INT OBSERVING LOG (ISAAC NEWTON GROUP, LA PALMA)

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TELESCOPE:             INT
DATE:                  1999 JUL 17/18
INT TAPE NR:           INTD 4118
OBSERVER:              M. Irwin, R. Sharp
PROGRAMME:             INT WFS
PATT/CAT:              WFS09
TELESCOPE OPERATOR:    M. Irwin
SUPPORT ASTRONOMER:    N. Walton

FOCUS:                 Prime
INSTRUMENT:            WFC
FILTER WHEEL (PF):     U,KPB,g,r,i,Z
CAMERA (IDS):          -
COLLIMATOR (IDS):      -
COLL. FOCUS (IDS):     -
GRATING (IDS):         -
DETECTOR:              EEV
PIXELS:                4x4200x2148
PIXEL SIZE (microns): 13.5
WINDOW:                Xstart= , Xsize= , Ystart= , Ysize=
BINNING:               in X=1, in Y=1

WEATHER:               Good - Photometric
OUTSIDE TEMP (deg C):   16.8            (FIRST HALF)
OUTSIDE TEMP (deg C):   17.2            (SECOND HALF)
HUMIDITY (%):           22              (FIRST HALF)
HUMIDITY (%):           10              (SECOND HALF)
CLOUD COVER (%):         0              (FIRST HALF)
CLOUD COVER (%):         0              (SECOND HALF)
DUST (0 - 2):            0              (FIRST HALF)
DUST (0 - 2):            0              (SECOND HALF)
SEEING (arcsec):         0.9            (FIRST HALF)
SEEING (arcsec):         1.3            (SECOND HALF)
AV. SEEING (arcsec):     -
NO. SEEING MEASURES:     20

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

DARK HOURS:            07:12
DOME OPEN (UTC):       18:45
MOON PHASE (D/G/B):       G
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:

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Run no. Object name              RA         Dec.     Equinox    AM    PA     UT       Exp. T.   Filter      Psys Channel  Binning Comments

 180340 Bias frame            0:00:00.00 +00:00:00.0 A        1.477 179.7 13:47:55.2      0.0        U        RGO    1      1 x 1
 180341 Bias frame            0:00:00.00 +00:00:00.0 A        1.477 179.7 13:47:55.2      0.0        U        RGO    5      1 x 1
 180342 Bias frame            0:00:00.00 +00:00:00.0 A        1.477 179.7 13:47:55.2      0.0        U        RGO    3      1 x 1
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180343	Bias frame	0:00:00.00	+00:00:00.0	A	1.477	179.7	13:47:55.2	0.0	U	RGO	4	1 x 1
180344	Bias frame	9:59:59.99	+49:59:59.9	A	1.096	179.7	14:30:26.6	0.0	U	RGO	1	1 x 1
180345	Bias frame	9:59:59.99	+49:59:59.9	A	1.096	179.7	14:30:26.6	0.0	U	RGO	5	1 x 1
180346	Bias frame	9:59:59.99	+49:59:59.9	A	1.096	179.7	14:30:26.6	0.0	U	RGO	3	1 x 1
180347	Bias frame	9:59:59.99	+49:59:59.9	A	1.096	179.7	14:30:26.6	0.0	U	RGO	4	1 x 1
180348	Bias frame	14:30:00.00	+40:00:00.0	J2000.00	1.022	179.7	20:20:51.1	0.0	z	Gunn	1	1 x 1
180349	Bias frame	14:30:00.00	+40:00:00.0	J2000.00	1.022	179.7	20:20:51.1	0.0	z	Gunn	5	1 x 1
180350	Bias frame	14:30:00.00	+40:00:00.0	J2000.00	1.022	179.7	20:20:51.1	0.0	z	Gunn	3	1 x 1
180351	Bias frame	14:30:00.00	+40:00:00.0	J2000.00	1.022	179.7	20:20:51.1	0.0	z	Gunn	4	1 x 1
