ForestSAT 2026

Association for Forest Spatial Analysis Technologies

| May 4-8, 2026 | | Gainesville, Florida, USA |

Title: Harnessing Deep Learning for Enhanced Data Analysis in Forestry

Instructors/Affiliation:

- Mr. Erik Lindquist, Ms. Yelena Finegold

Forestry Officers, Food and Agriculture Organization of the United Nations (FAO).

- Ms. Yelena Finegold

Forestry Officers, Food and Agriculture Organization of the United Nations (FAO).

Description: This workshop provides a comprehensive, hands-on introduction to the Food and Agriculture Organization's (FAO) SEPAL (System for Earth Observation Data Access, Processing, and Analysis for Land Monitoring) platform. SEPAL leverages cloud computing and direct access to massive satellite data archives (e.g., Landsat, Sentinel) to lower the barrier for robust environmental monitoring.

The session will guide participants through the entire workflow of a typical land monitoring project. We will begin by accessing and processing satellite imagery within SEPAL to create analysis-ready data products. We will then explore specialized applications integrated within the OpenForis suite, including using WHISP (What is in that Plot) as a contribution to due-diligence assessments for supply chain monitoring and SE.PLAN (SEPAL for Ecosystem Restoration Planning) to identify and prioritize areas for restoration interventions.

Learning Objectives: By the end of this workshop, participants will be able to:

Utilize the SEPAL platform to access, process, and analyze petabyte-scale satellite imagery archives without high-performance hardware.

Design and execute a complete land cover change analysis workflow, from image selection to final map generation.

Analyze potential EUDR supply chain compliance with WHISP.

Generate a preliminary landscape restoration plan using the SE.PLAN tool to support decision-making.

Integrate cloud-based data products into national environmental monitoring and reporting frameworks.

Target audience: The workshop is designed for land managers, remote sensing specialists, GIS analysts, students, researchers, and government officers involved in environmental monitoring.

Format & Activities: The full-day workshop will blend presentations, guided hands-on sessions, and open discussions.

- Introduction - presentation and demonstration covering the challenges in land monitoring and the role of the FAO OpenForis toolkit, with a focus on SEPAL's architecture and capabilities.
- Hands-On Part 1 - Using SEPAL: A guided, practical session where participants will use their own SEPAL accounts to access Sentinel-2 data, create a cloud-free composite, and perform an NDVI-based change detection analysis.
- Hands-On Part 2 - Continued land analysis with SEPAL. Participants will identify potential restoration areas with SE.PLAN.
- Wrap-up and Q&A - Open discussion on how participants can apply these tools to their own projects and challenges.

Expected outcomes:

The primary goal is to empower participants to use these free, open-source tools to support national environmental reporting, inform policy, and advance climate action initiatives.

Language: English

Requirements:

- Hardware: A personal laptop (Windows, macOS, or Linux) with a modern web browser (Google Chrome or Mozilla Firefox is recommended).
- Accounts: A free, personal SEPAL account. Instructions for creating an account are available at docs.sepal.io. A Google Earth Engine non-billed account available at earthengine.google.com.

Participant Prerequisites

Knowledge Level: Beginner to Advanced.

Participants should have a basic, conceptual understanding of Remote Sensing and GIS (e.g., what satellite imagery is, the concepts of spectral bands, vector vs. raster data).

No prior programming, coding, or cloud computing experience is required. The workshop is designed to be accessible to all backgrounds.

Schedule: Monday, May 4, 2026

Duration: 4 hours.

Instructor Biography:

Name: Mr. Erik Lindquist, Ms. Yelena Finegold

Affiliation: Forestry Officers, Food and Agriculture Organization of the United Nations (FAO).

Contact Details: erik.lindquist@fao.org, yelena.finegold@fao.org

Bio: Mr. Erik Lindquist and Ms. Yelena Finegold are Forestry Officers at the UN-FAO. Mr. Lindquist is the leader of the SEPAL project and a remote sensing specialist. Ms. Finegold is the leader of the forest restoration program at FAO and remote sensing specialist.

Agenda

Topic	Instructor
Using SEPAL: A guided, practical session where participants will use their own SEPAL accounts to access Sentinel-2 data, create a cloud-free composite, and perform an NDVI-based change detection analysis.	Mr. Erik Lindquist, Ms. Yelena Finegold
Using SEPAL	Mr. Erik Lindquist, Ms. Yelena Finegold
Analyze potential EUDR supply chain compliance with WHISP.	Mr. Erik Lindquist, Ms. Yelena Finegold
Generate a preliminary landscape restoration plan using the SE.PLAN tool to support decision-making. Integrate cloud-based data products into national environmental monitoring and reporting frameworks.	Mr. Erik Lindquist, Ms. Yelena Finegold