

Flight Scientist Report
Saturday 02/29/2020 ACTIVATE RF12

Flight Type: Statistical Survey Flight – Clouds

Flight Route: ATLIC – OUTES – Northeastern point

Special Notes: This was forecasted as a clear day but became a nice low cloud day

King Air

- Delayed take off due instrument issues

Instruments:

Fine

Falcon

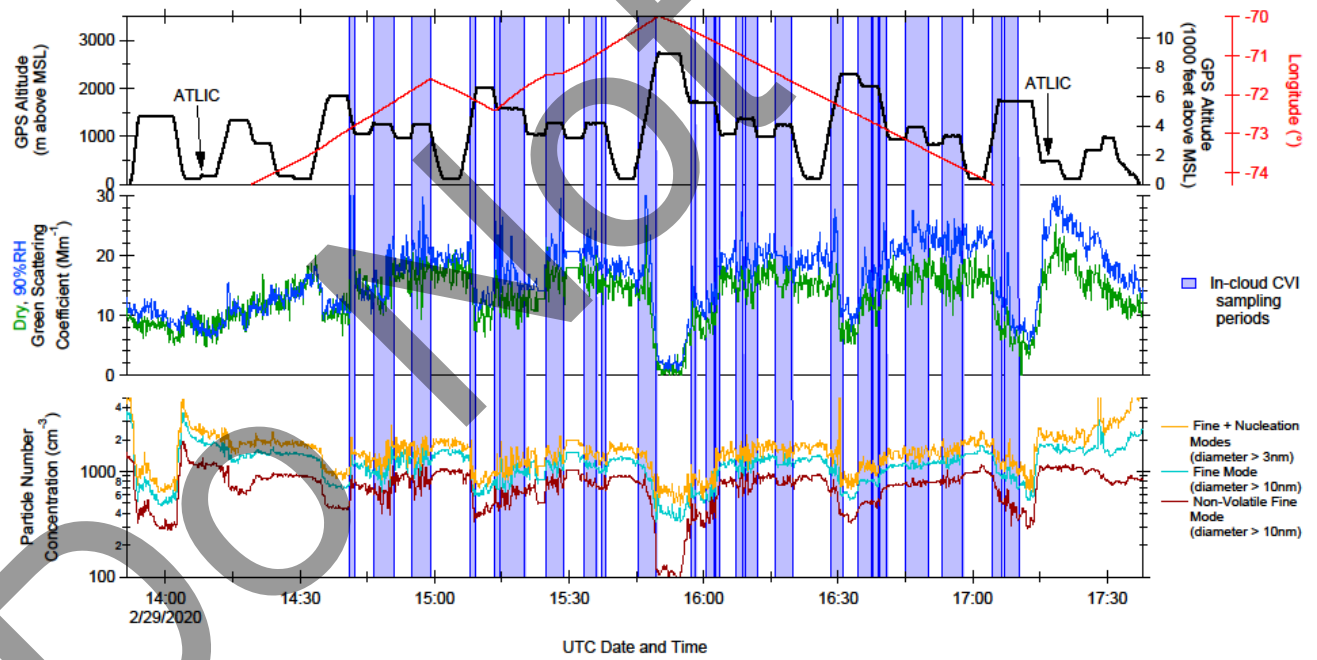
- The delayed take off of King Air affected coordination so fit in a delay loop during flight to let King Air catch up
- During that delay loop there was a slight miscommunication on plane about how to chase cloud tops leading to a wider loop before getting back on the right heading to the NEast
- Irregular shapes on 2DS, possibly snow; cold clouds

Instruments:

Clouds were too cold for cloud water

Do Not Cite!