180352	Flat field	14:30:00.00	+39:59:59.9	J2000.00	1.027	179.7	20:34:18.4	5.5	z	Gunn	1	1 x 1
180353	Flat field	14:30:00.00	+39:59:59.9	J2000.00	1.027	179.7	20:34:18.4	5.5	z	Gunn	5	1 x 1
180354	Flat field	14:30:00.00	+39:59:59.9	J2000.00	1.027	179.7	20:34:18.4	5.5	z	Gunn	3	1 x 1
180355	Flat field	14:30:00.00	+39:59:59.9	J2000.00	1.027	179.7	20:34:18.4	5.5	z	Gunn	4	1 x 1
180356	Flat field	14:30:00.00	+40:00:00.0	J2000.00	1.029	179.7	20:37:23.3	9.6	z	Gunn	1	1 x 1
180357	Flat field	14:30:00.00	+40:00:00.0	J2000.00	1.029	179.7	20:37:23.3	9.6	z	Gunn	5	1 x 1
180358	Flat field	14:30:00.00	+40:00:00.0	J2000.00	1.029	179.7	20:37:23.3	9.6	z	Gunn	3	1 x 1
180359	Flat field	14:30:00.00	+40:00:00.0	J2000.00	1.029	179.7	20:37:23.3	9.6	z	Gunn	4	1 x 1
180360	Flat field	14:30:02.61	+39:59:59.9	J2000.00	1.030	179.7	20:40:37.6	5.5	i	Sloan	1	1 x 1
180361	Flat field	14:30:02.61	+39:59:59.9	J2000.00	1.030	179.7	20:40:37.6	5.5	i	Sloan	5	1 x 1
180362	Flat field	14:30:02.61	+39:59:59.9	J2000.00	1.030	179.7	20:40:37.6	5.5	i	Sloan	3	1 x 1
180363	Flat field	14:30:02.61	+39:59:59.9	J2000.00	1.030	179.7	20:40:37.6	5.5	i	Sloan	4	1 x 1
180364	Flat field	14:30:02.61	+40:00:29.9	J2000.00	1.032	179.7	20:43:42.4	10.1	i	Sloan	1	1 x 1
180365	Flat field	14:30:02.61	+40:00:29.9	J2000.00	1.032	179.7	20:43:42.4	10.1	i	Sloan	5	1 x 1
180366	Flat field	14:30:02.61	+40:00:29.9	J2000.00	1.032	179.7	20:43:42.4	10.1	i	Sloan	3	1 x 1
180367	Flat field	14:30:02.61	+40:00:29.9	J2000.00	1.032	179.7	20:43:42.4	10.1	i	Sloan	4	1 x 1
180368	Flat field	14:30:02.61	+40:00:29.9	J2000.00	1.034	179.7	20:47:10.3	29.0	r	Sloan	1	1 x 1
180369	Flat field	14:30:02.61	+40:00:29.9	J2000.00	1.034	179.7	20:47:10.3	29.0	r	Sloan	5	1 x 1
180370	Flat field	14:30:02.61	+40:00:29.9	J2000.00	1.034	179.7	20:47:10.3	29.0	r	Sloan	3	1 x 1
180371	Flat field	14:30:02.61	+40:00:29.9	J2000.00	1.034	179.7	20:47:10.3	29.0	r	Sloan	4	1 x 1
180372	Flat field	14:30:05.22	+40:00:00.0	J2000.00	1.037	179.7	20:50:39.1	50.1	r	Sloan	1	1 x 1
180373	Flat field	14:30:05.22	+40:00:00.0	J2000.00	1.037	179.7	20:50:39.1	50.1	r	Sloan	5	1 x 1
180374	Flat field	14:30:05.22	+40:00:00.0	J2000.00	1.037	179.7	20:50:39.1	50.1	r	Sloan	3	1 x 1
180375	Flat field	14:30:05.22	+40:00:00.0	J2000.00	1.037	179.7	20:50:39.1	50.1	r	Sloan	4	1 x 1
180376	Focus run	15:39:19.00	-00:14:14.0	J2000.00	1.143	179.7	21:07:17.5	10.1	r	Sloan	1	1 x 1
180377	Focus run	15:39:19.00	-00:14:14.0	J2000.00	1.143	179.7	21:07:17.5	10.1	r	Sloan	5	1 x 1
180378	Focus run	15:39:19.00	-00:14:14.0	J2000.00	1.143	179.7	21:07:17.5	10.1	r	Sloan	3	1 x 1
180379	Focus run	15:39:19.00	-00:14:14.0	J2000.00	1.143	179.7	21:07:17.5	10.1	r	Sloan	4	1 x 1
180384	N4395 i	12:25:48.90	+33:32:47.9	J2000.00	1.368	179.7	21:15:58.4	299.9	i	Sloan	1	1 x 1
180385	N4395 i	12:25:48.90	+33:32:47.9	J2000.00	1.368	179.7	21:15:58.4	299.9	i	Sloan	5	1 x 1
180386	N4395 i	12:25:48.90	+33:32:47.9	J2000.00	1.368	179.7	21:15:58.4	299.9	i	Sloan	3	1 x 1
