INT OBSERVING LOG (ISAAC NEWTON GROUP, LA PALMA)

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TELESCOPE:             INT
DATE:                  1999 Apr 12/13
INT TAPE NR:           INTD4020
OBSERVER:              J. Davies, A. Kambas, J. Haynes, R. Pain, D. Hardin
PROGRAMME:             WFS 09
PATT/CAT:              WFS 09
TELESCOPE OPERATOR:    -
SUPPORT ASTRONOMER:    -

FOCUS:                 PRIME
INSTRUMENT:            WFC
FILTER WHEEL (PF):     U,B,V,r,i,Z
CAMERA (IDS):          ---
COLLIMATOR (IDS):      ---
COLL. FOCUS (IDS):     ---
GRATING (IDS):         ---
DETECTOR:              4xEEV
PIXELS:                2K x 4K
PIXEL SIZE (microns): 13.5
WINDOW:                none
BINNING:               none

WEATHER:               Good
OUTSIDE TEMP (deg C):              (FIRST HALF)
OUTSIDE TEMP (deg C):              (SECOND HALF)
HUMIDITY (%):                      (FIRST HALF)
HUMIDITY (%):                      (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):                   (FIRST HALF)
SEEING (arcsec):                   (SECOND HALF)
AV. SEEING (arcsec):
NO. SEEING MEASURES:      -

UTC    TELESCOPE                CASELLA OUT   CASELLA IN    SEEING
       AZ   EL  Focus  TComp    Temp   Humid  Temp   Humid  Det./TV  Comments

DARK HOURS:            08:30
DOME OPEN (UTC):       20:00
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:
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Run no.	Object name	RA	Dec.	Equinox	AM	PA	UT	Exp. T.	Filter	Psys	Channel	Binning	Comments
159180	Bias frame	0:00:00.00	+00:00:00.0	J2000.00	1.000	180.0	13:34:09.4	0.0	V	Harris	1	1 x 1	
159181	Bias frame	0:00:00.00	+00:00:00.0	J2000.00	1.000	180.0	13:34:09.4	0.0	V	Harris	5	1 x 1	
159182	Bias frame	0:00:00.00	+00:00:00.0	J2000.00	1.000	180.0	13:34:09.4	0.0	V	Harris	3	1 x 1	
159183	Bias frame	0:00:00.00	+00:00:00.0	J2000.00	1.000	180.0	13:34:09.4	0.0	V	Harris	4	1 x 1	
159184	Bias frame	0:00:00.00	+00:00:00.0	J2000.00	1.000	180.0	19:39:40.3	0.0	B	Kitt Peak	1	1 x 1	
159185	Bias frame	0:00:00.00	+00:00:00.0	J2000.00	1.000	180.0	19:39:40.3	0.0	B	Kitt Peak	5	1 x 1	
159186	Bias frame	0:00:00.00	+00:00:00.0	J2000.00	1.000	180.0	19:39:40.3	0.0	B	Kitt Peak	3	1 x 1	
159187	Bias frame	0:00:00.00	+00:00:00.0	J2000.00	1.000	180.0	19:39:40.3	0.0	B	Kitt Peak	4	1 x 1	
159188	Bias frame	0:00:00.00	+00:00:00.0	J2000.00	1.000	180.0	19:43:31.6	0.0	B	Kitt Peak	1	1 x 1	
159189	Bias frame	0:00:00.00	+00:00:00.0	J2000.00	1.000	180.0	19:43:31.6	0.0	B	Kitt Peak	5	1 x 1	
