INT OBSERVING LOG (ISAAC NEWTON GROUP, LA PALMA)

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TELESCOPE:              INT
DATE:                   1999 AUG 16/17
INT TAPE NR:            INTD 4154
OBSERVER:               Nic Walton + Javier Mendez
PROGRAMME:              WFS
PATT/CAT:               WFS 09 + M31
TELESCOPE OPERATOR:     ---
SUPPORT ASTRONOMER:     ---

FOCUS:                  Prime
INSTRUMENT:             WFC
FILTER WHEEL (PF):      U,Z,g',r',i',KPB
CAMERA (IDS):           235
COLLIMATOR (IDS):       Ag-red
COLL. FOCUS (IDS):      211
GRATING (IDS):          R300V
DETECTOR:               4*EEV
PIXELS:                 2148x4128
PIXEL SIZE (microns): 13.5
WINDOW:                 Xstart=0, Xsize=0, Ystart=0, Ysize=0
BINNING:                in X=1, in Y=1

WEATHER:                Good
OUTSIDE TEMP (deg C):   17              (FIRST HALF)
OUTSIDE TEMP (deg C):   17              (SECOND HALF)
HUMIDITY (%):           30              (FIRST HALF)
HUMIDITY (%):           20              (SECOND HALF)
CLOUD COVER (%):        10%-20%         (FIRST HALF)
CLOUD COVER (%):        10%-20%         (SECOND HALF)
DUST (0 - 2):            1              (FIRST HALF)
DUST (0 - 2):            1              (SECOND HALF)
SEEING (arcsec):         1.0              (FIRST HALF)
SEEING (arcsec):         1.1              (SECOND HALF)
AV. SEEING (arcsec):
NO. SEEING MEASURES:

UTC    TELESCOPE                CASELLA OUT   CASELLA IN    SEEING
       AZ   ZD  Focus  TubeTemp  Temp   Humid  Temp   Humid  Det./TV  Comments

DARK HOURS:             08:00
DOME OPEN (UTC):        17:00
MOON PHASE (D/G/B):        D
DK HRS LOST (WEATHER):00:00
DK HRS LOST (TELESC): 00:00
DK HRS LOST (DOME):   00:00
DK HRS LOST (INSTR.): 00:00
DK HRS LOST (DET.):   00:00
DK HRS LOST (COMPS.): 00:00
DK HRS LOST (A&G):    00:00
DK HRS LOST (OTHER):  00:00

COMMENTS:

photometric night - good image quality

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Run no. Object name             RA         Dec.     Equinox    AM    PA     UT       Exp. T.   Filter      Psys Channel  Binning Comments
 189552 Bias frame           0:00:00.00 +00:00:00.0 J2000.00 1.000 179.7 15:08:05.0      0.0        g      Sloan    1      1 x 1
 189553 Bias frame           0:00:00.00 +00:00:00.0 J2000.00 1.000 179.7 15:08:05.0      0.0        g      Sloan    5      1 x 1
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189554	Bias frame	0:00:00.00	+00:00:00.0	J2000.00	1.000	179.7	15:08:05.0	0.0	g	Sloan	3	1 x 1
189555	Bias frame	0:00:00.00	+00:00:00.0	J2000.00	1.000	179.7	15:08:05.0	0.0	g	Sloan	4	1 x 1
189556	Bias frame	0:00:00.00	+00:00:00.0	J2000.00	1.000	179.7	15:10:58.9	0.0	g	Sloan	1	1 x 1
189557	Bias frame	0:00:00.00	+00:00:00.0	J2000.00	1.000	179.7	15:10:58.9	0.0	g	Sloan	5	1 x 1
189558	Bias frame	0:00:00.00	+00:00:00.0	J2000.00	1.000	179.7	15:10:58.9	0.0	g	Sloan	3	1 x 1
189559	Bias frame	0:00:00.00	+00:00:00.0	J2000.00	1.000	179.7	15:10:58.9	0.0	g	Sloan	4	1 x 1
189560	Bias frame	0:00:00.00	+00:00:00.0	J2000.00	1.000	179.7	15:13:52.8	0.0	g	Sloan	1	1 x 1
