

Flight Scientist Report
Friday 01/29/2021 ACTIVATE RF42

Flight Type: Part Instrument Check Flight (ICF) and Part Science Flight

Flight Route: KLF1 KECG OXANA HECOO DOUGS KECG KLF1

Special Notes: The UC-12 focused primarily on checking the health of the HSRL-2, and it was determined in flight that it was working good. It was decided after the flight that there was sufficient good science done to call this an actual science flight with data to be archived.

King Air

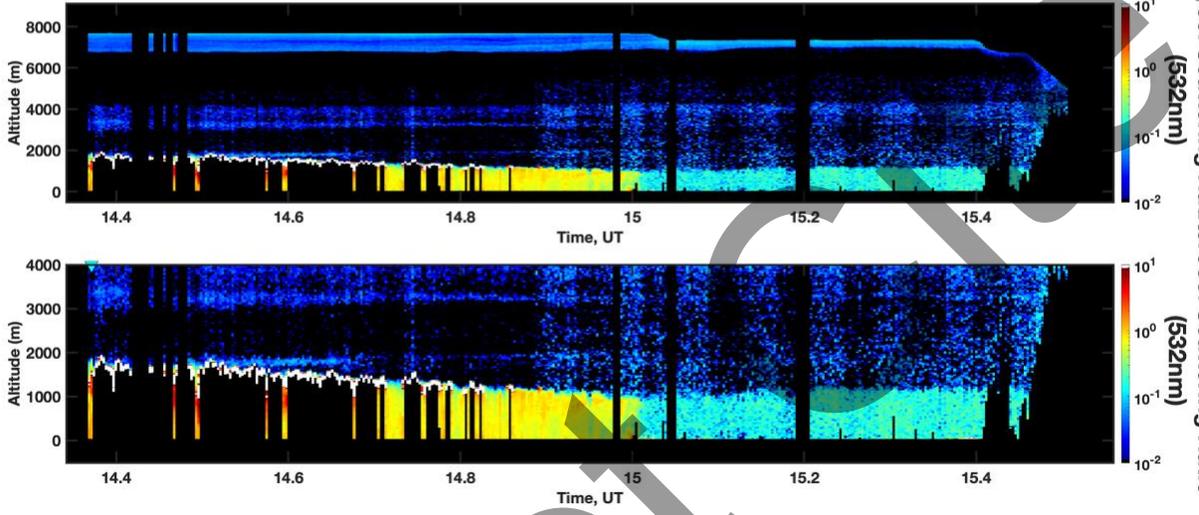
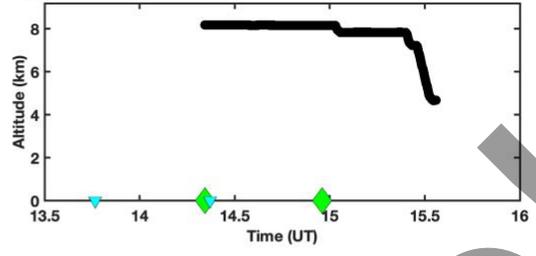
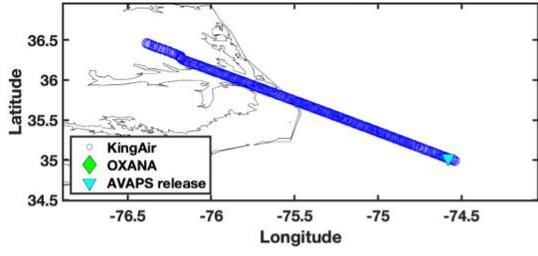
Pilot report from Luke Delaney:

First science flight for the UC-12 in support of ACTIVATE Campaign #3. This event also served as a continued instrument calibration flight to validate the system functionality. It was conducted solo (independent of the HU-25), although the same geographic region was covered during both sorties. The weather was clear with a broken/overcast layer at approximately 4000 ft, and a predominant wind from the northwest at 130 knots. Data was collected at 27000 ft MSL for most of the flight, and a descent to 26000 ft MSL was conducted at the end of collection effort to verify some instrument parameters. Two dropsondes were deployed, one near OXANA and the other midway down track (OXANA - ECG). All objectives were achieved and no system discrepancies were noted, pending post-flight data analysis.

