Geophysical Research Abstracts
Vol. 18, EGU2016-13509, 2016
EGU General Assembly 2016

The Last Glacial Maximum experiment in PMIP4-CMIP6

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The Last Glacial Maximum (LGM), around 21,000 years ago, is a cold climate extreme. As such, it has been the focus of many studies on modelling and climate reconstruction, which have brought knowledge on the mechanisms explaining this climate, in terms of climate on the continents and of the ocean state, and in terms relationships between climate changes over land, ice sheets and oceans.
It is still a challenge for climate or Earth System models to represent the amplitude of climate changes for this period, under the following forcings:
- Ice sheets, which represent perturbations in land surface type, altitude and land/ocean distribution
- Atmospheric composition
- Astronomical parameters
Feedbacks from the vegetation and dust are also known to have played a role in setting up the LGM climate but have not been accounted for in previous PMIP experiments.
In this poster, we will present the experimental set-up of the PMIP4 LGM experiment, which is presently being discussed and will be finalized for March 2016.
For more information and discussion of the PMIP4-CMIP6 experimental design, please visit: https://wiki.lsce.ipsl.fr/pmip3/doku.php/pmip3:cmip6:design:index