INT OBSERVING LOG (ISAAC NEWTON GROUP, LA PALMA)

TELESCOPE:	INT
DATE:	1999 Apr 09/10
INT TAPE NR:	INTD4014-15
OBSERVER:	J. Davies, A. Kambas, J. Haynes, R. Pain, D. Hardin
PROGRAMME:	WFS 09
PATT/CAT:	WFS 09
TELESCOPE OPERATOR:	P. Sorensen
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):	9 (FIRST HALF)
OUTSIDE TEMP (deg C):	10 (SECOND HALF)
HUMIDITY (%):	10 (FIRST HALF)
HUMIDITY (%):	8 (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):	1 (FIRST HALF)
SEEING (arcsec):	1 (SECOND HALF)
AV. SEEING (arcsec):	1
NO. SEEING MEASURES:	-

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

DARK HOURS:	08:36
DOME OPEN (UTC):	19:00
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.):	01:30
DK HRS LOST (DET.):	03:00
DK HRS LOST (COMPS.):	00:00
DK HRS LOST (A&G):	00:00
DK HRS LOST (OTHER):	00:00

COMMENTS:

Run no.	Object name	RA	Dec.	Equinox	AM	PA	UT	Exp. T.	Filter	Psys	Channel	Binning	Comments
158408	Bias frame	0:00:00.00	+00:00:00.0	A	1.538	179.9	16:21:34.2	0.0	B	Kitt Peak	1	1 x 1	

158409	Bias frame	0:00:00.00	+00:00:00.0	A		1.538	179.9	16:21:34.2	0.0	B	Kitt Peak	5	1 x 1
158410	Bias frame	0:00:00.00	+00:00:00.0	A		1.538	179.9	16:21:34.2	0.0	B	Kitt Peak	3	1 x 1
158411	Bias frame	0:00:00.00	+00:00:00.0	A		1.538	179.9	16:21:34.2	0.0	B	Kitt Peak	4	1 x 1
158412	Bias frame	0:00:00.00	+00:00:00.0	A		1.538	179.9	17:29:27.8	0.0	B	Kitt Peak	1	1 x 1
158413	Bias frame	0:00:00.00	+00:00:00.0	A		1.538	179.9	17:29:27.8	0.0	B	Kitt Peak	5	1 x 1
158414	Bias frame	0:00:00.00	+00:00:00.0	A		1.538	179.9	17:29:27.8	0.0	B	Kitt Peak	3	1 x 1
158415	Bias frame	0:00:00.00	+00:00:00.0	A		1.538	179.9	17:29:27.8	0.0	B	Kitt Peak	4	1 x 1
158416	Bias frame	0:00:00.00	+00:00:00.0	A		1.538	179.9	17:32:19.0	0.0	B	Kitt Peak	1	1 x 1
158417	Bias frame	0:00:00.00	+00:00:00.0	A		1.538	179.9	17:32:19.0	0.0	B	Kitt Peak	5	1 x 1
158418	Bias frame	0:00:00.00	+00:00:00.0	A		1.538	179.9	17:32:19.0	0.0	B	Kitt Peak	3	1 x 1
158419	Bias frame	0:00:00.00	+00:00:00.0	A		1.538	179.9	17:32:19.0	0.0	B	Kitt Peak	4	1 x 1
158420	Bias frame	0:00:00.00	+00:00:00.0	A		1.538	179.9	17:35:08.7	0.0	B	Kitt Peak	1	1 x 1
158421	Bias frame	0:00:00.00	+00:00:00.0	A		1.538	179.9	17:35:08.7	0.0	B	Kitt Peak	5	1 x 1
158422	Bias frame	0:00:00.00	+00:00:00.0	A		1.538	179.9	17:35:08.7	0.0	B	Kitt Peak	3	1 x 1
158423	Bias frame	0:00:00.00	+00:00:00.0	A		1.538	179.9	17:35:08.7	0.0	B	Kitt Peak	4	1 x 1
158424	Bias frame	0:00:00.00	+00:00:00.0	A		1.538	179.9	17:38:00.7	0.0	B	Kitt Peak	1	1 x 1
158425	Bias frame	0:00:00.00	+00:00:00.0	A		1.538	179.9	17:38:00.7	0.0	B	Kitt Peak	5	1 x 1
158426	Bias frame	0:00:00.00	+00:00:00.0	A		1.538	179.9	17:38:00.7	0.0	B	Kitt Peak	3	1 x 1
158427	Bias frame	0:00:00.00	+00:00:00.0	A		1.538	179.9	17:38:00.7	0.0	B	Kitt Peak	4	1 x 1
158428	Bias frame	0:00:00.00	+00:00:00.0	A		1.538	179.9	17:40:51.9	0.0	B	Kitt Peak	1	1 x 1
158429	Bias frame	0:00:00.00	+00:00:00.0	A		1.538	179.9	17:40:51.9	0.0	B	Kitt Peak	5	1 x 1
158430	Bias frame	0:00:00.00	+00:00:00.0	A		1.538	179.9	17:40:51.9	0.0	B	Kitt Peak	3	1 x 1
158431	Bias frame	0:00:00.00	+00:00:00.0	A		1.538	179.9	17:40:51.9	0.0	B	Kitt Peak	4	1 x 1
