

Flight Scientist Report
Tuesday 06/14/2022 ACTIVATE RF176

Flight Type: Process Study Flight

Flight Route:

Special Notes:

King Air

Pilot report (Coldsnow):

Flight planned as a statistical survey (TXKF SOMRR ADEMR BDA 3149N06420W PIREX 3010N06210W PIREX 3149N06420W 3215N06500W 322211N0651131W TXKF) with an option to switch to a Process Study. Approximately 100 NM south of BDA a line of clouds appeared to be ideal for a Process Study. The process study started around a build-up located at 3021.25N 06425.49W. We estimate the buildup of interest moved approximately 12 NM over a 2 hr period. All portions of the flight were within 10 min up with the Falcon. Five dropsondes were released approximately 15 NM from the buildup of interest. A clear air spiral was performed at 3036.64N 06427.16. Winds were light out of the north (10-20 knots).

Flight scientist report (Seaman):

Instrument notes: HSRL server/PXI was not booting properly but after two restarts, operated nominally. All else nominal.

Science notes: Process study focussing on a line of clouds that were building and eventually dissipated by the end of the study. As with most of the Bermuda flights, appreciable dust present.

Sonde drops: 5 sondes were dropped on the perimeter of the process study area.

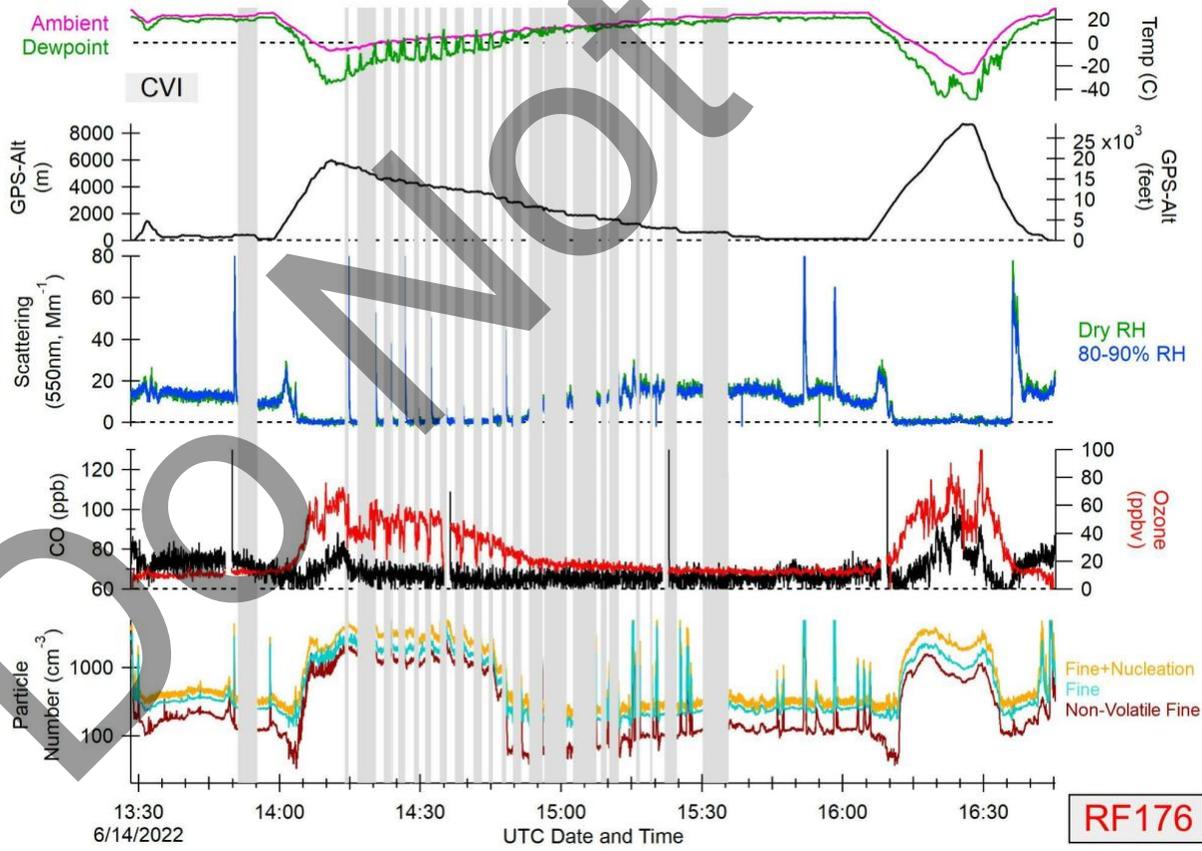
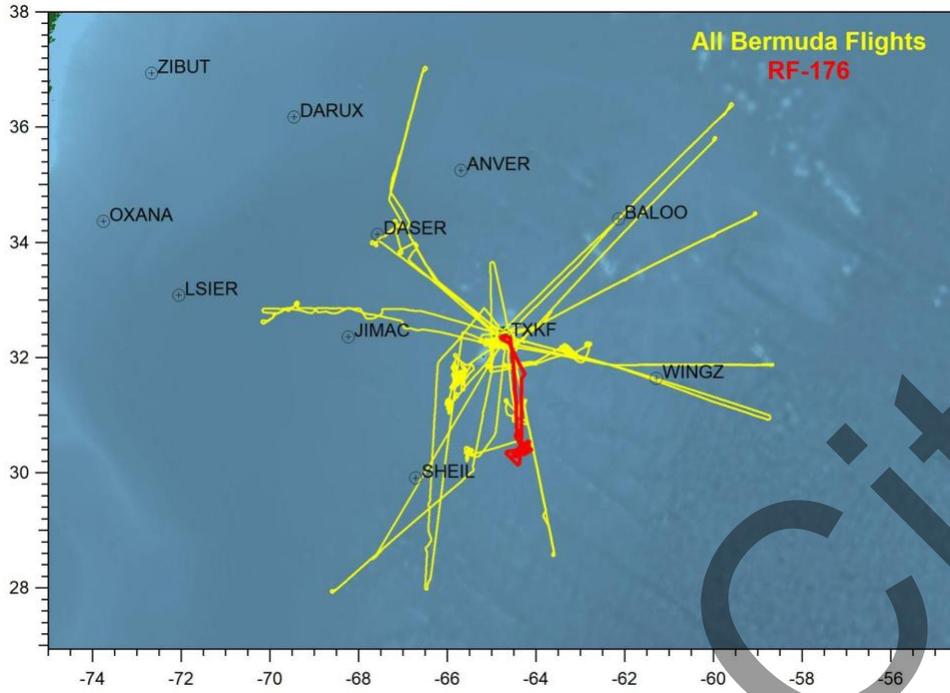
Falcon

