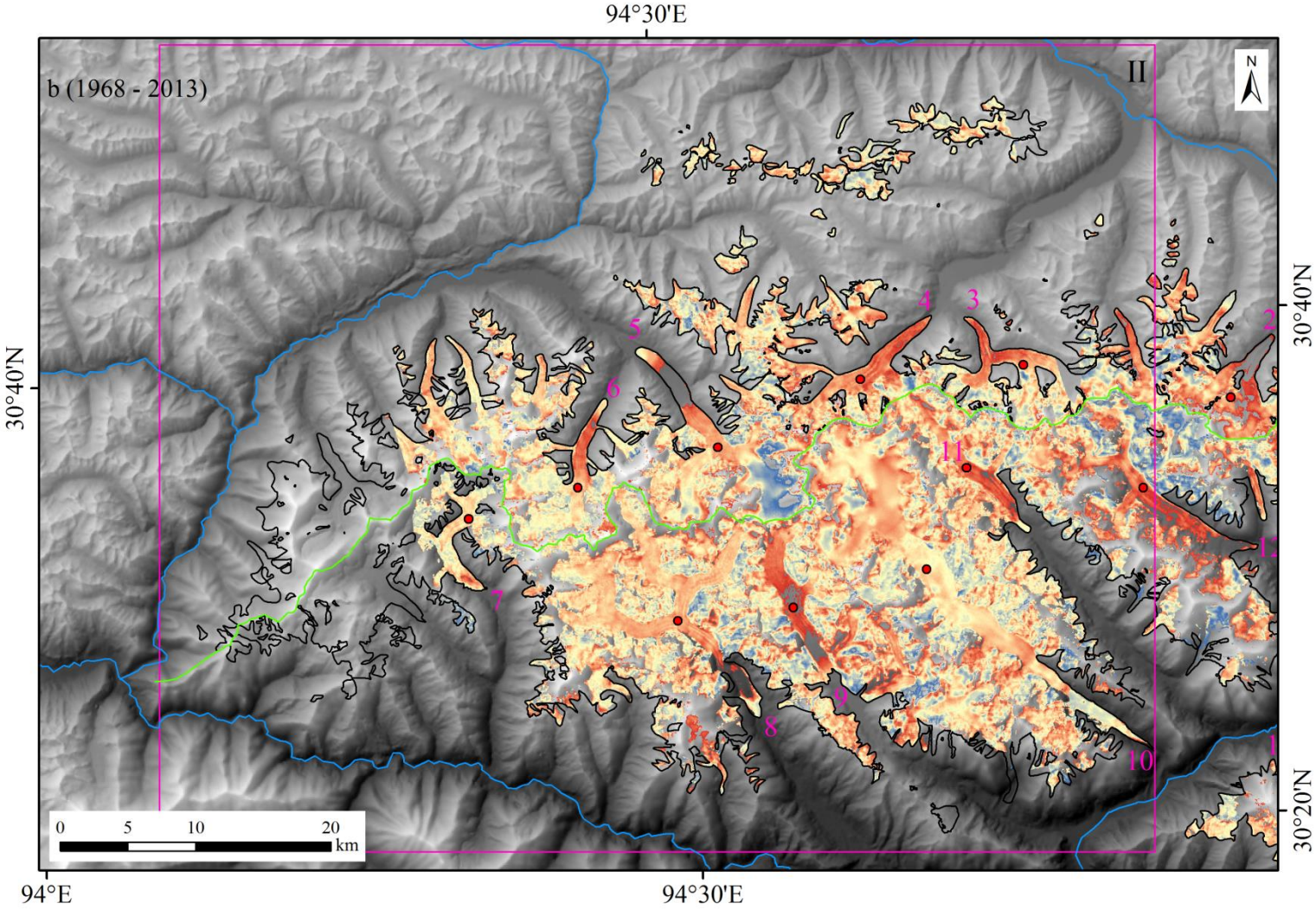

95°E
95°30'E
30°40'N
30°20'N
a (2000 - 2013)
I
N
0
1
2
3
11
12
13
14
15
16
17
Elevation Difference(m/a)
7.69
0
-7.69
Glacier outlines
The boundary of slopes
0
4
8
16
km