159190	Bias frame	0:00:00.00	+00:00:00.0	J2000.00	1.000	180.0	19:43:31.6	0.0	B	Kitt Peak	3	1 x 1	
159191	Bias frame	0:00:00.00	+00:00:00.0	J2000.00	1.000	180.0	19:43:31.6	0.0	B	Kitt Peak	4	1 x 1	
159192	Bias frame	0:00:00.00	+00:00:00.0	J2000.00	1.000	180.0	19:46:28.2	0.0	B	Kitt Peak	1	1 x 1	
159193	Bias frame	0:00:00.00	+00:00:00.0	J2000.00	1.000	180.0	19:46:28.2	0.0	B	Kitt Peak	5	1 x 1	
159194	Bias frame	0:00:00.00	+00:00:00.0	J2000.00	1.000	180.0	19:46:28.2	0.0	B	Kitt Peak	3	1 x 1	
159195	Bias frame	0:00:00.00	+00:00:00.0	J2000.00	1.000	180.0	19:46:28.2	0.0	B	Kitt Peak	4	1 x 1	
159196	Flat field	4:25:46.00	+54:09:03.0	B1950.00	1.488	180.0	20:05:51.0	5.1	B	Kitt Peak	1	1 x 1	
159197	Flat field	4:25:46.00	+54:09:03.0	B1950.00	1.488	180.0	20:05:51.0	5.1	B	Kitt Peak	5	1 x 1	
159198	Flat field	4:25:46.00	+54:09:03.0	B1950.00	1.488	180.0	20:05:51.0	5.1	B	Kitt Peak	3	1 x 1	
159199	Flat field	4:25:46.00	+54:09:03.0	B1950.00	1.488	180.0	20:05:51.0	5.1	B	Kitt Peak	4	1 x 1	
159200	Flat field	4:25:45.99	+54:09:03.0	B1950.00	1.503	180.0	20:09:14.2	15.1	B	Kitt Peak	1	1 x 1	
159201	Flat field	4:25:45.99	+54:09:03.0	B1950.00	1.503	180.0	20:09:14.2	15.1	B	Kitt Peak	5	1 x 1	
159202	Flat field	4:25:45.99	+54:09:03.0	B1950.00	1.503	180.0	20:09:14.2	15.1	B	Kitt Peak	3	1 x 1	
159203	Flat field	4:25:45.99	+54:09:03.0	B1950.00	1.503	180.0	20:09:14.2	15.1	B	Kitt Peak	4	1 x 1	
159204	Flat field	4:25:46.00	+54:09:03.0	B1950.00	1.519	180.0	20:12:47.9	40.0	B	Kitt Peak	1	1 x 1	
159205	Flat field	4:25:46.00	+54:09:03.0	B1950.00	1.519	180.0	20:12:47.9	40.0	B	Kitt Peak	5	1 x 1	
159206	Flat field	4:25:46.00	+54:09:03.0	B1950.00	1.519	180.0	20:12:47.9	40.0	B	Kitt Peak	3	1 x 1	
159207	Flat field	4:25:46.00	+54:09:03.0	B1950.00	1.519	180.0	20:12:47.9	40.0	B	Kitt Peak	4	1 x 1	
159208	Flat field	4:25:46.00	+54:09:03.0	B1950.00	1.537	180.0	20:16:44.3	60.0	B	Kitt Peak	1	1 x 1	
159209	Flat field	4:25:46.00	+54:09:03.0	B1950.00	1.537	180.0	20:16:44.3	60.0	B	Kitt Peak	5	1 x 1	
159210	Flat field	4:25:46.00	+54:09:03.0	B1950.00	1.537	180.0	20:16:44.3	60.0	B	Kitt Peak	3	1 x 1	
159211	Flat field	4:25:46.00	+54:09:03.0	B1950.00	1.537	180.0	20:16:44.3	60.0	B	Kitt Peak	4	1 x 1	
159212	Flat field	4:25:46.00	+54:09:02.9	B1950.00	1.566	180.0	20:21:46.9	179.9	B	Kitt Peak	1	1 x 1	stars in
159213	Flat field	4:25:46.00	+54:09:02.9	B1950.00	1.566	180.0	20:21:46.9	179.9	B	Kitt Peak	5	1 x 1	
