

Flight Scientist Report

Saturday 02/22/2020 ACTIVATE RF06

Flight Type: Statistical Survey Flight - Clouds

Flight Route: OXANA to 34.103/-72.479; idea is to hit the centerpoint and do a wall so we are sampling conditions representative of what we sampled upwind in first flight;

King Air

NA

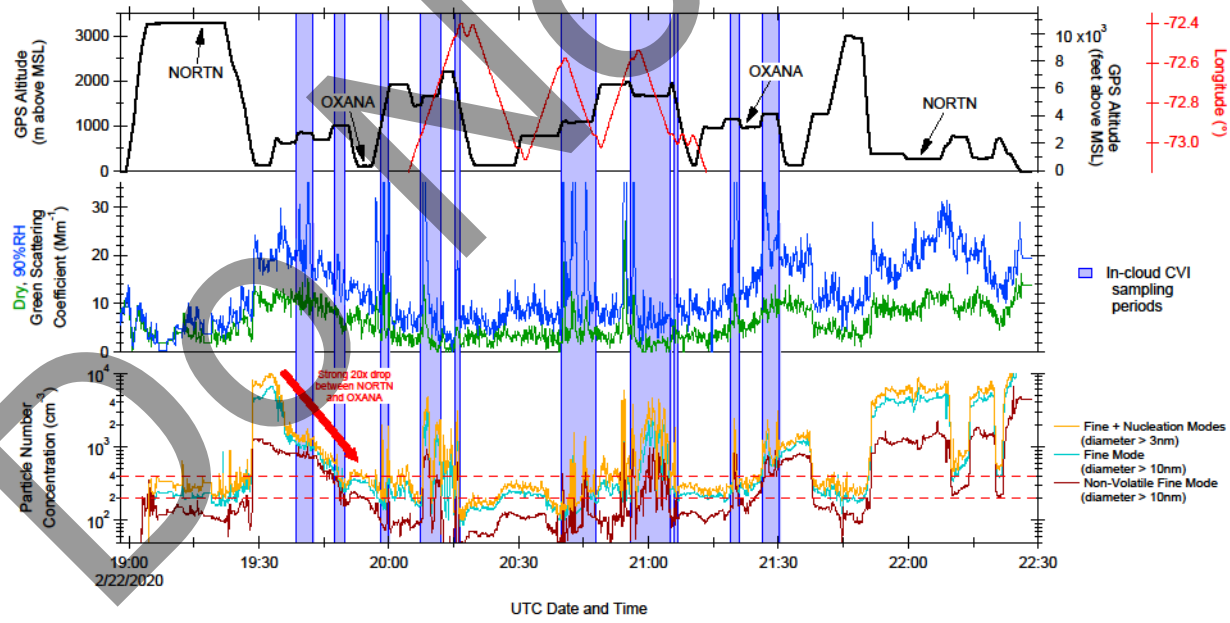
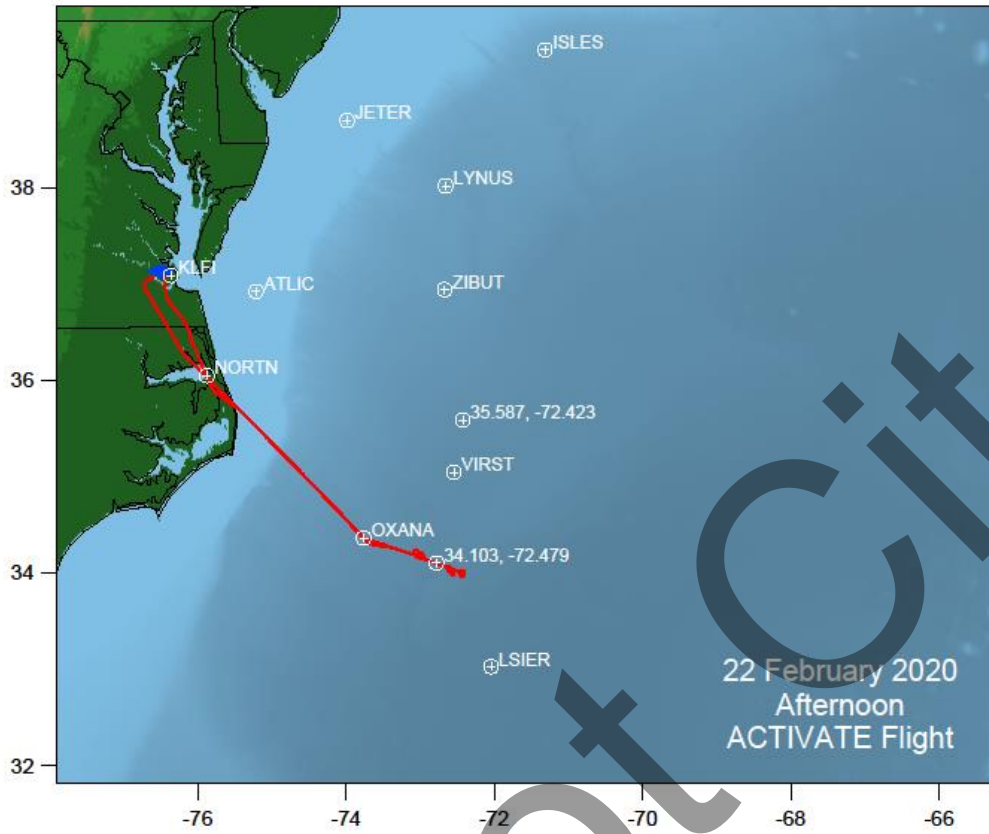
Falcon

- Bonus MINALT before starting starting 1st ensemble
- 1st cloud stat survey was standard; at end spiraled down from ~7500-8000'
- 2nd survey was a Wall and it worked very well and was straightforward
- 3rd survey also standard; during MINALT leg clouds ended and we didn't get a proper BCT leg but still did sample at high altitude
- Bonus low altitude work over land

Instruments:

All fine

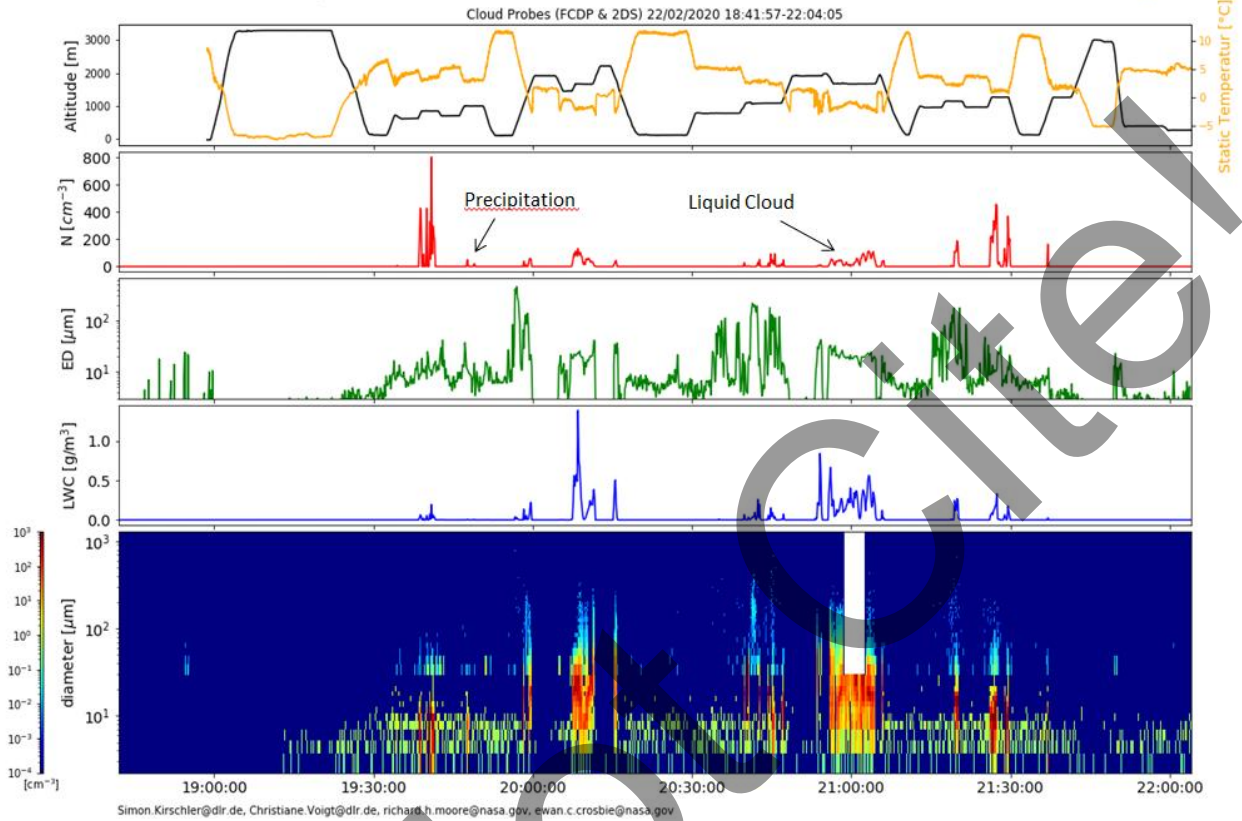
Rich Moore Quicklook Images:



Quicklook ACTIVATE Cloud Probes (FCDP & 2DS)

preliminary data, only for quicklook use

Simon Kirschler, Christiane Voigt, Richard Moore, Ewan Crosbie

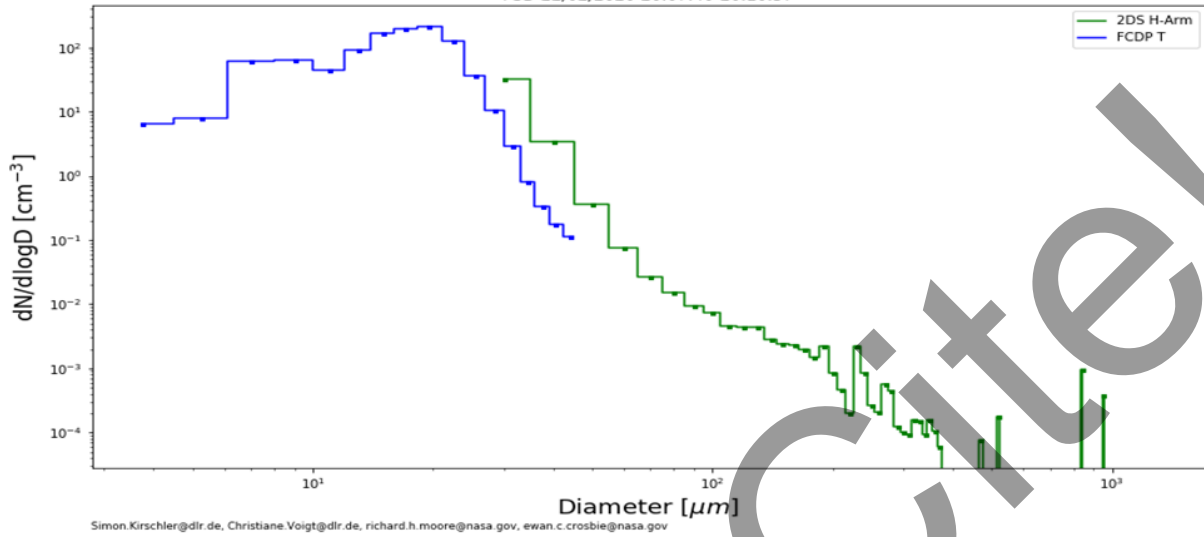


PSD ACTIVATE

preliminary data, only for quicklook use
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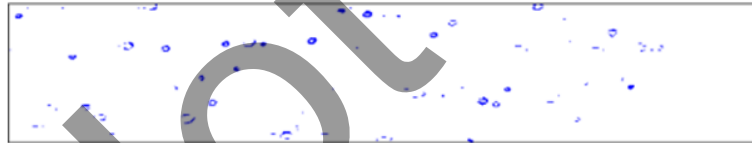
PSD 22/02/2020 20:07:40-20:10:37



