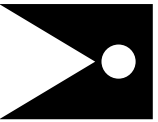
UT Date 03/11/05 Observers Mueller and FarnhamTelescope 2.1m Scale 0.19 CCD F3KB Gain 1.00Filters: 1 OH 2 UV 3 CN 4 BC 5 C2 6 GC 7 RC 8 R Program Tempel 1, Machholz

Disk Image	Title	Filter	Exp Time	UT Start	Hour Angle	Air Mass	Focus	FWHM	Comments
na0001	Shutter test	R	5	21:39	+0:00	1.000			
na0002	Shutter test	R	5	21:44	+0:00	1.000			
na0003	Shutter test	R	5	21:46	+0:00	1.000			
na0004	Shutter test	R	5	21:47	+0:00	1.000			
na0005	dark	R	0	22:24	+0:00	1.000			
na0006	d-flat R	R	50	23:41	+0:00	2.012			Low lamp @max
na0007	d-flat R	R	50	23:44	+0:00	2.012			30000 counts
na0008	d-flat R	R	50	23:46	+0:00	2.012			
na0009	d-flat R	R	50	23:48	+0:00	2.012			
na0010	d-flat R	R	50	23:51	+0:00	2.012			
na0011	d-flat BC	BC	30	23:56	+0:00	2.012			high lamp @max, 20000counts
na0012	d-flat BC	BC	30	23:59	+0:00	2.012			
na0013	d-flat BC	BC	30	0:01	+0:00	2.012			
na0014	d-flat BC	BC	30	0:03	+0:00	2.012			
na0015	d-flat BC	BC	30	0:05	+0:00	2.012			
na0016	d-flat CN	CN	120	0:07	+0:00	2.012			high lamp @ max, 13000 counts
na0017	d-flat CN	CN	120	0:12	+0:00	2.012			
na0018	d-flat CN	CN	120	0:15	+0:00	2.012			
na0019	d-flat CN	CN	120	0:19	+0:00	2.012			
na0020	d-flat CN	CN	120	0:22	+0:00	2.012			

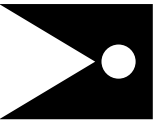


UT Date 03/11/05 Observers Mueller and Farnham

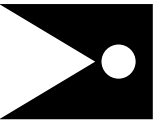
Telescope 2.1m Scale 0.19 CCD F3KB Gain 1.00

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

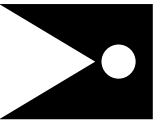
Disk Image	Title	Filter	Exp Time	UT Start	Hour Angle	Air Mass	Focus	FW HM	Comments
na0021	d-flat OH	OH	1800	0:28	+0:00	2.012			high lamp @max, 9000counts
na0022	Bias	OH	0	1:16	+0:00	2.012			about 902 counts
na0023	Bias	OH	0	1:18	+0:00	2.012			Sky looked photometric all night - some haze and fog
na0024	Bias	OH	0	1:19	+0:00	2.012			below the summit at sunrise, but the sky looks good
na0025	Bias	OH	0	1:21	+0:00	2.012			New moon
na0026	Bias	OH	0	1:22	+0:00	2.012			
na0027	Bias	OH	0	1:24	+0:00	2.012			
na0028	Bias	OH	0	1:25	+0:00	2.012			
na0029	Bias	OH	0	1:27	+0:00	2.012			
na0030	Bias	OH	0	1:28	+0:00	2.012			
na0031	Bias	OH	0	1:29	+0:00	2.012			
na0032	Twilight Flat CM	CM	5	1:50	+1:09	1.108			Dome partly occulting
na0033	Twilight Flat CM	CM	5	1:52	+1:11	1.109			Twilight sky test - 500 counts
na0034	Twilight Flat CM	CM	30	1:54	+1:13	1.111			2000 counts
na0035	Twilight Flat CM	CM	60	1:57	+1:16	1.114			1500 counts
na0036	Twilight Flat BC	BC	90	2:00	+1:19	1.116			3000 counts
na0037	Twilight Flat BC	BC	120	2:04	+1:23	1.120			2000 counts
na0038	pointing check	CM	5	2:26	+0:12	1.001			
na0039	pointing check	CM	5	2:28	+0:14	1.001			
na0040	pointing check	CM	5	2:33	+0:19	1.003			

