Run 6 / Night 1 Photometric @ Sunset

KITT PEAK NATIONAL OBSERVATORY CCD DIRECT CAMERA LOG page 1

Date(U.T.) 14 Sep 05 Observer MacKenty, Robberto, Smith Telescope 2.1m f Ratio 15 CCD _____ Gain _____

Raw Tape No. _____ Reduced Tape No. _____ Filters: 1 _____ 2 _____ 3 _____ 4 _____ 5 _____ 6 _____ 7 _____ 8 _____

Disk Pic#	Raw. Tape Pic#	Copied To Sun ?	Object	Integ. Time	Start U.T.	Start H.A.	Air Mass	GW ~~Focus~~	Filter	DMD ~~Seeing~~	Remarks
focus 1-21			HD 162208	2				I	J	ON	focus = 336
S 1-6			HD 225023	2			1.003	I	J	ON	focus = 326
7-8			"	2				"	H	ON	
9-10			"	2				"	K	ON	
11-12			"	2				"	K	OFF	
13-14			"	2				"	H	"	
15-16			"	2				"	J	"	
17			"	20					J	OFF	
18-22									K	slit	setup 279-478, 296-305
23-				2					K		DMD temp lowered to 235
26				20				300	K		
27				20				1000	K		
28--				2				I	H		GW failed to home?/powercycled
38				2				I	H	slit	
39				20				300	H	"	
40				20				1000	H	"	
41				2				I	H	"	
42-44				2				I	J	ON	MR hit telescope OFF button
45-48				2			1.093	I	J	slit	re centered
49				20				300	J	"	
50				20				1000	J	"	

Run 6 / Night 1

KITT PEAK NATIONAL OBSERVATORY CCD DIRECT CAMERA LOG page 2

Date(U.T.) 14 Sept 05 Observer Roberto Muckaity Telescope 2.1 f Ratio_____ CCD_____ Gain_____

Raw Tape No._____ Reduced Tape No._____ Filters: 1_____ 2_____ 3_____ 4_____ 5_____ 6_____ 7_____ 8_____

Disk Pic#	Raw. Tape Pic#	Copied To Sun ?	Object	Integ. Time	Start U.T.	Start H.A.	Air Mass	~~Focus~~ GW	Filter	~~Seeing~~ Slit DMP	Remarks
Orion	1-11		Orion	2				I	J/H		Center slit
	12			20				1000	H	slit	(350-530, 345-350)(182-345, 318-322)
	13-17			60			1.56	"	"	slit	
	18-22			60				"	"	~~slit~~ OFF	
	23-			60				"	"	~~OFF~~ slit	~~2" East~~
	24			60			1.48	"	"	"	2" East
	25			60				"	"	"	2W
	26			60				"	"	"	4W
	27			60							4E
	28			2				I	K	slit	
	29 ~~30~~			2					"	ON	
	30-31			2					"	slit	position (3 pixel slits) to 31
	32			20				1000	K	"	3 pixel wide
	33			60				"	"	"	"
	34			60							4W
	35			60							4E
	36			60							4E
	37			60							4W
	38			60							4E
	39			60						OFF	same pos as 38
	40			60						OFF	4W
	41			60						OFF	4W

Run 6 / Night 1

Photometric @ dawn
excellent weather all night

KITT PEAK NATIONAL OBSERVATORY CCD DIRECT CAMERA LOG page 3

Date(U.T.) 14 Sept 05 Observer MacKenty Roberto Telescope 2.1 f Ratio_____ CCD_____ Gain_____

Raw Tape No._____ Reduced Tape No._____ Filters: 1_____ 2_____ 3_____ 4_____ 5_____ 6_____ 7_____ 8_____

Disk Pic#	Raw. Tape Pic#	Copied To Sun ?	Object	Integ. Time	Start U.T.	Start H.A.	Air Mass	~~Focus~~ GW	Filter	~~Seeing~~ DMD	Remarks
orion	42		Orion	10				1000	K	slit	Neon=2
	43			60							Neon=4
	44-45			60				1000	H	slit	" "
											End of Night

Run 6 / Night 2 photometric @ Sunset

KITT PEAK NATIONAL OBSERVATORY CCD DIRECT CAMERA LOG page 4

Date(U.T.) 15 Sept 09 Observer ~~Robberto~~ MacKenty Telescope 2.1 f Ratio_____ CCD_____ Gain_____

Raw Tape No._____ Reduced Tape No._____ Filters: 1_____ 2_____ 3_____ 4_____ 5_____ 6_____ 7_____ 8_____

Disk Pic#	Raw. Tape Pic#	Copied To Sun ?	Object	Integ. Time	Start U.T.	Start H.A.	Air Mass	~~Focus~~ FW	~~Filter~~ GW	~~Seeing~~ DMD	Remarks
GridA	1		metrology of DMD					J	I	slit	3x3 @ 100,100
	2							"	"		shift -50,-50
	3							"	"	OFF	
	4							K		OFF	
	5							K			shift -50,-50
	6							K			original 3x3 @ 100,100
Fraser ~~279~~ A	1-9		Fraser 279-617	Various			1.316	H	I	ON	locating and focusing
	10-13		"	2,10				K	I	slit	
	14-31		"	30			1.425	K	1000	slit	6 pixel wide slit (step 2" in Dec)
	32			10				K	I	slit	after image
	33			2				K	I	ON	
	34			2				K	I	ON	20 South
	35-~~38~~			10				K	I	slit	from slit 1
	36			10				K	I	"	" " 2 } Y parity error
	37			10				K	I	"	6E
	38-49			10				K	I	"	alignment experiment
Nolan	1-6		HD 191612	~~10~~ 5				Z	I	Walborn	Setup 3 pixel wide slit
	7		"	60				Z	1000	"	
	8		"	60				Z	"	"	4W
	9		"	60				Z	"	"	4W
	10-12		"	60				J	1000	"	0, 4, 4E

