

Tue 29 Mar 2016 HST = Day 01 pg. 1 of 1

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MLML RADIOMETRIC CALIBRATION LOG				SETUP SKETCH / REMARKS	
EXPERIMENT HI-2016-02		LOCATION H ₂ O Van		cf 03 = Chroma ET695sp 8°, Lot 300205 @ tilted substrate to cure infrared artifact	
DATE 30 Mar 2016		OBSERVERS MF			
INSTRUMENT BS		S/N 01		Andon LKon-M DU934P-BR-USB CCD-17878 shutter 35/35 ms vert shift 4.25 ms horiz shift 3 MHz @ 16 bit preamp gain 4x SAVEASS: FITS unsigned 16-bit files (*.fits)	
COLLECTOR all bare FO		CONFIG 03			
		DISTANCE Jig = 12", 17FP		Aux logging to aux2016033001.txt	
SOURCE Ekspla		CONFIG (09) 12" Spectralon			
PWR SUPPLY		CONFIG sphere w/ 4" exit port		AUX logging to aux2016033001.txt	
MULTIMETER		SHUNT			
LAMP VOLTAGE		CURRENT		AUX logging to aux2016033001.txt	
LAMP TIME ON 04:10		WARMUP OFF 04:49 TOTAL			
WHERE NODE :: DEV : [DIR]				PROCESSED DATE: _____ BY: _____	

Time	Filename	Int Time/Bin Fact or Gain	Shunt Current nm	Lamp Voltage Euv V mJ	Humidity % RH	Temp. °C	Remarks
03:59	CAM INIT -40°C						
415	a2016033001	0.75	350	1.94	MAX		amb = laser Port1 shuttered
420	s,b 01	0.7	350	1.93	↓		
22	s,b 02	0.9	400	1.98	↓		
31	03	1.5	450	1.94	MAX!		move Eks FO back from sphere to keep max Eksp power
34	04	1.2	500	1.92	↓		AUD big(er) exp time
35	05	1.4	550	1.94	↓		
41	06	1.0	600	1.97	↓		
43	s,b 07	1.2	650	1.96	MAX		
47	a 07	1.2	650	?	MAX		amb = Port1 shuttered
50	CAM TEMP CTRL	OFF					

Wed 30 Mar 2016 HST = Day 02

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MLML RADIOMETRIC CALIBRATION LOG			
EXPERIMENT	HI-2016-02		LOCATION
DATE	31 Mar 2016		OBSERVERS
INSTRUMENT	BS1	S/N	1
COLLECTOR	all FO, bare	CONFIG	03
	mux	position	fiber
SOURCE	NIST OL455-18 U	S/N	
PWR SUPPLY	OL400-C	S/N	
MULTIMETER	NOPE	S/N	
LAMP VOLTAGE	Δ	CURRENT	6.000 A dc
LAMP TIME	ON	WARMUP	OFF
TOTAL			
WHERE NODE::DEV:[DIR]			

SETUP SKETCH / REMARKS

Lamp time Amin
ON 03:44
OFF 04:16 32

PD = .0002e-10 w/ room
lights off & black cloth on
before zero PD @ start

19 Mar 2016, post-L245, MOS 205c16
radiance scale x-far from OL425 (L9)-W6
@ mm = 2.5 + 2x20, PD avg 3.1923e-7 A

shutter 35/35, Vert 4.25, Horiz 3MHz, Gain 4x

PROCESSED DATE:

BY:

Time	Filename	Int Time/Bin Fact or Gain	Shunt Current PD μ A	Lamp Voltage V	Humidity % R.H.	Temp. °C	Remarks
03:27	CAM@-40°C						
04:01	a2016033101:05	0.35s	0.0001e-10	15.39			amb = sphere shuttered
04:04	sb 01	"	.3199e-6	15.39			
04	sb 02:05	"	.3199e-6	.3199, .3199, .3200			
09	a 06:10	"	.0001e-10	15.39			shuttered
12	sb 06	"	.3199e-6	15.39			
13	sb 07:10	"	.3199, .3198, .3197, .3197				PD @ end, lamp off = .0006e-10
04:18	CAM TEMP CTRL OFF						PD van lights on = 0.199e-10 w/ black cloth on

Thurs 31 Mar 2016 HST = Day 03 = repeat OI455 stability baseline

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MLML RADIOMETRIC CALIBRATION LOG			
EXPERIMENT HI-2016-02		LOCATION H ₂ O Van	
DATE 01 Apr 2016	OBSERVERS mf		
INSTRUMENT BS	S/N 01	CONFIG 03	
COLLECTOR all FO bare @ jig	DISTANCE 9/32 in		
SOURCE NIST OI455-18U		CONFIG $\mu m = 2.5 + 20 + 18 -$	
PWR SUPPLY 0 L400-C	S/N	CONFIG	
MULTIMETER	S/N	SHUNT	
LAMP VOLTAGE	CURRENT 6.000 A dc		
LAMP TIME ON	WARMUP	OFF	TOTAL
WHERE NODE::DEV:[DIR]			

SETUP SKETCH / REMARKS
Comp time Δ min ON 02:09 OFF 2:40 31 repeat last night with NO Δ to setup lights out PD before zero $0.0002e-10$ yesterday PD avg = $.31986e-6 \pm .030\%$ (N=10) some camera settings as yesterday
PROCESSED DATE: BY:

Time	Filename	Int Time/Bin Fact or Gain	Shunt Current	Lamp Voltage	Humidity	Temp.	Remarks
02:01	CAMP -40°C		PD mA A	V	% R.H.	°C	
02:22	22016040101:05	0.35 sec	-0.000 De-10	15.39	65	22.7	amb = sphere shuttered
29	s,b 01	"	0.3199 e-6	15.39	54	21.1	
30	s,b 02:05	"	.3200, .3199, .3199, .3199				
33	s,b 06:10	"	.3196, .3196, .3196, .3195		65	22.7	
38	a 06:10	"	0.0003e-10	15.39			shuttered
02:41	CAM TEMP CTRL OFF						

