

Seismic imaging of the Bjerkreim Layered Intrusion

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Seismic data collected over the Bjerkreim Layered Intrusion illustrates the capability of the seismic reflection technique to image the layering in these crystalline rocks. Strong continuous reflections were recorded at megacyclic unit boundaries that correspond to large-scale changes in bulk

composition of the magma chamber resulting from progressive crystallization as well as the reversals that occur when major influxes of new magma enter the chamber. Modelling of some other mapped layered intrusions further illustrates the reflective nature of intrusions with varying composition.