

Flight Scientist Report
Monday 01/24/2022 ACTIVATE RF110

Flight Type: Statistical Survey Flight
Flight Route: KLF1 ECG OXANA 3230N07530W OXANA ECG KLF1
Special Notes: Second of two flights on this day.

King Air

Pilot report (Sandeen): (note this report applies to both flights this day)
Morning and afternoon cooperative flights with HU-25. Morning route of flight: KLF1 ECG OXANA 3221N/07214W OXANA ECG KLF1. Afternoon Route of Flight: KLF1 ECG OXANA 3230N/7530W. Weather clear with winds calm (around 6 knots or less) for 08 runway operations. B200 took off second during first flight (delayed slightly due to temporary tower operations) and took off first during second flight. Uneventful climb to FL280, except that in first flight was held at FL270 until passing outer banks. Positioning with HU-25 was maintained within 10 minutes through duration of science collection until approx. Very clear air at altitude, with a single cirrus section for about 30 seconds encountered during return of second flight. 4x dropsondes each flight. Flight level winds were generally a crosswind component, creating head/tailwind depending on specific heading/route chosen. Maintained FL280 altitude until ECG/Elizabeth City.

Flight scientist report (Seaman):

Summary: The second sortie on 1/24/2022 for the B200. **Statistical survey** joint flight with the HU25 Falcon.

QNC(s): Shane Seaman and Dave Harper.

HSRL-2: nominal operation.

RSP: nominal operation.

Cameras: nominal operation.

Sondes: A total of 4 sondes were dropped.

