



Debris-cover on glaciers in the Austrian Alps.

Regional patterns, Changes and Significance

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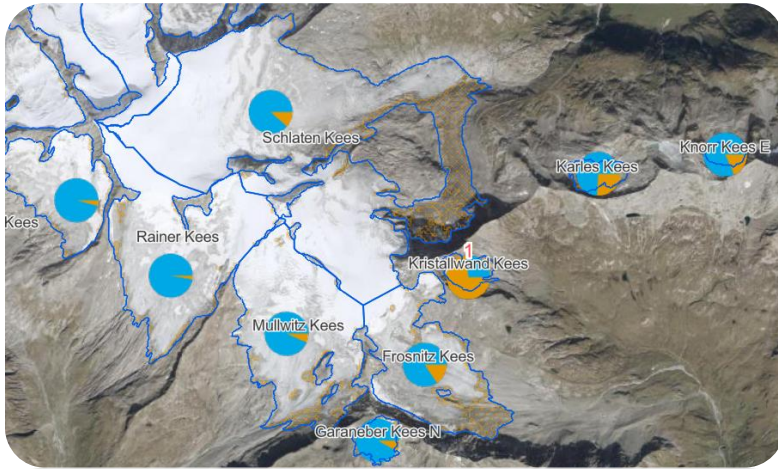
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Objectives

- *quantify the distribution of debris cover* in the Austrian Alps over three decades (1996 - 2015)
 - Evaluate the *applicability and precision* of threshold-based debris cover mapping using Landsat scenes
 - Relate *glacier catchment characteristics* to debris cover and debris cover changes
- 255 glaciers analysed of >800
 - Manual mapping (*orthofotos*) on subset for validation
 - *Glacier outlines* from Austrian Glacier Inventory 1998, 2009, 2015
 - Automated mapping using near-infrared and shortwave infrared bands of *Landsat images*

Methods



Main Findings:

- Debris cover increased by 10% between 1996-2015
- Strong differences between individual glaciers
- Overall accuracy is limited due to poor resolution of Landsat
- All glaciers lost area despite increase in debris cover

Get more and access the data directly:

<https://bit.ly/2QNYWYL>

