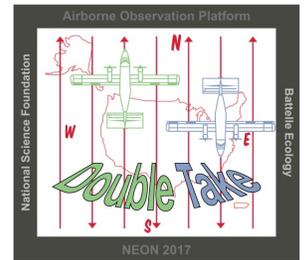




March 19, 2018 Payload 3 Daily Flight Report



Date: 2018-03-19

Flight Campaign ID: 2018_P3C1

Airport, FBO ID, City: Boulder Municipal Airport (KBDU) – Boulder, CO

Domain: 10

Sites Flown: N10C (Functional Check Flight – Nominal Runway)

Days left in Domain: 10

Report Author: Matt DeVoe

Flight Crew: Cameron Chapman, Matt DeVoe, Ivana Vu

Ground/GPS Crew: Abe Morrison, Robb Walker

Pilots: Stephen Brawders, Mike Francis

Additional Personnel: None

GPS Instruments: GPS01 – FBO_KBDU

Flight Hours: 02:54

Hours until aircraft maintenance: 122.10

Summary:

- The FCF/nominal runway was completed. Lines 1 – 26 (RiAquire Project: D10_N10C_Nominal_Rnwy_v7_Q780)
- Ivana V. completed her NIS recertification.
- Cameron C. completed his Reigl LIDAR observation flight.
- Abe M. completed his ground crew recertification

New Faults:

Lidar – Remote Desktop to RiAquire lost connection several times in-flight.

Flight Plans – Current N10C flight plan KML does not include markers.

Ongoing Faults:

Shutter on NIS not closed at the request of the lab manager due to a known malfunction.

Other Issues & Concerns:

None

Comments:

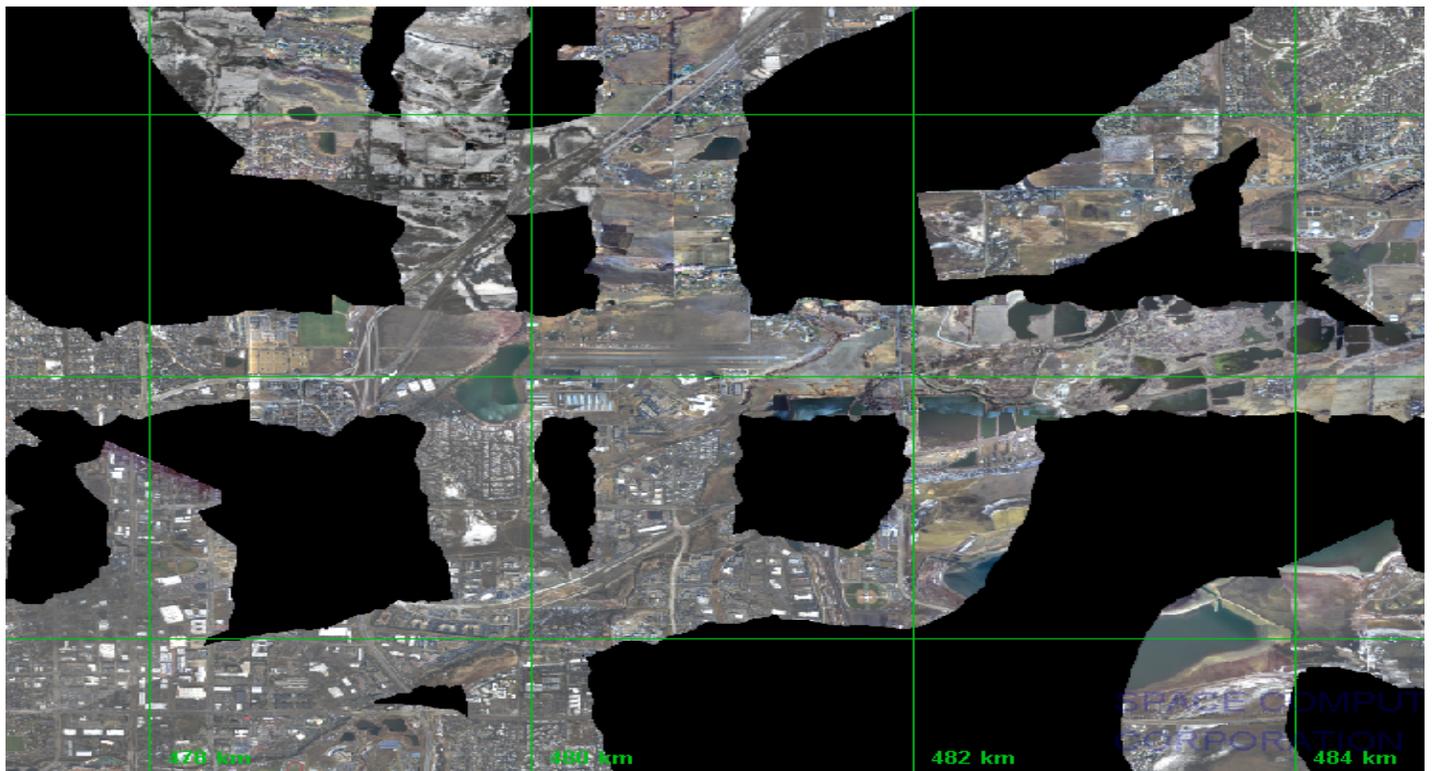
The weather was mostly cloudy with conditions broken at 8000' MSL and overcast at 10,000' MSL. The cloud deck remained high enough for us to accomplish 26 Functional Check Flight lines plus 2 test lines during 2.54 hours of flight. The LIDAR performed well but will need to have the remote desktop connection to RiAquire fixed ASAP.

