New Data on the Upper Barremian–Aptian Bio- and Sequence Stratigraphy in the Racha Region (West Georgia)

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Within the eastern segment of the Racha-Lechkhumi syncline of the northern stripe of the Transcaucasic Intermountain area, in the vicinity of villages Kvatskhuti and Khimshi the Lower Aptian Deshayesites weissi, Deshayesites deshayesi and Dufrenoyia furcata Zones are absent and lowermost Upper Aptian with reworked brecciate basement lies on the erosion uneven surface of limestones of the upper Barremian–lowermost lower Aptian sequence. As it turns out, the causes of formation of the mentioned stratigraphic break primarily was related to eustatic sea-level changes, established also in some adjacent southern regions of Georgia, where the synchronous Lower Cretaceous sequences are represented by shallow water carbonate subplatform facies (DEVDARIANI et al., 1975; KAKABADZE, 2006; KAKABADZE & KAKABADZE, 2012; KAKABADZE et al., 2013). It is noteworthy that similarity between the Georgian (KAKABADZE, 2006) and global (HAQ, 2013) sequence stratigraphic Aptian schemes, is in coincidence namely of lower boundaries of the lowermost Upper Aptian sequence, whereas there is no synchronicity when correlating the subsequent Upper Aptian–Lower Albian sequences. Such mismatch, in all probability, points out to a more or less simultaneous influence of the eustasy and regional tectonic movements in formation of the revealed sequences and their stratigraphical unconformities in Georgia and its some adjacent areas during the latest Aptian–early Albian.

Palaeogeographic features of the pre-late Aptian basin within the studied and adjacent southern areas of Georgia are discussed. In particular, questions of location of the pre-late Aptian shallow sea areas, with their submarine elevations and temporary islands, as well as subsequent event of the earliest late Aptian transgressive subcycle are reconsidered.