

Table 1

File	Object	RA set	DEC set	Filter	Date	UT-STRT	Log Differences	Comments (N left E up, rotate 90 CC)
fr87c001.fits	1P/Halley	10:34:26.81	-13:51:09.8	R	03/01/87	+03:44:24		
fr87c002.fits	1P/Halley	10:34:25.89	-13:51:04.3	R	03/01/87	+04:03:41		
fr87c003.fits	1P/Halley	10:34:24.96	-13:50:58.8	R	03/01/87	+04:16:47		
fr87c004.fits	1P/Halley	10:34:24.50	-13:50:56.0	R	03/01/87	+04:32:34		
fr87c005.fits	1P/Halley	10:34:23.57	-13:50:50.5	R	03/01/87	+04:48:13		
fr87c006.fits	1P/Halley	10:34:23.11	-13:50:47.8	R	03/01/87	+05:05:58		
fr87c007.fits	1P/Halley	10:34:22.18	-13:50:42.3	R	03/01/87	+05:22:51		
fr87c008.fits	1P/Halley	10:34:21.25	-13:50:36.8	R	03/01/87	+05:37:23		
fr87c009.fits	1P/Halley	10:34:20.79	-13:50:34.0	R	03/01/87	+05:54:14		
fr87c010.fits	1P/Halley	10:34:19.86	-13:50:28.5	R	03/01/87	+06:11:10		
fr87c011.fits	"FLAT FIELD"			R	03/01/87	+07:33:52		
fr87c012.fits	"FLAT FIELD"			R	03/01/87	+07:36:06		
fr87c013.fits	"FLAT FIELD"			R	03/01/87	+07:37:28		
fr87c014.fits	"FLAT FIELD"			R	03/01/87	+07:38:47		
fr87c015.fits	DARK			R	03/01/87	+07:42:36		
fr87c016.fits	DARK			R	03/01/87	+07:44:26		
fr87c017.fits	DARK			R	03/01/87	+07:46:11		
fr87c018.fits	1P/Halley	10:33:17.57	-13:44:10.4	R	03/02/87	+04:53:30		
fr87c019.fits	1P/Halley	10:33:16.64	-13:44:04.8	R	03/02/87	+05:14:05		
fr87c020.fits	1P/Halley	10:33:15.72	-13:43:59.2	R	03/02/87	+05:28:36		
fr87c021.fits	1P/Halley	10:33:15.26	-13:43:56.4	R	03/02/87	+05:42:55		
fr87c022.fits	1P/Halley	10:33:14.34	-13:43:50.8	R	03/02/87	+06:00:08		
fr87c023.fits	1P/Halley	10:33:12.95	-13:43:42.5	R	03/02/87	+06:16:49		
fr87c024.fits	1P/Halley	10:33:13.41	-13:43:45.3	R	03/02/87	+06:30:15		
fr87c025.fits								Log is written
fr87c026.fits	1P/Halley	10:33:11.56	-13:43:34.1	R	03/02/87	+07:00:35		
fr87c027.fits	1P/Halley	10:33:10.18	-13:43:25.7	R	03/02/87	+07:29:15		
fr87c028.fits	1P/Halley	10:33:09.71	-13:43:22.9	R	03/02/87	+07:44:40		
fr87c029.fits	1P/Halley	10:33:08.33	-13:43:14.5	R	03/02/87	+08:06:55		
fr87c030.fits	1P/Halley	10:33:07.87	-13:43:11.7	R	03/02/87	+08:21:22		
fr87c031.fits	G 162-66	10:33:42.76	-11:41:38.3	R	03/02/87	+08:42:05	xName	Object name is empty in header, Updated the object name and RA/DEC since it was not getting uploaded for normalization without the object name.