Run 6 / Night 2

KITT PEAK NATIONAL OBSERVATORY CCD DIRECT CAMERA LOG page 5

Date(U.T.) 15 Sept 05 Observer McCarthy Roberto Telescope 2.1 f Ratio_____ CCD_____ Gain_____

Raw Tape No._____ Reduced Tape No._____ Filters: 1_____ 2_____ 3_____ 4_____ 5_____ 6_____ 7_____ 8_____

Disk Pic#	Raw. Tape Pic#	Copied To Sun ?	Object	Integ. Time	Start U.T.	Start H.A.	Air Mass	Focus FW	Filter GW	Seeing DLD	Remarks
Nolan	13-15		HD 191162	60			1.232	H	1000	Wallbank	0,4,4W
	16-17		"	"				H	1000	OFF	
	18-19		"	"				K	1000	OFF	
	20-24			"				K		Wallbank	0,4,4E, IN, 2S
	25			5				J	I		IN (position check)
	26-30		"	"				J	1000	Wallbank	/ OFF (alternated)
	31-35						1.423	Z	1000	"	" "
ogilB	1			5				K	I		3x3 @ 100,100
	2			5				"	"		-50,-50 offset
	3			5				K	I		"slewed near zenith (still @ -50,-50)
	4			5				K			3x3 @ 100,100
ALIGNEMENT			TEST								
M45	1		M45	5				K	OPEN		
	2			30				J	"		OUT OF FOCUS
	3			30				J	"		FOCUS ON
	4			10				"			Test slit on 2 stars
	5			10				J	1000		Short for check
	6			10				"	"		repeated
	7			10				"	"		

R unb/Night 2

KITT PEAK NATIONAL OBSERVATORY CCD DIRECT CAMERA LOG page 6

Date(U.T.) 15 Sept 05 Observer Muckenty Roberto Telescope 2.1 f Ratio_____ CCD_____ Gain_____

Raw Tape No._____ Reduced Tape No._____ Filters: 1_____ 2_____ 3_____ 4_____ 5_____ 6_____ 7_____ 8_____

Disk Pic#	Raw. Tape Pic#	Copied To Sun ?	Object	Integ. Time	Start U.T.	Start H.A.	Air Mass	Focus	Filter	Seeing	Remarks
	8		M45	10				J	1000		strange
	9										dark
	10								OPEN		mech OFF: on
	11										
	12			30							larger Slit (20×20)
	13										alignement - wrong direction
	14										
	15								1000		OK, stars in slits
	16								OPEN		large Slit again - No star!
	17										OPEN all - no star!!
	18-25								—		CAL EXP - lost grating wheel.
	26										
	27										Test again
	28										
	29-33										
			ORION								
	34			10				J	OPEN		JBAND - Acquisition
	35			30							
	36			30							i' N
	37			15				K			

Run 6/Night 2 Photometric @ sunrise

KITT PEAK NATIONAL OBSERVATORY CCD DIRECT CAMERA LOG page 7

Date(U.T.) 15 Sept 00 Observer_____ Telescope 2.1 f Ratio_____ CCD_____ Gain_____
Raw Tape No._____ Reduced Tape No._____ Filters: 1_____ 2_____ 3_____ 4_____ 5_____ 6_____ 7_____ 8_____

Disk Pic#	Raw. Tape Pic#	Copied To Sun ?	Object	Integ. Time	Start U.T.	Start H.A.	Air Mass	Focus	Filter	Seeing	Remarks
	38										ALIGNMENT
	49										↓ 49 IS FINAL!
z~1.3	50		ORI 2 MASK	60s				n	1000		
	51										4" W slit D: WRONG
	52										-10 OK
	53										Repeat
	54										
	55							n+1	1000		DARK - / NOT AT WHEEL
?	56/57										
	57/58		BLANK MMA OFF								"DARK" MMA Exp.
z=	1.275	59						K			" " "
	60										
			END OF NIGHT 2								
			CHECK THE NUMBERS AT THE END								

Run 6/ NIGHT 3 Photometric @ Sunset

KITT PEAK NATIONAL OBSERVATORY ~~CCD DIRECT~~ IRMOS CAMERA LOG page 1/7

Date(U.T.) 9/16/05 Observer J. Matt al. Telescope 2.1 f Ratio_____ CCD_____ Gain_____

Raw Tape No._____ Reduced Tape No._____ Filters: 1_____ 2_____ 3_____ 4_____ 5_____ 6_____ 7_____ 8_____

