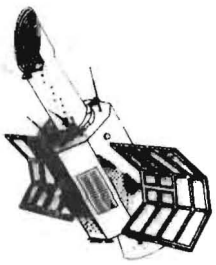

IUE esa

NEWSLETTER

NO. 2 APRIL 1979

Observatory Controller's Message

As we enter the second year of the guest observer phase of IUE, I am happy to report the considerable improvements made during the first year. Our speed-up in operations is impressive and we recently obtained 22 spectra (some at low dispersion and hence with 2 spectra on each image) in one shift. The image processing has greatly improved too with speed increases of factors of 3.6 to 2.4, depending on the type of image processed, since the release of last May.

The daunting task of scheduling observers on IUE for 1979/80 is now well under way and, at the time of writing (mid-March) the schedule for April, May and June is firm. Those of you who wish to propose for the third year will get an opportunity this Summer. I expect detailed instructions on how to propose to be ready in the next month or two and a deadline for proposals around late September. We expect strong competition as last year when 173 proposals were received!

The risk of a conflict with the EXOSAT project because of an overlap of the operational phase has now been removed, and it will therefore be possible for IUE to enjoy full access to our facilities at VILSPA until the end of the presently scheduled 3-year operational lifetime.

ESA IUE Newsletter

Editor : A. Heck
Published by : The ESA IUE Observatory
Villafranca Satellite Tracking Station
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Typing : C. Ramirez Palacios, A. Luchena Raffo
Drawing : J. Garcia Palacios
Photograph : J.L. Casero
Table of Contents at the back.

I expect soon to see a number of IUE results in the journals and presented at conferences, in particular "The First Year of IUE" at University College London. Please don't forget to send copies of your IUE preprints and reprints to me at VILSPA and Dr. F. Macchetto at ESTEC.

M.V. Penston

VIP's Visit

The Director of the Scientific Programme, Dr. E.A. Trendelenburg, visited the VILSPA Observatory on February 21, accompanied by his assistant, Dr. V. Manno. To permit him to view operations, the VILSPA shift was extended one hour (repaid, of course, to NASA another day!). Resident Astronomers discussed real-time operations, image processing and some of IUE's scientific achievements. We believe the visit was successful and heard that the VIP was suitably impressed!

from left to right: Prof. E. Trendelenburg, Dr. A. Ripoll, Dr. V. Manno.

A Few Words from the Station Director

I gladly take the opportunity that A. Heck, Editor, gives me to write a few words in the n° 2 issue of the IUE ESA Newsletter. I wish the group working with him in this endeavour every success. It is now a fact that the work performed at the Villafranca Station by the team of astronomers, engineers, technicians, clerks and support personnel is known by the IUE users around the world. It is for me a great pleasure to head this team whose prime objective is to provide the best possible service to the European astronomical community.

Also, let me welcome all the "Guest Observers" (SRC and ESA) since I not always have the occasion to welcome them personally. The Station is aware that its primary mission is to obtain the best scientific results from astronomers' observations. We try hard, however we need all the feedback we can get from our "Guest Observers" to help us make improvements where deficiencies may exist. For instance, let me illustrate how this can work. The construction of the dormitories was the result of Professor de Jager, Chairman of the Selection Committee, suggesting them to Mr. Gibson, Director General of ESA. Dr. Penston's idea of providing Users with forms inviting suggestions have brought about such improvements as hot water heaters, new lockers, better air conditioning, added cleaning, prohibition of vehicle parking near the dormitories, etc.

I wish to praise the remarkable job being performed by the Resident Astronomers who, not only fulfil well their main duties efficiently, but also accomplish their own observations as reflected by the extensive publications produced by them.

Public relations have been gaining importance all along and although it may represent added work and even though visitors may interfere at times with Station activities, I hope everyone realizes that the "tax payer" has the right to know how and where funds are being spent. Visits by Spanish TV and press representatives, school students, engineering graduates and high university members, etc. are unavoidable. A recent informal visit by Dr. Trendelenburg and his deputy, Dr. Manno, turned out to be particularly inspiring.

Not all is perfect at the Station, however the truth is that we all work enthusiastically to solve the problems that do exist.

A. Ripoll

ESA's Angels (with apologies to Charlie)

When arriving at VILSPA, Visiting Astronomers have first to contact the Observatory Secretary, Carmen Ramirez de Palacios, whose office (Room n° 31A) is the first on the left when entering by the main entrance of the Station's main building.

She will take care of some administrative matters, deliver the necessary documentation and introduce V.A. to the Observatory staff. She is also the person to contact for accomodation at the Station. V.A. should announce to Carmen their arrival time (at least 10 days in advance, please). She is also responsible for dispatching the observational output.

Born in Morocco, Carmen went later to Canada where she got a teaching degree and ... a husband. Back to Morocco, she spent 4 years teaching and then came to Spain where she joined the Station in August 1977. Her husband is also working at the Station as Chief Computer Operator.

Carmen speaks fluently Spanish, French and English (kein Deutsch, entschuldigen Sie bitte, liebe deutschsprachige Kollegen!).

When Carmen is absent, Visiting Astronomers should turn instead to the office in front of Carmen's (Room n° 2) where Elisa Alonso de Oerke and/or Angelina Luchena Raffo will attend them. This office should be visited anyway to sign in the Guest Book of the Station.

Born in Las Palmas (Canarias Islands), Elisa is the Station Director's Secretary and speaks Spanish, English and some French. Her past experience covers secretarial work by the JPL representative at the NASA office in Madrid and at the USAF base at Torrejón near Madrid. She joined ESA in 1976.

Angelina is a Madrileña and is mainly Elisa's assistant. She speaks Spanish, Italian, English and also un peu le français. She worked at NASA stations near Madrid (Apollo project), at the US Navy base in Rota and later in a KLM office. She joined the Station in May 1978.

Have a Good (exposure) Time

Some users do not exploit to the full their allocated time getting over/under-exposures even for objects with tabulated UV fluxes.

Recently at VILSPA, we have used a sample of about 30 high resolution spectra of different objects with very well known UV fluxes, in order to update the values of the quantities E_λ used in the calculations of the exposure times.

Moreover we have made some attempts to calibrate the ratios between high and low resolution exposures.

The results are reported in sections A and B.

A. HIGH RESOLUTION

Tables 1 and 2 give the values E_λ for obtaining 100 % exposure (205 DN above background), at the corresponding λ, according to the relation:

$$t\ (\text{sec}) = \frac{E_\lambda}{F_\lambda} \quad .$$

These values are for high resolution, large aperture.

TABLE 1

SHORT WAVELENGTH PRIME CAMERA (SWP)

λ	E_λ
1200	$2.01\ 10^{-7}$
1250	1.46
1300	1.25
1350	1.16
1400	1.28
1450	1.43
1500	1.53
1550	1.43
1600	1.16
1650	0.95
1700	0.76
1800	0.56
1900	0.43
1950	0.40
2000	0.37

TABLE 2

LONG WAVELENGTH REDUNDANT CAMERA (LWR)

λ	E_λ
1900	$1.68\ 10^{-7}$
2000	1.08
2100	0.64
2200	0.48
2300	0.40
2400	0.29
2500	0.22
2600	0.18
2700	0.16
2800	0.17
2900	0.21
3000	0.27
3100	0.45
3200	1.05

Due to the slope of the curves represented by the values reported in Tables 1 and 2, for almost all stars (apart from the hottest O-type stars only) saturation occurs first in the region λλ1850-2000 for the SWP and λλ2650-2800 for the LWR. Therefore for almost all stars the highest exposure level (best S/N ratio) compatible with no saturation in these two critical regions can be obtained using these two single relations:

$$t\ (\text{sec}) \simeq 8.6\ 10^{-8}/F_{1950} \qquad \text{for SWP}$$

$$t\ (\text{sec}) \simeq 3.6\ 10^{-8}/F_{2740} \qquad \text{for LWR .}$$

Using the small apertures, the following relation applies for both cameras:

$$t_{sm} \simeq 2\ ^{+0.1}_{-0.2}\ t_{lg} \qquad \text{(focus dependent).}$$

B. LOW RESOLUTION

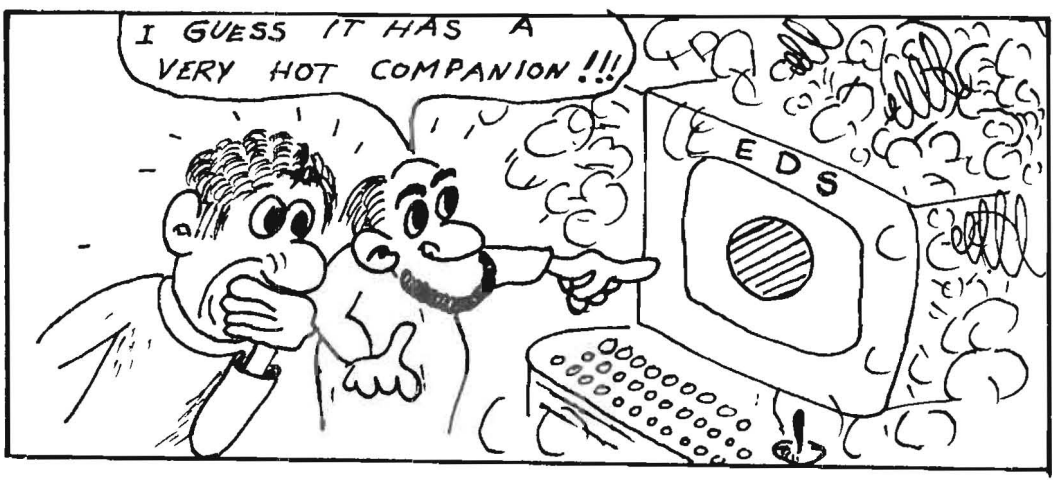
In the same aperture (large) the ratio t_{high}/t_{low} is not constant but wavelength dependent for both cameras. In the SWP, it can be linearly approximated (within 10%) as varying from about 95 at λ1300 to 60 at λ1950. In the LWR, the variation is smaller and a ratio of about 90 can be assumed throughout the whole range, instead of 50 as given in the User's Guide.

The time ratios between small and large apertures are the following:

$$t_{sm} \simeq 1.65\ t_{lg} \qquad \text{for SWP}$$

$$t_{sm} \simeq 1.80\ t_{lg} \qquad \text{for LWR .}$$

P.L. Selvelli



Scattered Light in the IUE Telescope

Recently it was noted whilst pointing the telescope into the Earth constraint area - for users who have not yet observed with the IUE satellite, this type of observation is permitted to some degree - that the amount of scattered light as measured by the number of photons impinging on the photo-cathode surface of the fine error sensor (FES) was rather high (appr. 300 counts).

During an observation performed in March, it was even impossible to identify the star field within one hour, because the user had selected a faint object of 12.0 magnitude, being to faint compared to the scattered light entering the telescope.

The data of this observation have been further analysed and the following is the result which may help users in future to plan observations in more detail and to avoid unnecessary losses of observation time.

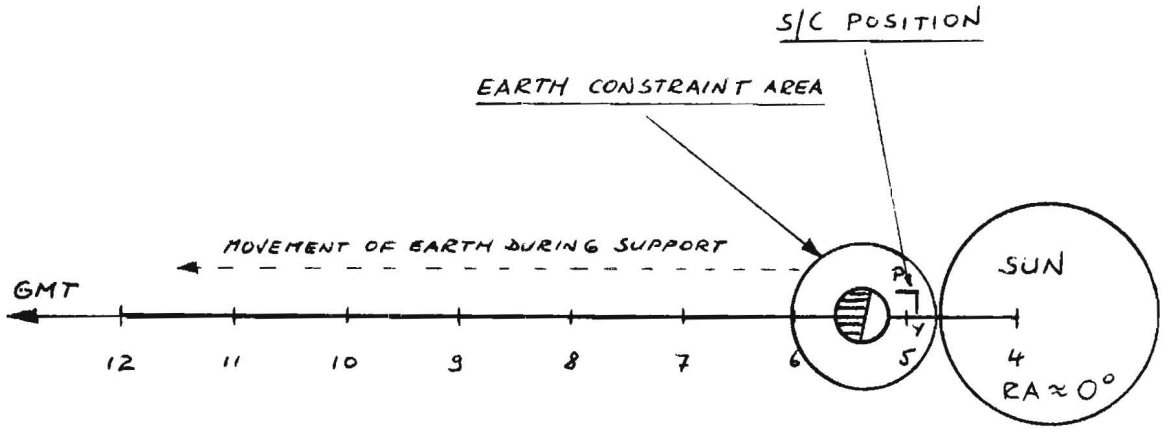


FIG. 1 Relative positions of Earth and Sun in March at the beginning of support hours, S/C pointing into the Earth constraint area.

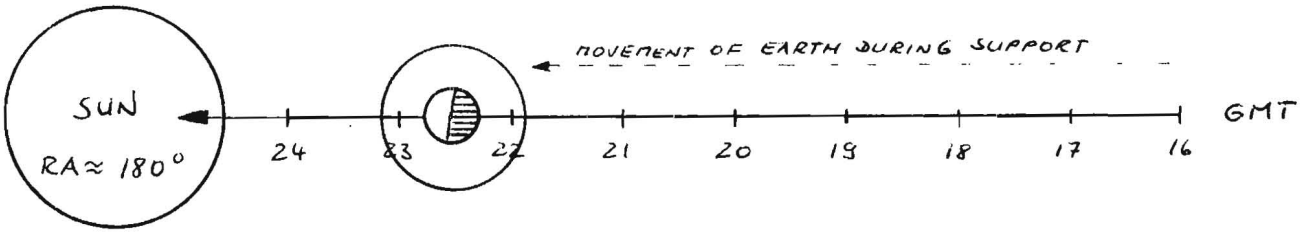


FIG. 2 Relative positions of Earth and Sun in September prior to the end of support hours.

The satellite was positioned between Sun constraint area and Earth (Ref. Fig. 1), but pointing into the Earth constraint area close to the illuminated limb, which was the obvious reason of having more scattered light in the telescope. Under these circumstances, it would be advisable to observe an alternative object first and to allow the Earth in the meantime to move further away and then perform the observation originally intended.

For observations to be performed next September, similar conditions will exist prior to the end of the VILSPA support (Ref. Fig. 2). Therefore users should be alerted already at this time to plan their observations accordingly.

J. Faelker

IUE Publications

Since the publication of Newsletter n°1, we received only a few (p)reprints of papers based on observations by IUE from VILSPA. May we insist you send us (and to Dr. F. Macchetto, ESTEC) a copy of all your papers based on IUE observations? Thanks in advance.

- Appenzeller, E., Wolf, B. 1979, IUE Observations of the Extreme B1 Supergiant ζ^1 Sco, Preprint submitted to Astron. Astrophys. Suppl.

- Flower, D. R., Nussbaumer, H., Schild, H. 1979, The EUV Spectra of Young Planetary Nebulae, preprint.

- Gahm, G.F., Fredga, K., Liseau, R., Dravins, D. 1979, The Far UV Spectrum of the T Tauri Star RU Lupi, preprint.

- Huber, M.C.E., Nussbaumer, H., Smith, L.J., Willis, A.J., Wilson, R. 1979, IUE Observations of Absorption by Hot Gas in the Nebula NGC 6888, submitted as a letter to Nature.

- Morossi, C., Stalio, R. 1979, IUE Observations of Hot Supergiants, Mem. Soc. Astron. Ital., in press.

- Nussbaumer, H., Storey, P. 1979, NIII lines for Solar Diagnostics, preprint.

- Schönberner, D., Hunger, K. 1978, The UV-Spectrum of the Extreme Helium Stars BD + 10°2179 and BD - 9°4395, Astron. Astrophys. 70, L57.

IUE Observatory Publications

We are updating below the list published in Newsletter n° 1:

- Benvenuti, P., D'Odorico, S., Dopita, M.A. 1979, UV Spectrum of Supernova Remnant Reveals Carbon Depletion in the Insterstellar Medium, Nature, 277, 99.

- Cassatella, A., Beeckmans, F., Benvenuti, P., Clavel, J., Heck, A., Lamers, H.J.G.L.M., Macchetto, F., Penston, M., Selvelli, P.L., Stickland, D.J. 1979, On the High Resolution Ultraviolet Spectrum of P Cygni, Astron. Astrophys., in press.

- Cassatella, A., Benvenuti, P., Clavel, J., Heck, A., Macchetto, F., Penston, M., Selvelli, P.L. 1979, On the Ultraviolet Spectrum of Nova Cygni 1978, Astron. Astrophys. Lett., in press.

- Cassatella, A., Giangrande, A., Viotti, R. 1979, The Ultraviolet Spectrum and Expansion Velocity of η Carinae from IUE Observations, Astron. Astrophys. 71, L9.

- Faraggiana, R., Hack, M., Selvelli, P.L. 1979, The UV Spectrum of CH Cygni and VV Cep, Mem. Soc. Astron. Ital., in press.

- Flora, V., Hack, M., Santin, P., Selvelli, P.L., 1979 UV Spectra of the two Binary Systems β Lyr and υ Sgr, Mem. Soc. Astron. Ital., in press.

- Hack, M., Selvelli, P.L. 1979, The UV Spectrum of the Eclipsing Binary ε Aur, Mem. Soc. Astron. Ital., in press.

- Jaschek, M., Jaschek, C., Grenier, S., Gómez, A.E., Heck, A. 1979, The Absolute Magnitude of the Hg-Mn Stars, Astron. Astrophys., in press.

- Penston, M.V. 1979, Spectroscopy of Active Galaxies, in Proc. ESA/ESO Workshop on Space Telescope, in press.

- Stickland, D.J., Harmer, D.L. 1978, The Discovery of a Hot Companion to HR 8752, Astron. Astrophys. 70, L53.

- Viotti, R., Cassatella, A., Giangrande, A.1978 High Resolution Ultraviolet Observations of Eta Carinae with IUE, in High Resolution Spectroscopy, Ed. M. Hack, Osservatorio Astronomico, Trieste, p. 686.

- Wilson, A.S., Penston, M.V. 1979, IC 4329 A, The Nearest Quasar?, Astrophys. J., in press.

Excerpt of ESA 1979 Report to Cospar

The IUE was commissioned and the guest observer phase started on April 3rd 1978. Between that date and the end of the year, 73 different groups of astronomers from 11 countries came to the ESA Villafranca Satellite Tracking Station near Madrid to use IUE and to take 1380 different images (some with more than one spectrum) of over 400 celestial objects. These included the SRC guest observers who also use the ESA ground station. The results of these astronomers are reported separately to COSPAR by the SRC and are not included here.

From the lists of the observing programmes approved by ESA for 1978-79 and carried out by guest observers during the first year, it is clear ESA has provided access to astronomers at many different institutes and with many diverse astronomical programmes. Consequently it is only possible to give a few selected highlights.

The Stockholm group have studied RU Lupi, a young star still evolving onto the main sequence. They find very intense emission lines of two and three times ionized atoms ten thousand times stronger than solar lines and implying extended regions at temperatures as high as 10^5 degrees. In addition they see a far-ultraviolet continuum from this hot plasma.

Observers from Paris have studied peculiar A stars to correlate their variability with that in the visible. In one such star, 21 Comae, they find large variations in ultraviolet flux in contrast to a very small photometric variation in visible light.

A group of astronomers from Trieste have been working on problems related to binary stars. In ε Aurigae where a hot subluminous companion star was predicted, this has indeed been found using the IUE but in other cases, β Lyrae and υ Sagitarii, the IUE data show instead broad emission lines from an expanding shell of gas around the system. Two systems containing a cool supergiant and a possible hot companion have also been studied. In both cases the blue companion was found in the IUE data and in one star, VV Cep, the light from this shines through the envelope of the supergiant permitting an unusual study of its outer atmosphere.

Stars showing 'P Cygni' line profiles (absorption from an outflowing wind superposed on an emission line) have been studied by several groups. Astronomers at Utrecht and ESTEC report small but rapid variations in line profile on a timescale of hours or less. Determining the details of the flow in the winds, the Heidelberg group showed that in the star ζ^1 Scorpii the flow decelerated with distance from the star whereas, by contrast, the Villafranca group found an accelerating flow in P Cygni itself.

The Utrecht-ESTEC observers have also been studying the rate at which hot supergiants lose material as a function of their luminosity and temperature. A particular effort is being made to locate the lowest luminosity at which mass loss still occurs. Evidence of mass loss is also present in Wolf-Rayet stars and the Zurich group used IUE to discover absorption lines of three times ionized carbon and silicon in nebulae around such stars.

Several new results on peculiar and symbiotic stars have been obtained by the Frascati group. In the symbiotic star, Z Andromedae, a strong ultraviolet continuum representing an O-type star is present as well as several emission lines. For the extraordinary star, η Carinae, one of the brightest objects in our galaxy, IUE data shows a mass loss rate larger than any yet measured from a star.

The Villafranca astronomers have obtained IUE data at high dispersion of another symbiotic star, RR Telescopii, showing over 400 emission lines. Identification of these is almost complete and analysis of their intensities is in progress.

Zurich astronomers report IUE observations of two planetary nebulae in formation, V1016 Cygni and HM Sagitae. They find that the profiles and intensities of the ultraviolet emission lines confirm the youth of these objects.

Supernovae remnants have been studied by astronomers at Asiago and Villafranca. The IUE data show emission lines whose intensities are well explained by a model in which a shock wave penetrates the interstellar medium.

Scientists from Paris and Villafranca have pointed IUE at giant irregular galaxies. They find the rather puzzling fact that while optical spectra of these objects show strong emission lines, there are none in the ultraviolet.

The radio galaxy, M87, has been studied with the IUE. Astronomers from Padova observing the nucleus of the galaxy find an excess shortward of 2000 A suggesting the presence of hitherto unsuspected hot stars. Meanwhile observers from Milano and ESO studied the 'jet' in this galaxy. They find a flatter spectrum (smaller α, where $f_\nu \propto \nu^\alpha$) at short wavelength than would be suggested from an extrapolation of the optical continuum.

A collaboration of seven European groups obtained data on the brightest quasar, 3C273, and the brightest Seyfert galaxy, NGC 4151. In the case of 3C273 the data shows that 3C273 is basically similar to high redshift quasars where, because of the redshift, the ultraviolet part of the spectrum can be observed from the ground. Interesting results include the fact that hydrogen and iron emission lines are weaker

.than anticipated from optical line intensities. Perhaps surprisingly one of the most interesting results is the presence of absorption lines showing a large amount of gas in the halo of our galaxy ! In the case of NGC 4151 the collaboration confirms the conclusion reached by the Commissioning Team that the absorption lines made in the outer parts of the Seyfert nucleus are variable.

The IUE satellite reacted quickly to two unexpected astronomical events during the year. Spectra were obtained of Comet Seargent, 1978m, showing emission lines due to atomic hydrogen and OH, CS, CO_2^+, NH and CO^+ molecules. Spectra were also obtained during the outburst of Nova Cygni 1978. Strong P Cygni-types profiles of Mg II are seen indicating outflow velocities of up to 1160 km s^{-1}.

(Michael Penston wishes to thank all persons who made this report possible.)

*

IUE High Dispersion Calibration

IUE Users should have received by now a note entitled "Preliminary Absolute Calibration for High Resolution IUE Spectra" by A. Cassatella and P.L. Selvelli. If it is not the case, please ask for one copy by the IUE Observatory at VILSPA.

*

VILSPA Images for Release to Scientific Community

The tables below update the list of VILSPA images released at the expiration of their six month period (see previous lists in Newsletter n° 1).

As explained in M.V. Penston's message in Newsletter n° 1, astronomers interested in getting copies of images should write first to the Observatory Controller in order to receive a "Tape Archive Retrieval" form (slightly modified as compared to that published in Newsletter n°1).

1979 FEB 1st (despatched 1978 July)

Camera 2 (LWR)		Camera 3 (SWP)		
1587	1824	1681	1963	2038
1664	1825	1782	1964	2046
1665	1826	1877	1965	2047
1749	1827	1882	1975	2054
1750	1829	1883	1976	2055
1751	1830	1884	1977	2072
1755	1838	1891	1978	2073
1756	1844	1892	1985	2074
1757	1845	1893	1986	2075
1762	1850	1899	1987	2092
1763	1855	1900	1988	2098
1764	1856	1901	1996	2099
1765	1871	1902	1997	2100
1769	1885	1907	1998	2107
1770	1886	1908	1999	2115
1771	1887	1912	2000	2128
1772	1893	1916	2001	2148
1780	1894	1917	2002	
1788	1915	1925	2011	
1789		1926	2012	
1804		1938	2013	
1811		1952	2019	
1812		1953	2020	
1817		1954	2021	
1818		1962	2031	

1979 Mar 1st (despatched 1978 Aug)

Camera 2 (LWR)		Camera 3 (SWP)	
1860	2009	2085	2227
1861	2010	2136	2232
1862	2011	2137	2233
1863	2021	2157	2247
1864	2022	2162	2251
1865	2109	2163	2261
1876	2128	2164	2333
1909	2129	2170	2343
1910	2130	2171	2344
1931	2131	2178	2355
1932	2151	2186	2356
1933	2152	2187	2357
1954	2153	2188	2358
1955	2154	2189	2379
1969	2161	2202	2398
1970	2162	2203	
1971	2169	2204	
1982	2171	2205	
1984	2175	2215	
	2176	2216	

1979 April 1st (despatched 1978 Sept.)

Camera 2 LWR

2138	2242	2388
2139	2249	2407
2140	2250	2408
2141	2259	2409
2168	2260	2410
2170	2261	2416
2189	2272	2417
2190	2282	2418
2191	2283	2419
2192	2290	2425
2193	2291	2426
2194	2303	2427
2201	2304	2434
2218	2324	2435
2219	2337	2436
2220	2338	2437
2227	2345	2447
2228	2346	2448
2229	2356	2462
2233	2357	2463
2234	2365	2464
2236	2366	2465
2238	2367	2468
2239	2376	2469
2240	2377	2470
2241	2378	2471

Camera 3 SWP

2345	2485	2697
2346	2499	2698
2368	2500	2699
2369	2507	2707
2391	2508	2708
2392	2517	2709
2393	2518	2710
2412	2519	2719
2416	2546	2720
2417	2547	2721
2418	2548	2722
2419	2587	2731
2425	2638	2732
2426	2639	2733
2427	2643	2742
2433	2644	
2434	2645	
2435	2646	
2436	2650	
2454	2655	
2456	2656	
2465	2657	
2466	2658	
2467	2663	
2468	2674	
2469	2675	

ESA Proposals for the Second Year of Observations on IUE

The following pages give a list of proposals which were allocated IUE shifts by the ESA Selection Committee for the second block of observations beginning April 1st., 1979. The columns give successively the serial number of reception the proposals, the code number which will now identify the corresponding proposal in all operations, the title of the proposal and the contact investigator.

N	CODE	PROGRAM TITLE	CONTACT INVESTIGATOR
2	JC 101	A SEARCH FOR CO ABSORPTION LINES IN THE SPECTRA OF PLANETARY NEBULAE WITH THE IUE	CLAVEL, J.
3	AH 102	ULTRAVIOLET OBSERVATIONS OF EARLY B EMISSION AND SHELL STARS	HUBERT-DELPLACE, A.M.
4	NP 103	U.V. SPECTRA OF SUPERNOVAE	PANAGIA, N.
5	C7 104	CHROMOSPHERIC STRUCTURE IN F, G, AND K TYPE STARS	ZWAAN, C.
7	RW 105	OBSERVATION OF PLANETARY NEBULAE WITH THE IUE	WEHRSE, R.
10	BF 106	UV OBSERVATIONS OF THE UPPER ATMOSPHERE AND NEAR EARTH ENVIRONMENT	FITTON, B.
11	SV 107	ULTRA-VIOLET OBSERVATIONS OF HG-MN STARS AS CHECK OF THE DIFFUSION THEORY	VAUCLAIR, S.
12	NB 108	ULTRA-VIOLET OBSERVATIONS OF X-RAY EMITTING GLOBULAR CLUSTERS	BEI, N.
14	JR 109	U.V. OBSERVATIONS OF DWARF NOVAE	RAHE, J.
15	CC 110	U.V. OBSERVATIONS OF PECULIAR YOUNG EMISSION LINE OBJECTS	CHAVARRIA-K, C.
16	GV 111	CHEMICAL COMPOSITION AND DIFFUSION IN HOT, HIGH GRAVITY STARS	VAUCLAIR, G.
17	CJ 112	STUDY OF BETA CANIS MAJORIS STARS	DE JAGER, C.
18	ET 113	OBSERVATIONS OF X-RAY EMITTING QSOS	TANZI, E.G.
19	AT 114	OBSERVATIONS OF A SELECTED LIST OF CATACLYSMIC VARIABLES: AM HER, DQ HER, UX UMA, AND CD -42 14462	TREVES, A.
23	RR 115	SPECTROSCOPY OF STARS WITH ULTRA-VIOLET EXCESS	BARBIER, R.
25	GG 116	EXPLORATION OF THE ULTRAVIOLET SPECTRUM OF T TAURI STARS	GAHM, G.F.
26	GP 117	NARROW EMISSION LINE GALAXIES WITH X-RAY EMISSION	PEROLA, G.C.
27	CJ 118	SEARCH FOR AUTOIONISATION LINES IN CHEMICALLY PECULIAR STARS	JAMAR, C.
28	JK 119	INTERMEDIATE HE-RICH STARS (2ND RUN)	KAUFMANN, J.P.
29	MU 120	MONITORING OF THE CONTINUUM AND LINE STRENGTHS OF NGC 4151 WITH THE IUE SATELLITE	ULRICH, M.H.

N	CODE	PROGRAM TITLE	CONTACT INVESTIGATOR
30	HH 121	STUDY OF THE AP CHARACTERTSTICS IN THE UV	HAUCK, B.
32	HH 122	THE PROTO PLANETARY NEBULAE V 1016 CYGNI AND HM SAGITTAE	NUSSBAUMER, H.
34	PB 190	SPECTROPHOTOMETRY OF GALACTIC AND EXTRAGALACTIC SUPERNOVA-REMNANTS	DENNEFELD, M.
35	MD 123	SPECTROPHOTOMETRY OF HII REGIONS CLOSE TO SNR	DENNEFELD, M.
37	MG 124	OBSERVATION OF INTERSTELLAR ABSORPTION AND EMISSION LINES FROM ATOMS AND MOLECULES	GREWING, M.
38	JM 125	UV OBSERVATIONS OF DENSE GLOBULAR CLUSTERS	MELNICK, J.
39	MG 126	SEARCH FOR ULTRAVIOLET EMISSION LINES FROM OPTICALLY IDENTIFIED EXTRAGALACTIC X-RAY SOURCES	GREWING, M.
42	SP 127	CENTRAL STARS OF PLANETARY NEBULAE	POTTASCH, S.R.
43	SP 128	SDO AND NOVA-LIKE STARS	POTTASCH, S.R.
44	PB 190	LOW RESOLUTION SPECTROSCOPY OF THE SUPERNOVA REMNANTS N49 AND N63A IN THE LARGE MAGELLANIC CLOUD	GREVE, A.
45	MH 129	SIMULTANEOUS UV, OPTICAL, AND X-RAY OBSERVATIONS OF BL LACERTAE OBJECTS	ULRICH, M.H.
48	MP 130	IDENTIFICATION OF LINES OF HIGHLY IONIZED SPECIES	PENSTON, M.V.
49	PV 131	LOOKING FOR DWARF SEYFERT 1 NUCLEI	VERON, P.
50	RF 132	AP STAR ATMOSPHERES (WITH EXTENSION TO SOME AM STARS)	FARAGGIANA, R.
51	HH 135	HEAVY ELEMENTS IN PECULIAR A-STAR ATMOSPHERES, IN PARTICULAR, UNSTABLE ISOTOPES.	WEISS, W.W.
52	JD 136	INTEGRATED PROPERTIES OF HOT EVOLVED STARS	DEHARVENG, J.M.
53	HR 137	HIGH RESOLUTION SPECTROSCOPY OF B-TYPE HALO-STARS	BASCHEK, B.
54	MG 138	UV OBSERVATIONS OF THE COMA BERENICE OPEN CLUSTER'S AP STARS AND SOME OF THE STRONGEST MAGNETIC AP STARS	GERBALDI, M.
55	MG 139	ULTRAVIOLET OBSERVATIONS OF BP-AP STARS AT HIGH GALACTIC LATITUDE	GERBALDI, M.
58	MD 123	UV-OBSERVATIONS OF EXTRAGALACTIC HII-REGIONS	SCHEFFLER, H.

N	CODE	PROGRAM TITLE	CONTACT INVESTIGATOR
59	GG 140	THE ULTRAVIOLET CONTINUUM OF BL LAC OBJECTS	GATOA, G.
61	GH 141	THE STUDY OF X-RAY BINARIES	HAMMERSCHLAG-HENSBERGE, G.
62	UZ 180	UPPER ATMOSPHERES OF JUPITER AND SATURN	COMBES, M.
68	JR 143	STUDY OF MASS FLOW IN CLOSE BINARY SYSTEMS	RAHE, J.
65	KF 144	STELLAR MG II LINES (2ND RUN)	FREDGA, K.
66	CL 145	MASS LOSS AND MASS TRANSFER IN CLOSE BINARY SYSTEMS	DE LOORE, C.
67	JR 146	ULTRAVIOLET OBSERVATIONS OF X-RAY SOURCES IN THE MAGELLANIC CLOUDS WITH IUE	BONNET-BIDAUD, J.M.
68	LP 147	A FAR UV STUDY OF STARS IN THE MAGELLANIC CLOUDS	PREVOT, L.
70	DF 148	MASS-LOSS OF LUMINOUS G AND F SUPERGIANTS	REIMERS, D.
71	DR 149	MASS-LOSS OF RED GIANTS WITH HOT COMPANIONS	REIMERS, D.
72	DK 149	ULTRAVIOLET SPECTROSCOPY OF HOT WHITE DWARFS	KOESTER, D.
77	AM 150	BQ RADIO-STARS WITH INFRARED EXCESS AS PROTO-PLANETARY NEBULAE	MAMMANO, A.
78	JD 151	STELLAR WIND IN BE STARS	DACHS, J.
79	BH 152	MASS LOSS FROM OB STARS IN THE LMC	WOLF, B.
80	ID 153	SPECTROSCOPY OF 2 SOUTHERN PL OBJECTS	DANZIGER, I.J.
82	JR 109	EVOLUTION TOWARDS THE WHITE DWARF STAGE. 2. DWARF NOVAE AND NOVALIKE VARIABLES.	SPITTER, H.
87	MH 154	EXCEPTIONAL BINARIES AND ATMOSPHERIC-ECLIPSE BINARIES	HACK, M.
88	MH 155	BP AND HE-POOR STARS BELONGING TO POPULATION I AND TO POPULATION II	HACK, M.
89	AM 156	ULTRAVIOLET STUDIES OF MAGNETIC STARS	WROBLEWSKI, A.
91	JA 157	STUDY OF OLD NOVAE AND NOVAE OUT-BURST	AUDOUZE, J.

N	CODE	PROGRAM TITLE	CONTACT INVESTIGATOR
92	VC 158	LOW MASS STARS	CALOI, V.
93	JM 125	INTEGRATED SPECTRA OF GALACTIC AND EXTRAGALACTIC GLOBULAR CLUSTERS	CALOI, V.
95	VC 159	EVOLVED GLOBULAR CLUSTER STARS	CALOI, V.
97	PK 160	UV SPECTRA OF NORMAL ELLIPTICAL GALAXIES AND GLOBULAR CLUSTERS	KJAERGAARD RASMUSSEN, P.
98	PK 161	ULTRAVIOLET SPECTROSCOPY OF LATE-TYPE STARS COVERING A WIDE RANGE IN THE THREE BASIC ATMOSPHERIC PARAMETERS	KJAERGAARD RASMUSSEN, P.
99	GG 162	STUDY OF ULTRAVIOLET SPECTRUM IN DUSTY GALAXIES	GALLETTA, G.
100	AC 163	INVESTIGATIONS ON UV SPECTRA OF COOL GIANT VARIABLE STARS	CASSATELLA, A.
104	CC 168	OBSERVATIONS OF INTERACTING GALAXIES	CASINI, C.
105	PK 165	NON-LTE ANALYSIS OF SUBDWARF O-STARS	KUDRITZKI, R.P.
107	JK 119	ULTRAVIOLET SPECTROSCOPY OF EXTREME HELIUM STARS	HUNGER, K.
108	JR 166	SPECTROPHOTOMETRY OF NARROW LINE ACTIVE NUCLEI WITH OBSERVED X-RAY EMISSION AND/OR HIGH EXCITATION LINES	BERGERON, J.
109	CB 167	BLUE DWARF GALAXIES	BARBIERI, C.
110	LR 168	HERBIG-HARO OBJECTS	ROSINO, L.
111	LR 169	AE AND BE STARS ASSOCIATED WITH NEBULOSITY	ROSINO, L.
112	LR 170	A STUDY OF LUMINOSITY EFFECTS IN THE SPECTRUM OF OLD NOVAE	ROSINO, L.
113	HS 171	THE ULTRAVIOLET SPECTRA AND VARIABILITY OF MASSIVE BINARY X-RAY SOURCES	SCHMIDT, H.U.
115	JS 172	SYMBIOTIC STARS AND VV CEPHEI STARS	SWINGS, J.P.
117	HK 173	SPECTROSCOPY OF B(E) STARS	KLUTZ, M.
118	JH 174	OBSERVATION OF CLUMPY IRREGULAR MARKARIAN GALAXIES	HEIDMANN, J.
120	CC 164	UV OBSERVATIONS OF DOUBLE ACTIVE GALAXIES	TARENGHI, M.

N	CODE	PROGRAM TITLE	CONTACT INVESTIGATOR
121	FD 175	ULTRAVIOLET OBSERVATIONS OF HOT WHITE DWARFS AND WHITE DWARF PROGENITORS	D'ANTONA, F.
123	CC 110	ULTRAVIOLET SPECTRA OF T TAURI STARS WITH STRONG UV-EXCESSES	APPENZELLER, I.
125	CC 110	UV CONTINUA AND LINE SPECTRA OF YY ORIONIS STARS	BASTIAN, U.
128	EG 176	THE ULTRAVIOLET EXCESSES OF RS CVN-TYPE BINARIES	GIOVANNELLI, F.
129	EG 177	UV SPECTRA OF HDE 245770/A0535+26	GIOVANNELLI, F.
130	JR 109	SPECTROSCOPIC UV-OBSERVATIONS OF CATACLYSMIC VARIABLES	KRAUTTER, J.
132	RC 178	ULTRAVIOLET STUDIES OF COMPACT X-RAY SOURCES	CANAL, R.
133	MR 179	SOLAR-TYPE STELLAR ACTIVITY ON BRIGHT BY DRA STARS	RODONO, M.
135	HZ 180	UV EMISSION FROM PLANETARY ATMOSPHERES	FRICKE, K.H.
137	SP 181	PHYSICAL CONDITIONS IN TWO BINARY SYSTEMS WHICH ARE BLACK-HOLE CANDIDATES	POTTASCH, S.R.
138	PB 182	CONTINUUM ENERGY DISTRIBUTION AND EMISSION LINE SPECTRUM IN BLUE COMPACT GALAXIES WITH BROAD EMISSION LINES	BARBON, R.
139	DK 183	ULTRAVIOLET OBSERVATIONS OF COMPACT EMISSION-LINES GALAXIES	KUNTH, D.
140	PW 184	ULTRAVIOLET OBSERVATIONS OF THE "HOT" COMPANIONS OF LATE TYPE STARS	WESSELIUS, P.R.
142	DG 185	ULTRAVIOLET OBSERVATONS OF STARS IN DUSTY HII REGIONS	GILRA, D.P.
148	KH 186	OBSERVATIONS OF THE SPECTROSCOPIC BINARY THETA MUSCAE (HR4952,WC6+ O9.5/B0IAB, MV = 5.69)	VAN DER HUCHT, K.A.
149	PS 187	RECURRENT NOVAE IN THE MINIMUM AND THE NEBULAR PHASE AND THEIR RELATIONSHIP WITH CLASSICAL NOVAE	SELVELLI, P.L.
150	PB 188	ACTIVE NUCLEI OF SPIRAL GALAXIES	BENVENUTI, P.
151	PB 189	MASS LOSS FROM O STARS IN THE MAGELLANIC CLOUDS	BENVENUTI, P.
152	PB 190	ULTRAVIOLET OBSERVATIONS OF SHOCK IONIZED GAS	BENVENUTI, P.
154	EG 191	UV OBSERVATIONS OF STAR SPOT ACTIVITY IN SOLAR TYPE ECLIPSING BINARIES	GEYER, E.H.

N	CODE	PROGRAM TITLE	CONTACT INVESTIGATOR
155	PR 192	THE BINARY SYSTEM X PERSEI (3U 0352+30)	BERNACCA, P.L.
157	KF 193	DISTRIBUTION OF UV FLUX IN THE CENTRAL REGION OF M82	FRICKE, K.J.
158	KF 194	UV SPECTROSCOPY OF SELECTED SEYFERT I GALAXIES	FRICKE, K.J.
159	KF 195	UV SPECTROPHOTOMETRY OF BL LAC AND OF OBJECTS RELATED TO BL LACERTAE	FRICKE, K.J.
160	JC 196	OBSERVATION OF SEYFERT AND OTHER GALAXIES AND LOW REDSHIFT QUASARS	CLAVEL, J.
161	GH 197	DOUBLE STARS WITH CEPHEID AND B-STAR COMPONENTS AND, A TRIPLE SYSTEM WITH A CEPHEID A B-GIANT AND A BLACK HOLE	HENRIKSSON, G.
162	KF 198	OBSERVATIONS OF F DWARFS WITH DIFFERENT METAL ABUNDANCIES	ERIKSSON, K.
163	RV 199	UV OBSERVATIONS OF EMISSION LINE STARS	VIOTTI, R.
164	MC 200	INVESTIGATION OF THE UV CONTINUUM OF ELLIPTICAL GALAXIES	CAPACCIOLI, M.
165	CR 201	STELLAR CHROMOSPHERES	BLANCO, C.
166	SC 202	RS CVN BINARIES	CATALANO, S.
167	MP 203	STUDY OF OB STARS ASSOCIATED WITH THE CEPHEUS OB COMPLEX AND THE S 155 NEBULA	PERINOTTO, M.
168	PC 204	ENERGY DISTRIBUTION IN THE ULTRA-VIOLET OF NORMAL GIANT ELLIPTICAL GALAXIES	CRANE, P.
169	MR 205	CHROMOSPHERIC ACTIVITY IN DWARF STARS (2ND RUN)	REGO, M.
170	HM 206	PECULIAR A-STARS (2ND RUN)	MAITZEN, H.M.
171	FM 207	A STUDY OF THE MASS-LOSS PROCESS IN EARLY-TYPE STARS (2ND RUN)	MACCHETTO, F.

NASA Log of IUE Images

We are happy to publish here a first NASA log of images covering the period of observations until December 31, 1978. The Station hopes to be able to release NASA images in a short time. The procedure to follow for European Astronomers will be the same as for VILSPA images.

THE FOLLOWING IS A GLOSSARY OF OBJECT CLASSIFICATION UTILIZED IN THE OBSERVATORY LOG

00 SUN
01 EARTH
02 MOON
03 PLANET
04 PLANETARY SATELLITE
05 RINGS PLANET
06 COMET
07 INTERPLANETARY MEDIUM
08
09
10 W C
11 WN
12 MAIN SEQUENCE O
13 SUPERGIANT O
14 OE
15 OF
16 SD O
17 WD C
18
19
20 B0-B2 V-IV
21 B3-B5 V-IV
22 B6-B9.5 V-IV
23 B0-B2 III-I
24 B3-B5 III-I
25 B6-B9.5 III-I
26 BE
27 BP
28 SDB
29 WDB
30 A0-A3 V-IV
31 A4-A9 V-IV
32 A0-A3 III-I
33 A4-A9 III-I
34 AE
35 AM
36 AP
37 WDA
38
39
40 F0-F2
41 F3-F9
42 FP
43
44 G TYPE
45
46 K TYPE
47
48 M TYPE
49
50 R, N OR S TYPES
51 LONG PERIOD VARIABLE STARS
52 IRREGULAR VARIABLES
53 REGULAR VARIABLES
54 DWARF NOVAE
55 CLASSICAL NOVAE
56 SUPERNOVAE
57 SYMBIOTIC STARS
58 T TAURI
59 X-RAY
60 SHELL STAR
61 ETA CASINAE
62 PULSAR
63 NOVA-LIKE
64
65
66
67
68
69
70 PLANETARY NEBULA + CENTRAL STAR
71 PLANETARY NEBULA - CENTRAL STAR
72 H II REGION
73 REFLECTION NEBULA
74 DARK CLOUD (ABSORPTION SPECTRUM)
75 SUPERNOVA REMNANT
76 RING NEBULA (SHOCK IONIZED)
77
78
79
80 SPIRAL GALAXY
81 ELLIPTICAL GALAXY
82 IRREGULAR GALAXY
83 GLOBULAR GALAXY
84 SEYFERT GALAXY
85 QUASAR
86 RADIO GALAXY
87 BL LACERTAE OBJECT
88 EMISSION LINE GALAXY (NON-SEYFERT)
89
90 INTERGALACTIC MEDIUM
91
92
94
95
96
97
98
99

THE PROGRAM IDENTIFICATION LIST IS DEFINED AS FOLLOWS:

ACEAK "ULTRAVIOLET STUDIES OF THE STAR A CENTAURI" DANIEL A. KLINGLESMITH

AFEBV "ULTRAVIOLET OBSERVATIONS OF A AND F STARS" ERIKA BOHM VITENSE - UNIVERSITY OF WASHINGTON

AIEBJ "THE STUDY OF INTERSTELLAR ABSORPTION LINES" E. B. JENKINS - PRINCETON UNIVERSITY

AVALL "THE DETERMINATION OF THE SEASONAL DYNAMICS OF MARS FROM OBSERVED OZONE AND ATMOSPHERIC DUST VARIATIONS" A. LANE - JET PROPULSION LABORATORY

BC2DF "STUDY OF ALPHA CEPHEI STARS" DAVID FISCHEL - GSFC

BCSRB "BINARIES HAVING O-TYPE COMPONENTS" SARA R. HEAP -GSFC

BSJLG "OBSERVATIONS OF FAINT, HIGH-LATITUDE BLUE STARS" J.L. GREENSTEIN - CALIFORNIA INSTITUTE OF TECHNOLOGY

CR2JS "ULTRAVIOLET STUDIES OF SYMBIOTIC STARS" JORGE SAHADE - INSTITUTO DE ASTRONOMIA Y FISCIA DEL ESPACIO, ARGENTINA

CBNJE "PROBLEMS OF MASS LOSS AND MASS TRANSFER IN CLOSE BI-NARY SYSTEMS" M. J. PLAVEC - UNIVERSITY OF CALIFORNIA, LOS ANGELES

CCAAE "INVESTIGATIONS OF STELLAR CHROMOSPHERES AND CORONAS" ANDREA K. DUPREE - HARVARD UNIVERSITY OBSERVATORY

CFJLI "OBSERVATIONS OF CHROMOSPHERIC EMISSION LINES FROM F-K DWARFS AND GIANTS" JEFFREY L. LINSKY - JILA

CH2GI "GRAVITY DARKENING IN ROTATING STARS AND CIRCUMSTELLAR MATTER IN CLOSE BINARIES" GRAHAM HILL - DOMINION ASTROPHYSICAL OBSERVATORY

CSSMJ "INVESTIGATIONS OF CIRCUMSTELLAR MATTER" H. M. JOHNSON - LOCKHEED PALO ALTO RESEARCH LAB

DSDS1 "ULTRAVIOLET SPECTROSCOPY OF DWARF AND GIANT B-A STARS" DAVID S. LECKRONE - GSFC

EGAMS "ULTRAVIOLET EMISSION LINE SPECTRA IN BRIGHT GALAXIES" ANDREW M. SMITH - GSFC

GPTLP "GALAXY POPULATION AND INTERGALACTIC GAS" THORNTON PAGE JOHNSON SPACE CENTER

GQJBO "ULTRAVIOLET SPECTROSCOPY OF PECULIAR GALAXIES" J. B.OKE - HALE OBSERVATORIES

HBDAK "BERLIN BLUE STARS" DANIEL A. KLINGLESMITH - GSFC

HWDAK "BERLIN WLAK STARS" DANIEL A. KLINGLESMITH - GSFC

HSSRB "HOT SUBLUMINOUS STARS" SARA R. HEAP - GSFC

ICJAE "INVESTIGATION OF INTERSTELLAR CARBON" J. H. BLACK - UNIVERSITY OF MINNESOTA

IMBDD "THE SEARCH FOR SPECTRA OF INTERSTELLAR MOLECULES AGAINST HOT STARS" B. D. DONN - GSFC

IM2MS "ULTRAVIOLET OBSERVATIONS OF QUASISTELLAR OBJECTS AND THE INTERGALACTIC MEDIUM" M. SCHMIDT - CAL TECH

IMPVE "OBSERVATIONS OF INTERSTELLAR MOLECULES" P. A. VANDEN BOUT - UNIVERSITY OF TEXAS - AUSTIN

LABDS "INTERSTELLAR LYMAN-ALPHA OBSERVATIONS" B. D. SAVAGE - UNIVERSITY OF WISCONSIN - MADISON

LSDKW "ULTRAVIOLET SPECTRA OF WOLF-RAYET STARS AND MASS LOSING SUPERGIANTS" DONALD K. WEST - GSFC

LTRPS "EXPLORATORY OBSERVATIONS OF THE ULTRAVIOLET SPECTRA OF LATE-TYPE STARS" R. F. WING - OHIO STATE UNIVERSITY

MF2YK "INVESTIGATION OF MASS FLOW IN CLOSE BINARY SYSTEMS" YOJI KONDO - GSFC

MGLRE "OBSERVATIONS OF STELLAR MG II 2800 A LINES IN MAIN SEQUENCE F-G STARS" L. R. DOHERTY - WASHBURN OBSERVATORY UNIVERSITY OF WISCONSIN

MLJBH "EVIDENCE FOR MASS LOSS IN THE ULTRAVIOLET SPECTRA OF EARLY-TYPE SUPERGIANTS" J. B. HUTCHINGS - DOMINION ASTROPHYSICAL OBSERVATORY

MSJDW "SPECTROMETRY OF SELECTED EARLY-TYPE STARS, MAGELLANIC WOLF-RAYET STARS AND GALACTIC NUCLEII" J. D. WRAY - UNIVERSITY OF TEXAS

MVDSI "SPECTROSCOPY OF THE DP, AP AND MAGNETIC VARIABLE STARS AT ULTRAVIOLET WAVELENGTHS" DAVID S. LECKRONE - GSFC

NPRSW "SEARCH FOR ULTRAVIOLET EMISSION BY SUPERNOVA REMNANTS" R. S. WOLFF - COLUMBIA UNIVERISTY

OD1AB DISCRETIONARY TIME

OD2AB DISCRETIONARY TIME

OD3AB DISCRETIONARY TIME

OD4AB DISCRETIONARY TIME

OD5AB DISCRETIONARY TIME

OD6AB DISCRETIONARY TIME

OPHWM "ULTRAVIOLET STUDIES OF THE OUTER PLANETS" H. W. MOOS - JOHNS HOPKINS UNIVERSITY

OSPSC "SPECTROSCOPIC OBSERVATIONS OF O, OF, AND WOLF-RAYET STARS" PETER S. CONTI - JILA

PG2SS "ULTRAVIOLET SPECTROSCOPY OF PECULIAR ECLIPSING BINARY STARS" STANLEY SOBIESKI - GSFC

PHCAL PHOTOMETRIC CALIBRATION STARS

PN2AB "OBSERVATIONS OF PLANETARY NEBULAE AND OF GALACTIC H II REGIONS" ALBERT BOGGESS - GSFC

PP2ED "ULTRAVIOLET PHOTOELECTRIC PHOTOMETRY OF EMISSION LINE OBJECTS" ENRIQUE DALTABUIT - INSTITUTO DE ASTRONOMIC, UNIVERSIDAD NACIONAL AUTONOMA DE MEXICO

PSMGT "SPECTROPHOTOMETRY OF PLANETS, SATELLITES AND ASTEROIDS" M. G. TOMASKO - UNIVERSITY OF ARIZONA

PSTCO "ULTRAVIOLET SPECTROSCOPY OF PECULIAR GALAXIES AND COMETS" TOBY OWEN - UNIVERSITY OF NEW YORK - STONYBROOK

QO2AB "ULTRAVIOLET OBSERVATIONS OF QUASI-STELLAR OBJECTS" ALBERT BOGGESS - GSFC

PHSTD PHOTOMETRIC STANDARD STARS - FURTHER BROKEN DOWN INTO RP1ST AND RP2ST

RP1ST SEE PHSTD

RP2ST SEE PHSTD

RQRCR "ULTRAVIOLET SPECTRA OF BRIGHTER, LOW REDSHIFT QUASARS AND SOME OTHER RELATED OBJECTS" R. C. REDER - DAVID DUNLAP OBSERVATORY UNIVERSITY OF TORONTO

RSLWK "HIGH RESOLUTION STUDIES OF THE ULTRAVIOLET LINES IN O-B STARS" LUCAS W. KAMP - BOSTON UNIVERSITY

RSRLE "SIMULTANEOUS RADIO AND ULTRAVIOLET STUDIES OF RADIO STARS" R. L. SBROWN - NATIONAL RADIO ASTRONOMY OBSERVATORY

RSRLH "OBSERVATIONS OF THE ULTRAVIOLET SPECTRA OF THE PECULIAR RADIO SOURCE OJ 287 AND RELATED OBJECTS" RICHARD AND KAREN HACKNEY - WESTERN KENTUCKY UNIVERSITY

SGABU "STUDY OF THE ULTRAVIOLET SPECTRA OF EARLY-TYPE SUPERGIANTS" ANNE B. UNDERHILL - GSFC

SGSBP "ULTRAVIOLET SPECTROSCOPY OF A, F, AND G SUPERGIANTS" SIDNEY B. PARSONS - WARNER AND SWASEY OBSERVATORY CASE WESTERN RESERVE UNIVERSITY

SS2JJ "ULTRAVIOLET SPECTROSCOPY OF SELECTED B AND A STARS" JUN JUGAKU - TOKYO ASTRONOMICAL OBSERVATORY

SX2HG "STUDY OF THE ULTRAVIOLET SPECTRA OF SELECTED GALACTIC X-RAY SOURCES"- HENRY GURSKY HARVARD UNIVERSITY

TTCLI "ULTRAVIOLET SPECTRA OF T TAURI STARS" CATHERINE L. IMHOFF - UNIVERSITY OF ARIZONA

VPTPS "THE PHYSICAL STATE AND DISTRIBUTION OF GAS IN OUR GALAXY" THEODORE P. STECHER - GSFC

XBPVB "ULTRAVIOLET SPECTROSCOPY OF X-RAY EMITTING BINARY SYSTEMS" PAUL VAN DEN BOUT - UNIVERSITY OF TEXAS - AUSTIN

XSAKE "ULTRAVIOLET INVESTIGATIONS OF STELLAR X-RAY SOURCES" ANDREA K. DUPREE - HARVARD COLLEGE OBSERVATORY

THE COLUMN HEADINGS WHICH MAY NOT BE SELF EXPLANATORY ARE DESCRIBED FURTHER

H/L HIGH DISPERSION OR LOW DISPERSION
C/O LARGE APERTURE OPEN OR LARGE APERTURE CLOSED
L/S OBJECT IN LARGE APERTURE OR OBJECT IN SMALL APERTURE
SWR SHORT WAVELENGTH REDUNDANT CAMERA
LWR LONG WAVELENGTH REDUNDANT CAMERA
SWP SHORT WAVELENGTH PRIME CAMERA
LWP LONG WAVELENGTH PRIME CAMERA

01/15/79 IUE - NASA OBSERVATORY LOG PAGE 1

ORDERED BY RIGHT ASCENSION
SORTED BY PROGRAM ID

OBJ ID	PROG ID	TARGET RA H M S	TARGET DEC D M S	VIS MAG	OBJ CLASS	B(B-V) OR B-V	DISP H/L	LG - OBJ APERTURE O/C	OBJ APERTURE L/S	EXPOSE TIME MIN	EXPOSE TIME SEC	EXPOSURE START TIME YR	DAY	HR	MIN	IMAGE SEQ NUM	OBSERVERS COMMENTS
CALWL							H	C	S	000	16	78	130	19	58	LWR 1870	
CALWL							L	O	S	000	01	78	130	23	43	LWR 1874	
SKY							H	O	L	752	00	78	278	16	06	SWP 2862	
SKY							L	O	L	690	00	78	282	16	57	SWP 2898	02126158
SKY							L	O	L	270	00	78	301	23	12	SWP 3181	NB HK421
TP CALWL	ACDAK						H	C	S	000	23	78	207	15	34	LWR 1900	T07"C16"
TP CALWL							H	C	S	003	05	78	207	15	39	SWP 2111	T05"C03"
BEAD							H	C	S							SWP 2209	
TP CALWL							H	C	S	003	05	78	217	14	53	SWP 2211	T05"C03"
TP CALWL				4.4	27	E0.02	H	C	S	003	05	78	218	13	45	SWP 2222	T05"C03"
TP CALWL				4.4	27	E0.02	H	C	S	003	05	78	220	13	52	SWP 2239	T05"C03"
TP CALWL				4.4	27	E0.02	H	C	S	001	05	78	222	13	35	SWP 2256	T05"C03"
TP CALWL				4.4	27	E0.02	H	C	S	003	05	78	224	05	24	SWP 2270	T05"C03"
TP CALWL				4.4	27	E0.02	H	C	S	003	05	78	226	06	11	SWP 2286	T05"C03"
TP CALWL							H	C	S	001	05	78	228	13	50	SWP 2310	T05"C03"
TP CALWL							H	C	S	000	23	78	229	13	22	LWP 2088	T07"C16"
TP CALWL							H	C	S	000	23	78	230	14	03	LWR 2105	T07"C16"
TP CALWL							H	C	S	003	05	78	230	14	09	SWP 2329	T05"C03"
MARS	AVALL			0.6	03		L		S	002	00	78	093	13	43	SWP 1329	
MARS				0.6	03		L	O	S	060	00	78	098	14	52	SWP 1330	
MARS				0.6	03		L	C	S	001	30	78	098	16	35	LWR 1287	
MARS				0.6	03		L	C	L	000	03	78	098	17	24	LWR 1288	
SATURN				0.6	03		L	C	S	000	15	78	098	17	58	LWR 1288	
SATURNRNG				0.6	03		L	C	S	001	00	78	099	12	24	LWR 1291	4"S
SATURN				0.6	03		L	C	S	001	00	78	099	12	35	LWR 1291	8" ELONG
SATURNRNG				0.6	03		L	C	S	004	00	78	099	13	30	LWR 1292	8" N
SATURN				0.6	03		L	C	S	003	00	78	099	13	42	LWR 1292	20"E
SATURNRNG				0.6	03		L	C	S	010	00	78	099	14	16	SWP 1337	4" N
TITAN				0.6	03		L	C	S	010	00	78	099	14	40	SWP 1337	
SATURN				8.5	04		L	C	S	060	00	78	099	15	47	LWR 1293	
JUPITER				0.6	03		L	C	S	010	30	78	099	17	07	SWP 1338	
JUPITER				-1.7	03		L	C	S	000	08	78	100	12	55	LWR 1297	
JUPITER				-1.7	03		L	C	S	000	30	78	100	13	46	LWR 1298	
JUPITER				-1.7	03		L	C	S	002	15	78	100	14	34	LWR 1298	
JUPITER				-1.7	03		L	C	S	060	00	78	100	15	19	SWP 1344	
MARS				0.7	03		L	C	S	030	00	78	100	17	43	LWR 1300	
MARS				0.7	03		L	C	S	060	00	78	101	11	35	SWP 1351	
MARS				0.7	03		L	C	S	090	00	78	101	13	17	LWR 1305	
GANYMEDE				6	04		L	C	S	030	45	78	101	15	46	LWR 1306	
GANYMEDE				6	04		L	C	S	002	00	78	101	17	24	LWR 1307	
MOON					02		L	C	S	004	00	78	101	17	35	LWR 1307	
MOON					02		L	C	S	030	18	78	114	00	02	LWR 1375	
MOON					02		L	C	L	030	02	78	114	00	05	LWR 1375	
MOON					02		L	O	S							LWR 1375	
MOON					02		L	O	S							SWP 1406	
MOON					02		L	O	S							SWP 1406	
VENUS				-4	03		L	C	S	001	00	78	114	01	30	LWR 1376	
VENUS				-4	03		L	C	S	000	02	78	239	14	01	LWR 2187	
							L	C	S	000	12	78	239	14	14	LWR 2187	

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VENUS	AVALL				03		L	C	S	003 00	78 239 15 07	SWP 2404	
VENUS					03		L	O	L	000 32	78 239 15 16	SWP 2404	
VENUS					03		L	O	L	010 00	78 239 16 16	SWP 2405	
VENUS					03		L	C	S	005 00	78 239 16 32	SWP 2405	
VENUS					03		L	C	S	000 12	78 239 17 01	LWR 2188	
VENUS					03		L	O	L	000 01	78 239 17 10	LWR 2188	
VENUS				-.4	03		L	O	L	000 01	78 240 04 41	LWR 2195	
VENUS				-.4	03		L	C	S	000 04	78 240 04 45	LWR 2195	
VENUS				-.4	03		L	O	L	000 01	78 240 07 00	LWR 2196	
VENUS				-.4	03		L	C	S	000 04	78 240 07 10	LWR 2196	
VENUS					03		L	C	S	016 00	78 240 08 08	LWR 2197	
VENUS					03		L	O	L	002 00	78 240 08 37	SWP 2406	
VENUS					03		L	O	L	001 00	78 240 08 42	SWP 2406	
VENUS					03		L	C	S	015 00	78 242 04 23	LWR 2210	
VENUS					03		L	C	S	040 00	78 242 05 35	LWR 2211	
VENUS					03		L	C	S	030 00	78 242 07 52	SWP 2413	
NEPTUNE					03		L	O	L	004 00	78 242 10 50	LWP 2212	
NEPTUNE					03		L	O	L	005 00	78 242 11 28	LWR 2213	
VENUS					03		L	O	L	004 00	78 242 12 02	LWR 2214	
VENUS					03		L	O	L	007 00	78 242 14 05	SWP 2414	
VENUS					03		L	O	L	003 00	78 242 15 00	SWP 2415	
VENUS					03		L	C	S	007 00	78 242 15 48	LWR 2215	
VENUS					03		L	C	S	004 00	78 242 16 33	LWR 2216	
CALLISTO				6	04		L	C	S	001 30	78 242 17 12	LWR 2217	
CALLISTO				6	04		L	C	S	015 00	78 255 05 27	LWR 2329	
IO				5	04		L	C	S	012 00	78 255 05 55	LWR 2329	
EUROPA				5	04		L	O	L	060 00	78 256 01 06	SWP 2640	
EUROPA				5	04		L	C	L	004 00	78 256 02 21	LWR 2339	
JUPITER				-1.8	03		L	C	L	006 00	78 256 02 34	LWR 2339	
JUPITER				-1.8	03		L	O	L	010 00	78 256 03 56	LWR 2340	
JUPITER				-1.6	03		L	C	S	010 00	78 256 05 11	LWR 2340	
JUPITER				-1.6	03		L	C	S	000 15	78 256 06 45	LWR 2341	
JUPITER				-1.6	03		L	O	L	010 00	78 256 06 50	LWR 2341	
JUPITER				-1.6	03		L	O	L	001 45	78 256 14 14	LWR 2344	
JUPITER				-1.6	03		L	C	S	005 00	78 256 14 24	LWR 2344	
JUPITER				-1.6	03		L	O	L	005 01	78 256 14 39	SWP 2642	
JUPITER				-1.6	03		L	C	S	005 01	78 256 14 51	SWP 2642	
JUPITER				-1.6	03		L	C	S	000 15	78 257 02 36	LWR 2347	GRS
CALLISTO				5.8	04		L	O	L	000 03	78 257 02 49	LWR 2347	GRS
CALLISTO				5.8	04		L	O	L	090 00	78 257 03 20	SWP 2647	J4
EUROPA				5.5	04		L	C	S	060 00	78 257 05 00	LWR 2348	J4
EUROPA				5.5	04		L	C	S	002 00	78 257 07 24	LWR 2349	J2
JUPITER				-1.6	03		L	C	S	003 45	78 257 07 36	LWR 2349	J2
JUPITER				-1.6	03		L	C	S	002 00	78 257 06 32	SWP 2648	
JUPITER				-1.6	03		L	C	S	030 00	78 257 06 39	SWP 2648	
EUROPA					04		L	C	S	006 00	78 257 08 15	LWR 2350	
EUROPA					04		L	O	L	003 30	78 257 08 28	LWR 2350	J2
EUROPA					04		L	O	L	003 50	78 257 09 07	LWR 2351	J2
EUROPA					04		L	C	S	007 00	78 257 09 19	LWR 2351	J2
EUROPA				5.5	04		L	O	L	007 00	78 257 10 07	LWR 2352	J2
EUROPA				5.5	04		L	C	S	025 00	78 257 10 22	LWR 2352	J2

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IO	AVALL			5	04		L	C	S	005 01	78 257 11 35	LWR 2353	J1
IO				5	04		L	O	L	005 01	78 257 11 48	LWR 2353	J1
IO					04		L	O	L	010 00	78 257 12 29	LWR 2354	
IO					04		L	O	L	010 00	78 257 12 48	LWR 2354	
IO				5	04		L	C	S	030 00	78 257 13 34	LWR 2355	
IO				5	04		L	C	S	030 00	78 257 14 10	LWR 2355	
JUPITER					03		L	O	L	002 20	78 257 14 55	SWP 2649	
IO				-4.8	04		L	O	L	010 00	78 258 10 09	LWR 2361	
JUPITER				-1.6	03		L	O	L	002 40	78 258 10 38	SWP 2650	
JUPITER				-1.6	03		L	C	S	035 00	78 258 10 50	SWP 2650	
IO					04		L	O	L	030 00	78 258 11 40	LWR 2362	
IO					04		L	O	L	068 00	78 258 12 57	LWR 2363	
GANYMEDE					04		L	O	L	005 01	78 258 15 07	LWR 2364	
GANYMEDE					04		L	C	S	004 15	78 258 15 21	LWR 2364	
JUPITER				-1.6	03		L	O	L	045 00	78 259 09 34	SWP 2662	
W WOOD										000 08	78 259 09 44	LWR 2370	
EUROPA				5.5	04		L	O	L	003 30	78 259 10 29	LWR 2371	
EUROPA				5.5	04		L	C	S	006 00	78 259 10 37	LWR 2371	
IO					04		L	O	L	015 00	78 259 11 18	LWR 2372	
IO					04		L	C	S	015 00	78 259 11 47	LWR 2372	
JUPITER					03		L	C	S	000 15	78 259 13 13	LWR 2373	
JUPITER					03		L	O	L	000 03	78 259 13 16	LWR 2373	
JUPITER					03		L	O	L	000 02	78 259 13 58	LWR 2374	
JUPITER					03		L	C	S	000 17	78 259 14 04	LWR 2374	
GANYMEDE					04		L	C	S	005 01	78 259 14 47	LWR 2375	
GANYMEDE					04		L	C	S	004 15	78 259 14 57	LWR 2375	
MOON				-5	02		L	C	S	004 00	78 261 01 30	SWP 2676	
MOON				-5	02		L	C	S	004 00	78 261 01 37	SWP 2676	
MOON				-5	02		L	O	L	000 01	78 261 01 43	LWR 2389	
MOON				-5	02		L	O	L	000 09	78 261 01 45	LWR 2389	
MOON				-5	02		L	C	S	000 03	78 261 02 47	LWR 2390	
MOON				-5	02		L	C	S	000 22	78 261 02 49	LWR 2390	
MOON				-5	02		L	O	L	012 00	78 261 02 50	SWP 2677	
IO				5.0	04		L	O	L	020 00	78 261 03 05	SWP 2677	
JUPITER				-1.7	03		L	O	L	090 00	78 261 05 21	SWP 2678	
JUPITER				-1.7	03		L	C	S	000 07	78 261 07 22	LWR 2391	
										000 45	78 261 07 05	LWR 2391	
WAVE CAL	BC2D1						H	C	S	000 00	78 285 13 28	SWP 2939	
SKY	BSJLG						L	O	B	120 00	78 151 09 02	SWP 1674	NB 640
READ 61	CALIB											SWP 1684	SWP,HI
READ BT										000 00		SWP 1685	HIGAIN
TPLD 50%										000 11	78 152 19 24	SWP 1686	READ,LO
TP CALWL							L	O	B	000 08	78 152 20 36	LWR 1590	T07=C01=
TP CALWL	CR2G6						H	C	S	000 23	78 234 08 50	LWR 2146	T07=C16=
TP CALWL							H	C	S	003 05	78 236 02 23	SWP 2380	T05=C03=
PREPREAP	HCAL											LWR 1854	NOKBNUL

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CALWC	HSSRH						H	C		000 16	78 095	LWR 1281	LWR
TP CALWL	MLJBH						L	C	S	000 07	78 208 15 43	SWP 2128	T05"C02"
TP CALWL							H	C	S	002 05	78 210 15 56	SWP 2144	T05"C02"
WL CAL							H	C	S		78 285 21 58	SWP 2946	
WL CAL							H	C	S	000 00	78 286 01 30	LWR 2588	
TP CALWL							L	O	S	002 05	78 287 12 39	SWP 2974	T05"C02"
TP CALWL							L	O	S	000 07	78 287 13 37	SWP 2975	T05"C02"
TP CALWL							H	C	S	000 00	78 287 22 32	LWR 2604	
TP CALWL							H	C	S	000 00	78 289 22 05	SWP 2998	
TP CALWL	MVDSL						H	C	S	000 00	78 295 01 59	SWP 3094	
WAVCAL							H	C	S	000 00	78 295 11 07	LWR 2677	
TP CALWL							H	C	S	000 00	78 297 06 29	LWR 2697	
WAVECAL							H	C	S	000 00	78 297 12 20	SWP 3125	
WAVECAL							H	C	S	000 00	78 299 08 58	LWR 2722	
WAVECAL							H	C	S	000 00	78 299 13 47	SWP 3160	
STENRING	OPHWH				03		L	O	L	110 00	78 179 11 46	SWP 1878	18"W2"S
SATURN					03							SWP 1878	2"S CNTR
SATURN					03							SWP 1878	
TP CALWL	PHCAL						H	C	S	000 23	78 130 19 06	LWR 1469	T07"C16"
TP CALWL							L	O	B	000 08	78 130 22 43	LWR 1473	T07"C01"
TP CALWL							L	O	B	000 08	78 133 17 31	LWR 1484	T07"C01"
TP CALWL							L	O	B	000 08	78 133 18 02	LWR 1485	T07"C01"
TP CALWL							L	O	B	000 06	78 133 19 19	SWP 1535	T05"C01"
TP CALWL							L	O	B	000 06	78 133 20 22	SWP 1536	T05"C01"
TP CALWL							H	C	S	000 23	78 133 21 42	LWR 1487	T07"C16"
TP CALWL							H	C	S	002 07	78 133 22 53	SWP 1538	T07"C02"
PRSTNULL												SWP 1589	
PRSTNULL												LWR 1523	
PRBEPNUL							H	C		000 00		SWP 1585	
PRBEPSWP							H	C		001 49	78 140 10 22	SWP 1586	CALUV
PRBEPSWP							H	C		003 02	78 140 11 23	SWP 1587	
SAFEREAD												LWP 1068	
SAFEREAD												SWR 1074	
40KBNULL												LWR 1546	
40KBNULL												SWP 1610	
20KBNULL												SWP 1611	
20KBNULL												LWR 1547	
TP CALWL							H	C	S	000 23	78 143 14 31	LWR 1548	T07"C16"
TP CALWL							H	C	S	002 05	78 143 14 57	SWP 1612	T05"C02"
PRBEPNUL												SWP 1613	
SKY							H	C	S	030 00	78 146 17 26	SWP 1644	NR 93521
TEST							H	C	S	001 31	78 146 19 41	SWP 1645	CALUV
NULLIMAG							H	C		000 00	78 146	SWP 1646	
NULLIMAG							L	O		000 00	78 146	LWR 1566	40 KB/S
TP CALWL							L	O	B	000 07	78 151 20 44	SWP 1679	T05"C02"
TP CALWL							H	C	S	002 05	78 156 08 09	SWP 1723	T05"C02"

01/15/79

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TP CALWL	PHCAL						H	C	S	000 23	78 156 09 04	LWR 1622	T07"C16"
SAFEREAD											78 156	LWP 1069	LWP
SAFEREAD											78 156	SWR 1075	SWR
PRSTNULL										000 05	78 156 17 24	SWP 1726	TFLOOD
TP CALWL											78 156	SWP 1728	
TP CALWL							L	O		000 08	78 160 19 02	LWR 1643	T07"C01"
TP CALWL							L	O		000 07	78 160 19 30	SWP 1753	T05"C02"
TP CALWL							H	C	S	000 23	78 161 19 33	LWR 1650	T07"C16"
PRBEPNUL							H	C	S	002 05	78 161 20 12	SWP 1759	T05"C02"
PRBEPSTP										000 00	78 166	LWR 1670	
P PREP							H	C		001 52	78 166 06 41	LWR 1671	UVFLD60%
S PREP							H	C		003 08	78 166 07 06	LWR 1672	UVFL100
S PREP											78 166 15 58	SWP 1788	NULL
S PREP											78 166 17 25	SWP 1790	NULL
S PREP											78 166 19 50	SWP 1791	NULL20KB
SAFEREAD											78 166 20 48	SWP 1792	NULL20KB
SAFEREAD							H	C		000 00	78 173	LWP 1070	LWP40KBS
NULL SWP							H	C		000 00	78 173	SWR 1076	SWR40KBS
SWPDTFLD							H	C		000 00	78 173	SWP 1832	
TP CALWL							H	C		001 49	78 173 12 49	SWP 1833	60%
TP CALWL							L	O		000 08	78 173 13 40	LWR 1713	T07"C01"
SWENULL							L			000 07	78 173 17 28	SWP 1834	T05"C02"
READPREP										000 00	78 173	SWP 1835	SYSTEM5
SPREP												SWP 1836	SWP NULL
READPREP												SWP 1837	SWP NULL
READPREP												SWP 1837	NULL
READPREP												SWP 1838	SWP NULL
READPREP												SWP 1839	SWP NULL
READPREP												SWP 1863	
READPREP												SWP 1864	OPSTEST4
READPREP												SWP 1865	OPSTEST4
READPREP												SWP 1866	OPSTEST4
READPREP												SWP 1867	OPSTEST4
READPREP												SWP 1868	OPSTEST4
SATURN					03		L	O	L	185 00	78 179 07 42	SWP 1864	OPSTEST4
READPREP												SWP 1673	
READPREP												LWR 1741	OPSTEST5
READPREP												LWP 1742	OPSTEST5
READPREP												LWR 1743	OPSTEST5
READPREP												SWP 1875	OPSTEST5
READPREP												LWR 1744	OPSTEST5
TP CALWL												LWR 1745	READ LO
TP CALWL							H	C	S	000 23	78 181 08 17	LWR 1753	T07"C16"
TP CALWL							H	C	S	003 05	78 181 09 00	SWP 1886	T05"C03"
TP CALWL							L	O	L	000 07	78 181 09 54	SWP 1887	T05"C02"
PREP							L	O	L	000 08	78 181 10 13	LWR 1754	T07"C01"
PREP										000 00	78 181	SWP 1889	40KBNULL
TP CALWL										000 00		SWP 1890	20KBNULL
TP CALWL							L	O		000 07	78 188 08 03	SWP 1928	T05"C02"
TP TEST							L	O		000 08	78 188 08 11	LWR 1791	T07"C01"
											78 188	LWR 1792	UV NULL

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ITF TEST	PHCAL									78 188		LWR 1793	60% UVF
NULL										000 00 78		SWP 1930	
READPREP										000 00 78		SWP 1931	NULL
SPREP										000 00 78		SWP 1932	NULL
READPREP										000 00 78		SWP 1933	NULL
NULL										000 00 78		SWP 1934	
NULL										000 00 78		SWP 1935	
NULL										000 00 78		SWP 1936	
NULL										000 00 78		SWP 1937	
SPREP												SWP 2016	SWP LO
READPREP												SWP 2017	NULL
READPREP												SWP 2018	
TF CALWL							T	C	S	000 05	78 197 05 14	SWP 2023	T05"C03"
TF CALWL							T	C	S	000 23	78 197 06 06	LWR 1832	T07"C16"
TF CALWL							L	C	S	000 07	78 197 09 16	SWP 2025	T05"C02"
TF CALWL							L	C	L	000 08	78 197 10 33	LWR 1834	T07"C01"
SPREP							L	C			78 197	SWP 2026	SWP NULL
UVFLD							L	C			78 197 11 45	SWP 2027	60%SWP
PREP20KB												SWP 2052	NULL
READ40KB												SWP 2052	NULL
PREPREAD												SWP 2053	40KBNUL
PREP20KB												LWR 1883	NULL
READ40KB												LWP 1883	NULL
MAYDUTYEP												LWR 1884	NULL
TF CALWL							L	C		000 06	78 205 14 03	SWP 2097	T05"C01"
TF CALWL							L	C		000 08	78 205 14 06	SWP 2097	T05"C03"
TF CALWL										000 07	78 210 05 02	SWP 2138	T05"C02"
NULL										000 00	78 210	LWR 1913	UVITF
UVFLOOD											78 210 08 48	LWR 1914	60%CALUV
TF CALWL							H	C		003 05	78 212 14 41	SWP 2160	T05"C03"
TF CALWL							H	C		000 23	78 212 14 49	LWR 1929	T07"C16"
NULL										000 00	78 216	SWP 2193	
UVFLOOD										001 09	78 216 09 14	SWP 2194	60%
TF CALWL							T	C	S	000 23	78 221 12 10	LWR 2026	T07"C16"
TF CALWL							T	C	S	003 08	78 221 12 39	LWR 2027	T07"C01"
TF CALWL							T	C	S	000 23	78 221 12 47	LWR 2028	T07"C16"
TF CALWL							T	C	S	000 23	78 221 24 38	LWR 2030	T07"C16"
TF CALWL							T	C	S	000 23	78 221 16 30	LWR 2031	T07"C16"
TF CALWL							T	C	S	002 05	78 232 12 51	SWP 2340	T05"C02"
TF CALWL							T	C	S	000 23	78 232 13 05	LWR 2126	T07"C16"
TF CALWL							L	C	S	000 08	78 240 13 08	LWR 2128	T07"C01"
TF CALWL							L	C	S	000 07	78 240 13 09	SWP 2407	T05"C02"
TF CALWL							T	C	S	000 23	78 245 14 53	LWR 2246	T07"C16"
TF CALWL							T	C	S	002 05	78 245 14 55	SWP 2450	T05"C02"
TF CALWL							T	C	S	002 05	78 252 14 40	SWP 2635	T05"C02"
TF CALWL							T	C	S	000 23	78 255 14 27	LWR 2333	T07"C16"
TF CALWL							L	C	S	000 08	78 263 00 44	LWR 2411	T07"C01"
TF CALWL							L	C	S	000 07	78 263 04 23	SWP 2701	T05"C02"
TF CALWL							T	C	S	000 23	78 274 10 39	LWR 2516	T07"C16"
TF CALWL							L	C	S	002 05	78 274 11 01	SWP 2822	T05"C02"
TF CALWL							L	C	S	000 08	78 274 12 01	LWR 2517	T07"C01"

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TF CALWL	PHCAL						L	C	S	000 07	78 274 12 04	SWP 2823	T05"C02"
TF CALWL							L	C	S	000 00	78 300 08 17	SWP 3168	
TF CALWL							H	C	S	000 00	78 300 10 56	LWR 2733	
TF CALWL							H	C	B	000 00	78 300 13 46	LWR 2735	
TF CALWL							H	C	S	000 00	78 302 09 11	SWP 3183	
TF CALWL							L	C	B	000 00	78 305 05 26	LWR 2786	
TF CALWL							L	C	L	000 00	78 305 08 14	SWP 3204	
TF CALWL	PHSTD						H	C	S	000 24	78 120 19 16	LWR 1821	T08"C16"
TF CALWL							H	C	S	007 07	78 120 20 52	SWP 1446	T07"C02"
SAFEREAD											78 120	LWP 1067	
TF CALWL							L	C	B	000 02	78 121 20 25	SWP 1455	TFLOOD
TF CALWL							L	C	B	000 05	78 121 20 28	SWP 1455	CALWL
NULL											78 121	SWP 1456	
TF CALWL							L	C	S	000 08	78 124 18 46	LWR 1841	T07"C01"
SWR SAFE												SWP 1073	
JUPITER	PSNGT				03		L	C	S	005 00	78 117 12 24	LWR 1399	
JUPITER					03		L	C	S	004 30	78 117 15 49	LWR 1400	
JUPITER					03		L	C	S	004 00	78 117 16 47	LWR 1401	
JUPITER					03		L	C	S	010 00	78 117 17 50	LWR 1402	
JUPITER					03		L	C	S	004 00	78 118 13 10	LWR 1406	
JUPITER					03		L	C	S	004 00	78 118 14 07	LWR 1407	
JUPITER					03		L	C	S	004 00	78 118 14 27	LWR 1408	
JUPITER					03		L	C	S	004 30	78 118 15 47	LWR 1409	
JUPITER					03		L	C	S	004 30	78 118 16 42	LWR 1410	
JUPITER					03		L	C	S	004 00	78 118 17 24	LWR 1411	
STRNRING	PSICO				03		L	C	L	020 00	78 174 15 47	SWP 1841	2"S17"W
STRNRING					03		L	C	L	003 00	78 174 16 20	LWR 1717	18"W2"S
STRNRING					03		L	C	L	002 00	78 174 18 22	LWR 1718	18"W2"S
STRNRING					03		L	C	L	020 00	78 174 19 30	SWP 1842	18"W2"S
STRNRING					03		L	C	L	001 00	78 174 20 06	LWR 1719	18"W2"S
STRNRING					03		L	C	L	040 00	78 174 20 57	SWP 1843	18"W2"S
VENUS				-4.4	03		H	C	S	002 00	78 239 03 17	LWR 2181	
VENUS				-4.4	03		H	C	S	000 20	78 239 03 55	LWR 2182	
VENUS				-4.4	03		H	C	S	002 00	78 239 04 25	LWR 2183	
VENUS				-4.4	03		H	C	S	000 05	78 239 05 15	LWR 2184	
NEPTUNE				8	03		L	C	S	010 00	78 239 07 00	SWP 2403	
NEPTUNE				7.5	03		L	C	S	120 00	78 239 07 16	LWR 2185	
NEPTUNE				PR	03		L	C	S	040 00	78 239 10 29	LWR 2186	
NEPTUNE				8	03		L	C	S	007 00	78 239 11 16	LWR 2186	
URANUS					03		L	C	S	030 00	78 241 02 04	LWR 2202	
URANUS					03		L	C	S	040 30	78 241 02 42	SWP 2411	
VENUS					03		L	C	S	000 01	78 241 05 52	SWP 2203	
VENUS					03		L	C	S	000 04	78 241 05 58	LWR 2203	
VENUS					03		L	C	S	000 01	78 241 06 52	LWR 2204	
VENUS					03		L	C	S	000 04	78 241 06 56	LWP 2204	
VENUS					03		L	C	S	000 04	78 241 07 41	LWR 2205	
VENUS					03		L	C	S	030 30	78 241 08 22	LWR 2206	
VENUS					03		H	C	S	015 00	78 241 15 10	LWR 2207	

OBJ ID	PROG ID	TARGET RA H M S	TARGET DEC D M S	VIS MAG	OBJ CLASS	B(B-V) OR U-V	DISP H/L	LG - APERTURE O/C	OBJ APERTURE L/S	EXPOSE TIME MIN SEC	EPOSURE START TIME YR DAY HR MIN	IMAGE SEQ NUM	OBSERVERS COMMENTS
VENUS	PSICO				03		H	C	S	005 00	78 241 16 00	LWR 2208	
VENUS					03		H	C	S	009 00	78 241 17 10	LWR 2209	
VENUS					03		H	C	S	015 00	78 243 07 15	SWP 2420	
VENUS					03		H	C	S	030 00	78 243 08 15	SWP 2421	
STRNRING	RSICR				03		L	O	S	020 00	78 174 15 02	SWP 1841	2"S15"W
SKY	RUSCR						L	O	L	220 00	79 150 11 25	SWP 1670	NR OJ287
SKY							L	O		300 00	78 307 22 17	SWP 3217	
SKY	RSBLH						L	O	B	005 00	78 148 15 43	SWP 1657	B2110138
SKY							L	O	L	060 00	78 300 00 46	SWP 3165	
SKY							L	O	L	180 00	78 300 02 13	SWP 3166	
LAMCALIB	SGABU						H	C	S	000 16	78 172 21 02	LWR 1708	CALWL
TF CALWL	SX2HG						L	O	B	000 06	78 123 15 33	SWP 1472	T05"C01"
TF CALWL	VRIPS						H	C	S	002 05	78 284 00 48	SWP 2907	T05"C02"
TF CALWL							H	C	S	002 05	78 292 11 18	SWP 3041	T05"C02"
TF CALWL	XSAKD						H	C	S	002 07	78 128 23 11	SWP 1508	T07"C02"
TF CALWL							L	O	B	000 06	78 132 23 22	SWP 1529	T05"C01"
HD 108	LSDKW	00 03 26	63 24	7.4	15		H	C	S	030 00	78 226 13 21	SWP 2292	
HD 108		00 03 26	63 24	7.4	15	B0.46	H	C	S	040 00	78 236 11 21	SWP 2386	
HD108		00 03 26	63 24	7.4	15	B0.46	H	C	S	040 00	78 249 01 36	SWP 2501	
HD108		00 03 26	63 24	7.4	15	B0.46	H	C	S	030 00	78 298 10 27	SWP 3137	
HD 108	MLJBH	00 03 26	63 24	7.4	15	B 0.5	H	C	S	028 00	78 208 17 57	SWP 2126	
HD 108	OSESC	00 03 26	63 24	7.48	15	B0.48	H	C	S	033 00	78 140 16 50	SWP 1589	
HD 108		00 03 26	63 24	7.48	15	B0.48	H	C	S	030 00	78 140 17 31	LWR 1526	
HD 108		00 03 26	63 24	7.48	15	B0.48	L	C	I	000 30	78 140 18 46	SWP 1590	
HD 108		00 03 26	63 24	7.48	15	B0.48	L	C	S	000 30	78 140 18	SWP 1590	
MRN 335	QO2AB	00 03 45	19 55 27	13.85	B4		L	O	L	030 00	78 186 15 35	SWP 1918	
MRN 335		00 03 45	19 55 27	13.85	B4		L	O	I	045 00	78 186 16 16	LWR 1782	
MRN 335		00 03 45	19 55 27	13.85	B4		L	O	I	045 30	78 186 17 07	SWP 1919	
BD+ CAS	CEJLL	00 06 30	58 52 27	2.25	B0		L	O	L	026 00	78 235 05 15	SWP 2372	
BD+ CAS		00 06 30	58 52 27	2.25	B0		L	O	I	011 00	78 235 05 50	LWR 2156	
BD+ CAS		00 06 30	58 52 27	2.25	B0		L	O	L	006 30	78 235 06 41	SWP 2373	
3 2W 2	ZODCM	00 07 57	10 41 46	15.4	B5		L	O	L	030 00	78 168 17 02	SWP 1802	
3 2W 2		00 07 57	10 41 46	14.85	B5		L	O	I	020 00	78 169 07 24	LWR 1686	
3 2W 2		00 07 57	10 41 46	14.85	B5		L	O	I	225 00	78 169 07 55	SWP 1806	
3 2W 2		00 07 57	10 41 46	14.85	B5		L	O	L	115 00	78 169 11 57	LWR 1687	
SX CAS	PG2SS	00 08 04	54 36 48	9.0	B4	B0.38	L	O	L	026 00	78 139 19 21	LWR 1519	
SX CAS		00 08 04	54 36 48	9.0	B4	B0.38	L	O	S	009 00	78 139 19 57	LWR 1519	

OBJ ID	PROG ID	TARGET RA H M S	TARGET DEC D M S	VIS MAG	OBJ CLASS	B(B-V) OR U-V	DISP H/L	LG - APERTURE O/C	OBJ APERTURE L/S	EXPOSE TIME MIN SEC	EPOSURE START TIME YR DAY HR MIN	IMAGE SEQ NUM	OBSERVERS COMMENTS
SX CAS	PG2SS	00 08 04	54 36 48	9.0	B4	B0.38	L	O	L	024 00	78 139 20 15	SWP 1520	
SX CAS		00 08 04	54 36 48	9.0	B4	B0.38	L	O	S	006 00	78 139 20 46	SWP 1521	
HD232121		00 08 04	54 36 48	8.9		B0.36	L	O	L	028 00	78 221 09 00	LWR 2025	
HD232121		00 08 04	54 36 48	8.9		B0.36	L	O	S	009 00	78 221 09 36	LWR 2026	
HD232121		00 08 04	54 36 48	8.9		B0.36	L	O	L	030 00	78 221 09 55	SWP 2249	
HD232121		00 08 04	54 36 48	8.9		B0.36	L	O	L	014 00	78 222 08 29	LWR 2035	
HD232121		00 08 04	54 36 48	8.9		B0.36	L	O	L	012 00	78 223 14 06	LWR 2048	
HD232121		00 08 04	54 36 48	8.9		B0.36	L	O	S	009 00	78 223 14 31	LWR 2048	
HD886	SS2JJ	00 10 39	14 54 21	2.8	20	-0.33	H	C	S	000 17	78 296 07 41	LWR 2689	
HD886		00 10 39	14 54 21	2.9	20	-0.33	H	C	S	000 19	78 296 07 46	SWP 3110	
AO CAS	CM2GH	00 15 02	51 09 00	6.05	12	B0.34	H	C	S	008 30	79 232 05 51	LWR 2119	
AO CAS		00 15 02	51 09 00	6.05	12	B0.34	H	C	S	006 00	78 232 09 37	LWR 2124	
AO CAS		00 15 02	51 09 00	6.05	12	B0.34	H	C	S	007 00	78 234 10 17	LWR 2147	
AO CAS		00 15 02	51 09 00	6.05	12	B0.34	H	C	S	012 00	78 234 10 33	SWP 2363	
AO CAS		00 15 02	51 09 00	6.05	12	B0.34	H	C	S	012 00	78 236 09 34	SWP 2384	
AO CAS	RF2YK	00 15 03	51 09 19	6.05	12	B0.19	H	C	S	006 30	78 153 09 58	SWP 1632	
AO CAS		00 15 03	51 09 19	6.05	12	B0.19	H	C	S	006 30	78 153 10 13	LWR 1596	
AO CAS		00 15 03	51 09 19	6.05	12	B0.19	H	C	S	006 30	78 155 06 51	LWR 1614	
AO CAS		00 15 03	51 09 19	6.05	12	B0.19	H	C	S	007 00	78 156 08 05	SWP 1712	
DM+43.44	CEJLL	00 15 31	43 44	3.07	48		L	O	L	030 00	78 238 12 08	LWR 2180	
DM+43.44		00 15 31	43 44	3.07	48		L	O	S	002 00	78 238 12 46	LWR 2180	
NGC 104	XSAKD	00 21 45	-72 22 06	10	93	B0.04	L	O	L	018 00	78 204 09 30	LWR 1877	
NGC 104	SX2HG	00 21 53	-72 21 30	5.35	81	B0.04	L	O	L	260 00	78 204 04 56	SWP 2086	
NGC 104	XSAKD	00 21 53	-72 22	4.35	83		L	O	L	030 00	78 128 22 14	LWR 1461	
NGC 104		00 21 53	-72 21 30	4.4	83	B0.04	L	O	L	180 00	78 129 11 07	SWP 1510	
KAP CAS	OD42B	00 30 08	62 39 22	4.24	23	B0.41	H	C	S	010 00	78 252 23 56	SWP 2589	
KAP CAS		00 30 08	62 39 22	4.24	23	B0.41	H	C	S	007 00	79 [illegible] 02 48	SWP 2592	
KAP CAS		00 30 08	62 39 22	4.24	23	B0.41	H	C	S	007 00	78 252 03 28	SWP 2593	
KAP CAS		00 30 08	62 39 22	4.24	23	B0.41	H	C	S	007 00	78 [illegible] 05 [illegible]	SWP 2596	
KAP CAS		00 30 08	62 39 22	4.24	23	B0.41	H	C	S	007 00	78 253 06 35	SWP 2597	
KAP CAS		00 30 08	62 39 22	4.24	23	B0.41	H	C	S	007 00	78 253 08 48	SWP 2600	
KAP CAS		00 30 08	62 39 22	4.24	23	B0.41	H	C	S	007 00	78 253 09 24	SWP 2601	
KAP CAS		00 30 08	62 39 22	4.24	23	B0.41	H	C	S	005 00	78 253 10 48	SWP 2603	
KAP CAS		00 30 09	62 39 22	4.24	23	B0.41	H	C	S	006 00	78 253 11 44	SWP 2604	
KAP CAS		00 30 08	62 39 22	4.24	23	B0.41	H	C	S	006 00	78 253 11 [illegible]	SWP 2605	
KAP CAS		00 30 08	62 39 22	4.24	23	B0.41	H	C	S	006 00	78 253 13 24	SWP 2607	
KAP CAS		00 30 08	62 39 22	4.24	23	B0.41	H	C	S	005 00	78 253 13 58	SWP 2608	
KAP CAS		00 30 08	62 39 22	4.24	23	B0.41	H	C	S	006 00	78 253 14 39	SWP 2609	
											78 253 15 05	SWP 2610	
BD 2905	SGABU	00 30 08	62 39 22	4.15	23	B0.41	H	C	S	006 00	78 170 17 38	SWP 1814	
BD 2905		00 30 08	62 39 22	4.15	23	B0.41	H	C	S	004 00	78 170 18 05	LWR 1695	

OBJ ID	PROG ID	TARGET RA H M S	TARGET DEC D M S	VIS MAG	OBJ CLASS	E(B-V) OR B-V	DISP P/L	LG - OBJ APERTURE O/C	APERTURE L/S	EXPOSE TIME MIN SEC	EPOSURE START TIME YR DAY HR MIN	IMAGE SEQ NUM	OBSERVERS COMMENTS
BD 2905	SGA8U	00 20 08	62 39 22	8.15	23	E0.41	H	C	S	006 30	78 175 20 06	SWP 1850	
BD 2905		00 20 08	62 39 22	8.15	23	E0.41	H	C	S	003 00	78 175 20 21	LWR 1725	
BD 2905		00 20 08	62 39 22	8.15	23	E0.41	H	C	S	004 00	78 175 21 28	SWP 1851	
ZERO CAS	PHCAL	00 34 10	53 37 19	3.68	20	E0.04	H	C	S	000 30	78 130 18 37	LWR 1468	
ZERO CAS		00 34 10	53 37 19	3.68	20	E0.04	L	C	L	000 01	78 130 20 56	LWR 1471	
ZERO CAS		00 34 10	53 37 19	3.68	20	E0.04	L	C	L	000 02	78 130 22 13	LWR 1472	
ZERO CAS		00 34 10	53 37 19	3.68	20	E0.04	H	C	S	000 30	78 156 07 45	SWP 1722	
ZERO CAS		00 34 10	53 37 19	3.68	20	E0.04	H	C	S	000 30	78 156 08 38	LWR 1621	
ZERO CAS		00 34 10	53 37 19	3.68	20	E0.04	H	C	S	000 30	78 156 10 15	SWP 1724	
ZERO CAS		00 34 10	53 37 19	3.68	20		H	C	S	000 40	78 197 04 42	SWP 2022	
ZERO CAS		00 34 10	53 37 19	3.68	20		H	C	S	000 35	78 197 06 17	LWR 1831	
HD 3660		00 34 10	53 37	3.68	20	E0.04	H	C	S	000 35	78 281 12 38	SWP 2885	
HD 3660		00 34 10	53 37	3.68	20	E0.04	H	C	S	000 30	78 281 12 42	LWR 2554	
ZERO CAS	PHSTD	00 34 10	53 37	3.68	20	E0.04	H	C	S	000 30	78 124 21 58	SWP 1481	
ZERO CAS		00 34 10	53 37	3.68	20	E0.04	H	C	S	000 30	78 124 23 38	SWP 1482	
ZERO CAS		00 34 10	53 37	3.68	20	E0.04	H	C	S	000 30	78 124 23 14	SWP 1483	
ZERO CAS		00 34 10	53 37	3.68	20	E0.04	H	C	S	000 30	78 124 23 43	SWP 1484	
BD61 154	LABDS	00 40 23	61 38 00	10.6	26		L	O	L	020 00	78 272 10 13	LWR 2496	
BD61 154		00 40 23	61 38 00	10.6	26		L	C	S	020 00	78 272 10 48	LWR 2496	
BD61 154		00 40 23	61 38 00	10.6	26		L	O	L	040 00	78 272 11 15	SWP 2800	
BD61 154		00 40 23	61 38 00	10.6	25		L	C	L	060 00	78 272 12 25	LWR 2497	
9BT CET	CEJLL	00 41 05	-18 16	2.04	46		H	O	L	004 00	78 235 03 01	LWR 2155	
9BT CET		00 41 05	-18 16	2.04	46		L	O	L	040 00	78 235 03 13	SWP 2371	
WMA 2	BSJLG	00 46 35	05 07 41	12.4	44		L	O	L	060 00	78 149 17 26	LWR 1578	
-11 162		00 49 44	-10 56 16	11.2	16		L	O	L	005 07	78 149 19 46	SWP 1666	
-11 162		00 49 44	-10 56 16	11.2	16		L	O	S	001 30	78 149 20 12	SWP 1666	
HD5394	IMEVB	00 53 40	60 27	2.7	20	E0.08	H	C	S	000 10	78 247 00 41	SWP 2470	
HD5394	LSDKW	00 53 40	60 27	2.7	25	E-.22	H	C	S	001 00	78 226 14 31	SWP 2293	
HD5394		00 53 40	60 27	2.7	26	E-.22	H	C	S	000 04	78 226 15 19	SWP 2294	
HD5394		00 53 40	60 27	2.7	26	E-.22	H	C	S	000 09	78 226 15 52	LWR 2075	
GAM CAS		00 53 40	60 27	2.7	26	E-.22	H	C	S	000 13	78 236 10 38	SWP 2385	
GAM CAS		00 53 40	60 27	2.7	26	E-.22	H	C	S	000 11	78 261 13 15	SWP 2681	
GAM CAS		00 53 40	60 27	2.7	26	E-.22	H	C	S	000 09	78 261 13 20	LWR 2394	
GAM CAS	XSAKD	00 53 40	60 26 47	2.55	26	E-.22	H	C	S	000 12	78 127 20 48	SWP 1503	
GAM CAS		00 53 40	60 26 47	2.41	30	E-.22	H	C	S	000 10	78 127 21 35	LWR 1454	
U CEP	MF2YK	00 57 44	81 36 24	6.83	22	E0.02	H	O	L	020 00	78 153 11 46	LWR 1597	
U CEP		00 57 44	81 36 24	6.83	22	E0.02	H	O	L	050 00	78 153 12 19	SWP 1693	
U CEP		00 57 44	81 36 24	6.83	22		H	C	S	028 00	78 250 00 57	LWR 2292	
U CEP		00 57 44	81 36 24	6.83	22		H	C	S	020 00	78 250 14 33	LWR 2301	
U CEP		00 57 44	81 36 24	6.83	22		H	C	S	025 00	78 250 15 25	LWR 2302	
U CEP		00 57 44	81 36 24	6.83	22	E0.02	H	C	S	036 00	78 254 00 37	LWR 2314	
U CEP		00 57 44	81 36 24	6.83	22	E0.02	H	C	S	040 00	78 254 01 47	LWR 2315	

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U CEP	MF2YK	00 57 44	81 36 24	6.83	22		H	C	S	034 00	78 254 13 39	LWR 2321	
U CEP		00 57 44	81 36 24	6.83	22		H	C	S	037 00	78 254 14 47	LWR 2322	
U CEP		00 57 44	81 36 24	6.83	22		H	C	S	022 00	78 255 15 27	LWR 2334	
HD5679	PG2SS	00 57 48	81 36 24	7.5	22	E0.05	L	O	L	002 00	78 135 17 07	SWP 1552	
HD5679		00 57 48	81 36 24	7.5	22	E0.05	L	O	L	006 20	78 135 17 22	SWP 1552	
HD5679		00 57 48	81 36 24	7.5	22	E0.05	L	O	L	001 06	78 135 18 06	LWR 1500	
HD5679		00 57 48	81 36 24	7.5	22	E0.05	L	O	L	002 00	78 135 18 19	LWR 1500	
U CEP		00 57 44	81 36 24	7.0	22	E0.07	H	O	L	060 00	78 139 22 06	SWP 1580	
U CEP	CM2GH	00 57 45	81 36 00	6.87	22	E0.14	H	C	S	020 00	78 232 04 54	LWR 2118	
SK 80	OSPSC	00 57 52	-72 26	12.36	15	E0.10	L	O	L	008 00	78 141 21 51	SWP 1597	
SK 80		00 57 52	-72 26	11.86	15	E0.10	L	C	S	010 01	78 141 22 15	SWP 1597	
HD 9980		00 57 52	-72 26	11.86	12	E0.06	L	O	L	005 00	78 141 23 43	SWP 1598	
R 37	MLJBH	01 01	-72 22	12.3	15	E 0.1	L	O	S	015 00	78 209 19 34	SWP 2135	
331		01 01 02	-72 22 42	12.3	13	E 0.1	L	O	L	015 00	78 286 11 24	SWP 2954	
ODUFLINK	FHCAL	01 03 13	04 38 33	6.32	41	E-.06						SWP 2096	
37 CETI	MGLBD	01 11 53	-08 11	4.39	40	.46	H	C	S	020 00	78 306 08 19	LWR 2803	
SMC X 1	XREVB	01 15 45	-73 42 24	13.2	23	E0.25	L	O	L	040 00	78 192 09 42	SWP 1808	
SMC X 1		01 15 45	-73 42 24	13.2	23	E0.25	L	O	L	020 00	78 192 10 33	LWR 1814	
SMC X 1	XSAKL	01 15 45	-73 42 24	13.2	23	E0.25	L	O	L	045 00	78 131 09 40	SWP 1520	
SMC X 1		01 15 45	-73 42 24	13.2	23		L	O	L	035 00	78 133 14 57	SWP 1533	
SMC X 1	XS2KG	01 15 45	-73 42 24	13.2	23	E0.25	L	O	I	032 00	78 199 16 46	SWP 2044	
BS0113	PHCAL	01 41 51	-59 03 56		85		L	O	L	045 00	78 179 18 14	LWR 1744	113 IG45
P9	GQ2AB	01 41 51	-59 03 58	13.23	85		L	O	L	120 00	78 169 01 38	SWP 1804	
P9		01 41 51	-59 03 58	13.23	85		L	O	L	045 00	78 169 03 48	LWR 1685	
P9		01 41 51	-59 03 58	13.23	85		L	O	L	045 00	78 169 04 40	SWP 1805	
P9		01 41 51	-59 03 58	13.23	85		L	C	S	015 00	78 169 05 37	SWP 1805	
HD10250	LABDS	01 39 01	70 22 15	5.19	22	E0.03	L	C	S	000 10	78 272 14 31	LWR 2498	
HD10250		01 39 01	70 22 15	5.19	22	E0.03	L	C	L	000 08	78 272 14 35	LWR 2498	
HD10250		01 39 01	70 22 15	5.19	22	E0.03	L	C	S	000 16	78 272 14 40	SWP 2801	
HD10250		01 39 01	70 22 15	5.19	22	E0.03	L	O	I	000 08	78 272 14 43	SWP 2801	
HD 8890	CCAKD	01 48 48	89 01	2.5	41		L	C	S	045 00	78 137 14 48	SWP 1566	
ALF HYI	APEBW	01 57 11	-61 48 45	2.9	40		H	C	S	012 00	78 144 08 55	LWR 1553	
ALF HYI		01 57 11	-61 48 45	2.9	50		L	C	S	001 30	78 144 09 51	SWP 1621	
ALF HYI		01 57 11	-61 48 45	2.9	40		L	O	I	005 00	78 144 09 58	SWP 1621	
HD13854	ICJEB	02 13 20	56 49 26	6.49	23	E0.30	H	C	S	070 00	78 266 08 45	SWP 2737	
HD13854		02 13 20	56 49 26	6.49	33	E0.30	H	C	S	020 00	78 266 10 01	LWR 2443	

ORDERED BY RIGHT ASCENSION
SORTED BY PROGRAM ID

OBJ ID	PROG ID	TARGET RA H M S	TARGET DEC D M S	VIS MAG	OBJ CLASS	E(B-V) OR B-V	DISP H/L	LG - OBJ APERTURE O/C L/S	EXPOSE TIME MIN SEC	EPOSURE START TIME YR DAY HR MIN	IMAGE SEQ NUM	OBSERVERS COMMENTS
HD 14143	HLJbH	02 15 42	56 56	6.6	20	E 0.6	L	O I	001 30	78 210 15 14	SWP 2143	
HD 14143		02 15 42	56 56	6.6	20	E 0.6	L	C S	001 30	78 210 15 22	SWP 2143	
14143		02 15 42	56 56	6.6	23	E 0.6	L	O L	005 00	78 287 08 48	SWP 2969	
14143		02 15 42	56 56	6.6	23	E 0.6	L	C S	005 00	78 287 08 59	SWP 2969	
HD 14947	OSPSC	02 23 25	58 39	7.98	15	0.49	L	O L	005 00	78 280 10 04	SWP 2876	
HD 15558		02 48 33	61 19	7.86	15	0.55	L	O L	006 00	78 280 10 52	SWP 2877	
HD 15570		02 26 59	61 10	8.10	15	.73	L	O I	015 00	78 280 12 26	SWP 2879	
HD 15629		02 29 29	61 19	8.42	15	0.45	L	O L	005 00	78 280 11 41	SWP 2878	
NGC 985	QQ4AB	02 32 10	-09 00 25	13.78	BA		L	O L	045 00	78 190 18 21	LWR 1803	
NGC 985		02 32 10	-09 00 25	13.12	BA		L	O L	040 00	78 190 19 18	SWP 1951	
IST 461	HLJBH	02 36	61 00	10.9	23	E 0.8	L	O L	030 00	78 208 19 15	SWP 2127	
LS 460303		02 36 41	61 00 50	10.8	23	E 0.8	L	O L	090 00	78 286 05 17	SWP 2951	
HD 16691	OSPSC	02 39 11	56 42	8.70	15	0.51	L	O L	007 00	78 280 13 24	SWP 2880	
NGC 1068	PP2ED	02 40	-00 13	12.5	BA		L	O L	050 00	78 182 19 53	SWP 1898	
NGC 1068		02 40	-00 13	12.7	BA		L	O S	080 00	78 183 17 02	LWR 1778	
NGC 1068		02 40	-00 13	12.5	BA		L	C S	120 00	78 187 08 13	SWP 1921	
NGC 1068	EGAAS	02 40 07	-00 13 31	2	BA		H	O I	405 00	78 177 06 57	LWR 1734	
NGC 1068		02 40 07	-00 13 31	11	BA		L	O L	020 00	78 180 21 26	SWP 1881	
NGC 1068	EOBCK	02 40 07	-00 13 31	2	BA		H	O L	480 00	78 165 07 08	SWP 1783	
NGC 1068		02 40 07	-00 13 31	8	BA		L	O L	040 00	78 165 15 22	LWR 1666	
P1 CET	DGDSL	02 41 44	-14 04	4.4	22	E0.00	H	C S	003 00	78 189 14 55	SWP 1944	
P1 CET		02 41 44	-14 04	4.4	22	E0.00	H	C S	003 00	78 189 15 44	LWR 1799	
P1 CET		02 41 44	-14 04	4.2	22	E0.00	H	C S	002 30	78 189 16 42	LWR 1800	
P1 CET		02 41 44	-14 04	4.2	22	E0.00	H	C S	005 00	78 189 16 51	SWP 1945	
BZ CAS	CB2GB	02 44 22	69 26 00	6.35	30	E0.00	H	C S	035 00	78 236 02 51	LWR 2163	
HD 18256	HGLBD	02 55 16	17 49	5.50	41	E .03	H	C S	045 00	78 213 05 49	LWR 1935	
21 PER	HVDSL	02 56 15	31 46	5.1	36	E0.11	H	C S	010 00	78 299 04 22	SWP 3151	PHSE0.03
21 PER		02 56 15	31 46	5.1	36	E0.11	H	C S	008 45	78 299 07 55	LWR 2721	PHSE0.07
21 PER		02 56 15	31 46	5.1	36	E0.11	H	C S	013 10	78 299 07 52	SWP 3154	PHSE0.08
RX CAS	PG2SL	03 03 14	67 23 09	8.3	31	E0.61	L	O L	090 00	78 222 06 35	SWP 2253	
RX CAS	CBNJP	03 03 15	67 23 08	8.5	31	E0.61	L	O L	080 00	78 230 05 01	SWP 2324	
RX CAS	PG3SS	03 03 15	67 23 09	8.5	31	E0.61	L	O L	030 00	78 222 05 29	LWR 2034	
RX CAS		03 03 15	67 23 08	8.5	31	E0.61	L	O S	020 00	78 222 06 06	LWR 2034	
RX CAS		03 03 15	67 23 08	8.5	31	E0.61	L	C S	035 00	78 223 15 35	LWR 2049	
RX CAS		03 03 15	67 23 08	8.5	31	E0.61	L	O L	080 00	78 224 14 24	SWP 2275	
RX CAS		03 03 15	67 23 08	8.5	31	E0.61	L	O L	025 00	78 224 15 53	LWR 2059	

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56 ARI	HVDSL	03 09 15	27 04	5.7	27	-0.10	H	C S	009 20	78 293 13 28	SWP 3072	PHSE0.5
56 ARI		03 09 15	27 04	5.7	27	-0.10	H	C S	010 00	78 293 13 41	LWR 2655	
56 ARI		03 09 15	27 04	5.7	27	-0.10	H	C S	016 00	78 297 04 11	SWP 3117	PHSE0.89
56 ARI		03 09 15	27 04	5.7	27	-0.10	H	C S	011 00	78 297 04 43	LWR 2696	PHSE0.52
56 ARI		03 09 15	27 04	5.7	27	-0.10	H	C S	035 30	78 297 05 13	SWP 3118	PHSE0.54
56 ARI		03 09 15	27 04	5.7	27	-0.10	H	C S	014 00	78 297 10 26	SWP 3123	PHSE0.8
56 ARI		03 09 15	27 04	5.7	27	-0.10	H	C S	009 30	78 297 10 45	LWR 2699	PHSE0.8
56 ARI		03 09 15	27 04	5.7	27	-0.10	H	C S	024 00	78 297 11 14	SWP 3124	PHSE0.8
56 ARI		03 09 15	27 04	5.7	27	-0.10	H	C S	016 00	78 298 23 57	SWP 3147	PHSE0.00
56 ARI		03 09 15	27 04	5.7	27	-0.10	H	C S	010 30	78 299 00 27	LWR 2716	PHSE0.03
56 ARI		03 09 15	27 04	5.7	27	-0.10	H	C S	033 00	78 299 00 57	SWP 3148	PHSE0.07
56 ARI		03 09 15	27 04	5.7	27	-0.10	H	C S	010 00	78 299 01 34	LWR 2717	PHSE0.09
56 ARI		03 09 15	27 04	5.7	27	-0.10	H	C S	016 00	78 299 02 03	SWP 3149	PHSE0.12
56 ARI		03 09 15	27 04	5.7	27	-0.10	H	C S	009 30	78 299 02 33	LWR 2718	PHSE0.15
56 ARI		03 09 15	27 04	5.7	27	-0.10	H	C S	030 00	78 299 03 04	SWP 3150	PHSE0.19
56 ARI		03 09 15	27 04	5.7	27	-0.10	H	C S	009 30	78 299 03 37	LWR 2719	PHSE0.1
56 ARI		03 09 15	27 04	5.7	27	-0.10	H	C S	016 00	78 299 05 13	SWP 3152	PHSE0.
56 ARI		03 09 15	27 04	5.7	27	-0.10	H	C S	009 30	78 299 06 42	LWR 2724	PHSE0.
56 ARI		03 09 15	27 04	5.7	27	-0.10	H	C S	030 00	78 299 07 17	SWP 3153	PHSE0.
56 ARI		03 09 15	27 04	5.7	27	-0.10	H	C S	015 00	78 299 12 14	SWP 3158	PHSE0.11
56 ARI		03 09 15	27 04	5.7	27	-0.10	H	C S	009 30	78 299 12 34	LWR 2725	PHSE0.
94 CET	HGLBD	03 10 13	-01 23	5.06	41	.58	H	C S	045 00	78 304 08 03	LWR 2774	PHSE0.
HD 20210	XSAKD	03 12 53	34 30 18	6.24	35	E0.10	L	O L	002 00	78 192 05 58	SWP 1966	
HD 20210		03 12 53	34 30 18	6.24	35	E0.10	L	O S	002 00	78 192 06 09	SWP 1966	
HD 20210		03 12 53	34 30 18	6.24	35	E0.10	L	O I	001 30	78 192 06 43	LWR 1813	
HD 20210		03 12 53	34 30 18	6.24	35	E0.10	L	O I	001 30	78 192 06 53	LWR 1813	
HD 20210		03 12 53	34 30 18	6.24	35	E0.10	L	O L	025 00	78 192 07 25	SWP 1967	
HD 21282	CEJLL	03 23 32	28 32 32	6.60	BA		H	O L	030 00	78 231 08 09	LWR 2111	
HD 21282		03 23 32	28 32 32	6.60	BA		L	O L	090 00	78 231 08 46	SWP 2336	
HD 21282		03 23 32	28 32 32	6.60	BA		L	O L	030 00	78 233 10 23	LWR 2136	
HD 21282		03 23 32	28 32 32	6.60	BA		L	O L	070 00	78 233 11 08	SWP 2351	
HD 21282		03 23 32	28 32 32	6.60	BA		H	O L	030 00	78 235 09 55	LWP 2158	
HD 21282		03 23 32	28 32 32	6.5	BA		L	O L	070 00	78 235 10 34	SWP 2375	
HD 21282		03 23 32	28 32 32	6.5	BA		L	O L	012 00	78 237 13 42	LWR 2081	
HD 21282		03 23 32	28 32 32	6.5	BA		L	O L	045 00	78 237 14 04	SWP 2301	
HD 22049		03 30 34	-09 38	3.7	BA		H	O L	030 00	78 227 15 00	LWP 2082	
HD 22049		03 30 34	-09 38	3.7	BA		L	O L	010 00	78 235 13 01	LWR 2159	
							L	O L	060 00	78 235 13 22	SWP 2376	
TAU 5	DGDSL	03 31 35	-21 47	4.3	22	E0.00	H	C S	007 00	78 189 18 17	SWP 1946	ERIDAN 1
TAU 5		03 31 35	-21 47	4.3	22	E0.00	H	C S	003 15	78 189 19 06	LWR 1801	ERIDAN 1
HD 22468	CEJLL	03 34 13	00 26	6.81	BA	E0.00	H	O L	005 01	78 227 11 06	LWR 2079	
HD 22468		03 34 13	00 26	6.81	BA	E0.00	L	O L	030 00	78 227 11 41	SWP 2300	
HD 22468		03 34 13	00 26	6.81	BA	E0.00	L	O L	015 00	78 227 12 25	LWR 2080	
							H	O L	015 00	78 229 13 03	LWR 2098	

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HD22468	CEJLL	03 34 13	00 26	6.01	44		L	O	I	060 00	78 229 13 28	SWP 2321	
HD22468		03 34 13	00 26	6.01	44		L	O	L	015 00	78 231 05 41	LWP 2110	
HD22468		03 34 13	00 26	6.01	44		L	O	L	060 00	78 231 06 07	SWP 2335	
HD22928	IMPVB	03 39 21	47 38	2.99	21	B0.04	H	C	S	001 05	78 247 01 29	SWP 2471	
HD23180	ICJHB	03 41 19	32 07 53	3.82	23	B0.30	H	C	S	002 20	78 266 11 19	SWP 2738	
HD23180		03 41 19	32 07 53	3.82	23	B0.30	H	C	S	002 20	78 266 11 29	LWR 2444	
HD23180		03 41 19	32 07 53	3.82	23	B0.30	H	C	S	002 20	78 266 12 31	SWP 2739	
HD23180		03 41 19	32 07 53	3.82	23	B0.30	H	C	S	004 40	78 266 12 42	LWR 2445	
HD23180	IMPVB	03 41 11	32 08	3.82	20	B0.33	H	C	S	002 30	78 245 01 18	SWP 2437	
HD23180		03 41 11	32 08	3.82	20	B0.33	H	C	S	001 29	78 245 01 06	LWR 2243	
31 643	IMBDD	03 41 25	32 00 23	8.5	21	B0.93	L	O	L	016 00	78 275 11 48	SWP 2833	
31 643		03 41 25	32 00 23	8.5	21	B0.93	L	O	L	007 00	78 275 12 08	LWR 2524	
31 643		03 41 25	32 00 23	8.5	21	B0.93	L	O	L	014 00	78 275 12 23	LWR 2524	
HR 1135	AFEDV	03 41 47	42 25 20	3.77	41	B0.43	L	O	L	015 00	78 260 15 36	SWP 2673	
HD23408	ICJHB	03 42 50	24 12 47	3.87	25	B0.02	H	C	S	001 00	78 266 14 19	LWR 2446	
HD23408		03 42 50	24 12 47	3.87	25	B0.02	H	C	S	005 15	78 266 14 27	SWP 2740	
HD23408		03 42 50	24 12 47	3.87	25	B0.02	H	C	S	001 40	78 270 01 59	LWR 2472	
HD23408		03 42 50	24 12 47	3.87	25	B0.02	H	C	S	004 45	78 270 02 07	SWP 2779	
HD23408		03 42 50	24 12 47	3.87	25	B0.02	H	C	S	007 30	78 270 03 08	LWR 2473	
HD23408		03 42 50	24 12 47	3.87	25	B0.02	H	C	S	007 00	78 270 03 21	SWP 2780	
HD23408		03 42 50	24 12 47	3.87	25	B0.02	H	C	S	015 00	78 270 04 22	LWR 2474	
HD23408		03 42 50	24 12 47	3.87	25	B0.02	H	C	S	007 00	78 270 04 43	SWP 2781	
HD23408		03 42 50	24 12 47	3.87	25	B0.02	H	C	S	007 30	78 270 15 33	LWR 2480	
HD23408	SS2JJ	03 42 50	24 12 47	3.1	23	-0.07	H	C	S	004 30	78 294 09 53	SWP 3085	
HD23408		03 42 50	24 12 47	3.1	23	-0.07	H	C	S	001 30	78 294 10 34	LWR 2665	
HD23408		03 42 50	24 12 47	3.1	23	-0.07	H	C	S	002 00	78 296 11 45	LWR 2692	
HD23408		03 42 50	24 12 47	3.1	23	-0.07	H	C	S	004 30	78 296 12 19	SWP 3113	
HD23408	IMEVB	03 42 51	24 13	3.87	22	B0.02	H	C	S	003 05	78 245 02 31	SWP 2438	
HD23480	ICJHB	03 43 21	23 47 39	4.18	22	B0.05	H	C	S	002 30	78 270 12 46	LWR 2478	
HD23480		03 43 21	23 47 39	4.18	22	B0.05	H	C	S	004 30	78 270 12 54	SWP 2785	
HD23480		03 43 21	23 47 39	4.18	22	B0.05	H	C	S	004 00	78 270 13 52	LWR 2479	
HD23480		03 43 21	23 47 39	4.18	22	B0.05	H	C	S	008 00	78 270 14 01	SWP 2786	
HD23480		03 43 21	23 47 39	4.18	22	B0.05	H	C	S	008 00	78 270 14 57	SWP 2787	
HD23480	IMEVB	03 43 21	23 48	4.2	22	B0.08	H	C	S	005 00	78 245 05 16	SWP 2441	
HD23753	SS2JJ	03 45 22	23 16 09	5.4	22	-0.07	H	C	S	020 00	78 294 11 07	SWP 3086	
HD23753		03 45 22	23 16 09	5.4	22	-0.07	H	C	S	010 00	78 294 11 39	LWR 2666	
HD23753	IMEVB	03 45 23	23 16	5.5	24	B0.02	H	C	S	014 00	78 245 03 24	SWP 2439	
BD+22563		03 45 23	23 16	5.5	25		H	C	S	020 00	78 245 04 10	SWP 2440	

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HD23862	SS2JJ	03 46 12	23 59 08	5.1	26	-0.08	H	C	S	010 00	78 294 07 30	LWR 2663	
HD23862		03 46 12	23 59 08	5.1	26	-0.08	H	C	S	020 00	78 294 07 53	SWP 3084	
HD23862		03 46 12	23 59 08	5.1	26	-0.08	H	C	S	020 00	78 294 08 27	LWR 2664	
HD23862		03 46 12	23 59 08	5.1	26	-0.08	H	C	S	010 00	78 296 09 42	LWR 2690	
HD23862		03 46 12	23 59 08	5.1	26	-0.08	H	C	S	017 00	78 296 09 57	SWP 3111	
HD23862		03 46 12	23 59 08	5.1	26	-0.08	H	C	S	016 00	78 296 10 27	LWR 2691	
HD23862		03 46 12	23 59 08	5.1	26	-0.08	H	C	S	012 00	78 296 11 01	SWP 3112	
HD24398	IMEVB	03 50 59	31 44	2.9	20	B0.32	H	C	S	002 30	78 247 04 03	SWP 2474	
HD24398	VEIPS	03 50 59	31 44	2.8	23	B0.33	H	C	S	001 20	78 292 12 01	SWP 3042	
HD24398		03 50 59	31 44	2.8	23	B0.33	H	C	S	001 40	78 292 12 31	SWP 3043	
HD24398		03 50 59	31 44	2.8	23	B0.33	H	C	S	001 40	78 292 13 08	SWP 3044	
HD24398		03 50 59	31 44	2.8	23	B0.33	H	C	S	001 40	78 292 13 38	SWP 3045	
HD24398		03 50 59	31 44	2.8	23	B0.33	H	C	S	001 20	78 292 22 56	SWP 3051	
HD24398		03 50 59	31 44	2.8	23	B0.33	H	C	S	001 40	78 292 23 34	SWP 3052	
HD24398		03 50 59	31 44	2.8	23	B0.33	H	C	S	001 20	78 293 00 03	SWP 3053	
HD24398		03 50 59	31 44	2.8	23	B0.33	H	C	S	001 20	78 293 00 31	SWP 3054	
HD24398		03 50 59	31 44	2.8	23	B0.33	H	C	S	001 20	78 293 01 01	SWP 3055	
HD24398		03 50 59	31 44	2.8	23	B0.33	H	C	S	001 20	78 293 01 30	SWP 3056	
HD24398		03 50 59	31 44	2.8	23	B0.33	H	C	S	001 20	78 293 01 58	SWP 3057	
BD24534	IMBDD	03 52 15	30 54 00	6.0	12	B0.62	H	C	S	024 00	78 275 13 10	SWP 2834	
X PER	SX2HG	03 52 15	30 54 00	7	15		L	O	I	000 12	78 204 17 09	SWP 2089	
X PER		03 52 15	30 54 00	7	15		L	O	L	000 12	78 204 17 16	SWP 2089	
HD24534	XSAKD	03 52 15	30 54 00	7.0	26	B 0.6	H	O	I	021 00	78 203 15 18	SWP 2082	
HD24534		03 52 15	30 54 00	7.0	26	B 0.6	H	O	L	014 00	78 203 15 45	LWR 1874	
HD24534		03 52 15	30 54 00	7.0	26	B 0.6	H	O	L	000 12	78 203 16 25	SWP 2083	
HD24534		03 52 15	30 54 00	7.0	26	L 0.6	H	O	L	000 12	78 203 16 32	SWP 2083	
HD24760	IMPVB	03 54 29	31 52	2.9	20	B0.10	H	C	S	000 21	78 247 02 26	SWP 2472	
HD24912		03 55 03	35 39	4.01	12	B0.32	H	C	S	002 00	78 247 03 15	SWP 2473	
HD24912	VEIPS	03 55 03	35 39	4.0	12	B0.33	H	C	S	001 40	78 292 05 20	SWP 3029	
HD24912		03 55 03	35 39	4.0	12	B0.33	H	C	S	001 40	78 292 05 51	SWP 3030	
HD24912		03 55 03	35 39	4.0	12	B0.33	H	C	S	001 30	78 292 06 32	SWP 3031	
HD24912		03 55 03	35 39	4.0	12	B0.33	H	C	S	001 30	78 292 06 51	SWP 3032	
HD24912		03 55 03	35 39	4.0	12	B0.33	H	C	S	001 20	78 292 07 21	SWP 3033	
HD24912		03 55 03	35 39	4.0	12	B0.33	H	C	S	001 20	78 292 07 51	SWP 3034	
HD24912		03 55 03	35 39	4.0	12	B0.33	H	C	S	001 20	78 292 08 19	SWP 3035	
HD24912		03 55 03	35 39	4.0	12	B0.33	H	C	S	001 20	78 292 08 49	SWP 3036	
HD24912		03 55 03	35 39	4.0	12	B0.33	H	C	S	001 20	78 292 09 19	SWP 3037	
HD24912		03 55 03	35 39	4.0	12	B0.33	H	C	S	001 20	78 292 09 50	SWP 3038	
HD24912		03 55 03	35 39	4.0	12	B0.33	H	C	S	001 20	78 292 10 20	SWP 3039	
HD24912		03 55 03	35 39	4.0	12	B0.33	H	C	S	001 20	78 292 10 49	SWP 3040	
TAU9 ERI	HVDSL	03 57 47	-24 09	4.7	27	-0.14	H	C	S	004 30	78 293 10 35	SWP 3069	
TAU9 ERI		03 57 47	-24 09	4.7	27	-0.14	H	C	S	004 01	78 293 10 45	LWP 2654	
TAU9 ERI		03 57 47	-24 09	4.7	27	-0.14	H	C	S	015 00	78 293 11 20	SWP 3070	