159214	Flat field	4:25:46.00	+54:09:02.9	B1950.00	1.566	180.0	20:21:46.9	179.9	B	Kitt Peak	3	1 x 1	
159215	Flat field	4:25:46.00	+54:09:02.9	B1950.00	1.566	180.0	20:21:46.9	179.9	B	Kitt Peak	4	1 x 1	
159215	Flat field	4:25:46.00	+54:09:02.9	B1950.00	1.566	180.0	20:21:46.9	179.9	B	Kitt Peak	4	1 x 1	
159216	SS98	6:51:52.00	-00:20:16.0	J2000.00	1.504	180.0	21:22:28.4	20.1	B	Kitt Peak	1	1 x 1	bad seeing
159217	SS98	6:51:52.00	-00:20:16.0	J2000.00	1.504	180.0	21:22:28.4	20.1	B	Kitt Peak	5	1 x 1	
159218	SS98	6:51:52.00	-00:20:16.0	J2000.00	1.504	180.0	21:22:28.4	20.1	B	Kitt Peak	3	1 x 1	
159219	SS98	6:51:52.00	-00:20:16.0	J2000.00	1.504	180.0	21:22:28.4	20.1	B	Kitt Peak	4	1 x 1	
159220	SS98	6:51:51.99	-00:20:16.0	J2000.00	1.611	180.0	21:39:29.1	20.1	B	Kitt Peak	1	1 x 1	bad seeing
159221	SS98	6:51:51.99	-00:20:16.0	J2000.00	1.611	180.0	21:39:29.1	20.1	B	Kitt Peak	5	1 x 1	
159222	SS98	6:51:51.99	-00:20:16.0	J2000.00	1.611	180.0	21:39:29.1	20.1	B	Kitt Peak	3	1 x 1	
159223	SS98	6:51:51.99	-00:20:16.0	J2000.00	1.611	180.0	21:39:29.1	20.1	B	Kitt Peak	4	1 x 1	
159224	SS98	6:51:52.00	-00:20:15.9	J2000.00	1.713	180.0	21:52:55.0	20.1	B	Kitt Peak	1	1 x 1	
159225	SS98	6:51:52.00	-00:20:15.9	J2000.00	1.713	180.0	21:52:55.0	20.1	B	Kitt Peak	5	1 x 1	
159226	SS98	6:51:52.00	-00:20:15.9	J2000.00	1.713	180.0	21:52:55.0	20.1	B	Kitt Peak	3	1 x 1	
159227	SS98	6:51:52.00	-00:20:15.9	J2000.00	1.713	180.0	21:52:55.0	20.1	B	Kitt Peak	4	1 x 1	
159228	SS101	9:56:21.00	-00:27:19.0	J2000.00	1.150	180.0	22:05:39.9	20.1	B	Kitt Peak	1	1 x 1	
159229	SS101	9:56:21.00	-00:27:19.0	J2000.00	1.150	180.0	22:05:39.9	20.1	B	Kitt Peak	5	1 x 1	
159230	SS101	9:56:21.00	-00:27:19.0	J2000.00	1.150	180.0	22:05:39.9	20.1	B	Kitt Peak	3	1 x 1	
159231	SS101	9:56:21.00	-00:27:19.0	J2000.00	1.150	180.0	22:05:39.9	20.1	B	Kitt Peak	4	1 x 1	
159238	SS104	12:42:22.00	-00:33:09.0	J2000.00	1.365	180.0	22:19:39.6	20.1	B	Kitt Peak	1	1 x 1	
159239	SS104	12:42:22.00	-00:33:09.0	J2000.00	1.365	180.0	22:19:39.6	20.1	B	Kitt Peak	5	1 x 1	
159240	SS104	12:42:22.00	-00:33:09.0	J2000.00	1.365	180.0	22:19:39.6	20.1	B	Kitt Peak	3	1 x 1	
159241	SS104	12:42:22.00	-00:33:09.0	J2000.00	1.365	180.0	22:19:39.6	20.1	B	Kitt Peak	4	1 x 1	
159242	VIRGO277	12:44:08.70	+11:43:59.9	J2000.00	1.179	180.0	22:30:22.2	748.8	B	Kitt Peak	1	1 x 1	bad seeing
159243	VIRGO277	12:44:08.70	+11:43:59.9	J2000.00	1.179	180.0	22:30:22.2	748.8	B	Kitt Peak	5	1 x 1	
159244	VIRGO277	12:44:08.70	+11:43:59.9	J2000.00	1.179	180.0	22:30:22.2	748.8	B	Kitt Peak	3	1 x 1	

