INT OBSERVING LOG (ISAAC NEWTON GROUP, LA PALMA)

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TELESCOPE:             INT
DATE:                  1999 JUL 16/17
INT TAPE NR:           INTD 4117
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):   17.5            (FIRST HALF)
OUTSIDE TEMP (deg C):   17.8            (SECOND HALF)
HUMIDITY (%):           10              (FIRST HALF)
HUMIDITY (%):           12              (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):         0.8            (FIRST HALF)
SEEING (arcsec):         1.2            (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:            07:09
DOME OPEN (UTC):       18:52
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:

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

 179976 Bias frame            0:00:00.00 +00:00:00.0 A        4.168 179.7 14:16:05.3      0.0        z       Gunn    1      1 x 1
 179977 Bias frame            0:00:00.00 +00:00:00.0 A        4.168 179.7 14:16:05.3      0.0        z       Gunn    5      1 x 1
 179978 Bias frame            0:00:00.00 +00:00:00.0 A        4.168 179.7 14:16:05.3      0.0        z       Gunn    3      1 x 1
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179979	Bias frame	0:00:00.00	+00:00:00.0	A	4.168	179.7	14:16:05.3	0.0	z	Gunn 4	1 x 1
179980	Bias frame	0:00:00.00	+00:00:00.0	A	4.168	179.7	14:25:19.6	0.0	z	Gunn 1	1 x 1
179981	Bias frame	0:00:00.00	+00:00:00.0	A	4.168	179.7	14:25:19.6	0.0	z	Gunn 5	1 x 1
179982	Bias frame	0:00:00.00	+00:00:00.0	A	4.168	179.7	14:25:19.6	0.0	z	Gunn 3	1 x 1
179983	Bias frame	0:00:00.00	+00:00:00.0	A	4.168	179.7	14:25:19.6	0.0	z	Gunn 4	1 x 1
179984	Bias frame	0:00:00.00	+00:00:00.0	A	4.168	179.7	14:29:03.1	0.0	z	Gunn 1	1 x 1
179985	Bias frame	0:00:00.00	+00:00:00.0	A	4.168	179.7	14:29:03.1	0.0	z	Gunn 5	1 x 1
179986	Bias frame	0:00:00.00	+00:00:00.0	A	4.168	179.7	14:29:03.1	0.0	z	Gunn 3	1 x 1
179987	Bias frame	0:00:00.00	+00:00:00.0	A	4.168	179.7	14:29:03.1	0.0	z	Gunn 4	1 x 1
179988	Bias frame	0:00:00.00	+00:00:00.0	A	4.168	179.7	14:32:06.4	0.0	z	Gunn 1	1 x 1
179989	Bias frame	0:00:00.00	+00:00:00.0	A	4.168	179.7	14:32:06.4	0.0	z	Gunn 5	1 x 1
179990	Bias frame	0:00:00.00	+00:00:00.0	A	4.168	179.7	14:32:06.4	0.0	z	Gunn 3	1 x 1
179991	Bias frame	0:00:00.00	+00:00:00.0	A	4.168	179.7	14:32:06.4	0.0	z	Gunn 4	1 x 1
179992	Bias frame	0:00:00.00	+00:00:00.0	A	4.168	179.7	14:35:12.4	0.0	z	Gunn 1	1 x 1
179993	Bias frame	0:00:00.00	+00:00:00.0	A	4.168	179.7	14:35:12.4	0.0	z	Gunn 5	1 x 1
179994	Bias frame	0:00:00.00	+00:00:00.0	A	4.168	179.7	14:35:12.4	0.0	z	Gunn 3	1 x 1
179995	Bias frame	0:00:00.00	+00:00:00.0	A	4.168	179.7	14:35:12.4	0.0	z	Gunn 4	1 x 1
179996	Dome flat 1	0:00:00.00	+00:00:00.0	A	4.168	179.7	14:54:45.5	1.1	z	Gunn 1	1 x 1
179997	Dome flat 1	0:00:00.00	+00:00:00.0	A	4.168	179.7	14:54:45.5	1.1	z	Gunn 5	1 x 1
179998	Dome flat 1	0:00:00.00	+00:00:00.0	A	4.168	179.7	14:54:45.5	1.1	z	Gunn 3	1 x 1
179999	Dome flat 1	0:00:00.00	+00:00:00.0	A	4.168	179.7	14:54:45.5	1.1	z	Gunn 4	1 x 1
180000	Dome flat 2	0:00:00.00	+00:00:00.0	A	4.168	179.7	14:57:44.2	2.1	z	Gunn 1	1 x 1
180001	Dome flat 2	0:00:00.00	+00:00:00.0	A	4.168	179.7	14:57:44.2	2.1	z	Gunn 5	1 x 1
180002	Dome flat 2	0:00:00.00	+00:00:00.0	A	4.168	179.7	14:57:44.2	2.1	z	Gunn 3	1 x 1
180003	Dome flat 2	0:00:00.00	+00:00:00.0	A	4.168	179.7	14:57:44.2	2.1	z	Gunn 4	1 x 1
180004	Dome flat 3	0:00:00.00	+00:00:00.0	A	4.168	179.7	15:00:42.8	2.7	z	Gunn 1	1 x 1
180005	Dome flat 3	0:00:00.00	+00:00:00.0	A	4.168	179.7	15:00:42.8	2.7	z	Gunn 5	1 x 1
180006	Dome flat 3	0:00:00.00	+00:00:00.0	A	4.168	179.7	15:00:42.8	2.7	z	Gunn 3	1 x 1
180007	Dome flat 3	0:00:00.00	+00:00:00.0	A	4.168	179.7	15:00:42.8	2.7	z	Gunn 4	1 x 1
180008	Dome flat 4	0:00:00.00	+00:00:00.0	A	4.168	179.7	15:03:43.3	4.1	z	Gunn 1	1 x 1
180009	Dome flat 4	0:00:00.00	+00:00:00.0	A	4.168	179.7	15:03:43.3	4.1	z	Gunn 5	1 x 1
180010	Dome flat 4	0:00:00.00	+00:00:00.0	A	4.168	179.7	15:03:43.3	4.1	z	Gunn 3	1 x 1
180011	Dome flat 4	0:00:00.00	+00:00:00.0	A	4.168	179.7	15:03:43.3	4.1	z	Gunn 4	1 x 1
180012	Dome flat 5	0:00:00.00	+00:00:00.0	A	4.168	179.7	15:06:43.3	5.1	z	Gunn 1	1 x 1
180013	Dome flat 5	0:00:00.00	+00:00:00.0	A	4.168	179.7	15:06:43.3	5.1	z	Gunn 5	1 x 1
180014	Dome flat 5	0:00:00.00	+00:00:00.0	A	4.168	179.7	15:06:43.3	5.1	z	Gunn 3	1 x 1
180015	Dome flat 5	0:00:00.00	+00:00:00.0	A	4.168	179.7	15:06:43.3	5.1	z	Gunn 4	1 x 1
180016	Dome flat 6	0:00:00.00	+00:00:00.0	A	4.168	179.7	15:09:46.6	6.1	z	Gunn 1	1 x 1
180017	Dome flat 6	0:00:00.00	+00:00:00.0	A	4.168	179.7	15:09:46.6	6.1	z	Gunn 5	1 x 1
180018	Dome flat 6	0:00:00.00	+00:00:00.0	A	4.168	179.7	15:09:46.6	6.1	z	Gunn 3	1 x 1
180019	Dome flat 6	0:00:00.00	+00:00:00.0	A	4.168	179.7	15:09:46.6	6.1	z	Gunn 4	1 x 1
180020	Dome flat 7	0:00:00.00	+00:00:00.0	A	4.168	179.7	15:12:48.7	7.1	z	Gunn 1	1 x 1
180021	Dome flat 7	0:00:00.00	+00:00:00.0	A	4.168	179.7	15:12:48.7	7.1	z	Gunn 5	1 x 1
180022	Dome flat 7	0:00:00.00	+00:00:00.0	A	4.168	179.7	15:12:48.7	7.1	z	Gunn 3	1 x 1
180023	Dome flat 7	0:00:00.00	+00:00:00.0	A	4.168	179.7	15:12:48.7	7.1	z	Gunn 4	1 x 1
180024	Dome flat 8	0:00:00.00	+00:00:00.0	A	4.168	179.7	15:15:52.6	8.0	z	Gunn 1	1 x 1
180025	Dome flat 8	0:00:00.00	+00:00:00.0	A	4.168	179.7	15:15:52.6	8.0	z	Gunn 5	1 x 1
180026	Dome flat 8	0:00:00.00	+00:00:00.0	A	4.168	179.7	15:15:52.6	8.0	z	Gunn 3	1 x 1
180027	Dome flat 8	0:00:00.00	+00:00:00.0	A	4.168	179.7	15:15:52.6	8.0	z	Gunn 4	1 x 1
180028	Dome flat 9	0:00:00.00	+00:00:00.0	A	4.168	179.7	15:18:57.6	8.6	z	Gunn 1	1 x 1
180029	Dome flat 9	0:00:00.00	+00:00:00.0	A	4.168	179.7	15:18:57.6	8.6	z	Gunn 5	1 x 1
180030	Dome flat 9	0:00:00.00	+00:00:00.0	A	4.168	179.7	15:18:57.6	8.6	z	Gunn 3	1 x 1
180031	Dome flat 9	0:00:00.00	+00:00:00.0	A	4.168	179.7	15:18:57.6	8.6	z	Gunn 4	1 x 1
180032	Dome flat 10	0:00:00.00	+00:00:00.0	A	4.168	179.7	15:22:04.0	10.1	z	Gunn 1	1 x 1
180033	Dome flat 10	0:00:00.00	+00:00:00.0	A	4.168	179.7	15:22:04.0	10.1	z	Gunn 5	1 x 1
180034	Dome flat 10	0:00:00.00	+00:00:00.0	A	4.168	179.7	15:22:04.0	10.1	z	Gunn 3	1 x 1
180035	Dome flat 10	0:00:00.00	+00:00:00.0	A	4.168	179.7	15:22:04.0	10.1	z	Gunn 4	1 x 1
180036	Dome flat 11	0:00:00.00	+00:00:00.0	A	4.168	179.7	15:25:10.7	11.1	z	Gunn 1	1 x 1
180037	Dome flat 11	0:00:00.00	+00:00:00.0	A	4.168	179.7	15:25:10.7	11.1	z	Gunn 5	1 x 1
180038	Dome flat 11	0:00:00.00	+00:00:00.0	A	4.168	179.7	15:25:10.7	11.1	z	Gunn 3	1 x 1
180039	Dome flat 11	0:00:00.00	+00:00:00.0	A	4.168	179.7	15:25:10.7	11.1	z	Gunn 4	1 x 1
180040	Dome flat 12	0:00:00.00	+00:00:00.0	A	4.168	179.7	15:28:18.3	12.2	z	Gunn 1	1 x 1

