

Table 1

File	Object	RA set	DEC set	Filter	Date	UT-STRT	Log Differences	Comments (N left E down, rotate 270 CC)
fr86a001.fits	1P/Halley	22:02:12.20	-03:51:11.5	V	01/08/86	+01:35:27		
fr86a002.fits	1P/Halley	22:02:12.20	-03:51:11.5	V	01/08/86	+01:36:49		
fr86a003.fits	1P/Halley	22:02:12.20	-03:51:11.5	V	01/08/86	+01:38:17		
fr86a004.fits	1P/Halley	22:02:12.20	-03:51:11.5	R	01/08/86	+01:40:33		
fr86a005.fits	1P/Halley	22:02:12.20	-03:51:11.5	R	01/08/86	+01:41:56		
fr86a006.fits	1P/Halley	22:02:12.20	-03:51:11.5	B	01/08/86	+01:43:37		
fr86a007.fits	1P/Halley	22:02:11.37	-03:51:16.5	B	01/08/86	+01:45:17		
fr86a008.fits	1P/Halley	22:02:11.37	-03:51:16.5	I	01/08/86	+01:47:16		
fr86a009.fits	1P/Halley	22:02:11.37	-03:51:16.5	I	01/08/86	+01:48:53		
fr86a010.fits	1P/Halley	22:02:11.37	-03:51:16.5	I	01/08/86	+01:53:41		
fr86a011.fits	1P/Halley	22:02:10.53	-03:51:21.4	R	01/08/86	+01:56:00		
fr86a012.fits	1P/Halley	22:02:10.53	-03:51:21.4	V	01/08/86	+01:57:37		
fr86a013.fits	1P/Halley	22:02:10.53	-03:51:21.4	B	01/08/86	+01:59:12		
fr86a014.fits	1P/Halley	22:02:10.53	-03:51:21.4	6185	01/08/86	+02:03:30		
fr86a015.fits	1P/Halley	22:02:09.70	-03:51:26.4	6185	01/08/86	+02:06:26		
fr86a016.fits	1P/Halley	22:02:09.70	-03:51:26.4	6250	01/08/86	+02:13:09		
fr86a017.fits	1P/Halley	22:02:08.86	-03:51:31.3	6250	01/08/86	+02:15:44		
fr86a018.fits	1P/Halley	22:02:08.86	-03:51:31.3	9180	01/08/86	+02:23:36		
fr86a019.fits	1P/Halley	22:02:08.03	-03:51:36.3	9180	01/08/86	+02:25:26		
fr86a020.fits	1P/Halley	22:02:08.03	-03:51:36.3	8600	01/08/86	+02:31:20		
fr86a021.fits	1P/Halley	22:02:08.03	-03:51:36.3	8600	01/08/86	+02:33:16		
fr86a022.fits	1P/Halley	22:02:07.20	-03:51:41.2	6185	01/08/86	+02:37:15		
fr86a023.fits	"SA 76-281"	08:21:06.00	+14:44:13.2	V	01/08/86	+08:08:28		SA 76-281
fr86a024.fits	"SA 76-281"	08:21:06.00	+14:44:13.2	V	01/08/86	+08:11:11		
fr86a025.fits	"SA 76-281"	08:21:06.00	+14:44:13.2	R	01/08/86	+08:13:31		
fr86a026.fits	"SA 76-281"	08:21:06.00	+14:44:13.2	I	01/08/86	+08:17:49		
fr86a027.fits	"SA 76-281"	08:21:06.00	+14:44:13.2	I	01/08/86	+08:19:26		
fr86a028.fits	"SA 76-281"	08:21:06.00	+14:44:13.2	R	01/08/86	+08:21:55		
fr86a029.fits	"SA 76-281"	08:21:06.00	+14:44:13.2	V	01/08/86	+08:23:34		
fr86a030.fits	"SA 76-281"	08:21:06.00	+14:44:13.2	B	01/08/86	+08:26:10		
fr86a031.fits	"SA 76-281"	08:21:06.00	+14:44:13.2	B	01/08/86	+08:27:53		
fr86a032.fits	"SA 76-281"	08:21:06.00	+14:44:13.2	V	01/08/86	+08:30:10		

File	Object	RA set	DEC set	Filter	Date	UT-STRT	Log Differences	Comments (N left E down, rotate 270 CC)
fr86a033.fits	70P/Kojima	08:19:51.80	+18:39:34.0	V	01/08/86	+08:35:28	xName	Comet 70P/Kojima
fr86a034.fits	70P/Kojima	08:19:51.80	+18:39:34.0	V	01/08/86	+08:39:51	xName	
fr86a035.fits	"NGC 3310"	10:38:45.86	+53:30:12.2	V	01/08/86	+09:01:30		
fr86a036.fits	"NGC 3310"	10:38:45.86	+53:30:12.2	V	01/08/86	+09:05:01		
fr86a037.fits	"NGC 3310"	10:38:45.86	+53:30:12.2	R	01/08/86	+09:10:43		
fr86a038.fits	"NGC 3310"	10:38:45.86	+53:30:12.2	R	01/08/86	+09:13:00		
fr86a039.fits	"NGC 3310"	10:38:45.86	+53:30:12.2	B	01/08/86	+09:17:47		
fr86a040.fits	"NGC 3310"	10:38:45.86	+53:30:12.2	B	01/08/86	+09:20:38		
fr86a041.fits	"NGC 3310"	10:38:45.86	+53:30:12.2	I	01/08/86	+09:26:39		
fr86a042.fits	"NGC 3310"	10:38:45.86	+53:30:12.2	I	01/08/86	+09:28:56		
fr86a043.fits	"BD +8 2015"	08:15:41.54	+07:37:05.2	9180	01/08/86	+10:14:18		
fr86a044.fits	"BD +8 2015"	08:15:41.54	+07:37:05.2	9180	01/08/86	+10:18:37		
fr86a045.fits	"BD +8 2015"	08:15:41.54	+07:37:05.2	8600	01/08/86	+10:21:41		
fr86a046.fits	"BD +8 2015"	08:15:41.54	+07:37:05.2	8600	01/08/86	+10:25:17		
fr86a047.fits	"BD +8 2015"	08:15:41.54	+07:37:05.2	6250	01/08/86	+10:27:49		
fr86a048.fits	"BD +8 2015"	08:15:41.54	+07:37:05.2	6250	01/08/86	+10:29:35		
fr86a049.fits	"BD +8 2015"	08:15:41.54	+07:37:05.2	6185	01/08/86	+10:32:01		
fr86a050.fits	"BD +8 2015"	08:15:41.54	+07:37:05.2	6185	01/08/86	+10:33:31		
fr86a051.fits	"BD +8 2015"	08:15:41.54	+07:37:05.2	HA	01/08/86	+10:39:15		
fr86a052.fits	"BD +8 2015"	08:15:41.54	+07:37:05.2	HA	01/08/86	+10:41:43		
fr86a053.fits	"ETA DRA"	16:23:59.49	+61:30:51.2	HA	01/08/86	+11:51:08	xName	Only one object, assuming correct
fr86a054.fits	"ETA DRA"	16:23:59.49	+61:30:51.2	HA	01/08/86	+11:53:05		Only one object, assuming correct
fr86a055.fits	"UWE 1"	16:50:26.0	+60:56:29	HA	01/08/86	+11:58:08		Object unknown, RA/DEC came from log and provide correct field
fr86a056.fits	"UWE 1"	16:50:26.0	+60:56:29	OPEN	01/08/86	+12:05:29		Object unknown, RA/DEC came from log and provide correct field
fr86a057.fits	"UWE 1"	16:50:26.0	+60:56:29	OPEN	01/08/86	+12:12:49		Object unknown, RA/DEC came from log and provide correct field
fr86a058.fits	"UWE 1"	16:50:26.0	+60:56:29	HA	01/08/86	+12:18:53		Object unknown, RA/DEC came from log and provide correct field
fr86a059.fits	"UWE 1"	16:50:26.0	+60:56:29	HA	01/08/86	+12:36:17		Object unknown, RA/DEC came from log and provide correct field
fr86a060.fits	"UWE 1"	16:50:26.0	+60:56:29	OPEN	01/08/86	+13:09:06		Object unknown, RA/DEC came from log and provide correct field
fr86a061.fits	DARK				01/08/86	+13:13:09		
fr86a062.fits	DARK				01/08/86	+13:14:03		
fr86a063.fits	1P/Halley	22:00:15.37	-04:02:54.7	V	01/09/86	+01:27:00		wide field
fr86a064.fits	1P/Halley	22:00:15.37	-04:02:54.7	V	01/09/86	+01:30:55		wide field
fr86a065.fits	1P/Halley	22:00:14.56	-04:02:59.5	I	01/09/86	+01:35:22		wide field
fr86a066.fits	1P/Halley	22:00:14.56	-04:02:59.5	I	01/09/86	+01:38:21		wide field
fr86a067.fits	1P/Halley	22:00:14.56	-04:02:59.5	R	01/09/86	+01:43:50		wide field
fr86a068.fits	1P/Halley	22:00:13.74	-04:03:04.4	R	01/09/86	+01:48:21		wide field
fr86a069.fits	1P/Halley	22:00:13.74	-04:03:04.4	R	01/09/86	+01:51:46		wide field
fr86a070.fits	1P/Halley	22:00:13.74	-04:03:04.4	R	01/09/86	+01:54:22		wide field
fr86a071.fits	1P/Halley	22:00:12.92	-04:03:09.2	V	01/09/86	+02:02:40		wide field
fr86a072.fits	1P/Halley	22:00:12.92	-04:03:09.2	V	01/09/86	+02:04:50		wide field
fr86a073.fits	1P/Halley	22:00:12.10	-04:03:14.1	B	01/09/86	+02:12:05		wide field
fr86a074.fits	1P/Halley	22:00:12.10	-04:03:14.1	B	01/09/86	+02:14:01		wide field
fr86a075.fits	1P/Halley	22:00:11.29	-04:03:18.9	6185	01/09/86	+02:24:32		wide field
fr86a076.fits	1P/Halley	22:00:10.47	-04:03:23.8	6250	01/09/86	+02:29:53		wide field
fr86a077.fits	1P/Halley	22:00:10.47	-04:03:23.8	6185	01/09/86	+02:34:57		wide field
fr86a078.fits	DARK				01/09/86	+02:58:13		