159245	VIRGO277	12:44:08.70	+11:43:59.9	J2000.00	1.179	180.0	22:30:22.2	748.8	B	Kitt Peak	4	1 x 1
159246	VIRGO277	12:44:08.70	+11:44:00.0	J2000.00	1.136	180.0	22:49:34.0	749.4	B	Kitt Peak	1	1 x 1 bad seeing
159247	VIRGO277	12:44:08.70	+11:44:00.0	J2000.00	1.136	180.0	22:49:34.0	749.4	B	Kitt Peak	5	1 x 1
159248	VIRGO277	12:44:08.70	+11:44:00.0	J2000.00	1.136	180.0	22:49:34.0	749.4	B	Kitt Peak	3	1 x 1
159249	VIRGO277	12:44:08.70	+11:44:00.0	J2000.00	1.136	180.0	22:49:34.0	749.4	B	Kitt Peak	4	1 x 1
159250	VIRGO277	12:44:08.69	+11:44:00.0	J2000.00	1.102	180.0	23:08:52.7	749.4	B	Kitt Peak	1	1 x 1 poor seeing use?
159251	VIRGO277	12:44:08.69	+11:44:00.0	J2000.00	1.102	180.0	23:08:52.7	749.4	B	Kitt Peak	5	1 x 1
159252	VIRGO277	12:44:08.69	+11:44:00.0	J2000.00	1.102	180.0	23:08:52.7	749.4	B	Kitt Peak	3	1 x 1
159253	VIRGO277	12:44:08.69	+11:44:00.0	J2000.00	1.102	180.0	23:08:52.7	749.4	B	Kitt Peak	4	1 x 1
159254	VIRGO277	12:44:08.70	+11:44:00.0	J2000.00	1.077	180.0	23:28:14.1	749.2	B	Kitt Peak	1	1 x 1 bad seeing
159255	VIRGO277	12:44:08.70	+11:44:00.0	J2000.00	1.077	180.0	23:28:14.1	749.2	B	Kitt Peak	5	1 x 1
159256	VIRGO277	12:44:08.70	+11:44:00.0	J2000.00	1.077	180.0	23:28:14.1	749.2	B	Kitt Peak	3	1 x 1
159257	VIRGO277	12:44:08.70	+11:44:00.0	J2000.00	1.077	180.0	23:28:14.1	749.2	B	Kitt Peak	4	1 x 1
159258	UMAJ	11:57:11.10	+49:17:17.9	J2000.00	1.070	180.0	00:00:03.6	749.1	B	Kitt Peak	1	1 x 1
159259	UMAJ	11:57:11.10	+49:17:17.9	J2000.00	1.070	180.0	00:00:03.6	749.1	B	Kitt Peak	5	1 x 1
159260	UMAJ	11:57:11.10	+49:17:17.9	J2000.00	1.070	180.0	00:00:03.6	749.1	B	Kitt Peak	3	1 x 1
159261	UMAJ	11:57:11.10	+49:17:17.9	J2000.00	1.070	180.0	00:00:03.6	749.1	B	Kitt Peak	4	1 x 1
159262	MALIN1	12:36:59.29	+14:19:47.9	J2000.00	1.033	180.0	00:24:53.7	749.3	B	Kitt Peak	1	1 x 1
159263	MALIN1	12:36:59.29	+14:19:47.9	J2000.00	1.033	180.0	00:24:53.7	749.3	B	Kitt Peak	5	1 x 1
159264	MALIN1	12:36:59.29	+14:19:47.9	J2000.00	1.033	180.0	00:24:53.7	749.3	B	Kitt Peak	3	1 x 1
159265	MALIN1	12:36:59.29	+14:19:47.9	J2000.00	1.033	180.0	00:24:53.7	749.3	B	Kitt Peak	4	1 x 1
159266	VIRGO278	12:46:15.40	+11:44:00.0	J2000.00	1.048	180.0	00:43:55.4	749.5	B	Kitt Peak	1	1 x 1
159267	VIRGO278	12:46:15.40	+11:44:00.0	J2000.00	1.048	180.0	00:43:55.4	749.5	B	Kitt Peak	5	1 x 1
159268	VIRGO278	12:46:15.40	+11:44:00.0	J2000.00	1.048	180.0	00:43:55.4	749.5	B	Kitt Peak	3	1 x 1
