

# SNAP ESA OPEN-SOURCE REMOTE SENSING

## LEVEL 1 - INITIATION

### PEDAGOGICAL OBJECTIVES

The aim of this training course is to manipulate, organize and process satellite data from SNAP ESA in order to perform classifications and index calculations.

At the end of the course, participants will be able to:

- Understanding the fundamentals of remote sensing
- Extracting SENTINEL satellite images
- Processing satellite images in SNAP ESA
- Generating color compositions in SNAP ESA
- Generate statistics
- Supervised classification with SNAP ESA



#### TARGET AUDIENCE

General public



#### PREREQUISITES

Basic computer skills



#### TEACHING RESOURCES

Software license available: yes

Digital training material given to trainees (with concrete examples and practical exercises)

Evaluation questionnaire and end-of-training certificate



**DURATION** > 2 days (14h training)



**RATES** > On quotation



#### TERMS AND CONDITIONS

No pre-selection required  
Dates to be agreed



#### REGISTRATIONS

Email > [formation@arxit.com](mailto:formation@arxit.com)

Tel. > +33 (0)5 46 34 07 71

For disabled access, please contact us.

### CONTENTS

#### THEORETICAL BACKGROUND ON REMOTE SENSING

The main principles of remote sensing

Remote sensing mission sequence

Reminders about sensors and their use

Introducing the European Copernicus program

Create an account on the Copernicus hub

#### IMAGE ACQUISITION / GETTING STARTED

Introducing SNAP ESA software

Getting started

Sentinel image acquisition

Understanding image structure

Application of atmospheric corrections

#### MANIPULATING SENTINEL IMAGES

Image display

Image enhancement

Creation / Interpretation of colorful compositions

Understanding spectral cues

Calculate a spectral index (NDVI)

Using color palettes

#### LAND USE MAP

A reminder of classifications

Understanding supervised classification

Define land use classes

Sample management or Region Of Interest

Start supervised classification analysis