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Disk Image	Title	Filt	Exp Time	UT Start	Hour Angle	Air Mass	Focus	FWHM	Comments
na0041	focus	R	10	2:54	-0:06	1.184			missed focus
na0042	focus	R	7	3:02	+0:01	1.184			focus near 20500, Sec temp=13.3
na0043	focus R	R	7	3:11	+0:09	1.185			best at 20520 4.76 pixels = 0.91''
na0044	focus - CM	CM	20	3:20	+0:20	1.188			best at 20617 (offset = +100)
na0045	Landolt 98-666	R	5	3:34	+0:30	1.195			guiding, stars are elongated
na0046	Landolt 98-666	R	5	3:39	+0:35	1.198			not guiding - stars still elongated
na0047	Comet Machholz (2004 q2)	R	120	4:32	+1:03	1.666			out of focus, used 20580 Problem with slew limits - fixed
na0048	Comet Machholz	CM	900	4:52	+1:22	1.671			
na0049	Comet Machholz	BC	900	5:11	+1:41	1.678			
na0050	Landolt 98-666	R	5	5:38	+2:35	1.521			
na0051	Comet Machholz	OH	900	6:00	+2:29	1.702			400 counts - trailed stars are jumpy
na0052	Comet Machholz	OH	900	6:19	+2:48	1.713			stars are still jumpy (all right) - guiding not smooth?
na0053	Comet Machholz	CM	900	6:39	+3:08	1.727			
na0054	Comet Machholz	BC	900	6:58	+3:27	1.742			
na0055	Comet Tempel 1	R	300	7:37	-2:03	1.223			15000 counts
na0056	Comet Tempel 1	R	300	7:46	-1:54	1.200			
na0057	Comet Tempel 1	R	300	7:53	-1:46	1.181			
na0058	Comet Machholz	CM	900	8:11	+4:38	1.806			
na0059	Comet Machholz	BC	900	8:29	+4:56	1.824			
na0060	Comet Machholz	R	120	8:47	+5:14	1.844			center pixel near saturation - redo just in case

UT Date 03/11/05 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
na0061	Comet Machholz	R	60	8:53	+5:20	1.851			
na0062	Comet Machholz	CM	900	8:56	+5:23	1.855			
na0063	HD 97991	C2	5	9:30	+2:03	1.440			60k
na0064	HD 97991	GC	7	9:33	+2:07	1.454			35k
na0065	HD 97991	RC	7	9:36	+2:09	1.464			28k
na0066	HD 97991	BC	7	9:38	+2:12	1.475			48k
na0067	HD 97991	CM	12	9:41	+2:14	1.486			48k
na0068	HD 97991	UV	12	9:43	+2:17	1.498			45k
na0069	HD 97991	OH	60	9:47	+2:20	1.514			25k
na0070	HD 120086	OH	60	9:55	-0:02	1.212			23k
na0071	HD 120086	UV	12	9:59	+0:01	1.212			28k
na0072	HD 120086	CM	15	10:02	+0:04	1.212			42k
na0073	HD 120086	BC	9	10:05	+0:07	1.213			42k
na0074	HD 120086	C2	5	10:08	+0:10	1.214			23k
na0075	HD 120086	GC	9	10:10	+0:12	1.214			34k
na0076	HD 120086	RC	9	10:13	+0:15	1.215			32k
na0077	Comet Tempel 1	R	300	10:20	+0:40	1.083			wrong field
na0078	Comet Tempel 1	R	300	10:33	+0:53	1.096			9k
na0079	Comet Tempel 1	CM	900	10:43	+1:03	1.106			120 counts above sky
na0080	Comet Tempel 1	BC	900	11:02	+1:22	1.134			400 counts above sky

UT Date 03/11/05 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
na0081	Comet Tempel 1	CM	900	11:22	+1:41	1.170			
na0082	Landolt 111-2088	R	5	11:52	-3:56	2.266			
na0083	HD 187350	OH	300	12:02	-3:57	2.373			5000 counts
na0084	HD 187350	CM	60	12:09	-3:49	2.241			40000 counts
na0085	HD 187350	BC	30	12:13	-3:46	2.185			40000 counts
na0086	Comet Tempel 1	R	300	12:23	+2:43	1.366			
na0087	Comet Tempel 1	BC	900	12:31	+2:51	1.400			Astronomical twilight
na0088	Comet Tempel 1	CM	900	12:48	+3:08	1.494			Nautical twilight