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fr86a079.fits	DARK				01/09/86	+02:59:43		
fr86a080.fits	DARK				01/09/86	+03:00:40		
fr86a081.fits	"HD 315"			V	01/09/86	+04:25:04		HD 315 wide field 5.14 arcsec/pixel
fr86a082.fits	"HD 315"			V	01/09/86	+04:27:04		
fr86a083.fits	"HD 315"			V	01/09/86	+04:29:24		
fr86a084.fits	"HD 315"			R	01/09/86	+04:31:06		
fr86a085.fits	"HD 315"			R	01/09/86	+04:34:36		
fr86a086.fits	"HD 315"			R	01/09/86	+04:36:19		
fr86a087.fits	"HD 315"			I	01/09/86	+04:40:23		
fr86a088.fits	"HD 315"			I	01/09/86	+04:41:40		
fr86a089.fits	"HD 315"			B	01/09/86	+04:46:09		
fr86a090.fits	"HD 315"			B	01/09/86	+04:48:25		
fr86a091.fits	"HD 315"			V	01/09/86	+04:51:04		
fr86a092.fits	"BS 718"	02:28:09.54	+08:27:36.2	6185	01/09/86	+05:12:14		Only one object, assuming correct
fr86a093.fits	"BS 718"	02:28:09.54	+08:27:36.2	6185	01/09/86	+05:14:13		Only one object, assuming correct
fr86a094.fits	"BS 718"	02:28:09.54	+08:27:36.2	6250	01/09/86	+05:16:19		Only one object, assuming correct
fr86a095.fits	"BS 718"	02:28:09.54	+08:27:36.2	6250	01/09/86	+05:17:54		Only one object, assuming correct
fr86a096.fits	"FLAT FIELD"			V	01/09/86	+05:52:26		
fr86a097.fits	"FLAT FIELD"			V	01/09/86	+05:53:40		
fr86a098.fits	"FLAT FIELD"			R	01/09/86	+05:56:16		
fr86a099.fits	"FLAT FIELD"			R	01/09/86	+05:57:16		
fr86a100.fits	"FLAT FIELD"			I	01/09/86	+06:00:32		
fr86a101.fits	"FLAT FIELD"			I	01/09/86	+06:01:31		
fr86a102.fits	"FLAT FIELD"			B	01/09/86	+06:04:19		
fr86a103.fits	"FLAT FIELD"			B	01/09/86	+06:05:36		
fr86a104.fits	"FLAT FIELD"			V	01/09/86	+06:47:05		
fr86a105.fits	"FLAT FIELD"			V	01/09/86	+06:49:19		
fr86a106								Missing
fr86a107.fits	"FLAT FIELD"			R	01/09/86	+06:54:11		
fr86a108.fits	"FLAT FIELD"			R	01/09/86	+06:55:19		
fr86a109.fits	"FLAT FIELD"			R	01/09/86	+06:56:33		
fr86a110.fits	"FLAT FIELD"			I	01/09/86	+07:00:07		
fr86a111.fits	"FLAT FIELD"			I	01/09/86	+07:01:17		
fr86a112.fits	"FLAT FIELD"			I	01/09/86	+07:02:31		
fr86a113.fits	"FLAT FIELD"			B	01/09/86	+07:34:13		
fr86a114.fits	"FLAT FIELD"			B	01/09/86	+07:35:19		
fr86a115.fits	"FLAT FIELD"			B	01/09/86	+07:36:24		
fr86a116.fits	"FLAT FIELD"			6185	01/09/86	+07:44:47		
fr86a117.fits	"FLAT FIELD"			6185	01/09/86	+07:46:00		
fr86a118.fits	"FLAT FIELD"			6250	01/09/86	+07:47:42		
fr86a119.fits	"FLAT FIELD"			6250	01/09/86	+07:48:53		
fr86a120.fits	"FLAT FIELD"			8600	01/09/86	+07:55:15		
fr86a121.fits	"FLAT FIELD"			8600	01/09/86	+07:56:50		
fr86a122.fits	"FLAT FIELD"			9180	01/09/86	+08:01:19		
fr86a123.fits	"FLAT FIELD"			9180	01/09/86	+08:02:58		
fr86a124.fits	DARK				01/09/86	+08:06:29		
fr86a125.fits	DARK				01/09/86	+08:08:02		
fr86a126.fits	DARK				01/09/86	+08:09:19		
fr86a127.fits	70P/Kojima	08:19:09.85	+18:42:07.0	V	01/09/86	+10:39:08	xName	typo
fr86a128.fits	70P/Kojima	08:19:09.85	+18:42:07.0	V	01/09/86	+10:44:38	xName	typo

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fr86a129.fits	70P/Kojima	08:19:09.56	+18:42:08.0	V	01/09/86	+10:47:56	xName	typo
fr86a130.fits	70P/Kojima	08:19:09.56	+18:42:08.0	V	01/09/86	+10:52:12	xName	typo
fr86a131.fits	70P/Kojima	08:19:09.28	+18:42:08.9	V	01/09/86	+10:57:27	xName	typo
fr86a132.fits	70P/Kojima	08:19:09.28	+18:42:08.9	V	01/09/86	+11:01:10	xName	typo
fr86a133.fits	70P/Kojima	08:19:09.00	+18:42:10.0	V	01/09/86	+11:05:11	xName	typo
fr86a134.fits	70P/Kojima	08:19:09.00	+18:42:10.0	V	01/09/86	+11:08:32	xName	typo
fr86a135.fits	70P/Kojima	08:19:09.00	+18:42:10.0	V	01/09/86	+11:11:54	xName	typo
fr86a136.fits	70P/Kojima	08:19:08.72	+18:42:10.8	V	01/09/86	+11:15:47	xName	typo
fr86a137.fits	70P/Kojima	08:19:08.72	+18:42:10.8	V	01/09/86	+11:19:04	xName	typo
fr86a138.fits	70P/Kojima	08:19:08.72	+18:42:10.8	V	01/09/86	+11:22:58	xName	typo
fr86a139.fits	70P/Kojima	08:19:08.43	+18:42:11.8	V	01/09/86	+11:25:52	xName	typo
fr86a140.fits	70P/Kojima	08:19:08.43	+18:42:11.8	V	01/09/86	+11:28:46	xName	typo
fr86a141.fits	DARK				01/09/86	+11:32:07		
fr86a142.fits	DARK				01/09/86	+11:33:06		
fr86a143.fits	"UWE 2"	16:54:22.3	+61:19:09	6775	01/09/86	+12:03:25		Object unknown, RA/DEC came from log and provide correct field
fr86a144.fits	"UWE 2"	16:54:22.3	+61:19:09	6563	01/09/86	+12:11:25		Object unknown, RA/DEC came from log and provide correct field
fr86a145.fits	"UWE 2"	16:54:22.3	+61:19:09	6775	01/09/86	+12:30:04		Object unknown, RA/DEC came from log and provide correct field
fr86a146.fits	"UWE 2"	16:54:22.3	+61:19:09	6563	01/09/86	+12:50:29		Object unknown, RA/DEC came from log and provide correct field
fr86a147.fits	"UWE 2"	16:54:22.3	+61:19:09	6563	01/09/86	+13:07:20		Object unknown, RA/DEC came from log and provide correct field
fr86a148.fits	"UWE 2"	16:54:22.3	+61:19:09	6775	01/09/86	+13:24:29		Object unknown, RA/DEC came from log and provide correct field
fr86a149.fits	"UWE 2"	16:54:22.3	+61:19:09	6563	01/09/86	+13:27:59		Object unknown, RA/DEC came from log and provide correct field
fr86a150.fits	"FLAT FIELD"			6775	01/09/86	+13:53:00		
fr86a151.fits	"FLAT FIELD"			6775	01/09/86	+13:54:09		
fr86a152.fits	"FLAT FIELD"			6563	01/09/86	+13:55:33		
fr86a153.fits	"FLAT FIELD"			6563	01/09/86	+13:56:44		
fr86a154.fits	DARK				01/09/86	+13:58:37		
fr86a155.fits	DARK				01/09/86	+13:59:37		
fr86a156.fits	"FF SKY"			6563	01/09/86	+14:01:49		
fr86a157.fits	"FF SKY"			6563	01/09/86	+14:02:58		
fr86a158.fits	HELIUM				01/09/86	+23:33:02		
fr86a159.fits	HELIUM				01/09/86	+23:35:03		
fr86a160.fits	XENON				01/09/86	+23:37:44		
fr86a161.fits	XENON				01/09/86	+23:39:47		
fr86a162.fits	"ALPHA AND"	00:08:23.26	+29:05:25.6		01/10/86	+00:45:15		Test *In index as HR 15
fr86a163.fits	"BS 8931"	23:31:31.50	-04:05:14.6		01/10/86	+01:10:14		
fr86a164.fits	"BS 8931"	23:31:31.50	-04:05:14.6		01/10/86	+01:12:08		
fr86a165.fits	1P/Halley	21:58:20.83	-04:14:24.3		01/10/86	+01:22:08		
fr86a166.fits	1P/Halley	21:58:20.03	-04:14:29.0		01/10/86	+01:26:04		
fr86a167.fits	1P/Halley	21:58:20.03	-04:14:29.0		01/10/86	+01:29:45		
fr86a168.fits	1P/Halley	21:58:20.03	-04:14:29.0		01/10/86	+01:34:30		
fr86a169.fits	1P/Halley	21:58:19.22	-04:14:33.8		01/10/86	+01:38:35		
fr86a170.fits	1P/Halley	21:58:18.42	-04:14:38.6		01/10/86	+01:47:51		
fr86a171.fits	1P/Halley	21:58:17.62	-04:14:43.3		01/10/86	+01:56:51		
fr86a172.fits	1P/Halley	21:58:17.62	-04:14:43.3		01/10/86	+02:03:04		
fr86a173.fits	1P/Halley	21:58:16.82	-04:14:48.1		01/10/86	+02:11:06		