fr87c032.fits	Helium Lamp				03/03/87	+00:40:33		
fr87c033.fits	Helium Lamp				03/03/87	+00:42:16		
fr87c034.fits	Xenon Lamp				03/03/87	+00:45:47		
fr87c035.fits	Xenon Lamp				03/03/87	+00:47:19		
fr87c036.fits	"R MON"	06:39:09.95	+08:44:09.7		03/03/87	+02:54:47		
fr87c037.fits	"R MON"	06:39:09.95	+08:44:09.7		03/03/87	+03:00:25		
fr87c038.fits	"R MON"	06:39:09.95	+08:44:09.7		03/03/87	+03:08:57		
fr87c039.fits	Hubble's Nebula	06:39:10.08	+08:45:00.0		03/03/87	+03:19:40		Hubbles nebula
fr87c040.fits	"BS 3750"	09:27:46.78	-06:04:16.3		03/03/87	+03:49:57		
fr87c041.fits	"BS 3750"	09:27:46.78	-06:04:16.3		03/03/87	+03:52:28		
fr87c042.fits	"BS 3750"	09:27:46.78	-06:04:16.3		03/03/87	+03:54:12		
fr87c043.fits	"BS 4030"	10:16:32.29	+23:30:11.1		03/03/87	+04:08:25		
fr87c044.fits	"BS 4030"	10:16:32.29	+23:30:11.1		03/03/87	+04:13:34		
fr87c045.fits	"BS 4030"	10:16:32.29	+23:30:11.1		03/03/87	+04:11:37		
fr87c046.fits	"BS 3314"	08:25:39.63	-03:54:23.1		03/03/87	+04:25:23		
fr87c047.fits	"BS 3314"	08:25:39.63	-03:54:23.1		03/03/87	+04:30:12		
fr87c048.fits	"BS 3314"	08:25:39.63	-03:54:23.1		03/03/87	+04:32:02		
fr87c049.fits	Hubble's Nebula	06:39:10.08	+08:45:00.0		03/03/87	+04:45:00		

File	Object	RA set	DEC set	Filter	Date	UT-STRT	Log Differences	Comments (N left E up, rotate 90 CC)
fr87c050.fits	Hubble's Nebula	06:39:10.08	+08:45:00.0		03/03/87	+05:03:27		
fr87c051.fits	"BS 3314"	08:25:39.63	-03:54:23.1		03/03/87	+05:31:47		
fr87c052.fits	"BS 3314"	08:25:39.63	-03:54:23.1		03/03/87	+05:33:28		
fr87c053.fits	"BS 3314"	08:25:39.63	-03:54:23.1		03/03/87	+05:35:10		
fr87c054.fits	"BS 3750"	09:27:46.78	-06:04:16.3		03/03/87	+05:41:13		
fr87c055.fits	"BS 3750"	09:27:46.78	-06:04:16.3		03/03/87	+05:43:20		
fr87c056.fits	"BS 3750"	09:27:46.78	-06:04:16.3		03/03/87	+05:45:30		
fr87c057.fits	"BS 4030"	10:16:32.29	+23:30:11.1		03/03/87	+05:53:33		
fr87c058.fits	"BS 4030"	10:16:32.29	+23:30:11.1		03/03/87	+05:55:16		
fr87c059.fits	"BS 4030"	10:16:32.29	+23:30:11.1		03/03/87	+05:56:29		
fr87c060.fits	1P/Halley	10:32:06.90	-13:36:54.2	R	03/03/87	+06:43:05		
fr87c061.fits	1P/Halley	10:32:05.99	-13:36:48.6	R	03/03/87	+06:55:57		
fr87c062.fits	1P/Halley	10:32:05.53	-13:36:45.7	R	03/03/87	+07:08:16		
fr87c063.fits	1P/Halley	10:32:05.07	-13:36:42.9	R	03/03/87	+07:20:34		
fr87c064.fits	G 162-66	10:33:42.76	-11:41:38.3	R	03/03/87	+07:40:45		G 162-66
fr87c065.fits	G 162-66	10:33:42.76	-11:41:38.3	R	03/03/87	+07:45:27		G 162-66
fr87c066.fits	G 162-66	10:33:42.76	-11:41:38.3	R	03/03/87	+07:47:21		G 162-66
