

COMBINATION OF PARALLEL ZONAL BENTHOS-BASED SCALES FOR THE JURASSIC AND NEOCOMIAN OF SIBERIA AS THE BASIS FOR BIOEVENT CIRCUMARCTIC SCALES OF HIGH RESOLUTION

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Siberian basins in the Mesozoic occupied central position in Arctic. Regular and similar on a vast area of Siberia margins cyclicity in sections structure was caused by eustatic reasons. The Jurassic and Cretaceous in Siberia are satiated with fossils. All this allowed the construction of a single scale for regional horizons and the combination of parallel zonal scales based on diverse groups. Combination of Siberian scales is successfully applied to the Northern Russia and to adjacent regions (circumarctic scales). The main biostratons were the zones recognized in a variety of methods (phylozones, oppelzones, acmezones, composite zones, etc.). The single combination of scales consists of polytaxa zones based on bivalves (b-zones), foraminifers (f-zones), ostracods (o-zones), palynozones and others compared with each other and ammonite zones. The whole diversity of zones is considered as operational combination of scales used directly for biostratigraphic division, for determination of datum horizons (reference points) in cyclic and seismostratigraphic analyses, for intra- and interregional correlation. Considerable parts of Siberian biostraton successions are well recognized in the Jurassic sections of West Europe, Canada, Alaska and others. In interregional correlation, benthos-based zonal scales may be treated as bioevent scales, where reference intervals demonstrate a unique succession of results provided by combination of biologic events of different nature (phylogenetic, chorologic and ecosystem). It is precisely recorded succession of events of different (independent of one another) nature that has the highest probability to be isochronous, when recognizing it in different regions. The boundaries of zones defined by different groups of fauna do not coincide, that allows to identify co-intervals.