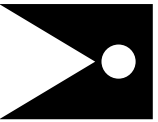


UT Date 3/13/05 Observers Mueller and Farnham

Telescope 2.1m Scale 0.19 CCD F3KB Gain 1.00

Filters: 1 OH 2 UV 3 CN 4 BC 5 C2 6 GC 7 RC 8 R Program Tempel 1, Machholz

Disk Image	Title	Filter	Exp Time	UT Start	Hour Angle	Air Mass	Focus	FW HM	Comments
nc0001	Bias	OH	0	21:49	+0:00	1.000			
nc0002	Bias	OH	0	21:50	+0:00	1.000			
nc0003	Bias	OH	0	21:52	+0:00	1.000			
nc0004	Bias	OH	0	21:53	+0:00	1.000			
nc0005	Bias	OH	0	21:54	+0:00	1.000			
nc0006	Bias	OH	0	21:56	+0:00	1.000			
nc0007	Bias	OH	0	21:57	+0:00	1.000			
nc0008	Bias	OH	0	21:59	+0:00	1.000			
nc0009	Bias	OH	0	22:00	+0:00	1.000			
nc0010	Bias	OH	0	22:02	+0:00	1.000			
nc0011	Dark	OH	0	22:15	+0:00	1.000			
nc0012	D-flat R	R	50	23:05	+0:00	2.012			Low lamp @max 31k no dust speck in upper right corner unlike subsequent flats
nc0013	D-flat R	R	50	23:08	+0:00	2.012			
nc0014	D-flat R	R	50	23:10	+0:00	2.012			
nc0015	D-flat R	R	50	23:12	+0:00	2.012			
nc0016	D-flat R	R	50	23:15	+0:00	2.012			
nc0017	D-Flat CN	CN	120	23:23	+0:00	2.012			high lamp @max, 14k
nc0018	D-Flat CN	CN	120	23:27	+0:00	2.012			
nc0019	D-Flat CN	CN	120	23:31	+0:00	2.012			
nc0020	D-Flat CN	CN	120	23:34	+0:00	2.012			

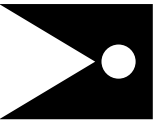


UT Date 3/13/05 Observers Mueller and Farnham

Telescope 2.1m Scale 0.19 CCD F3KB Gain 1.00

Filters: 1 OH 2 UV 3 CM 4 BC 5 C2 6 GC 7 RC 8 R Program Tempel 1, Machholz

Disk Image	Title	Filter	Exp Time	UT Start	Hour Angle	Air Mass	Focus	FW HM	Comments
nc0021	D-flat CN	CN	120	23:37	+0:00	2.012			
nc0022	D-flat BC	BC	30	23:42	+0:00	2.012			high lamp @max 20k
nc0023	D-flat BC	BC	30	23:45	+0:00	2.012			
nc0024	D-flat BC	BC	30	23:46	+0:00	2.012			
nc0025	D-flat BC	BC	30	23:48	+0:00	2.012			
nc0026	D-flat BC	BC	30	23:50	+0:00	2.012			
nc0027	D-flat GC	GC	10	23:53	+0:00	2.012			high lamp @max, 21k
nc0028	D-flat GC	GC	10	23:55	+0:00	2.012			
nc0029	D-flat GC	GC	10	23:57	+0:00	2.012			
nc0030	D-flat GC	GC	10	23:58	+0:00	2.012			
nc0031	D-flat GC	GC	10	0:00	+0:00	2.012			
nc0032	D-flat C2	C2	30	0:02	+0:00	2.012			high lamp @50, 17k
nc0033	D-flat C2	C2	30	0:05	+0:00	2.012			
nc0034	D-flat C2	C2	30	0:07	+0:00	2.012			
nc0035	D-flat C2	C2	30	0:08	+0:00	2.012			
nc0036	D-flat C2	C2	30	0:10	+0:00	2.012			
nc0037	D-flat RC	RC	7	0:13	+0:00	2.012			high lamp @50, 22k
nc0038	D-flat RC	RC	7	0:15	+0:00	2.012			
nc0039	D-flat RC	RC	7	0:17	+0:00	2.012			
nc0040	D-flat RC	RC	7	0:18	+0:00	2.012			

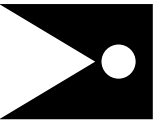


UT Date 3/13/05 Observers Mueller and Farnham

Telescope 2.1m Scale 0.19 CCD F3KB Gain 1.00

Filters: 1 OH 2 UV 3 CM 4 BC 5 C2 6 GC 7 RC 8 R Program Tempel 1, Machholz

Disk Image	Title	Filter	Exp Time	UT Start	Hour Angle	Air Mass	Focus	FW HM	Comments
nc0041	D-flat RC	RC	7	0:20	+0:00	2.012			
nc0042	Twilight sky flat BC	BC	180	1:54	+0:02	1.000			
nc0043	Twilight sky flat CM	CM	180	1:59	+0:07	1.000			
nc0044	Focus 20400 start	R	7	2:19	+0:10	1.003	20700	1.0	best focus 20700 Temp=11.5
nc0045	Machholz	R	90	2:41	-1:25	1.666	20530		49k
nc0046	Machholz	CM	900	2:47	-1:19	1.664	20635		4k
nc0047	Machholz	BC	900	3:05	-1:01	1.659			7.5k
nc0048	Machholz	C2	900	3:22	-0:43	1.655			19k, guiding error at beginning
nc0049	Machholz	GC	900	3:40	-0:26	1.652			10k
nc0050	Machholz	RC	900	3:57	-0:09	1.651			19k
nc0051	Machholz	CM	900	4:24	+0:17	1.652	20730		
nc0052	Machholz	OH	900	4:41	+0:34	1.654			
nc0053	HD 72526	RC	9	5:06	+0:29	1.192	21030		12k, focus not good
nc0054	HD 72526	GC	9	5:08	+0:31	1.194	21070		8k, focus worse
nc0055	HD 72526	C2	5	5:11	+0:34	1.196	20990	1.3	focus much better
nc0056	HD 72526	BC	10	5:13	+0:37	1.198			30k
nc0057	HD 72526	CM	20	5:16	+0:39	1.200			25k
nc0058	HD 72526	OH	120	5:18	+0:41	1.203			7k
nc0059	HD 37112	OH	300	5:29	+3:49	2.222	20945		out of focus
nc0060	HD 37112	CM	30	5:36	+3:57	2.348	20845		focus much better, 12k

