

A01-P04

CLIMATE MODELLING STUDIES IN THE GRENE ARCTIC CLIMATE RESEARCH PROJECT

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By conducting the following three sub-themes, we are aiming at improving the reliability of future Arctic climate change projected by the coupled general circulation models. The first one is the validation of the models' ability to reproduce the Arctic climate, making assessments on the reproducibility of mean climate states, long-term climate changes, etc. in the Arctic. The second one is to understand the mechanisms of Arctic climate variability and change, and to identify their causes, acquiring a better understanding of the Arctic warming amplification mechanism. The third one is the development and improvement of component models in the coupled general circulation models, developing new, or improving existing, component sub-models for snow cover, land surface, etc. which are important processes in the Arctic climate. We will show current status and principal results in this presentation.