



Atmospheric and Oceanic reorganisations during glacial abrupt events: an IPSL model study

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Available reconstructions of glacial abrupt events as well as model studies have shown that when the Atlantic Meridional Overturning Circulation quickly changes, in an abrupt slow down or resumption, there are large reorganisations of the atmosphere circulation, which ultimately translates into climate changes. In previous work, we have analysed changes in the ITCZ (Intertropical Convergence Zone), over the Indian Monsoon area (Kageyama et al., *Climate of the Past*, 2009, Marzin et al., *Climate of the Past*, 2013) and South American sector (Montade et al., *Geology*, 2015). In this study, we analyse these reorganisations in the mean atmospheric circulation at mid-latitudes, in particular in the North Atlantic/Europe zone. We will also examine its variability at the daily and interannual time-scales, in order to better understand the climatic response, in particular in terms of precipitation, over this area to changes in AMOC. We perform these analyses on experiments of the LGM and MIS3 states realized with the IPSL coupled model, versions 4 and 5.