

3 Post - Glacial history of Croatian Dinarides

Excursion /Leaders: Dr.sc. Ljerka Marjanac Dr.sc. Tihomir Marjanac

Proposed Excursion Dates: 22. – 25. July 2023.

Draft Itinerary:

Day 1 (22nd July): Start in Trogir (Croatia) at 9 am

- Geostops on the way from Trogir to Novigrad (glacial deposits)
- overnight in Novigrad (hotel accommodation)

Day 2 (23rd July): Geostops at Novigrad Sea coast and Ždrilo (Pleistocene glacial, proglacial and interglacial deposits; fossil flora and fauna in glaciolacustrine deposits)

- overnight in Starigrad-Paklenica (small hotel)

Day 3 (24th July): Geostops in Paklenica National Park and Seline coast (glacial and glaciolacustrine deposits)

- overnight in Starigrad-Paklenica (small hotel)

Day 4 (25th July): Geostops at Obrovac, Žegar and Medviđa (glacial deposits)

End in Trogir in late afternoon

(Excursion fee includes bus transportation, accommodation for 3 nights, daily meals, field guidebook, visit to cultural sites, group insurance)

Definitive cost per head: 580 €

Accommodation arrangements: Hotel and Guesthouse

Proposer Contact Details:

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Description

Long-term investigation revealed sedimentological evidence of an extensive glaciation of the Croatian part of Dinarides (eastern Adriatic coast and islands). Maximum glacial advance occurred during Middle Pleistocene as documented by U-series dating of calcite cements taken from glacial deposits, which provided minimum age of over 350 ka. Glaciers must have descended from a large ice cap, and they reached areas below the present sea level. The excursion route will track remarkable evidence of such extensive glaciation, though it is hard to imagine that the present-day beautiful seaside places have once been under thick ice. Unique locations will be visited to observe various sedimentary features related to subglacial and proglacial environments, specifically at the 3 km long Novigrad Sea coastal section. The Karin Sea coastal section displays subglacial deformations caused by glacial advance. Seline coastal section displays the oldest glaciogenic sediments, a transition from glaciodeltaic to glaciolacustrine. Glaciotectonized lacustrine sediments composed of clastic varves and with diverse fossil flora will be observed at Ždrilo site, the only one of this kind in Croatia. The

type locality of the mega-diamict facies, specific evidence of Middle Pleistocene glacial extent, will be visited in the Paklenica National Park. All sites on the field tour represent the valuable glacial geoheritage of the Mediterranean.