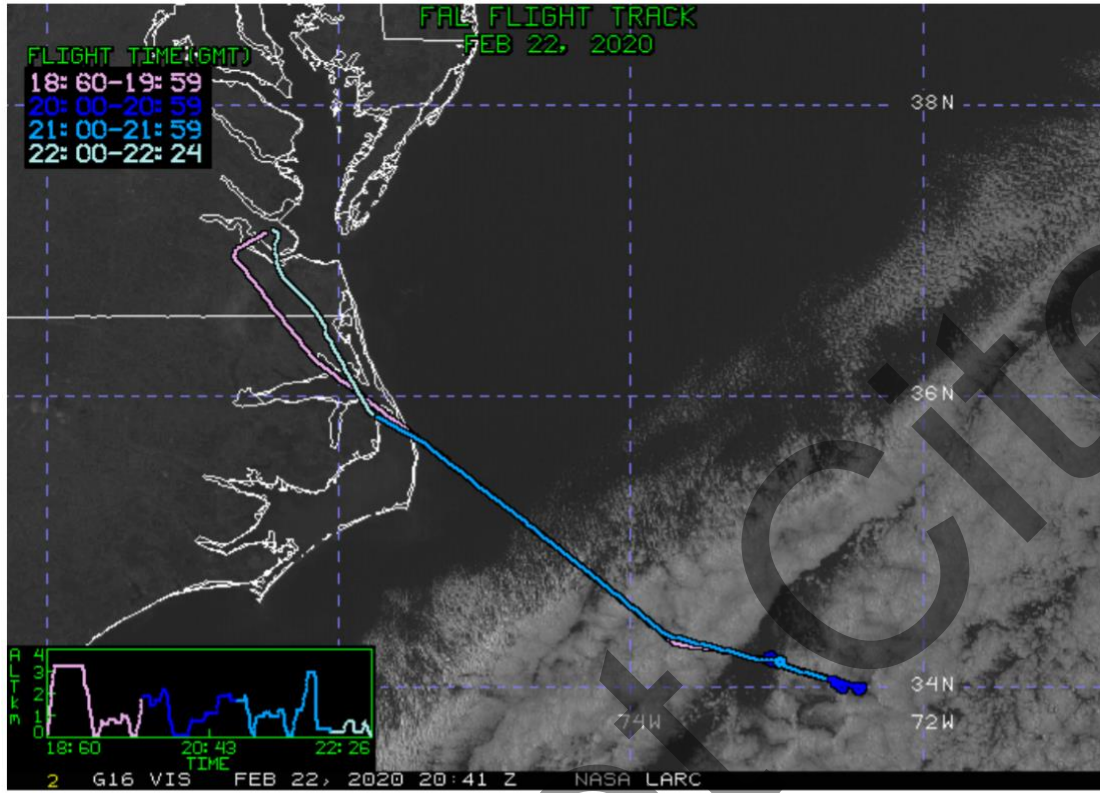
Precipitation: 19:56:51



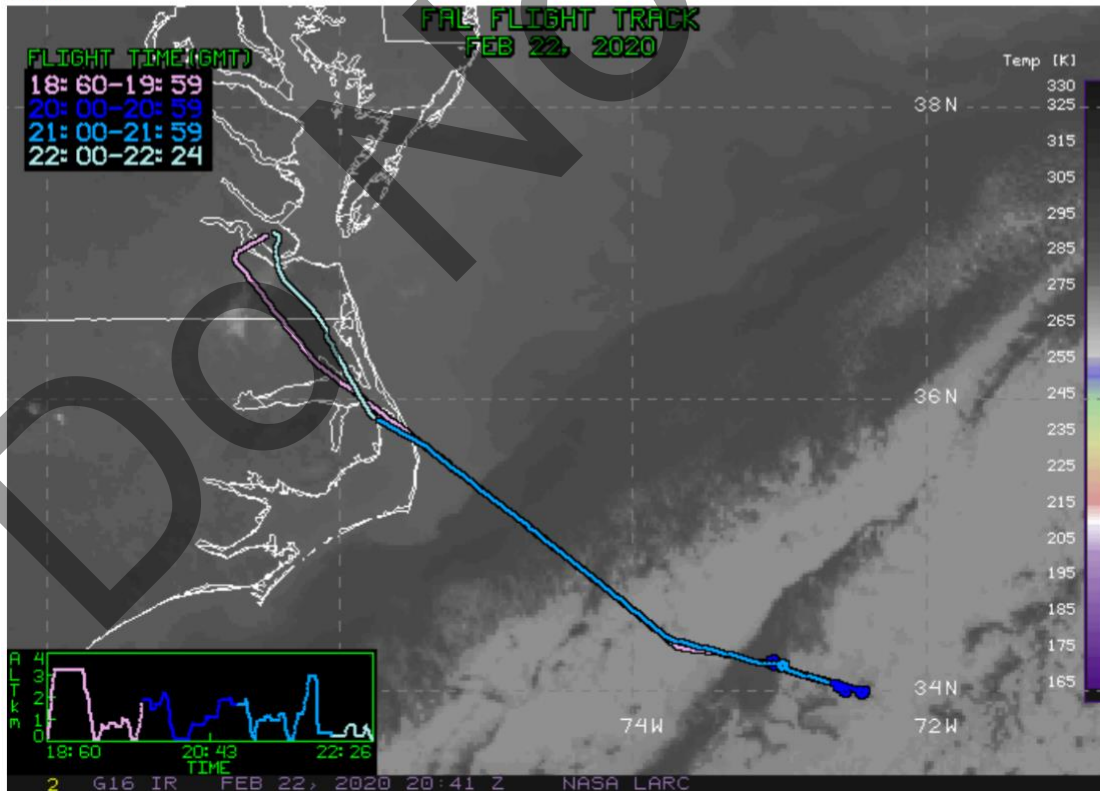