189561	Bias frame	0:00:00.00	+00:00:00.0	J2000.00	1.000	179.7	15:13:52.8	0.0	g	Sloan	5	1 x 1
189562	Bias frame	0:00:00.00	+00:00:00.0	J2000.00	1.000	179.7	15:13:52.8	0.0	g	Sloan	3	1 x 1
189563	Bias frame	0:00:00.00	+00:00:00.0	J2000.00	1.000	179.7	15:13:52.8	0.0	g	Sloan	4	1 x 1
189564	Bias frame	0:00:00.00	+00:00:00.0	J2000.00	1.000	179.7	15:16:43.9	0.0	g	Sloan	1	1 x 1
189565	Bias frame	0:00:00.00	+00:00:00.0	J2000.00	1.000	179.7	15:16:43.9	0.0	g	Sloan	5	1 x 1
189566	Bias frame	0:00:00.00	+00:00:00.0	J2000.00	1.000	179.7	15:16:43.9	0.0	g	Sloan	3	1 x 1
189567	Bias frame	0:00:00.00	+00:00:00.0	J2000.00	1.000	179.7	15:16:43.9	0.0	g	Sloan	4	1 x 1
189568	sky g	13:04:33.00	+29:50:49.0	B1950.00	1.496	179.7	20:21:50.8	3.6	g	Sloan	1	1 x 1
189569	sky g	13:04:33.00	+29:50:49.0	B1950.00	1.496	179.7	20:21:50.8	3.6	g	Sloan	5	1 x 1
189570	sky g	13:04:33.00	+29:50:49.0	B1950.00	1.496	179.7	20:21:50.8	3.6	g	Sloan	3	1 x 1
189571	sky g	13:04:33.00	+29:50:49.0	B1950.00	1.496	179.7	20:21:50.8	3.6	g	Sloan	4	1 x 1
189572	sky g	13:04:32.23	+29:50:59.0	B1950.00	1.515	179.7	20:24:53.2	7.1	g	Sloan	1	1 x 1
189573	sky g	13:04:32.23	+29:50:59.0	B1950.00	1.515	179.7	20:24:53.2	7.1	g	Sloan	5	1 x 1
189574	sky g	13:04:32.23	+29:50:59.0	B1950.00	1.515	179.7	20:24:53.2	7.1	g	Sloan	3	1 x 1
189575	sky g	13:04:32.23	+29:50:59.0	B1950.00	1.515	179.7	20:24:53.2	7.1	g	Sloan	4	1 x 1
189576	sky g	13:04:33.00	+29:50:59.0	B1950.00	1.535	179.7	20:27:55.7	14.1	g	Sloan	1	1 x 1
189577	sky g	13:04:33.00	+29:50:59.0	B1950.00	1.535	179.7	20:27:55.7	14.1	g	Sloan	5	1 x 1
189578	sky g	13:04:33.00	+29:50:59.0	B1950.00	1.535	179.7	20:27:55.7	14.1	g	Sloan	3	1 x 1
189579	sky g	13:04:33.00	+29:50:59.0	B1950.00	1.535	179.7	20:27:55.7	14.1	g	Sloan	4	1 x 1
189580	sky g	13:04:33.38	+29:50:53.8	B1950.00	1.558	179.7	20:31:09.0	32.1	g	Sloan	1	1 x 1
189581	sky g	13:04:33.38	+29:50:53.8	B1950.00	1.558	179.7	20:31:09.0	32.1	g	Sloan	5	1 x 1
189582	sky g	13:04:33.38	+29:50:53.8	B1950.00	1.558	179.7	20:31:09.0	32.1	g	Sloan	3	1 x 1
189583	sky g	13:04:33.38	+29:50:53.8	B1950.00	1.558	179.7	20:31:09.0	32.1	g	Sloan	4	1 x 1
189584	Flat field	13:04:32.61	+29:50:34.0	B1950.00	1.587	179.7	20:35:04.5	61.8	i	Sloan	1	1 x 1
189585	Flat field	13:04:32.61	+29:50:34.0	B1950.00	1.587	179.7	20:35:04.5	61.8	i	Sloan	5	1 x 1
189586	Flat field	13:04:32.61	+29:50:34.0	B1950.00	1.587	179.7	20:35:04.5	61.8	i	Sloan	3	1 x 1
189587	Flat field	13:04:32.61	+29:50:34.0	B1950.00	1.587	179.7	20:35:04.5	61.8	i	Sloan	4	1 x 1
189588	Flat field	13:04:33.76	+29:50:58.9	B1950.00	1.624	179.7	20:39:27.7	133.0	i	Sloan	1	1 x 1
189589	Flat field	13:04:33.76	+29:50:58.9	B1950.00	1.624	179.7	20:39:27.7	133.0	i	Sloan	5	1 x 1
189590	Flat field	13:04:33.76	+29:50:58.9	B1950.00	1.624	179.7	20:39:27.7	133.0	i	Sloan	3	1 x 1
189591	Flat field	13:04:33.76	+29:50:58.9	B1950.00	1.624	179.7	20:39:27.7	133.0	i	Sloan	4	1 x 1
189592		18:42:44.99	+00:10:19.0	J2000.00	1.206	179.7	20:59:46.8	10.1	g	Sloan	1	1 x 1
189593	Focus run	18:42:44.99	+00:10:19.0	J2000.00	1.206	179.7	20:59:46.8	10.1	g	Sloan	5	1 x 1
