

Flight Scientist Report
Friday 03/02/2020 ACTIVATE RF15

Flight Type: Statistical Survey Flight – Clouds
Flight Route: OXANA to 32.61409/-73.20304
Special Notes: interesting line of convergence just off shore leading to convection

King Air

11:55 take-off

15:11 landing

- o Did 'registration' maneuvering for RSP near end of flight

Instruments:

- o No HSRL issues; however CR is still low, but not lower than it has been
- o Sondes dropped near OXANA and then at turn-around
- o Cal on way out before OXANA, no cal on the way back in
- o Applanix issue on startup but restart of iridium fixed it
- o GoPro stopped at some point, but restarted

Falcon

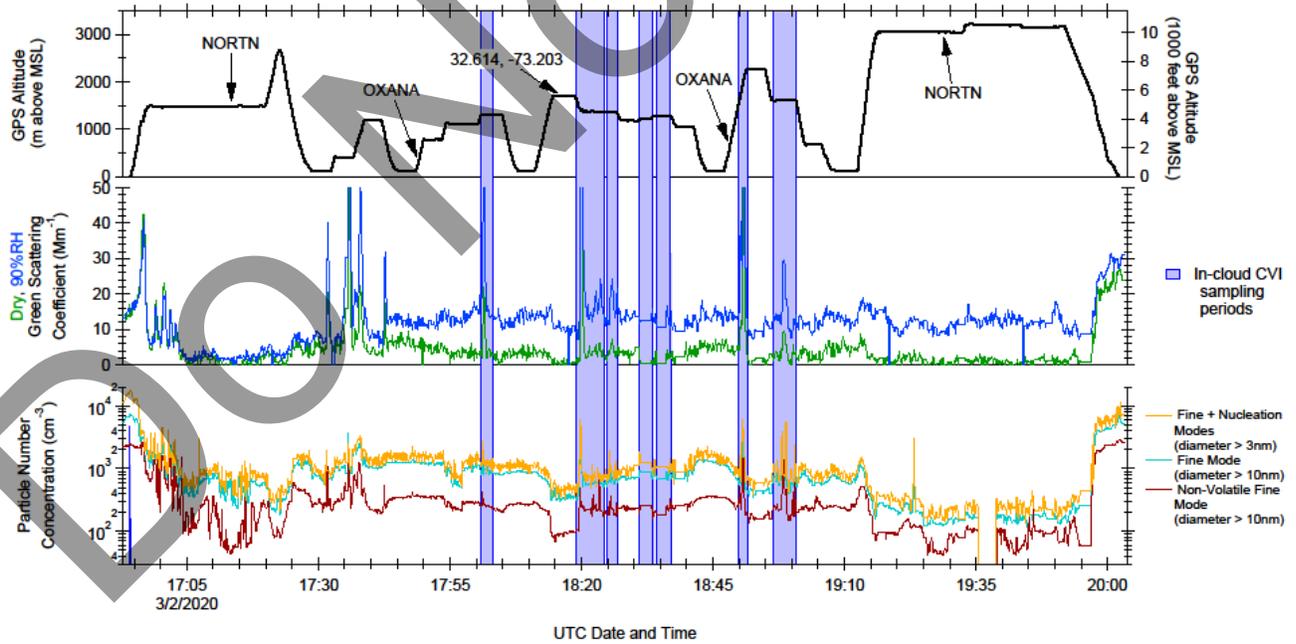
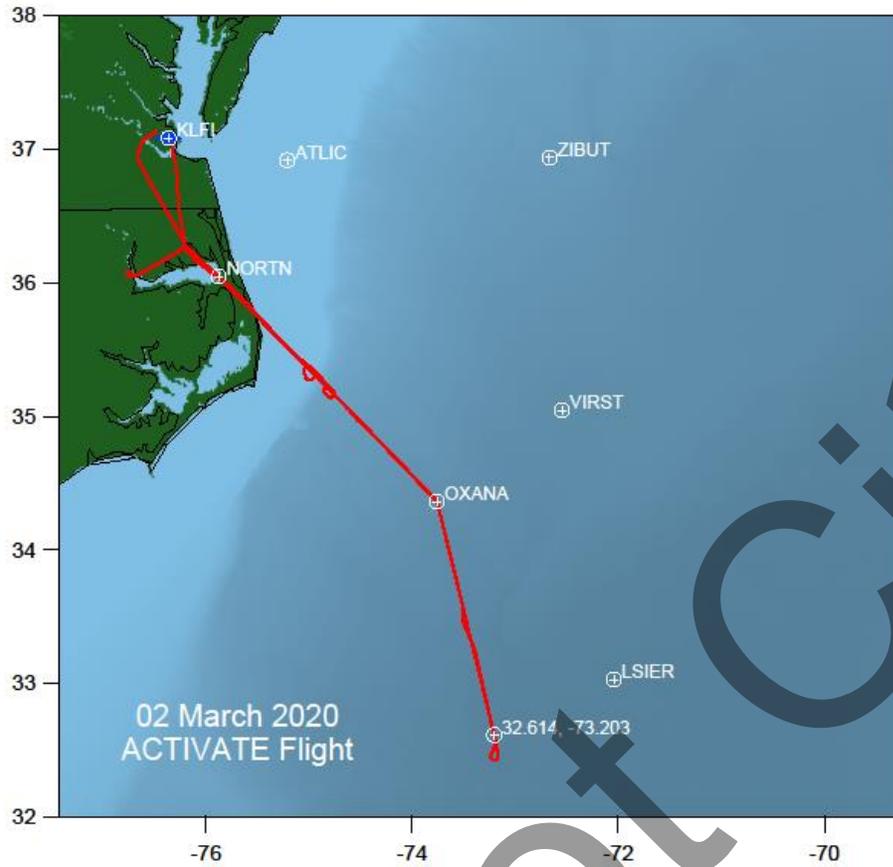
11:53 take-off

