INT OBSERVING LOG (ISAAC NEWTON GROUP, LA PALMA)

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TELESCOPE:             INT
DATE:                  20000913
TAPE NR:               INTD4500
OBSERVER:              David James, David Mitchell, Kevin Pearson
PROGRAMME:             Planet Transits in NGC7789
PATT/CAT REF.:         P30+M31
TELESCOPE OPERATOR:    -
SUPPORT ASTRONOMER:    -

TELESCOPE FOCUS:       not specified
CALIBRATE RESULTS:     not specified

INSTRUMENT:            WFC

WFC FILTER WHEEL:      g,V,r,i,z,Ha

WEATHER:               (1st half)
                       (2nd half)
CLOUD COVER (%):       (1st half)
                       (2nd half)
DUST (0-2):            (1st half)
                       (2nd half)
SEEING (arcsec):       (1st half)
                       (2nd half)

DOME OPENED (UT):      17:00
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METEOROLOGICAL PARAMETERS

UT	AirT	Hum%	Wspd	Gust	Wdir	Press	LocT	IntT	Mirr	LocRH	IntRH
20:00	15.6	7	23.0	26.5	218	770.4	15.8	17.6	18.4	6	7
21:00	14.8	7	24.4	26.8	232	770.6	15.0	16.8	18.2	6	7
22:00	14.2	6	19.6	22.5	241	771.1	14.5	15.8	18.0	5	6
23:00	14.3	5	20.2	21.7	250	771.6	14.5	15.6	17.9	4	5
00:00	14.8	6	13.3	17.5	216	771.8	14.9	15.6	17.8	5	6
01:00	14.9	9	17.0	20.5	258	771.5	14.9	15.6	17.6	8	8
02:00	14.9	13	18.7	20.4	255	771.3	14.9	15.5	17.6	15	14
03:00	14.7	19	22.0	23.5	226	770.8	14.6	15.2	17.6	14	12
04:00	14.1	36	23.6	25.7	225	770.6	14.2	14.9	17.4	32	29
05:00	13.8	41	22.7	29.9	196	770.5	14.1	14.8	17.4	40	38
06:00	13.7	38	20.2	23.3	192	770.5	14.1	15.0	17.2	38	36

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SUNSET(UT)             19:27
EVENING TWILIGHT(UT)   20:39
MORNING TWILIGHT(UT)   05:36
SUNRISE(UT)            06:49
MOON'S QUARTER (1-4)   3
DISK % OF ILLUM.       100
DARK TIME              08:57
TWILIGHT TIME          02:25
MOONRISE(UT)           Moon up all night
MOONSET(UT)            Moon up all night

TIME LOST(WEATHER):    00:00
TIME LOST(TECHNICAL):  00:15
TIME LOST(OTHER):      00:00
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Run no.	Object name	RA	Dec.	Equinox	AM	PA	UT	Exp. T.	Filter	Psys	Channel	Binning	Comments
229487	Bias frame	12:49:59.99	+35:00:00.0	A	1.025	180.0	13:37:48.0	0.0	g	Sloan		1 x 1	