180041	Dome flat 12	0:00:00.00	+00:00:00.0	A	4.168 179.7 15:28:18.3	12.2	z	Gunn 5	1 x 1
180042	Dome flat 12	0:00:00.00	+00:00:00.0	A	4.168 179.7 15:28:18.3	12.2	z	Gunn 3	1 x 1
180043	Dome flat 12	0:00:00.00	+00:00:00.0	A	4.168 179.7 15:28:18.3	12.2	z	Gunn 4	1 x 1
180044	Dome flat 13	0:00:00.00	+00:00:00.0	A	4.168 179.7 15:31:25.9	13.1	z	Gunn 1	1 x 1
180045	Dome flat 13	0:00:00.00	+00:00:00.0	A	4.168 179.7 15:31:25.9	13.1	z	Gunn 5	1 x 1
180046	Dome flat 13	0:00:00.00	+00:00:00.0	A	4.168 179.7 15:31:25.9	13.1	z	Gunn 3	1 x 1
180047	Dome flat 13	0:00:00.00	+00:00:00.0	A	4.168 179.7 15:31:25.9	13.1	z	Gunn 4	1 x 1
180048	Dome flat 14	0:00:00.00	+00:00:00.0	A	4.168 179.7 15:34:36.8	14.1	z	Gunn 1	1 x 1
180049	Dome flat 14	0:00:00.00	+00:00:00.0	A	4.168 179.7 15:34:36.8	14.1	z	Gunn 5	1 x 1
180050	Dome flat 14	0:00:00.00	+00:00:00.0	A	4.168 179.7 15:34:36.8	14.1	z	Gunn 3	1 x 1
180051	Dome flat 14	0:00:00.00	+00:00:00.0	A	4.168 179.7 15:34:36.8	14.1	z	Gunn 4	1 x 1
180052	Dome flat 15	0:00:00.00	+00:00:00.0	A	4.168 179.7 15:37:47.2	15.1	z	Gunn 1	1 x 1
180053	Dome flat 15	0:00:00.00	+00:00:00.0	A	4.168 179.7 15:37:47.2	15.1	z	Gunn 5	1 x 1
180054	Dome flat 15	0:00:00.00	+00:00:00.0	A	4.168 179.7 15:37:47.2	15.1	z	Gunn 3	1 x 1
180055	Dome flat 15	0:00:00.00	+00:00:00.0	A	4.168 179.7 15:37:47.2	15.1	z	Gunn 4	1 x 1
180056	Dome flat 16	0:00:00.00	+00:00:00.0	A	4.168 179.7 15:40:57.6	15.6	z	Gunn 1	1 x 1
180057	Dome flat 16	0:00:00.00	+00:00:00.0	A	4.168 179.7 15:40:57.6	15.6	z	Gunn 5	1 x 1
180058	Dome flat 16	0:00:00.00	+00:00:00.0	A	4.168 179.7 15:40:57.6	15.6	z	Gunn 3	1 x 1
180059	Dome flat 16	0:00:00.00	+00:00:00.0	A	4.168 179.7 15:40:57.6	15.6	z	Gunn 4	1 x 1 IDS spurions
180065	Dome flat 17	0:00:00.00	+00:00:00.0	A	4.168 179.7 15:44:08.9	17.1	z	Gunn 1	1 x 1 from here
180066	Dome flat 17	0:00:00.00	+00:00:00.0	A	4.168 179.7 15:44:08.9	17.1	z	Gunn 5	1 x 1 on caused
180067	Dome flat 17	0:00:00.00	+00:00:00.0	A	4.168 179.7 15:44:08.9	17.1	z	Gunn 3	1 x 1 strange
180068	Dome flat 17	0:00:00.00	+00:00:00.0	A	4.168 179.7 15:44:08.9	17.1	z	Gunn 4	1 x 1 run nos.
180070	Dome flat 18	0:00:00.00	+00:00:00.0	A	4.168 179.7 15:47:26.2	16.2	z	Gunn 1	1 x 1
180071	Dome flat 18	0:00:00.00	+00:00:00.0	A	4.168 179.7 15:47:26.2	16.2	z	Gunn 5	1 x 1 MCA timing
180072	Dome flat 18	0:00:00.00	+00:00:00.0	A	4.168 179.7 15:47:26.2	16.2	z	Gunn 3	1 x 1 FU'd
180073	Dome flat 18	0:00:00.00	+00:00:00.0	A	4.168 179.7 15:47:26.2	16.2	z	Gunn 4	1 x 1
180076	Dome flat 19	0:00:00.00	+00:00:00.0	A	4.168 179.7 15:50:41.6	0.0	z	Gunn 1	1 x 1 |
180077	Dome flat 19	0:00:00.00	+00:00:00.0	A	4.168 179.7 15:50:41.6	0.0	z	Gunn 5	1 x 1 |
180078	Dome flat 19	0:00:00.00	+00:00:00.0	A	4.168 179.7 15:50:41.6	0.0	z	Gunn 3	1 x 1 V
180079	Dome flat 19	0:00:00.00	+00:00:00.0	A	4.168 179.7 15:50:41.6	0.0	z	Gunn 4	1 x 1
180080	Dome flat 20	0:00:00.00	+00:00:00.0	A	4.168 179.7 15:53:56.6	0.0	z	Gunn 1	1 x 1
180081	Dome flat 20	0:00:00.00	+00:00:00.0	A	4.168 179.7 15:53:56.6	0.0	z	Gunn 5	1 x 1
180082	Dome flat 20	0:00:00.00	+00:00:00.0	A	4.168 179.7 15:53:56.6	0.0	z	Gunn 3	1 x 1
180083	Dome flat 20	0:00:00.00	+00:00:00.0	A	4.168 179.7 15:53:56.6	0.0	z	Gunn 4	1 x 1
180084	Dome flat 21	0:00:00.00	+00:00:00.0	A	4.168 179.7 15:57:12.1	0.0	z	Gunn 1	1 x 1
180085	Dome flat 21	0:00:00.00	+00:00:00.0	A	4.168 179.7 15:57:12.1	0.0	z	Gunn 5	1 x 1
180086	Dome flat 21	0:00:00.00	+00:00:00.0	A	4.168 179.7 15:57:12.1	0.0	z	Gunn 3	1 x 1
180087	Dome flat 21	0:00:00.00	+00:00:00.0	A	4.168 179.7 15:57:12.1	0.0	z	Gunn 4	1 x 1
180088	Dome flat 22	0:00:00.00	+00:00:00.0	A	4.168 179.7 16:00:29.4	0.0	z	Gunn 1	1 x 1
180089	Dome flat 22	0:00:00.00	+00:00:00.0	A	4.168 179.7 16:00:29.4	0.0	z	Gunn 5	1 x 1
180090	Dome flat 22	0:00:00.00	+00:00:00.0	A	4.168 179.7 16:00:29.4	0.0	z	Gunn 3	1 x 1
180091	Dome flat 22	0:00:00.00	+00:00:00.0	A	4.168 179.7 16:00:29.4	0.0	z	Gunn 4	1 x 1
180092	Dome flat 23	0:00:00.00	+00:00:00.0	A	4.168 179.7 16:03:47.4	0.0	z	Gunn 1	1 x 1
180093	Dome flat 23	0:00:00.00	+00:00:00.0	A	4.168 179.7 16:03:47.4	0.0	z	Gunn 5	1 x 1
