

Flight Scientist Report  
Monday 05/16/2022 ACTIVATE RF153

Flight Type: Statistical Survey Flight  
Flight Route: KLF1 ATLC ZIBUT DARUX ZIBUT ATLC KLF1  
Special Notes:

**King Air**

Pilot report (Coldsnow):

Mission flown as briefed (KLF1 ATLC ZIBUT DARUX ZIBUT ATLC KLF1). Winds were W/SW at 20-35 knots. Four dropsonds were released and all were nominal (ZIBUT, DARUX, midpoint between ZIBUT and DARUX and at ATLC). Timing was within 10 minutes of Falcon the entire day.

Flight scientist report (Harper):

UC12 Takeoff: 12:21:33utc

Aircraft sync: less than 1min out to DARUX.  
Within 2min for return leg toward the coast.

Cloud conditions: no cirrus above throughout flight.

Sonde 1: 13:17:10utc at ZIBUT.

Sonde 2: 13:55:47utc at DARUX

Sonde 3: 14:21:39utc at midpoint between ZIBUT and DARUX

Sonde 4: 15:19:37utc at ATLC.

Instrument status: no instrument issues.

**Falcon**

Pilot report (Slover):

ACTIVATE statistical survey flight. About half cloudy module and half clear module. Flown from KLF1 ATLC ZIBUT DARUX ZIBUT ATLC KLF1 as planned. Clouds were mostly below 4000' MSL and bottomed out about 900' MSL. Some convective activity off the track nearby.

Flight scientist report ():

Winstead:

12:24:44 Takeoff

15:37:17 Landing

Notes:

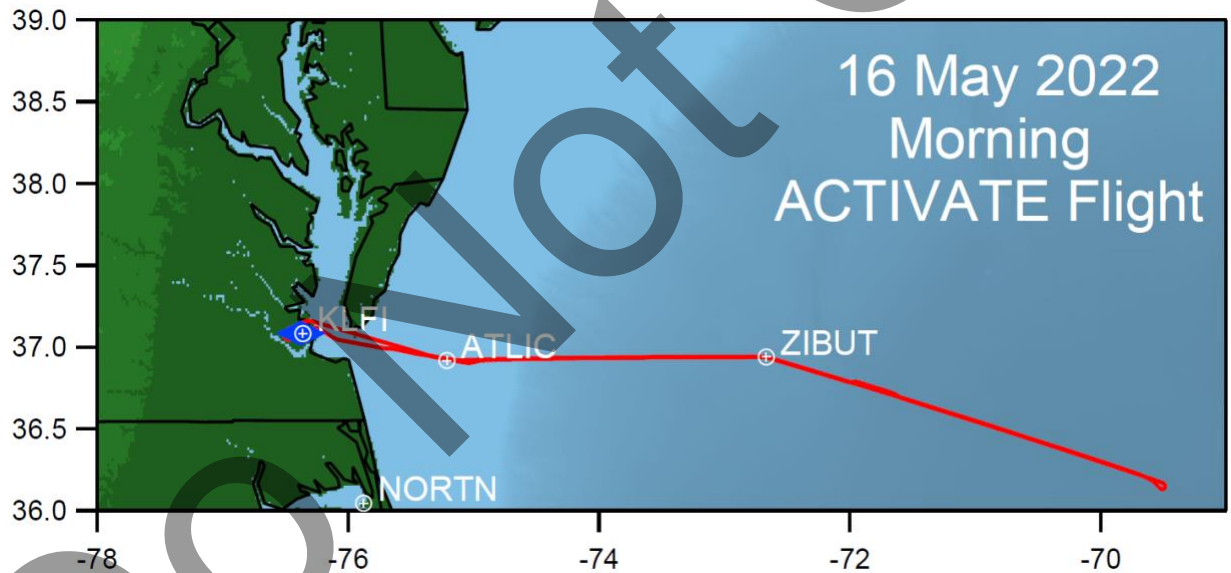
Morning:

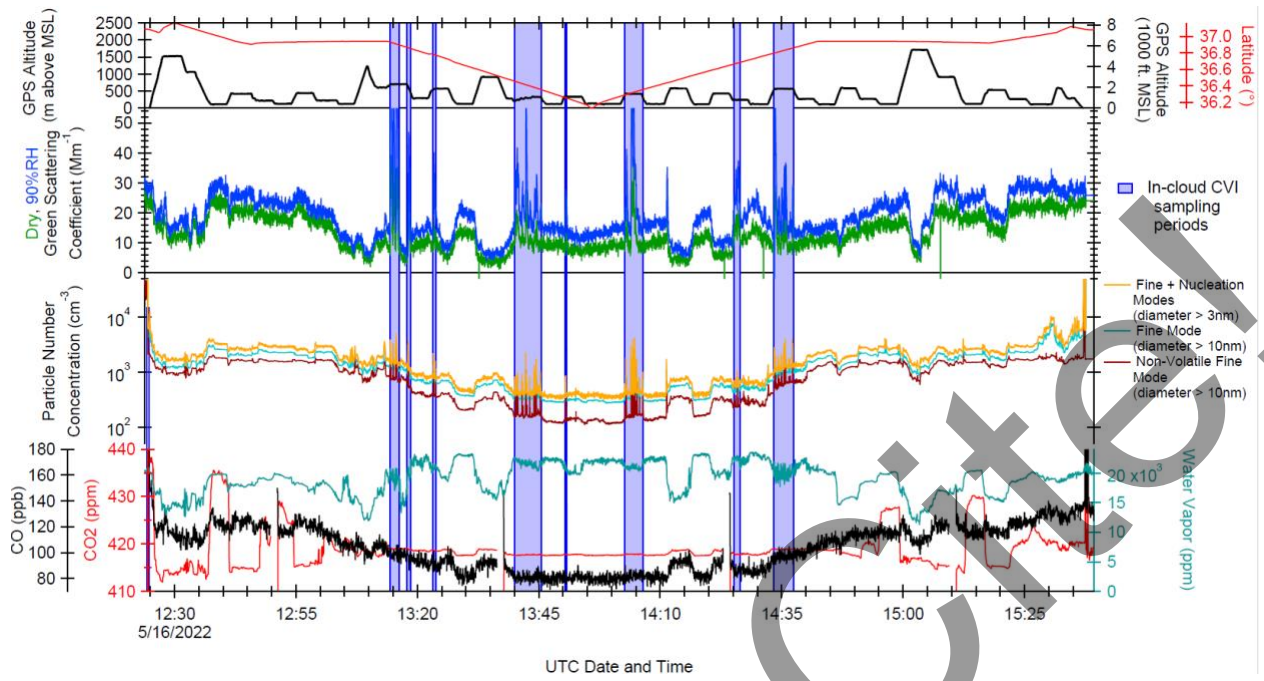
During taxi, wet neph RH > 100%

12:27:20 Wet neph RH <100%; Still adjusting TH

Scattering 25 to 30 on way out, but decreasing as we proceeded further east.