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fr86a174.fits	1P/Halley	21:58:16.02	-04:14:52.8		01/10/86	+02:17:11		
fr86a175.fits	1P/Halley	21:58:16.02	-04:14:52.8		01/10/86	+02:19:40		
fr86a176.fits	1P/Halley	21:58:16.02	-04:14:52.8		01/10/86	+02:23:16		
fr86a177.fits	1P/Halley	21:58:15.22	-04:14:57.6		01/10/86	+02:29:08		
fr86a178.fits	"BS 8931"	23:31:31.50	-04:05:14.6		01/10/86	+02:58:44	xtime	ut-start +10 min, effects 178-181
fr86a179.fits	"BS 8931"	23:31:31.50	-04:05:14.6		01/10/86	+03:00:19	xtime	
fr86a180.fits	"BS 8931"	23:31:31.50	-04:05:14.6		01/10/86	+03:03:40	xtime	
fr86a181.fits	"SKY ADJ BS8931"				01/10/86	+03:06:12	xtime	??
fr86a182.fits	"BS 8931"	23:31:31.50	-04:05:14.6		01/10/86	+03:19:17		
fr86a183.fits	"BS 8931"	23:31:31.50	-04:05:14.6		01/10/86	+03:21:56		
fr86a184.fits	"BS 8931"	23:31:31.50	-04:05:14.6		01/10/86	+03:23:31		
fr86a185.fits	"BS 8931"	23:31:31.50	-04:05:14.6		01/10/86	+03:40:28		
fr86a186.fits	"BS 8931"	23:31:31.50	-04:05:14.6		01/10/86	+03:45:24		
fr86a187.fits	"BS 8931"	23:31:31.50	-04:05:14.6		01/10/86	+03:46:55		
fr86a188.fits	"SKY ADJ"				01/10/86	+03:49:03		
fr86a189.fits	"BS 8931"	23:31:31.50	-04:05:14.6		01/10/86	+03:57:55		
fr86a190.fits	"BS 8931"	23:31:31.50	-04:05:14.6		01/10/86	+03:59:12		
fr86a191.fits	"BS 8931"	23:31:31.50	-04:05:14.6		01/10/86	+04:05:10		
fr86a192.fits	"BS 1855"	05:31:55.86	-07:18:05.5		01/10/86	+04:31:52		
fr86a193.fits	"BS 1855"	05:31:55.86	-07:18:05.5		01/10/86	+04:34:48		
fr86a194.fits	"BS 1855"	05:31:55.86	-07:18:05.5		01/10/86	+04:37:41		
fr86a195.fits	"SAO 149816"	04:40:33.09	-10:24:45.6		01/10/86	+04:58:17		
fr86a196.fits	"SAO 149816"	04:40:33.09	-10:24:45.6		01/10/86	+05:01:23		
fr86a197.fits	"SAO 149816"	04:40:33.09	-10:24:45.6		01/10/86	+05:03:27		
fr86a198.fits	"MKN 618"	04:36:22.24	-10:22:33.8		01/10/86	+05:25:11		In index as MRK 618
fr86a199.fits	"MKN 618"	04:36:22.24	-10:22:33.8		01/10/86	+05:35:36		
fr86a200.fits	"MKN 618"	04:36:22.24	-10:22:33.8		01/10/86	+05:48:13		
fr86a201.fits	"MKN 618"	04:36:22.24	-10:22:33.8		01/10/86	+05:59:33		
fr86a202.fits	"MKN 618"	04:36:22.24	-10:22:33.8		01/10/86	+06:11:30		
fr86a203.fits	"MKN 618"	04:36:22.24	-10:22:33.8		01/10/86	+06:26:12		
fr86a204.fits	"MKN 618"	04:36:22.24	-10:22:33.8		01/10/86	+06:38:20		
fr86a205.fits	"SAO 149816"	04:40:33.09	-10:24:45.6		01/10/86	+07:01:20		
fr86a207.fits	"SAO 149816"	04:40:33.09	-10:24:45.6		01/10/86	+07:10:44		
fr86a208.fits	"SAO 149816"	04:40:33.09	-10:24:45.6		01/10/86	+07:16:06		
fr86a209.fits	"SAO 149816"	04:40:33.09	-10:24:45.6		01/10/86	+07:19:00		
fr86a210.fits	"FLAT FIELD"				01/10/86	+07:33:59		
fr86a211.fits	"FLAT FIELD"				01/10/86	+07:35:37		
fr86a212.fits	"FLAT FIELD"				01/10/86	+07:37:01		
fr86a213.fits	"FLAT FIELD"				01/10/86	+07:38:17		
fr86a214.fits	"FLAT FIELD"				01/10/86	+07:43:58		
fr86a215.fits	"FLAT FIELD"				01/10/86	+07:45:12		
fr86a216.fits	"FLAT FIELD"				01/10/86	+07:46:25		
fr86a217.fits	"FLAT FIELD"				01/10/86	+07:47:38		
fr86a218.fits	DARK				01/10/86	+07:50:07		
fr86a219.fits	"SAO 26530"	07:50:26.19	+50:35:22.7		01/10/86	+09:33:58		
fr86a220.fits	"SAO 26530"	07:50:26.19	+50:35:22.7		01/10/86	+09:35:18		
fr86a221.fits	"SAO 26530"	07:50:26.19	+50:35:22.7		01/10/86	+09:36:47		
fr86a222.fits	"MKN 79"	07:42:32.80	+49:48:34.7		01/10/86	+09:49:29		In index as MRK 79
fr86a223.fits	"MKN 79"	07:42:32.80	+49:48:34.7		01/10/86	+09:59:38		
fr86a224.fits	"MKN 79"	07:42:32.80	+49:48:34.7		01/10/86	+10:21:55	xtime	-6m from log

File	Object	RA set	DEC set	Filter	Date	UT-STRT	Log Differences	Comments (N left E down, rotate 270 CC)
fr86a225.fits	"MKN 79"	07:42:32.80	+49:48:34.7		01/10/86	+10:33:51		
fr86a226.fits	"MKN 79"	07:42:32.80	+49:48:34.7		01/10/86	+10:46:17		
fr86a227.fits	"MKN 79"	07:42:32.80	+49:48:34.7		01/10/86	+10:59:15		
fr86a228.fits	"SAO 26530"	07:50:26.19	+50:35:22.7		01/10/86	+11:17:21		
fr86a229.fits	"SAO 26530"	07:50:26.19	+50:35:22.7		01/10/86	+11:19:49		
fr86a230.fits	"SAO 26530"	07:50:26.19	+50:35:22.7		01/10/86	+11:21:31		
fr86a231.fits	"SAO 26530"	07:50:26.19	+50:35:22.7		01/10/86	+11:26:34		
fr86a232.fits	"UWE 2"	16:54:22.3	+61:19:09		01/10/86	+11:43:30		Object unknown, RA/DEC came from log
fr86a233.fits	"UWE 2"	16:54:22.3	+61:19:09		01/10/86	+11:56:02		Object unknown, RA/DEC came from log
fr86a234.fits	"UWE 2"	16:54:22.3	+61:19:09		01/10/86	+12:29:08		Object unknown, RA/DEC came from log
fr86a235.fits	SATURN	16:19:09.02	-19:34:34.4		01/10/86	+13:20:27	xtime	+5m from log
fr86a236.fits	BS 8931	23:31:31.50	-04:05:14.6		01/11/86	+01:08:55		
fr86a237.fits	BS 8931	23:31:31.50	-04:05:14.6		01/11/86	+01:10:07		
fr86a238.fits	1P/Halley	21:56:27.52	-04:25:46.8		01/11/86	+01:19:50		
fr86a239.fits	1P/Halley	21:56:27.52	-04:25:46.8		01/11/86	+01:23:06		
fr86a240.fits	1P/Halley	21:56:26.73	-04:25:51.4		01/11/86	+01:25:10		
fr86a241.fits	1P/Halley	21:56:26.73	-04:25:51.4		01/11/86	+01:29:57		
fr86a242.fits	1P/Halley	21:56:26.73	-04:25:51.4		01/11/86	+01:31:40		
fr86a243.fits	1P/Halley	21:56:25.94	-04:25:56.1		01/11/86	+01:37:11		
fr86a244.fits	1P/Halley	21:56:25.15	-04:26:00.8		01/11/86	+01:47:51		
fr86a245.fits	1P/Halley	21:56:24.36	-04:26:05.5		01/11/86	+01:55:58		
fr86a246.fits	1P/Halley	21:56:22.79	-04:26:14.9		01/11/86	+02:15:23		
fr86a247.fits	1P/Halley	21:56:22.79	-04:26:14.9		01/11/86	+02:24:48		
fr86a248.fits	1P/Halley	21:56:21.22	-04:26:24.2		01/11/86	+02:38:03		
fr86a249.fits	"BS 8931"	23:31:31.50	-04:05:14.6		01/11/86	+02:59:19		
fr86a250.fits	"BS 8931"	23:31:31.50	-04:05:14.6		01/11/86	+03:05:55		
fr86a251.fits	"BS 8931"	23:31:31.50	-04:05:14.6		01/11/86	+03:07:11		
fr86a252.fits	"SKY ADJ BS8931"				01/11/86	+03:10:10		
fr86a253.fits	"BS 8931"	23:31:31.50	-04:05:14.6		01/11/86	+03:20:27		
fr86a254.fits	"BS 8931"	23:31:31.50	-04:05:14.6		01/11/86	+03:21:57		
fr86a255.fits	"SKY ADJ BS8931"				01/11/86	+03:25:05		
fr86a256.fits	"BS 8931"	23:31:31.50	-04:05:14.6		01/11/86	+03:49:56		
fr86a257.fits	"BS 8931"	23:31:31.50	-04:05:14.6		01/11/86	+03:51:07		
fr86a258.fits	"BS 8931"	23:31:31.50	-04:05:14.6		01/11/86	+03:55:08		
fr86a259.fits	"SKY ADJ BS8931"				01/11/86	+03:57:02		
fr86a260.fits	"BS 8931"	23:31:31.50	-04:05:14.6		01/11/86	+04:08:52		
fr86a261.fits	"BS 8931"	23:31:31.50	-04:05:14.6		01/11/86	+04:10:01		
fr86a262.fits	"BS 8931"	23:31:31.50	-04:05:14.6		01/11/86	+04:11:07		
fr86a263.fits	"SAO 36542"	00:38:41.55	+46:57:245		01/11/86	+04:20:47		
fr86a264.fits	"SAO 36542"	00:38:41.55	+46:57:245		01/11/86	+04:23:22		
fr86a265.fits	"SAO 36542"	00:38:41.55	+46:57:245		01/11/86	+04:28:19		
fr86a266.fits	"FLAT FIELD"				01/11/86	+05:08:59		
fr86a267.fits	"FLAT FIELD"				01/11/86	+05:10:30		
fr86a268.fits	"FLAT FIELD"				01/11/86	+05:11:34		
fr86a269.fits	"FLAT FIELD"				01/11/86	+05:15:33		
fr86a270.fits	"FLAT FIELD"				01/11/86	+05:16:47		
fr86a271.fits	"FLAT FIELD"				01/11/86	+05:17:55		
fr86a272.fits	"FLAT FIELD"				01/11/86	+05:19:30		
fr86a2739.fits	"SAO 41579"	07:08:06.31	+44:02:23.9		01/11/86	+07:40:12	xfilename	fr86a273.fits
fr86a274.fits	"SAO 41579"	07:08:06.31	+44:02:23.9		01/11/86	+07:41:51		