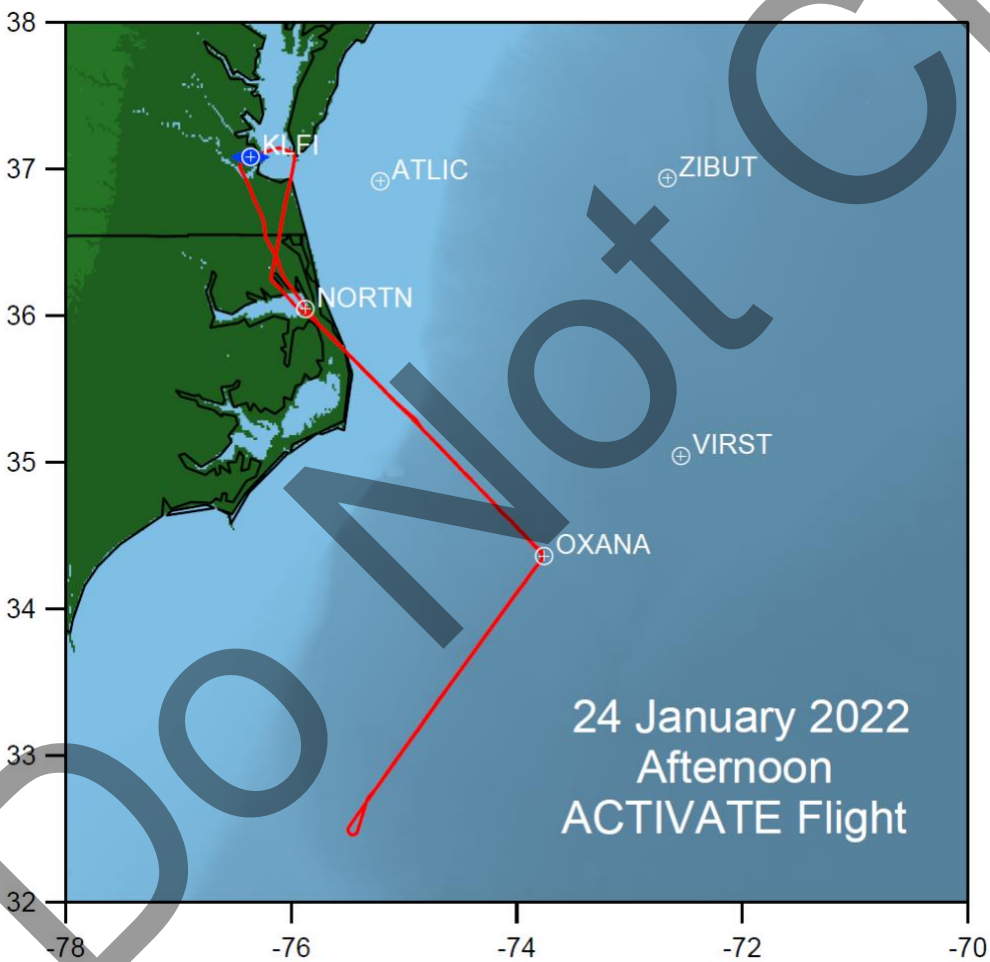
Falcon

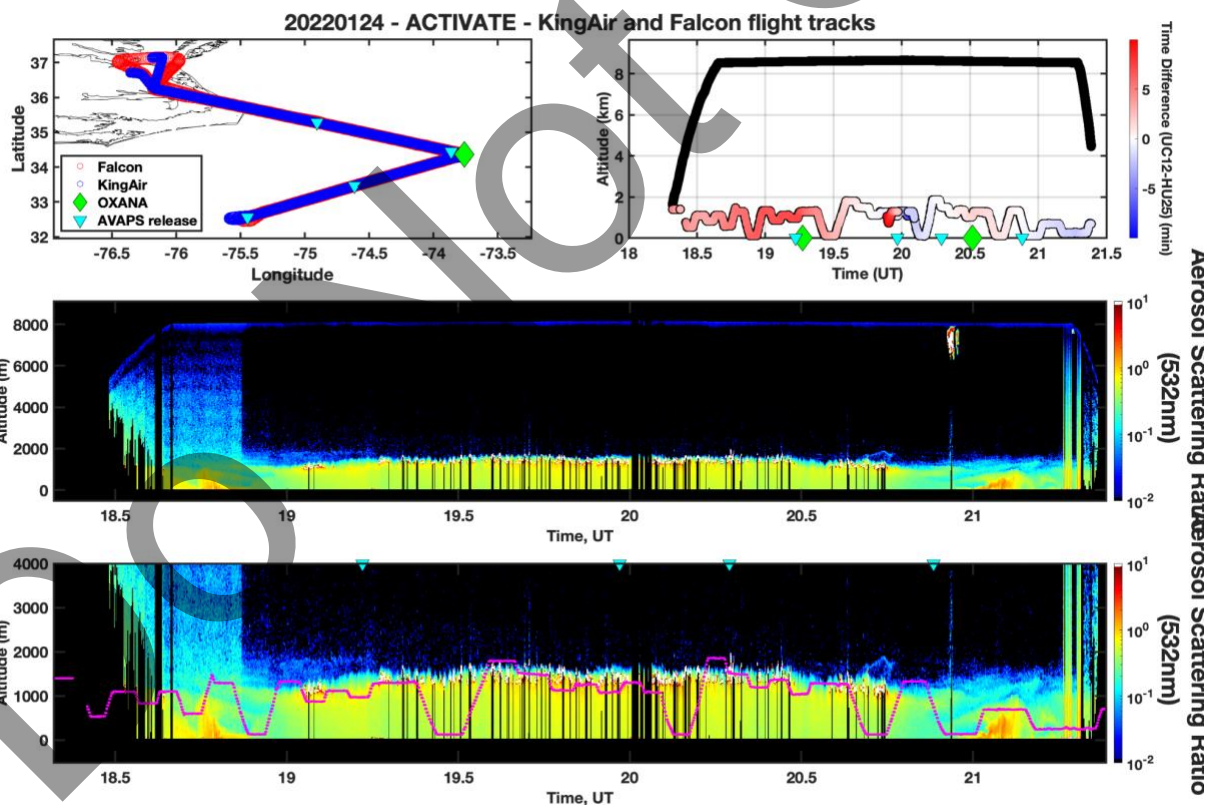
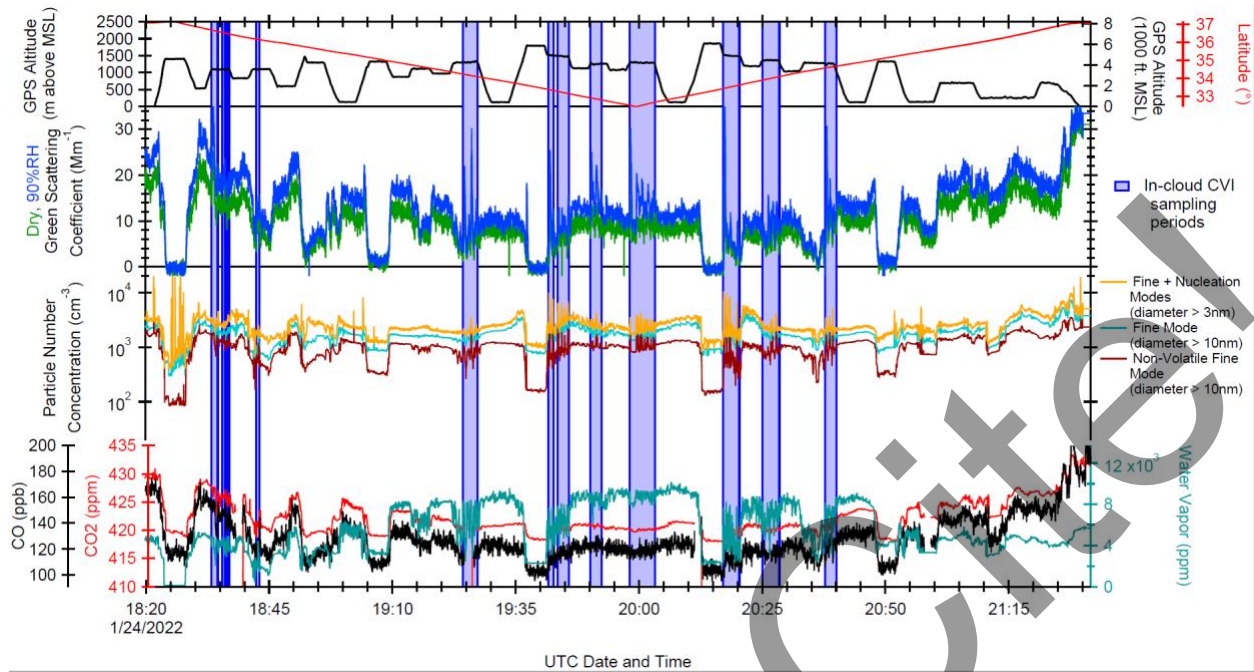
Pilot report (Slover):