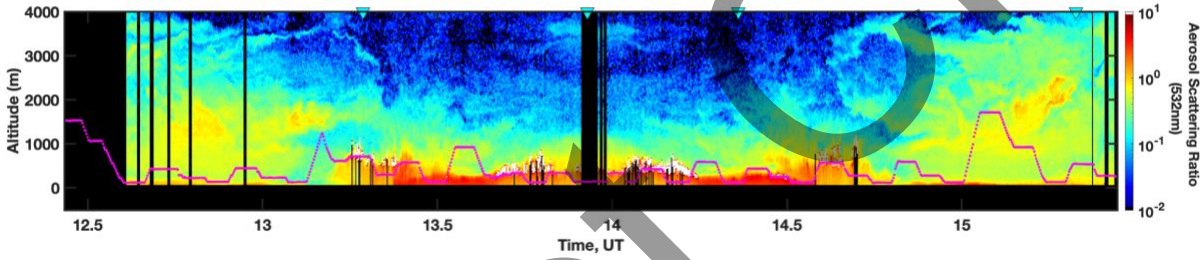
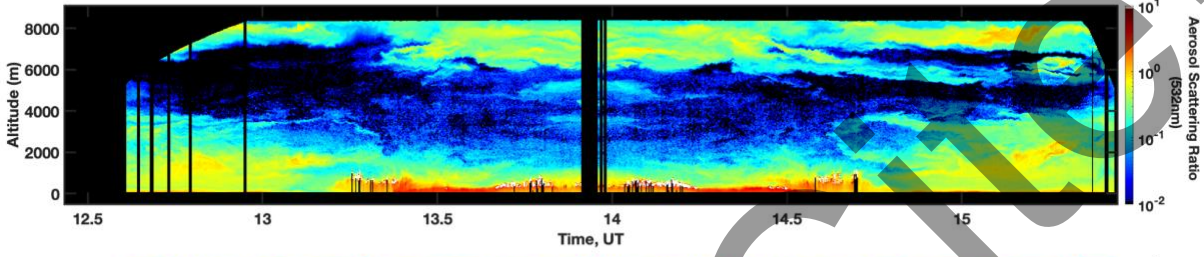
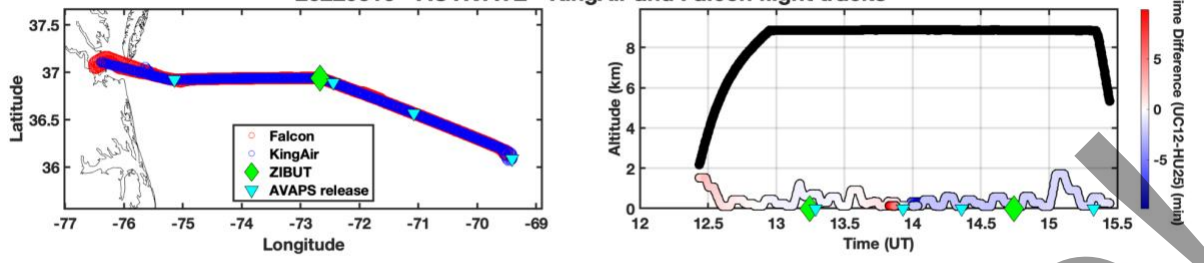
15:31:39 WCM & Humidifier off in preparation for landing





Do Not

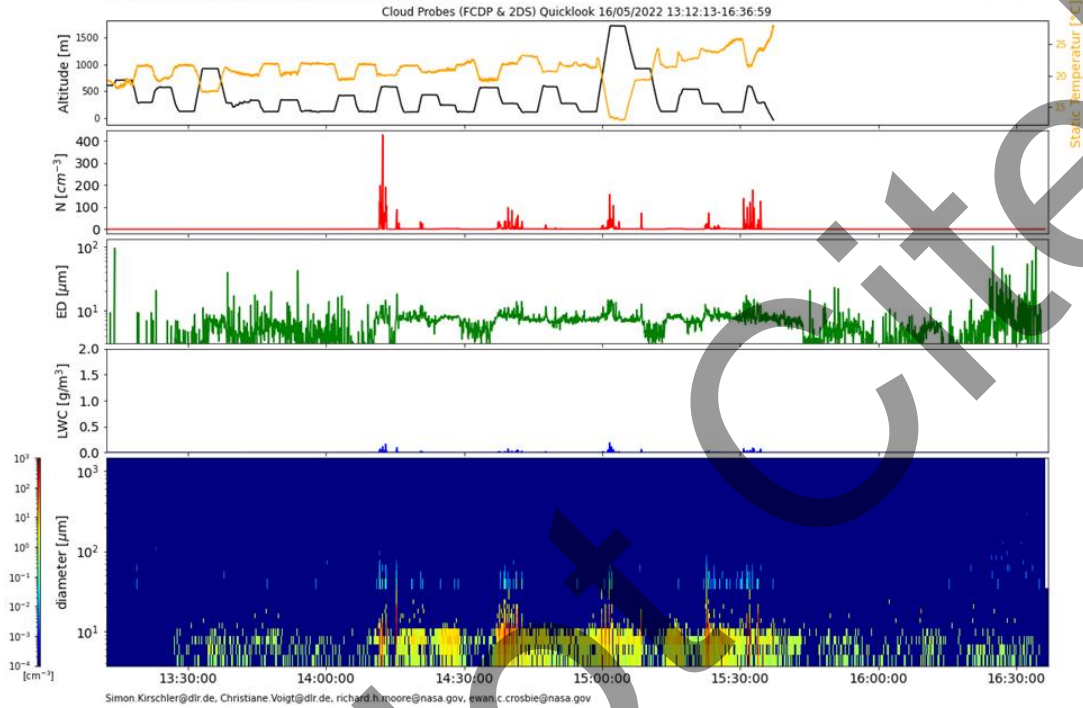
### 20220516 - ACTIVATE - KingAir and Falcon flight tracks