File	Object	RA set	DEC set	Filter	Date	UT-STRT	Log Differences	Comments (N left E down, rotate 270 CC)
fr86a275.fits	"SAO 41579"	07:08:06.31	+44:02:23.9		01/11/86	+07:43:04		
fr86a276.fits	"SAO 41579"	07:08:06.31	+44:02:23.9		01/11/86	+07:45:30		
fr86a277.fits	"SAO 41579"	07:08:06.31	+44:02:23.9		01/11/86	+07:47:11		
fr86a278.fits	"MKN 376"	07:14:15.07	+45:41:55.8		01/11/86	+08:03:13		In index as MRK 376
fr86a279.fits	"MKN 376"	07:14:15.07	+45:41:55.8		01/11/86	+08:11:01		
fr86a280.fits	"MKN 376"	07:14:15.07	+45:41:55.8		01/11/86	+08:25:06		
fr86a281.fits	"MKN 376"	07:14:15.07	+45:41:55.8		01/11/86	+08:39:51		
fr86a282.fits	"MKN 376"	07:14:15.07	+45:41:55.8		01/11/86	+08:59:35		
fr86a283.fits	"MKN 376"	07:14:15.07	+45:41:55.8		01/11/86	+09:12:04		
fr86a284.fits	"SAO 41579"	07:08:06.31	+44:02:23.9		01/11/86	+09:33:35		
fr86a285.fits	"SAO 41579"	07:08:06.31	+44:02:23.9		01/11/86	+09:35:52		
fr86a286.fits	"SAO 41579"	07:08:06.31	+44:02:23.9		01/11/86	+09:37:16		
fr86a287.fits	"SAO 41579"	07:08:06.31	+44:02:23.9		01/11/86	+09:38:37		
fr86a288.fits	"BS 3314"	08:25:39.63	-03:54:23.1		01/11/86	+10:14:04		
fr86a289.fits	"BS 3314"	08:25:39.63	-03:54:23.1		01/11/86	+10:15:58		
fr86a290.fits	"BS 3314"	08:25:39.63	-03:54:23.1		01/11/86	+10:17:38		
fr86a291.fits	"SAO 14368"	07:55:30.73	+62:02:38.1		01/11/86	+10:32:27		
fr86a292.fits	"SAO 14368"	07:55:30.73	+62:02:38.1		01/11/86	+10:39:02		
fr86a293.fits	"SAO 14368"	07:55:30.73	+62:02:38.1		01/11/86	+10:40:22		
fr86a294.fits	"MKN 10"	07:47:29.13	+60:56:00.6		01/11/86	+10:48:41		In index MRK 10
fr86a295.fits	"MKN 10"	07:47:29.13	+60:56:00.6		01/11/86	+10:57:22		
fr86a296.fits	"MKN 10"	07:47:29.13	+60:56:00.6		01/11/86	+11:11:09		
fr86a297.fits	"MKN 10"	07:47:29.13	+60:56:00.6		01/11/86	+11:25:11		
fr86a298.fits	"SAO 14368"	07:55:30.73	+62:02:38.1		01/11/86	+11:42:24		
fr86a299.fits	"SAO 14368"	07:55:30.73	+62:02:38.1		01/11/86	+11:43:57		
fr86a300.fits	"SAO 14368"	07:55:30.73	+62:02:38.1		01/11/86	+11:45:13		
fr86a301.fits	"SAO STAR"				01/11/86	+12:13:24		??
fr86a302.fits	"UWE 2"	16:54:21.8	+61:19:32		01/11/86	+12:20:43		Object unknown, RA/DEC came from log
fr86a303.fits	"UWE 2"	16:54:21.8	+61:19:32		01/11/86	+12:28:18		Object unknown, RA/DEC came from log
fr86a304.fits	"UWE 2"	16:54:21.8	+61:19:32		01/11/86	+13:04:12		Object unknown, RA/DEC came from log
fr86a305.fits	"BS 8931"	23:31:31.50	-04:05:14.6		01/12/86	+01:04:32		
fr86a306.fits	"BS 8931"	23:31:31.50	-04:05:14.6		01/12/86	+01:05:54		
fr86a307.fits	"BS 8931"	23:31:31.50	-04:05:14.6		01/12/86	+01:22:09		
fr86a308.fits	1P/Halley	21:54:35.24	-04:37:03.7		01/12/86	+01:28:36		
fr86a309.fits	1P/Halley	21:54:35.24	-04:37:03.7		01/12/86	+01:30:53		
fr86a310.fits	1P/Halley	21:54:35.24	-04:37:03.7		01/12/86	+01:32:32		
fr86a311.fits	1P/Halley	21:54:35.24	-04:37:03.7		01/12/86	+01:34:23		
fr86a312.fits	1P/Halley	21:54:34.46	-04:37:08.3		01/12/86	+01:36:59		
fr86a313.fits	1P/Halley	21:54:34.46	-04:37:08.3		01/12/86	+01:44:15		
fr86a314.fits	1P/Halley	21:54:32.13	-04:37:22.2		01/12/86	+02:09:20		
fr86a315.fits	1P/Halley	21:54:31.36	-04:37:26.8		01/12/86	+02:21:40		
fr86a316.fits	1P/Halley	21:54:29.81	-04:37:36.0		01/12/86	+02:38:05		
fr86a317.fits	"BS 8931"	23:31:31.50	-04:05:14.6		01/12/86	+02:57:10		
fr86a318.fits	"BS 8931"	23:31:31.50	-04:05:14.6		01/12/86	+02:58:24		
fr86a319.fits	"BS 8931"	23:31:31.50	-04:05:14.6		01/12/86	+03:02:43		
fr86a320.fits	"BS 8931"	23:31:31.50	-04:05:14.6		01/12/86	+03:05:08		
fr86a321.fits	"BS 8931"	23:31:31.50	-04:05:14.6		01/12/86	+03:06:23		
fr86a322.fits	SKY				01/12/86	+03:07:54		
fr86a323.fits	"BS 8931"	23:31:31.50	-04:05:14.6		01/12/86	+03:21:54		
fr86a324.fits	"BS 8931"	23:31:31.50	-04:05:14.6		01/12/86	+03:24:22		

File	Object	RA set	DEC set	Filter	Date	UT-STRT	Log Differences	Comments (N left E down, rotate 270 CC)
fr86a325.fits	SKY				01/12/86	+03:38:51		
fr86a326.fits	"BS 8931"	23:31:31.50	-04:05:14.6		01/12/86	+03:52:45		
fr86a327.fits	"BS 8931"	23:31:31.50	-04:05:14.6		01/12/86	+03:54:04		
fr86a328.fits	SKY				01/12/86	+03:56:02		
fr86a329.fits	"BS 8931"	23:31:31.50	-04:05:14.6		01/12/86	+04:10:07		
fr86a330.fits	"BS 8931"	23:31:31.50	-04:05:14.6		01/12/86	+04:18:46		
fr86a331.fits	"BS 8931"	23:31:31.50	-04:05:14.6		01/12/86	+04:21:15		
fr86a332.fits	"FLAT FIELD"				01/12/86	+04:44:27		
fr86a333.fits	"FLAT FIELD"				01/12/86	+04:46:56		
fr86a334.fits	"FLAT FIELD"				01/12/86	+04:53:57		
fr86a335.fits	"FLAT FIELD"				01/12/86	+05:12:12		
fr86a336.fits	"FLAT FIELD"				01/12/86	+05:13:39		
fr86a337.fits	"FLAT FIELD"				01/12/86	+05:14:48		
fr86a338.fits	"FLAT FIELD"				01/12/86	+05:20:15		
fr86a339.fits	"FLAT FIELD"				01/12/86	+05:21:37		
fr86a340.fits	"FLAT FIELD"				01/12/86	+05:22:47		
fr86a341.fits	"FLAT FIELD"				01/12/86	+05:23:56		
fr86a342.fits	DARK				01/12/86	+05:25:48		
fr86a343.fits	"BS 1855"	05:31:55.86	-07:18:05.5		01/12/86	+05:55:37		
fr86a344.fits	"BS 1855"	05:31:55.86	-07:18:05.5		01/12/86	+05:57:26		
fr86a345.fits	"BS 1855"	05:31:55.86	-07:18:05.5		01/12/86	+05:58:37		
fr86a346.fits	"SAO 26070"	06:58:16.11	+54:30:51.1		01/12/86	+06:15:03		
fr86a347.fits	"SAO 26070"	06:58:16.11	+54:30:51.1		01/12/86	+06:17:23		
fr86a348.fits	"SAO 26070"	06:58:16.11	+54:30:51.1		01/12/86	+06:24:35		
fr86a349.fits	"SAO 26070"	06:58:16.11	+54:30:51.1		01/12/86	+06:22:32		
fr86a350.fits	"MKN 374"	06:59:38.11	+54:11:47.9		01/12/86	+06:48:49		In index as MRK 374
fr86a351.fits								deleted
fr86a352.fits	"MKN 374"	06:59:38.11	+54:11:47.9		01/12/86	+07:48:39	xtime	-1h
fr86a353.fits	"MKN 374"	06:59:38.11	+54:11:47.9		01/12/86	+08:03:29	xtime	-1h
fr86a354.fits	"MKN 374"	06:59:38.11	+54:11:47.9		01/12/86	+08:16:20	xtime	-1h
fr86a355.fits	"MKN 374"	06:59:38.11	+54:11:47.9		01/12/86	+08:29:56	xtime	-1h
fr86a356.fits	"SAO 14368"	07:55:30.73	+62:02:38.1		01/12/86	+08:54:19		
fr86a357.fits	"SAO 14368"	07:55:30.73	+62:02:38.1		01/12/86	+08:55:46		
fr86a358.fits	"SAO 14368"	07:55:30.73	+62:02:38.1		01/12/86	+08:57:05		
fr86a359.fits	"MKN 10"	07:47:29.13	+60:56:00.6		01/12/86	+09:08:34		
fr86a360.fits	"MKN 10"	07:47:29.13	+60:56:00.6		01/12/86	+09:15:18		
fr86a361.fits	"MKN 10"	07:47:29.13	+60:56:00.6		01/12/86	+09:27:33		
fr86a362.fits	"MKN 10"	07:47:29.13	+60:56:00.6		01/12/86	+09:41:39		
fr86a363.fits	"MKN 10"	07:47:29.13	+60:56:00.6		01/12/86	+09:53:36		
fr86a364.fits	"MKN 10"	07:47:29.13	+60:56:00.6		01/12/86	10:17:20	xName, xtime	
fr86a365.fits	"MKN 10"	07:47:29.13	+60:56:00.6		01/12/86	+10:59:12		
fr86a366.fits	"SAO 14368"	07:55:30.73	+62:02:38.1		01/12/86	+11:04:54		
fr86a367.fits	"SAO 14368"	07:55:30.73	+62:02:38.1		01/12/86	+11:06:23		
fr86a368.fits	"SAO 14368"	07:55:30.73	+62:02:38.1		01/12/86	+11:07:59		
fr86a369.fits	SAO				01/12/86	+11:46:55		
fr86a370.fits	SAO				01/12/86	+11:49:04		
fr86a371.fits	"UWE 5"	16:50:40.0	+60:56:11		01/12/86	+11:55:21		Object unknown, RA/DEC came from log
fr86a372.fits	"UWE 5"	16:50:40.0	+60:56:11		01/12/86	+12:01:32		Object unknown, RA/DEC came from log
fr86a373.fits	"UWE 5"	16:50:40.0	+60:56:11		01/12/86	+12:24:49		Object unknown, RA/DEC came from log
fr86a374.fits	"UWE 5"	16:50:40.0	+60:56:11		01/12/86	+12:47:44		Object unknown, RA/DEC came from log



