

CYCLOSTRATIGRAPHY OF THE JURASSIC AND LOWER CRETACEOUS (BERRIASIAN-LOWER VALANGINIAN) ROCKS IN WESTERN BULGARIA

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In western Bulgaria are obtained the following preliminary data of the cyclicity in Milankovitch band of the Jurassic and the Lower Cretaceous (Berriasian and Lower Valanginian) strata. (1) Hettangian (lacustrine-marine and marine clays and sandstones) - no data; (2) Sinemurian-Domerian (bioclastic limestones and marls) - 88 Ka (Eccentricity); (3) Toarcian (marls) - no data; (4) Aalenian-Lower Bathonian (predominantly bioclastic limestones) - 42 Ka (Obliquity); (5) Lower Bathonian-Lower Callovian (alternation of marls and clayey limestones) - 120 Ka (Eccentricity); (6) Middle Callovian-Lower Tithonian (micritic and predominantly nodular limestones) - 47 Ka (Obliquity); (7) Middle Tithonian - Chitinoidea & Praetintinopsis Zones - (thin bedded micritic and nodular limestones)- 17 Ka (Precession); (8) Upper Tithonian - Crassicolaria Zone (thin bedded micritic limestones) - 25 Ka (Precession); (9) Berriasian - Calpionella Zone: (a) Calpionella alpina and Remaniella Subzones (thin bedded micritic limestones) - 21 Ka (Precession); Calpionellopsis Zone - (a) C. simplex Subzone (micritic and clayey limestones and marls) - 38 Ka (Obliquity); (b) C. oblonga Subzone (clayey limestones and marls) - 48 Ka (Obliquity); (10) Lower Valanginian - Calpionellites Zone: (a) Praecalpionellites murgeanui Subzone (clayey limestones and marls) - 50 Ka (Obliquity); (b) C. darderi Subzone (clayey limestones and marls) - couplet - 15 Ka (Precession?), bundle - 73 Ka (Eccentricity?); (c) C. major Subzone (clayey limestones and marls) - couplet - 11 Ka (Perihelion? or Precession?), bundle - 66 Ka (Obliquity ?).