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TAU9 ERI	MVDSL	03 57 47	-24 09	4.7	27	-0.14	H	C	S	015 00	78 293 12 02	SWP 3071	
LAM TAU	CM2GH	03 57 54	12 21 00	3.5	21	E0.38	H	C	S	003 30	78 232 08 10	LWR 2122	
LAM TAU		03 57 54	12 21 00	3.5	21	E0.33	H	C	S	001 40	78 234 06 17	LWR 2144	
LAM TAU		03 57 54	12 21 00	3.5	21	E0.26	H	C	S	003 20	78 234 06 26	SWP 2361	
PKS0405	IM2MS	04 05 27	-12 19 32	14.6	35		L	0	L	180 00	78 102 12 42	SWP 1356	
PKS0405		04 05 27	-12 19 32	14.6	35		L	0	L	180 00	78 102 19 11	LWR 1310	
NGC1514	ESSAH	04 06 09	30 39	9.42	70	0.55	L	0	L	025 00	78 094 00 50	SWP 1308	
NGC1514		04 06 09	30 39	9.42	70	0.55	L	0	L	025 00	78 094 18 20	SWP 1313	
NGC1514		04 06 06	30 39	9.42	70	0.55	L	0	L	025 00	78 094 20 27	LWR 1279	
NGC1535	EN2AB	04 11 57	-12 51 45	9	70		L	0	L	005 00	78 244 14 20	LWR 2232	
NGC1535		04 11 57	-12 51 45	9	70		L	0	L	005 00	78 244 14 32	SWP 2232	
NGC1535		04 12 10	-12 52	9	70		L	0	L	008 00	78 245 08 21	LWR 2254	
NGC1535		04 12 10	-12 52	9	70		L	0	L	015 00	78 245 08 38	SWP 2460	
NGC1535		04 12 10	-12 52	9	70		L	0	L	003 00	78 246 14 12	SWP 2463	
3 1324	CB2GH	04 14 27	50 10 00	4.5	30	E0.00	H	C	S	012 00	78 232 08 51	LWR 2123	
3 1324		04 14 27	50 10 00	4.5	30	E0.00	H	C	S	024 00	78 235 03 54	SWP 2381	
3 1324		04 14 27	50 10 00	4.5	30	E0.00	H	C	S	012 00	78 236 04 26	LWR 2164	
RW PER	CBEJP	04 16 47	42 11 48	9.7	31	E0.27	L	0	L	060 00	78 230 02 51	SWP 2323	
RW PER	PG2SS	04 16 47	42 11 48	9.7	31	E0.27	L	0	L	021 00	78 222 03 11	LWR 2033	
RW PER		04 16 47	42 11 48	9.7	31	E0.27	L	C	S	014 00	78 222 03 39	LWR 2033	
RW PER		04 16 47	42 11 48	9.9	31	E0.27	L	C	L	042 00	78 222 04 01	SWP 2352	
RW PER		04 16 47	42 11 48	9.7	31	E0.27	L	C	L	021 00	78 223 16 52	LWR 2050	
RW PER		04 16 47	42 11 48	9.7	31	E0.27	L	C	S	040 00	78 224 17 01	LWR 2059	
HD 1392	AFEBV	04 23 18	22 42 07	4.3	40	E0.27	L	0	L	020 00	78 260 13 47	SWP 2672	
HD 1392		04 23 18	22 42 07	4.3	40	E0.27	L	C	S	004 00	78 260 14 24	SWP 2672	
HD 1392		04 23 18	22 42 07	4.3	40	E0.27	H	0	L	012 00	78 260 14 34	LWR 2387	
30 120	GQJBO	04 30 31	05 15 03	14.6	84		L	0	L	025 00	78 103 00 49	SWP 1357	
30 120		04 30 31	05 14 59	14.6	84		L	0	L	160 00	78 104 12 38	SWP 1360	
30 120		04 30 31	05 14 59	14.6	84		L	0	L	180 00	78 104 16 11	LWR 1317	
HD29712	LTBFM	04 36 10	-62 10 32	4.6	48	E0000	L	C	S	010 00	78 111	LWR 1357	
HD29712		04 36 10	-62 10 32	4.6	48	B0000	L	C	L	040 00	78 111 18 14	LWR 1357	
HR 1502	AFEBV	04 38 56	-41 57 29	4.4	40	E0.34	H	0	L	020 00	78 262 14 03	LWR 2405	
HR 1502		04 38 56	-41 57 29	4.4	40	E0.34	L	C	S	004 00	78 262 14 46	SWP 2599	
HR 1502		04 38 56	-41 57 29	4.4	40	E0.34	L	C	L	020 00	78 262 14 58	SWP 2595	
HR 1502		04 38 56	-41 57 29	4.4	40	E0.34	H	0	L	012 00	78 262 15 30	LWR 2406	
R 51	RIJBH	04 47	-67 11	11.3	20	E0.3	L	C	S	030 00	78 210 17 55	SWP 2146	
HD30614	ICJHB	04 49 03	66 15 38	4.29	12	E0.34	H	C	S	004 00	78 115 00 05	SWP 1411	

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OBJ ID	PROG ID	TARGET RA H M S	TARGET DEC D M S	VIS MAG	OBJ CLASS	E(B-V) OR B-V	DISP H/L	LG - OBJ APERTURE O/S	L/S	EXPOSE TIME MIN SEC	EPOSURE START TIME YR DAY HR MIN	IMAGE SEQ NUM	OBSERVERS COMMENTS
ALP CAM	CD4AE	04 49 03	66 15 39	4.2	13	E0.32	H	C	S	005 00	78 251 01 04	SWP 2520	
ALP CAM		04 49 03	66 15 39	4.2	13	E0.32	H	C	S	004 00	78 251 01 49	SWP 2521	
ALP CAM		04 49 03	66 15 39	4.2	13	E0.32	H	C	S	003 00	78 251 02 27	SWP 2522	
ALP CAM		04 49 03	66 15 39	4.2	13	E0.32	H	C	S	003 00	78 251 03 08	SWP 2523	
ALP CAM		04 49 03	66 15 39	4.2	13	E0.32	H	C	S	003 00	78 251 03 55	SWP 2524	
ALP CAM		04 49 03	66 15 39	4.2	13	E0.32	H	C	S	001 00	78 251 04 26	SWP 2525	
ALP CAM		04 49 03	66 15 39	4.2	13	E0.32	H	C	S	003 00	78 251 05 02	SWP 2526	
ALP CAM		04 49 03	66 15 39	4.2	13	E0.32	H	C	S	003 00	78 251 05 41	SWP 2527	
ALP CAM		04 49 03	66 15 39	4.2	13	E0.32	H	C	S	003 00	78 251 06 19	SWP 2528	
ALP CAM		04 49 03	66 15 39	4.2	13	E0.32	H	C	S	003 00	78 251 06 56	SWP 2529	
ALP CAM		04 49 03	66 15 39	4.2	13	E0.32	H	C	S	003 00	78 251 07 32	SWP 2530	
ALP CAM		04 49 03	66 15 39	4.2	13	E0.32	H	C	S	003 00	78 251 08 11	SWP 2531	
ALP CAM		04 49 03	66 15 39	4.2	13	E0.32	H	C	S	003 00	78 251 08 45	SWP 2532	
ALP CAM		04 49 03	66 15 39	4.2	13	E0.32	H	C	S	003 00	78 251 09 18	SWP 2533	
ALP CAM		04 49 03	66 15 39	4.2	13	E0.32	H	C	S	003 00	78 251 09 51	SWP 2534	
ALP CAM		04 49 03	66 15 39	4.2	13	E0.32	H	C	S	003 00	78 251 10 23	SWP 2535	
ALP CAM		04 49 03	66 15 39	4.2	13	E0.32	H	C	S	003 00	78 251 10 55	SWP 2536	
ALP CAM		04 49 03	66 15 39	4.2	13	E0.32	H	C	S	003 00	78 251 11 26	SWP 2537	
ALP CAM		04 49 03	66 15 39	4.2	13	E0.32	H	C	S	003 00	78 251 11 57	SWP 2538	
ALP CAM		04 49 03	66 15 39	4.2	13	E0.32	H	C	S	003 00	78 251 12 28	SWP 2539	
ALP CAM		04 49 03	66 15 39	4.2	13	E0.32	H	C	S	003 00	78 251 13 00	SWP 2540	
ALP CAM		04 49 03	66 15 39	4.2	13	E0.32	H	C	S	003 00	78 251 13 31	SWP 2541	
ALP CAM		04 49 03	66 15 39	4.2	13	E0.32	H	C	S	003 00	78 251 14 06	SWP 2542	
ALP CAM		04 49 03	66 15 39	4.2	13	E0.32	H	C	S	003 00	78 251 14 37	SWP 2543	
ALP CAM		04 49 03	66 15 39	4.2	13	E0.32	H	C	S	003 00	78 251 15 10	SWP 2544	
ALP CAM		04 49 03	66 15 39	4.2	13	E0.32	H	C	S	003 00	78 252 00 16	SWP 2560	
ALP CAM		04 49 03	66 15 39	4.2	13	E0.32	H	C	S	003 00	78 252 00 53	SWP 2561	
ALP CAM		04 49 03	66 15 39	4.2	13	E0.32	H	C	S	005 30	78 252 01 37	LWR 2306	
ALP CAM		04 49 03	66 15 39	4.2	13	E0.32	H	C	S	003 30	78 252 02 19	SWP 2562	
ALP CAM		04 49 03	66 15 39	4.2	13	E0.32	H	C	S	003 00	78 252 02 54	SWP 2563	
ALP CAM		04 49 03	66 15 39	4.2	13	E0.32	H	C	S	003 00	78 252 03 28	SWP 2564	
ALP CAM		04 49 03	66 15 39	4.2	13	E0.32	H	C	S	007 00	78 252 04 12	LWR 2307	
ALP CAM		04 49 03	66 15 39	4.2	13	E0.32	H	C	S	003 00	78 252 04 49	SWP 2565	
ALP CAM		04 49 03	66 15 39	4.2	13	E0.32	H	C	S	003 00	78 252 05 29	SWP 2566	
ALP CAM		04 49 03	66 15 39	4.2	13	E0.32	H	C	S	003 00	78 252 06 07	SWP 2567	
ALP CAM		04 49 03	66 15 39	4.2	13	E0.32	H	C	S	003 00	78 252 06 45	SWP 2568	
ALP CAM		04 49 03	66 15 39	4.2	13	E0.32	H	C	S	007 00	78 252 07 22	LWR 2308	
ALP CAM		04 49 03	66 15 39	4.2	13	E0.32	H	C	S	003 00	78 252 07 24	SWP 2569	
ALP CAM		04 49 03	66 15 39	4.2	13	E0.32	H	C	S	003 00	78 252 08 36	SWP 2570	
ALP CAM		04 49 03	66 15 39	4.2	13	E0.32	H	C	S	003 00	78 252 09 08	SWP 2571	
ALP CAM		04 49 03	66 15 39	4.2	13	E0.32	H	C	S	003 00	78 252 09 39	SWP 2572	
ALP CAM		04 49 03	66 15 39	4.2	13	E0.32	H	C	S	007 00	78 252 09 47	LWR 2309	
ALP CAM		04 49 03	66 15 39	4.2	13	E0.32	H	C	S	003 00	78 252 10 46	SWP 2573	
ALP CAM		04 49 03	66 15 39	4.2	13	E0.32	H	C	S	003 00	78 252 11 17	SWP 2574	
ALP CAM		04 49 03	66 15 39	4.2	13	E0.32	H	C	S	003 00	78 252 11 47	SWP 2575	
ALP CAM		04 49 03	66 15 39	4.2	13	E0.32	H	C	S	003 00	78 252 12 18	SWP 2576	
ALP CAM		04 49 03	66 15 39	4.2	13	E0.32	H	C	S	007 00	78 252 12 27	LWR 2310	
ALP CAM		04 49 03	66 15 39	4.2	13	E0.32	H	C	S	003 00	78 252 13 25	SWP 2577	
ALP CAM		04 49 03	66 15 39	4.2	13	E0.32	H	C	S	003 00	78 252 14 00	SWP 2578	
ALP CAM		04 49 03	66 15 39	4.2	13	E0.32	H	C	S	003 00	78 252 14 33	SWP 2579	
ALP CAM		04 49 03	66 15 39	4.2	13	E0.32	H	C	S	003 00	78 252 15 03	SWP 2580	

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OBJ ID	PROG ID	TARGET RA H M S	TARGET DEC D M S	VIS MAG	OBJ CLASS	B-V OR B-V	DISP H/L	LG - OBJ APERTURE O/C L/S	EXPOSE TIME MIN SEC	EPOSURE START TIME YR DAY HR MIN	IMAGE SEQ NUM	OBSERVERS COMMENTS
ALF CAM	OD4A2	04 49 03	66 15 39	4.2	13	E0.32	H	C S	007 00	78 252 15 12	LWR 2311	
ALF CAM		04 49 03	66 15 39	4.2	13	E0.32	H	C S	004 00	78 253 01 12	SWP 2590	
ALF CAM		04 49 03	66 15 39	4.2	13	E0.32	H	C S	003 00	78 253 01 49	SWP 2591	
ALF CAM		04 49 03	66 15 39	4.2	13	E0.32	H	C S	003 00	78 253 04 26	SWP 2594	
ALF CAM		04 49 03	66 15 39	4.2	13	E0.32	H	C S	003 00	78 253 05 01	SWP 2595	
ALF CAM		04 49 03	66 15 39	4.2	13	E0.32	H	C S	003 00	78 253 07 29	SWP 2598	
ALF CAM		04 49 03	66 15 39	4.38	13	E0.32	H	C S	003 00	78 253 08 08	SWP 2599	
ALF CAM		04 49 03	66 15 39	4.38	13	E0.32	H	C S	003 00	78 253 10 05	SWP 2602	
ALF CAM		04 49 03	66 15 39	4.38	13	E0.32	H	C S	003 00	78 253 12 43	SWP 2606	
ALF CAM		04 49 03	66 15 39	4.38	13	E0.32	H	C S	003 00	78 253 15 46	SWP 2611	
HD 30614	ICJHB	04 49 04	66 15 39	4.29	12	E0.34	H	C L	001 12	78 115 01 05	LWR 1884	
HD 30614		04 49 04	66 15 39	4.29	12	E0.34	H	C S	002 30	78 115 01 57	SWP 1412	
HD 30614	IMEVB	04 49 04	66 15	4.29	12	E0.32	H	C S	004 30	78 247 04 55	SWP 2475	
HD 30614		04 49 04	66 15	4.29	12	E0.32	H	C S	001 47	78 247 05 06	LWR 2263	
HD 31293	LABDS	04 52 34	30 28 22	7.2	26	E0.18	L	O L	000 50	78 272 08 49	LWR 2495	
HD 31293		04 52 34	30 28 22	7.2	26	E0.19	L	C S	001 20	78 272 08 54	LWR 2495	
HD 31293		04 52 34	30 28 22	7.2	26	E0.18	L	C S	004 30	78 272 09 02	SWP 2798	
HD 31293		04 52 34	30 28 22	7.2	26	E0.18	L	O L	003 00	78 272 09 12	SWP 2799	
AB AUR	TTCLI	04 52 34	30 28 22	7.0	22	E0.14	L	O L	001 30	78 211 04 39	LWR 1919	
AB AUR		04 52 34	30 28 22	7.0	22	E0.14	L	C S	001 00	78 211 04 47	LWR 1919	
AB AUR		04 52 34	30 28 22	7.1	22	E0.14	L	C S	005 00	78 211 05 22	SWP 2149	
AB AUR		04 52 34	30 28 22	7.1	22	E0.14	L	C S	005 00	78 211 05 35	SWP 2149	
AB AUR		04 52 34	30 28 22	7.1	22	E0.14	L	O S	120 00	78 211 05 51	LWR 1920	
HD 31964	CBNJP	04 58 22	43 45 12	3.0	40	E0.00	L	O L	005 00	78 225 02 38	SWP 2276	
HD 31964		04 58 22	43 45 12	3.0	40	E0.00	L	C S	002 30	78 225 02 50	SWP 2276	
HD 31964		04 58 22	43 45 12	3.0	40	E0.00	L	C S	001 30	78 225 02 57	LWR 2060	
HD 31964		04 58 22	43 45 12	3.0	40	E0.00	L	O L	003 00	78 225 03 03	LWR 2060	
HD 31964	PG2SS	04 58 22	43 45 12	3.0	40		L	O L	000 24	78 223 17 39	SWP 2267	
HD 31964		04 58 22	43 45 12	3.0	40		L	C S	001 00	78 223 17 46	SWP 2267	
R 67	HLJBH	04 59	-70 16	11.4	50		L	C S	011 00	78 209 18 25	SWP 2134	
R67		04 59 48	-70 16	11.4	27	E 0.3	L	O L	020 00	78 290 00 00	SWP 3000	
R67		04 59 48	-70 16	11.4	27	E 0.3	L	O L	015 00	78 290 00 29	LWR 2627	
HD270952	OSESC	05 01 13	-65 56	12.06	15	E0.17	L	O L	010 01	78 144 23 07	SWP 1628	
HD32633	MVDSL	05 02 51	33 51	7.1	27	-0.04	H	C S	061 00	78 296 22 44	SWP 3115	PHSE0.50
HD32633		05 02 51	33 51	7.1	27	-0.04	H	C S	035 00	78 296 23 50	LWP 2694	
HD32633		05 02 51	33 51	7.1	26	-0.04	H	C S	154 00	78 297 00 30	SWP 3116	
HD32633		05 02 51	33 51	7.1	27	-0.04	H	C S	035 00	78 297 03 10	LWR 2695	PHSE0.53
RW AUR	TTCLI	05 04 38	30 20 14	10.4	58		L	O L	060 00	78 211 08 40	LWR 1921	
RW AUR		05 04 39	30 20 14	10.4	58		L	C L	090 00	78 212 05 28	LWR 1925	
RW AUR		05 04 38	30 20 14	10.4	58		L	C L	180 00	78 212 06 56	SWP 2158	
RW AUR		05 04 38	30 20 14	10.4	58		L	O L	020 00	78 212 10 09	LWR 1926	

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OBJ ID	PROG ID	TARGET RA H M S	TARGET DEC D M S	VIS MAG	OBJ CLASS	B-V OR B-V	DISP H/L	LG - OBJ APERTURE O/C L/S	EXPOSE TIME MIN SEC	EPOSURE START TIME YR DAY HR MIN	IMAGE SEQ NUM	OBSERVERS COMMENTS
104 TAU	MGLBD	05 04 19	18 35	4.90	44	B-.01	H	C S	050 00	78 304 04 53	LWR 2772	
68 ERI		05 06 15	-04 31	5.11	41	.45	H	C S	035 00	78 304 06 44	LWR 2773	
HD33904	MVDSL	05 10 41	-16 16	3.3	27	E0.00	H	C S	003 00	78 100 18 51	SWP 1345	
HD33904		05 10 41	-16 16	3.3	27	E0.00	H	C S	001 47	78 100 20 33	LWR 1301	
HD33904		05 10 41	-16 16	3.3	27	E0.00	H	C S	005 00	78 100 21 48	SWP 1346	
NGC1851	XSAKD	05 12 28	-40 06 12	7.13	83	E0.14	L	O L	180 00	78 101 12 33	SWP 1521	
NGC1851		05 12 28	-40 06 12	7.13	83	E0.14	L	O L	060 00	78 203 13 03	LWR 1873	
ALF AUR	CEJLL	05 12 59	45 57	0.1	44	E0.90	H	C S	016 00	78 093 12 03	SWP 1304	
ALF AUR		05 12 59	45 57	0.1	44	E0.80	H	C S	120 00	78 093 13 23	SWP 1305	
ALF AUR		05 12 59	45 57	0.1	44	E0.80	H	C S	001 12	78 093 16 29	LWR 1276	
ALF AUR		05 12 59	45 57	0.1	44	E0.80	H	C S	003 00	78 093 17 47	LWR 1277	
HD34029		05 12 59	45 56 58	0.06	44		H	C S	090 00	78 121 17 39	SWP 1454	
ALF AUR		05 12 59	45 56	0.09	44	E0.00	L	O L	006 00	78 227 03 11	SWP 2296	
ALF AUR		05 12 59	45 56	0.09	44	E0.00	L	C S	006 00	78 227 03 25	SWP 2296	
ALF AUR		05 12 59	45 56	0.09	44	E0.00	L	O L	002 00	78 227 03 43	LWR 2077	
ALF AUR		05 12 59	45 56	0.09	44	E0.00	L	O L	001 30	78 227 04 42	SWP 2297	
ALF AUR		05 12 59	45 56	0.09	44	E0.00	L	C S	001 30	78 227 04 57	SWP 2297	
ALF AUR		05 12 59	45 56	0.09	44	E0.00	L	O L	000 40	78 227 05 08	LWR 2078	
ALF AUR		05 12 59	45 56	0.09	44	E0.00	L	O L	030 00	78 227 05 55	SWP 2298	
ALF AUR		05 12 59	45 56	0.09	44	E0.00	L	O L	180 00	78 227 07 16	SWP 2299	
ALF AUR		05 12 59	45 56 58	0.09	44	E0.00	H	C S	060 00	78 233 13 00	SWP 2352	
HD34078	IMEVB	05 13 01	34 13	5.6	12	E0.00	H	C S	019 00	78 245 06 09	SWP 2442	
R 84	HLJBH	05 14	-69 35	11.7	13		L	O L	010 00	78 208 04 44	SWP 2116	
R 84		05 14	-69 35	11.7	13		L	C L	010 30	78 208 05 07	SWP 2116	
R84		05 14 18	-69 35	11.7	27	E 0.2	L	O L	008 00	78 290 12 22	LWR 2630	
HD34811	MGLBD	05 15 37	40 03	4.74	44	B .04	H	C S	060 00	78 213 09 12	LWP 1937	
LAM AUR		05 15 37	40 03	4.74	44	.62	H	C S	040 00	78 308 07 50	LWR 2818	
HD34852	MVDSL	05 15 42	33 42	5.4	27	-0.19	H	C S	008 00	78 295 12 14	SWP 3098	PHSE0.4
HD34852		05 15 42	33 42	5.4	27	-0.19	H	C S	005 42	78 295 12 27	LWR 2678	PHSE0.4
HD34852		05 15 42	33 42	5.4	27	-0.19	H	C S	014 00	78 295 12 56	SWP 3100	PHSE0.4
HD34852		05 15 42	33 42	5.4	27	-0.19	H	C S	005 00	78 297 08 56	SWP 3121	PHSE0.15
HD34852		05 15 42	33 42	5.4	27	-0.19	H	C S	005 00	78 297 08 58	LWP 2698	PHSE0.15
HD34852		05 15 42	33 42	5.4	27	-0.19	H	C S	018 00	78 297 09 07	SWP 3122	PHSE0.17
HD34852		05 15 42	33 42	5.4	27	-0.19	H	C S	006 30	78 298 23 03	SWP 3146	PHSE0.8
HD34852		05 15 42	33 42	5.4	27	-0.19	H	C S	005 01	78 298 23 14	LWP 2715	PHSE0.8
HD34852		05 15 42	33 42	5.4	27	-0.19	H	C S	006 15	78 299 09 06	SWP 3155	PHSE0.98
HD34852		05 15 42	33 42	5.4	27	-0.19	H	C S	004 45	78 299 09 40	LWP 2723	PHSE0.98
HD34852		05 15 42	33 42	5.4	27	-0.19	H	C S	020 00	79 299 10 14	SWP 3156	PHSE0.00
HD34852		05 15 42	33 42	5.4	27	-0.19	H	C S	005 12	78 299 10 43	LWP 2724	PHSE0.01
HD34852		05 15 42	33 42	5.4	27	-0.19	H	C S	008 00	79 299 11 12	SWP 3157	PHSE0.02
LAM LEP	PHCAL	05 17 16	-13 13 17	4.29	20	E0.03	L	C L	000 01	78 126 21 28	SWP 1495	
LAM LEP		05 17 16	-13 13 37	4.29	20	E0.03	L	C L	000 02	78 126 22 29	SWP 1496	

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OBJ ID	PROG ID	TARGET RA H M S	TARGET DEC D M S	VIS MAG	OBJ CLASS	B-V OR B-V	DISP H/L	LG - OBJ APERTURE O/C	L/S	EXPOSE TIME MIN SEC	EXPOSURE START TIME YR DAY HR MIN	IMAGE SEQ NUM	OBSERVERS COMMENTS
LAF 1767	PHCAL	05 17 16	-13 13 37	4.29	20	E0.03	L	C	S	000 02	78 126 23 27	SWP 1497	
LAF 1767		05 17 16	-13 13 37	4.29	20	E0.03	H	C	S	000 41	78 221 13 35	LWR 2029	
LAF 1767		05 17 16	-13 13 37	4.29	20	E0.03	H	C	S	000 36	78 221 13 41	SWP 2250	
LAF 1767		05 17 16	-13 13 37	4.29	20	E0.03	H	C	S	000 41	78 221 17 53	LWR 2032	
HR 1767	AFEBV	05 18 38	-50 39 32	5.5	41	E0.51	H	C	L	060 00	78 267 05 46	LWR 2452	
HR 1767		05 18 38	-50 39 32	5.5	41	E0.51	L	C	S	020 00	78 267 06 53	SWP 2746	
HR 1767		05 18 38	-50 39 32	5.5	41	E0.51	L	C	I	120 00	78 267 07 20	SWP 2746	
OV AUR	LTBFW	05 18 33	32 27 51	11.0	50		L	C	L	030 00	78 111 23 29	LWR 1359	
B 64	MLJBH	05 21	-65 48	10.0	20		L	C	I	007 00	78 208 06 15	SWP 2117	
B 64		05 21	-65 48	10.0	20		L	C	S	007 00	78 208 06 32	SWP 2117	
HD 36296	MGLBL	05 21 30	17 20	4.98	41	E .02	H	C	S	050 00	78 213 07 21	LWR 1936	
HD 36296		05 21 30	17 20	4.98	41	E .02	H	C	S	050 00	78 308 10 54	LWR 2820	
HD 35411	MF2YK	05 21 58	-02 25	3.35	20		H	C	S	000 21	78 248 14 31	SWP 2498	
HD 35411		05 21 58	-02 26	3.35	20		H	C	S	000 22	78 248 14 36	LWR 2281	
R99	MLJBH	05 23 06	-68 05 00	11.5	27	E0.3	L	C	L	007 00	78 286 12 24	SWP 2955	
R99		05 23 06	-68 05	11.5	27	E0.3	L	C	L	020 00	78 290 01 20	SWP 3001	
B 1911	CM2GH	05 24 12	03 03 00	4.58	20	E .02	H	C	S	001 40	78 232 06 43	LWR 2120	
B 1911	ORI	05 24 12	03 03 00	4.59	20	E0.02	H	C	S	003 30	78 236 08 44	SWP 2383	
TD 4418	FN2AB	05 25 10	-12 44 15	11	70		L	C	L	020 00	78 246 04 41	LWR 2252	
TD 4418		05 25 10	-12 44 15	11	70		L	C	L	027 00	78 246 05 16	SWP 2458	
TD 4418		05 25 10	-12 44 15	11	70		H	C	L	001 30	78 246 06 22	SWP 2459	
TD 4418		05 25 10	-12 44 15	11	70		L	C	L	020 00	78 246 06 26	SWP 2459	
TD 4418		05 25 10	-12 44 15	11	70		H	C	L	000 45	78 246 06 54	LWR 2253	
TD 4418		05 25 10	-12 44 15	11	70		L	C	L	020 00	78 246 06 57	LWR 2253	
TD 4418		05 25 10	-12 44 15	11	70		L	C	L	000 30	78 246 12 18	LWR 2256	
TD 4418		05 25 10	-12 44 15	11	70		L	C	L	001 00	78 246 12 23	SWP 2464	
TD 4418		05 25 10	-12 44 15	11	70		L	C	L	001 00	78 246 13 20	LWR 2257	
TD 4418	PF2ED	05 25 12	-12 43 59		70		L	C	L	003 00	78 301 11 46	SWP 3177	
TD 4418		05 25 12	-12 43 59		70		H	C	S	010 00	78 301 11 55	SWP 3177	
TD 4418		05 25 12	-12 43 59		70		L	C	S	010 00	78 301 12 27	LWR 2740	
TD 4418		05 25 12	-12 43 59		70		L	C	L	003 00	78 301 12 54	LWR 2740	
TD 4418		05 25 12	-12 43 59		70		H	C	S	003 00	78 301 13 01	SWP 3178	
TD 4418		05 25 12	-12 43 59		70		T	C	S	002 00	78 301 13 07	SWP 3178	
TD 4418		05 25 12	-12 43 59		70		L	O	L	002 00	78 301 13 43	LWR 2741	
HD 36486	IMEVB	05 29 27	-00 20	2.23	12	E0.07	H	C	S	000 09	78 247 07 44	SWP 2477	
HD 36486		05 29 27	-00 20	2.23	12	E0.07	H	C	S	000 08	78 247 07 49	LWR 2265	
R113	MLJBH	05 31 24	-71 07	11.1	23		L	C	S	012 00	78 290 02 50	SWP 3002	
R113		05 31 48	-71 07	11.7	13		L	C	L	007 00	78 290 02 33	SWP 3002	
HD 269698	OSPSC	05 31 51	-67 40	12.27	15	E0.08	L	O	L	007 00	78 145 20 25	SWP 1636	

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OBJ ID	PROG ID	TARGET RA H M S	TARGET DEC D M S	VIS MAG	OBJ CLASS	B-V OR B-V	DISP H/L	LG - OBJ APERTURE O/C	L/S	EXPOSE TIME MIN SEC	EXPOSURE START TIME YR DAY HR MIN	IMAGE SEQ NUM	OBSERVERS COMMENTS
HD 36861	ICJBH	05 32 22	-09 54 08	3.66	15	E0.12	H	C	S	000 25	78 264 15 08	LWR 2424	
HD 36861		05 32 22	-09 54 08	3.66	15	E0.12	H	C	S	000 25	78 264 15 15	SWP 2718	
HD 36861	IMEVB	05 32 23	-09 54	3.55	12	E0.12	H	C	S	000 30	78 247 06 28	SWP 2476	
HD 36861		05 32 23	-09 54	3.55	12	E0.12	H	C	S	000 27	78 247 06 35	LWR 2264	
HD 36879	ICJHB	05 32 40	-21 22 19	7.56	13	E0.54	H	C	S	048 00	78 264 01 37	LWR 2420	
HD 36879		05 32 40	-21 22 19	7.56	13	E0.54	H	C	S	140 00	78 264 02 26	SWP 2711	
LMC X 4	SX2BG	05 32 42	-66 24 15	14.0	23	E0.15	L	O	L	050 00	78 204 14 47	SWP 2088	
LMC X 4		05 32 42	-66 24 15	14.0	23	E0.85	L	O	L	025 00	78 204 15 47	LWR 1879	
LMC X 4	XS2HG	05 32 42	-66 24 15	14.0	12	E0.18	L	O	L	050 00	78 199 18 18	SWP 2045	
LMC X 4		05 32 42	-66 24 15	14.0	12	E0.15	L	O	L	025 00	78 199 19 17	LWR 1849	
HD 37020	LABDS	05 32 48	-05 25 06	6.75	20	E .38	L	C	S	000 16	78 113 00 16	LWR 1367	
HD 37020		05 32 48	-05 25 06	6.75	20	E .38	L	C	S	000 06	78 113 00 24	LWR 1367	
HD 37022		05 32 49	-05 25 16	5.14	14	E0.32	L	C	S	000 08	78 110 20 50	LWR 1349	
HD 37035		05 32 49	-05 25 16	5.14	14	E0.32	L	C	S	000 02	78 110 21 06	LWR 1349	
HD 37022		05 32 49	-05 25 16	5.14	14	E0.32	L	C	S	000 04	78 110 22 36	SWP 1394	
HD 37022		05 32 49	-05 25 16	5.14	14	E0.32	L	C	S	000 01	78 110 22 45	SWP 1394	
HD 37035		05 32 49	-05 25 16	5.14	14	E0.32	L	C	S	000 05	78 110 23	LWR 1350	
HD 37022		05 32 49	-05 25 16	5.14	14	E0.32	L	C	S	000 03	78 110 23	LWR 1350	
HD 37022		05 32 49	-05 25 16	5.14	14	E0.32	L	C	S	000 02	78 111 00 54	LWR 1351	
HD 37022		05 32 49	-05 25 16	5.14	14	E0.32	L	C	S	000 01	78 111 01 02	LWR 1351	
HD 37023		05 32 49	-05 25 22	6.70	20	E0.35	L	C	S	000 18	78 111 02 08	LWR 1352	
HD 37023		05 32 49	-05 25 22	6.70	20	E0.36	L	C	L	000 06	78 111 02 13	LWR 1352	
HD 37023		05 32 49	-05 25 22	6.70	20	E0.36	L	C	L	000 14	78 112 22 56	SWP 1403	
HD 37023		05 32 49	-05 25 22	6.70	20	E0.36	L	C	L	000 04	78 112 23 02	SWP 1403	
HD 37022	ORI	05 32 49	-05 25 16	5.08	15	E0.32	H	C	S	002 00	78 269 10 57	SWP 2768	
HD 37022	ORI	05 32 49	-05 25 16	5.08	15	E0.32	H	C	S	002 00	78 269 11 16	LWR 2466	
HD 37022	ORI	05 32 49	-05 25 16	5.08	15	E0.32	H	C	S	002 25	78 269 12 29	SWP 2769	
HD 37023		05 32 49	-05 25 02	6.70	27	E0.38	H	O	L	004 30	78 269 13 19	SWP 2770	
NGC 1976	PP2ED	05 32 49	-05 24 31		72		L	O		003 00	78 301 07 04	SWP 3174	
NGC 1976		05 32 49	-05 24 31		72		L	O		006 00	78 301 07 12	LWR 2737	
NGC 1976		05 32 49	-05 24 31		72		H	O		090 00	78 301 07 56	SWP 3175	
NGC 1976		05 32 49	-05 24 31		72		L	O		020 00	78 301 08 53	LWR 2738	
ORION		05 32 49	-05 27 36		72		L	O		030 00	78 301 10 33	SWP 3176	
ORION		05 32 49	-05 27 36		72		L	O		030 00	78 301 10 53	LWR 2739	
HD 37041	LABDS	05 32 55	-05 26 51	6.2	12		L	C	S	000 05	78 110 00 27	LWR 1344	
HD 37041		05 32 55	-05 26 51	6.2	12		L	C	L	000 01	78 110 00 33	LWR 1344	
HD 37041		05 32 55	-05 26 51	6.2	12		L	C	L	000 01	78 110 01 12	SWP 1389	
HD 37041		05 32 55	-05 26 51	6.2	12		L	C	S	000 04	78 110 01 28	SWP 1389	
HD 37041		05 32 55	-05 26 51	6.2	12		H	C	S	005 00	78 110 02 16	SWP 1390	
HD 37041	ORION	05 32 55	-05 26 50	5.08	12	E0.19	H	C	S	002 30	78 269 14 01	SWP 2771	
HD 37041	SX2BG	05 32 55	-05 26 50	5.07	12	E0.22	H	C	S	003 30	78 119 20 21	SWP 1437	
HD 37041		05 32 55	-05 26 50	5.07	12	E0.22	H	C	S	003 30	78 119 21 03	SWP 1438	

OBJ ID	PRCG ID	TARGET RA H M S	TARGET DEC D M S	VIS MAG	OBJ CLASS	B-V OR B-V	DISP H/L	LG - APERTURE O/C	OBJ L/S	EXPOSE TIME MIN SEC	EPOSURE START TIME YR DAY HR MIN	IMAGE SEQ NUM	OBSERVERS COMMENTS
HD37041	SX2HG	05 32 55	-05 26 50	5.07	12	B0.22	H	C	S	003 30	78 119 22 24	SWP 1439	
B 37042	LABDS	05 32 58	-05 26 52	6.1	20	B0.17	L	C	S	000 09	78 113 01 31	LWP 1368	
B 37042		05 32 58	-05 26 52	6.1	20	B0.17	L	O	L	000 03	78 113	LWR 1368	
THYLONIN	SX2HG	05 32 58	-05 26 52	6.37	30		H	C	S	009 00	78 119 23 49	SWP 1440	
HD37043	IMEVB	05 32 59	-05 56	2.77	12	B0.07	H	C	S	000 09	78 247 08 54	SWP 2478	
HD37043		05 32 59	-05 56	2.77	12	B0.07	H	C	S	000 15	78 247 09 00	LWR 2266	
HD37043		05 32 59	-05 56	2.77	12	B0.07	H	C	S	000 22	79 247 09 33	SWP 2479	
HD37128		05 33 40	-01 14	1.7	20	B0.08	H	C	S	000 08	78 247 10 38	SWP 2480	
HD37128		05 33 40	-01 14	1.70	20	B0.08	H	C	S	000 05	78 247 10 44	LWR 2267	
37128	HLJBH	05 33 40	-11 3	1.7	23	B0.00	H	C	S	000 18	78 287 10 46	SWP 2971	
V380ORI	TTCLI	05 34 00	-06 44 26	10.3	58		L	O	I	008 00	76 212 11 26	LWR 1927	
V380ORI		05 34 00	-06 44 26	10.3	58		L	C	S	008 00	78 212 11 43	LWR 1927	
HD37202	LSDKW	05 34 19	-21 06	3.0	20	B1.13	H	C	S	000 40	78 236 12 58	SWP 2387	
XI TAU		05 34 33	-21 06	3.0	26	B1.13	H	C	S	000 36	78 261 14 42	SWP 2682	
29I TAU		05 34 33	-21 06	3.0	26	B1.13	H	C	S	000 40	78 298 11 48	SWP 3138	
29I TAU		05 34 39	-21 06	3.0	26	B1.13	H	C	S	000 20	78 298 11 51	LWR 2707	
ADS42418	CMBMJ	05 36 16	-02 37 17	6.5	27	B0.09	H	C	S	009 00	78 219 17 21	LWR 2008	
ADS42418		05 36 16	-02 37 17	6.5	27	B0.09	H	C	S	005 00	78 219 17 57	SWP 2230	
ADS42418		05 36 16	-02 37 17	6.5	27	B0.09	H	C	S	005 00	78 219 18 39	SWP 2231	
HD37974	LABDS	05 36 49	-69 24 30	10.92	26	B [illegible]	L	O	L	020 00	78 112 18 22	LWR 1364	
HD37974		05 36 49	-69 24 30	10.92	26	B [illegible]	L	O	L	010 00	78 112 19 31	LWR 1365	
HD37974		05 36 49	-69 24 30	10.92	26	B [illegible]	L	O	L	007 00	78 112 20 13	SWP 1402	
HD37974		05 36 49	-69 24 30	10.92	26	B [illegible]	L	O	L	005 00	78 112 21 12	LWR 1366	
B 129	HLJBH	05 38	-68 56	11.6	13		L	O	L	015 00	78 208 07 31	SWP 2118	
B 129		05 38	-68 56	11.6	13		L	C	S	015 00	78 208 07 55	SWP 2118	
B129		05 38 06	-68 56 42	11.6	23	B 0.1	L	O	L	010 00	78 290 12 48	SWP 3009	
HD37742	IMEVB	05 38 14	-01 58	1.9	12	B0.09	H	C	S	000 06	78 247 11 50	SWP 2481	
HD37742		05 38 14	-01 58	1.9	12	B0.09	H	C	S	000 04	78 247 11 56	LWR 2268	
37742	HLJBH	05 38 14	-01 58	1.8	13	B 0.1	H	C	S	000 10	78 289 22 54	SWP 2999	
HD38268	LABDS	05 39 03	-69 07 35	9.4	15	B00.4	L	O	I	004 00	78 269 00 42	SWP 2765	
HD38268		05 39 03	-69 07 35	9.4	15	B00.4	L	C	S	007 00	78 269 00 56	SWP 2765	
HD38268		05 39 03	-69 07 35	9.4	15	B00.4	L	C	S	420 00	78 269 01 41	SWP 2766	
HD38268		05 39 04	-69 07 35	9.42	15	B0.38	L	C	S	005 00	79 112 12 25	SWP 1400	
HD38268		05 39 04	-69 07 35	9.42	15	B0.38	L	O	I	001 10	78 112 12 42	LWR 1400	
HD38268		05 39 04	-69 07 35	9.42	15	B0.38	L	C	S	010 30	78 112 13 45	SWP 1401	
HD38268		05 39 04	-69 07 35	9.42	15	B0.38	L	O	I	005 15	78 112 13 28	SWP 1401	
HD38268		05 39 04	-69 07 35	9.42	15	B0.38	L	C	S	020 00	78 112 14 24	LWR 1362	
HD38268		05 39 04	-69 07 35	9.42	15	B0.38	L	O	I	005 00	78 112 15 00	LWR 1362	
HD38268		05 39 04	-69 07 35	9.42	15	B0.38	L	C	S	007 00	78 112 16 36	LWR 1363	

OBJ ID	PRCG ID	TARGET RA H M S	TARGET DEC D M S	VIS MAG	OBJ CLASS	B-V OR B-V	DISP H/L	LG - APERTURE O/C	OBJ L/S	EXPOSE TIME MIN SEC	EPOSURE START TIME YR DAY HR MIN	IMAGE SEQ NUM	OBSERVERS COMMENTS
HD38268	LABDS	05 39 04	-69 07 35	9.42	15	B0.38	L	O	L	009 00	78 112 16 16	LWR 1363	
HD38268		05 39 04	-69 07 35	9.42	15	B0.15	L	C	S	005 00	78 269 09 40	SWP 2767	
HD38268		05 39 04	-69 07 35	9.42	15	B0.15	L	C	S	005 00	78 269 09 53	SWP 2767	
HD38268		05 39 04	-69 07 35	9.42	15	B0.15	L	C	S	324 00	78 272 00 52	SWP 2798	
HD38268		05 39 04	-69 07 35	9.42	15	B0.15	L	O	I	004 00	78 272 07 39	LWR 2494	
NGC2022	PN2AB	05 39 22	09 03 54	12	70		L	O	I	005 00	78 246 15 12	LWR 2258	
NGC2022		05 39 22	09 03 54	12	70		L	O	L	002 00	78 246 15 24	SWP 2464	
HD38666	ICJHB	05 44 08	-32 19 27	5.16	12	B0.02	H	C	S	001 15	78 264 13 19	LWR 2423	
HD38666		05 44 08	-32 19 27	5.16	12	B0.02	H	C	S	001 25	78 264 13 27	SWP 2717	
MU CCL	PHCAI	05 44 08	-32 19 27	5.16	12	B0.02	H	O	I	000 49	78 133 21 20	LWR 1486	
MU CCL		05 44 08	-32 19 27	5.16	12	B0.29	H	O	L	000 46	78 133 22 35	SWP 1537	
HD38666	XBFVB	05 44 08	-32 19 27	5.17	12	B0.02	H	C	S	001 40	78 123 20 07	LWR 1435	
HD38666		05 44 08	-32 10 27	5.17	12	B0.02	H	C	S	001 40	78 123 20 41	SWP 1474	
HD38771	IMEVB	05 45 23	-09 41	2.09	20	B0.27	H	C	S	000 10	78 247 13 03	SWP 2482	
HD38771		05 45 23	-09 41	2.09	20	B0.07	H	C	S	000 06	78 247 13 09	LWR 2269	
HD38587	HGIRD	05 51 40	20 20 30	4.41	44	B 0.1	H	C	S	030 00	78 303 22 30	LWR 2768	
ALF ORI	LTBFW	05 52 27	07 23 58	1	48	B 0.1	H	O	L	120 00	78 113 13 00	LWR 1371	
ALF ORI	CEJLL	05 52 28	07 24	0.8	48		L	C	S	020 00	78 094 12 04	SWP 1311	
ALF ORI		05 52 28	07 24	0.8	48		L	C	S	180 00	78 094 12 08	SWP 1312	
ALF ORI		05 52 28	07 24	0.80	48		H	C	I	002 40	78 224 15 18	LWR 2099	
ALF ORI		05 52 28	07 24	0.80	48		H	C	I	090 00	78 226 15 30	SWP 2322	
ALF ORI		05 52 28	07 24	0.80	48		L	C	I	035 00	78 229 17 11	LWR 2100	
ALF ORI		05 52 28	07 24	0.80	48		L	C	I	001 30	78 231 13 49	LWR 2114	
ALF ORI		05 52 28	07 24	0.80	48		L	O	L	100 00	78 231 14 24	LWR 2115	
HD40111	IMEVB	05 54 53	25 57	4.83	20	B0.15	H	C	S	000 06	78 231 16 35	LWR 2116	
HD40111		05 54 53	25 57	4.83	20	B0.15	H	C	S	000 30	78 245 07 16	SWP 2443	
29I AUR	MVDSL	05 56 19	37 13	2.6	36	-0.06	H	C	S	002 05	78 245 07 44	LWR 2244	
29I AUR		05 56 19	37 13	2.6	36	-0.06	H	C	S	001 05	78 295 13 38	LWR 2679	
29IAUR		05 56 19	37 13	2.6	36	-0.06	H	C	S	001 35	78 297 06 54	SWP 3114	
HD41117	ICJHB	06 00 57	20 08 28	4.61	23	B0.45	H	C	S	007 00	78 297 07 03	SWP 3120	
HD41117		06 00 57	20 08 28	4.61	23	B0.45	H	C	S	020 00	78 116 01 56	SWP 1419	
41117	HLJBH	06 00 57	20 08	4.6	23	B 0.4	H	C	S	005 00	78 117 01 22	LWR 1395	
HD41511	LBMJP	06 02 45	-16 28 47	4.92	22	B0.05	H	C	S	015 00	78 287 09 52	SWP 2970	
13 1120	CM2GB	06 05 38	13 53 48	8.13	20	B0.30	H	C	S	011 30	78 225 17 35	LWR 2067	
13 1120		06 05 38	13 53 48	8.13	20	B0.30	H	C	S	020 00	78 234 02 25	LWR 2142	
										060 00	78 234 02 58	SWP 2359	

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13 1120	CM2GH	06 05 28	13 58 48	8.1	20	E0.20	H	C	S	070 00	78 236 05 25	LWR 2165	
DEL PIC	ALEBJ	06 09 19	-54 57	4.84	20	E0.01	H	C	S	001 45	78 169 16 41	SWP 1808	
HD42933	MF2YK	06 09 20	-54 57	4.73	23		H	C	S	001 20	78 248 13 10	SWP 2497	
HD42933		06 09 20	-54 57	4.73	23		H	C	S	001 05	78 248 13 16	LWR 2280	
71 ORI	NGLED	06 11 54	19 11	5.19	41	E0.00	H	C	S	045 00	78 303 23 39	LWP 2769	
71 ORI		06 11 54	19 11	5.19	41	.45	H	C	S	037 00	78 308 09 38	LWR 2819	
HR 2290	PBCAL	06 18 47	-48 42 49	6.60	44	0.66	L	C	S	003 37	78 176 21 01	LWR 1731	
HR 2290		06 18 47	-48 42 49	6.60	44	0.66	L	O	I	010 10	78 176 21 17	LWR 1731	
IC2165	PM2AB	06 19 24	-12 57 40	12	70		L	O	L	015 00	78 246 10 09	LWR 2255	
IC2165		06 19 24	-12 57 40	12	70		L	O	L	005 00	78 246 11 05	SWP 2461	
ALF CAR	CEJLL	06 24 50	-52 40	-0.73	40		H	O	L	030 00	78 227 16 36	SWP 2302	
ALF CAR		06 24 50	-52 40	-0.73	40		H	O	L	000 40	78 227 17 34	LWR 2083	
HD45166	HSSRH	06 23 30	08 01	9.88	11	-0.10	L	O	L	002 30	78 093 22 37	SWP 1307	
HD45166		06 23 30	08 01	9.88	11	-0.10	L	O	S	003 30	78 093 22 56	SWP 1307	
HD45677	LABDS	06 25 59	-13 01	7.6	26	E0.21	L	O	L	001 40	78 109 20 48	LWR 1342	
HD45677		06 25 59	-13 01	7.6	26	E0.21	L	O	S	004 10	78 109 20 59	LWR 1342	
HD45677		06 25 59	-13 01	7.6	26	E0.21	L	O	S	004 10	78 109 21 51	SWP 1388	
HD45677		06 25 59	-13 01	7.6	26	E0.21	L	O	L	001 40	78 109 22 51	SWP 1388	
HD45677		06 25 59	-13 01	7.6	26	E0.21	L	O	L	001 00	78 109 23 52	LWR 1343	
HD45677		06 25 59	-13 01	7.6	26	E0.21	L	O	S	002 50	78 109 24 04	LWR 1343	
HD45677		06 25 59	-13 01 12	8.0	26	E0.27	L	O	S	001 40	78 269 15 09	LWP 2467	
HD45677		06 25 59	-13 01 12	8.0	26	E0.27	L	O	L	001 10	78 269 15 18	LWP 2467	
HD45677		06 25 59	-13 01 12	8.0	26	E0.27	L	O	L	002 10	78 269 15 27	SWP 2772	
HD45677		06 25 59	-13 01 12	8.0	26	E0.27	L	O	S	003 30	78 269 15 36	SWP 2772	
HD46223	ICJHB	06 29 29	04 51 38	7.25	15	E0.54	H	O	S	033 00	78 264 05 09	LWR 2421	
HD46223		06 29 29	04 51 38	7.25	15	E0.54	H	O	S	060 00	78 264 05 50	SWP 2712	
HD46223		06 29 29	04 51 38	7.25	15	E0.54	H	O	S	060 00	78 264 07 24	SWP 2713	
HD46223		06 29 29	04 51 38	7.25	15	E0.54	H	O	S	060 00	78 264 09 01	SWP 2714	
B 2422	CM2GH	06 34 42	06 10 00	6.04	12	E0.36	H	O	S	006 00	78 232 07 26	LWR 2121	
B2422		06 34 42	06 10 00	6.04	12	E0.36	H	O	S	007 00	78 234 04 43	LWR 2143	
B2422		06 34 42	06 10 00	6.04	12	E0.32	H	O	S	014 00	78 234 04 57	SWP 2360	
HD47129	MF2YK	06 34 43	06 11	6.06	14		H	O	S	009 00	78 250 13 08	LWR 2300	
HD47129		06 34 43	06 11	6.06	14		H	O	S	016 00	78 250 13 23	SWP 2516	
HD47129		06 34 43	06 11	6.06	14		H	O	S	014 00	78 254 11 42	SWP 2626	
HD47129		06 34 43	06 11	6.06	14		H	O	S	010 00	78 254 12 17	LWR 2320	
HD47830	IMPVB	06 38 13	09 57	4.65	12	E0.07	H	O	S	001 05	78 247 14 15	SWP 2483	
HD47830		06 38 13	09 57	4.65	12	E0.07	H	O	S	001 00	78 247 14 21	LWR 2270	
HD48099	OSESC	06 39 18	06 23	6.36	12	-0.02	H	O	S	010 00	78 282 11 31	LWR 2563	

ORDERED BY RIGHT ASCENSION
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OBJ ID	PROG ID	TARGET RA H M S	TARGET DEC D M S	VIS MAG	OBJ CLASS	B(B-V) OR B-V	DISP H/L	LG - OBJ APERTURE O/C	L/S	EXPOSE TIME MIN SEC	EPOSURE START TIME YR DAY HR MIN	IMAGE SEQ NUM	OBSERVERS COMMENTS
HD48099	OSESC	06 39 18	06 23	6.36	12	-0.02	H	O	S	011 00	78 282 11 48	SWP 2896	
HD48329	CEJLL	06 40 51	25 10 57	3.08	44		H	O	L	008 00	78 231 11 05	LWR 2112	
HD48329		06 40 51	25 10 57	3.08	44		H	O	L	048 00	78 231 11 23	SWP 2337	
HD48329		06 40 51	25 10 57	3.09	44		H	O	L	024 00	78 231 12 21	LWR 2113	
SIRIUS A	AFEBV	06 42 55	-16 39 20	-1.6	30	E0.03	H	O	L	000 02	78 265 14 10	SWP 2729	
SIRIUS A		06 42 55	-16 39 20	-1.5	37		H	O	L	010 00	78 265 15 29	SWP 2730	
SIRIUS A		06 42 55	-16 39 19	-1.5	30	E0.01	H	O	S	000 04	78 267 10 41	SWP 2747	
SIRIUS A		06 42 55	-16 39 10	-1.5	30	E0.01	H	O	L	000 02	78 267 11 55	SWP 2748	
SIRIUS B		06 42 56	-16 38 46	8	38		H	O	S	000 20	78 263 15 02	SWP 2706	
SIRIUS B		06 42 56	-16 39 12	8	37	E-.27	H	O	L	005 10	78 267 13 27	SWP 2749	
SIRIUS B		06 42 56	-16 39 12	8	38	E-.27	H	O	L	010 00	78 267 14 52	SWP 2750	
SIRIUS B		06 42 56	-16 39 12	8	37	E-.29	L	O	L	000 10	78 267 15 35	SWP 2751	
56 AUR	NGLRD	06 43 04	43 37	5.22	44	.57	H	C	S	050 00	78 304 10 02	LWR 2774	
56 AUR		06 43 08	43 37	5.22	44	.57	H	C	S	050 00	78 308 06 19	LWR 2817	
HD49798	MF2YK	06 46 36	-44 16	8.29	14		H	C	S	018 00	78 250 08 53	SWP 2513	
HD49798		06 46 36	-44 16	8.29	14		H	C	S	021 00	78 250 09 23	LWR 2297	
HD50138	LABDS	06 49 07	-06 54 21	6.6	22	E0.10	L	O	L	000 17	78 272 15 24	LWR 2499	
HD50138		06 49 07	-06 54 21	6.6	22	E0.10	L	O	S	000 30	78 272 15 28	LWR 2499	
HD50896	OSESC	06 52 06	-23 51	6.90	11	-0.09	H	O	S	008 00	78 278 12 15	SWP 2860	
HD50896		06 52 06	-23 51	6.90	11	-0.09	H	O	S	006 00	78 278 12 29	LWR 2538	
HD50896		06 52 08	-23 51	6.90	11	-0.09	L	O	L	000 04	78 279 11 32	SWP 2859	
HD50896		06 52 08	-23 51	6.90	11	-0.09	L	O	S	000 04	78 278 11 43	SWP 2859	
HD51765	CM2GH	07 03 28	-10 34 59	6.48	20	E0.26	H	O	S	007 00	78 234 07 52	LWR 2145	
HD51765		07 03 28	-10 34 59	6.48	20	E0.26	H	O	S	014 00	78 234 08 05	SWP 2162	
HD51765		07 03 28	-10 34 59	6.48	20	E0.26	H	O	S	008 00	78 236 07 19	LWR 2166	
HD51765		07 03 28	-10 34 59	6.48	20	E0.26	H	O	S	018 00	78 236 07 34	SWP 2382	
HR 2693	AFEBV	07 06 21	-26 18 46	1.0	41	E0.68	L	O	S	015 00	78 262 12 20	LWR 2404	
HR 2693		07 06 21	-26 18 46	1.8	41	E0.68	L	O	S	002 30	78 262 12 53	SWP 2695	
HR 2693		07 06 21	-26 18 45	1.8	41	E0.68	L	O	S	013 00	78 262 13 03	SWP 2695	
HD54662	OSESC	07 09 58	-10 15 56	6.21	12	0.03	H	O	L	000 06	78 278 13 39	SWP 2861	
HD54662		07 09 58	-10 15 56	6.21	12	0.03	H	O	S	010 00	78 282 09 57	LWR 2562	
HD54662		07 09 58	-10 15 56	6.21	12	0.03	H	O	S	012 00	78 282 10 14	SWP 2895	
HKH 376	GO4AB	07 10 35	45 47 37	14.62	84		L	O	L	128 00	78 244 05 57	SWP 2429	
HD57060	ICJHB	07 16 35	-24 27 58	4.90	15		H	O	L	000 50	78 115 23 20	LWR 1389	
HD57060		07 16 35	-24 27 58	4.90	15		H	O	L	002 40	78 115 22 21	SWP 1417	
HD57060		07 16 35	-24 27 58	4.90	15		H	O	S	001 20	78 116 00 16	SWP 1418	
OW CMA		07 16 35	-24 27 58	4.90	15	E0.45	H	O	S	002 30	78 264 10 48	SWP 2715	
OW CMA		07 16 35	-24 27 58	4.90	15	E0.45	H	O	S	002 00	78 266 15 34	SWP 2741	
OW CMA		07 16 35	-24 27 58	4.90	15	E0.45	H	O	S	001 20	78 270 00 54	SWP 2778	

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OBJ ID	PROG ID	TARGET RA H M S	TARGET DEC D M S	VIS MAG	OBJ CLASS	B-V OR B-V	DISP H/L	LG - OBJ APERTURE O/C	LG - OBJ APERTURE L/S	EXPOSE TIME MIN SEC	EPOSURE START TIME YR DAY HR MIN	IMAGE SEQ NUM	OBSERVERS COMMENTS
UW CMA	MF2YR	07 16 35	-24 27 58	4.95	15	E0.19	H	C	S	000 50	78 153 19 20	LWR 1600	
UW CMA		07 16 35	-24 27 58	4.95	15	E0.19	H	C	S	001 30	78 153 19 51	SWP 1697	
UW CMA		07 16 35	-24 27 58	4.95	15	E0.19	H	C	S	001 15	78 153 20 50	LWR 1601	
UW CMA		07 16 35	-24 27 58	4.95	15	E0.19	H	C	S	002 30	78 153 21 37	LWR 1602	
UW CMA		07 16 35	-24 27 58	4.95	15	E0.19	H	C	S	002 20	78 155 17 52	LWR 1618	
UW CMA		07 16 35	-24 27 58	4.95	15	E0.19	H	C	S	001 40	78 155 18 17	SWP 1716	
HD57060		07 16 35	-24 27 58	4.95	15		H	C	S	001 30	78 250 11 47	SWP 2515	
HD57060		07 16 35	-24 27 58	4.95	15		H	C	S	002 10	78 250 11 54	LWR 2299	
HD57060	MLJBH	07 16 35	-24 28	4.9	15	E 0.14	H	C	S	002 00	78 210 16 51	SWP 2145	
57060		07 16 35	-24 28	4.9	15	E 0.1	H	C	S	004 00	78 287 11 28	SWP 2972	
HD57060	XBEVL	07 16 35	-24 27 59	4.9	15	E0.18	H	C	S	002 00	79 202 19 26	SWP 2071	
HD57060		07 16 35	-24 27 59	4.9	15	E0.18	H	C	S	001 40	79 202 19 35	LWR 1870	
TAU CMA	ICJHB	07 16 33	-24 51 42	4.39	13	E0.17	H	C	S	000 45	78 264 11 34	LWR 2422	
TAU CMA		07 16 33	-24 51 42	4.39	13	E0.17	H	C	S	001 00	78 264 12 09	SWP 2716	
HD57061	IMEVB	07 16 38	-24 52	4.4	12	E0.15	H	C	S	001 10	78 247 15 32	SWP 2484	
HR 2803	AFEBV	07 16 51	-67 51 56	4.0	41	E0.79	H	C	L	025 00	78 262 06 12	LWR 2401	
HR 2803		07 16 51	-67 51 56	4.0	41	E0.79	L	C	L	030 00	78 262 06 45	SWP 2692	
HR 2803		07 16 51	-67 51 56	4.0	41	E0.79	L	C	S	006 00	78 262 07 22	SWP 2692	
58350	MLJBH	07 22 07	-29 12	2.4	24	E0.00	H	C	S	001 00	78 290 13 48	SWP 3010	
NGC2392	HSSRB	07 26 13	21 01	10.83	70	-0.24	L	O	L	002 30	78 094 22 35	SWP 1314	
NGC2392		07 26 13	21 01	10.83	70	-0.24	L	O	S	003 30	78 094	SWP 1314	
HD60414	LTBFB	07 31 30	-14 24 52	5.1	48		L	C	S	002 00	78 110 17 52	LWR 1348	
HD60414		07 31 30	-14 24 52	5.1	48		L	C	L	005 00	78 110 18 10	LWR 1348	
HD60414		07 31 30	-14 24 52	5.1	48		H	C	L	060 00	78 111 20 50	LWR 1358	
HD60414		07 31 30	-14 24 52	5.1	48		H	C	L	020 00	78 112 01 04	LWR 1360	
HD60753	IUESO	07 32 08	-50 28	6.69	21		L	O	L	000 10	78 108	LWR 1332	
HD60753		07 32 08	-50 29	6.69	21		L	O	L	000 10	78 108	LWR 1332	
HD60753		07 32 08	-50 28	6.69	21		L	O	L	000 10	78 108 18 15	LWR 1333	
HD60753		07 32 08	-50 29	6.69	21		L	O	S	000 10	78 108 18 25	LWR 1333	
HD60753		07 32 08	-50 28	6.69	21		L	O	S	000 10	78 108 19 19	LWR 1334	
HD60753		07 32 08	-50 28	6.69	21		L	O	L	000 10	78 108 19 30	LWR 1334	
HD60753		07 32 08	-50 29	6.69	21		L	O	S	000 10	78 108 20 11	LWR 1335	
HD60753		07 32 08	-50 29	6.69	21		L	O	L	000 10	78 108 20 21	LWR 1335	
HD60753		07 32 08	-50 28	6.69	21		L	O	S	000 10	78 108 21 00	LWR 1336	
HD60753		07 32 08	-50 29	6.69	21		L	O	L	000 10	78 108 21 14	LWR 1336	
HD60753		07 32 08	-50 28	6.69	21		L	O	L	000 10	78 108 22 10	LWR 1337	
HD60753		07 32 08	-50 29	6.69	21		L	O	S	000 10	78 108 22 11	LWR 1337	
HD60753		07 32 08	-50 28	6.69	21		L	O	S	000 10	78 108 23 04	LWR 1338	
HD60753		07 32 08	-50 28	6.69	21		L	O	L	000 10	78 108 23 11	LWR 1338	
HD60753		07 32 08	-50 28	6.69	21		L	O	L	000 13	78 109 23 49	SWP 1381	
HD60753		07 32 08	-50 28	6.69	21		L	O	S	000 13	78 109 00 03	SWP 1381	
HD60753		07 32 08	-50 28	6.69	21		L	O	S	000 13	78 109 00 52	SWP 1382	

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OBJ ID	PROG ID	TARGET RA H M S	TARGET DEC D M S	VIS MAG	OBJ CLASS	B-V OR B-V	DISP H/L	LG - OBJ APERTURE O/C	LG - OBJ APERTURE L/S	EXPOSE TIME MIN SEC	EPOSURE START TIME YR DAY HR MIN	IMAGE SEQ NUM	OBSERVERS COMMENTS
HD60753	IUESO	07 32 08	-50 28	6.69	21		L	O	L	000 13	78 109 00 57	SWP 1382	
HD60753		07 32 08	-50 29	6.69	21		L	O	S	000 13	78 109 01 47	SWP 1383	
HD 60753		07 32 08	-50 29	6.69	21		L	O	L	000 13	78 109 01	SWP 1383	
HD60753	PHCAL	07 32 08	-50 29 29	6.69	21	E0.11	L	C	L	000 10	78 133 17 06	LWR 1483	
HD60753		07 32 08	-50 28 28	6.69	21	E0.11	L	O	L	000 13	78 133 18 55	SWP 1534	
NULLREAD		07 32 08	-50 28								78 156	SWP 1727	
HD60753		07 32 08	-50 28 28	6.69	21		L	O	L	000 12	78 160 15 13	SWP 1750	HD60753
HD60753		07 32 08	-50 28 28	6.69	21		L	O	L	000 12	78 160 15 24	SWP 1750	
HD60753		07 32 08	-50 28 28	6.69	21		L	O	S	000 12	78 160 16 06	SWP 1751	
HD60753		07 32 08	-50 28 28	6.69	21		L	O	L	000 12	78 160 16 [illegible]	SWP 1751	
HD60753		07 32 08	-50 28 28	6.69	21		L	O	L	000 12	78 160 17 [illegible]	SWP 1752	
HD60753		07 32 08	-50 28 28	6.69	21		L	O	S	000 12	78 160 17 [illegible]	SWP 1752	
HD60753		07 32 08	-50 28 28	6.69	21		L	O	S	000 09	78 160 18 14	LWR 1642	
HD 60753		07 32 08	-50 28 28	6.69	21		L	O	L	000 09	78 160 18 21	LWR 1642	
HD 60753		07 32 08	-50 28 28	6.69	21		L	O	L	000 12	78 160 20 34	SWP 1754	
HD60753		07 32 08	-50 28 28	6.69	21		L	O	L	001 12	78 160 20 41	SWP 1754	TRAILED
HD60753		07 32 08	-50 28 28	6.69	21		L	O	L	000 09	78 160 21 12	LWR 1644	
HD60753		07 32 08	-50 28 28	6.69	21		L	O	L	000 54	78 160 21 18	LWR 1644	TRAILED
HD60753		07 32 08	-50 28 28	6.69	21		L	O	S	000 12	78 161 15 19	SWP 1757	
HD60753		07 32 08	-50 28 28	6.69	21		L	O	L	000 47	78 161 15 24	SWP 1757	TRAILED
HD60753		07 32 08	-50 28 28	6.69	21		L	O	S	000 09	78 161 16 08	LWR 1649	
HD 60753		07 32 08	-50 28 28	6.69	21		L	O	L	000 35	78 161 16 12	LWR 1648	TRAILED
HD 60753		07 32 08	-50 28 29	6.69	21	E0.11	L	O	S	000 09	78 179 21 16	LWR 1746	
HD 60753		07 32 08	-50 28 29	6.69	21	E0.11	L	O	L	000 09	78 179 21 20	LWR 1746	
HD60753		07 32 08	-50 28 28	6.69	21	E0.11	L	O	L	000 12	78 179 21 57	SWP 1876	
HD60753		07 32 08	-50 28 28	6.69	21		L	O	L	000 12	78 197 08 38	SWP 2024	
HD60753		07 32 08	-50 28 28	6.69	21		L	O	L	000 12	78 197 08 46	SWP 2024	
HD60753		07 32 08	-50 28 28	6.69	21		L	O	L	000 08	78 197 09 53	LWR 1833	
HD60753		07 32 08	-50 28 28	6.69	21		L	O	L	000 09	78 197 09 59	LWR 1833	
HD60753		07 32 09	-50 28 29	6.69	21	E0.11	L	O	L	000 06	78 216 04 10	LWR 1972	
HD CALWL		07 32 08	-50 28 29	6.69	21	E0.11	L	O	L	000 08	78 216 04 16	LWR 1972	T07=C01=
HD CALWL		07 32 08	-50 28 29	6.69	21	E0.11	L	O	L	000 07	78 216 04 22	SWP 2190	
HD60753		07 32 08	-50 28 29	6.69	21	E0.11	L	O	L	000 07	78 216 04 30	SWP 2190	
HD60753		07 32 08	-50 28 29	6.69	21	E0.11	L	O	L	000 00	78 216 04 35	SWP 2190	NR60753
HD60753		07 32 08	-50 28 29	6.69	21	E0.11	L	O	L	000 18	78 216 05 07	LWR 1973	
HD60753		07 32 08	-50 28 29	6.69	21	E0.11	L	O	L	000 08	78 216 06 25	LWR 1974	
HD60753		07 32 08	-50 28 29	6.69	21	E0.11	L	O	L	000 08	78 216 06 31	LWR 1974	
HD60753		07 32 08	-50 28 29	6.69	21	E0.11	L	O	S	025 00	78 216 09 53	SWP 2191	
HD60753		07 32 08	-50 28 29	6.69	21	E0.11	L	O	S	000 20	78 216 09 53	SWP 2191	
HD60753		07 32 08	-50 28 29	6.69	21	E0.11	L	O	L	000 12	78 216 10 02	SWP 2195	
HD60753		07 32 08	-50 28 29	6.69	21	E0.11	L	O	L	000 20	78 216 10 02	SWP 2195	
HD60753		07 32 08	-50 28 29	6.69	21	E0.11	L	O	L	000 08	78 216 10 32	LWR 1975	40KB/S
HD60753		07 32 08	-50 28 29	6.69	21		L	O	S	000 18	78 216 10 32	LWR 1975	
HD60753		07 32 08	-50 28 29	6.69	21		L	O	S	000 19	78 240 14 26	SWP 2408	
HD60753		07 32 08	-50 28 29	6.69	21		L	O	L	000 41	78 240 16 07	SWP 2408	TRAILED
HD60753		07 32 08	-50 28 29	6.69	21		L	O	L	000 31	78 240 16 17	LWR 2199	TRAILED
HD60753		07 32 08	-50 28 29	6.69	21		L	O	S	000 14	78 240 16 28	LWR 2199	
HD60753		07 32 08	-50 28 29	6.69	21		L	O	S	000 19	78 240 17 27	SWP 2409	
HD60753		07 32 08	-50 28 29	6.69	21		L	O	L	000 12	78 240 17 31	SWP 2409	

