Master Thesis in remote sensing and vegetation surveys

FRAGMENT is a project collaboration of Agroscope Reckenholz and the University of Landau (DE) which aims to predict ecosystem service provision by pollinators and pest control agents from environmental traits. The service done by pollinators in agronomical landscapes is estimated to value more than 150 Billion Euros a year. Their declining numbers motivate many ecologists to study their interplay with the environment. This often includes the assessment of flower abundance and distribution, which is an extremely time consuming task.

Part of the FRAGMENT Project is to develop a drone driven approach to revolutionize floral mapping. For your thesis you will work in a team, producing floral maps taken by the drone and compare them with hand sampled subsets of the same meadow.

Your skills required:

- Precise data acquisition in the field
- Knowledge of GIS and plant species from Swiss midland meadows are an asset

You will learn to:

- prepare a drone flight, including flight planning, terrain judgement and setup in the field
- fly a drone
- do post processing of the pictures taken
- do ground truthing (vegetation surveys on meadows)
- do data analysis, partially in GIS
- improve your scientific writing

Your project will include field work from April to June 2018, on wind- and cloudless days.

Starting time and duration are flexible. If you are interested please send your application to:

Lolita.ammann@agroscope.admin.ch

Agroscope Reckenholz
Agrarlandschaft und Biodiversität
Reckenholzstrasse 191
8046 Zürich