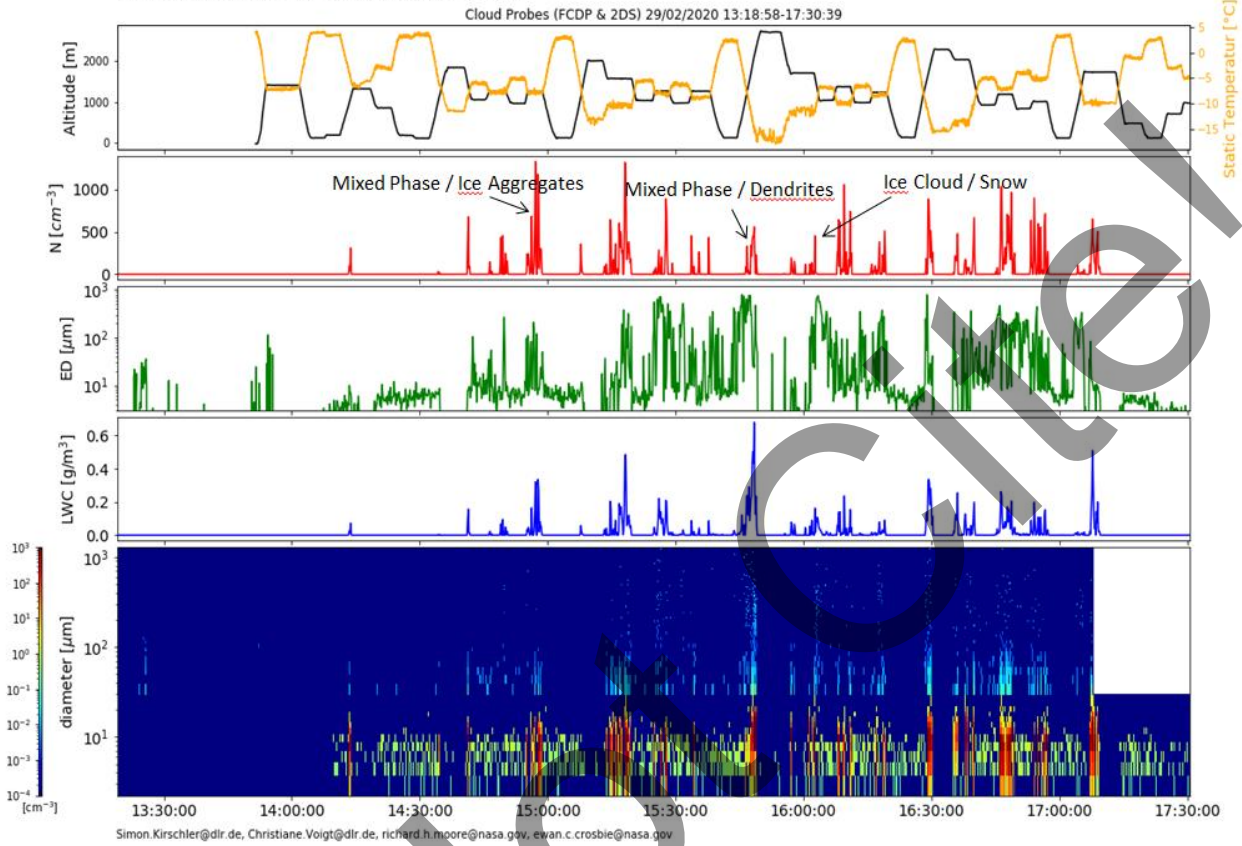
Rich Moore Quicklook Images:



Quicklook ACTIVATE Cloud Probes (FCDP & 2DS)