File	Object	RA set	DEC set	Filter	Date	UT-STRT	Log Differences	Comments (N left E down, rotate 270 CC)
fr86a375.fits	SAO				01/12/86	+13:10:07		
fr86a376.fits	SAO				01/12/86	+13:11:54		
fr86a377.fits	"FLAT FIELD"				01/12/86	+13:19:04		filter/slit 7800
fr86a378.fits	"FLAT FIELD"				01/12/86	+13:20:36		filter/slit 8000
fr86a379.fits	"FLAT FIELD"				01/12/86	+13:22:18		filter/slit 8000
fr86a380.fits	1P/Halley	21:52:45.32	-04:48:07.5	R	01/13/86	+01:33:12	xfilter	
fr86a381.fits	1P/Halley	21:52:44.78	-04:48:12.1	6300	01/13/86	+01:36:46		
fr86a382.fits	1P/Halley	21:52:44.78	-04:48:12.1	6300	01/13/86	+01:43:03		
fr86a383.fits	1P/Halley	21:52:43.78	-04:48:16.7	"6300 TLT"	01/13/86	+01:46:08		
fr86a384.fits	1P/Halley	21:52:43.78	-04:48:16.7	"6300 TLT"	01/13/86	+01:48:27		
fr86a385.fits	1P/Halley	21:52:43.02	-04:48:21.2	I	01/13/86	+01:56:13		
fr86a386.fits	1P/Halley	21:52:43.02	-04:48:21.2	R	01/13/86	+01:57:34		
fr86a387.fits	1P/Halley	21:52:43.02	-04:48:21.2	V	01/13/86	+01:58:54		
fr86a388.fits	1P/Halley	21:52:43.02	-04:48:21.2	B	01/13/86	+02:00:18		
fr86a389.fits	1P/Halley	21:52:43.02	-04:48:21.2	B	01/13/86	+02:04:32		
fr86a390.fits	1P/Halley	21:52:42.25	-04:48:25.8	V	01/13/86	+02:07:00		
fr86a391.fits	1P/Halley	21:52:42.25	-04:48:25.8	R	01/13/86	+02:08:09		
fr86a392.fits	1P/Halley	21:52:42.25	-04:48:25.8	I	01/13/86	+02:09:17		
fr86a393.fits	1P/Halley	21:52:41.49	-04:48:30.4	6185	01/13/86	+02:20:22		
fr86a394.fits	1P/Halley	21:52:41.49	-04:48:30.4	6185	01/13/86	+02:22:44		
fr86a395.fits	1P/Halley	21:52:41.49	-04:48:30.4	6185	01/13/86	+02:24:36		
fr86a396.fits	1P/Halley	21:52:40.72	-04:48:34.9	6250	01/13/86	+02:27:48		
fr86a397.fits	1P/Halley	21:52:40.72	-04:48:34.9	6250	01/13/86	+02:30:46		
fr86a398.fits	1P/Halley	21:52:40.72	-04:48:34.9	6250	01/13/86	+02:32:10		
fr86a399.fits	1P/Halley	21:52:39.96	-04:48:39.5	5980	01/13/86	+02:35:21		
fr86a400.fits	1P/Halley	21:52:39.96	-04:48:39.5	5980	01/13/86	+02:37:13		
fr86a401.fits	1P/Halley	21:52:39.96	-04:48:39.5	5139	01/13/86	+02:39:16		
fr86a402.fits	1P/Halley	21:52:39.96	-04:48:39.5	5139	01/13/86	+02:40:40		
fr86a403.fits	1P/Halley	21:52:39.96	-04:48:39.5	4565	01/13/86	+02:42:20		
fr86a404.fits	1P/Halley	21:52:39.20	-04:48:44.0	4060	01/13/86	+02:49:53		
fr86a405.fits	1P/Halley	21:52:39.20	-04:48:44.0	4060	01/13/86	+02:54:21		
fr86a406.fits	1P/Halley	21:52:38.44	-04:48:48.6	4565	01/13/86	+02:57:20		
fr86a407.fits	1P/Halley	21:52:38.44	-04:48:48.6	4060-	01/13/86	+03:01:58		
fr86a408.fits	"NGC 985"	02:34:37.77	-08:47:15.4	V	01/13/86	+03:47:45		
fr86a409.fits	"NGC 985"	02:34:37.77	-08:47:15.4	V	01/13/86	+03:58:07		
fr86a410.fits	"NGC 985"	02:34:37.77	-08:47:15.4	R	01/13/86	+04:02:43		
fr86a411.fits	"NGC 985"	02:34:37.77	-08:47:15.4	R	01/13/86	+04:06:54		
fr86a412.fits	"NGC 985"	02:34:37.77	-08:47:15.4	I	01/13/86	+04:09:11		
fr86a413.fits	"NGC 985"	02:34:37.77	-08:47:15.4	I	01/13/86	+04:12:18		
fr86a414.fits	"NGC 985"	02:34:37.77	-08:47:15.4	B	01/13/86	+04:18:11		
fr86a415.fits	"NGC 985"	02:34:37.77	-08:47:15.4	B	01/13/86	+04:22:25		
fr86a416.fits	"NGC 1068"	02:42:40.71	-00:00:47.8	B	01/13/86	+04:40:47		
fr86a417.fits	"NGC 1068"	02:42:40.71	-00:00:47.8	B	01/13/86	+04:42:20		
fr86a418.fits	"NGC 1068"	02:42:40.71	-00:00:47.8	V	01/13/86	+04:44:18		
fr86a419.fits	"NGC 1068"	02:42:40.71	-00:00:47.8	V	01/13/86	+04:45:58		
fr86a420.fits	"NGC 1068"	02:42:40.71	-00:00:47.8	R	01/13/86	+04:49:04		
fr86a421.fits	"NGC 1068"	02:42:40.71	-00:00:47.8	R	01/13/86	+04:52:10		
fr86a422.fits	"NGC 1068"	02:42:40.71	-00:00:47.8	I	01/13/86	+04:53:39		
fr86a423.fits	"NGC 1068"	02:42:40.71	-00:00:47.8	I	01/13/86	+04:54:56		
fr86a424.fits	DARK				01/13/86	+05:10:26		

