

04/10/2012

Mission: 'Operation IceBridge Overflight'



Weather: Clear over sea ice

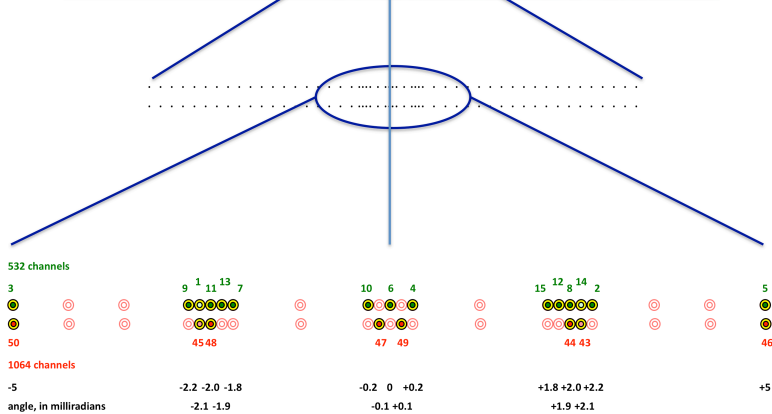
Comments: Also included: CPL, DCS. MABEL did not write to disk on northbound leg
- Matches ATM 4/10/12

Etalon; daytime flights

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, u)	0	0	0	0	0	0	0	0																																	
Filtered Energy (u)	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, u)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0																									
Filtered Energy (u)	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	-1.5	-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	-30	-40	-20	-20	-30	-50	-30																									

Points of interest:

Time (UTC)	Description
15:47:48	Laser status healthy
15:47:48	North end of sea-ice run
16:49:11	South end of sea-ice run
17:23:3	Laser off