Flight executed as planned; KLFI ECG OXANA 3230N07530W OXANA ECG KLFI. Statistical survey flight. Clear much of way to OXANA. Clouds generally from 3-5.5K MSL. No precipitation.

Flight scientist report (Crosbie):

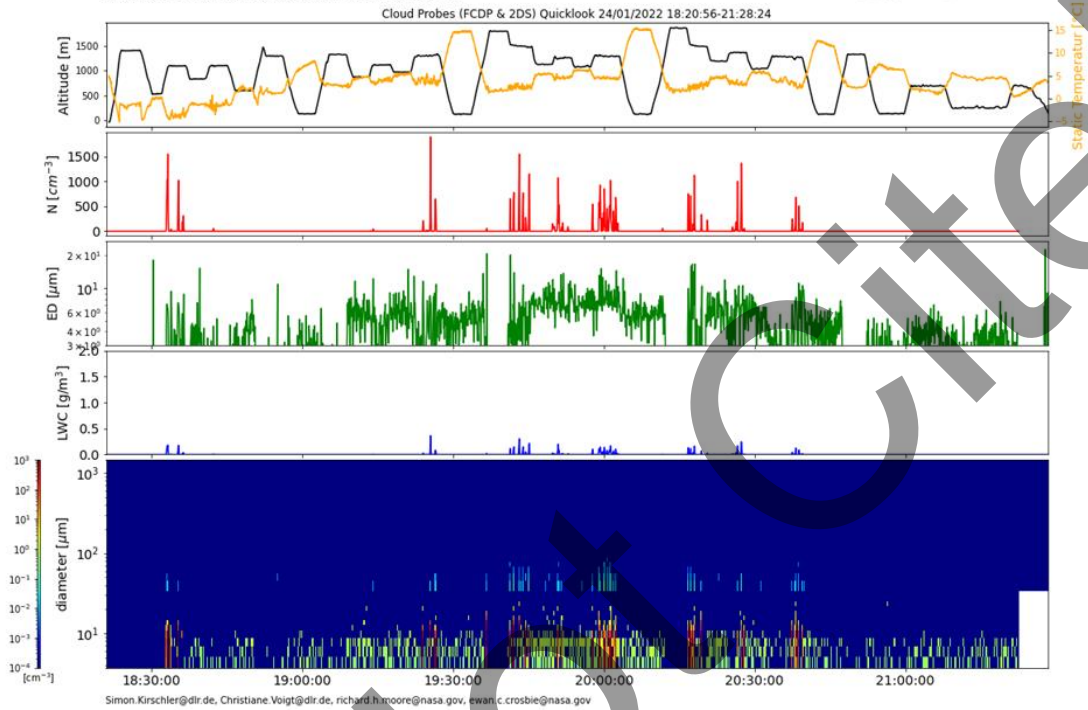
Stat survey OXANA-SSW. Very similar conditions to the morning flight. On the outbound leg over land some cloud sampling was achieved of small cumulus. There was evidence of some ice particles in these small clouds. Also, much of the return low level survey performed was above a surface that still had snow cover from the recent snowfall.





