



Modelling vegetation growth and associated energy fluxes over the AMMA Malian site

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The AMMA (*African Monsoon Multidisciplinary Analyses*) project aims to improve our knowledge about the hypothesized relationships between the West African monsoon and vegetation. Particularly, time variation of vegetation components have a strong effect on the partitioning of latent and sensible heat fluxes, at the soil-vegetation-atmosphere interface. The analysis of these relationships can be carried out through the use of appropriate surface models.

Before their utilisation at mesoscale, surface models must be tested with experimental data acquired at a finer scale. Here, simulated fluxes using a coupled vegetation – SVAT model are confronted to radiation measurements including net surface radiation and soil heat fluxes. Furthermore, simulated soil water contents are compared to soil moisture measurements performed between the soil surface down to 2.50m. All the experimental data are acquired by an automatic weather station deployed on the Agoufou local site since April 2002. Flux data will be available only from April 2005.

The Agoufou site is located in northern Mali (15.35°N and 1.48°W) within the Gourma mesoscale site (3°x1°) which is one of the three experimental windows defined for the Enhanced Observation Period (EOP).