189594	Focus run	18:42:44.99	+00:10:19.0	J2000.00	1.206	179.7	20:59:46.8	10.1	g	Sloan	3	1 x 1
189595		18:42:44.99	+00:10:19.0	J2000.00	1.206	179.7	20:59:46.8	10.1	g	Sloan	4	1 x 1
189596	sa110-361 g	18:42:44.99	+00:12:34.0	J2000.00	1.191	179.7	21:05:56.4	10.1	g	Sloan	1	1 x 1
189597	sa110-361 g	18:42:44.99	+00:12:34.0	J2000.00	1.191	179.7	21:05:56.4	10.1	g	Sloan	5	1 x 1
189598	sa110-361 g	18:42:44.99	+00:12:34.0	J2000.00	1.191	179.7	21:05:56.4	10.1	g	Sloan	3	1 x 1
189599	sa110-361 g	18:42:44.99	+00:12:34.0	J2000.00	1.191	179.7	21:05:56.4	10.1	g	Sloan	4	1 x 1
189600	sa110-361 r	18:42:45.00	+00:12:33.9	J2000.00	1.185	179.7	21:09:47.3	10.1	r	Sloan	1	1 x 1
189601	sa110-361 r	18:42:45.00	+00:12:33.9	J2000.00	1.185	179.7	21:09:47.3	10.1	r	Sloan	5	1 x 1
189602	sa110-361 r	18:42:45.00	+00:12:33.9	J2000.00	1.185	179.7	21:09:47.3	10.1	r	Sloan	3	1 x 1
189603	sa110-361 r	18:42:45.00	+00:12:33.9	J2000.00	1.185	179.7	21:09:47.3	10.1	r	Sloan	4	1 x 1
189604	sa110-361 i	18:42:45.00	+00:12:34.0	J2000.00	1.181	179.7	21:13:02.1	10.1	i	Sloan	1	1 x 1
189605	sa110-361 i	18:42:45.00	+00:12:34.0	J2000.00	1.181	179.7	21:13:02.1	10.1	i	Sloan	5	1 x 1
189606	sa110-361 i	18:42:45.00	+00:12:34.0	J2000.00	1.181	179.7	21:13:02.1	10.1	i	Sloan	3	1 x 1
189607	sa110-361 i	18:42:45.00	+00:12:34.0	J2000.00	1.181	179.7	21:13:02.1	10.1	i	Sloan	4	1 x 1
189612	wfsj1610+5430_009	16:00:30.20	+55:49:59.9	J2000.00	1.209	179.7	21:25:32.5	599.5	r	Sloan	1	1 x 1
189613	wfsj1610+5430_009	16:00:30.20	+55:49:59.9	J2000.00	1.209	179.7	21:25:32.5	599.5	r	Sloan	5	1 x 1
189614	wfsj1610+5430_009	16:00:30.20	+55:49:59.9	J2000.00	1.209	179.7	21:25:32.5	599.5	r	Sloan	3	1 x 1
189615	wfsj1610+5430_009	16:00:30.20	+55:49:59.9	J2000.00	1.209	179.7	21:25:32.5	599.5	r	Sloan	4	1 x 1
189616	wfsj1610+5430_009	16:00:30.20	+55:50:00.0	J2000.00	1.231	179.7	21:38:34.3	599.6	i	Sloan	1	1 x 1
189617	wfsj1610+5430_009	16:00:30.20	+55:50:00.0	J2000.00	1.231	179.7	21:38:34.3	599.6	i	Sloan	5	1 x 1
189618	wfsj1610+5430_009	16:00:30.20	+55:50:00.0	J2000.00	1.231	179.7	21:38:34.3	599.6	i	Sloan	3	1 x 1
189619	wfsj1610+5430_009	16:00:30.20	+55:50:00.0	J2000.00	1.231	179.7	21:38:34.3	599.6	i	Sloan	4	1 x 1

189620	wfsj1610+5430_009	16:00:30.19	+55:50:00.0	J2000.00	1.255	179.7	21:51:40.0	599.6	g	Sloan	1	1 x 1
189621	wfsj1610+5430_009	16:00:30.19	+55:50:00.0	J2000.00	1.255	179.7	21:51:40.0	599.6	g	Sloan	5	1 x 1
189622	wfsj1610+5430_009	16:00:30.19	+55:50:00.0	J2000.00	1.255	179.7	21:51:40.0	599.6	g	Sloan	3	1 x 1
189623	wfsj1610+5430_009	16:00:30.19	+55:50:00.0	J2000.00	1.255	179.7	21:51:40.0	599.6	g	Sloan	4	1 x 1
189624	wfsj1610+5430_010	16:04:39.70	+53:09:59.9	J2000.00	1.257	179.7	22:06:36.7	598.9	r	Sloan	1	1 x 1
189625	wfsj1610+5430_010	16:04:39.70	+53:09:59.9	J2000.00	1.257	179.7	22:06:36.7	598.9	r	Sloan	5	1 x 1
189626	wfsj1610+5430_010	16:04:39.70	+53:09:59.9	J2000.00	1.257	179.7	22:06:36.7	598.9	r	Sloan	3	1 x 1
189627	wfsj1610+5430_010	16:04:39.70	+53:09:59.9	J2000.00	1.257	179.7	22:06:36.7	598.9	r	Sloan	4	1 x 1
189628	wfsj1610+5430_010	16:04:39.70	+53:10:00.0	J2000.00	1.288	179.7	22:19:39.2	599.4	i	Sloan	1	1 x 1
