

03/31/2011

Mission: 'Sierras'



Weather: Clear

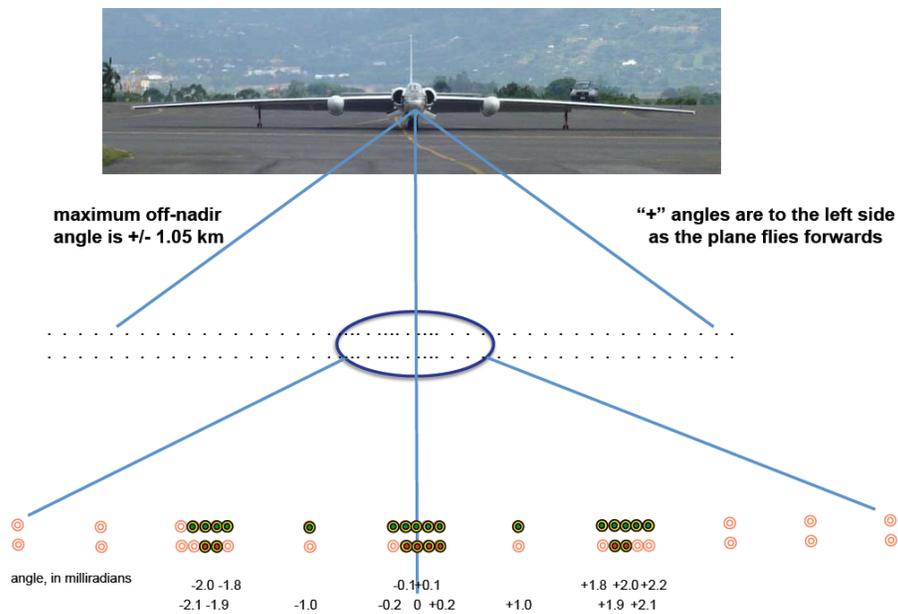
Comments: There was snow in the Sierras at the time of this flight. A small, potentially ice-covered lake was also surveyed.

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
16:18:42	1	Laser status healthy
16:25:17	54	start of Sierra run
17:30:45	479	end of Sierra run
17:38:53	556	start of Lk Crowley SE run
17:39:31	563	end of Lk Crowley SE run
17:44:04	608	start of Lk Crowley SW run
17:44:37	614	end of Lk Crowley SW run
17:55:44	786	Laser off