229488	TEST JUNK	0:00:00.00	+00:00:00.0	A	4.524	180.0	16:59:46.8	0.0	r	Sloan	1 x 1
229489	FLAT	19:19:09.00	+12:22:04.9	B1950.00	1.098	180.0	19:42:35.1	2.1	r	Sloan	1 x 1
229490	FLAT	19:19:09.00	+12:22:05.0	B1950.00	1.093	180.0	19:46:09.9	6.1	r	Sloan	1 x 1
229491	FLAT - R	19:19:09.00	+12:22:04.9	B1950.00	1.090	180.0	19:48:06.8	16.1	r	Sloan	1 x 1
229492	FLAT - R	19:19:10.36	+12:22:25.0	B1950.00	1.087	180.0	19:50:08.6	34.6	r	Sloan	1 x 1
229493	FLAT - R	19:19:11.04	+12:22:35.0	B1950.00	1.083	180.0	19:52:19.3	75.0	r	Sloan	1 x 1
229494	FLAT - R	19:19:11.73	+12:22:44.8	B1950.00	1.080	180.0	19:54:55.6	74.6	r	Sloan	1 x 1
229495	BIAS	19:19:11.72	+12:22:44.9	B1950.00	1.077	180.0	19:58:33.5	0.0	r	Sloan	1 x 1
229496	BIAS	19:19:11.73	+12:22:44.9	B1950.00	1.075	180.0	19:59:31.9	0.0	r	Sloan	1 x 1
229497	BIAS	19:19:11.73	+12:22:44.9	B1950.00	1.074	180.0	20:00:30.8	0.0	r	Sloan	1 x 1
229498	BIAS	19:19:11.72	+12:22:45.0	B1950.00	1.073	180.0	20:01:28.0	0.0	r	Sloan	1 x 1
229499	BIAS	19:19:11.73	+12:22:44.9	B1950.00	1.072	180.0	20:02:25.6	0.0	r	Sloan	1 x 1
229500	BIAS	19:19:11.73	+12:22:44.9	B1950.00	1.071	180.0	20:03:22.8	0.0	r	Sloan	1 x 1
229501	BIAS	19:19:11.72	+12:22:45.0	B1950.00	1.070	180.0	20:04:20.4	0.0	r	Sloan	1 x 1
229502	BIAS	19:19:11.73	+12:22:45.0	B1950.00	1.069	180.0	20:05:18.1	0.0	r	Sloan	1 x 1
229503	Focus run	19:04:29.83	+08:21:02.0	J2000.00	1.069	180.0	20:30:55.8	10.1	r	Sloan	1 x 1
229504	NGC 7789	23:57:30.81	+56:43:41.8	J2000.00	1.846	180.0	20:40:48.4	299.9	r	Sloan	1 x 1
229505	NGC 7789	23:57:30.80	+56:43:41.8	J2000.00	1.801	180.0	20:47:31.3	299.8	r	Sloan	1 x 1
229506	NGC 7789	23:57:30.81	+56:43:41.8	J2000.00	1.759	180.0	20:54:10.3	299.8	r	Sloan	1 x 1
229507	NGC 7789	23:57:30.81	+56:43:41.8	J2000.00	1.720	180.0	21:00:49.3	299.8	r	Sloan	1 x 1
229508	NGC 7789	23:57:30.81	+56:43:41.8	J2000.00	1.683	180.0	21:07:28.5	299.8	r	Sloan	1 x 1
229509	NGC 7789	23:57:30.80	+56:43:41.8	J2000.00	1.647	180.0	21:14:07.5	299.8	r	Sloan	1 x 1
229510	NGC 7789	23:57:30.80	+56:43:41.8	J2000.00	1.614	180.0	21:20:47.1	299.8	r	Sloan	1 x 1
229511	NGC 7789	23:57:30.81	+56:43:41.8	J2000.00	1.582	180.0	21:27:26.4	299.8	r	Sloan	1 x 1
229512	NGC 7789	23:57:30.80	+56:43:41.8	J2000.00	1.552	180.0	21:34:13.4	299.9	r	Sloan	1 x 1
229513	NGC 7789	23:57:30.80	+56:43:41.8	J2000.00	1.524	180.0	21:40:52.6	299.8	r	Sloan	1 x 1
229514	NGC 7789	23:57:30.80	+56:43:41.8	J2000.00	1.497	180.0	21:47:31.8	299.7	r	Sloan	1 x 1
229515	BIAS	23:57:30.80	+56:43:41.8	J2000.00	1.481	180.0	21:54:08.0	0.0	r	Sloan	1 x 1
229516	NGC 7789	23:57:30.81	+56:43:41.8	J2000.00	1.466	180.0	21:55:48.8	299.8	r	Sloan	1 x 1
229517	NGC 7789	23:57:30.81	+56:43:41.8	J2000.00	1.442	180.0	22:02:28.3	299.6	r	Sloan	1 x 1
229518	NGC 7789	23:57:30.81	+56:43:41.8	J2000.00	1.419	180.0	22:09:07.1	299.9	r	Sloan	1 x 1