Disk Pic#	Raw. Tape Pic#	Copied To Sun ?	Object	Integ. Time	Start U.T.	Start H.A.	Air Mass	Focus	Filter	Seeing	Remarks
	1-13								H	OPEN	Setup
	14		Figer	10s						1	Position of slits
	15			10s				1000		1000	Test: OK?
	16			60							GO! Looks GOOD
	17			.							slit: -20, Tel = 5" W : BAD!
	18										20 5" W : BAD ??
	19										0 10" W (error)
	20										0 0
	21										? where are we? Lost...
	22			10						OPEN	Back to imaging: 40" off
	23-29										Acquisition
	30			60							.
	31			60				1000		1000	OK
	32										Repeat slit 0,0
	33										Tel: 4" W ; Slit: -10,0
	34							OFF		OFF	Probably not moved -10,0
	35			10				OFF		NEG	CHECK = yes: not moved
	36			10							Tel 4" W Slit -10,0 ok
	37			60				1000		NEG	CRAP
	38									Slit	OK -4W, -10,0
	39									OFF	OFF: DARK OFFSET

Run 6 / Night 3

KITT PEAK NATIONAL OBSERVATORY CCD DIRECT CAMERA LOG

Date(U.T.) 9/16/05 Observer_____ Telescope_____ f Ratio_____ CCD_____ Gain_____

Raw Tape No._____ Reduced Tape No._____ Filters: 1_____ 2_____ 3_____ 4_____ 5_____ 6_____ 7_____ 8_____

Disk Pic#	Raw. Tape Pic#	Copied To Sun ?	Object	Integ. Time	Start U.T.	Start H.A.	Air Mass	Focus	Filter	Seeing	Remarks
	40			60						Slit	Tel 0, Slit 0,0
	41			60				1000	H	OFF	DARK 0
	42		NEON LAMP	60						Slit	
	43			60						OFF	
	44			60						Slit	Slit -10"
	45			60					K		
	46										Slit 0"
	47									OFF	
	48		CONT. LAMP								
	49									Slit	Slit 0"
	50										Slit -10"
	51		SOURCE								
	52									OFF	Tel = -4" W
	53									Slit	Slit 0" Tel = 0"
	54									OFF	
	55			10				1000		Slit	
	56							NEG			check position! need 10,5 offset
	57									NEG	
	58										
	59										
	60			10				1000		Slit	

Run 6 / Night 3

KITT PEAK NATIONAL OBSERVATORY CCD DIRECT CAMERA LOG

Date(U.T.) 9/16/05 Observer_____ Telescope_____ f Ratio_____ CCD_____ Gain_____

Raw Tape No._____ Reduced Tape No._____ Filters: 1_____ 2_____ 3_____ 4_____ 5_____ 6_____ 7_____ 8_____

Disk Pic#	Raw. Tape Pic#	Copied To Sun ?	Object	Integ. Time	Start U.T.	Start H.A.	Air Mass	~~Focus~~ R	Filter	~~Seeing~~ Slit	Remarks Tel
FIGER	61		SOURCE	60				1000	K	Slit 0"	0"
	62										
	63									OFF	
	64									Slit 0"	
	65										
	66									Slit -10	Tel 4"W
	67										
	68									OFF	
	69									Slit -10	
	70										
	71		NEON LAMP								Saturated } Buy in ACC ON
	72			10							= } button found.
	73			10							On
	74			60							
	75			60						Slit 0"	
	76									OFF	
	77		CONT LAMP								
	78									Slit 0"	
	79									Slit -10"	

Run 6 / Night 3

KITT PEAK NATIONAL OBSERVATORY CCD DIRECT CAMERA LOG

Date(U.T.) 9/16/05 Observer_____ Telescope_____ f Ratio_____ CCD_____ Gain_____
Raw Tape No._____ Reduced Tape No._____ Filters: 1_____ 2_____ 3_____ 4_____ 5_____ 6_____ 7_____ 8_____

Disk Pic#	Raw. Tape Pic#	Copied To Sun ?	Object	Integ. Time	Start U.T.	Start H.A.	Air Mass	Focus	Filter	Seeing	Remarks
	1		STD HR8905	1				OFF	K	OPEN	Long slit : 100
	2			1				1		SLIT	
	3			10				1000			Too bright
	4			5							OK
	5										
	6										
	7										
	8										Tel.
	9-13										→ 8" E
	14-18									OFF	
	19-~~23~~									1	back to 0" UH-OH!
			CRASH	-	RESTART						
FILES B	B.1		STD HR8905 B	1s				OFF	K	~~NEG~~	Restart - Pointing
	2-~~4~~			5s				1000		SLIT	DATA
	5-7							OFF		SLIT	DARKS
	8-10							1			Tel 8" E DARKS
	11-13							1000			
	14		Neon LAMP								Tel 0" ~~CAL~~
	15			30s							~~CAL~~

Run 6 / Night 3

KITT PEAK NATIONAL OBSERVATORY CCD DIRECT CAMERA LOG page 5/7

Date(U.T.) 9/14/05 Observer_____ Telescope_____ f Ratio_____ CCD_____ Gain_____
Raw Tape No._____ Reduced Tape No._____ Filters: 1_____ 2_____ 3_____ 4_____ 5_____ 6_____ 7_____ 8_____

