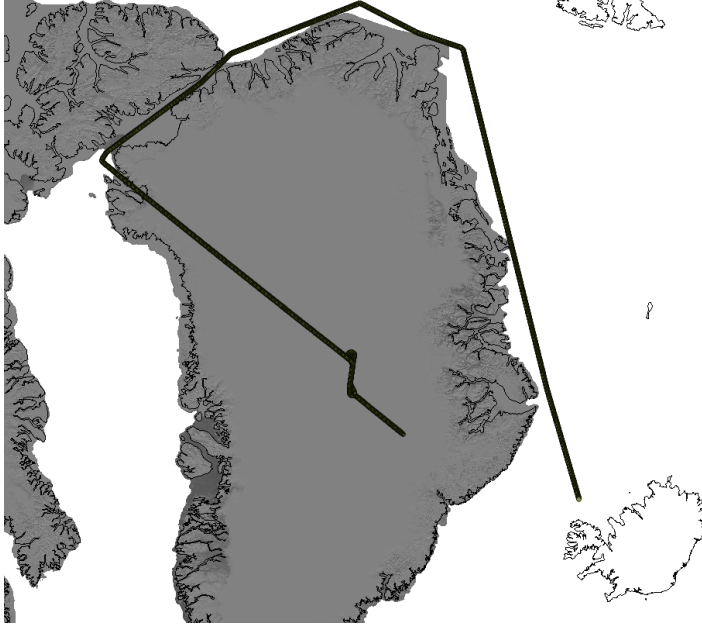


04/08/2012

Mission: 'Second Flight' (Nares Strait)



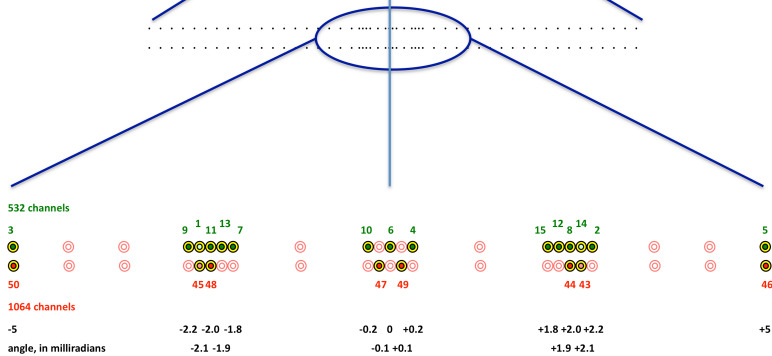
Weather: Clear over sea ice; Summit Camp reported clear skies
Comments: Also included: CPL, DCS; 3x passes over Summit Camp
- Bob Hawley's team GPS surveyed Summit the same day (4/8/12).
- Matches: ATM 4/2/12 flight; ATM 4/4/12; ATM 4/10/12

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, 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
10:23:1	Laser status healthy
10:41:38	Start Summit Camp
11:20:15	End Summit Camp
13:1:11	Turn into Nares Strait
14:59:17	North end of sea-ice run
17:3:40	Laser off