



Explosive seismic reflection data from dome Halfarryggen, Antarctica

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Here we present the results from a explosive seismic survey performed in January 2010, at the ice dome Halfarryggen, close to the ice shelf Ekströmisen in East Antarctica. The dome lies 120 km south east of the German research station Neumayer. Two 6 km long perpendicular lines were shot over the dome, large enough to capture the structure of the present Raymond bump. For recording we used a 60 channel 1500 m long snow streamer. To reduce spatial aliasing two shots were combined into one data record.

The focus of the seismic survey lies upon the physics that can be extracted from the internal and basal ice reflections. This includes bed conditions, crystal orientation fabric and seismic wave velocities.