

## Plan of Panel Discussion

### “Arctic warming amplification and impacts to the mid-latitude”

#### Introduction

The special session “Warming in the Arctic and Its Influences” has been arranged on 18 November 2015, intending to introduce and discuss outcomes of our GRENE Arctic Climate Change Research Project (FY2011-2015). For this purpose, session is composed of three parts as follows.

I: Report from Research Themes (answers to the Strategic Research Targets)

"Arctic Climate Change Research Project (FY2011-2015)" within the framework of the Green Network of Excellence Program (GRENE) is now in the final year. As a result of the implementation of the project, clear messages to the community and society, “what could be concluded as a whole,” are requested, with the central axis in the Arctic warming and its influences. The project is composed of 7 bottom-up Research Themes, requested to create new research outcomes (answers) resulted for the 4 strategic research targets, set by MEXT at the funding. The presentations of the central results for the outcomes will be invited.

II: Direction of the new research projects

Then, the new directions of the next Arctic research projects will be introduced, following the recent national and international circumstances of the Arctic research.

III: Panel discussion

#### Panel discussion on “Arctic warming amplification and impacts to the mid-latitude”

Finally, panel is set to discuss the Arctic warming amplification and impacts to the mid-latitude, which are the prominent topics of the GRENE project. We are expecting to conclude as the final message of the GRENE Arctic Project.

#### Panel members and tasks (key words)

S. Warren (Univ Washington/ NIPR): ice-albedo feedback, cloud effect

J. Cohen (AER): impact of snow cover, stratosphere effect, prediction

K. Dethloff (AWI): Arctic sea ice and baroclinic-planetary scale interactions in the atmosphere

M. Yoshimori (Hokkaido Univ): warming amplification and its seasonality

K. Yamazaki (NIPR/ Hokkaido Univ): mid-latitude link, stratosphere effect

Y. Iijima (JAMSTEC): role of terrestrial process

S. Sugiyama (Hokkaido Univ): role of glacier change, Greenland

K. Shimada (Tokyo Marine Univ): role of sea ice and ocean

T. Yamanouchi (NIPR): Chair