File	Object	RA set	DEC set	Filter	Date	UT-STRT	Log Differences	Comments (N left E down, rotate 270 CC)
fr86a425.fits	DARK				01/13/86	+05:11:36		
fr86a426.fits	"NGC 1275"	03:19:48.16	+41:30:42.1	V	01/13/86	+05:19:01		
fr86a427.fits	"NGC 1275"	03:19:48.16	+41:30:42.1	V	01/13/86	+05:20:38		
fr86a428.fits	"NGC 1275"	03:19:48.16	+41:30:42.1	R	01/13/86	+05:23:04		
fr86a429.fits	"NGC 1275"	03:19:48.16	+41:30:42.1	R	01/13/86	+05:25:07		
fr86a430.fits	"NGC 1275"	03:19:48.16	+41:30:42.1	I	01/13/86	+05:28:36		
fr86a431.fits	"NGC 1275"	03:19:48.16	+41:30:42.1	I	01/13/86	+05:30:58		
fr86a432.fits	"NGC 1275"	03:19:48.16	+41:30:42.1	B	01/13/86	+05:34:40		
fr86a433.fits	"NGC 1275"	03:19:48.16	+41:30:42.1	B	01/13/86	+05:37:04		
fr86a434.fits	"Hubble's Nebula"	06:39:10.08	+08:45:00.0	B	01/13/86	+06:34:36		
fr86a435.fits	"Hubble's Nebula"	06:39:10.08	+08:45:00.0	B	01/13/86	+06:36:50		
fr86a436.fits	"Hubble's Nebula"	06:39:10.08	+08:45:00.0	B	01/13/86	+06:39:13		
fr86a437.fits	"Hubble's Nebula"	06:39:10.08	+08:45:00.0	V	01/13/86	+06:46:38		
fr86a438.fits	"Hubble's Nebula"	06:39:10.08	+08:45:00.0	V	01/13/86	+06:47:59		
fr86a439.fits	"Hubble's Nebula"	06:39:10.08	+08:45:00.0	V	01/13/86	+06:49:18		
fr86a440.fits	"Hubble's Nebula"	06:39:10.08	+08:45:00.0	R	01/13/86	+06:52:30		
fr86a441.fits	"Hubble's Nebula"	06:39:10.08	+08:45:00.0	R	01/13/86	+06:54:09		
fr86a442.fits	"Hubble's Nebula"	06:39:10.08	+08:45:00.0	R	01/13/86	+06:56:07		
fr86a443.fits	"Hubble's Nebula"	06:39:10.08	+08:45:00.0	R	01/13/86	+06:57:54		
fr86a444.fits	"Hubble's Nebula"	06:39:10.08	+08:45:00.0	I	01/13/86	+07:10:37		
fr86a445.fits	"Hubble's Nebula"	06:39:10.08	+08:45:00.0	I	01/13/86	+07:12:24		
fr86a446.fits	"Hubble's Nebula"	06:39:10.08	+08:45:00.0	I	01/13/86	+07:13:52		
fr86a447.fits	"Hubble's Nebula"	06:39:10.08	+08:45:00.0	I	01/13/86	+07:15:49		
fr86a448.fits	"Hubble's Nebula"	06:39:10.08	+08:45:00.0	6563	01/13/86	+07:36:56		
fr86a449.fits	"Hubble's Nebula"	06:39:10.08	+08:45:00.0	6563	01/13/86	+07:38:44		
fr86a450.fits	"Hubble's Nebula"	06:39:10.08	+08:45:00.0	6563	01/13/86	+07:40:24		
fr86a451.fits	"Hubble's Nebula"	06:39:10.08	+08:45:00.0	6563	01/13/86	+07:42:13		
fr86a452.fits	"Hubble's Nebula"	06:39:10.08	+08:45:00.0	6775	01/13/86	+07:48:54		
fr86a453.fits	"Hubble's Nebula"	06:39:10.08	+08:45:00.0	6775	01/13/86	+07:50:58		
fr86a454.fits	"Hubble's Nebula"	06:39:10.08	+08:45:00.0	6775	01/13/86	+07:54:09		
fr86a455.fits	"BD +8 2015"	08:15:41.54	+07:37:05.2	6775	01/13/86	+08:22:34		BD +8 2015
fr86a456.fits	"BD +8 2015"	08:15:41.54	+07:37:05.2	6775	01/13/86	+08:25:10		
fr86a457.fits	"BD +8 2015"	08:15:41.54	+07:37:05.2	6563	01/13/86	+08:30:42		
fr86a458.fits	"BD +8 2015"	08:15:41.54	+07:37:05.2	6563	01/13/86	+08:31:51		
fr86a459.fits	"BD +8 2015"	08:15:41.54	+07:37:05.2	6300	01/13/86	+08:36:46		
fr86a460.fits	"BD +8 2015"	08:15:41.54	+07:37:05.2	6300	01/13/86	+08:38:53		
fr86a461.fits	"BD +8 2015"	08:15:41.54	+07:37:05.2	"6300 TLT"	01/13/86	+08:41:16		
fr86a462.fits	"BD +8 2015"	08:15:41.54	+07:37:05.2	"6300 TLT"	01/13/86	+08:43:26		
fr86a463.fits	"BD +8 2015"	08:15:41.54	+07:37:05.2	6185	01/13/86	+08:53:59		
fr86a464.fits	"BD +8 2015"	08:15:41.54	+07:37:05.2	6185	01/13/86	+08:55:20		
fr86a465.fits	"BD +8 2015"	08:15:41.54	+07:37:05.2	6250	01/13/86	+08:57:16		
fr86a466.fits	"BD +8 2015"	08:15:41.54	+07:37:05.2	6250	01/13/86	+08:58:36		
fr86a467.fits	"BD +8 2015"	08:15:41.54	+07:37:05.2	5980	01/13/86	+09:15:21		
fr86a468.fits	"BD +8 2015"	08:15:41.54	+07:37:05.2	5980	01/13/86	+09:16:48		
fr86a469.fits	"BD +8 2015"	08:15:41.54	+07:37:05.2	5139	01/13/86	+09:20:19		
fr86a470.fits	"BD +8 2015"	08:15:41.54	+07:37:05.2	5139	01/13/86	+09:21:34		
fr86a471.fits	"BD +8 2015"	08:15:41.54	+07:37:05.2	4565	01/13/86	+09:25:29		
fr86a472.fits	"BD +8 2015"	08:15:41.54	+07:37:05.2	4565	01/13/86	+09:26:51		
fr86a473.fits	"BD +8 2015"	08:15:41.54	+07:37:05.2	4060	01/13/86	+09:30:49		
fr86a474.fits	"BD +8 2015"	08:15:41.54	+07:37:05.2	4060	01/13/86	+09:33:32		

File	Object	RA set	DEC set	Filter	Date	UT-STRT	Log Differences	Comments (N left E down, rotate 270 CC)
fr86a475.fits	"SA 76-281"	08:21:06.00	+14:44:13.2	V	01/13/86	+09:47:23		SA 76-281
fr86a476.fits	"SA 76-281"	08:21:06.00	+14:44:13.2	V	01/13/86	+09:48:40		
fr86a477.fits	"SA 76-281"	08:21:06.00	+14:44:13.2	R	01/13/86	+09:51:57		
fr86a478.fits	"SA 76-281"	08:21:06.00	+14:44:13.2	R	01/13/86	+09:53:10		
fr86a479.fits	"SA 76-281"	08:21:06.00	+14:44:13.2	I	01/13/86	+09:56:52		
fr86a480.fits	"SA 76-281"	08:21:06.00	+14:44:13.2	I	01/13/86	+09:58:15		
fr86a481.fits	"SA 76-281"	08:21:06.00	+14:44:13.2	B	01/13/86	+10:02:44		
fr86a482.fits	"SA 76-281"	08:21:06.00	+14:44:13.2	B	01/13/86	+10:04:17		
fr86a483.fits	"FLAT FIELD"			B	01/13/86	+10:12:29		
fr86a484.fits	"FLAT FIELD"			B	01/13/86	+10:13:44		
fr86a485.fits	"FLAT FIELD"			V	01/13/86	+10:15:05		
fr86a486.fits	"FLAT FIELD"			V	01/13/86	+10:16:02		
fr86a487.fits	"FLAT FIELD"			R	01/13/86	+10:17:11		
fr86a488.fits	"FLAT FIELD"			R	01/13/86	+10:18:06		
fr86a489.fits	"FLAT FIELD"			I	01/13/86	+10:19:12		
fr86a490.fits	"FLAT FIELD"			I	01/13/86	+10:20:08		
fr86a491.fits	"FLAT FIELD"			6300	01/13/86	+10:23:55		
fr86a492.fits	"FLAT FIELD"			6300	01/13/86	+10:26:10		
fr86a493.fits	"FLAT FIELD"			"6300 TLT"	01/13/86	+10:28:15		
fr86a494.fits	"FLAT FIELD"			"6300 TLT"	01/13/86	+10:30:14		
fr86a495.fits	"FLAT FIELD"			6185	01/13/86	+10:37:02		
fr86a496.fits	"FLAT FIELD"			6185	01/13/86	+10:38:03		
fr86a497.fits	"FLAT FIELD"			6250	01/13/86	+10:39:37		
fr86a498.fits	"FLAT FIELD"			6250	01/13/86	+10:40:49		
fr86a499.fits	"FLAT FIELD"			5980	01/13/86	+11:58:39		
fr86a500.fits	"FLAT FIELD"			5980	01/13/86	+12:00:14		
fr86a501.fits	"FLAT FIELD"			5139	01/13/86	+12:01:47		
fr86a502.fits	"FLAT FIELD"			5139	01/13/86	+12:02:54		
fr86a503.fits	"FLAT FIELD"			4565	01/13/86	+12:04:28		
fr86a504.fits	"FLAT FIELD"			4565	01/13/86	+12:06:26		
fr86a505.fits	"FLAT FIELD"			4060	01/13/86	+12:08:50		
fr86a506.fits	"FLAT FIELD"			4060	01/13/86	+12:15:13		
fr86a507.fits	"FLAT FIELD"			6563	01/13/86	+12:26:40		
fr86a508.fits	"FLAT FIELD"			6563	01/13/86	+12:27:53		
fr86a509.fits	"FLAT FIELD"			6775	01/13/86	+12:33:09		
fr86a510.fits	"FLAT FIELD"			6775	01/13/86	+12:34:03		
fr86a511.fits	dark			6775	01/13/86	+12:35:56	xname	
fr86a512.fits	dark			6775	01/13/86	+12:41:20	xname	
fr86a513.fits	"UWE 5"	16:50:40.0	+60:56:02	6775	01/13/86	+12:52:18		Object unknown, RA/DEC came from log and provide correct field
fr86a514.fits	"UWE 5"	16:50:38.8	+60:56:02	6563	01/13/86	+12:56:38		Object unknown, RA/DEC came from log and provide correct field
fr86a515.fits	"UWE 5"	16:50:39.2	+60:56:02	6563	01/13/86	+13:12:39		Object unknown, RA/DEC came from log and provide correct field
fr86a516.fits	1P/Halley	21:47:22.78	-05:20:44.9	R	01/16/86	+01:34:39		wide field
fr86a517.fits	1P/Halley	21:47:22.03	-05:20:49.4	R	01/16/86	+01:37:45		wide field
fr86a518.fits	1P/Halley	21:47:22.03	-05:20:49.4	V	01/16/86	+01:40:53		wide field
fr86a519.fits	1P/Halley	21:47:22.03	-05:20:49.4	V	01/16/86	+01:42:41		wide field
fr86a520.fits	1P/Halley	21:47:21.29	-05:20:53.9	B	01/16/86	+01:45:12		wide field
fr86a521.fits	1P/Halley	21:47:21.29	-05:20:53.9	B	01/16/86	+01:48:11		wide field
fr86a522.fits	1P/Halley	21:47:21.29	-05:20:53.9	B	01/16/86	+01:51:00		wide field

