

Flight Scientist Report
Tuesday 06/07/2022 ACTIVATE RF166

Flight Type: Statistical Survey Flight
Flight Route: TXKF 3232N/06400W 3545N/06000W 3232N/06400W 3212N/06430W
3215N/0650W TXKF
Special Notes:

King Air

Pilot report (Wusk):

First flight of a Two flight day in conjunction with HU25. Take off 1/2 hour early to get to altitude then pass back over the island when the HU takes-off. Path out to the NE. Back south of the island, pass over the underwater gliders, and then over fly the HU spiral. Crew Sandeen, Wusk, Shingler

Flight scientist report (Shingler):

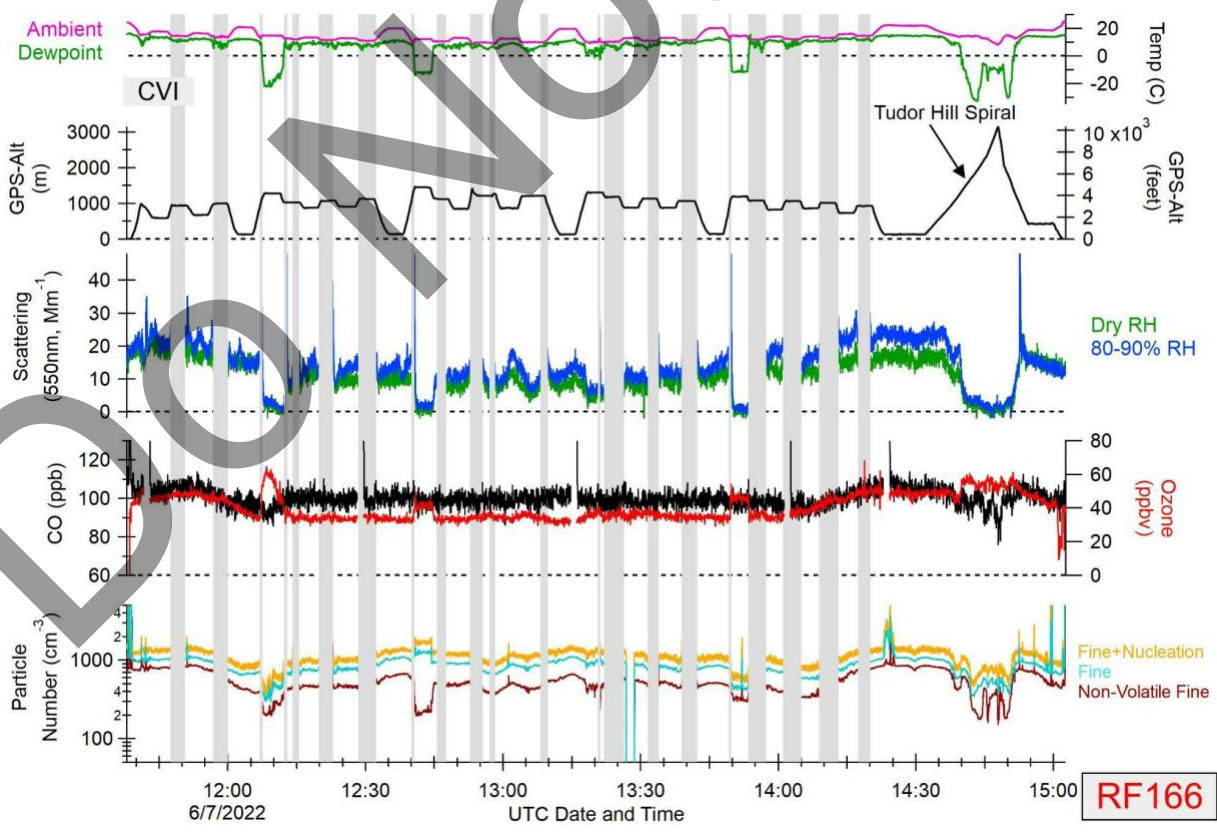
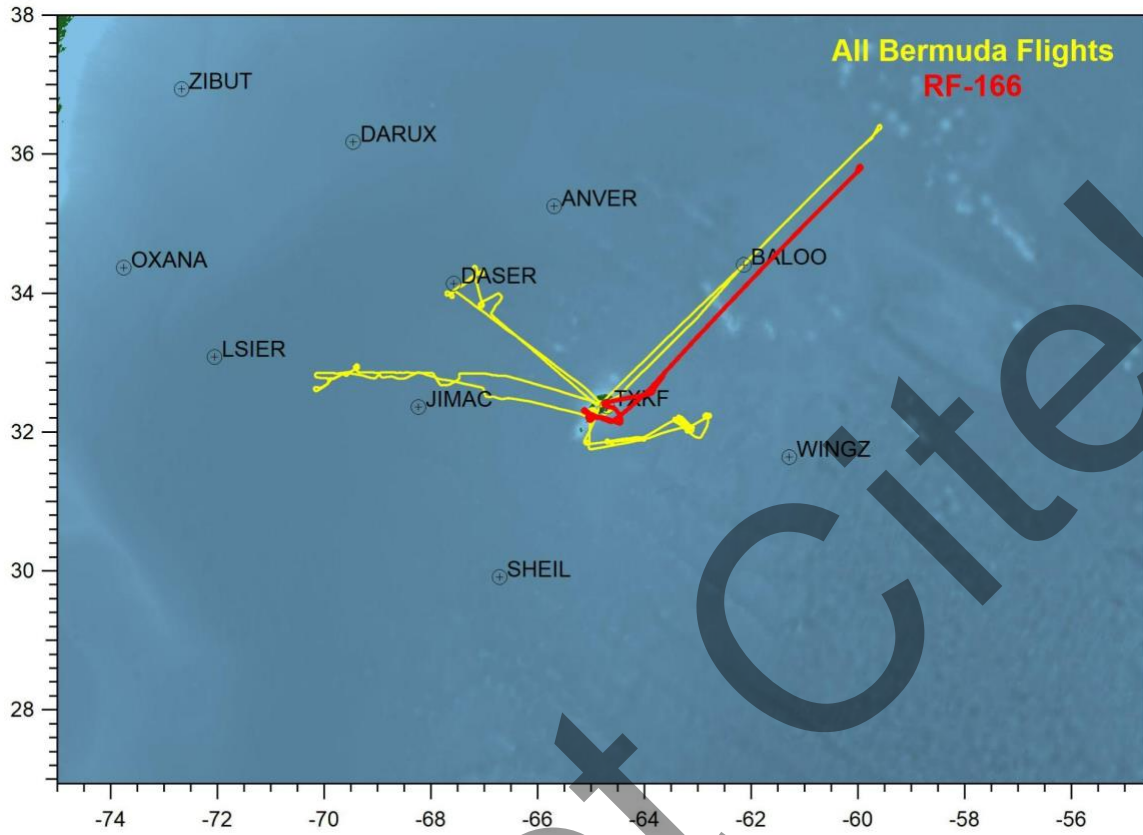
Homogeneous lidar curtain throughout essentially the entire flight. Shallow cu was persistent with CTHs at about 4kft. The FT above was clear and void of most aerosols. There were some cirrus present around 26kft. UC12 descended to stay under the cirrus. Performed an overpass to the BIOS glider location to the east of Bermuda and then an overpass to the Tudor Hill spiral location.

Falcon

Pilot report (Baxley):

ACTIVATE flight with HU-25 and UC-12; Thorson/Baxley, Crosbie/Winstead TXKF 3232N/06400W 3545N/06000W 3232N/06400W 3212N/06430W 3215N/0650W TXKF - Mission flown as planned, weather as briefed. Minor deviations to course at direction of research team to capture more data. Conducted ~5 nm spiral at Tudor Hill up to ~9000 MSL. No issues or anomalies noted.

Flight scientist report ():

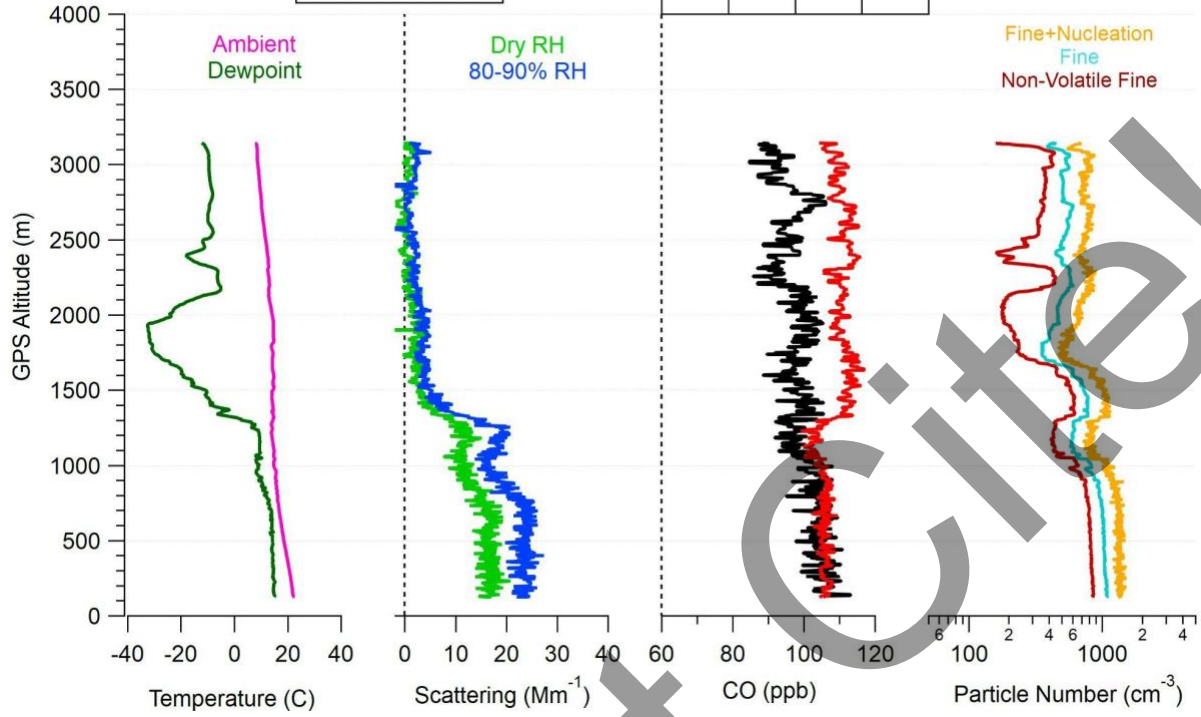


Tudor Hill Spiral

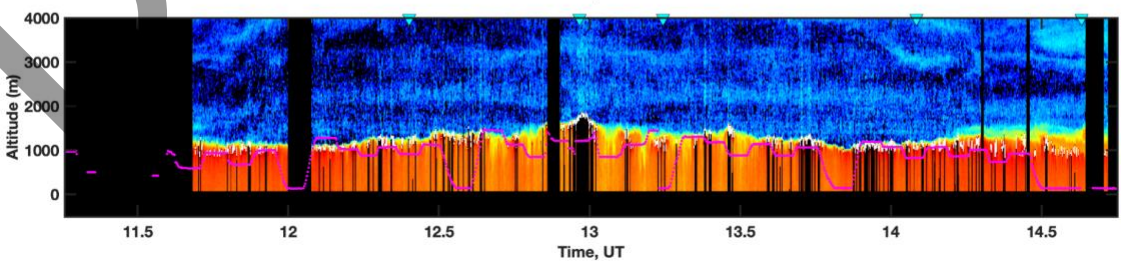
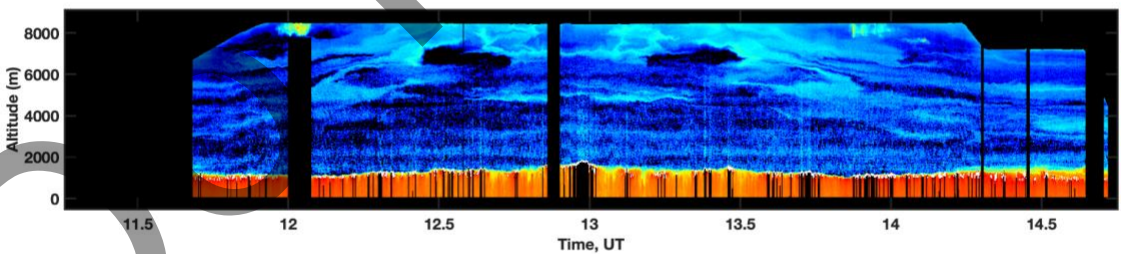
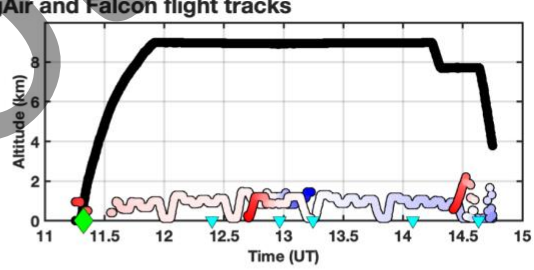
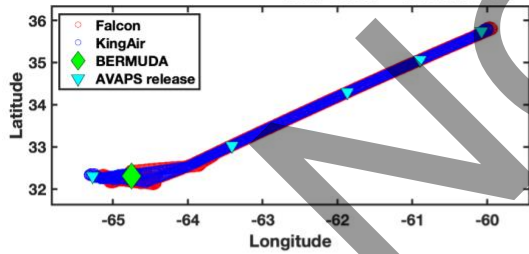
6/7/2022
14:32 - 14:47 UTC

Ozone (ppbv)
0 20 40 60 80

RF166



20220607 - ACTIVATE - KingAir and Falcon flight tracks



Aerosol Scattering Ratio (532nm)

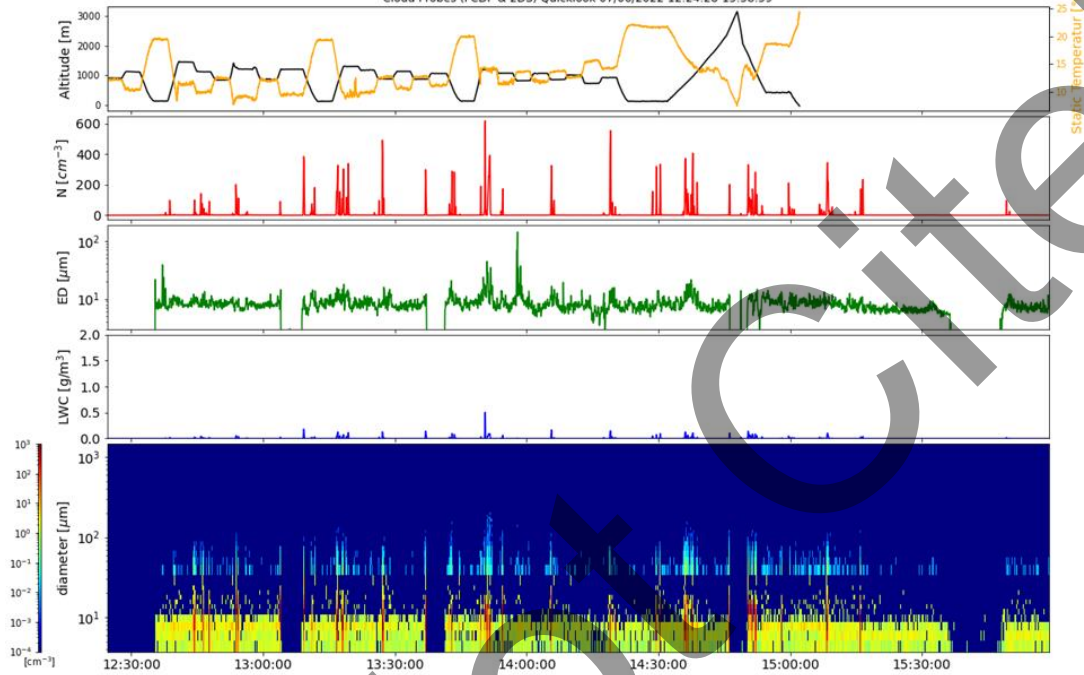
Quicklook ACTIVATE Cloud Probes (FCDP & 2DS) Quicklook

