



Simulating the glacial vegetation with two dynamical vegetation models

Marie-Noelle Woillez (1), Ryouta O'ishi (2), Masa Kageyama (1), Ayako Abe-Ouchi (2), and Gerhard Krinner (3)

(1) Laboratoire des Sciences du Climat et de l'Environnement, Gif-sur-Yvette Cedex, France (masa.kageyama@lsce.ipsl.fr),

(2) AORI, University of Tokyo, Kashiwa, Japan, (3) LGGE, Saint-Martin d'Herès, France

Pollen data from the last glacial period show that the vegetation covering the Earth surface at that time was radically different from today, with in particular a massive regression of forested areas in both hemispheres. Here we use two different vegetation models, ORCHIDEE and LPJ, forced by climatic outputs from the AOGCMs IPSL_CM4 and MIROC respectively, to simulate the vegetation at LGM. We compare the two simulated vegetations obtained to available reconstructions to evaluate the relative performances of the models, and we will also investigate the relative impact of climate and CO₂ on vegetation changes.