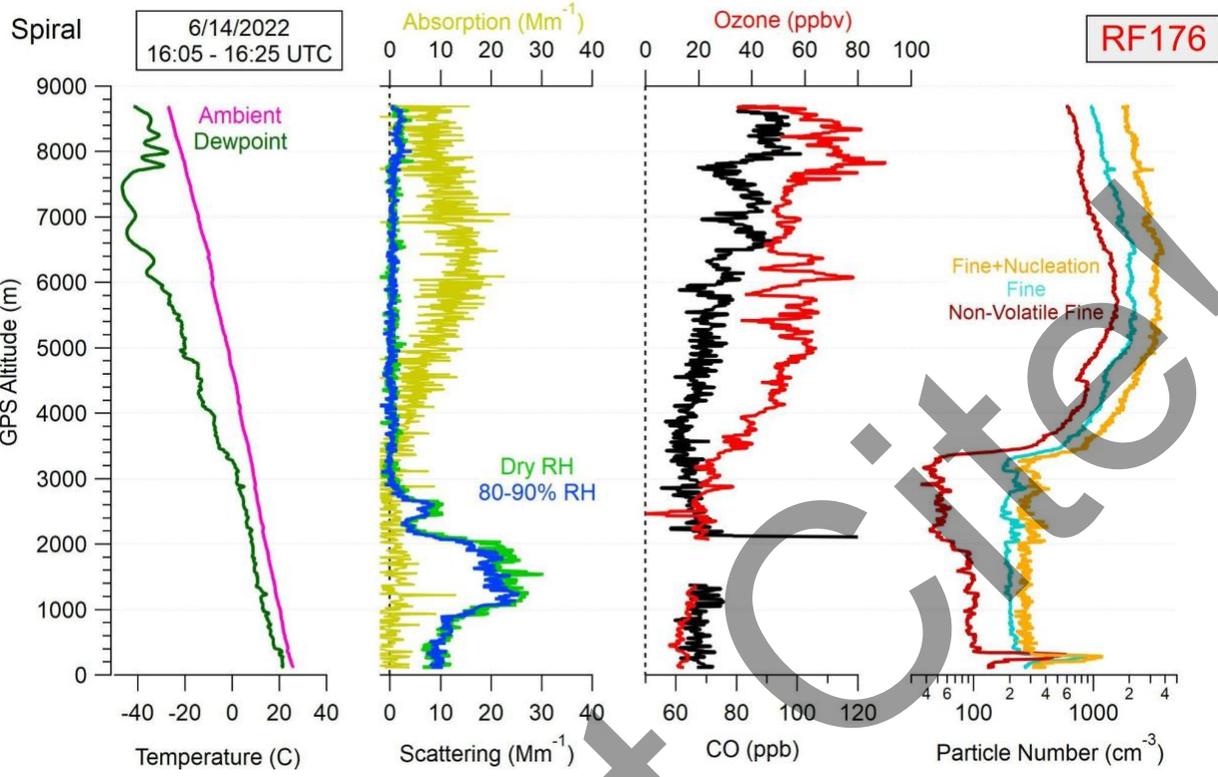
Pilot report (Baxley):