158432	Flat field	7:00:00.00	+25:00:00.0	J2000.00		1.018	179.9	19:46:17.9	6.5	B	Kitt Peak	1	1 x 1 Saturated
158433	Flat field	7:00:00.00	+25:00:00.0	J2000.00		1.018	179.9	19:46:17.9	6.5	B	Kitt Peak	5	1 x 1
158434	Flat field	7:00:00.00	+25:00:00.0	J2000.00		1.018	179.9	19:46:17.9	6.5	B	Kitt Peak	3	1 x 1
158435	Flat field	7:00:00.00	+25:00:00.0	J2000.00		1.018	179.9	19:46:17.9	6.5	B	Kitt Peak	4	1 x 1
158436	Flat field	7:00:00.00	+25:00:00.0	J2000.00		1.022	179.9	19:51:43.5	6.6	B	Kitt Peak	1	1 x 1
158437	Flat field	7:00:00.00	+25:00:00.0	J2000.00		1.022	179.9	19:51:43.5	6.6	B	Kitt Peak	5	1 x 1
158438	Flat field	7:00:00.00	+25:00:00.0	J2000.00		1.022	179.9	19:51:43.5	6.6	B	Kitt Peak	3	1 x 1
158439	Flat field	7:00:00.00	+25:00:00.0	J2000.00		1.022	179.9	19:51:43.5	6.6	B	Kitt Peak	4	1 x 1 Saturated
158440	Flat field	6:59:59.99	+24:59:59.9	J2000.00		1.028	179.9	19:58:54.2	3.3	B	Kitt Peak	1	1 x 1
158441	Flat field	6:59:59.99	+24:59:59.9	J2000.00		1.028	179.9	19:58:54.2	3.3	B	Kitt Peak	5	1 x 1
158442	Flat field	6:59:59.99	+24:59:59.9	J2000.00		1.028	179.9	19:58:54.2	3.3	B	Kitt Peak	3	1 x 1
158443	Flat field	6:59:59.99	+24:59:59.9	J2000.00		1.028	179.9	19:58:54.2	3.3	B	Kitt Peak	4	1 x 1
158444	Flat field	7:00:00.00	+24:59:59.9	J2000.00		1.031	179.9	20:02:17.0	8.3	B	Kitt Peak	1	1 x 1
158445	Flat field	7:00:00.00	+24:59:59.9	J2000.00		1.031	179.9	20:02:17.0	8.3	B	Kitt Peak	5	1 x 1
158446	Flat field	7:00:00.00	+24:59:59.9	J2000.00		1.031	179.9	20:02:17.0	8.3	B	Kitt Peak	3	1 x 1
158447	Flat field	7:00:00.00	+24:59:59.9	J2000.00		1.031	179.9	20:02:17.0	8.3	B	Kitt Peak	4	1 x 1
158448	Flat field	7:00:00.00	+25:00:00.0	J2000.00		1.036	179.9	20:06:28.3	26.1	B	Kitt Peak	1	1 x 1
158449	Flat field	7:00:00.00	+25:00:00.0	J2000.00		1.036	179.9	20:06:28.3	26.1	B	Kitt Peak	5	1 x 1
158450	Flat field	7:00:00.00	+25:00:00.0	J2000.00		1.036	179.9	20:06:28.3	26.1	B	Kitt Peak	3	1 x 1
158451	Flat field	7:00:00.00	+25:00:00.0	J2000.00		1.036	179.9	20:06:28.3	26.1	B	Kitt Peak	4	1 x 1
158452	Flat field	7:00:00.00	+25:00:00.0	J2000.00		1.040	179.9	20:10:20.3	69.6	B	Kitt Peak	1	1 x 1
158453	Flat field	7:00:00.00	+25:00:00.0	J2000.00		1.040	179.9	20:10:20.3	69.6	B	Kitt Peak	5	1 x 1
158454	Flat field	7:00:00.00	+25:00:00.0	J2000.00		1.040	179.9	20:10:20.3	69.6	B	Kitt Peak	3	1 x 1
158455	Flat field	7:00:00.00	+25:00:00.0	J2000.00		1.040	179.9	20:10:20.3	69.6	B	Kitt Peak	4	1 x 1
158456	Focus run	9:56:21.00	-00:25:34.0	J2000.00		1.176	179.9	21:06:17.3	15.1	V	Harris	1	1 x 1
158457	Focus run	9:56:21.00	-00:25:34.0	J2000.00		1.176	179.9	21:06:17.3	15.1	V	Harris	5	1 x 1
158458	Focus run	9:56:21.00	-00:25:34.0	J2000.00		1.176	179.9	21:06:17.3	15.1	V	Harris	3	1 x 1
158459	Focus run	9:56:21.00	-00:25:34.0	J2000.00		1.176	179.9	21:06:17.3	15.1	V	Harris	4	1 x 1
158460	SS101	9:56:21.00	-00:23:48.9	J2000.00		1.161	179.9	21:18:56.9	20.1	B	Kitt Peak	1	1 x 1 aper 0 (Crap)
158461	SS101	9:56:21.00	-00:23:48.9	J2000.00		1.161	179.9	21:18:56.9	20.1	B	Kitt Peak	5	1 x 1 crap
158462	SS101	9:56:21.00	-00:23:48.9	J2000.00		1.161	179.9	21:18:56.9	20.1	B	Kitt Peak	3	1 x 1 crap
