

pre-M267

BS/RS test

Thur 28 Mar 2019, 11:12

BS & RS housings were installed yesterday
LPJ house installed today
Art tested OK today!

MF re-made female XSJJ9 pin to female RJ45
for BS Enet comm

★ when attaching XSJJ pigtail to BS
I saw that bulkhead XSJJ conn = cracked!

- ✓ to test Art's new asg-interactive
w/ Aux data out to HDF file - Mark finished
Aux sensors & LabJack A/D
- ✓ to test Art's new asg-power
to switch ON/OFF CCD camera
via new Relay Mark installed
- ✓ to check RS 04 Trk 04 shtr = return says closed
" " BS 04 Trk 12 " " " "

Enet comm via Fast Gbit switch

my BS Enet Comm cable has long Seacon pigtail
~41in long

my RS Enet Comm cable has older Seacon pigtail
~24in long

04:36 BS camera ON = OK via "asg-power-0"
asg-interactive → AUX-20190329.h5

04:44 TEC on @ -60 °C

test Trk 12 (at 0:13 = T11)

error (?) set 1, state 0

04:51, exp time 10 sec, Trk 12, 2dk/4lt/2dk

→ I never saw Shtr 12 open → file cntr 1:4.fits

check shtr 11 set t=10 → open OK

04:59, exp time 10 sec, Trk 11 (Art's T10) → file 5:8.fits

05:03 TEC OFF → 2.1 Amps

05:00 asg-cooler-s → cooler is OFF, 18 C
asg-power-f → 0.8 Amps

Files @ /mnt/data/bsg/tent/

2.fits, AUX-20190329.h5 = 39.1 Kb

d, 520190329001:008.fits

FileZilla FTP to PC OK, moby-shutdown OK → 0.3 Amps

RS

05:05 asg-power = 0 $\rightarrow$ 4.9 A
 asg-cooler-s $\rightarrow$ cooler is ON, -11 C
 asg-cooler-f $\rightarrow$ 2.3 A
 asg-cooler-s $\rightarrow$ cooler is OFF, -4 C

asg-interactive

... didn't see anything about HDF file ...
 ... OK, after first 'n' answer to set default filename
 AUX-20190329.h5

05:15 TEC = ON $\rightarrow$ 5.1 Amps

set 't' trk = 3 (Trk 04) $\rightarrow$ error: set=1 / state=0
 but shtr = open

testscan $\rightarrow$ 39k ADU max

05:20 exptime 10 sec, Trk 04 (Art's t3) $\rightarrow$ file 1:4.fits
 ... shtr closed OK for darks
 shtr opened OK for lites
 shtr closed OK for darks
 shtr opened OK @ end of scans

05:24 'q' $\rightarrow$ closed shtr 4 OK
 TEC OFF $\rightarrow$ 2.0 Amps

05:28 asg-cooler-s $\rightarrow$ cooler is OFF, 3 C
 asg-power-f $\rightarrow$ 0.7 Amps

Files @ /mnt/data/rsq/tent /

2.fits, AUX-20190329.h5 = 22.5 Kb

d,s 20190329001:004.fits

Filezilla FTP to PC OK $\rightarrow$ 0.2 Amps

Thur Day 1 pre-MOBY267 cals / housed B503 test

Page 1 of

MLML RADIOMETRIC CALIBRATION LOG

EXPERIMENT pre-L279 LOCATION tent @ P35
 DATE 29 Mar 2019 OBSERVERS MF
 INSTRUMENT B503 S/N CONFIG 007
 COLLECTOR bare shtr DISTANCE NA
 SOURCE LED tent & Flite S/N CONFIG
 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

test new Art software
 asg-interactive → HDF aux data
 asg-power → turn on/off camera
 asg-cooler → " " " CCD cooler
 check bad (?) shutter return signals
 B503 trk 12 (counting from 1)
 R504 trk 04 " " "

putty log = 2019032901_B503_putty-log

PROCESSED DATE:

BY:

Time	Filename	Int Time/Bin Fact or Gain	Shunt Current	Lamp Voltage	Humidity	Temp.	Remarks
			mA	V	% RH	°C	
04:36	camera ON via "asg-power-o"						
444	TEC ON @ -60°C						
	test Trk 12 (asg-interactive = T11) error: set=1, state=0						
	... by uncover shutter inside splitter house						
451	s_d 20190329001-204 10sec						<I never saw shtr open!> 2dk / 4 dt / 2dk
	test Trk 11 ... no shtr state error						
459	s_d 20190329005:8 10sec						
503	TEC off → 2.1 Amps						
509	"asg-cooler-s" → cooler is OFF, 18°C						
	"asg-power-F" → 0.8 Amps						
	Files @ /mnt/data/bsg/tent/						AUX-20190329.h5, *001:008.fits

Thurs Day 01 pre-MOBY267 cols / housed RS04 test

Page 1 of

MLML RADIOMETRIC CALIBRATION LOG

EXPERIMENT pre-L279 LOCATION tent @ P35
 DATE 29 Mar 2019 OBSERVERS MF
 INSTRUMENT RS04 S/N CONFIG 004
 COLLECTOR bare mux position fiber DISTANCE NA
 SOURCE LED tent & flete S/N CONFIG
 PWR SUPPLY S/N CONFIG
 MULTIMETER S/N SHUNT
 LAMP VOLTAGE CURRENT
 LAMP TIME ON WARMUP OFF TOTAL

SETUP SKETCH / REMARKS

putty log = 2019032902-RS04-
 putty-log

WHERE NODE :: DEV : [DIR]

PROCESSED DATE:

BY:

Time	Filename	Int Time/Bin Fact or Gain	Shunt Current mA	Lamp Voltage V	Humidity % RH	Temp. °C	Remarks
05:05	"2sg-power-o"	→ 4.9 Amps					
	2sg-cooler-s	→ cooler is ON, -11C					
	2sg-cooler-f	→ 2.3 Amps					
	2sg-interactive	→ AUX-20190329.h5					
5:15	TEC=ON	→ 5.1 Amps					
	test Trk 04 (Art's t3)	→ error: set=1, state=0 <I saw shtr open>					
5:20	s_d20190329001:004 10sec	<shtr open, then closed, then open OK>					
5:24	'q' = quit	→ closed shtr 4 OK					
	TEC off	→ 2.0 Amps					
5:28	"2sg-cooler-s"	→ cooler is OFF, 3°C					
	2sg-power-f	→ 0.7 Amps					

Files @ /mnt/data/rsg/tent/ AUX-20190329.h5, *001:004.fits

(21-Feb-05 MF)

Fri Day 02

Page 2 of

MLML RADIOMETRIC CALIBRATION LOG

EXPERIMENT Pre-L279 LOCATION Tent@ P35
 DATE 30 Mar 2019 OBSERVERS MF
 INSTRUMENT BS03, RS04 S/N CONFIG 007, 004
 COLLECTOR Es
 mux position fiber DISTANCE jiggled
 SOURCE LED Flash light S/N CONFIG
 PWR SUPPLY batty = Apr 2018 S/N CONFIG
 MULTIMETER S/N SHUNT
 LAMP VOLTAGE CURRENT
 LAMP TIME ON WARMUP OFF TOTAL

WHERE NODE :: DEV : [DIR]

SETUP SKETCH / REMARKS

Sean & MF connected Es FO @ Trk 2
 w/ 2x tight 2.5 in dia coils in FO
 ~ 8 in from FO block @ splitter house

Ether comm via long RJ45 from PC
 to switch @ MOBY top controller

PROCESSED DATE:

BY:

Time	Filename	Int Time/Bin Fact or Gain	Shunt Current	Lamp Voltage	Humidity	Temp.	Remarks
			mA	V	% RH	°C	
06:34	TEC on @ -60°C	→ 5 A dc					
643	sp2200330001.004	2 sec			48	25	Trk 2 = Es
645	TEC off	→ 2.2 A dc					
650	asg-power - f	→ 0.9 A dc					
657	moby-shutdown	→ 0.3 A dc					

Note: RS amb therm @ chan # 5
YSI FEL " " 6

RS
BS data @ /home/user
32x.fity = 64 Mbyte

Sun Day 03 pg. 1 of 2

Page 3 of

MLML RADIOMETRIC CALIBRATION LOG				
EXPERIMENT	Pre-L279		LOCATION	tent @ P35
DATE	01 Apr 2019		OBSERVERS	MF, SM
INSTRUMENT	BS03, RS04	S/N	CONFIG	008, 005 →
COLLECTOR	Es		DISTANCE	50cm
	mux	position	fiber	
SOURCE	GS5000		S/N	
PWR SUPPLY	6030A #1		CONFIG	F601(c3)
MULTIMETER	34970A		SHUNT	GS125
LAMP VOLTAGE		CURRENT	8.2	
LAMP TIME	ON 04:59	WARMUP	20min	OFF 05:40 TOTAL
WHERE NODE :: DEV : [DIR]				

SETUP SKETCH / REMARKS
4x FOs attached yesterday/saturday @ FO block w/ 2x tight coils each @ new pucks near FO block @ Splitter house
Es still has no ND Filter @ spltr. House still off spltr, butt spltr is covered via black cloth, butt tent lights ON bcs Mark working on MOB top controller + OM
PROCESSED DATE: BY:

Time	Filename	Int Time/Bin Fact or Gain	Shunt Current mA	Lamp Voltage V	Humidity % RH	Temp. °C	Remarks
04:45	2sq-power-0						
448	TEC on @ -60°C				47	27	(Art Trk #1, counting from zero)
522	sd20190401 001:004	20/1.5	8.2000	106.94	51	27	Es @ Trk 2, 2dk/4et/2dk
531		005:008	.2000	6.94	52	27	
535		009:012	.2005	6.94	51	27	
544		013:016			51	27	
			lamp off = ambient				

FEL
°C
50
50.5
50.4
28

Sun Day 03 pg. 2 of 2

Page 4 of

MLML RADIOMETRIC CALIBRATION LOG

EXPERIMENT Pre-L279 LOCATION tent, P35
DATE 01 Apr 2019 OBSERVERS MF (SM he went home)
INSTRUMENT BS03, RS04 S/N CONFIG 008, 005
COLLECTOR Lu mux position fiber DISTANCE 6 in
SOURCE 0L425 S/N CONFIG (L10) W6D100
PWR SUPPLY 0L450 S/N CONFIG
MULTIMETER 34970A S/N SHUNT GS125
LAMP VOLTAGE CURRENT 6.6
LAMP TIME ON WARMUP OFF TOTAL

SETUP SKETCH / REMARKS
lamp time hrs
ON 07:29 470.6 6.588
OFF 815 471.4
ON 843 6.588
OFF 918 472.0
ON 948 6.587
OFF 1031 472.7

0L450
front
panel

WHERE NODE :: DEV: [DIR]

PROCESSED DATE:

BY:

Time	Filename	Int Time/Bin Fact or Gain	Shunt Current mA	Lamp Voltage PD FL	Humidity % RH	Temp. °C	Remarks	
07:50	sd20190401017:020	50, 4 sec	6.5999	22.15	55	24	LuBot@Trk13 (Art t12)	7.360
7:58		21:24	6.6002	22.21	55	23	put blk tape over MOS LuBot	7.364
8:07		25:28	6.5999	22.22	55	23	covered red light @ ext cord on floor	7.365
9:03		29:32 30, 3.5	6.5985	22.18	55	22	LuMid@Trk9 (Art t8)	7.358
9:08		33:36	6.6000	22.21	54	22		7.362
9:13		37:40	6.6020	22.23	54	22		7.366
10:13		41:44 25, 30	6.6020	22.21	54	21	LuTop@Trk6 (Art t5)	7.364
21		45:48	6.6018	22.21	54	21		7.365
26		49:52	6.6020	22.22	54	21		7.365
10:33	quit = cooler off							
47	asg. power - f → 0.8 A dc							

