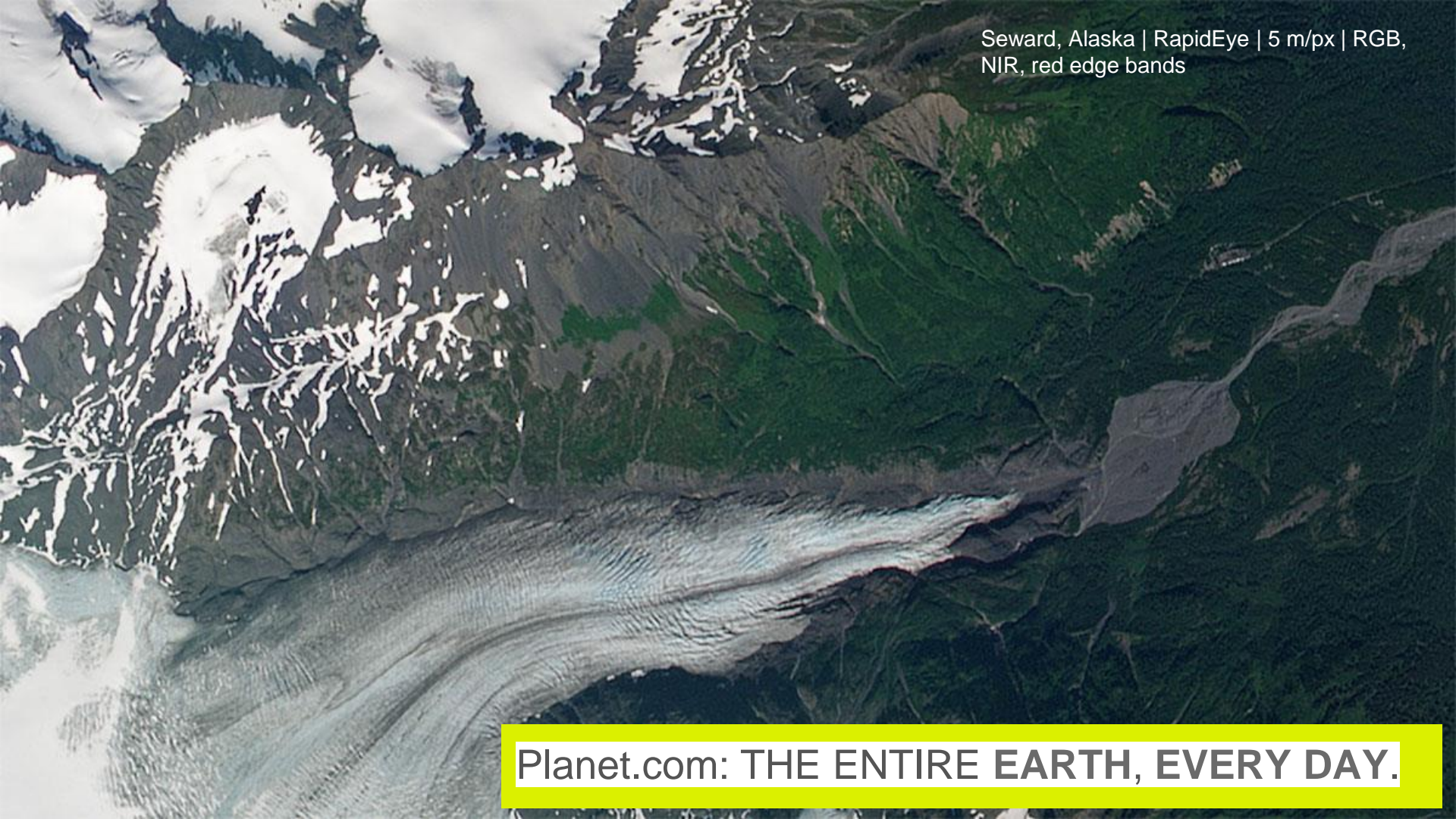


# Assessing High-Resolution CubeSat Imagery to Infer Detailed Snow-Covered Areas for Studying Changes in Mountain Ecosystems

