

Significance of collision events and exploration for geological boundaries to study continental evolution of Antarctic lithosphere

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"Structure and Evolution of the Antarctic Lithosphere (SEAL)" Project have been carrying out in a framework of the Japanese Antarctic Research Expedition in recent years. Particularly, we concentrated on the geological surveys and deep seismic probing in the Western Enderby Land area. The main target of the SEAL geotransect is to obtain the crustal section in relation to the evolution from the Archean Napier to the Paleozoic Lutzow-Holm Complex. This presentation is particularly focused on the significance of collision events, such as delamination process and craton-arc accretion, and exploration for geological boundaries to study continental evolution. Several collisional process are important to reveal the formation and dynamics of the Earth.