

Svartberget boreal forest

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Svartberget (64° 15' N, 19° 47' E) is a combined ecosystem and atmospheric ICOS station, operated by Swedish University of Agricultural Sciences. The ICOS tower (150 m) and ecosystem site is located in a 100 years old mixed pine & spruce forest.

ICOS-Svartberget is located in the Svartberget Experimental Forest, Vindeln. The experimental forest covers 1076 hectare of boreal forest land and govern a manifold of research activities since 1923. A reference monitoring program of climate and water is active since 1980.

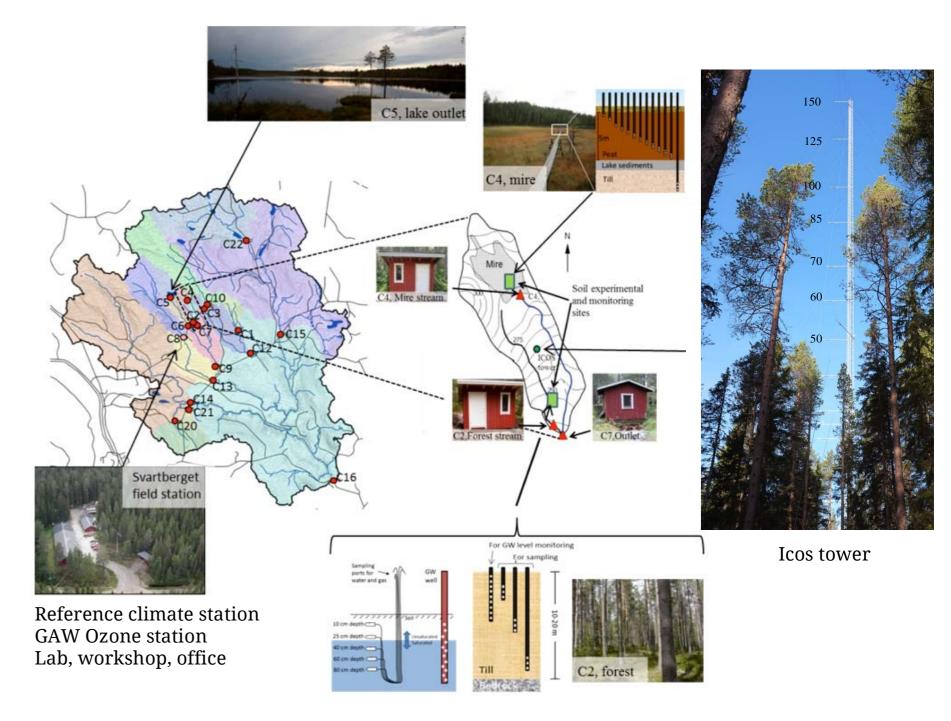




View to SW from ICOS tower in October 2013

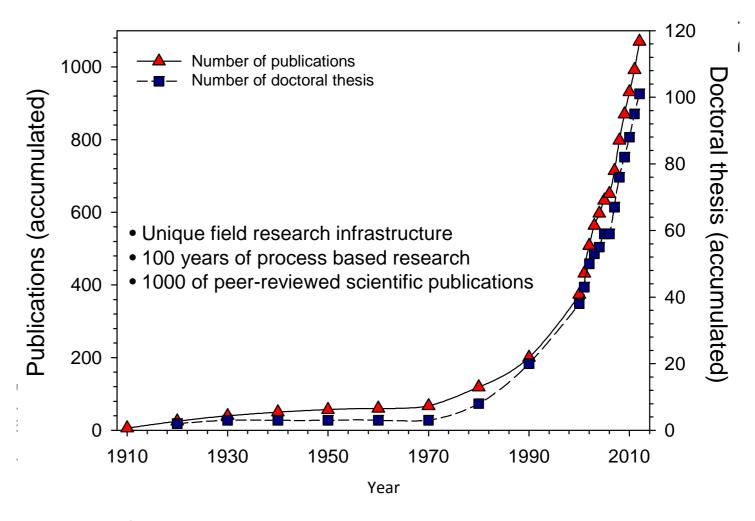
The cold temperate humid climate type of the site is attributed by relatively short summer (150 days/year of growing season) and permanent snow cover during winter (170 days/year). The mean annual air temperature is 1.8 °C and annual precipitation 614 mm (1981-2010) [1].

ICOS-Svartberget site is situated on a moraine slope covered mainly by Scots pine (60%) and Norway spruce (40%), in the centre of a well investigated subcatchment with long-term hydrological measurement. The sub-catchment is part of the larger Krycklan catchment area [1]. A wide range of ancillary data is available at ICOS-Svartberget and invites to collaborative research in field.



The Krycklan catchment study area, major facilities and stream measurment points.

Atmospheric and ecosystem site is located in the heart of Krycklan catchment area, which encompass the natural mosaic of boreal landscape, including forests, mires, streams and lakes that make up 70% of the area in Sweden.



The number of publications related to Svartberget and boreal ecosystem field research in the Vindeln area during 100 years.

Representing high latitude boreal ecosystem, with high quality atmospheric and ecosystem data together with ancillary measurements, ICOS-Svartberget invites to field research. Welcome!

[1] Laudon, H., Taberman, I., Ågren, A, Futter, M., Ottosson Löfvenius, M. and Bishop, K. (2013) The Krycklan catchment – a flagship infrastructure for hydrological biogeochemistry and climate research in the boreal landscape. *Water resourses research Vol.* **49**, 7154-7158.











