

TRANSGRESSIVE AND REGRESSIVE EVENTS AND EUSTACY IN LATE JURASSIC OF THE ARCTIC BASIN (WEST SIBERIA NORTH ALASKA)

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The lithostratigraphic construction of the Upper Jurassic sections in northern Alaska, Siberia and Sverdrup basin and even the succession of basic eustatic events are closely similar: maximum of transgressions in early, middle and late Oxfordian and early in the Kimmeridgian coincides. The Upper Jurassic of the western and southern margins of West Siberia has been studied in a detail to date: there were developed detailed charts for its bio- and lithostratigraphic division and sequence-stratigraphic models. The main feature of the sequence is a distinct alternation of essentially sandy and essentially clayey horizons. Hypsometric situation in Late Jurassic was very specific there. The territory was a gentle (low-gradient) slope, which regularly was underwater or overwater due to relative sea-level change. This resulted in deposition of sedimentary strata with frequent alternation of beds of shallow marine and transitional genesis, which recorded the succession of T-R events. Within oil-bearing horizon ?1 (Oxfordian-Kimmeridgian) in the south of West Siberia, intercoal sequence, that is interpreted as subcontinental part of LST, is clearly traced. Its lower erosion limit is a classical 1-st type boundary between sequences (SB1). Time intervals of the major T-R events in West Siberia are precisely registered with application of the parallel biostratigraphic scales. The comparison of Late Jurassic T-R curves of the western and southern flanges of West Siberia with quantitative eustatic curve for the same interval on the Russian platform and for other regions of Boreal basin shows their well correlation (almost 100% in Callovian-Kimmeridgian). Consequently, eustatic fluctuations can be treated as a principal factor, that is responsible for parallel change in relative sea level within such a different basins.