

Early Cretaceous larger foraminifers from the Shyok tectonic belt, eastern Karakoram, Ladakh, India : paleobiogeographic implications

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Biostratigraphic investigations were carried out in the Shyok tectonic belt, eastern Karakoram. This belt lying in northern part of Ladakh is a geologically poorly known terrain. Various tectonostratigraphic units represented by igneous, sedimentary and metamorphic rocks are sandwiched between Ladakh Batholith to the south and Karakoram Batholith to the north. Out of these tectonic units, the marine sedimentary sequence in Shyok belt is represented by Hundiri Formation. Lithologically this unit is constituted mainly by massive grey limestone in lower part, and carbonaceous shale and grey to green shale in the upper. This unit has yielded several age diagnostic foraminiferal taxa indicating a Barremian-Aptian age. The fauna includes several species of *Palaeodictyoconus*, *Palorbitolina*, *Mesorbitolina*, *Orbitolina*, *Tibetella*, *Praeorbitolina* and *Alpillina* in addition to a few taxa of algae, bryozoans and corals.

Foraminiferal taxa recorded herein from Hundiri Formation of Shyok tectonic belt are comparable with several taxa known to occur in Khalsi Limestone and Dras Formation in Ladakh; the *Orbitolina* bearing limestone of Burzil Pass; Yasin Group in Kohistan in the Indian Subcontinent; lower Cretaceous strata from Rutog and Nagri region in Tibet; and *Orbitolina* bearing rocks in Irrawaddy Valley, Burma. Faunal similarity in these regions during early Cretaceous is significant in understanding paleoecological and paleogeographical evolution in the regions. Fossil data suggests existence of transgressive Neo-Tethys sea north of Indus / Yarlung suture during the early Cretaceous times.