Rheological behaviour on the crust of the northern Fennoscandian shield

K. Moisio, P. Kaikkonen

1 Geophysics, Oulu Mining School, University of Oulu, kari.moisio@oulu.fi
P.O. Box 3000
FI-90014 University of Oulu

The continental lithosphere is usually old, cold, having a multilayer rheology and its rheological behaviour is determined by the brittle and ductile properties of the constitutive rocks that form the lithosphere. Rheological strength was derived for the seismic POLAR profile based on the seismic velocity structure (Janik et al., 2009; Moisio and Kaikkonen, 2013). Relations between the focal depths of the earthquakes and the rheological strengths were analyzed especially the factors that have influence on the brittle strength favouring the observed distribution of the earthquakes.

References:
