

Break-Up of Pangea: Evidence from Permo–Triassic Sedimentology and Ore-Deposits (Western Slovenia and Western Croatia)

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Introduction

Intracontinental Permian rifting, the first stage of the Alpine Wilson cycle, i.e. the opening and closure of the Tethyan ocean, caused uplift of Pangea, development of different sedimentary environments, including dry land, braided rivers (sedimentary uranium deposits in Žirovski Vrh, western Slovenia), coastal Sabkha (Lokve barite deposit in Gorski Kotar, western Croatia), fan delta, epicontinental, marine and evaporitic environments. At particular coastal locations of Pangea, in the Middle Permian, carbonate platform deposition already existed (central Velebit Mt., Croatia).

Advanced rifting in Triassic time was followed by widespread magmatism, transgression, and foundation of a carbonate platform (*sensu stricto*). Besides magmatism, thermal events can be recognized by characteristic SEDEX deposits (Idrija mercury ore deposit, failed rift), scattered throughout the whole Dinaric belt. The field trip encompasses terrains with continuous and discontinuous sedimentation across the Permo–Triassic boundary. It also embraces visits to rare igneous formations (andesite, andesite-basalt) placed within the Mesozoic Carbonate Platform itself. The route of the field trip with the stops is marked on Fig. 1:

- 1) Uranium mine on the Žirovski vrh, western Slovenia;
- 2) Žažar formation of the Javorjev dol, southwestern from Cerklje, western Slovenia;
- 3) Mercury mine of Idrija, western Slovenia;
- 4) Stratabound barite deposit near Lokve village in the Gorski Kotar, Croatia;
- 5) Andesite quarry near Fužine in the Gorski Kotar, Croatia;
- 6) Palaeozoic sediments of the central Velebit Mt., Croatia and
- 7) Andesite body from Vratnik and Senjska Draga, Croatia.



Fig. 1 Map showing A3 field trip stops.

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