

STRATIGRAPHIC FRAMEWORK FOR THE TYPE CISURALIAN, SOUTHERN PRE-URALIAN FOREDEEP - I: THE AQTÖBE SUB-BASIN AND CARBONIFEROUS-PERMIAN BOUNDARY

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The type Cisuralian occurs in the stratigraphic successions of the Pre-Uralian Foredeep, a tectonic basin developed during the mid-Carboniferous to Triassic Uralian orogeny. The overall geometry of this basin during the Permian is that of a westward dipping ramp, which, along with other factors, suggest that the Pre-Uralian Foredeep was not a simple flexural foreland basin. The southern Pre-Uralian Foredeep is comprised of two tectonic sub-basins, the Aqtöbe and Ural sub-basins, first recognized by Khorova (1962). The Aqtöbe sub-basin is a mixed carbonate-siliciclastic, shallow shelf to ramp succession. It merges southward with NW margin of the Pre-Caspian Basin as the carbonate component gradually increases. Fluvial-deltaic complexes occur in the paleogeographically easternmost sections. Conglomerates mark the most obvious sequence boundaries in the more central sections whereas finer-grained successions tend to dominate the more western, deeper water sections. No sequence boundaries (unconformities) occur in the upper Gzhelian-early Asselian portion of the succession as displayed within the C-P boundary stratotype at Aidaralash Creek. Stratigraphically higher Aidaralash-type sequences reflect shallowing upward successions that are capped by lowstand sequence tract conglomerates. These same sequences can be seen in the more offshore sections (e.g., Aktasty, Sholak Sai), but with a more subtle expression, and in some cases are most readily recognized via missing fusulinid zones. Event beds (storm-driven) are an important feature in most sections. These beds contain redistributed (no time significance) fusulinids and conodonts and sometimes reworked taxa (time significant). The reworked taxa are easily distinguished from the redistributed forms.