



The AMMA information system

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In the framework of the African Monsoon Multidisciplinary Analyses (AMMA) programme, several tools have been developed in order to facilitate and speed up data and information exchange between researchers from different disciplines. The AMMA information system includes (i) a multidisciplinary user-friendly data management and dissemination system, (ii) report and chart archives associated with display websites and (iii) a scientific paper exchange system. The AMMA information system is enriched by several previous (IMPETUS...) and following projects (FENNEC, ESCAPE, QweCI, DACCIWA...) and is becoming a reference information system about West Africa monsoon.

(i) The AMMA project includes airborne, ground-based and ocean measurements, satellite data use, modelling studies and value-added product development. Therefore, the AMMA database user interface enables to access a great amount and a large variety of data:

- 250 local observation datasets, that cover many geophysical components (atmosphere, ocean, soil, vegetation) and human activities (agronomy, health). They have been collected by operational networks from 1850 to present, long term monitoring research networks (CATCH, IDAF, PIRATA...) or scientific campaigns;
- 1350 outputs of a socio-economics questionnaire;
- 60 operational satellite products and several research products;
- 10 output sets of meteorological and ocean operational models and 15 of research simulations.

All the data are documented in compliance with metadata international standards, and delivered into standard formats. The data request user interface takes full advantage of the data and metadata base relational structure and enables users to elaborate easily multicriteria data requests (period, area, property, property value...). The AMMA data portal counts around 800 registered users and process about 50 data requests every month.

The AMMA databases and data portal have been developed and are operated jointly by SEDOO and ESPRI in France: <http://database.amma-international.org>. The complete system is fully duplicated and operated by CRA in Niger: <http://amma.agrhymet.ne/amma-data>.

(ii) A day-to-day chart and report display application has been designed and operated in order to monitor meteorological and environment information and to meet the observational team needs during the 2006 AMMA SOP (<http://aoc.amma-international.org>) and 2011 FENNEC campaigns (<http://fenoc.sedoo.fr>). At present the websites constitute a testimonial view on the campaigns and a preliminary investigation tool for researchers. Since 2011, the same application enables a group of French and Senegalese researchers and forecasters to share in near real time physical indices and diagnosis calculated from numerical weather operational forecasts, satellite products and in situ operational observations along the monsoon season, in order to better estimate, understand and anticipate the monsoon intraseasonal variability (<http://misva.sedoo.fr>).

(iii) A collaborative WIKINDEX tool has also been set online in order to gather together scientific publications, theses and communications of interest to AMMA: <http://biblio.amma-international.org>. Now the bibliographic database counts about 1200 references. It is the most exhaustive document collection about the West African monsoon available for all.

Every scientist is invited to make use of the different AMMA online tools and data. Scientists or project leaders who have data management needs for existing or future datasets over West Africa are welcome to use the AMMA database framework and to contact ammaAdmin@sedoo.fr.