



Comparison of high-resolution snow profiles from Antarctica and Greenland

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Perennial and seasonal snow profiles in Antarctica and Greenland are deposited mostly under windy conditions. We measured snow profiles with very high vertical resolution on several places in Antarctica and Greenland. As instruments we measured the penetration hardness with the SnowMicroPen (1 mm vertical resolution), with a combination of near-infrared and translucent photography (2 mm² resolution) and micro-CT samples (20 μm resolution). All profiles show horizontal spatial variability caused by wind deposition, and a vertically highly variable profile, difficult to measure by traditional means. We try a first interpretation of the features found in these profiles and features typical for certain regions.