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## Pleistocene forearc sedimentation during active uplift of the Japanese South Alps

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The South Alps of Japan or Akaishi Mountains has been rapidly uplifted from ca. 1 Ma due to subduction of the Philippine Sea Plate underneath the Eurasian Plate and related collision of the Izu-Ogasawara arc with the main island of Japan. Synchronously with this rapid uplift, depositional environments in forearc basin around the South Alps largely varied. Previous sedimentological studies in both onshore and offshore fields (Muto, 1985, *J. Geol. Soc. Japan*; Saito and Masuda, 1996, *Sedi. Geol.*; Takano et al., 2009, *J. Geograph.*) described that the Lower Pleistocene Kakegawa Group was deposited with distinct marine transgression, followed by sedimentation of the Middle Pleistocene Ogasa Group that unconformably covers the underlying Kakegawa Group with significant submarine fan progradation. In this contribution, three-dimensional seismic reflection interpretation in off Tokai area reveals that (i) the Kakegawa Group became folded under compressional stresses after its deposition and subsequent unconformable covering of the Ogasa Group occurred on the folded Kakegawa Group, and (ii) the lower and upper sequences of the Ogasa Group have sediment waves showing north-northeasterly and northwesterly paleocurrent directions, respectively. Based on these new results, we discuss how the Pleistocene forearc basin in off Tokai area was filled during active uplift of the South Alps. This contribution is a study as part of MH21 Research Consortium.

Keywords: Off Tokai area, Pleistocene forearc basin, Kakegawa Group, Ogasa Group, compressional folding, sediment wave