

September 12, 2018 Payload 3 Daily Flight Report



Date: 2018-09-12

Flight Campaign ID: 2018_P3C1

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

Domain: 10

Sites Flown: RMNP_P1 (Rocky Mountain National Park Priority 1), RMNP_P2 (Rocky Mountain National Park Priority 2)

Hours until maintenance: 74.27

Days left in Domain: 1

Report Author: Nick Marusich

Flight Crew: Nick Marusich, Matt Devoe Flight Hours: 01:39

Ground/GPS: Matt Devoe

Pilots: Stephen Brawders, Grant Frost

Additional Personnel:

GPS Instruments: 08 - BLDR, 14 - RMNP_P1

Summary

Perfect sky conditions clashed with payload issues, and the payload won. GPS degradation during flight resulted in low confidence of navigation solution. Re-attempt was made in the afternoon but was thwarted by a GPU failure.

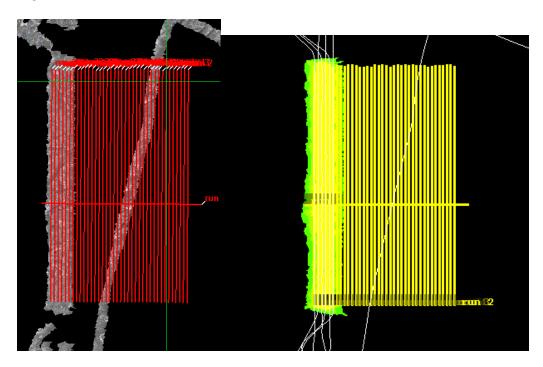
Concerns

Lidar and NIS GPS satellite acquisition fell to 5 during flight and did not improve.

Comments

With one more day in the domain and clear weather forecast for tomorrow, coverage of RMNP is anticipated.

Flight Screenshots



Pictures



Above: Rocky Mountains under blue skies Below: Fall hits the mountains early due to drought conditions



Daily Coverage

D10 RMNP_P1	Line	SpecG	SpecY	SpecR	NIS	Lidar	Camera	Cumulative
	34				>	✓	√	NLC
	35				✓	✓	✓	NLC
	36				✓	✓	✓	NLC
	37				✓	✓	✓	NLC
	38				✓	✓	✓	NLC
	39				✓	✓	✓	NLC
Flown:	6							

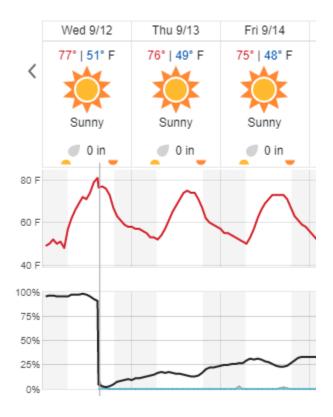
Cumulative Domain Coverage

RMNP_P1

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
ĺ	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	

Flown: 15% (6/39) Green: 15% (6/39) Yellow: 0% (0/39) Red: 0% (0/39)

Weather Forecast



Flight Collection Plan for 13 September 2018

Flyority 1 (Flight Priority 1):

Collection Area: Rocky Mountain National Park – RMNP

Flight Plan Name: D10_RMNP_R2_P1_v2_Q780

On-Station Time: 16:30 UTC / 10:30 L

Crew: Matt DeVoe (Lidar), Robb Walker (NIS)