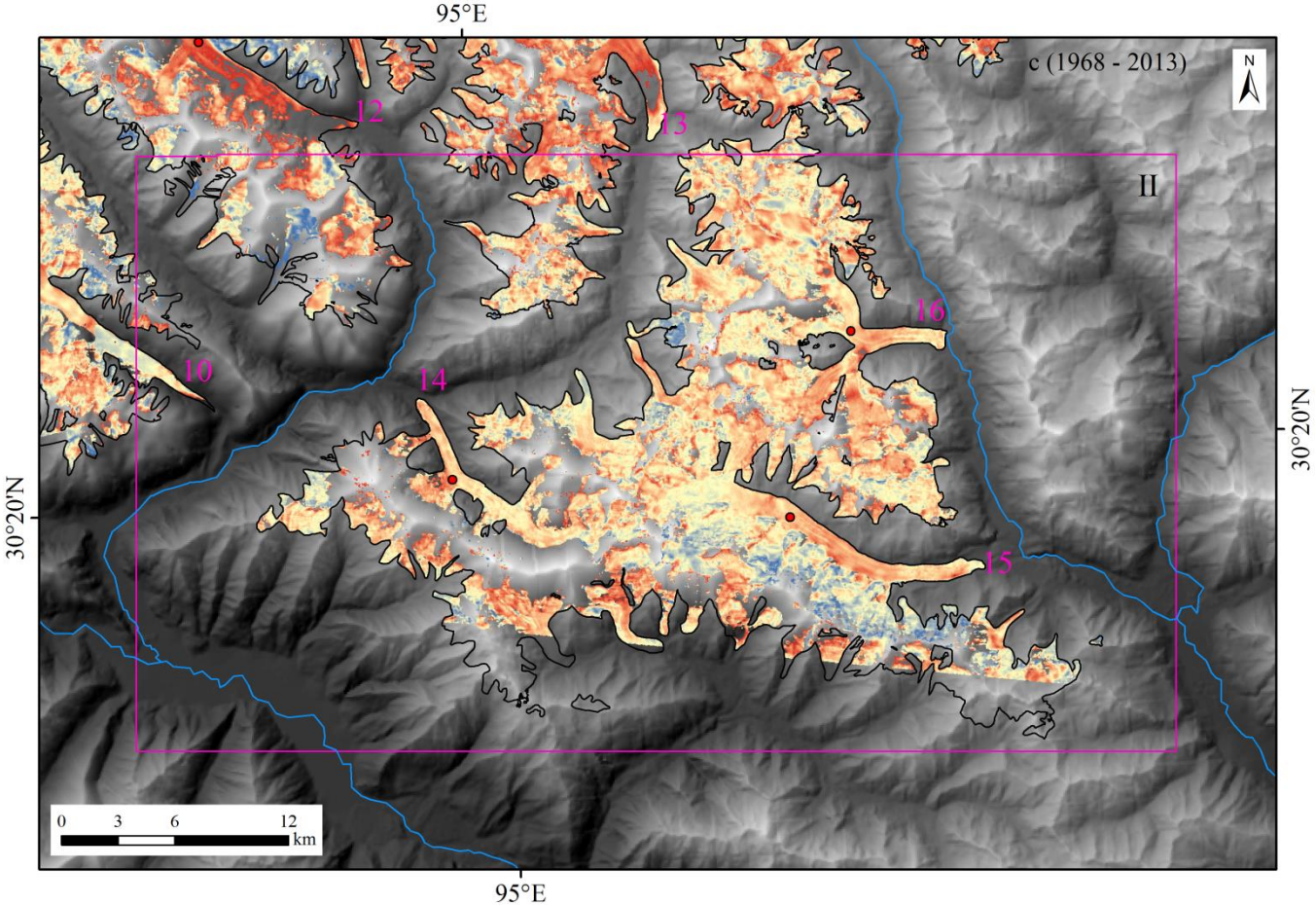

94°30'E
b (2000 - 2013)
II
N
30°40'N
30°40'N
30°20'N
1
2
3
4
5
6
7
8
9
10
11
12
0 5 10 20
km
94°E
94°30'E



Supplementary Figure S5 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.