180387	N4395 i	12:25:48.90	+33:32:47.9	J2000.00	1.368	179.7	21:15:58.4	299.9	i	Sloan	4	1 x 1
180388	N4395 g	12:25:48.89	+33:32:48.0	J2000.00	1.407	179.7	21:23:54.6	299.9	g	Sloan	1	1 x 1
180389	N4395 g	12:25:48.89	+33:32:48.0	J2000.00	1.407	179.7	21:23:54.6	299.9	g	Sloan	5	1 x 1
180390	N4395 g	12:25:48.89	+33:32:48.0	J2000.00	1.407	179.7	21:23:54.6	299.9	g	Sloan	3	1 x 1
180391	N4395 g	12:25:48.89	+33:32:48.0	J2000.00	1.407	179.7	21:23:54.6	299.9	g	Sloan	4	1 x 1
180396	sa107-602	15:39:19.00	-00:15:28.8	J2000.00	1.150	179.7	21:34:12.3	20.1	U	RGO	1	1 x 1
180397	sa107-602	15:39:19.00	-00:15:28.8	J2000.00	1.150	179.7	21:34:12.3	20.1	U	RGO	5	1 x 1
180398	sa107-602	15:39:19.00	-00:15:28.8	J2000.00	1.150	179.7	21:34:12.3	20.1	U	RGO	3	1 x 1
180399	sa107-602	15:39:19.00	-00:15:28.8	J2000.00	1.150	179.7	21:34:12.3	20.1	U	RGO	4	1 x 1
180400	sa107-602 g	15:39:19.00	-00:15:28.9	J2000.00	1.152	179.7	21:37:38.0	10.1	g	Sloan	1	1 x 1
180401	sa107-602 g	15:39:19.00	-00:15:28.9	J2000.00	1.152	179.7	21:37:38.0	10.1	g	Sloan	5	1 x 1
180402	sa107-602 g	15:39:19.00	-00:15:28.9	J2000.00	1.152	179.7	21:37:38.0	10.1	g	Sloan	3	1 x 1
180403	sa107-602 g	15:39:19.00	-00:15:28.9	J2000.00	1.152	179.7	21:37:38.0	10.1	g	Sloan	4	1 x 1
180408	sa107-602 r	15:39:19.00	-00:15:29.0	J2000.00	1.154	179.7	21:41:43.0	10.1	r	Sloan	1	1 x 1
180409	sa107-602 r	15:39:19.00	-00:15:29.0	J2000.00	1.154	179.7	21:41:43.0	10.1	r	Sloan	5	1 x 1
180410	sa107-602 r	15:39:19.00	-00:15:29.0	J2000.00	1.154	179.7	21:41:43.0	10.1	r	Sloan	3	1 x 1
180411	sa107-602 r	15:39:19.00	-00:15:29.0	J2000.00	1.154	179.7	21:41:43.0	10.1	r	Sloan	4	1 x 1
180412	sa107-602 i	15:39:19.00	-00:15:29.0	J2000.00	1.157	179.7	21:44:50.4	10.1	i	Sloan	1	1 x 1
180413	sa107-602 i	15:39:19.00	-00:15:29.0	J2000.00	1.157	179.7	21:44:50.4	10.1	i	Sloan	5	1 x 1
180414	sa107-602 i	15:39:19.00	-00:15:29.0	J2000.00	1.157	179.7	21:44:50.4	10.1	i	Sloan	3	1 x 1
180415	sa107-602 i	15:39:19.00	-00:15:29.0	J2000.00	1.157	179.7	21:44:50.4	10.1	i	Sloan	4	1 x 1
180416	sa107-602 z	15:39:19.00	-00:15:29.0	J2000.00	1.159	179.7	21:47:55.8	10.1	z	Gunn	1	1 x 1

180417	sa107-602 z	15:39:19.00	-00:15:29.0	J2000.00	1.159	179.7	21:47:55.8	10.1	z	Gunn	5	1 x 1
180418	sa107-602 z	15:39:19.00	-00:15:29.0	J2000.00	1.159	179.7	21:47:55.8	10.1	z	Gunn	3	1 x 1
180419	sa107-602 z	15:39:19.00	-00:15:29.0	J2000.00	1.159	179.7	21:47:55.8	10.1	z	Gunn	4	1 x 1
180424	wfsj1610+5430_043	16:15:36.09	+55:10:00.0	J2000.00	1.117	179.7	21:52:54.5	599.5	z	Gunn	1	1 x 1
180425	wfsj1610+5430_043	16:15:36.09	+55:10:00.0	J2000.00	1.117	179.7	21:52:54.5	599.5	z	Gunn	5	1 x 1
180426	wfsj1610+5430_043	16:15:36.09	+55:10:00.0	J2000.00	1.117	179.7	21:52:54.5	599.5	z	Gunn	3	1 x 1
180427	wfsj1610+5430_043	16:15:36.09	+55:10:00.0	J2000.00	1.117	179.7	21:52:54.5	599.5	z	Gunn	4	1 x 1
180428	wfsj1610+5430_043	16:15:36.09	+55:10:00.0	J2000.00	1.120	179.7	22:06:02.8	599.5	r	Sloan	1	1 x 1
180429	wfsj1610+5430_043	16:15:36.09	+55:10:00.0	J2000.00	1.120	179.7	22:06:02.8	599.5	r	Sloan	5	1 x 1
