

Flight Scientist Report

Tuesday 09/29/2020 ACTIVATE RF39

Flight Type: Process Study Flight: Zibut to the north

Flight Route: KLF1 ATLC ZIBUT 3656N07125W ZIBUT ATLC KLF1

Special Notes:

Focusing on "Type B" clouds today

Today represents a case of it being as far as possible to still do a process study flight. Had to adapt to where the type B clouds were.

King Air

Flight went well and encountered some thick layers on the ascent. Chat was down.

A few instrument issues but at times when it wasn't a major issue.

13 dropsondes today

Falcon

Flight went well according to pilots

Eddie found a leak during ascent and fixed it around ~8 min after takeoff

High humidity today so had trouble drying the dry-neph

CCN flows looked ok early in flight but at times they were noisier than past flights (eddie thinks usable)

Did an APU test at end of flight, and it was successful.

Ewan noted overall that we pulled off the summertime process study flight well.

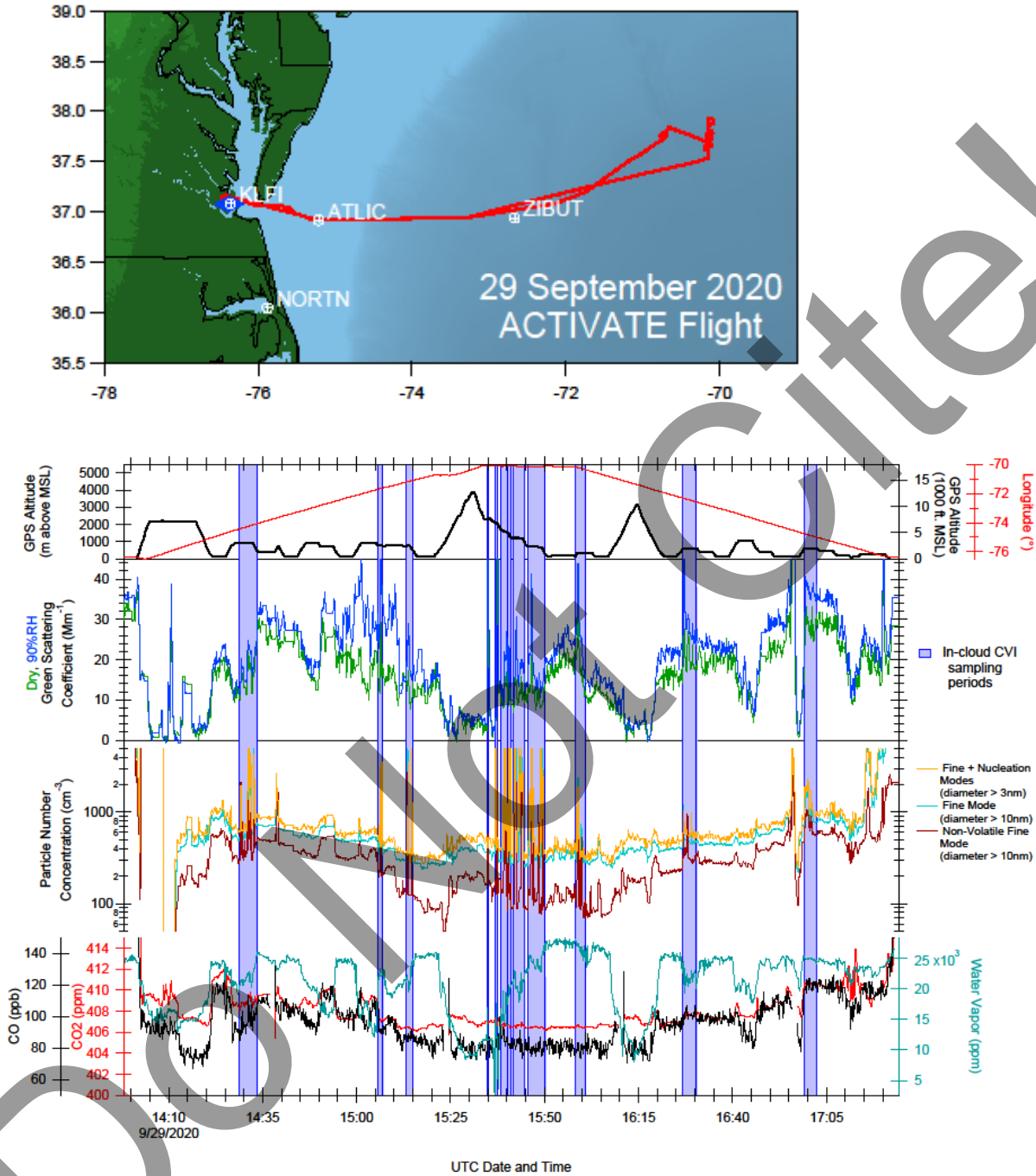
Got 3 clear modules on way to the station area.