preliminary data, only for quicklook use

Simon Kirschler, Christiane Voigt, Richard Moore, Ewan Crosbie



Cloud Probes (FCDP & 2DS) Quicklook 07/06/2022 12:24-15:58:59

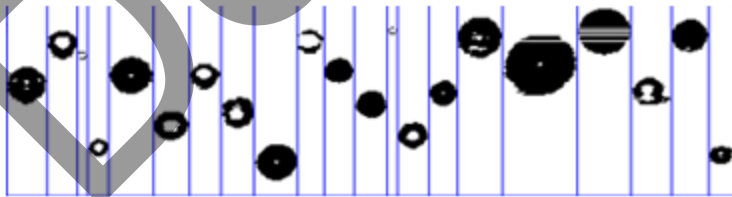
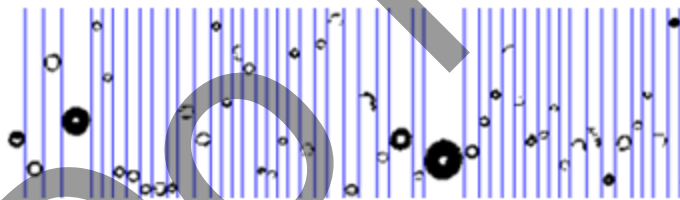
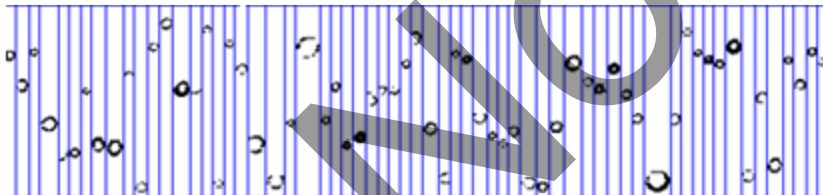
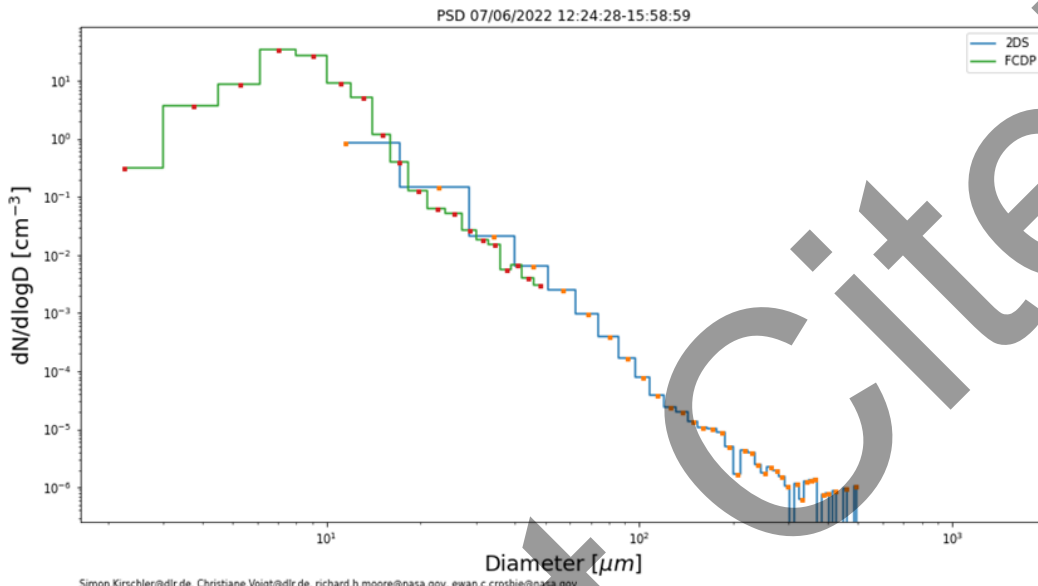


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Do Not Cite!