# Quicklook ACTIVATE Cloud Probes (FCDP & 2DS) Quicklook

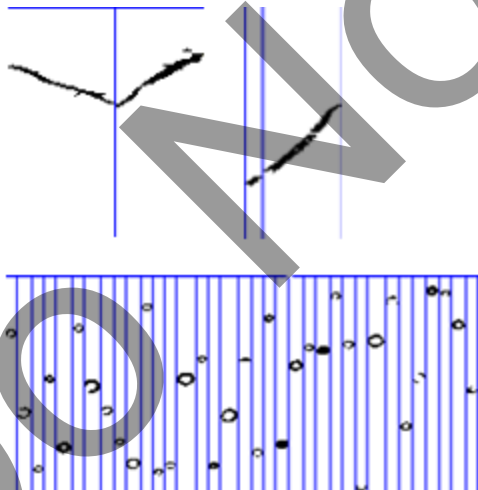
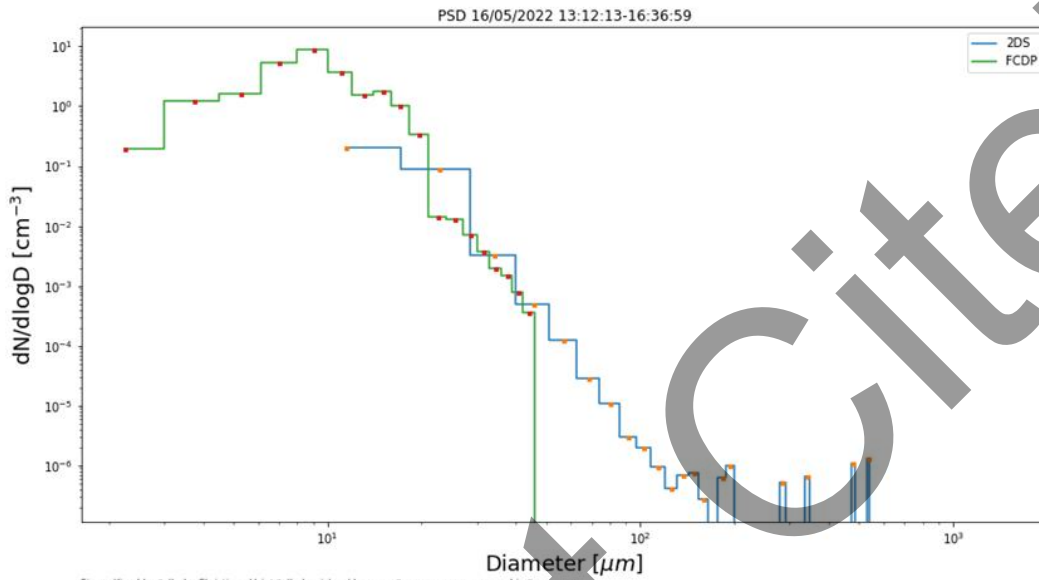
preliminary data, only for quicklook use

Simon Kirschler, Christiane Voigt, Richard Moore, Ewan Crosbie



# PSD ACTIVATE

preliminary data, only for quicklook use  
Simon Kirschler, Christiane Voigt, Richard Moore, Ewan Crosbie