Disk Pic#	Raw. Tape Pic#	Copied To Sun ?	Object	Integ. Time	Start U.T.	Start H.A.	Air Mass	~~Focus~~ R	Filter	~~Seeing~~ SLIT	Remarks
(B)	16		NEON LAMP	30s				1000	K	~~OFF~~	TEL 0" CAL
	17		CONT LAMP							OFF	
	18									SLIT	
	19							3000	KBLUE		K3000 BLUE CAL
	20									OFF	
	21		NEON LAMP								
	22									SLIT	
	23		STD HR8905								BAD: STILL CAL MIRROR IN
	24-25										OK; REPEATED
	26									OFF	DARK
	27-28									SLIT	Tel 8"E
	29-30								K-RED		
	31									OFF	
	32-33									SLIT	Tel 0"
	34									OFF	
	35		NEON LAMP								
	36									SLIT	
	37		CONT LAMP								
	38									OFF	
	39							300	K	SLIT	
	40									OFF	

Run 6 / Night 3

KITT PEAK NATIONAL OBSERVATORY CCD DIRECT CAMERA LOG

Date(U.T.) 9/16/05 Observer_____ Telescope_____ f Ratio_____ CCD_____ Gain_____
Raw Tape No._____ Reduced Tape No._____ Filters: 1_____ 2_____ 3_____ 4_____ 5_____ 6_____ 7_____ 8_____

Disk Pic#	Raw. Tape Pic#	Copied To Sun ?	Object	Integ. Time	Start U.T.	Start H.A.	Air Mass	~~Focus~~ R	Filter	~~Seeing~~ GAMA	Remarks
	41		NEON LAMP	30s				300	K	OFF	
	42		"							SLIT	
	43		STD HR8405							SLIT	SATURATED
	44			10s							"
	45-46			5s							OK, REPEATED
	47-48									OFF	
	49-50									"	Tel 8" E
	51-53									SLIT	
	54										
			ORION								
Orion	1-3			30				~~OFF~~	KBLU	NEG	POINTING
	4			30					K	SLIT	
	5			60							
	6-8							1000			
	9									OFF	
	10									"	Tel 5" West
	11									SLIT	
	12-14										Tel back TO 0" POINTING?
	15-26							OFF		NEG	TESTS
	27-31							1000	K	SLIT	

Run 6 / Night 3 photometric @ Sunrise

KITT PEAK NATIONAL OBSERVATORY CCD DIRECT CAMERA LOG page 7/7

Date(U.T.) 9/16/05 Observer_____ Telescope_____ f Ratio_____ CCD_____ Gain_____
Raw Tape No._____ Reduced Tape No._____ Filters: 1_____ 2_____ 3_____ 4_____ 5_____ 6_____ 7_____ 8_____

Disk Pic#	Raw. Tape Pic#	Copied To Sun ?	Object	Integ. Time	Start U.T.	Start H.A.	Air Mass	Focus R	Filter	~~Seeing~~ MMA	Remarks
ORION	32		ORION	60				1000	R	OFF	
	33		Neon Lamp							OFF	
	34									SLIT	
	35		CONT. LAMP								
	36									OFF	
	37/38		ORION NORTH	30				OFF		ON	ORION ADJACENT FIELDS
	39		ORION SOUTH								

RUN 6 – NIGHT 4

- Photometric at sunset
- Clouds at SE

KITT PEAK NATIONAL OBSERVATORY CCD DIRECT CAMERA LOG

Date(U.T.) 9/17/05 Observer JM et al Telescope_____ f Ratio_____ CCD_____ Gain_____

Raw Tape No._____ Reduced Tape No._____ Filters: 1_____ 2_____ 3_____ 4_____ 5_____ 6_____ 7_____ 8_____

Evening of 9.16.05 local time:

	Disk Pic#	Raw. Tape Pic#	Copied To Sun ?	Object	Integ. Time	Start U.T.	Start H.A.	Air Mass	~~Focus~~ R	~~Filter~~	MMA ~~Seeing~~ MASK	Remarks
~8:45PM	F279_	1-4		FIGER: F279	1sec				MIRROR	K	OPEN	Focus check: 342 counts
		5-6									SLIT	Slit alignment: file
		7							1000	K	SLIT	ON F279_SLIT1.CSV
		8									OFF	
		9-12									SLIT	ON Repeated 4 TIMES
		13		CAL MIRROR								CAL MIRROR ON
		14		LAMP CAL								LAMP LOW
		15										LAMP HIGH
9:20PM		16									OFF	
		17		NEON LAMP								
		18-20									SLIT	
		21		F279								Back on Target
9:33PM		22-24						1.5				added 4 slits for sky (10:13)
		25		Tel 4" EAST								F297_SLIT2.CSV
		26		Tel 8" WEST								
		27		Tel 4" EAST								
				Telescope clearly is not cooperating, as yesterday.								
				Back to open to check								
		28							MIRROR	K	OL	
				Telescope is 2" SOUTH! WHY?								
9:50PM				Stop on this source, z ≃ 1.6 already								

GO TO ANOTHER FIGER'S TARGET

Run 6/ Night 4

KITT PEAK NATIONAL OBSERVATORY CCD DIRECT CAMERA LOG page 2/5

Date(U.T.) 9/17/05 Observer MacKenty Roberto Telescope 2.1 f Ratio_____ CCD_____ Gain_____

Raw Tape No._____ Reduced Tape No._____ Filters: 1_____ 2_____ 3_____ 4_____ 5_____ 6_____ 7_____ 8_____

