Flight Scientist Report  
Tuesday 03/30/2021 ACTIVATE RF58

Flight Type: Statistical Survey Flight  
Flight Route: KLFI KECG OXANA PERDO OXANA KECG KLFI  
Special Notes: Morning flight of a 2 flight day. This one is focused on good cloud conditions moving towards Oxana and the southeast.

King Air  
Pilot report (Wusk): Take-off 0801 Lndg 1125 3.4 hours

ACTIVATE dual aircraft (with HU25) science flight. UC12 crew was Coldsnow, Wusk, Shingler. 1st flight of a two-flight day. Planned route was KLFI ECG OXANA PERDO OXANA ECG KLFI. Take-off was slightly early to help with afternoon flight timing. Take-off at 0801 and landed at 1125 for 3.4 hours. Flown as planned, at FL270, 4 sondes dropped. Aircraft performed well, no issues.

Flight scientist report (Shingler): The first of two joint flights for the day were flown out of AR8 down to OXANA and out to PERDO with a return track on the same line. The cloud scene was fairly consistent throughout the entire flight with a thin low-level cloud deck between ~4-6kft with some thin aerosol layers at higher altitudes above the cloud deck. 4 sondes were dropped on this flight (OXANA, end of leg ~ONGOT, coast). All instruments were operating nominally.

Falcon  
Pilot report (Delaney): Science flight for the HU-25 in support of ACTIVATE Campaign #3, conducted cooperatively with the UC-12. Departed Rwy08 to ECG climbing to 3k ft MSL for initial transit. Research profiles conducted from ECG-OXANA-PERDO-OXANA-ECG-KLFI. Winds were light (<15 knots) and variable (120-210) at flight altitudes with a scattered offshore layer initially encountered from ~2-4 k FT MSL (ECG-OXANA), followed by a clear section approaching OXANA before re-entering layers outbound to PERDO. Both cloud and clear air modules were completed throughout the flight as conditions warranted, ranging from 500 – 5500 FT MSL. A temperature inversion was noted from ~2500-5500 ft MSL with a transition from ~4 to ~12 deg C, respectively. Aircraft geolocation was within ~20 nmi throughout the flight, and generally remained with ~10 nmi during the research-focused portion. All objectives were achieved and no system discrepancies were noted - pending post-flight data analysis.

Pilots: Baxley/Delaney  
QNCs: Crosbie/Winstead
Only pure liquid clouds without precipitation.

Visible Image

Cloud Phase