

PROJECT INFORMATION

Project title: How different forest covers influence on deep percolation during 120 years – Modelling of the water balance for the tree species beech, Norway spruce and poplar with the CoupModel (master thesis)

Project ID: 74

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PROJECT DESCRIPTION

The main objective is to write my master's thesis (30 ECTS, March to August 2015, supervisor: Jesper Riis Christiansen jrc@ign.ku.dk, co-supervisor: Karsten Raulund-Rasmussen krr@ign.ku.dk) in order to finalize the master's of science programme Forest and Nature Management at the University of Copenhagen.

The objective of the project is to survey the long term effect of three different forest species on deep percolation. Simulation of the water balance will be carried out with the CoupModel, and each species will be represented in the CoupModel by means of leaf area index estimation for each day during 120 years. In order to estimate the leaf area index measured leaf area index have been searched for in the literature. But in most articles leaf area index have only been recorded for short periods.

In this project a site called Frederiksborg situated in the northern part of Sealand in Denmark is used for all three species. The soil on this location is nutrient rich and dominated by clay; climate is characterized as coastal temperate.