

Flight Scientist Report
Tuesday 05/31/2022 ACTIVATE RF161

Flight Type: Statistical Survey Flight
Flight Route: KLF1 - ATLC - ZIBUT - BOVIC - TXKF
Special Notes: Transit flight from LaRC to Bermuda. Excellent day for science as weather cooperated.

King Air

Pilot report (Wusk):
Deployment flight of UC12 to Bermuda in conjunction with the HU for the ACTIVATE Project. Crew was Sandeen, Wusk, Shingler, Banda.

Flight scientist report (Shingler):

KLF1 ATLC ZIBUT BOVIC TXKF

Transit for Bermuda deployment. On the way out to ZIBUT, a fairly capped layer up to 5kft with moderate scattering of ~2ASR at peak. Lofted layers above with possible dust at 10-12kft and smoke from 14-16kft. Fairly stratified layers along the way today. Shallow cu at 2kft along the money leg. Scattered shallow cu at 2kft all along the way in during the second half of flight.

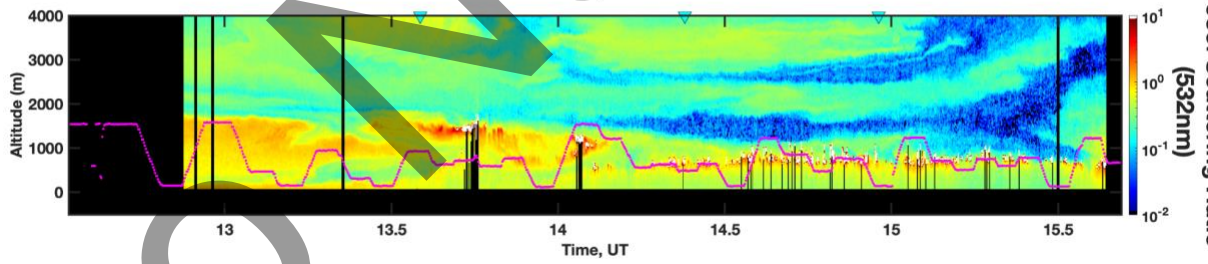
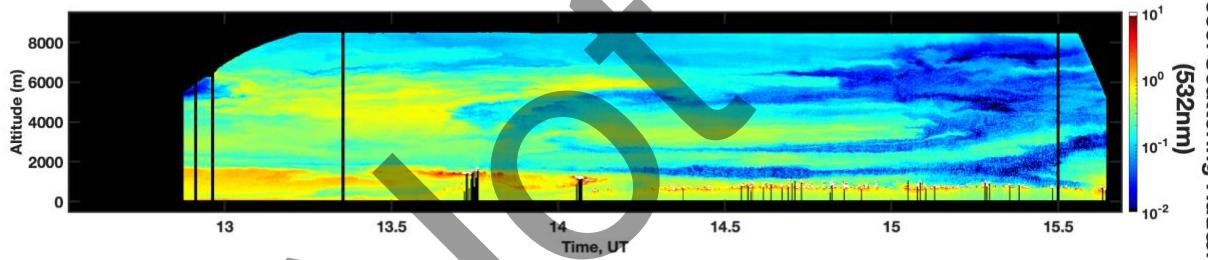
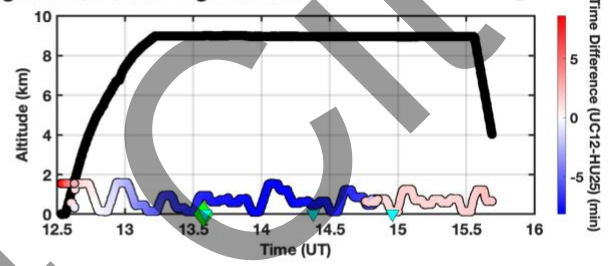
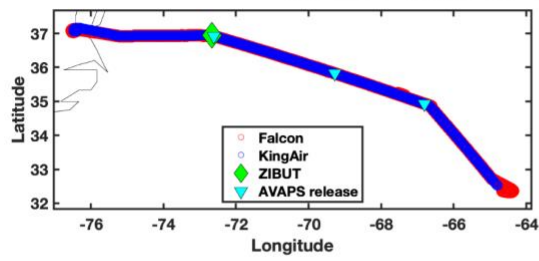
3 SONDES dropped
ZIBUT
MID ZIBUT/BOVIC
BOVIC

