04/04/2011

Mission: 'CATS Ocean'



Weather: Cloudy; marine layer

Comments: This was officially a CATS mission, which flew out over the ocean.

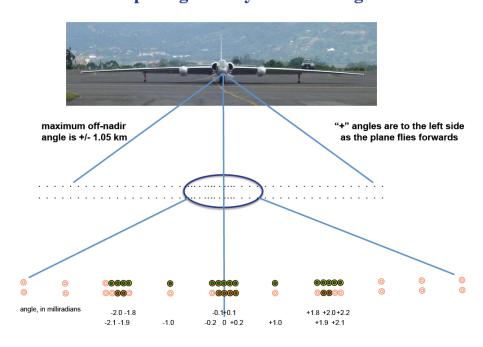
Sample rate: 5 kHz

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)

Footprint geometry for initial flights



Angle to Channel map:

Fiber	1	2	3	- 4	5	6	7	8								
Connector	6	5	2	1	0	-1	-5	-6								
Channel	47	48	49	50	46	45	44	43								
Power (Matt, mW)	32	33.6	25	17.2	25.2	25	20	23.8								
Filter	0.49	0.15	0.49	0.15	0.49	0.15	0.49	0.15								
Raw Energy (Matt, uJ)	6.4	6.72	5	3.44	5.1	5	4	4.76								
Filtered Energy (uJ)	3.14	1.01	2.45	0.52	2.50	0.75	1.96	0.71								
Path Lengths (Matt, mm)	0	16	32	48	65	81	97	113								
Angle (mrad)	2	1.9	0.2	0.1	0	-0.1	-1.9	-2								
Approx offset on ground (m): 65k'	40	38	4	2	0	-2	-38	-40								
Fiber	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Connector	-7	-6	-5	-4	-3	-2	-1	0	1	2	3	4	5	6	7	8
Channel	2	3	1	4	16	5	15	6	14	7	13	8	12	9	11	10
Power (Matt, mW)	34.4	38	32.2	35.8	18.8	24.7	27.6	26.7	24.5	31.2	30.2	28.8	27.5	27.6	31.2	31.4
Filter	0.69	0.69	0.49	0.69	0.69	0.69	0.69	0.49	0.69	0.69	0.69	0.69	0.69	0.49	0.69	0.69
Raw Energy (Matt, uJ)	6.88	7.6	6.44	7.16	3.76	4.94	5.52	5.34	4.9	6.24	6.04	5.76	5.5	5.52	6.24	6.28
Filtered Energy (uJ)	4.75	5.24	3.16	4.94	2.59	3.41	3.81	2.62	3.38	4.31	4.17	3.97	3.80	2.70	4.31	4.33
Path Lengths (Matt, mm)	27	43	59	75	92	108	124	140	156	172	188	204	221	237	253	269
Angle (mrad)	-2.1	-2	-1.9	-1.8	-1	-0.2	-0.1	0	0.1	0.2	1	1.8	1.9	2	2.1	2.2
Approx offset on ground (m): 65k'	-42	-40	-38	-36	-20	-4	-2	0	2	4	20	36	38	40	42	44

Points of interest:

Time (UTC)	TOF File	Description						
20:02:45	0	Laser status healthy						
20:48:26 335		Laser off						