Science Goals Related to Spray Modification of Hurricane Winds and Turbulent Fluxes

Past Work: Dropsonde data →
log-profile analysis → estimate surface
fluxes of momentum, latent heat, and
sensible heat

Goals:

- Improve estimates of surface fluxes
  - Improved roughness lengths
  - Increase size of dataset
- Use Saildrones to determine impacts
  to the spray layer

Lockheed WP-3D NOAA42 "Kermit"
Photo credit: LT K. Doremus 2017

NCAR NRD41 (Left) and RD41 (Right)
Dropsondes [Hock 2020]

Saildrone Explorer 1045
Photo from Saildrone