

Symbol	Description	Value used in this study
	NIR/SWIR threshold for debris mapping (for this study: Landsat 8 OLI5/OLI6)	1.2
	Threshold area for bare ice area reclassified as debris-covered area	2700 m ²
n	Number of iterations	36 (2.5° increments over 90°)
L_e	Ice cliff centerline extension length	see Table 2
α	Centerline buffer distance	see Table 2
β_e	Degrees by which β^*_i is reduced to define A_{ei}	see Table 2
A_{\min}	Minimum ice cliff area threshold	see Table 2
φ	$p(x = \text{Ice cliff} \beta, \omega)$ reduction factor	0.5
γ	Limit where $y'(\beta)$ (derivative of Eq. 2) is effectively 0	0.0001
L_t	Target/maximum domain processing square tile side length	1500 m (area: 2.25 km ²)
n_c	Look distance for domain segmentation	1