Liquid Cloud: 20:54:24



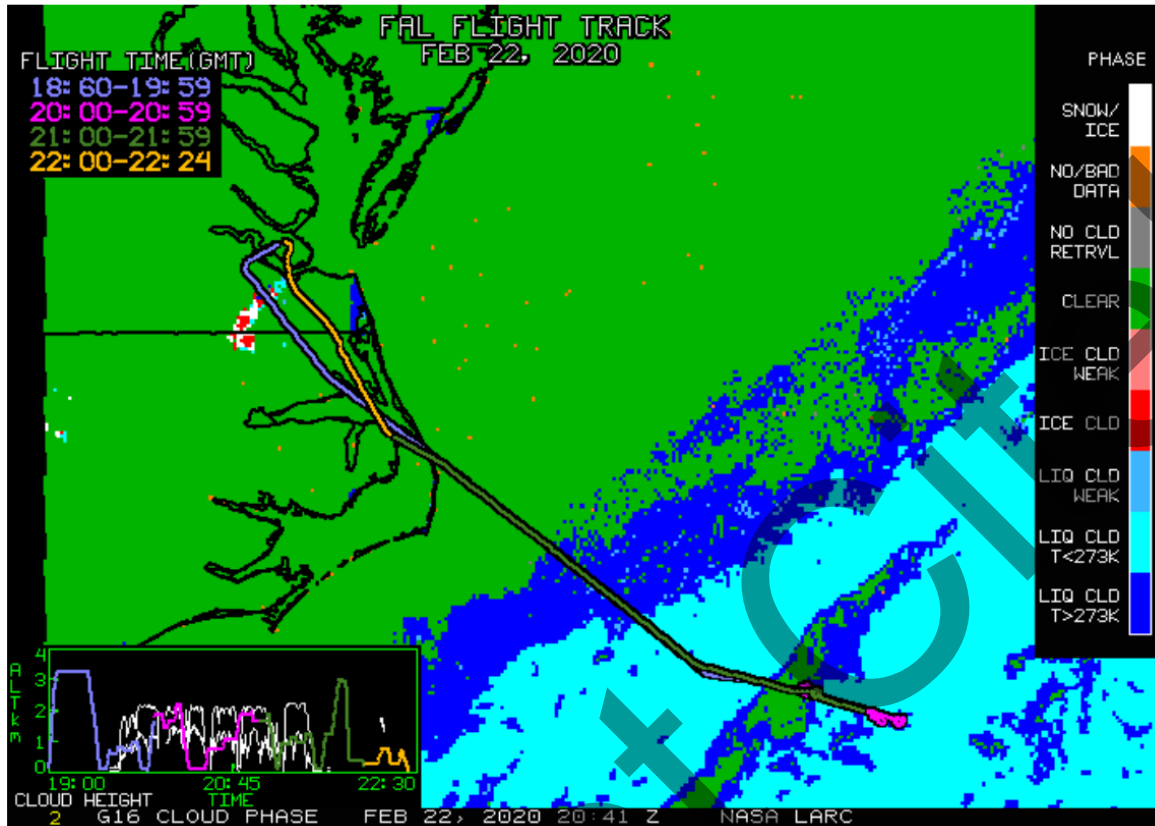
Satellite Group GOES-16 Images (near middle of flight):
Visible