180094	Dome flat 23	0:00:00.00	+00:00:00.0	A	4.168 179.7 16:03:47.4	0.0	z	Gunn 3	1 x 1
180095	Dome flat 23	0:00:00.00	+00:00:00.0	A	4.168 179.7 16:03:47.4	0.0	z	Gunn 4	1 x 1
180096	Dome flat 24	0:00:00.00	+00:00:00.0	A	4.168 179.7 16:07:05.1	0.0	z	Gunn 1	1 x 1
180097	Dome flat 24	0:00:00.00	+00:00:00.0	A	4.168 179.7 16:07:05.1	0.0	z	Gunn 5	1 x 1
180098	Dome flat 24	0:00:00.00	+00:00:00.0	A	4.168 179.7 16:07:05.1	0.0	z	Gunn 3	1 x 1
180099	Dome flat 24	0:00:00.00	+00:00:00.0	A	4.168 179.7 16:07:05.1	0.0	z	Gunn 4	1 x 1
180100	Dome flat 25	0:00:00.00	+00:00:00.0	A	4.168 179.7 16:10:24.8	0.0	z	Gunn 1	1 x 1
180101	Dome flat 25	0:00:00.00	+00:00:00.0	A	4.168 179.7 16:10:24.8	0.0	z	Gunn 5	1 x 1
180102	Dome flat 25	0:00:00.00	+00:00:00.0	A	4.168 179.7 16:10:24.8	0.0	z	Gunn 3	1 x 1
180103	Dome flat 25	0:00:00.00	+00:00:00.0	A	4.168 179.7 16:10:24.8	0.0	z	Gunn 4	1 x 1
180104	Dome flat 26	0:00:00.00	+00:00:00.0	A	4.168 179.7 16:13:46.7	0.0	z	Gunn 1	1 x 1
180105	Dome flat 26	0:00:00.00	+00:00:00.0	A	4.168 179.7 16:13:46.7	0.0	z	Gunn 5	1 x 1
180106	Dome flat 26	0:00:00.00	+00:00:00.0	A	4.168 179.7 16:13:46.7	0.0	z	Gunn 3	1 x 1
180107	Dome flat 26	0:00:00.00	+00:00:00.0	A	4.168 179.7 16:13:46.7	0.0	z	Gunn 4	1 x 1
180108	Dome flat 27	0:00:00.00	+00:00:00.0	A	4.168 179.7 16:17:07.8	0.0	z	Gunn 1	1 x 1
180109	Dome flat 27	0:00:00.00	+00:00:00.0	A	4.168 179.7 16:17:07.8	0.0	z	Gunn 5	1 x 1
180110	Dome flat 27	0:00:00.00	+00:00:00.0	A	4.168 179.7 16:17:07.8	0.0	z	Gunn 3	1 x 1

180111	Dome flat 27	0:00:00.00	+00:00:00.0	A	4.168	179.7	16:17:07.8	0.0	z	Gunn	4	1 x 1
180112	Dome flat 28	0:00:00.00	+00:00:00.0	A	4.168	179.7	16:20:29.6	0.0	z	Gunn	1	1 x 1
180113	Dome flat 28	0:00:00.00	+00:00:00.0	A	4.168	179.7	16:20:29.6	0.0	z	Gunn	5	1 x 1
180114	Dome flat 28	0:00:00.00	+00:00:00.0	A	4.168	179.7	16:20:29.6	0.0	z	Gunn	3	1 x 1
180115	Dome flat 28	0:00:00.00	+00:00:00.0	A	4.168	179.7	16:20:29.6	0.0	z	Gunn	4	1 x 1
180116	Dome flat 29	0:00:00.00	+00:00:00.0	A	4.168	179.7	16:23:52.5	0.0	z	Gunn	1	1 x 1
180117	Dome flat 29	0:00:00.00	+00:00:00.0	A	4.168	179.7	16:23:52.5	0.0	z	Gunn	5	1 x 1
180118	Dome flat 29	0:00:00.00	+00:00:00.0	A	4.168	179.7	16:23:52.5	0.0	z	Gunn	3	1 x 1
180119	Dome flat 29	0:00:00.00	+00:00:00.0	A	4.168	179.7	16:23:52.5	0.0	z	Gunn	4	1 x 1
180120	Dome flat 30	0:00:00.00	+00:00:00.0	A	4.168	179.7	16:27:18.0	0.0	z	Gunn	1	1 x 1
180121	Dome flat 30	0:00:00.00	+00:00:00.0	A	4.168	179.7	16:27:18.0	0.0	z	Gunn	5	1 x 1
180122	Dome flat 30	0:00:00.00	+00:00:00.0	A	4.168	179.7	16:27:18.0	0.0	z	Gunn	3	1 x 1
180123	Dome flat 30	0:00:00.00	+00:00:00.0	A	4.168	179.7	16:27:18.0	0.0	z	Gunn	4	1 x 1
180124	Dome flat 31	0:00:00.00	+00:00:00.0	A	4.168	179.7	16:30:43.3	0.0	z	Gunn	1	1 x 1
180125	Dome flat 31	0:00:00.00	+00:00:00.0	A	4.168	179.7	16:30:43.3	0.0	z	Gunn	5	1 x 1
180126	Dome flat 31	0:00:00.00	+00:00:00.0	A	4.168	179.7	16:30:43.3	0.0	z	Gunn	3	1 x 1
180127	Dome flat 31	0:00:00.00	+00:00:00.0	A	4.168	179.7	16:30:43.3	0.0	z	Gunn	4	1 x 1
180128	Dome flat 32	0:00:00.00	+00:00:00.0	A	4.168	179.7	16:34:09.4	0.0	z	Gunn	1	1 x 1
180129	Dome flat 32	0:00:00.00	+00:00:00.0	A	4.168	179.7	16:34:09.4	0.0	z	Gunn	5	1 x 1
180130	Dome flat 32	0:00:00.00	+00:00:00.0	A	4.168	179.7	16:34:09.4	0.0	z	Gunn	3	1 x 1
180131	Dome flat 32	0:00:00.00	+00:00:00.0	A	4.168	179.7	16:34:09.4	0.0	z	Gunn	4	1 x 1
180132	Flat field	14:29:59.99	+40:00:00.0	J2000.00	1.024	179.7	20:30:51.5	2.1	U	RGO	1	1 x 1
180133	Flat field	14:29:59.99	+40:00:00.0	J2000.00	1.024	179.7	20:30:51.5	2.1	U	RGO	5	1 x 1
180134	Flat field	14:29:59.99	+40:00:00.0	J2000.00	1.024	179.7	20:30:51.5	2.1	U	RGO	3	1 x 1
180135	Flat field	14:29:59.99	+40:00:00.0	J2000.00	1.024	179.7	20:30:51.5	2.1	U	RGO	4	1 x 1
180136	Flat field	14:30:02.61	+40:00:00.0	J2000.00	1.025	179.7	20:34:07.6	3.6	U	RGO	1	1 x 1
180137	Flat field	14:30:02.61	+40:00:00.0	J2000.00	1.025	179.7	20:34:07.6	3.6	U	RGO	5	1 x 1
180138	Flat field	14:30:02.61	+40:00:00.0	J2000.00	1.025	179.7	20:34:07.6	3.6	U	RGO	3	1 x 1
180139	Flat field	14:30:02.61	+40:00:00.0	J2000.00	1.025	179.7	20:34:07.6	3.6	U	RGO	4	1 x 1
180140	Flat field	14:30:02.61	+39:59:59.9	J2000.00	1.027	179.7	20:38:55.7	2.1	g	Sloan	1	1 x 1