15:03 landing

- o Yasky buying 1st round for having a delayed take-off; AMS recovered thankfully
- o Took off down south, off coast, descended to minalt 400-1000 leg
- o Mixed below cloud
- o Matched up well with 528, 528 did pass and 524 went 1 minute past turn around point, passed them again on way back
- o Audible over land, no traffic in Elizabeth, Norfolk was accommodating to do wind calibration here
- o 250 heading, 5 minutes in each direction for winds calibration
- o OXANA to beach, 1 360 spiral down/up at Tom's Corner
- o Very shallow clouds, modified module when in cloud levels to maximize time in clouds, very mixed, 6-7 minute transect, cloud bases were changing, precip on the way out, none on the way back

Rich Moore Quicklook Images:

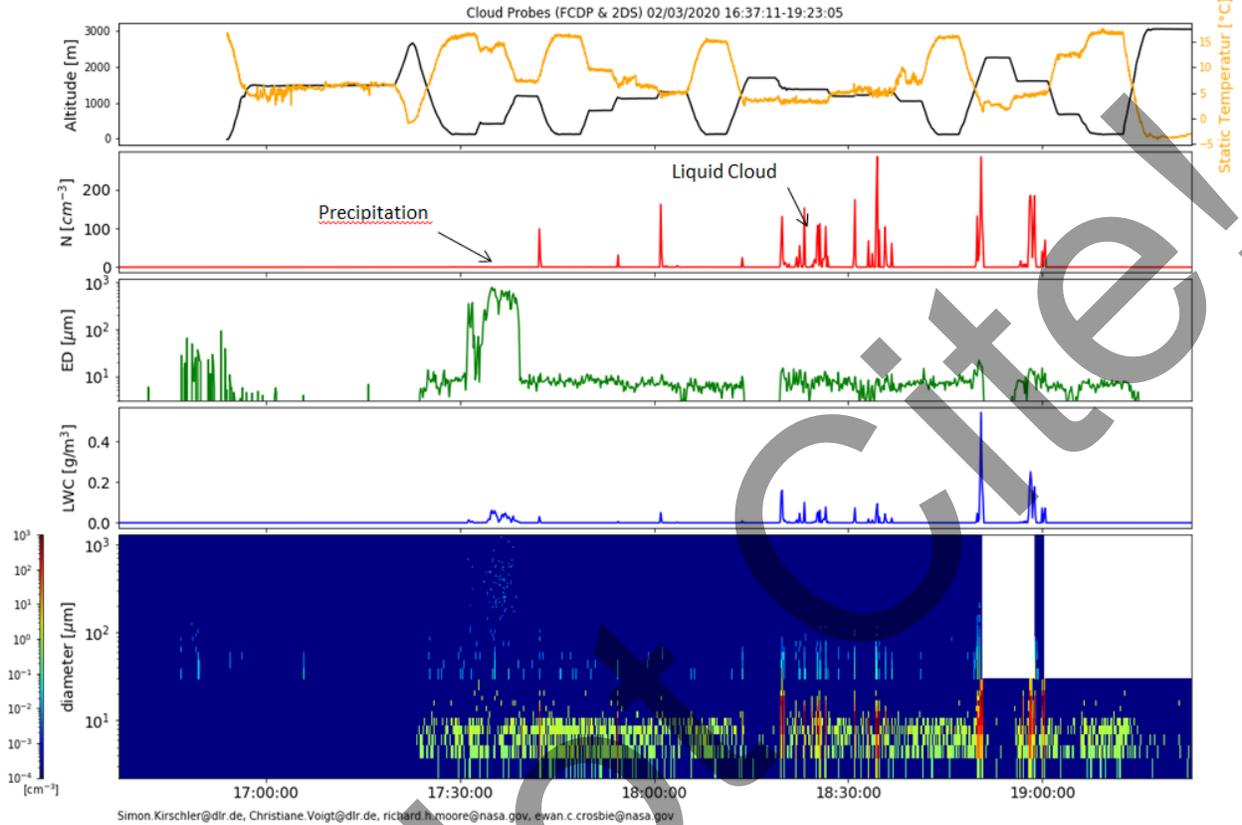
Do Not Cite!



Quicklook ACTIVATE Cloud Probes (FCDP & 2DS)

preliminary data, only for quicklook use

Simon Kirschler, Christiane Voigt, Richard Moore, Ewan Crosbie

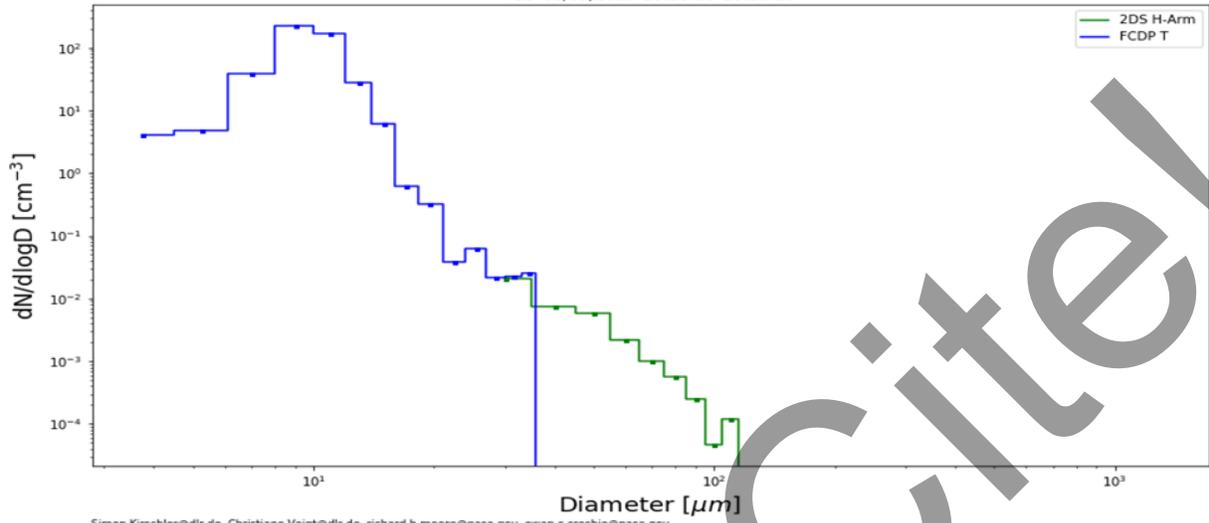


PSD ACTIVATE

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



PSD 02/03/2020 18:25:10-18:26:20



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

Precipitation: 17:31:27



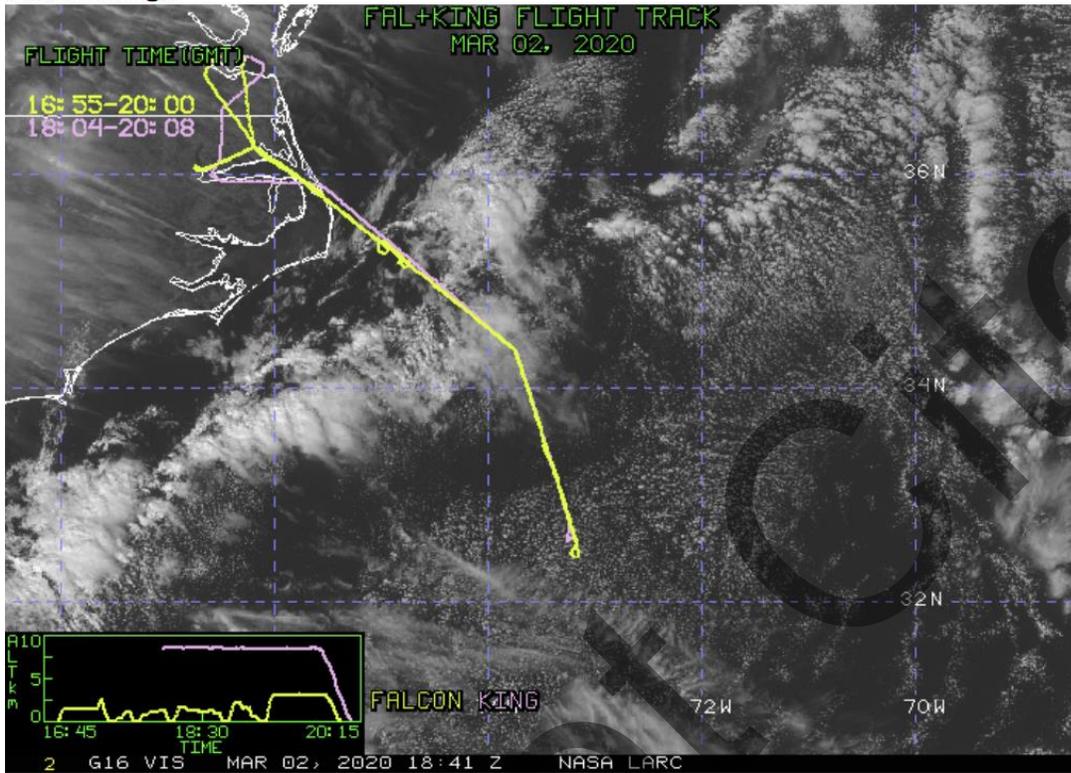
Liquid Cloud: 18:25:53



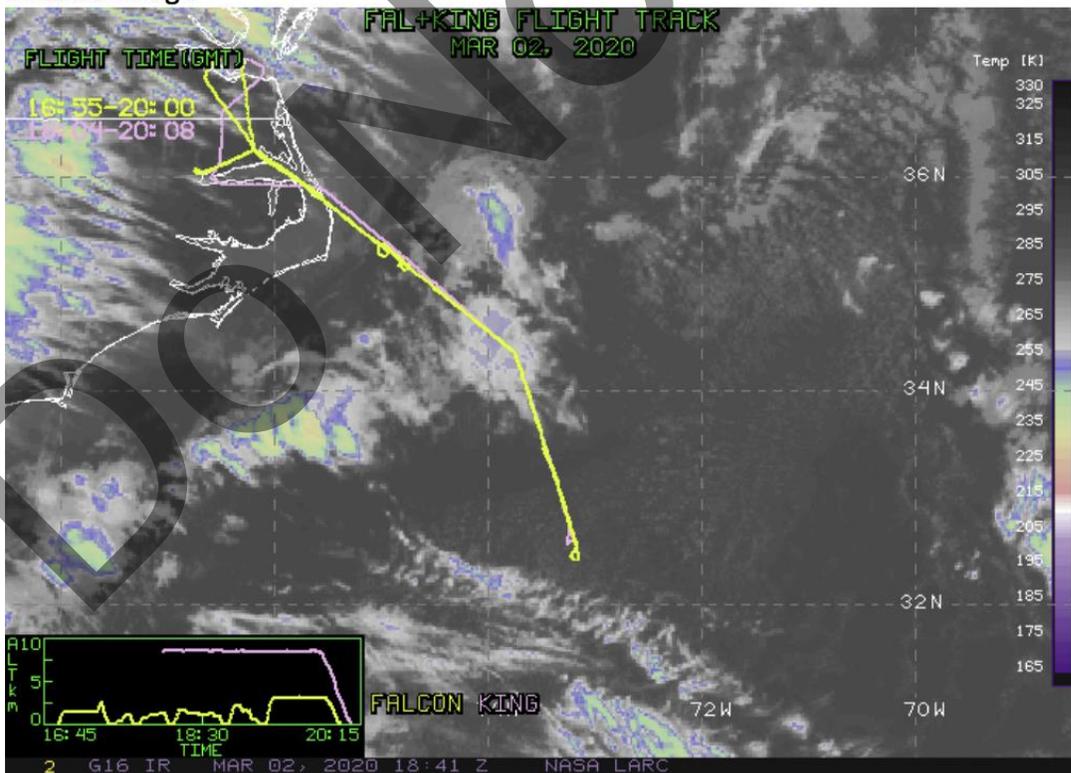
Do Not Cite!

NASA-LaRC Clouds Group GOES-16 Quicklook Images for Flight 15, 18:41 UTC Mar 02, 2020
(near middle of flight)

