

**WATER CYCLE MEASUREMENTS DURING THE AMMA EOP ON THE  
MESOSCALE SITE OF THE UPPER OUÉMÉ RIVER, BENIN**

**Marielle GOSSE (1), Frederic CAZENAVE (1), Olivier LEBROUSTER (1),  
Josias DOSSUGOUIN (2) and Etienne HOUNGNINOU (2)**

(1) IRD, Cotonou, Bénin (2) Univ Abomey Calavey, Cotonou, Benin

The Xband polarimetric weather radar Xport has been installed in the Upper Valley of the Oueme River in Benin, since June 2005. The radar is located in Djougou with a good visibility of the Donga watershed well equipped with a full set of hydrological measurements, such as rain gages, river flow and well levels.

Early August 2005 this equipment has been completed with the installation of an optical spectrogranulometer, to measure rain drops size distributions at ground level. During July 2005 several rainy events were sampled by the radar as they were crossing the Oueme Basin. The very first result from these observations will be presented. The scanning strategy adopted for 2005 allows fast scanning of the rainfield at a 2 PPIs per minute rate. This will allow to discuss the dynamic of the rain cells.

The experiment itself and the logistical and field issues will also be discussed.



*Afrikaanse Moesson Multidisciplinaire Analyse*  
*Afrikanske Monsun : Multidisplinaere Analyser*  
*Analisi Multidisciplinare per il Monsone Africano*  
*Análisis Multidisciplinar de los Monzones Africanos*  
*Afrikanischer Monsun : Multidisziplinäre Analysen*  
*Analyses Multidisciplinaires de la Mousson Africaine*

## **African Monsoon Multidisciplinary Analyses**

### **1<sup>st</sup> International Conference**

**Dakar, 28<sup>th</sup> November – 4<sup>th</sup> December 2005**

### **Extended abstracts**

Isabelle Genau, Sally Marsh, Jim McQuaid, Jean-Luc Redelsperger,  
Christopher Thorncroft and Elisabeth van den Akker (Editors)

AMMA International

**Conference organisation:**

Bernard Bourles, Amadou Gaye, Jim McQuaid, Elisabeth van den Akker

**English and French editing :**

Jean-Luc Redelsperger , Chris Thorncroft, Isabelle Genau

**Typesetting:**

Sally Marsh, Isabelle Genau, Elisabeth van den Akker

**Printing and binding:**

Corlet Numérique  
14110 Condé-sur-Noireau  
France  
numeric@corlet.fr

**Copyright** © AMMA International 2006

**AMMA International Project Office**

IPSL/UPMC  
Post Box 100  
4, Place Jussieu  
75252 PARIS cedex 5

Web : <http://www.amma-international.org/>

Email [amma.office@ipsl.jussieu.fr](mailto:amma.office@ipsl.jussieu.fr)

Tel. +33 (0) 1 44 27 48 66

Fax +33 (0) 1 44 27 49 93

All rights reserved.

**Back page photo:** (Françoise Guichard, Laurent Kergoat)

Convective wind system with aerosols, named "haboob", Hombori in Mali, West Africa.