159269	VIRGO278	12:46:15.40	+11:44:00.0	J2000.00	1.048	180.0	00:43:55.4	749.5	B	Kitt Peak	4	1 x 1
159270	VIRGO279	12:48:21.99	+11:44:00.1	J2000.00	1.055	180.0	01:02:18.4	749.2	B	Kitt Peak	1	1 x 1
159271	VIRGO279	12:48:21.99	+11:44:00.1	J2000.00	1.055	180.0	01:02:18.4	749.2	B	Kitt Peak	5	1 x 1
159272	VIRGO279	12:48:21.99	+11:44:00.1	J2000.00	1.055	180.0	01:02:18.4	749.2	B	Kitt Peak	3	1 x 1
159273	VIRGO279	12:48:21.99	+11:44:00.1	J2000.00	1.055	180.0	01:02:18.4	749.2	B	Kitt Peak	4	1 x 1
159274	VIRGO280	12:50:28.70	+11:43:59.8	J2000.00	1.068	180.0	01:21:50.4	749.2	B	Kitt Peak	1	1 x 1
159275	VIRGO280	12:50:28.70	+11:43:59.8	J2000.00	1.068	180.0	01:21:50.4	749.2	B	Kitt Peak	5	1 x 1
159276	VIRGO280	12:50:28.70	+11:43:59.8	J2000.00	1.068	180.0	01:21:50.4	749.2	B	Kitt Peak	3	1 x 1
159277	VIRGO280	12:50:28.70	+11:43:59.8	J2000.00	1.068	180.0	01:21:50.4	749.2	B	Kitt Peak	4	1 x 1
159278	VIRGO251	12:31:28.79	+11:24:00.0	J2000.00	1.119	180.0	01:40:11.8	748.7	B	Kitt Peak	1	1 x 1
159279	VIRGO251	12:31:28.79	+11:24:00.0	J2000.00	1.119	180.0	01:40:11.8	748.7	B	Kitt Peak	5	1 x 1
159280	VIRGO251	12:31:28.79	+11:24:00.0	J2000.00	1.119	180.0	01:40:11.8	748.7	B	Kitt Peak	3	1 x 1
159281	VIRGO251	12:31:28.79	+11:24:00.0	J2000.00	1.119	180.0	01:40:11.8	748.7	B	Kitt Peak	4	1 x 1
159282	VIRGO252	12:33:35.29	+11:24:00.1	J2000.00	1.152	180.0	01:59:19.8	749.3	B	Kitt Peak	1	1 x 1
159283	VIRGO252	12:33:35.29	+11:24:00.1	J2000.00	1.152	180.0	01:59:19.8	749.3	B	Kitt Peak	5	1 x 1
159284	VIRGO252	12:33:35.29	+11:24:00.1	J2000.00	1.152	180.0	01:59:19.8	749.3	B	Kitt Peak	3	1 x 1
159285	VIRGO252	12:33:35.29	+11:24:00.1	J2000.00	1.152	180.0	01:59:19.8	749.3	B	Kitt Peak	4	1 x 1
159286	VIRGO253	12:35:41.79	+11:23:59.8	J2000.00	1.191	180.0	02:17:31.5	749.1	B	Kitt Peak	1	1 x 1
159287	VIRGO253	12:35:41.79	+11:23:59.8	J2000.00	1.191	180.0	02:17:31.5	749.1	B	Kitt Peak	5	1 x 1
159288	VIRGO253	12:35:41.79	+11:23:59.8	J2000.00	1.191	180.0	02:17:31.5	749.1	B	Kitt Peak	3	1 x 1
159289	VIRGO253	12:35:41.79	+11:23:59.8	J2000.00	1.191	180.0	02:17:31.5	749.1	B	Kitt Peak	4	1 x 1
159290	VIRGO254	12:37:48.30	+11:23:59.9	J2000.00	1.239	180.0	02:35:53.7	749.1	B	Kitt Peak	1	1 x 1
159291	VIRGO254	12:37:48.30	+11:23:59.9	J2000.00	1.239	180.0	02:35:53.7	749.1	B	Kitt Peak	5	1 x 1
159292	VIRGO254	12:37:48.30	+11:23:59.9	J2000.00	1.239	180.0	02:35:53.7	749.1	B	Kitt Peak	3	1 x 1
