

Proposal of Polar Science to Master Plan 2020

*Takuji Nakamura¹, Atsuko Sugimoto², Shin Sugiyama², Yoshifumi Nogi¹, Tetsuo Sueyoshi¹

1. National Institute of Polar Research, 2. Hokkaido University

The academic large-scale research master plan of the Science Council of Japan is a collection of large-scale research plans that should be tackled in about 10 years, regardless of the field. After the discussion during past two years, we submitted in March 2019 as a proposal to Master Plan 2020 "Prediction of sea level fluctuation caused by ice sheet fluctuation" on behalf of the polar science field.

In the "Frontier of Polar Regions Science" for masterplan 2017, we have proposed a comprehensive and interdisciplinary research plan covering important processes and data acquisition of polar regions, which records the past global environmental changes with high accuracy, having multiple tipping points and great impact on the global environment. There were some critical comments that the focus was not clear enough, and also about structural issue whether it should be a mission of the National Institute of Polar Research or a national academic projects.

In the master plan of 2020, we have restructured the proposal from a differentiated view point from the recent Arctic environmental research and Antarctic observation projects, as a comprehensive study of the ice sheet change, by setting the future sea level change for the main outcome of the project.

In this presentation we will introduce the situation of large-scale research projects, review the efforts for masterplan of polar science so far, explain the background of examination of this proposal. The aim is to stimulate the discussion at the session and future studies. The Antarctic / Arctic is an important research field that various topics such as space and planetary science, atmospheric and ocean science, solid earth science etc. should collaborate. It is also essential to obtain public understanding on its importance by stakeholders.

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