180141	Flat field	14:30:02.61	+39:59:59.9	J2000.00	1.027	179.7	20:38:55.7	2.1	g	Sloan	5	1 x 1
180142	Flat field	14:30:02.61	+39:59:59.9	J2000.00	1.027	179.7	20:38:55.7	2.1	g	Sloan	3	1 x 1
180143	Flat field	14:30:02.61	+39:59:59.9	J2000.00	1.027	179.7	20:38:55.7	2.1	g	Sloan	4	1 x 1
180144	Flat field	14:30:02.61	+40:00:29.9	J2000.00	1.029	179.7	20:42:01.5	4.1	g	Sloan	1	1 x 1
180145	Flat field	14:30:02.61	+40:00:29.9	J2000.00	1.029	179.7	20:42:01.5	4.1	g	Sloan	5	1 x 1
180146	Flat field	14:30:02.61	+40:00:29.9	J2000.00	1.029	179.7	20:42:01.5	4.1	g	Sloan	3	1 x 1
180147	Flat field	14:30:02.61	+40:00:29.9	J2000.00	1.029	179.7	20:42:01.5	4.1	g	Sloan	4	1 x 1
180148	Flat field	14:30:05.21	+39:59:59.9	J2000.00	1.031	179.7	20:45:05.6	9.6	g	Sloan	1	1 x 1
180149	Flat field	14:30:05.21	+39:59:59.9	J2000.00	1.031	179.7	20:45:05.6	9.6	g	Sloan	5	1 x 1
180150	Flat field	14:30:05.21	+39:59:59.9	J2000.00	1.031	179.7	20:45:05.6	9.6	g	Sloan	3	1 x 1
180151	Flat field	14:30:05.21	+39:59:59.9	J2000.00	1.031	179.7	20:45:05.6	9.6	g	Sloan	4	1 x 1
180152	Flat field	14:30:05.22	+39:59:59.9	J2000.00	1.033	179.7	20:48:25.5	40.0	r	Sloan	1	1 x 1
180153	Flat field	14:30:05.22	+39:59:59.9	J2000.00	1.033	179.7	20:48:25.5	40.0	r	Sloan	5	1 x 1
180154	Flat field	14:30:05.22	+39:59:59.9	J2000.00	1.033	179.7	20:48:25.5	40.0	r	Sloan	3	1 x 1
180155	Flat field	14:30:05.22	+39:59:59.9	J2000.00	1.033	179.7	20:48:25.5	40.0	r	Sloan	4	1 x 1
180156	Focus run	15:39:19.00	-00:14:14.0	J2000.00	1.143	179.7	21:18:42.0	10.1	r	Sloan	1	1 x 1
180157	Focus run	15:39:19.00	-00:14:14.0	J2000.00	1.143	179.7	21:18:42.0	10.1	r	Sloan	5	1 x 1
180158	Focus run	15:39:19.00	-00:14:14.0	J2000.00	1.143	179.7	21:18:42.0	10.1	r	Sloan	3	1 x 1
180159	Focus run	15:39:19.00	-00:14:14.0	J2000.00	1.143	179.7	21:18:42.0	10.1	r	Sloan	4	1 x 1
180160	Focus run	15:39:18.99	-00:12:59.0	J2000.00	1.145	179.7	21:29:16.6	9.1	g	Sloan	1	1 x 1
180161	Focus run	15:39:18.99	-00:12:59.0	J2000.00	1.145	179.7	21:29:16.6	9.1	g	Sloan	5	1 x 1
180162	Focus run	15:39:18.99	-00:12:59.0	J2000.00	1.145	179.7	21:29:16.6	9.1	g	Sloan	3	1 x 1
180163	Focus run	15:39:18.99	-00:12:59.0	J2000.00	1.145	179.7	21:29:16.6	9.1	g	Sloan	4	1 x 1
180164	Focus run	15:39:19.00	-00:12:58.9	J2000.00	1.148	179.7	21:35:18.8	10.1	i	Sloan	1	1 x 1
180165	Focus run	15:39:19.00	-00:12:58.9	J2000.00	1.148	179.7	21:35:18.8	10.1	i	Sloan	5	1 x 1
180166	Focus run	15:39:19.00	-00:12:58.9	J2000.00	1.148	179.7	21:35:18.8	10.1	i	Sloan	3	1 x 1
180167	Focus run	15:39:19.00	-00:12:58.9	J2000.00	1.148	179.7	21:35:18.8	10.1	i	Sloan	4	1 x 1
180168	Focus run	15:39:19.00	-00:12:59.0	J2000.00	1.151	179.7	21:41:24.5	9.6	z	Gunn	1	1 x 1
180169	Focus run	15:39:19.00	-00:12:59.0	J2000.00	1.151	179.7	21:41:24.5	9.6	z	Gunn	5	1 x 1
180170	Focus run	15:39:19.00	-00:12:59.0	J2000.00	1.151	179.7	21:41:24.5	9.6	z	Gunn	3	1 x 1
180171	Focus run	15:39:19.00	-00:12:59.0	J2000.00	1.151	179.7	21:41:24.5	9.6	z	Gunn	4	1 x 1
180176	Focus run	15:39:19.00	-00:13:29.0	J2000.00	1.158	179.7	21:51:41.5	0.0	U	RGO	1	1 x 1

180177	Focus run	15:39:19.00	-00:13:29.0	J2000.00	1.158	179.7	21:51:41.5	0.0	U	RGO	5	1 x 1
180178	Focus run	15:39:19.00	-00:13:29.0	J2000.00	1.158	179.7	21:51:41.5	0.0	U	RGO	3	1 x 1
180179	Focus run	15:39:19.00	-00:13:29.0	J2000.00	1.158	179.7	21:51:41.5	0.0	U	RGO	4	1 x 1
180180	wfsj1610+5430_025	16:08:08.00	+55:09:59.9	J2000.00	1.121	179.7	22:06:20.3	599.4	r	Sloan	1	1 x 1
180181	wfsj1610+5430_025	16:08:08.00	+55:09:59.9	J2000.00	1.121	179.7	22:06:20.3	599.4	r	Sloan	5	1 x 1
180182	wfsj1610+5430_025	16:08:08.00	+55:09:59.9	J2000.00	1.121	179.7	22:06:20.3	599.4	r	Sloan	3	1 x 1
180183	wfsj1610+5430_025	16:08:08.00	+55:09:59.9	J2000.00	1.121	179.7	22:06:20.3	599.4	r	Sloan	4	1 x 1
180184	wfsj1610+5430_025	16:08:08.00	+55:10:00.0	J2000.00	1.127	179.7	22:19:35.5	599.4	g	Sloan	1	1 x 1
180185	wfsj1610+5430_025	16:08:08.00	+55:10:00.0	J2000.00	1.127	179.7	22:19:35.5	599.4	g	Sloan	5	1 x 1
180186	wfsj1610+5430_025	16:08:08.00	+55:10:00.0	J2000.00	1.127	179.7	22:19:35.5	599.4	g	Sloan	3	1 x 1