Falcon

Pilot report (Baxley):
ACTIVATE HU-25 flight with UC-12; deployment to Bermuda Crew: Thorson/Baxley, QNC: Crosbie/Winstead KLF1 - ATLC - ZIBUT - BOVIC - TXKF Mission flown as briefed and weather as expected (light low level clouds). Made one three minute reverse track in the vicinity of BOVIC to align aircraft.

Flight scientist report ():

20220531 - ACTIVATE - KingAir and Falcon flight tracks



Aerosol Scattering Ratio (532nm)

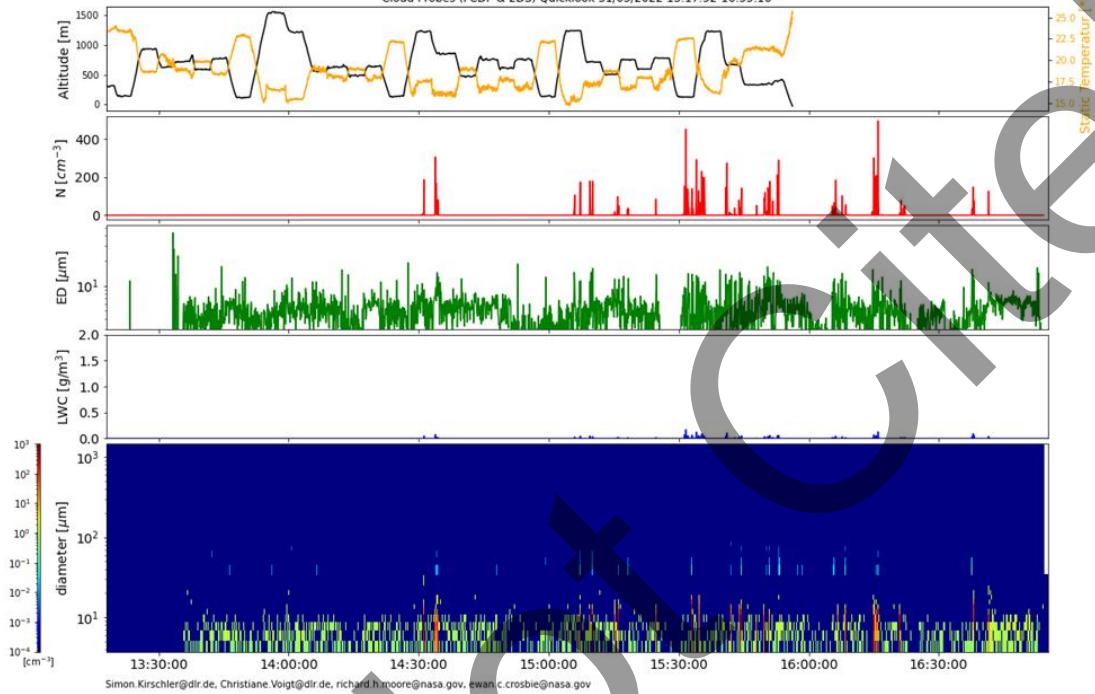
Quicklook ACTIVATE Cloud Probes (FCDP & 2DS) Quicklook

