

Tropical air-sea interaction in the Navy Coupled Data Assimilation/Modeling System

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Abstract: The Navy Global Coupled Modeling System consists of atmospheric and oceanic circulation forecast models, combined with data assimilation procedures that produce nowcasts of the atmosphere and ocean state on daily basis. This system is used to study the air-sea interaction in tropical convective systems. The effects of surface heat, momentum and fresh water fluxes on the ocean temperature and salinity are examined. The influence of SST feedback on development and predictability of modeled convection, on the time scales ranging from daily to intraseasonal, is evaluated