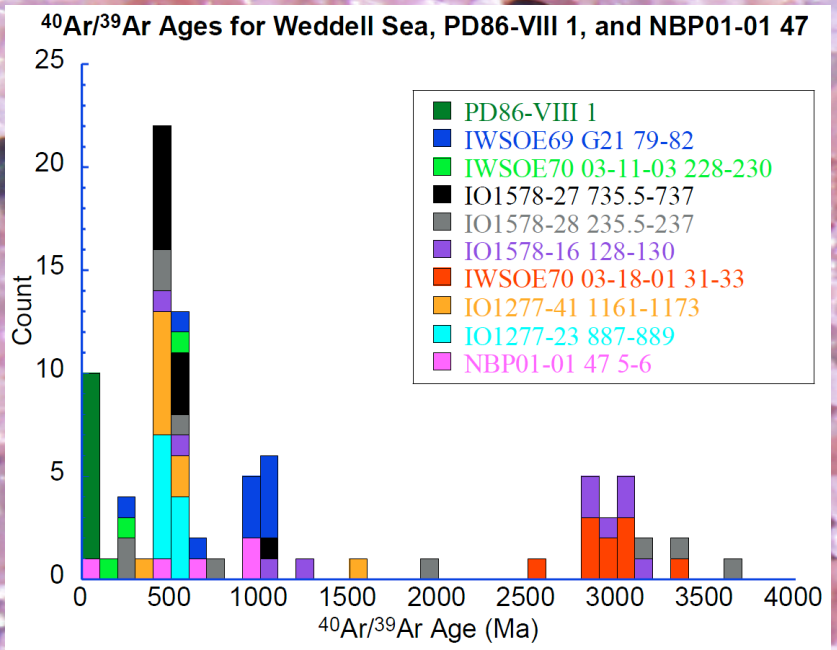
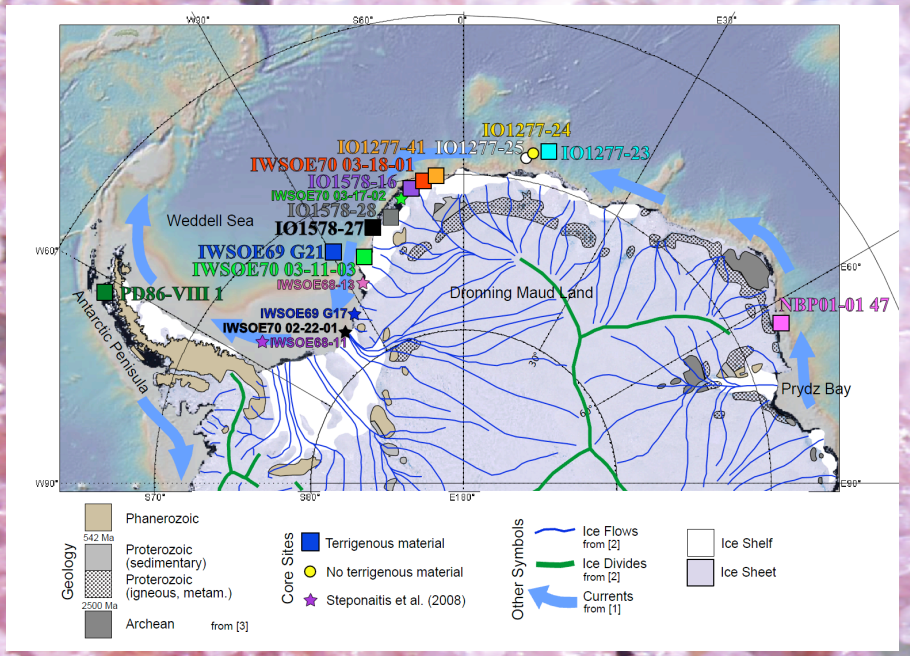
Characterization of Glacially Derived Sediments in the Eastern Weddell Sea: $^{40}Ar/^{39}Ar$ Age Distributions of Hornblende Grains

Ethan M. Dahlhauser[a,*], Elizabeth L. Pierce[b,c], Sidney R. Hemming[b,c], Trevor Williams[c], Elena Steponaitis[d]





- The purpose of this project is to learn more about the subglacial geology around the Eastern Weddell Sea and to characterize the source areas of ice rafted detritus in an effort to support future work reconstructing past ice sheet dynamics.
- Overall, the $^{40}Ar/^{39}Ar$ ages of the samples agree with the known on-land ages, showing age populations that represent three major tectonothermal events in East Antarctica: craton formation with the Humboldt Orogeny (~3000 Ma), Grenville Orogeny (~1000 Ma), and Pan-African Orogeny (~500 Ma)

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