

## SILICICLASTIC TERMINATION OF THE CARBONATE SEQUENCE-SIGNAL OF VARISCAN OROGENY

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Great part of the Devonian in the Barrandian is represented by a carbonate sequence. The topmost Devonian unit is, however, mostly of siliciclastic nature. The deposition of the Givetian Srbsko Formation starts sharply with dark claystones, bedded cherts and intraclastic limestones. Its base corresponds to a transgressive event of global character (Kačák Event). The overlying unit, the Roblín Member – consists mostly of siltstones and has a flysch character. It corresponds to distal turbidites with some specific features. The moderately mature detritus is river-borne. Slow and diluted turbidity currents were triggered by an input of river suspension into the basin. The turbidites were intensively reworked by traction currents. The freshening of water masses accompanied the turbidity sedimentation. The beginning of siliciclastic flysch sedimentation was influenced by an aseismic uplift of the source areas. The development of soils and terrestrial vegetation could have played also an important role. All the detritus is formed of a denudational material eroded from a regolith and transported by rivers. Regolith (soils) and a stable river system possibly developed in the source area due to the onset of land vegetation. Thus the turbidity currents filling the basin did not start as earthquake-triggered slumps but as river suspension inflows.

The Roblín Member represents a natural sequence from immature flysch through mature flysch probably up to supermature molasse. This molasse, however, is preserved only in a small Koněprusy area.

## THE DEVELOPMENT OF THE CARBONIFEROUS ACCRETIONARY WEDGE IN THE MORAVIAN-SILESIA PALEOZOIC BASIN

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The Moravian-Silesian Paleozoic Basin, the most extensive Paleozoic Basin of the Bohemian Massif represents a relic of a polyhistory large basinal structure. It was formed between Variscan collision zone on the West, the remnants of the Brunovistulian platform on the East and the Cracowides on the ENE. The terminal stage of the collision exhibits the basin type transitions from the remnant basins with flysch sediments (Famenian? – Upper Viséan) overlying predominately carbonate platform sediments to the foreland basin with marine (uppermost Viséan–Namurian A), paralic (Namurian A) and finally continental (Namurian A – Westphalian) molasse deposits.

In Late Devonian and Carboniferous, the borders of Brunovistulicum were gradually disintegrated. This process was provoked by gradual shifting of Variscan collision zone toward Brunovistulicum and was accompanied by formation of the thrust-fold belt which led to the creation of a mountain relief in the close source area. At the same time, a system of relatively narrow remnant basins filled by flysch-type sediments originated. During the closing stage of the collision, the foredeep and foreland basin were filled by marine, coalbearing paralic and coalbearing continental molasse deposits.

The geometry of the basin passed through great changes due to the subsidence axis migration from collision zone (from W) toward foreland (in E direction) and simultaneous folding and thrusting of sediments already deposited in western depressions. Under the conditions of the gradual resedimentation and tectonic reworking, a complicated accretionary wedge of clastic sediments and metasediments originated in Late Devonian (?) and Carboniferous. Its overall thickness (after compaction) is more than 10,000 m.

The flysch stage of the accretionary wedge evolution is typical of the sedimentation and resedimentation by turbidity currents, mudflows and sandflows. Sedimentary lineations (sole marks) prove the longitudinal filling of the flysch depressions from S to N up to ENE. The Upper Viséan flysch sediments, which are paleontologically well proved include a whole megafacies distribution starting by marginal coarse conglomeratic beds in southern part of Drahanská výsočina Upland (deep sea midfan) and continuing to the north by fluxoturbidites, proximal turbidites, distal turbidites (outer fan) and hemipelagic sediments gradually in the northern parts of the preserved accretionary wedge.