OBJ ID	PROG ID	TARGET RA H	M	S	TARGET DEC D	M	S	VIS MAG	OBJ CLASS	E(B-V) OR B-V	DISP P/L	LG - OBJ APERTURE O/C	L/S	EXPOSE TIME MIN	SEC	EXPOSURE START TIME YR	DAY	HR	MIN	IMAGE SEQ NUM	OBSERVERS COMMENTS
HD607553	PRCAL	07	32	08	-50	28	29	6.69	21		L	O	L	000	12	78	249	15	40	SWP 2506	
HD607553		07	32	08	-50	28	29	6.69	21	-0.09	L	O	L	000	12	78	279	11	30	SWP 2864	
HD607553		07	32	08	-50	28	29	6.69	21	-0.09	L	C	S	000	19	78	279	11	36	SWP 2864	
HD607553		07	32	08	-50	28	29	6.69	21	-0.09	L	C	I	000	09	78	279	11	40	LWR 2541	
HD607553		07	32	08	-50	28	29	6.69	21	-0.09	L	C	S	000	15	78	279	11	45	LWR 2541	
HD607553		07	32	08	-50	28	29	6.69	21	-0.09	L	O	L	000	06	78	279	12	52	LWR 2542	
HD607553		07	32	08	-50	28	29	6.69	21	-0.09	L	O	L	000	06	78	279	12	59	LWR 2542	
HD607553		07	32	08	-50	28	29	6.69	21	-0.09	L	C	I	000	06	78	279	13	06	LWR 2542	
HD607553		07	32	08	-50	28	29	6.69	21	-0.09	L	C	S	000	15	78	279	13	12	LWP 2542	
HD607553		07	32	08	-50	28	29	6.69	21	-0.09	L	C	I	000	11	78	279	13	17	SWP 2865	
HD607553		07	32	08	-50	28	29	6.69	21	-0.09	L	C	S	000	19	78	279	13	22	SWP 2865	
HD607553		07	32	08	-50	28	29	6.69	21	-0.09	L	C	S	000	00	78	289	08	03	LWR 2617	WAVCAL
HD607553		07	32	08	-50	28	29	6.69	21	-0.09	L	C	L	000	04	78	289	08	24	LWR 2617	
HD607553		07	32	08	-50	28	29	6.69	21	-0.09	L	C	S	000	09	78	289	08	58	LWR 2618	
HD607553		07	32	08	-50	28	29	6.69	21	-0.09	L	C	S	000	05	78	289	09	04	LWR 2618	
HD607553		07	32	08	-50	28	29	6.69	21	-0.09	L	C	S	000	12	78	289	09	10	SWP 2995	
HD607553		07	32	08	-50	28	29	6.69	21	-0.09	L	O	L	000	07	78	289	09	14	SWP 2995	
HD607553		07	32	08	-50	28	29	6.69	21	-0.09	L	O	L	000	12	78	289	12	24	SWP 2997	
HD607553		07	32	08	-50	28	29	6.69	21	-0.09	L	O	L	000	09	78	289	13	29	LWR 2620	
HD608448	OSESC	07	34	12	17	07		6.85	14	-0.20	H	C	S	006	00	78	282	13	11	SWP 2897	
HD608448		07	34	12	17	01		6.45	14	-0.20	H	C	S	006	00	78	282	13	23	LWR 2564	
NLF CMI	CEJLL	07	36	41	05	22		0.34	41	E0.40	L	C	S	030	00	78	093	19	16	SWP 1306	
NLF CMI		07	36	41	05	21		0.34	41		L	C	S	030	00	78	095	21	14	SWP 1317	
NLF CMI		07	36	41	05	21		0.34	41		L	C	S	006	00	78	095	22	32	SWP 1318	
NLF CMI		07	36	41	05	21		0.34	41		L	C	S	010	00	78	095	23	27	SWP 1319	
NLF CMI		07	36	41	05	21		0.34	41		L	C	S	020	00	78	096	00	26	SWP 1320	
HKN 79	GGJBG	07	38	47	49	55	39	14.4	84		L	O	L	180	00	78	105	13	23	SWP 1364	
HKN 79		07	38	47	49	55	39	14.4	84		L	O	L	180	00	78	105	16	44	LWR 1320	
3 EDP	CBMJP	07	41	48	-28	50	03	1.96	32	E0.25	H	C	S	006	46	78	225	16	29	LWR 2066	
HD64440	MFZYK	07	50	27	-40	26	45	3.70	44		H	C	L	020	00	78	254	10	38	LWR 2319	
HD64760	ALEBJ	07	51	50	-47	58		4.32	23	E0.04	H	C	S	002	07	78	164	21	17	SWP 1781	
HD 64760		07	51	50	-47	58		4.32	23	E0.04	H	C	S	001	00	78	167	21	11	LWR 1679	
HD 64760		07	51	50	-47	58		4.32	23	E0.04	H	C	S	001	20	78	167	21	18	SWP 1797	
HD66811	XBEVB	08	01	49	-39	51	40	2.27	15	E0.04	H	C	S	000	03	78	125	18	25	SWP 1489	
HD66811		08	01	49	-39	51	40	2.27	15	E0.04	H	C	S	000	06	78	125	18	54	LWR 1445	
66811	MLJBH	08	01	50	-39	51		2.3	13	E 0.1	H	C	S	000	05	78	287	12	13	SWP 2973	
HD66811	VEIPS	08	01	50	-39	52		2.3	15	- .27	H	C	S	000	07	78	293	02	51	SWP 3058	
HD66811		08	01	50	-39	52		2.3	15	- .27	H	C	S	000	06	78	293	03	19	SWP 3059	
HD66811		08	01	50	-39	52		2.3	15	- .27	H	C	S	000	06	78	293	03	49	SWP 3060	
HD66811		08	01	50	-39	52		2.3	15	- .27	H	C	S	000	05	78	293	04	16	SWP 3061	
HD66811		08	01	50	-39	52		2.3	15	- .27	H	C	S	000	05	78	293	04	44	SWP 3062	
HD66811		08	01	50	-39	52		2.3	15	- .27	H	C	S	000	05	78	293	05	11	SWP 3063	

OBJ ID	PROG ID	TARGET RA H	M	S	TARGET DEC D	M	S	VIS MAG	OBJ CLASS	E(B-V) OR B-V	DISP P/L	LG - OBJ APERTURE O/C	L/S	EXPOSE TIME MIN	SEC	EXPOSURE START TIME YR	DAY	HR	MIN	IMAGE SEQ NUM	OBSERVERS COMMENTS
HD66811	VEIPS	08	01	50	-39	52		2.3	15	- .27	H	C	S	000	05	78	293	05	38	SWP 3064	
BD75 325	PRCAL	08	04	43	75	06	48	9.5	16		L	O	L	000	30	78				SWP 1583	
BD75 325		08	04	43	75	06	48	9.5	16		L	O	S	000	30	78				SWP 1583	
BD75 325		08	04	43	75	06	48	9.5	16		L	O	L	001	00	78				LWR 1522	
BD75 325		08	04	43	75	06	48	9.54	16	-0.37	L	C	L	000	17	78	283	10	02	SWP 2900	
BD75 325		08	04	43	75	06	48	9.54	16	-0.37	L	C	S	000	27	78	283	10	07	SWP 2900	
BD75 325		08	04	43	75	06	48	9.54	16	-0.37	L	O	L	000	27	78	283	10	11	LWR 2568	
BD75 325		08	04	43	75	06	48	9.54	16	-0.37	L	O	S	000	43	78	283	10	16	LWR 2568	
BD75 325		08	04	43	75	06	48	9.54	16	-0.37	L	C	L	000	24	78	283	13	19	LWR 2570	
BD75 325		08	04	43	75	06	48	9.54	16	-0.37	L	C	S	000	24	78	283	13	26	LWR 2570	
BD75 325		08	04	43	75	06	48	9.54	16	-0.37	L	C	S	000	40	78	283	13	33	LWR 2570	
BD75 325		08	04	43	75	06	48	9.54	16	-0.37	L	C	I	000	14	78	289	10	40	SWP 2996	
BD75 325		08	04	43	75	06	48	9.54	16	-0.37	L	C	S	000	22	78	289	10	45	SWP 2996	
BD75 325		08	04	43	75	06	48	9.54	16	-0.37	L	C	S	000	38	78	289	10	49	LWR 2619	
BD75 325		08	04	43	75	06	48	9.54	16	-0.37	L	O	L	000	24	78	289	10	53	LWR 2619	
BD75 325		08	04	43	75	06	48	9.54	16	-0.37	L	O	S	000	22	78	302	09	57	SWP 3184	
BD75 325		08	04	43	75	06	48	9.54	16	-0.37	L	C	I	000	14	78	302	10	04	SWP 3184	
BD75 325		08	04	43	75	06	48	9.54	16	-0.37	L	C	S	000	27	78	302	10	56	SWP 3185	
BD75 325		08	04	43	75	06	48	9.54	16	-0.37	L	C	S	000	07	78	302	10	59	SWP 3185	
BD75 325		08	04	43	75	06	48	9.54	16	-0.37	L	C	S	000	07	78	302	11	36	SWP 3186	
BD75 325		08	04	43	75	06	48	9.54	16	-0.37	L	C	S	000	07	78	302	11	38	SWP 3186	
BD75 325		08	04	43	75	06	48	9.54	16	-0.37	L	C	S	000	22	78	302	12	09	SWP 3187	
BD75 325		08	04	43	75	06	48	9.54	16	-0.37	L	O	L	000	07	78	302	12	12	SWP 3187	
BD75 325		08	04	43	75	06	48	9.54	16	-0.37	L	O	S	000	22	78	302	12	44	SWP 3188	
BD75 325		08	04	43	75	06	48	9.54	16	-0.37	L	C	S	000	14	78	302	12	47	SWP 3188	
BD75 325		08	04	43	75	06	48	9.54	16	-0.37	L	C	S	000	38	78	302	13	36	LWR 2748	
BD75 325		08	04	43	75	06	48	9.54	16	-0.37	L	C	S	000	24	78	302	13	39	LWR 2748	
BD75 325		08	04	43	75	06	48	9.54	16	-0.37	L	C	S	000	38	78	305	09	24	LWR 2789	
BD75 325		08	04	43	75	06	48	9.54	16	-0.37	L	O	L	000	24	78	305	09	24	LWR 2789	
BD75 325		08	04	43	75	06	48	9.54	16	-0.37	L	O	S	000	38	78	305	10	08	LWR 2790	
BD75 325		08	04	43	75	06	48	9.54	16	-0.37	L	C	S	000	12	78	305	10	11	LWR 2790	
BD75 325		08	04	43	75	06	48	9.54	16	-0.37	L	C	S	000	38	78	305	10	45	LWR 2791	
BD75 325		08	04	43	75	06	48	9.54	16	-0.37	L	C	S	000	12	78	305	10	48	LWR 2791	
BD75 325	DHCAL	08	04	43	75	06	48	9.54	16	-0.37	L	O	L	000	24	78	283	13	13	LWR 2570	
MU CNC	MGLRD	08	04	49	31	44		5.36	44	0.07	H	C	S	075	00	78	304	01	05	LWR 2770	
MU CNC		08	04	49	31	44		5.36	44	.07	H	C	S	075	00	78	308	04	27	LWR 2816	
HD 3185	AFEBV	08	05	24	-24	09	12	2.8	41	E0.43	H	C	S	016	00	78	262	08	31	LWR 2402	
HD 3185		08	05	24	-24	09	12	2.8	41	E0.43	H	C	S	001	00	78	262	08	57	SWP 2693	
HD 3185		08	05	24	-24	09	12	2.8	41	E0.43	H	C	L	015	00	78	262	09	08	SWP 2693	
HD68273	LSDKW	08	07	59	-47	11		1.8	10	E-0.0	H	C	S	000	05	78	226	10	32	SWP 2290	
HD68273		08	07	59	-47	11		1.8	10	E-0.0	H	C	S	000	12	78	226	11	05	LWR 2073	
HD68273		08	07	59	-47	11		1.8	10	E-0.0	H	C	S	000	02	78	226	11	10	SWP 2291	
HD68273		08	07	59	-47	11		1.8	10	E-0.0	H	C	S	000	04	78	226	12	06	LWR 2074	
HD68273		08	07	59	-47	11		1.8	10	E-0.0	H	C	S	000	02	78	226	17	29	SWP 2295	
														000	03	78	226	17	34	LWR 2076	

OBJ ID	PROG ID	TARGET RA H M S	TARGET DEC D M S	VIS MAG	OBJ CLASS	B(B-V) OR B-V	DISP H/L	LG - OBJ APERTURE O/C	LG - OBJ APERTURE L/S	EXPOSE TIME MIN SEC	EPOSURE START TIME YR DAY HR MIN	IMAGE SEQ NUM	OBSERVERS COMMENTS
HD68273	LSEKW	08 07 59	-47 11	1.P	10	B-2.0	H	C	S	000 06	78 236 14 19	SWP 2388	
GAM VEL		08 07 59	-47 11	1.6	10	B-2.0	H	C	S	000 03	78 236 14 24	LWR 2167	
GAM VEL		08 07 59	-47 11	1.6	10	B-2.0	H	C	S	000 12	78 236 15 02	SWP 2389	
GAM VEL		08 07 59	-47 11	1.6	10	B-2.0	H	C	S	000 06	78 249 08 09	SWP 2504	
GAM VEL		08 07 59	-47 11	1.8	10	B-2.0	H	C	S	000 06	78 261 15 43	SWP 2693	
GAM VEL		08 07 59	-47 11 18	1.8	10	B-2.0	H	C	S	000 06	78 274 00 50	SWP 2817	
GAM VEL		08 07 59	-47 11 18	1.8	10	B-2.0	H	C	S	000 03	78 274 00 55	LWR 2511	
GAM2 VEL		08 07 59	-47 11 18	1.8	10	B-2.0	H	C	S	000 02	78 274 01 43	LWR 2512	
GAM VEL		08 07 59	-47 11 18	1.8	10	B-2.0	H	C	S	000 04	78 286 22 48	SWP 2964	
GAM VEL		08 07 59	-47 11 18	-1.908	10	B-2.0	H	C	S	000 03	78 286 23 12	LWR 2596	
GAM VEL		08 07 59	-47 11	1.6	10	B-2.0	H	C	S	000 04	78 298 13 10	SWP 3139	
GAM VEL		08 07 59	-47 11	1.8	10	B-2.0	H	C	S	000 03	78 298 13 13	LWR 2708	
GAM VEL	MF2YK	08 07 59	-47 11 18	1.82	10	B0.07	H	C	S	000 01	78 155 19 16	SWP 1717	
GAM VEL		08 07 59	-47 11 18	1.82	10	B0.07	H	C	S	000 03	78 155 20 05	SWP 1718	
GAM VEL		08 07 59	-47 11 18	1.82	10	B0.07	H	C	S	000 04	78 155 20 50	LWR 1619	
GAM VEL		08 07 59	-47 11 18	1.82	10	B0.07	H	C	S	000 05	78 155 21 32	SWP 1719	
GAM VEL		08 07 59	-47 11 18	1.82	11		H	C	S	000 05	78 250 10 32	SWP 2514	
GAM VEL		08 07 59	-47 11 18	1.82	11		H	C	S	000 04	78 250 10 38	LWR 2298	
HD68273	XBEVB	08 07 59	-47 11 18	1.83	13	B0.04	H	C	S	000 04	78 202 17 48	LWR 1869	
HD68273		08 07 59	-47 11 18	1.83	13	B0.04	H	C	S	000 04	78 202 17 54	SWP 2070	
GANYMEDE	AVALL	08 14 28	20 22 55	6	04		L	O	S	002 45	78 255 01 19	LWR 2327	
GANYMEDE		08 12 28	20 22 55	6	04		L	O	S	015 00	78 255 02 08	SWP 2631	
GANYMEDE		08 12 28	20 22 55	6	04		L	O	L	060 00	78 255 04 13	SWP 2632	
GANYMEDE		08 14 28	20 22 55	6	04		L	C	S	004 15	78 255 03 43	LWR 2328	
GANYMEDE		08 14 28	20 22 55	6	04		L	C	L	005 00	78 255 03 53	LWR 2329	
GANYMEDE		08 14 28	20 22 55	6	04		L	O	L	015 00	78 255 07 04	LWR 2330	
GANYMEDE		08 12 28	20 22 55	6	04		L	C	S	004 15	78 255 07 20	LWR 2330	
49 CNC	MVDSL	08 42 02	10 16	5.7	27	-0.10	H	C	S	027 00	78 295 02 39	SWP 3095	
49 CNC		08 42 02	10 16	5.7	27	-0.10	H	C	S	015 00	78 295 03 11	LWR 2672	
49 CNC		08 42 02	10 16	5.7	27	-0.10	H	C	S	101 00	78 295 03 40	SWP 3096	
OJ 287	BQBCR	08 51 57	20 18 58	15	85	B0.5	L	O	L	070 00	78 146 14 50	SWP 1643	
OJ 287		08 51 57	20 17 58	15	85	B0.5	L	O	L	310 00	78 149 10 23	SWP 1665	
OJ 287		08 51 57	20 17 58	15	85	B0.5	L	O	L	270 00	78 150 11 13	LWR 1592	
OJ287		08 51 57	20 17 58	15	87		L	O	L	360 00	78 307 21 45	LWR 2615	
OJ 287		08 51 57	20 17 58	15	87		L	O	L	300 00	78 307 20 53	SWP 3218	
OJ 287	BSBLB	08 51 57	20 17 58	15	85		L	O	L	310 00	78 159 08 38	LWR 1637	
OJ 287		08 51 57	20 17 58	15	85		L	O	L	375 00	78 160 07 28	SWP 1749	
10 UMA	AFEBV	08 57 24	41 58 55	4.0	41		H	O	L	020 00	78 145 15 35	LWR 1561	
HD77350	SS2JJ	08 59 49	24 39 03	5.5	36	-0.03	H	C	S	042 00	78 291 09 41	SWP 3019	
HD77350		08 59 49	24 39 03	5.5	36	-0.03	H	C	S	016 00	78 291 10 29	LWR 2642	
HD77350		08 59 49	24 39 03	5.5	36	-0.03	H	C	S	020 00	78 291 11 01	SWP 3020	
HD77581	LSEKW	09 00 12	-40 22	6.9	20	B-.33	H	C	S	108 00	78 236 15 58	SWP 2390	

OBJ ID	PROG ID	TARGET RA H M S	TARGET DEC D M S	VIS MAG	OBJ CLASS	B(B-V) OR B-V	DISP H/L	LG - OBJ APERTURE O/C	LG - OBJ APERTURE L/S	EXPOSE TIME MIN SEC	EPOSURE START TIME YR DAY HR MIN	IMAGE SEQ NUM	OBSERVERS COMMENTS
HD77581	BLJBH	09 00 12	-40 22	6.9	23		L	O	L	002 00	78 211 12 40	SWP 2151	
HD77581		09 00 12	-40 22	6.9	23		L	C	S	002 00	78 211 12 48	SWP 2151	
HD77581	SX2HG	09 00 13	-40 21 25	6.8	23	B0.78	L	C	S	005 00	78 118 19 51	SWP 1433	
HD77581		09 00 13	-40 21 25	6.8	23	B0.78	L	C	L	001 48	78 118 19 41	SWP 1433	
HD77581		09 00 12	-40 21 25	6.8	23	B0.78	L	C	S	004 00	78 118 20 35	LWR 1412	
VELA X1		09 00 13	-40 21 25	6.8	23	B0.78	L	C	L	000 40	78 118 20 23	LWR 1412	
VELA X1		09 00 13	-40 21 25	6.9	23		L	C	L	001 48	78 120 01 22	SWP 1441	
VELA X1		09 00 13	-40 21 25	6.9	23		L	C	S	005 00	78 120 01 36	SWP 1441	
VELA X1		09 00 13	-40 21 25	6.9	23		L	C	S	004 00	78 120 01 49	LWR 1417	
HD77581		09 00 13	-40 21 25	6.9	23		L	C	L	000 40	78 120 01 58	LWR 1417	
HD77581		09 00 13	-40 21 25	6.9	23	B0.56	H	O	L	150 00	78 125 13 35	SWP 1488	
HD77581		09 00 13	-40 21 25	6.9	23	B0.85	H	O	L	125 00	78 204 10 49	SWP 2087	
						B0.85	H	O	L	042 00	78 204 13 04	LWR 1878	
HD77581	XBPVB	09 00 13	-40 21 25	6.8	23	B0.75	L	O	L	001 35	78 121 14 33	SWP 1453	
HD77581		09 00 13	-40 21 25	6.8	23	B0.75	L	C	S	001 35	78 121 14 46	SWP 1453	
HD77581		09 00 13	-40 21 25	6.8	23	B0.75	L	C	L	000 40	78 121 15 28	LWR 1426	
HD77581		09 00 13	-40 21 25	6.8	23	B0.75	L	C	S	000 40	78 121 15 40	LWR 1426	
HD77581		09 00 13	-40 21 25	6.8	23	B0.75	L	O	S	002 20	78 123 23 09	SWP 1475	
HD77581		09 00 13	-40 21 25	6.8	23	B0.75	L	O	L	002 20	78 123 23 21	SWP 1475	
HD77581		09 00 13	-40 21 25	6.8	23	B0.75	L	C	S	000 40	78 123 23 17	LWR 1436	
HD77581		09 00 13	-40 21 25	6.8	23	B0.75	L	C	L	000 40	78 123 23 25	LWR 1436	
VELA X-1		09 00 13	-40 21 25	6.8	23	B0.75	H	O	L	055 30	78 125 16 15	LWR 1444	
										060 00	78 199 10 38	LWR 1847	
HD78316	MVDSL	09 05 02	10 52	5.2	27	B0.00	H	C	S	021 00	78 100 23 30	SWP 1347	
HD78316		09 05 02	10 52	5.2	27	B0.00	H	C	S	010 01	78 101 00 16	LWR 1302	
HD78316		09 05 02	10 52	5.2	27	B0.00	H	C	S	019 31	78 101 01 10	SWP 1348	
HD78316		09 05 02	10 52	5.2	27	B0.00	H	C	S	017 00	78 101 19 16	SWP 1352	
HD78316	SS2JJ	09 05 02	10 52 14	5.2	27	-0.11	H	C	S	007 30	78 291 12 08	LWR 2644	
HD78316		09 05 02	10 52 14	5.2	27	-0.11	H	C	S	014 30	78 291 12 20	SWP 3021	
HD78316		09 05 02	10 52 14	5.2	27	-0.11	H	C	S	006 30	78 294 13 20	LWR 2667	
HD78316		09 05 02	10 52 14	5.2	27	-0.11	H	C	S	011 00	78 294 13 33	SWP 3086	
LAM VEL	CCAKL	09 06 09	-43 13 48	2.3	46		L	O	L	060 00	78 138 14 21	SWP 1573	
IC 2488	PP2ED	09 06 14	-69 43 37	3	70		L	O	L	030 00	78 303 11 35	LWR 2756	
IC 2488		09 06 14	-69 43 37	3	70		L	O	L	030 00	78 303 12 13	SWP 3194	
TAU UMA	AFEBV	09 06 47	63 43 07	4.7	45		H	O	L	040 00	78 145 13 00	LWR 1560	
TAU UMA		09 06 49	63 43 07	4.7	45		L	O	L	020 00	78 145 14 01	SWP 1633	
TAU UMA		09 06 49	63 43 07	4.7	45		L	O	S	004 00	78 145 14 37	SWP 1633	
HR 3364		09 13 48	-37 12 14	4.6	41	B0.46	L	O	L	020 00	78 252 10 20	LWR 2403	
HR 3364		09 13 48	-37 12 14	4.6	41	B0.46	L	O	L	030 00	78 262 11 05	SWP 2594	
+501631	ALEEJ	09 19 08	50 13 44	10.0	21	B0.05	H	C	S	225 00	78 163 07 01	SWP 1771	
HDE1188	XSAKD	09 20 33	-54 47 47	2.49	20	B0.05	H	C	S	000 10	78 203 12 21	SWP 2081	

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OBJ ID	PROG ID	TARGET RA H M S	TARGET DEC D M S	VIS MAG	OBJ CLASS	B(B-V) OR B-V	DISP H/L	LG - APERTURE O/C	OBJ APERTURE L/S	EXPOSE TIME MIN SEC	EPOSURE START TIME YR DAY HR MIN	IMAGE SEQ NUM	OBSERVERS COMMENTS
BD371977	HRDAK	09 21 2	36 55 49	9.2	24		L	O	L	000 30	78 285 00 24	SWP 2924	
BD371977	BSJLG	09 21 21	36 55 49	10.1	16		L	O	L	002 00	78 150 20 15	SWP 1672	TRAILED
BD371977		09 21 21	36 55 49	10.1	16		L	C	S	001 40	78 150 20 30	SWP 1672	
BD371977		09 21 21	36 55 49	10.1	16		L	O	L	004 00	78 150 21 17	LWR 1584	TRAILED
BD371977	HRDAK	09 21 21	36 55 49	9.2	24		L	C	S	000 40	78 285 00 21	SWP 2924	
BD371977		09 21 21	36 55 49	9.2	24		L	O	L	001 10	78 285 01 16	LWR 2580	
BD371977		09 21 21	36 55 49	9.2	24		L	C	S	003 30	78 285 01 44	LWR 2580	
HD61809	NGL9D	09 25 18	-05 51	5.38	44	0.64	H	C	S	070 00	78 304 02 59	LWR 2771	
HD61809		09 25 19	-05 51	5.38	44	.64	H	C	S	070 00	78 305 20 41	LWR 2796	
BD481777	HRDAK	09 27 27	48 29 42	10.7	24	-0.34	L	O	L	001 10	78 285 02 26	SWP 2925	
BD481777		09 27 27	48 29 42	10.7	24	-0.34	L	C	S	003 30	78 285 02 58	SWP 2925	
BD481777		09 27 27	48 29 42	10.7	24	-0.34	L	O	L	002 30	78 285 04 15	LWR 2582	
BD481777		09 27 27	41 29 42	10.7	24	-0.34	L	C	S	005 00	78 285 04 26	LWR 2582	
BD481777		09 27 27	48 29 42	10.3	24	-0.34	H	C	S	080 00	78 285 05 12	SWP 2926	
IC 2501	PP2ED	09 37 12	-59 51 27	13.5	70		L	O	L	030 00	78 303 13 17	LWR 2757	
HD84346	LTBFW	09 42 34	34 44 34	7	48	E0000	L	O	L	040 00	78 110 13 08	LWR 1347	
HD84346		09 42 34	34 44 34	7	48	E0000	L	O	L	120 00	78 110 14 03	SWP 1393	
R LEO		09 44 52	11 39 41	7.0	48	E0000	L	O	I	120 00	78 113 16 24	LWR 1372	
TITAN	PSTCO	09 51 45	14 18 23	7.5	04		L	O	S	360 00	78 170 07 39	LWR 1693	
PG 0953	IN2MS	09 53 48	41 29 57	14.5	85		L	O	I	190 00	78 104 22 07	SWP 1361	
TITAN	PSTCO	09 54 15	14 16 35	7.5	04		L	O	S	360 00	78 171 07 40	SWP 1817	
SATURN		09 54 26	14 16 35	0	03		L	O	S	008 00	78 171 15 27	LWR 1699	
SATURN		09 54 25	14 16 35	0	03		L	O	S	020 00	78 171 16 08	SWP 1818	OFF 3"S
SATURN		09 54 25	14 16 35	0	03		L	O	S	016 00	78 171 17 12	LWR 1700	OFF 3"S
SATURN		09 54 26	14 16 35	0	03		L	O	S	040 00	78 171 18 02	SWP 1819	OFF 3"S
SATURN		09 54 26	14 16 35	0	03		L	O	S	030 00	78 171 19 00	LWR 1701	OFF 3"S
SATURN		09 54 26	14 16 35	0	03		L	O	S	070 00	78 171 19 53	SWP 1820	5"S
SATURN		09 54 25	14 16 35	0	03		L	O	S	005 00	78 171 21 29	LWR 1702	
BD 86606	ALEBJ	09 55 17	-71 09	6.34	23	E0.10	H	C	S	008 30	78 167 19 07	LWR 1678	
BD 86606		09 55 17	-71 09	6.34	23	E0.10	H	C	S	021 00	78 167 19 40	SWP 1796	
3C232	PP2ED	09 55 25	32 38 23	15.78	85	0.10	L	O	L	420 00	78 300 23 15	SWP 2173	
3C 232		09 55 25	32 38 23	15.78	85	0.10	L	O	L	435 00	78 302 23 10	LWR 2752	
TITAN	PSTCO	09 55 29	14 10 46	7.5	04		L	O	S	180 00	78 174 10 25	LWR 1715	
SATURN		09 55 29	14 10 46	0	03		L	O	S	002 30	78 174 14 18	LWR 1716	
HD86986	SS2JJ	09 59 46	14 48 05	8.0	30	E0.06	L	O	L	006 00	78 291 13 25	SWP 3022	
NGC 3132	EN2AB	10 04 54	-40 12	8	70		L	O	L	020 00	78 159 15 16	SWP 1745	

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SORTED BY PROGRAM ID

OBJ ID	PROG ID	TARGET RA H M S	TARGET DEC D M S	VIS MAG	OBJ CLASS	B(B-V) OR B-V	DISP H/L	LG - APERTURE O/C	OBJ APERTURE L/S	EXPOSE TIME MIN SEC	EPOSURE START TIME YR DAY HR MIN	IMAGE SEQ NUM	OBSERVERS COMMENTS
NGC 3132	EN2AB	10 04 54	-40 12	8	70		L	O	L	030 00	78 159 15 55	LWR 1638	
NGC 3132		10 04 54	-40 12	8	70		L	O	L	020 00	78 159 16 34	SWP 1746	
ZET LEO	AFE8V	10 13 54	23 40 01	3.5	40	E0.30	H	C	S	010 00	78 115 14 50	LWR 1386	
ZET LEO		10 13 54	23 40 01	3.5	40	E0.30	H	C	S	030 00	78 115 15 41	SWP 1415	
BD-73007	BSJLG	10 17 28	-08 26 59	10.2			L	O	L	004 30	78 150 16 45	LWR 1583	TRAILED
BD-73007		10 17 28	-08 26 59	10.2			L	C	L	006 00	78 150 18 39	SWP 1671	
BD-73007		10 17 28	-08 26 59	10.2			L	C	S	006 00	78 150 18 55	SWP 1671	
HR 4072	HVDSL	10 20 33	65 49	4.9	27	E0.00	H	C	S	012 00	78 098 21 24	SWP 1332	
HR 4072		10 20 33	65 49	4.9	27	E0.00	H	C	S	033 00	78 098 19 43	SWP 1331	
HD89822	SS2JJ	10 20 33	65 49 12	4.9	36	-0.06	H	C	S	020 00	78 291 06 13	SWP 3018	
HD89822		10 20 33	65 49 12	4.9	36	-0.06	H	C	S	010 00	78 291 08 48	LWR 2642	
HR 4138	AFE8V	10 29 04	-71 44 07	4.7	30	E0.04	H	C	S	015 00	78 267 04 12	LWR 2451	
HR 4138		10 29 04	-71 44 07	4.7	30	E0.04	H	O	L	015 00	78 267 04 33	SWP 2745	
HD91316	ICJHB	10 30 10	09 33 52	3.85	23	E0.08	H	C	S	002 00	78 115 19 59	SWP 1416	
HD91316		10 30 10	09 33 52	3.85	23	E0.08	H	O	L	000 30	78 115 20 38	LWR 1388	
HD 91316	SGA8G	10 30 10	09 33 52	3.85	23	E0.12	H	C	S	002 15	78 170 14 40	SWP 1813	
HD 91316		10 30 10	09 33 52	3.85	23	E0.12	H	C	S	002 00	78 170 15 29	LWR 1694	
HD91316		10 30 10	09 33 52	3.85	23	E0.12	H	C	S	001 00	78 177 20 28	LWR 1737	
HD91316		10 30 10	09 33 52	3.85	23	E0.12	H	C	S	001 35	78 177 20 39	SWP 1659	
HD91316		10 30 10	09 33 52	3.85	23	E0.12	H	C	S	001 15	78 177 21 42	SWP 1660	
HD92740	OSF5C	10 39 23	-59 25	6.41	11	E0.28	H	C	S	011 00	78 143 17 04	SWP 1614	
HD92740		10 39 23	-59 25	6.41	11	E0.28	H	C	S	012 00	78 143 17 29	LWR 1549	
HD92740		10 39 23	-59 25	6.41	11	E0.28	L	C	S	000 06	78 143 18 21	SWP 1615	
HD92740		10 39 23	-59 25	6.41	11	E0.28	L	C	S	000 08	78 143 18 29	SWP 1615	
HD93131		10 41 56	-59 51	6.48	11	E0.25	H	C	S	005 00	78 140 22 19	SWP 1591	
HD93131		10 41 56	-59 51	6.48	11	E0.25	H	C	S	007 00	78 140 23 12	LWR 1527	
HD93131		10 41 56	-59 51	6.48	11	E0.25	L	O	L	000 05	78 145 17 32	SWP 1634	
HD93129	NLJBH	10 42 31	-59 17	7.1	13	E .25	H	C	S	020 00	78 209 17 15	SWP 2133	
93129		10 42 31	-59 17	7.1	13	E0.25	H	C	S	030 00	78 286 13 19	SWP 2956	
93129		10 42 31	-59 17	7.1	13	E0.00	H	C	S	025 00	78 287 13 08	LWR 2599	
HD93250	ICJHB	10 42 48	-59 18 07	7.38	15	E0.48	H	C	S	050 00	78 270 06 16	SWP 2782	
HD93250		10 42 48	-59 18 07	7.38	15	E0.48	H	C	S	026 00	78 270 07 15	LWR 2475	
HD93250		10 42 48	-59 18 07	7.38	15	E0.48	H	C	S	070 00	78 270 07 54	SWP 2783	
HD93250		10 42 48	-59 18 07	7.38	15	E0.48	H	C	S	026 00	78 270 09 23	LWR 2476	
HD93250	OSF5C	10 42 48	-59 18	7.38	12	E0.45	H	C	S	050 00	78 143 22 19	SWP 1618	
HD93250		10 42 48	-59 18	7.38	12	E0.45	L	O	L	000 35	78 143 23 41	LWR 1551	
HD93250		10 42 48	-59 18	7.38	12	E0.45	L	O	L	000 27	78 145 18 51	SWP 1635	
ETA CAR	HSSRH	10 43 07	-59 26	6.2	61		H	O	L	025 00	78 094 24 34	LWR 1280	

OBJ ID	PSCG ID	TARGET RA H M S	TARGET DEC D M S	VIS MAG	OBJ CLASS	B-V OR	DISP H/L	LG - APERTURE O/C	OBJ L/S	EXPOSE TIME MIN SEC	EPOSURE START TIME YR DAY HR MIN	IMAGE SEQ NUM	OBSERVERS COMMENTS
HD93403	MF2YK	10 43 46	-59 08	7.27	15	E0.56	H	C	S	050 00	78 254 09 04	SWP 2625	
HD93497	CEJLL	10 44 37	-49 09 20	2.66	48		L	O	L	015 00	78 231 17 43	SWP 2338	
HD93497		10 44 37	-49 09 20	2.68	48		L	O	L	004 00	78 235 15 28	SWP 2377	
HD93497		10 44 37	-49 09 20	2.68	48		H	O	L	007 00	78 235 15 46	LWR 2160	
HD93521	PHCAL	10 45 33	37 50 04	6.89	12		L	C	S	000 12	78 188 06 24	SWP 1927	
HD93521		10 45 33	37 50 04	6.89	12		L	O	L	000 03	78 188 06 31	SWP 1927	
HD93521		10 45 33	37 50 04	6.89	12		L	O	L	000 03	78 188 06 38	LWR 1790	
HD93521		10 45 33	37 50 04	6.89	12		L	C	S	000 06	78 188 06 44	LWR 1790	
HD93521		10 45 33	37 50 04	6.89	12		L	O	L	000 15	78 188 11 22	SWP 1929	TRAILED
HD93521		10 45 33	37 50 04	6.89	12		L	O	S	000 06	78 188 11	SWP 1929	
HD93521		10 45 33	37 50 04	6.89	12		L	O	S	000 22	78 188 11 38	LWR 1794	TRAILED
							H	O	S	000 06	78 188 11 47	LWR 1794	
HD93521	CALIB	10 45 34	37 50 04	7.04	12	E0.04	L	O	L	000 03	78 152 15 30	LWR 1589	
HD93521		10 45 34	37 50 04	7.04	12	D0.04	L	C	S	000 03	78 152 15 40	LWR 1589	
HD93521		10 45 34	37 50 04	7.04	12	B0.04	L	O	L	000 15	79 152 21 30	LWR 1591	TRAILED
HD93521	PHCAL	10 45 34	37 50	7.04	12	B0.03	L	C	S	000 04	78 146 23 43	SWP 1647	
HD93521		10 45 34	37 50	7.04	12	B0.03	L	O	L	000 04	78 146 23 50	SWP 1647	
HD93521		10 45 34	37 50 04	7.04	12	B0.03	L	O	L	000 01	78 151 16 54	SWP 1675	
HD93521		10 45 34	37 50 04	7.04	12	B0.03	L	C	S	000 01	78 151 17 07	SWP 1675	
HD93521		10 45 34	37 50 04	7.04	12	B0.04	L	C	S	000 02	78 151 17 51	SWP 1676	
HD93521		10 45 34	37 50 04	7.04	12	B0.04	L	O	L	000 02	78 151 17 57	SWP 1676	
HD93521		10 45 34	37 50 04	7.04	12	B0.03	L	O	L	000 04	78 151 18 45	SWP 1677	
HD93521		10 45 34	37 50 04	7.04	12	B0.03	L	C	S	000 04	78 151 18 52	SWP 1677	
HD93521		10 45 34	37 50 04	7.04	12		L	C	S	000 12	78 191 04 52	SWP 1955	
HD93521		10 45 34	37 50 04	7.04	12		L	O	L	000 03	78 191 05 00	SWP 1955	
HD93521		10 45 34	37 50 04	7.04	12		L	C	S	000 12	78 191 05 30	LWR 1805	
HD93521		10 45 34	37 50 04	7.04	12		L	O	L	000 03	78 191 05 36	LWR 1805	
HD93521		10 45 34	37 50 04	7.04	12		L	O	L	000 03	78 191 06 57	LWR 1806	
HD93521		10 45 34	37 50 04	7.04	12		L	C	S	000 12	78 191 07 05	LWR 1806	
HD93521		10 45 34	37 50 04	7.04	12		L	C	S	000 12	78 191 07 10	SWP 1956	
HD93521		10 45 34	37 50 04	7.04	12		L	O	L	000 03	78 191 07 17	SWP 1956	
HD93521		10 45 34	37 50	7.04	12	B0.03	L	O	L	000 03	78 282 08 19	SWP 2899	
HD93521		10 45 34	37 50	7.04	12	B0.03	L	O	S	000 05	78 282 08 38	SWP 2899	
HD93521		10 45 34	37 50	7.04	12	B0.03	L	O	L	000 03	78 283 08 43	LWR 2567	
HD93521		10 45 34	37 50 04	7.04	12	B0.03	L	O	S	000 05	78 283 08 47	LWR 2567	
HD93521		10 45 34	37 50 04	7.04	12	-0.28	L	O	L	000 03	78 283 11 41	SWP 2901	
HD93521		10 45 34	37 50 04	7.04	12	-0.28	L	O	S	000 06	78 283 11 48	SWP 2901	
HD93521		10 45 34	37 50 04	7.04	12	-0.28	L	O	S	000 03	78 283 11 52	LWR 2569	
						-0.28	L	O	S	000 06	78 283 11 57	LWR 2569	
HD93840	ALEBJ	10 46 57	-46 30 49	7.75	23	B0.16	H	C	S	033 00	78 169 17 42	SWP 1809	
HD93840		10 46 57	-46 30 49	7.95	24	B0.16	H	C	S	038 00	78 169 18 35	LWR 1689	
HD93521	PHCAL	10 54 34	37 50 04	7.04	12	B0.04	L		L	001 00	78 151 19 55	SWP 1678	
HD93521		10 54 34	37 50 04	7.04	12	B0.04	L	O	L	000 17	78 151 21 33	SWP 1680	

OBJ ID	PSCG ID	TARGET RA H M S	TARGET DEC D M S	VIS MAG	OBJ CLASS	B-V OR	DISP H/L	LG - APERTURE O/C	OBJ L/S	EXPOSE TIME MIN SEC	EPOSURE START TIME YR DAY HR MIN	IMAGE SEQ NUM	OBSERVERS COMMENTS
470MA	HGLBD	10 56 40	40 42	5.06	44	.61	H	C	S	050 00	78 304 11 27	LWR 2775	
HD95608	AFEBV	10 59 38	20 26 54	4.4	35		H	C	S	030 00	78 115 17 35	LWR 1387	
60 LEO		10 59 39	20 26 54	4.4	35		H	O	L	060 00	78 145 11 11	SWP 1632	
3C 249.1	PP2ED	11 00 27	77 15 08	15.72	85		L	O	L	330 00	78 183 06 16	SWP 1903	
3C 249.1		11 00 27	77 15 08	15.72	85		L	O	L	360 00	78 195 06 25	LWR 1776	
ALF UMA	CCAKD	11 00 39	62 01	1.79	46		L	O	L	045 00	78 137 09 34	SWP 1564	
HD95689	CEJLI	11 00 33	62 01 17	1.79	46		L	O	L	050 00	78 237 12 54	SWP 2396	
HD95689		11 00 39	62 01 17	1.79	46		H	O	L	003 00	78 237 13 54	LWR 2173	
92110138	BSKLF	11 01 40	38 28 45	13.5	85		L	O	L	080 00	78 148 12 27	SWP 1656	
92110138		11 01 40	38 28 45	13.5	95		L	O	L	090 00	78 148 14 01	LWR 1573	
92110138		11 01 40	38 28 45	13	85		L	O	L	090 00	78 161 07 45	LWR 1646	
92110138		11 01 40	38 28 45	13	85		L	O	L	180 00	78 161 09 30	SWP 1756	
92110138		11 01 40	38 28 45	13	85		L	O	L	060 00	78 161 12 42	LWR 1647	
BD220238		11 01 40	38 28 45	13	87		L	O	L	820 00	78 301 22 44	LWR 2745	
HD96548	OSPSL	11 04 18	-65 14	7.85	11	E0.40	H	C	S	025 00	78 143 19 42	SWP 1616	
HD96548		11 04 18	-65 14	7.85	11	E0.40	L	C	S	035 00	78 143 20 27	LWR 1550	
HD96548		11 04 18	-65 14	7.85	11	E0.40	L	O	L	000 16	78 143 21 10	SWP 1617	
HD96548		11 04 18	-65 14	7.85	11	E0.40	L	C	S	000 16	78 143 21 17	SWP 1617	
4C 16.30	QQ2AB	11 04 35	16 44 06	15.70	85		L	O	L	318 00	78 186 06 13	LWR 1781	
[illegible]	PG2SS	11 10 45	-26 11 34	7.2	38	B0.14	L	O	L	070 00	78 138 16 32	SWP 1574	
[illegible]		11 10 45	-26 11 34	7.2	38	B0.14	L	C	S	008 00	78 138 17 52	SWP 1574	
[illegible]		11 10 45	-26 11 34	7.2	38	B0.14	L	C	S	004 00	78 138 18 12	LWR 1513	
[illegible]		11 10 45	-26 11 34	7.2	38	B0.14	L	O	L	005 00	78 138 18 25	LWR 1513	
[illegible]		11 10 45	-26 11 34	7.2	38	B0.14	L	O	I	008 00	78 138 19 45	SWP 1575	
[illegible]		11 10 45	-26 11 34	7.2	38	B0.14	L	O	S	004 00	78 138 20 02	SWP 1575	
[illegible]		11 10 46	-26 11 35	7.2	38	B0.14	L	C	S	003 00	78 221 05 27	SWP 2246	
[illegible]		11 10 46	-26 11 35	7.2	38	B0.14	L	C	S	004 00	78 221 05 53	SWP 2248	
[illegible]		11 10 46	-26 11 35	7.2	38	B0.14	L	C	L	004 45	78 221 06 04	LWR 2024	
							L	C	S	003 55	78 221 06 17	LWR 2024	
HD 97991	ALEBJ	11 13 33	-03 12	7.81	20		H	C	S	018 00	78 167 14 25	LWR 1676	
HD 97991		11 13 39	-03 12	7.81	20		H	C	S	025 00	78 167 15 13	SWP 1794	
IOT LEO	AFEBV	11 21 19	10 48 17	3.9	40		L	O	L	010 00	78 145 09 10	SWP 1631	
IOT LEO		11 21 19	10 48 17	3.9	40		L	C	S	002 00	78 145 09 29	SWP 1631	
IOT LEO		11 21 19	10 48 17	3.9	40		H	O	L	025 00	78 145 09 46	LWR 1559	
HD 99171	ALEBJ	11 21 58	-42 24	6.11	23	E0.11	H	C	S	007 00	78 167 16 46	LWR 1677	
HD 99171		11 21 53	-42 24	6.11	23	E0.11	H	C	S	014 00	78 167 17 22	SWP 1795	
+6 2961		11 30 15	05 33 10	10.2	30		H	C	S	150 00	78 167 10 57	SWP 1793	
COMETSGT	CCWNJ	11 32 10	-61 54 49	7.0	04		L	O	I	000 30	78 288 23 38	LWR 2613	
COMETSGT		11 32 10	-61 54 49	10.0	06		L	O	I	005 00	78 288 23 43	SWP 2991	

OBJ ID	PROG ID	TARGET RA H M S	TARGET DEC D M S	VIS MAG	OBJ CLASS	E(B-V) OR B-V	DISP H/L	LG - APERTURE O/C	OBJ L/S	EXPOSE TIME MIN SEC	EPOSURE START TIME YR DAY HR MIN	IMAGE SEQ NUM	OBSERVERS COMMENTS
COMET1SGT	COMEJ	11 32 10	-61 54 49	10.0	06		L	O	L	002 00	78 289 01 06	SWP 2992	
COMET1SGT		11 32 10	-61 54 49	10.0	06		L	O	L	002 00	78 289 02 12	LWR 2614	
COMET1SGT		11 32 10	-61 54 49	10.0	06		L	O	L	002 00	78 289 02 18	SWP 2993	
COMET1SGT		11 32 10	-61 54 49	10.0	06		L	O	L	025 00	78 289 02 55	LWR 2615	
COMET1SGT		11 32 10	-61 54 49	10.0	06		L	O	L	025 00	78 289 03 33	SWP 2994	
COMET1SGT		11 32 10	-61 54 49	10.0	06		H	O	L	128 45	78 289 04 09	LWR 2616	
COMET1SGT		11 32 10	-61 54 49		06		L		B	130 00	78 291	LWR 2646	VILSPA
COMET1SGT		11 32 10	-61 54 49		06		L	O	B	180 00	78 291 19 25	SWP 3025	
COMET1SGT		11 32 10	-61 54 49		06		H	O	L	030 00	78 291 22 33	LWR 2647	
COMET1SGT		11 32 10	-61 54 49		06		L	O	B	010 00	78 291 23 21	SWP 3026	
COMET1SGT		11 32 10	-61 54 49		06		L	O	L	156 28	78 291 23 56	LWR 2648	
COMET1SGT		11 32 10	-61 54 49		06		L	O	L	003 00	78 292 00 30	SWP 3027	
COMET1SGT		11 32 10	-61 54 49		06		L	O	L	135 00	78 292 01 06	SWP 3028	
							H	O	L	045 00	78 292 03 06	LWR 2649	
HR 4511	APEDV	11 41 07	-62 12 42	5.0	44	E0.80	L	O	L	060 00	78 252 02 00	SWP 2690	
HR 4511		11 41 07	-62 12 42	5.0	44	E0.80	L	O	S	020 00	78 262 03 33	SWP 2690	
HR 4511		11 41 07	-62 12 42	5.0	44	E0.80	L	O	L	010 00	78 262 03 07	LWR 2399	
HR 4511		11 41 07	-62 12 42	5.0	44	E0.80	L	O	S	004 00	78 262 03 23	LWR 2399	
HR 4511		11 41 07	-62 12 42	5.0	44	E0.80	H	O	L	025 00	78 262 04 24	LWR 2400	
HR 4520		11 43 14	-66 27 05	3.4	31	E0.16	H	C	S	015 00	78 262 05 18	SWP 2691	
HR 4520		11 43 14	-66 27 05	3.8	31	E0.16	H	C	S	010 00	78 267 02 51	LWR 2450	
							H	C	S	020 00	78 267 03 06	SWP 2744	
NGC 3918	PP2ED	11 47	-56 54	0.5	70		L	O	L	007 00	78 183 15 54	SWP 1905	
NGC 3918		11 47	-56 54	8.5	70		L	C	S	013 00	78 183 16 09	SWP 1905	
NGC 3918		11 47	-56 54	8.5	70		L	O	L	012 00	78 183 17 46	LWR 1747	
NGC 3918		11 47	-56 54	8.5	70		L	O	L	007 00	78 183 18 32	SWP 1906	
NGC 3918		11 47	-56 54	8.5	70		L	C	S		78 183 18 50	SWP 1906	
NGC 3918		11 47 48	-56 54 00	8.5	70		H	C	S	080 00	78 183 19 23	LWR 1768	
NGC 3918		11 47 48	-56 54 00	8.5	70		L	O	L	020 00	78 303 07 21	LWR 2753	
NGC 3918		11 47 48	-56 54 00	8.5	70		L	O	L	020 00	78 303 07 47	SWP 3191	
NGC 3918		11 47 48	-56 54 00	8.5	70		L	O	L	010 00	78 303 08 20	LWR 2754	
NGC 3918		11 47 48	-56 54 00	8.5	70		L	O	L	010 00	79 303 08 51	SWP 3192	
NGC 3918		11 47 48	-56 54 00	8.5	70		H	O	L	120 00	78 307 08 48	SWP 3215	
NGC 3918		11 47 48	-56 54 00	8.5	70		L	O	L	006 00	78 307 10 56	LWR 2809	
NGC 3918		11 47 48	-56 54 00	8.5	70		L	O	L	012 00	78 307 11 08	LWR 2809	
							L	C	S	015 00	78 307 11 39	SWP 3216	
NGC 4051	EGAMS	12 00 36	44 48 39		80		L	O	L	030 00	78 176 13 19	LWR 1728	
HD105056	PLJBH	12 03 13	-69 18	7.5	23		H	C	S	030 00	78 209 15 53	SWP 2132	
105056		12 03 13	-69 18	7.5	23	E 0.5	H	C	S	020 00	78 290 03 34	LWR 2628	
105056		12 03 13	-69 18	7.5	23	E 0.5	H	C	S	035 00	78 290 04 04	SWP 3003	
NGC 4151	PP2ED	12 08 00	39 41	11.2	84		L	O	S	050 00	78 304 23 41	SWP 3199	
NGC 4151	EOLCM	12 08 01	39 41 03	11.2	94		L	O	S	080 00	78 168 11 40	SWP 1800	
NGC 4151		12 08 01	39 41 03	11.2	94		L				78 168	SWP 1800	
NGC 4151		12 08 01	39 41 03	11.2	84		L	O	S	030 00	78 168 13 44	SWP 1801	

OBJ ID	PROG ID	TARGET RA H M S	TARGET DEC D M S	VIS MAG	OBJ CLASS	E(B-V) OR B-V	DISP H/L	LG - APERTURE O/C	OBJ L/S	EXPOSE TIME MIN SEC	EPOSURE START TIME YR DAY HR MIN	IMAGE SEQ NUM	OBSERVERS COMMENTS
NGC4151	GQJBO	12 08 01	39 41 03	12	84		L	O	L	050 00	78 106 19 57	LWR 1324	
NGC4151		12 08 01	39 41 03	12	84		L	O	L	040 00	78 106 20 55	SWP 1371	
NGC4151		12 08 01	39 41 03	12	84		L	O	L	060 00	78 106 22 09	LWR 1325	
NGC4151		12 08 01	39 41 03	12	84		L	O	L	040 00	78 106 23 18	SWP 1372	
NGC4151		12 08 01	39 41 03	12	84		L	O	L	040 00	79 107 00 09	LWR 1326	
							L	O	S	020 00	78 107 00 58	SWP 1373	
NGC 4151	PP2ED	12 08 01	39 41 03	11.2	84		L	C	S	080 00	78 304 22 07	LWR 2782	
HD105098	CBMJP	12 09 20	-58 31	9.2	44		L	O	L	030 00	78 228 02 46	SWP 2303	
HD105098		12 09 20	-58 31	9.2	44		L	O	L	020 00	78 228 03 49	LWR 2084	
HD105098		12 09 20	-58 31	9.2	44		L	C	S	010 00	78 228 04 18	LWR 2084	
		12 09 20	-58 31	9.2	44		L	O	L	080 00	78 228 04 36	SWP 2304	
HZ 21	GQJBO	12 11 24	33 12 00	14	16		L	O	L	030 00	78 108 00 27	LWR 1330	
HZ 21		12 11 24	33 12 00	14	16		L	O	L	015 00	78 109 01 25	SWP 1378	
HD106677	CCAKD	12 13 21	72 49 45	5.4	86		L	O	L	060 00	78 137 11 54	SWP 1565	
HD106677		12 13 21	72 49 45	5.4	46		H	C	S	015 00	78 137 13 07	LWR 1508	
MKN 205	QO2AB	12 19 35	75 35 14	14.5	85		L	O	L	150 00	78 182 07 26	SWP 1894	
MKN 205		12 19 35	75 35 14	14.5	85		L	O	L	165 00	78 182 10 16	LWR 1758	
MKN 205		12 19 35	75 35 14	14.5	85		L	O	L	240 00	78 184 06 03	LWR 1773	
3C 273	GQJBO	12 26 33	02 19 42	12.9	85		L	O	L	100 00	78 105 20 31	SWP 1365	
3C 273		12 26 33	02 19 42	12.9	95		L	O	L	050 00	78 105 23 50	SWP 1366	
3C 273	GQJBO	12 26 33	02 19 42	12.9	85		L	O	L	070 00	78 105 22 28	LWR 1321	
3C 273	EQBCB	12 29 33	02 19	12.8	85	E0.38	L	O	L	090 00	78 146 09 46	SWP 1642	
3C 273		12 26 33	02 19	12.8	85	E0.38	L	O	L	060 00	78 146 11 28	LWR 1565	
3C 273		12 26 33	02 19 42	12.8	85	E 0.4	L	O	S	060 00	78 148 10 13	SWP 1655	
NGC 4486	EGAMS	12 28 17	12 40 04		81		L	O	L	300 00	78 176 07 09	SWP 1854	
HD108903	LIBPW	12 28 22	-56 50 00	1.6	48	E0000	L	C	S	000 30	78 111 12 01	LWR 1354	
HD108903		12 28 22	-56 50 00	1.6	48	E0000	L	C	S	005 00	79 111 12 09	LWR 1354	
HD108903		12 28 22	-56 50 00	1.6	48	E0000	L	C	S	005 00	78 111 12 47	SWP 1397	
HD108903		12 28 22	-56 50 00	1.6	48	E0000	L	C	S	015 00	78 111 13 10	SWP 1397	
HD108903		12 28 22	-56 50 00	1.6	48	E0000	L	C	S	000 10	78 111 13 56	LWR 1355	
HD108903		12 28 22	-56 50 00	1.6	48	E0000	L	O	L	001 00	78 111 14 03	LWR 1355	
							H	O	L	120 00	78 111 14 50	LWR 1356	
BET CVN	MGLRD	12 31 32	41 38	4.29	44	.59	H	C	S	027 00	78 304 12 53	LWR 2777	
BET CVN	CCAKD	12 31 45	-23 07	2.66	44		L	O	L	045 00	79 138 09 26	SWP 1571	
BET CVN		12 31 45	-23 07	2.66	44		H	O	L	010 00	78 138 10 38	LWR 1512	
							L	O	L	090 00	78 138 11 37	SWP 1572	
HZ 29	BSJLG	12 32 29	37 54 14	14.2	28		L	O	L	060 00	78 150 22 50	SWP 1673	

OBJ ID	PROG ID	TARGET RA H M S	TARGET DEC D M S	VIS MAG	OBJ CLASS	B(B-V) OR B-V	DISP H/L	LG - OBJ APERTURE O/C L/S	EXPOSE TIME MIN SEC	EPOSURE START TIME YR DAY HR MIN	IMAGE SEQ NUM	OBSERVERS COMMENTS
GAM VIR	AFEHV	12 39 07	-01 10 31	2.9	40	B0.07	H	C S	015 00	78 115 11 46	LWR 1385	
GAM VIR		12 39 07	-01 10 31	2.9	40	B0.07	H	O I	030 00	78 115 12 38	SWP 1414	
FB1GE67	BSJLG	12 39 22	17 47 49	11.3	16		L	O L	004 00	78 147 21 56	LWR 1570	
FB1GE67		12 39 22	17 47 49	11.3	16		L	O L	011 00	78 147 22 31	SWP 1652	TRAILED
FB1GF67		12 39 22	17 47 49	11.3	16		L	C S	002 00	78 147 23 33	SWP 1652	
HD112185	SS2JJ	12 51 50	56 13 51	1.8	36	-0.02	H	C S	002 00	78 291 06 58	SWP 3017	
HD112185		12 51 50	56 13 51	1.8	36	B0.02	H	O I	002 00	78 294 06 05	SWP 3083	
HD112185		12 51 50	56 13 51	1.8	36	B0.02	H	C S	000 50	78 294 06 15	LWR 2662	
HD112185		12 51 50	56 13 51	1.8	36	B0.02	H	C S	001 00	78 296 13 28	LWR 2693	
HD112244	ICJHB	12 52 54	-56 33 55	5.40	12	B0.34	H	C S	004 00	78 117 19 52	SWP 1428	
HD112244		12 52 54	-56 33 55	5.40	12	B0.34	H	C S	004 00	78 117 20 30	LWR 1403	
HD112244	MLJBH	12 53 00	-56 33	5.4	12	B 0.3	H	C S	005 00	78 209 15 02	SWP 2131	
ALP2CVN	MVGSL	12 53 40	38 35 18	2.9	36	-0.12	H	C S	001 00	78 295 06 36	LWR 2673	PHSE0.0
ALP2CVN		12 53 40	38 35 18	2.9	36	-0.12	H	O I	000 30	78 295 07 10	LWR 2674	PHSE0.0
ALP2CVN		12 53 40	38 35 18	2.9	36	-0.12	H	C S	001 24	78 295 07 41	LWR 2675	PHSE0.0
MKN 58	GQJBC	12 54 32	32 43 04	15	80		L	O L	060 00	78 107 19 42	LWR 1329	
MKN 58		12 54 32	32 43 04	15	80		L	O L	040 00	78 107 21 37	SWP 1377	
113904	MLJBH	13 04 52	-65 02	5.5	13	B 0.2	H	C S	007 00	78 288 13 10	SWP 2980	
113904		13 04 52	-65 02	5.5	13	B 0.2	H	C S	004 00	78 288 13 40	LWP 2608	
HD113904	MF2YK	13 04 53	-65 02	5.5	10		H	C S	001 50	78 248 11 51	SWP 2496	
HD113904		13 04 53	-65 02	5.5	10		H	C S	002 20	78 248 11 58	LWR 2279	
THI VIR	DGDSL	13 07 21	-05 16	4.4	30	B0.00	H	C S	027 00	78 189 05 22	SWP 1939	
THI VIR		13 07 21	-05 16	4.4	30	B0.00	H	C S	011 30	78 189 06 00	LWR 1796	
THI VIR		13 07 21	-05 16	4.4	30	B0.00	H	C S	069 00	78 189 06 44	SWP 1940	
HD114378	MGLBD	13 07 33	17 48	4.30	41		H	C S	018 00	78 214 03 30	LWR 1943	
HD114710		13 08 55	28 08	4.28	44	B-.01	H	C S	025 00	78 213 05 17	LWR 1957	
DBT CCM		13 09 12	29 08	4.29	44	.57	H	C S	025 00	78 305 22 45	LWR 2797	
HZ 43	SX2BG	13 14 00	29 21 50	12.86	37	B 0.1	L	O L	006 30	78 118 23 06	LWR 1413	
HZ 43		13 14 00	29 21 50	12.86	37	B 0.1	L	O L	015 00	78 119 00 13	SWP 1434	
HZ 43		13 14 00	29 21 50	12.86	37	B 0.1	L	C S	020 00	78 119 01 24	LWR 1414	
HZ 43		13 14 00	29 21 50	12.86	37	B 0.1	L	C S	007 00	78 119 02 01	LWR 1414	
HZ 43	ISAKD	13 14 00	29 21 50	12.86	37	B 0.1	L	O L	007 00	78 132 20 25	SWP 1528	
HZ 43		13 14 00	29 21 50	12.86	37	B 0.1	L	C S	007 00	78 132 20 43	SWP 1528	
HZ 43		13 14 00	29 21 49	12.9	37	B 0.1	L	O L	006 30	78 132 21 28	LWR 1478	
HD115393	MGLBD	13 14 18	09 41	5.23	41	B .06	H	C S	060 00	78 214 04 35	LWR 1944	
NGC 5128	EODCM	13 22 31	-42 45 31	7.2	82		L	O L	120 00	78 168 07 43	SWP 1799	
NGC 5128		13 22 31	-42 45 31	7.2	82		L	O L	040 00	78 168 09 52	LWR 1681	