189629	wfsj1610+5430_010	16:04:39.70	+53:10:00.0	J2000.00	1.288	179.7	22:19:39.2	599.4	i	Sloan	5	1 x 1
189630	wfsj1610+5430_010	16:04:39.70	+53:10:00.0	J2000.00	1.288	179.7	22:19:39.2	599.4	i	Sloan	3	1 x 1
189631	wfsj1610+5430_010	16:04:39.70	+53:10:00.0	J2000.00	1.288	179.7	22:19:39.2	599.4	i	Sloan	4	1 x 1
189632	wfsj1610+5430_010	16:04:39.69	+53:09:59.9	J2000.00	1.324	179.7	22:32:43.8	599.1	g	Sloan	1	1 x 1
189633	wfsj1610+5430_010	16:04:39.69	+53:09:59.9	J2000.00	1.324	179.7	22:32:43.8	599.1	g	Sloan	5	1 x 1
189634	wfsj1610+5430_010	16:04:39.69	+53:09:59.9	J2000.00	1.324	179.7	22:32:43.8	599.1	g	Sloan	3	1 x 1
189635	wfsj1610+5430_010	16:04:39.69	+53:09:59.9	J2000.00	1.324	179.7	22:32:43.8	599.1	g	Sloan	4	1 x 1
189636	wfsj1610+5430_018	16:04:18.10	+55:49:59.8	J2000.00	1.387	179.7	22:47:44.7	599.5	r	Sloan	1	1 x 1
189637	wfsj1610+5430_018	16:04:18.10	+55:49:59.8	J2000.00	1.387	179.7	22:47:44.7	599.5	r	Sloan	5	1 x 1
189638	wfsj1610+5430_018	16:04:18.10	+55:49:59.8	J2000.00	1.387	179.7	22:47:44.7	599.5	r	Sloan	3	1 x 1
189639	wfsj1610+5430_018	16:04:18.10	+55:49:59.8	J2000.00	1.387	179.7	22:47:44.7	599.5	r	Sloan	4	1 x 1
189640	wfsj1610+5430_018	16:04:18.09	+55:49:59.9	J2000.00	1.430	179.7	23:00:49.3	599.6	i	Sloan	1	1 x 1
189641	wfsj1610+5430_018	16:04:18.09	+55:49:59.9	J2000.00	1.430	179.7	23:00:49.3	599.6	i	Sloan	5	1 x 1
189642	wfsj1610+5430_018	16:04:18.09	+55:49:59.9	J2000.00	1.430	179.7	23:00:49.3	599.6	i	Sloan	3	1 x 1
189643	wfsj1610+5430_018	16:04:18.09	+55:49:59.9	J2000.00	1.430	179.7	23:00:49.3	599.6	i	Sloan	4	1 x 1
189644	wfsj1610+5430_018	16:04:18.10	+55:49:59.9	J2000.00	1.478	179.7	23:13:54.4	599.4	g	Sloan	1	1 x 1
189645	wfsj1610+5430_018	16:04:18.10	+55:49:59.9	J2000.00	1.478	179.7	23:13:54.4	599.4	g	Sloan	5	1 x 1
189646	wfsj1610+5430_018	16:04:18.10	+55:49:59.9	J2000.00	1.478	179.7	23:13:54.4	599.4	g	Sloan	3	1 x 1
189647	wfsj1610+5430_018	16:04:18.10	+55:49:59.9	J2000.00	1.478	179.7	23:13:54.4	599.4	g	Sloan	4	1 x 1
189648	wfsj1610+5430_027	16:08:06.00	+55:50:00.0	J2000.00	1.526	179.7	23:29:29.5	599.3	r	Sloan	1	1 x 1
189649	wfsj1610+5430_027	16:08:06.00	+55:50:00.0	J2000.00	1.526	179.7	23:29:29.5	599.3	r	Sloan	5	1 x 1
189650	wfsj1610+5430_027	16:08:06.00	+55:50:00.0	J2000.00	1.526	179.7	23:29:29.5	599.3	r	Sloan	3	1 x 1
189651	wfsj1610+5430_027	16:08:06.00	+55:50:00.0	J2000.00	1.526	179.7	23:29:29.5	599.3	r	Sloan	4	1 x 1
189652	wfsj1610+5430_027	16:08:06.00	+55:50:00.0	J2000.00	1.585	179.7	23:42:31.6	599.4	i	Sloan	1	1 x 1
189653	wfsj1610+5430_027	16:08:06.00	+55:50:00.0	J2000.00	1.585	179.7	23:42:31.6	599.4	i	Sloan	5	1 x 1
189654	wfsj1610+5430_027	16:08:06.00	+55:50:00.0	J2000.00	1.585	179.7	23:42:31.6	599.4	i	Sloan	3	1 x 1
189655	wfsj1610+5430_027	16:08:06.00	+55:50:00.0	J2000.00	1.585	179.7	23:42:31.6	599.4	i	Sloan	4	1 x 1
189656	wfsj1610+5430_027	16:08:06.00	+55:50:00.0	J2000.00	1.651	179.7	23:55:36.4	599.3	g	Sloan	1	1 x 1
189657	wfsj1610+5430_027	16:08:06.00	+55:50:00.0	J2000.00	1.651	179.7	23:55:36.4	599.3	g	Sloan	5	1 x 1
189658	wfsj1610+5430_027	16:08:06.00	+55:50:00.0	J2000.00	1.651	179.7	23:55:36.4	599.3	g	Sloan	3	1 x 1