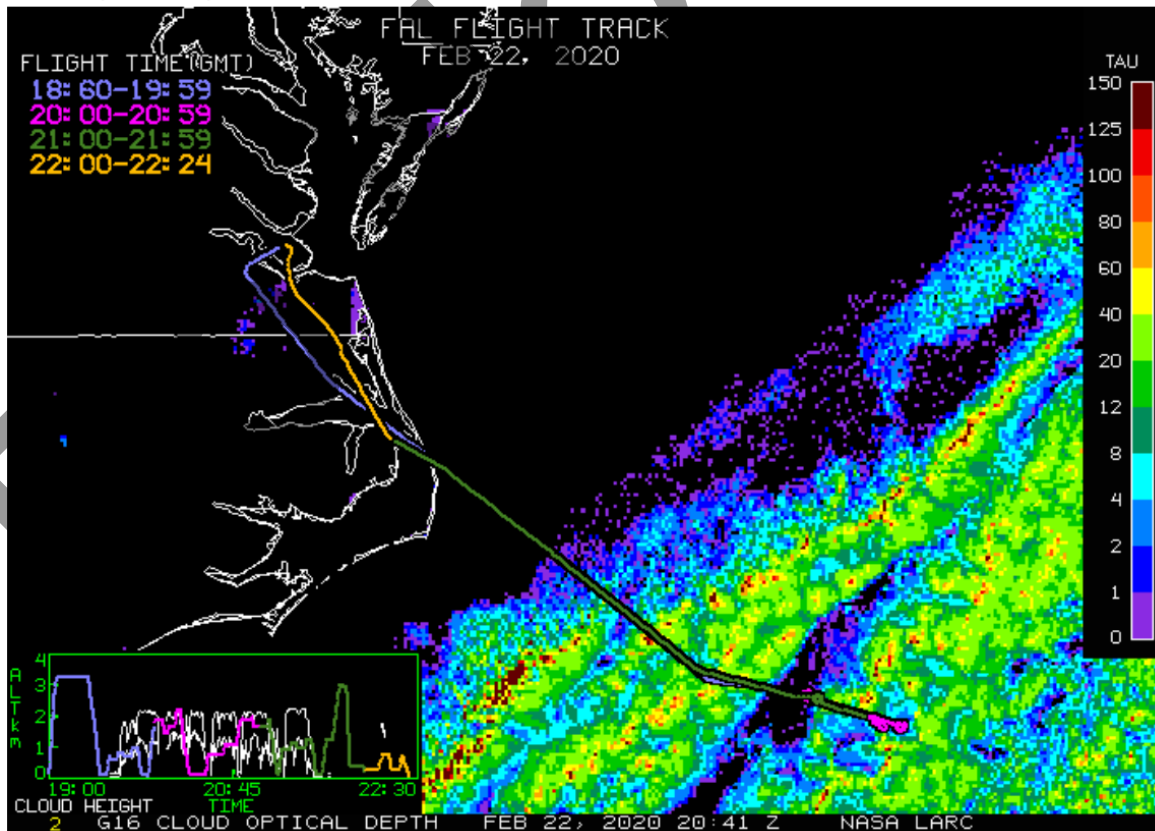
Infrared



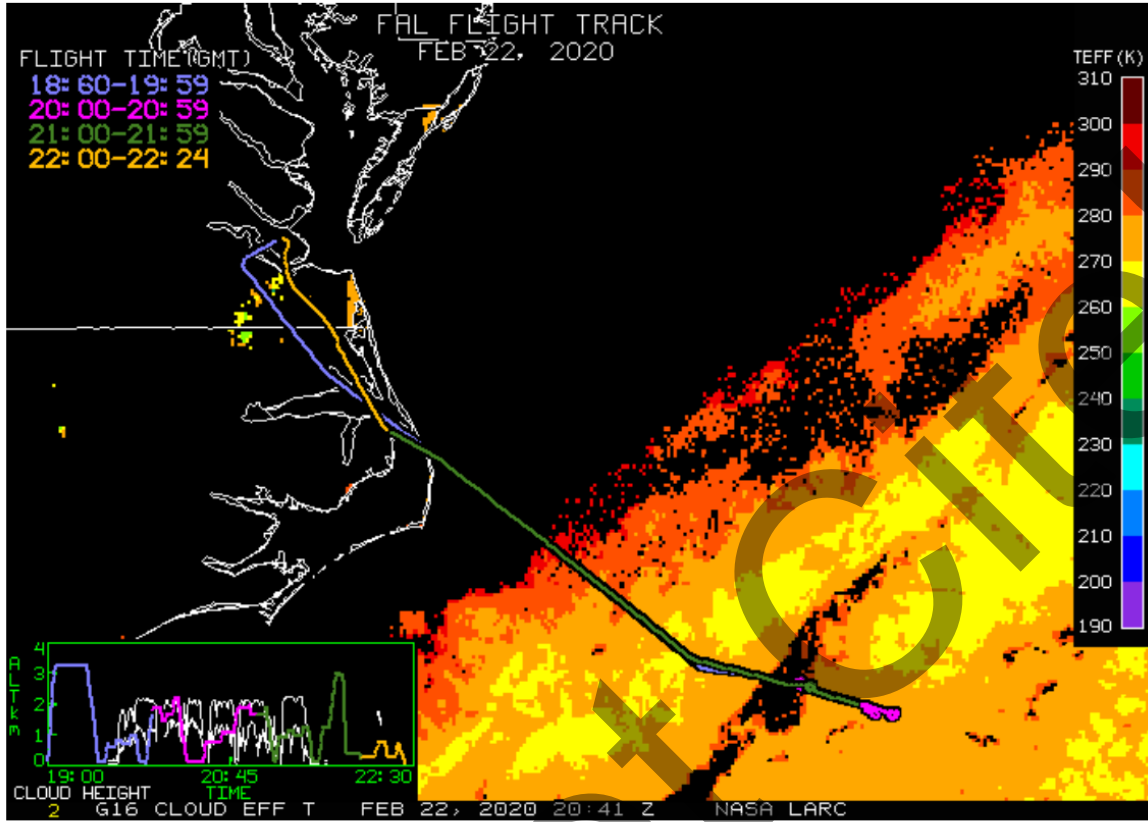
Cloud Phase