preliminary data, only for quicklook use

Simon Kirschler, Christiane Voigt, Richard Moore, Ewan Crosbie



Cloud Probes (FCDP & 2DS) Quicklook 31/05/2022 13:17:52-16:55:16

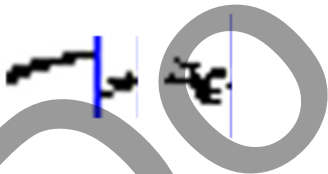
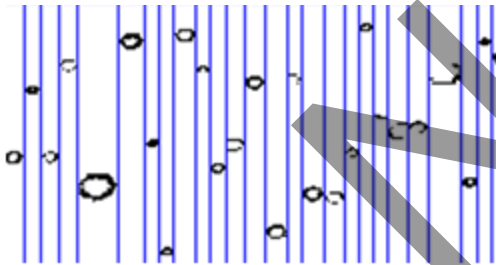
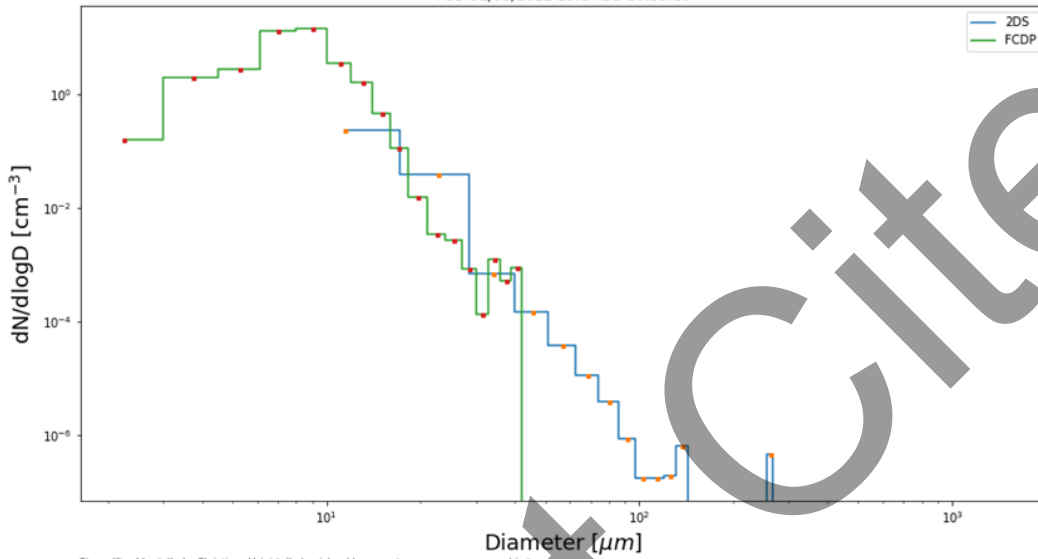


