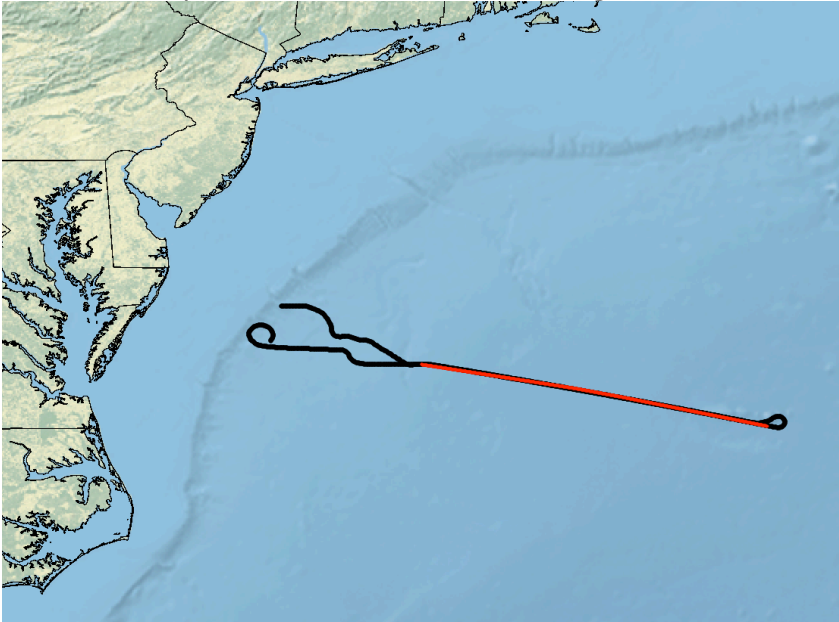


09/23/2012

Mission: 'CPL/Global Hawk Coordinated Flight'



Weather: Variable clouds at various elevations

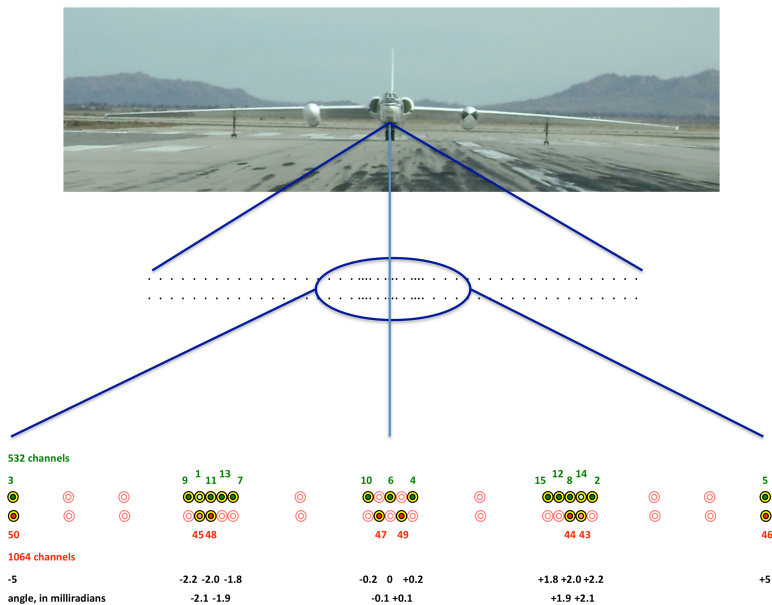
Comments: Coordinated flight with CPL on Global Hawk (red line above) which tookoff on 9/22/12; fourth data segment of that flight includes the coordinated stretch. ER-2 also included: CPL, CATS.

Etalon; DAYTIME 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
15:58:0	Laser status healthy
16:53:45	Global hawk coordination start time
17:20:0	Global hawk coordination end time
17:36:0	Laser off