Master's Thesis

The Swiss Federal Institute for Forest, Snow and Landscape Research WSL is part of the ETH Domain. Approximately 600 people work on the sustainable use and protection of the environment and on the handling of natural hazards.

The Research Group Sustainable Forestry offers a research opportunity, at the intersection of forest management and remote sensing, in form of a master's thesis.

Is ground-based vehicle lidar data collection an alternative to airborne and terrestrial laser scanning systems?

Lidar data is the basis of many recent projects that aim to integrate virtual reality into forest management. This data is commonly collected using airborne lidar systems and terrestrial laser scanners. This study will use a new approach to collect lidar data using the existing forest road infrastructure and a ground-based vehicle equipped with a lidar sensor.

Your thesis will include:

- Setting up a field trial for the vehicle based lidar data system in the forest
- Collect lidar data in cooperation with our industry partner
- Assess the new collection system and compare it to existing systems
- Assess the data and compare it to datasets gathered by airborne/ terrestrial lidar systems

We value diversity at WSL and encourage everyone interested in the topic to join our team.

Please contact Janine Schweier <u>janine.schweier@wsl.ch</u> or Holger Griess <u>holger.griess@wsl.ch</u> for further information.



Eidg. Forschungsanstalt WSL Zürcherstrasse 111 CH-8903 Birmensdorf www.wsl.ch