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## The end-Triassic conodont genus *Misikella* in the Slovenian Basin

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Triassic strata of present Slovenia were until the Middle Triassic formed more or less on an isolated carbonate platform surrounded by deep basins of Tethys. During Anisian and Ladinian times, the carbonate platform began to disintegrate as a result of extensional tectonics on the eastern edge of Pangea, where the Meliata Ocean began to develop. In Slovenia, there was disintegration of the previously combined carbonate platform into the Adriatic-Dinaric Carbonate Platform in the south and the Julian Carbonate Platform in the north with an intermediate Slovenian Basin. All three paleogeographic units are roughly recognizable in today's geotectonic structure of Slovenia. Sedimentary rocks of the Julian Carbonate Platform, that built a large part of the Julian Alps, South Karavanke and Kamnik-Savinja Alps, make up the larger part of the eastern Southern Alps. Sediments of the Slovenian Basin are exposed on the surface in the foreland of the Julian Alps, from where they extend through central Slovenia to the south-east. They belong to the eastern Southern Alps in the west, and to the transitional area between the External and Internal Dinarides in the east. Sediments of the Adriatic-Dinaric Carbonate Platform correspond to the External Dinarides that today represent an extensive carbonate area of the southern and south-western Slovenia.

Sediments of the Slovenian Basin in central Slovenia have been for years systematically sampled for conodonts. In the area of Mt. Kobra and Mt. Slatnik (south-eastern Julian Alps), structurally belonging to the Tolmin nappe, in the Norian Bača Dolomite is followed by a 50 to 100 m thick sequence of the Late Norian-Rhaetian Slatnik Formation. Its lower part is marked by hemipelagic limestone with chert, whereas its upper part is dominated by different resedimented limestone, calcarenite and limestone conglomerate. The Slatnik Formation is followed by the Lower Jurassic Krikov Formation. Conodont faunas of the upper part of the Bača Dolomite and the laterally developed Slatnik Formation indicate a Sevatian and Rhaetian age. Conodont faunas are represented by: *Norigondolella steinbergensis*, *Epigondolella postera*, *E. abneptis*, *E. bidentata*, *Parvigondolella andrusovi*, *P. lata*, *Misikella hernsteini*, *Zieglericonus rhaeticus*, *M. buseri*, *M. posthernsteini*, and *Oncodella paucidentata*. In the transitional area between the External and Internal Dinarides the youngest conodont fauna with *M. hernsteini* has been documented also in the Bača Dolomite near Telče in the Sava Folds.

The genus *Misikella* is the most important conodont taxon for the stratigraphy of the Late Sevatian – Rhaetian interval. Soon after the appearance of *M. hernsteini* during the late Sevatian in the Slovenian Basin, two evolutionary lineages can be recognized that markedly differ in the basal area. The first lineage *M. hernsteini* – (*M. rhaetica*) – *M. koessenensis* – *M. buseri* is recognized in the drop-shaped basal area, whereas a heart-shaped basal area is characterized by the second lineage represented by *M. hernsteini* – *M. posthernsteini* – *M. ultima* – *M. kovacsi*. These two phylogenetic lineages share similar stages of evolution and the final step of the two lineages is represented by *M. buseri* and *M. ultima* characterized by elements bearing only two denticles. Our study documents a strong homeomorphism

in the evolution of the Middle Triassic genus *Celsigondolella* and late Triassic genera *Misikella* and *Parvigondolella*.

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