fr87c067.fits	"BS 3750"	09:27:46.78	-06:04:16.3		03/03/87	+07:59:42		
fr87c068.fits	"BS 3750"	09:27:46.78	-06:04:16.3		03/03/87	+08:01:56		
fr87c069.fits	"BS 3750"	09:27:46.78	-06:04:16.3		03/03/87	+08:03:06		
fr87c070.fits	PLUTO	14:51:13.83	+01:00:32.9		03/03/87	+08:20:17		
fr87c071.fits	PLUTO	14:51:13.82	+01:00:33.2		03/03/87	+08:29:13		
fr87c072.fits	PLUTO	14:51:13.79	+01:00:33.7		03/03/87	+08:46:05		
fr87c073.fits	PLUTO	14:51:13.76	+01:00:34.2		03/03/87	+09:09:54		
fr87c074.fits	PLUTO	14:51:13.74	+01:00:34.5		03/03/87	+09:22:15		
fr87c075.fits	PLUTO	14:51:13.73	+01:00:34.8		03/03/87	+09:34:41		
fr87c076.fits	PLUTO	14:51:13.66	+01:00:36.1		03/03/87	+10:17:02		
fr87c077.fits	PLUTO	14:51:13.64	+01:00:36.4		03/03/87	+10:31:05		
fr87c078.fits	PLUTO	14:51:13.62	+01:00:36.9		03/03/87	+10:45:02		
fr87c079.fits	PLUTO	14:51:13.60	+01:00:37.2		03/03/87	+10:59:12		
fr87c080.fits	PLUTO	14:51:13.59	+01:00:37.4		03/03/87	+11:11:43		
fr87c081.fits	PLUTO	14:51:13.57	+01:00:37.7		03/03/87	+11:24:48		
fr87c082.fits	PLUTO	14:51:13.54	+01:00:38.2		03/03/87	+11:36:52		
fr87c083.fits								Log says 'may be lost'
fr87c084.fits	PLUTO	14:51:13.50	+01:00:39.0		03/03/87	+12:08:56		
fr87c085.fits	PLUTO	14:51:13.49	+01:00:39.3		03/03/87	+12:21:10		
fr87c086.fits	PLUTO	14:51:13.47	+01:00:39.5		03/03/87	+12:33:02		
fr87c087.fits	PLUTO	14:51:13.46	+01:00:39.8		03/03/87	+12:44:44		
fr87c088.fits	Hubble's Nebula	06:39:10.08	+08:45:00.0		03/04/87	+02:34:57	xName	
fr87c089.fits	Hubble's Nebula	06:39:10.08	+08:45:00.0		03/04/87	+02:46:44	xName	
fr87c090.fits	F2-COMP	06:38:35.18	+08:47:11.4		03/04/87	+03:44:01		Unknown object, some star nearby Hubbles nebula
fr87c091.fits	F2-COMP	06:38:35.18	+08:47:11.4		03/04/87	+03:46:12		
fr87c092.fits	F2-COMP	06:38:35.18	+08:47:11.4		03/04/87	+03:50:47		
fr87c093.fits	BS 3750	09:27:46.78	-06:04:16.3		03/04/87	+04:00:41		
fr87c094.fits	BS 3750	09:27:46.78	-06:04:16.3		03/04/87	+04:02:42		
fr87c095.fits	BS 3750	09:27:46.78	-06:04:16.3		03/04/87	+04:04:24		
fr87c096.fits	FF				03/04/87	+04:17:21		
fr87c097.fits	FF				03/04/87	+04:19:08		
fr87c098.fits	FF				03/04/87	+04:20:20		
fr87c099.fits	FF				03/04/87	+04:21:06		
fr87c100.fits	Dark				03/04/87	+04:22:11	xName	
fr87c101.fits	Dark				03/04/87	+04:23:03	xName	

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fr87c102.fits	BS 3750	09:27:46.78	-06:04:16.3		03/04/87	+04:28:22		
fr87c103.fits	BS 3750	09:27:46.78	-06:04:16.3		03/04/87	+04:34:42		
fr87c104.fits	BS 3750	09:27:46.78	-06:04:16.3		03/04/87	+04:36:44		
