



# INTRODUCTION TO GOOGLE EARTH ENGINE FOR REMOTE SENSING ANALYSIS

Join the session [here](#) - Passcode: FVQ+EE

EVERY THURSDAY, FROM 18th JANUARY TO 2nd MAY 2024, 16.00-17.00 CET

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## FOR WHO?

The course is dedicated to beginner users that want to understand how to write scripts in Google Earth Engine to boost their remote sensing analysis. A basic understanding of remote sensing is required; familiarity with scripts is a plus.

## TRAINING STRUCTURE

### 1. Introduction to GEE (Google Earth Engine)

*Installation, set-up, interface, first script, and share, update existing scripts, including a brief introduction about the GEE data catalog.*

18 January 2024

### 2. Image and Image Collection

*2-1. Introduction to Image & Image Collection, data catalog and loading data  
2-2. Image collections & image, properties, visualization  
2-3 & 2-4. Main functions [e.g. math operation and conditional operation, selection & filter, mask]*

25 January 2024

1 February 2024

8 & 15 February 2024

### 3. Feature and feature collection

*3-1. Intro to Feature & Feature Collection, Feature collections & Feature property and visualization  
3-2. Feature/Feature collection main function [GIS analysis, extract data from images, zonal analysis]*

22 February 2024

29 February 2024

### 4. Reducers

*Introduction to Reducers [e.g. image Collection reducer, image reducer, statistics]*

7 March 2024

### 5. Functions

*5-1. Simple functions [e.g. NDVI]  
5-2. Complex functions [e.g. cloud removals, monthly anomaly]*

14 March 2024

21 March 2024

### 6. Map (loop), iterate and other ways for loops in GEE

*6-1. Map for Image Collection/Feature Collection/List [e.g. time series data]  
6-2. Iterate for Image Collection/Feature Collection/List*

28 March 2024

4 April 2024

### 7. SAR

*7-1. Introduction to SAR images  
7-2. SAR images properties, visualization  
7-3. Pre-process of SAR images, combining optical and radar images*

11 April 2024

18 April 2024

25 April 2024

### 8. Troubleshooting

*Solutions to script problems*

2 May 2024