Diary 1 – 29 April 2014

A four week snow adventure from Wollaston Foreland to Revet

Glen Liston (Colorado State University) and I spend the last four weeks measuring snow depths, digging snow pits to measure snow density and stratigraphy, and noting snow crystal sizes and hardness in Northeast Greenland.

Travelling on snowmobiles, we have collected snow data as part of my PhD project in a region stretching from the most eastern point of Wollaston Foreland, through the broad valleys around Zackenberg Research Station, and into the inland parts of Tyrolerfjord and Store Sødal with their mountainous terrain populated by numerous groups of 3-10 musk oxen. During our travels, we stayed in trapper huts with dimensions as small as 2.0 by 2.7 meters and heated with coal. Several strong storms during the winter have packed the snow cover and left the snow surface icy, 'polished,' and shining in large patches all over the region. We found solid ice encapsulating the vegetation in the bottom of most of our snow pits and additional ice lenses in the snow made it a challenge and hard work to dig our 2.5 m deep snow pits around Wollaston Foreland.



Stine in a snow pit. Photo: Glen Liston.

During this April field campaign the air temperature increased from -26 to -10 °C; we were also gifted with many sunny and clear days and only four days of snow storm with winds strong enough to knock you down and reduce the visibility to only a few meters. It has been a true adventure being out in this white, late winter, remote landscape and we return with an extensive snow dataset suitable for an exciting PhD programme!



Snow crystal captured during snowy day. Photo: Stine Højlund Pedersen.

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ARC-ASP Young Sund Campaign 2014