fr87c105.fits	BS 4030	10:16:32.29	+23:30:11.1		03/04/87	+04:42:55		
fr87c106.fits	BS 4030	10:16:32.29	+23:30:11.1		03/04/87	+04:44:48		
fr87c107.fits	BS 4030	10:16:32.29	+23:30:11.1		03/04/87	+04:46:33		
fr87c108.fits	1P/Halley	10:31:05.39	-13:30:27.0	R	03/04/87	+05:23:35		
fr87c109.fits	1P/Halley	10:31:04.48	-13:30:21.3	R	03/04/87	+05:42:20		
fr87c110.fits	1P/Halley	10:31:03.57	-13:30:15.6	R	03/04/87	+05:55:31		
fr87c111.fits	1P/Halley	10:31:03.11	-13:30:12.8	R	03/04/87	+06:09:15		
fr87c112.fits	1P/Halley	10:31:02.66	-13:30:09.9	R	03/04/87	+06:23:49		
fr87c113.fits	G 162-66	10:33:42.76	-11:41:38.3	R	03/04/87	+06:48:01		G 162-66
fr87c114.fits	G 162-66	10:33:42.76	-11:41:38.3	R	03/04/87	+06:52:27		G 162-66
fr87c115.fits	1P/Halley	10:31:00.83	-13:29:58.5	R	03/04/87	+06:57:18		
fr87c116.fits	1P/Halley	10:31:00.37	-13:29:55.6	R	03/04/87	+07:13:44		
fr87c117.fits	1P/Halley	10:30:58.09	-13:29:41.3	R	03/04/87	+08:02:27		
fr87c118.fits	1P/Halley	10:30:57.18	-13:29:35.5	R	03/04/87	+08:18:10		
fr87c119.fits	1P/Halley	10:30:56.27	-13:29:29.8	R	03/04/87	+08:35:10		
fr87c120.fits	1P/Halley	10:30:56.27	-13:29:29.8	R	03/04/87	+08:41:05		
fr87c121.fits	G 162-66	10:33:42.76	-11:41:38.3	R	03/04/87	+09:00:57		G 162-66
fr87c122.fits	G 162-66	10:33:42.76	-11:41:38.3	R	03/04/87	+09:03:09		G 162-66
fr87c123.fits	SA 101-281	09:57:05.01	-00:31:42.9	R	03/04/87	+09:12:33		SA 101-281
fr87c124.fits	SA 101-281	09:57:05.01	-00:31:42.9	R	03/04/87	+09:15:16		SA 101-281
fr87c125.fits	1P/Halley	10:30:54.45	-13:29:18.3	R	03/04/87	+09:21:15		
fr87c126.fits	PLUTO	14:51:11.60	+01:01:15.2		03/04/87	+10:46:57		
fr87c127.fits	PLUTO	14:51:11.58	+01:01:15.4		03/04/87	+11:00:43		
fr87c128.fits	PLUTO	14:51:11.57	+01:01:15.7		03/04/87	+11:13:45		
fr87c129.fits	PLUTO	14:51:11.53	+01:01:16.2		03/04/87	+11:26:21		
fr87c130.fits	PLUTO	14:51:11.52	+01:01:16.5		03/04/87	+11:44:16		
fr87c131.fits	C/Levy (1987 A1)	15:30:57.86	-12:23:21.2	R	03/04/87	+12:18:50		C/1987 A1
fr87c132.fits	C/Levy (1987 A1)	15:30:56.01	-12:23:34.6	R	03/04/87	+12:33:11		C/1987 A1
fr87c133.fits	1P/Halley	10:30:05.18	-13:24:01.7	R	03/05/87	+03:35:26		
fr87c134.fits	1P/Halley	10:30:04.73	-13:23:58.8	R	03/05/87	+03:53:36		
fr87c135.fits	FF			R	03/05/87	+04:37:29		
fr87c136.fits	FF			R	03/05/87	+04:39:36		
fr87c137.fits	FF			R	03/05/87	+04:40:49		
fr87c138.fits	FF			R	03/05/87	+04:41:48		
fr87c139.fits	DARK			R	03/08/87	+03:45:01		
fr87c140.fits	DARK			R	03/08/87	+03:45:43		
fr87c141.fits	1P/Halley	10:26:53.00	-13:02:50.4	R	03/08/87	+04:00:39		