ACTIVATE coordinated flight with HU-25 and UC-12; Baxley/Elder, Crosbie/Winstead TXKF - 3149.02N/06419.98W - PIREX - 3010.01N/06210.02W - PIREX - 3149.02N/06419.98W - 3214N/06500W - TXKF Alternate mission briefed for process study, researchers directed change to alternate plan while airborne. Cloud sampled located at 3038.46N/06423.10W. Successful mission, no anomalies noted.

Flight scientist report ():

Do Not Cite!





Do Not Cite!

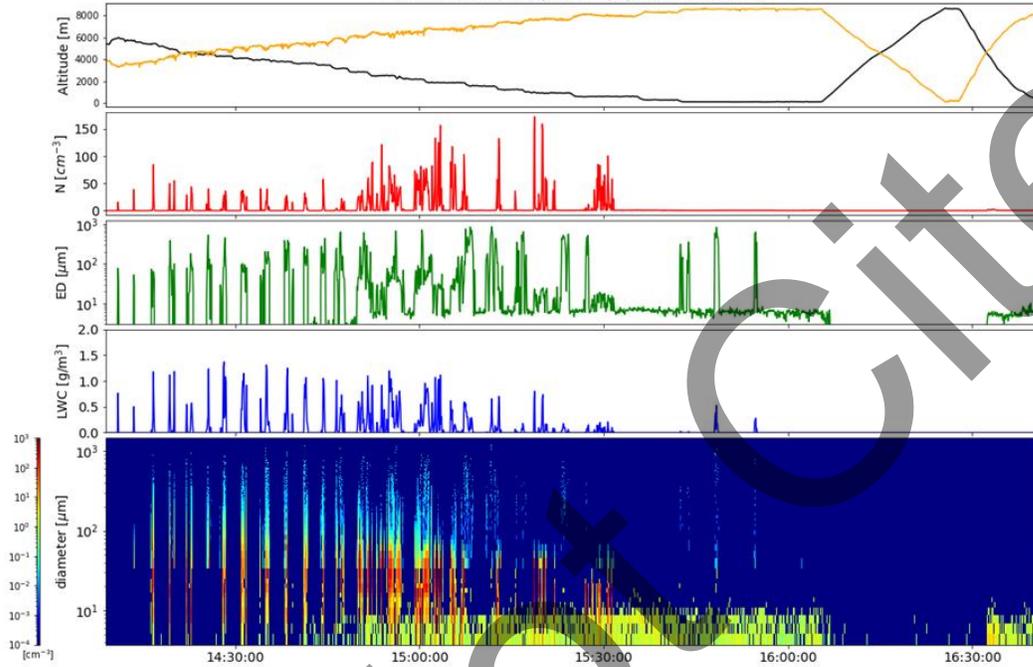
Quicklook ACTIVATE Cloud Probes (FCDP & 2DS) Quicklook