Flight Screenshots:

The screenshot shows a flight software interface. The main window displays a 3D plot of flight paths in white lines against a black background. A prominent green cross-shaped path is visible, with the text "run 2" in yellow above it. The status bar at the bottom of the plot area shows: FPS: 2, POINTS: 10410/10410, PROC BUF: 0.00%/0.00%, and NODE BUF: 95.11%/0.00%. To the right of the plot is a vertical status panel with various indicators: Roll, Pitch, Yaw, GNS, Altit, Grou, Spee, Acc, Q780, Lase, Safe, GPS, Syn, Stat, Las, Con, Ran, Ran, Rea, and numerical values 0, 0, 0.

Messages

2018-03-19 19:03:55....	2018-03-19 19:04:50.272/6...	State of 'Q780' changed to 'Stop work-Logging
2018-03-19 19:03:55....	2018-03-19 19:04:50.274/6...	Automatic sensor stop accepted automatically after '2' seconds.
2018-03-19 19:04:08....	2018-03-19 19:05:03.169/6...	'Data Port' of 'Q780' changed to 'disconnecting' state
2018-03-19 19:04:08....	2018-03-19 19:05:03.170/6...	'Data Port' of 'Q780' changed to 'disconnected' state
2018-03-19 19:04:08....	2018-03-19 19:05:03.172/6...	State of 'Q780' changed to 'Initialized'
2018-03-19 19:04:34....	2018-03-19 19:05:29.914/6...	'Disk Usage' of 'INS-GPS 1' changed to '6.5%'.



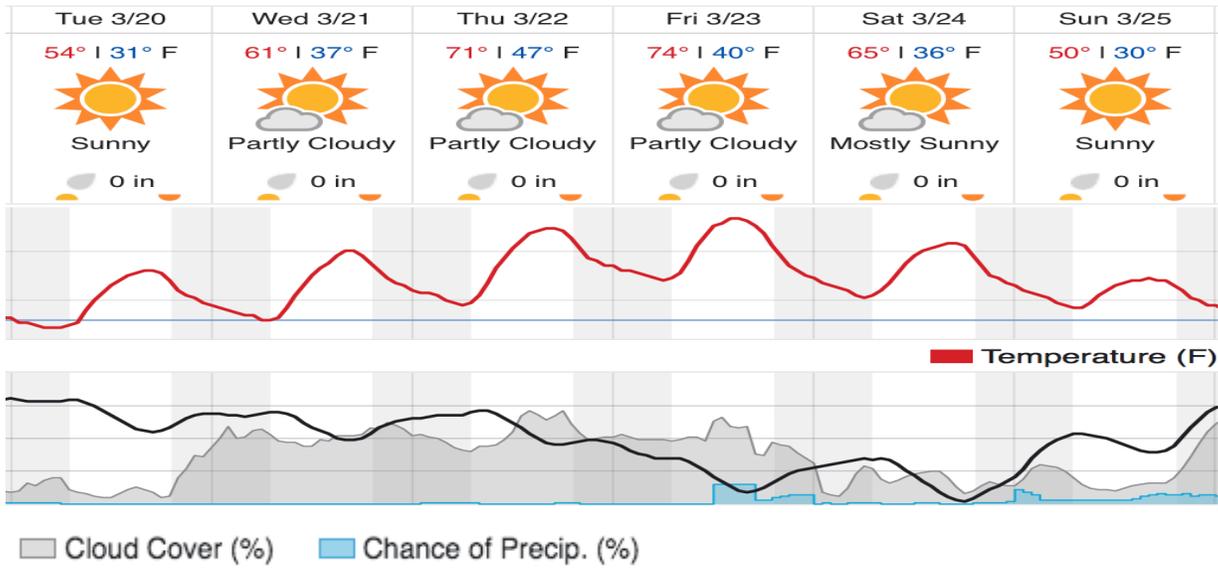
Daily Domain Coverage:

Not Applicable to calibration/training flights

Cumulative Domain Coverage:

Not Applicable to calibration/training flights

Weather Forecast:



Flight Collection Plan for 20 March 2018

Continue P3C1 calibration, NIS and LIDAR training/certification flights.

Flight Collection Plan for 21 March 2018

Continue P3C1 calibration, NIS and LIDAR training/certification flights.