Thu 15 Sep 2016 HST = Day 01 pg. 1 of 1

MLML RADIOMETRIC CALIBRATION LOG

EXPERIMENT HI-2016-09 LOCATION Pier 35, Rm 124

DATE 16Sep2016 OBSERVERS MF

INSTRUMENT BS S/N 01 CONFIG 005

COLLECTOR bare FO bindle (mux / position / fiber) DISTANCE jig @ sphere

SOURCE Oriel 6000 S/N CONFIG iris @ 12" Spect.

PWR SUPPLY Oriel S/N CONFIG baffled IN port

MULTIMETER Keithley S/N SHUNT

LAMP VOLTAGE 10V CURRENT ~7.7A

LAMP TIME ON 04:31 WARMUP OFF TOTAL

WHERE NODE :: DEV : [DIR]

SETUP SKETCH / REMARKS

BS01 back in HI from Miami & Resonon: Ken replaced short screw(s) Casey replaced Schrader valve, "realigned unit", replaced camera mount screws w/ longer ones

CCD 17878 = on house & via Solis ✓

Pwr Sup PS2S @ II Deep Cooling

PROCESSED DATE: BY:

Time	Filename	Int Time/Bin Fact or Gain	~~Shunt Current~~ PD mA	Lamp Voltage V	Humidity % R.H.	Temp. °C	Remarks
04:27	zd20160916 01.dat		.002nA				
433	com on / TEC=off						297,228 / 197,633 / 138,61 / 76,19
441	bs 20160916 01:03.fits	1sec	13.07μA		59	22.4	definitely some hot pixels →
444	TEC set @ -20°C						
449	bs 04:06	1s	13.05μA				
452	TEC set @ -40°C						
456	bs 07:09	1s	13.09μA				
458	TEC set -80°C				60	23.2	
506	bs 10:12	1s	13.13μ				
508	TEC=off / Solis=Exit						
518	AD=off						

Thurs 22 Sep 2016 HST = Dy 02

MLML RADIOMETRIC CALIBRATION LOG

EXPERIMENT HI-2016-09 LOCATION Pier 35 1st high bay

DATE 23 Sep 2016 OBSERVERS

INSTRUMENT BS S/N 01 CONFIG 005

COLLECTOR bare FO bundle DISTANCE
mux position fiber

SOURCE Sun S/N CONFIG Gray Plaque

PWR SUPPLY S/N CONFIG

MULTIMETER S/N SHUNT

LAMP VOLTAGE CURRENT

LAMP TIME ON WARMUP OFF TOTAL

WHERE NODE :: DEV : [DIR]

SETUP SKETCH / REMARKS

wait for sun to go behind Kilo Moana

PROCESSED DATE: BY:

Time	Filename	Int Time/Bin Fact or Gain	Shunt Current mA	Lamp Voltage V	Humidity % R.H.	Temp. °C	Remarks
03:30	ad20160923 01.dat						
3:40	com on TEC to -40°c						
3:53	bs20160923 01.fits	0.5 sec			58	29.9	white caps on all FO tips
57	D2	0.5					trk 1,7,14 = uncapped
59	03	1.0					... other FO tips = covered
401	04	1.2			62	29.2	
403	05	10	this st.fits ~ dark scan				all FO = cap & covered
405	TEC=OFF						

Mon 17 Oct 2016 HST = Day 03 pg. 1 of 2

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MLML RADIOMETRIC CALIBRATION LOG

EXPERIMENT HI-2016-09 LOCATION Pier 35, rm 124
DATE 18 Oct 2016 OBSERVERS MF
INSTRUMENT BS S/N 01 CONFIG 005
COLLECTOR FO #7 (mux / position / fiber) DISTANCE Jig @ sphere
SOURCE Ekspla S/N CONFIG 12" Spect. sphere
PWR SUPPLY S/N CONFIG
MULTIMETER Keithley S/N SHUNT
LAMP VOLTAGE CURRENT
LAMP TIME ON 00:14! WARMUP OFF TOTAL
WHERE NODE :: DEV : [DIR]

SETUP SKETCH / REMARKS
Ekspla laser aligned w/ Fiber Coupling Unit, FCU via Gentec Power Meter Maestro (SN 234357) + detector UP19K-15S-W5-D0 (SN 233370).
Try use laser power meter @ Port 1 = between Ekspla & FCU to compare w/ TEC PD @ sphere out port.
UltraSonic bath has FO from FCU then coupled to Aurora Optics FO to sphere

PROCESSED DATE: BY:

Time	Filename	Int Time/Bin Fact or Gain	Shunt Current mA	Lamp Voltage V	Humidity % R.H.	Temp. °C	Remarks
04:44	bd20161018 01.dat						LabJack A/D Avx data
50	pd 20161018 01.txt			laserPower pulse delay	65 EUV (mJ)	25.4 Gentec Power Meter Zero(mV)	TEC'ed PD monitor @ sphere Port 1 (mW)
51	com on @ -40°C						
05 14	bs20161018 01	1.0 s	500 nm	215 μsec	0.80	3.4	8-10 mW
19	02	"	"	214	.84	3.7	10-13 mW
21	03	"	"	213	.94	1.7	15-20
24	04			212	.98	3.9	18-24
26	05			211	1.04	4.2	24-29
28	06			210	1.08	3.3	39-43
31	07			209	1.08		43-48
33	08			208	1.19	3.9	47-53
	09			207	1.24	3.7	55-65
05:37	10			206	1.28	3.8	64-74