	Disk Pic#	Raw. Tape Pic#	Copied To Sun ?	Object	Integ. Time	Start U.T.	Start H.A.	Air Mass	~~Focus~~ R	Filter	MMA ~~Seeing~~ MASK	Remarks
10 PM	F408_		1	FIGER 408	1s				—	K	ON	RA: 20:38:29 ; Dec: +42:06:25 (2/c)
			2		30s				—			
			3		30s							move Tel
			4		30 s						SLIT	WITH SLITS "F408-SLIT1"
			5		30 s						SLIT^{-1}	INVERSE SLITS, COMPLETELY OFF!
			6									USE SHIFTTOOL +10, -40
			7									+5, 2
10:30PM			8-17		60s			1.04	1000		SLIT	ON x10 FRAMES
			18-20								OFF	CAL
			21	CAL LAMP								
			22-24								SLIT	
			25-26	NEON LAMP								
			27-28								OFF	
—	—	—	—	—	—	—	—	—	—	—	—	—
11:00PM		F406_	1	FIGER F406					—	K	ON	Shutter closed
			2-3		10s				—			Field acquisition
			4		30s				—			
				PROBLEMS WITH AUTOGUIDER - MANUAL GUIDE: KESTER !!								
			5-8						—	K	SLIT^{-1}	CHECK - 8 is OK Rej fig wing
			9-		60				1000		SLIT^{-1}	BAD: slit was OPEN
12:20PM			10-19					1.25			SLIT	

Run 6 / Night 4

KITT PEAK NATIONAL OBSERVATORY CCD DIRECT CAMERA LOG

Date(U.T.) 9/17/05 Observer_____ Telescope_____ f Ratio_____ CCD_____ Gain_____
Raw Tape No._____ Reduced Tape No._____ Filters: 1_____ 2_____ 3_____ 4_____ 5_____ 6_____ 7_____ 8_____

Disk Pic#	Raw. Tape Pic#	Copied To Sun ?	Object	Integ. Time	Start U.T.	Start H.A.	Air Mass	~~Focus~~ R	Filter	DMD ~~Seeing~~	Remarks
12:32 FG06	20-22		FIGER FG06	60				1000	K	OFF	
	23		CAL LAMP	60							
	24-25									SLIT	
	26-27		Ne LAMP								
	28-29										
	30		FIGER FG06	30				—	K	SLIT⁻¹	Check Position: BINGO!
	31			1				—	#	ON	next source
HD225023	11		HD225023	15			1.06	—	K	ON	ELIAS STD
	12		(starts at 11 by typing							SLIT⁻¹	CHECK
	13		error)								SHIFT +15, -42
	14										" 0, +3 OK
	15-16			10s				1000		SLIT	
	16-17			60s							
	18-19									OFF	
	110		CAL LAMP								
	111-112									SLIT	
	113-114		Ne LAMP								
	115-116									OFF	
	117		HD225023	10s						SLIT⁻¹	Final check, but grating still out!
	118			10s				—		SLIT⁻¹	" " OK

Run 6/Night 4

KITT PEAK NATIONAL OBSERVATORY CCD DIRECT CAMERA LOG page 4/5

Date(U.T.) 9/17/05 Observer_____ Telescope_____ f Ratio_____ CCD_____ Gain_____
Raw Tape No._____ Reduced Tape No._____ Filters: 1_____ 2_____ 3_____ 4_____ 5_____ 6_____ 7_____ 8_____

Disk Pic#	Raw. Tape Pic#	Copied To Sun ?	Object	Integ. Time	Start U.T.	Start H.A.	Air Mass	Focus R	Filter	Seeing DMD	Remarks
HD225023	1 20		HD225023	10			1.025	1000	H	SLIT	
	121-24			60							
	125-26									OFF	
	127		FLAT LAMP								
	128-29									SLIT	
	130-31		Ne LAMP								
	132									OFF	
	133								H		
	134-35									SLIT	
	136-37		FLAT LAMP								
	138									OFF	
	139		HD 225023								
	140-41									SLIT	
	42							—		ON	CHECK
	43	is on Trapezium...									

Run 6 / Night 4

Photometric @ Sunset but clouds persisted to SSE all night - ~~[illegible]~~ Probably no ~~[illegible]~~ - ~full moon

KITT PEAK NATIONAL OBSERVATORY CCD DIRECT CAMERA LOG page 5/5

Date(U.T.) 9/17/05 Observer_____ Telescope_____ f Ratio_____ CCD_____ Gain_____

Raw Tape No._____ Reduced Tape No._____ Filters: 1_____ 2_____ 3_____ 4_____ 5_____ 6_____ 7_____ 8_____

	Disk Pic#	Raw. Tape Pic#	Copied To Sun ?	Object	Integ. Time	Start U.T.	Start H.A.	Air Mass	~~Focus~~ R	Filter	Seeing	Remarks
3:20AM	ORION-N4-	1-12		ORION	10				—	J	SLIT	Acquisition
		13			1				—	J		POINTING OK
		14			60				3000	Kblue	SLIT	DO K BLUE (BAD)
		15-20										OK → ORION-N4-1.csv
		21										removed slits 4 → ORION-N4-2.csv
		22-31										turned #4 → ORION-N4-3.csv
		32-34									OFF	
		35		FLAT LAMP								
		36-37									SLIT	
		38		SHUTTER ON								Try another thermal flat - NOP
		39-41		Ne LAMP								
		42-43									OFF	
		—		—								Take a STD
5:00	HD40335-	1		HD40335-	5				—			ELIAS STD - Bad
		2-5			1s				—			Acquisition
		6			1				—		SLIT	
		7-9			60s				3000	Kblue	SLIT	
		10-11									OFF	
		12-13		FLAT LAMP								
		14-15									SLIT	
		16-18										
		19-20									OFF	