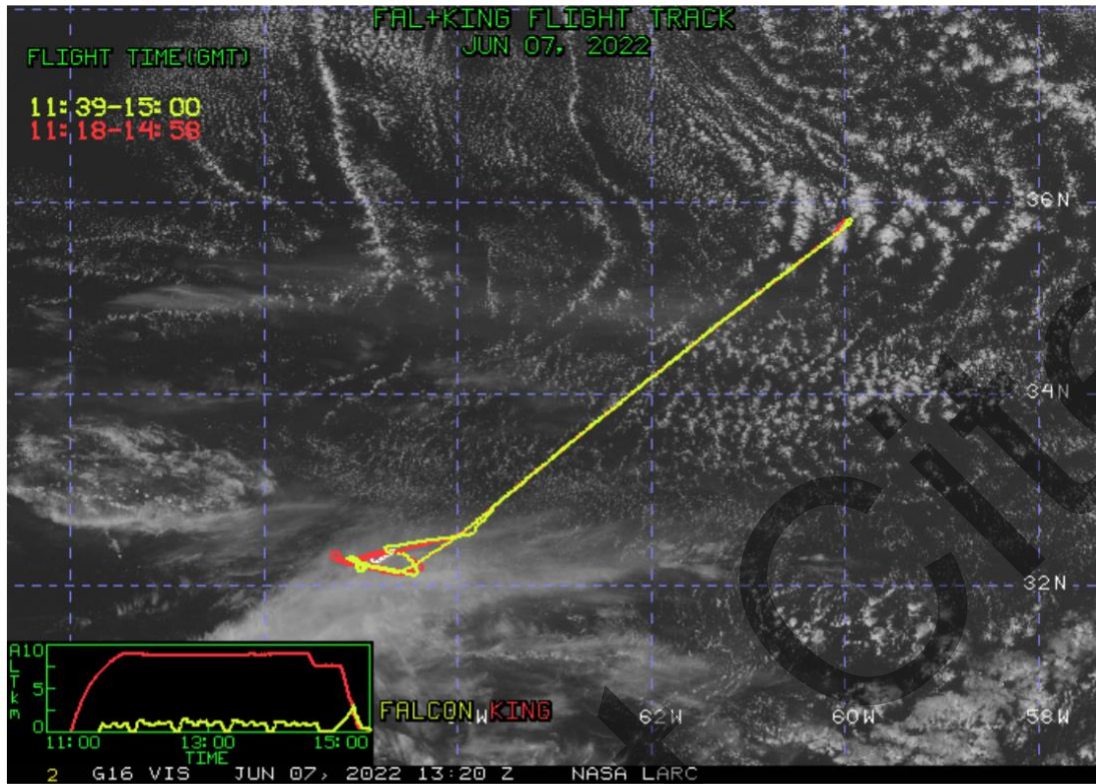
PSD ACTIVATE

preliminary data, only for quicklook use
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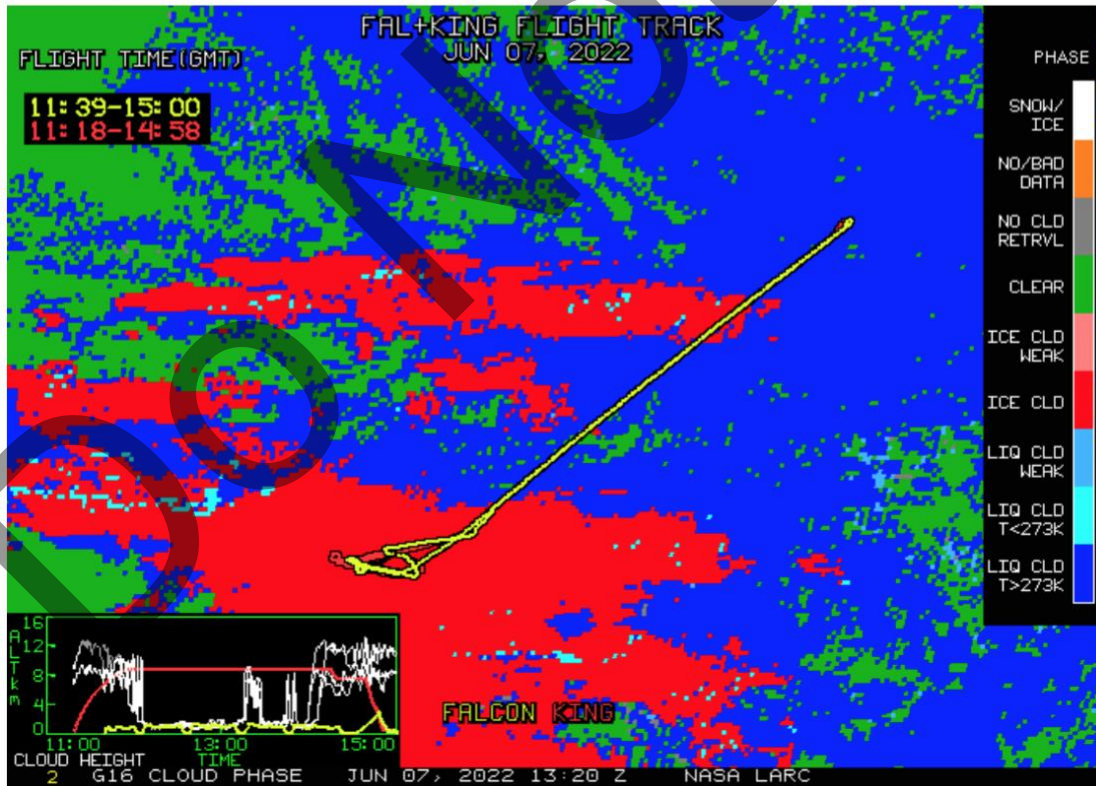