229519	NGC 7789	23:57:30.81	+56:43:41.8	J2000.00	1.398	180.0	22:15:46.5	299.8	r	Sloan	1 x 1
229520	NGC 7789	23:57:30.81	+56:43:41.8	J2000.00	1.378	180.0	22:22:25.9	299.7	r	Sloan	1 x 1
229521	NGC 7789	23:57:30.80	+56:43:41.8	J2000.00	1.359	180.0	22:29:05.4	299.8	r	Sloan	1 x 1
229522	NGC 7789	23:57:30.81	+56:43:41.8	J2000.00	1.341	180.0	22:35:44.6	299.8	r	Sloan	1 x 1
229523	NGC 7789	23:57:30.80	+56:43:41.8	J2000.00	1.323	180.0	22:42:23.8	299.8	r	Sloan	1 x 1
229524	NGC 7789	23:57:30.80	+56:43:41.8	J2000.00	1.307	180.0	22:49:02.6	299.8	r	Sloan	1 x 1
229525	BIAS	23:57:30.80	+56:43:41.7	J2000.00	1.276	180.0	23:05:38.1	0.0	r	Sloan	1 x 1
229526	NGC 7789	23:57:30.81	+56:43:41.8	J2000.00	1.266	180.0	23:08:16.5	299.8	r	Sloan	1 x 1
229527	NGC 7789	23:57:30.81	+56:43:41.9	J2000.00	1.253	180.0	23:14:55.1	299.8	r	Sloan	1 x 1
229528	NGC 7789	23:57:30.81	+56:43:41.8	J2000.00	1.241	180.0	23:21:33.5	299.8	r	Sloan	1 x 1
229529	NGC 7789	23:57:30.81	+56:43:41.8	J2000.00	1.229	180.0	23:28:12.4	299.8	r	Sloan	1 x 1
229530	NGC 7789	23:57:30.81	+56:43:41.8	J2000.00	1.219	180.0	23:34:51.9	299.8	r	Sloan	1 x 1
229531	NGC 7789	23:57:30.81	+56:43:41.8	J2000.00	1.209	180.0	23:41:30.9	299.8	r	Sloan	1 x 1
229532	NGC 7789	23:57:30.80	+56:43:41.8	J2000.00	1.200	180.0	23:48:09.8	299.8	r	Sloan	1 x 1
229533	NGC 7789	23:57:30.80	+56:43:41.8	J2000.00	1.191	180.0	23:54:49.2	299.8	r	Sloan	1 x 1
229534	NGC 7789	23:57:30.80	+56:43:41.8	J2000.00	1.183	180.0	00:01:28.3	299.9	r	Sloan	1 x 1
229535	NGC 7789	23:57:30.80	+56:43:41.8	J2000.00	1.176	180.0	00:08:07.4	299.8	r	Sloan	1 x 1
229536	BIAS	23:57:30.81	+56:43:41.8	J2000.00	1.170	180.0	00:16:11.1	0.0	r	Sloan	1 x 1
229537	NGC 7789	23:57:30.80	+56:43:41.7	J2000.00	1.164	180.0	00:19:36.0	299.7	r	Sloan	1 x 1
229538	NGC 7789	23:57:30.81	+56:43:41.8	J2000.00	1.159	180.0	00:26:14.7	299.7	r	Sloan	1 x 1
229539	NGC 7789	23:57:30.81	+56:43:41.8	J2000.00	1.154	180.0	00:32:54.0	299.9	r	Sloan	1 x 1
229540	NGC 7789	23:57:30.81	+56:43:41.8	J2000.00	1.149	180.0	00:39:32.8	299.7	r	Sloan	1 x 1
229541	NGC 7789	23:57:30.81	+56:43:41.8	J2000.00	1.145	180.0	00:46:12.2	299.8	r	Sloan	1 x 1
229542	NGC 7789	23:57:30.81	+56:43:41.8	J2000.00	1.142	180.0	00:52:51.1	299.8	r	Sloan	1 x 1
229543	NGC 7789	23:57:30.81	+56:43:41.8	J2000.00	1.139	180.0	00:59:29.6	299.9	r	Sloan	1 x 1
229544	NGC 7789	23:57:30.81	+56:43:41.8	J2000.00	1.136	180.0	01:06:08.7	299.3	r	Sloan	1 x 1
229545	NGC 7789	23:57:30.80	+56:43:41.8	J2000.00	1.134	180.0	01:12:48.5	299.8	r	Sloan	1 x 1
229546	NGC 7789	23:57:30.80	+56:43:41.8	J2000.00	1.133	180.0	01:19:27.4	299.8	r	Sloan	1 x 1
229547	NGC 7789	23:57:30.81	+56:43:41.8	J2000.00	1.132	180.0	01:26:06.3	299.9	r	Sloan	1 x 1
229548	BIAS	23:57:30.80	+56:43:41.8	J2000.00	1.132	180.0	01:32:30.0	0.0	r	Sloan	1 x 1
229549	NGC 7789	23:57:30.81	+56:43:41.8	J2000.00	1.132	180.0	01:34:28.9	299.8	r	Sloan	1 x 1

