

# Latest Early Cretaceous calcareous nannofossils from southern Tibet, China

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Cretaceous marine sediments are widely distributed in the Tethyan Himalayan region. They outcrop in the southern Tibet region of Tingri and consist of the following successions from the bottom upward: the Gucucun, Gambacunkou, Jiubao, and Zhepure Shanpo Formations. The ages of these formations have been poorly constrained due to a scarcity of macrofossils. Fifty-one samples, which were collected from the Gangbacunkou Formation in the Kangsha Section, Tingri, are primarily gray calcareous marl and marly limestone. Routine calcareous nannofossil biostratigraphic examination, using the “double-slurry” technique, revealed that calcareous nannofossils occurred at varying abundances throughout the section. The most

common taxa include *Watznaueria barnesiae*, *Discorhabdus ignotus*, *Watznaueria fossacincta*, *Prediscosphaera columnata*, *Retecapsa* sp., *Biscutum constans*, *Braarudosphaera hockwoldensis*, *Hayesites irregularis*, *Tranolithus orionatus*, *Zeugrhabdotus diplogrammus*, *Zeugrhabdotus xenotus*, *Helenea chiastia*, and *Cylindralithus* sp. The co-occurrence of the marker species *H. irregularis* (last occurrence dated at 100.84Ma) and *T. orionatus* (first occurrence at 110.74Ma) constrains the study interval to nannofossil Subzones CC8b to CC9a, which fall within the middle-late Albian Stage. This study highlights the usefulness of calcareous nannofossils in dating lithological units in southern Tibet.