Geophysical Research Abstracts, Vol. 9, 10737, 2007 SRef-ID: 1607-7962/gra/EGU2007-A-10737 © European Geosciences Union 2007



AMMA Land surface Model Intercomparison Project (ALMIP) Phase 1 results

A. Boone (1), P.deRosnay (2) and J. Polcher (3)

(1) CNRM (aaron.boone@meteo.fr), (2) CESBIO (pdr@cesbio.cnes.fr), (3) LMD (jan.polcher@lmd.jussieu.fr)

One of the main goals of the African Monsoon Multi-disciplinary Analysis (AMMA) Project is to obtain a better understanding of the physical processes influencing the West-African Monsoon (WAM) on daily to inter-annual timescales. There is evidence that the land surface influences the variability of the WAM over a wide range of spatiotemporal scales, therefore there is a need to better understand the land-surface atmosphere coupling mechanisms from the local, to the mesoscale and up to the regional scale. A critical aspect of this coupling is the feedback between the regional atmospheric circulation and the strong meridional surface flux gradients of mass and energy.

The first step towards obtaining a better understanding of the surface processes is being addressed through the AMMA Land surface Model Intercomparison Project (ALMIP). In the recently completed Phase 1 of this project, an ensemble of state-of-the-art land surface schemes have been run in "off-line" mode (i.e. decoupled from an atmospheric model) at a regional scale over western Africa for four annual cycles (2002-5). In this talk, intercomparison results will be presented. In addition, results from a second experiment will be presented which show the significant impact of including remotely sensed data in the forcing database.