fr87c142.fits	"FF SKY"			R	03/08/87	+04:14:31		
fr87c143.fits	1P/Halley	10:26:51.68	-13:02:41.6	R	03/08/87	+04:31:39		
fr87c144.fits	1P/Halley	10:26:50.79	-13:02:35.7	R	03/08/87	+04:47:44		
fr87c145.fits	1P/Halley	10:26:50.35	-13:02:32.7	R	03/08/87	+04:59:52		
fr87c146.fits	G 162-66	10:33:42.76	-11:41:38.3	R	03/08/87	+05:16:53		G 162-66
fr87c147.fits	G 162-66	10:33:42.76	-11:41:38.3	R	03/08/87	+05:20:39		G 162-66
fr87c148.fits	G 162-66	10:33:42.76	-11:41:38.3	R	03/08/87	+05:22:34		G 162-66
fr87c149.fits	1P/Halley	10:26:49.03	-13:02:23.8	R	03/08/87	+05:28:27		
fr87c150.fits	1P/Halley	10:26:48.58	-13:02:20.8	R	03/08/87	+05:40:22		
fr87c151.fits	1P/Halley	10:26:48.14	-13:02:17.9	R	03/08/87	+05:53:25		
fr87c152.fits	G 162-66	10:33:42.76	-11:41:38.3	R	03/08/87	+06:06:53		G 162-66
fr87c153.fits	G 162-66	10:33:42.76	-11:41:38.3	R	03/08/87	+06:08:40		G 162-66

File	Object	RA set	DEC set	Filter	Date	UT-STRT	Log Differences	Comments (N left E up, rotate 90 CC)
fr87c154.fits	SA 101-281	09:57:05.01	-00:31:42.9	R	03/08/87	+06:21:19		SA 101-281
fr87c155.fits	SA 101-281	09:57:05.01	-00:31:42.9	R	03/08/87	+06:23:04		SA 101-281
fr87c156.fits	1P/Halley	10:26:46.37	-13:02:06.0	R	03/08/87	+06:28:52		
fr87c157.fits	1P/Halley	10:26:45.93	-13:02:03.1	R	03/08/87	+06:42:45		
fr87c158.fits	"1P/Halley FIELD 1"	10:34:28.03	-13:51:00.7	R	03/08/87	+06:56:04		RA/DEC from astrometry
fr87c159.fits	"G 162-66"	10:33:42.76	-11:41:38.3	R	03/08/87	+07:09:31		
fr87c160.fits	"G 162-66"	10:33:42.76	-11:41:38.3	R	03/08/87	+07:11:53		
fr87c161.fits	"1P/Halley FIELD 2"	10:23:10.85	-13:43:20.9	R	03/08/87	+07:15:22		RA/DEC from astrometry
fr87c162.fits	"G 162-66"	10:33:42.76	-11:41:38.3	R	03/08/87	+07:27:41		
fr87c163.fits	"G 162-66"	10:33:42.76	-11:41:38.3	R	03/08/87	+07:29:02		
fr87c164.fits	1P/Halley	10:26:43.72	-13:01:48.2	R	03/08/87	+07:31:38		
fr87c165.fits	1P/Halley	10:26:43.28	-13:01:45.2	R	03/08/87	+07:41:48		
fr87c166.fits	"G 162-66"	10:33:42.76	-11:41:38.3	R	03/08/87	+07:53:16		
fr87c167.fits	"G 162-66"	10:33:42.76	-11:41:38.3	R	03/08/87	+07:54:45		
fr87c168.fits	"1P/Halley FIELD 3"	10:30:05.29	-13:22:39.8	R	03/08/87	+07:56:59		RA/DEC from astrometry
fr87c169.fits	Above output obtained by running: <code>hselect fr*.fits sl,exptime,object,ra,dec,filter,date,ut-stirt yes > 87c_hselect</code>							
fr87c170.fits	The Log Differences and Comments columns are the observations noted after comparing the FITS header with log sheets.							
fr87c170.fits	1P/Halley	10:26:41.96	-13:01:36.3	R	03/08/87	+08:11:11		