Quicklook ACTIVATE Cloud Probes (FCDP & 2DS) Quicklook

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

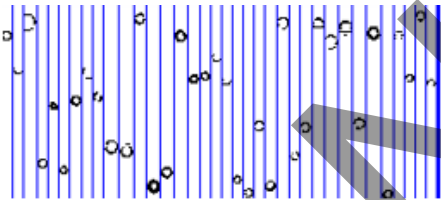
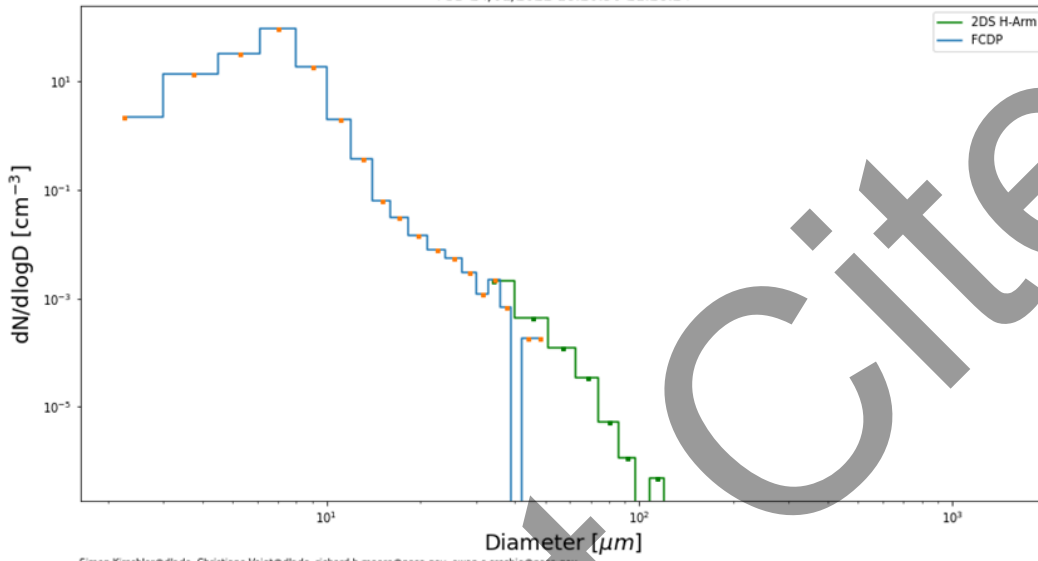