180430	wfsj1610+5430_043	16:15:36.09	+55:10:00.0	J2000.00	1.120	179.7	22:06:02.8	599.5	r	Sloan	3	1 x 1
180431	wfsj1610+5430_043	16:15:36.09	+55:10:00.0	J2000.00	1.120	179.7	22:06:02.8	599.5	r	Sloan	4	1 x 1
180432	wfsj1610+5430_043	16:15:36.09	+55:09:59.9	J2000.00	1.125	179.7	22:19:12.0	599.6	i	Sloan	1	1 x 1
180433	wfsj1610+5430_043	16:15:36.09	+55:09:59.9	J2000.00	1.125	179.7	22:19:12.0	599.6	i	Sloan	5	1 x 1
180434	wfsj1610+5430_043	16:15:36.09	+55:09:59.9	J2000.00	1.125	179.7	22:19:12.0	599.6	i	Sloan	3	1 x 1
180435	wfsj1610+5430_043	16:15:36.09	+55:09:59.9	J2000.00	1.125	179.7	22:19:12.0	599.6	i	Sloan	4	1 x 1
180436	wfsj1610+5430_052	16:19:20.20	+55:09:59.9	J2000.00	1.131	179.7	22:34:23.4	599.4	z	Gunn	1	1 x 1
180437	wfsj1610+5430_052	16:19:20.20	+55:09:59.9	J2000.00	1.131	179.7	22:34:23.4	599.4	z	Gunn	5	1 x 1
180438	wfsj1610+5430_052	16:19:20.20	+55:09:59.9	J2000.00	1.131	179.7	22:34:23.4	599.4	z	Gunn	3	1 x 1
180439	wfsj1610+5430_052	16:19:20.20	+55:09:59.9	J2000.00	1.131	179.7	22:34:23.4	599.4	z	Gunn	4	1 x 1
180440	wfsj1610+5430_052	16:19:20.20	+55:10:00.0	J2000.00	1.140	179.7	22:47:32.5	598.9	r	Sloan	1	1 x 1
180441	wfsj1610+5430_052	16:19:20.20	+55:10:00.0	J2000.00	1.140	179.7	22:47:32.5	598.9	r	Sloan	5	1 x 1
180442	wfsj1610+5430_052	16:19:20.20	+55:10:00.0	J2000.00	1.140	179.7	22:47:32.5	598.9	r	Sloan	3	1 x 1
180443	wfsj1610+5430_052	16:19:20.20	+55:10:00.0	J2000.00	1.140	179.7	22:47:32.5	598.9	r	Sloan	4	1 x 1
180444	wfsj1610+5430_052	16:19:20.19	+55:09:59.9	J2000.00	1.151	179.7	23:00:43.0	599.4	i	Sloan	1	1 x 1
180445	wfsj1610+5430_052	16:19:20.19	+55:09:59.9	J2000.00	1.151	179.7	23:00:43.0	599.4	i	Sloan	5	1 x 1
180446	wfsj1610+5430_052	16:19:20.19	+55:09:59.9	J2000.00	1.151	179.7	23:00:43.0	599.4	i	Sloan	3	1 x 1
180447	wfsj1610+5430_052	16:19:20.19	+55:09:59.9	J2000.00	1.151	179.7	23:00:43.0	599.4	i	Sloan	4	1 x 1
180448	wfsj1610+5430_052	16:19:20.20	+55:09:59.9	J2000.00	1.166	179.7	23:14:59.8	598.9	g	Sloan	1	1 x 1
180449	wfsj1610+5430_052	16:19:20.20	+55:09:59.9	J2000.00	1.166	179.7	23:14:59.8	598.9	g	Sloan	5	1 x 1
180450	wfsj1610+5430_052	16:19:20.20	+55:09:59.9	J2000.00	1.166	179.7	23:14:59.8	598.9	g	Sloan	3	1 x 1
180451	wfsj1610+5430_052	16:19:20.20	+55:09:59.9	J2000.00	1.166	179.7	23:14:59.8	598.9	g	Sloan	4	1 x 1
180452	wfsj1610+5430_052	16:19:20.20	+55:09:59.9	J2000.00	1.183	179.7	23:28:42.7	599.5	U	RGO	1	1 x 1
180453	wfsj1610+5430_052	16:19:20.20	+55:09:59.9	J2000.00	1.183	179.7	23:28:42.7	599.5	U	RGO	5	1 x 1
180454	wfsj1610+5430_052	16:19:20.20	+55:09:59.9	J2000.00	1.183	179.7	23:28:42.7	599.5	U	RGO	3	1 x 1
180455	wfsj1610+5430_052	16:19:20.20	+55:09:59.9	J2000.00	1.183	179.7	23:28:42.7	599.5	U	RGO	4	1 x 1
180456	wfsj1610+5430_043	16:15:36.09	+55:10:00.0	J2000.00	1.211	179.7	23:43:19.8	599.4	U	RGO	1	1 x 1
180457	wfsj1610+5430_043	16:15:36.09	+55:10:00.0	J2000.00	1.211	179.7	23:43:19.8	599.4	U	RGO	5	1 x 1
180458	wfsj1610+5430_043	16:15:36.09	+55:10:00.0	J2000.00	1.211	179.7	23:43:19.8	599.4	U	RGO	3	1 x 1
180459	wfsj1610+5430_043	16:15:36.09	+55:10:00.0	J2000.00	1.211	179.7	23:43:19.8	599.4	U	RGO	4	1 x 1
