



Correction of humidity bias for Vaisala RS80 sondes during AMMA 2006 observing period

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During the African Monsoon Multidisciplinary Analyses (AMMA) program whose Special Observing Period took place over West Africa in 2006, a major effort has been devoted to monitor the atmosphere and its water cycle. The radiosoundings network has been upgraded and enhanced, and GPS receivers deployed. Among all sondes released in the atmosphere, a significant part was Vaisala RS80 sondes which revealed a strong dry bias. This presentation makes use of a simple but robust statistical approach to correct the bias. Comparisons against independent GPS data show that the bias is almost removed at night, whereas for daytime conditions, a weak dry bias still remains. The correction dramatically enhances CAPE, which becomes much more in line with expected values over the region.