File	Object	RA set	DEC set	Filter	Date	UT-STRT	Log Differences	Comments (N left E down, rotate 270 CC)
fr86a523.fits	1P/Halley	21:47:20.55	-05:20:58.4	I	01/16/86	+01:56:15		wide field
fr86a524.fits	1P/Halley	21:47:20.55	-05:20:58.4	I	01/16/86	+01:58:36		wide field
fr86a525.fits	1P/Halley	21:47:20.55	-05:20:58.4	R	01/16/86	+02:00:46		wide field
fr86a526.fits	1P/Halley	21:47:20.55	-05:20:58.4	R	01/16/86	+02:02:31		wide field
fr86a527.fits	1P/Halley	21:47:19.81	-05:21:02.8	R	01/16/86	+02:07:28		wide field
fr86a528.fits	1P/Halley	21:47:19.81	-05:21:02.8	R	01/16/86	+02:11:31		wide field
fr86a529.fits	1P/Halley	21:47:19.06	-05:21:07.3	V	01/16/86	+02:18:41		wide field
fr86a530.fits	1P/Halley	21:47:18.32	-05:21:11.8	B	01/16/86	+02:25:24		wide field
fr86a531.fits	1P/Halley	21:47:17.58	-05:21:16.3	I	01/16/86	+02:37:14		wide field
fr86a532.fits	1P/Halley	21:47:17.58	-05:21:16.3	I	01/16/86	+02:43:47		wide field
fr86a533.fits	1P/Halley	21:47:16.84	-05:21:20.7	R	01/16/86	+02:45:12		wide field
fr86a534.fits	1P/Halley	21:47:16.84	-05:21:20.7	V	01/16/86	+02:47:07		wide field
fr86a535.fits	1P/Halley	21:47:16.84	-05:21:20.7	B	01/16/86	+02:48:54		wide field
fr86a536.fits	DARK				01/16/86	+03:24:05		
fr86a537.fits	DARK				01/16/86	+03:25:19		
fr86a538.fits	"HD 315"			V	01/16/86	+03:30:36		??
fr86a539.fits	"HD 315"			V	01/16/86	+03:33:29		
fr86a540.fits	"HD 315"			B	01/16/86	+03:36:05		
fr86a541.fits	"HD 315"			B	01/16/86	+03:37:44		
fr86a542.fits	"HD 315"			R	01/16/86	+03:41:14		
fr86a543.fits	"HD 315"			R	01/16/86	+03:42:20		
fr86a544.fits	"HD 315"			I	01/16/86	+03:43:59		
fr86a545.fits	"HD 315"			I	01/16/86	+03:45:23		
fr86a546.fits	"HD 315"			B	01/16/86	+04:08:27		
fr86a547.fits	"HD 315"			V	01/16/86	+04:14:31		
fr86a548.fits	"HD 315"			R	01/16/86	+04:16:50		
fr86a549.fits	"HD 315"			I	01/16/86	+04:19:03		
fr86a550.fits	"HD 315"			V	01/16/86	+04:22:06		
fr86a551-553								missing
fr86a554.fits	"FLAT FIELD"			R	01/17/86	+00:54:06		
fr86a555-556								missing
fr86a557.fits	"FLAT FIELD"			I	01/17/86	+00:59:49		
fr86a558.fits	"FLAT FIELD"			I	01/17/86	+01:02:39		
fr86a559-566								missing
fr86a567.fits	1P/Halley	21:45:34.80	-05:31:44.7	R	01/17/86	+01:57:11		wide field
fr86a568.fits	1P/Halley	21:45:33.32	-05:31:49.1	R	01/17/86	+02:09:55		wide field
fr86a569								missing
fr86a570.fits	1P/Halley	21:45:32.59	-05:31:58.1	I	01/17/86	+02:33:52		wide field
fr86a571-578								missing
fr86a579.fits	DARK				01/17/86	+04:40:52		
fr86a580.fits	DARK				01/17/86	+04:41:55		
fr86a581.fits	1P/Halley	21:42:07.76	-05:52:59.2	6300	01/19/86	+01:22:12	xName	
fr86a582.fits	1P/Halley	21:42:07.76	-05:52:59.2	6300	01/19/86	+01:23:56	xName	
fr86a583								missing
fr86a584.fits	1P/Halley	21:42:07.03	-05:53:03.7	OI	01/19/86	+01:31:47	xName, xfilter	
fr86a585.fits	1P/Halley	21:42:06.29	-05:53:08.1	6300	01/19/86	+01:36:02	xName	
fr86a586.fits	1P/Halley	21:42:06.29	-05:53:08.1	OI	01/19/86	+01:40:16	xName, xfilter	
fr86a587.fits	1P/Halley	21:42:06.29	-05:53:08.1	6300	01/19/86	+01:44:30	xName	
fr86a588.fits	1P/Halley	21:42:05.56	-05:53:12.6	6185	01/19/86	+01:49:47		
fr86a589.fits	1P/Halley	21:42:05.56	-05:53:12.6	6250	01/19/86	+01:52:47	xfilter	

File	Object	RA set	DEC set	Filter	Date	UT-STRT	Log Differences	Comments (N left E down, rotate 270 CC)
fr86a590.fits	1P/Halley	21:42:05.56	-05:53:12.6	6250	01/19/86	+01:54:16	xfilter	
fr86a591.fits	1P/Halley	21:42:04.83	-05:53:17.1	6185	01/19/86	+01:55:59		
fr86a592.fits	1P/Halley	21:42:04.83	-05:53:17.1	6185	01/19/86	+01:57:15		
fr86a593.fits	1P/Halley	21:42:04.83	-05:53:17.1	8600	01/19/86	+01:59:19	xfilter	
fr86a594.fits	1P/Halley	21:42:04.83	-05:53:17.1	9180	01/19/86	+02:01:12	xfilter	
fr86a595.fits	1P/Halley	21:42:04.83	-05:53:17.1	9180	01/19/86	+02:03:18	xfilter	
fr86a596.fits	1P/Halley	21:42:04.83	-05:53:17.1	8600	01/19/86	+02:04:31	xfilter	
fr86a597.fits	1P/Halley	21:42:04.10	-05:53:21.6	6185	01/19/86	+02:05:43		
fr86a598.fits	1P/Halley	21:42:04.10	-05:53:21.6	6250	01/19/86	+02:07:21	xfilter	
fr86a599.fits	BD +8 2015	08:15:41.54	+07:37:05.2	6250	01/19/86	+02:34:01	xName	BD +8 2015
fr86a600.fits	BD +8 2015	08:15:41.54	+07:37:05.2	6250	01/19/86	+02:35:54	xName	
fr86a601.fits	BD +8 2015	08:15:41.54	+07:37:05.2	6185	01/19/86	+02:38:06	xName	
fr86a602.fits	BD +8 2015	08:15:41.54	+07:37:05.2	6185	01/19/86	+02:39:28	xName	
fr86a603.fits	BD +8 2015	08:15:41.54	+07:37:05.2	8600	01/19/86	+02:45:18	xName	
fr86a604.fits	BD +8 2015	08:15:41.54	+07:37:05.2	8600	01/19/86	+02:47:20	xName	
fr86a605.fits	BD +8 2015	08:15:41.54	+07:37:05.2	9180	01/19/86	+02:49:49	xName	
fr86a606.fits	BD +8 2015	08:15:41.54	+07:37:05.2	9180	01/19/86	+02:51:55	xName	
fr86a607.fits	BD +8 2015	08:15:41.54	+07:37:05.2	6300	01/19/86	+03:04:02	xName	
fr86a608.fits	BD +8 2015	08:15:41.54	+07:37:05.2	6300	01/19/86	+03:01:04	xName	
fr86a609l.fits	BD +8 2015	08:15:41.54	+07:37:05.2	"6300 TILT"	01/19/86	+03:07:15	,xName, xfilename	fr86a609
fr86a610.fits	FF			"6300 TILT"	01/19/86	+03:59:44		
fr86a611.fits	FF			"6300 TILT"	01/19/86	+04:02:15		
fr86a612.fits	FF			6300	01/19/86	+04:05:29		
fr86a613.fits	FF			6300	01/19/86	+04:07:45		
fr86a614.fits	FF			6185	01/19/86	+04:14:12		
fr86a615.fits	FF			6185	01/19/86	+04:15:50		
fr86a616.fits	FF			6250	01/19/86	+04:18:17		
fr86a617.fits	FF			6250	01/19/86	+04:19:44		
fr86a618.fits	FF			8600	01/19/86	+04:23:55		
fr86a619.fits	FF			8600	01/19/86	+04:25:02		
fr86a620.fits	FF			9180	01/19/86	+04:28:28		
fr86a621.fits	FF			9180	01/19/86	+04:29:37		
fr86a622.fits	1P/Halley	21:40:22.49	-06:03:52.5	OI	01/20/86	+01:32:34	xfilter	
fr86a623.fits	1P/Halley	21:40:21.76	-06:03:57.0	6300	01/20/86	+01:35:00		
fr86a624.fits	1P/Halley	21:40:21.76	-06:03:57.0	6300	01/20/86	+01:37:05		
fr86a625.fits	1P/Halley	21:40:21.76	-06:03:57.0	OI	01/20/86	+01:38:37	xfilter	
fr86a626.fits	1P/Halley	21:40:21.76	-06:03:57.0	OI	01/20/86	+01:40:08	xfilter	
fr86a627.fits	1P/Halley	21:40:21.76	-06:03:57.0	6300	01/20/86	+01:44:29		
fr86a628.fits	1P/Halley	21:40:21.03	-06:04:01.5	6300	01/20/86	+01:48:46		
fr86a629.fits	1P/Halley	21:40:21.03	-06:04:01.5	OI	01/20/86	+01:49:55	xfilter	
fr86a630.fits	1P/Halley	21:40:21.03	-06:04:01.5	OI	01/20/86	+01:51:10	xfilter	
fr86a631.fits	1P/Halley	21:40:21.03	-06:04:01.5	6300	01/20/86	+01:53:04		
fr86a632.fits	1P/Halley	21:40:20.30	-06:04:06.0	6185	01/20/86	+01:55:19		
fr86a633.fits	1P/Halley	21:40:20.30	-06:04:06.0	6250	01/20/86	+01:56:39	xfilter	
fr86a634.fits	1P/Halley	21:40:20.30	-06:04:06.0	6250	01/20/86	+01:58:12	xfilter	
fr86a635.fits	1P/Halley	21:40:20.30	-06:04:06.0	6185	01/20/86	+02:00:08		
fr86a636.fits	1P/Halley	21:40:20.30	-06:04:06.0	6185	01/20/86	+02:02:08		
fr86a637.fits	1P/Halley	21:40:19.84	-06:04:10.4	6250	01/20/86	+02:05:04	xfilter	
fr86a638.fits	BD +8 2015	08:15:41.54	+07:37:05.2	6250	01/20/86	+02:58:11	xName	BD +8 2015