180460	wfsj1610+5430_043	16:15:36.10	+55:10:00.0	J2000.00	1.234	179.7	23:56:38.6	599.4	g	Sloan	1	1 x 1
180461	wfsj1610+5430_043	16:15:36.10	+55:10:00.0	J2000.00	1.234	179.7	23:56:38.6	599.4	g	Sloan	5	1 x 1
180462	wfsj1610+5430_043	16:15:36.10	+55:10:00.0	J2000.00	1.234	179.7	23:56:38.6	599.4	g	Sloan	3	1 x 1
180463	wfsj1610+5430_043	16:15:36.10	+55:10:00.0	J2000.00	1.234	179.7	23:56:38.6	599.4	g	Sloan	4	1 x 1
180468	wfsj1610+5430_033	16:11:51.10	+54:50:00.0	J2000.00	1.270	179.7	00:11:49.6	599.0	U	RGO	1	1 x 1
180469	wfsj1610+5430_033	16:11:51.10	+54:50:00.0	J2000.00	1.270	179.7	00:11:49.6	599.0	U	RGO	5	1 x 1
180470	wfsj1610+5430_033	16:11:51.10	+54:50:00.0	J2000.00	1.270	179.7	00:11:49.6	599.0	U	RGO	3	1 x 1
180471	wfsj1610+5430_033	16:11:51.10	+54:50:00.0	J2000.00	1.270	179.7	00:11:49.6	599.0	U	RGO	4	1 x 1
180472	wfsj1610+5430_024	16:08:08.89	+54:49:59.8	J2000.00	1.313	179.7	00:26:01.5	599.4	U	RGO	1	1 x 1
180473	wfsj1610+5430_024	16:08:08.89	+54:49:59.8	J2000.00	1.313	179.7	00:26:01.5	599.4	U	RGO	5	1 x 1
180474	wfsj1610+5430_024	16:08:08.89	+54:49:59.8	J2000.00	1.313	179.7	00:26:01.5	599.4	U	RGO	3	1 x 1
180475	wfsj1610+5430_024	16:08:08.89	+54:49:59.8	J2000.00	1.313	179.7	00:26:01.5	599.4	U	RGO	4	1 x 1
180476	wfsj1610+5430_042	16:15:33.40	+54:50:00.0	J2000.00	1.331	179.7	00:40:19.9	599.4	U	RGO	1	1 x 1
180477	wfsj1610+5430_042	16:15:33.40	+54:50:00.0	J2000.00	1.331	179.7	00:40:19.9	599.4	U	RGO	5	1 x 1
180478	wfsj1610+5430_042	16:15:33.40	+54:50:00.0	J2000.00	1.331	179.7	00:40:19.9	599.4	U	RGO	3	1 x 1
180479	wfsj1610+5430_042	16:15:33.40	+54:50:00.0	J2000.00	1.331	179.7	00:40:19.9	599.4	U	RGO	4	1 x 1
180480	wfsj1610+5430_015	16:04:26.60	+54:50:00.0	J2000.00	1.407	179.7	00:53:52.6	598.8	U	RGO	1	1 x 1
180481	wfsj1610+5430_015	16:04:26.60	+54:50:00.0	J2000.00	1.407	179.7	00:53:52.6	598.8	U	RGO	5	1 x 1
180482	wfsj1610+5430_015	16:04:26.60	+54:50:00.0	J2000.00	1.407	179.7	00:53:52.6	598.8	U	RGO	3	1 x 1
180483	wfsj1610+5430_015	16:04:26.60	+54:50:00.0	J2000.00	1.407	179.7	00:53:52.6	598.8	U	RGO	4	1 x 1
180484	sa110-361 U	18:42:45.00	+00:08:04.0	J2000.00	1.174	179.7	01:08:52.6	19.6	U	RGO	1	1 x 1
180485	sa110-361 U	18:42:45.00	+00:08:04.0	J2000.00	1.174	179.7	01:08:52.6	19.6	U	RGO	5	1 x 1
180486	sa110-361 U	18:42:45.00	+00:08:04.0	J2000.00	1.174	179.7	01:08:52.6	19.6	U	RGO	3	1 x 1

180487	sa110-361	U	18:42:45.00	+00:08:04.0	J2000.00	1.174	179.7	01:08:52.6	19.6	U	RGO	4	1 x 1
180488	sa110-361	g	18:42:45.00	+00:08:04.0	J2000.00	1.178	179.7	01:12:12.2	10.1	g	Sloan	1	1 x 1
180489	sa110-361	g	18:42:45.00	+00:08:04.0	J2000.00	1.178	179.7	01:12:12.2	10.1	g	Sloan	5	1 x 1
180490	sa110-361	g	18:42:45.00	+00:08:04.0	J2000.00	1.178	179.7	01:12:12.2	10.1	g	Sloan	3	1 x 1
180491	sa110-361	g	18:42:45.00	+00:08:04.0	J2000.00	1.178	179.7	01:12:12.2	10.1	g	Sloan	4	1 x 1
180492	sa110-361	r	18:42:45.00	+00:08:04.0	J2000.00	1.183	179.7	01:15:26.5	8.3	r	Sloan	1	1 x 1
180493	sa110-361	r	18:42:45.00	+00:08:04.0	J2000.00	1.183	179.7	01:15:26.5	8.3	r	Sloan	5	1 x 1
