



# Small satellites, big data, and the fate of permafrost landscapes

**Dr. Joanmarie Del Vecchio**

Postdoctoral fellow,  
Neukom Institute for  
Computational Science,  
Department of Earth Science,  
Dartmouth College



Eastman Lecture

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Tuesday, November 7, 2023, Beneski Room 100, 10:00 - 11:20 am

**Open to everyone! We will have donuts!**

**How are permafrost landscapes changing in the face of climate change?**

The Arctic, vast and largely inaccessible, is now imaged by satellites at least once a day, allowing us to learn new things about permafrost landscape dynamics. I use new datasets and computational tools to learn about permafrost landscapes at levels of detail that had been limited to well-studied landscapes in lower latitudes, where most geomorphic laws have been formulated and tested...until now. And not a moment too soon - amplified warming of Arctic landscapes threatens their stored carbon and thus global greenhouse gas emissions goals. Coding skills and big datasets will unlock new kinds of science methods and discoveries about how our Earth works - and I'd love to show you a few examples!