

Weiterführende Ergänzung durch Praktikantendienst Agrarwissenschaften zum Praktikumsgeber folgt auf der zweiten Seite der Ausschreibung

Title: Yield Index Insurance using VanderSat satellite data.

Themes: Remote Sensing, Agronomy, Insurance

VanderSat is an earth observation company, based in Haarlem, the Netherlands. We have developed a patented method to provide high-resolution observations of soil moisture anywhere on earth, every day. Based on our unique soil moisture dataset, we have successfully developed and marketed drought/soil moisture excess index crop insurance together with partners in the insurance sector. In 2021, we are operational in 10 countries in the world.

We are now looking to launch a new product: **Yield Index insurance**, and we need your help to realize this! The objective of this internship is to envision and implement a yield index insurance product based on a newly developed product at VanderSat, the [Biomass Proxy](#), which is a measure of the amount of above-ground crop biomass.

The internship activities will include:

Literature Study

- Overview of (technical) limitations of current yield index insurance products in the market

Technical analysis

Work alongside our team members on an R&D Pilot project

- Collect and prepare available crop yield/ production data for selected regions
- Correlate observed yield/ production data with satellite data sources, such as Biomass Proxy, NDVI, Soil Moisture and Land Surface Temperature
- Investigate which combination of products leads to highest correlation results (implement f.e. machine learning techniques)
- Think of innovative solution to transform the developed index into a successful insurance product

Application of technical analysis

- Present results to our insurance partners to develop an Yield Index Insurance product together
-product launch!

VanderSat is looking for a creative and initiative-oriented student with good python or R programming skills, who has an affinity for economical/market studies/environmental/agricultural modeling. You will be supervised by a team of remote sensing specialists and business developers. We will be able to host you at our office in Haarlem for a few days a week, while working from home.

Please send your application and CV to [Lexy Ratering Arntz](mailto:Lexy.Ratering.Arntz@vandersat.com) / lrateringarntz@vandersat.com and Léo Friedli / lfriedli@vandersat.com