229550	NGC 7789	23:57:30.81	+56:43:41.8	J2000.00	1.132	180.0	01:41:08.0	299.9	r	Sloan	1 x 1
229551	NGC 7789	23:57:30.81	+56:43:41.8	J2000.00	1.133	180.0	01:47:46.2	299.8	r	Sloan	1 x 1
229552	NGC 7789	23:57:30.80	+56:43:41.8	J2000.00	1.135	180.0	01:54:25.5	299.8	r	Sloan	1 x 1
229553	NGC 7789	23:57:30.80	+56:43:41.8	J2000.00	1.137	180.0	02:01:05.3	299.8	r	Sloan	1 x 1
229554	NGC 7789	23:57:30.80	+56:43:41.8	J2000.00	1.139	180.0	02:07:44.6	299.9	r	Sloan	1 x 1
229555	NGC 7789	23:57:30.81	+56:43:41.8	J2000.00	1.142	180.0	02:14:23.3	299.8	r	Sloan	1 x 1
229556	NGC 7789	23:57:30.81	+56:43:41.8	J2000.00	1.145	180.0	02:21:02.3	299.8	r	Sloan	1 x 1
229557	NGC 7789	23:57:30.80	+56:43:41.8	J2000.00	1.150	180.0	02:27:41.3	299.7	r	Sloan	1 x 1
229558	NGC 7789	23:57:30.80	+56:43:41.8	J2000.00	1.154	180.0	02:34:20.7	299.9	r	Sloan	1 x 1
229559	BIAS	23:57:30.81	+56:43:41.8	J2000.00	1.160	180.0	02:44:05.9	0.0	r	Sloan	1 x 1
229560	NGC 7789	23:57:30.80	+56:43:41.8	J2000.00	1.164	180.0	02:45:50.8	299.8	r	Sloan	1 x 1
229561	NGC 7789	23:57:30.80	+56:43:41.8	J2000.00	1.170	180.0	02:52:29.7	299.7	r	Sloan	1 x 1
229562	NGC 7789	23:57:30.81	+56:43:41.8	J2000.00	1.177	180.0	02:59:08.8	299.8	r	Sloan	1 x 1
229563	NGC 7789	23:57:30.81	+56:43:41.8	J2000.00	1.184	180.0	03:05:48.9	299.8	r	Sloan	1 x 1
229564	NGC 7789	23:57:30.81	+56:43:41.8	J2000.00	1.192	180.0	03:12:28.6	299.7	r	Sloan	1 x 1
229565	NGC 7789	23:57:30.81	+56:43:41.8	J2000.00	1.201	180.0	03:19:07.5	299.6	r	Sloan	1 x 1
229566	NGC 7789	23:57:30.81	+56:43:41.8	J2000.00	1.210	180.0	03:25:46.6	299.8	r	Sloan	1 x 1
229567	NGC 7789	23:57:30.80	+56:43:41.8	J2000.00	1.220	180.0	03:32:25.9	299.8	r	Sloan	1 x 1
229568	NGC 7789	23:57:30.80	+56:43:41.8	J2000.00	1.231	180.0	03:39:05.0	299.8	r	Sloan	1 x 1
229569	NGC 7789	23:57:30.81	+56:43:41.8	J2000.00	1.242	180.0	03:45:44.8	299.8	r	Sloan	1 x 1
229570	NGC 7789	23:57:30.80	+56:43:41.8	J2000.00	1.254	180.0	03:52:25.0	299.8	r	Sloan	1 x 1
229571	NGC 7789	23:57:30.81	+56:43:41.8	J2000.00	1.267	180.0	03:59:04.5	299.8	r	Sloan	1 x 1
229572	BIAS	23:57:30.81	+56:43:41.8	J2000.00	1.275	180.0	04:05:34.8	0.0	r	Sloan	1 x 1
229573	NGC 7789	23:57:30.80	+56:43:41.8	J2000.00	1.284	180.0	04:07:12.6	299.9	r	Sloan	1 x 1