159293	VIRGO254	12:37:48.30	+11:23:59.9	J2000.00	1.239	180.0	02:35:53.7	749.1	B	Kitt Peak	4	1 x 1
159294	VIRGO256	12:42:01.29	+11:23:59.9	J2000.00	1.297	180.0	02:56:24.5	749.0	B	Kitt Peak	1	1 x 1
159295	VIRGO256	12:42:01.29	+11:23:59.9	J2000.00	1.297	180.0	02:56:24.5	749.0	B	Kitt Peak	5	1 x 1
159296	VIRGO256	12:42:01.29	+11:23:59.9	J2000.00	1.297	180.0	02:56:24.5	749.0	B	Kitt Peak	3	1 x 1
159297	VIRGO256	12:42:01.29	+11:23:59.9	J2000.00	1.297	180.0	02:56:24.5	749.0	B	Kitt Peak	4	1 x 1
159298	VIRGO257	12:44:07.79	+11:24:00.0	J2000.00	1.392	180.0	03:19:59.1	749.3	B	Kitt Peak	1	1 x 1
159299	VIRGO257	12:44:07.79	+11:24:00.0	J2000.00	1.392	180.0	03:19:59.1	749.3	B	Kitt Peak	5	1 x 1
159300	VIRGO257	12:44:07.79	+11:24:00.0	J2000.00	1.392	180.0	03:19:59.1	749.3	B	Kitt Peak	3	1 x 1
159301	VIRGO257	12:44:07.79	+11:24:00.0	J2000.00	1.392	180.0	03:19:59.1	749.3	B	Kitt Peak	4	1 x 1
159302	VIRGO255B	12:39:44.00	+11:25:59.9	J2000.00	1.519	180.0	03:37:56.7	749.3	B	Kitt Peak	1	1 x 1
159303	VIRGO255B	12:39:44.00	+11:25:59.9	J2000.00	1.519	180.0	03:37:56.7	749.3	B	Kitt Peak	5	1 x 1
159304	VIRGO255B	12:39:44.00	+11:25:59.9	J2000.00	1.519	180.0	03:37:56.7	749.3	B	Kitt Peak	3	1 x 1
159305	VIRGO255B	12:39:44.00	+11:25:59.9	J2000.00	1.519	180.0	03:37:56.7	749.3	B	Kitt Peak	4	1 x 1
159306	VIRGO258	12:46:14.29	+11:23:59.7	J2000.00	1.608	180.0	03:56:48.5	749.3	B	Kitt Peak	1	1 x 1

159307	VIRGO258	12:46:14.29	+11:23:59.7	J2000.00	1.608	180.0	03:56:48.5	749.3	B	Kitt Peak	5	1 x 1	
159308	VIRGO258	12:46:14.29	+11:23:59.7	J2000.00	1.608	180.0	03:56:48.5	749.3	B	Kitt Peak	3	1 x 1	
159309	VIRGO258	12:46:14.29	+11:23:59.7	J2000.00	1.608	180.0	03:56:48.5	749.3	B	Kitt Peak	4	1 x 1	
159310	SS104	12:42:22.00	-00:33:08.9	J2000.00	2.064	180.0	04:14:52.4	20.1	B	Kitt Peak	1	1 x 1	
159311	SS104	12:42:22.00	-00:33:08.9	J2000.00	2.064	180.0	04:14:52.4	20.1	B	Kitt Peak	5	1 x 1	
159312	SS104	12:42:22.00	-00:33:08.9	J2000.00	2.064	180.0	04:14:52.4	20.1	B	Kitt Peak	3	1 x 1	
159313	SS104	12:42:22.00	-00:33:08.9	J2000.00	2.064	180.0	04:14:52.4	20.1	B	Kitt Peak	4	1 x 1	
159314	SS104	12:42:22.00	-00:33:08.9	J2000.00	2.112	180.0	04:18:21.7	10.1	r	SLOAN	1	1 x 1	
159315	SS104	12:42:22.00	-00:33:08.9	J2000.00	2.112	180.0	04:18:21.7	10.1	r	SLOAN	5	1 x 1	
159316	SS104	12:42:22.00	-00:33:08.9	J2000.00	2.112	180.0	04:18:21.7	10.1	r	SLOAN	3	1 x 1	