File	Object	RA set	DEC set	Filter	Date	UT-STRT	Log Differences	Comments (N left E down, rotate 270 CC)
fr86a639.fits	BD +8 2015	08:15:41.54	+07:37:05.2	6250	01/20/86	+02:59:55		
fr86a640.fits	BD +8 2015	08:15:41.54	+07:37:05.2	6185	01/20/86	+03:02:10		
fr86a641.fits	BD +8 2015	08:15:41.54	+07:37:05.2	6185	01/20/86	+03:03:48		
fr86a642.fits	BD +8 2015	08:15:41.54	+07:37:05.2	6300	01/20/86	+03:07:52		
fr86a643.fits	BD +8 2015	08:15:41.54	+07:37:05.2	6300	01/20/86	+03:10:29		
fr86a644.fits	BD +8 2015	08:15:41.54	+07:37:05.2	"6300 TILT"	01/20/86	+03:14:47		
fr86a645.fits	BD +8 2015	08:15:41.54	+07:37:05.2	"6300 TILT"	01/20/86	+03:18:16		
fr86a646.fits	FF			"6300 TILT"	01/20/86	+03:26:27		
fr86a647.fits	FF			"6300 TILT"	01/20/86	+03:29:05		
fr86a648.fits	FF			OI	01/20/86	+03:40:42		
fr86a649.fits	FF			OI	01/20/86	+03:42:53		
fr86a650.fits	FF			6185	01/20/86	+03:47:01		
fr86a651.fits	FF			6185	01/20/86	+03:48:21		
fr86a652.fits	FF			6250	01/20/86	+03:49:38		
fr86a653.fits	FF			6250	01/20/86	+03:51:00		
fr86a654.fits	1P/Halley	21:31:39.15	-06:59:14.5	6185	01/25/86	+01:33:48		
fr86a655.fits	1P/Halley	21:31:38.42	-06:59:19.2	6300	01/25/86	+01:36:47		
fr86a656.fits	1P/Halley	21:31:38.42	-06:59:19.2	"6300 TLT"	01/25/86	+01:41:16		
fr86a657.fits	1P/Halley	21:31:37.68	-06:59:23.9	"6300 TLT"	01/25/86	+01:45:31		
fr86a658.fits	1P/Halley	21:31:37.68	-06:59:23.9	6300	01/25/86	+01:46:38		
fr86a659.fits	1P/Halley	21:31:37.68	-06:59:23.9	6250	01/25/86	+01:51:24		
fr86a660.fits	1P/Halley	21:31:37.68	-06:59:23.9	8600	01/25/86	+01:52:50		
fr86a661.fits	DARK				01/25/86	+02:10:00		
fr86a662.fits	DARK				01/25/86	+02:10:56		
fr86a663.fits	"BD +8 2015"	08:15:41.54	+07:37:05.2	6185	01/25/86	+02:33:24		
fr86a664.fits	"BD +8 2015"	08:15:41.54	+07:37:05.2	6185	01/25/86	+02:35:10		
fr86a665.fits	"BD +8 2015"	08:15:41.54	+07:37:05.2	6250	01/25/86	+02:38:15		
fr86a666.fits	"BD +8 2015"	08:15:41.54	+07:37:05.2	6250	01/25/86	+02:40:36		
fr86a667.fits	"BD +8 2015"	08:15:41.54	+07:37:05.2	6300	01/25/86	+02:44:51		
fr86a668.fits	"BD +8 2015"	08:15:41.54	+07:37:05.2	6300	01/25/86	+02:47:53		
fr86a669.fits	"BD +8 2015"	08:15:41.54	+07:37:05.2	"6300 TLT"	01/25/86	+02:51:48		
fr86a670.fits	"BD +8 2015"	08:15:41.54	+07:37:05.2	"6300 TLT"	01/25/86	+02:54:54		
fr86a671.fits	"BD +8 2015"	08:15:41.54	+07:37:05.2	8600	01/25/86	+02:59:26		
fr86a672.fits	"BD +8 2015"	08:15:41.54	+07:37:05.2	4800	01/25/86	+03:02:03	xfilter	
fr86a673.fits	Hubble's Nebula	06:39:10.08	+08:45:00.0	6185	01/25/86	+03:42:29		Hubbles nebula
fr86a674.fits	Hubble's Nebula	06:39:10.08	+08:45:00.0	6185	01/25/86	+03:50:21		
fr86a675.fits	Hubble's Nebula	06:39:10.08	+08:45:00.0	6250	01/25/86	+03:54:15		
fr86a676.fits	Hubble's Nebula	06:39:10.08	+08:45:00.0	6250	01/25/86	+03:59:53		
fr86a677.fits	Hubble's Nebula	06:39:10.08	+08:45:00.0	8600	01/25/86	+04:18:52		
fr86a678.fits	Hubble's Nebula	06:39:10.08	+08:45:00.0	8600	01/25/86	+04:21:20		
fr86a679.fits	Hubble's Nebula	06:39:10.08	+08:45:00.0	9160	01/25/86	+04:25:42		
fr86a680.fits	Hubble's Nebula	06:39:10.08	+08:45:00.0	9160	01/25/86	+04:28:39		
fr86a681.fits	Hubble's Nebula	06:39:10.08	+08:45:00.0	4565	01/25/86	+04:48:59		
fr86a682.fits	Hubble's Nebula	06:39:10.08	+08:45:00.0	4565	01/25/86	+04:53:48		
fr86a683.fits	"BD +8 2015"	08:15:41.54	+07:37:05.2	4565	01/25/86	+05:22:08		
fr86a684.fits	"BD +8 2015"	08:15:41.54	+07:37:05.2	4565	01/25/86	+05:24:43		
fr86a685.fits	"BD +8 2015"	08:15:41.54	+07:37:05.2	6185	01/25/86	+05:29:39		
fr86a686.fits	"BD +8 2015"	08:15:41.54	+07:37:05.2	6185	01/25/86	+05:31:02		
fr86a687.fits	"BD +8 2015"	08:15:41.54	+07:37:05.2	6250	01/25/86	+05:32:52		
fr86a688.fits	"BD +8 2015"	08:15:41.54	+07:37:05.2	6250	01/25/86	+05:34:32		

File	Object	RA set	DEC set	Filter	Date	UT-STRT	Log Differences	Comments (N left E down, rotate 270 CC)
fr86a689.fits	"BD +8 2015"	08:15:41.54	+07:37:05.2	8600	01/25/86	+05:39:19		
fr86a690.fits	"BD +8 2015"	08:15:41.54	+07:37:05.2	8600	01/25/86	+05:40:35		
fr86a691.fits	"BD +8 2015"	08:15:41.54	+07:37:05.2	9160	01/25/86	+05:44:34		
fr86a692.fits	"BD +8 2015"	08:15:41.54	+07:37:05.2	9160	01/25/86	+05:46:15		
fr86a693.fits	DARK				01/25/86	+05:51:52		
fr86a694.fits	DARK				01/25/86	+05:52:55		
fr86a695.fits	"FLAT FIELD"			9160	01/25/86	+06:06:09		
fr86a696.fits	"FLAT FIELD"			9160	01/25/86	+06:07:21		
fr86a697.fits	"FLAT FIELD"			8600	01/25/86	+06:09:07		
fr86a698.fits	"FLAT FIELD"			8600	01/25/86	+06:10:09		
fr86a699.fits	"FLAT FIELD"			6250	01/25/86	+06:12:00		
fr86a700.fits	"FLAT FIELD"			6250	01/25/86	+06:13:20		
fr86a701.fits	"FLAT FIELD"			6185	01/25/86	+06:14:58		
fr86a702.fits	"FLAT FIELD"			6185	01/25/86	+06:16:03		
fr86a703.fits	"FLAT FIELD"			6300	01/25/86	+06:18:00		
fr86a704.fits	"FLAT FIELD"			6300	01/25/86	+06:20:07		
fr86a705.fits	"FLAT FIELD"			"6300 TLT"	01/25/86	+06:22:17		
fr86a706.fits	"FLAT FIELD"			"6300 TLT"	01/25/86	+06:24:20		
fr86a707.fits	"FLAT FIELD"			4565	01/25/86	+06:27:46		
fr86a708.fits	"FLAT FIELD"			4565	01/25/86	+06:29:42		
fr86a709.fits	"FLAT FIELD"			R	01/26/86	+01:09:20		
fr86a710.fits	"FLAT FIELD"			R	01/26/86	+01:10:20		
fr86a711.fits	"FLAT FIELD"			V	01/26/86	+01:11:23		
fr86a712.fits	"FLAT FIELD"			V	01/26/86	+01:12:20		
fr86a713.fits	1P/Halley	21:29:52.90	-07:10:47.4	R	01/26/86	+01:41:50		
fr86a714.fits	1P/Halley	21:29:52.90	-07:10:47.4	V	01/26/86	+01:44:26		
fr86a715.fits	1P/Halley	21:29:52.16	-07:10:52.2	R	01/26/86	+01:47:28		
fr86a716.fits	1P/Halley	21:29:52.16	-07:10:52.2	R	01/26/86	+01:51:23		
fr86a717.fits	1P/Halley	21:29:52.16	-07:10:52.2	V	01/26/86	+01:54:15		
fr86a718.fits	1P/Halley	21:29:51.43	-07:10:57.0	N/A	01/26/86	+01:58:09		
fr86a719.fits	1P/Halley	21:29:51.43	-07:10:57.0	N/A	01/26/86	+01:59:41		
fr86a720.fits	1P/Halley	21:29:51.43	-07:10:57.0	R	01/26/86	+02:02:57		
fr86a721.fits	1P/Halley	21:29:50.69	-07:11:01.8	R	01/26/86	+02:11:08		
fr86a722.fits	1P/Halley	21:29:50.69	-07:11:01.8	R	01/26/86	+02:16:00		
fr86a723.fits	DARK				01/26/86	+02:28:33		
fr86a724.fits	DARK				01/26/86	+02:29:39		
fr86a725.fits	"HD 315"			R	01/26/86	+03:59:40		
fr86a726.fits	"HD 315"			R	01/26/86	+04:01:26		
fr86a727.fits	"HD 315"			V	01/26/86	+04:02:57		
fr86a728.fits	"HD 315"			V	01/26/86	+04:04:11		
fr86a729.fits	DARK				01/26/86	+04:07:09		
fr86a730.fits	DARK				01/26/86	+04:08:32		