

A Comparison of the Inland Impacts of Tropical Storm Fay (2008) and Hurricane Dora (1964)

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Abstract. Both Tropical Storm Fay and Hurricane Dora generated extreme inland rainfalls with similar tracks across northern Florida. Some of the similarities between the two systems were: moist maritime tropical air mass; landfalls along the Florida Northeast coast of Florida followed by an inland recurvature over the southeast United States; extremely slow movement over land; asymmetric pattern of rainfalls; extreme rainfalls in the Florida Big Bend and Suwannee River Basin; role of moisture flows from the Atlantic Ocean and Gulf of Mexico in the heavy rainfall production; widespread flooding; and an area of low rainfall in north central Florida near the storm centers. Some of the differences between the two systems were: Originating track across the Atlantic, phase of the El Niño/Southern Oscillation, wind strength, wind damage, storm surge and coastal flooding, greater number of flood-related deaths due to Fay; and absence of reported tornadoes during Dora.

This presentation will also address some of the forecasting challenges associated with Tropical Storm Fay and how similarities with Hurricane Dora aided the warning decision processes at the Weather Forecast Office in Tallahassee, Florida. Lessons learned will also be discussed.