

Flight Scientist Report  
Wednesday 02/16/2022 ACTIVATE RF122

Flight Type: Statistical Survey Flight  
Flight Route: LFI ECG OXANA 32N / 07330W OXANA ECG LFI  
Special Notes: First of 2 flights today.

**King Air**

Pilot report (Coldsnow): Flight flown as briefed (LFI ECG OXANA 32N / 07330W OXANA ECG LFI) at FL280. Timing was within 5 minutes of the FALCON all day. Three dropsondes were released (OXANA, 32N / 07330W, TOMMZ). All were nominal. No issues with cirrus clouds. Winds were generally out of the west/southwest at 20-50 knots.

Flight scientist report (Seaman):

Takeoff time: 13:25:05 UTC

Landing time: 16:50:49 UTC

All instruments operated nominally.

Dropped 3 sondes on track:

1. OXANA
2. TURN
3. Coast

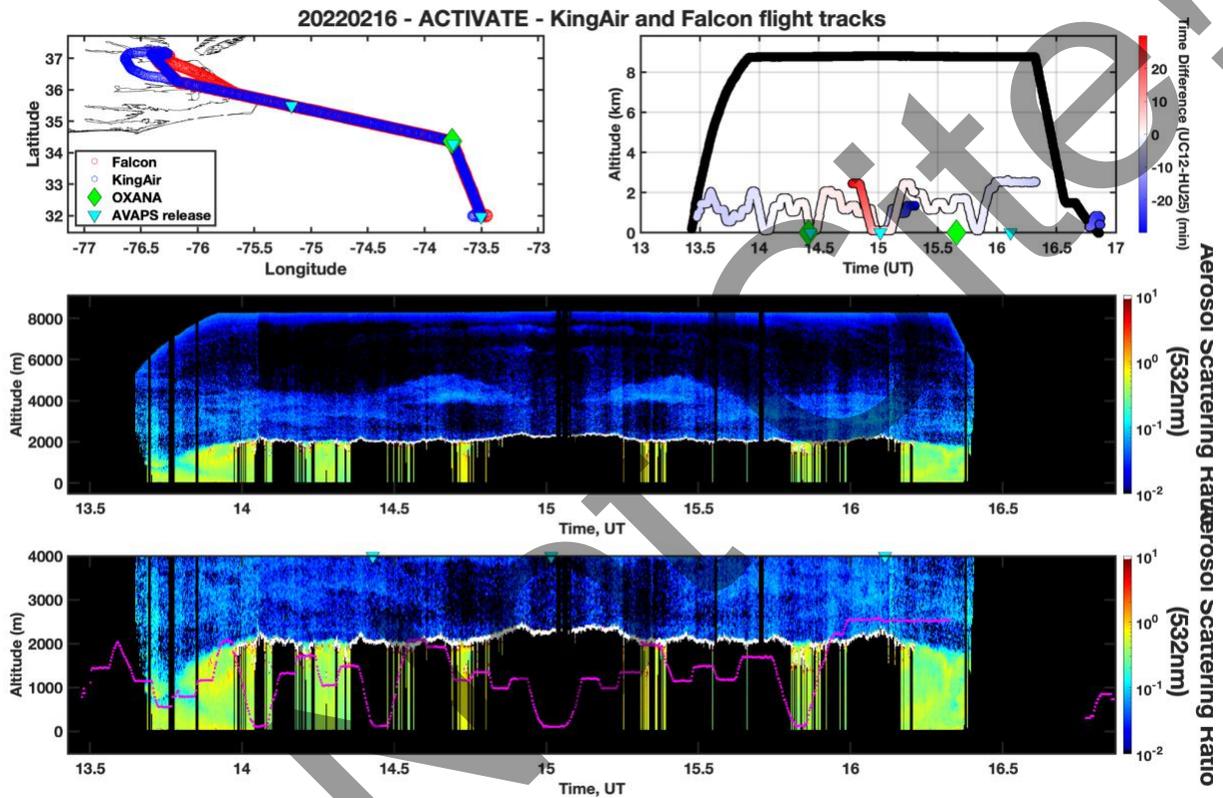
**Falcon**

Pilot report ():

Flight scientist report (Crosbie):

Stat survey OXANA-South. Cloudy conditions began shortly after passing over OBX. The clouds had the appearance of an overcast near the inversion with cumulus feeding from below. The cloud bases were quite ragged and the degree to which the coupling Cu extended into the overlying stratiform seemed to

vary quite significantly. In some places, the Cu were not connected to the overlying thin stratiform. The aerosol was mostly SO<sub>4</sub>, with relatively constant 2-3 ug/m<sup>3</sup> concentration. On the return leg shortly before reaching the OBX, had to climb to altitude after a mechanical issue with the aircraft and return directly.



