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Preliminary results from the EGEE/AMMA experiment

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The EGEE campains are the oceanic component of the AMMA program. They started in 2005 with EGEE1 and EGEE2 as components of the EOP. As part of the SOP, EGEE3 was the oportunity of a tight coordination between three well-instrumented vessels covering the entire Tropical Atlantic basin at the same time: the R/V l'ATALANTE in the eastern part of the basin and Gulf of Guinea; the German R/V METEOR in the central basin and the American Ronal H. Brown in the north-eastern tropical Atlantic. Aside from oceanic measurements, simultaneous studies of air-sea interactions were conducted in order to document the upper layers. Preliminary results will be presented concerning the marked interannual variability in the thermocline, current structures and surface layers that was observed between 2005 and 2006. Cooling in the Gulf of Guinea and development of cross-basin SST gradients in 2006 lagged 2005 both in terms of the extent and degree of cooling, possibly contributing to the delay in monsoon onset. A closer examination of the differences observed will be discussed in terms of relevant air-sea fluxes and variability in mixed layer dynamics. A perspective for needed further diagnostics in the oceanic upper layers will also be discussed.