



## **Evaluation of sea surface flux fields from nwp models**

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For forcing oceanic models in the Gulf of Guinea, sea surface heat and salt budgets from different numerical weather prediction models and other fields (i.e. including satellite field products) are systematically compared. Both the ECMWF, NCEP and the French operational ARPEGE models are evaluated. The period (May/June/July 2006) concerns the placement of the cold tongue. Three distinct regions are specially considered: North of the Equator, from the Equator to  $6^{\circ}\text{S}$  and South of  $6^{\circ}\text{S}$ . Analyzes suggest that sea surface fluxes play different roles in each of these areas, depending on which physical process dominates. Differences and errors affecting these fields are evaluated and discussed through comparison with ship (from the R/V ATALANTE) or buoy data collected during the AMMA/EGEE3 experiment. Results indicate very different surface heat and salt budgets, with strong uncertainties and non-systematic biases, especially between the Equator and the African continent where atmospheric convection prevails. In this region, discrepancies between models are thought to be mainly due to differences in cloud cover, humidity, winds and aerosols.