CRETACEOUS/TERTIARY BOUNDARY SECTIONS FROM THE EASTERN BULGARIA: GENERAL REVIEW

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The Cretaceous/Tertiary boundary sections from the Eastern Bulgaria are the object of the serious investigations. Biostratigraphical, sedimentological, geochemical, mineralogical and magnetostratigraphical studies have been provided (Stoykova, Ivanov, 1992; Preisinger at al. 1993, 1993a; Ivanov, Stoykova, 1994, 1995; Synniovsky, Stoykova, 1995; Rogl et al. 1996).

The studied sections are continuous across the Cretaceous/Tertiary boundary which have been determined with calcareous nannofossils. The boundary interval have been established in two types of successions: 1/ thin to medium rhythmic clastic-limestone flysh (mainly calcareous siltstones and silty limestones) and 2/ irregular alternation of gray marles and clayey limestones (mainly foraminiferal wackestones and mudstones/wackestones) with planctonic fauna (foraminiferas, calcareous nannoplancton, radiolarians). Dark gray to black boundary clay (2-4 cm) with high iridium content (7,1 ppb), composed of smectite, quartz, fedspar, mixed-layer clay minerals and calcite (up to 10%) is very characteristic for the marly-limestone succession.

The sedimentation during The Upper Maastrichtian and Danian have been realized in deep marine environment. The deposition of the flysh sediments have been proceeded in the linear asymmetrical basin with steep south and gentle north slope. Hemipelagic marles and clayey limestones lay on the slope of the Cretaceous platform (north side of the basin) and are the connection between the flysh basin and the shallow epicontinental sea.