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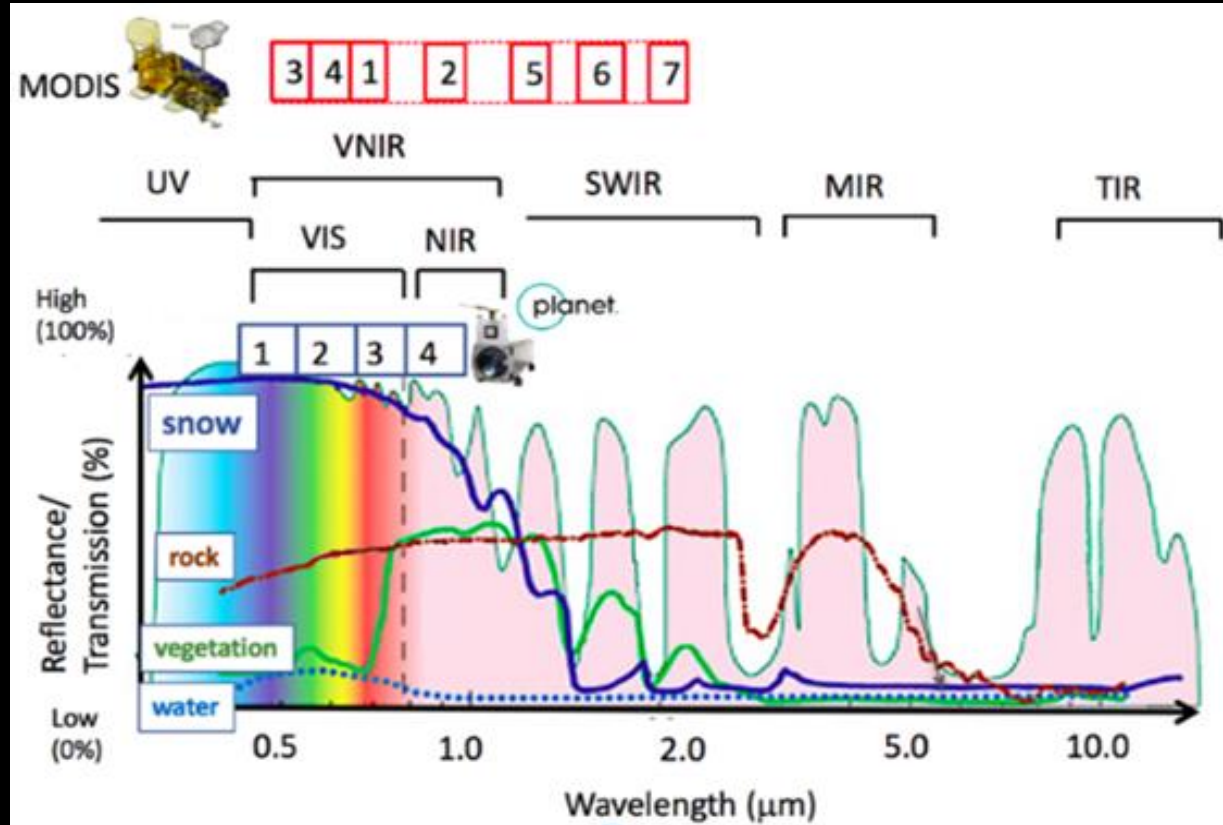
**Nicoleta Cristea, Anthony Cannistra**  
*University of Washington, Seattle*

A satellite image showing a large glacier flowing through a mountainous region. The glacier is a light blue-grey color, contrasting with the dark green forested slopes and the white snow-covered peaks of the mountains. The image is captured from a high angle, showing the intricate patterns of the glacier's surface and the surrounding terrain.

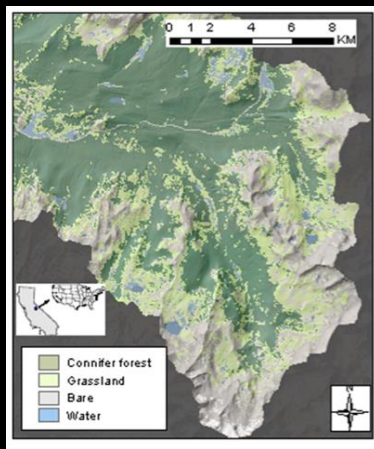
Seward, Alaska | RapidEye | 5 m/px | RGB,  
NIR, red edge bands

Planet.com: THE ENTIRE EARTH, EVERY DAY.

