## MSc thesis topic: How green is the boreal landscape? Using phenocams to explore vegetation phenology in mires and forests

## Background

The phenology of tree and field layer vegetation is an important regulator of multiple ecological and biogeochemical processes in the boreal landscape. Quantifying these seasonal changes in vegetation properties is, however, traditionally cumbersome and challenging. The use of image archives obtained from phenocams provides new opportunities to explore the 'greening' of vegetation over the course of the growing season and to link these observations to other ecosystem processes.

## Thesis questions

This MSc project makes use of one decade of phenological records in mires and forests within the boreal landscape around the town of Vindeln. This offers a variety of potential research questions:

- What is the inter-annual variation (and its underlying drivers) in mire phenology during one entire decade?
- How does the tree canopy phenology differ from the forest floor phenology?
- What is the phenology of a managed forest catchment (based on images taken from a 150m tall tower!)
- How do mire and forest phenology patterns explain ecosystem carbon and water fluxes?

## For more information please contact Matthias Peichl (<u>Matthias.peichl@slu.se</u>)

See also: <a href="https://www.youtube.com/watch?app=desktop&v=-4uHLXL1yZA">https://www.youtube.com/watch?app=desktop&v=-4uHLXL1yZA</a>