158463	SS101	9:56:21.00	-00:23:48.9	J2000.00		1.161	179.9	21:18:56.9	20.1	B	Kitt Peak	4	1 x 1 aper 0 (Crap)
158464	SS101	9:56:21.00	-00:23:48.9	J2000.00		1.157	179.9	21:24:09.0	20.1	B	Kitt Peak	1	1 x 1 good
158465	SS101	9:56:21.00	-00:23:48.9	J2000.00		1.157	179.9	21:24:09.0	20.1	B	Kitt Peak	5	1 x 1
158466	SS101	9:56:21.00	-00:23:48.9	J2000.00		1.157	179.9	21:24:09.0	20.1	B	Kitt Peak	3	1 x 1
158467	SS101	9:56:21.00	-00:23:48.9	J2000.00		1.157	179.9	21:24:09.0	20.1	B	Kitt Peak	4	1 x 1 good
158468	SS98	6:51:52.00	-00:20:16.0	J2000.00		1.474	179.9	21:28:41.3	19.7	B	Kitt Peak	1	1 x 1 crap
158469	SS98	6:51:52.00	-00:20:16.0	J2000.00		1.474	179.9	21:28:41.3	19.7	B	Kitt Peak	5	1 x 1 crap
158470	SS98	6:51:52.00	-00:20:16.0	J2000.00		1.474	179.9	21:28:41.3	19.7	B	Kitt Peak	3	1 x 1 crap

158471	SS98	6:51:52.00	-00:20:16.0	J2000.00	1.474	179.9	21:28:41.3	19.7	B	Kitt Peak	4	1 x 1 crap
158472	SS104	12:42:22.00	-00:33:08.9	J2000.00	1.690	179.9	21:34:00.5	20.1	B	Kitt Peak	1	1 x 1 crap
158473	SS104	12:42:22.00	-00:33:08.9	J2000.00	1.690	179.9	21:34:00.5	20.1	B	Kitt Peak	5	1 x 1 crap
158474	SS104	12:42:22.00	-00:33:08.9	J2000.00	1.690	179.9	21:34:00.5	20.1	B	Kitt Peak	3	1 x 1 crap
158475	SS104	12:42:22.00	-00:33:08.9	J2000.00	1.690	179.9	21:34:00.5	20.1	B	Kitt Peak	4	1 x 1 crap
158476	SS98	6:51:52.00	-00:20:15.9	J2000.00	1.617	179.9	21:52:14.5	19.6	B	Kitt Peak	1	1 x 1
158477	SS98	6:51:52.00	-00:20:15.9	J2000.00	1.617	179.9	21:52:14.5	19.6	B	Kitt Peak	5	1 x 1
158478	SS98	6:51:52.00	-00:20:15.9	J2000.00	1.617	179.9	21:52:14.5	19.6	B	Kitt Peak	3	1 x 1
158479	SS98	6:51:52.00	-00:20:15.9	J2000.00	1.617	179.9	21:52:14.5	19.6	B	Kitt Peak	4	1 x 1
158480	SS104	12:42:22.00	-00:33:08.9	J2000.00	1.529	179.9	21:57:25.5	19.6	B	Kitt Peak	1	1 x 1
158481	SS104	12:42:22.00	-00:33:08.9	J2000.00	1.529	179.9	21:57:25.5	19.6	B	Kitt Peak	5	1 x 1
158482	SS104	12:42:22.00	-00:33:08.9	J2000.00	1.529	179.9	21:57:25.5	19.6	B	Kitt Peak	3	1 x 1
158483	SS104	12:42:22.00	-00:33:08.9	J2000.00	1.529	179.9	21:57:25.5	19.6	B	Kitt Peak	4	1 x 1
158484	VIRGO311	12:31:29.00	+12:24:00.0	J2000.00	1.254	179.9	22:02:26.4	749.2	B	Kitt Peak	1	1 x 1 crap
158485	VIRGO311	12:31:29.00	+12:24:00.0	J2000.00	1.254	179.9	22:02:26.4	749.2	B	Kitt Peak	5	1 x 1 crap
158486	VIRGO311	12:31:29.00	+12:24:00.0	J2000.00	1.254	179.9	22:02:26.4	749.2	B	Kitt Peak	3	1 x 1 crap
158487	VIRGO311	12:31:29.00	+12:24:00.0	J2000.00	1.254	179.9	22:02:26.4	749.2	B	Kitt Peak	4	1 x 1 crap
158488	VIRGO312	12:33:35.90	+12:24:00.0	J2000.00	1.198	179.9	22:22:24.8	749.3	B	Kitt Peak	1	1 x 1 crap
158489	VIRGO312	12:33:35.90	+12:24:00.0	J2000.00	1.198	179.9	22:22:24.8	749.3	B	Kitt Peak	5	1 x 1
158490	VIRGO312	12:33:35.90	+12:24:00.0	J2000.00	1.198	179.9	22:22:24.8	749.3	B	Kitt Peak	3	1 x 1
158491	VIRGO312	12:33:35.90	+12:24:00.0	J2000.00	1.198	179.9	22:22:24.8	749.3	B	Kitt Peak	4	1 x 1
158492	VIRGO313	12:35:42.89	+12:24:00.0	J2000.00	1.155	179.9	22:41:42.3	749.3	B	Kitt Peak	1	1 x 1 crap
158493	VIRGO313	12:35:42.89	+12:24:00.0	J2000.00	1.155	179.9	22:41:42.3	749.3	B	Kitt Peak	5	1 x 1
158494	VIRGO313	12:35:42.89	+12:24:00.0	J2000.00	1.155	179.9	22:41:42.3	749.3	B	Kitt Peak	3	1 x 1