180187	wfsj1610+5430_025	16:08:08.00	+55:10:00.0	J2000.00	1.127	179.7	22:19:35.5	599.4	g	Sloan	4	1 x 1
180188	wfsj1610+5430_025	16:08:07.99	+55:10:00.0	J2000.00	1.135	179.7	22:32:40.3	599.5	i	Sloan	1	1 x 1
180189	wfsj1610+5430_025	16:08:07.99	+55:10:00.0	J2000.00	1.135	179.7	22:32:40.3	599.5	i	Sloan	5	1 x 1
180190	wfsj1610+5430_025	16:08:07.99	+55:10:00.0	J2000.00	1.135	179.7	22:32:40.3	599.5	i	Sloan	3	1 x 1
180191	wfsj1610+5430_025	16:08:07.99	+55:10:00.0	J2000.00	1.135	179.7	22:32:40.3	599.5	i	Sloan	4	1 x 1
180192	wfsj1610+5430_025	16:08:08.00	+55:09:59.9	J2000.00	1.145	179.7	22:45:42.5	599.4	z	Gunn	1	1 x 1
180193	wfsj1610+5430_025	16:08:08.00	+55:09:59.9	J2000.00	1.145	179.7	22:45:42.5	599.4	z	Gunn	5	1 x 1
180194	wfsj1610+5430_025	16:08:08.00	+55:09:59.9	J2000.00	1.145	179.7	22:45:42.5	599.4	z	Gunn	3	1 x 1
180195	wfsj1610+5430_025	16:08:08.00	+55:09:59.9	J2000.00	1.145	179.7	22:45:42.5	599.4	z	Gunn	4	1 x 1
180196	wfsj1610+5430_025	16:08:07.99	+55:09:59.9	J2000.00	1.157	179.7	22:59:04.3	599.6	U	RGO	1	1 x 1
180197	wfsj1610+5430_025	16:08:07.99	+55:09:59.9	J2000.00	1.157	179.7	22:59:04.3	599.6	U	RGO	5	1 x 1
180198	wfsj1610+5430_025	16:08:07.99	+55:09:59.9	J2000.00	1.157	179.7	22:59:04.3	599.6	U	RGO	3	1 x 1
180199	wfsj1610+5430_025	16:08:07.99	+55:09:59.9	J2000.00	1.157	179.7	22:59:04.3	599.6	U	RGO	4	1 x 1
180200	wfsj1610+5430_034	16:11:52.00	+55:10:00.2	J2000.00	1.168	179.7	23:13:15.6	599.5	U	RGO	1	1 x 1 FITS header
180201	wfsj1610+5430_034	16:11:52.00	+55:10:00.2	J2000.00	1.168	179.7	23:13:15.6	599.5	U	RGO	5	1 x 1 has _025
180202	wfsj1610+5430_034	16:11:52.00	+55:10:00.2	J2000.00	1.168	179.7	23:13:15.6	599.5	U	RGO	3	1 x 1 instead of
180203	wfsj1610+5430_034	16:11:52.00	+55:10:00.2	J2000.00	1.168	179.7	23:13:15.6	599.5	U	RGO	4	1 x 1 correct _034
180204	wfsj1610+5430_034	16:11:52.00	+55:09:59.9	J2000.00	1.185	179.7	23:26:25.1	599.3	z	Gunn	1	1 x 1
180205	wfsj1610+5430_034	16:11:52.00	+55:09:59.9	J2000.00	1.185	179.7	23:26:25.1	599.3	z	Gunn	5	1 x 1
180206	wfsj1610+5430_034	16:11:52.00	+55:09:59.9	J2000.00	1.185	179.7	23:26:25.1	599.3	z	Gunn	3	1 x 1
180207	wfsj1610+5430_034	16:11:52.00	+55:09:59.9	J2000.00	1.185	179.7	23:26:25.1	599.3	z	Gunn	4	1 x 1
180208	wfsj1610+5430_034	16:11:52.00	+55:10:00.0	J2000.00	1.204	179.7	23:39:30.6	599.4	i	Sloan	1	1 x 1
180209	wfsj1610+5430_034	16:11:52.00	+55:10:00.0	J2000.00	1.204	179.7	23:39:30.6	599.4	i	Sloan	5	1 x 1
180210	wfsj1610+5430_034	16:11:52.00	+55:10:00.0	J2000.00	1.204	179.7	23:39:30.6	599.4	i	Sloan	3	1 x 1
180211	wfsj1610+5430_034	16:11:52.00	+55:10:00.0	J2000.00	1.204	179.7	23:39:30.6	599.4	i	Sloan	4	1 x 1
180212	wfsj1610+5430_034	16:11:52.00	+55:09:59.9	J2000.00	1.226	179.7	23:52:36.2	599.4	r	Sloan	1	1 x 1
180213	wfsj1610+5430_034	16:11:52.00	+55:09:59.9	J2000.00	1.226	179.7	23:52:36.2	599.4	r	Sloan	5	1 x 1
180214	wfsj1610+5430_034	16:11:52.00	+55:09:59.9	J2000.00	1.226	179.7	23:52:36.2	599.4	r	Sloan	3	1 x 1
180215	wfsj1610+5430_034	16:11:52.00	+55:09:59.9	J2000.00	1.226	179.7	23:52:36.2	599.4	r	Sloan	4	1 x 1
180216	wfsj1610+5430_034	16:11:51.99	+55:09:59.9	J2000.00	1.251	179.7	00:05:40.6	599.5	g	Sloan	1	1 x 1
180217	wfsj1610+5430_034	16:11:51.99	+55:09:59.9	J2000.00	1.251	179.7	00:05:40.6	599.5	g	Sloan	5	1 x 1
180218	wfsj1610+5430_034	16:11:51.99	+55:09:59.9	J2000.00	1.251	179.7	00:05:40.6	599.5	g	Sloan	3	1 x 1
180219	wfsj1610+5430_034	16:11:51.99	+55:09:59.9	J2000.00	1.251	179.7	00:05:40.6	599.5	g	Sloan	4	1 x 1
180220	wfsj1610+5430_016	16:04:23.89	+55:09:59.9	J2000.00	1.301	179.7	00:20:42.6	599.4	U	RGO	1	1 x 1
180221	wfsj1610+5430_016	16:04:23.89	+55:09:59.9	J2000.00	1.301	179.7	00:20:42.6	599.4	U	RGO	5	1 x 1
180222	wfsj1610+5430_016	16:04:23.89	+55:09:59.9	J2000.00	1.301	179.7	00:20:42.6	599.4	U	RGO	3	1 x 1
180223	wfsj1610+5430_016	16:04:23.89	+55:09:59.9	J2000.00	1.301	179.7	00:20:42.6	599.4	U	RGO	4	1 x 1
180224	wfsj1610+5430_016	16:04:23.90	+55:10:00.0	J2000.00	1.338	179.7	00:34:33.2	599.5	z	Gunn	1	1 x 1
180225	wfsj1610+5430_016	16:04:23.90	+55:10:00.0	J2000.00	1.338	179.7	00:34:33.2	599.5	z	Gunn	5	1 x 1
