

Revised conodont and ammonoid biochronology of the N. waageni-date based IOB in the GSSP candidate section of Mud (Spiti, Himalaya)

→ Leopold Krystyn¹, Mike Orchard² & Sylvain Richoz³

¹ Department of Paleontology, Vienna University, Althanstr. 14, 1090 Vienna, Austria; e-mail: leopold.krystyn@univie.ac.at

² Geologic Survey of Canada, Vancouver, Canada; e-mail: mike.orchard@canada.ca

³ Department of Geology, Lund University, Sölvegatan 12, 22362 Lund, Swede; e-mail: sylvain.richoz@geol.lu.se

After the primary GSSP candidate proposal for section Mud M04 around 10 years ago additional important ammonoid and conodont data have been acquired within recent years. Their results are summarized and comprise:

a) a revised conodont range chart for the basal Olenekian whose lower boundary is drawn with the FO of *N. waageni* s.str. in bed 12B/C of the section. This revised date corresponds to a lowering of the boundary for two beds or 25 cm compared to the original proposal,

b) a new ammonoid zonation and expanded ammonoid record for the basal Olenekian and its correlation with the NIM (North Indian Margin) ammonoid standard of Brühwiler et al. This Salt

Range based standard allows demonstrating that Mud shows a rather complete and – though sedimentary reduced – clearly uncondensed faunal succession,

c) a discussion of the regional and intercontinental correlation potential of the Mud *N. waageni* date by ammonoids and conodonts, and

d) a weighting of the suitability of Mud as a *N. waageni* date based GSSP for the IOB in comparison to Chaohu and the Salt Range.

LK thanks D. Ware and T. Brühwiler for intensive discussions on Olenekian ammonoid taxonomy.

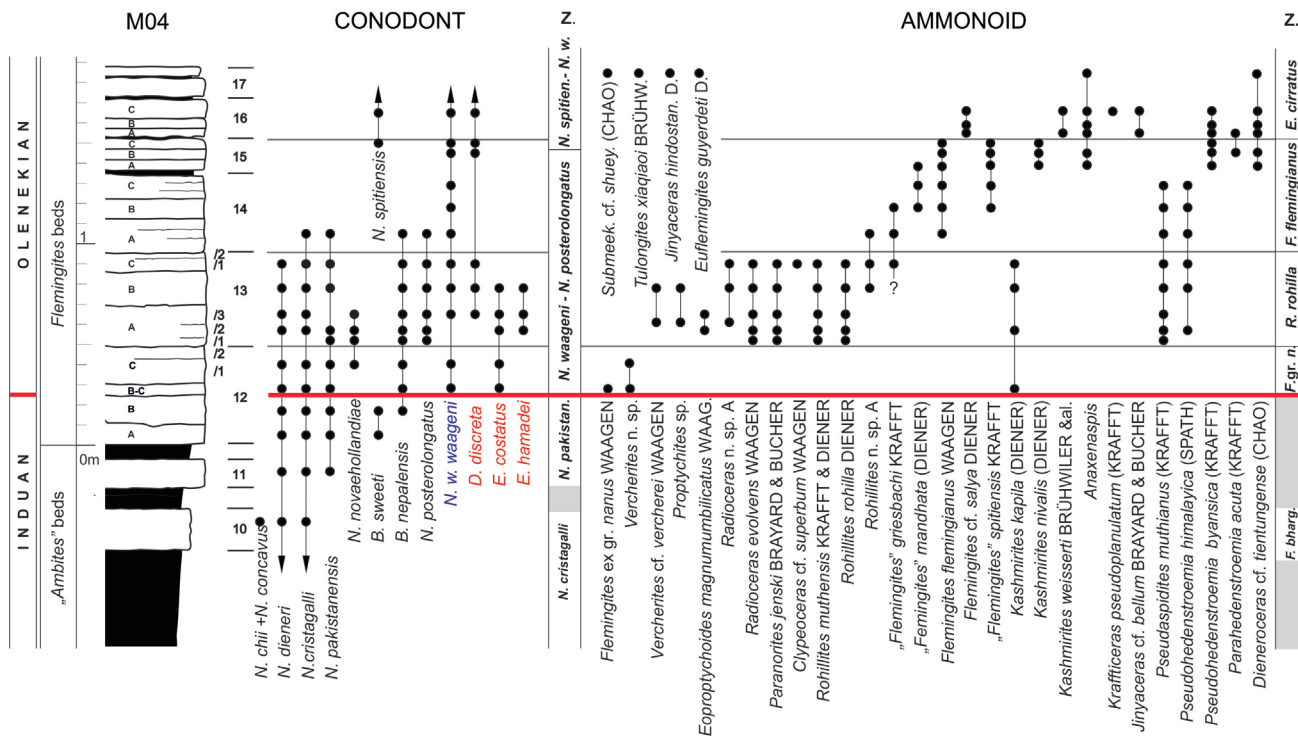


FIG. 1: Ammonoid and conodont biostratigraphy in the IOB GSSP candidate section of Mud (Spiti, Himalaya).