189659	wfsj1610+5430_027	16:08:06.00	+55:50:00.0	J2000.00	1.651	179.7	23:55:36.4	599.3	g	Sloan	4	1 x 1
189660	wfsj2056-0437_003	20:55:22.49	-04:17:44.9	J2000.00	1.194	179.7	00:12:47.6	599.6	r	Sloan	1	1 x 1
189661	wfsj2056-0437_003	20:55:22.49	-04:17:44.9	J2000.00	1.194	179.7	00:12:47.6	599.6	r	Sloan	5	1 x 1
189662	wfsj2056-0437_003	20:55:22.49	-04:17:44.9	J2000.00	1.194	179.7	00:12:47.6	599.6	r	Sloan	3	1 x 1
189663	wfsj2056-0437_003	20:55:22.49	-04:17:44.9	J2000.00	1.194	179.7	00:12:47.6	599.6	r	Sloan	4	1 x 1
189664	sa113-163 g	21:42:35.00	+00:16:45.9	J2000.00	1.162	179.7	00:26:22.9	10.1	g	Sloan	1	1 x 1
189665	sa113-163 g	21:42:35.00	+00:16:45.9	J2000.00	1.162	179.7	00:26:22.9	10.1	g	Sloan	5	1 x 1
189666	sa113-163 g	21:42:35.00	+00:16:45.9	J2000.00	1.162	179.7	00:26:22.9	10.1	g	Sloan	3	1 x 1
189667	sa113-163 g	21:42:35.00	+00:16:45.9	J2000.00	1.162	179.7	00:26:22.9	10.1	g	Sloan	4	1 x 1
189669	Focus run	21:42:35.00	+00:19:00.9	J2000.00	1.156	179.7	00:34:24.9	10.1	g	Sloan	1	1 x 1
189670	Focus run	21:42:35.00	+00:19:00.9	J2000.00	1.156	179.7	00:34:24.9	10.1	g	Sloan	5	1 x 1
189671	Focus run	21:42:35.00	+00:19:00.9	J2000.00	1.156	179.7	00:34:24.9	10.1	g	Sloan	3	1 x 1
189672	Focus run	21:42:35.00	+00:19:00.9	J2000.00	1.156	179.7	00:34:24.9	10.1	g	Sloan	4	1 x 1
189673	wfssgc063	0:04:00.00	+00:00:00.0	J2000.00	1.501	179.7	00:48:09.6	599.4	g	Sloan	1	1 x 1
189674	wfssgc063	0:04:00.00	+00:00:00.0	J2000.00	1.501	179.7	00:48:09.6	599.4	g	Sloan	5	1 x 1
189675	wfssgc063	0:04:00.00	+00:00:00.0	J2000.00	1.501	179.7	00:48:09.6	599.4	g	Sloan	3	1 x 1
189676	wfssgc063	0:04:00.00	+00:00:00.0	J2000.00	1.501	179.7	00:48:09.6	599.4	g	Sloan	4	1 x 1
189677	wfssgc064	0:06:00.00	+00:00:00.0	J2000.00	1.432	179.7	01:03:27.3	599.5	g	Sloan	1	1 x 1
189678	wfssgc064	0:06:00.00	+00:00:00.0	J2000.00	1.432	179.7	01:03:27.3	599.5	g	Sloan	5	1 x 1
189679	wfssgc064	0:06:00.00	+00:00:00.0	J2000.00	1.432	179.7	01:03:27.3	599.5	g	Sloan	3	1 x 1
189680	wfssgc064	0:06:00.00	+00:00:00.0	J2000.00	1.432	179.7	01:03:27.3	599.5	g	Sloan	4	1 x 1
189681	wfssgc065	0:08:00.00	+00:00:00.0	J2000.00	1.376	179.7	01:18:14.2	599.3	g	Sloan	1	1 x 1
189682	wfssgc065	0:08:00.00	+00:00:00.0	J2000.00	1.376	179.7	01:18:14.2	599.3	g	Sloan	5	1 x 1

189683	wfssgc065	0:08:00.00	+00:00:00.0	J2000.00	1.376	179.7	01:18:14.2	599.3	g	Sloan	3	1 x 1
189684	wfssgc065	0:08:00.00	+00:00:00.0	J2000.00	1.376	179.7	01:18:14.2	599.3	g	Sloan	4	1 x 1
189685	M31-microfld1	0:43:59.99	+41:34:00.0	J2000.00	1.193	179.7	01:38:37.0	698.9	r	Sloan	1	1 x 1
189686	M31-microfld1	0:43:59.99	+41:34:00.0	J2000.00	1.193	179.7	01:38:37.0	698.9	r	Sloan	5	1 x 1
189687	M31-microfld1	0:43:59.99	+41:34:00.0	J2000.00	1.193	179.7	01:38:37.0	698.9	r	Sloan	3	1 x 1
189688	M31-microfld1	0:43:59.99	+41:34:00.0	J2000.00	1.193	179.7	01:38:37.0	698.9	r	Sloan	4	1 x 1
189689	M31-microfld1	0:44:00.00	+41:34:00.0	J2000.00	1.159	179.7	01:53:30.7	699.2	g	Sloan	1	1 x 1
189690	M31-microfld1	0:44:00.00	+41:34:00.0	J2000.00	1.159	179.7	01:53:30.7	699.2	g	Sloan	5	1 x 1
