

## **Aircraft Measurements of Air-Sea Interaction during DYNAMO in Active and Suppressed Phases of the MJO**

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Measurement and mapping of air-sea fluxes of latent heat, sensible heat and momentum were among the primary objectives of the aircraft measurements component of the Madden-Julian Oscillation (DYNAMO) field experiment that was carried out from Nov 11 to Dec 13, 2011. To this end, the NOAA WP-3D N43RF aircraft was equipped with fast-response temperature, humidity, pressure, and wind instrumentation for turbulence measurements and a nadir scanning lidar for wave field mapping. Eddy correlation fluxes were obtained by calculation of covariances of the vertical wind component with the appropriate variables: humidity, potential temperature and horizontal wind components. In this presentation we will give a brief description of the measurements techniques and calibration procedures that were used. The discussion of the results from our analysis will focus on the comparison of air-sea fluxes results obtained during the suppressed phase versus those obtained during the active phase of the MJO which were both captured during the deployment. Results of ocean surface waves obtained for a new airborne scanning lidar will also be presented.