(21-Feb-05 MF)

Mon 17Oct2016 HST= Day 03 pg.2of2

MLML RADIOMETRIC CALIBRATION LOG

EXPERIMENT HI-2016-09 LOCATION pier35, rm124
DATE 18Oct2016 OBSERVERS
INSTRUMENT BSI S/N 01 CONFIG 005
COLLECTOR bare FO #7 (mux position fiber) DISTANCE Jig
SOURCE Ekspla S/N CONFIG
PWR SUPPLY S/N CONFIG
MULTIMETER S/N SHUNT
LAMP VOLTAGE CURRENT
LAMP TIME ON WARMUP OFF 06:17 TOTAL
WHERE NODE :: DEV : [DIR]

SETUP SKETCH / REMARKS

PROCESSED DATE: BY:

Time	Filename	Int Time/Bin Fact or Gain	Shunt Current mA	Lamp Voltage V	Humidity % R.H.	Temp. °C	Remarks
05:41	sb20161018 11	1.0 sec	500 nm	205 ms	1.32mJ	4.2mW	76-82 mW
43	12	"	"	204	1.36	3.6	84-91
	13			203	1.38	4.0	88-102
49	14			202	1.40	3.9	99-112
51	15			201	1.42	3.9	105-117
53	16			200	1.48	2.7	111-124
55	17			199	1.50	4.1	120-132
57	18			198	1.52	4.2	128-139
0600	19			197	1.54	4.2	132-145
02	20			196	1.58	3.7	140-152
04	21			195	1.62	3.9	142-154
06:07	22			194	164	3.8	148-159
0609	23			193	166	4.1	154-163
612	com TEC=OFF						

(21-Feb-05 MF)

Thu 10 Oct 2016 HST = Day 04

MLML RADIOMETRIC CALIBRATION LOG

EXPERIMENT HI-2016-09 LOCATION Pier 35, rm 124

DATE 11 Oct 2016 OBSERVERS MF

INSTRUMENT BS S/N 01 CONFIG 005

COLLECTOR mux position fiber DISTANCE

SOURCE Darkness S/N CONFIG

PWR SUPPLY test DC-DC S/N CONFIG

MULTIMETER via 12V S/N SHUNT

LAMP VOLTAGE MOBY truck battery CURRENT

LAMP TIME ON WARMUP OFF TOTAL

WHERE NODE :: DEV : [DIR]

SETUP SKETCH / REMARKS

check Dark noise via DC-DC power supply + 12V MOBY truck battery. Pwr sup ~ 4 in to back of Andor camera

4.25 msec Vert shift, 3 MHz Horiz
4x pre amp gain, shutter 35/35 msec

PROCESSED DATE: BY:

Time	Filename	Int Time/Bin Fact or Gain	Shunt Current mA	Lamp Voltage V	Humidity % R.H.	Temp. °C	Remarks
04:49	a20161111 01.dat				61	256	LabJack Aux data
04:55	com @ -60 °C						
05:04	b,d20161111 01.Fits	0.1 sec					Background & dark scans
505	02:04	0.5, 1, 2					"dark" = SOLIS "signal"
507	05:07	5, 10, 30					w/ no light input
511	08	60 sec					
514	com temp ctrl OFF						

Wed 16Nov2016 HST= Day 05

MLML RADIOMETRIC CALIBRATION LOG

EXPERIMENT HI-2016-09 LOCATION Pier 35, rm 124 still no AC...

DATE 17Nov2016 OBSERVERS MF

INSTRUMENT BS S/N 01 CONFIG 005

COLLECTOR Nope DISTANCE

mux position fiber

SOURCE Darkness S/N CONFIG

PWR SUPPLY DC-DC pwr S/N CONFIG

MULTIMETER sup S/N SHUNT

LAMP VOLTAGE via MOBY CURRENT

LAMP TIME ON truck batt WARMUP OFF TOTAL

WHERE NODE :: DEV : [DIR]

SETUP SKETCH / REMARKS

repeat Day 04 darks @ preamp gain= 2 to compare w/ Art/Ken data

PROCESSED DATE: BY:

Time	Filename	Int Time/Bin Fact or Gain	Shunt Current mA	Lamp Voltage V	Humidity % R.H.	Temp. °C	Remarks
04:45	q20161170 1.dat				58	25.4	LabJack Aux data
4:53	com @ -60°C						11.71 Vdc into DC-DC pwr sup
05:00	b, d 20161170 1, fits	0.1s, 2x Gain					
502	02:04	.5, 1, 2 sec					
503	05:07	5, 10, 30					
507	08:	60 sec					11.89 Vdc @ DC-CC input
511	com temp ctrl off						