preliminary data, only for quicklook use

Simon Kirschler, Christiane Voigt, Richard Moore, Ewan Crosbie



Cloud Probes (FCDP & 2DS) Quicklook 14/06/2022 14:08:51-16:41:30

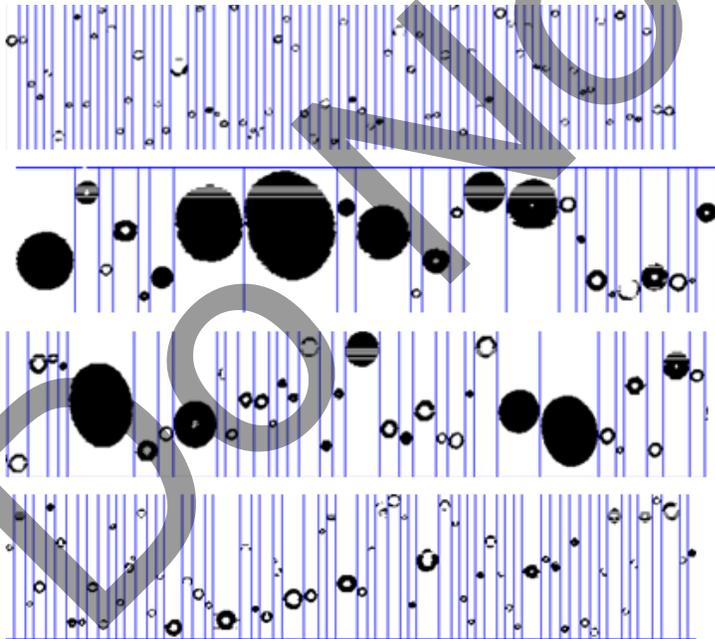
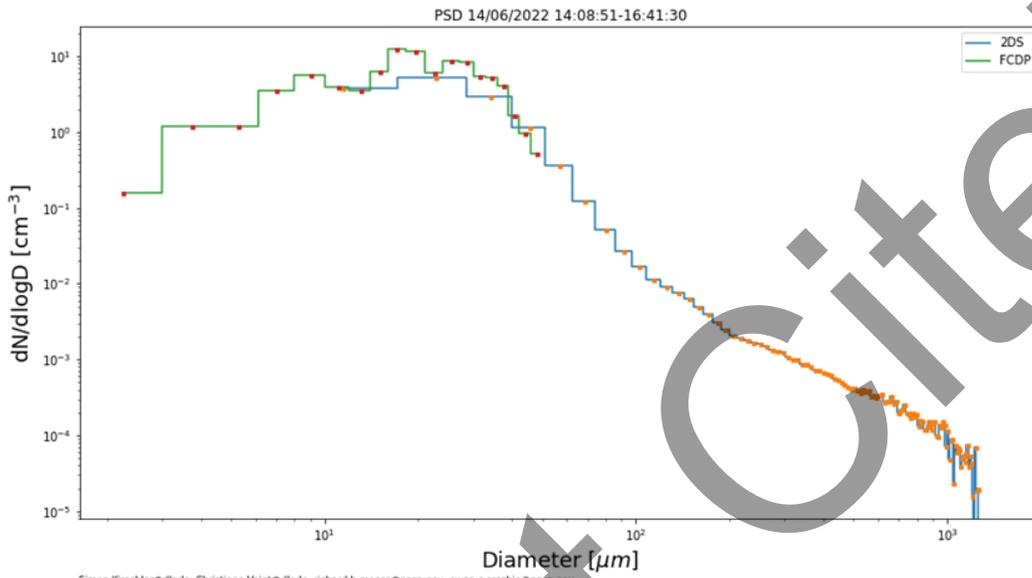


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Do Not Cite!