180226	wfsj1610+5430_016	16:04:23.90	+55:10:00.0	J2000.00	1.338	179.7	00:34:33.2	599.5	z	Gunn	3	1 x 1
180227	wfsj1610+5430_016	16:04:23.90	+55:10:00.0	J2000.00	1.338	179.7	00:34:33.2	599.5	z	Gunn	4	1 x 1
180228	wfsj1610+5430_016	16:04:23.90	+55:10:00.1	J2000.00	1.376	179.7	00:47:41.3	599.4	r	Sloan	1	1 x 1
180229	wfsj1610+5430_016	16:04:23.90	+55:10:00.1	J2000.00	1.376	179.7	00:47:41.3	599.4	r	Sloan	5	1 x 1
180230	wfsj1610+5430_016	16:04:23.90	+55:10:00.1	J2000.00	1.376	179.7	00:47:41.3	599.4	r	Sloan	3	1 x 1
180231	wfsj1610+5430_016	16:04:23.90	+55:10:00.1	J2000.00	1.376	179.7	00:47:41.3	599.4	r	Sloan	4	1 x 1
180232	wfsj1610+5430_016	16:04:23.90	+55:10:00.0	J2000.00	1.419	179.7	01:00:51.6	599.4	i	Sloan	1	1 x 1
180233	wfsj1610+5430_016	16:04:23.90	+55:10:00.0	J2000.00	1.419	179.7	01:00:51.6	599.4	i	Sloan	5	1 x 1
180234	wfsj1610+5430_016	16:04:23.90	+55:10:00.0	J2000.00	1.419	179.7	01:00:51.6	599.4	i	Sloan	3	1 x 1
180235	wfsj1610+5430_016	16:04:23.90	+55:10:00.0	J2000.00	1.419	179.7	01:00:51.6	599.4	i	Sloan	4	1 x 1
180236	wfsj1610+5430_016	16:04:23.89	+55:10:00.0	J2000.00	1.468	179.7	01:14:03.6	599.4	g	Sloan	1	1 x 1
180237	wfsj1610+5430_016	16:04:23.89	+55:10:00.0	J2000.00	1.468	179.7	01:14:03.6	599.4	g	Sloan	5	1 x 1
180238	wfsj1610+5430_016	16:04:23.89	+55:10:00.0	J2000.00	1.468	179.7	01:14:03.6	599.4	g	Sloan	3	1 x 1

180239	wfsj1610+5430_016	16:04:23.89	+55:10:00.0	J2000.00	1.468	179.7	01:14:03.6	599.4	g	Sloan	4	1 x 1
180240	wfsj1610+5430_051	16:19:15.60	+54:49:59.7	J2000.00	1.471	179.7	01:30:07.6	599.5	g	Sloan	1	1 x 1
180241	wfsj1610+5430_051	16:19:15.60	+54:49:59.7	J2000.00	1.471	179.7	01:30:07.6	599.5	g	Sloan	5	1 x 1
180242	wfsj1610+5430_051	16:19:15.60	+54:49:59.7	J2000.00	1.471	179.7	01:30:07.6	599.5	g	Sloan	3	1 x 1
180243	wfsj1610+5430_051	16:19:15.60	+54:49:59.7	J2000.00	1.471	179.7	01:30:07.6	599.5	g	Sloan	4	1 x 1
180244	wfsj1610+5430_051	16:19:15.59	+54:49:59.9	J2000.00	1.526	179.7	01:43:27.9	599.5	r	Sloan	1	1 x 1
180245	wfsj1610+5430_051	16:19:15.59	+54:49:59.9	J2000.00	1.526	179.7	01:43:27.9	599.5	r	Sloan	5	1 x 1
180246	wfsj1610+5430_051	16:19:15.59	+54:49:59.9	J2000.00	1.526	179.7	01:43:27.9	599.5	r	Sloan	3	1 x 1
180247	wfsj1610+5430_051	16:19:15.59	+54:49:59.9	J2000.00	1.526	179.7	01:43:27.9	599.5	r	Sloan	4	1 x 1
180248	sa113-163 U	21:42:35.00	+00:16:46.0	J2000.00	1.205	179.7	01:58:32.2	19.6	U	RGO	1	1 x 1
180249	sa113-163 U	21:42:35.00	+00:16:46.0	J2000.00	1.205	179.7	01:58:32.2	19.6	U	RGO	5	1 x 1
180250	sa113-163 U	21:42:35.00	+00:16:46.0	J2000.00	1.205	179.7	01:58:32.2	19.6	U	RGO	3	1 x 1
180251	sa113-163 U	21:42:35.00	+00:16:46.0	J2000.00	1.205	179.7	01:58:32.2	19.6	U	RGO	4	1 x 1
180252	sa113-163 g	21:42:35.00	+00:16:45.9	J2000.00	1.199	179.7	02:01:51.4	10.1	g	Sloan	1	1 x 1
180253	sa113-163 g	21:42:35.00	+00:16:45.9	J2000.00	1.199	179.7	02:01:51.4	10.1	g	Sloan	5	1 x 1
180254	sa113-163 g	21:42:35.00	+00:16:45.9	J2000.00	1.199	179.7	02:01:51.4	10.1	g	Sloan	3	1 x 1
180255	sa113-163 g	21:42:35.00	+00:16:45.9	J2000.00	1.199	179.7	02:01:51.4	10.1	g	Sloan	4	1 x 1
180256	sa113-163 r	21:42:34.99	+00:16:46.0	J2000.00	1.194	179.7	02:05:02.0	10.1	r	Sloan	1	1 x 1
180257	sa113-163 r	21:42:34.99	+00:16:46.0	J2000.00	1.194	179.7	02:05:02.0	10.1	r	Sloan	5	1 x 1
180258	sa113-163 r	21:42:34.99	+00:16:46.0	J2000.00	1.194	179.7	02:05:02.0	10.1	r	Sloan	3	1 x 1
180259	sa113-163 r	21:42:34.99	+00:16:46.0	J2000.00	1.194	179.7	02:05:02.0	10.1	r	Sloan	4	1 x 1
180260	sa113-163 i	21:42:35.00	+00:16:45.9	J2000.00	1.188	179.7	02:08:37.6	10.1	i	Sloan	1	1 x 1
180261	sa113-163 i	21:42:35.00	+00:16:45.9	J2000.00	1.188	179.7	02:08:37.6	10.1	i	Sloan	5	1 x 1
180262	sa113-163 i	21:42:35.00	+00:16:45.9	J2000.00	1.188	179.7	02:08:37.6	10.1	i	Sloan	3	1 x 1
180263	sa113-163 i	21:42:35.00	+00:16:45.9	J2000.00	1.188	179.7	02:08:37.6	10.1	i	Sloan	4	1 x 1
180264	sa113-163 z	21:42:34.99	+00:16:45.9	J2000.00	1.183	179.7	02:11:50.6	10.1	z	Gunn	1	1 x 1
180265	sa113-163 z	21:42:34.99	+00:16:45.9	J2000.00	1.183	179.7	02:11:50.6	10.1	z	Gunn	5	1 x 1
180266	sa113-163 z	21:42:34.99	+00:16:45.9	J2000.00	1.183	179.7	02:11:50.6	10.1	z	Gunn	3	1 x 1