END OF NIGHT 4

Run 6 / Night 5

~~Clouds around but generally clear. Probably lost [illegible]~~

KITT PEAK NATIONAL OBSERVATORY CCD DIRECT CAMERA LOG page 1

Date(U.T.) 9/18/05 Observer_____ Telescope_____ f Ratio_____ CCD_____ Gain_____

Raw Tape No._____ Reduced Tape No._____ Filters: 1_____ 2_____ 3_____ 4_____ 5_____ 6_____ 7_____ 8_____

Disk Pic#	Raw. Tape Pic#	Copied To Sun ?	Object	Integ. Time	Start U.T.	Start H.A.	Air Mass	~~Focus~~ G-W	Filter	~~Seeing~~ DMD	Remarks
Grad			Astrom					I	K	SlitD	Cal = closed
nolan	1-8		HD 191612	10				I	J	ON	focus = 336
	9-10			10				I	J	nolan-slit2	current / +2Y
	11			10						slit2	
	12-13			60				3000A	J1	"	
	14							"	"	OFF	
	15									slit2	Cont = high
	16									slit2	Neon = 4
	17									OFF	Neon = 4
	18									OFF	cont = high
	19-21							3000B	J2	slit2	
	22									OFF	
	23									OFF	cont = high
	24									OFF	neon = 4
	25									slit2	neon = 4
	26									slit2	cont = high
	27			10	3:30	-0:16	1.004	I	J2	current	
	28			60				1000	J	slit2	(current – mostak)
	29-33			"				1000	J	slit2	
	34									OFF	
	35-38									slit/off	cont, Neon

Run 6/Night 5

KITT PEAK NATIONAL OBSERVATORY CCD DIRECT CAMERA LOG page 2

Date(U.T.)_____ Observer_____ Telescope_____ f Ratio_____ CCD_____ Gain_____
Raw Tape No._____ Reduced Tape No._____ Filters: 1_____ 2_____ 3_____ 4_____ 5_____ 6_____ 7_____ 8_____

Disk Pic#	Raw. Tape Pic#	Copied To Sun ?	Object	Integ. Time	Start U.T.	Start H.A.	Air Mass	GW Focus	Filter	PWP Seeing	Remarks
Moon	39-45		HD191612	60			1.003	1000	K	SLIT2	
	46									OFF	
	47									OFF	cont=high
	48									SLIT2	" "
	49									"	neon=4
	50									OFF	" "
	51-57			60				1000	H	SLIT2	
	58-59									OFF	
	60-61									SLIT/OFF	cont=high
	62-63									"	neon=4
NGC7469	1		NGC 7467	60				I	H	ON	
	2		"	"					J		90N
Moon			Moon								~~40S~~
	21-22							3000B	H2	3x100	55 clouds on the load
11:20 HD203856	1-4		HD203856						Z	SLIT'	Setup
	5-6							3000		SLIT	
	7-8									OFF	
	9		FLAT								
	10-11										LOST CPU

KITT PEAK NATIONAL OBSERVATORY CCD DIRECT CAMERA LOG page 3

Date(U.T.)_____ Observer_____ Telescope_____ f Ratio_____ CCD_____ Gain_____

Raw Tape No._____ Reduced Tape No._____ Filters: 1_____ 2_____ 3_____ 4_____ 5_____ 6_____ 7_____ 8_____

Disk Pic#	Raw. Tape Pic#	Copied To Sun ?	Object	Integ. Time	Start U.T.	Start H.A.	Air Mass	Focus R	Filter	Seeing DMD	Remarks
HD203856_1	1-13		HD203856 - 1 -	60				—	Z		RESUME
-1	14									SLIT	no GRATING, SORRY!
	15-16		FLAT LAMP					1000			
	17									OFF	
	18		NEON LAMP								
	19-20									SLIT	
	21-22		HD203856					3000B	H		
	23-24									OFF	
	25		FLAT LAMP								
	26-27									SLIT	
	28-29		NEON								
	30									OFF	
	31-32		HD203856					1000	H	SLIT	
	33-34									OFF	
	35		FLAT LAMP							OFF	
	36-37									SLIT	
	38-39		NEON								
	40									OFF	
1:10	41-		HD203856					1000	K	SLIT	
	42-43			2				—		SLIT'	check pointing, shifted -2
	44-45			60				1000		SLIT	(349, 298)°

KITT PEAK NATIONAL OBSERVATORY CCD DIRECT CAMERA LOG page 4

Date(U.T.)_____ Observer_____ Telescope_____ f Ratio_____ CCD_____ Gain_____

Raw Tape No._____ Reduced Tape No._____ Filters: 1_____ 2_____ 3_____ 4_____ 5_____ 6_____ 7_____ 8_____

