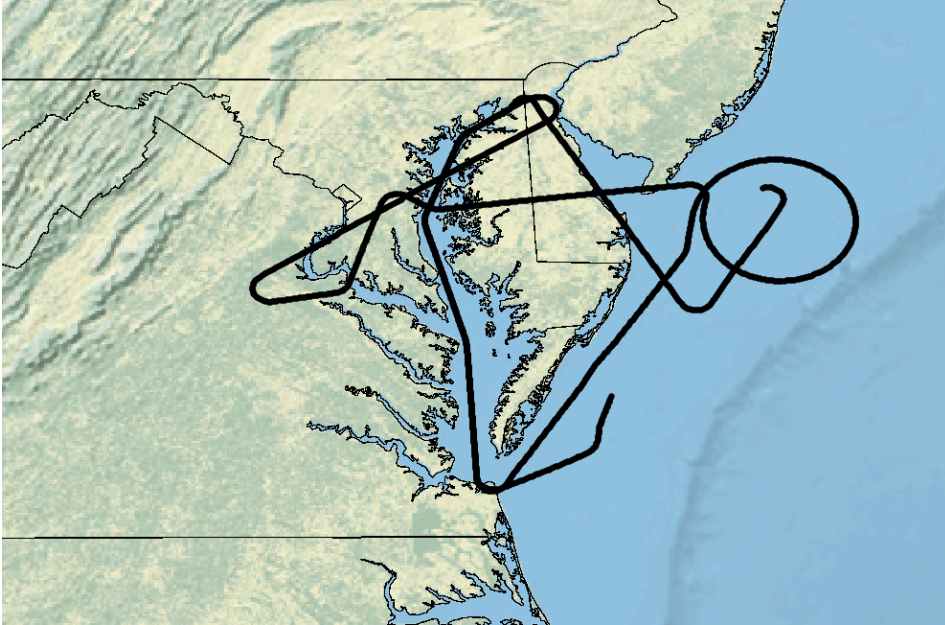


09/15/2012

Mission: 'Water Targets'



Weather: High cirrus

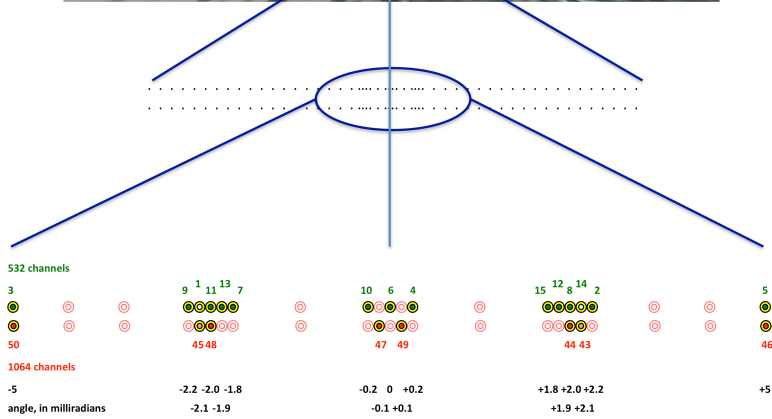
Comments: Also included: CPL, CATS.

Etalon; night flight

Sample rate: 5 kHz

Energy levels throughout channels: variable: some beams were filtered to simulate ICESat-2 'weak' beams (see **colored** channels below).

FOV: 'Cluster FOV' (see image below)



### Angle to Channel map:

Fiber	1	2	3	4	5	6	7	8											
Connector	7	6	-7	11	-1	-6	1	-11											
Channel	43	44	45	46	47	48	49	50											
Transmitter Power (mW)	6.17	7.12	4.7	7.67	8.26	7.06	8.73	7.67											
Filter	0.25	0.25	0.25	0.49	0.49	0.25	0.49	0.49											
Receiver Power (mW) MEASURED	2.49	4.45	2.07	7.43	7.53	4.33	9.27	5.68											
Raw Energy (Matt, uJ)	0	0	0	0	0	0	0	0											
Filtered Energy (uJ)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00											
Relative path difference (Matt, mm)	48	0	97	32	16	81	113	65											
Angle (mrad)	2.1	2	-2.1	5	-0.1	-2	0.1	-5											
Approx offset on ground (m): 65k'	42	40	-42	99	-2	-40	2	-99											
Elevaton (mrad)	2.0	1.5	1.0	1.5	1.0	1.5	2.0	1.5											
Approx offset on ground (m): 65k'	40	30	20	30	20	30	40	30											
Fiber	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16			
Connector	-7	8	-11	2	11	0	-4	6	-8	-2	-6	5	-5	7	4	10			
Channel	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16			
Transmitter Power (mW)	1.08	3.22	7.35	2.92	6.92	9.86	3.19	3.41	2.99	1.33	3.09	3.55	0.01	1.36	3.08	0.01			
Filter	0.25	0.37	0.69	0.69	0.69	0.69	0.49	0.37	0.37	0.69	0.37	0.69	0.69	0.25	0.37	0.69			
Receiver Power (mW) MEASURED	1.59	2.41	3.01	1.91	2.89	3.21	2.26	2.61	1.98	1.76	2.23	2.67	1.09	1.89	2.21	1.05			
Raw Energy (Matt, uJ)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Filtered Energy (uJ)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00			
Relative path difference (Matt, mm)	172	237	253	75	188	140	59	221	43	27	108	204	269	156	124	92			
Angle (mrad)	-2.1	2.2	-5	0.2	5	0	-1.8	2	-2.2	-0.2	-2	1.9	-1.9	2.1	1.8	4			
Approx offset on ground (m): 65k'	-42	44	-99	4	99	0	-36	40	-44	-4	-40	38	-38	42	36	79			
Elevaton (mrad)	-2.0	-0.5	-1.5	-0.5	-1.5	-1.5	-0.5	-1.5	-2.5	-1.5	-2.0	-1.0	-1.0	-1.0	-2.5	-1.5			
Approx offset on ground (m): 65k'	-40	-10	-30	-10	-30	-30	-10	-30	-50	-50	-30	-40	-20	-20	-50	-30			

### Points of interest:

Time (UTC)	Description
20:06:30	Laser status healthy
20:11:0	Start of P&R maneuvers
20:13:0	End of P&R maneuvers
20:32:0	Start of Chesapeake run
20:59:45	End of Chesapeake run
21:05:0	Start of P&R maneuvers
21:08:0	End of P&R maneuvers
22:31:30	Start of Chesapeake run
22:55:45	End of Chesapeake run
22:59:0	Start of P&R maneuvers
23:01:0	End of P&R maneuvers
23:4:30	Laser off