

THE SEDIMENTOLOGICAL, PALEONTOLOGICAL AND GEOCHEMICAL IMPLICATIONS OF THE BASAL CHOTEČ EVENT (MIDDLE DEVONIAN, EIFELIAN) IN PRAGUE BASIN (CZECH REPUBLIC)

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The Basal Choteč event, first named by House (1985) and typified by sequences in Bohemia (Chlupáč and Kukal, 1986) has been documented in Central and Southern Europe (e.g. Chlupáč et al. 2000), North Africa (e.g. Becker and House 1994), Southern America (Troth 2005), North America (Ver Straeten 2005), Siberian platform (Yolkin et al. 2005) and therefore it is regarded as an important global geo-event. In its type area (Prague Basin) the aforementioned event falls at the boundary between the Třebotov Limestone (Emsian/Eifelian) and the Choteč Limestone (Eifelian) and their equivalents, close above the Lower-Middle Devonian boundary. It is correlated with the base of the *Pinacites jugleri* and *Polygnathus costatus costatus* biozones. The **Třebotov Limestone** is mostly a bioclastic wackestone-packstone with a relatively high biogenic content and intense bioturbation. The presence of micritic matrix, benthic fauna typical for muddy bottom environments and absence of sedimentological features indicating current activity suggest a calm, low-energy, relatively deep sedimentary environment rich in free oxygen (inferred from intense bioturbation and diverse benthic assemblages). The sedimentary environment is interpreted here as proximal offshore, below storm wave base. The **Choteč Limestone**, on the other hand, reflects in its development and fossil content perturbation and non steady state conditions. The above mentioned limestone is represented by the alternation of well-sorted peloidal packstone/grainstone and dark lime- mudstone/wackestone and are regarded here as representatives of tempestites, reflecting in its development eustatic oscillations in sea level.

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