

## Preliminary results of the JARE 61 geomorphological survey at Langhovde in Lutzow Holm Bay, East Antarctica

\*Takeshige Ishiwa<sup>1</sup>, Yuki Tokuda<sup>2</sup>, Takuya Itaki<sup>3</sup>, Satoshi Sasaki<sup>4</sup>, Yusuke Suganuma<sup>1</sup>, Shintaro Yamasaki<sup>5</sup>

1. National Institute of Polar Research, 2. Tottori University of Environmental Studies, 3. National Institute of Advanced Industrial Science and Technology, 4. Shimane University, 5. Disaster Prevention Research Institute, Kyoto University

The mass loss of the Antarctic Ice Sheet due to the global climate changes will largely contribute to global sea-level rise. The information of present ice-sheet mass balance is required to achieve an accurate projection of Antarctic Ice Sheet changes. The timing and amplitude of Antarctic Ice Sheet change during the Last Deglaciation is essential to assess a glacial isostatic adjustments effect on the present ice-sheet mass balance. However, the difficulty of access to Antarctica makes it challenging to obtain field-based evidence of ice-sheet and sea-level change during the Last Deglaciation. In the 61st Japanese Antarctic Research Expedition (JARE61), the geomorphological survey was carried out in Langhovde and West Ongul Island in Lutzow Holm Bay, East Antarctica. We will report the preliminary results of JARE 61 such as the bathymetry data, CTD profiles, and sampling locations in shallow water and Lake Nurume of Langhovde. These data will be used to obtain the geological evidence of paleoenvironmental changes due to sea-level and ice-sheet fluctuation in future studies.

Keywords: Japanese Antarctic Research Expedition , Antarctic Ice Sheet Change, Geomorphological Survey