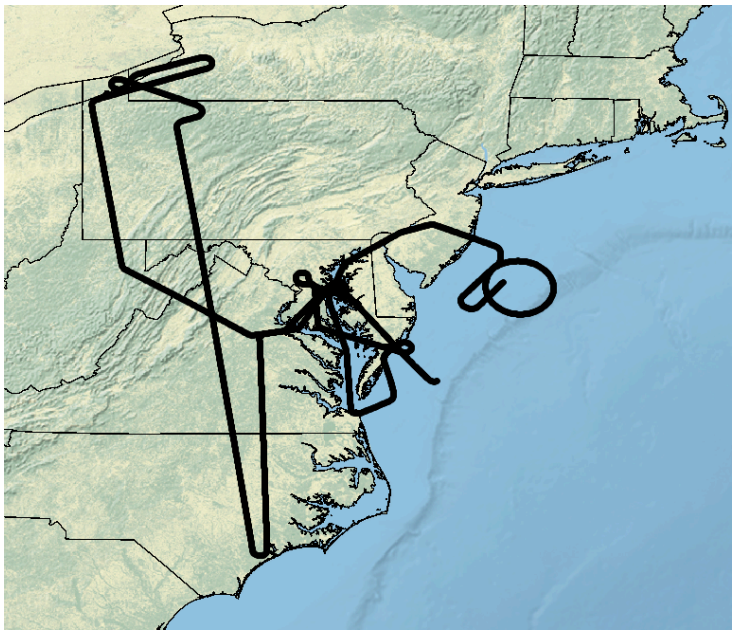
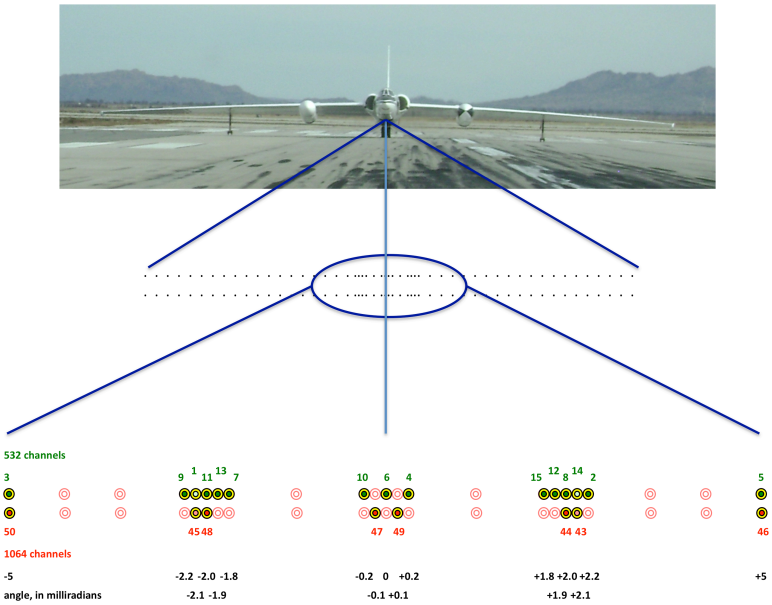
09/24/2012

Mission: 'Mid-Atlantic'



Weather: Very clear
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	-2.5	-1.5	-2.0	-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
20:28:0	Laser status healthy
20:41:0	5 degree banking turn start
21:5:30	5 degree banking turn end
21:6:30	Data loss start
21:20:30	Data loss end
21:26:0	Start of Chesapeake run
21:50:30	End of Chesapeake run
2:18:45	Laser off