

## 2019 NOAA/AOML/HRD Hurricane Field Program - IFEX

### SATELLITE VALIDATION EXPERIMENT *Science Goals & Observational Applications*

---

**ADM-Aeolus Satellite Validation Module:** Jason Dunion (Co-PI), Lidia Cucurull (Co-PI), Mike Hardesty (Co-PI, University of Colorado - NOAA/CIRES)

Goal: Coordinate P-3 Orion and G-IV under-flights of the ADM-Aeolus satellite that will provide opportunities to calibrate and validate the satellite-based wind and aerosol observations against the remote sensing and in situ observations that will be collected by the NOAA aircraft [*IFEX Goals 1 and 2*]. See the 2019 HRD HFP web page for additional details:

<http://www.aoml.noaa.gov/hrd/HFP2019/index.html>

Observational Applications: The data collected during this experiment will be useful for validating ADM-Aeolus 3-dimensional wind and aerosol profiles. Remote sensing aircraft data that will be collected includes Doppler Wind Lidar (DWL) wind profiles (P-3 Orion), Tail Doppler Radar (TDR) wind profiles (P-3 Orion and G-IV), and DWL aerosol profiles (P-3 Orion). In situ data observations will include GPS dropsondes deployed from both the P-3 Orion and G-IV. The aircraft data will also be valuable for evaluating numerical model performance in environments such as TCs and the Saharan Air Layer.