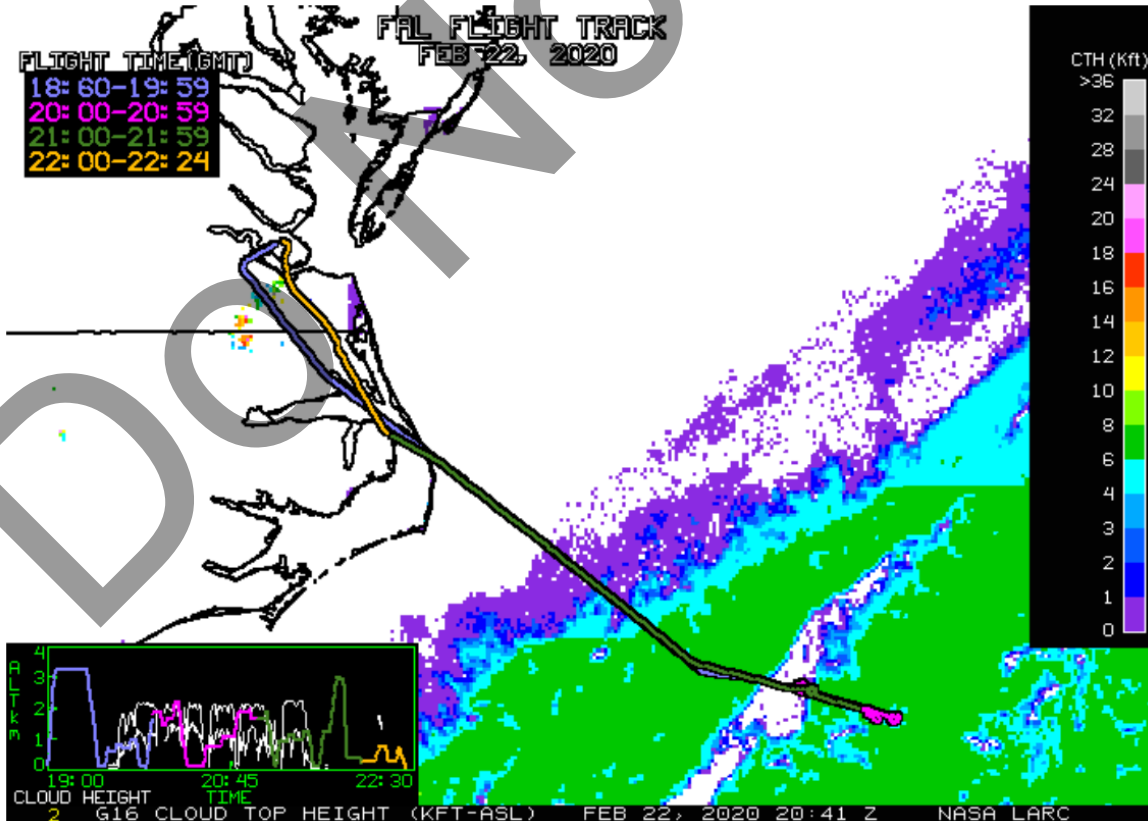
Cloud Optical Depth



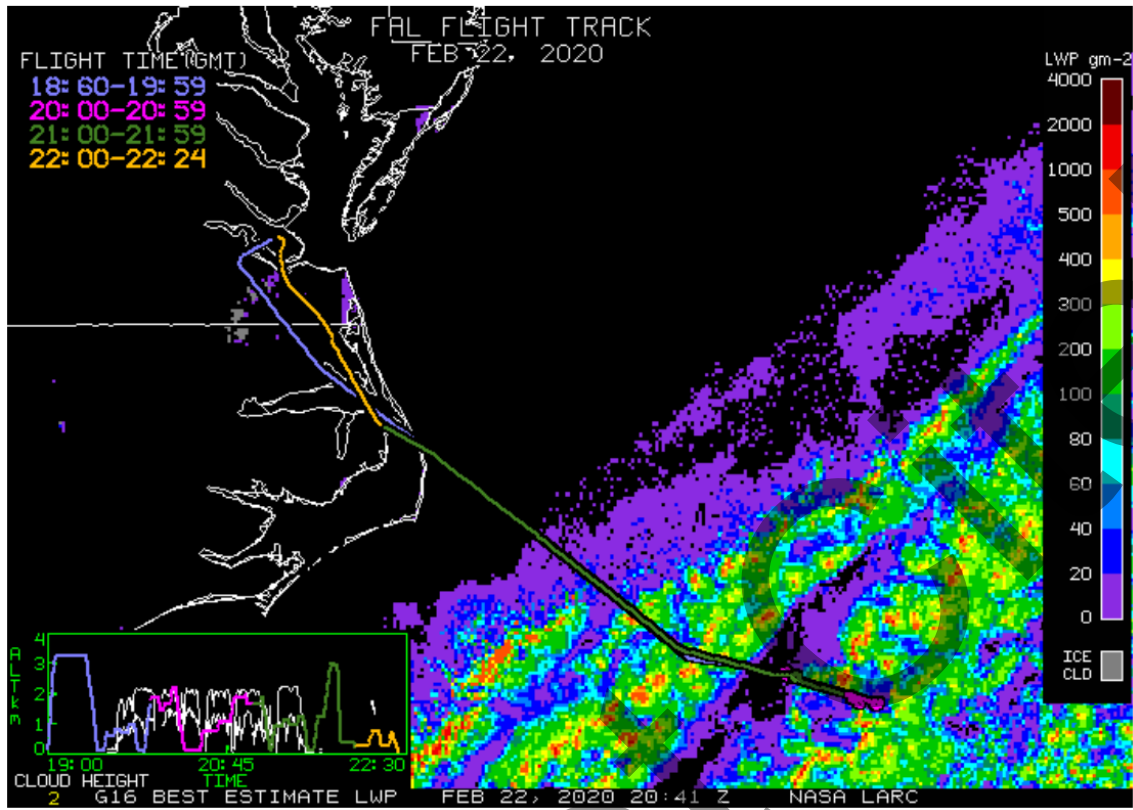
Cloud Effective Temperature (K)



Cloud-Top Height (Kft-ASL)



Liquid Water Path (gm-2)



Cloud Droplet Number Concentration (cm-3)