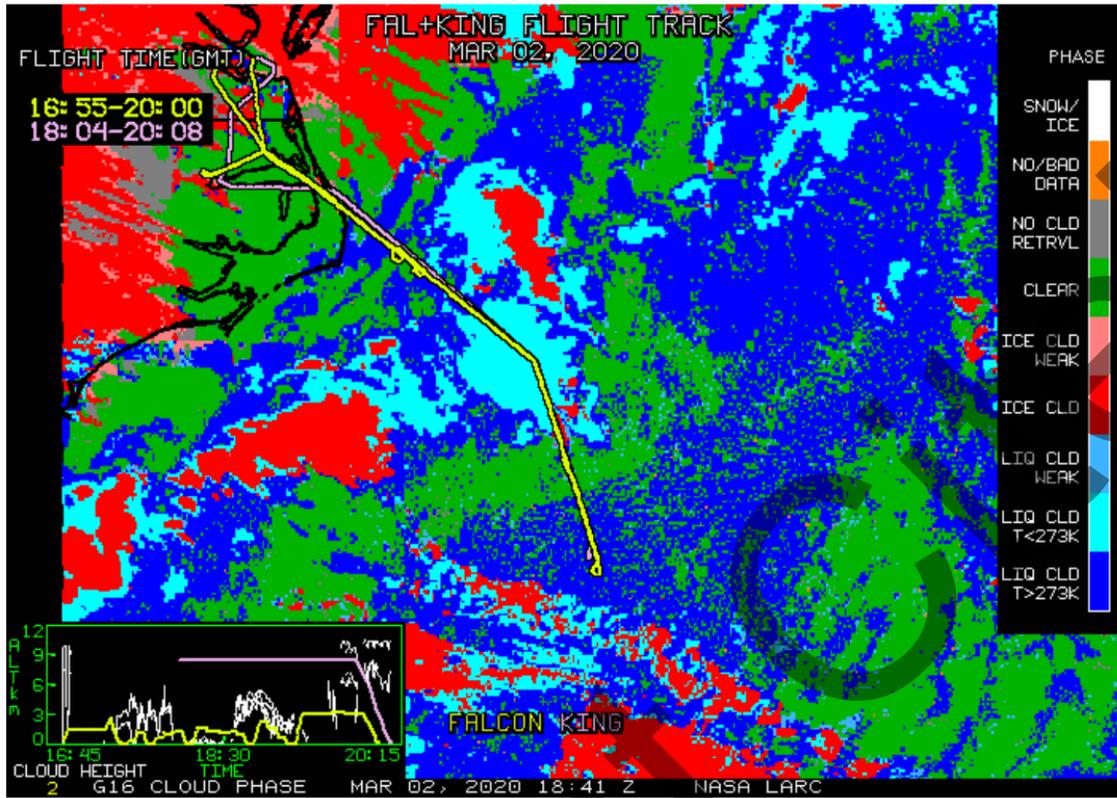
Visible Image



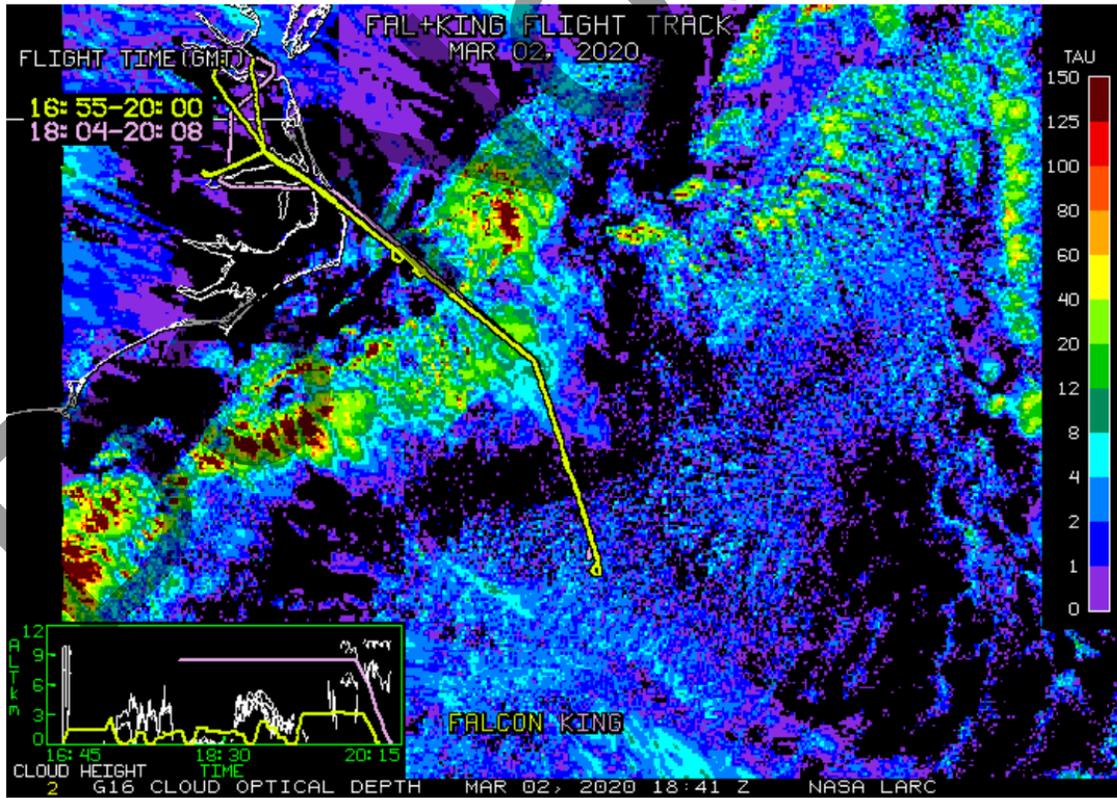