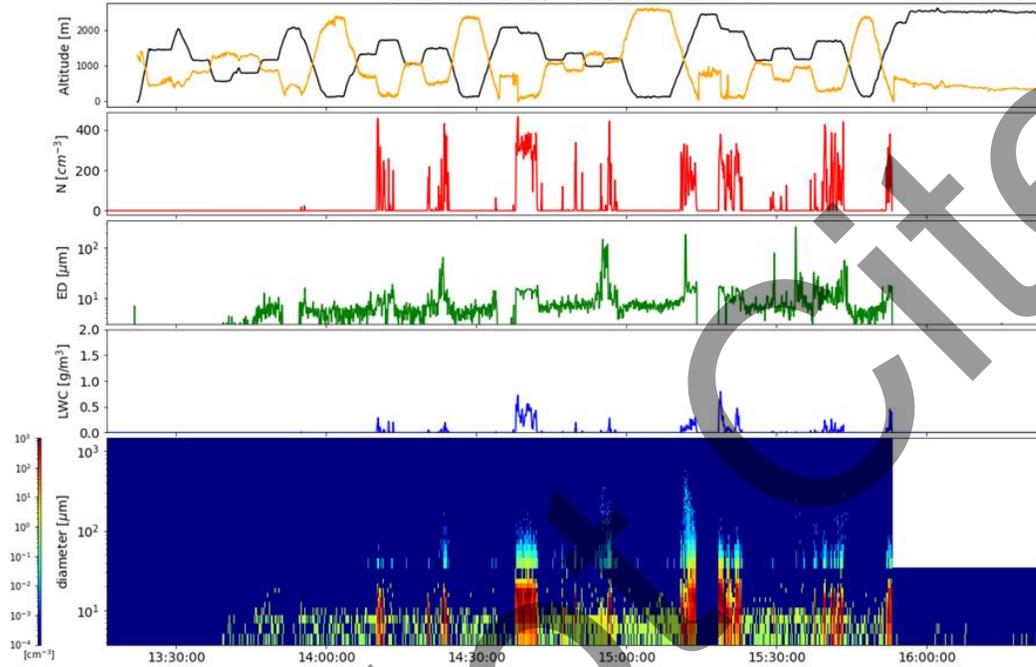
# Quicklook ACTIVATE Cloud Probes (FCDP & 2DS) Quicklook

preliminary data, only for quicklook use

Simon Kirschler, Christiane Voigt, Richard Moore, Ewan Crosbie



Cloud Probes (FCDP & 2DS) Quicklook 16/02/2022 13:16:03-16:23:27



Simon.Kirschler@dlr.de, Christiane.Voigt@dlr.de, richard.h.moore@nasa.gov, ewan.c.crosbie@nasa.gov

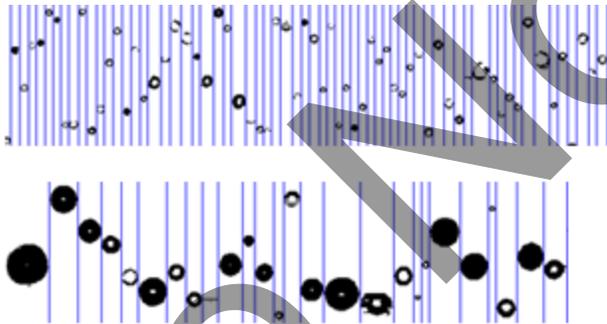
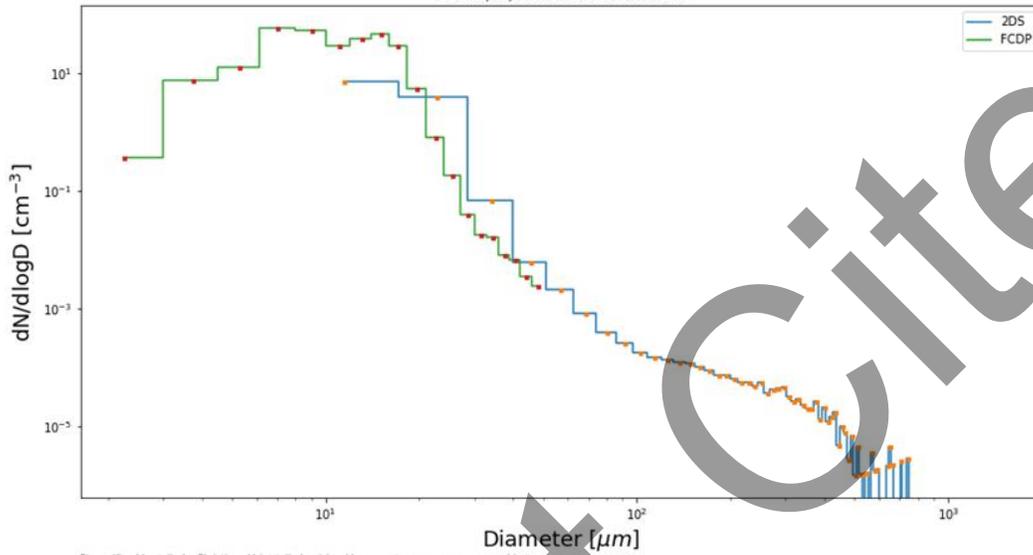
Do Not Cite!

