

pre M263 B503 adj Lris

GMT 29 Jul 2017

1/1

shoot for Es & Ed $\downarrow$ 100x, Lu $\downarrow$ 10x

N04:30 lamp on

trk 14, X=950, Y=986 = reference
05113 56509 ADU

Lb	trk 13	= 18250	= 3.7x dn	@ X=950, Y=908	
Lm	11	20597	2.7	763	
Lt	9	21699	2.6	621	
Ed	7	5488	10.3	474	t14=56509
Em	5	5501	10.3	332	
Et	3	5660	19.98	187	
Es	1	4311	13.1	35	

13: 56929 / 5868 = 9.7 File 2 = 56915 / 5910 = 9.6
11: 56504 5788 = 9.8 3 56669 5777 = 9.8
9: 56622 56936 5731 = 9.9

7 56936 / 3846 = 14.8 File 5 = 56835 / 3849 = 14.8
closed!
5 56984 3871 6
3 56753 3862 7
- 3836 - 3841
2923 21

back ~ 3840 ADU

T14 57388 - 3840 = 57004
5700 + 3840

T13 18532 - 3840 = 14692 = 3.6 $\downarrow$ want ~ 9200

Fri, Pre-MOBY263

Page 1 of

MLML RADIOMETRIC CALIBRATION LOG					
EXPERIMENT	Pre-1264		LOCATION	Pier 35, Rm 124	
DATE	29 Jul 2017		OBSERVERS	MF	
INSTRUMENT	B503	S/N 03	CONFIG	002	
COLLECTOR	Shutter Block		DISTANCE	@ sphere exit port	
SOURCE	Oriel 60000	S/N	CONFIG	+ iris @ entrance port	
PWR SUPPLY	Oriel 68830	S/N	CONFIG	12" Spect. Sphere	
MULTIMETER		S/N	SHUNT		
LAMP VOLTAGE	10Vdc	CURRENT			
LAMP TIME	ON 04:30	WARMUP	OFF	TOTAL	
WHERE NODE :: DEV : [DIR]					

SETUP SKETCH / REMARKS

CFG for MOBY263 deployment =

port #1 = $E_s = \text{iris} + \text{ND1} + \text{ND0.5}$

3 = $E_t = \text{iris} + \text{ND1}$

5 = $E_m = \text{iris} + \text{ND1}$

7 = $E_b = \text{iris} + \text{ND1}$

9 = $L_t = \text{iris}$

11 = $L_m = \text{iris}$

13 = $L_b = \text{iris}$

ND1 = Thorlabs NDUV510B, OD=1.0

ND0.5 = Thorlabs NDUV505B, OD=0.5

Reflective Ø12.7mm NDUV filter

PROCESSED DATE:

BY:

Time	Filename	Int Time/Bin Fact or Gain	Shunt Current mA	Lamp Voltage V	Humidity % R.H.	Temp. °C	Remarks
~4:40	-40°C TEC						
	sb 2017072901	0.9sec 4x gain					port 14 = ref = no ND, no iris
05:48	02	same	adj trk 13	iris → 10x down			
558	03		adj	11	10x		
604	04			09	10x		
613	05		adj trk 7	→ 100x ↓, closed iris			→ 15x ↓ (!)
616	06		5	"	"		"
619	07		3	"	"		"
! STOP! need to account for bac ADU!							
re-open all iris & start over ... pg. 2 ...							

MLML RADIOMETRIC CALIBRATION LOG

EXPERIMENT Pre-L264 LOCATION Rm 124
 DATE 29 Jul 2017 OBSERVERS MF
 INSTRUMENT B S' S/N 03 CONFIG CCD 16346
 COLLECTOR Shtr Belk DISTANCE @ sphere
 SOURCE oriel mux position fiber
 PWR SUPPLY S/N CONFIG
 MULTIMETER S/N SHUNT
 LAMP VOLTAGE CURRENT
 LAMP TIME ON WARMUP OFF 07:36 TOTAL

WHERE NODE :: DEV : [DIR]

SETUP SKETCH / REMARKS

re-open all iris & begin again!