Infrared Image



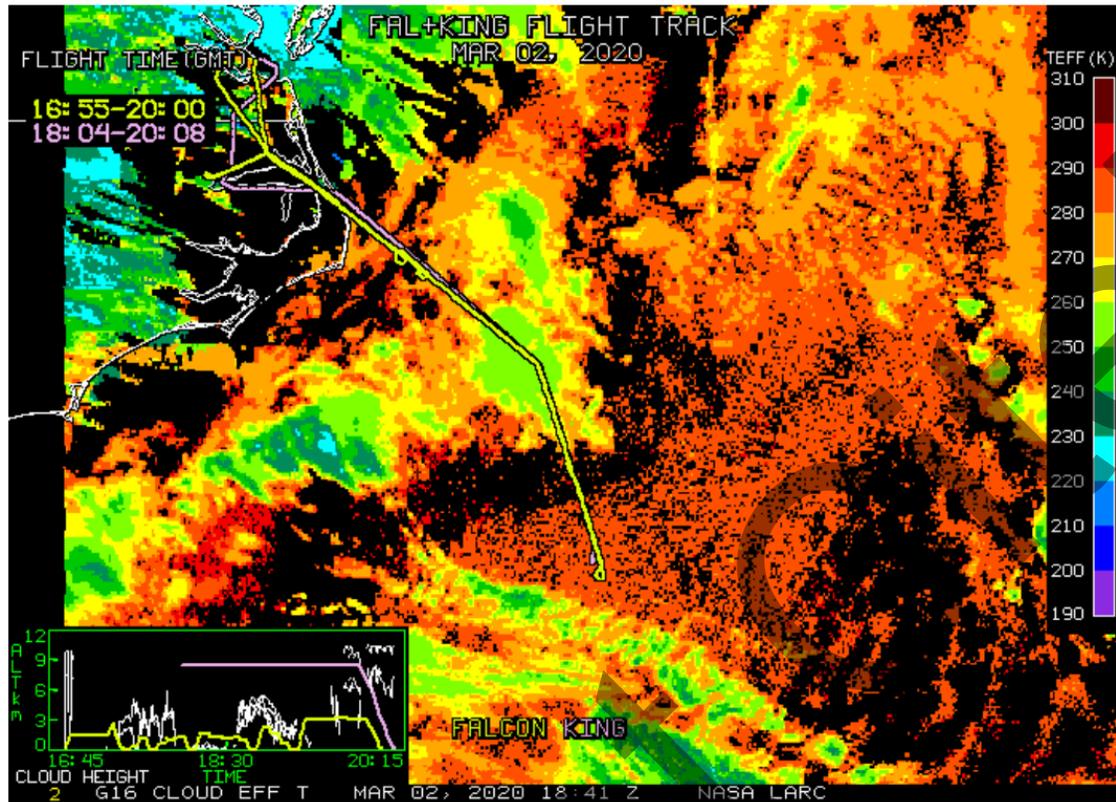
Cloud Phase



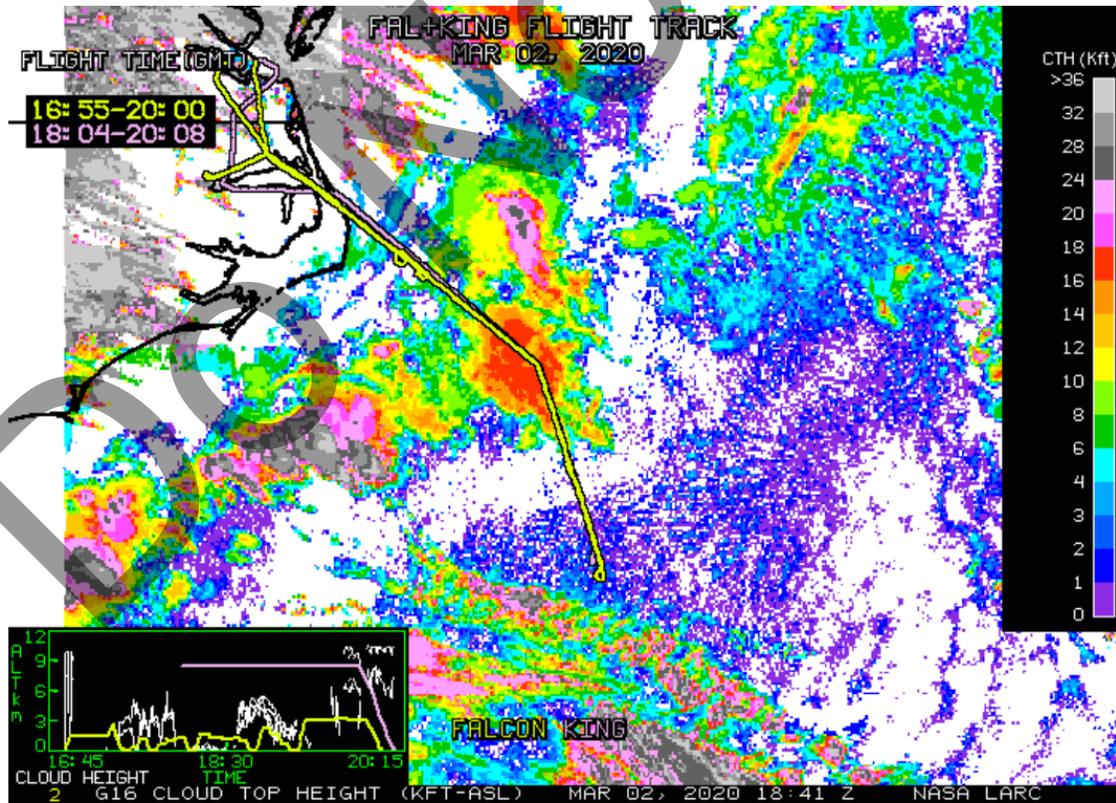