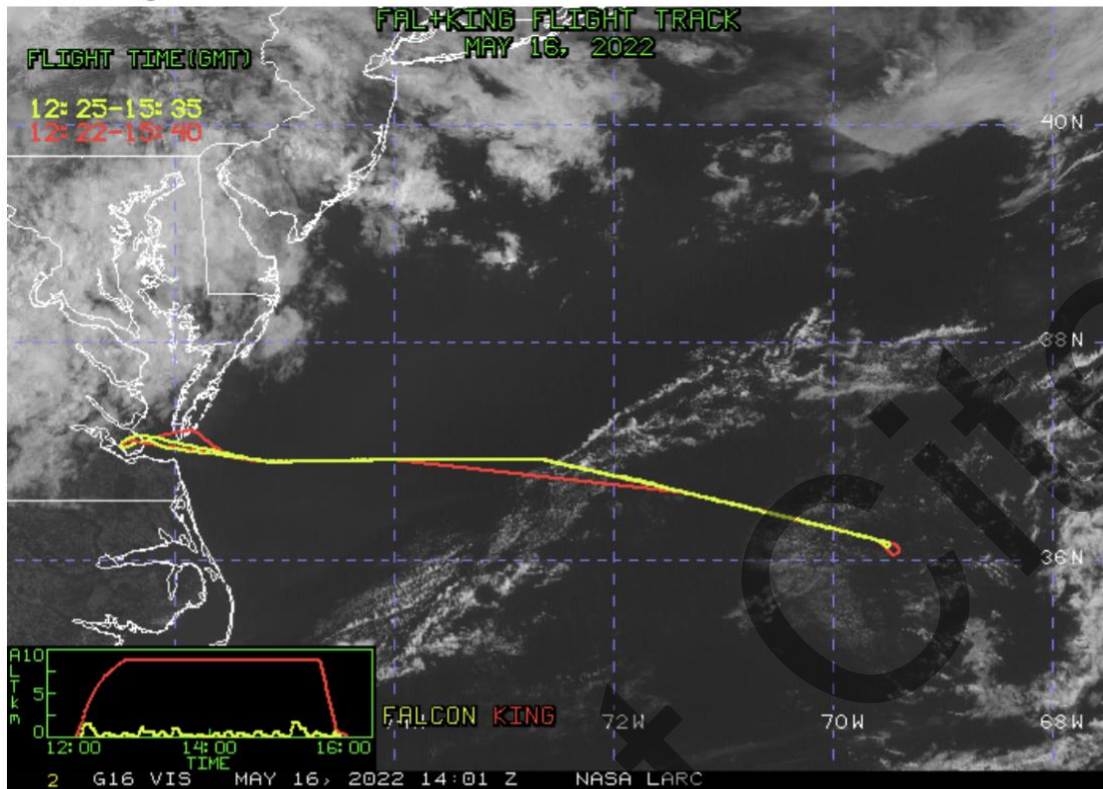


Only pure liquid shallow clouds and large Bioaerosol.

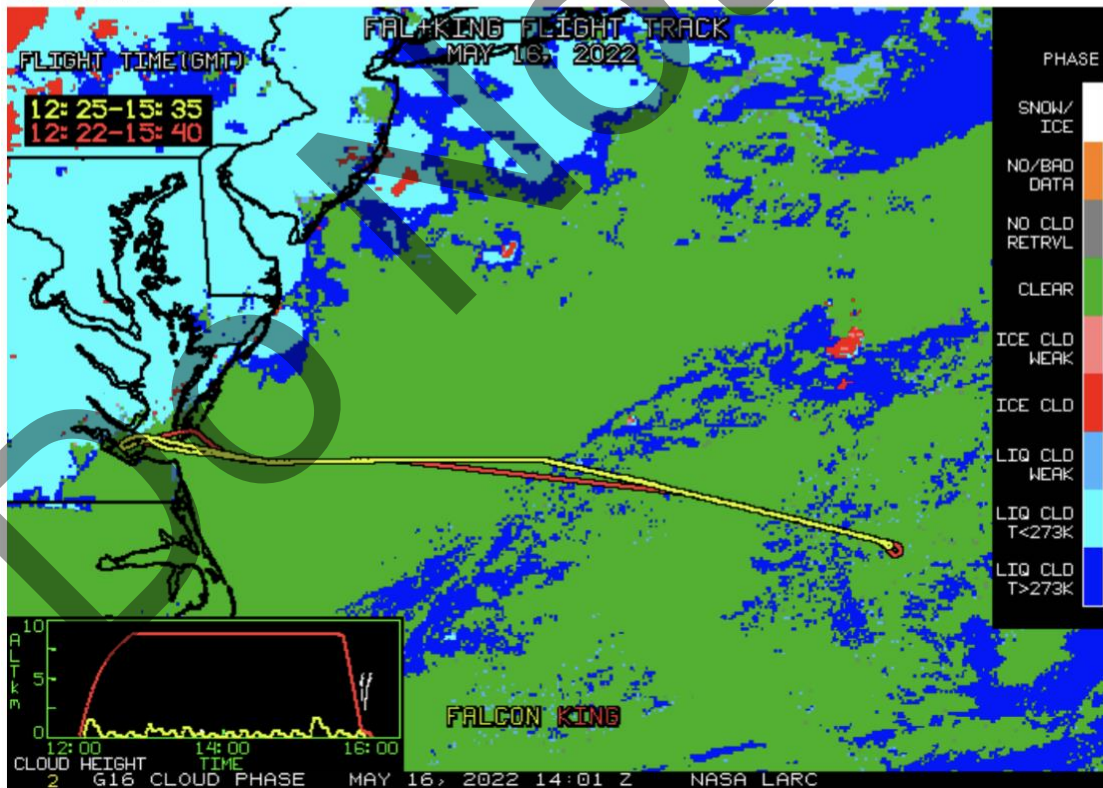
NASA-LaRC Clouds Group GOES-16 Quicklook Images for Flight 153, 14:01 UTC May 16, 2022