Only pure liquid clouds with Precip.

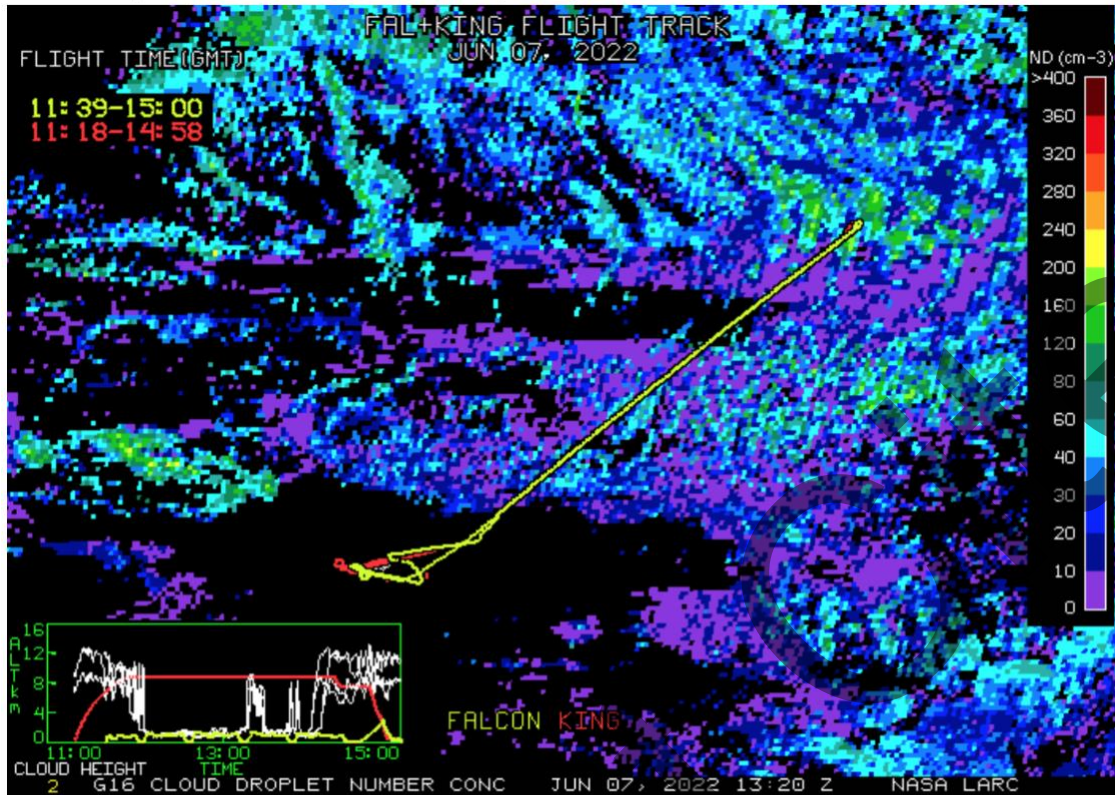
Visible Image



Cloud Phase



Cloud Droplet Number Concentration (cm-3)



Cloud-Top Height (Kft-ASL)

