

Abstract Submitted
for the 4CF12 Meeting of
The American Physical Society

The Moist Entropy Change in Tropical Cyclones ANA JURACIC,
New Mexico Institute of Mining and Technology — Important part of moist entropy budget is the advection of moist entropy in or out of the system, due to interaction of wind and moist entropy fields. The dropwindsonde data from several tropical storms is used to calculate both of those fields, as well as the resulting flow. In order to determine if the storm is exporting or importing moist entropy, the advection is horizontally averaged and vertically integrated. The storms of interest were Alex, Karl, Gaston and Fanapi from 2010. First three occurred in Atlantic basin while Fanapi evolved over Pacific basin. Gaston is the only one that was not developing during dropsonde missions, so it can be used as some kind of indicator of non-developing features in the entropy flux. The data show that during the development of the storm, the values of the moist entropy export are lower than for non-developing systems.

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Date submitted: 20 Sep 2012

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