159317	SS104	12:42:22.00	-00:33:08.9	J2000.00	2.112	180.0	04:18:21.7	10.1	r	SLOAN	4	1 x 1	
159318	SS107	15:39:35.00	-00:15:06.0	J2000.00	1.178	180.0	04:22:57.5	20.1	B	Kitt Peak	1	1 x 1	
159319	SS107	15:39:35.00	-00:15:06.0	J2000.00	1.178	180.0	04:22:57.5	20.1	B	Kitt Peak	5	1 x 1	
159320	SS107	15:39:35.00	-00:15:06.0	J2000.00	1.178	180.0	04:22:57.5	20.1	B	Kitt Peak	3	1 x 1	
159321	SS107	15:39:35.00	-00:15:06.0	J2000.00	1.178	180.0	04:22:57.5	20.1	B	Kitt Peak	4	1 x 1	
159322	SS107	15:39:34.99	-00:15:05.9	J2000.00	1.183	180.0	04:27:15.4	9.6	r	SLOAN	1	1 x 1	
159323	SS107	15:39:34.99	-00:15:05.9	J2000.00	1.183	180.0	04:27:15.4	9.6	r	SLOAN	5	1 x 1	
159324	SS107	15:39:34.99	-00:15:05.9	J2000.00	1.183	180.0	04:27:15.4	9.6	r	SLOAN	3	1 x 1	
159325	SS107	15:39:34.99	-00:15:05.9	J2000.00	1.183	180.0	04:27:15.4	9.6	r	SLOAN	4	1 x 1	
159326	SA110-361	18:42:45.00	+00:08:04.0	J2000.00	1.289	180.0	04:38:21.8	10.1	r	SLOAN	1	1 x 1	
159327	SA110-361	18:42:45.00	+00:08:04.0	J2000.00	1.289	180.0	04:38:21.8	10.1	r	SLOAN	5	1 x 1	
159328	SA110-361	18:42:45.00	+00:08:04.0	J2000.00	1.289	180.0	04:38:21.8	10.1	r	SLOAN	3	1 x 1	
159329	SA110-361	18:42:45.00	+00:08:04.0	J2000.00	1.289	180.0	04:38:21.8	10.1	r	SLOAN	4	1 x 1	
159330	SA110-361	18:42:45.00	+00:08:04.0	J2000.00	1.279	180.0	04:41:56.2	20.1	B	Kitt Peak	1	1 x 1	
159331	SA110-361	18:42:45.00	+00:08:04.0	J2000.00	1.279	180.0	04:41:56.2	20.1	B	Kitt Peak	5	1 x 1	
159332	SA110-361	18:42:45.00	+00:08:04.0	J2000.00	1.279	180.0	04:41:56.2	20.1	B	Kitt Peak	3	1 x 1	
159333	SA110-361	18:42:45.00	+00:08:04.0	J2000.00	1.279	180.0	04:41:56.2	20.1	B	Kitt Peak	4	1 x 1	
159334	WFSNGC119	13:56:00.00	-00:00:00.0	J2000.00	1.720	180.0	04:55:27.3	299.8	r	SLOAN	1	1 x 1	99%
159335	WFSNGC119	13:56:00.00	-00:00:00.0	J2000.00	1.720	180.0	04:55:27.3	299.8	r	SLOAN	5	1 x 1	
159336	WFSNGC119	13:56:00.00	-00:00:00.0	J2000.00	1.720	180.0	04:55:27.3	299.8	r	SLOAN	3	1 x 1	
159337	WFSNGC119	13:56:00.00	-00:00:00.0	J2000.00	1.720	180.0	04:55:27.3	299.8	r	SLOAN	4	1 x 1	
159339	WFSNGC119	13:56:00.00	+00:00:00.0	J2000.00	1.803	180.0	05:04:37.0	299.8	r	SLOAN	1	1 x 1	
159340	WFSNGC119	13:56:00.00	+00:00:00.0	J2000.00	1.803	180.0	05:04:37.0	299.8	r	SLOAN	5	1 x 1	
159341	WFSNGC119	13:56:00.00	+00:00:00.0	J2000.00	1.803	180.0	05:04:37.0	299.8	r	SLOAN	3	1 x 1	
159342	WFSNGC119	13:56:00.00	+00:00:00.0	J2000.00	1.803	180.0	05:04:37.0	299.8	r	SLOAN	4	1 x 1	