180494	sa110-361	r	18:42:45.00	+00:08:04.0	J2000.00	1.183	179.7	01:15:26.5	8.3	r	Sloan	3	1 x 1
180495	sa110-361	r	18:42:45.00	+00:08:04.0	J2000.00	1.183	179.7	01:15:26.5	8.3	r	Sloan	4	1 x 1
180496	sa110-361	i	18:42:45.00	+00:08:04.0	J2000.00	1.188	179.7	01:18:45.4	10.1	i	Sloan	1	1 x 1
180497	sa110-361	i	18:42:45.00	+00:08:04.0	J2000.00	1.188	179.7	01:18:45.4	10.1	i	Sloan	5	1 x 1
180498	sa110-361	i	18:42:45.00	+00:08:04.0	J2000.00	1.188	179.7	01:18:45.4	10.1	i	Sloan	3	1 x 1
180499	sa110-361	i	18:42:45.00	+00:08:04.0	J2000.00	1.188	179.7	01:18:45.4	10.1	i	Sloan	4	1 x 1
180500	sa110-361	Z	18:42:45.00	+00:08:03.9	J2000.00	1.193	179.7	01:21:53.5	9.6	z	Gunn	1	1 x 1
180501	sa110-361	Z	18:42:45.00	+00:08:03.9	J2000.00	1.193	179.7	01:21:53.5	9.6	z	Gunn	5	1 x 1
180502	sa110-361	Z	18:42:45.00	+00:08:03.9	J2000.00	1.193	179.7	01:21:53.5	9.6	z	Gunn	3	1 x 1
180503	sa110-361	Z	18:42:45.00	+00:08:03.9	J2000.00	1.193	179.7	01:21:53.5	9.6	z	Gunn	4	1 x 1
180504	UKIRT	U	20:00:02.99	+54:57:17.8	J2000.00	1.114	179.7	01:26:25.5	599.5	U	RGO	1	1 x 1
180505	UKIRT	U	20:00:02.99	+54:57:17.8	J2000.00	1.114	179.7	01:26:25.5	599.5	U	RGO	5	1 x 1
180506	UKIRT	U	20:00:02.99	+54:57:17.8	J2000.00	1.114	179.7	01:26:25.5	599.5	U	RGO	3	1 x 1
180507	UKIRT	U	20:00:02.99	+54:57:17.8	J2000.00	1.114	179.7	01:26:25.5	599.5	U	RGO	4	1 x 1
180512	ukirt	Z	20:00:02.99	+54:57:17.8	J2000.00	1.116	179.7	01:40:34.1	598.2	z	Gunn	1	1 x 1
180513	ukirt	Z	20:00:02.99	+54:57:17.8	J2000.00	1.116	179.7	01:40:34.1	598.2	z	Gunn	5	1 x 1
180514	ukirt	Z	20:00:02.99	+54:57:17.8	J2000.00	1.116	179.7	01:40:34.1	598.2	z	Gunn	3	1 x 1
180515	ukirt	Z	20:00:02.99	+54:57:17.8	J2000.00	1.116	179.7	01:40:34.1	598.2	z	Gunn	4	1 x 1
180516	ukirt	r	20:00:02.99	+54:57:17.9	J2000.00	1.119	179.7	01:53:42.4	599.4	r	Sloan	1	1 x 1
180517	ukirt	r	20:00:02.99	+54:57:17.9	J2000.00	1.119	179.7	01:53:42.4	599.4	r	Sloan	5	1 x 1
180518	ukirt	r	20:00:02.99	+54:57:17.9	J2000.00	1.119	179.7	01:53:42.4	599.4	r	Sloan	3	1 x 1
180519	ukirt	r	20:00:02.99	+54:57:17.9	J2000.00	1.119	179.7	01:53:42.4	599.4	r	Sloan	4	1 x 1
180520	ukirt	i	20:00:02.99	+54:57:17.8	J2000.00	1.125	179.7	02:06:50.6	599.4	i	Sloan	1	1 x 1
180521	ukirt	i	20:00:02.99	+54:57:17.8	J2000.00	1.125	179.7	02:06:50.6	599.4	i	Sloan	5	1 x 1
180522	ukirt	i	20:00:02.99	+54:57:17.8	J2000.00	1.125	179.7	02:06:50.6	599.4	i	Sloan	3	1 x 1
180523	ukirt	i	20:00:02.99	+54:57:17.8	J2000.00	1.125	179.7	02:06:50.6	599.4	i	Sloan	4	1 x 1
180524	ukirt	g	20:00:03.00	+54:57:17.8	J2000.00	1.133	179.7	02:20:06.0	599.0	g	Sloan	1	1 x 1
180525	ukirt	g	20:00:03.00	+54:57:17.8	J2000.00	1.133	179.7	02:20:06.0	599.0	g	Sloan	5	1 x 1
180526	ukirt	g	20:00:03.00	+54:57:17.8	J2000.00	1.133	179.7	02:20:06.0	599.0	g	Sloan	3	1 x 1
180527	ukirt	g	20:00:03.00	+54:57:17.8	J2000.00	1.133	179.7	02:20:06.0	599.0	g	Sloan	4	1 x 1
180528	wfsj2240+0000_005		22:34:39.99	+00:00:00.0	J2000.00	1.218	179.7	02:37:03.7	599.5	U	RGO	1	1 x 1