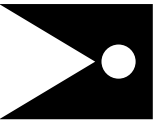


UT Date 3/13/05 Observers Mueller and Farnham

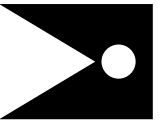
Telescope 2.1m Scale 0.19 CCD F3KB Gain 1.00

Filters: 1 OH 2 UV 3 CM 4 BC 5 C2 6 GC 7 RC 8 R Program Tempel 1, Machholz

Disk Image	Title	Filter	Exp Time	UT Start	Hour Angle	Air Mass	Focus	FW HM	Comments
nc0061	HD 37112	BC	15	5:40	+4:00	2.408	20800		focus ok 25k
nc0062	HD 37112	C2	10	5:42	+4:03	2.458			25k
nc0063	HD 37112	GC	15	5:45	+4:05	2.506			
nc0064	HD 37112	RC	15	5:47	+4:08	2.567			
nc0065	HD 37112	OH	300	5:50	+4:11	2.629			2k
nc0066	Landolt 97-224	R	30	6:01	+3:59	2.355	20680		8k
nc0067	Landolt 97-224	R	5	6:04	+4:02	2.413			
nc0068	Landolt 97-224	R	10	6:15	+4:13	2.641			1.2k
nc0069	Machholz	R	90	6:27	+2:18	1.689	20700		36k
nc0070	Machholz	CM	900	6:32	+2:22	1.692			3.9k seeing is getting worse
nc0071	Machholz	BC	900	6:50	+2:40	1.703			5.6k
nc0072	Machholz	C2	900	7:12	+3:02	1.717	20815		17k
nc0073	Machholz	CM	900	7:29	+3:19	1.731			4k
nc0074	Tempel 1	R	300	7:57	-1:34	1.154	209300		19k
nc0075	Tempel 1	CM	770	8:06	-1:26	1.138			power failure
nc0076	Machholz	R	90	8:45	+4:33	1.799			trailing did not work
nc0077	Pg 1323-086	R	20	9:40	+0:11	1.323			
nc0078	Pg 1323-086	R	20	9:43	+0:15	1.325			
nc0079	23 Sex	RC	7	9:53	+3:29	1.862			
nc0080	23 Sex	GC	7	9:56	+3:33	1.893			

UT Date 3/13/05 Observers Mueller and FarnhamTelescope 2.1m Scale 0.19 CCD F3KB Gain 1.00Filters: 1 OH 2 UV 3 CM 4 BC 5 C2 6 GC 7 RC 8 R Program Tempel 1, Machholz

Disk Image	Title	Filter	Exp Time	UT Start	Hour Angle	Air Mass	Focus	FW HM	Comments
nc0081	23 Sex	C2	5	9:59	+3:35	1.922			
nc0082	23 Sex	BC	7	10:03	+3:39	1.968		1.7	
nc0083	23 Sex	CM	15	10:05	+3:42	1.996			
nc0084	23 Sex	OH	120	10:08	+3:44	2.032			
nc0085	PG 1047+003	R	20	10:17	+3:24	1.884			
nc0086	PG 1047+003	R	30	10:21	+3:28	1.922			
nc0087	Comet Tempel 1	R	300	10:36	+1:03	1.106			20k
nc0088	Comet Tempel 1	R	300	10:44	+1:11	1.116			
nc0089	Comet Tempel 1	CM	523	10:51	+1:19	1.127			we lost tracking!
nc0090	Comet Tempel 1	BC	900	11:14	+1:42	1.169			
nc0091	Comet Tempel 1	C2	900	11:31	+1:59	1.210			3k
nc0092	Comet Tempel 1	GC	900	11:49	+2:17	1.262	21140		2k
nc0093	Comet Tempel 1	R	600	12:11	+2:39	1.345			
nc0094	Comet Tempel 1	CM	900	12:25	+2:53	1.410			1.1k
nc0095	HD 120086	RC	10	12:49	+3:00	1.736	21030	1.2	20k
nc0096	HD 120086	GC	10	12:52	+3:02	1.756			30k
nc0097	HD 120086	C2	5	12:54	+3:05	1.775			30k
nc0098	HD 120086	C2	10	12:56	+3:07	1.796			45k
nc0099	HD 120086	CM	20	12:59	+3:10	1.822			35k
nc0100	HD 120086	BC	10	13:01	+3:12	1.841			30k

UT Date 3/13/05 Observers Mueller and FarnhamTelescope 2.1m Scale 0.19 CCD F3KB Gain 1.00Filters: 1 OH 2 UV 3 CM 4 BC 5 C2 6 GC 7 RC 8 R Program Tempel 1, Machholz

Disk Image	Title	Filt	Exp Time	UT Start	Hour Angle	Air Mass	Focus	F/W HM	Comments
nc0101	HD 120086	OH	120	13:04	+3:15	1.870			12k