PSD ACTIVATE

preliminary data, only for quicklook use
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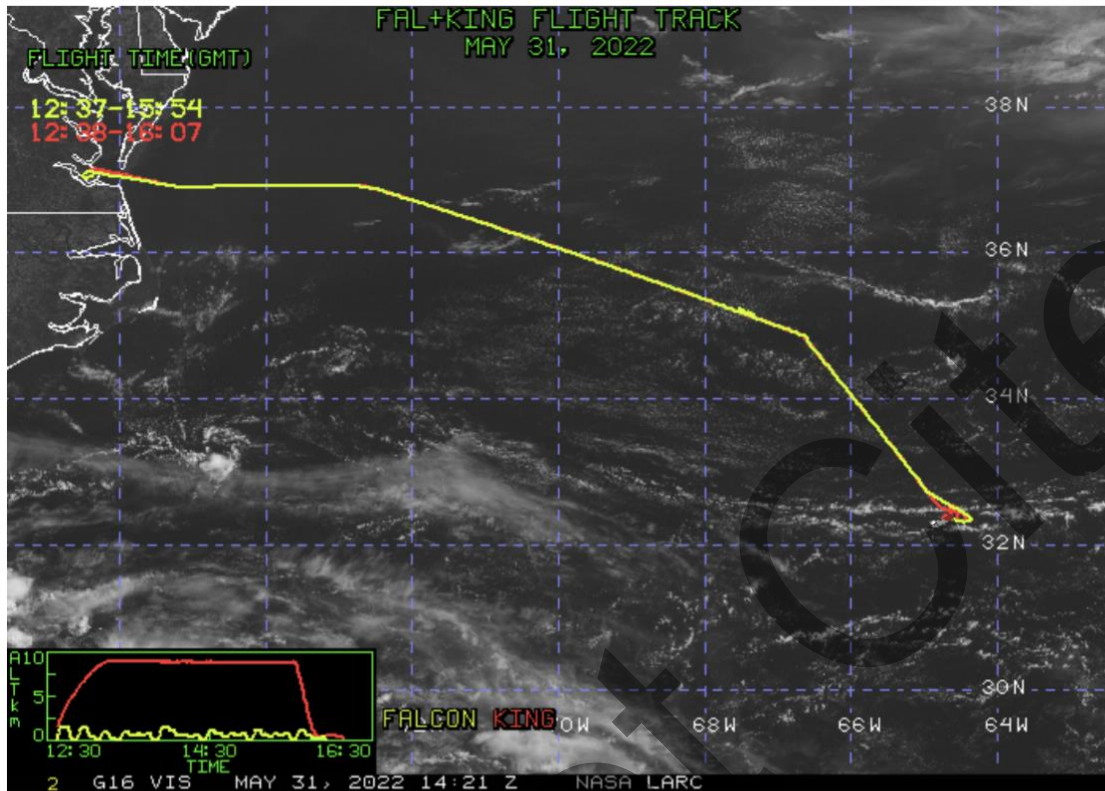