189691	M31-microfld1	0:44:00.00	+41:34:00.0	J2000.00	1.159	179.7	01:53:30.7	699.2	g	Sloan	3	1 x 1
189692	M31-microfld1	0:44:00.00	+41:34:00.0	J2000.00	1.159	179.7	01:53:30.7	699.2	g	Sloan	4	1 x 1
189693	M31-microfld2	0:43:10.00	+40:58:14.9	J2000.00	1.096	179.7	02:25:54.7	699.3	g	Sloan	1	1 x 1
189694	M31-microfld2	0:43:10.00	+40:58:14.9	J2000.00	1.096	179.7	02:25:54.7	699.3	g	Sloan	5	1 x 1
189695	M31-microfld2	0:43:10.00	+40:58:14.9	J2000.00	1.096	179.7	02:25:54.7	699.3	g	Sloan	3	1 x 1
189696	M31-microfld2	0:43:10.00	+40:58:14.9	J2000.00	1.096	179.7	02:25:54.7	699.3	g	Sloan	4	1 x 1
189697	M31-microfld2	0:43:09.99	+40:58:14.9	J2000.00	1.076	179.7	02:40:40.2	699.2	r	Sloan	1	1 x 1
189698	M31-microfld2	0:43:09.99	+40:58:14.9	J2000.00	1.076	179.7	02:40:40.2	699.2	r	Sloan	5	1 x 1
189699	M31-microfld2	0:43:09.99	+40:58:14.9	J2000.00	1.076	179.7	02:40:40.2	699.2	r	Sloan	3	1 x 1
189700	M31-microfld2	0:43:09.99	+40:58:14.9	J2000.00	1.076	179.7	02:40:40.2	699.2	r	Sloan	4	1 x 1
189701	wfssgc089	0:56:00.00	-00:00:00.0	J2000.00	1.222	179.7	02:57:54.8	599.4	g	Sloan	1	1 x 1
189702	wfssgc089	0:56:00.00	-00:00:00.0	J2000.00	1.222	179.7	02:57:54.8	599.4	g	Sloan	5	1 x 1
189703	wfssgc089	0:56:00.00	-00:00:00.0	J2000.00	1.222	179.7	02:57:54.8	599.4	g	Sloan	3	1 x 1
189704	wfssgc089	0:56:00.00	-00:00:00.0	J2000.00	1.222	179.7	02:57:54.8	599.4	g	Sloan	4	1 x 1
189705	wfssgc090	0:57:59.99	-00:00:00.0	J2000.00	1.198	179.7	03:12:37.7	599.0	g	Sloan	1	1 x 1
189706	wfssgc090	0:57:59.99	-00:00:00.0	J2000.00	1.198	179.7	03:12:37.7	599.0	g	Sloan	5	1 x 1
189707	wfssgc090	0:57:59.99	-00:00:00.0	J2000.00	1.198	179.7	03:12:37.7	599.0	g	Sloan	3	1 x 1
189708	wfssgc090	0:57:59.99	-00:00:00.0	J2000.00	1.198	179.7	03:12:37.7	599.0	g	Sloan	4	1 x 1
189709	wfssgc091	1:00:00.01	-00:00:00.1	J2000.00	1.179	179.7	03:27:21.7	598.5	g	Sloan	1	1 x 1
189710	wfssgc091	1:00:00.01	-00:00:00.1	J2000.00	1.179	179.7	03:27:21.7	598.5	g	Sloan	5	1 x 1
189711	wfssgc091	1:00:00.01	-00:00:00.1	J2000.00	1.179	179.7	03:27:21.7	598.5	g	Sloan	3	1 x 1
189712	wfssgc091	1:00:00.01	-00:00:00.1	J2000.00	1.179	179.7	03:27:21.7	598.5	g	Sloan	4	1 x 1
189717	wfssgc113	1:44:00.00	-00:00:00.0	J2000.00	1.225	179.7	03:44:25.5	599.4	g	Sloan	1	1 x 1
189718	wfssgc113	1:44:00.00	-00:00:00.0	J2000.00	1.225	179.7	03:44:25.5	599.4	g	Sloan	5	1 x 1
189719	wfssgc113	1:44:00.00	-00:00:00.0	J2000.00	1.225	179.7	03:44:25.5	599.4	g	Sloan	3	1 x 1
189720	wfssgc113	1:44:00.00	-00:00:00.0	J2000.00	1.225	179.7	03:44:25.5	599.4	g	Sloan	4	1 x 1
189725	wfssgc122	2:02:00.00	-00:00:00.0	J2000.00	1.225	179.7	04:02:08.9	599.4	g	Sloan	1	1 x 1
189726	wfssgc122	2:02:00.00	-00:00:00.0	J2000.00	1.225	179.7	04:02:08.9	599.4	g	Sloan	5	1 x 1
189727	wfssgc122	2:02:00.00	-00:00:00.0	J2000.00	1.225	179.7	04:02:08.9	599.4	g	Sloan	3	1 x 1
189728	wfssgc122	2:02:00.00	-00:00:00.0	J2000.00	1.225	179.7	04:02:08.9	599.4	g	Sloan	4	1 x 1
189729	wfssgc123	2:04:00.00	+00:00:00.0	J2000.00	1.201	179.7	04:16:57.4	599.5	g	Sloan	1	1 x 1
189730	wfssgc123	2:04:00.00	+00:00:00.0	J2000.00	1.201	179.7	04:16:57.4	599.5	g	Sloan	5	1 x 1
189731	wfssgc123	2:04:00.00	+00:00:00.0	J2000.00	1.201	179.7	04:16:57.4	599.5	g	Sloan	3	1 x 1