Falcon

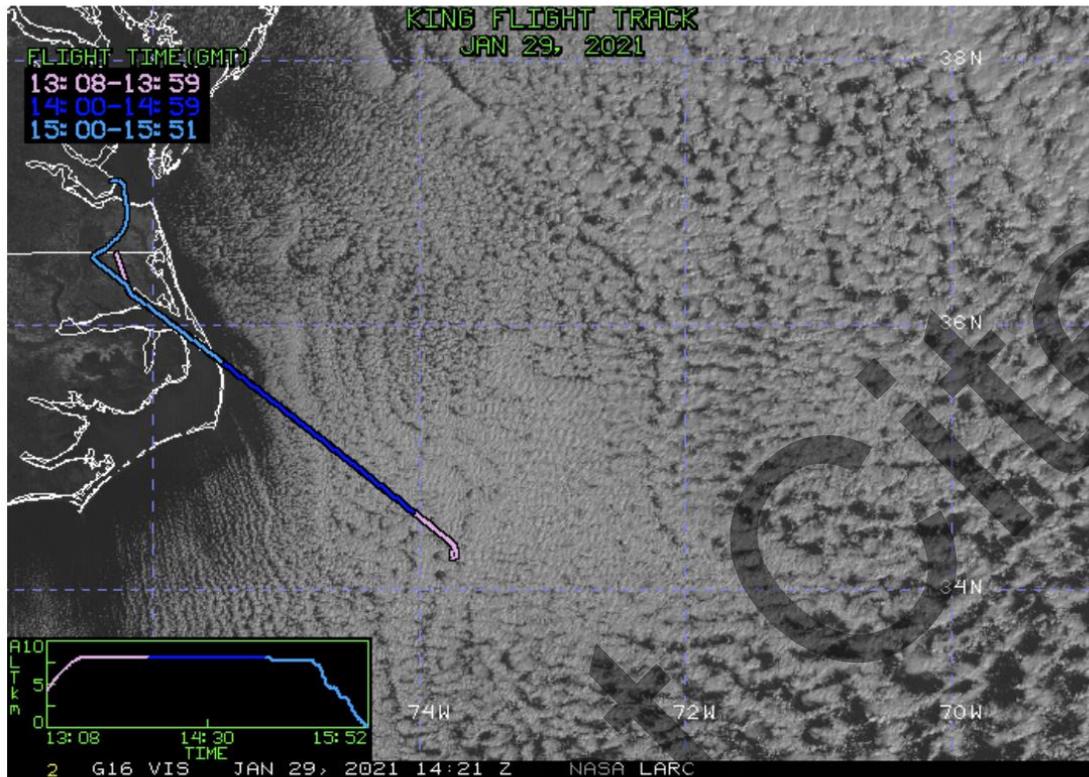
No flight due to pilot staffing issues.

