Hands-on field workshop on Earthquake Geology and Paleoseismology

(12-18 October 2026, Petrinja, Croatia)

Program as delivered

12 October - Morning: Arrival at the workshop site. **Afternoon**: Briefing. Presentations on the regional setting of the Western Balkans, and the Petrinja fault and the coseismic environmental effects of the 2020 earthquake. Introduction to the planned activities and formation of three student teams.

13 October - Full day: Interactive analysis of geomorphological evidence of the Petrinja fault and of the remnants of the 2020 surface rupture. Field survey, mapping, and measurements on fault geometry and kinematics. Discussion on the selection of suitable paleoseismological trenching site, start of trench excavation at the Donja Budičina site. **Evening:** the student Sara Eude presented the results of her master's thesis: “Morphotectonic analysis and quantification of recent deformations along the Petrinja fault (Central Croatia)”.

14 October - Full day: Each team experience one of the three practical activities at the Donja Budicina site and sorroundings: Photogrammetry, geophysical, and paleoseismological exercises at the fault area.

Team 1: field photogrammetry: trench and landscape documentation using unmanned aerial systems (UAS) and terrestrial photogrammetry.

Team 2: high-resolution geophysics for near-surface fault activity: evidence with Electrical Resistivity, Tomography (ERT): setup, data acquisition, configurations, resistivity processing/interpretation; Georadar survey.

Team 3: paleoseismological investigation: cleaning, gridding, flagging, and logging and sampling methods; trench wall analysis.

15 October - Full day: Rotating student team activities.

16 October - Full day: Rotating student team activities.

17 October - Morning. Closing ceremony in Petrinja town, open to the public, with the distribution of certificate of attendance to the students and certificates of appreciation to the IDASH Team. **Afternoon**: Final exercise on fault mapping based on field observations and topographic analysis performed by each student team. Presentation of each team’s map by a designated representative, followed by a plenary discussion on lessons learned and future IDASH activities.

Day 7 Morning: Departure.