

## Upper Triassic conodont, ammonoid, and radiolarian biostratigraphy in a pelagic sequence of Japan

YAMASHITA, Daisuke<sup>1\*</sup> ; YASUDA, Chika<sup>2</sup> ; SATO, Honami<sup>3</sup> ; ONOUE, Tetsuji<sup>4</sup>

<sup>1</sup>Earth and Environmental Sciences, Graduate School of Science and Engineering, Kagoshima University, <sup>2</sup>INPEX Corporation, <sup>3</sup>Graduate School of Earth and Planetary Sciences, Kyushu University, <sup>4</sup>Earth and Environmental Sciences, Graduate School of Science and Technology, Kumamoto University

The chronology for the Triassic pelagic deposits in the Panthalassa Ocean is based on the radiolarian zonation, which is well studied in the Middle and Upper Triassic bedded chert successions in the Japanese accretionary complex. Although accurate calibration for the chronostratigraphic stages and substages are established basically by means of ammonites and conodonts, most of the Japanese radiolarian zones were calibrated through correlation with zonal schemes in other regions, and have not been calibrated with ammonoid and conodont biostratigraphy. Here we present the results of Late Triassic (Carnian-early Norian) conodont biostratigraphy from the two pelagic sections in the Jurassic accretionary complex of southwest Japan. Samples for this study were collected from the Sakahogi section of a bedded chert sequence in central Japan and the Nakijin Formation of a pelagic limestone sequence in the northern tip of the Okinawa Island. We found 56 platform conodonts from 36 samples in the Sakahogi section, where the radiolarian biostratigraphy have previously been investigated. The biostratigraphy of the Carnian-Norian sequence of the Nakijin Formation is based primarily on ammonites, since the rare occurrence of conodonts minimizes the stratigraphic potential of these groups. However, our study revealed that the clastic limestones intercalated within the Nakijin Formation contain rich conodonts assemblages. Based on detailed study of the conodont biostratigraphy from the interval of the Carnian and the early Norian in the Sakahogi section and the Nakijin Formation, three conodont zones are recognized in ascending order as follows: lower Carnian *Paragondolella praelindae* - *Metapolygnathus polygnathiformis* zone, upper Carnian *Metapolygnathus lindae* - *Metapolygnathus primitius* zone, and lower Norian *Epigondolella quadrata* zone. This result is consistent with the presence of the lower to upper Carnian ammonites assemblages in the Nakijin Formation.

Keywords: Late Triassic, Carnian to early Norian, conodont, ammonoid, and radiolarian biostratigraphy, Sambosan Terrane, Mino Terrane, Panthalassa Ocean