159343	WFSNGC116	13:49:59.99	-00:00:00.2	J2000.00	1.983	180.0	05:15:11.0	299.8	r	SLOAN	1	1 x 1	
159344	WFSNGC116	13:49:59.99	-00:00:00.2	J2000.00	1.983	180.0	05:15:11.0	299.8	r	SLOAN	5	1 x 1	
159345	WFSNGC116	13:49:59.99	-00:00:00.2	J2000.00	1.983	180.0	05:15:11.0	299.8	r	SLOAN	3	1 x 1	
159346	WFSNGC116	13:49:59.99	-00:00:00.2	J2000.00	1.983	180.0	05:15:11.0	299.8	r	SLOAN	4	1 x 1	
159347	WFSNGC117	13:51:59.99	-00:00:00.0	J2000.00	2.085	180.0	05:24:58.6	299.8	r	SLOAN	1	1 x 1	
159348	WFSNGC117	13:51:59.99	-00:00:00.0	J2000.00	2.085	180.0	05:24:58.6	299.8	r	SLOAN	5	1 x 1	
159349	WFSNGC117	13:51:59.99	-00:00:00.0	J2000.00	2.085	180.0	05:24:58.6	299.8	r	SLOAN	3	1 x 1	
159350	WFSNGC117	13:51:59.99	-00:00:00.0	J2000.00	2.085	180.0	05:24:58.6	299.8	r	SLOAN	4	1 x 1	
159351	WFSNGC118	13:54:00.00	-00:00:00.0	J2000.00	2.216	180.0	05:35:42.6	299.7	r	SLOAN	1	1 x 1	
159352	WFSNGC118	13:54:00.00	-00:00:00.0	J2000.00	2.216	180.0	05:35:42.6	299.7	r	SLOAN	5	1 x 1	
159353	WFSNGC118	13:54:00.00	-00:00:00.0	J2000.00	2.216	180.0	05:35:42.6	299.7	r	SLOAN	3	1 x 1	
159354	WFSNGC118	13:54:00.00	-00:00:00.0	J2000.00	2.216	180.0	05:35:42.6	299.7	r	SLOAN	4	1 x 1	
159355	Flat field	19:19:09.00	+12:22:05.1	B1950.00	1.072	180.0	06:10:32.4	75.1	B	Kitt Peak	1	1 x 1	
159356	Flat field	19:19:09.00	+12:22:05.1	B1950.00	1.072	180.0	06:10:32.4	75.1	B	Kitt Peak	5	1 x 1	
159357	Flat field	19:19:09.00	+12:22:05.1	B1950.00	1.072	180.0	06:10:32.4	75.1	B	Kitt Peak	3	1 x 1	
159358	Flat field	19:19:09.00	+12:22:05.1	B1950.00	1.072	180.0	06:10:32.4	75.1	B	Kitt Peak	4	1 x 1	
159359	Flat field	19:19:09.00	+12:22:05.1	B1950.00	1.068	180.0	06:15:13.0	30.1	B	Kitt Peak	1	1 x 1	
159360	Flat field	19:19:09.00	+12:22:05.1	B1950.00	1.068	180.0	06:15:13.0	30.1	B	Kitt Peak	5	1 x 1	
159361	Flat field	19:19:09.00	+12:22:05.1	B1950.00	1.068	180.0	06:15:13.0	30.1	B	Kitt Peak	3	1 x 1	
159362	Flat field	19:19:09.00	+12:22:05.1	B1950.00	1.068	180.0	06:15:13.0	30.1	B	Kitt Peak	4	1 x 1	
159363	Flat field	19:19:09.00	+12:22:05.0	B1950.00	1.064	180.0	06:19:06.3	20.1	r	SLOAN	1	1 x 1	
159364	Flat field	19:19:09.00	+12:22:05.0	B1950.00	1.064	180.0	06:19:06.3	20.1	r	SLOAN	5	1 x 1	
159365	Flat field	19:19:09.00	+12:22:05.0	B1950.00	1.064	180.0	06:19:06.3	20.1	r	SLOAN	3	1 x 1	
159366	Flat field	19:19:09.00	+12:22:05.0	B1950.00	1.064	180.0	06:19:06.3	20.1	r	SLOAN	4	1 x 1	