Mon Day 04 pg. 1 of 2

Page 5 of

MLML RADIOMETRIC CALIBRATION LOG					
EXPERIMENT pre-2279		LOCATION tent @ P35			
DATE 02 Apr 2019		OBSERVERS MF			
INSTRUMENT BS03, RS04		S/N			
COLLECTOR Es		CONFIG 009, 006			
mux position fiber		DISTANCE 50cm			
SOURCE G85000		S/N			
PWR SUPPLY 6030A		CONFIG F601 (C3)			
MULTIMETER 34970A		S/N			
LAMP VOLTAGE		CURRENT 8.2			
LAMP TIME ON		WARMUP 20		OFF TOTAL	
WHERE NODE :: DEV : [DIR]					

SETUP SKETCH / REMARKS	
Lamp time Δmin	ISCT
ON 0833	8.174
OFF 929 56	
Neutral Density filters added between shutter & collimator @ Es Trk 2	
BS = 0.5 ND, Thorlabs NDUV505B	
RS = 0.5 + 1.0 ND NDUV510B	
Splitter not housed, butt tent lights off	
PROCESSED DATE:	
BY:	

Time	Filename	Int Time/Bin Fact or Gain	Shunt Current mA	Lamp Voltage V	Humidity % RH	Temp. °C	Remarks
	2sg-power - 0	→ 2.0 Adc					
08:23	TEC on @ -60°C	→ 5.1 A/c					Es @ Trk 2 (Arts ±1)
858	sd 20190402001:04	60, 60 sec	8.1977	NA	62	23	Es @ Trk 2 (Arts ±1)
908		5:8	.1972	NA	60	23	
918		9:12	.1974	NA	61	23	

FEL
°C
46.5
46.3
46.0

Mon Day 04 pg. 2 of 2

Page 6 of

MLML RADIOMETRIC CALIBRATION LOG

SETUP SKETCH / REMARKS

EXPERIMENT Pre-L279 LOCATION tent P35
DATE 02 Apr 2019 OBSERVERS MF
INSTRUMENT B503, R504 S/N CONFIG 009, 006
COLLECTOR Δ mux position fiber DISTANCE YES
SOURCE Oriel pen lamp S/N CONFIG 009, 006
PWR SUPPLY Oriel S/N CONFIG
MULTIMETER Fluke S/N SHUNT NO
LAMP VOLTAGE CURRENT
LAMP TIME ON WARMUP OFF TOTAL

WHERE NODE :: DEV : [DIR]

PROCESSED DATE:

BY:

Time	Filename	Int Time/Bin Fact or Gain	Shunt Current	Lamp Voltage	Humidity	Temp.	Remarks
			mA	V	% RH.	°C	
10:07	s2 20190402 013:06	15, 60 sec		-100 mV	61	22	Es @ Trk 2, HgA
20	17:20	3, 3		-100 mV			bare lamps Ne
35	21:24	30, 0.3		+100	60	22	Lu Top @ Trk 6, Ar
43	25:28	0.5, 4		+100			12 in Spect sphere HgA
47	29:32	0.05, 0.1		+100			Ne
50	33:36	18, 0.3		+120			Kr
58	37:40	60, 1.5		+140			Xe
11:14	41:44	0.7, 1.1		-100			Lu Bot @ Trk 13, HgA
18	45:48	0.15, 0.05		-100	62	21	12 in Spect sphere Ne
20	quit, TEC off $\rightarrow$ 2.1 A dc						
11:29	avg-power -f $\rightarrow$ 0.8 A						

11:39 moby-shutdown $\rightarrow$ 0.03 A