Did clear spiral first since had a hard time picking place to do our process study

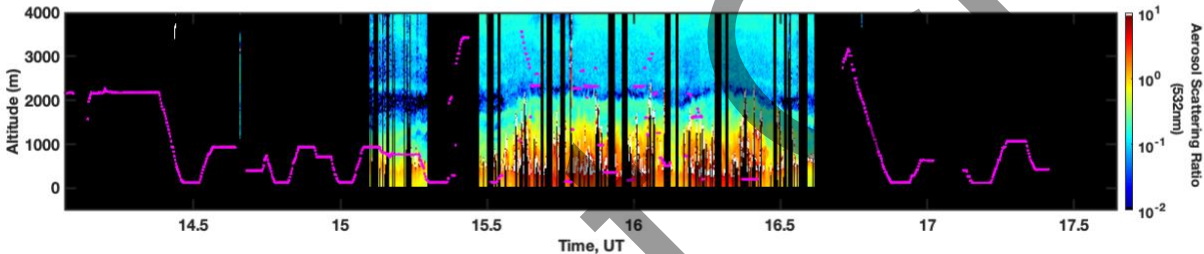
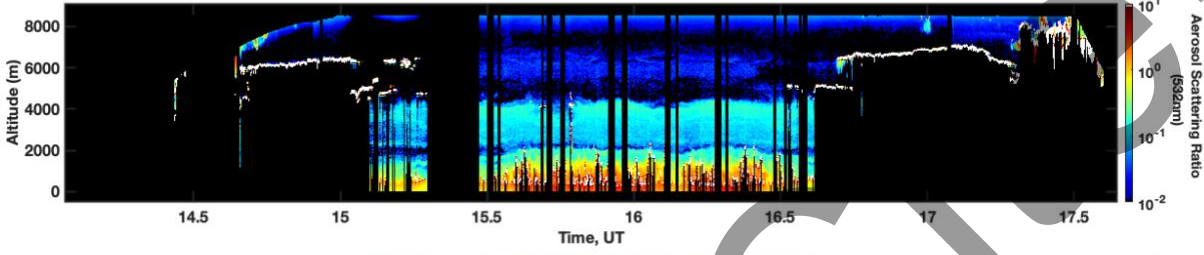
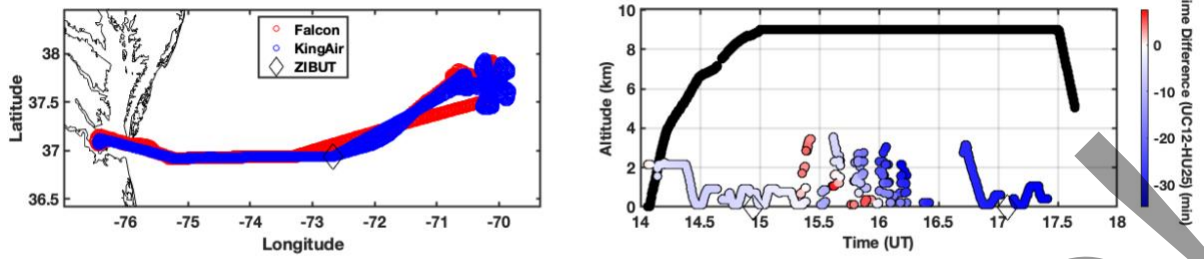
Got cloudwater samples

Got a clear ramp at the end

Rich Moore Quicklook Images:

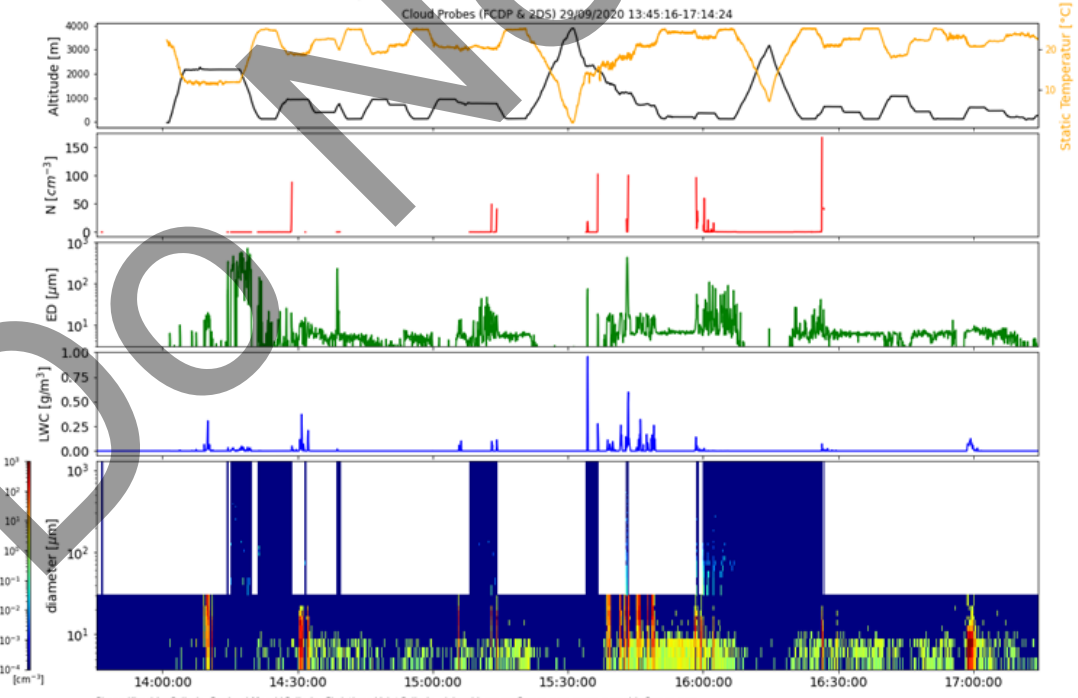


20200929 - ACTIVATE - KingAir and Falcon flight tracks



Quicklook ACTIVATE Cloud Probes (FCDP & 2DS)

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



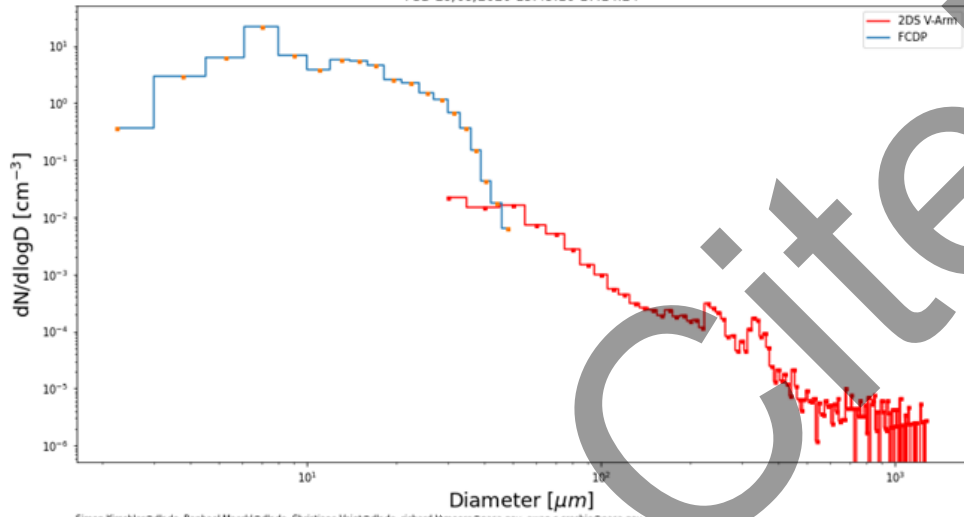
Simon Kirschler@dlr.de, Raphael Maerki@dlr.de, Christiane Voigt@dlr.de, richard.h.moore@nasa.gov, ewan.c.crosbie@nasa.gov

PSD ACTIVATE

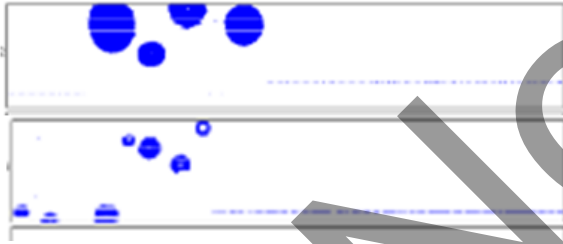
preliminary data, only for quicklook use
Simon Kirschler, Raphael Märki, Christiane Voigt, Richard Moore, Ewan Crosbie