158495	VIRGO313	12:35:42.89	+12:24:00.0	J2000.00	1.155	179.9	22:41:42.3	749.3	B	Kitt Peak	4	1 x 1
158496	VIRGO311	12:31:29.00	+12:24:00.0	J2000.00	1.109	179.9	23:01:09.2	749.4	B	Kitt Peak	1	1 x 1 crap
158497	VIRGO311	12:31:29.00	+12:24:00.0	J2000.00	1.109	179.9	23:01:09.2	749.4	B	Kitt Peak	5	1 x 1
158498	VIRGO311	12:31:29.00	+12:24:00.0	J2000.00	1.109	179.9	23:01:09.2	749.4	B	Kitt Peak	3	1 x 1
158499	VIRGO311	12:31:29.00	+12:24:00.0	J2000.00	1.109	179.9	23:01:09.2	749.4	B	Kitt Peak	4	1 x 1
158500	VIRGO311	12:31:28.99	+12:24:00.0	J2000.00	1.057	179.9	23:45:20.1	749.3	B	Kitt Peak	1	1 x 1
158501	VIRGO311	12:31:28.99	+12:24:00.0	J2000.00	1.057	179.9	23:45:20.1	749.3	B	Kitt Peak	5	1 x 1
158502	VIRGO311	12:31:28.99	+12:24:00.0	J2000.00	1.057	179.9	23:45:20.1	749.3	B	Kitt Peak	3	1 x 1
158503	VIRGO311	12:31:28.99	+12:24:00.0	J2000.00	1.057	179.9	23:45:20.1	749.3	B	Kitt Peak	4	1 x 1
158504	VIRGO312	12:33:35.90	+12:23:59.9	J2000.00	1.045	179.9	00:08:37.6	748.4	B	Kitt Peak	1	1 x 1
158505	VIRGO312	12:33:35.90	+12:23:59.9	J2000.00	1.045	179.9	00:08:37.6	748.4	B	Kitt Peak	5	1 x 1
158506	VIRGO312	12:33:35.90	+12:23:59.9	J2000.00	1.045	179.9	00:08:37.6	748.4	B	Kitt Peak	3	1 x 1
158507	VIRGO312	12:33:35.90	+12:23:59.9	J2000.00	1.045	179.9	00:08:37.6	748.4	B	Kitt Peak	4	1 x 1
158508	VIRGO313	12:35:42.87	+12:24:00.2	J2000.00	1.042	179.9	00:29:09.8	749.2	B	Kitt Peak	1	1 x 1
158509	VIRGO313	12:35:42.87	+12:24:00.2	J2000.00	1.042	179.9	00:29:09.8	749.2	B	Kitt Peak	5	1 x 1
158510	VIRGO313	12:35:42.87	+12:24:00.2	J2000.00	1.042	179.9	00:29:09.8	749.2	B	Kitt Peak	3	1 x 1
158511	VIRGO313	12:35:42.87	+12:24:00.2	J2000.00	1.042	179.9	00:29:09.8	749.2	B	Kitt Peak	4	1 x 1
158512	VIRGO314	12:37:49.80	+12:23:59.9	J2000.00	1.045	179.9	00:49:20.2	749.4	B	Kitt Peak	1	1 x 1
158513	VIRGO314	12:37:49.80	+12:23:59.9	J2000.00	1.045	179.9	00:49:20.2	749.4	B	Kitt Peak	5	1 x 1
158514	VIRGO314	12:37:49.80	+12:23:59.9	J2000.00	1.045	179.9	00:49:20.2	749.4	B	Kitt Peak	3	1 x 1
158515	VIRGO314	12:37:49.80	+12:23:59.9	J2000.00	1.045	179.9	00:49:20.2	749.4	B	Kitt Peak	4	1 x 1
158516	VIRGO315	12:39:56.79	+12:24:00.2	J2000.00	1.052	179.9	01:07:36.4	749.2	B	Kitt Peak	1	1 x 1
158517	VIRGO315	12:39:56.79	+12:24:00.2	J2000.00	1.052	179.9	01:07:36.4	749.2	B	Kitt Peak	5	1 x 1
158518	VIRGO315	12:39:56.79	+12:24:00.2	J2000.00	1.052	179.9	01:07:36.4	749.2	B	Kitt Peak	3	1 x 1
158519	VIRGO315	12:39:56.79	+12:24:00.2	J2000.00	1.052	179.9	01:07:36.4	749.2	B	Kitt Peak	4	1 x 1
158520	VIRGO316	12:42:03.80	+12:24:00.1	J2000.00	1.065	179.9	01:26:31.3	749.3	B	Kitt Peak	1	1 x 1
158521	VIRGO316	12:42:03.80	+12:24:00.1	J2000.00	1.065	179.9	01:26:31.3	749.3	B	Kitt Peak	5	1 x 1
158522	VIRGO316	12:42:03.80	+12:24:00.1	J2000.00	1.065	179.9	01:26:31.3	749.3	B	Kitt Peak	3	1 x 1
158523	VIRGO316	12:42:03.80	+12:24:00.1	J2000.00	1.065	179.9	01:26:31.3	749.3	B	Kitt Peak	4	1 x 1
158524	VIRGO317	12:44:10.70	+12:23:59.9	J2000.00	1.083	179.9	01:44:28.8	748.6	B	Kitt Peak	1	1 x 1
158525	VIRGO317	12:44:10.70	+12:23:59.9	J2000.00	1.083	179.9	01:44:28.8	748.6	B	Kitt Peak	5	1 x 1
