



## **Measurements of humidity flux in Hurricanes Fabian and Isabel**

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In order for present dynamical models to produce realistic hurricanes, they require constraints on the momentum and latent heat fluxes at high winds. As these constraints require a fundamental change in the fluxes from their known behaviour at lower winds ( $\ll 20\text{m/s}$ ), the measurement of these fluxes is a primary goal of the CBLAST-hurricane program. For the past 30 years, NOAA-AOC Orion WD-P3 aircraft have played a key role in hurricane research. As part of CBLAST, the turbulent gust probe system installed in the P3 nose as part of TOGA-COARE (1990) was operated, in addition to the NOAA/FRD BAT probe system, to obtain turbulent momentum flux. A fast response humidity package, incorporating a LICOR-7500, was added to obtain latent heat flux. Here we present these measurements of latent heat flux in hurricanes from the 2003 field season.