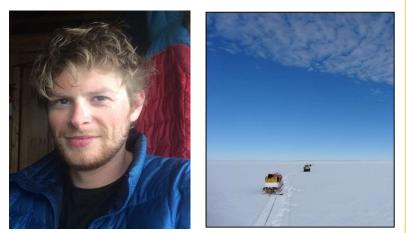
School of Earth and Environmental Sciences Colloquium Series

Jonathan Kingslake, PhD

Associate Professor, Dept. Earth and Env. Sciences, Lamont-Doherty Earth Observatory of Columbia University **"Past and present flow of the Antarctic Ice Sheet"**

Wed., Nov.29th 12:15-1:30PM Science Bldg. C-207 Zoom ID: 820 5441 6677 Passcode: 895367



Ice sheets are large accumulations of ice that flow under their own weight. This flow controls how fast they grow or shrink, which controls how fast sea level is rising around the globe. In this talk, I will discuss why studying ice sheets is important and interesting, the essentials of how ice sheets work, and some of my own work aimed at determining how the Antarctic Ice Sheet flowed in the past. This work included two field seasons in Antarctica using ice-penetrating radar to look inside the ice sheet and map previously unknown structures 100's of meters below the surface. These discoveries provided evidence that the ice sheet was unexpectedly smaller in the recent past (in the last few thousand years) than it is today. This has motivated subsequent work to date when this happened and determine why it happened. I finish by discussing potential implications of these findings for the future of the ice sheet.