Upper Cretaceous nautilids from the Elbtal Group (Cenomanian-Coniacian, Saxony, Germany)

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Nautilids are quite common in appropriate facies of the Saxonian Cretaceous (lower Upper Cretaceous Elbtal Group), especially in the offshore Pläner and marl deposits. However, specimens are often strongly deformed internal moulds that are difficult to identify to species and even genus level. This taphonomic issues, in combination with systematic problems and the lack of synoptic modern revisions on Cretaceous nautilids, led to considerable uncertainty in the knowledge on the taxonomy and palaeobiodiversity of the group, not only in the Saxonian Cretaceous.

Extensive material in the palaeozoological collection of the Museum for Mineralogy and geology of the Senckenberg Natural History Collections Dresden forms the basis for the systematic revision of the Cretaceous nautilids from Saxony (WILMSEN, 2016). In total, eight nautilid species' in four genera have been documented for late Cenomanian to late Turonian interval (ca. 5 myr): *Eutrephoceras sublaevigatum* (D'ORBIGNY, 1850), *E. sphaericum* (FORBES, 1845), *E. justum* (BLANFORD, 1861), *Angulithes fleuriausianus* (D'ORBIGNY, 1840) and *Cymatoceras elegans* (J. SOWERBY, 1816) as well as *Deltocymatoceras rugatum* (FRITSCH, 1872), *D. galea* (FRITSCH, 1872) and *D. leiotropis*? (SCHLÜTER, 1876). Representatives of the genus *Eutrephoceras* are the most common group and most specimens have been classified as *E. sublaevigatum* in former times. However, two more species of the genus have been identified, the strongly inflated *E. sphaericum* and the compressed *E. justum*. Furthermore, it turned out that understanding of taphonomy plays a crucial role for nautilid identification because deformation can produce inflated or compressed taphoforms as well. Moreover, the differentiation of simple *versus* composite internal moulds may be important for the taxonomy of ribbed taxa and the existence of "taphospecies" may be a widespread problem in nautild systematics (e.g., inferred taphonomic pair of "*Angulithes*" *galea* and *D. rugatum*). Representatives of the largely smooth-shelled genera *Eutrephoceras* and *Angulithes* predominantly occur in offshore Pläner and marl facies while ribbed forms of the genera *Cymatoceras* and *Deltocymatoceras* also have been recorded from nearshore sandy deposits of the Saxonian Cretaceous.

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