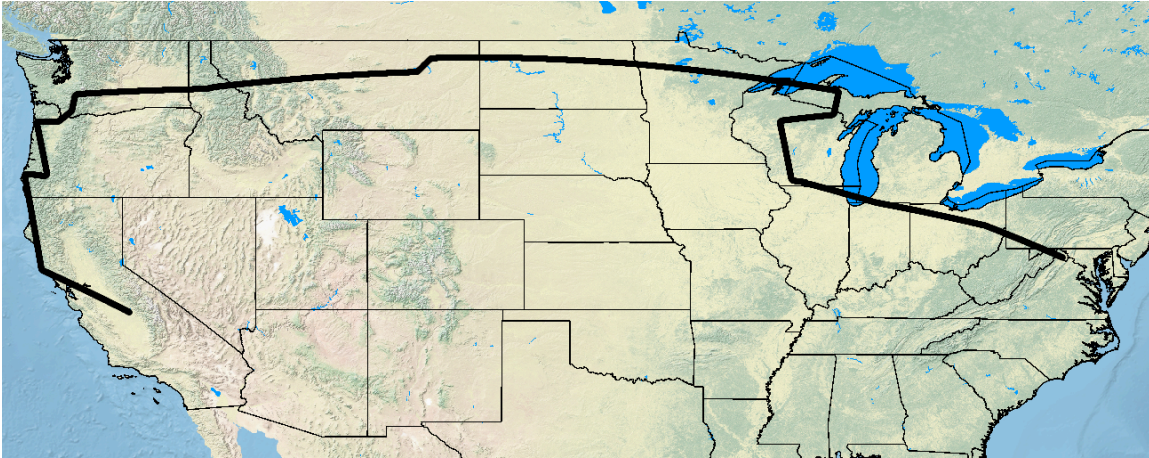


09/26/2012

Mission: 'Transit to KPMD'



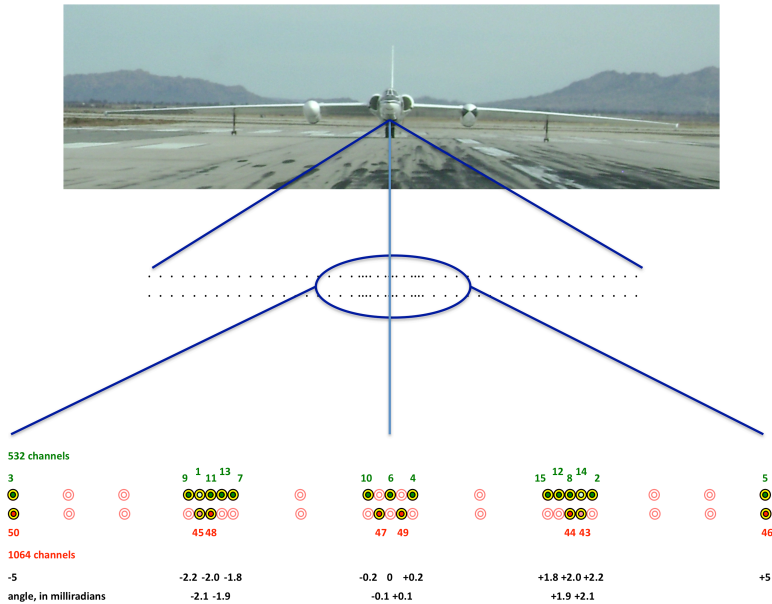
Weather: Clear over Lk Michigan; clear over WI G-LiHT line; cloudy over MI G-LiHT line, MT, ID, and eastern OR; pilot reported clear over Portland; clear on west coast.  
Comments: Also included: CPL, CATS.

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
21:30:30	Laser status healthy
21:35:0	Start of P&R maneuvers
21:40:0	End of P&R maneuvers
21:42:30	Data loss start
22:11:45	Data loss end
2:35:30	Start of Portland run
4:22:30	Laser off