

of the true shallow-water sequence of Wetterstein-type (DIMITRIJEVIC & DIMITRIJEVIC, 1991). The decollement surface below is characterized by grey-greenish tuffitic layer and nearly the whole Ladinian and the highest part of Bulog are missing below this low angle normal fault.

In the wider surrounding of the quarry different blocks and shallow-water limestones of Upper Triassic age (Dachstein limestone) are present separated by the radiolaritic-ophiolitic matrix of Middle Jurassic age, also in containing Carnian radiolarites.

This drowning of the Steinalm carbonate platform is contemporaneous in the whole western Neotethys realm from Hellenides, over the Dinarides to the Eastern Alps. This process was governed by tectonic events like rapid subsidence, followed by rapid sea-level rise and other processes which are known by now (paradox of carbonate platform drowning). This drowning led to an overall change of the shallow-water conditions the whole western Neotethys realm to hemipelagic, extremely condensed sedimentary sequences. Crustal extension firstly led to the formation of neptunian dykes and to the end of the shallow-water production. Due to the beginning of the block tilting and new topographic relief was formed. On topographic highs very reduced sedimentation rate occurs where as in the newly formed asymmetric basins accumulations of several metres occur. In comparison with other Late Pelsonian to Illyrian hemipelagic sequences, similar to Bulog limestone (e.g. Schreyeralm limestone in the Eastern Alps), in the western Neotethys realm, the investigated sequence in the Klisura quarry reaches a thickness up to 17 m. Continuous block tilting is mirrored in the accumulation of ammonites layers and the occurrence of condensed sections.

The slides in Zlatibor mélangé show identical facial stratigraphic and tectonic evolution as known in complete sequences from the Hellenides to the Eastern Alps. The sedimentary evolution in this whole realm follows overall geodynamic phases. Therefore, they belong to the same shelf, the Western Neotethys continental margin.

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Radiolarian dating in the Middle Jurassic radiolaritic-ophiolitic wildflysch (= ophiolitic mélangé) of the Dinaridic Ophiolite Belt, SW Serbia

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Hellenic orogenic system. The Dinaridic Ophiolite Belt forms as northward continuation of the Mirdita ophiolites from northern Albania into Kosovo and Serbia through Bosnia to Croatia together with the Western Hellenic ophiolites in Greece and southern Albania a relatively continuous ophiolitic belt. The Dinaridic Ophiolite Belt of western and southwestern Serbia is made of ophiolites and widespread mélanges containing different components up to nappe-size and is now interpreted as radiolaritic-ophiolitic wildflysch. The matrix of the components and blocks consists mainly of fine- to partly coarse-grained, partly radiolaritic, ophiolitic siliciclastics, further of shales, radiolaritic marls and rare radiolarites. Direct datings of these radiolaritic matrix-sediments in the Dinaridic Ophiolite Belt are missing. Westnorthwest of Sjenica in the central Dinaridic Ophiolite Belt occur an albite granite olistolith together with various ophiolitic material, spilite olistoliths, Late Triassic radiolarite olistoliths, and various very small still undetachable carbonate components.

From the radiolaritic matrix, which is in the surrounding of the albite granite olistolith we, isolate a radiolarian fauna of Middle Jurassic age, e.g.: *Archaeodictyomitra amabilis*, *Archaeodictyomitra mitra*, *Archaeodictyomitra rigida*, *Archaeodictyomitra* sp. B, *Dictyomitrella kamoensis*, *Eucyrtidiellum circumperforatum*, *Eucyrtidiellum semifactum*, *Eucyrtidiellum unumaense pustulatum*, *Eucyrtidiellum unumaense dentatum*, *Eucyrtidiellum unumaense unumaense*, *Hsuum maxwelli*, *Helvetocapsa* cf. *matsuokai*, *Hiscopaspsa magnipora* *Parvicingula spinata*, *Parvicingula* sp., *Praezhamoidellum buekkense*, *Praezhamoidellum yaoi*, *Protunuma lanosus*, *Protunuma turbo*, *Pseudodictyomitra* cf. *venusta*, *Quarticella ovalis*, *Stichocapsa convexa*, *Stichocapsa japonica*, *Striatojaponocapsa* cf. *conexa*, *Striatojaponocapsa* cf. *synconexa*, *Tetracapsa himedarum*, *Tricolocapsa* aff. *fusififormis*, *Tricolocapsa fusiformis*, *Tricolocapsa* sp. S, *Tricolocapsa tetragona*, *Triversus hungaricus*, *Williriedellum dierschei*, *Williriedellum marcucciae*, and *Zhamoidellum exquisita*. This late Middle Jurassic dating of these matrix sediments proves directly the sedimentary emplacement of the different blocks. Therefore the ophiolitic mélangé is interpreted to be formed originally as a primary synorogenic sediment (radiolaritic wild-flysch sequence) formed simultaneously during west-directed thrusting of ophiolite and sediment-cover nappes representing ocean floor and underplated fragments of the western continental margin (Drina-Ivanjica Element), later overprinted by contemporaneous and younger tectonics forming a typical mélangé.

The age range of the Sjenica mélangé and the sedimentary emplacement of the olistoliths in the Dinaridic Ophiolite Belt seems to be similar to the radiolaritic-ophiolitic wildflysch in the Mirdita Ophiolite Zone of Albania to the south and the ophiolitic mélangé areas in Medvenica and Kalnik Mts. to the northwest. The age of the ophiolitic-radiolaritic wildflysch is also similar to the radiolaritic carbonate-clastic flysch in the Northern Calcareous Alps (Hallstatt Mélangé) and the Western Carpathians (Meliata Mélangé) as well as to the ophiolitic-radiolaritic wildflysch in the Mirdita zone.

The situation in the Dinaridic Ophiolite Belt conform that of the Albanides („Mirdita mélangé“) and Medvednica and Kalnik mountains in Croatia. To clarify the palaeogeographic derivation of the different blocks and the time span of their emplacement in detail, widespread investigations in a larger regional scale are necessary in future. Only a detailed component analysis of the „mélangé“ with dating of the matrix allows a reconstruction of the source area.

Bioorganic particles as transport vehicles for iron in the continental runoff

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The Dinaridic Ophiolite Belt with its widespread mélangé areas is an important link within the Alpine-Dinaridic-Albanide-