preliminary data, only for quicklook use

Simon Kirschler, Christiane Voigt, Richard Moore, Ewan Crosbie

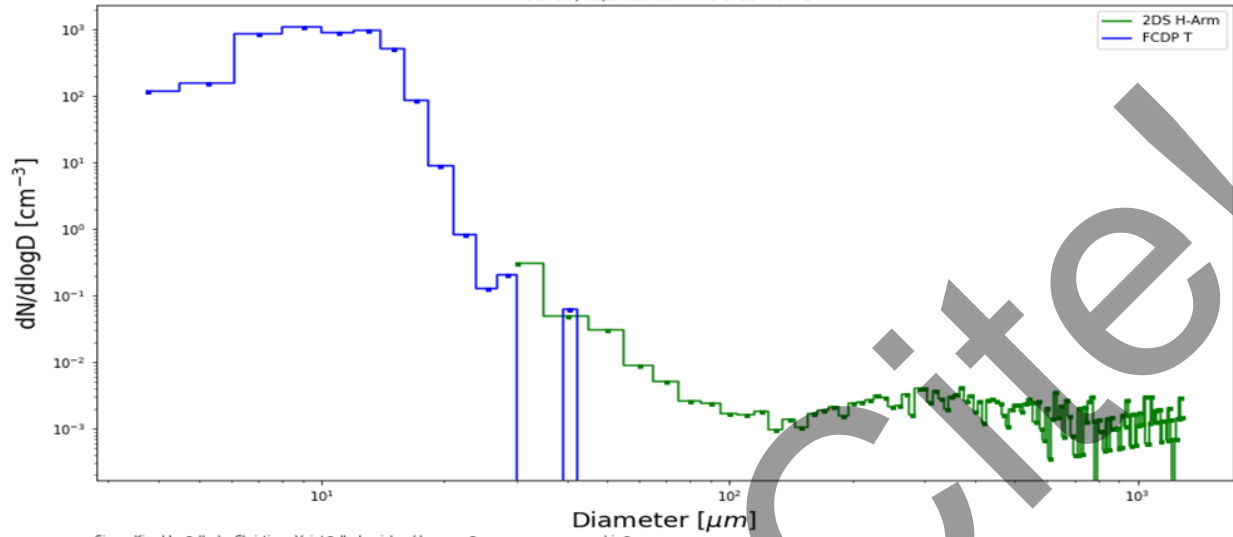


PSD ACTIVATE

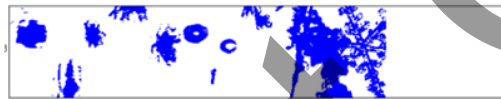
preliminary data, only for quicklook use
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PSD 29/02/2020 15:47:56-15:48:42