158526	VIRGO317	12:44:10.70	+12:23:59.9	J2000.00	1.083	179.9	01:44:28.8	748.6	B	Kitt Peak	3	1 x 1
158527	VIRGO317	12:44:10.70	+12:23:59.9	J2000.00	1.083	179.9	01:44:28.8	748.6	B	Kitt Peak	4	1 x 1
158528	VIRGO318	12:46:17.69	+12:23:59.8	J2000.00	1.105	179.9	02:02:23.1	749.3	B	Kitt Peak	1	1 x 1
158529	VIRGO318	12:46:17.69	+12:23:59.8	J2000.00	1.105	179.9	02:02:23.1	749.3	B	Kitt Peak	5	1 x 1
158530	VIRGO318	12:46:17.69	+12:23:59.8	J2000.00	1.105	179.9	02:02:23.1	749.3	B	Kitt Peak	3	1 x 1
158531	VIRGO318	12:46:17.69	+12:23:59.8	J2000.00	1.105	179.9	02:02:23.1	749.3	B	Kitt Peak	4	1 x 1
158532	SS101	9:56:21.00	-00:27:19.0	J2000.00	2.836	179.9	02:20:53.9	19.6	B	Kitt Peak	1	1 x 1

158533	SS101	9:56:21.00	-00:27:19.0	J2000.00	2.836	179.9	02:20:53.9	19.6	B	Kitt Peak	5	1 x 1
158534	SS101	9:56:21.00	-00:27:19.0	J2000.00	2.836	179.9	02:20:53.9	19.6	B	Kitt Peak	3	1 x 1
158535	SS101	9:56:21.00	-00:27:19.0	J2000.00	2.836	179.9	02:20:53.9	19.6	B	Kitt Peak	4	1 x 1
158536	SS104	12:42:22.00	-00:33:08.9	J2000.00	1.275	179.9	02:25:51.9	20.1	B	Kitt Peak	1	1 x 1
158537	SS104	12:42:22.00	-00:33:08.9	J2000.00	1.275	179.9	02:25:51.9	20.1	B	Kitt Peak	5	1 x 1
158538	SS104	12:42:22.00	-00:33:08.9	J2000.00	1.275	179.9	02:25:51.9	20.1	B	Kitt Peak	3	1 x 1
158539	SS104	12:42:22.00	-00:33:08.9	J2000.00	1.275	179.9	02:25:51.9	20.1	B	Kitt Peak	4	1 x 1
158540	SS104	12:42:22.00	-00:33:08.9	J2000.00	1.285	179.9	02:29:35.2	10.1	r	SLOAN	1	1 x 1
158541	SS104	12:42:22.00	-00:33:08.9	J2000.00	1.285	179.9	02:29:35.2	10.1	r	SLOAN	5	1 x 1
158542	SS104	12:42:22.00	-00:33:08.9	J2000.00	1.285	179.9	02:29:35.2	10.1	r	SLOAN	3	1 x 1
158543	SS104	12:42:22.00	-00:33:08.9	J2000.00	1.285	179.9	02:29:35.2	10.1	r	SLOAN	4	1 x 1
158544	SS107	15:39:35.00	-00:15:06.0	J2000.00	1.191	179.9	02:34:11.6	9.6	r	SLOAN	1	1 x 1
158545	SS107	15:39:35.00	-00:15:06.0	J2000.00	1.191	179.9	02:34:11.6	9.6	r	SLOAN	5	1 x 1
158546	SS107	15:39:35.00	-00:15:06.0	J2000.00	1.191	179.9	02:34:11.6	9.6	r	SLOAN	3	1 x 1
158547	SS107	15:39:35.00	-00:15:06.0	J2000.00	1.191	179.9	02:34:11.6	9.6	r	SLOAN	4	1 x 1
158548	SS107	15:39:35.00	-00:15:05.9	J2000.00	1.186	179.9	02:37:34.7	20.1	B	Kitt Peak	1	1 x 1
158549	SS107	15:39:35.00	-00:15:05.9	J2000.00	1.186	179.9	02:37:34.7	20.1	B	Kitt Peak	5	1 x 1
158550	SS107	15:39:35.00	-00:15:05.9	J2000.00	1.186	179.9	02:37:34.7	20.1	B	Kitt Peak	3	1 x 1
158551	SS107	15:39:35.00	-00:15:05.9	J2000.00	1.186	179.9	02:37:34.7	20.1	B	Kitt Peak	4	1 x 1
158552	WFSNGC096	6:35:00.00	-00:00:00.0	J2000.00	1.253	179.9	02:46:01.1	239.8	r	SLOAN	1	1 x 1
158553	WFSNGC096	6:35:00.00	-00:00:00.0	J2000.00	1.253	179.9	02:46:01.1	239.8	r	SLOAN	5	1 x 1
158554	WFSNGC096	6:35:00.00	-00:00:00.0	J2000.00	1.253	179.9	02:46:01.1	239.8	r	SLOAN	3	1 x 1
158555	WFSNGC096	6:35:00.00	-00:00:00.0	J2000.00	1.253	179.9	02:46:01.1	239.8	r	SLOAN	4	1 x 1
158556	WFSNGC098	13:14:00.00	-00:00:00.1	J2000.00	1.268	179.9	02:55:48.3	239.9	r	SLOAN	1	1 x 1
158557	WFSNGC098	13:14:00.00	-00:00:00.1	J2000.00	1.268	179.9	02:55:48.3	239.9	r	SLOAN	5	1 x 1
158558	WFSNGC098	13:14:00.00	-00:00:00.1	J2000.00	1.268	179.9	02:55:48.3	239.9	r	SLOAN	3	1 x 1