OBJ ID	PROG ID	TARGET RA H M S	TARGET DEC D M S	VIS MAG	OBJ CLASS	B(B-V) OR B-V	DISP H/L	LG - OBJ APERTURE O/C L/S	EXPOSE TIME MIN SEC	EPOSURE START TIME YR DAY HR MIN	IMAGE SEQ NUM	OBSERVERS COMMENTS
HD117176	MGLBD	13 25 59	14 03	4.99	44	B -.01	H	C S	110 00	78 214 06 19	LWR 1945	
NGC5189	CMHMJ	13 29 59	-65 43 00	14.4	70		L	O I	060 00	78 217 04 07	LWR 1985	
NGC5189		13 29 59	-65 43 00	14.4	70		L	C S	010 00	78 217 05 17	LWR 1985	
NGC5189		13 29 59	-65 43 00	14.4	70		L	O L	060 00	78 217 05 36	SWP 2206	
EQ VIR	CBJLL	13 32 06	-08 05 06	8.8	46		L	O L	002 30	78 237 15 11	LWR 2174	
AB2LL36	BSJLG	13 37 57	-19 37 14	12	70		L	O L	012 00	78 152 13 14	SWP 1683	TRAILED
HD120136	MGLBD	13 44 53	17 42	4.51	41	B-.01	H	C S	025 00	78 215 06 31	LWR 1958	
BETA UMA	PBCAL	13 45 38	49 33 44	1.91	21		H	C S	000 08	78 143 08 43	SWP 1609	
BETA UMA		13 45 38	49 33 44	1.91	21		H	C S	000 08	78 143 09 15	LWR 1545	
BETA UMA		13 45 38	49 33 44	1.88	21	B0.01	H	C S	000 10	78 181 06 50	SWP 1865	
BETA UMA		13 45 38	49 33 44	1.84	21	B0.01	H	C S	000 09	78 181 07 32	LWR 1752	
HD120315		13 45 38	49 34	1.84	21	B0.02	H	C S	000 10	78 181 20 24	SWP 1888	
HD120315		13 45 38	49 34	1.84	21	B0.02	H	C S	000 10	78 212 13 26	SWP 2159	
HD120315		13 45 38	49 34	1.84	21	B0.02	H	C S	000 09	78 212 13 31	LWR 1928	
HD120315		13 45 38	49 34	1.84	21	B0.02	H	L L	003 -2	78 213 16 44	SWP 2161	TRAILED
BETA UMA		13 45 38	49 33 44	1.88	21	B0.01	H	L L	000 10	78 213 16 49	LWR 1930	
BETA UMA		13 45 38	49 33 44	1.88	21	B0.01	H	C S	000 10	78 232 11 30	SWP 2339	
BETA UMA		13 45 38	49 33 44	1.88	21	B0.01	H	C S	000 09	78 232 12 19	LWR 2125	
BETA UMA		13 45 38	49 33 44	1.88	21	B0.01	H	L L	000 01	78 232 14 24	LWR 2127	TRL0.12"
BETA UMA		13 45 38	49 33 44	1.84	21	B0.01	H	L L	000 01	78 232 14 54	LWR 2127	TRL0.29"
BETA UMA		13 45 38	49 33 44	1.84	21	B0.01	H	C S	000 01	78 232 15 27	SWP 2341	TRL0.10"
BETA UMA		13 45 38	49 33 44	1.84	21		H	C S	000 01	78 232 15 44	SWP 2341	TRL0.29"
BETA UMA		13 45 38	49 33 44	1.84	21		H	C S	000 10	78 243 15 27	SWP 2428	
BETA UMA		13 45 38	49 33 44	1.84	21		H	C S	000 09	78 243 15 31	LWP 2226	
BETA UMA		13 45 38	49 33 44	1.84	21		H	L L	000 06	78 245 13 29	SWP 2449	
BETA UMA		13 45 38	49 33 44	1.84	21		H	L L	000 06	78 245 15 26	LWR 2245	
BETA UMA		13 45 38	49 33 44	1.84	21	B0.02	H	C S	000 10	78 255 10 44	SWP 2633	
BETA UMA		13 45 38	49 33 44	1.84	21	B0.02	H	C S	000 09	78 255 13 51	LWR 2391	
BETA UMA		13 45 38	49 33 44	1.84	21	B0.01	H	C S	000 09	78 274 09 53	LWR 2515	
BETA UMA		13 45 38	49 33 44	1.84	21	B0.01	H	C S	000 10	78 274 09 57	SWP 2821	
BETA UMA		13 45 38	49 33 44	1.84	21	B0.02	H	C S	000 09	78 274 13 01	LWR 2518	
BETA UMA		13 45 38	49 33 44	1.84	21	B0.02	H	C S	000 10	78 274 13 07	SWP 2824	
BETA UMA		13 45 38	49 33 43	1.84	21	B0.02	H	C S	000 10	78 300 12 17	SWP 3170	
HD120315	PHSTD	13 45 38	49 34	1.84	21	B0.02	H	C S	000 09	78 300 13 20	LWR 2734	
HD120315		13 45 38	49 34	1.84	21	B0.02	H	C S	000 08	78 120 20 21	LWR 1422	
										78 120 21 40	SWP 1447	
NGC 5315	PF2ED	13 50	-66 16	13	70		L	O L	070 00	78 185 19 23	SWP 1915	
NGC 5315		13 50	-66 16	13	70		L	O I	035 00	78 185 20 08	LWP 1774	
NGC 5315		13 50 21	-66 16		70		L	O L	030 00	78 303 09 52	LWR 2755	
NGC 5315		13 50 21	-66 16		70		L	O L	030 00	78 303 10 28	SWP 3193	
HD121370	CCAKL	13 52 18	18 39	2.69	44		H	O L	180 00	78 135 09 43	SWP 1550	

OBJ ID	PROG ID	TARGET RA H	M	S	TARGET DEC D	M	S	VIS MAG	OBJ CLASS	E(B-V) OR B-V	DISP H/L	LG - OBJ APERTURE O/C	L/S	EXPOSE TIME MIN	SEC	EPOSURE START TIME YR	DAY	HR	MIN	IMAGE SEQ NUM	OBSERVERS COMMENTS
HD121370	SX2HG	13	52	18	18	38	51	2.69	44	E0.58	L	O	L	033	00	78	125	09	30	SWP	1487	
HD121370		13	52	18	18	38	51	2.69	44	E0.58	H	O	L	015	00	78	125	10	15	LWR	1443	
-2 3766	ALEBJ	13	56	15	-02	40	20	10.3	20		H	C	S	210	00	78	164	07	37	SWP	1777	
HD124570	MGIKD	14	11	41	13	12		5.48	41	B .05	H	C	S	060	00	78	215	07	44	LWR	1959	
HD124897	CEJLL	14	13	22	19	26		0.06	46	E0.00	L	C	S	020	00	78	095	12	20	SWP	1315	
HD124897		14	13	22	19	26		0.06	46	E0.00	L	C	S	240	00	78	095	13	36	SWP	1316	
HD124850	MGIJB	14	13	23	-05	46		4.07	41	B .02	H	C	S	021	00	78	214	08	54	LWR	1946	
NGC5548	EGAMS	14	15	43	25	21	57	13.5	80		L	O	L	084	00	78	178	07	20	SWP	1662	OFFSET
NGC5548		14	15	43	25	21	57	13.5	80		L	O	L	120	00	78	178	08	57	LWR	1738	
NGC5548		14	15	43	25	21	57	13.5	80		L	C	S	015	00	78	178	11	19	LWR	1738	
A CEN	ACDAK	14	19	56	-39	17	05	4.41	27	E0.02	H	C	S	001	15	78	207	13	03	LWR	1898	
A CEN		14	19	56	-39	17	05	4.41	27	E0.02	H	C	S	001	40	78	207	13	12	SWP	2109	
A CEN		14	19	56	-39	17	05	4.41	27	E0.02	H	C	S	001	15	78	207	14	16	LWR	1899	
A CEN		14	19	56	-39	17	05	4.41	27	E0.02	H	C	S	001	30	78	207	14		SWP	2110	
A CEN		14	19	56	-39	17	05	4.41	27	E0.02	L	O	L	000	02	78	207	16	48	LWR	1901	TRAILED
A CEN		14	19	56	-39	17	05	4.41	27	E0.02	L	O	L	000	02	78	207	16	56	SWP	2112	TRAILED
A CEN		14	19	56	-39	17	05	4.41	27	E0.02	H	C	S	001	15	78	207	18	02	LWR	1902	
A CEN		14	19	56	-39	17	05	4.41	27	E0.02	H	C	S	001	30	78	207	18	09	SWP	2113	
A CEN		14	19	56	-39	17	05	4.41	27	E0.02	H	C	S	001	30	78	207	19	08	SWP	2114	
A CEN		14	19	56	-39	17	05	4.41	27	E0.02	H	C	S	001	15	78	207	19	14	LWR	1903	
A CEN		14	19	56	-39	17	05	4.41	27	E0.02	H	C	S	001	15	78	213	12	31	LWR	1938	
A CEN		14	19	56	-39	17	05	4.41	27	E0.02	H	C	S	001	30	78	213	12	39	SWP	2165	
A CEN		14	19	56	-39	17	05	4.41	27	E0.02	H	C	S	001	25	78	213	14	05	LWR	1939	
TF CALWL		14	19	56	-39	17	05	4.41	27	E0.02	H	C	S	001	30	78	213	14	12	SWP	2166	
TF CALWL		14	19	56	-39	17	05	4.41	27	E0.02	H	C	S	000	23	78	213	14	46	LWR	1940	T07"C16"
A CEN		14	19	56	-39	17	05	4.41	27	E0.02	H	C	S	003	05	78	213	15	16	SWP	2167	T05"C03"
A CEN		14	19	56	-39	17	05	4.41	27	E0.02	L	O	L	000	02	78	213	16	24	LWR	1941	TRAILED
A CEN		14	19	56	-39	17	05	4.41	27	E0.02	L	O	L	000	02	78	213	16	34	SWP	2168	TRAILED
A CEN		14	19	56	-39	17	05	4.41	27	E0.02	H	C	S	001	25	78	213	17	49	LWR	1942	
A CEN		14	19	56	-39	17	05	4.41	27	E0.02	H	C	S	001	30	78	213	17	57	SWP	2169	
A CEN		14	19	56	-39	17	05	4.41	27	E0.02	H	C	S	001	25	78	214	11	46	LWR	1948	
A CEN		14	19	56	-39	17	05	4.41	27	E0.02	H	C	S	001	30	78	214	11	55	SWP	2172	
A CEN		14	19	56	-39	17	05	4.41	27	E0.02	H	C	S	001	25	78	214	13	00	LWR	1949	
TF CALWL		14	19	56	-39	17	05	4.41	27	E0.02	H	C	S	001	30	78	214	13	08	SWP	2173	
TF CALWL		14	19	56	-39	17	05	4.41	27	E0.02	H	C	S	000	23	78	214	13	39	LWR	1950	T07"C16"
A CEN		14	19	56	-39	17	05	4.41	27	E0.02	H	C	S	003	05	78	214	14	12	SWP	2174	T05"C03"
A CEN		14	19	56	-39	17	05	4.41	27	E0.02	L	O	L	000	02	78	214	16	00	LWR	1951	TRAILED
A CEN		14	19	56	-39	17	05	4.41	27	E0.02	L	O	L	000	02	78	214	16	08	SWP	2175	TRAILED
A CEN		14	19	56	-39	17	05	4.41	27	E0.02	H	C	S	001	25	78	214	17	09	LWR	1952	
A CEN		14	19	56	-39	17	05	4.41	27	E0.02	H	C	S	001	30	78	214	17	15	SWP	2176	
A CEN		14	19	56	-39	17	05	4.41	27	E0.02	H	C	S	001	25	78	214	18	13	LWR	1953	
A CEN		14	19	56	-39	17	05	4.41	27	E0.02	H	C	S	001	30	78	214	18	19	SWP	2177	
A CEN		14	19	56	-39	17	05	4.41	27	E0.02	H	C	S	001	25	78	215	11	51	LWR	1962	
A CEN		14	19	56	-39	17	05	4.41	27	E0.02	H	C	S	001	30	78	215	11	58	SWP	2179	

OBJ ID	PROG ID	TARGET RA H	M	S	TARGET DEC D	M	S	VIS MAG	OBJ CLASS	E(B-V) OR B-V	DISP H/L	LG - OBJ APERTURE O/C	L/S	EXPOSE TIME MIN	SEC	EPOSURE START TIME YR	DAY	HR	MIN	IMAGE SEQ NUM	OBSERVERS COMMENTS
A CEN	ACDAK	14	19	56	-39	17	05	4.4	27	E0.02	H	C	S	001	15	78	215	12	55	LWR	1963	
A CEN		14	19	56	-39	17	05	4.4	27	E0.02	H	C	S	001	20	78	215	13	03	SWP	2180	
TF CALWL		14	19	56	-39	17	05	4.4	27	E0.02	H	C	S	000	23	78	215	13	34	LWR	1964	T07"C16"
TF CALWL		14	19	56	-39	17	05	4.4	27	E0.02	H	C	S	003	05	78	215	14	07	SWP	2181	T05"C03"
A CEN		14	19	56	-39	17	05	4.4	27	E0.02	L	O	L	000	02	78	215	15	46	LWR	1965	TRAILED
A CEN		14	19	56	-39	17	05	4.4	27	E0.02	L	O	L	000	02	78	215	15	26	SWP	2182	TRAILED
A CEN		14	19	56	-39	17	05	4.4	27	E0.02	H	C	S	001	15	78	215	16	24	LWR	1966	
A CEN		14	19	56	-39	17	05	4.4	27	E0.02	H	C	S	001	20	78	215	16	30	SWP	2183	
A CEN		14	19	56	-39	17	05	4.4	27	E0.02	H	C	S	001	15	78	215	17	25	LWR	1967	
A CEN		14	19	56	-39	17	05	4.4	27	E0.02	H	C	S	001	20	78	215	17	31	SWP	2184	
A CEN		14	19	56	-39	17	05	4.4	27	E0.02	H	C	S	001	15	78	215	18	18	LWR	1968	
A CEN		14	19	56	-39	17	05	4.4	27	E0.02	H	C	S	001	20	78	215	18	34	SWP	2185	
A CEN		14	19	56	-39	17	05	4.4	27	E0.02	H	C	S	001	15	78	216	11	38	LWR	1976	
A CEN		14	19	56	-39	17	05	4.4	27	E0.02	H	C	S	001	25	78	216	11	46	SWP	2196	
A CEN		14	19	56	-39	17	05	4.4	27	E0.02	H	C	S	001	45	78	216	12	44	LWR	1977	
TF CALWL		14	19	56	-39	17	05	4.4	27	E0.02	H	C	S	001	35	78	216	12	51	SWP	2197	
TF CALWL		14	19	56	-39	17	05	4.4	27	E0.02	H	C	S	003	05	78	216	13	46	SWP	2198	T05"C03"
A CEN		14	19	56	-39	17	05	4.4	27	E0.02	H	C	S	000	23	78	216	13	53	LWR	1978	T07"C16"
A CEN		14	19	56	-39	17	05	4.4	27	E0.02	L	O	L	000	02	78	216	14	55	LWR	1979	TRAILED
A CEN		14	19	56	-39	17	05	4.4	27	E0.02	L	O	L	000	02	78	216	15	03	SWP	2199	TRAILED
A CEN		14	19	56	-39	17	05	4.4	27	E0.02	H	C	S	001	25	78	216	16	04	LWR	1980	
A CEN		14	19	56	-39	17	05	4.4	27	E0.02	H	C	S	001	35	78	216	16	11	SWP	2200	
A CEN		14	19	56	-39	17	05	4.4	27	E0.02	H	C	S	001	35	78	216	17	20	LWR	1981	
A CEN		14	19	56	-39	17	05	4.4	27	E0.02	H	C	S	001	45	78	216	17	26	SWP	2201	
A CEN		14	19	56	-39	17	05	4.4	27	E0.02	H	C	S	001	25	78	217	12	23	LWR	1987	
A CEN		14	19	56	-39	17	05	4.4	27	E0.02	H	C	S	001	35	78	217	12	28	SWP	2208	
A CEN		14	19	56	-39	17	05	4.4	27	E0.02	H	C	S	001	20	78	217	13	44	LWR	1988	
TF CALWL		14	19	56	-39	17	05	4.4	27	E0.02	H	C	S	001	45	78	217	13	48	SWP	2210	
A CEN		14	19	56	-39	17	05	4.4	27	E0.02	H	C	S	000	23	78	217	14	50	LWR	1989	T07"C16"
A CEN		14	19	56	-39	17	05	4.4	27	E0.02	L	O	L	000	02	78	217	15	57	LWR	1990	TRAILED
A CEN		14	19	56	-39	17	05	4.4	27	E0.02	L	O	L	000	02	78	217	16	05	SWP	2212	TRAILED
A CEN		14	19	56	-39	17	05	4.4	27	E0.02	H	C	S	001	20	78	217	17	04	LWR	1991	
A CEN		14	19	56	-39	17	05	4.4	27	E0.02	H	C	S	001	35	78	217	17	09	SWP	2213	
A CEN		14	19	56	-39	17	05	4.4	27	E0.02	H	C	S	001	25	78	217	18	15	LWR	1992	
A CEN		14	19	56	-39	17	05	4.4	27	E0.02	H	C	S	001	30	78	217	18	22	SWP	2214	
A CEN		14	19	56	-39	17	05	4.4	27	E0.02	H	C	S	001	35	78	218	11	19	LWR	1995	
A CEN		14	19	56	-39	17	05	4.4	27	E0.02	H	C	S	001	35	78	218	11	27	SWP	2220	
A CEN		14	19	56	-39	17	05	4.4	27	E0.02	H	C	S	001	20	78	218	12	26	LWR	1996	
TF CALWL		14	19	56	-39	17	05	4.4	27	E0.02	H	C	S	001	45	78	218	12	33	SWP	2221	
A CEN		14	19	56	-39	17	05	4.4	27	E0.02	H	C	S	000	23	78	218	13	41	LWR	1997	T07"C16"
A CEN		14	19	56	-39	17	05	4.4	27	E0.02	L	O	L	000	02	78	218	14	50	LWR	1998	TRAILED
A CEN		14	19	56	-39	17	05	4.4	27	E0.02	L	O	L	000	02	78	218	15	01	SWP	2223	TRAILED
A CEN		14	19	56	-39	17	05	4.4	27	E0.02	H	C	S	001	25	78	218	16	06	LWR	1999	
A CEN		14	19	56	-39	17	05	4.4	27	E0.02	H	C	S	001	35	78	218	16	13	SWP	2224	
A CEN		14	19	56	-39	17	05	4.4	27	E0.02	H	C	S	001	25	78	218	17	10	LWP	2000	
A CEN		14	19	56	-39	17	05	4.4	27	E0.02	H	C	S	001	30	78	218	17	17	SWP	2225	
A CEN		14	19	56	-39	17	05	4.4	27	E0.02	H	C	S	001	25	78	218	18	13	LWR	2001	
A CEN		14	19	56	-39	17	05	4.4	27	E0.02	H	C	S	001	25	78	218	18	20	SWP	2226	
A CEN		14	19	56	-39	17	05	4.4	27	E0.02	H	C	S	001	25	78	220	11	43	LWR	2014	
A CEN		14	19	56	-39	17	05	4.4	27	E0.02	H	C	S	001	30	78	220	11	52	SWP	2237	
A CEN		14	19	56	-39	17	05	4.4	27	E0.02	H	C	S	001	15	78	220	12	51	LWR	2015	

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A CEN	ACLAA	14 19 56	-39 17 05	4.4	27	E0.02	H	C	S	001 30	78 220 12 56	SWP 2238	
TF CALWL		14 19 56	-39 17 05	4.4	27	E0.02	H	C	S	000 23	78 220 14 23	LWR 2016	T07"C16"
A CEN		14 19 56	-39 17 05	4.4	27	E0.02	L	C	L	000 02	78 220 14 55	LWR 2017	TRAILED
A CEN		14 19 56	-39 17 05	4.4	27	E0.02	L	C	L	000 02	78 220 15 04	SWP 2240	TRAILED
A CEN		14 19 56	-39 17 05	4.4	27	E0.02	H	C	S	001 15	78 220 16 05	LWR 2018	
A CEN		14 19 56	-39 17 05	4.4	27	E0.02	H	C	S	001 30	78 220 16 13	SWP 2241	
A CEN		14 19 56	-39 17 05	4.4	27	E0.02	H	C	S	001 15	78 220 17 09	LWR 2019	
A CEN		14 19 56	-39 17 05	4.4	27	E0.02	H	C	S	001 30	78 220 17 16	SWP 2242	
A CEN		14 19 56	-39 17 05	4.4	27	E0.02	H	C	S	001 15	78 220 18 13	LWR 2020	
A CEN		14 19 56	-39 17 05	4.4	27	E0.02	H	C	S	001 30	78 220 18 20	SWP 2243	
A CEN		14 19 56	-39 17 05	4.4	27	E0.04	H	C	S	001 15	78 222 11 15	LWR 2036	
A CEN		14 19 56	-39 17 05	4.4	27	E0.03	H	C	S	001 25	78 222 11 23	SWP 2254	
A CEN		14 19 56	-39 17 05	4.4	27	E0.02	H	C	S	001 15	78 222 12 16	LWR 2037	
TF CALWL		14 19 56	-39 17 05	4.4	27	E0.02	H	C	S	001 25	78 222 12 26	SWP 2255	
A CEN		14 19 56	-39 17 05	4.4	27	E0.02	L	C	S	000 23	78 222 14 05	LWR 2038	T07"C16"
A CEN		14 19 56	-39 17 05	4.4	27	E0.02	L	C	L	000 02	78 222 14 42	LWR 2039	TRAILED
A CEN		14 19 56	-39 17 05	4.4	27	E0.02	L	C	L	000 02	78 222 14 50	SWP 2257	TRAILED
A CEN		14 19 56	-39 17 05	4.4	27	E0.02	H	C	S	001 15	78 222 15 53	LWR 2040	
A CEN		14 19 56	-39 17 05	4.4	27	E0.02	H	C	S	001 25	78 222 16 00	SWP 2258	
A CEN		14 19 56	-39 17 05	4.4	27	E0.02	H	C	S	001 15	78 222 16 57	LWR 2041	
A CEN		14 19 56	-39 17 05	4.4	27	E0.02	H	C	S	001 25	78 222 17 04	SWP 2259	
A CEN		14 19 56	-39 17 05	4.4	27	E0.02	H	C	S	001 25	78 222 17 37	SWP 2260	
A CEN		14 19 56	-39 17 05	4.4	27	E0.02	H	C	S	001 15	78 224 03 21	LWR 2051	
A CEN		14 19 56	-39 17 05	4.4	27	E0.02	H	C	S	001 30	78 224 03 28	SWP 2268	
A CEN		14 19 56	-39 17 05	4.4	27	E0.02	H	C	S	001 15	78 224 04 25	LWR 2052	
TF CALWL		14 19 56	-39 17 05	4.4	27	E0.02	H	C	S	001 25	78 224 04 31	SWP 2269	
A CEN		14 19 56	-39 17 05	4.4	27	E0.02	L	C	L	000 23	78 224 05 32	LWR 2053	T07"C16"
A CEN		14 19 56	-39 17 05	4.4	27	E0.02	L	C	L	000 02	78 224 06 30	LWR 2054	TRAILED
A CEN		14 19 56	-39 17 05	4.4	27	E0.02	L	C	L	000 02	78 224 06 39	SWP 2271	TRAILED
A CEN		14 19 56	-39 17 05	4.4	27	E0.02	H	C	S	001 15	78 224 07 25	LWR 2055	
A CEN		14 19 56	-39 17 05	4.4	27	E0.02	H	C	S	001 30	78 224 07 41	SWP 2272	
A CEN		14 19 56	-39 17 05	4.4	27	E0.02	H	C	S	001 15	78 224 09 12	LWR 2056	
A CEN		14 19 56	-39 17 05	4.4	27	E0.02	H	C	S	001 30	78 224 09 18	SWP 2273	
A CEN		14 19 56	-39 17 05	4.4	27	E0.02	H	C	S	001 15	78 226 03 57	LWR 2068	
A CEN		14 19 56	-39 17 05	4.4	27	E0.02	H	C	S	001 25	78 226 04 06	SWP 2284	
A CEN		14 19 56	-39 17 05	4.4	27	E0.02	H	C	S	001 15	78 226 05 03	LWR 2069	
TF CALWL		14 19 56	-39 17 05	4.4	27	E0.02	H	C	S	001 25	78 226 05 11	SWP 2285	
A CEN		14 19 56	-39 17 05	4.4	27	E0.02	L	C	L	000 23	78 226 06 06	LWR 2070	T07"C16"
A CEN		14 19 56	-39 17 05	4.4	27	E0.02	L	C	L	000 02	78 226 07 15	LWR 2071	TRAILED
A CEN		14 19 56	-39 17 05	4.4	27	E0.02	L	C	L	000 02	78 226 07 25	SWP 2287	TRAILED
A CEN		14 19 56	-39 17 05	4.4	27	E0.02	H	C	S	001 15	78 226 08 22	LWR 2072	
A CEN		14 19 56	-39 17 05	4.4	27	E0.02	H	C	S	001 25	78 226 08 30	SWP 2288	
A CEN		14 19 56	-39 17 05	4.4	27	E0.02	H	C	S	001 25	78 226 09 27	SWP 2289	
A CEN		14 19 56	-39 17 05	4.4	27	E0.02	H	C	S	001 15	78 228 10 42	LWR 2086	
A CEN		14 19 56	-39 17 05	4.4	27	E0.02	H	C	S	001 25	78 228 10 49	SWP 2308	
A CEN		14 19 56	-39 17 05	4.4	27	E0.02	H	C	S	001 20	78 228 11 46	LWR 2087	
A CEN		14 19 56	-39 17 05	4.4	27	E0.02	H	C	S	001 35	78 228 11 53	SWP 2309	
A CEN		14 19 56	-39 17 05	4.4	27	E0.02	L	C	L	000 02	78 228 13 56	LWR 2089	TRAILED
A CEN		14 19 56	-39 17 05	4.4	27	E0.02	L	C	L	000 02	78 228 14 05	SWP 2311	TRAILED
A CEN		14 19 56	-39 17 05	4.4	27	E0.02	H	C	S	001 20	78 229 15 07	LWR 2090	
A CEN		14 19 56	-39 17 05	4.4	27	E0.02	H	C	S	001 35	78 228 15 13	SWP 2312	

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A CEN	ACCAK	14 19 56	-39 17 05	4.4	27	E0.02	H	C	S	001 20	78 228 15 09	LWR 2091	
A CEN		14 19 56	-39 17 05	4.4	27	E0.02	H	C	S	001 35	78 228 16 16	SWP 2313	
A CEN		14 19 56	-39 17 05	4.4	27	E0.02	H	C	S	001 20	78 228 17 11	LWR 2092	
A CEN		14 19 56	-39 17 05	4.4	27	E0.02	H	C	S	001 35	78 228 17 18	SWP 2314	
A CEN		14 19 56	-39 17 05	4.4	27	E0.02	H	C	S	001 20	78 230 11 56	LWR 2103	
A CEN		14 19 56	-39 17 05	4.4	27	E0.02	H	C	S	001 35	78 230 11 54	SWP 2327	
A CEN		14 19 56	-39 17 05	4.4	27	E0.02	H	C	S	001 20	78 230 12 57	LWR 2104	
A CEN		14 19 56	-39 17 05	4.4	27	E0.02	H	C	S	001 35	78 230 13 05	SWP 2328	
A CEN		14 19 56	-39 17 05	4.4	27	E0.02	L	C	L	000 02	78 230 15 12	LWR 2106	TRAILED
A CEN		14 19 56	-39 17 05	4.4	27	E0.02	L	C	L	000 02	78 230 15 23	SWP 2330	TRAILED
A CEN		14 19 56	-39 17 05	4.4	27	E0.02	H	C	S	001 10	78 230 16 28	LWR 2107	
A CEN		14 19 56	-39 17 05	4.4	27	E0.02	H	C	S	001 25	78 230 16 35	SWP 2331	
A CEN		14 19 56	-39 17 05	4.4	27	E0.02	H	C	S	001 10	78 230 17 40	LWR 2108	
HD127762	CEJLL	14 30 04	-38 31 34	3.03	33		L	O	L	024 00	78 237 10 46	SWP 2395	
HD127762		14 30 04	-38 31 34	3.03	33		L	O	L	016 00	78 237 11 18	LWR 2172	
ALPCEN B		14 35 55	-60 37 38		46		H	O	L	005 00	78 229 08 57	LWR 2095	
ALPCEN B		14 35 55	-60 37 38		46		L	O	L	001 30	78 229 09 33	LWR 2096	
ALPCEN B		14 35 55	-60 37 38		46		L	O	L	004 00	78 229 10 28	SWP 2319	
ALPCEN B		14 35 55	-60 37 38		46		L	O	L	018 00	78 229 10 03	LWR 2097	
ALPCEN A		14 35 57	-60 37 19	-0.01	44	E0.00	L	O	L	040 00	78 229 11 00	SWP 2320	
ALPCEN A		14 35 57	-60 37 19	-0.01	44	E0.00	L	O	L	002 00	78 229 03 43	LWR 2093	
ALPCEN A		14 35 57	-60 37 19	-0.01	44	E0.00	L	O	L	030 00	78 229 03 57	SWP 2315	
ALPCEN A		14 35 57	-60 37 19	-0.01	44	E0.00	L	O	L	001 00	78 229 05 05	LWR 2094	
ALPCEN A		14 35 57	-60 37 19	-0.01	44	E0.00	L	O	L	010 00	78 229 05 11	SWP 2316	
ALPCEN A		14 35 57	-60 37 19	-0.01	44	E0.00	L	O	L	010 00	78 229 07 20	SWP 2317	
ALPCEN A		14 35 57	-60 37 19	-0.01	44	E0.00	H	O	L	001 00	78 229 08 20	SWP 2318	
URANUS	PSTCC	14 39 34	-15 08 30	5.7	03		L	O	S	090 00	78 174 07 02	LWR 1714	
BKN 479	QO2AB	14 40 01	35 38 53	10.38	34		L	O	L	070 00	78 244 02 39	SWP 2428	
BKN 479	QO2AB	14 40 04	35 38 53		34		L	O	L	050 00	78 184 18 39	LWR 1775	
BKN 479		14 40 01	35 38 53		34		L	O	L	135 00	78 190 05 35	SWP 1947	
HD129502	AF6BV	14 40 23	-05 26 30	3.9	41	E0.38	L	O	L	013 00	78 259 00 46	SWP 2659	
HD129502		14 40 23	-05 26 30	3.9	41	E0.38	H	O	S	002 30	78 259 01 05	SWP 2659	
HD129502		14 40 23	-05 26 30	3.9	41	E0.38	H	O	L	015 00	78 259 01 15	LWR 2368	
109 VIR	TTCLI	14 43 44	02 06	3.7	58	E0000	H	C	S	01 00	78 211 10 59	LWR 1922	
109 VIR		14 43 44	02 06	3.7	58	E0000	L	C	L	0 02	78 211 11 16	SWP 2150	
109 VIR		14 43 44	02 06	3.7	58	E0000	L	C	S	0 08	78 211 11	SWP 2150	
ZET BOO	CCAKD	14 49 04	19 18	4.54	44								
ZET BOO		14 49 04	19 18	4.54	44		L	O	L	045 00	78 136 09 55	SWP 1558	
ZET BOO		14 49 04	19 18	4.54	44		H	C	S	045 00	78 136 11 16	LWR 1604	
							L	O	L	160 00	78 136 12 27	SWP 1559	
HD131156	CEJLL	14 49 05	19 18 27	4.54	44		L	C	L	000 50	78 233 02 57	LWR 2132	
HD131156		14 49 05	19 18 27	4.54	44		L	C	L	090 00	78 233 03 16	SWP 2347	

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HD131156	CEJLL	14 49 05	19 10 27	4.54	44		H	O L	012 30	78 233 04 55	LWR 2133	
1613YCBE	PSEGT	14 49 01	-11 43 55	10.6	05		L	O L	090 00	78 142 09 28	LWR 1538	
B 5586	CM2GH	14 58 18	-09 19 00	4.9	30	B0.00	H	C S	015 00	78 232 02 26	LWR 2117	
HD133640	XSAKD	15 02 09	47 50 53	4.76	44	B0.00	L	O L	023 00	78 196 11 25	SWP 2015	
HD135240	MF2YK	15 12 55	-60 46	5.08	12		H	C S	003 00	78 248 09 58	SWP 2494	
HD135240		15 12 55	-60 46	5.08	12		H	C S	002 00	78 248 10 06	LWR 2278	
HD135240		15 12 55	-60 46	5.08	12		H	C S	001 30	78 248 10 43	SWP 2495	
HD135591	OSPSC	15 14 46	-60 18	5.43	15	-0.06	H	C S	003 30	78 282 08 11	LWR 2561	
HD136175	CBEJP	15 16 09	31 49 43	7.9	21	B0.00	L	O L	000 20	78 223 02 38	SWP 2262	
HD136175		15 16 09	31 49 43	7.9	21	B0.00	L	C S	000 20	78 223 02 45	SWP 2262	
HD136175		15 16 09	31 49 43	7.8	21	B0.00	L	O L	000 35	78 223 03 17	LWR 2042	
HD136175		15 16 09	31 49 43	7.8	21	B0.00	L	C S	000 35	78 223 03 23	LWR 2042	
HD136202	MGLED	15 16 45	01 57	5.06	41	B .02	H	C S	045 00	78 214 10 03	LWR 1947	
HD137909	AFEBV	15 25 45	29 15 37	3.7	36	B0.27	H	C S	015 00	78 259 06 13	LWR 2369	
HD137909		15 25 45	29 15 37	3.7	36	B0.27	H	O L	050 00	78 259 06 47	SWP 2661	
HD137909		15 25 45	29 15 37	3.7	36	B0.27	H	C S	007 00	78 260 08 36	LWR 2382	
HD137909		15 25 45	29 15 37	3.7	36	B0.27	H	C S	030 00	78 260 08 47	SWP 2667	
HD140283		15 40 22	-10 46 17	7.2	44		L	O L	160 00	78 259 02 19	SWP 2660	
HD140283		15 40 22	-10 46 17	7.2	44		L	O S	020 00	78 259 05 25	SWP 2660	
ALF SCR	CEJLL	15 41 49	06 35	2.65	46		L	O L	050 00	78 235 16 56	SWP 2378	
HD140573		15 41 49	06 35	2.65	46		L	O L	180 00	78 237 16 06	SWP 2397	
GD 190	BSJLG	15 42 01	18 16 10	14.6	28		L	O L	120 00	78 157 07 43	SWP 1682	
GD 190		15 42 01	18 16 10	14.6	28		L	O L	120 00	78 152 09 50	LWR 1588	
HD141004	MGLRD	15 44 01	07 21	4.43	41	B .02	H	C S	025 00	78 215 09 29	LWR 1960	
HD135591	OSPSC	15 46 46	-60 18	5.43	15	-0.06	H	C S	003 30	78 282 08 00	SWP 2894	
HD141556	MVDSL	15 47 46	-33 29	3.9	27	B0.00	H	C S	012 00	78 100 00 43	SWP 1341	
HD141556		15 47 46	-33 29	3.9	27	B0.00	H	C S	006 00	78 100 01 21	LWR 1295	
HR 5892	AFEBV	15 48 19	04 37 36	3.7	35	B0.16	H	C S	006 00	78 265 03 56	LWR 2430	
HR 5892		15 48 19	04 37 36	3.7	35	B0.16	H	O L	020 00	78 265 04 11	SWP 2725	
+332642	ALEBJ	15 50 09	33 05 41	10.8	20	B0.09	H	C S	240 00	78 164 12 19	SWP 1778	
HD332642	PHCAL	15 50 01	33 05	10.83	20	B0.07	L	C S	005 00	78 162 19 38	SWP 1766	
HD332642		15 50 01	33 05	10.83	20	B0.07	L	O S	005 00	78 162 19 53	SWP 1766	
HD332642		15 50 01	33 05	10.83	20	B0.07	L	O L	004 00	78 162 20 44	LWR 1657	
HD332642		15 50 01	33 05	10.83	20	B0.07	L	C S	004 00	78 162 20 57	LWR 1657	
HD332642		15 50 01	33 05	10.83	20	B0.07	L	O L	019 24	78 162 21 22	SWP 1767	TRAILED

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OBJ ID	PROG ID	TARGET RA H M S	TARGET DEC D M S	VIS MAG	OBJ CLASS	B-V OR B-V	DISP S/L	LG - OBJ APERTURE O/S I/S	EXPOSE TIME MIN SEC	EXPOSURE START TIME YR DAY HR MIN	IMAGE SEQ NUM	OBSERVERS COMMENTS
BD332642	PHCAL	15 50 01	33 05 28	10.83	20	B0.07	L	O L	003 45	78 201 18 04	LWR 1859	
BD332642		15 50 01	33 05 28	10.83	20	B0.07	L	O S	003 45	78 201 18 18	LWR 1859	
BD332642		15 50 01	33 05 28	10.83	20	B0.07	L	O L	004 45	78 201 18 30	SWP 2061	
BD332642		15 50 01	33 05 28	10.83	20	B0.07	L	O S	004 45	78 201 18 44	SWP 2061	
BD332642		15 50 01	33 05 28	10.83	20	B0.08	L	C S	004 00	78 233 15 24	SWP 2353	
BD332642		15 50 01	33 05 28	10.83	20	B0.09	L	O L	004 00	78 233 15 39	SWP 2353	
BD332642		15 50 01	33 05 28	10.83	20	B0.08	L	O L	003 10	78 233 15 55	LWR 2137	
BD332642		15 50 01	33 05 28	10.83	20	B0.09	L	O S	003 10	78 233 16 10	LWR 2137	
+332642		15 50 01	33 05	10.83	20	B0.08	L	C L	030 00	78 233 17 14	SWP 2354	TRAILED
+332642		15 50 01	33 05 28	10.83	20	B0.08	L	O L	004 00	78 271 14 33	SWP 2797	
+332642		15 50 01	33 05 28	10.83	20	B0.08	L	O S	006 15	78 271 14 47	SWP 2797	
+332642		15 50 01	33 05 28	10.83	20	B0.08	L	C S	005 00	78 271 14 59	LWR 2490	
BD332642	PHSTD	15 50 01	33 05	10.83	20	B0.07	L	O L	006 00	78 121 22 59	SWP 1457	
BD332642		15 50 01	33 05	10.83	20	B0.07	L	C S	006 00	78 121 23 16	SWP 1457	
HD142373	MGLRD	15 50 57	42 35	4.60	41	B .01	H	C S	030 00	78 215 03 59	LWR 1956	
CBI PEB		15 50 57	42 35	4.60	41	B .56	H	C S	022 00	78 206 11 26	LWR 2804	
BD142860		15 54 09	15 49	3.85	41	B .02	H	C S	013 00	78 215 10 39	LWR 1961	
HD143018	XBEVB	15 55 49	-25 58 18	2.90	20	B0.07	H	C S	000 22	78 198 15 19	SWP 2035	
HD143018		15 55 49	-25 58 18	2.90	20	B0.07	H	C S	000 20	78 198 15 36	LWR 1840	
HD143275		15 57 23	-22 28 52	2.13	20	B0.16	H	C S	000 23	78 198 15 56	LWR 1837	
HD143275		15 57 23	-22 28 52	2.13	20	B0.16	H	C S	000 17	78 198 14 32	SWP 2034	
HD142761	MGLRD	15 59 08	33 27	5.40	44	.60	H	C S	065 00	78 306 00 12	LWR 2798	
BD143807	MVDSL	15 59 25	29 59	4.9	27	B0.00	H	C S	027 00	78 098 23 28	SWP 1333	
BD143807		15 59 26	29 59	4.9	27	B0.00	H	O S	011 00	78 099 00 27	LWR 1289	
HD143807		15 59 25	29 59	4.9	27	B0.00	H	O L	010 00	78 099 01 17	SWP 1334	
BD143807		15 59 25	29 59	4.9	27	B0.00	H	C S	038 00	78 101 23 49	SWP 1334	
		15 59 25	29 59	4.9	27	B0.00	H	C S	012 30	78 102 01 12	LWR 1308	
BR 6023	AFEBV	16 07 11	45 03 54	4.3	22	B-.06	H	C S	007 00	78 260 05 47	LWR 2383	
HR 6023		16 07 11	45 03 54	4.3	22	B-.06	H	C S	020 00	78 260 06 04	SWP 2668	
HD146813	ALEBJ	16 14 09	55 55 23	9.1	20		H	C S	096 00	78 163 11 50	SWP 1772	
SCO X 1	SX2HG	16 17 04	-15 31 14	13.5	52	B 0	L	O L	040 00	78 123 09 36	SWP 1470	
SCO X 1		16 17 04	-15 31 14	13.5	59	B 0	L	O L	040 00	78 123 10 30	LWR 1434	
SCO X 1	XBEVB	16 17 04	-15 31 15	13	59		L	O L	060 00	78 120 12 05	SWP 1444	
SCO X 1		16 17 04	-15 31 15	13	59		L	O S	020 00	78 120 13 17	SWP 1444	
SCO X 1		16 17 04	-15 31 15	13	59		L	O L	040 00	78 120	LWR 1420	
SCO X 1		16 17 04	-15 31 15	13	59		L	C L	040 00	78 121 13 00	SWP 1452	
SCO X 1		16 17 04	-15 31 15	13	59		L	O L	035 00	78 122 17 15	SWP 1463	
SCO X 1		16 17 04	-15 31 15	13	59		L	O L	040 00	78 123 17 22	SWP 1473	
SCO X 1		16 17 04	-15 31 15	13	59		L	O L	025 00	78 125 21 07	SWP 1490	
SCO X 1		16 17 04	-15 31 15	13	59		L	O L	040 00	78 125 22 13	LWR 1446	
SCO X 1		16 17 04	-15 31 15	13	59		L	O L	030 00	78 125 23 04	SWP 1491	

OBJ ID	PROG ID	TARGET RA H M S	TARGET DEC D M S	VIS MAG	OBJ CLASS	E(B-V) OR B-V	DISP H/L	LG - OBJ APERTURE O/C	OBJ APERTURE L/S	EXPOSE TIME MIN SEC	EPOSURE START TIME YR DAY HR MIN	IMAGE SEQ NUM	OBSERVERS COMMENTS
SCO X 1	XBFVB	16 17 04	-15 31 15	13	59		L	O	L	040 00	78 127 11 41	LWR 1450	
SCO X 1		16 17 04	-15 31 15	13	59		L	O	L	040 00	78 197 13 29	SWP 2028	
SCO X 1		16 17 04	-15 31 15	13	59		L	O	L	040 00	78 198 13 03	SWP 2033	
SCO X 1		16 17 04	-15 31 15	13	59		L	O	L	040 00	78 199 05 50	SWP 2039	
SCO X 1		16 17 04	-15 31 15	13	59		L	O	L	040 00	78 199 06 40	LWR 1846	
SCO X 1		16 17 04	-15 31 15	13	59		L	O	L	040 00	78 199 07 29	SWP 2040	
SCO X 1		16 17 04	-15 31 15	13	59		L	O	L	040 00	78 199 08 49	SWP 204	
SCO X 1		16 17 04	-15 31 15	13	59		L	O	L	050 00	78 200 06 00	SWP 2048	
SCO X 1		16 17 04	-15 31 15	13	59		L	O	L	050 00	78 202 05 07	SWP 2062	
SCO X 1		16 17 04	-15 31 15	13	59		L	O	L	040 00	78 202 06 09	LWR 1866	
SCO X 1		16 17 04	-15 31 15	13	59		L	O	L	050 00	78 202 06 56	SWP 2063	
SCO X 1		16 17 04	-15 31 15	13	59		L	O	L	050 00	78 202 08 20	SWP 2064	
SCO X 1		16 17 04	-15 31 15	13	59		L	O	L	050 00	79 202 09 41	SWP 2065	
SCO X 1		16 17 04	-15 31 15	13	59		L	O	L	050 00	78 202 11 15	SWP 2066	
SCO X 1		16 17 04	-15 31 15	13	59		L	O	L	050 00	78 203 04 53	SWP 2076	
SCO X 1		16 17 04	-15 31 15	13	59		L	O	L	040 00	78 203 05 50	LWR 1872	
SCO X 1		16 17 04	-15 31 15	13	59		L	O	L	050 00	78 203 06 37	SWP 2077	
SCO X 1		16 17 04	-15 31 15	13	59		L	O	L	050 00	78 203 53 22	SWP 2078	
SCO X 1		16 17 04	-15 31 15	13	59		L	O	L	050 00	78 203 09 08	SWP 2079	
SCO X 1		16 17 04	-15 31 15	13	59		L	O	L	050 00	78 203 10 23	SWP 2080	
SCO X 1	XPBVB	16 17 04	-15 31 15	13	59		L	O	I	040 00	78 127 10 43	SWP 1499	
HD147165	XBFVB	16 18 09	-25 33 39	2.9	23	B0.80	H	C	S	000 50	78 197 16 01	LWR 1835	
HD147165		16 18 09	-25 29 29	2.9	23	B0.80	H	C	S	001 00	78 197 16 25	SWP 2029	
HD147889	IMBDD	16 22 32	-24 31 07	7.9	20	B1.10	L	O	L	026 00	78 271 01 17	SWP 2792	
HD147889		16 22 33	-24 31 07	7.9	20	B1.10	L	O	S	010 00	78 271 01 49	LWR 2482	
HD147889		16 22 33	-24 31 -7	7.9	20	B1.10	L	O	L	007 00	78 271 02 35	SWP 2793	
HD147889		16 22 22	-24 21 -7	7.9	20	B1.10	L	O	S	006 00	78 271 03 44	LWR 2483	
HD147933	ICJHB	16 22 34	-23 59 57	4.63	21	B0.42	H	C	S	006 00	78 117 22 30	SWP 1429	
HD147933		16 22 34	-23 20 02	4.63	21	B0.42	H	C	S	004 00	78 117 23 59	LWR 1404	
HD147934		16 22 34	-23 13 58	4.63	21	B0.42	H	C	S	009 00	78 118 01 17	SWP 1430	
HD147933		16 22 35	-23 20 00	4.63	21	B0.42	H	O	L	003 00	78 118 02 13	SWP 1431	
HD147933	XBFVB	16 22 35	-23 20 02	5.2	21		H	C	S	006 00	78 197 17 44	SWP 2030	
HD147933		16 22 35	-23 20 02	5.2	21		H	C	S	005 00	78 197 18 26	LWR 1836	
BR 6117	AFEDV	16 23 06	14 08 49	4.6	27	B0.01	H	C	S	009 00	78 265 05 16	LWR 2431	
BR 6117		16 23 06	14 08 49	4.6	27	B0.01	H	C	S	012 00	78 265 05 30	SWP 2726	
HD148387	CCAKD	16 23 18	61 37	2.77	46		L	O	L	045 00	78 135 14 09	SWP 1551	
HD148387		16 23 18	61 37	2.77	46		H	O	L	015 00	78 135 15 10	LWR 1499	
HD148184	CBHJP	16 24 07	-18 21	4.4	20	B 0.4	H	C	S	012 00	78 228 06 40	SWP 2305	
HD148184	IMDDD	16 24 07	-18 20 40	4.3	12	B0.52	H	C	S	004 00	78 273 15 17	LWR 2505	
HD148184		16 24 07	-18 20 40	4.3	12	B0.52	H	C	S	008 00	78 275 08 34	SWP 2831	
HD148184	XBFVB	16 24 07	-18 20 41	4.3	20	B0.52	H	C	S	001 40	78 202 15 58	LWR 1868	

OBJ ID	PROG ID	TARGET RA H M S	TARGET DEC D M S	VIS MAG	OBJ CLASS	E(B-V) OR B-V	DISP H/L	LG - OBJ APERTURE O/C	OBJ APERTURE L/S	EXPOSE TIME MIN SEC	EPOSURE START TIME YR DAY HR MIN	IMAGE SEQ NUM	OBSERVERS COMMENTS
HD148184	XBFVB	16 24 07	-18 20 41	4.3	20	B0.52	H	C	S	001 40	78 202 16 07	SWP 2069	
HD148379	IMBDD	16 26 04	-46 08 03	5.4	23	B0.80	H	O	S	000 30	78 273 10 21	LWR 2502	
HD148379		16 26 04	-46 08 03	5.4	23	B0.80	H	O	S	000 30	78 273 10 26	SWP 2808	
HD148379		16 26 04	-46 08 03	5.4	23	B0.80	H	O	S	004 00	78 273 10 30	SWP 2809	
HD148379		16 26 04	-46 08 03	5.4	23	B0.80	H	O	S	020 00	78 273 11 04	LWR 2503	
HD148379		16 26 04	-46 08 03	5.4	23	B0.80	H	O	S	002 00	78 273 11 34	SWP 2810	
HD148379		16 26 04	-46 08 03	5.4	23	B0.80	H	O	S	000 55	78 273 11 40	SWP 2810	
HD148379		16 26 04	-46 08 03	5.4	23	B0.80	H	O	S	120 00	78 274 22 36	SWP 2829	
HD148379		16 26 04	-46 08 03	5.4	23	B0.80	H	O	S	050 00	78 275 00 48	LWP 2831	
HD148379		16 26 04	-46 08 03	5.4	23	B0.80	H	O	S	300 00	78 275 01 54	SWP 2830	
HD148379		16 26 04	-46 08 03	5.4	23	B0.80	H	O	S	030 00	78 275 07 16	LWR 2522	
ROSS 640	BSJLG	16 26 37	36 52 33	13.9	40		L	O	L	180 00	78 151 08 53	LWR 1586	
HD148783	LTEFW	16 26 59	41 59 27	5.0	48	B0000	L	O	L	015 00	78 109 12 31	LWR 1340	
HD148783		16 26 59	41 59 27	5.0	48	B0000	L	O	S	180 00	78 109 14 34	SWP 1387	
HD148783		16 26 59	41 59 27	5.0	48	B0000	L	O	S	005 00	78 109 17 21	LWP 1341	
HD148783		16 26 59	41 59 27	5.0	48	B0000	L	O	L	045 00	78 109 17 40	LWR 1341	
HD148937	ICJHB	16 30 09	-48 00 24	6.71	15	B0.66	H	C	S	025 00	78 268 04 47	LWR 2455	
HD148937		16 30 07	-48 00 24	6.71	15	B0.66	H	C	S	075 00	78 268 05 17	SWP 2754	
HD148937		16 30 09	-48 00 24	6.71	15	B0.66	H	C	S	100 00	78 268 06 37	LWR 2456	
HD148937	OSESC	16 30 09	-48 00	6.71	15	B0.64	L	O	L	000 45	78 145 21 44	SWP 1637	
HD148937		16 30 09	-48 00	6.71	15	0.34	H	O	L	060 00	78 282 05 56	SWP 2893	
HD148937	BLJBE	16 30 10	-48 00	6.8	12	B 1.0	L	C	S	015 00	78 209 13 55	SWP 2110	
HD148937		16 30 10	-48 00	6.8	13	B 0.6	H	C	S	060 00	78 211 13 47	SWP 2152	
148937		16 30 10	-48 00	6.8	13	B 0.4	H	C	S	050 00	78 288 11 31	SWP 2988	
HD149038	XBFVB	16 30 31	-43 56 20	4.89	13	B0.36	H	C	S	004 00	78 198 19 38	LWR 1843	
HD149038		16 30 31	-43 56 29	4.89	13	B0.36	H	C	S	004 00	78 202 15 01	SWP 2068	
HD149038	EODCM	16 30 32	-43 56	4.89	13	B0.35	H	C	S	004 30	78 163 15 29	SWP 1773	
HD149438	PHCAL	16 32 45	-28 06 50	2.91	20	B0.06	H	C	S	000 06	78 161 16 01	SWP 1758	
HD149438		16 32 45	-28 06 50	2.91	20	B0.06	H	C	S	000 15	78 161 18 23	LWR 1649	
HD149438		16 32 45	-28 06 50	2.91	20		H	C	S	000 09	78 161 21 15	SWP 1760	
TAU SCO		16 32 45	-28 06 50	2.88	20	B0.06	H	C	S	000 09	78 255 13 18	SWP 2634	
TAU SCO		16 32 45	-28 06 50	2.88	20	B0.06	H	C	S	000 11	78 255 13 24	LWR 2332	
HD149438	XBFVB	16 32 46	-28 06 51	2.34	20	B0.06	H	C	S	000 22	78 198 18 28	SWP 2037	
HD149438		16 32 46	-28 06 51	2.84	20	B0.06	H	C	S	000 20	78 198 18 33	LWR 1842	
HD149438		16 32 46	-28 06 51	2.84	20	B0.06	H	C	S	000 12	78 202 13 15	LWR 1867	
HD149438		16 32 46	-28 06 51	2.84	20	B0.06	H	C	S	000 12	78 202 13 21	SWP 2067	
HD149404	ICJHB	16 32 51	-42 45 27	5.53	13	B0.74	H	C	S	045 00	78 268 08 35	SWP 2755	
HD149404		16 32 51	-42 45 27	5.53	13	B0.74	H	C	S	014 00	78 268 09 37	LWR 2457	
HD149404		16 32 51	-42 45 27	5.53	13	B0.74	H	C	S	030 00	78 268 09 57	SWP 2756	
HD149404		16 32 51	-42 45 27	5.53	13	B0.74	H	C	S	014 00	78 268 10 32	LWR 2458	

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HD149404	ICJHB	16 32 51	-42 45 27	5.58	13	E0.74	H	C	S	030 00	78 268 11 02	SWP 2757	
HD149404	HLJBH	16 32 51	-42 45	5.5	13	E 0.7	H	C	S	033 00	78 209 12 42	SWP 2129	
149404		16 32 51	-42 45	5.5	13	E 0.4	H	C	S	025 00	78 284 12 35	SWP 2919	
149404		16 32 51	-42 45	5.5	13	E 0.4	H	C	S	015 00	78 284 13 06	LWR 2575	
149404		16 32 51	-42 45	5.5	13	E 0.7	H	C	S	025 00	78 290 11 05	SWP 3008	
HD149757	EODCM	16 34 24	-10 28	2.56	12	E0.32	H	C	S	000 35	78 165 18 23	SWP 1784	
HD149757		16 34 24	-10 28	2.56	12	E0.32	H	C	S	000 48	78 165 18 50	LWR 1667	
HD149757	VETPS	16 34 24	-10 28 03	2.5	12	E0.33	H	C	S	000 23	78 283 22 42	SWP 2903	
HD149757		16 34 24	-10 28 03	2.5	12	E0.33	H	C	S	000 29	78 283 23 20	SWP 2904	
HD149757		16 34 24	-10 28 03	2.5	12	E0.33	H	C	S	002 36	78 283 23 51	SWP 2904	
HD149757		16 34 24	-10 28 03	2.5	12	E0.33	H	C	S	000 40	78 284 00 21	SWP 2906	
HD149757		16 34 24	-10 28 03	2.5	12	E0.33	H	C	S	000 40	78 284 01 26	SWP 2908	
HD149757		16 34 24	-10 28 03	2.5	12	E0.33	H	C	S	000 40	78 284 01 56	SWP 2909	
HD149757		16 34 24	-10 28 03	2.5	12	E0.33	H	C	S	000 40	78 284 02 28	SWP 2910	
HD149757		16 34 24	-10 28 03	2.5	12	E0.33	H	C	S	000 40	78 284 03 02	SWP 2911	
HD149757		16 34 24	-10 28 03	2.5	12	E0.33	H	C	S	000 40	78 284 03 49	SWP 2912	
HD149757		16 34 24	-10 28 03	2.5	12	E0.33	H	C	S	000 40	78 284 04 25	SWP 2913	
HD149757		16 34 24	-10 28 03	2.5	12	E0.33	H	C	S	000 40	78 284 04 55	SWP 2914	
HD149757	XBPVB	16 34 24	-10 28	2.56	12	E0.32	H	C	S	001 20	78 122 19 05	LWR 1429	
HD149757		16 34 24	-10 28	2.56	12	E0.32	H	C	S	005 00	78 122 19 49	SWP 1464	
HD149757		16 34 24	-10 28	2.54	12	E0.32	H	C	S	000 37	78 122 20 59	SWP 1465	
HD149757		16 34 24	-10 28	2.54	12	E0.32	H	C	S	000 24	78 122 21 46	LWR 1430	
HD149881	ALEBJ	16 34 41	14 35	6.60	23	E0.12	H	C	S	013 00	78 169 20 34	SWP 1810	
HD149881		16 34 41	14 35	6.60	23	E0.12	H	C	S	011 20	78 169 20 53	LWR 1640	
15CYG B	PHCAL	16 40 32	50 24 02	6.20	44		L	C	S	002 30	78 176 17 03	LWR 1730	
NGC 6210	PP2EB	16 42 23	23 53 29	8.5	70		L	O	L	011 00	78 183 12 49	LWR 1765	
NGC 6210		16 42 23	23 53 29	8.5	70		L	C	S	025 00	78 183 13 11	LWR 1766	
NGC 6210		16 42 23	23 53 29	8.5	70		L	O	L	009 00	78 183 14 02	SWP 1904	
NGC 6210		16 42 23	23 53 29	8.5	70		L	C	S	015 00	78 183 14 18	SWP 1904	
HD150958	GSESC	16 42 57	-47 00 02	7.28	15	0.38	L	O	L	001 20	78 278 09 47	SWP 2857	
HD150958		16 42 57	-47 00 02	7.28	15	0.38	L	C	S	002 00	78 278 09 55	SWP 2857	
HD151680	CEJLL	16 46 55	-34 12 16	2.28	46		L	O	L	090 00	78 238 13 55	SWP 2401	
HD151804	ICJHB	16 48 04	-41 09 47	5.22	15	E0.38	H	C	S	007 00	78 268 14 18	SWP 2759	
HD151804		16 48 04	-41 08 47	5.22	15	E0.38	H	C	S	003 50	78 268 14 49	LWR 2461	
HD151804		16 48 04	-41 08 47	5.22	15	E0.38	H	C	S	007 00	78 268 15 22	SWP 2760	
151804	HLJBH	16 48 04	-41 08	5.3	13	E 0.4	H	C	S	010 00	78 288 08 58	SWP 2986	
HD151804	OSESC	16 48 04	-41 08	5.22	15	E0.37	H	C	S	004 00	78 144 20 25	SWP 1626	
HD151804		16 48 04	-41 08	5.22	15	E0.37	H	C	S	004 00	78 144 20 40	LWR 1556	
HD151804		16 48 04	-41 08	5.22	15	E0.37	L	O	L	000 02	78 144 21 32	SWP 1627	

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OBJ ID	PROG ID	TARGET RA H M S	TARGET DEC D M S	VIS MAG	OBJ CLASS	E(B-V) OR a-v	DISP H/L	LG - OBJ APERTURE O/C	L/S	EXPOSE TIME MIN SEC	EXPOSURE START TIME YR DAY HR MIN	IMAGE SEQ NUM	OBSERVERS COMMENTS
HD151804	OSESC	16 48 04	-41 08	5.22	15	0.07	L	C	S	000 04	78 278 10 38	SWP 2858	
HD151804		16 48 04	-41 08	5.22	15	0.07	L	O	L	000 04	78 278 10 43	SWP 2858	
HD151932	HLJBH	16 48 48	-41 46	6.5	11	E 0.6	H	C	S	015 00	78 211 16 34	LWR 1923	
HD151932		16 48 48	-41 46	6.5	11	E 0.6	H	C	S	035 00	78 211 17 07	SWP 2154	
151932		16 48 48	-41 46	6.5	13	E 0.6	H	C	S	030 00	78 290 09 54	SWP 3007	
HD151932	OSESC	16 48 48	-41 46	6.51	11	E0.58	H	C	S	050 00	78 142 20 27	SWP 1603	
HD151932		16 48 48	-41 46	6.51	11	E0.58	H	C	S	060 00	78 142 21 28	LWR 1542	
HD151932		16 48 48	-41 46	6.51	11	E0.58	L	C	S	000 30	78 142 23 30	SWP 1604	
HD152236	EODCM	16 50 27	-42 51	4.74	23	E0.76	H	C	S	024 00	78 163 16 52	SWP 1774	
HD152236		16 50 27	-42 16 51	4.74	23	E0.76	H	C	S	040 00	78 163 19 53	SWP 1776	
HD152236		16 50 27	-42 16 51	4.74	23	E0.76	H	C	S	033 00	78 163 20 40	LWR 1660	
HD152236	IMBOD	16 50 27	-42 16 51	4.7	23	E0.70	L	O	L	001 00	78 273 12 21	SWP 2811	
HD152236		16 50 27	-42 16 51	4.7	23	E0.70	L	C	S	000 38	78 273 12 27	SWP 2811	
HD152236		16 50 27	-42 16 51	4.7	23	E0.70	H	C	S	010 00	78 273 12 56	LWR 2504	
HD152236		16 50 27	-42 16 51	4.7	23	E0.70	H	C	S	045 00	78 273 13 54	SWP 2812	
HD152236	HLJBH	16 50 28	-42 17	4.7	23	E 0.5	H	C	S	035 00	78 206 16 09	SWP 2103	
HD152236		16 50 28	-42 17	4.7	23	E 0.5	H	C	S	012 00	78 206 16 52	LWR 1892	
HD152236		16 50 28	-42 17	4.7	23	E 0.5	L	C	S	000 25	78 206 17 23	SWP 2104	
152236		16 50 24	-42 16	4.7	23	E 0.7	H	C	S	020 30	78 288 09 35	LWR 2507	
152236		16 50 28	-42 16	4.7	23	E 0.7	H	C	S	035 00	78 288 10 10	SWP 2987	
HD152234		16 50 31	-41 43	5.5	23	E 0.4	H	C	S	020 00	78 210 19 28	SWP 2147	
HD152233	OSESC	16 50 32	-41 42	6.56	15	0.14	L	O	L	000 20	78 278 08 49	SWP 2856	
HD152233		16 50 32	-41 42	6.56	15	0.14	L	C	S	000 20	78 278 08 55	SWP 2856	
HD152233		16 50 32	-41 42	6.56	15	0.14	H	C	S	030 00	78 282 00 28	SWP 2890	
HD152233		16 50 32	-42 42	6.56	15	0.14	H	C	S	025 00	78 292 01 09	LWR 2559	
HD152270	MF2YK	16 50 48	-41 45	6.61	10		H	C	S	027 00	78 250 07 37	LWR 2296	
HD152270	MY2YK	16 50 48	-41 45	6.61	10		H	C	S	025 00	78 250 07 02	SWP 2512	
HD152386	OSESC	16 51 28	-44 54	8.08	15	E0.00	L	O	L	000 30	78 145 23 54	SWP 1639	
HD152386		16 51 28	-44 54	8.08	15	E0.80	L	O	L	010 00	78 276 13 27	SWP 2848	
HD152386		16 51 28	-44 54	8.08	15	E0.80	L	C	S	010 00	78 276 13 45	SWP 2848	
HD152408	HLJBH	16 51 29	-41 04	5.8	15	E 0.2	H	C	S	015 00	78 206 18 13	SWP 2105	
HD152408	OSESC	16 51 30	-41 04	5.77	15	E0.46	H	C	S	012 00	78 144 17 04	SWP 1624	
HD152408		16 51 30	-41 04	5.77	15	E0.46	H	C	S	014 00	78 144 17 27	LWR 1555	
HD152408		16 51 30	-41 04	5.77	15	E0.46	L	C	S	000 07	78 144 18 34	SWP 1625	
HD152408		16 51 30	-41 04	5.77	15	E0.46	L	O	L	000 07	78 144 18 41	SWP 1625	
HD152424	ICJHB	16 51 31	-42 00 39	6.27	13	E0.70	H	C	S	020 00	78 268 11 49	LWR 2459	
HD152424		16 51 31	-42 00 39	6.27	13	E0.70	H	C	S	070 00	78 268 12 19	SWP 2758	
HD152424		16 51 31	-42 00 39	6.27	13	E0.70	H	C	S	027 00	78 268 13 34	LWR 2460	