Mixed Phase / Dendrites: 15:26:18



Mixed Phase / Ice Aggregates: 14:56:52

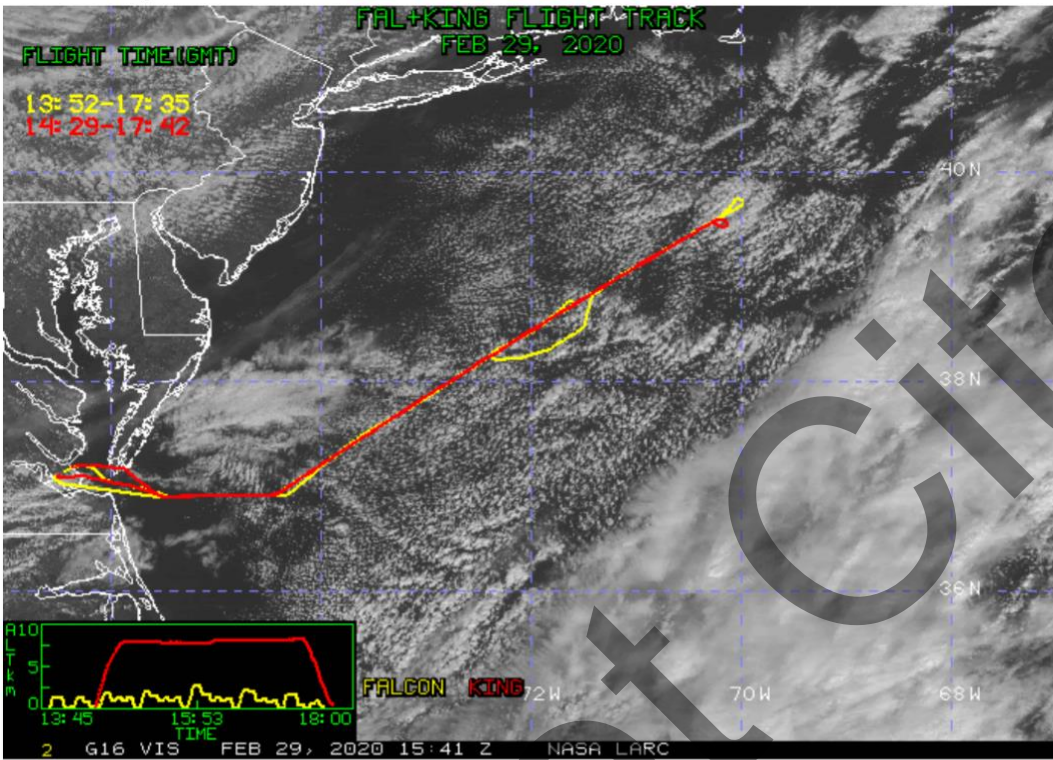


Ice Cloud / Snow: 16:03:29

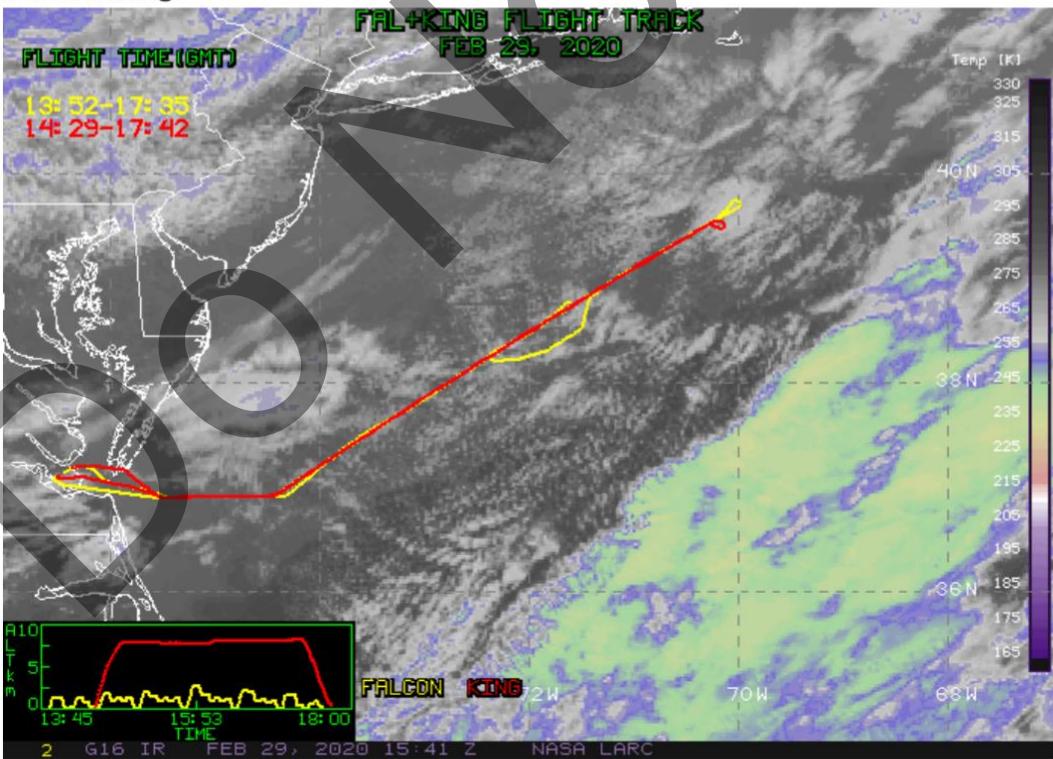


NASA-LaRC Clouds Group GOES-16 Quicklook Images for Flight 12, 15:41 UTC Feb 29, 2020
(near middle of flight)