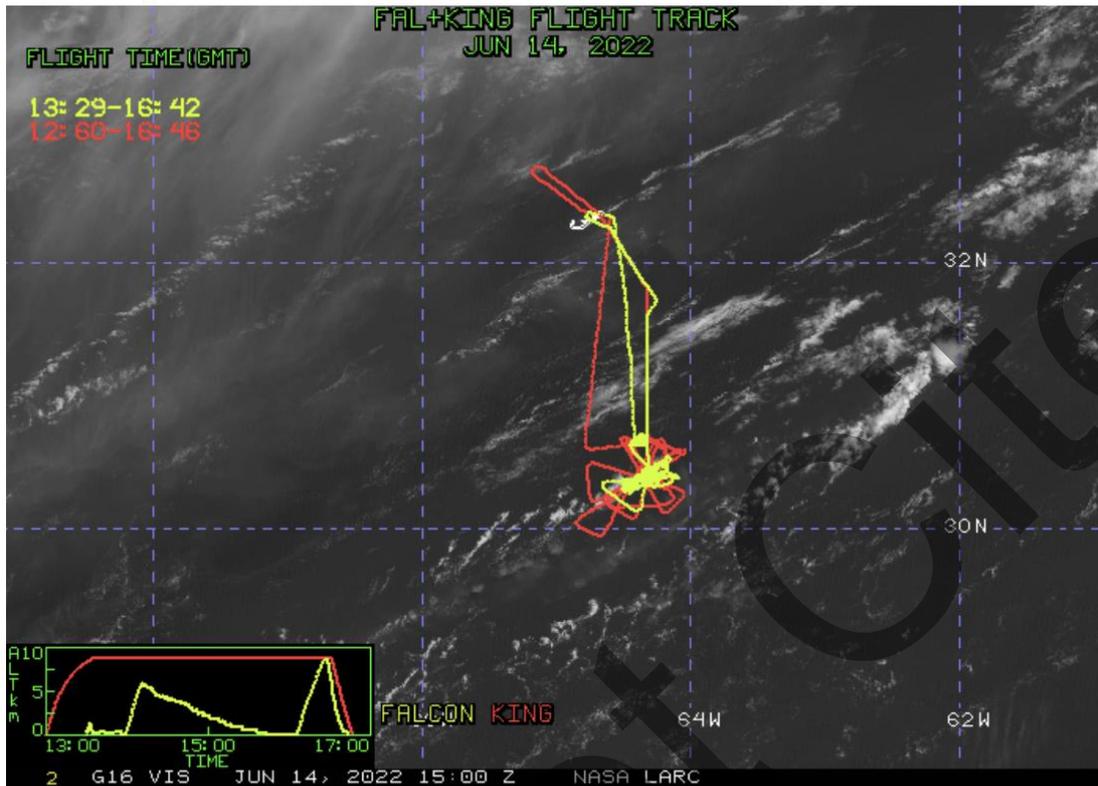
PSD ACTIVATE

preliminary data, only for quicklook use
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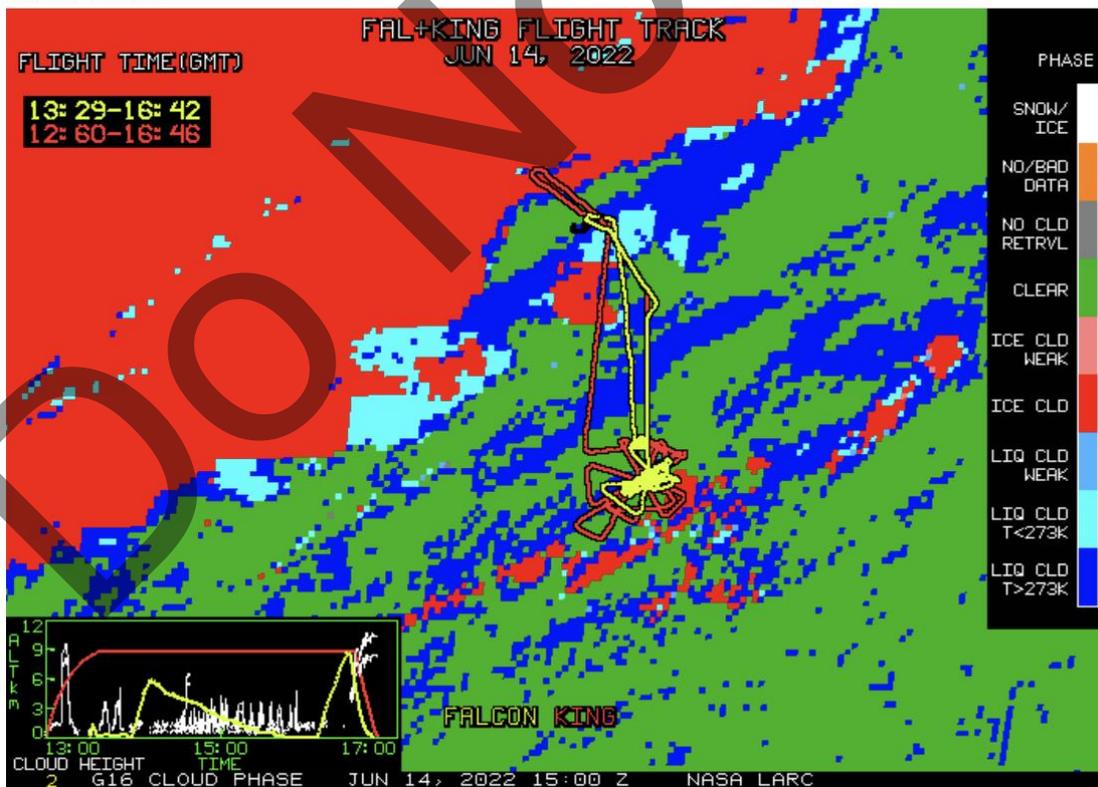


