



March 28, 2018 Payload 3 Daily Flight Report



Date: 03-28-18

Flight Campaign ID: 2018_P3C1

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

Domain: 10

Sites Flown: None

Days left in Domain: 1

Report Author: Ivana Vu

Flight Crew: Matt DeVoe, Ivana Vu, Robb Walker

Ground/GPS Crew: Cameron Chapman

Pilots: Stephen Brawdgers, Mike Francis

Additional Personnel: None

GPS Instruments: None

Flight Hours: 0.00

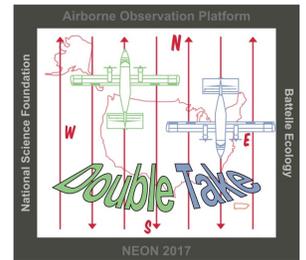
Hours until aircraft maintenance: 110.77

Summary: Low clouds and rain prevented flights today. Tomorrow will be the last day of calibration and training flights before the aircraft transits to D17 (Fresno, CA).

New Faults: None

Ongoing Faults:

- RiAcquire – 20180324 Received several 'INS-GPS 1' errors on RiAcquire that don't look familiar (see screenshot below). Will investigate to see what these errors mean and why they're being received.
- Hotel Kit 3 – 20180324 SBET plots are failing to generate in QAQC. Extractions otherwise occurring properly.
- Grafana Dashboard – 20180324 No Environmental Pressure and Humidity Readings being received, even after reset
- Database – 20180324 Flight lines from Lidar logs not being placed in PDF logs, only CSV.
- Lidar – 20180327 "LASER_HEARTBEAT_TIMEOUT_EXPIRED" and corresponding visible gaps in swath error occurred when RDP lost connection twice. 20180324 Error occurred on one line. 20180323 Same error occurred. 20180322 Error occurred again, believed to be related to lost connection with scanner. 20180321 Error message on RiAcquire. "LASER_HEARTBEAT_TIMEOUT_EXPIRED" and corresponding visible gaps in swath
- Flight Disks – 20170327 Set 2 disks were tried again today after receiving replacements, could not read MIDAS 1 Disk. 20180321 MIDAS disks from Disk Set 2 were not recognized by MIDAS computer during system startup. Disk set has been removed from rotation till issue is resolved.
- Lidar – 20180327 Tried tactic of unchecking production of MONSDW files to reduce network load, but RDP connection was lost twice during this flight. 2018032414 Several lost connections occurred for the Remote Desktop to both RiAcquire and Tracker snapSHOT, which effected the pilot display. Issue will continue to be monitored. 20180322 New Ethernet cable attached but same issues occurred. 20180321 Remote Desktop to RiAcquire lost connection several times in-flight. Issue is believed to be isolated to the Ethernet connection.
- Spectrometer – 20180319 Shutter on NIS not closed at request of the lab manager due to a known malfunction



Resolved Faults:

Flight Plans – 20180328 Diagnosis: John Musinsky created new flight plan kml's using an ArcMap and ALTM-NAV workaround. A more permanent solution using TrackAir is in progress. 20180319 All Riegl flight plan kml's do not load markers onto DCC software.

Other Issues & Concerns:

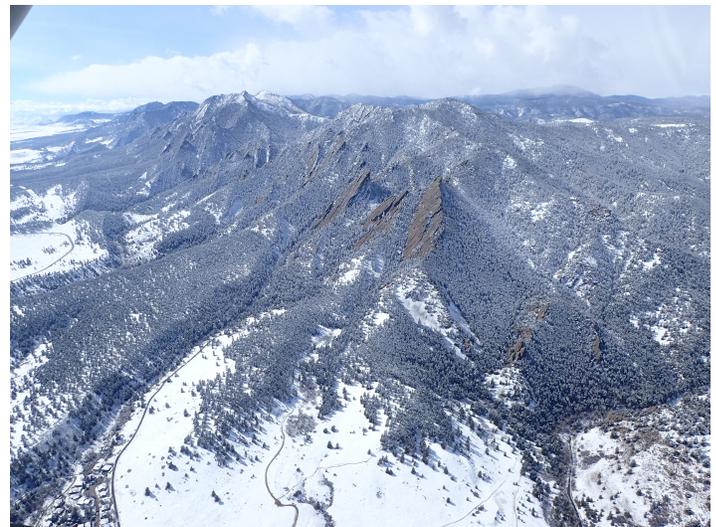
NIS getter was re-activated and crew will continue to closely monitor chamber pressure throughout the D17 deployment.