95°E
95°30'E
30°40'N
30°20'N
a (1968 - 2013)
I
N
0
1
2
3
11
12
13
14
15
16
17
Elevation Difference(m/a)
7.69
0
-7.69
Glacier outlines
The boundary of slopes
0
4
8
16
km


94°30'E
b (1968 - 2013)
II
N
30°40'N
30°40'N
30°20'N
94°E
94°30'E
0 5 10 20
km
1
2
3
4
5
6
7
8
9
10
11
12



Supplementary Figure S6 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 Tables

Supplementary Table S1 Length change of glaciers in the CNR. The uncertainties in glacier length in 1968 and 2016 are 6 and 7.5 m. The uncertainties in length change is 0.20 m a^{-1} during 1968 to 2016.

WGI ID	1968		2016		Length change (m a^{-1})	Rise in terminus elevation (m)
	Length (m)	Terminus elevation (m)	Length (m)	Terminus elevation (m)		
5N225E0005	19465.11	4246	19002.16	4293	-9.64	47
5N225E0010	14915.31	4337	14010.08	4389	-18.86	52
5N225E0012	5895.97	4740	4226.54	4846	-34.78	106
5N225E0014	3354.56	5054	2791.55	5116	-11.73	62
5N225E0018	5819.22	4795	4587.67	4845	-25.66	50
5N225E0022	5201.72	4848	4164.37	4906	-21.61	58
5N225E0033	12624.73	4184	11642.76	4227	-20.46	43
5N225E0034	3074.01	5012	2457.07	5135	-12.85	123
5N225E0036	2907.52	4685	2600.69	4761	-6.39	76
5O281B0534	3355.81	4694	2240.71	4792	-23.23	98
5O281B0546	6083.60	4870	5309.17	4909	-16.13	39
5O281B0567	4742.23	4622	4525.15	4672	-4.52	50
5O281B0575	24703.52	3915	19657.25	4110	-105.13	195
5O281B0583	10774.57	4094	8506.80	4201	-47.25	107
5O281B0596	6781.61	4590	6501.30	4619	-5.84	29
5O281B0610	10804.78	4213	9773.67	4379	-21.48	166
5O281B0611	11068.81	4112	10521.56	4195	-11.40	83
5O281B0626	14162.98	4123	12339.75	4336	-37.98	213
5O281B0632	5734.49	4229	4483.55	4450	-26.06	221
5O281B0661	9636.27	3846	7707.38	4037	-40.19	191
5O281B0668	18706.15	3779	9879.99	3878	-183.88	99
5O281B0702	43458.08	3179	41656.85	3284	-37.53	105
5O281B0729	34651.63	2738	33993.28	2882	-13.72	144
5O281B0746	13687.27	3624	11756.18	3705	-40.23	81
5O281B0755	5487.93	3981	4332.47	4304	-24.07	323
5O281B0768	18371.37	3466	17789.97	3522	-12.11	56
5O281B0804	5312.66	3562	4250.48	3810	-22.13	248
5O281B0813	24408.54	3989	22164.38	4118	-46.75	129
5O281B0818	3323.90	4744	2461.76	4886	-17.96	142
5O281B0836	5143.41	4434	4331.54	4601	-16.91	167
5O282A0071	19662.20	3381	18471.66	3474	-24.80	93
5O282A0101	5840.49	4230	5277.31	4355	-11.73	125
5O282A0103	11395.90	4276	9871.65	4350	-31.76	74