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High impact weather prediction and predictability for the West African Monsoon

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African Monsoon: Multidisciplinary Analyses (AMMA) is a major international project concerned with the West African Monsoon and its regional and global influences. One of the aims of AMMA is to define and implement relevant prediction and monitoring strategies for West African nations. High impact weather investigated in AMMA is related to the West African Monsoon over West Africa (e.g. wet/dry spells, monsoon onset and breaks), the tropical Atlantic (e.g. tropical cyclones) and in the extratropics (e.g. extratropical transition of tropical cyclones, Rossby wave trains). Current activities in AMMA related to the prediction and predictability of High impact weather include: (i) Tailoring of forecast products for users in tropical regions: a major contribution to this theme is the operational forecasting activity developed for the summer 2006 field programme. A vast array of new and old forecast products has been provided and is being evaluated. There are plans for a series of follow-up workshops to promote this evaluation and ultimately to produce a "forecaster's handbook" for the West African region. (ii) Data impact and predictability studies: A number of observing system experiments are planned by several groups that aim to explore the sensitivity to inclusion of various datastreams including in particular the impact of enhancements to the operational radiosounding network and droposondes from the driftsonde system. In addition, the summer season will be the focus for sensitive area calculations that can be evaluated with the enhanced observing system. In this presentation we will give an overview of the activities in progress and discuss future plans.