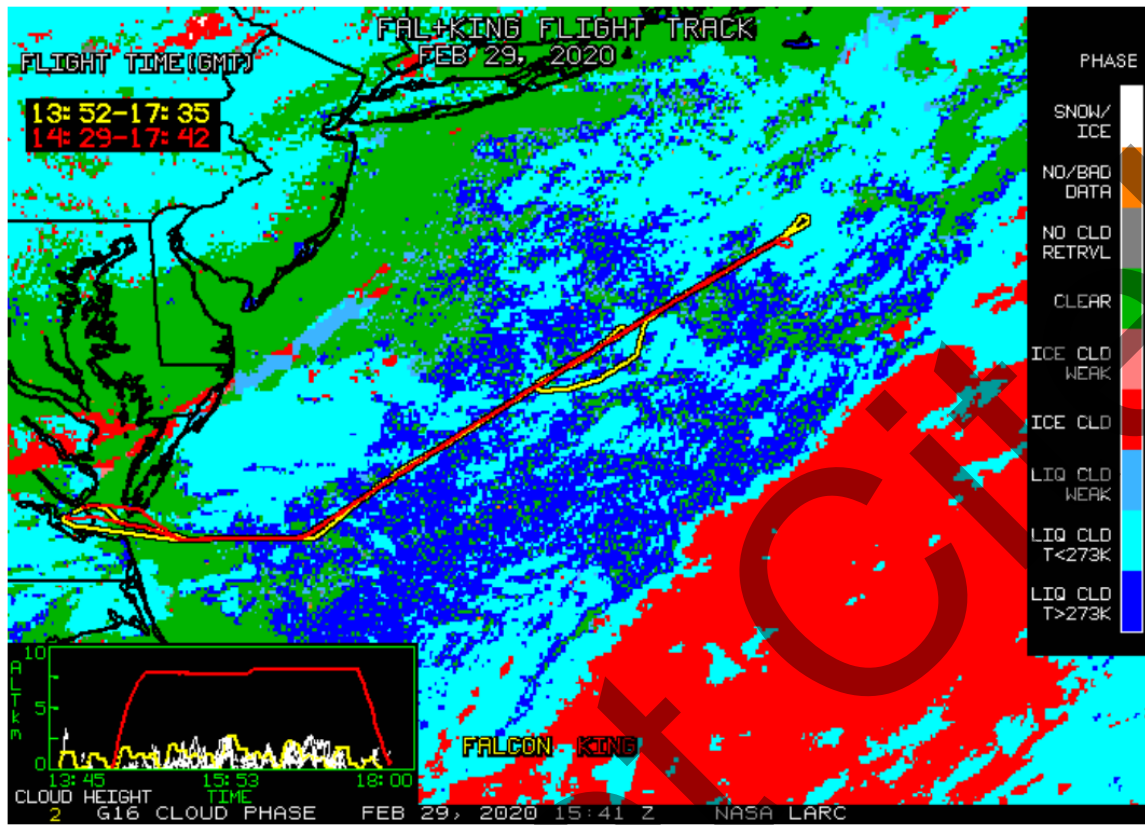
Visible Image



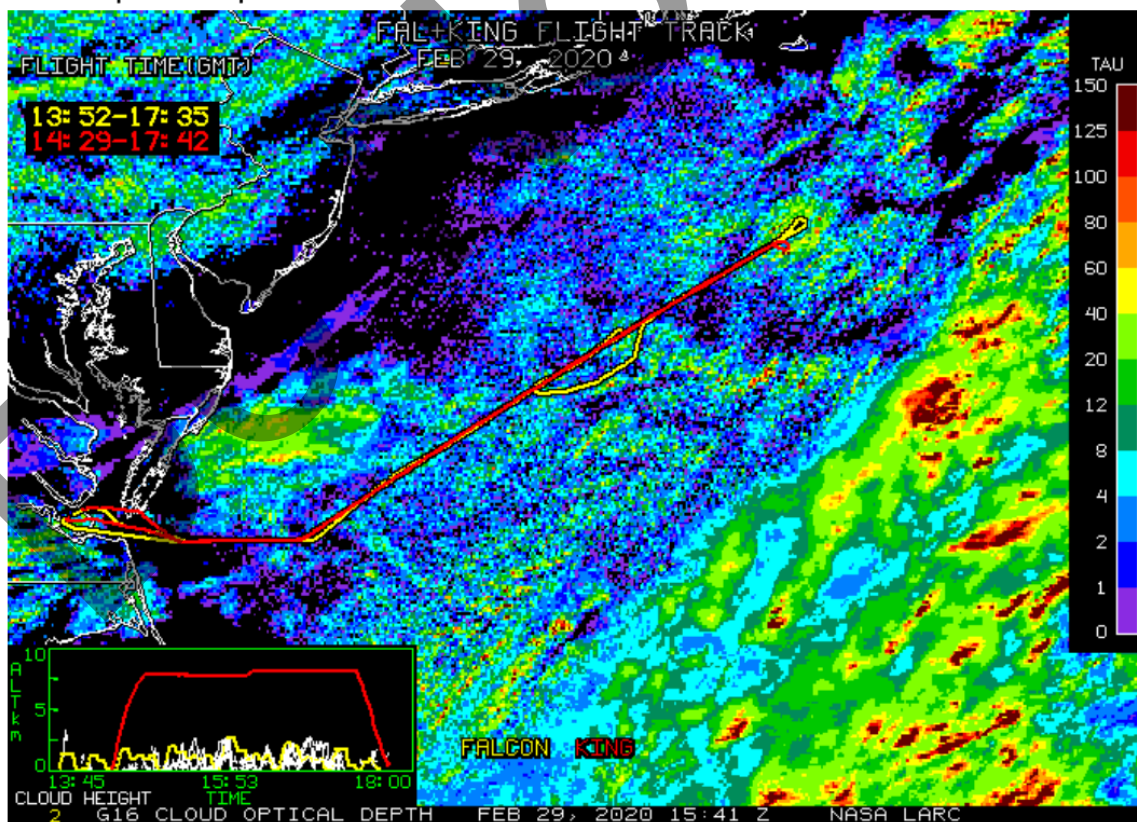
Infrared Image