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12VICTOR	PSMGT	16 51 44	-19 07 40	9.5	05		L	C S	090 00	78 141 14 24	LWR 1533	
HD166239	GD4AB	16 52 11	39 50 25	14	85		L	O L	380 00	78 237 03 22	SWP 2394	
HPK 501		16 52 11	39 50 25	14	85		L	O I	300 00	78 239 03 12	LWR 2171	
B1652+39	RSELB	16 52 11	39 50 25	14	87		L	O L	360 00	78 297 23 08	SWP 3133	
HK 501		16 52 11	39 50 25	14	87		L	O I	320 00	78 300 00 44	LWR 2729	
HD152667	MF2YK	16 53 06	-40 44	6.23	23		H	C S	030 00	78 250 05 32	SWP 2511	
HD152667		16 53 06	-40 44	6.23	23		H	C S	015 00	78 250 06 11	LWR 2295	
HD152667		16 53 06	-40 44	6.23	23	E0.59	H	C S	015 00	78 254 06 35	LWR 2318	
HD152667		16 53 06	-40 44	6.23	23	E0.59	H	C S	030 00	78 254 07 00	SWP 2624	
HD152667	XSAKD	16 53 06	-40 44 43	6.07	23	E0.58	H	C S	018 00	78 191 17 08	SWP 1959	
HD152667		16 53 06	-40 44 43	6.10	23	E0.28	H	C S	022 00	78 194 16 42	SWP 1993	
HD152667		16 53 06	-40 44 44	6.10	23	E0.47	H	C S	025 00	78 195 18 07	SWP 2010	
HD152667		16 53 06	-40 44 44	6.10	23	E0.55	L	O L	000 11	78 195 19 14	LWR 1828	
HD152667	CH2GH	16 53 07	-40 44 00	6.2	23	E0.52	H	C S	030 00	78 234 15 57	SWP 2366	
HD152667		16 53 07	-40 44 00	6.2	23	E0.52	H	C S	015 00	78 234 16 24	LWR 2150	
HD152667		16 53 07	-40 44 00	6.2	23	E0.52	L	O S	000 10	78 234 17 06	SWP 2367	
HD152667		16 53 07	-40 44 00	6.2	23	E0.51	L	O I	000 05	78 234 17 10	SWP 2367	
HD152667	RLJBH	16 53 07	-40 44	6.2	20	E 0.5	H	C S	025 00	78 206 13 33	SWP 2101	
HD152667		16 53 07	-40 44	6.2	20	E 0.5	L	O S	000 12	78 206 15 04	SWP 2102	
HD152667		16 53 07	-40 44	6.2	20	E 0.5	L	O S	000 12	78 206 15 09	SWP 2102	
HD152667		16 53 07	-40 44	6.2	20	E 0.5	L	O S	000 18	78 211 18 29	SWP 2155	
HD152667		16 53 07	-40 44	6.2	20	E 0.5	L	O S	000 18	78 211 18 32	SWP 2155	
HD152667		16 53 07	-40 44	6.2	20	E 0.5	H	C S	015 00	78 211 18 39	LWR 1924	
152667		16 53 07	-40 44	6.2	20	E 0.5	H	C S	035 00	78 211 19 11	SWP 2156	
152667		16 53 07	-40 44	6.2	23	E 0.5	H	C S	030 00	78 284 08 56	SWP 2916	
152667		16 53 07	-40 44	6.2	23	E 0.4	H	C S	025 00	78 284 09 36	LWR 2573	
152667		16 53 07	-40 44	6.2	23	E 0.5	L	O S	000 20	78 284 10 09	SWP 2917	
152667		16 53 07	-40 44	6.2	23	E 0.5	L	O S	000 30	78 284 10 15	SWP 2917	
152667		16 53 07	-40 44	6.2	23	E 0.5	L	O S	030 00	78 286 01 49	SWP 2948	
152667		16 53 07	-40 44	6.2	23	E 0.5	L	O S	000 20	78 286 02 57	SWP 2949	
152667		16 53 07	-40 44	6.2	23	E 0.5	L	O S	000 30	78 286 03 00	SWP 2949	
152667		16 53 07	-40 44	6.2	23	E 0.5	H	C S	020 00	78 286 02 26	LWR 2589	
152667		16 53 07	-40 44	6.2	23	E 0.5	L	O S	000 20	78 288 01 04	SWP 2981	
152667		16 53 07	-40 44	6.2	23	E 0.5	L	O S	000 30	78 288 01 10	SWP 2981	
152667		16 53 07	-40 44	6.2	23	E 0.5	H	C S	020 00	78 288 01 16	LWR 2605	
152667		16 53 07	-40 44	6.2	23	E 0.5	H	C S	030 00	78 288 01 46	SWP 2982	
152667		16 53 07	-40 44	6.2	23	E 0.5	H	C S	030 00	78 290 07 55	SWP 3005	
152667		16 53 07	-40 44	6.2	23	E 0.5	L	O S	003 30	78 290 09 05	SWP 3006	
152667		16 53 07	-40 44	6.2	23	E 0.5	L	O L	000 20	78 290 09 11	SWP 3006	
HZ HER	SX2HG	16 56 01	35 25 04	14.6	59	E 0.1	H	C S	020 00	78 290 08 36	LWR 2629	
HZ HER		16 56 01	35 25 04	14.8	59	E 0.1	L	O L	120 00	78 129 16 06	SWP 1511	
HZ HER		16 56 01	35 25 04	13.3	59	E 0.1	L	O L	060 00	78 130 11 39	SWP 1516	
HZ HER		16 56 01	35 25 04	13.3	59	E 0.1	L	O L	060 00	78 196 08 06	SWP 2014	

OBJ ID	PROG ID	TARGET RA H M S	TARGET DEC D M S	VIS MAG	OBJ CLASS	E(B-V) OR B-V	DISP H/L	LG - OBJ APERTURE O/C L/S	EXPOSE TIME MIN SEC	EPOSURE START TIME YR DAY HR MIN	IMAGE SEQ NUM	OBSERVERS COMMENTS
HZ HER	SX2HG	16 56 01	35 25 04	14.6	59	E 0.1	L	O L	035 00	78 201 05 17	SWP 2056	
HZ HER		16 56 01	35 25 04	14.6	59	E 0.1	L	O L	035 00	78 201 07 20	SWP 2057	
HZ HER		16 56 01	35 25 04	14.6	59	E 0.1	L	O L	035 00	78 201 09 37	SWP 2057	
HZ HER		16 56 01	35 25 04	14.6	59	E 0.1	L	O L	035 00	78 201 11 06	SWP 2058	
HZ HER	XSAKD	16 56 01	35 25 04	14.6	59	E 0.1	L	O I	060 00	78 132 16 10	SWP 1526	
HZ HER	XS2HG	16 56 01	35 25 04	14.6	59	E 0.1	L	O L	035 00	78 201 06 13	SWP 2056	
HZ HER	XBFVB	16 56 02	35 25	14.8	59	E 0	L	O I	125 00	78 119 13 24	LWR 1416	
HZ HER		16 56 02	35 25	14.8	59	E 0	L	O I	120 00	78 119 16 06	SWP 1436	
HZ HER	XSAKD	16 56 04	35 25 05	14	59	E 0.1	L	O I	040 00	78 127 23 01	LWR 1455	
HZ HER		16 56 04	35 25 05	14	59	E 0.1	L	O I	120 00	78 128 15 22	SWP 1506	
HD153426		16 57 48	-38 07 51	7.50	12	E0.05	H	C S	090 00	78 130 14 16	SWP 1517	
HD153919	MF2YK	17 00 32	-37 46 28	6.50	15	E0.61	H	C S	030 00	78 155 12 44	SWP 1714	
HD153919		17 00 32	-37 46 28	6.50	15	E0.61	H	C S	035 00	78 155 13 26	LWR 1617	
HD153919	RLJBH	17 00 32	-37 46	6.7	15	E 0.6	H	C S	030 00	78 206 19 21	SWP 2106	
HD153919		17 00 32	-37 46	6.7	15	E 0.6	H	C S	030 00	78 211 15 30	SWP 2153	
153919		17 00 32	-37 46	6.5	13	E 0.3	H	C S	030 00	78 284 11 06	SWP 2918	
153919		17 00 32	-37 46	6.5	13	E 0.3	H	C S	020 00	78 284 11 42	LWR 2574	
HD153919	SXAKD	17 00 32	-37 46 28	6.6	15	E0.56	H	C S	035 00	78 129 21 39	SWP 1513	
HD153919	XBFVB	17 00 32	-37 46 29	6.55	15	E0.58	L	O I	000 25	78 120 09 48	LWR 1419	
HD153919		17 00 32	-37 46 29	6.55	15	E0.58	L	O I	001 00	78 120 10	SWP 1443	
HD153919		17 00 32	-37 46 29	6.55	15	E0.58	L	O S	001 00	78 120 10	SWP 1443	
HD153919		17 00 32	-37 46 29	6.55	15	E0.58	L	O I	000 15	78 122 23 26	SWP 1466	
HD153919		17 00 32	-37 46 29	6.55	15	E0.58	L	O S	000 15	78 122 23 32	SWP 1466	
HD153919	XSAKD	17 00 32	-37 46 28	6.6	15	E0.56	H	C S	027 00	78 129 23 05	LWR 1464	
HD153919		17 00 32	-37 46 28	6.50	15	E0.55	H	C S	020 00	78 191 18 17	SWP 1960	
HD153919		17 00 32	-37 46 28	6.50	15	E0.55	H	C S	018 00	78 191 19 18	SWP 1961	
HD153919		17 00 32	-37 46 28	6.50	15	E0.55	H	C S	022 00	78 192 12 32	SWP 1969	
HD153919		17 00 32	-37 46 28	6.50	15	E0.55	H	C S	020 00	78 192 13 03	LWR 1615	
HD153919		17 00 32	-37 46 28	6.50	15	E0.55	H	C S	018 00	78 192 13 53	SWP 1970	
HD153919		17 00 32	-37 46 29	6.50	15	E0.55	L	O S	000 13	78 192 16 18	SWP 1973	
HD153919		17 00 32	-37 46 28	6.50	15	E0.55	H	C S	027 00	78 192 17 19	SWP 1972	
HD153919		17 00 32	-37 46 29	6.50	15	E0.55	H	C S	027 00	78 192 18 26	SWP 1973	
HD153919		17 00 32	-37 46 29	6.50	15	E0.55	L	O S	000 20	78 192 19 36	SWP 1974	
HD153919		17 00 32	-37 46 29	6.50	15	E0.55	L	O S	000 18	78 193 16 24	SWP 1981	
HD153919		17 00 32	-37 46 29	6.50	15	E0.55	H	C S	027 00	78 193 17 09	SWP 1982	
HD153919		17 00 32	-37 46 29	6.50	15	E0.55	H	C S	027 00	79 193 18 18	SWP 1983	
HD153919		17 00 32	-37 46 29	6.50	15	E0.55	L	O S	000 18	78 193 19 26	SWP 1984	
HD153919		17 00 32	-37 46 29	6.50	15	E0.55	H	C S	033 00	78 194 14 06	SWP 1991	
HD153919		17 00 32	-37 46 29	6.50	15	E0.55	H	C S	027 00	78 194 15 19	SWP 1992	
HD153919		17 00 32	-37 46 29	6.50	15	E0.55	H	C S	033 00	78 194 17 55	SWP 1994	
HD153919		17 00 32	-37 46 28	6.5	15	E0.55	H	C S	060 00	78 195 04 29	SWP 2003	

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OBJ ID	PROG ID	TARGET RA H M S	TARGET DEC D M S	VIS MAG	OBJ CLASS	B-V OR B-V	DISP H/L	LG - APERTURE O/C	OBJ L/S	EXPOSE TIME MIN SEC	EPOSURE START TIME YR DAY HR MIN	IMAGE SEQ NUM	OBSERVERS COMMENTS
HD153919	XSAKD	17 00 32	-37 46 29	6.5	15	E0.55	H	C	S	035 00	78 195 06 12	SWP 2000	
HD153919		17 00 32	-37 46 29	6.5	15	E0.55	H	C	S	035 00	78 195 13 19	SWP 2006	
HD153919		17 00 32	-37 46 29	6.5	15	E0.55	L	O	L	000 20	78 195 14 34	SWP 2007	
HD153919		17 00 32	-37 46 29	6.5	15	E0.55	L	O	L	000 20	78 195 14 42	SWP 2007	
HD153919		17 00 32	-37 46 29	6.5	15	E0.55	H	C	S	035 00	78 195 15 28	SWP 2008	
HD153919		17 00 32	-37 46 29	6.5	15	E0.55	H	C	S	033 00	78 195 16 40	SWP 2009	
HD153919		17 00 33	-37 45 29	6.50	15	E0.55	L	O	L	000 12	78 192 15 31	LWR 1816	
3C 351	IM2A5	17 04 03	60 48 23	15.3	95		L	O	L	060 00	78 106 18 05	SWP 1370	
3C 351		17 04 03	60 48 29	15.3	85		L	O	L	320 00	78 107 12 24	SWP 1376	
VESTA	PSMGT	17 05 26	-15 20 31	5.7	05		L	C	S	050 00	78 141 10 40	LWR 1531	
VESTA		17 05 30	-15 20 25	5.7	05		L	C	S	012 00	78 141 09 26	LWR 1530	
VESTA		17 06 15	-15 19	5.7	05		L	C	S	005 00	78 141 12 35	LWR 1532	
BTA SCO	AFEBV	17 08 34	-43 10 31	3.3	40	E0.40	L	O	S	001 30	78 262 00 25	SWP 2689	
BTA SCO		17 08 34	-43 10 31	3.3	40	E0.40	L	O	S	006 00	78 262 00 33	SWP 2689	
BTA SCO		17 08 34	-43 10 31	3.3	40	E0.40	H	C	S	020 00	78 262 00 59	LWP 2398	
HD155763	SGABU	17 08 38	65 46 13	3.17	25	E0.03	H	C	S	001 20	78 172 20 47	SWP 1827	
HD155763		17 08 38	65 46 33	3.17	25	E0.03	H	C	S	003 00	78 175 18 11	SWP 1849	
HD155763		17 08 38	65 46 33	3.17	25	E0.03	H	C	S	000 48	78 175 18 23	LWR 1724	
ALP HER	MF2YA	17 12 22	14 26	3.1	48		H	O	L	060 00	78 250 03 58	LWR 2294	
NGC6341	SX2HG	17 15	43 12	6.46	83	E .61	L	O	L	180 00	78 126 14 41	SWP 1494	
NGC6341		17 15	43 12	6.46	83	E .61	L	O	L	030 00	78 126 17 57	LWR 1448	
NGC6341		17 15 36	43 12	6.46	83	E0.01	L	O	L	075 00	78 205 04 37	SWP 2093	
NGC6341		17 15 36	43 12	6.46	83	E0.01	L	O	L	040 00	78 205 06 02	LWR 1881	
NGC6341		17 15 36	43 12	6.46	83	E0.01	L	O	L	075 00	78 205 06 56	SWP 2094	
NGC6341		17 15 36	43 12	6.46	83	E0.01	L	O	L	040 00	78 205 08 20	LWR 1892	
NGC6341		17 15 36	43 12	6.46	83	E0.01	L	O	L	075 00	78 205 09 12	SWP 2095	
HD156385	OSPSC	17 15 49	-45 35	7.45	10	0.18	L	O	L	000 30	78 276 10 38	SWP 2846	
HD156385		17 15 49	-45 35	7.45	10	0.18	L	C	S	000 30	78 276 10 45	SWP 2846	
HD156385		17 15 49	-45 35	7.45	10	0.18	L	C	S	000 30	79 276 10 49	LWR 2532	
HD156385		17 15 49	-45 35	7.45	10	0.18	L	C	S	000 30	78 276 10 55	LWR 2532	
HD156385		17 15 49	-45 35	7.45	10	-0.12	H	C	S	025 00	78 278 07 28	LWR 2537	
HD156385		17 15 49	-45 35	7.45	10	-0.12	H	C	S	029 00	78 282 01 45	SWP 2891	
HD319703	CHHMJ	17 16 23	-36 02 43	10.71	12	31.53	L	O	L	135 00	78 219 05 22	LWR 2003	
44 NYSA	PSMGT	17 17 20	-19 57 40	11.3	08		L	O	L	120 00	78 209 05 59	LWR 1907	
44 NYSA		17 17 20	-19 57 40	11.3	08		L	O	L	120 00	78 209 09 05	LWR 1908	
HD156738	CHHMJ	17 17 30	-36 01 22	9.35	12		L	O	L	100 00	78 217 08 06	LWR 1986	
HD156738		17 17 30	-36 01 22	9.35	12		H	C	S	020 00	78 217 09 53	LWR 1986	
HD156738		17 17 30	-36 01 22	9.35	12		L	O	L	025 00	78 217 10 22	SWP 2207	
10FYGIEA	PSMGT	17 17 37	-23 57 07	9.9	05		L	O	L	080 00	78 206 10 00	LWR 1891	

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SORTED BY PROGRAM ID

OBJ ID	PROG ID	TARGET RA H M S	TARGET DEC D M S	VIS MAG	OBJ CLASS	B-V OR B-V	DISP H/L	LG - APERTURE O/C	OBJ L/S	EXPOSE TIME MIN SEC	EPOSURE START TIME YR DAY HR MIN	IMAGE SEQ NUM	OBSERVERS COMMENTS
72 HER	MGLBD	17 18 47	32 32	5.39	44	.62	H	C	S	065 00	79 306 02 15	LWR 2799	
BET ARA	CCAKD	17 21 08	-55 29	2.84	46		L	C	S	100 00	78 139 09 42	SWP 1576	
BET ARA		17 21 08	-55 29 06	2.84	46		H	C	S	090 00	78 139 11 35	LWR 1517	
HD157246	XBEVB	17 21 11	-56 19 50	3.33	23	E0.08	H	C	S	000 45	78 198 16 59	SWP 2036	
HD157246		17 21 11	-56 19 59	3.33	23	E0.08	H	C	S	000 30	78 198 17 04	LWR 1841	
HD157246	EODCM	17 21 12	-56 20	3.33	23	E0.05	H	C	S	000 30	78 163 18 28	SWP 1775	
PALLAS	PSMG1	17 22 59	24 53 23	9.2	05		L	C	S	069 00	78 142 13 38	LWR 1540	
PALLAS		17 23 01	24 53 12	9.2	05		L	C	S	015 00	78 142 12 32	LWR 1539	
PALLAS		17 23 01	24 53 12	9.2	05		L	O	L	010 00	78 142 15 06	LWR 1540	
HD159181	AFEBV	17 29 18	52 20 15	2.99	44		H	O	L	020 00	78 114 17 49	LWR 1381	
HR 6535		17 29 18	52 20 15	2.9	44	E0.37	H	C	S	015 00	78 260 06 55	LWR 2384	
HR 6535		17 29 19	52 20 15	2.9	44	E0.37	L	C	S	030 00	78 260 07 32	SWP 2669	
HR 6535		17 29 18	52 20 15	2.9	44	30.47	L	C	S	006 00	78 260 08 10	SWP 2669	
HD159181	CBJLL	17 29 18	52 20 15	2.87	44		H	O	L	008 00	78 233 06 25	LWR 2134	
HD159181		17 29 18	52 20 15	2.87	44		L	O	L	024 00	78 233 06 43	SWP 2348	
HD159181		17 29 18	52 20 15	2.87	44		H	O	L	016 00	78 233 07 18	LWR 2135	
HD159181		17 29 18	52 20 15	2.87	44		L	O	L	060 00	78 233 07 59	SWP 2349	
HD159181		17 29 18	52 20 15	2.87	44		L	O	L	010 00	78 233 09 36	SWP 2350	
HD 1DRA	AFEBV	17 31 11	55 13 04	5.0	35	E0.28	L	C	S	000 30	78 114 11 44	LWR 1378	
HD 1DRA		17 31 11	55 13 04	5.0	35	E0.28	L	O	L	002 00	78 114 11 35	LWR 1378	
HD 1DRA		17 31 11	55 13 04	5.0	35	E0.28	H	C	S	030 00	78 114 12 35	LWR 1379	
HD 1DRA		17 31 11	55 13 04	5.0	35	E0.28	L	C	S	010 00	78 114 13 34	SWP 1408	
HD 1DRA		17 31 11	55 13 04	5.0	35	E0.28	L	O	L	040 00	78 114 13 56	SWP 1408	
HD 1DRA		17 31 16	55 12 22	5.0	35	E0.28	H	C	S	030 00	78 114 15 11	LWR 1380	
HD 6567		17 35 07	-08 05 24	4.6	27	E0.11	H	C	S	040 00	78 114 16 11	SWP 1409	
HR 6567		17 35 07	-08 05 24	4.6	27	E0.11	H	O	L	015 00	78 265 02 47	SWP 2724	
HD161114	CBBJP	17 41 16	-06 15	9.5	36	E0.00	L	O	L	010 00	78 223 07 40	SWP 2265	
HD161114		17 41 16	-06 15	9.5	36	E0.00	L	C	S	005 00	78 223 08 06	SWP 2265	
HD161114		17 41 16	-06 15	9.5	36	E0.00	L	C	S	006 00	78 223 08 26	LWR 2045	
HD161114		17 41 16	-06 15	9.5	36	E0.00	L	C	S	003 00	78 223 08 37	LWR 2045	
NOVA SER	NOVA7	17 48 59	-14 43 08	13	55		L	O	L	120 00	78 147 11 45	LWR 1567	1978
NOVA SER		17 48 59	-14 43 08	13	55		L	O	L	085 00	78 147 14 19	SWP 1649	1978
NOVA SER	OD2AB	17 48 59	-14 43 08	13.5	55		L	O	L	180 00	78 162 07 36	LWR 1654	1978
NOVA SER		17 48 59	-14 43 08	14.5	55		L	O	L	150 00	78 162 11 46	SWP 1763	1978
HD163181	PG2SS	17 52 59	-32 28 06	6.50	23	E0.50	L	O	L	001 18	78 134 23 17	LWR 1496	
HD163181		17 52 59	-32 28 06	6.50	23	E0.50	L	O	L	000 28	78 134 23 26	LWR 1496	
HD163181		17 52 59	-32 28 06	6.40	23	E0.73	L	O	L	001 12	78 135 21 18	SWP 1553	
HD163181		17 52 59	-32 28 06	6.40	23	E0.73	L	C	S	002 24	78 135 21 29	SWP 1553	
HD163181		17 52 59	-32 28 06	6.40	23	E0.73	L	O	L	002 00	78 135 21 45	LWR 1501	

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OBJ ID	PROG ID	TARGET RA H M S	TARGET DEC D M S	VIS MAG	OBJ CLASS	E(B-V) OR B-V	DISP H/L	LG - OBJ APERTURE O/C	OBJ APERTURE L/S	EXPOSE TIME MIN SEC	EPOSURE START TIME YR DAY HR MIN	IMAGE SEQ NUM	OBSERVERS COMMENTS
HD163181	PG2SS	17 52 59	-32 28 06	6.40	23	E0.73	L	C	S	000 28	78 135 21 58	LWR 1501	
HD163181		17 52 59	-32 28 06	6.5	20	E0.73	H	O	L	060 00	78 137 21 56	SWP 1568	
HD163181		17 52 59	-32 28 06	6.5	20	E0.73	H	O	L	035 00	78 137 23 04	LWR 1510	
HD163181		17 52 59	-32 28 06	6.50	20	E0.73	H	O	L	090 00	78 139 17 04	SWP 1578	
HD163181	LSDKW	17 53 00	-32 27	6.6	20	E0.73	H	C	S	120 00	78 249 05 17	SWP 2503	
HD163181		17 53 00	-32 27	6.6	20	E0.5	H	C	S	120 00	78 287 00 21	SWP 2965	
HD163181	MLJBb	17 53 00	-32 27	6.6	23	E 0.7	L	O	L	001 30	78 208 09 05	SWP 2118	
HD163181		17 53 00	-32 27	6.6	23	E0.7	L	C	S	001 30	78 208 09 16	SWP 2119	
HD163181		17 53 00	-32 27	6.6	23	E0.7	H	C	S	020 00	78 208 04 24	LWR 1904	
HD163181		17 53 00	-32 27	6.6	23	E0.5	H	C	S	025 00	78 284 07 27	LWR 2572	
HD163181		17 53 00	-32 27	6.6	23	E0.7	L	O	S	003 00	78 284 08 02	SWP 2915	
HD163181		17 53 00	-32 27	6.6	23	E0.7	L	O	L	001 30	78 284 08 11	SWP 2915	
HD163181	PG2SS	17 53 00	-32 28 15	6.4	23	E0.73	H	O	L	065 00	78 220 06 43	SWP 2235	
HD163181		17 53 00	-32 28 15	6.4	23	E0.73	H	O	L	031 00	78 220 07 56	LWR 2019	
HD163296	CBMJP	17 53 21	-21 56 57	6.8	30	E0.00	L	O	L	000 30	78 225 14 25	LWR 2065	
HD163296		17 53 21	-21 56 57	6.8	30	E0.00	L	C	S	000 30	78 225 14 36	LWR 2065	
HD163296		17 53 21	-21 56 57	6.8	30	E0.15	L	O	S	000 55	78 225 15 07	SWP 2283	
HD163296		17 53 21	-21 56 57	6.8	30	E0.15	L	O	S	000 55	78 225 15 14	SWP 2283	
HD163758	OSFSC	17 56 06	-36 01	7.31	15	E0.37	L	O	L	000 16	78 145 22 52	SWP 1638	
HD163758		17 56 06	-36 01	7.31	15	0.07	H	O	L	030 00	78 282 03 31	LWR 2560	
HD163758		17 56 06	-36 01	7.31	15	0.07	H	C	S	036 00	78 282 04 13	SWP 2842	
HD164353	SGABU	17 58 08	02 55 56	4.00	24	E0.18	H	C	S	003 30	78 177 15 34	SWP 1857	
HD164353		17 58 08	02 55 56	4.00	24	E0.18	H	C	S	002 30	78 177 16 04	LWR 1735	
HD164353		17 58 08	02 55 56	4.00	24	E0.18	H	C	S	005 00	78 177 18 18	LWR 1736	
HD164353		17 58 08	02 55 56	4.00	24	E0.18	H	C	S	008 00	78 177 18 32	SWP 1858	
HD164270	OSFSC	17 58 23	-32 43	9.01	10	0.33	L	O	L	002 00	78 276 09 03	SWP 2845	
HD164270		17 58 23	-32 43	9.01	10	0.33	L	C	S	002 00	78 276 09 13	SWP 2845	
HD164270		17 58 23	-32 43	9.02	20	0.33	L	C	S	002 00	78 276 09 20	LWR 2531	
HD164270		17 58 23	-32 43	9.03	20	0.33	L	C	S	002 00	78 276 09 27	LWR 2531	
HD164270		17 58 26	-32 42 55	9.01	10	0.03	H	C	S	360 00	78 278 01 00	SWP 2855	
HD164270		17 58 26	-32 42 55	9.01	10	0.03	H	C	S	180 00	78 279 23 31	LWR 2547	
NGC6543	PHCAL	17 58 34	66 38 05		70		L	C	S	030 00	78 188 17 11	LWR 1795	
NGC 6543	PP2ED	17 58 34	66 38 05	7.6	70	E0.00	L	O	L	004 00	78 182 17 43	SWP 1897	
NGC 6543		17 58 34	66 38 05	7.6	70	E0.00	L	C	S	020 00	78 182 17 54	SWP 1897	
NGC 6543		17 58 34	66 38 05	7.6	70	E0.00	L	O	L	004 00	78 182 18 26	LWR 1761	
NGC 6543		17 58 34	66 38 05	7.6	70	E0.00	L	C	S	020 00	78 182 18 37	LWR 1761	
NGC6543	HSSRH	17 58 36	66 38	9.5	70		L	C	S	002 00	78 097 20 02	SWP 1328	
NGC6543		17 58 36	66 38	9.5	70		L	O	L	010 00	78 097 20 22	SWP 1328	
NGC 6523	PP2ED	18 00 29	-24 22 45		72		L	O	L	030 00	78 187 18 48	LWR 1787	

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OBJ ID	PROG ID	TARGET RA h M S	TARGET DEC D M S	VIS MAG	OBJ CLASS	E(B-V) OR B-V	DISP H/L	LG - OBJ APERTURE O/C	OBJ APERTURE L/S	EXPOSE TIME MIN SEC	EPOSURE START TIME YR DAY HR MIN	IMAGE SEQ NUM	OBSERVERS COMMENTS
EBRSHL36	IMBDD	18 00 36	-24 24 52	9.5	12	E1.10	H	O	L	012 00	78 271 04 49	LWR 2484	
EBRSHL36		18 00 36	-24 22 52	9.5	12	E1.10	L	O	L	120 00	78 271 05 10	SWP 2794	
EBRSHL36		18 00 36	-24 22 52	9.5	12	E1.10	L	O	L	012 00	78 271 05 45	LWR 2485	
EBRSHL36		18 00 36	-24 22 52	9.5	12	E1.10	L	C	S	020 00	78 273 07 56	SWP 2808	
EBRSHL36		18 00 36	-24 22 52	9.5	12	E1.10	L	O	L	040 00	78 273 08 25	SWP 2808	
EBRSHL36		18 00 36	-24 22 52	9.5	12	E1.10	L	O	S	012 00	78 273 09 10	LWR 2501	
EBRSHL36		18 00 38	-24 22 46	9.5	12	E1.10	H	C	S	280 00	78 273 01 46	LWR 2500	
HD164794	OSFSC	18 00 38	-24 22	5.97	12	E0.33	H	C	S	010 00	78 141 19 13	LWR 1534	
NGC 6523	PP2ED	18 00 39	-24 22 18		72		L	O	L	030 00	78 187 16 48	LWR 1786	
NGC 6523		18 00 39	-24 22 18		72		L	O	L	025 00	78 187 17 57	SWP 1924	
HD164794	OSFSC	18 00 48	-24 22	5.97	12	E0.33	H	C	S	008 00	78 141 18 36	SWP 1595	
HD164794		18 00 48	-24 22	5.97	12	E0.33	L	C	S	000 10	78 141 19 47	SWP 1596	
HD164794		18 00 49	-24 22	5.97	12	E0.33	L	O	L	000 10	78 141 19 56	SWP 1596	
MB HRGLS	PN2AB	18 00 49	-24 22	8	72		L	O	L	025 00	78 159 21 21	LWR 1640	
99 HER	MGLBD	18 05 08	30 33	5.04	41	.52	H	C	S	040 00	78 306 04 07	LWR 2800	
HD165763	OSFSC	18 05 29	-21 16	8.22	10	0.20	L	C	S	000 20	78 276 12 05	SWP 2847	
HD165763		18 05 29	-21 16	8.22	10	0.20	L	O	L	000 20	78 276 12 12	SWP 2847	
HD165763		18 05 29	-21 16	8.22	10	0.20	L	C	S	000 20	79 276 12 18	LWR 2533	
HD165763		18 05 29	-21 16	8.22	10	0.20	L	O	L	000 30	78 276 12 23	LWR 2533	
HD165763		18 05 29	-21 16	8.22	10	-0.10	H	C	S	020 00	78 280 03 19	LWR 2548	
HD165763		18 05 29	-21 16	8.22	10	-0.10	H	C	S	020 00	79 280 03 44	SWP 2872	
HD166126	CBMJP	18 06 58	-15 34	8.6	41	E0.00	L	O	L	010 00	78 223 05 38	LWR 2044	
HD166126		18 06 58	-15 34	8.6	41	E0.00	L	C	S	005 00	78 223 06 08	LWR 2044	
HD166126		18 06 58	-15 34	8.6	41	E0.00	L	C	L	015 00	78 223 06 21	SWP 2264	
HD166126		18 06 58	-15 34	8.6	41	E0.00	L	C	L	005 00	78 223 06 48	SWP 2264	
HD166126		18 06 58	-15 34	8.6	41	E0.00	L	O	L	030 00	78 223 09 21	SWP 2266	
HD166126		18 06 58	-15 34	8.6	41	E0.00	L	O	L	040 00	78 228 09 12	SWP 2307	
NGC 6572	PN2AB	18 09 40	06 50 25	9	70		L	O	L	012 19	78 154 07 32	LWR 1606	
NGC 6572	PP2ED	18 09 40	06 50 25	8.2	70		L	O	L	012 00	78 305 01 36	LWR 2783	
NGC 6572		18 09 40	06 50 25	8.2	70		L	O	L	012 00	78 305 02 11	SWP 3200	
NGC 6572		18 09 40	06 50 25	8.2	70		L	O	L	012 00	79 305 02 45	LWR 2784	
NGC 6572		18 09 40	06 50 25	8.2	70		L	O	L	018 00	78 305 03 19	SWP 3201	
NGC 6572	PN2AB	18 09 42	06 50 25	9	70		L	O	L	012 30	78 154 08 19	SWP 1703	
NGC 6572		18 09 42	06 50 25	9	70		L	C	S	007 00	79 154 08 40	SWP 1703	
HD166937	CBMJP	18 10 46	-21 04	3.65	25	E0.22	H	C	S	015 00	78 223 04 13	SWP 2263	
HD166937		18 10 46	-21 04 26	3.86	25	E0.24	H	C	S	004 00	78 223 04 59	LWR 2043	
HD166537		18 10 46	-21 04	3.85	25	E0.22	L	O	L	003 08	79 229 08 07	LWR 2085	TRAILED
HD166937		18 10 46	-21 04	3.85	25	E0.22	L	O	L	000 08	78 228 07 48	SWP 2306	
HD SGB	MF2YK	18 10 46	-21 04 25	3.86	25	E0.31	H	O	L	036 00	78 155 15 36	SWP 1715	

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OBJ ID	PROG ID	TARGET RA H M S	TARGET DEC D M S	VIS MAG	OBJ CLASS	B(B-V) OR B-V	DISP H/L	LG - OBJ APERTURE O/C	L/S	EXPOSE TIME MIN SEC	EPOSURE START TIME YR DAY HR MIN	IMAGE SEQ NUM	OBSERVERS COMMENTS
HD166937	MF2YK	18 10 46	-21 04 25	3.86	25		H	C	S	005 01	78 248 07 56	LWR 2277	
HD166937		18 10 46	-21 04 25	3.86	25		H	C	S	008 00	78 248 08 41	SWP 2493	
HD167771	IN8DD	18 14 32	-18 28 58	6.5	14		H	C	S	014 00	78 275 09 14	LWR 2523	
HD167771		18 14 32	-18 28 58	6.5	14		H	C	S	012 00	78 275 09 45	SWP 2832	
AM [illegible]	SX2EG	18 14 56	49 50 55	13.11	59	B 0.2	L	O	L	045 00	78 122 12 54	SWP 1461	
AM [illegible]		18 14 56	49 50 55	13.11	59	B 0.2	L	O	L	045 00	78 122 14 36	SWP 1462	
AM [illegible]		18 14 56	49 50 55	13	59	B 0.2	L	O	L	010 00	78 203 16 31	SWP 2084	
AM [illegible]		18 14 56	49 50 55	13	59	B 0.2	L	O	L	010 00	78 203 14 53	SWP 2084	
AM [illegible]		18 14 56	49 50 55	13	59	B 0.2	H	O	L	030 00	78 203 19 13	LWR 1875	
AM [illegible]		18 14 56	49 50 55	13	59		H	O	L	030 00	78 204 18 26	SWP 2090	
AM [illegible]	XSAKL	18 14 58	49 50 55	12.8	59	B 0.5	L	O	L	01W 01	78 128 18 40	SWP 1507	
AM [illegible]		18 14 56	49 50 55	12.8	59	B 0.5	L	O	L	010 00	78 128 19 02	LWR 1459	
AM [illegible]		18 14 56	49 50 55	12.8	59	B 0.5	L	O	L	010 00	78 128 20 16	LWR 1460	
AM [illegible]		18 14 58	49 50 55	12.8	59		L	O	L	005 00	78 129 19 18	SWP 1512	
AM [illegible]		18 14 58	49 50 55	12.8	59		L	O	L	010 00	78 129 19 54	SWP 1512	
AM [illegible]		18 14 58	49 50 55	13.1	59		L	O	L	005 00	78 132 18 11	SWP 1527	
AM [illegible]		18 14 58	49 50 55	13.1	59		L	O	L	005 00	78 132 18 27	SWP 1527	
AM [illegible]		18 14 58	49 50 55	13.1	59		L	O	L	015 00	78 135 06 09	SWP 1548	
AM [illegible]		18 14 58	49 50 55	13.2	59		L	O	L	005 00	78 135 07 15	SWP 1549	
AM [illegible]	SX2HG	18 14 59	49 50 55	13	59		L	O	L	010 00	78 204 19 05	LWR 1880	
AM [illegible]		18 14 59	49 50 55	13	59		L	O	L	010 00	78 204 19 39	SWP 2091	
AR PAV	PG2SS	18 15 24	-66 06 15	10	12		L	O	L	045 00	78 220 09 14	SWP 2236	
AR PAV		18 15 24	-66 06 15	10	12		L	O	L	045 00	78 220 10 08	SWP 2236	
AR PAV		18 15 24	-66 06 15	9.5	12		L	O	L	045 00	78 221 03 14	LWR 2023	
AR PAV		18 15 24	-66 06 15	9.5	12		L	O	L	045 00	78 221 04 07	LWR 2023	
AR PAV		18 15 25	-66 06 12	11.2	12	B 0.4	L	O	L	025 00	78 136 20 54	SWP 1561	
AR PAV		18 15 25	-66 06 12	11.2	12	B 0.4	L	O	L	010 00	78 136 21 31	SWP 1561	
HD168733	MVDSL	18 19 30	-36 42	5.4	27	-0.19	H	O	S	009 00	78 295 00 16	SWP 3092	
HD168733		18 19 30	-36 42	5.4	27	-0.19	H	O	S	005 45	78 295 00 29	LWR 2671	
HD168733		18 19 30	-36 42	5.4	27	-0.19	H	O	S	015 00	78 295 00 58	SWP 3093	
NGC6624B	SX2HG	18 20 27	-30 23 14	13.2	83	B 1.2	L	O	L	180 00	78 126 10 04	SWP 1493	
NGC6624	XSAKD	18 20 30	-30 23	8.6	83	B01.2	L	O	L	090 00	78 128 12 34	LWR 1458	
HD169454	BLJBH	18 22 28	-14 00	6.6	23	B 1.1	L	O	S	025 00	78 208 10 36	SWP 2120	
169454		18 22 28	-14 00	6.6	23	B 1.1	L	O	L	030 00	78 288 07 31	SWP 2985	
HD169515	PG2SS	18 22 42	-12 43 09	9.40	20	B1.12	L	O	L	045 00	78 134 17 01	LWR 1493	
HD169515		18 22 42	-12 43 09	9.40	20	B1.12	L	O	L	019 00	78 134 17 56	SWP 1543	
HD169753	CBMJP	18 23 49	-09 14	7.5	23	B0.00	L	O	L	002 00	78 225 08 33	SWP 2279	
HD169753		18 23 49	-09 14	7.5	23	B0.00	L	O	S	001 00	78 225 08 41	SWP 2279	
HD169753		18 23 49	-09 14	7.5	23	B1.00	L	O	S	001 00	78 225 08 46	LWR 2062	

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OBJ ID	PROG ID	TARGET RA H M S	TARGET DEC D M S	VIS MAG	OBJ CLASS	B(B-V) OR B-V	DISP H/L	LG - OBJ APERTURE O/C	L/S	EXPOSE TIME MIN SEC	EPOSURE START TIME YR DAY HR MIN	IMAGE SEQ NUM	OBSERVERS COMMENTS
HD169753	CBMJP	18 23 49	-09 14	7.5	23	B1.00	L	O	L	002 00	78 225 08 51	LWR 2062	
HD169753		18 23 49	-09 14	7.5	23	B0.00	L	O	L	020 00	78 225 09 53	SWP 2280	
NGC 6644	PN2AE	18 29 30	-25 10	10	70		L	O	L	030 00	78 157 19 31	SWP 1734	
NGC 6644		18 29 30	-25 10	10	70		L	O	L	040 00	78 157 20 19	LWR 1630	
NGC 6644		18 29 30	-25 10	10	70		L	O	L	005 00	78 157 21 07	SWP 1735	
HR 6678	AF8BV	18 31 43	57 00 24	4.8	41	B0.61	H	O	L	035 00	78 260 08 39	LWR 2385	
HR 6678		18 31 43	57 00 24	4.8	41	B0.61	L	O	L	060 00	78 260 09 23	SWP 2670	
HR 6678		18 31 43	57 00 24	4.8	41	B0.61	L	O	S	012 00	78 260 10 30	SWP 2670	
HD172044	SS2JJ	18 34 47	33 25 33	5.4	36	-0.10	H	O	S	015 00	78 291 00 00	SWP 3013	
HD172044		18 34 47	33 25 33	5.4	36	-0.10	H	O	S	008 00	78 291 00 53	LWR 2637	
HD172044		18 34 47	33 25 33	5.4	36	-0.10	H	O	S	015 00	78 291 01 23	SWP 3014	
HD173524	MVDSL	18 41 40	55 29	5.1	27	B0.00	H	O	S	025 00	78 099 20 08	SWP 1339	
HD173524		18 41 40	55 29	5.1	27	B0.00	H	O	S	011 00	78 099 21 08	LWR 1294	
HD173524		18 41 40	55 29	5.1	27	B0.00	H	O	S	024 00	78 099 22 05	SWP 1340	
HD173524		18 41 40	55 29	5.1	27	B0.00	H	O	S	036 00	78 101 21 37	SWP 1353	
HD173219	CM2GH	18 41 48	-07 10 00	7.85	20	B0.48	H	O	S	060 00	78 234 13 46	LWR 2149	
HD173219		18 41 48	-07 10 00	7.85	20	B0.48	H	O	S	003 00	78 234 14 56	SWP 2365	
HD173219		18 41 48	-07 10 00	7.85	20	B0.49	H	O	L	001 30	78 234 15 07	SWP 2365	
173219	BLJBH	18 41 48	-07 10 00	7.9	23	B 0.5	H	C	S	090 00	78 290 05 26	SWP 3004	
HD173787	CBMJI	18 44 54	-20 19 50	6.9	21	B1.00	L	O	L	005 00	78 225 11 01	LWR 2063	
HD173787		18 44 54	-20 19 50	6.9	21	B1.00	L	O	L	002 00	78 225 11 36	LWR 2063	
HD173787		18 44 54	-20 19 50	6.9	21	B0.5	L	O	L	002 00	78 225 12 03	SWP 2281	
HD173787		18 44 54	-20 19 50	6.9	21	B0.5	L	O	L	002 00	78 225 12 19	SWP 2281	
V356S0R		18 44 54	-20 19 50	6.9	21	B0.5	L	O	L	000 40	78 225 13 13	LWR 2064	
[illegible]		18 44 54	-20 19 50	6.9	21	B0.5	L	O	L	000 50	78 225 13 16	SWP 2282	
[illegible]	MF2YK	18 46 13	33 18 12	3.4	22	B0.09	H	O	S	005 00	78 153 14 12	SWP 1694	
[illegible]		18 46 13	33 18 12	3.4	22	B0.09	H	O	S	003 00	78 153 14 49	LWR 1598	
[illegible]		18 46 13	33 18 12	3.4	22	B0.09	H	O	S	002 30	78 153 15 37	SWP 1695	
[illegible]		18 46 13	33 18 12	3.4	22	B0.09	H	O	S	002 00	78 153 16 30	LWR 1599	
[illegible]		18 46 13	33 18 12	3.4	22	B0.09	H	O	S	001 00	78 153 17 19	SWP 1696	
[illegible]		18 46 13	33 18 12	3.4	22	B0.09	H	O	S	001 50	78 155 09 18	LWR 1615	
[illegible]		18 46 13	33 18 12	3.4	22	B0.09	H	O	S	001 20	78 155 10 04	SWP 1713	
[illegible]		18 46 13	33 18 12	3.4	22		H	O	S	001 30	78 240 02 51	SWP 2510	
HD174933	SS2JJ	18 50 08	21 21 49	5.5	27	B0.03	H	O	S	002 30	78 250 03 04	LWR 2293	
HD174933		18 50 08	21 21 49	5.5	27	B0.03	H	O	S	009 00	78 296 06 26	LWR 2688	
[illegible]	MVDSL	18 53 17	-37 25	5.4	27	-0.16	H	O	S	013 00	78 296 06 40	SWP 3104	
[illegible]		18 53 17	-37 25	5.4	27	-0.16	H	O	S	005 30	78 293 06 25	SWP 3065	PHSE.12
[illegible]		18 53 17	-37 25	5.4	27	-0.16	H	O	S	005 01	78 293 06 37	LWR 2652	PHSE.14
[illegible]		18 53 17	-37 25	5.4	27	-0.16	H	O	S	008 15	78 293 07 08	SWP 3066	PHSE.13
[illegible]		18 53 17	-37 25	5.4	27	-0.16	H	O	S	008 36	78 294 22 28	SWP 3090	PHSE.58
[illegible]		18 53 17	-37 25	5.4	27	-0.16	H	O	S	005 00	78 294 22 37	LWR 2670	PHSE.58

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OBJ ID	PROG ID	TARGET RA H M S	TARGET DEC D M S	VIS MAG	OBJ CLASS	B(B-V) OR B-V	DISP H/L	LG - OBJ APERTURE O/C	L/S	EXPOSE TIME MIN SEC	EPOSURE START TIME YR DAY HR MIN	IMAGE SEQ NUM	OBSERVERS COMMENTS
HR7129	MVDSL	18 53 17	-37 25	5.4	27	-0.16	H	C	S	008 15	78 294 23 07	SWP 3091	
HR7129		18 53 17	-37 25	5.4	27	-0.16	H	C	S	005 01	78 295 09 19	SWP 3097	PHSE0.7
HR7129		18 53 17	-37 25	5.4	27	-0.16	H	C	S	004 30	78 295 09 30	LWR 2676	PHSE0.7
HR7129		18 53 17	-37 25	5.4	27	-0.16	H	C	S	008 00	78 295 10 05	SWP 3098	PHSE0.7
HR7129		18 53 17	-37 25	5.4	27	-0.16	H	C	S	005 01	78 297 13 14	SWP 3126	PHSE0.28
HR7129		18 53 17	-37 25	5.4	27	-0.16	H	C	S	004 15	78 297 15 24	LWR 2700	PHSE0.29
G70 8247	BSJLG	19 00 39	70 35 22	13.2	37		L	O	L	040 00	78 148 21 53	SWP 1660	GRW
G70 8247		19 00 39	70 35 22	13.2	37		L	O	L	060 00	78 148 22 46	LWR 1575	GRW
CPD55	FSBGI	19 00 50	-30 39 16	7.4	35		L	C	S	010 00	78 206 07 59	LWR 1890	
CPD55		19 00 50	-30 39 16	7.4	35		L	O	L	020 00	78 206 06 15	LWR 1890	
NGC6752	XSAKD	19 06 24	-60 04	6.6	83		L	O	L	050 00	78 132 12 20	SWP 1525	
NGC6752		19 06 24	-60 04	6.6	83		L	O	L	045 00	78 133 09 35	SWP 1531	
NGC6752		19 06 24	-60 04	6.6	83		L	O	L	045 00	78 133 11 33	SWP 1532	
NGC6752		19 06 24	-60 04	5.2	83		L	O	L	030 00	78 133 12 34	LWR 1492	
NGC6752		19 06 24	-60 04	6.6	83		L	O	L	090 00	78 194 11 10	SWP 1990	
NGC6752		19 06 24	-60 04	6.90	83	E0.00	L	O	L	030 00	78 198 11 19	LWP 1839	
NGC6752	XS2BG	19 06 24	-60 04	6.93	83	E0.00	L	O	L	060 00	78 199 12 35	SWP 2042	15"ECNTR
NGC6752		19 06 24	-60 04	6.93	83	E0.00	L	O	L	040 00	78 199 13 44	LWR 1808	15"ECNTR
NGC6752		19 06 24	-60 04	6.93	83	E0.00	L	O	L	060 00	79 199 14 36	SWP 2043	15"WCNTR
HR 7264	AFEBV	19 06 47	-21 06 17	2.9	40	E0.36	H	C	S	012 30	78 265 00 51	LWR 2428	
HR 7264		19 06 47	-21 06 17	2.9	40	E0.36	L	O	S	001 00	78 265 01 13	SWP 2723	
HR 7264		19 06 47	-21 06 17	2.9	40	E0.36	L	O	L	005 00	78 265 01 22	SWP 2723	
NGC6752	XSAKD	19 06 48	-60 09	13.5	83	E0.05	L	O	L	180 00	78 194 06 27	SWP 1989	
NGC6752		19 06 57	-60 06 01	15.68	83	E0.00	L	O	L	180 00	78 198 07 31	SWP 2032	
NGC6764	QO2AB	19 07 01	50 51 03	13.6	84		L	O	L	060 00	78 190 09 15	LWR 1802	
NGC6764		19 07 01	50 51 03	13.2	84		L	O	L	180 00	78 190 10 24	SWP 1948	
M1-67	CMBMJ	19 09 16	16 46 29	11.2	11	B 1.4	L	O	L	050 00	78 219 09 14	LWR 2004	
M1-67		19 09 16	16 46 29	11.2	11	B 1.4	L	O	S	010 00	78 219 10 23	LWR 2004	
IC 4846	FN2AB	19 13 00	-09 05	10	70		L	O	L	060 00	78 158 17 08	LWR 1634	
IC 4846		19 13 00	-09 05	10	70		L	O	L	020 00	78 158 18 37	SWP 1740	
IC 1297		19 14 00	-39 42	11.5	70		L	O	L	060 00	78 158 20 04	LWR 1635	
IC 1297		19 14 00	-39 42	11.5	70		L	O	L	025 00	78 158 21 02	SWP 1741	
HD181655	PSMGI	19 17 53	37 14 21	6.30	44	E0.00	L	O	L	006 30	79 207 11 02	LWR 1897	
HD181655		19 17 53	37 14 21	6.30	44	E0.00	L	C	S	003 18	78 207 11 19	LWR 1897	
UPS SGR	MF2YK	19 18 51	-16 03 01	4.6*	27		H	C	S	016 30	78 153 07 15	SWP 1691	
UPS SGR		19 18 51	-16 03 01	4.61	27		H	C	S	010 00	78 155 11 16	LWR 1616	
HD181615		19 18 51	-16 03 01	4.61	36		H	C	S	010 00	78 248 06 23	LWR 2276	
HD181615		19 18 51	-16 03 01	4.61	36		H	C	S	016 00	78 248 07 03	SWP 2492	
HD181615	PG2SS	19 18 51	-16 03 01	4.60	36	E0000	H	O	I	007 30	78 134 19 46	LWR 1494	

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HD181615	PG2SS	19 18 51	-16 03 01	4.60	36	E0000	H	O	L	010 00	78 134 20 44	SWP 1504	
HD181615		19 18 51	-16 03 01	4.60	36	E0000	H	O	L	006 00	78 134 21 53	LWR 1495	
HD181615		19 18 51	-16 03 01	4.60	36	E0000	L	O	I	000 12	78 135 23 53	SWP 1554	
HD181615		19 18 51	-16 03 01	4.60	36	E0000	H	O	L	010 00	78 136 18 45	LWR 1505	
UPS SGR	MF2YK	19 19 52	-16 02	4.61	27		H	C	S	017 00	78 153 08 23	LWR 1595	
HD181615	PG2SS	19 18 52	-16 03 02	4.3	36	E0.00	H	O	L	007 45	78 218 00 06	LWR 1994	
HD181615		19 18 52	-16 03 02	4.3	36	E0.00	H	O	L	015 00	78 218 09 23	SWP 2219	
HD182308	SS2JJ	19 19 23	64 17 46	6.3	27	-0.04	H	C	S	025 00	78 294 01 54	LWP 2660	
HD182308		19 19 23	64 17 46	6.3	27	-0.04	H	C	S	040 00	78 294 02 25	SWP 3081	
NGC 6790	FN2AB	19 20 42	01 25	9.4	70		L	O	L	005 00	78 154 20 35	SWP 1708	
NGC 6790		19 20 42	01 25	9.4	70		L	C	S	005 00	78 154 20 46	SWP 1708	
NGC 6790		19 20 42	01 25	9.4	70		L	O	L	005 00	78 154 21 15	LWR 1610	
NGC 6790		19 20 42	01 25	9.4	70		L	O	S	005 00	78 154 21 26	LWR 1610	
BD303639	PP1ZD	19 32 47	30 24 20	9.6	70		L	O	I	012 00	78 182 14 38	LWR 1759	
BD303639		19 32 47	30 24 20	9.6	70		L	O	I	012 00	78 182 14 17	SWP 1995	
BD303639		19 32 47	30 24 20	9.6	70		L	O	I	004 00	78 182 16 13	LWR 1760	
BD303639		19 32 47	30 24 20	9.6	70		L	O	I	004 00	78 182 15 39	SWP 1896	
HR SGE	FN2AB	19 39 41	16 37 33	12	70		L	O	I	030 00	78 157 09 26	LWR 1626	
HR SGE		19 39 41	16 37 33	12	70		L	O	I	060 00	78 157 10 22	SWP 1730	
HR SGE		19 39 41	16 37 33	12	70		L	O	I	005 00	78 157 11 55	LWR 1627	
HR SGE		19 39 41	16 37 33	11.5	70		L	O	I	005 00	78 244 12 19	LWR 2231	
HR SGE		19 39 41	16 37 33	12	70		L	O	I	030 00	78 246 01 31	LWR 2251	
HR SGE		19 39 41	16 37 33	12	70		L	O	I	060 00	78 246 02 10	SWP 2457	
16 CYG B	PS1CC	19 40	50 24	6.20	44		L	O	L	180 00	78 263 00 52	SWP 2700	
16CYG	PSBGI	19 40 33	50 24 30	5.96	44	E0.00	L	O	L	004 42	78 206 04 44	LWR 1888	
16CYG		19 40 33	50 24 30	5.96	44	E0.00	L	C	S	002 30	78 206 04 57	LWR 1888	
16CYG		19 40 33	50 24 30	5.96	44	E0.00	L	O	L	021 00	78 206 05 34	LWR 1889	
16CYG B	PHCAL	19 40 32	50 24 02	6.20	44		L	O	I	015 00	78 176 15 15	LWR 1729	
16CYG B		19 40 32	50 24 02	6.20	44		L	C	S	010 01	78 176 15 50	LWR 1729	
16CYG B		19 40 32	50 24 02	6.20	44		L	O	I	007 00	78 176 17 19	LWR 1730	
16CYG B		19 40 32	50 24 02	6.20	44		L	O	I	015 00	78 176 17 38	SWP 1655	
16CYG B		19 40 33	50 24 02	6.20	44		L	C	S	001 00	78 176 18 04	SWP 1855	
NGC 6819	FN2AB	19 41 06	-14 16	10	70		L	O	L	020 00	78 154 10 34	SWP 1704	
NGC 6819		19 41 06	-14 16	10	70		L	O	L	025 00	78 154 11 54	LWR 1607	
NGC 6819		19 41 06	-14 16	10	70		L	O	I	060 00	78 154 12 36	SWP 1705	
NGC 6819		19 41 06	-14 16	10	70		L	O	I	075 00	78 154 13 38	LWR 1608	
HD186994	ALEBC	19 44 04	44 50	7.30	33	E0.00	H	C	S	011 00	78 164 16 55	LWR 1662	
HD186994		19 44 04	44 50	7.30	33	E0.00	H	C	S	011 00	78 164 17 52	SWP 1779	
17 CYG	MG1BD	19 44 32	33 37	4.39	81	.46	H	C	S	032 00	78 306 06 54	LWR 2802	

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HD187399	CM4GH	19 46 42	29 17 00	6.9	25	E0.28	H	C	S	045 00	78 234 11 45	LWR 2148	
HD187399		19 46 42	29 17 00	6.9	25	E0.28	L	O	L	000 50	78 234 12 41	SWP 2364	
187399	CM2QH	19 46 42	29 17 00	6.9	25	E0.28	H	C	S	045 00	78 285 22 44	LWR 2587	
187399		19 46 42	29 17 00	6.9	25	E 0.3	H	C	S	080 00	78 285 23 42	SWP 2947	
187399	PLJBH	19 46 42	29 17 00	6.9	25	E 0.3	H	C	S	080 00	78 287 22 55	SWP 2980	
ALF AQL	AFEBV	19 48 40	08 44 05	0.8	31	E0.22	H	C	S	000 45	78 267 01 09	LWR 2449	
ALF AQL		19 48 20	08 44 05	0.8	31	E0.22	H	C	S	005 30	78 267 01 16	SWP 2743	
CYG ACL	MGIKD	19 48 38	10 17	5.12	41	.55	H	C	S	045 00	78 306 05 27	LWR 2801	
HD188001	OSESC	19 50 07	18 32	6.21	15	E0.31	H	C	S	010 01	78 142 16 52	SWP 1601	
HD188001		19 50 07	18 32	6.21	15	E0.31	H	C	S	012 30	78 142 17 12	LWR 1541	
HD188001		19 50 07	18 32	6.21	15	E0.31	L	C	S	000 06	78 142 18 19	SWP 1602	
HD188001		19 50 07	18 32	6.21	15	E0.31	L	O	L	000 06	78 142 18 27	SWP 1602	
HD188001	EODLE	19 50 08	18 33	6.25	15	E0.31	L	O	L	000 06	78 168 20 49	LWR 1682	
HD188001		19 50 08	18 33	6.25	15	E0.31	L	C	S	000 12	78 168 20 52	LWR 1682	
HD188001		19 50 08	18 33	6.25	15		L	C	S	000 07	78 168 21 46	LWR 1683	
HD188001		19 50 08	18 33	6.25	15		L	O	L	000 04	78 168 21 50	LWR 1683	
188001	PLJBH	19 50 08	19 32	6.2	13	E 0.3	H	C	S	010 00	78 286 03 46	SWP 2950	
HD226868	SS2JJ	19 56 28	35 03 54	8.9	23	E1.11	L	O	L	045 00	78 290 22 19	SWP 3012	
HD226868		19 56 28	35 03 54	8.9	23	E1.11	L	O	L	009 00	78 290 23 12	LWR 2636	
HD226868		19 56 28	35 03 54	8.9	23	E1.11	L	O	L	009 00	78 293 22 34	LWR 2658	
HD226868		19 56 28	35 03 54	8.9	23	E1.11	L	C	S	013 00	78 293 22 48	LWR 2658	
HD226868		19 56 28	35 03 54	8.9	23	E1.11	L	O	L	045 00	78 293 23 15	SWP 3079	
HD226868		19 56 28	35 03 54	8.9	23	E1.11	L	O	L	009 00	78 296 02 05	LWR 2686	
HD226868		19 56 28	35 03 54	8.9	23	E1.11	L	C	S	013 00	78 296 02 21	LWR 2686	
HD226868		19 56 28	35 03 54	8.9	23	E1.11	L	O	L	045 00	78 296 02 42	SWP 3107	
HD226868	SX2HG	19 56 28	35 03 54	8.89	12	E 1.1	L	O	L	045 00	78 122 09 10	SWP 1460	
HD226868		19 56 28	35 03 54	8.89	12	E 1.1	L	O	L	010 00	78 122 10 16	LWR 1428	
HD226868		19 56 28	35 03 54	8.89	12	E 1.1	L	C	S	010 01	78 122 10 42	LWR 1428	
HD226868		19 56 28	35 03 54	8.89	23	E 1.1	L	O	L	045 00	78 124 08 50	SWP 1478	
HD226868		19 56 28	35 03 54	8.89	23	E 1.1	L	C	S	010 01	78 124 09 50	LWR 1439	
HD226868		19 56 28	35 03 54	8.89	23	E 1.1	L	O	L	010 01	78 124 10 21	LWR 1439	
HD226868		19 56 28	35 03 54	8.89	23	E 1.1	L	O	L	045 00	78 130 09 24	SWP 1515	
HD226868	XBRVB	19 56 28	35 03 55	8.89	23	E1.12	L	O	L	050 00	78 120 16 55	SWP 1445	
HD226868		19 56 28	35 03 55	8.89	23	E1.12	L	C	L	015 00	78 121 08 52	LWR 1425	
HD226868		19 56 28	35 03 55	8.89	23	E1.12	L	O	L	050 00	78 121 09 36	SWP 1451	
HD226868		19 56 28	35 03 55	8.89	23	E1.12	L	O	L	050 00	78 127 13 15	SWP 1500	
HD226868		19 56 28	35 03 55	8.89	23	E1.12	L	C	L	010 01	78 127 14 15	LWR 1451	
CYG X 1		19 56 28	35 03 55	8.89	20	E1.12	L	O	L	050 00	78 200 08 08	SWP 2049	
HD226868	XSAKD	19 56 28	35 03 55	8.89	23	E1.15	L	O	L	045 00	78 193 05 49	SWP 1979	

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HD226868	XSAKD	19 56 28	35 03 58	8.89	23	E1.15	L	O	L	009 00	78 193 07 04	LWR 1819	
3 JUNO	ESHGT	19 58 25	-05 04 23	9.3	05		L	O	L	060 00	78 207 08 36	LWR 1896	
15 VUL	AFEBV	19 59 02	27 36 51	4.7	35	E0.18	L	C	S	002 00	78 263 08 37	SWP 2704	
15 VUL		19 59 02	27 35 51	4.7	35	E0.18	L	O	L	020 00	78 263 08 37	SWP 2704	
15 VUL		19 59 02	27 36 51	4.7	35	E0.18	H	C	S	020 00	78 263 09 30	LWR 2415	
RR TEL	HSSRH	20 00 18	-55 52	6.6	55		L	C	S	016 00	78 097 00 56	SWP 1326	
RR TEL		20 00 18	-55 52	4.6	55		L	O	L	004 00	78 097 00 39	SWP 1326	
HD190603	BLJBH	20 02 38	32 04	5.6	23	E 0.7	L	O	L	001 00	78 208 12 06	SWP 2121	
HD190603		20 02 38	32 04	5.6	23	E 0.7	L	C	S	001 00	78 208 12 15	SWP 2121	
HD190603		20 02 38	32 04	5.6	23	E 0.7	H	C	S	020 00	78 208 12 26	LWR 1905	
190603		20 02 38	32 04	5.6	23	E 0.7	H	C	S	110 00	78 288 04 37	SWP 2984	
HD190603	SGABU	20 02 38	32 04 32	5.65	23	E0.82	H	C	S	160 00	78 172 06 55	SWP 1822	
HD190603		20 02 38	32 04 32	5.65	23	E0.82	H	C	S	060 00	78 175 09 04	LWR 1704	
HD190603		20 02 38	32 04 32	5.65	23	E0.82	H	C	S	286 00	78 175 08 36	SWP 1846	
HD190603		20 02 38	32 04 32	5.65	23	E0.82	H	C	S	045 00	78 175 13 30	LWR 1722	
HD190918	MF2YK	20 04 05	35 40	6.8	11	E 0.4	H	C	S	014 00	78 254 04 21	SWP 2623	
HD190918		20 04 05	35 40	6.8	11	E 0.4	H	C	S	014 00	78 254 05 12	SWP 2623	
HD190918		20 04 05	35 40	6.8	11	E 0.4	H	C	S	015 00	78 254 04 51	LWR 2317	
HD191765	OSESC	20 08 21	36 02	8.24	11	0.54	H	C	S	000 00	78 276 05 24	LWR 2530	
HD191765		20 08 21	36 02	8.24	11	0.54	L	O	L	001 00	78 276 07 40	SWP 2844	
HD191765		20 08 21	36 02	8.24	11	0.54	L	C	S	001 00	78 276 07 47	SWP 2844	
HD191765		20 08 21	36 02	8.24	11	0.27	H	C	S	080 00	78 280 05 42	SWP 2873	
NGC 6884	FP2ED	20 08 49	46 18 44	10.5	70		L	O	L	030 00	78 187 12 38	SWP 1922	
NGC 6884		20 08 50	46 18 44	10.5	70		L	O	L	040 00	78 187 11 29	LWR 1784	
PG SGE	FN2AB	20 09 41	20 11	10	70		L	O	L	015 00	78 157 16 31	SWP 1733	
PG SGE		20 09 41	20 11	10	70		L	O	L	040 00	78 157 17 29	LWR 1629	
HD192103	OSESC	20 10 00	36 03	8.44	10	0.23	L	O	L	001 00	78 276 01 24	SWP 2842	
HD192103		20 10 00	36 03	8.44	10	0.23	L	C	S	001 00	78 276 01 37	SWP 2842	
HD192103		20 10 00	36 03	8.44	10	0.23	H	C	S	080 00	78 276 01 46	LWR 2529	
HD192103		20 10 00	36 03	8.44	10	0.23	H	C	S	100 00	78 276 03 13	SWP 2843	
HD192163		20 10 18	32 12	7.50	11	E0.54	L	O	L	000 30	78 275 22 38	SWP 2840	
HD192163		20 10 18	32 12	7.50	11	E0.54	L	C	S	000 30	78 275 22 48	SWP 2840	
HD192163		20 10 18	32 12	7.50	11	E0.54	H	C	S	040 00	78 275 22 56	LWR 2528	
HD192163		20 10 18	32 12	7.50	11	E0.54	H	C	S	050 00	78 275 23 43	SWP 2841	
31 CYG	MF2YK	20 12 08	46 35	3.73	46		H	C	S	006 00	78 248 01 37	LWR 2274	
31 CYG		20 12 08	46 35	3.73	46		H	C	S	015 00	78 248 01 50	SWP 2490	
31 CYG		20 12 08	46 35	3.73	46		H	C	S	010 00	78 234 03 17	LWR 2216	
32 CYG		20 13 58	47 33	3.9	46		H	C	S	040 00	78 248 02 46	LWR 2275	
32 CYG		20 13 58	47 33	3.9	46		H	C	S	070 00	78 248 03 33	SWP 2491	

