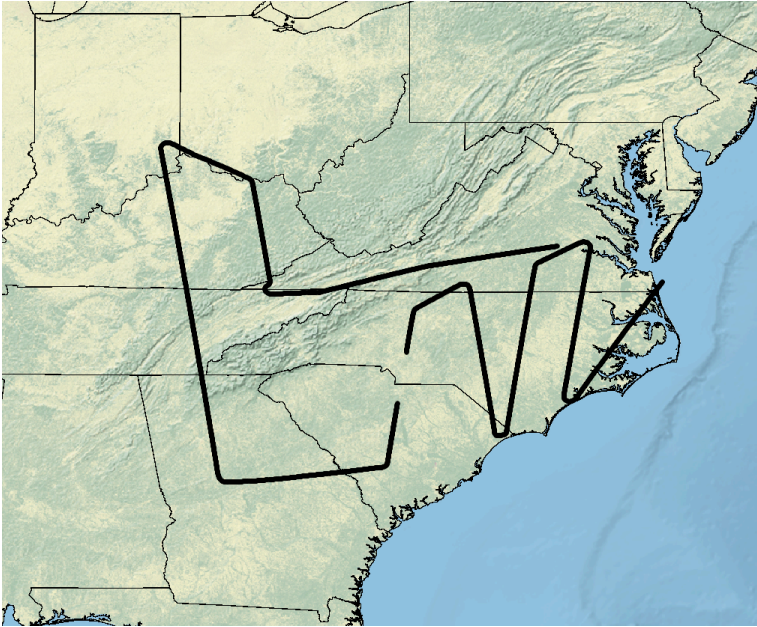


09/20/2012

Mission: 'Modified Southeast'



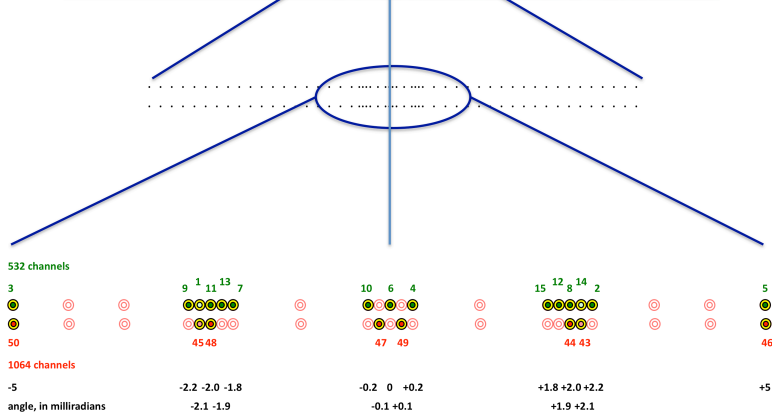
Weather: Dense clouds for the first half of flight (AMIGA lines SE of the Appalachian Range); clear NW of range  
Comments: Also included: CPL, CATS.

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												
Elevation (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				
Elevation (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
22:16:45	Laser status healthy
0:9:15	Power cycle start (data loss)
0:44:30	Power cycle end (data loss)
1:7:45	Start of clear weather
3:13:45	Laser off