180267	sa113-163 z	21:42:34.99	+00:16:45.9	J2000.00	1.183	179.7	02:11:50.6	10.1	z	Gunn	4	1 x 1
180268	wfsj2240+0000_021	22:38:55.99	-00:39:59.9	J2000.00	1.286	179.7	02:20:36.5	599.0	U	RGO	1	1 x 1
180269	wfsj2240+0000_021	22:38:55.99	-00:39:59.9	J2000.00	1.286	179.7	02:20:36.5	599.0	U	RGO	5	1 x 1
180270	wfsj2240+0000_021	22:38:55.99	-00:39:59.9	J2000.00	1.286	179.7	02:20:36.5	599.0	U	RGO	3	1 x 1
180271	wfsj2240+0000_021	22:38:55.99	-00:39:59.9	J2000.00	1.286	179.7	02:20:36.5	599.0	U	RGO	4	1 x 1
180272	wfsj2240+0000_021	22:38:56.00	-00:40:00.1	J2000.00	1.251	179.7	02:34:06.7	599.5	z	Gunn	1	1 x 1
180273	wfsj2240+0000_021	22:38:56.00	-00:40:00.1	J2000.00	1.251	179.7	02:34:06.7	599.5	z	Gunn	5	1 x 1
180274	wfsj2240+0000_021	22:38:56.00	-00:40:00.1	J2000.00	1.251	179.7	02:34:06.7	599.5	z	Gunn	3	1 x 1
180275	wfsj2240+0000_021	22:38:56.00	-00:40:00.1	J2000.00	1.251	179.7	02:34:06.7	599.5	z	Gunn	4	1 x 1
180276	wfsj2240+0000_021	22:38:56.00	-00:40:00.0	J2000.00	1.222	179.7	02:47:14.7	599.4	r	Sloan	1	1 x 1
180277	wfsj2240+0000_021	22:38:56.00	-00:40:00.0	J2000.00	1.222	179.7	02:47:14.7	599.4	r	Sloan	5	1 x 1
180278	wfsj2240+0000_021	22:38:56.00	-00:40:00.0	J2000.00	1.222	179.7	02:47:14.7	599.4	r	Sloan	3	1 x 1
180279	wfsj2240+0000_021	22:38:56.00	-00:40:00.0	J2000.00	1.222	179.7	02:47:14.7	599.4	r	Sloan	4	1 x 1
180280	wfsj2240+0000_021	22:38:56.00	-00:40:00.0	J2000.00	1.199	179.7	03:00:24.2	599.4	i	Sloan	1	1 x 1
180281	wfsj2240+0000_021	22:38:56.00	-00:40:00.0	J2000.00	1.199	179.7	03:00:24.2	599.4	i	Sloan	5	1 x 1
180282	wfsj2240+0000_021	22:38:56.00	-00:40:00.0	J2000.00	1.199	179.7	03:00:24.2	599.4	i	Sloan	3	1 x 1
180283	wfsj2240+0000_021	22:38:56.00	-00:40:00.0	J2000.00	1.199	179.7	03:00:24.2	599.4	i	Sloan	4	1 x 1
180284	wfsj2240+0000_021	22:38:56.00	-00:39:59.9	J2000.00	1.180	179.7	03:13:36.7	599.5	g	Sloan	1	1 x 1
180285	wfsj2240+0000_021	22:38:56.00	-00:39:59.9	J2000.00	1.180	179.7	03:13:36.7	599.5	g	Sloan	5	1 x 1
180286	wfsj2240+0000_021	22:38:56.00	-00:39:59.9	J2000.00	1.180	179.7	03:13:36.7	599.5	g	Sloan	3	1 x 1
180287	wfsj2240+0000_021	22:38:56.00	-00:39:59.9	J2000.00	1.180	179.7	03:13:36.7	599.5	g	Sloan	4	1 x 1
180288	wfsj2240+0000_030	22:41:03.99	-00:40:00.0	J2000.00	1.166	179.7	03:28:42.9	599.7	U	RGO	1	1 x 1
180289	wfsj2240+0000_030	22:41:03.99	-00:40:00.0	J2000.00	1.166	179.7	03:28:42.9	599.7	U	RGO	5	1 x 1
180290	wfsj2240+0000_030	22:41:03.99	-00:40:00.0	J2000.00	1.166	179.7	03:28:42.9	599.7	U	RGO	3	1 x 1
180291	wfsj2240+0000_030	22:41:03.99	-00:40:00.0	J2000.00	1.166	179.7	03:28:42.9	599.7	U	RGO	4	1 x 1
180292	wfsj2240+0000_030	22:41:04.00	-00:40:00.0	J2000.00	1.156	179.7	03:42:10.9	599.4	z	Gunn	1	1 x 1
180293	wfsj2240+0000_030	22:41:04.00	-00:40:00.0	J2000.00	1.156	179.7	03:42:10.9	599.4	z	Gunn	5	1 x 1
180294	wfsj2240+0000_030	22:41:04.00	-00:40:00.0	J2000.00	1.156	179.7	03:42:10.9	599.4	z	Gunn	3	1 x 1
180295	wfsj2240+0000_030	22:41:04.00	-00:40:00.0	J2000.00	1.156	179.7	03:42:10.9	599.4	z	Gunn	4	1 x 1
180296	wfsj2240+0000_030	22:41:04.00	-00:40:00.0	J2000.00	1.150	179.7	03:55:19.0	599.4	r	Sloan	1	1 x 1
180297	wfsj2240+0000_030	22:41:04.00	-00:40:00.0	J2000.00	1.150	179.7	03:55:19.0	599.4	r	Sloan	5	1 x 1
180298	wfsj2240+0000_030	22:41:04.00	-00:40:00.0	J2000.00	1.150	179.7	03:55:19.0	599.4	r	Sloan	3	1 x 1
180299	wfsj2240+0000_030	22:41:04.00	-00:40:00.0	J2000.00	1.150	179.7	03:55:19.0	599.4	r	Sloan	4	1 x 1
180304	wfsj2240+0000_030	22:41:04.00	-00:40:00.0	J2000.00	1.148	179.7	04:08:51.5	599.4	g	Sloan	1	1 x 1

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180305 wfsj2240+0000_030    22:41:04.00 -00:40:00.0 J2000.00 1.148 179.7 04:08:51.5    599.4       g      Sloan    5      1 x 1
180306 wfsj2240+0000_030    22:41:04.00 -00:40:00.0 J2000.00 1.148 179.7 04:08:51.5    599.4       g      Sloan    3      1 x 1
180307 wfsj2240+0000_030    22:41:04.00 -00:40:00.0 J2000.00 1.148 179.7 04:08:51.5    599.4       g      Sloan    4      1 x 1
180308 wfsj2240+0000_030    22:41:03.99 -00:39:59.9 J2000.00 1.150 179.7 04:22:39.2    599.0       i      Sloan    1      1 x 1