PSD ACTIVATE

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

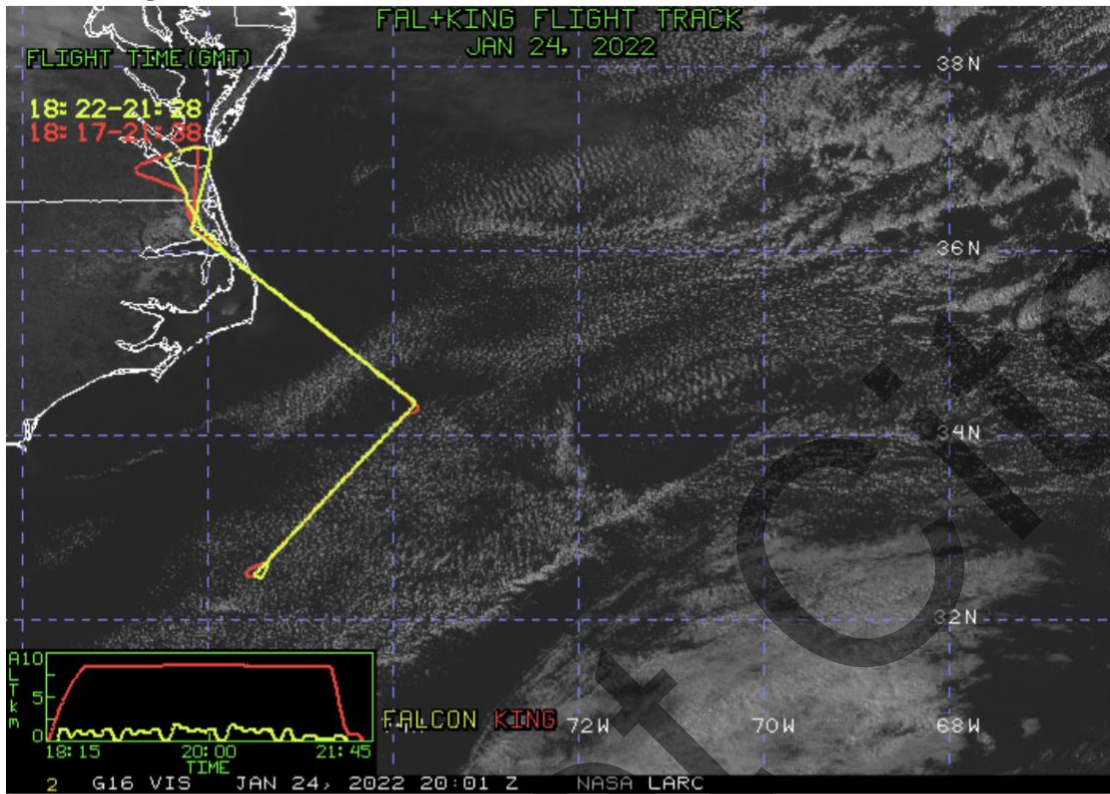


PSD 24/01/2022 18:20:56-21:28:24

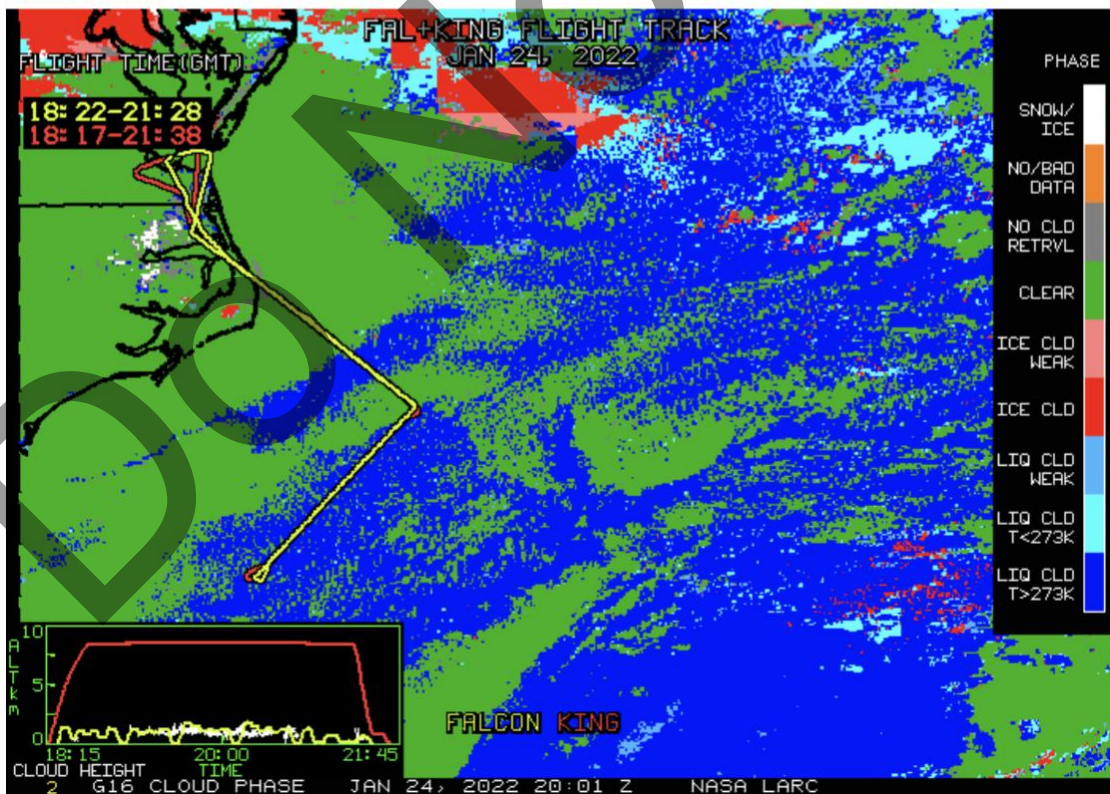


Only Pure liquid clouds with no Precip.