Do Not Cite!

Visible Image

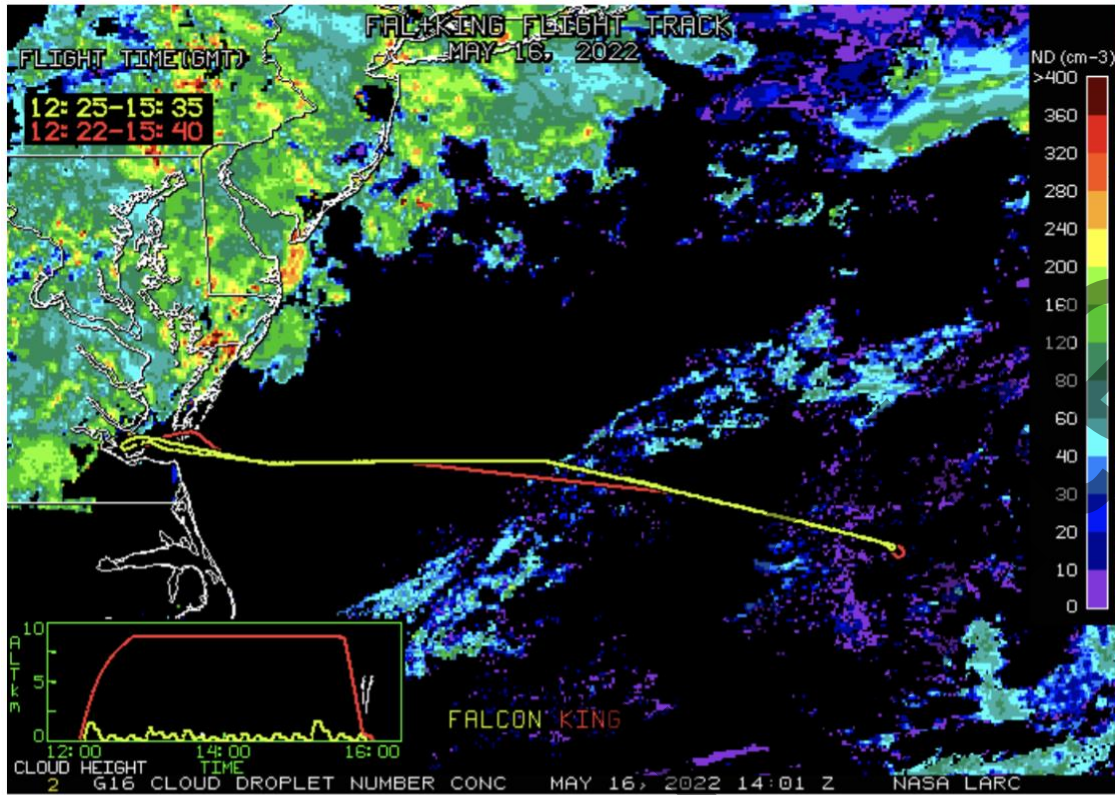


Cloud Phase





Cloud Droplet Number Concentration (cm<sup>-3</sup>)



Cloud-Top Height (Kft-ASL)