158559	WFSNGC098	13:14:00.00	-00:00:00.1	J2000.00	1.268	179.9	02:55:48.3	239.9	r	SLOAN	4	1 x 1
158560	WFSNGC097	13:12:00.00	+00:00:00.0	J2000.00	1.305	179.9	03:06:21.3	239.8	r	SLOAN	1	1 x 1
158561	WFSNGC097	13:12:00.00	+00:00:00.0	J2000.00	1.305	179.9	03:06:21.3	239.8	r	SLOAN	5	1 x 1
158562	WFSNGC097	13:12:00.00	+00:00:00.0	J2000.00	1.305	179.9	03:06:21.3	239.8	r	SLOAN	3	1 x 1
158563	WFSNGC097	13:12:00.00	+00:00:00.0	J2000.00	1.305	179.9	03:06:21.3	239.8	r	SLOAN	4	1 x 1
158564	WFSNGC099	13:15:59.99	+00:00:00.1	J2000.00	1.325	179.9	03:16:31.6	239.9	r	SLOAN	1	1 x 1
158565	WFSNGC099	13:15:59.99	+00:00:00.1	J2000.00	1.325	179.9	03:16:31.6	239.9	r	SLOAN	5	1 x 1
158566	WFSNGC099	13:15:59.99	+00:00:00.1	J2000.00	1.325	179.9	03:16:31.6	239.9	r	SLOAN	3	1 x 1
158567	WFSNGC099	13:15:59.99	+00:00:00.1	J2000.00	1.325	179.9	03:16:31.6	239.9	r	SLOAN	4	1 x 1
158568	WFSNGC096	13:10:00.00	-00:00:00.0	J2000.00	1.383	179.9	03:25:52.8	239.8	r	SLOAN	1	1 x 1
158569	WFSNGC096	13:10:00.00	-00:00:00.0	J2000.00	1.383	179.9	03:25:52.8	239.8	r	SLOAN	5	1 x 1
158570	WFSNGC096	13:10:00.00	-00:00:00.0	J2000.00	1.383	179.9	03:25:52.8	239.8	r	SLOAN	3	1 x 1
158571	WFSNGC096	13:10:00.00	-00:00:00.0	J2000.00	1.383	179.9	03:25:52.8	239.8	r	SLOAN	4	1 x 1
158572	WFSNGC098	13:13:59.99	+00:00:00.0	J2000.00	1.408	179.9	03:35:37.9	239.9	r	SLOAN	1	1 x 1
158573	WFSNGC098	13:13:59.99	+00:00:00.0	J2000.00	1.408	179.9	03:35:37.9	239.9	r	SLOAN	5	1 x 1
158574	WFSNGC098	13:13:59.99	+00:00:00.0	J2000.00	1.408	179.9	03:35:37.9	239.9	r	SLOAN	3	1 x 1
158575	WFSNGC098	13:13:59.99	+00:00:00.0	J2000.00	1.408	179.9	03:35:37.9	239.9	r	SLOAN	4	1 x 1
158576	WFSNGC099	13:15:59.99	-00:00:00.0	J2000.00	1.440	179.9	03:44:24.3	239.9	r	SLOAN	1	1 x 1
158577	WFSNGC099	13:15:59.99	-00:00:00.0	J2000.00	1.440	179.9	03:44:24.3	239.9	r	SLOAN	5	1 x 1
158578	WFSNGC099	13:15:59.99	-00:00:00.0	J2000.00	1.440	179.9	03:44:24.3	239.9	r	SLOAN	3	1 x 1
158579	WFSNGC099	13:15:59.99	-00:00:00.0	J2000.00	1.440	179.9	03:44:24.3	239.9	r	SLOAN	4	1 x 1
158586	WFSNGC096	13:09:59.99	+00:00:00.0	J2000.00	1.554	179.9	03:59:06.0	239.4	r	SLOAN	1	1 x 1
158587	WFSNGC096	13:09:59.99	+00:00:00.0	J2000.00	1.554	179.9	03:59:06.0	239.4	r	SLOAN	5	1 x 1
158588	WFSNGC096	13:09:59.99	+00:00:00.0	J2000.00	1.554	179.9	03:59:06.0	239.4	r	SLOAN	3	1 x 1
158589	WFSNGC096	13:09:59.99	+00:00:00.0	J2000.00	1.554	179.9	03:59:06.0	239.4	r	SLOAN	4	1 x 1
158590	WFSNGC096	13:10:00.00	+00:00:00.0	J2000.00	1.637	179.9	04:11:19.6	239.8	r	SLOAN	1	1 x 1
158591	WFSNGC096	13:10:00.00	+00:00:00.0	J2000.00	1.637	179.9	04:11:19.6	239.8	r	SLOAN	5	1 x 1
158592	WFSNGC096	13:10:00.00	+00:00:00.0	J2000.00	1.637	179.9	04:11:19.6	239.8	r	SLOAN	3	1 x 1
158593	WFSNGC096	13:10:00.00	+00:00:00.0	J2000.00	1.637	179.9	04:11:19.6	239.8	r	SLOAN	4	1 x 1
158594	WFSNGC097	13:11:59.99	-00:00:00.0	J2000.00	1.695	179.9	04:20:46.7	239.8	r	SLOAN	1	1 x 1
158595	WFSNGC097	13:11:59.99	-00:00:00.0	J2000.00	1.695	179.9	04:20:46.7	239.8	r	SLOAN	5	1 x 1
158596	WFSNGC097	13:11:59.99	-00:00:00.0	J2000.00	1.695	179.9	04:20:46.7	239.8	r	SLOAN	3	1 x 1
158597	WFSNGC097	13:11:59.99	-00:00:00.0	J2000.00	1.695	179.9	04:20:46.7	239.8	r	SLOAN	4	1 x 1
