

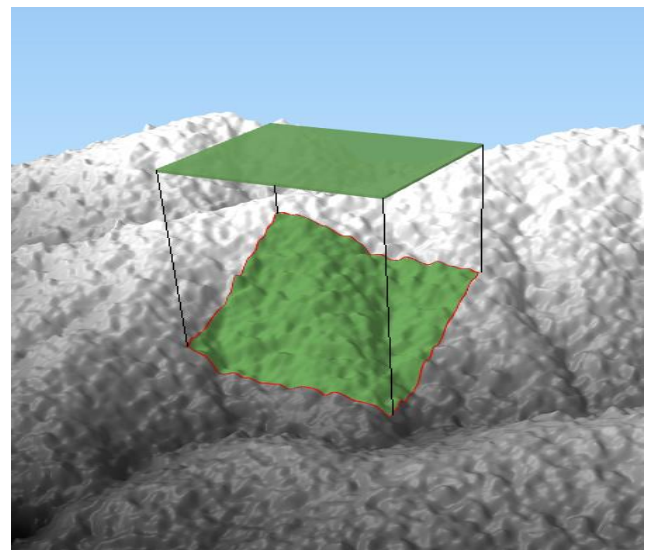
Topic for a Bachelor or Master Thesis

Slope correction for square and rectangular field plots

Background

Slope correction is a must when establishing forest inventory field plots. Standard procedures are there for the common forest inventory plot types (including circle plots and Bitterlich plots).

Square or rectangular field plots are frequently used in ecological studies and are increasingly employed because of their supposedly better matching with square pixels from remote sensing data. Slope correction is then, of course, also a must; however, specific procedures how to implement slope correction are usually not reported.



Scope of the thesis

The thesis shall analyze, evaluate and compare options for slope corrections of square and rectangular field plots.

The thesis research may consist, for example, (1) of general geometric considerations of slope corrections of square and rectangular field plots in different topographies, (2) of a literature research how this topic is dealt with in the scientific literature and in inventory reports, (3) of practical studies in the field, possibly with a comparison to the implementation of slope correction for circular sample plots. (4) The effects of not or wrongly applying the slope correction may also be analyzed for inventory variables both regarding erroneous expansion factors and regarding the linking to remote-sensing data.

The specific scope of the thesis will be agreed with the candidate and, of course, be adapted to whether it will be a BSc or MSc thesis.

The thesis may be written in German or English

If you are interested, please contact Prof. Dr. Kleinn (ckleinn@gwdg.de) or Dr. Nils Nölke (Nils.Noelke@forst.uni-goettingen.de) for further information!