# PSD ACTIVATE

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



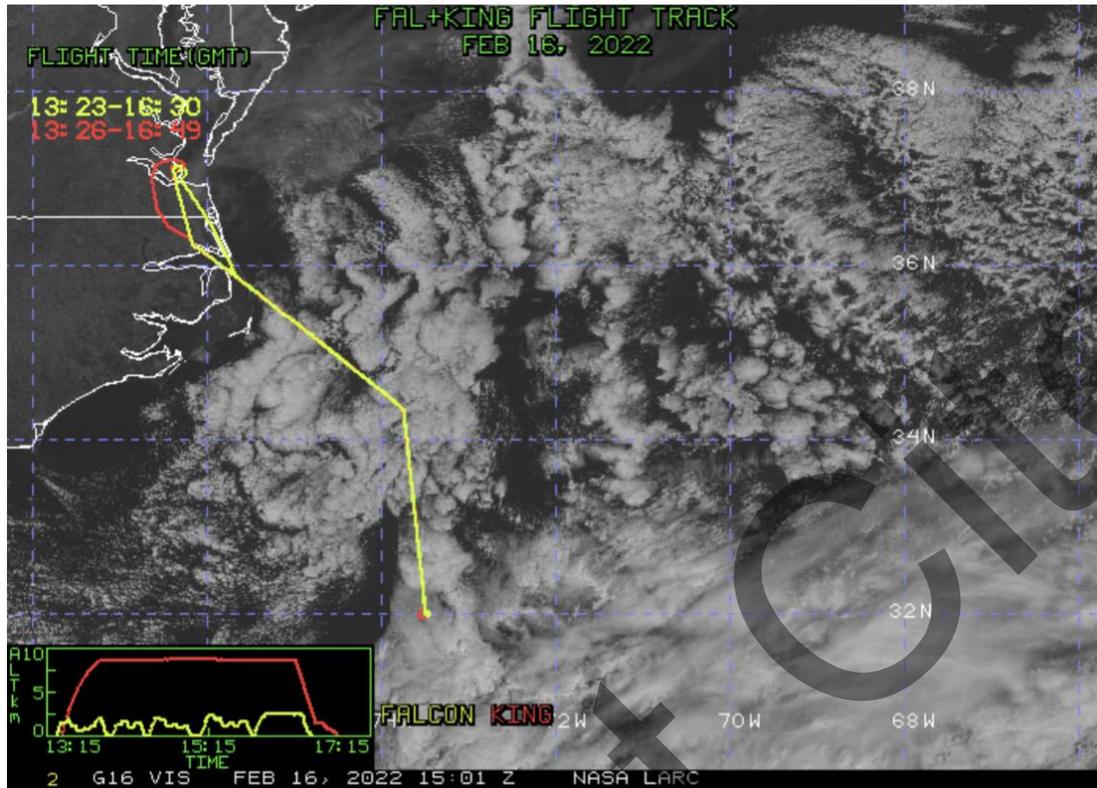
PSD 16/02/2022 13:16:03-16:23:27



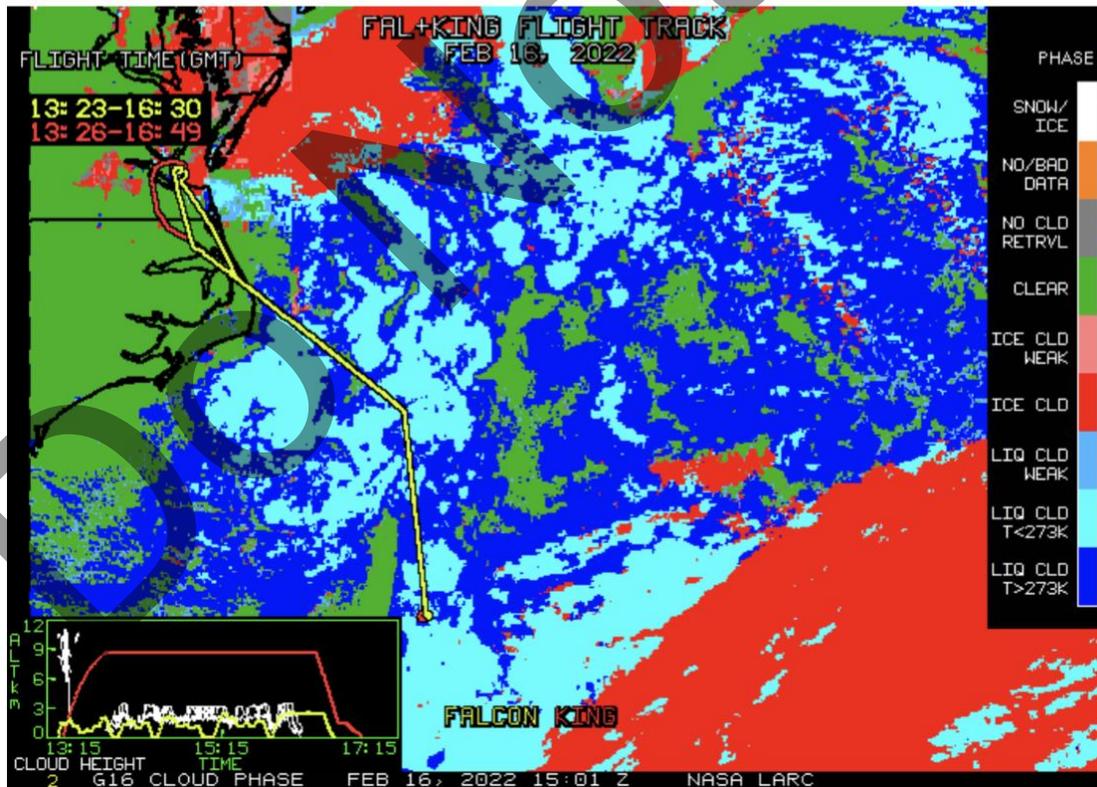