180529	wfsj2240+0000_005		22:34:39.99	+00:00:00.0	J2000.00	1.218	179.7	02:37:03.7	599.5	U	RGO	5	1 x 1
180530	wfsj2240+0000_005		22:34:39.99	+00:00:00.0	J2000.00	1.218	179.7	02:37:03.7	599.5	U	RGO	3	1 x 1
180531	wfsj2240+0000_005		22:34:39.99	+00:00:00.0	J2000.00	1.218	179.7	02:37:03.7	599.5	U	RGO	4	1 x 1
180536	wfsj2240+0000_005		22:34:40.00	+00:00:00.0	J2000.00	1.191	179.7	02:52:18.5	599.3	z	Gunn	1	1 x 1
180537	wfsj2240+0000_005		22:34:40.00	+00:00:00.0	J2000.00	1.191	179.7	02:52:18.5	599.3	z	Gunn	5	1 x 1
180538	wfsj2240+0000_005		22:34:40.00	+00:00:00.0	J2000.00	1.191	179.7	02:52:18.5	599.3	z	Gunn	3	1 x 1
180539	wfsj2240+0000_005		22:34:40.00	+00:00:00.0	J2000.00	1.191	179.7	02:52:18.5	599.3	z	Gunn	4	1 x 1
180540	wfsj2240+0000_005		22:34:40.00	-00:00:00.0	J2000.00	1.173	179.7	03:05:25.2	599.4	r	Sloan	1	1 x 1
180541	wfsj2240+0000_005		22:34:40.00	-00:00:00.0	J2000.00	1.173	179.7	03:05:25.2	599.4	r	Sloan	5	1 x 1
180542	wfsj2240+0000_005		22:34:40.00	-00:00:00.0	J2000.00	1.173	179.7	03:05:25.2	599.4	r	Sloan	3	1 x 1
180543	wfsj2240+0000_005		22:34:40.00	-00:00:00.0	J2000.00	1.173	179.7	03:05:25.2	599.4	r	Sloan	4	1 x 1
180544	wfsj2240+0000_005		22:34:40.00	-00:00:00.0	J2000.00	1.159	179.7	03:18:35.4	599.4	i	Sloan	1	1 x 1
180545	wfsj2240+0000_005		22:34:40.00	-00:00:00.0	J2000.00	1.159	179.7	03:18:35.4	599.4	i	Sloan	5	1 x 1
180546	wfsj2240+0000_005		22:34:40.00	-00:00:00.0	J2000.00	1.159	179.7	03:18:35.4	599.4	i	Sloan	3	1 x 1
180547	wfsj2240+0000_005		22:34:40.00	-00:00:00.0	J2000.00	1.159	179.7	03:18:35.4	599.4	i	Sloan	4	1 x 1
180548	wfsj2240+0000_005		22:34:40.00	-00:00:00.0	J2000.00	1.149	179.7	03:31:47.8	599.6	g	Sloan	1	1 x 1
180549	wfsj2240+0000_005		22:34:40.00	-00:00:00.0	J2000.00	1.149	179.7	03:31:47.8	599.6	g	Sloan	5	1 x 1
180550	wfsj2240+0000_005		22:34:40.00	-00:00:00.0	J2000.00	1.149	179.7	03:31:47.8	599.6	g	Sloan	3	1 x 1
180551	wfsj2240+0000_005		22:34:40.00	-00:00:00.0	J2000.00	1.149	179.7	03:31:47.8	599.6	g	Sloan	4	1 x 1
180552	wfsj2240+0000_050		22:45:19.99	-00:00:00.0	J2000.00	1.144	179.7	03:51:37.0	599.5	U	RGO	1	1 x 1
180553	wfsj2240+0000_050		22:45:19.99	-00:00:00.0	J2000.00	1.144	179.7	03:51:37.0	599.5	U	RGO	5	1 x 1
180554	wfsj2240+0000_050		22:45:19.99	-00:00:00.0	J2000.00	1.144	179.7	03:51:37.0	599.5	U	RGO	3	1 x 1
180555	wfsj2240+0000_050		22:45:19.99	-00:00:00.0	J2000.00	1.144	179.7	03:51:37.0	599.5	U	RGO	4	1 x 1
180560	wfsj2240+0000_050		22:45:20.00	-00:00:00.0	J2000.00	1.141	179.7	04:05:48.8	599.5	z	Gunn	1	1 x 1

180561	wfsj2240+0000_050	22:45:20.00	-00:00:00.0	J2000.00	1.141	179.7	04:05:48.8	599.5	z	Gunn	5	1 x 1
180562	wfsj2240+0000_050	22:45:20.00	-00:00:00.0	J2000.00	1.141	179.7	04:05:48.8	599.5	z	Gunn	3	1 x 1
180563	wfsj2240+0000_050	22:45:20.00	-00:00:00.0	J2000.00	1.141	179.7	04:05:48.8	599.5	z	Gunn	4	1 x 1
180568	wfsj2240+0000_050	22:45:20.00	+00:00:00.0	J2000.00	1.141	179.7	04:19:15.8	599.5	i	Sloan	1	1 x 1
180569	wfsj2240+0000_050	22:45:20.00	+00:00:00.0	J2000.00	1.141	179.7	04:19:15.8	599.5	i	Sloan	5	1 x 1