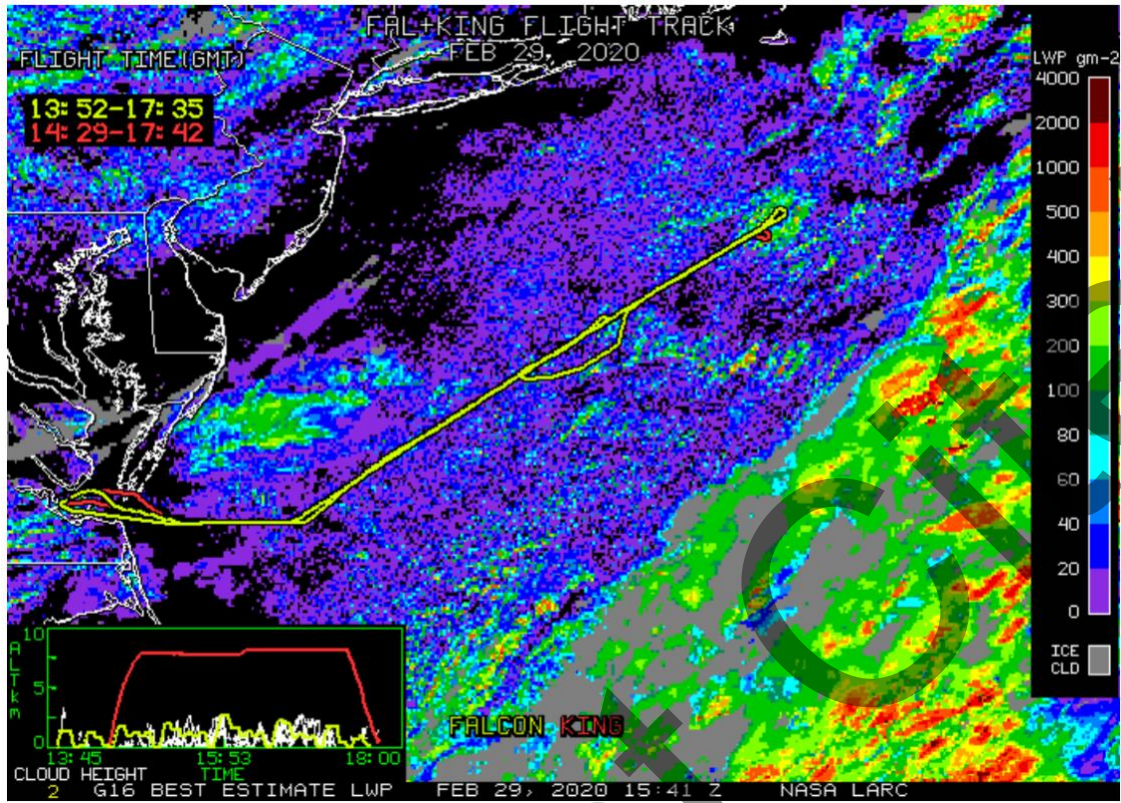
Cloud Phase



Cloud Optical Depth



Liquid Water Path (gm-2)



Cloud Droplet Number Concentration (cm-3)

