

Online Resource 1

Supplementary information for: Correcting Two Processing Pitfalls in Landsat Glacier Change Detection: Bualtar Glacier and the Karakoram Anomaly, 1990-2025. Zainab Sohail and Salman Tariq.

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Class breaks are pooled across all epochs so that a colour denotes the same value on every sheet. Colour schemes are from ColorBrewer (Harrower and Brewer 2003) except aspect, which uses the standard Esri compass ramp. In all categorical layers the value 0 denotes ground outside the common observation footprint and is rendered transparent.

Table S1 Land surface temperature: classified, five classes, ColorBrewer RdYlBu

Class	Range (°C)	R, G, B	Hex
Very Low	-38.14 to -5.51	44, 123, 182	#2C7BB6
Low	-5.51 to 0.52	171, 217, 233	#ABD9E9
Moderate	0.52 to 2.24	255, 255, 191	#FFFFBF
High	2.24 to 8.12	253, 174, 97	#FDAE61
Very High	8.12 to 52.38	215, 25, 28	#D7191C

Table S2 NDSI: classified, five classes, ColorBrewer BrBG

Class	Range	R, G, B	Hex
Very Low	-0.955 to 0.287	166, 97, 26	#A6611A
Low	0.287 to 0.755	223, 194, 125	#DFC27D
Moderate	0.755 to 0.873	245, 245, 245	#F5F5F5
High	0.873 to 0.920	128, 205, 193	#80CDC1
Very High	0.920 to 1.000	1, 133, 113	#018571

Table S3 Categorical layers

Layer	Value	Class	R, G, B	Hex
Debris	1	Clean ice	198, 219, 239	#C6DBEF
Debris	2	Debris cover	166, 97, 26	#A6611A
Snow cover	1	Snow cover	67, 147, 195	#4393C3
Snow cover	2	Snow free	217, 217, 217	#D9D9D9
Change	1	Non-glacier	150, 150, 150	#969696
Change	2	Loss	202, 0, 32	#CA0020
Change	3	Stable	198, 219, 239	#C6DBEF
Change	4	Gain	8, 81, 156	#08519C

Table S4 Topographic layers

Layer	Class	Range	R, G, B	Hex
Elevation (YIGnBu)	Very Low	2300-3868 m	255, 255, 204	#FFFFCC
Elevation	Low	3868-4567 m	161, 218, 180	#A1DAB4
Elevation	Moderate	4567-5022 m	65, 182, 196	#41B6C4
Elevation	High	5022-5744 m	44, 127, 184	#2C7FB8
Elevation	Very High	5744-7246 m	37, 52, 148	#253494
Slope (YlOrRd)	Gentle	0-9.5°	255, 255, 178	#FFFFB2
Slope	Moderate	9.5-18°	254, 204, 92	#FECC5C
Slope	Steep	18-29°	253, 141, 60	#FD8D3C
Slope	Very Steep	29-41°	240, 59, 32	#F03B20
Slope	Extreme	41-77.9°	189, 0, 38	#BD0026
Aspect (Esri)	North	337.5-22.5°	230, 0, 0	#E60000
Aspect	Northeast	22.5-67.5°	230, 152, 0	#E69800
Aspect	East	67.5-112.5°	255, 255, 0	#FFFF00
Aspect	Southeast	112.5-157.5°	76, 230, 0	#4CE600
Aspect	South	157.5-202.5°	0, 255, 255	#00FFFF
Aspect	Southwest	202.5-247.5°	0, 112, 255	#0070FF
Aspect	West	247.5-292.5°	127, 0, 255	#7F00FF
Aspect	Northwest	292.5-337.5°	255, 0, 255	#FF00FF