180309 wfsj2240+0000_030    22:41:03.99 -00:39:59.9 J2000.00 1.150 179.7 04:22:39.2    599.0       i      Sloan    5      1 x 1
180310 wfsj2240+0000_030    22:41:03.99 -00:39:59.9 J2000.00 1.150 179.7 04:22:39.2    599.0       i      Sloan    3      1 x 1
180311 wfsj2240+0000_030    22:41:03.99 -00:39:59.9 J2000.00 1.150 179.7 04:22:39.2    599.0       i      Sloan    4      1 x 1
180312 wfsj2240+0000_012    22:36:48.00 -00:40:00.0 J2000.00 1.159 179.7 04:36:45.4    599.5       U        RGO    1      1 x 1
180313 wfsj2240+0000_012    22:36:48.00 -00:40:00.0 J2000.00 1.159 179.7 04:36:45.4    599.5       U        RGO    5      1 x 1
180314 wfsj2240+0000_012    22:36:48.00 -00:40:00.0 J2000.00 1.159 179.7 04:36:45.4    599.5       U        RGO    3      1 x 1
180315 wfsj2240+0000_012    22:36:48.00 -00:40:00.0 J2000.00 1.159 179.7 04:36:45.4    599.5       U        RGO    4      1 x 1
180316 wfsj2240+0000_012    22:36:48.00 -00:40:00.0 J2000.00 1.170 179.7 04:49:45.5    599.4       g      Sloan    1      1 x 1
180317 wfsj2240+0000_012    22:36:48.00 -00:40:00.0 J2000.00 1.170 179.7 04:49:45.5    599.4       g      Sloan    5      1 x 1
180318 wfsj2240+0000_012    22:36:48.00 -00:40:00.0 J2000.00 1.170 179.7 04:49:45.5    599.4       g      Sloan    3      1 x 1
180319 wfsj2240+0000_012    22:36:48.00 -00:40:00.0 J2000.00 1.170 179.7 04:49:45.5    599.4       g      Sloan    4      1 x 1
180320 wfsj2240+0000_012    22:36:48.00 -00:40:00.0 J2000.00 1.186 179.7 05:02:45.1    599.5       r      Sloan    1      1 x 1
180321 wfsj2240+0000_012    22:36:48.00 -00:40:00.0 J2000.00 1.186 179.7 05:02:45.1    599.5       r      Sloan    5      1 x 1
180322 wfsj2240+0000_012    22:36:48.00 -00:40:00.0 J2000.00 1.186 179.7 05:02:45.1    599.5       r      Sloan    3      1 x 1
180323 wfsj2240+0000_012    22:36:48.00 -00:40:00.0 J2000.00 1.186 179.7 05:02:45.1    599.5       r      Sloan    4      1 x 1
180324 wfsj2240+0000_012    22:36:47.99 -00:39:59.8 J2000.00 1.205 179.7 05:15:42.3    599.4       i      Sloan    1      1 x 1----Sky too
180325 wfsj2240+0000_012    22:36:47.99 -00:39:59.8 J2000.00 1.205 179.7 05:15:42.3    599.4       i      Sloan    5      1 x 1 bright for
180326 wfsj2240+0000_012    22:36:47.99 -00:39:59.8 J2000.00 1.205 179.7 05:15:42.3    599.4       i      Sloan    3      1 x 1 these
180327 wfsj2240+0000_012    22:36:47.99 -00:39:59.8 J2000.00 1.205 179.7 05:15:42.3    599.4       i      Sloan    4      1 x 1 will repeat
180328 wfsj2240+0000_012    22:36:48.00 -00:40:00.0 J2000.00 1.229 179.7 05:28:40.3    599.6       z       Gunn    1      1 x 1 tomorrow
180329 wfsj2240+0000_012    22:36:48.00 -00:40:00.0 J2000.00 1.229 179.7 05:28:40.3    599.6       z       Gunn    5      1 x 1     |
180330 wfsj2240+0000_012    22:36:48.00 -00:40:00.0 J2000.00 1.229 179.7 05:28:40.3    599.6       z       Gunn    3      1 x 1     |
180331 wfsj2240+0000_012    22:36:48.00 -00:40:00.0 J2000.00 1.229 179.7 05:28:40.3    599.6       z       Gunn    4      1 x 1----|
180332 sa113-163 r          21:42:34.99 +00:16:46.0 J2000.00 1.415 179.7 05:42:03.5     10.1       r      Sloan    1      1 x 1
180333 sa113-163 r          21:42:34.99 +00:16:46.0 J2000.00 1.415 179.7 05:42:03.5     10.1       r      Sloan    5      1 x 1
180334 sa113-163 r          21:42:34.99 +00:16:46.0 J2000.00 1.415 179.7 05:42:03.5     10.1       r      Sloan    3      1 x 1
180335 sa113-163 r          21:42:34.99 +00:16:46.0 J2000.00 1.415 179.7 05:42:03.5     10.1       r      Sloan    4      1 x 1
180336 sa113-163 g          21:42:35.00 +00:16:46.0 J2000.00 1.432 179.7 05:45:41.2     10.1       g      Sloan    1      1 x 1
180337 sa113-163 g          21:42:35.00 +00:16:46.0 J2000.00 1.432 179.7 05:45:41.2     10.1       g      Sloan    5      1 x 1
180338 sa113-163 g          21:42:35.00 +00:16:46.0 J2000.00 1.432 179.7 05:45:41.2     10.1       g      Sloan    3      1 x 1
180339 sa113-163 g          21:42:35.00 +00:16:46.0 J2000.00 1.432 179.7 05:45:41.2     10.1       g      Sloan    4      1 x 1
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