PROCESSED DATE:

BY:

Time	Filename	Int Time/Bin Fact or Gain	Shunt Current	Lamp Voltage	Humidity	Temp.	Remarks
			mA	V	% R.H.	°C	
630	562017072910	10s 4x	ref = trk 14, all iris open				
643	11		adj T13 iris → 10x ↓				57456-3850 / 9224-3833 = 9.9x
654	12		11	10			57584 9126 10.1
656	13		9				
701	14		9	10x			56897 9139 10.0
710	15		7 → 100x ↓				57612-3831 4498-3833 81x
717	16		5				5730-3821 4498-3843 82x
724	17		3				57397-3842 4498-3845 82x
728	18		1 did NOT adj iris!				57520-3826 4302-3822 112x
732	19	8 sec	Trk 14 = closed				

BS ctrl via USB & SOLIS, Shutter ctrl via USB
 Sun = BS on/in MOBY263 without BS housing (Es, Et, Em FOs not @ bot block yet...)
 Page 3 of 3

MLML RADIOMETRIC CALIBRATION LOG				SETUP SKETCH / REMARKS	
EXPERIMENT	Pre-L264		LOCATION	tant@P35	
DATE	31 Jul 2017		OBSERVERS	MF, Sean Mundell	
INSTRUMENT	BS	S/N	03	CONFIG	003
COLLECTOR	Lu	mux	position	fiber	DISTANCE 6 in
SOURCE	0L425	S/N		CONFIG	(L9) w6 D100
PWR SUPPLY	0L450	S/N		CONFIG	
MULTIMETER	34970A	S/N		SHUNT	G\$125
LAMP VOLTAGE	YES	CURRENT	6.6		
LAMP TIME	ON	WARMUP	20	OFF	TOTAL
WHERE NODE :: DEV : [DIR]				PROCESSED DATE: _____ BY: _____	

today = Sunday, 30 Jul 2017 HST
 My epoxied in settings & installed shutter ctrl
 MF & SM re-terminated Eb, Lb, Lm
 Fibers & new Lt FO @ bot end FO block

NOTE Shtr ctrl: open shtr #9 returns
 5V = open @ #10, & open 10 → 5V @ #9
 but open #9 → shtr #9 = open
 all other shtr ctrl = OK

Time	Filename	Int Time/Bin Fact or Gain	Shunt Current mA	Lamp Voltage FL	Humidity % R.H.	Temp. °C	Remarks
09:00	-60°C TEC						
10:26	s,d,b 2017073101:05	25 sec	6.6011	25.61, 61 .61, 62, 61	55	27	Lamp on @ 10:06 to 10:43 (41.7 hrs) to
	... only shtr #13 = open, trk #13 = Lu Bot: sig, drk, bac scans						
	... #1:3 bac w/ shtr closed, #4:5 bac w/ shtr open						
11:22	s,d,b 2017073106:10	31 sec	6.6013	25.65, 66 .66, 66, 67	55	26	Lamp on @ 11:02 to 11:37 w/ 415.3 hrs
	... trk 11 = Lu Mid, all bac scans w/ shtr #11 = open						
12:14	s,d,b 2017073111:15	28 sec	6.6006	25.64, .63 .63, 65, 63	58	26	Lamp on @ 11:54 to 12:30 w/ 415.9 hrs
	... trk #9 = Lu Top, all bac w/ shtr #9 = open						

MOBY (top) controller got new Campbell real time clock battery & 2x new Falcon discs

Mon = BS testing w/ Art

Page 4 of

MLML RADIOMETRIC CALIBRATION LOG				
EXPERIMENT	Pre-L264		LOCATION	Tent @ P35
DATE	01 Aug 2017	OBSERVERS	MF, S. Mundell	
INSTRUMENT	BS	S/N	03	CONFIG 003
COLLECTOR	Es		DISTANCE	50cm
SOURCE	GS 5000	S/N		CONFIG F601(c3)
PWR SUPPLY	6030A	S/N		CONFIG
MULTIMETER	34970A	S/N		SHUNT GS125
LAMP VOLTAGE		CURRENT	8.2	
LAMP TIME	ON	WARMUP	20	OFF TOTAL
WHERE NODE :: DEV : [DIR]				

SETUP SKETCH / REMARKS

Es, Et, Eb FOS re/terminated & connected to Fiber Block & check OK

PROCESSED DATE:

BY:

Time	Filename	Int Time/Bin Fact or Gain	Shunt Current mA	Lamp Voltage V	Humidity % R.H.	Temp. °C	Remarks	FEL °C
06:59	-60°C TEC = ON							
8:56	sd2017080101	240 sec	8.2040	107.19	57	28	compen 08:30 to 09:45	74
9:06		02	2041	19	59	27		73
9:15		03	41	19	60	27		73
9:26		04	43	19	60	27	Covered BS Fiber bundle	73
9:35		05	42	19	61	27	w/ black cloth... Tent lights = ON (see photo)	73
	NOTE: TH maybe moving Es mast during						#5	