



UNIVERSITY OF
EASTERN FINLAND



**Funded by
the European Union**

Summer school: Resilience of Forest to Climate Change Remote Sensing and Machine Learning Applied to Forest Disturbances

Remote sensing and machine learning-based approaches to detect, predict and analyse changes in forests under climate change. The training will include theory lectures, on climate resilience and remote sensing, practical exercises and a field trip to disturbed areas. Other subject studies are dynamics of boreal forests and forestry in the boreal region.

Participants will have the opportunity to work in groups, learning how to retrieve remote sensing data, detect and analyse forest change, classify data, as well as making predictions of forest damage (i.e. disturbances).

The summer school will be organised at the **University of Eastern Finland in Joensuu Finland**, in collaboration with INRAE and the Horizon Europe Eco2adapt project and the support from IUFR0 Division 8 on Forest Environment.

Dates: The Summer School will take place from **7 to 18 August 2023**.

Topical contents:

- Forestry in boreal forests, Finland
- Which forests are prone to disturbances in boreal areas?
- Planetary Computer and remote sensing data
- Monitoring disturbances and their management (i.e. mitigation measures)
- Machine learning theory
- Change detection analyses

Person in Charge: Frank Berninger (Frank.Berninger@uef.fi)

Experts: Frank Berninger (UEF, Finland), Blas Mola (UEF, Finland), Dino Ienco (Inrae, TETIS, France), Kenji Ose (Inrae, TETIS, France)

How to apply:

More information is under:

<https://apply.summerschool.uef.fi/courses/course/129-resilience-forest-climate-change>

From Frank.Berninger@uef.fi (for questions on the curriculum)

Or merja.haapiainen@uef.fi (for questions on organisation, logistics etc.)

Participation fee: Normal participant fee (500 €), Participant from the UEF partner university (400 €), Incoming UEF exchange student (200 €), Participant from company/organization (1000 €).