20210129 - ACTIVATE - KingAir flight track

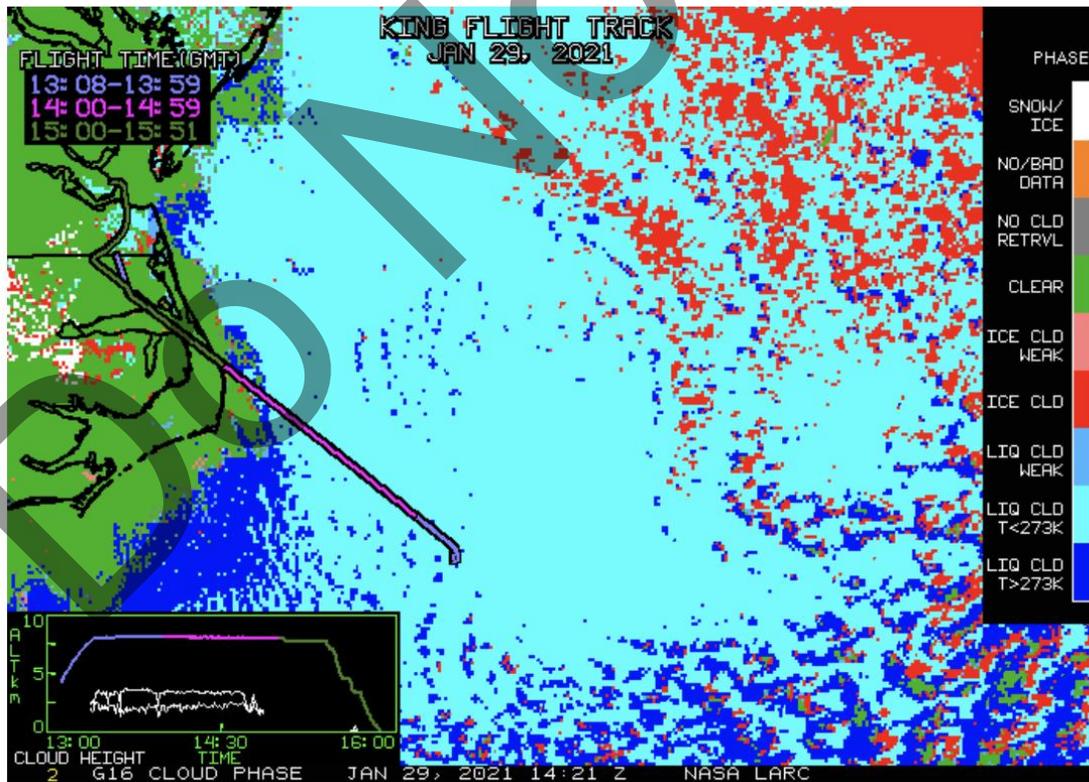


DO NOT

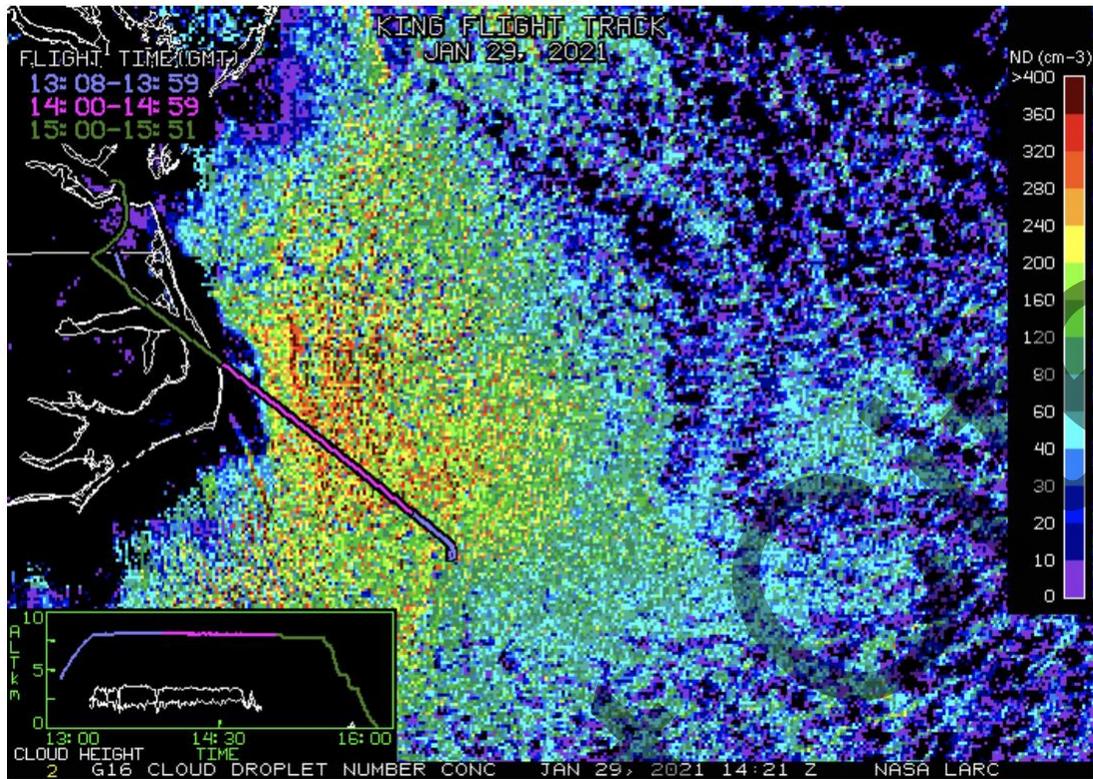
NASA-LaRC Clouds Group GOES-16 Quicklook Images for Flight 42, 14:21 UTC Jan 29, 2021
Visible Image



Cloud Phase



Cloud Droplet Number Concentration (cm⁻³)



Cloud-Top Height (Kft-ASL)

