

ASP PROJECT SUMMARY

Name of all actual participants	AU: Stine Højlund Pedersen
listed by institution	UoM:
	GINR:
	Other : Glen E. Liston (Cooperative Institute for Research in the
	Atmosphere (CIRA), Colorado State University, USA)
Actual field work start / end	2 - 30 April 2014
dates	
Actual field work site	Zackenberg Valley, Wollaston Forland, Store Sødal, Payers Land, and
	Clavering Island, NE-Greenland
Number of man-days used in	Stine Højlund Pedersen : 28 days
field (specify for participants)	Glen E. Liston: 28 days

Short summary, main achievements and difficulties encountered during field season (150 - 250 words)

Regional snow cover in North East Greenland

In April 2014, good snow conditions and clear weather enabled us to traveling on snow mobiles across a region stretching 100 km 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. We collected snow observations in 44 snow observational sites. In each site, we conducted snow depth transects (in total 8400 snow depth measurements), dug snow pits to measure snow density and observe stratigraphy, and noting snow crystal sizes and hardness.

The observations of the landscape and snow distribution across the region in April 2014, gave an impression of a decreasing wind speed gradient from the coast and inland direction. We, therefore, expect to identify a gradient of decreasing winter precipitation amounts as well as decreasing wind speed across this region from east to west in the extensive snow dataset collected through April, which is currently being analyzed.

Photos (1 – 3 relevant photos in high resolution. Attach all photos as individual files)

Greenland Ice Sheet

Credit: Stine Højlund Pedersen

Photo 1 (map/study area)

Caption: April 2014, snow mobile route (yellow lines) and 44 snow observational sites (red triangles) in the Young Sound region in Northeast Greenland.

Photo 2 (field work)



Credit: Glen E. Liston Caption: 194 cm deep snow pit dug at northern coast of Wollaston Forland.

Photo 3 (field work)



Credit: Stine Højlund Pedersen Caption: 15 cm deep snow pit dug inland at Payers Land.

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