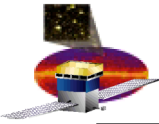


GLAST Large Area Telescope:

TKR Hand-off review for Tower 8

**Hiro Tajima,
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SU-SLAC**

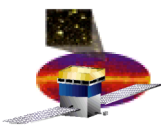
**R. P. Johnson
UCSC**



Power Consumption

- Values for MCM measurements account for the increase due to PS voltage itself, not current increase due to voltage increase.

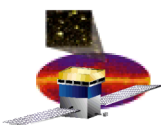
Tower 8	Pisa	SLAC	MCM
Tower total	10.1 W	10.3 W	9.4 W
Tower + TEM/TPS	19.0 W	19.9 W	N/A
Leak current @100V	73.7 μA	89.1 μA	N/A



Band Channels (Tower 8)

No major change observed. (except for small number of disconnected strips)

Layer	Pre ship (Pisa)				Handoff (SLAC)					Layer
	disconnect	dead	noisy	total	disconnect	dead	noisy	others (offline)	total	
Y17		1	1	2	0	1	1	0	2	Y17
X17				0	1	0	0	0	1	X17
X16		1		1	0	1	0	0	1	X16
Y16				0	0	1	2	0	3	Y16
Y15				0	0	0	0	0	0	Y15
X15				0	0	0	0	0	0	X15
X14				0	0	0	0	0	0	X14
Y14		3		3	0	3	0	3	6	Y14
Y13	1			1	1	0	0	0	1	Y13
X13				0	5	0	0	0	5	X13
X12				0	0	0	0	0	0	X12
Y12				0	0	0	0	0	0	Y12
Y11				0	0	0	0	0	0	Y11
X11				0	0	0	0	0	0	X11
X10				0	0	0	0	0	0	X10
Y10				0	1	0	0	0	1	Y10
Y9				0	0	0	0	0	0	Y9
X9	1			1	1	0	0	0	1	X9
X8				0	0	0	0	0	0	X8
Y8				0	0	0	0	0	0	Y8
Y7				0	0	0	2	3	5	Y7
X7	1	5	4	10	1	5	4	0	10	X7
X6		7	2	9	2	7	2	0	11	X6
Y6		2		2	0	2	0	0	2	Y6
Y5		2		2	0	2	0	0	2	Y5
X5				0	0	0	0	0	0	X5
X4				0	1	0	0	0	1	X4
Y4		1		1	1	1	0	2	4	Y4
Y3				0	0	0	0	0	0	Y3
X3		5	1	6	1	6	2	1	10	X3
X2		2	1	3	2	2	1	0	5	X2
Y2		3	3	6	0	3	3	0	6	Y2
Y1		2		2	0	2	0	0	2	Y1
X1	1			1	1	0	0	0	1	X1
X0				0	0	0	2	0	2	X0
Y0		8		8	0	8	0	0	8	Y0
Total	4	42	12	58	18	44	19	9	90	
Fraction	0.01%	0.08%	0.02%	0.10%	0.03%	0.08%	0.03%	0.02%	0.16%	



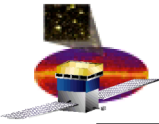
Hit and Trigger Efficiency

Hit Efficiency

	pre-ship	error	hand-off	error	delta/error
Y0	99.2	0.08	99.29	0.07	0.9
X0	99.5	0.06	99.43	0.06	-0.7
X1	99.9	0.03	99.86	0.03	-0.4
Y1	99.9	0.03	99.84	0.03	-0.6
Y2	99.7	0.05	99.69	0.04	-0.1
X2	99.8	0.04	99.75	0.04	-0.5
X3	99.4	0.07	99.30	0.06	-1.0
Y3	99.6	0.05	99.62	0.05	0.2
Y4	99.6	0.05	99.63	0.05	0.3
X4	99.6	0.05	99.65	0.04	0.5
X5	99.8	0.04	99.73	0.04	-0.7
Y5	99.7	0.05	99.73	0.04	0.3
Y6	99.7	0.05	99.73	0.04	0.3
X6	99.5	0.06	99.47	0.06	-0.3
X7	99.6	0.06	99.38	0.06	-2.2
Y7	99.7	0.05	99.75	0.04	0.5
Y8	99.9	0.03	99.84	0.03	-0.6
X8	99.8	0.04	99.86	0.03	0.6
X9	99.9	0.03	99.87	0.03	-0.3
Y9	99.9	0.03	99.86	0.03	-0.4
Y10	99.8	0.04	99.86	0.03	0.6
X10	99.9	0.03	99.86	0.03	-0.4
X11	99.9	0.03	99.86	0.03	-0.4
Y11	99.9	0.03	99.85	0.03	-0.5
Y12	99.8	0.04	99.90	0.02	1.0
X12	99.9	0.03	99.84	0.03	-0.6
X13	99.8	0.04	99.83	0.03	0.3
Y13	99.8	0.04	99.86	0.03	0.6
Y14	99.8	0.04	99.68	0.04	-1.2
X14	99.9	0.03	99.78	0.03	-1.2
X15	100	0.00	99.91	0.02	-0.9
Y15	99.9	0.02	99.90	0.02	0.0
Y16	99.9	0.03	99.84	0.03	-0.6
X16	99.9	0.03	99.87	0.03	-0.3
X17	99.6	0.05	99.53	0.05	-0.7
Y17	99.3	0.07	99.40	0.06	1.0
average	99.74	0.01	99.72	0.01	-2.0

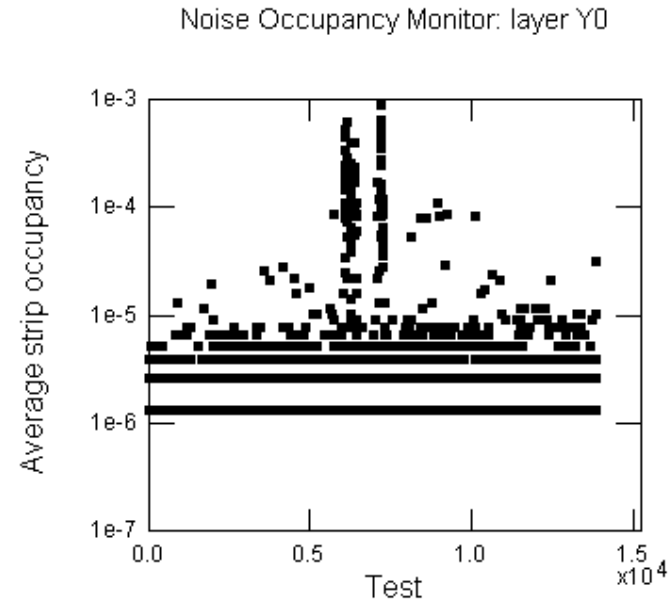
Trigger Efficiency

trigger combination	handoff
C0-1-2	97.9
C1-2-3	98.1
C2-3-4	97.6
C3-4-5	97.6
C4-5-6	97.8
C5-6-7	97.6
C6-7-8	97.9
C7-8-9	98.5
C8-9-10	99.1
C9-10-11	99.1
C10-11-12	99.1
C11-12-13	99.0
C12-13-14	98.8
C13-14-15	99.0
C14-15-16	98.9
C15-16-17	98.5



Notes and Anomalies

- Intermittent noisy channels observed on layer Y0.



- GTRC FIFO full occurred in one event with a random trigger.
 - GTCC 7, GTRC 7,8 (X15, X17) and GTCC 2, GRC 8 (X16)
 - It appears to be an isolated event.