189732	wfssgc123	2:04:00.00	+00:00:00.0	J2000.00	1.201	179.7	04:16:57.4	599.5	g	Sloan	4	1 x 1
189733	wfssgc124	2:06:00.00	+00:00:00.0	J2000.00	1.181	179.7	04:31:45.1	599.1	g	Sloan	1	1 x 1
189734	wfssgc124	2:06:00.00	+00:00:00.0	J2000.00	1.181	179.7	04:31:45.1	599.1	g	Sloan	5	1 x 1
189735	wfssgc124	2:06:00.00	+00:00:00.0	J2000.00	1.181	179.7	04:31:45.1	599.1	g	Sloan	3	1 x 1
189736	wfssgc124	2:06:00.00	+00:00:00.0	J2000.00	1.181	179.7	04:31:45.1	599.1	g	Sloan	4	1 x 1
189737	wfssgc131	2:19:59.99	+00:00:00.1	J2000.00	1.180	179.7	04:46:39.4	599.0	g	Sloan	1	1 x 1
189738	wfssgc131	2:19:59.99	+00:00:00.1	J2000.00	1.180	179.7	04:46:39.4	599.0	g	Sloan	5	1 x 1
189739	wfssgc131	2:19:59.99	+00:00:00.1	J2000.00	1.180	179.7	04:46:39.4	599.0	g	Sloan	3	1 x 1
189740	wfssgc131	2:19:59.99	+00:00:00.1	J2000.00	1.180	179.7	04:46:39.4	599.0	g	Sloan	4	1 x 1
189741	wfssgc132	2:22:00.00	-00:00:00.0	J2000.00	1.164	179.7	05:01:27.9	599.6	g	Sloan	1	1 x 1
189742	wfssgc132	2:22:00.00	-00:00:00.0	J2000.00	1.164	179.7	05:01:27.9	599.6	g	Sloan	5	1 x 1
189743	wfssgc132	2:22:00.00	-00:00:00.0	J2000.00	1.164	179.7	05:01:27.9	599.6	g	Sloan	3	1 x 1
189744	wfssgc132	2:22:00.00	-00:00:00.0	J2000.00	1.164	179.7	05:01:27.9	599.6	g	Sloan	4	1 x 1
189745	wfssgc133	2:24:00.00	-00:00:00.0	J2000.00	1.153	179.7	05:16:11.3	599.5	g	Sloan	1	1 x 1
189746	wfssgc133	2:24:00.00	-00:00:00.0	J2000.00	1.153	179.7	05:16:11.3	599.5	g	Sloan	5	1 x 1
189747	wfssgc133	2:24:00.00	-00:00:00.0	J2000.00	1.153	179.7	05:16:11.3	599.5	g	Sloan	3	1 x 1
189748	wfssgc133	2:24:00.00	-00:00:00.0	J2000.00	1.153	179.7	05:16:11.3	599.5	g	Sloan	4	1 x 1
189749	sa95-330 i	3:54:31.00	+00:29:05.0	J2000.00	1.294	179.7	05:30:02.4	10.1	i	Sloan	1	1 x 1
189750	sa95-330 i	3:54:31.00	+00:29:05.0	J2000.00	1.294	179.7	05:30:02.4	10.1	i	Sloan	5	1 x 1
189751	sa95-330 i	3:54:31.00	+00:29:05.0	J2000.00	1.294	179.7	05:30:02.4	10.1	i	Sloan	3	1 x 1
189752	sa95-330 i	3:54:31.00	+00:29:05.0	J2000.00	1.294	179.7	05:30:02.4	10.1	i	Sloan	4	1 x 1

189753	sa95-330 r	3:54:30.99	+00:29:05.0	J2000.00	1.285	179.7	05:33:13.1	10.1	r	Sloan	1	1 x 1
189754	sa95-330 r	3:54:30.99	+00:29:05.0	J2000.00	1.285	179.7	05:33:13.1	10.1	r	Sloan	5	1 x 1
189755	sa95-330 r	3:54:30.99	+00:29:05.0	J2000.00	1.285	179.7	05:33:13.1	10.1	r	Sloan	3	1 x 1
189756	sa95-330 r	3:54:30.99	+00:29:05.0	J2000.00	1.285	179.7	05:33:13.1	10.1	r	Sloan	4	1 x 1
189757	sa95-330 g	3:54:31.00	+00:29:05.0	J2000.00	1.275	179.7	05:36:36.3	10.1	r	Sloan	1	1 x 1 r band
189758	sa95-330 g	3:54:31.00	+00:29:05.0	J2000.00	1.275	179.7	05:36:36.3	10.1	r	Sloan	5	1 x 1
189759	sa95-330 g	3:54:31.00	+00:29:05.0	J2000.00	1.275	179.7	05:36:36.3	10.1	r	Sloan	3	1 x 1
189760	sa95-330 g	3:54:31.00	+00:29:05.0	J2000.00	1.275	179.7	05:36:36.3	10.1	r	Sloan	4	1 x 1
189765	sa95-330 g	3:54:31.00	+00:29:05.0	J2000.00	1.251	179.7	05:45:17.9	10.1	g	Sloan	1	1 x 1
189766	sa95-330 g	3:54:31.00	+00:29:05.0	J2000.00	1.251	179.7	05:45:17.9	10.1	g	Sloan	5	1 x 1
189767	sa95-330 g	3:54:31.00	+00:29:05.0	J2000.00	1.251	179.7	05:45:17.9	10.1	g	Sloan	3	1 x 1