229574	NGC 7789	23:57:30.81	+56:43:41.8	J2000.00	1.299	180.0	04:13:52.0	299.8	r	Sloan	1 x 1
229575	NGC 7789	23:57:30.81	+56:43:41.8	J2000.00	1.315	180.0	04:20:31.6	299.9	r	Sloan	1 x 1
229576	NGC 7789	23:57:30.80	+56:43:41.8	J2000.00	1.331	180.0	04:27:11.7	299.7	r	Sloan	1 x 1
229577	NGC 7789	23:57:30.81	+56:43:41.8	J2000.00	1.349	180.0	04:33:51.3	299.7	r	Sloan	1 x 1
229578	NGC 7789	23:57:30.81	+56:43:41.8	J2000.00	1.368	180.0	04:40:30.3	299.8	r	Sloan	1 x 1
229579	TEST	23:57:30.80	+56:43:41.8	J2000.00	1.381	180.0	04:47:40.8	10.1	r	Sloan	1 x 1
229580	M31-microfld1	0:44:00.00	+41:34:00.0	J2000.00	1.199	180.0	04:52:19.9	319.7	r	Sloan	1 x 1
229581	M31-microfld1	0:44:00.00	+41:34:00.0	J2000.00	1.218	180.0	04:59:23.7	319.8	r	Sloan	1 x 1
229584	M31-microfld1	0:44:00.00	+41:33:59.9	J2000.00	1.297	180.0	05:24:58.3	319.8	r	Sloan	1 x 1
229585	M31-microfld1	0:43:59.99	+41:34:00.0	J2000.00	1.322	180.0	05:31:59.8	319.8	r	Sloan	1 x 1
229586	M31-microfld1	0:43:59.99	+41:33:59.9	J2000.00	1.349	180.0	05:39:01.2	319.8	i	Sloan	1 x 1
229587	M31-microfld1	0:43:59.99	+41:34:00.0	J2000.00	1.379	180.0	05:46:08.6	319.8	i	Sloan	1 x 1
229588	M31-microfld2	0:43:10.00	+40:58:15.1	J2000.00	1.421	180.0	05:54:32.6	319.7	r	Sloan	1 x 1
229590	Flat -R	4:25:46.00	+54:09:02.9	B1950.00	1.109	180.0	06:24:13.9	20.1	r	Sloan	1 x 1
229591	Flat -R	4:25:47.13	+54:09:13.0	B1950.00	1.110	180.0	06:27:47.7	12.1	r	Sloan	1 x 1
229592	Flat -R	4:25:48.27	+54:09:22.9	B1950.00	1.111	180.0	06:29:43.3	4.1	r	Sloan	1 x 1
229593	Flat -R	4:25:49.41	+54:09:32.9	B1950.00	1.111	180.0	06:31:22.3	3.1	r	Sloan	1 x 1
229594	Flat -R	4:25:50.55	+54:09:42.9	B1950.00	1.112	180.0	06:32:56.5	2.1	r	Sloan	1 x 1
229595	Flat -R	4:25:51.69	+54:09:52.8	B1950.00	1.112	180.0	06:34:28.1	1.1	r	Sloan	1 x 1
229596	Flat -R	4:25:52.82	+54:10:03.0	B1950.00	1.113	180.0	06:35:51.2	1.1	r	Sloan	1 x 1
229597	BIAS	4:25:52.83	+54:10:02.9	B1950.00	1.113	180.0	06:37:37.5	0.0	r	Sloan	1 x 1
229598	BIAS	4:25:52.83	+54:10:02.9	B1950.00	1.114	180.0	06:38:34.7	0.0	r	Sloan	1 x 1
229599	BIAS	4:25:52.83	+54:10:02.9	B1950.00	1.114	180.0	06:39:32.3	0.0	r	Sloan	1 x 1
229600	BIAS	4:25:52.83	+54:10:03.0	B1950.00	1.114	180.0	06:40:29.5	0.0	r	Sloan	1 x 1
229601	BIAS	4:25:52.83	+54:10:02.9	B1950.00	1.115	180.0	06:41:27.0	0.0	r	Sloan	1 x 1