Comments:

- Mike Wussow arrived in D17
- RAID 2018_P3C1_02 was shipped
- Plane will be packed tomorrow afternoon in preparation for the transit

Flight Screenshots: None

Pictures: Views of Boulder and the Flatirons during a Functional Check Flight last week (taken on 3/19/2018, the last day of winter)

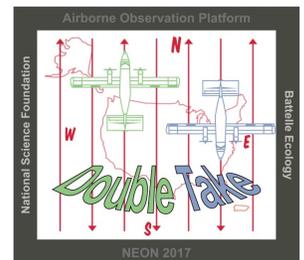


Daily Domain Coverage: N/A

Cumulative Domain Coverage:

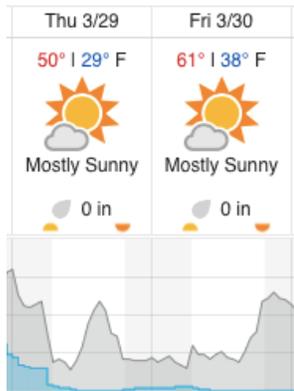
Calibration Flights Completed: Nominal Runway Survey, NEON HQ Lidar Validation, Greeley Boresight, Wiggle Timing Test

Not Complete: Table Mountain Radiometric, NIS Offset Flight

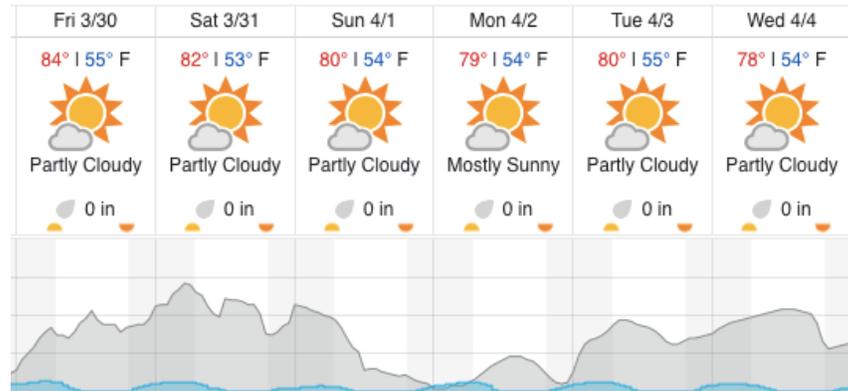


Weather Forecast:

Boulder, CO



Fresno, CA



☐ Cloud Cover (%) ☐ Chance of Precip. (%)

Flight Collection Plan for 29 March 2018

Flyority 1

Collection Area: Table Mountain Radiometric Calibration
 Flight Plan Name: D10_R10C_Rad_Cal_TMBT_v1_Q780.rpp
 On Station Time: 1740 Local / 1140 UTC (45°)

Flyority 2

Collection Area: NIS Offset Flight
 Flight Plan Name: D10_O10B_NIS_Offset_v2_Q780.rpp
 On Station Time: 1700 Local / 1100 UTC (40°)

Flyority 3

Collection Area: Greeley Boresight Calibration (re-fly if Green)
 Flight Plan Name: D10_B10D_Boresight_Apx_Q780.rpp
 On Station Time: 1550 Local / 0950 UTC (30°)

Crew: TBD

Flight Collection Plan for 30 March 2018

Transit from KBDU to D17 (Fresno, CA)
Crew: Mitch Haynes

Flight Collection Plan for 31 March 2018

Flyority 1

Collection Area: San Joaquin Experimental Range
 Flight Plan Name: D17_SJER_C1_P1_v3_Q780
 On Station Time: 1020 Local / 1720 UTC (40°)
Crew: Cameron Chapman, Mitch Haynes, Robb Walker, Mike Wussow