Fri 01 Apr 2016 HST=

Day 04

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MLML RADIOMETRIC CALIBRATION LOG

SETUP SKETCH / REMARKS

EXPERIMENT HI-2016-02 LOCATION H₂O van@Snrg
 DATE 02 Apr 2016 OBSERVERS MF
 INSTRUMENT BS S/N 01 CONFIG 03
 COLLECTOR all bare FO @ Jug = 12" 17FP
 SOURCE Oriel pen lamp S/N CONFIG
 PWR SUPPLY Oriel 6060 S/N CONFIG
 MULTIMETER S/N SHUNT
 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 mA	Lamp Voltage V	Humidity % R.H.	Temp. °C	Remarks
04:37	CAM@ -40°C						
458	s_b2016040201	1.4					Ar @ -100 mV = normal
510	02	0.05 = FAST vs 35 ms shutter delay					HgA -20 = Low!
517	03	0.05 → SATURATE					Ne -65 = Low!
523	04	0.75					Kr -120 = normal
528	05	6.0					Xe -140 = normal
530	CAM TEMP CTRL OFF						

Mon 04 Apr 2016 HST = Day 05

Day 16
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MLML RADIOMETRIC CALIBRATION LOG			
EXPERIMENT HI-2016-02		LOCATION H2O Van, Snug	
DATE 05 Apr 2016	OBSERVERS MF		
INSTRUMENT BS	S/N 01	CONFIG 03	
COLLECTOR bare Fo #8 only	DISTANCE		
SOURCE NIST OL455-18U	S/N	CONFIG	
PWR SUPPLY OL400-C	S/N	CONFIG	
MULTIMETER	S/N	SHUNT	
LAMP VOLTAGE	CURRENT 6.000		
LAMP TIME ON	WARMUP	OFF	TOTAL
WHERE NODE :: DEV : [DIR]			

SETUP SKETCH / REMARKS
Lamp Time Amin ON 04:53 OFF 5:30 37 FO #8 mounted @ centre of jig see photos...
during HI-2015-03 via BS01cfg02 we easily saw the infrared artifact via 2x crossed polarizers so we re-check here BS01cfg03
PROCESSED DATE: BY:

Time	Filename	Int Time/Bin Fact or Gain	Shunt Current	Lamp Voltage	Humidity	Temp.	Remarks
04:46	CAM@-40°C		PD A	V	% R.H.	°C	
05:07	a2016040501	90sec	0.000e-10	15.40	52	23.1	shuttered sphere
05:14	s,b 01	90	0.3199e-6	15.39			2x Polarizers @ 90° = crossed
525	s,b 02	0.35	.3207e-6	15.39			no polarizers = single track
526	03:06	0.35	.3209, .3209, .3210, .3210				scan for Stephanie
531	CAM °C ctrl off						

Tue 05 Apr 2016 HST = Day 06

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MLML RADIOMETRIC CALIBRATION LOG

EXPERIMENT HI-2016-02 LOCATION H₂O van & outside
 DATE 06 Apr 2016 OBSERVERS MF
 INSTRUMENT BS S/N 01 CONFIG 03
 COLLECTOR FO #8 to MDSY ES FO
 SOURCE Sun S/N CONFIG via 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

Solar Fraunhofer scan
 long 1mm FO #700 from M259 ES
 bare FO tip, coupled to BS FO #8,
 via Labsphere gray plaque, 10x10 in.
 ID: CSTM-SRT-10-120 DATE: 3-16-95
 SET REP NO: 13248A
 100% overcast sky w/ rain clouds
 see photos

PROCESSED DATE:

BY:

Time	Filename	Int Time/Bin Fact or Gain	Shunt Current mA	Lamp Voltage V	Humidity % R.H.	Temp. °C	Remarks
01:58	CAMO - 40°C						
02:17	5,62016040601	0.33 doc					
18	02	"					
19	03	"					
20	04	"					
21	05	"					
02:37	TEMP CTRL OFF						

Wed 06 Apr 2016 HST = Day 07

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MLML RADIOMETRIC CALIBRATION LOG

EXPERIMENT HI-2016-02 LOCATION H₂O van + outside
 DATE 07 Apr 2016 OBSERVERS MF
 INSTRUMENT BS S/N 01 CONFIG 03
 COLLECTOR FO # 8 mux position fiber DISTANCE
 SOURCE Sun S/N CONFIG Gray Plague
 PWR SUPPLY S/N CONFIG
 MULTIMETER S/N SHUNT
 LAMP VOLTAGE CURRENT
 LAMP TIME ON WARMUP OFF TOTAL

SETUP SKETCH / REMARKS

repeat Solar Fraunhofer scan
 w/ inside-o-van lights OFF
 some M259 Es FO # 700 @ gray plague
 clear sky today, but WINDY

WHERE NODE :: DEV: [DIR]

PROCESSED DATE:

BY:

Time	Filename	Int Time/Bin Fact or Gain	Shunt Current mA	Lamp Voltage V	Humidity % R.H.	Temp. °C	Remarks
02:02	CAM2-40°C						
02:10	a2016040701	.07 sec			48	22.4	amb = disconnect FO#8 frm FO#700
11	s,b 01	"					
12	s,b 02	"					
13	s,b 03	"					
14	s,b 04	"					
15	s,b 05	"					
16	a 05	"					amb
02:16	CAM °C ctrl. off						