	Disk Pic#	Raw. Tape Pic#	Copied To Sun ?	Object	Integ. Time	Start U.T.	Start H.A.	Air Mass	Focus R	Filter	Seeing DMD	Remarks
	HD203846	46-47		HD203846	60				1000	K		OFF
	-1	48		FLAT LAMP							OFF	
		49-50									SLIT	
		51-52		Neon								
		53									OFF	
1:25		54-55		HD203846					1000	J	SLIT	
		56-57									OFF	
		58		FLAT LAMP								
		59-60									SLIT	
		61-62		Neon								
		63									OFF	63 repeated, DMD problem?
		65-66-67		HD203846					3000A	J	SLIT	
1:42		68-69							(BLUE)		OFF	
		70		FLAT LAMP								
		71-72									SLIT	
		73-74		Neon								
		75									OFF	
2:04		76-77-78		HD203846					3000B	J	SLIT	
2:06		79-80							(RED)		OFF	
		81		FLAT LAMP								
		82-83									SLIT	

KITT PEAK NATIONAL OBSERVATORY CCD DIRECT CAMERA LOG page 5

Date(U.T.)_____ Observer_____ Telescope_____ f Ratio_____ CCD_____ Gain_____

Raw Tape No._____ Reduced Tape No._____ Filters: 1_____ 2_____ 3_____ 4_____ 5_____ 6_____ 7_____ 8_____

Disk Pic#	Raw. Tape Pic#	Copied To Sun ?	Object	Integ. Time	Start U.T.	Start H.A.	Air Mass	Focus R	Filter	Seeing OMD	Remarks
HD80386	84-85		Neon	60s				3000B	J	SLIT	
-1	86			1				(red)		OFF	
2:22	87-88		HD803856	1				3000R	K	SLIT	LOST GUIDE, 2~1.6
								(Red)			
HD18881	1-5		HD18881	60s				3000R	K	SLIT-1	Acquisition
	6-11							(Red		SLIT	
	12-13									OFF	
	14-		FLAT FIELD LAMP							1	
	15-16									SLIT	
	17-18		Neon							1	
	19									OFF	
ORION	1-8		ORION	5				~~J~~		SLIT-1	Acquisition
	9-10			5				3000Red	J	Slit	
	11-20			60s				1	1	1	
	21-23									OFF	
	24										Tel 2" West in not yet
	25										

Run 6 / Nights

scattered thin/high clouds at sunrise (not cirrus) ≈ 5%

KITT PEAK NATIONAL OBSERVATORY CCD DIRECT CAMERA LOG page 6

Date(U.T.) 9/18/05 Observer_____ Telescope_____ f Ratio_____ CCD_____ Gain_____

Raw Tape No._____ Reduced Tape No._____ Filters: 1_____ 2_____ 3_____ 4_____ 5_____ 6_____ 7_____ 8_____

Disk Pic#	Raw. Tape Pic#	Copied To Sun ?	Object	Integ. Time	Start U.T.	Start H.A.	Air Mass	Focus R	Filter B	~~Seeing~~ OUD	Remarks
ORION_B	1-5		ORION					—			Recognize field
	6							3000 Red	J Red	ORION MASHB	FOWLER 16 - failed
	7										8 OK
	8-19										1
	20-22									OFF	
	23-25									SLIT	
	~~26~~									OFF	26 is bad
	27-28									1	
	29-30									SLIT	
	31-32									SLIT	
	33									OFF	

Run 6/ Night 6

Clear but a few scattered high/cirrus and medium clouds over entire sky.

KITT PEAK NATIONAL OBSERVATORY CCD DIRECT CAMERA LOG

Date(U.T.) 9/19/05 Observer_____ Telescope_____ f Ratio_____ CCD_____ Gain_____
Raw Tape No._____ Reduced Tape No._____ Filters: 1_____ 2_____ 3_____ 4_____ 5_____ 6_____ 7_____ 8_____

Disk Pic#	Raw. Tape Pic#	Copied To Sun ?	Object	Integ. Time	Start U.T.	Start H.A.	Air Mass	~~Focus~~ G-W	Filter	~~Seeing~~ DMD	Remarks
fw-	1-2		Filterwheel test	10			zenith	I	J2	ON	normal control
fwA-	1		"	10			"	I	J2	ON	com18 manual FW
	2-3			10			"	"	"	"	"
	4			10					"	"	BSP050
	5			10					"	OFF	
	6			10						ON	BSN050 (return to initial pt)
	7									"	BSN010 peak@150
	8									"	BSN010 peak@270
	9										BSP020 (IP) peak@67
	10										BSP002' peak @ 46
	11										BSP002' peak ~ 30
	12										BSP002' peak @ edge
	13										BSP002
	14										BSP002
	15										BSN010 (IP)
F391-	1-4		Fogn 391	10				I	H	ON	Eeby, + fans
	5			10				I	K	ON	
	6-9			10				I	H	slit	F 391-slit1
	10-			60			1.010	1000	K	slit	(forgot - ~~marked~~ DMD
	11-15			60			1.012	1000	K	"	
	16-17									OFF	

Run 6 / Night 6

KITT PEAK NATIONAL OBSERVATORY CCD DIRECT CAMERA LOG

Date(U.T.) 9/19/05 Observer_____ Telescope_____ f Ratio_____ CCD_____ Gain_____
Raw Tape No._____ Reduced Tape No._____ Filters: 1_____ 2_____ 3_____ 4_____ 5_____ 6_____ 7_____ 8_____

