

Master 2: Research Training 2023-2024

Laboratory: LPCA

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Eventually CaPPA Work Package: Aerosol Observations: Instrumentation, Intensive field campaigns...

Meteorological Study of an Environment Affected by an Invasive Exotic Plant

The spread of Invasive Exotic Species (IES), facilitated by human activities, is a major component of global change. Plant introductions impact local species, communities, and ecosystems in various ways. In forests, woody IES can form dense understories, thus altering the micro-environmental conditions of the understory and soil, particularly microclimatic conditions. The DiSPLEx project (Spatial Distribution of Soil Functionality Affected by an Invasive Exotic Understory Plant) aims to examine the spatial distribution of organic matter degradation and CO₂ emission through respiration. One of the actions of this project involves continuously monitoring microclimatic and meteorological conditions for one year at the Bois du Breuil study site. This action will be complemented by an Intensive Observation Period (IOP) that will take place in June 2024 at the study site.

- Initially, the candidate will be responsible for processing meteorological data from the instruments (sodar and ultrasonic anemometers) already installed at the study site.
- In the second phase, the candidate will participate in the organization of the IOP, learn to use all the instruments for field deployment, and contribute to data collection as well as the verification of their proper functioning during the IOP.
- In the third phase, the candidate will process and analyze the obtained data in order to interpret the results.

The candidate will carry out their internship at the LPCA and will be required to work at the study site, particularly during the IOP.

Key words: Meteorology, lidar, sodar, ultrasonic anemometer