Only pure liquid clouds with Precip.

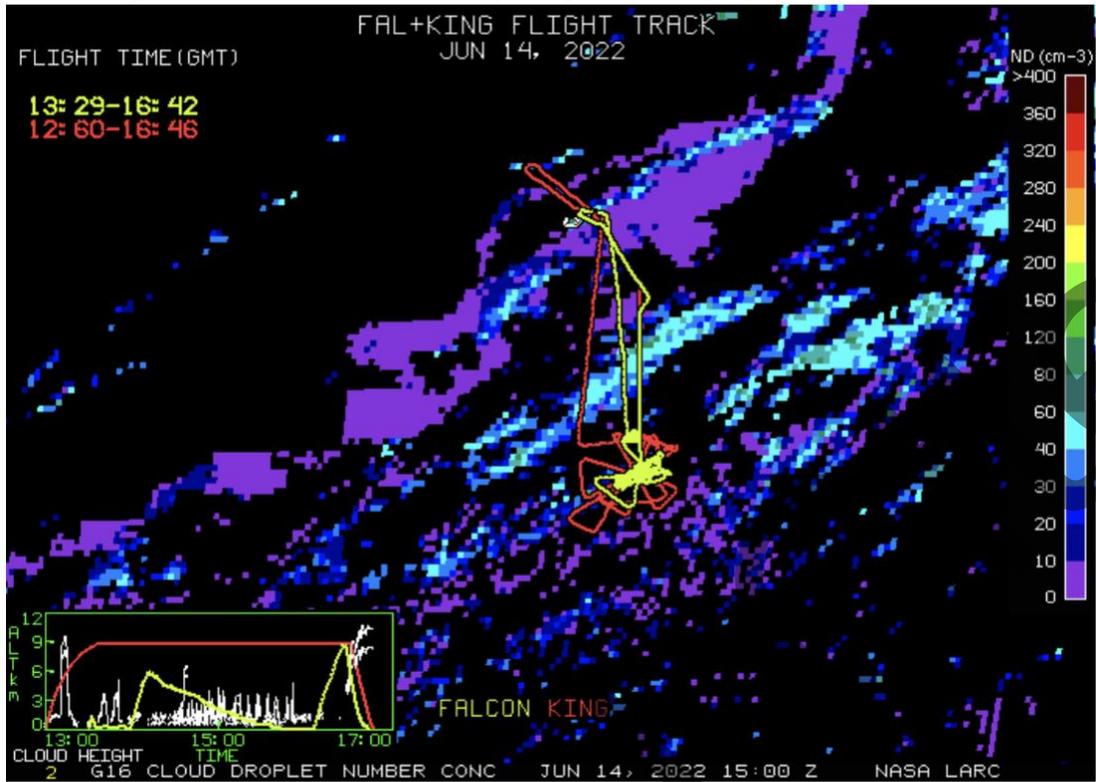
NASA-LaRC Clouds Group GOES-16 Quicklook Images for Flight 176, 15:00 UTC Jun 14, 2022
Visible Image



Cloud Phase



Cloud Droplet Number Concentration (cm-3)



Cloud-Top Height (Kft-ASL)