189768	sa95-330 g	3:54:31.00	+00:29:05.0	J2000.00	1.251	179.7	05:45:17.9	10.1	g	Sloan	4	1 x 1
189769	Bias frame	4:25:45.99	+54:09:03.1	B1950.00	1.217	179.7	05:49:40.9	0.0	g	Sloan	1	1 x 1
189770	Bias frame	4:25:45.99	+54:09:03.1	B1950.00	1.217	179.7	05:49:40.9	0.0	g	Sloan	5	1 x 1
189771	Bias frame	4:25:45.99	+54:09:03.1	B1950.00	1.217	179.7	05:49:40.9	0.0	g	Sloan	3	1 x 1
189772	Bias frame	4:25:45.99	+54:09:03.1	B1950.00	1.217	179.7	05:49:40.9	0.0	g	Sloan	4	1 x 1
189773	Bias frame	4:25:45.99	+54:09:03.0	B1950.00	1.212	179.7	05:52:34.6	0.0	g	Sloan	1	1 x 1
189774	Bias frame	4:25:45.99	+54:09:03.0	B1950.00	1.212	179.7	05:52:34.6	0.0	g	Sloan	5	1 x 1
189775	Bias frame	4:25:45.99	+54:09:03.0	B1950.00	1.212	179.7	05:52:34.6	0.0	g	Sloan	3	1 x 1
189776	Bias frame	4:25:45.99	+54:09:03.0	B1950.00	1.212	179.7	05:52:34.6	0.0	g	Sloan	4	1 x 1
189777	Flat field	4:25:46.00	+54:09:02.9	B1950.00	1.202	179.7	05:56:44.6	183.7	i	Sloan	1	1 x 1
189778	Flat field	4:25:46.00	+54:09:02.9	B1950.00	1.202	179.7	05:56:44.6	183.7	i	Sloan	5	1 x 1
189779	Flat field	4:25:46.00	+54:09:02.9	B1950.00	1.202	179.7	05:56:44.6	183.7	i	Sloan	3	1 x 1
189780	Flat field	4:25:46.00	+54:09:02.9	B1950.00	1.202	179.7	05:56:44.6	183.7	i	Sloan	4	1 x 1
189781	Flat field	2:12:53.56	+27:04:36.6	B1950.00	1.194	179.7	06:03:08.1	54.5	i	Sloan	1	1 x 1
189782	Flat field	2:12:53.56	+27:04:36.6	B1950.00	1.194	179.7	06:03:08.1	54.5	i	Sloan	5	1 x 1
189783	Flat field	2:12:53.56	+27:04:36.6	B1950.00	1.194	179.7	06:03:08.1	54.5	i	Sloan	3	1 x 1
189784	Flat field	2:12:53.56	+27:04:36.6	B1950.00	1.194	179.7	06:03:08.1	54.5	i	Sloan	4	1 x 1
189785	sky r	4:25:47.13	+54:08:53.0	B1950.00	1.187	179.7	06:07:32.5	23.6	r	Sloan	1	1 x 1
189786	sky r	4:25:47.13	+54:08:53.0	B1950.00	1.187	179.7	06:07:32.5	23.6	r	Sloan	5	1 x 1
189787	sky r	4:25:47.13	+54:08:53.0	B1950.00	1.187	179.7	06:07:32.5	23.6	r	Sloan	3	1 x 1
189788	sky r	4:25:47.13	+54:08:53.0	B1950.00	1.187	179.7	06:07:32.5	23.6	r	Sloan	4	1 x 1
189789	Flat field	4:25:44.86	+54:08:52.9	B1950.00	1.181	179.7	06:11:55.7	8.3	r	Sloan	1	1 x 1
189790	Flat field	4:25:44.86	+54:08:52.9	B1950.00	1.181	179.7	06:11:55.7	8.3	r	Sloan	5	1 x 1
189791	Flat field	4:25:44.86	+54:08:52.9	B1950.00	1.181	179.7	06:11:55.7	8.3	r	Sloan	3	1 x 1
189792	Flat field	4:25:44.86	+54:08:52.9	B1950.00	1.181	179.7	06:11:55.7	8.3	r	Sloan	4	1 x 1
189793	Bias frame	0:00:00.00	+00:00:00.0	B1950.00	2.438	179.7	06:18:57.6	0.0	r	Sloan	1	1 x 1
189794	Bias frame	0:00:00.00	+00:00:00.0	B1950.00	2.438	179.7	06:18:57.6	0.0	r	Sloan	5	1 x 1
189795	Bias frame	0:00:00.00	+00:00:00.0	B1950.00	2.438	179.7	06:18:57.6	0.0	r	Sloan	3	1 x 1
189796	Bias frame	0:00:00.00	+00:00:00.0	B1950.00	2.438	179.7	06:18:57.6	0.0	r	Sloan	4	1 x 1
189797	Bias frame	0:00:00.00	+00:00:00.0	B1950.00	4.227	179.7	06:21:50.3	0.0	r	Sloan	1	1 x 1
189798	Bias frame	0:00:00.00	+00:00:00.0	B1950.00	4.227	179.7	06:21:50.3	0.0	r	Sloan	5	1 x 1
189799	Bias frame	0:00:00.00	+00:00:00.0	B1950.00	4.227	179.7	06:21:50.3	0.0	r	Sloan	3	1 x 1
189800	Bias frame	0:00:00.00	+00:00:00.0	B1950.00	4.227	179.7	06:21:50.3	0.0	r	Sloan	4	1 x 1