PSD 31/05/2022 13:17:52-16:55:16

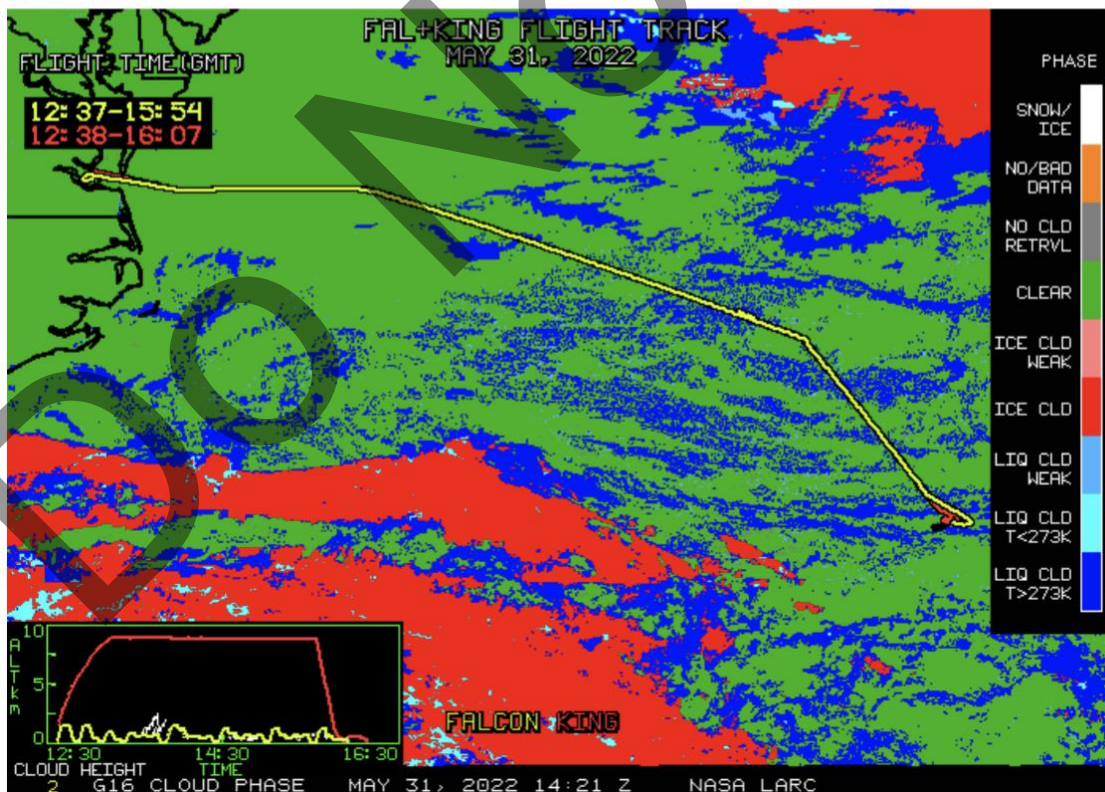


Only pure liquid clouds without Precip and occasionally small Bioaerosol.

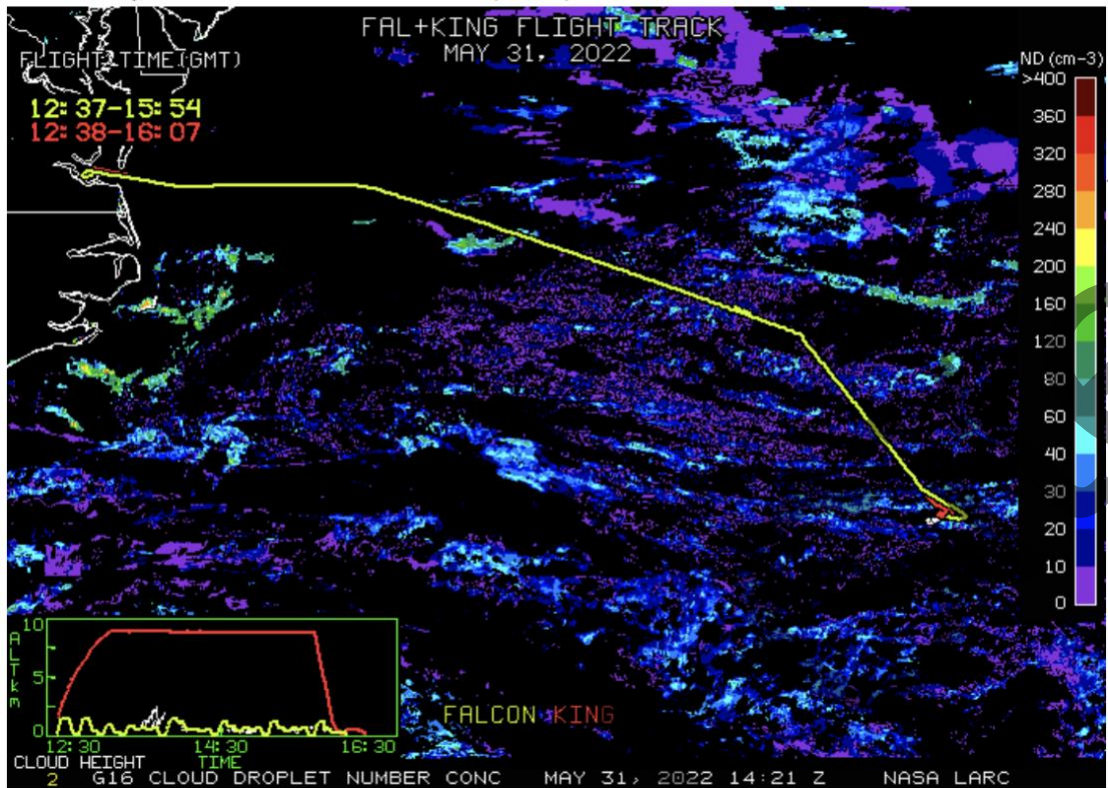
NASA-LaRC Clouds Group GOES-16 Quicklook Images for Flight 161, 14:21 UTC May 31, 2022
Visible Image



Cloud Phase



Cloud Droplet Number Concentration (cm-3)



Cloud-Top Height (Kft-ASL)