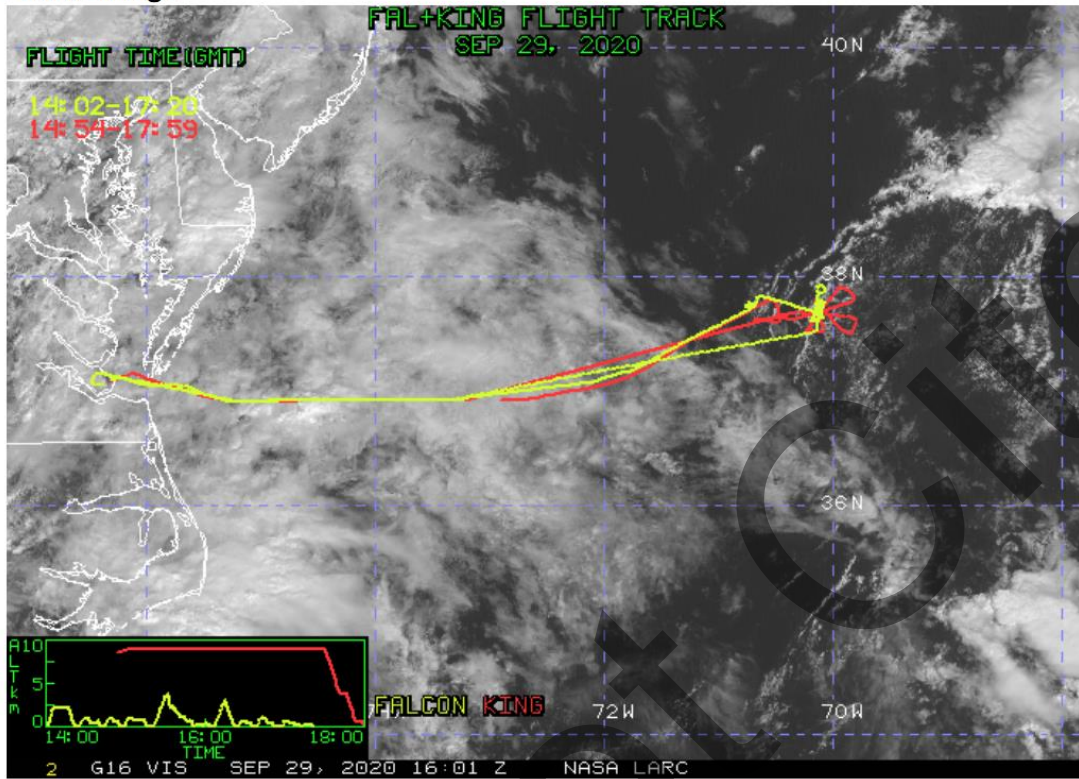
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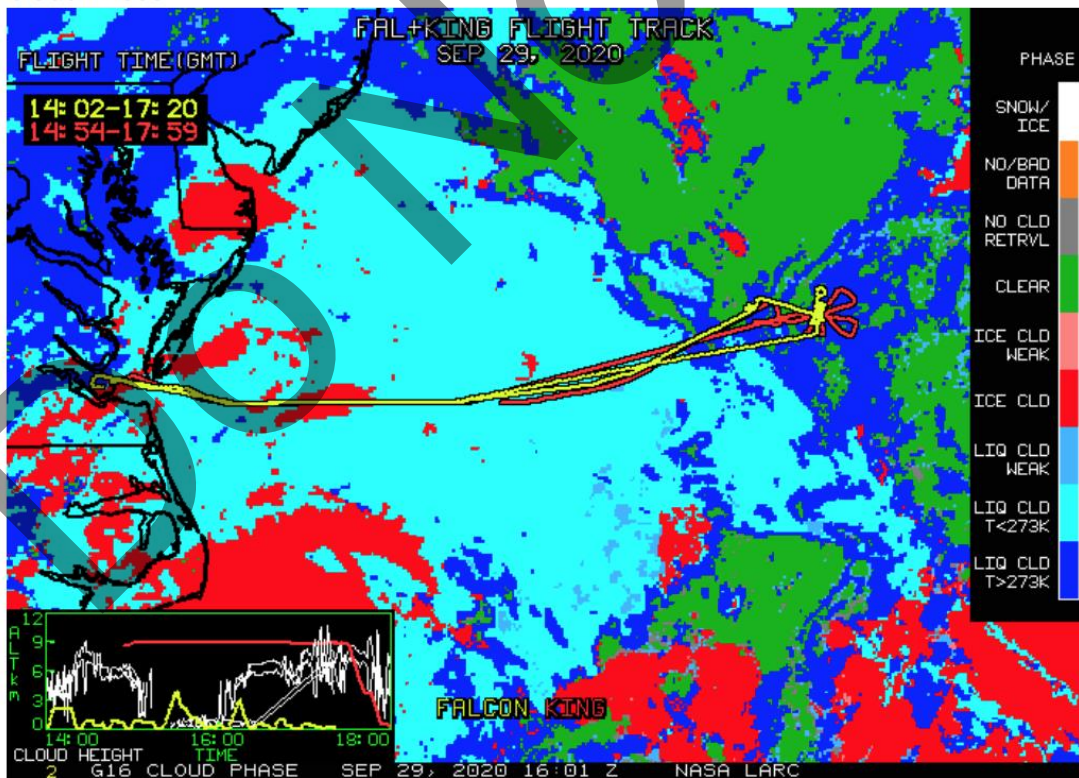
14:17