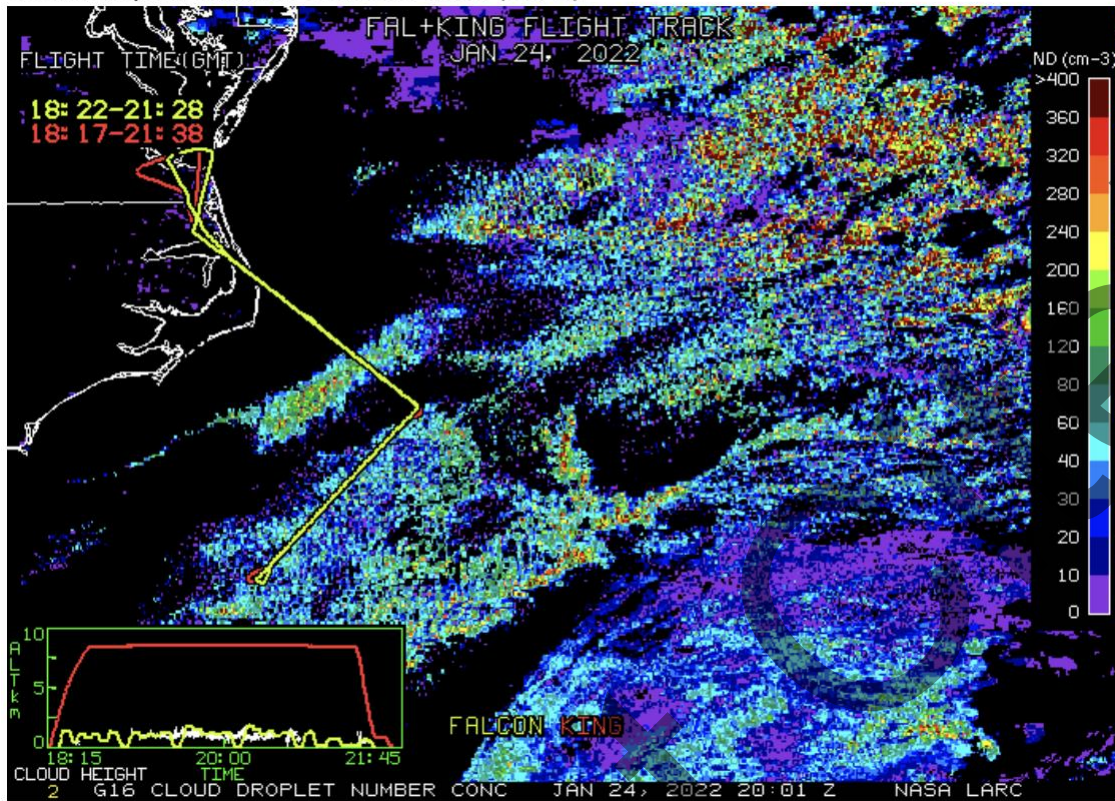
NASA-LaRC Clouds Group GOES-16 Quicklook Images for Flight 110, 20:01 UTC Jan 24, 2022
Visible Image



Cloud Phase



Cloud Droplet Number Concentration (cm-3)



Cloud-Top Height (Kft-ASL)