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P CYG	LSDKW	20 15 56	37 52 35	4.7	27	E0.42	H	C	S	012 00	78 274 03 50	LWR 2513	
HD193237	MLJBB	20 15 56	37 52	4.8	23	E 0.6	H	C	S	030 00	78 210 13 58	SWP 2142	
HD193237		20 15 56	37 52	4.8	23	E 0.6	H	C	S	015 00	78 286 07 44	LWR 2590	
HD193237		20 15 56	37 52	4.8	23	E 0.6	H	C	S	030 00	78 296 08 10	SWP 2952	
P CYG	LSDKW	20 15 57	37 52	4.8	20	E0.42	H	C	S	016 00	78 249 03 06	LWR 2285	
P CYG		20 15 57	37 52	4.8	20	E0.42	H	C	S	008 00	78 249 03 30	SWP 2502	
P CYG		20 15 57	37 52	4.7	26	E0.42	H	C	S	040 00	78 274 04 14	SWP 2818	
HD228854	PG2SS	20 16 53	36 11 00	9.40	12	E0.94	L	O	L	015 00	78 136 16 56	SWP 1560	
HD228854		20 16 53	36 11 00	9.40	12	E0.94	L	C	S	011 00	78 136 17 22	SWP 1560	
HD228854		20 16 54	36 11 00	9.4	12	E0.94	L	O	L	016 00	78 218 03 55	SWP 2217	
HD228854		20 16 54	36 11 00	9.4	12	E0.94	L	C	S	045 00	78 218 04 19	SWP 2217	
V SGE		20 17 52	20 56 23	10.6	12	E0.40	L	O	L	020 00	78 220 03 40	SWP 2234	
V SGE		20 17 52	20 56 23	10.6	12	E0.40	L	C	S	019 00	78 220 04 11	SWP 2234	
V SGE		20 17 52	20 57	10.6	12	E0.40	L	O	L	026 00	78 220 04 40	LWR 2012	
V SGE		20 17 52	20 57	10.6	12	E0.40	L	C	S	022 00	78 220 05 14	LWR 2012	
V SGE		20 17 52	20 56 23	10.6	12	E0.40	L	O	L	027 00	78 223 10 54	LWR 2046	
V SGE		20 17 52	20 56 23	10.6	12	E0.40	L	C	S	013 00	78 223 11 30	LWR 2046	
V SGE		20 17 52	20 56 23	10.6	12	E0.40	L	O	L	020 00	78 224 11 01	SWP 2274	
V SGE		20 17 52	20 56 23	10.6	12	E0.40	L	C	S	017 00	78 224 11 30	SWP 2274	
MU CAP	DGESL	20 17 53	-12 55	4.8	22	E0.00	H	C	S	014 00	78 189 09 46	SWP 1941	
MU CAP		20 17 53	-12 55	4.8	22	E0.00	H	C	S	011 00	78 189 10 09	LWR 1797	
MU CAP		20 17 53	-12 55	4.8	22	E0.00	H	C	S	022 00	78 189 10 52	SWP 1942	
MU CAP		20 17 53	-12 55	4.8	22	E0.00	H	C	S	010 01	78 189 11 47	LWR 1798	
MU CAP		20 17 53	-12 55	4.8	22	E0.00	H	C	S	035 00	78 189 12 13	SWP 1943	
IC 4997	PN2AB	20 17 54	16 35	11.5	70		L	O	L	015 00	78 157 13 17	SWP 1731	
IC 4997		20 17 54	16 35	11.5	70		L	O	L	020 00	78 157 14 16	LWR 1628	
IC 4997		20 17 54	16 35	11.5	70		L	O	L	030 00	78 157 14 44	SWP 1732	
V SGE	PG2SS	20 17 59	20 56 23	10.7	12	E 0.4	L	O	L	017 00	78 137 17 26	SWP 1567	
V SGE		20 17 59	20 56 23	10.7	12	E 0.4	L	C	S	009 00	78 137 19 01	LWR 1509	
V SGE		20 17 59	20 56 23	10.7	12	E 0.4	L	O	L	018 00	78 137 19 22	LWR 1509	
V SGE		20 17 59	20 56 23	10.55	12	E0.40	L	O	L	012 00	78 218 05 54	LWR 1993	
V SGE		20 17 59	20 56 23	10.55	12	E0.40	L	C	S	040 00	78 218 06 14	LWR 1993	
V SGE		20 17 59	20 56 23	10.55	12	E0.40	L	O	L	016 00	78 218 07 15	SWP 2218	
V SGE		20 17 59	20 56 23	10.55	12	E0.40	L	C	S	012 00	78 218 07 41	SWP 2218	
V SGE	PG3SS	20 17 59	20 56 23	10.7	12	E 0.4	L	C	S	009 00	78 137 17 53	SWP 1567	
NGC6905	CMHBJ	20 20 08	19 56 39	14	70		L	O	L	060 00	78 219 11 56	LWR 2005	
NGC6905		20 20 08	19 56 39	14	70		L	O	L	020 00	78 219 13 10	SWP 2228	
NGC6905		20 20 08	19 56 39	14	70		L	O	L	020 00	78 219 14 06	LWR 2006	
HD195592	MLJBH	20 28 52	44 08	7.1	13	E 1.1	L	C	S	035 00	78 210 12 38	SWP 2141	
HD196502	SS2JJ	20 32 11	74 47 01	5.2	36	0.07	H	C	S	030 00	78 291 03 27	LWR 2639	

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HD196502	SS2JJ	20 32 11	74 47 01	5.2	36	0.07	H	C	S	080 00	78 291 04 02	SWP 3016	
HD196502		20 32 11	74 47 01	5.2	36	0.07	H	C	S	040 00	78 291 05 36	LWR 2640	
HD196502		20 32 11	74 47 01	5.2	36	E0.04	H	C	S	030 00	78 294 03 27	LWR 2661	
HD196502		20 32 11	74 47 01	5.2	36	E0.04	H	C	S	070 00	78 294 04 03	SWP 3092	
HD196502		20 32 11	74 47 01	5.2	36	E0.04	H	C	S	030 00	78 296 04 11	LWR 2687	
HD196502		20 32 11	74 47 01	5.2	36	E0.04	H	C	S	060 00	78 296 04 46	SWP 3108	
W 1346	BSJLG	20 32 12	24 53 03	11.5	37		L	O	L	010 01	78 147 16 53	LWR 1568	
W 1346		20 32 12	24 53 03	11.5	37		L	O	L	005 00	78 147 17 34	SWP 1650	
W 1346		20 32 12	24 53 03	11.5	37		L	O	L	005 00	78 147 18 17	LWR 1569	
HD197433	XSAKD	20 38 03	75 24 58	7.8	44	E0.00	L	O	L	060 00	78 191 12 38	SWP 1958	
HD197433		20 38 03	75 24 58	7.8	44	E0.00	L	O	L	035 00	78 191 13 46	LWR 1809	
HD197433		20 38 03	75 24 58	7.8	44	E0.00	L	O	L	005 00	78 191 15 07	LWR 1810	
HD197433		20 38 03	75 24 58	7.8	44	E0.00	L	C	S	005 00	78 191 15 21	LWR 1810	
HD197433		40 38 03	75 24 58	7.8	44	E0.00	L	O	L	150 00	78 195 08 27	SWP 2005	
HD197433		20 38 03	75 24 58	7.8	44	E0.00	L	O	L	005 00	78 205 11 10	LWR 1883	
HD197433		20 38 03	75 24 58	7.8	44	E0.00	L	C	S	010 00	78 205 11 22	LWP 1883	
HD197345	SGABU	20 39 43	45 06 02	1.26	32	E0.03	H	C	S	003 30	78 172 16 32	SWP 1825	
HD197345		20 39 43	45 06 02	1.26	32	E0.03	H	C	S	000 42	78 172 17 03	LWR 1702	
HD197345		20 39 43	45 06 02	1.26	32	E0.03	H	C	S	007 00	78 175 15 09	SWP 1847	
HD197345		40 39 43	45 06 02	1.26	32	E0.03	H	C	S	001 24	78 175 15 28	LWR 1723	
HD197345		20 39 43	45 06 02	1.26	32	E0.03	H	C	S	001 45	78 175 16 40	SWP 1848	
HR DEL	MLJBH	20 40 00	18 59	12.5	55		L	O	L	020 00	78 208 13 29	SWP 2122	
HR DEL		20 40 00	18 59	12	55		L	O	L	020 00	78 288 03 51	SWP 2983	
HR DEL		20 40 00	18 59	12	55		L	C	S	015 00	78 288 03 47	LWR 2636	
MKN 509	Q02AB	20 41 25	-10 54 19	13.12	84		L	O	L	037 00	78 186 19 06	LWR 1783	
MKN 509		20 41 25	-10 54 19	13.12	84		L	O	L	012 00	78 190 15 20	SWP 1948	
MKN 509		20 41 25	-10 54 19	13.12	84		L	O	L	022 30	78 190 16 45	SWP 1950	
HD198287	CBNJF	20 46 06	39 06 08	7.9	32		L	O	L	012 00	78 225 04 27	SWP 2277	
HD198287		20 46 06	39 06 08	7.9	32		L	C	S	006 00	78 225 04 55	SWP 2277	
HD198287		20 46 06	39 06 08	7.9	32		L	O	L	090 00	78 225 05 34	SWP 2278	
HD198287		20 46 05	39 06 08	6.9	32		L	O	L	020 00	78 225 07 13	LWR 2061	
HD198478	SGABU	20 47 13	45 55 40	4.82	24	E0.55	H	C	S	056 00	78 172 11 42	SWP 1823	
HD198478		20 47 13	45 55 40	4.82	24	E0.55	H	C	S	013 05	78 172 12 47	LWR 1705	
HD198478		20 47 13	45 55 40	4.82	24	E0.55	H	C	S	100 00	78 172 13 34	SWP 1824	
HD200120	XBPVD	20 58 27	47 19 30	4.79	20	E0.18	H	C	S	001 40	78 200 09 45	LWR 1851	
HD200120		20 58 07	47 19 30	4.79	20	E0.18	H	C	S	002 10	78 200 09 51	SWP 2050	
NGC 7009	PN2AB	21 00 30	-11 34	8	70		L	O	S	020 00	78 154 17 57	SWP 1707	
NGC 7009		21 01 30	-11 34	8	70		L	C	L	020 00	78 154 16 00	SWP 1706	
NGC 7009		21 01 30	-11 34	8	70		L	O	L	020 00	78 154 16 34	LWR 1609	
NGC 7009		21 01 30	-11 34	8	70		L	O	L	002 00	78 154 17 47	SWP 1707	
NGC 7025		21 04 35	47 39 23	10	70		L	O	L	060 00	78 158 13 15	SWP 1738	
NGC 7026		21 04 35	47 39 03	10	70		L	O	L	020 00	78 158 14 02	LWR 1633	

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NGC 7026	PN2AB	21 04 35	47 29 03	10	70		L	O	L	040 00	78 158 14 37	SWP 1739	
ANON		21 04 50	48 11 00	10	70		L	O	L	020 00	78 158 09 41	LWR 1632	
NGC7027		21 05 09	42 02 03	8.7	70		L	O	L	030 00	78 244 09 29	SWP 2430	
NGC7027		21 05 09	42 02 03	8.5	70		L	O	L	010 00	78 244 09 57	LWR 2230	
NGC7027		21 05 09	42 02 03	8.7	70		L	O	L	010 00	78 244 10 30	SWP 2431	
NGC 7027	PR2ED	21 05 09	42 02 03	8.6	70		L	O	L	012 00	78 185 13 26	SWP 1913	
NGC 7027		21 05 09	42 02 03	8.6	70		L	C	S	020 00	78 185 13 46	SWP 1913	
NGC 7027		21 05 09	42 02 03	8.6	70		L	O	L	025 00	78 185 14 18	LWR 1777	
NGC 7027		21 05 09	42 02 03	8.6	70		L	O	L	035 00	78 185 15 18	SWP 1914	
NGC 7027		21 05 09	42 02 03	8.6	70		L	O	L	010 00	78 305 04 20	LWR 2785	
NGC 7027		21 05 09	42 02 03	8.6	70		L	O	L	012 00	78 185 04 57	SWP 3202	
NGC 7027	PN2AB	21 05 10	42 02	8.5	70		L	O	L	025 00	78 159 18 18	LWR 1639	
NGC 7027		21 05 10	40 02	9	70		L	O	L	010 00	78 159 18 57	SWP 1747	
HD203064	ICJHB	21 16 35	43 44 05	4.09	12	E0.31	H	C	S	003 30	78 116 19 56	SWP 1423	
HD203064		21 16 35	43 44 05	4.09	12	E0.31	H	C	S	003 30	78 116 21 01	LWR 1393	
HD204038	PG255	21 22 54	33 29 09	8.6	40	E0.07	L	O	L	023 00	78 223 12 27	LWR 2047	
HD204038		21 22 54	33 29 09	8.6	40	E0.07	L	C	S	019 00	78 223 12 56	LWR 2047	
HD204038		21 22 54	33 29 09	8.4	40	E0.07	L	O	L	014 00	78 224 13 12	LWR 2058	
SKY	QO2AB	21 26	-15 52				H	O	L	446 00	78 280 17 07	LWR 2550	
SKY		21 26	-15 52				L	O	L	272 00	78 281 00 35	LWR 2550	
BMS2126		21 26 26	-15 51 51	17.3	85		L	O	L	793 00	78 281 03 32	SWP 2882	
W2126158		21 26 26	-15 51 51	17.6	85		L	O	L	852 00	78 282 16 21	LWR 2566	
73 8031	BSJLG	21 26 43	73 25 42	12.9	37		L	O	L	040 00	78 149 22 20	LWR 1579	
73 8031		21 26 43	73 25 42	12.9	37		L	O	L	030 00	78 149 23 21	SWP 1667	
NGC7078	XSAKD	21 27	11 57	6.96	83	E0.05	L	O	L	060 00	78 193 08 17	LWR 1820	
NGC 7079		21 27	11 57	6.2	83	E .15	L	O	L	090 00	78 193 09 30	SWP 1980	15"OFFST
NGC7078		21 27	11 57	6.2	83	E .05	L	O	L	070 00	78 193 11 14	LWR 1821	15"OFFST
NGC7078	SX2BG	21 27 36	11 57	6.2	83	E .13	L	O	L	210 00	78 124 12 03	SWP 1479	
NGC7078	XSAKD	21 27 36	11 57	6.2	83	E0.67	L	O	L	100 00	78 128 09 19	LWR 1457	
BET CEP	HRDAK	21 28 01	70 20	3.18	20		H	C	S	000 20	78 285 07 38	SWP 2927	
BET CEP		21 28 01	70 20	3.18	20		H	C	S	000 20	78 285 08 14	SWP 2928	
BET CEP		21 28 01	70 20	3.18	20		H	C	S	000 20	78 285 08 49	SWP 2929	
BET CEP		21 28 01	70 20	3.18	20		H	C	S	000 20	78 285 09 18	SWP 2930	
BET CEP		21 28 01	70 20	3.18	20		H	C	S	000 20	78 285 09 45	SWP 2931	
BET CEP		21 28 01	70 20	3.18	20		H	C	S	000 20	78 285 10 13	SWP 2932	
BET CEP		21 28 01	70 20	3.18	20		H	C	S	000 20	78 285 10 40	SWP 2933	
BET CEP		21 28 01	70 20	3.18	20		H	C	S	000 20	78 285 11 08	SWP 2934	
BET CEP		21 28 01	70 20	3.18	20		H	C	S	000 20	78 285 11 36	SWP 2935	
BET CEP		21 28 01	70 20	3.18	20		H	C	S	000 20	78 285 12 04	SWP 2936	
BET CEP		21 28 01	70 20	3.18	20		H	C	S	000 20	78 285 12 31	SWP 2937	
BET CEP		21 28 01	70 20	3.18	20		H	C	S	000 20	78 285 13 00	SWP 2938	

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ALF AGR	AF2BV	21 28 55	-05 47 31	3.1	44	E0.83	H	O	L	030 00	78 116 15 00	LWR 1391	
BET AGR		21 28 55	-05 47 31	3.1	44	E0.83	L	O	L	030 00	78 116 16 19	SWP 1422	
BET AGR		21 28 55	-05 47 31	3.1	44		L	O	L	030 00	78 144 11 20	SWP 1622	
BET AGR		21 28 55	-05 47 31	3.1	44		L	C	S	010 00	78 144 11 58	SWP 1622	
2 ZW 136	QO2AB	21 30 01	09 55 10	14.53	84		L	O	L	150 00	78 184 11 36	SWP 1909	
2 ZW 136		21 30 01	09 55 10	14.53	84		L	O	L	120 00	78 184 14 24	LWR 1774	
2 ZW 136		21 30 01	09 55 10	14.53	84		L	O	L	035 00	78 184 16 31	SWP 1910	
ABELL78	HSSRH	21 33 24	31 28	13.40	70	E0.15	L	O	L	017 00	78 096 12 24	SWP 1322	
HD206165	SGABU	21 36 34	61 51 21	4.72	23	E0.46	H	C	S	035 00	78 170 19 29	SWP 1815	
HD206165		21 36 34	61 51 21	4.72	23	E0.46	H	C	S	008 00	78 170 20 30	LWR 1696	
HD206165		21 36 34	61 51 21	4.72	23	E0.46	H	C	S	042 00	78 172 18 22	SWP 1826	
HD206165		21 36 34	61 51 21	4.72	23	E0.46	H	C	S	010 05	78 172 19 20	LWR 1707	
55 CYG	XSAKD	21 40 36	43 01 57	9	54	E0000	H	O	L	030 00	78 131 18 42	LWR 1475	
NOVA CYG	OD6AB	21 40 38	43 00 09	6.5	55		L	O	L	010 00	78 256 09 56	LWR 2342	
NOVA CYG		21 40 38	43 48 09	6.5	55		L	C	S	002 00	78 256 10 14	LWR 2342	
NOVA CYG		21 40 38	43 48 09	6.5	55		L	C	S	005 00	78 256 10 22	SWP 2641	
NOVA CYG		21 40 38	43 48 09	6.5	55		L	C	S	020 00	78 256 10 39	SWP 2641	
NOVA CYG		21 40 38	43 48 09	6.8	55		H	O	L	040 00	78 256 11 21	LWR 2343	
NOVA CYG		21 40 38	43 48 09	6.8	55		L	C	S	001 30	78 260 00 47	LWR 2381	
NOVA CYG		21 40 38	43 48 09	6.8	55		L	O	L	001 30	78 260 00 55	LWR 2381	
NOVA CYG		21 40 38	43 48 09	6.8	55		L	O	L	015 00	78 260 02 44	SWP 2666	
NOVA CYG		21 40 38	43 48 09	6.8	55		L	O	L	007 00	78 261 06 13	SWP 2679	
NOVA CYG		21 40 38	43 48 09	6.8	55		L	O	L	020 00	78 261 09 27	SWP 2679	
NOVA CYG		21 40 38	43 48 09	6.8	55		H	O	L	045 00	78 261 09 56	LWR 2392	
NOVA CYG		21 40 38	43 48 09	6.8	55		L	C	S	001 00	78 261 11 38	LWR 2393	
NOVA CYG		21 40 38	43 48 09	6.8	55		L	O	L	001 30	78 261 11 37	LWR 2393	
NOVA CYG		21 40 38	43 48 09	7.7	55		L	C	S	005 00	78 263 05 19	SWP 2702	
NOVA CYG		21 40 38	43 48 09	7.7	55		L	O	L	001 30	78 263 05 07	LWR 2412	
NOVA CYG		21 40 38	43 48 09	7.7	55		L	C	S	001 10	78 263 05 13	LWR 2412	
NOVA CYG		21 40 38	43 48 09	7.7	55		H	O	L	045 00	78 263 06 08	LWR 2413	
NOVA CYG		21 40 38	43 48 10	7.7	55		L	O	L	000 45	78 263 07 28	LWR 2414	
NOVA CYG		21 40 38	43 48 10	7.7	55		L	O	L	005 00	78 263 07 38	SWP 2703	
NOVA CYG		21 40 38	43 48 09	7.8	55		L	O	L	001 30	78 265 05 43	LWR 2432	
NOVA CYG		21 40 38	43 48 09	7.8	55		L	O	L	001 10	78 265 05 49	LWR 2432	
NOVA CYG		21 40 38	43 48 09	7.8	55		L	C	S	006 00	78 265 06 59	SWP 2727	
NOVA CYG		21 40 38	43 48 09	7.8	55		L	O	L	030 00	78 265 07 12	LWR 2433	
NOVA CYG		21 40 38	43 48 09	7.8	55		L	O	L	040 30	78 265 07 49	LWR 2433	
NOVA CYG		21 40 38	43 48 09	7.8	55		L	O	L	001 30	78 266 01 28	LWR 2438	
NOVA CYG		21 40 38	43 48 09	7.8	55		L	C	S	000 50	78 266 01 45	LWR 2438	
NOVA CYG		21 40 38	43 48 09	7.8	55		L	C	S	005 30	78 266 01 51	SWP 2734	
NOVA CYG		21 40 38	43 48 09	7.8	55		L	O	L	023 00	78 266 02 03	SWP 2734	
NOVA CYG		21 40 38	43 48 10	7.8	55		H	O	L	040 00	78 266 02 35	LWR 2439	
NOVA CYG		21 40 38	43 48 10	7.9	55		L	O	L	001 20	78 266 03 50	LWR 2440	TRAILED
NOVA CYG		21 40 38	43 48 10	7.9	55		L	C	S	004 10	78 268 01	LWR 2453	
NOVA CYG		21 40 38	43 48 10	7.9	55		L	O	L	000 25	78 268 01 17	LWR 2453	

OBJ ID	PROG ID	TARGET RA H	M	S	TARGET DEC D	M	S	VIS MAG	OBJ CLASS	B-V OR B-V	DISP H/L	LG - OBJ APERTURE O/C	L/S	EXPOSE TIME MIN	SEC	EPOSURE START TIME YR	DAY	HR	MIN	IMAGE SEQ NUM	OBSERVERS COMMENTS
NOVA CYG	OD6AB	21	40	38	43	48	10	7.9	55		L	C	S	005	01	78	268	01	22	SWP 2752	
NOVA CYG		21	40	38	43	48	10	7.9	55		L	O	L	020	00	78	268	01	38	SWP 2752	
NOVA CYG		21	40	38	43	48	10	7.9	55		H	O	L	040	00	78	268	02	11	LWR 2454	
NOVA CYG		21	40	38	43	48	10	7.9	55		L	O	L	060	00	78	268	02	59	SWP 2753	
NOVA CYG		21	40	38	43	48	09	7	55		L	C	S	003	00	78	271	08	41	LWR 2486	
NOVA CYG		21	40	38	43	48	09	7	55		L	O	L	000	15	78	271	08	51	LWR 2486	
NOVA CYG		21	40	38	43	49	09	7	55		L	C	S	015	00	78	271	08	57	SWP 2795	
NOVA CYG		21	40	38	43	49	09	7	55		L	O	L	005	01	78	271	09	29	SWP 2795	
NOVA CYG		21	40	38	43	49	09		55		L	C	L	120	00	78	274	05	54	SWP 2819	
NOVA CYG		21	40	38	43	48	09		55		H	O	L	030	00	78	274	08	03	LWR 2514	
NOVA CYG		21	40	38	43	48	09	8.9	55		L	C	S	008	00	78	274	08	40	SWP 2820	
NOVA CYG		21	40	38	43	48	09	8.96	55		L	O	S	005	01	78	274	09	16	SWP 2820	
NOVA CYG		21	40	38	43	48	10	8.96	55		L	C	S	002	00	78	281	08	05	SWP 2883	
NOVA CYG		21	40	39	43	48	10	8.96	55		L	O	S	006	30	78	281	08	31	SWP 2883	
NOVA CYG		21	40	38	43	48	10	8.96	55		L	O	L	000	10	78	281	08	16	LWR 2551	
NOVA CYG		21	40	38	43	48	10	8.96	55		L	O	L	001	30	78	281	08	23	LWR 2551	
NOVA CYG		21	40	38	43	48	10	8.96	55		L	O	L	000	47	78	281	09	16	LWR 2551	
NOVA CYG		21	40	38	43	48	10	9.00	55		L	C	S	003	00	78	281	09	55	LWR 2552	TRAILED
NOVA CYG		21	40	38	43	48	10	9.00	55		L	C	S	006	30	78	281	10	05	SWP 2884	
NOVA CYG		21	40	38	43	48	10	9.00	55		L	O	S	008	00	78	281	10	15	SWP 2884	
NOVA CYG		21	40	38	43	48	10	9.0	55		H	O	L	020	00	78	281	10	52	LWR 2553	
NOVA CYG		21	40	38	43	48	09	9	55		L	O	L	106	00	78	287	04	42	SWP 2967	
NOVA CYG		21	40	38	43	48	09	9	55		L	C	S	002	50	78	287	03	13	LWR 2597	
NOVA CYG		21	40	39	43	48	09	9	55		L	O	L	000	17	78	287	03	18	LWR 2597	
NOVA CYG		21	40	38	43	48	09	9	55		L	O	L	001	36	78	287	03	21	SWP 2966	
NOVA CYG		21	40	38	43	48	09	9	55		L	C	S	006	00	78	287	03	30	SWP 2966	
NOVA CYG		21	40	38	43	48	09	9	55		H	C	S	030	00	78	287	04	02	LWR 2598	
NOVA CYG		21	40	38	43	48	09	9.71	55		L	C	S	000	50	78	294	16	15	LWR 2668	
NOVA CYG		21	40	38	43	48	09	9.71	55		L	O	L	002	30	78	294	16	26	LWR 2668	
NOVA CYG		21	40	38	43	48	09	9.71	55		L	O	L	110	00	78	294	17	25	SWP 2088	
NOVA CYG		21	40	38	43	48	09	9.71	55		H	O	L	070	00	78	294	19	38	LWR 2669	
NOVA CYG		21	40	38	43	48	09	9.7	55		L	O	L	001	36	78	294	20	44	SWP 3089	
NOVA CYG		21	40	38	43	48	0	9.7	55		L	C	S	015	00	78	294	20	52	SWP 3089	
NOVA CYG		21	40	39	43	48	09		55		L	C	S	008	00	78	298	06	01	LWR 2703	
NOVA CYG		21	40	39	43	48	09		55		L	C	S	004	00	78	298	06	17	LWR 2703	
NOVA CYG		21	40	38	43	48	09		55		L	C	S	015	00	78	298	06	26	SWP 3134	
NOVA CYG		21	40	38	43	48	09		55		L	C	L	002	30	78	298	06	53	SWP 3134	
NOVA CYG		21	40	38	43	48	09		55		H	C	S	052	00	78	298	07	02	LWR 2704	
NOVA CYG		21	40	38	43	48	09		55		L	C	S	015	00	78	298	08	03	SWP 3135	
NOVA CYG		21	40	38	43	48	09		55		L	C	L	002	30	78	298	08	29	SWP 3135	
NOVA CYG		21	40	38	43	48	09		55		L	C	L	002	00	78	298	08	36	LWR 2705	
NOVA CYG		21	40	38	43	48	09		55		L	C	S	005	01	78	298	09	02	LWR 2705	
NOVA CYG		21	40	38	43	48	09		55		L	C	S	015	00	78	298	09	08	SWP 3136	
NOVA CYG		21	40	38	43	48	09		55		L	C	L	002	30	78	298	09	33	SWP 3136	
NOVA CYG		21	40	38	43	48	09		55		L	C	S	001	45	78	298	09	39	LWR 2706	
NOVA CYG		21	40	38	43	48	09		55		L	C	S	005	01	78	298	09	47	LWR 2706	
NOVA CYG		21	40	38	43	48	09		55		L	C	S	002	00	78	300	09	02	LWR 2731	
NOVA CYG		21	40	38	43	48	09		55		L	C	S	020	00	78	300	09	11	LWR 2731	
NOVA CYG		21	40	38	43	48	09		55		L	C	S	020	00	78	300	09	37	SWP 3169	
NOVA CYG		21	40	38	43	48	09		55		L	O	L	003	00	78	300	09	47	SWP 3169	
NOVA CYG		21	40	38	43	48	09		55		L	O	L	004	00	78	300	10	22	LWR 2732	

OBJ ID	PROG ID	TARGET RA H	M	S	TARGET DEC D	M	S	VIS MAG	OBJ CLASS	B-V OR B-V	DISP H/L	LG - OBJ APERTURE O/C	L/S	EXPOSE TIME MIN	SEC	EPOSURE START TIME YR	DAY	HR	MIN	IMAGE SEQ NUM	OBSERVERS COMMENTS
NOVA CYG	OD6AB	21	40	38	43	48	09	10.01	55		L	C	S	002	30	78	302	06	41	LWR 2746	
NOVA CYG		21	40	38	43	48	09	10.01	55		L	O	L	024	00	78	302	06	51	LWR 2746	
NOVA CYG		21	40	38	43	48	09	10.01	55		L	O	L	003	00	78	302	07	10	SWP 3182	
NOVA CYG		21	40	38	43	48	09	10	55		L	C	S	022	00	78	302	07	27	SWP 3182	
NOVA CYG		21	40	38	43	48	09		55		L	O	L	004	00	78	302	07	58	LWR 2747	
NOVA CYG		21	40	38	43	48	09		55		L	C	S	002	30	78	305	06	33	LWR 2787	
NOVA CYG		21	40	38	43	48	09		55		L	O	L	025	00	78	305	06	33	LWR 2787	
NOVA CYG		21	40	38	43	48	09		55		L	O	L	003	00	78	305	07	08	SWP 3203	
NOVA CYG		21	40	38	43	48	09		55		L	C	S	022	00	78	305	07	18	SWP 3203	
NOVA CYG											L	O	L	004	00	78	305	07	50	LWR 2788	
NOVA CYG	OD6AB	21	40	38	43	48	09		55												
NOVA CYG		21	40	38	43	48	09		55		H	O	L	020	00	78	258	06	57	SWP 2653	
NOVA CYG		21	40	38	43	48	09	6.8	55		L	C	S	040	00	78	259	07	22	LWR 2360	
NOVA CYG		21	40	38	43	49	09	7.7	55		L	O	L	010	00	78	261	10	53	SWP 2680	
											L	O	L	030	00	78	263	05	31	SWP 2702	
SS CYG	OD3AB	21	40	45	43	34	24	8.5	54												
SS CYG		21	40	45	43	34	24	8.5	54		L	O	L	000	30	78	165	20	50	SWP 1785	
SS CYG		21	40	45	43	34	24	8.5	54		L	O	S	000	30	78	165	20	56	SWP 1785	
SS CYG		21	40	45	43	34	24	8.5	54		L	C	S	000	40	78	165	21	33	LWR 1568	
SS CYG		21	40	45	43	34	24	8.5	54		L	C	S	000	40	78	165	21	40	LWR 1568	
SS CYG		21	40	45	43	34	24	8.5	54		L	C	L	000	50	78	166	12	32	LWR 1675	
SS CYG		21	40	45	43	34	24	8.5	54		L	C	S	000	50	78	166	12	39	LWR 1675	
SS CYG		21	40	45	43	34	24	8.5	54		L	C	S	003	40	78	166	13	05	SWP 1788	
SS CYG		21	40	45	43	34	24	8.5	54		L	C	S	000	40	78	166	13	17	SWP 1788	
SS CYG		21	40	45	43	21	24	8.7	54		L	O	L	000	42	78	168	23	13	SWP 1803	
											L	O	L	000	46	78	168	23	30	LWR 1684	
SS CYG	SXAKD	21	40	45	43	21	24	8	54	E0000	H	O	L	025	00	78	131	17	49	SWP 1522	
SS CYG	SX4HG	21	40	45	43	34	24	8.4	54	E 0	L	C	S	015	00	78	123	14	00	SWP 1471	
SS CYG		21	40	45	43	21	24	8.7	54	E 0	L	O	L	030	00	78	123	13	18	SWP 1471	
BD206773	CBEJP	21	40	52	57	31		6.91	20	B0.51	L	C	S	000	24	78	230	09	08	LWR 2102	
HD206773		21	40	52	57	31		6.91	20	B0.51	L	O	L	000	12	78	230	09	17	LWR 2102	
BD207757	ELJBH	21	48	36	12	23			57												
HD207757		21	48	36	12	23			57		L	C	L	002	00	78	208	14	52	SWP 2123	
207757		21	48	36	12	23		9	57		L	C	S	001	00	78	209	15	04	SWP 2123	
207757		21	48	36	12	23		9	57	B0 1	H	O	S	020	00	78	286	09	10	LWR 2591	
											H	O	S	040	00	78	286	09	47	SWP 2953	
BD207757	CBEJP	21	48	37	12	24		8.3	48	B0.2											
HD207757		21	48	37	12	24		8.3	48	B0.2	L	C	L	001	00	78	230	07	02	SWP 2325	
BD207757		21	48	37	12	24		8.3	48	B0.2	L	O	L	000	30	78	230	07	12	SWP 2325	
HD207757		21	48	37	12	24		8.3	48	B0.2	L	O	S	004	00	78	230	07	19	LWR 2101	
BD207757		21	48	37	12	24		8.3	48	B0.2	L	O	S	010	00	78	230	07	31	LWR 2101	
HD207757		21	48	37	12	24		8.3	48	B0.2	H	O	L	020	00	78	230	09	47	SWP 2329	
											H	O	L	100	00	78	231	03	01	SWP 2334	
BD284211	PHCAL	21	48	56	28	38		10.53	16	B-.02											
HD284211		21	48	56	28	38		10.53	16	B-.02	L	C	S	000	30	78	134	10	10	SWP 1541	
BD284211		21	48	56	28	38		10.53	16	B-.02	L	O	L	000	30	78	134	10	20	SWP 1541	
HD284211		21	48	56	28	38		10.53	16	B-.02	L	O	L	050	00	78	134	11	50	SWP 1542	
											H	C	S	110	30	78	134	12	53	LWR 1491	

OBJ ID	PROG ID	TARGET RA H M S	TARGET DEC D M S	VIS MAG	OBJ CLASS	B(B-V) OR B-V	DISP H/L	LG - OBJ APERTURE O/C L/S	EXPOSE TIME MIN SEC	EPOSURE START TIME YR DAY HR MIN	IMAGE SEQ NUM	OBSERVERS COMMENTS
BD284211	PHCAL	21 48 56	28 38	10.53	16	E-.02	L	C S	001 10	78 134 15 22	LWR 1492	
BD284211		21 48 56	28 38	10.53	16	E-.02	L	O L	001 10	78 134 15 32	LWR 1492	
BD284211		21 48 56	28 37 35	10.53	16	E0.00	L	C S	000 26	78 173 07 24	SWP 1831	
BD284211		21 48 56	28 37 35	10.53	16	E0.00	L	O L	000 26	78 173 07 36	SWP 1831	
BD284211		21 48 56	28 37 35	10.53	16	E0.00	L	O L	001 00	78 173 08 07	LWR 1712	
BD284211		21 48 56	28 37 35	10.53	16	E0.00	L	C S	001 00	78 173 08	LWR 1712	
BD284211		21 48 56	28 37 34	9.5	16		L	O L	000 26	78 201 13 23	SWP 2059	
BD284211		21 48 56	28 37 34	9.5	16		L	C S	000 26	78 201 13 42	SWP 2059	
BD284211		21 48 56	28 37 34	9.5	16	E-.02	L	O L	001 00	78 201 13 48	LWR 1857	
BD284211		21 48 56	28 37 34	9.5	16	E-.02	L	O S	001 00	78 201 14 53	LWR 1857	
BD284211		21 48 56	28 37 34	9.5	16	E-.02	L	O S	000 26	78 201 15 03	SWP 2060	
BD284211		21 48 56	28 37 34	9.5	16	E-.02	L	O L	011 00	78 201 15 12	SWP 2060	TRAILED
BD284211		21 48 56	28 37 34	9.5	16	E-.02	L	O S	001 00	78 201 15 51	LWR 1858	
BD284211		21 48 56	28 37 34	9.5	16	E-.02	L	O L	015 00	78 201 15 57	LWR 1858	TRAILED
TF CAIWL		21 48 56	28 37 35	10.53	16	E0.00	L	C S	000 08	78 210 04 56	LWR 1911	BD284211
BD284211		21 48 56	28 37 35	10.53	16	E0.00	L	O S	060 00	78 210 05 08	SWP 2118	SKY
BD284211		21 48 56	28 37 35	10.53	16	E0.00	L	O L	000 17	78 210 06 26	SWP 2138	
BD284211		21 48 56	28 37 35	10.53	16	E0.00	L	O S	002 00	78 210 05 44	LWR 1912	
BD284211		21 48 56	28 37 35	10.53	16	E0.00	L	O L	001 00	78 210 05 51	LWR 1912	
BD284211		21 48 56	28 37 35	10.53	16	E0.00	L	O L	000 26	78 210 06 58	SWP 2139	
BD284211		21 48 56	28 37 35	10.53	16	E0.00	L	C S	000 52	78 210 07 04	SWP 2139	
BD284211		21 48 56	28 37 34	10.53	16	E-.02	L	C S	001 36	78 243 13 12	LWR 2225	
BD284211		21 48 56	28 37 34	10.53	16	E-.02	L	O L	001 00	78 243 13 20	LWR 2225	
BD284211		21 48 56	28 37 34	10.53	16	E-.02	L	O L	000 26	78 243 13 27	SWP 2422	
BD284211		21 48 56	28 37 34	10.53	16	E-.02	L	C S	000 42	78 243 13	SWP 2422	
BD284211		21 48 56	28 37 35	10.53	16		L	C S	000 24	78 245 09 48	SWP 2444	
BD284211		21 48 56	28 37 35	10.53	16		L	O L	000 15	78 245 09 54	SWP 2444	
BD284211		21 48 56	28 37 35	10.53	16		L	O L	000 08	78 245 10 44	SWP 2445	
BD284211		21 48 56	28 37 35	10.53	16		L	C S	000 13	78 245 10 47	SWP 2445	
BD284211		21 48 56	28 37 35	10.53	16		L	O L	000 07	78 245 11 13	SWP 2446	
BD284211		21 48 56	28 37 35	10.53	16		L	C S	000 11	78 245 11 17	SWP 2446	
BD284211		21 48 56	28 37 35	10.53	16		L	O L	000 30	78 245 11 43	SWP 2447	
BD284211		21 48 56	28 37 35	10.53	16		L	C S	000 48	78 245 11 47	SWP 2447	
BD284211		21 48 56	28 37 35	10.53	16		L	O L	000 26	78 245 12 26	SWP 2448	
BD284211		21 48 56	28 37 35	10.53	16		L	O S	000 42	78 245 12 30	SWP 2448	
BD284211		21 48 56	28 37 35	10.53	16		L	O L	000 26	78 249 11 08	SWP 2505	
BD284211		21 48 56	28 37 35	10.53	16		L	C S	000 42	78 249 11 14	SWP 2505	
BD284211		21 48 56	28 37 35	10.53	16		L	O L	001 00	78 249 11 19	LWR 2286	
BD284211		21 48 56	28 37 35	10.53	16		L	C S	001 56	78 249 11 24	LWR 2286	
BD284211		21 48 56	28 37 35	10.53	16		L	O S	000 56	78 249 12 11	LWR 2287	
BD284211		21 48 56	28 37 35	10.53	16		L	O L	000 55	78 249 12 17	LWR 2287	
BD284211		21 48 56	28 37 35	10.53	16		L	O L	000 29	78 249 12 46	LWR 2288	
BD284211		21 48 56	28 37 35	10.53	16		L	O L	000 18	78 249 12 50	LWR 2288	
BD284211		21 48 56	28 37 35	10.53	16		L	C S	003 27	78 249 13 19	LWR 2289	
BD284211		21 48 56	28 37 35	10.53	16		L	O L	000 17	78 249 13 23	LWR 2289	
BD284211		21 48 56	28 37 35	10.53	16	+0.34	L	O L	000 26	78 279 08 15	SWP 2863	
BD284211		21 48 56	28 37 35	10.53	16	+0.34	L	O S	000 42	78 279 08 23	SWP 2863	
BD284211		21 48 56	28 37 35	10.53	16	+0.34	L	O L	001 00	78 279 08 29	LWR 2540	
BD284211		21 48 56	28 37 35	10.53	16	+0.34	L	C S	001 36	78 279 08 33	LWR 2540	
+284211		21 48 56	28 37 35	10.53	16	+0.34	L	O L	000 26	78 300 06 48	SWP 3167	
+284211		21 48 56	28 37 35	10.53	16	+0.34	L	O S	000 42	78 300 06 55	SWP 3167	

OBJ ID	PROG ID	TARGET RA H M S	TARGET DEC D M S	VIS MAG	OBJ CLASS	B(B-V) OR B-V	DISP H/L	LG - OBJ APERTURE O/C L/S	EXPOSE TIME MIN SEC	EPOSURE START TIME YR DAY HR MIN	IMAGE SEQ NUM	OBSERVERS COMMENTS
+284211	PHCAL	21 48 56	28 37 34	10.53	16		L	C S	001 36	78 300 07 11	LWR 2730	
+284211		21 48 56	28 37 34	10.53	16		L	O L	001 00	78 300 07 18	LWR 2730	
+284211		21 48 56	28 37 34	10.53	16		L	O I	000 17	78 300 08 15	SWP 3168	
BD284211	PHSTD	21 48 56	28 37 34	10.53	16	E-.02	L	O L	000 30	78 124 16 57	SWP 1440	
BD284211		21 48 56	28 37 34	10.53	16	E-.02	L	O L	000 30	78 124 17 07	SWP 1440	
BD284211		21 48 56	28 37 34	10.53	16	E-.02	L	C S	001 20	78 124 17 43	LWR 1440	
BD284211		21 48 56	28 37 34	10.53	16	E-.02	L	O L	001 20	78 124 17 52	LWR 1440	
BD284211	HSSBR	21 49 00	28 38	10.20	15	E0000	L	C S	090 00	78 095 18 32	SWP 1324	
BD284211		21 49 00	28 38	10.2	16	E0000	L	O S	000 45	78 096 21 13	SWP 1325	
BD208816	CCAKD	21 55 14	63 23 13	5.2	48	E0.3	L	C S	004 00	78 113 19 24	SWP 1405	
BD208816		21 55 14	63 23 13	5.2	48	E0.3	L	O L	020 00	78 113 19 56	SWP 1405	
BD208816		21 55 14	63 23 13	5.2	48	E0.3	L	O L	040 00	78 113 20 16	LWR 1373	
BD208816		21 55 14	63 23 13	5.2	48	E0.3	L	O L	030 00	78 113 21 45	LWR 1374	
BD208816		21 55 14	63 23 13	5.2	48	E0.3	L	O L	001 30	78 127 16 44	LWR 1452	
BD208816		21 55 14	63 23 13	5.2	48	E0.3	L	C S	001 00	78 127 16 55	LWR 1452	
BD208816		21 55 14	63 23 13	5.2	48	E0.3	L	O L	015 00	78 127 17 30	SWP 1501	
BD208816		21 55 14	63 23 13	5.2	48	E0.3	L	C S	015 00	78 127 18 02	LWR 1453	
BD208816		21 55 14	63 23 13	5.2	48	E0.3	L	O L	010 01	78 127 19 31	SWP 1502	
BD208816		21 55 14	63 23 13	5.2	48	E0.3	L	O L	030 00	78 140 12 56	LWR 1524	
BD208816		21 55 14	63 23 13	5.2	48	E0.3	L	O L	031 00	78 140 13 39	SWP 1588	
BD208816		21 55 14	63 23 13	5.2	48	E0.3	L	C S	010 00	78 140 14 21	SWP 1588	
VV CEP		21 55 14	63 23 13	5.2	48	E0.3	L	O L	030 00	78 140 15 15	LWR 1525	
BD208816		21 55 14	63 23 13	5.2	48	E0.3	L	O L	180 00	78 156 11 27	SWP 1725	
BD208816		21 55 14	63 23 13	5.2	48	E0.3	L	O L	003 00	78 166 08 39	SWP 1767	
BD208816		21 55 14	63 23 13	5.2	48	E0.3	L	C S	011 00	78 166 08 59	SWP 1767	
BD208816		21 55 14	63 23 13	5.2	48	E0.3	L	O L	060 00	78 166 09 13	LWR 1673	
BD208816		21 55 14	63 23 13	5.2	48	E0.3	L	O S	030 00	78 166 10 58	LWR 1674	
BD208816		21 55 14	63 23 13	5.0	48	E0.55	L	C S	015 00	78 191 08 52	SWP 1957	
BD208816		21 55 14	63 23 13	5.0	48	E0.55	L	O L	010 00	78 191 09 43	SWP 1957	
BD208816		21 55 14	63 23 13	5.0	48	E0.55	L	O L	045 00	78 191 10 05	LWR 1807	
BD208816		21 55 14	63 23 13	5.0	48	E0.55	L	C S	001 00	78 191 11 29	LWR 1808	
BD208816		21 55 14	63 23 13	5.0	48	E0.55	L	O S	001 00	78 191 11 39	LWR 1808	
BD208816	OU1AB	21 55 14	63 23 13	5.0	48	E0.55	H	O L	080 00	78 210 10 18	SWP 2140	
VV CEP		21 55 14	63 23 13	5.0	48	E0.55	L	O L	015 00	78 232 17 12	SWP 2342	
VV CEP		21 55 14	63 23 13	5.0	48	E0.55	L	C S	001 00	78 271 10 15	LWR 2487	
VV CEP		21 55 14	63 23 13	5.0	48	E0.55	L	O L	001 00	78 271 10 22	LWR 2487	
VV CEP		21 55 14	63 23 13	5.0	48	E0.55	L	O L	010 00	78 271 10 29	SWP 2796	
VV CEP		21 55 14	63 23 13	5.0	48	E0.55	L	C S	007 00	78 271 11 03	SWP 2796	
VV CEP		21 55 14	63 23 13	5.0	48	E0.55	H	O L	030 00	78 271 11 17	LWR 2488	
		21 55 14	63 23 13	5.0	48	E0.55	H	O L	025 00	79 271 13 07	LWR 2489	
BD256655	HSSBR	21 57 24	26 11	9.00	16		L	C S	060 00	78 096 14 55	SWP 1323	
BD256655	BSJLG	21 57 25	26 11 35	9.7	16		L	O L	003 00	78 147 19 31	SWP 1651	TRAILED
BD256655		21 57 25	26 11 32	9.7	16		L	C S	000 40	78 147 19 45	SWP 1651	
EPS IND	CCAKD	21 59 33	-56 59	4.67	46		L	O L	060 00	78 139 14 15	SWP 1577	

ORDERED BY RIGHT ASCENSION
SORTED BY PROGRAM ID

OBJ ID	PROG ID	TARGET RA H M S	TARGET DEC D M S	VIS MAG	OBJ CLASS	B(B-V) OR B-V	DISP H/L	LG - OBJ APERTURE O/C L/S	EXPOSE TIME MIN SEC	EPOSURE START TIME YR DAY HR MIN	IMAGE SEQ NUM	OBSERVERS COMMENTS
EPS IND	CCAKD	21 59 33	-56 59	4.67	46		H	O L	015 00	78 139 15 24	LWR 1518	
ALP ACR	AFEBV	22 03 12	-00 33 48	2.9	44	B0.98	H	C S	040 00	78 116 12 12	LWR 1390	
ALP ACR		22 03 12	-00 33 48	2.9	44	B0.98	L	C S	002 00	78 116 13 36	SWP 1421	
ALP AQR		22 03 12	-00 33 48	2.9	44	B0.98	L	O L	010 00	78 116 13 44	SWP 1421	
ALP AGR		22 03 12	-00 33 48	2.9	44		L	C S	010 00	78 144 14 03	SWP 1623	
ALP AGR		22 03 12	-00 33 48	2.9	44		L	O L	030 00	78 144 13 26	SWP 1623	
ALP AGR		22 03 12	-00 33 48	2.9	44		H	O L	040 00	78 144 14 22	LWP 1554	
HD209975	ICJHB	22 03 36	62 02 10	5.10	12	B0.39	H	C S	008 00	78 116 22 41	SWP 1420	
HD209975		22 03 36	62 02 10	5.10	12	B0.39	H	C S	004 00	78 116 23 46	LWR 1394	
QSC2204	CO2AB	22 04 33	-40 51 36	17.5	85		L	O L	859 00	78 276 16 52	SWP 2849	
Q2204409		22 04 33	-40 51 36	17.5	85		L	O L	861 00	78 276 16 00	LWR 2539	
BY PEG	AFEBV	22 07 45	32 55 56	4.3	41	B0.45	H	O L	020 00	78 116 18 10	LWR 1392	
HR 8454		22 07 45	32 55 56	4.3	41	0.45	L	C S	008 00	78 265 09 20	SWP 2728	
HR 8454		22 07 45	32 55 56	4.3	41	0.45	L	O L	040 00	78 265	SWP 2728	
BD210839	MLJBH	22 09 48	59 10	5.0	13	B 0.6	H	C S	015 00	78 208 16 34	SWP 2125	
BD210839		22 09 49	59 10	5.0	13	B 0.6	H	C S	008 00	78 208 16 59	LWR 1906	
HD210839	OSESC	22 09 48	59 10	5.25	15	0.25	H	C S	009 00	78 280 08 08	SWP 2874	
HD210839		22 09 48	59 10	5.25	15	0.25	H	C S	011 00	78 280 08 23	LWR 2549	
HD210839		22 09 48	59 10	5.25	15	0.25	L	O L	000 07	78 280 08 55	SWP 2875	
IC 5217	PP2ED	22 21 55	50 42 52	10.5	70		L	O L	040 00	78 187 14 04	LWR 1785	
IC 5217		22 21 55	50 42 52	10.5	70		L	O L	030 00	78 187 14 52	SWP 1923	
HD212571	ICJHB	22 22 43	01 07 22	4.68	27	B0.20	H	C S	002 00	78 270 10 49	SWP 2784	
HD212571		22 22 43	01 07 22	4.68	27	B0.20	H	C S	001 30	78 270 10 56	LWR 2477	
9 METIS	PS8GT	22 22 59	-19 14 38	9.4	08		L	O L	050 00	78 207 05 16	LWR 1895	
HD213C87	ICJHB	22 25 28	64 52 37	5.46	23	B0.62	H	C S	040 00	78 266 04 32	SWP 2735	
HD213C87		22 25 28	64 52 37	5.46	23	B0.62	H	C S	012 00	78 266 05 18	LWR 2441	
HD213C87		22 25 28	64 52 37	5.46	23	B0.62	H	C S	070 00	78 266 05 50	SWP 2736	
HD213C87		22 25 28	64 52 37	5.46	23	B0.62	H	C S	072 00	78 266 07 07	LWR 2442	
HD214080	ALEBJ	22 33 25	-16 39	6.90	23	B0.05	H	C S	013 00	78 164 19 23	LWR 1663	
HD214080		22 33 25	-16 39	6.90	23	B0.05	H	C S	025 00	78 164 19 43	SWP 1780	
HD214680	PHCAL	22 37 00	38 47 22	4.91	12	B0.11	L	O L	000 02	78 162 15 53	SWP 1764	TRAILED
HD214680		22 37 01	38 47	4.88	12	B0.11	L	O L	000 03	78 162 16 41	LWR 1655	TRAILED
HD214680		22 37 01	38 47	4.88	12	B0.11	H	C S	000 55	78 162 17 30	SWP 1765	
HD214680		22 37 01	38 47	4.88	12	B0.11	H	C S	001 00	78 162 18 22	LWR 1656	
HD214680	XBFVB	22 37 01	38 47 22	4.88	12	B0.11	H	C S	001 40	78 200 10 58	SWP 2051	
HD214680		22 37 01	38 47 22	4.88	12	B0.11	H	C S	001 30	78 200 11 36	LWR 1852	
9216365	MGLBD	22 49 52	09 34	5.16	41	B-.03	H	C S	030 00	78 213 04 16	LWR 1934	

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OBJ ID	PROG ID	TARGET RA H M S	TARGET DEC D M S	VIS MAG	OBJ CLASS	B(B-V) OR B-V	DISP H/L	LG - OBJ APERTURE O/C L/S	EXPOSE TIME MIN SEC	EPOSURE START TIME YR DAY HR MIN	IMAGE SEQ NUM	OBSERVERS COMMENTS
2251+11	PP2ED	22 51 40	11 20 38	15.82	85	0.21	L	O L	420 00	78 306 21 54	SWP 3212	
HR 8752	AFEBV	22 57 58	56 40 37	5.0	44	B 1.3	L	O L	010 00	78 258 00 44	LWR 2358	
HR 8752		22 57 58	56 40 37	5.0	44	1.3	L	O S	002 00	78 258 01 11	LWR 2358	
HR 8752		22 57 58	56 40 37	5.0	44	1.3	L	O L	120 00	78 258 01 19	SWP 2652	
HR 8752		22 57 58	56 40 37	5.0	44	1.3	H	C L	150 00	78 258 03 58	LWR 2359	
HR 8752		22 57 58	56 40 37	5.0	44	1.3	L	C S	010 00	78 263 10 46	SWP 2705	
							L	O L	030 00	78 263 11 09	SWP 2705	
NGC 7469	EGAMS	23 00 44	08 36 16	13.3	84		L	O L	020 00	78 180 15 43	SWP 1879	
NGC 7469		23 00 44	08 36 16	13.3	84		L	O L	030 00	78 180 16 16	LWR 1747	
NGC 7469		23 00 44	08 36 16	13.3	84		L	O L	040 00	78 180 18 04	LWR 1748	
NGC 7469		23 00 44	08 36 16	13.3	84		L	O L	030 00	78 180 18 56	SWP 1880	
MCG258822	CO2AB	23 02 07	-08 57 19	13.90	84		L	O L	035 00	78 277 09 04	SWP 2050	
MCG258822		23 02 07	-08 57 19	13.90	84		L	O L	070 00	78 277 09 48	LWR 2534	
MCG258822		23 02 07	-08 57 19	13.90	84		L	O L	060 00	78 277 11 07	SWP 2851	
MCG258822		23 02 07	-08 57 19	13.90	84		L	O L	050 00	78 277 12 57	LWR 2535	
HR 8781	AFEBV	23 02 16	14 56 09	2.5	25	B-.05	H	C S	001 10	78 260 12 20	LWR 2386	
HR 8781		23 02 16	14 56 09	2.5	25	B-.05	H	C S	003 00	78 260 12 27	SWP 2671	
HD218376	ICJHB	23 04 29	59 08 57	4.87	20	B0.24	H	C S	006 00	78 114 19 59	SWP 1410	
HD218376		23 04 29	59 08 57	4.87	20	B0.24	H	C S	006 00	78 114 20 45	LWR 1382	
HD218376		23 04 29	59 08 57	4.87	20	B0.24	H	O L	004 00	78 114 22 16	LWR 1383	
BD219188	ALEBJ	23 11 27	04 43 28	6.90	23	B0.12	H	C S	011 00	78 169 14 47	SWP 1807	
BD219188		23 11 28	04 43 28	6.90	23	B0.12	H	C S	011 00	78 169 15 30	LWR 1688	
BD602522	CBHMJ	23 18 31	60 55 14	8.7	12	B0.74	L	O L	001 20	78 219 15 24	LWP 2007	
BD602522		23 18 31	60 55 14	8.7	12	B0.74	L	C S	000 20	78 219 15 31	LWR 2007	
BD602522		23 18 31	60 55 14	8.7	12	B0.74	L	C S	001 00	78 219 15 37	SWP 2229	
BD602522		23 18 31	60 55 14	8.7	12	B0.74	L	O L	002 45	78 219 15 43	SWP 2229	
NGC 7662	PP2ED	23 23 29	42 15 36	7.6	70		L	O L	020 00	78 307 05 37	SWP 3213	
NGC 7662		23 23 29	42 15 36	7.6	70		L	O L	020 00	78 307 06 06	LWR 2808	
NGC 7662		23 23 29	42 15 36	7.6	70		L	O S	010 00	78 307 06 38	LWR 2808	
NGC 7662		23 23 29	42 15 36	7.6	70		L	O S	005 00	78 307 06 55	SWP 3214	
NGC 7662		23 23 29	42 15 36	7.6	70		L	O L	005 01	78 307 07 07	SWP 3214	
G 29 38	BSJLG	23 26 15	04 58 26	13.1	37		L	O S	015 00	78 148 18 02	SWP 1658	
G 29 38		23 26 15	04 58 26	13.1	37		L	O S	030 00	78 148 19 13	SWP 1659	
G 29 38		23 26 15	04 58 26	13.1	37		L	O L	030 00	78 148 19 55	LWR 1574	
BD221568	SS2JJ	23 30 26	57 37 46	8.9	36	B0.13	L	O L	001 10	78 291 02 33	LWR 2637	
BD221568		23 30 26	57 37 46	8.9	36	B0.13	L	O L	004 00	78 291 02 41	SWP 3015	
BD221568		23 30 26	57 37 46	8.9	36	B0.13	L	O L	001 10	78 294 00 44	LWR 2659	
BD221568		23 30 26	57 37 46	8.9	36	B0.13	L	C S	001 40	78 294 00 50	LWR 2659	
BD221568		23 30 26	57 37 46	8.9	36	B0.13	L	O L	003 20	78 294 00 00	SWP 3080	
							L	C S	005 00	78 294 00 56	SWP 3080	

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SORTED BY PROGRAM ID

OBJ ID	PRCG ID	TARGET RA H M S	TARGET DEC D M S	VIS MAG	OBJ CLASS	B-V OR B-V	DISP H/L	LG - APERTURE O/C	OBJ L/S	EXPOSE TIME MIN SEC	EPOSURE START TIME YR DAY HR MIN	IMAGE SEQ NUM	OBSERVERS COMMENTS
BD221569	SS2JJ	23 30 26	57 37 46	9.9	36	E0.13	H	C	S	150 00	78 295 22 55	LWR 2685	
BD222107	CCAKD	23 35 06	46 11 13	3.88	44	E 0.1	L	O	L	000 09	78 193 13 31	LWR 1822	
HD222107		23 35 06	46 11 13	3.99	44	E 0.1	L	C	S	000 09	78 193 13 38	LWR 1822	
BD222107	.	23 35 06	46 11 14	3.88	44	E 0.1	H	O	L	005 00	78 193 14 23	LWR 1823	
BD222107	CEJLL	23 35 07	46 11 14	3.88	44		H	O	L	005 00	78 238 09 11	LWR 2178	
BD222107		23 35 07	46 11 14	3.88	44		L	O	L	032 00	78 238 09 25	SWP 2399	
BD222107		23 35 07	46 11 14	3.98	44		H	O	L	023 00	78 238 10 05	LWR 2179	
BD222107		23 35 07	46 11 14	3.88	44		L	O	L	060 00	78 238 10 38	SWP 2400	
223365	BLJBH	23 46 23	61 56	5.4	32	E 0.6	L	C	S	002 00	78 287 07 28	SWP 2968	
223385		23 46 23	61 56	5.4	32	E 0.6	L	O	L	006 57	78 287 07 45	SWP 2968	TRAILED
108 AQR	BVDSL	23 48 46	-19 11	5.2	27	-0.16	H	C	S	009 00	78 293 08 15	SWP 3067	
108 AQR		23 48 46	-19 11	5.2	27	-0.16	H	C	S	007 45	78 293 08 29	LWR 3653	
108 AQR		23 48 46	-19 11	5.2	27	-0.16	H	C	S	016 00	78 293 09 00	SWP 3068	
BD224014	CEJLL	23 51 52	57 13 16	4.9	41		H	O	L	030 00	78 235 07 46	LWR 2157	
BD224014		23 51 52	57 13 16	4.9	41		L	O	L	120 00	78 235 08 25	SWP 2374	
ALP CAM	OD4BO	44 90 3	66 15 39	4.2	13	E0.32	H	C	S	003 00	78 251 15 41	SWP 2545	

VILSPA Log of Images for the First Year of IUE

The VILSPA images listed in the following pages are ordered by right ascension of the object and cover the first year of IUE observations (including the commissionning phase).

Due to the volume of such material, we intend to publish only updates in subsequent issues. Thus we advise you to keep this list. A microfiche output will also be considered. An explanation of the programme, object type and exposure codes is also given.

