

## Global Hawk Data Successfully Assimilated into HWRF for TS Erika

The NASA Global Hawk landed Thursday morning, 06:43 AM ET August 27, at NASA's Wallops Flight Facility, Wallops Island, Virginia, after flying the first operational NOAA Sensing Hazards with Operational Unmanned Technology (SHOUT) mission over and around Tropical Storm Erika. The mission builds on earlier collaborative research led by NASA and moved the Global Hawk one step closer to being put into routine operational use as a meteorological observation tool. The mission included successful dropsonde deployments from the Advanced Vertical Atmospheric Profiling System (AVAPS), which has been used previously for hurricane research.

NOAA's Hurricane Weather Research and Forecasting (HWRF) Numerical Weather Prediction (NWP) modeling team reached another milestone today with the assimilation of the AVAPS dropsonde data in real-time from Global Hawk for Tropical Storm Erika. The National Weather Service (NWS) was able to successfully assimilate dropsonde data from SHOUT aircraft into the 18Z operational model run of the HWRF model from 26 August (see attached model output). This "First Time" event provided real-time information to the hurricane forecasters and continues to build on previous research events.

The SHOUT mission was closely coordinated with NOAA's ongoing hurricane field program, which also provided dropsonde, flight level and tail Doppler radar data from the NOAA P-3 and G-IV aircraft for assimilation into the HWRF model. All aircraft will continue to observe, measure, and transmit data about Tropical Storm Erika in an effort to improve forecast guidance as the storm moves closer to the US mainland.

SHOUT is funded in part by the Disaster Relief Appropriations Act of 2013, passed by Congress in the wake of the devastating Hurricane Sandy. For more information on SHOUT go to: http://uas.noaa.gov/shout/.

The latest forecast can be found at: www.emc.ncep.noaa.gov/HWRF

Is this is an issue of potential concern?

This item has high visibility

Geographic Location (Relevant region, city location) NASA Wallops Flight Facility, Tropic Storm Erika

Partnering offices OAR, UAS Program Office, AOML, ESRL, NWS, OMAO

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