

# Unitar Online Catalogue

# Using Satellite Imagery and Geospatial Information Technologies (GIT) to Support Cultural Property Protection (CPP) in Ukraine

United Nations Satellite Centre UNOSAT

Date limite: 1 jan 2025

Type: Course

Emplacement: L'viv, Ukraine

Date: 13 jan 2025 to 16 jan 2025

Durée: 22 Hours

Zone du programme: Satellite Imagery and Analysis

Site internet: http://www.unosat.org

Prix: 0.00 \$US

Personne de référence de

l'évenement: unosat@unitar.org

Partenariat: United Nations Educational, Scientific and

Cultural Organization (UNESCO)

## ARRIÈRE PLAN

To address the urgent need for the monitoring of properties of cultural or historic relevance, as defined under Article 1 of the 1954 Hague Convention for the Protection of Cultural Property in the Event of Armed Conflict and its Two (1954)

and 1999) Protocols, capacity-building trainings were organised under the framework of the project "Monitoring of Cultural Heritage Sites via Satellite Imagery" (2024–2025)".

The Ministry of Culture and Information Policy of Ukraine requested assistance from UNESCO to provide capacity-building in data interpretation for extreme emergency cases. That request was in line with the recommendations from the Expert Meeting 'Heritage from Space for Peace' (UNESCO 2022). Those recommendations encouraged UNESCO to strengthen its existing framework in agreement with UNITAR/UNOSAT to enhance the execution of project agreements and provide capacity-building in data interpretation for extreme emergency cases.

# OBJECTIFS DE L'ÉVÉNEMENT

At the end of the training, participants should be able to retain:

- 1. Familiarity with datasets (including UNOSAT products) and data sources for satellite imagery.
- 2. Knowledge of the advantages and disadvantages of multispectral imagery and radar.
- 3. The ability to identify cultural heritage in imagery.
- 4. The ability to independently conduct damage assessments and produce maps.

#### CONTENU ET STRUCTURE

The course is designed to accommodate participants from a variety of backgrounds and professional experiences. The training was delivered in two languages English and Ukrainian, using the following software: QGIS, Google Earth and Google Earth Engine. Participants to register for Google Earth Engine two weeks prior to training.

#### **Duration**

This was a full-time, face-to-face training workshop designed with the following 6 modules divided over

4 days:

Module 1: Imagery and Data Sources

Module 2: Mapping and the use of GIS

Module 3: Google Earth and Google Earth Engine

Module 4: Analysis, Part 1 (remote sensing surveys, monitoring, and damage assessment)

Module 5: Analysis, Part 2 (georeferencing and orthorectification)

Module 6: Practical exercise

There were one or two modules per day. Each course module comprised 2-4 sessions of

60-90 minutes each, adding up to a total of 18 sessions and approx. 22 hours total. Instructional

### **MÉTHODOLOGIE**

To ensure active learning by all participants, interactive sessions were provided through the use of

MS PowerPoint presentations, group discussions, live demos, and maps with the purpose of achieving

learning objectives defined for this training workshop.

# **AUDIENCE VISÉE**

Archaeologists and professionals specializing in natural heritage