Department of Geological Sciences
Brøgger seminar series

Paleo ENSO from PMIP and IPSL simulations

Speaker: Pascale Braconnot, Laboratoire des Sciences du Climat et de l'Environnement (LSCE)
Date and time: Tuesday 25 November, 14.00 | **Location:** Ahlmannsalen, Geovetenskapens hus

Abstract
Improved understanding of the response of seasonal to decadal variability to external climate perturbations is an important issue for anticipating the changes due to the current global warming. The presentation will focus on monsoon and El Niño Southern Oscillation that represent two key modes of variability in the tropical region. Using the new results obtained for the PMIP3/CMIP5 simulations of the last Glacial Maximum and the mid-Holocene (Taylor et al., BAMS, 2012, Braconnot et al., NCC, 2012) and a suite of past climate simulations run with the IPSL climate model, Pascale Braconnot will discuss the role of insolation, ice-sheet and fresh water fluxes in the North Atlantic in altering these phenomena. She will highlight how past simulations can help us to better understand the relationship between the mean climate and climate variability. Emphasis will also be put on ongoing work as part of the paleovar PMIP group that should help to make better use of model-data comparisons using the numerous high-resolution archives that reflect changes in inter-annual variability across the Pacific Ocean.

About Pascale Braconnot
Dr. Pascale Braconnot is a CEA senior scientist at the Laboratoire des Sciences du Climat et de l'Environnement (LSCE). She has 20 years of expertise in climate modeling, ranging from coupled ocean-atmosphere model development to the use of these coupled models in different climatic contexts. Her research focus concerns the role of the ocean in climate change and climate variability with emphasis on past monsoon and inter-annual variability in tropical regions. She coordinates the international Paleoclimate Modeling Intercomparison Project (PMIP). In 2009 she received the EGU Milutin Milankovic medal for her work on insolation and climate. She has participated in the last two IPCC reports as a lead author, in AR4 chapter 9 (Understanding, detection and attribution) and AR5 chapter 9 (Evaluation of climate models).

Co-sponsored by the:
Bolin Centre for Climate Research
A cooperation between Stockholm University, SMHI and KTH

Stockholm University

Department of Geological Sciences, Stockholm University, SE-106 91 Stockholm | Contact: barbara.wohlfarth@geo.su.se