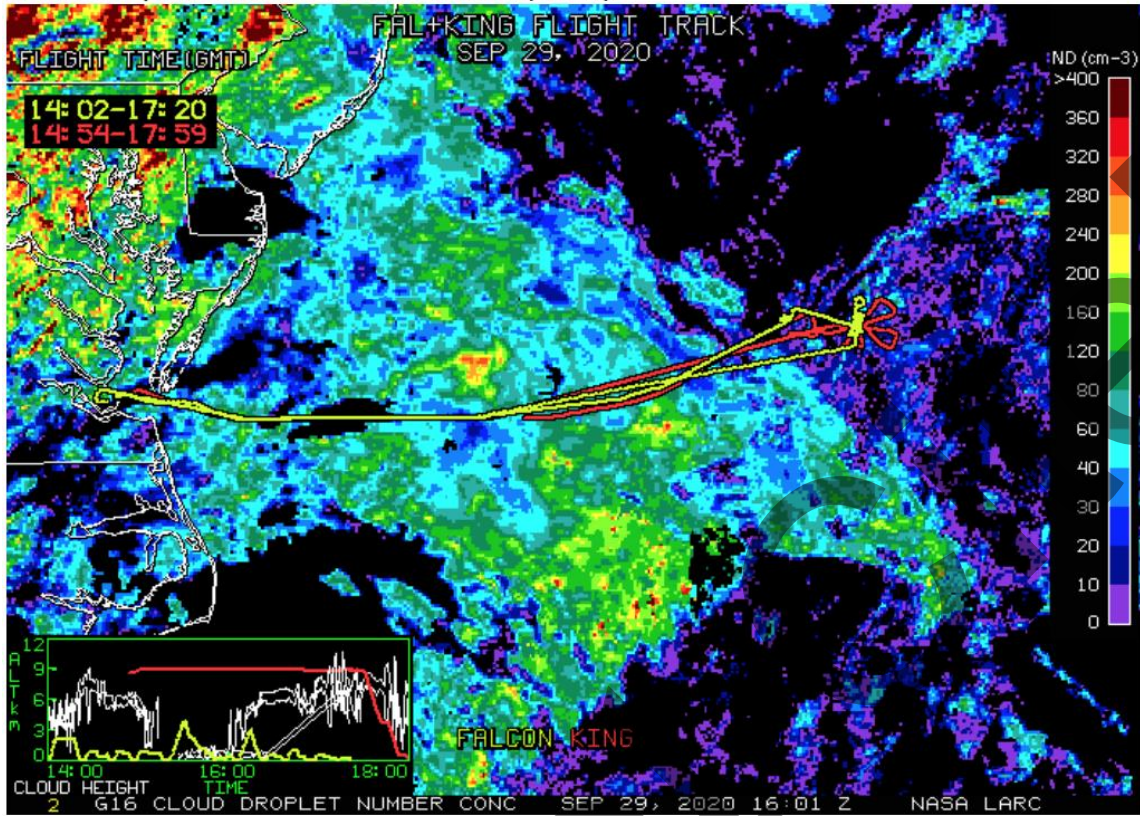
NASA-LaRC Clouds Group GOES-16 Quicklook Images for Flight 39, 1601 UTC Sep 29, 2020
Visible Image



Cloud Phase



Cloud Droplet Number Concentration (cm⁻³)



Cloud-Top Height (Kft-ASL)

