

# Holocene ice sheet advance deduced from geomorphological evidence in Skallen , East Antarctica

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We found geological and geomorphological evidence which suggests advance and retreat history of East Antarctic Ice Sheet (EAIS) during late Holocene at Skallen Rock in Ryuzou Holm Bay, East Antarctica, at the period of the 45th Japanese Antarctic Research Expedition. Two level marine terraces which are composed of thin coastal sand with shell fragments are developed at the elevation of about 20m and 10m asl. Small moraine ridges are put between the marine terraces. We can know the period when the ice sheet advanced suggested by moraine ridges from the age of the marine terraces. Our founding can be the key to solve whether the EAIS has been stable or unstable during late Holocene.