

# Improvement to the use of $^{10}\text{Be}$ in Pyroxene for cosmogenic nuclide exposure dating

*Berkeley Geochronology Center*



Measurement of multiple cosmogenic nuclides in single samples is routinely feasible only in quartz-bearing rocks. However, in Antarctica, the majority of clasts on the surface of extensive moraine sequences in the Transantarctic Mountains, are Ferrar Dolerite.

Therefore, this research project attempts to (i) improve the efficiency of  $^{10}\text{Be}$  extraction from pyroxene in the Ferrar Dolerite by fusion and (ii) make more precise estimates of the production rates of  $^{10}\text{Be}$  in pyroxene than are currently available.



**Visitor:** Marie Bergelin

**Visit dates:** September 4 - October 5, 2023

Marie Bergelin is a Postdoctoral Fellow at Berkeley Geochronology, and this visit will be her third time visiting the Cosmo Lab. She is an active person and enjoys outdoor activities such as hiking, running, biking, and paddle boarding.