158598	WFSNGC097	13:12:00.00	-00:00:00.0	J2000.00	1.771	179.9	04:29:36.2	239.9	r	SLOAN	1	1 x 1
158599	WFSNGC097	13:12:00.00	-00:00:00.0	J2000.00	1.771	179.9	04:29:36.2	239.9	r	SLOAN	5	1 x 1
158600	WFSNGC097	13:12:00.00	-00:00:00.0	J2000.00	1.771	179.9	04:29:36.2	239.9	r	SLOAN	3	1 x 1

158601	WFSNGC097	13:12:00.00	-00:00:00.0	J2000.00	1.771	179.9	04:29:36.2	239.9	r	SLOAN	4	1 x 1
158602	WFSNGC099	13:16:00.00	+00:00:00.0	J2000.00	1.829	179.9	04:39:39.6	239.9	r	SLOAN	1	1 x 1
158603	WFSNGC099	13:16:00.00	+00:00:00.0	J2000.00	1.829	179.9	04:39:39.6	239.9	r	SLOAN	5	1 x 1
158604	WFSNGC099	13:16:00.00	+00:00:00.0	J2000.00	1.829	179.9	04:39:39.6	239.9	r	SLOAN	3	1 x 1
158605	WFSNGC099	13:16:00.00	+00:00:00.0	J2000.00	1.829	179.9	04:39:39.6	239.9	r	SLOAN	4	1 x 1
158606	WFSNGC100	13:17:59.98	-00:00:00.0	J2000.00	1.899	179.9	04:48:17.7	239.4	r	SLOAN	1	1 x 1
158607	WFSNGC100	13:17:59.98	-00:00:00.0	J2000.00	1.899	179.9	04:48:17.7	239.4	r	SLOAN	5	1 x 1
158608	WFSNGC100	13:17:59.98	-00:00:00.0	J2000.00	1.899	179.9	04:48:17.7	239.4	r	SLOAN	3	1 x 1
158609	WFSNGC100	13:17:59.98	-00:00:00.0	J2000.00	1.899	179.9	04:48:17.7	239.4	r	SLOAN	4	1 x 1
158610	WFSNGC129	14:16:00.00	-00:00:00.2	J2000.00	1.512	179.9	04:57:59.2	239.7	r	SLOAN	1	1 x 1
158611	WFSNGC129	14:16:00.00	-00:00:00.2	J2000.00	1.512	179.9	04:57:59.2	239.7	r	SLOAN	5	1 x 1
158612	WFSNGC129	14:16:00.00	-00:00:00.2	J2000.00	1.512	179.9	04:57:59.2	239.7	r	SLOAN	3	1 x 1
158613	WFSNGC129	14:16:00.00	-00:00:00.2	J2000.00	1.512	179.9	04:57:59.2	239.7	r	SLOAN	4	1 x 1
158614	WFSNGC130	14:18:00.00	-00:00:00.0	J2000.00	1.552	179.9	05:06:35.3	239.8	r	SLOAN	1	1 x 1
158615	WFSNGC130	14:18:00.00	-00:00:00.0	J2000.00	1.552	179.9	05:06:35.3	239.8	r	SLOAN	5	1 x 1
158616	WFSNGC130	14:18:00.00	-00:00:00.0	J2000.00	1.552	179.9	05:06:35.3	239.8	r	SLOAN	3	1 x 1
158617	WFSNGC130	14:18:00.00	-00:00:00.0	J2000.00	1.552	179.9	05:06:35.3	239.8	r	SLOAN	4	1 x 1
158618	WFSNGC130	14:18:00.00	+00:00:00.0	J2000.00	1.604	179.9	05:14:29.6	239.3	r	SLOAN	1	1 x 1
158619	WFSNGC130	14:18:00.00	+00:00:00.0	J2000.00	1.604	179.9	05:14:29.6	239.3	r	SLOAN	5	1 x 1
158620	WFSNGC130	14:18:00.00	+00:00:00.0	J2000.00	1.604	179.9	05:14:29.6	239.3	r	SLOAN	3	1 x 1
158621	WFSNGC130	14:18:00.00	+00:00:00.0	J2000.00	1.604	179.9	05:14:29.6	239.3	r	SLOAN	4	1 x 1
158622	WFSNGC129	14:16:00.00	+00:00:00.3	J2000.00	1.680	179.9	05:22:49.3	239.8	r	SLOAN	1	1 x 1
158623	WFSNGC129	14:16:00.00	+00:00:00.3	J2000.00	1.680	179.9	05:22:49.3	239.8	r	SLOAN	5	1 x 1
158624	WFSNGC129	14:16:00.00	+00:00:00.3	J2000.00	1.680	179.9	05:22:49.3	239.8	r	SLOAN	3	1 x 1
158625	WFSNGC129	14:16:00.00	+00:00:00.3	J2000.00	1.680	179.9	05:22:49.3	239.8	r	SLOAN	4	1 x 1
158626	WFSNGC130	14:17:59.99	+00:00:00.0	J2000.00	1.733	179.9	05:31:13.1	239.9	r	SLOAN	1	1 x 1
158627	WFSNGC130	14:17:59.99	+00:00:00.0	J2000.00	1.733	179.9	05:31:13.1	239.9	r	SLOAN	5	1 x 1
158628	WFSNGC130	14:17:59.99	+00:00:00.0	J2000.00	1.733	179.9	05:31:13.1	239.9	r	SLOAN	3	1 x 1
158629	WFSNGC130	14:17:59.99	+00:00:00.0	J2000.00	1.733	179.9	05:31:13.1	239.9	r	SLOAN	4	1 x 1