Disk Pic#	Raw. Tape Pic#	Copied To Sun ?	Object	Integ. Time	Start U.T.	Start H.A.	Air Mass	~~Focus~~ GW	Filter	~~Seeing~~ DMD	Remarks
F391	18-23		F 391	60			1.018	1000	K	slit	3E
	24-25			60				"	"	OFF	
	26-30			60			1.027	"	"	slit	6W
	31-32			60				1000	K	OFF	
	33-34							"	"	slit	3E
	35									"	1N
	36									"	2S
	37-									"	1N Cal=high (cont)
	38						1.043			OFF	" "
	39									OFF	Neon=4
	40			↓						slit	Neon=4
	41			10				I	K	Invert	should be original position
	42			10				I	H	"	
HD168625	1-6		HD 168625						K		Align
HD168625	1-3			60s			1.5	1000	K	slit	Align
	4-5			60s						slit	saturated
	6-11			10s							
	12-18	16 mirror									Telescope 5" W
	19-23									OFF	
	23-26		FLAT LAMP								

Run 6 / Night 6

KITT PEAK NATIONAL OBSERVATORY CCD DIRECT CAMERA LOG

Date(U.T.) 9/19/05 Observer_____ Telescope_____ f Ratio_____ CCD_____ Gain_____
Raw Tape No._____ Reduced Tape No._____ Filters: 1_____ 2_____ 3_____ 4_____ 5_____ 6_____ 7_____ 8_____

Disk Pic#	Raw. Tape Pic#	Copied To Sun ?	Object	Integ. Time	Start U.T.	Start H.A.	Air Mass	~~Focus~~ GW R	Filter	~~Seeing~~ DMD	Remarks
	27-31		~~HD168625~~ FLAT NEON	10s				1000	K	SLIT	
	32-36			|				|			
	37-39			|				|		OFF	
NEON ZENITH	1-5		NEON-ZENITH	30s				1000	K	SLIT	longslit @ 361:363
	6-8							|		OFF	
	9-13							|		SLIT	211:213
	14-18							|		|	511:513
	19-23							|	H	|	511:513
	24-28							|	|	|	361:363
	29-33							|	|	|	211:213
	34-36							|	|	OFF	
	37-41							|	|	SLIT	211:213
	42-47							|	|	|	361:363
	48-51							|	|	|	511:513
	52-56							|	|	OFF	
NGC253	1-8		NGC253	10				I	H, K	Slit1,2	setup
	9-14		"	60				1000	K	Slit2	
	15-17									OFF	
	18-22						1.897 1.882				

Run 6 / Night 6

KITT PEAK NATIONAL OBSERVATORY CCD DIRECT CAMERA LOG page 4/5

Date(U.T.) 9/19/05 Observer_____ Telescope_____ f Ratio_____ CCD_____ Gain_____
Raw Tape No._____ Reduced Tape No._____ Filters: 1_____ 2_____ 3_____ 4_____ 5_____ 6_____ 7_____ 8_____

Disk Pic#	Raw. Tape Pic#	Copied To Sun ?	Object	Integ. Time	Start U.T.	Start H.A.	Air Mass	~~Focus~~ GW	Filter	~~Seeing~~ DWO	Remarks
NGC253	23-24		NGC 253	60				1000	K	Slit2	cont = high
	25		↓	60				↓	↓	OFF	" "
	26			60						OFF	neon = 4
	27-28			60						Slit2	" "
	29			10				I	K	Slit2	inward
	1-5		HD8864	ACQUISITION				—	K		Cauter & Meadows (1995) std
	6-10			60s				1000	K	SLIT	Start at 6 (240:456)
	11-13									OFF	(312:316)
	14-19	17 missing								SLIT	Tel 5" W
	20		FLAT LAMP								
	21-22									OFF	
	23		Neon LAMP								
	24-25		Both								
	26		Neon LAMP 1520								
	27		" " 1180								

Run 6 / Night 6

thin, scattered clouds @ dawn
- mainly to SE (not covering Orion)

KITT PEAK NATIONAL OBSERVATORY CCD DIRECT CAMERA LOG

Date(U.T.)_____ Observer_____ Telescope_____ f Ratio_____ CCD_____ Gain_____
Raw Tape No._____ Reduced Tape No._____ Filters: 1_____ 2_____ 3_____ 4_____ 5_____ 6_____ 7_____ 8_____

Disk Pic#	Raw. Tape Pic#	Copied To Sun ?	Object	Integ. Time	Start U.T.	Start H.A.	Air Mass	~~Focus~~ R.	Filter	~~Seeing~~ DMD	Remarks
	1-8		OMC1_South					—	K	Att.	Acquisition
	9-18		"	60				1000	K	Mask	OMC1-south.
	19-21			60						Off	
	22-31			60			1.56			Mask	
	32-33		FLAT	60				.	.	Mask	Contm lamp on high shutter open
	34-35			60						Off.	Contm lamp on high shutter open.
	36		Ne	60						Off	Ne 1520 + 1180
	37-38			60						Mask	Ne 1520 + 1180
	39		OMC1_South -8s W	60.			1.43			Mask	8s west. Mask 20 pix West.
	40-45									—	ALIGNMENT CHECK
	46-51		. -	60.	.	.	~1.37	1000	K	M	8s West, Mask 20 pix west.
	52,53										Guider problem. Attempt to relocate *'s
	i										
	63-73	65 missing		60				1000	K	SLIT	SLIT 5 pixel = 2" Test
	74-76									OFF	
	78-79		FLAT LAMP							SLIT	
	80										
	81 82		Neon								
	83									OFF	