The Polar Rock Repository: A polar PetDB partner

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While Antarctica is a prime place to study many geochemical processes in cold environments, its location provides unique challenges in terms of logistical accessibility and environmental impacts. The Polar Rock Repository (PRR) was created by the NSF Office of Polar Programs to preserve and freely provide access to rock, terrestrial core, unconsolidated till/soil, and marine dredge samples from Antarctica and the Southern Ocean for scientific research, including using destruction techniques. The PRR online database has 60,000+ samples (prr.osu.edu) and includes information useful to climate studies by noting locations with weathering salts/calcite skins, Fe-oxide staining, biological features, coral, soil residues, inclusions etc., which are included as multi-field searchable criteria on the PRR website. Samples can be ordered online for research use.

Since its creation, the PRR has loaned thousands of samples for geochemical analyses. The PRR is sending geochemical data associated with PRR rocks to the EarthChem PetDB petrological database, including 1,940 samples from 62 separate references. By partnering the PRR with the PetDB catalogue, we aim make polar information more accessible through community online databases, facilitate global correlations, and potentially reduce redundant analytical costs. With easy access to samples, images, and geochemical data, the PRR is a vital resource for studying a variety of geochemical processes in Antarctica.

