

# Seasonality of leaf area index in a boreal forest

[POSTER]

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## **Abstract**

Monitoring vegetation phenology with satellite images is currently a widely investigated topic. A key motivation for phenological studies is the changing climate and, especially in the northern latitudes, the ecological consequences of a longer or altered growing period. Global-scale plant phenology observation is needed to understand the seasonality of biosphere-atmosphere interactions. Satellite remote sensing offers an efficient means for making spatially and temporally continuous observations of vegetation dynamics. Understanding the seasonal dynamics of boreal ecosystems and linking its different phases to satellite reflectance data is crucial for efficient monitoring and modeling of northern hemisphere vegetation dynamics and productivity trends in the future. We present the first, seasonal *in situ* measurements of boreal forest canopy leaf area index (LAI) carried out at Hyytiälä test site, Finland expanding through the growing periods in 2009 and 2010. We compare our ground reference data to reflectance trajectories, spectral vegetation indices and vegetation products obtained from MODIS satellite images for the same area.