180570	wfsj2240+0000_050	22:45:20.00	+00:00:00.0	J2000.00	1.141	179.7	04:19:15.8	599.5	i	Sloan	3	1 x 1
180571	wfsj2240+0000_050	22:45:20.00	+00:00:00.0	J2000.00	1.141	179.7	04:19:15.8	599.5	i	Sloan	4	1 x 1
180572	wfsj2240+0000_050	22:45:19.99	+00:00:00.0	J2000.00	1.146	179.7	04:32:28.7	599.4	g	Sloan	1	1 x 1
180573	wfsj2240+0000_050	22:45:19.99	+00:00:00.0	J2000.00	1.146	179.7	04:32:28.7	599.4	g	Sloan	5	1 x 1
180574	wfsj2240+0000_050	22:45:19.99	+00:00:00.0	J2000.00	1.146	179.7	04:32:28.7	599.4	g	Sloan	3	1 x 1
180575	wfsj2240+0000_050	22:45:19.99	+00:00:00.0	J2000.00	1.146	179.7	04:32:28.7	599.4	g	Sloan	4	1 x 1
180576	wfsj2240+0000_050	22:45:20.00	-00:00:00.0	J2000.00	1.155	179.7	04:45:25.9	599.5	r	Sloan	1	1 x 1 No guided
180577	wfsj2240+0000_050	22:45:20.00	-00:00:00.0	J2000.00	1.155	179.7	04:45:25.9	599.5	r	Sloan	5	1 x 1 Check
180578	wfsj2240+0000_050	22:45:20.00	-00:00:00.0	J2000.00	1.155	179.7	04:45:25.9	599.5	r	Sloan	3	1 x 1
180579	wfsj2240+0000_050	22:45:20.00	-00:00:00.0	J2000.00	1.155	179.7	04:45:25.9	599.5	r	Sloan	4	1 x 1
180580	wfsj2240+0000_012	22:36:47.99	-00:40:00.0	J2000.00	1.186	179.7	04:59:01.5	599.4	i	Sloan	1	1 x 1
180581	wfsj2240+0000_012	22:36:47.99	-00:40:00.0	J2000.00	1.186	179.7	04:59:01.5	599.4	i	Sloan	5	1 x 1
180582	wfsj2240+0000_012	22:36:47.99	-00:40:00.0	J2000.00	1.186	179.7	04:59:01.5	599.4	i	Sloan	3	1 x 1
180583	wfsj2240+0000_012	22:36:47.99	-00:40:00.0	J2000.00	1.186	179.7	04:59:01.5	599.4	i	Sloan	4	1 x 1
180584	wfsj2240+0000_012	22:36:47.99	-00:39:59.9	J2000.00	1.205	179.7	05:11:58.6	599.5	z	Gunn	1	1 x 1
180585	wfsj2240+0000_012	22:36:47.99	-00:39:59.9	J2000.00	1.205	179.7	05:11:58.6	599.5	z	Gunn	5	1 x 1
180586	wfsj2240+0000_012	22:36:47.99	-00:39:59.9	J2000.00	1.205	179.7	05:11:58.6	599.5	z	Gunn	3	1 x 1
180587	wfsj2240+0000_012	22:36:47.99	-00:39:59.9	J2000.00	1.205	179.7	05:11:58.6	599.5	z	Gunn	4	1 x 1
180588	sa113-163 i	21:42:35.00	+00:16:45.9	J2000.00	1.360	179.7	05:25:02.4	10.2	i	Sloan	1	1 x 1
180589	sa113-163 i	21:42:35.00	+00:16:45.9	J2000.00	1.360	179.7	05:25:02.4	10.2	i	Sloan	5	1 x 1
180590	sa113-163 i	21:42:35.00	+00:16:45.9	J2000.00	1.360	179.7	05:25:02.4	10.2	i	Sloan	3	1 x 1
180591	sa113-163 i	21:42:35.00	+00:16:45.9	J2000.00	1.360	179.7	05:25:02.4	10.2	i	Sloan	4	1 x 1
180592	sa113-163 r	21:42:35.00	+00:16:45.9	J2000.00	1.372	179.7	05:28:09.6	10.1	r	Sloan	1	1 x 1
180593	sa113-163 r	21:42:35.00	+00:16:45.9	J2000.00	1.372	179.7	05:28:09.6	10.1	r	Sloan	5	1 x 1
180594	sa113-163 r	21:42:35.00	+00:16:45.9	J2000.00	1.372	179.7	05:28:09.6	10.1	r	Sloan	3	1 x 1
180595	sa113-163 r	21:42:35.00	+00:16:45.9	J2000.00	1.372	179.7	05:28:09.6	10.1	r	Sloan	4	1 x 1
180596	sa113-163 g	21:42:35.00	+00:16:46.0	J2000.00	1.385	179.7	05:31:15.5	10.1	g	Sloan	1	1 x 1
180597	sa113-163 g	21:42:35.00	+00:16:46.0	J2000.00	1.385	179.7	05:31:15.5	10.1	g	Sloan	5	1 x 1
180598	sa113-163 g	21:42:35.00	+00:16:46.0	J2000.00	1.385	179.7	05:31:15.5	10.1	g	Sloan	3	1 x 1
180599	sa113-163 g	21:42:35.00	+00:16:46.0	J2000.00	1.385	179.7	05:31:15.5	10.1	g	Sloan	4	1 x 1