158630	WFSNGC130	14:17:59.99	-00:00:00.0	J2000.00	1.811	179.9	05:39:40.6	239.3	r	SLOAN	1	1 x 1
158631	WFSNGC130	14:17:59.99	-00:00:00.0	J2000.00	1.811	179.9	05:39:40.6	239.3	r	SLOAN	5	1 x 1
158632	WFSNGC130	14:17:59.99	-00:00:00.0	J2000.00	1.811	179.9	05:39:40.6	239.3	r	SLOAN	3	1 x 1
158633	WFSNGC130	14:17:59.99	-00:00:00.0	J2000.00	1.811	179.9	05:39:40.6	239.3	r	SLOAN	4	1 x 1
158634	SA110-361	18:42:45.00	+00:08:03.9	J2000.00	1.167	179.9	05:51:36.2	20.1	B	Kitt Peak	1	1 x 1
158635	SA110-361	18:42:45.00	+00:08:03.9	J2000.00	1.167	179.9	05:51:36.2	20.1	B	Kitt Peak	5	1 x 1
158636	SA110-361	18:42:45.00	+00:08:03.9	J2000.00	1.167	179.9	05:51:36.2	20.1	B	Kitt Peak	3	1 x 1
158637	SA110-361	18:42:45.00	+00:08:03.9	J2000.00	1.167	179.9	05:51:36.2	20.1	B	Kitt Peak	4	1 x 1
158638	SA110-361	18:42:45.00	+00:08:03.9	J2000.00	1.163	179.9	05:55:07.9	10.1	r	SLOAN	1	1 x 1
158639	SA110-361	18:42:45.00	+00:08:03.9	J2000.00	1.163	179.9	05:55:07.9	10.1	r	SLOAN	5	1 x 1
158640	SA110-361	18:42:45.00	+00:08:03.9	J2000.00	1.163	179.9	05:55:07.9	10.1	r	SLOAN	3	1 x 1
158641	SA110-361	18:42:45.00	+00:08:03.9	J2000.00	1.163	179.9	05:55:07.9	10.1	r	SLOAN	4	1 x 1
158642	SA107-602	15:39:18.99	-00:15:28.9	J2000.00	1.399	179.9	05:59:31.3	10.1	r	SLOAN	1	1 x 1
158643	SA107-602	15:39:18.99	-00:15:28.9	J2000.00	1.399	179.9	05:59:31.3	10.1	r	SLOAN	5	1 x 1
158644	SA107-602	15:39:18.99	-00:15:28.9	J2000.00	1.399	179.9	05:59:31.3	10.1	r	SLOAN	3	1 x 1
158645	SA107-602	15:39:18.99	-00:15:28.9	J2000.00	1.399	179.9	05:59:31.3	10.1	r	SLOAN	4	1 x 1
158646	SA107-602	15:39:19.00	-00:15:29.0	J2000.00	1.415	179.9	06:02:53.7	19.7	B	Kitt Peak	1	1 x 1
158647	SA107-602	15:39:19.00	-00:15:29.0	J2000.00	1.415	179.9	06:02:53.7	19.7	B	Kitt Peak	5	1 x 1
158648	SA107-602	15:39:19.00	-00:15:29.0	J2000.00	1.415	179.9	06:02:53.7	19.7	B	Kitt Peak	3	1 x 1
158649	SA107-602	15:39:19.00	-00:15:29.0	J2000.00	1.415	179.9	06:02:53.7	19.7	B	Kitt Peak	4	1 x 1
158650	Flat field	19:19:08.99	+12:22:04.9	B1950.00	1.081	179.9	06:14:41.4	100.0	r	SLOAN	1	1 x 1
158651	Flat field	19:19:08.99	+12:22:04.9	B1950.00	1.081	179.9	06:14:41.4	100.0	r	SLOAN	5	1 x 1
158652	Flat field	19:19:08.99	+12:22:04.9	B1950.00	1.081	179.9	06:14:41.4	100.0	r	SLOAN	3	1 x 1
158653	Flat field	19:19:08.99	+12:22:04.9	B1950.00	1.081	179.9	06:14:41.4	100.0	r	SLOAN	4	1 x 1
158658	Flat field	19:19:09.00	+12:22:05.0	B1950.00	1.074	179.9	06:20:43.9	20.1	B	Kitt Peak	1	1 x 1
158659	Flat field	19:19:09.00	+12:22:05.0	B1950.00	1.074	179.9	06:20:43.9	20.1	B	Kitt Peak	5	1 x 1
158660	Flat field	19:19:09.00	+12:22:05.0	B1950.00	1.074	179.9	06:20:43.9	20.1	B	Kitt Peak	3	1 x 1
158661	Flat field	19:19:09.00	+12:22:05.0	B1950.00	1.074	179.9	06:20:43.9	20.1	B	Kitt Peak	4	1 x 1
158662	Flat field	19:19:09.00	+12:22:05.0	B1950.00	1.070	179.9	06:24:40.9	3.1	B	Kitt Peak	1	1 x 1
158663	Flat field	19:19:09.00	+12:22:05.0	B1950.00	1.070	179.9	06:24:40.9	3.1	B	Kitt Peak	5	1 x 1
158664	Flat field	19:19:09.00	+12:22:05.0	B1950.00	1.070	179.9	06:24:40.9	3.1	B	Kitt Peak	3	1 x 1
158665	Flat field	19:19:09.00	+12:22:05.0	B1950.00	1.070	179.9	06:24:40.9	3.1	B	Kitt Peak	4	1 x 1