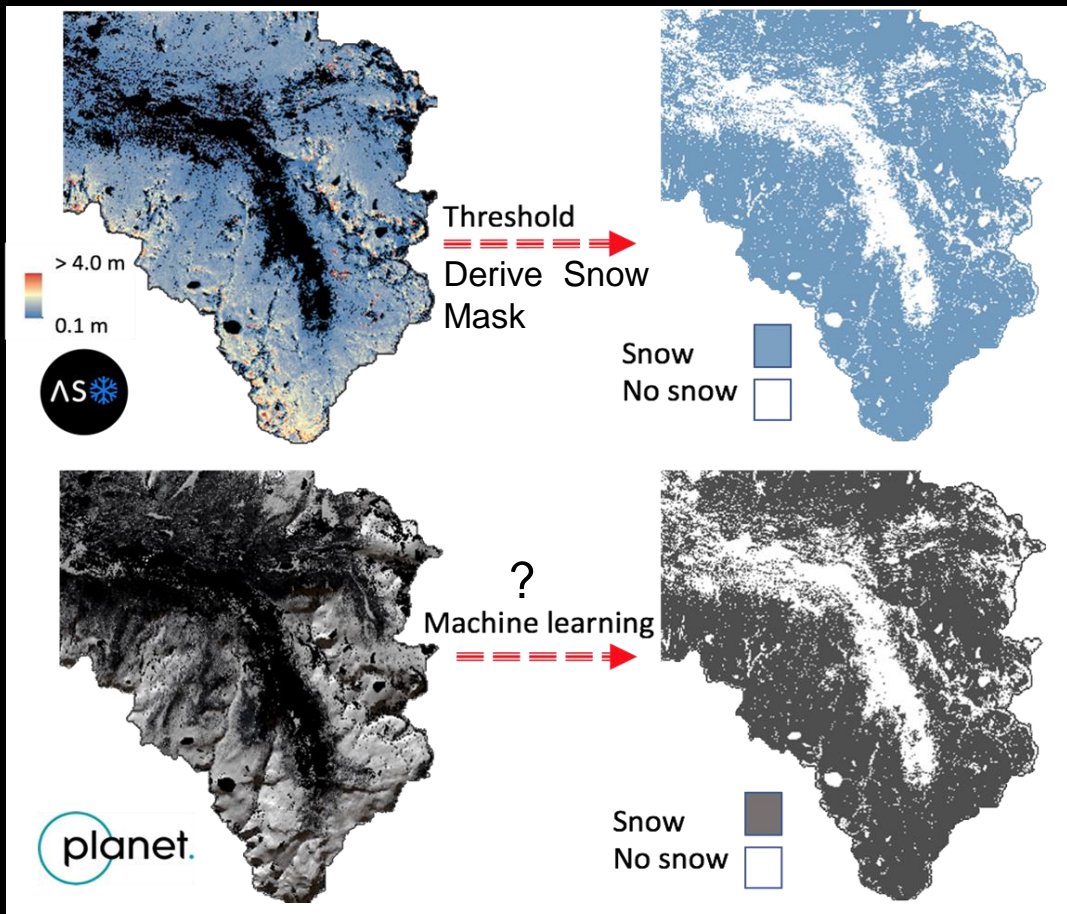
# Challenges to mapping snow-covered areas from Planet imagery







Can we use ML techniques to derive snow masks?

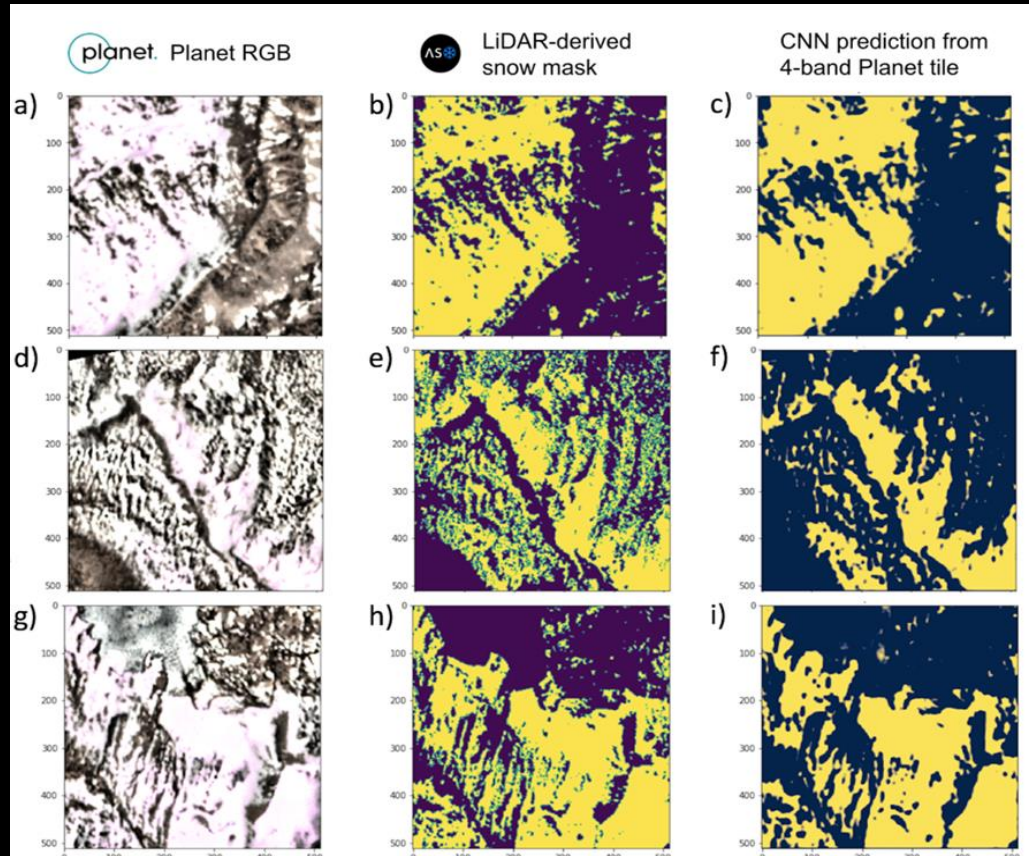


# Preliminary results

Snow vs. ground

Snow in forest gaps

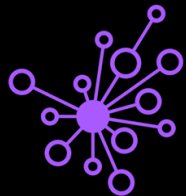
Snow vs. lake/ice



Thank you!

Please visit Tony Cannistra's  
poster to find out all the details.

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