Japan Geoscience Union Meeting 2011

(May 22-27 2011 at Makuhari, Chiba, Japan)

©2011. Japan Geoscience Union. All Rights Reserved.



ACG033-P05

会場:コンベンションホール

時間:5月25日10:30-13:00

高解像度氷床モデルを用いたグリーンランド氷床の温暖化応答実験 Response of Greenland ice sheet to global warming simulated by a high-resolution ice sheet model

齋藤 冬樹 1*, 阿部 彩子 2, 高橋 邦生 1 Fuyuki SAITO^{1*}, Ayako Abe-Ouchi², Kunio Takahashi¹

1 独立行政法人海洋研究開発機構, 2 東京大学大気海洋研究所

We present numerical experiments of Greenland ice sheet to global warming using Ice sheet model for Integrated Earth system Studies (IcIES). A high resolution (until around 5km horizontally) is chosen in order to better resolve locally high velocity regions of ice-stream. The ice sheet model is forced by the results of global warming experiments simulated by climate models. Effect of ice-sheet dynamics on changes in the ice sheet volume will be compared with that of that of climate condition such as changes in melting and accumulation due to the global warming. Uncertainties in the model result due to the horizontal resolution are also compared with those to several factors such as parameterization schemes in the model.

キーワード: 氷床, 温暖化

Keywords: ice sheet, global warming

¹JAMSTEC, ²AORI, Univ. of Tokyo