Only pure liquid clouds with Precip.

Do Not Cite!

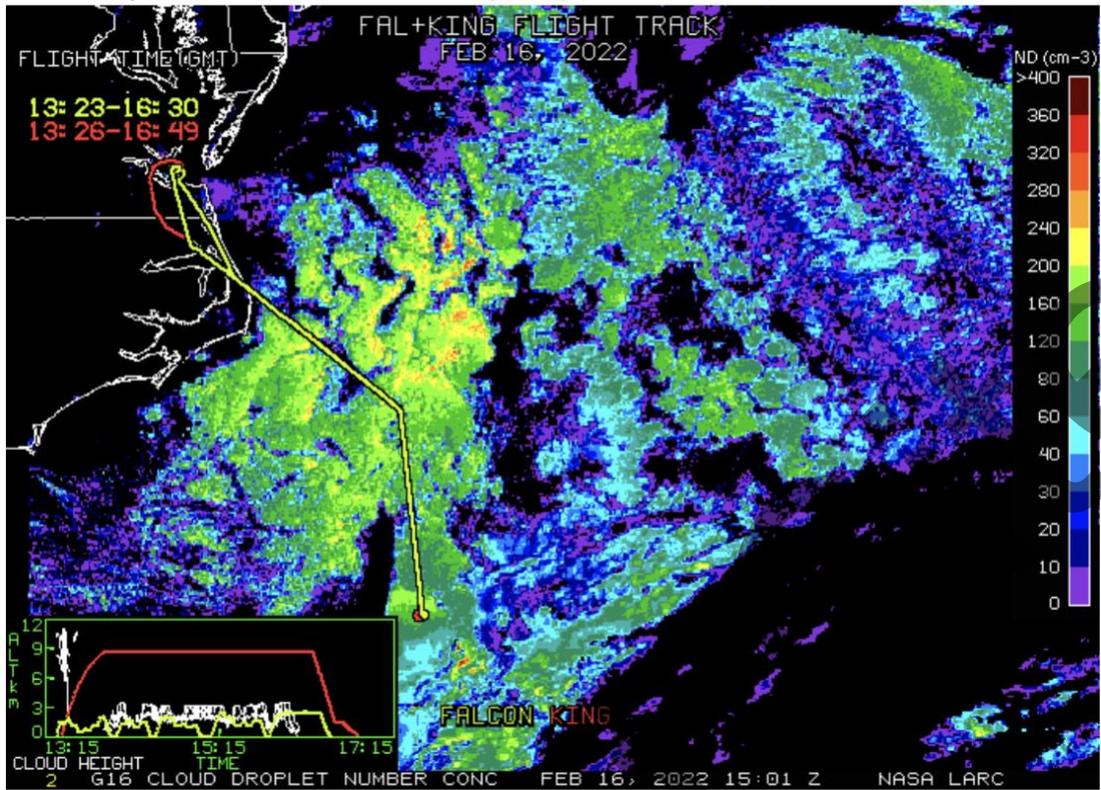
Visible Image



Cloud Phase



### Cloud Droplet Number Concentration (cm-3)



### Cloud-Top Height (Kft-ASL)

