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Evidence for the Lochkov-Prag Event in the Carnic Alps

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The Lochkov-Prag Event was defined by WALLISER (1996). Earlier sedimentological descriptions of CHLUPÁČ & KUKAL (1986) identified the nature of this event as being expressed by a lithological change from dark Lochkovian to lighter Pragian deposits. That specific sedimentological change accompanied by a change in benthic and planktonic communities is interpreted as regressive event by CHLUPÁČ & KUKAL (1986, 1988). ZIEGLER & LANE (1987) documented a conspicuous reduction in conodont diversity in the latest Lochkovian *pesavis* Biozone. TALENT et al. (1993) observed a similar sharp drop in conodont diversity in several sections from east-central New South Wales (Australia), wherefore the term end-*pesavis* Event was introduced. There, a gradual sedimentological change characterizes the event interval which was followed by a significant regional regression just before the end of the biozone. HOUSE (2002) concluded that the event did not result in a regression but in a transgression, which follows the interpretation of JOHNSON et al. (1985: T-R cycle Ia). Based on results from geophysical methods (magnetic susceptibility and gamma ray spectrometry) applied on sedimentary successions in the Czech Republic, VACEK (2011) concluded that the Lochkov-Prag Event was related to climate warming.

In the Central Carnic Alps the Early Devonian shallow marine sequence is best documented at Mount Seewarte in the Wolayer Area. There it starts with some few lithoclastic horizons and crinoidal limestones (organisms: brachiopods, gastropods, echinoderms, conodonts) followed by a short interval of dark grey nodular limestone bearing phosphatic brachiopod shells of *Opsiconidion* and some few conodonts during the Lochkovian (neritic Rauchkofel Limestone). These are overlain by well-bedded crinoidal grainstones (upper half of the neritic Rauchkofel Limestone) and a thick unit of massive bright grey frame- and rudstones (dominating skeletal components: calcareous algae, stromatoporoids, tabulate and rugose corals) of Pragian age (Hohe Warte Limestone). Lochkovian deposits continue in slope and pelagic facies towards north and east. They are named pelagic Rauchkofel Limestone and La Valute Limestone (syn. Boden Limestone) respectively. These are succeeded by the pelagic Findenig Limestone which is late Lochkovian (*pandora* beta Biozone) at La Valute in the Mount Zermula Area (CORRIGA et al. 2011) and Pragian in age at Rauchkofel Boden north of the Valentin Valley (SCHÖNLAUB, 1980).

In the shallow marine sequence of the central Carnic Alps trends in the MS-log show steadily increasing values during the *eleanore* Biozone. The above following interval of lacking measurements is due to an inaccessible section-part. At the top of the thick limestone bed (sample Se/02/07) a significant decline in values is recorded, which continues until short before the top of the *pesavis* Biozone. Minor shifting, in- and decreasing values follow which reflect a slightly increasing trend during the lowest part of the *steinachensis* Biozone. The MS-log culminates in a marking positive excursion at the top of the megaclast horizon. A short interval of decreasing values follows.

Our results confirm a “conspicuous reduction in conodont diversity in the latest Lochkovian *pesavis* Biozone” recognized by ZIEGLER & LANE (1987). According to the diversity pattern of conodont taxa observed in section 1, a certain drop as well as a change in the composition of the assemblage from an ozarkodinid to an icriodontid dominated community is recognized. However, important is that coniform taxa are more conservative and did not undergo a significant change at species level, but also show a decline in species from the *trigonicus* Biozone into the early Pragian *steinachensis* Biozone.

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