SNAP ESA open source remote sensing

Level 1 – Initiation

ONLINE CLASSROOM



OBJECTIVES

- Use European Union Copernicus program and SENTINEL satellite imagery (free) to map the land
- Understand the Remote Sensing basics
- Download satellite imagery data -
- Analyze satellite imagery data with SNAP ESA -
- Generate statistics -
- Perform a supervised land classification with SNAP ESA _
- Perform vegetation indices calculation from satellite imagery data (NDVI)

BACKGROUND

Basics in computing science and IT technology.

PUBLIC

Everyone who wants to handle, organize, and process satellite imagery data with SNAP ESA in order to perform classifications and spectral indices calculation.



DURATION > 2 days (14 hours of training)



PRICES

✓ Individual training: 1 500 € taxes free



TEACHING RESOURCES

- ✓ Interactive training using Microsoft Teams
- ✓ Practical exercices and case studies
- ✓ Loan of temporary software license : yes
- ✓ Training certificate : yes
- ✓ Evaluation : yes

HOW TO REGISTER

email: contact@maptogis.com phone: +33 (0)5 46 34 07 71

TRAINING CONTENTS

REMINDERS ON REMOTE SENSING

- Brief introduction to Remote Sensing
- Remote Sensing mission description
- Sensors and their uses
- Introduction to the European Earth Observation Program "Copernicus"
- Register a new account on the Copernicus Open Access Hub

DOWNLOAD IMAGERY / DISCOVER SNAP ESA

- Introduction to SNAP ESA
- SNAP ESA software handling
- Sentinel Imagery download
- Understand the structure of an image
- Understand images corrections

SENTINEL 2 IMAGERY HANDLING

- Display images
- Image enhancement
- Create / analyze natural and infrared color combination
- Understand spectral indices
- Spectral Indice calculation (NDVI)
- Use colour palettes

LAND OCCUPATION / LAND USE MAP

- Reminders on classification
- Understand supervised classification process
- Land use class definition
- Region of interest (ROI) management
- Run the supervised classification process