Cloud Optical Depth



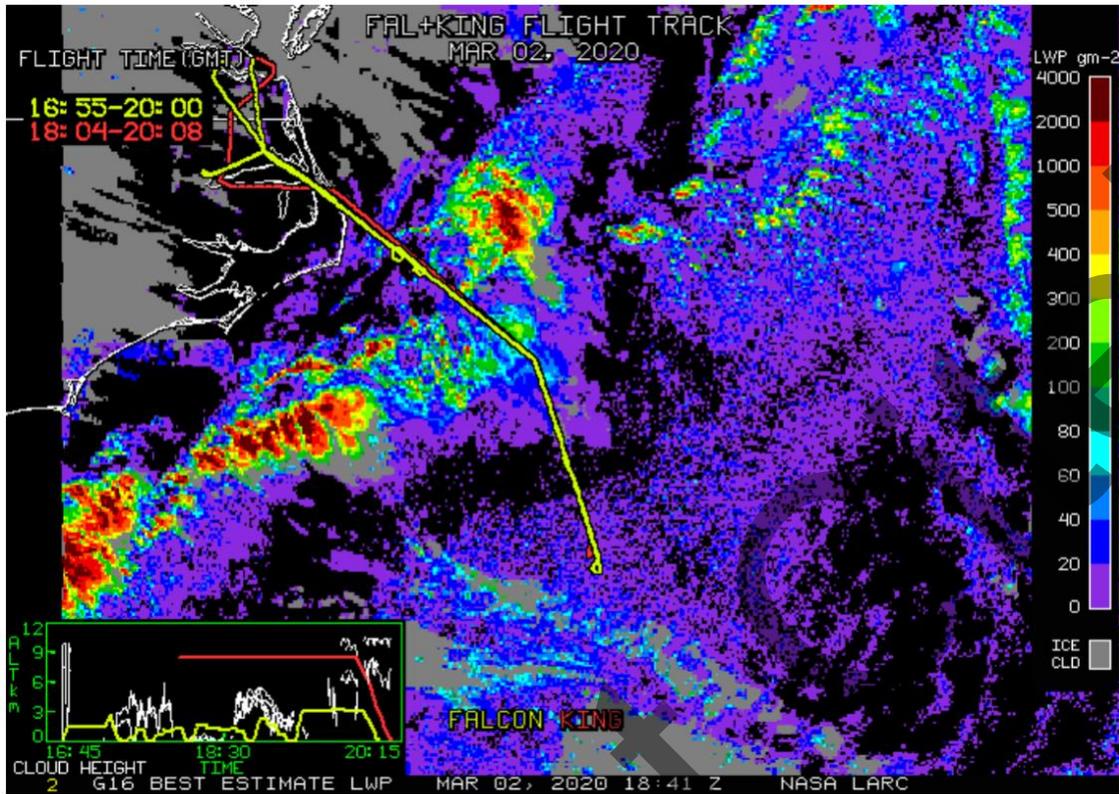
Cloud Effective Temperature (K)



Cloud-Top Height (Kft-ASL)



Liquid Water Path (gm-2)



Cloud Droplet Number Concentration (cm-3)