OBSERVING PROGRAMMES SUBMITTED THROUGH THE UK SCIENCE RESEARCH COUNCIL
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UKIXR UK CONTRIBUTION TO THE INTERNATIONAL X-RAY COOPERATION.
FOR OBSERVER INFORMATION SEE UK037

UKPOP UK HIGH PRIORITY PROGRAMME -- DETAILS FROM:
P GONDHALEKAR/UCL; M SANDFORD/AL

UK001 STRUCTURE OF STELLAR CHROMOSPHERES AND CORONAE
R WILSON/UCL; C JORDAN/OXFORD

UK002 A STUDY OF EARLY TYPE EMISSION LINE STARS
R WILSON, A BOKSENBERG, A J WILLIS/UCL; W M BURTON/ARD

UK003 ATMOSPHERIC STRUCTURE AND ABUNDANCES IN HOT SUBLUMINOUS STARS
R WILSON, D J CARNOCHAN/UCL; W M BURTON/ARD

UK005 A STUDY OF THE NUCLEI OF SEYFERT GALAXIES BY OBSERVING THEIR FUV EMISSION SPECTRUM
C JORDAN/OXFORD

UK006 THE PHYSICAL AND CHEMICAL STATE OF THE INTERSTELLAR GAS
R WILSON, P GONDHALEKAR, A BOKSENBERG/UCL

UK007 A STUDY OF NOVAE AND SUPERNOAVE
M J SEATON, J LUTZ/UCL

UK008 THE STRUCTURE OF PLANETARY NEBULAE
M J SEATON, J LUTZ/UCL

UK010 ULTRAVIOLET OBSERVATIONS OF STAR CLUSTERS
A BOKSENBERG/UCL

UK011 ATMOSPHERIC DYNAMICS OF CEPHEID VARIABLES
A BOKSENBERG/UCL

UK013 A STUDY OF NORMAL AND PECULIAR EXTRA-GALACTIC OBJECTS
R WILSON, A BOKSENBERG/UCL

UK015 A SEARCH FOR NITRIC OXIDE IN STELLAR ATMOSPHERES
M A GERRIE/AL

UK016 ULTRAVIOLET OBSERVATIONS OF EXTRAGALACTIC OBJECTS WITH COSMOLOGICAL RELEVANCE
M S LONGAIR, M J REES/CAMBRIDGE

UK017 ULTRAVIOLET SPECTRA OF EARLY TYPE HYDROGEN DEFICIENT STARS
P W HILL, D KILKENNY, A E LYNAS-GRAY/ST ANDREWS

UK018 INVESTIGATION OF HIGH LATITUDE EARLY TYPE STARS
P W HILL, D KILKENNY, A E LYNAS-GRAY/ST ANDREWS

UK019 INTERSTELLAR EXTINCTION IN THE SOUTHERN MILKY WAY
I G VAN BREDA/RGO; D C B WHITTET/ST ANDREWS

UK02C SEE UK002

UK020 MG II EMISSION LINE PROFILES IN BRIGHT F-M STARS
R E J PAGEL/RGO

UK021 INTERSTELLAR SPECTRAL LINES IN SOUTHERN HEMISPHERE STARS
D MCNALLY/UCL; J C BLADES/AAO

UK022 STUDY OF MG II EMISSION FROM STELLAR CHROMOSPHERES
R BATES, F N BYRNE, C D MCKEITH/BELFAST

UK022 INTERSTELLAR MG I AND MG II ABSORPTION
R BATES, F N BYRNE, C D MCKEITH/BELFAST

UK024 AN INVESTIGATION OF INTERSTELLAR AND CIRCUMSTELLAR REDDENING
K NANDY/ROE

UK025 ULTRAVIOLET OBSERVATIONS OF PECULIAR A STARS
R GUTHRIE/ROE

UK026 THE DELECTION OF HOT PLASMA ADJACENT TO THE GALACTIC DISK
D W SCIAMA/OXFORD; A H GABRIEL/ARD

UK027 THE EXTENDED ATMOSPHERES OF BE STARS
C R KITCHIN, J C D MARSH/HATFIELD

UK028 CIRCUMSTELLAR MATERIAL IN ECLIPSING BINARY AND IR EXCESS STARS
R F JAMESON/LEICESTER

UK029 DYNAMICS OF INTERSTELLAR NEUTRAL HYDROGEN
P THONEMANN/SWANSEA

UK031 A SEARCH FOR MOLECULES IN CELESTIAL OBJECTS
S P TARAFDAR/CARDIFF; K S KRISHNA SWAMY, M S VARDYA/BOMBAY

UK033 OBSERVATIONS OF 3C 273,NGC 4151 AND RELATED OBJECTS
A BOKSENBERG, RESEARCH ASSISTANT/UCL

UK035 AN INVESTIGATION OF THE PHYSICAL PROCESSES IN DWARF NOVAE
J A J WHELAN, J E PRINGLE/CAMBRIDGE; G T BATH, J PAPALOIZOU/OXFORD

UK036 A STUDY OF THE PECULIAR ULTRAVIOLET OBJECTS DISCOVERED BY THE
S2/68 SKY SURVEY TELESCOPE
R WILSON, D J CARNOCHAN, M W DWORETSKY/UCL

UK037 THE ULTRAVIOLET SPECTRA AND VARIABILITY OF GALACTIC AND EXTRAGALACTIC
X-RAY SOURCES
R WILSON, M M GLENCROSS/UCL, J L CULHANE/MSSL; M C M SANDFORD/AL

UK038 INTERSTELLAR ABSORPTION LINES OF CENTRO SYMMETRIC MOLECULES
C M HUMPHRIES/ROE

UK040 EXTRA-GALACTIC OBJECTS WITH PREDOMINANTLY CONTINUOUS OPTICAL SPECTRA
M M BURTON, R E PATCHETT/ARD

UK041 A SEARCH FOR AN INTER-GALACTIC MEDIUM
D W SCIAMA/OXFORD; A H GABRIEL/ARD

UK042 ULTRAVIOLET SPECTRA OF MARKARIAN GALAXIES
M M BURTON, R E PATCHETT/ARD

UK043 OBSERVATIONS OF PLANETS AND THEIR SATELLITES
G HUNT, P GONDHALEKAR/UCL; A MEADOWS/LEICESTER

UK044 STRUCTURE OF T-TAURI STARS
R WILSON, P GONDHALEKAR/UCL, N V PENSTON/ESTEC

UK045 ATMOSPHERIC STRATIFICATION IN ECLIPSING BINARY STARS
A BOKSENBERG/UCL; M R S GARTON/IC

UK13A SEE UK013

UK13H SEE UK013

UKCAL CALIBRATION OBSERVATIONS
D STICKLAND/VILSPA

UKFIL FILLER OBSERVATIONS
D STICKLAND/VILSPA

UKTOO TARGET OF OPPORTUNITY
D STICKLAND/VILSPA

LIST OF ABBREVIATIONS USED

AL SRC APPLETON LABORATORY
ARD ASTROPHYSICS RESEARCH DIVISION OF THE APPLETON LABORATORY
IC IMPERIAL COLLEGE, LONDON
MSSL MULLARD SPACE SCIENCE LABORATORY
RGO ROYAL GREENWICH OBSERVATORY
ROE ROYAL OBSERVATORY EDINBURGH
UCL UNIVERSITY COLLEGE LONDON

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OBSERVING PROGRAMMES SUBMITTED THROUGH THE EUROPEAN SPACE AGENCY

AB040 STUDY OF THE PECULIAR VARIABLE STAR GAMMA BOO
A BAGLIN, J M LE CONTEL, F PRADERIE/INSTITUT D'ASTROPHYSIQUE, PARIS

AR020 OBSERVATIONS OF OBJECTS WITH UNCERTAINTIES IN THE MKK CLASSIFICATION WITH DISCREPANCIES BETWEEN CHALONGE AND MKK CLASSIFICATION OR WITH ABNORMAL PASCHEN DISCONTINUITY
A RINGUELET/OBSERVATORIO ASTRONOMICO, LA PLATA (ARGENTINA)

BD033 OBSERVATIONS OF SUPERNOVAE REMNANTS
P BENVENUTI, S D'ODORICO/OSSERVATORIO ASTROFISICO DI ASIAGO

HW019 CHROMOSPHERES OF A-SUPERGIANTS
B WOLF/EUROPEAN SOUTHERN OBSERVATORY, SANTIAGO (CHILE)

CB031 STELLAR CHROMOSPHERS
C. BLANCO, S. CATALANO, E. MARILLI/OSSERVATORIO ASTROFISICO, CATANIA

CC038 OBSERVATIONS OF MARKARIAN GALAXIES
C CASINI/OSSERVATORIO ASTRONOMICO DI BRERA, MERATE

CP035 UV OBSERVATIONS OF COMPACT EXTRAGALACTIC I R EMITTERS
O CITTERIO,P DI BENEDETTO, E TANZI, G C PEROLA/LABORATORIO DI FISICA COSMICA, MILANO; M TARENGHI/STEWARD OBSERVATORY, TUCSON, ARIZONA

DF010 OBSERVATIONS OF CIII EMISSION IN PLANETARY NEBULAE
D R FLOWER/OBSERVATOIRE DE PARIS; H NUSSBAUMER/GRUPPE FUR ATOM UND ASTROPHYSIK, ZURICH

FB024 STUDY OF IRR II TYPE GALAXIES
F BERTOLA, G DI TULLIO/OSSERVATORIO ASTRONOMICO, PADOVA

FB024 INVESTIGATIONS OF THE U, V, CONTINUUM IN ELLIPTICAL GALAXIES
F BERTOLA, M CAPACCIOLI/OSSERVATORIO ASTRONOMICO, PADOVA

FC027 POPULATION II B-TYPE STARS WITH WEAK HELIUM LINES
P L BERNACCA, F CIATTI/OSSERVATORIO ASTROFISICO DI ASIAGO

FG006 STUDIES OF STELLAR MG II LINES AT 2800 ANGSTROMS
K, FREDGA, G, F, GAHM/STOCKHOLM OBSERVATORY; B, GUSTAFSSON/UPPSALA OBSERVATORY

FM050 A STUDY OF THE MASS-LOSS PROCESS IN EARLY-TYPE STARS
F MACCHETTO/ASTRONOMY DIVISION, ESTEC, NOORDWIJK
C DE JAGER, H J LAMERS/SPACE RESEARCH LABORATORY, UTRECHT

FP047 DIAGNOSTICS OF VELOCITY FIELDS, MASS-LOSS AND CHROMOSPHERES IN A TYPE GIANTS AND SUPERGIANTS
F PRADERIE, E SIMONNEAU, M N THOMAS/INSTITUT D'ASTROPHYSIQUE, PARIS; H J LAMERS/SPACE RESEARCH LABORATORY, UTRECHT

GG005 ULTRAVIOLET SPECTRUM OF T TAURI STARS
G, F, GAHM, K, FREDGA/STOCKHOLM OBSERVATORY

GM045 U, V, OBSERVATION OF AP STARS
M GERBALDI, N MORGULEFF/INSTITUT D'ASTROPHYSIQUE, PARIS; C MEGESSIER, V DOAZAN/OBSERVATOIRE DE PARIS

GP036 GALAXIES IN THE CLUSTERS COMA, HERCULES AND A 2199
G C PEROLA/LABORATORIO DI FISICA COSMICA, MILANO; W JAFFE/STERRENACHT, LEIDEN; M TARENGHI/STEWARD OBSERVATORY, TUCSON, ARIZONA

HL048 SHORT TIME VARIABILITY OF EARLY-TYPE SUPERGIANTS
H J LAMERS, C DE JAGER/SPACE RESEARCH LABORATORY, UTRECHT

HM021 PECULIAR A-STARS
H M MAITZEN/ASTRONOMISCHES INSTITUT, BOCHUM

HM043 OBSERVATIONS OF T TAURI STARS AND OB SUPERGIANTS
H MAUDER/ASTRONOMISCHES INSTITUT DER UNIVERSITAT TUBINGEN

KH001 HYDROGEN DEFICIENT STARS AND RELATED OBJECTS
K, HUNGER/INSTITUT FUR ASTROPHYSIK, BERLIN

KH014 A STUDY OF O-TYPE STARS
K A VAN DER HUCHT/SPACE RESEARCH LABORATORY, UTRECHT

KH052 SHORT TIME VARIABILITY OF TWO WOLF-RAYET STARS
K A VAN DER HUCHT/SPACE RESEARCH LABORATORY, UTRECHT;
F MACCHETTO/ASTRONOMY DIVISION, ESTEC, NOORDWIJK

LH006 STUDY OF LUMINOSITY EFFECTS IN THE SPECTRUM OF B-TYPE STARS
L HOUZIAUX/DEPARTEMENT D'ASTROPHYSIQUE, UNIVERSITE DE MONS.

LHA07 INVESTIGATION OF IO AND NI EXCITATION MECHANISMS IN BE STARS
L. HOUZIAUX/DEPARTEMENT D'ASTROPHYSIQUE, UNIVERSITE DE MONS.

LHB07 OBSERVATIONS OF THREE PECULIAR HOT STARS
L. HOUZIAUX/DEPARTEMENT D'ASTROPHYSIQUE, UNIVERSITE DE MONS.

LS017 OBSERVATIONS OF THE EXISTING STARS OF COMPACT HII REGIONS
L F SMITH/MPI FUR RADIOASTRONOMIE, BONN

LS044 OBSERVATION OF INTERSTELLAR ABSORPTION LINES OF ATOMS AND MOLECULES
L F SMITH, G WINNEWISSER/MPI FUR RADIOASTRONOMIE, BONN

MG012 STUDY OF OPEN CLUSTERS AND SELECTED FIELD STARS
M GOLAY, A GAIDE, G COY, A MAEDER/OBSERVATOIRE DE GENEVE

MHA02 EXCEPTIONAL BINARIES OR SUSPECTED BINARIES
H, CESTER, R, FARAGGIANA, M, HACK, M, PUCILLO/OSSERVATORIO ASTRONOMICO, TRIESTE

MHB02 EARLY-TYPE SUPERGIANTS
M, HACK, F.LANFRE-CASTELLI, R, STALIO/OSSERVATORIO ASTRONOMICO, TRIESTE

MHC02 AP AND MAGNETIC STARS
R, FARAGGIANA, M, HACK, F, LANFRE-CESTELLI, P.O, SELVELLI/OSSERVATORIO ASTRONOMICO, TRIESTE

MHD02 AP AND HE-POOR STARS OF POPULATION I AND II
M HACK, R STALIO/OSSERVATORIO ASTRONOMICO, TRIESTE

MH011 A STUDY OF WOLF-RAYET STARS IN SELECTED EMISSION LINES
M C E HUBER, H NUSSBAUMER/GRUPPE FUR ATOM UND ASTROPHYSIK, ZURICH

MP028 UV OBSERVATIONS OF PLANETARY NEBULAE
M PERINOTTO, P PATRIARCHI/OSSERVATORIO ASTROFISICO, ARCETRI

MP029 INVESTIGATION OF THE U V CONTINUUM IN THE ORION NEBULA
M PERINOTTO/OSSERVATORIO ASTROFISICO, ARCETRI

MR003 CHROMOSPHERIC ACTIVITY IN DWARF STARS
M. REGO, M. J. FERNANDEZ-FIGUEROA/DEPARTAMENTO DE ASTRONOMIA, UNIVERSIDAD DE MADRID; M. LOPEZ ARROYO/OBSERVATORIO ASTRONOMICO DE MADRID.

MU009 OBSERVATIONS OF NUCLEI OF TWO SEYFERT GALAXIES AND A QSO
M H ULRICH/DEPARTEMENT D'ASTROPHYSIQUE, OBSERVATORIE DE PARIS

NH051 EMISSION AND VARIABILITY IN AE-TYPE STARS
S DUMONT, N HEIDMANN, R N THOMAS/INSTITUT D'ASTROPHYSIQUE, PARIS; L V KUHI/DEPARTMENT OF ASTRONOMY, BERKELY UNIVERSITY, CALIFORNIA

PR030 U V INTERSTELLAR EXTINCTION IN THE DIRECTION OF OB ASSOCIATIONS
M PERINOTTO, G TAGLIAFERRI/OSSERVATORIO ASTROFISICO, ARCETRI; J AIELLO, A BONETTI, F MENCARAGLIA/ISTITUTO DI FISICA, UNIVERSITA DI FIRENZE

PR042 OPTICAL COUNTERPARTS OF GALACTIC X-RAY SOURCES
R BARBON, P L BERNACCA, F CIATTI/OSSERVATORIO ASTROFOSICO DI ASIAGO; C REINA, A TREVES/LABORATORIO DI FISICA COSMICA, MILANO; M TARENGHI/STEWARD OBSERVATORY, TUCSON, ARIZONA

PS413 PECULIAR EMISSION-LINE OBJECTS
J P SWINGS/INSTITUT D'ASTROPHYSIQUE, LIEGE

PSB13 O AND WR STARS
P SWINGS AND J M VREUX/INSTITUT DHASTROPHYSIQUE, LIEGE

PSC13 METAL-POOR F AND G STARS
C ARPIGNY/INSTITUT D'ASTROPHYSIQUE, LIEGE

PSD13 TD1 82/368 SELECTED STARS
D MALATSE, F BEECKMANS/INSTITUT D'ASTROPHYSIQUE, LIEGE

PT037 NUCLEAR REGIONS OF M87, NGC5253 AND NGC5128
G C PEROAL/LABORATORIO DI FISICA COSMICA, MILANO; M TARENGHI/STEWARD OBSERVATORY, TUCSON, ARIZONA

RR039 A SEARCH FOR THE SOLAR FEATURE AT 2085 A IN THE CONTINUOUS SPECTURM OF A, F AND G STARS
R M BONNET, D SACOTTE, D SAMAIN/LABORATOIRE DE PHYSIQUE STELLAIRE ET PLANETAIRE, VERRIERES-LE-BUISSON; F PRADERIE/INSTITUT D'ASTROPHYSIQUE, PARIS

RR041 STUDY OF SPECTRAL LINES FROM WHICH TO DETECT STELLAR CHROMOSPHERES IN A-TYPE STARS
R M BONNET/L.P.S.P. - VERRIERES-LE-BUISSON; M GROSS, F PRADERIE/INSTITUT D'ASTROPHYSIQUE, PARIS

RR016 OBSERVATIONS OF INTERSTELLAR ABSORPTION LINES
R J VAN DUINEN, S R POTTASCH/DEPARTMENT OF SPACE RESEARCH, UNIVERSITY OF GRONINGEN

SL034 OBSERVATIONS OF COMPACT EXTRAGALACTIC OBJECTS
J E STENFLO, L LINDEGREN, J LIND/LUND OBSERVATORY

VB032 INVESTIGATIONS OF EMISSION LINES OBJECTS
G B HARATTA/OSSERVATORIO ASTRONOMICO, ROMA; A CASSATELLA, R VIOTTI/LABORATORIO DI ASTROFISICA SPAZIALE, FRASCATI

VR032 U. V. OBSERVATIONS OF THE SPECTRUM OF ETA CARINAE
R VIOTTI/LABORATORIO DI ASTROFISICA SPAZIALE, FRASCATI

VH049 THE STUDY OF X-RAY BINARIES
F P J VAN DEN HEUVEL/ASTRONOMICAL INSTITUTE, UTRECHT; H J LAMERS/SPACE RESEARCH LABORATORY, UTRECHT

VILSP GENERAL STUDIES
P BENVENUTI, A CASSATELLA, J CLAVEL, A HECK, M PENSTON, P SELVELLI/ESTEC F MACCHETTO/ESTEC, D STICKLAND/VILSPA (SRC)

XGAL EUROPEAN 'EXTRAGALACTIC WEEK' -- COORDINATOR H.H.ULRICH / ESO

XR801 EUROPEAN CONTRIBUTION TO THE INTERNATIONAL X-RAY COOPERATION
XR802 OBSERVERS FROM PROGRAMS PR042 AND VH049

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CLASSIFICATION OF OBJECTS USED IN THE JOINT ESA/SRC LOG OF IUE OBSERVATIONS

00	SUN	50	R,N OR S TYPES
01	EARTH	51	LONG PERIOD VARIABLE STARS
02	MOON	52	IRREGULAR VARIABLES
03	PLANET	53	REGULAR VARIABLES
04	PLANETARY SATELLITE	54	DWARF NOVAE
05	MINOR PLANET	55	CLASSICAL NOVAE
06	COMET	56	SUPERNOVAE
07	INTERPLANETARY MEDIUM	57	SYMBIOTIC STARS
08		58	T TAURI
09		59	X-RAY
10	W C	60	SHELL STAR
11	W N	61	ETA CARINAE
12	MAIN SEQUENCE O	62	PULSAR
13	SUPERGIANT O	63	NOVA-LIKE
14	OE	64	
15	OF	65	
16	SD O	66	
17	WD O	67	
18		68	
19	UV-STRONG	69	
20	B0-B2 V-IV	70	PLANETARY NEBULA + CENTRAL STAR
21	B3-B5 V-IV	71	PLANETARY NEBULA - CENTRAL STAR
22	B6-B9,5 V-IV	72	H II REGION
23	B0-B2 III-I	73	REFLECTION NEBULA
24	B3-B5 III-I	74	DARK CLOUD (ABSORTION SPECTRUM)
25	B6-B9,5 III-I	75	SUPERNOVA REMNANT
26	BE	76	RING NEBULA (SHOCK IONISED)
27	BP	77	
28	SDB	78	
29	WDB	79	
30	A0-A3 V-IV	80	SPIRAL GALAXY
31	A4-A9 V-IV	81	ELLIPTICAL GALAXY
32	A0-A3 III-I	82	IRREGULAR GALAXY
33	A4-A9 III-I	83	GLOBULAR CLUSTER
34	AE	84	SEYFERT GALAXY
35	AM	85	QUASAR
36	AP	86	RADIO GALAXY
37	HDA	87	BL LACERTAE OBJECT
38		88	EMISSION LINE GALAXY (NON-SEYFERT)
39	COMPOSITE	89	
40	F0-F2	90	INTERGALACTIC MEDIUM
41	F3-F9	91	
42	FP	92	
43	LATE TYPE DEGENERATE STARS	93	
44	G (TO IFEB79); GIV-VI (FROM IFEB79)	94	
45	G I-II (FROM IFEB79)	95	
46	K (TO IFEB79); K IV-VI (FROM IFEB79)	96	
47	K I-III (FROM IFEB79)	97	
48	M (TO IFEB79); M DWARFS (FM IFEB79)	98	
49	M I-III (FROM IFEB79)	99	

THE CLASSIFICATION IS SUPPLIED BY D STICKLAND FOR USE ONLY WITHIN THE PROJECT

EXPOSURE CLASSIFICATION CODES

SINCE 1 AUG 78 A TWO-DIGIT CODE HAS BEEN USED TO DESCRIBE EXPOSURE LEVELS. THIS CODE OCCUPIES THE FIRST TWO CHARACTER POSITIONS OF THE COMMENT FIELD.

DIGIT 1: EXPOSURE LEVEL OF CONTINUUM
DIGIT 2: EXPOSURE LEVEL OF EMISSION LINES

THE CLASSIFICATIONS BELOW APPLY TO BOTH:

0: NOT APPLICABLE
1: NO SPECTRUM VISIBLE
2: FAINT SPECTRUM; MAX DN < 20 ABOVE BACKGROUND
3: UNDEREXPOSED; MAX DN < 100 ABOVE BACKGROUND
4: WEAK; MAX DN BETWEEN 100 AND 150 ABOVE BACKGROUND
5: GOOD; NO SATURATION BUT MAX DN OVER 150 ABOVE BACKGROUND
6: A BIT STRONG; A FEW PIXELS SATURATED
7: SATURATED FOR LESS THAN HALF THE SPECTRUM
8: MOSTLY SATURATED BUT SOME PARTS USABLE
9: COMPLETELY SATURATED

OBJECT	CL	MAG	RT ASCN HR MN SC	DECLN DEG MN	DISP +CAM	IMAGE	APERT OR	LG	DATE	START HR MN SC	LENGTH MIN SC	PROG	COMMENT
MKN 335	84	14.0	00 03 45	+19 55	L 3	1919	L	0	05JUL78	16 00 00	45 00	UK02AB	A BIT STRONG/APPROXSTART
NGC 40	70	11.4	00 10 18	+72 14	L 2	2656	L	0	20OCT78	16 12 34	8 00	MP02A	35
NGC 40	70	11.4	00 10 18	+72 14	L 3	3074	L	0	20OCT78	16 53 13	8 00	MP02A	24
NGC 40	70	11.4	00 10 18	+72 14	L 3	3075	L	0	20OCT78	17 34 26	20 00	MP02A	57
NGC 40	71	11.4	00 10 18	+72 14	L 3	3076	L	0	20OCT78	18 36 55	15 00	MP02A	02OFFSET BY 7 SEC
HD 886	20	2.8	00 10 42	+14 54	H 2	2262	S	C	03SEP78	22 24 40	28	UK022	60
HD 886	20	2.8	00 10 42	+14 54	H 3	2469	S	C	03SEP78	22 55 00	25	UK022	70GOOD FOR SW
HD 1581	44	4.2	00 17 19	-65 16	H 2	3699	L	0	07FEB79	08 30 27	20 00	BN053	65
HD 1581	44	4.2	00 17 29	-65 11	H 2	1862	S	C	20JUL78	23 39 00	31 00	BN053	WELL EXP AT LONG WL
HD 1581	44	4.2	00 17 29	-65 10	H 2	2191	S	C	27AUG78	21 58 00	45 00	BN053	60
HD 1581	44	4.2	00 17 37	-65 10	H 2	2621	S	C	16OCT78	14 34 31	60 00	UK020	74
HD 2151	44	2.8	00 23 09	-77 32	H 2	1863	S	C	21JUL78	00 57 00	16 00	BN053	GOOD AT LONG WL
HD 2151	44	2.8	00 23 09	-77 32	H 2	2192	S	C	27AUG78	23 33 00	13 00	BN053	60
HD 2151	44	2.8	00 23 09	-77 32	H 2	2610	S	C	15OCT78	16 20 00	30 00	UK020	75
HD 2151	44	2.8	00 23 09	-77 32	H 2	2811	S	C	03NOV78	15 49 47	15 00	FG004	77
HD 2151	44	2.8	00 23 09	-77 32	H 2	2812	S	C	03NOV78	16 57 50	15 00	FG004	77
HD 2151	44	2.8	00 23 09	-77 32	H 2	2813	S	C	03NOV78	17 43 25	15 00	FG004	77
HD 2151	44	2.8	00 23 09	-77 32	H 2	2833	S	C	05NOV78	18 10 26	15 00	FG004	65
HD 2151	44	2.8	00 23 09	-77 32	H 2	2834	S	C	05NOV78	18 56 58	15 00	FG004	65
HD 2151	44	2.8	00 23 09	-77 32	H 2	3700	L	0	07FEB79	09 34 29	8 30	BN053	75
HD 2151	44	2.8	00 23 29	-77 32	H 2	1593	S	C	02JUN78	02 46 11	15 00	UKP0P	GOOD FOR MG II LINES
HD 2151	44	2.8	00 23 29	-77 32	L 3	1589	S	C	02JUN78	03 24 11	20 00	UKP0P	CONT AT RED END ONLY
0026+129	85	14.8	00 26 38	+04 13	L 3	2108	L	0	30JUL78	01 40 00	120 00	UK016	A BIT WEAK MAX ON 120
HD 2905	23	4.2	00 30 08	+62 39	H 2	2313	S	C	09SEP78	18 35 28	6 00	FM056	70
HD 2905	23	4.1	00 30 08	+62 39	H 2	3926	S	C	04MAR79	11 30 05	6 00	FM050	70
HD 2905	23	4.2	00 30 08	+62 39	H 3	2582	S	C	09SEP78	17 53 04	10 00	FM050	60GOOD FOR SW
HD 2905	23	4.2	00 30 08	+62 39	H 3	2583	S	C	09SEP78	19 11 08	13 00	FM050	60GOOD FOR SW
HD 2905	23	4.2	00 30 08	+62 39	H 3	2586	S	C	09SEP78	21 45 30	10 00	FM050	60GOOD FOR SW
HD 2905	23	4.2	00 30 08	+62 39	H 3	2587	S	C	09SEP78	22 25 40	10 00	FM050	60
HD 2905	23	4.2	00 30 08	+62 39	H 3	2588	S	C	09SEP78	23 07 14	10 00	FM050	60
HD 2905	23	4.2	00 30 08	+62 39	H 3	2589	S	C	09SEP78	23 56 13	10 00	FM050	60
HD 2905	23	4.2	00 30 08	+62 39	H 3	2612	S	C	10SEP78	16 42 00	6 00	FM050	50
HD 2905	23	4.2	00 30 08	+62 39	H 3	2613	S	C	10SEP78	17 25 20	6 00	FM050	50
HD 2905	23	4.2	00 30 08	+62 39	H 3	2616	S	C	10SEP78	19 42 05	6 00	FM050	50
HD 2905	23	4.2	00 30 08	+62 39	H 3	2617	S	C	10SEP78	20 24 22	6 00	FM050	50
HD 2905	23	4.2	00 30 08	+62 39	H 3	2620	S	C	10SEP78	22 29 30	6 00	FM050	50
HD 2905	23	4.2	00 30 08	+62 39	H 3	2621	S	C	10SEP78	23 07 26	6 00	FM050	50
HD 2905	23	4.2	00 30 08	+62 39	H 3	2622	S	C	10SEP78	23 43 30	6 00	FM050	50
HD 2905	23	4.1	00 30 08	+62 39	H 3	4074	S	C	04MAR79	11 10 10	6 00	FM050	66
HD 2905	25	4.2	00 30 10	+62 40	H 3	2943	S	C	12OCT78	18 02 53	6 00	FM050	60
HD 3360	20	3.6	00 34 10	+53 37	H 2	3284	S	C	26DEC78	13 27 59	35	UKCAL	50
HD 3360	20	3.6	00 34 10	+53 37	H 3	3712	S	C	26DEC78	13 30 57	1 00	UKCAL	70
-38 222	19	10.5	00 40 34	-38 24	L 3	4184	S	C	08FEB79	06 49 50	2 25	UK036	50
-38 222	19	10.5	00 40 34	-38 24	L 3	4184	L	0	04FEB79	06 43 00	1 35	UK036	60
NGC 246	70	11.9	00 44 35	-12 09	L 2	1502	S	C	16MAY78	03 09 04	6 00	UKP0P	UNDEREXP
NGC 246	70	11.9	00 44 35	-12 09	L 2	1503	S	C	16MAY78	04 46 10	30 00	UKP0P	UNDEREXP
NGC 246	70	11.9	00 44 35	-12 09	L 3	1556	S	C	16MAY78	04 07 39	30 00	UKP0P	VERY UNDEREXP
NGC 246	70	11.9	00 44 35	-12 09	L 3	1563	S	C	17MAY78	07 23 47	4 00	UKP0P	UNDEREXP

OBJECT	CL	MAG	RT ASCN HR MN SC	DECLN DEG MN	DISP +CAM	IMAGE	APERT OR	LG	DATE	START HR MN SC	LENGTH MIN SC	PROG	COMMENT
HD 4614	44	3.4	00 46 03	+57 33	H 2	1765	S	C	02JUL78	03 53 05	15 00	MR003	DOUBLE - MISSED APERTURE
HD 4614	44	3.4	00 46 03	+57 33	L 3	1902	S	C	02JUL78	04 17 50	26 00	MR003	MISSED APERTURE
HD 4614	44	3.4	00 46 04	+57 33	L 3	4031	L	0	25JAN79	11 17 16	30 00	UK001	77SAT LONG OF 1050
HD 4614	44	3.4	00 46 05	+57 33	H 2	2170	S	C	24AUG78	23 29 00	25 00	UK031	30
-11 162	28	11.2	00 49 44	-10 56	L 3	4105	L	0	31JAN79	14 47 24	3 05	UK036	50
-11 162	28	11.2	00 49 44	-10 56	L 3	4105	S	C	31JAN79	14 36 39	4 40	UK036	50
I ZW 1	84	14.0	00 50 58	+12 25	L 2	1955	L	0	02AUG78	23 10 06	210 00	UK13B	56
I ZW 1	84	14.0	00 50 58	+12 25	L 3	2216	L	0	05AUG78	23 23 26	200 00	UK13B	45
I ZW 1	84	14.0	00 50 58	+12 25	L 3	2333	L	0	18AUG78	23 05 41	155 00	UK13B	34
SHC-X2	59	14.6	00 52 57	-73 57	L 3	2012	L	0	15JUL78	00 23 18	60 00	XR802	UXP X2
SHC-X2	59	14.6	00 52 57	-73 57	L 3	2013	L	0	15JUL78	02 03 19	97 00	XR802	WEAK MAX ON 130
HD 5394	20	2.6	00 53 40	+60 26	H 2	2556	S	C	08OCT78	18 05 00	20	LHA07	60
HD 5394	20	2.6	00 53 40	+60 26	H 3	2887	S	C	08OCT78	17 55 00	16	LHA07	50
HD 5394	59	2.6	00 53 41	+60 27	H 2	1423	S	C	01MAY78	01 37 17	6	XRB01	MAX ON 120, UNDEREXP.
HD 5394	59	2.6	00 53 41	+60 27	H 2	1424	S	C	01MAY78	03 18 09	10	XRB01	SLIGHTLY UNDEREXP.
HD 5394	59	2.6	00 53 41	+60 27	H 3	1321	S	C	06APR78	10 07 24	45	UKP0P	GOOD-SOME SAT LONG WL
HD 5394	59	2.6	00 53 41	+60 27	H 3	1448	S	C	01MAY78	00 47 14	45	XRB01	OVEREXP.
HD 5394	59	2.6	00 53 41	+60 27	H 3	1449	S	C	01MAY78	02 30 15	15	XRB01	GOOD
HD 5394	59	2.6	00 53 41	+60 27	H 3	4640	S	C	15MAR79	07 24 35	15	GH141	66
COM1978H	06	13.0	00 56 50	-68 01	L 2	2859	L	0	08NOV78	14 06 13	25 00	VILSP	02ONLY OH(0,0)
COM1978H	06	13.0	00 56 50	-68 01	L 3	3267	L	0	08NOV78	14 04 33	50 00	VILSP	03
COM1978H	06	13.0	00 56 50	-68 01	L 3	3267	L	0	08NOV78	14 04 33	50 00	VILBP	06
+03 1011	20	12.0	01 01 42	+03 58	L 2	3319	L	0	29DEC78	12 24 18	14 00	FC027	70
+03 1011	20	12.0	01 01 42	+03 58	L 3	3736	L	0	29DEC78	12 48 35	14 00	FC027	80
T0109-38	84	14.0	01 09 10	-38 21	L 3	1420	L	0	26APR78	05 03 00	180 00	UKP0P	NO SPECTRUM
SHC-X1	59	13.5	01 15 45	-73 42	L 2	1829	L	0	15JUL78	23 44 32	35 00	UKIXR	A BIT STRONG
SHC-X1	59	13.5	01 15 45	-73 42	L 3	2020	L	0	16JUL78	00 45 02	35 00	UKIXR	GOOD MAX ON 175
ESO 113	84	13.2	01 21 51	-59 04	L 2	1954	L	0	02AUG78	20 07 54	45 00	UK13B	56
ESO IG45	84	13.2	01 21 51	-59 04	L 2	3959	L	0	08MAR79	04 45 51	45 00	UK13B	56
ESO IG45	84	13.2	01 21 51	-59 04	L 2	3960	L	0	08MAR79	07 09 35	25 00	UK13B	55
ESO 113	84	13.2	01 21 51	-59 04	L 3	2178	L	0	02AUG78	21 16 37	45 00	UK13B	45
ESO 113	84	13.2	01 21 51	-59 04	L 3	2215	L	0	05AUG78	19 52 40	120 00	UK13B	57
ESO IG45	84	13.2	01 21 51	-59 04	L 3	4539	L	0	08MAR79	05 38 08	45 00	UK13B	56
E113IG45	85	13.2	01 21 51	-59 04	L 3	4732	L	0	23MAR79	05 51 45	30 00	UK13B	35
NGC 520	82	12.5	01 21 57	+03 33	L 3	4207	L	0	09FEB79	11 49 43	120 00	FR024	11
HD 9974	11	10.8	01 35 42	+57 54	L 2	3808	L	0	20FEB79	10 44 39	1 30	UK02A	22
HD 9974	11	10.8	01 35 42	+57 54	L 2	3808	S	C	20FEB79	10 37 04	2 20	UK02A	33
HD 9974	11	10.8	01 35 42	+57 54	L 3	4311	S	C	20FEB79	10 22 50	3 30	UK02A	23
HD 9974	11	10.8	01 35 42	+57 54	L 3	4311	L	0	20FEB79	10 13 46	2 20	UK02A	34
HD 10516	26	4.1	01 40 31	+50 26	H 2	2326	S	C	11SEP78	23 23 00	1 40	UK027	66
HD 10516	26	4.1	01 40 31	+50 26	H 2	3082	S	C	01DEC78	12 37 10	1 45	PSD13	60
HD 10516	26	4.1	01 40 31	+50 26	H 3	2630	S	C	11SEP78	23 46 00	2 00	UK027	66
HD 10516	26	4.1	01 40 31	+50 26	H 3	3504	S	C	01DEC78	12 32 17	1 30	PSD13	50
HD 10700	44	3.5	01 41 41	-16 12	H 2	2625	S	C	16OCT78	20 08 27	50 00	UK020	63
HD 10700	44	3.5	01 41 41	-16 12	H 2	2626	S	C	16OCT78	21 31 00	12 00	UK020	53
HD 10700	44	3.5	01 41 45	-16 12	H 2	2194	S	C	28AUG78	01 18 00	21 00	BN053	40
HD 10700	44	3.5	01 41 45	-16 12	H 2	3702	L	0	07FEB79	11 14 40	16 30	BN053	65
HD 10700	44	3.5	01 41 45	-16 21	L 3	4033	L	0	25JAN79	10 51 07	57 00	UK001	44

OBJECT	CL	MAG	RT ASCN HR MN SC	DECLN DEG MN	DISP +CAM	IMAGE	APERT OB	APERT LG	DATE	START HR MN SC	LENGTH MIN SC	PROG	COMMENT
HD 10700	44	3.5	01 41 45	-16 12	L 3	4054	L	0	27JAN79	11 45 38	150 00	UK001	66
HD 11937	44	3.7	01 54 01	-51 51	H 2	2814	S	C	05NOV78	19 27 36	20 00	FG004	35
HD 11937	44	3.7	01 54 01	-51 51	H 2	2831	S	C	05NOV78	15 25 12	60 00	FG004	66
HD 11937	44	3.7	01 54 01	-51 51	H 2	2832	S	C	05NOV78	17 08 12	20 00	FG004	45
+37 442	16	10.0	01 55 36	+38 20	L 2	2805	L	0	02NOV78	13 52 00	45	UK036	50
+37 442	16	10.0	01 55 36	+38 20	L 2	2805	S	C	02NOV78	13 46 00	1 05	UK036	50
+37 442	16	10.0	01 55 36	+38 20	L 3	3207	S	C	02NOV78	13 03 02	1 30	UK036	50
+37 442	16	10.0	01 55 36	+38 20	L 3	3207	L	0	02NOV78	12 53 26	1 00	UK036	60
HD 12311	40	2.9	01 57 12	-61 49	H 2	2193	S	C	28AUG78	00 33 00	7 00	BN053	50
HD 12311	40	2.9	01 57 12	-61 49	H 2	3701	L	0	07FEB79	10 35 00	4 30	BN053	70
HD 12311	40	2.9	01 59 12	-61 49	H 2	1869	S	C	21JUL78	02 12 00	9 00	BN053	GOOD AT LONG WL
HD 12301	25	5.6	01 59 17	+64 09	H 2	3774	L	0	15FEB79	10 32 20	16 00	FM050	50
HD 12301	25	5.6	01 59 17	+64 09	H 3	4265	L	0	15FEB79	09 22 31	65 00	FM050	50
HD 12869	35	5.0	02 03 46	+22 24	L 3	4447	S	C	01MAR79	11 16 48	2 00	RB041	60
HD 12869	35	5.0	02 03 46	+22 24	L 3	4447	L	0	01MAR79	11 02 28	9 00	RB041	70
HD 14386	51	5.6	02 16 49	-03 12	L 2	3892	L	0	28FEB79	12 40 03	29 00	VILSP	67MIRA
HD 15089	30	4.6	02 24 55	+67 10	H 2	2555	B	C	08OCT78	14 25 47	35 00	LHA07	60
HD 15089	34	4.6	02 24 55	+67 11	H 2	3950	L	0	07MAR79	08 48 47	8 00	LHB07	60
HD 15089	30	4.6	02 24 55	+67 10	H 3	2886	S	C	08OCT78	15 08 00	120 00	LHA07	60
HD 15089	34	4.6	02 24 55	+67 11	H 3	4522	L	0	07MAR79	09 01 11	9 00	LHB07	50
HD 15351	16	8.5	02 25 50	+13 39	L 3	4083	B	C	29JAN79	15 06 28	2 30	UK036	40
HD 15351	16	8.5	02 25 50	+13 39	L 3	4083	L	0	29JAN79	14 57 55	1 35	UK036	50
+60 497	12	8.9	02 28 09	+61 23	L 2	3660	S	C	03FEB79	07 20 00	10 00	MG012	70
+60 497	12	8.9	02 28 09	+61 23	L 2	3660	L	0	03FEB79	06 54 23	21 50	MG012	80
+60 497	12	8.8	02 28 09	+61 23	L 2	3663	L	0	03FEB79	12 11 20	4 00	MG012	60
+60 497	12	8.9	02 28 09	+61 23	L 3	4115	L	0	01FEB79	13 31 06	10 30	MG012	40
+60 498	12	9.9	02 28 22	+61 19	L 2	3662	S	C	03FEB79	11 12 36	20 00	MG012	50
+60 498	12	9.9	02 28 22	+61 19	L 2	3662	L	0	03FEB79	10 13 00	57 00	MG012	80
+60 498	12	9.9	02 28 22	+61 19	L 3	4132	L	0	03FEB79	09 28 00	29 00	MG012	50
+60 501	12	9.6	02 28 48	+61 15	L 2	3645	S	C	01FEB79	13 04 30	11 00	MG012	50
+60 501	12	9.6	02 28 48	+61 15	L 2	3645	L	0	01FEB79	12 21 57	26 00	MG012	70
+60 501	12	9.6	02 28 48	+61 15	L 3	4114	L	0	01FEB79	11 50 47	13 45	MG012	50
+60 502	13	7.8	02 28 54	+61 14	L 2	3644	S	0	01FEB79	11 15 06	3 00	MG012	5
+60 502	13	7.8	02 28 54	+61 14	L 2	3644	L	0	01FEB79	11 01 08	7 10	MG012	70
+60 502	13	7.8	02 28 54	+61 14	L 3	4113	L	0	01FEB79	10 48 40	3 25	MG012	50
HD 15570	20	8.0	02 29 01	+61 09	H 2	2736	S	C	27OCT78	14 37 13	30 00	UK068	10
HD 15570	13	8.1	02 29 01	+61 09	L 2	3643	S	C	01FEB79	09 58 30	12 00	MG012	60
HD 15570	13	8.1	02 29 01	+61 09	L 2	3643	L	0	01FEB79	09 25 53	23 00	MG012	70
HD 15570	20	8.0	02 29 01	+61 09	H 3	3171	S	C	27OCT78	15 14 45	167 00	UK068	30
HD 15570	20	8.0	02 29 01	+61 09	H 1	3189	S	C	29OCT78	16 20 00	180 00	UK068	34
HD 15570	13	8.1	02 29 01	+61 09	L 3	4112	L	0	01FEB79	09 05 20	10 34	MG012	45
+60 507	12	8.4	02 29 48	+61 18	L 2	3641	L	0	01FEB79	06 31 54	7 30	MG012	70OK FOR 2200A
+60 507	12	8.4	02 29 48	+61 18	L 2	3642	L	0	01FEB79	07 35 42	2 00	MG012	50
+60 507	12	8.4	02 29 48	+61 18	L 3	4111	L	0	01FEB79	06 55 00	4 00	MG012	55
+60 513	12	9.4	02 30 14	+61 10	L 2	3661	S	C	03FEB79	09 20 00	9 00	MG012	50
+60 513	12	9.4	02 30 14	+61 10	L 2	3661	L	0	03FEB79	08 34 20	27 00	UKCAL	70
+60 513	12	9.4	02 30 14	+61 10	L 3	4131	L	0	03FEB79	07 58 30	14 30	MG012	45
MOON	02	-9.9	02 34 30	+05 46	L 2	3141	L	0	10DEC78	17 44 09	3	UK043	70

OBJECT	CL	MAG	RT ASCN HR MN SC	DECLN DEG MN	DISP +CAM	IMAGE	APERT OB	APERT LG	DATE	START HR MN SC	LENGTH MIN SC	PROG	COMMENT
MOON	02	-9.9	02 34 30	+05 46	L 2	3141	S	C	10DEC78	17 42 35	28	UK043	70
0235+164	87	14.7	02 35 53	+16 24	L 2	3688	L	0	06FEB79	06 53 06	415 00	UK138	22
0235+164	87	14.7	02 35 53	+16 24	L 3	4161	L	0	05FEB79	07 22 41	385 00	UK138	22
HD 16523	10	10.6	02 37 30	+56 31	L 2	3807	L	0	20FEB79	08 41 39	4 00	UK02A	35
HD 16523	10	10.6	02 37 30	+56 31	L 2	3807	S	C	20FEB79	08 28 32	6 00	UK02A	34
HD 16523	10	10.6	02 37 30	+56 31	L 3	4310	S	C	20FEB79	08 03 42	8 00	UK02A	25
HD 16523	10	10.6	02 37 30	+56 31	L 3	4310	L	0	20FEB79	07 52 19	5 00	UK02A	35
NGC 1052	86	12.0	02 38 37	-08 28	L 2	3198	L	0	18DEC78	14 00 20	225 00	UK033	22
NGC 1052	86	12.0	02 38 37	-08 28	L 3	3645	L	0	19DEC78	14 42 40	183 00	UK033	22
NGC 1052	84	12.0	02 38 37	-08 28	L 3	4540	L	0	08MAR79	09 36 13	130 00	UK138	20
HD 17576	44	7.9	02 46 08	-37 11	L 2	3635	S	C	31JAN79	13 43 36	2 00	UK036	40
HD 17576	44	7.9	02 46 08	-37 11	L 2	3635	L	0	31JAN79	13 39 24	1 20	UK036	50
HD 17576	44	7.9	02 46 08	-37 11	L 3	4108	L	0	31JAN79	13 08 22	1 10	UK036	50
HD 17576	44	7.9	02 46 08	-37 11	L 3	4108	S	C	31JAN79	13 02 58	1 35	UK036	50
HD 18884	48	2.5	02 59 40	+03 54	L 3	2807	L	0	29SEP78	22 15 02	90 00	UK001	35
-23 1184	41	8.8	03 00 11	-23 00	L 2	1733	L	0	26JUN78	05 37 00	10 00	VILSP	NO SPECTRUM
HD 19356	22	2.1	03 04 55	+40 46	H 2	2345	B	C	13SEP78	19 04 35	20	UK028	40SW UXP
HD 19356	22	2.1	03 04 55	+40 46	H 3	2643	B	C	13SEP78	17 58 08	1 00	UK028	70SW UXP
HD 19373	44	4.0	03 05 27	+49 25	L 2	2376	L	0	16SEP78	16 35 51	1 55	PSC13	77
HD 19373	44	4.0	03 05 27	+49 25	L 2	2377	L	0	16SEP78	17 29 45	30	PSC13	56
HD 19373	44	4.0	03 05 27	+49 25	L 3	2663	L	0	16SEP78	16 44 58	25 00	PSC13	44
HD 19445	41	8.1	03 05 29	+26 09	L 2	2378	S	C	16SEP78	19 23 31	10 00	PSC13	56
HD 19445	41	8.1	03 05 29	+26 09	L 2	2378	L	0	16SEP78	19 05 46	10 00	PSC13	78
HD 19445	41	8.1	03 05 29	+26 09	L 3	2664	L	0	16SEP78	19 40 59	40 00	PSC13	50
NGC 1275	84	12.7	03 16 30	+41 20	L 2	1283	L	0	06APR78	05 42 21	120 00	UKPOP	WEAK MAXDN=100
NGC 1275	84	12.5	03 16 30	+41 20	L 2	4033	L	0	16MAR79	05 03 43	150 00	UK138	35
NGC 1275	84	12.5	03 16 30	+41 20	L 3	4658	L	0	16MAR79	07 37 11	250 00	UK138	34
HD 20630	44	4.8	03 16 44	+03 11	H 2	1789	S	C	07JUL78	02 48 24	70 00	MR003	GOOD
HD 20630	44	4.8	03 16 44	+03 11	L 3	1926	S	C	07JUL78	04 06 03	35 00	MR003	UNDEREXPOSED
HD 20902	41	1.8	03 20 42	+49 41	L 2	2481	L	0	27SEP78	21 52 26	1 00	UK001	80
HD 20902	41	1.8	03 20 42	+49 41	L 3	2788	L	0	27SEP78	17 01 45	30 00	UK001	70
HD 20902	41	1.8	03 20 42	+49 41	L 3	2789	L	0	27SEP78	18 24 44	120 00	UK001	80
HD 20902	41	1.8	03 20 42	+49 41	L 3	2790	L	0	27SEP78	21 12 19	2 00	UK001	50
HD 20902	41	1.8	03 20 42	+49 41	H 3	2791	L	0	27SEP78	22 17 10	90 00	UK001	70
HD 21278	21	5.0	03 24 29	+48 53	H 2	2525	S	C	02OCT78	14 51 25	4 00	RD016	50
HD 21278	21	5.0	03 24 29	+48 53	H 3	2835	S	C	02OCT78	14 38 03	7 00	RD016	50
HD 21278	21	5.0	03 24 29	+48 53	H 3	2836	S	C	02OCT78	15 27 44	15 00	RD016	80
HD 21278	21	5.0	03 24 29	+48 53	H 3	2838	S	C	02OCT78	19 15 29	11 00	RD016	70
HD 21364	26	3.0	03 24 37	+09 34	H 2	2337	S	C	12SEP78	21 48 00	4 00	UK027	60
HD 21364	26	3.0	03 24 37	+09 34	H 3	2638	S	C	12SEP78	22 24 00	5 00	UK027	70
HD 21291	25	4.2	03 25 00	+59 46	H 2	3772	L	0	15FEB79	07 56 43	10 00	FM050	70
HD 21291	25	4.2	03 25 00	+59 46	H 2	3925	L	0	04MAR79	10 17 20	7 00	FM050	55
HD 21291	25	4.2	03 25 00	+59 46	H 3	4269	L	0	15FEB79	07 02 02	50 00	FM050	70GOOD FOR SW
HD 21389	32	4.6	03 25 54	+58 42	H 2	2928	S	C	13NOV78	14 54 04	20 00	FP047	70
HD 21389	32	4.6	03 25 54	+58 42	H 2	2929	S	C	13NOV78	19 25 01	20 00	FP047	50
HD 21389	32	4.6	03 25 54	+58 42	H 2	3744	L	0	12FEB79	06 42 54	16 00	UK021	60
HD 21389	32	4.5	03 25 54	+58 42	H 2	3771	L	0	15FEB79	06 17 01	33 00	FM050	80
HD 21389	32	4.5	03 25 54	+58 42	H 2	3773	L	0	15FEB79	08 43 21	10 00	FM050	40

OBJECT	CL	MAG	RT ASCN HR MN SC	DECLN DEG MN	DISP +CAM	APERT IMAGE	APERT OR	APERT LG	DATE	START HR MN SC	LENGTH MIN SC	PROG	COMMENT
HD 21389	32	4.6	03 25 54	+58 42	H	3332	S	C	13NOV78	16 00 50	200 00	FP047	70
HD 21389	32	4.6	03 25 54	+58 42	H	4234	L	O	12FEB79	07 04 45	180 00	UK021	700K NEAR 1450A
HD 21389	32	4.5	03 25 54	+58 42	H	4462	L	O	03MAR79	08 39 54	180 00	FM050	70
HD 22192	21	4.2	03 32 55	+48 01	H	2557	S	C	08OCT78	19 40 00	4 52	LM407	30
HD 22192	21	4.2	03 32 55	+48 01	H	2558	S	C	08OCT78	21 20 00	10 00	LM407	70
HD 22192	21	4.2	03 32 55	+48 01	H	2888	S	C	08OCT78	19 28 00	5 30	LM407	20
HD 22192	21	4.2	03 32 55	+48 01	H	2889	S	C	08OCT78	21 00 00	10 00	LM407	70
HD 22192	26	4.2	03 32 56	+48 02	H	2168	S	C	24AUG78	20 02 00	4 00	UK031	60
HD 22192	26	4.3	03 32 56	+48 02	H	2324	S	C	11SEP78	18 45 00	5 00	UK027	55
HD 22192	26	4.2	03 32 56	+48 02	H	3960	L	O	09MAR79	08 24 51	2 10	LM807	70
HD 22192	26	4.2	03 32 56	+48 02	H	2391	S	C	24AUG78	19 50 00	5 00	UK031	60
HD 22192	26	4.3	03 32 56	+48 02	H	2628	S	C	11SEP78	19 29 00	6 00	UK027	66
HD 22192	26	4.2	03 32 56	+48 02	H	4558	L	O	09MAR79	08 32 05	2 10	LM807	55
HD 22928	24	3.1	03 39 18	+47 38	H	2325	S	C	11SEP78	21 46 00	1 20	UK027	66
HD 22928	24	3.1	03 39 18	+47 38	H	2629	S	C	11SEP78	22 19 00	1 45	UK027	66
HD 22928	24	3.0	03 39 20	+47 38	H	2260	S	C	03SEP78	18 37 10	1 10	UK022	50
HD 22928	24	3.0	03 39 20	+47 38	H	2466	S	C	03SEP78	19 09 00	1 25	UK022	70
HD 22928	24	3.0	03 39 20	+47 38	H	2867	S	C	03SEP78	19 56 00	2 33	UK022	700K FOR BW
HD 23302	26	3.0	03 41 54	+23 57	H	2338	S	C	12SEP78	22 58 59	1 00	UK027	40
HD 23302	26	3.0	03 41 54	+23 57	H	2639	S	C	12SEP78	23 43 00	1 45	UK027	40
HD 23324	22	5.6	03 42 11	+24 41	L	3358	S	C	31DEC78	12 56 36	35	MG012	70
HD 23324	22	5.6	03 42 11	+24 41	L	3358	L	O	31DEC78	12 53 09	8	MG012	60
HD 23324	22	5.6	03 42 11	+24 41	L	3760	L	O	31DEC78	13 09 18	9	MG012	50
HD 23324	22	5.6	03 42 11	+24 41	L	3760	S	C	31DEC78	13 00 26	17	MG012	50
HD 23338	22	4.3	03 42 18	+24 19	L	3360	L	O	02JAN79	12 03 03	2	MG012	50
HD 23338	22	4.3	03 42 18	+24 19	L	3360	S	C	02JAN79	11 59 37	6	MG012	70
HD 23338	22	4.3	03 42 18	+24 19	L	3782	S	C	02JAN79	12 10 39	3	MG012	50
HD 23338	22	4.3	03 42 18	+24 19	L	3782	L	O	02JAN79	12 06 21	2	MG012	50
HD 23408	25	3.9	03 42 51	+24 13	L	3361	L	O	02JAN79	13 38 42	2	MG012	50
HD 23408	25	3.9	03 42 51	+24 13	L	3361	S	C	02JAN79	13 25 15	6	MG012	70
HD 23408	25	3.9	03 42 51	+24 13	L	3783	S	C	02JAN79	13 41 20	3	MG012	50
HD 23408	25	3.9	03 42 51	+24 13	L	3783	L	O	02JAN79	13 42 10	1	MG012	50
HD 23432	22	5.7	03 42 56	+24 24	L	3362	L	O	02JAN79	15 20 28	9	MG012	60
HD 23432	22	5.7	03 42 56	+24 24	L	3362	S	C	02JAN79	15 15 48	35	MG012	70
HD 23432	22	5.7	03 42 56	+24 24	L	3784	S	C	02JAN79	15 28 24	18	MG012	50
HD 23432	22	5.7	03 42 56	+24 24	L	3784	L	O	02JAN79	15 24 05	10	MG012	50
HD 23480	25	4.2	03 43 21	+23 48	L	3359	L	O	02JAN79	10 28 58	2	MG012	50
HD 23480	25	4.2	03 43 21	+23 48	L	3359	S	C	02JAN79	10 22 48	8	MG012	70
HD 23480	25	4.2	03 43 21	+23 48	L	3781	S	C	02JAN79	10 40 15	8	MG012	50
HD 23480	25	4.2	03 43 21	+23 48	L	3781	L	O	02JAN79	10 36 30	3	MG012	50
HD 23817	46	3.9	03 43 30	-64 58	H	3703	L	O	07FEB79	12 14 47	30 00	BN053	32
HD 23568	22	6.8	03 44 01	+24 22	L	3337	S	C	31DEC78	11 29 44	2 30	MG012	70
HD 23568	22	6.8	03 44 01	+24 22	L	3337	L	O	31DEC78	11 21 22	40	MG012	60
HD 23568	22	6.8	03 44 01	+24 22	L	3759	L	O	31DEC78	12 05 07	15	MG812	30
HD 23568	22	6.8	03 44 01	+24 22	L	3759	S	C	31DEC78	12 01 07	1 00	MG012	40
HD 23568	22	6.8	03 44 01	+24 22	L	3761	S	C	31DEC78	14 09 53	1 24	MG012	50
HD 23568	22	6.8	03 44 01	+24 22	L	3761	L	O	31DEC78	14 05 55	38	MG012	40
HD 23630	25	2.9	03 44 30	+23 57	H	3381	S	O	04JAN79	11 57 49	53	AR020	40

OBJECT	CL	MAG	RT ASCN HR MN SC	DECLN DEG MN	DISP +CAM	APERT IMAGE	APERT OR	APERT LG	DATE	START HR MN SC	LENGTH MIN SC	PROG	COMMENT
HD 23630	25	2.9	03 44 30	+23 57	L	3382	S	O	04JAN79	13 00 00	3	AR020	80
HD 23630	25	2.9	03 44 30	+23 57	L	3382	L	O	04JAN79	12 57 53	1	AR020	60
HD 23630	25	2.9	03 44 30	+23 57	H	3801	S	O	04JAN79	12 01 41	1 37	AR020	50
HD 23630	24	2.9	03 44 31	+23 57	L	3339	L	O	31DEC78	15 03 14	1	MG012	60
HD 23630	24	2.9	03 44 31	+23 57	L	3339	S	C	31DEC78	14 59 54	3	MG012	70
HD 23630	24	2.9	03 44 31	+23 57	L	3762	S	C	31DEC78	15 09 49	2	MG012	50
HD 23630	24	2.9	03 44 31	+23 57	L	3762	L	O	31DEC78	15 06 26	1	MG012	50
HD 23850	24	3.6	03 46 11	+23 54	L	3340	L	O	31DEC78	16 21 17	1	MG012	50
HD 23850	24	3.6	03 46 11	+23 54	L	3340	S	C	31DEC78	16 17 13	5	MG012	70
HD 23850	24	3.6	03 46 11	+23 54	L	3763	S	C	31DEC78	16 27 38	3	MG012	50
HD 23850	24	3.6	03 46 11	+23 54	L	3763	L	O	31DEC78	16 24 18	2	MG012	50
HD 23862	27	5.1	03 46 13	+23 59	L	3341	L	O	31DEC78	17 04 08	4	MG012	40
HD 23862	27	5.1	03 46 13	+23 59	L	3341	S	C	31DEC78	17 00 38	20	MG012	60
HD 23862	27	5.1	03 46 13	+23 59	L	3760	S	C	02JAN79	09 39 09	10	MG012	40
HD 23862	27	5.1	03 46 13	+23 59	L	3760	L	O	02JAN79	09 35 13	5	MG012	30
HD 24398	21	2.9	03 50 59	+31 44	H	3996	S	C	23JAN79	08 39 06	3 00	UK038	70GOOD AT 1500A
HD 24534	59	6.1	03 52 15	+30 54	H	1830	S	C	16JUL78	02 34 52	20 00	XR802	GOOD AT LONG WL
HD 24534	14	6.1	03 52 15	+30 54	L	3122	L	O	07DEC78	16 28 10	10	HM043	40
HD 24534	14	6.1	03 52 15	+30 54	H	3123	S	C	07DEC78	17 02 13	20 00	HM043	40
HD 24534	59	6.1	03 52 15	+30 54	L	4027	S	C	15MAR79	06 42 08	18	GH141	50
HD 24534	59	6.1	03 52 15	+30 54	L	4027	L	O	15MAR79	06 38 24	15	GH141	60
HD 24534	14	6.5	03 52 15	+30 54	H	1309	S	C	08APR78	05 34 17	60 00	UKPOP	
HD 24534	59	6.1	03 52 15	+30 54	H	2021	S	C	16JUL78	03 23 19	20 00	XR802	UXP X1,5 MAX DN 166
HD 24534	14	6.1	03 52 15	+30 54	H	2978	S	C	18OCT78	20 28 15	15 00	PB042	30X PER
HD 24534	14	6.1	03 52 15	+30 54	L	2979	L	O	18OCT78	21 35 12	6	PB042	30
HD 24534	14	6.1	03 52 15	+30 54	L	2979	S	C	18OCT78	21 31 00	18	PB042	50
HD 24534	14	6.1	03 52 15	+30 54	H	3551	S	C	07DEC78	16 32 28	26 00	HM043	40
HD 24534	14	6.1	03 52 15	+30 54	L	3552	L	O	07DEC78	17 29 24	6	HM043	30
HD 24534	59	6.1	03 52 15	+30 54	H	4638	S	C	15MAR79	04 58 13	40 00	GH141	50
HD 24534	59	6.1	03 52 15	+30 54	L	4639	L	O	15MAR79	06 10 49	15	GH141	40
HD 24534	59	6.1	03 52 15	+30 54	L	4639	S	C	15MAR79	06 07 41	18	GH141	50
HD 24760	20	2.9	03 54 30	+39 52	H	2261	S	C	03SEP78	20 50 00	29	UK022	50
HD 24760	20	2.9	03 54 30	+39 52	H	2468	S	C	03SEP78	21 21 21	27	UK022	60
HD 24912	13	4.0	03 55 43	+35 38	H	3569	S	C	24JAN79	12 35 00	2 30	KH014	60
HD 24912	13	4.0	03 55 43	+35 38	H	4017	S	C	24JAN79	11 50 00	1 50	KH014	50
3C 98	86	14.5	03 56 10	+10 18	L	4256	L	O	14FEB79	07 08 07	90 00	UK016	11BLIND OFFSET
HD 25680	44	5.9	04 02 22	+21 53	H	2368	L	O	17SEP78	17 20 00	25 00	UKF1L	43ND SPECTRUM AT BW
SPACE	07	0.0	04 02 22	+21 53	L	2674	S	O	17SEP78	16 48 13	30 00	UK029	02
SPACE	07	0.0	04 02 22	+21 53	L	2674	L	O	17SEP78	16 48 13	30 00	UK029	03
SPACE	07	0.0	04 02 22	+21 53	H	2675	L	O	17SEP78	18 00 00	345 00	UK029	05
NGC 1514	70	9.4	04 06 06	+30 39	L	3394	L	O	05JAN79	15 14 51	7 00	UK007	50
NGC 1514	70	9.4	04 06 06	+30 39	L	3813	L	O	05JAN79	15 26 32	24 00	UK007	50
VW HYI	54	11.0	04 09 33	-71 25	L	3433	L	O	09JAN79	09 41 54	25 00	UK035	60
VW HYI	54	11.0	04 09 33	-71 25	L	3456	L	O	09JAN79	09 11 30	25 00	UK035	50
HD 26571	25	6.1	04 09 53	+22 17	H	2284	S	C	05SEP78	19 40 00	40 00	UK021	50
HD 26571	25	6.1	04 09 53	+22 17	H	2500	S	C	05SEP78	20 31 30	195 00	UK021	70GOOD FOR BW
HD 26676	22	6.2	04 10 51	+10 06	L	3550	L	O	22JAN79	15 28 50	21	UKF1L	60
HD 26676	22	6.2	04 10 51	+10 06	L	3550	S	O	22JAN79	15 25 48	21	UKF1L	50

OBJECT	CL	MAG	RT ASCN HR MN SC	DECLN DEG MN	DISP +CAM	APERT IMAGE	APERT OR LG	DATE	START HR MN SC	LENGTH MIN SC	PROG	COMMENT
HD 26676	22	6.2	04 10 51	+10 06	L 3	3985	L 0	22JAN79	15 21 30	36	UKFIL	60
HD 26676	22	6.2	04 10 51	+10 06	L 3	3985	S C	22JAN79	15 17 39	36	UKFIL	50
HD 27396	21	4.9	04 17 56	+46 23	H 2	3379	S C	04JAN79	08 54 01	4 22	AR020	50
HD 27396	21	4.9	04 17 56	+46 23	L 2	3380	S C	04JAN79	10 24 08	5	AR020	50
HD 27396	21	4.9	04 17 56	+46 23	L 2	3380	L 0	04JAN79	10 21 08	3	AR020	50
HD 27396	21	4.9	04 17 56	+46 23	H 3	3799	S C	04JAN79	09 51 06	5 40	AR020	50
HD 27396	21	4.9	04 17 56	+46 23	L 3	3800	S C	04JAN79	11 01 19	4	AR020	40
HD 27396	21	4.9	04 17 56	+46 23	L 3	3800	L 0	04JAN79	10 39 19	2	AR020	40
T TAURI	5A	9.6	04 19 04	+19 25	L 2	1278	S C	04APR78	06 04 49	60 00	UKPOP	
T TAURI	5A	9.6	04 19 04	+19 25	L 3	1310	S C	04APR78	10 01 39	15 00	UKPOP	NO DATA PRESENT
T TAURI	5A	9.6	04 19 04	+19 25	L 3	3172	L 0	27OCT78	19 35 49	120 00	UK044	23MICROPHONIC NOISE
HD 27819	31	4.8	04 21 13	+17 20	L 3	4446	L 0	01MAR79	09 25 40	32 00	RB041	80
HD 27819	31	4.8	04 21 13	+17 20	L 3	4446	S C	01MAR79	09 13 30	6 00	RB041	70
HD 28497	2U	5.4	04 26 48	-13 10	H 2	2726	S C	26OCT78	15 37 14	6 30	PSD13	50
HD 28497	20	5.4	04 26 48	-13 10	H 3	3161	S C	26OCT78	16 00 00	4 30	PSD13	40
HD 28446	20	5.8	04 28 04	+53 48	H 3	4001	S C	23JAN79	14 02 00	20 00	UK038	70GOOD AT 1500A
HD 29139	46	0.9	04 33 03	+16 24	H 2	2154	S C	23AUG78	00 25 26	30 00	UK031	37MGII BAT. OTHERS NOT
HD 29139	46	.8	04 33 03	+16 25	L 2	2519	L 0	01OCT78	15 07 00	10 00	UK001	80LW BAT
HD 29139	46	.9	04 33 03	+16 24	H 2	2965	S C	18NOV78	12 49 00	25 00	CB031	17
HD 29139	46	.9	04 33 03	+16 24	H 2	2966	L 0	18NOV78	15 02 18	5 00	CB031	16
HD 29139	46	.9	04 33 03	+16 24	H 2	3176	S C	15DEC78	16 01 48	8 00	CB031	25
HD 29139	46	0.9	04 33 03	+16 25	H 2	3465	S C	12JAN79	08 22 43	8 00	CB031	05
HD 29139	46	0.9	04 33 03	+16 24	L 3	2370	S C	23AUG78	01 05 02	35 00	UK031	37CONT 25 DN ABOVE BGD
HD 29139	46	.8	04 33 03	+16 25	L 3	2805	L 0	29SEP78	19 54 42	10 00	UK001	77DATA LOST
HD 29139	46	.8	04 33 03	+16 25	L 3	2806	L 0	29SEP78	20 48 06	20 00	UK001	35
HD 29139	46	.8	04 33 03	+16 25	L 3	2825	L 0	01OCT78	15 24 07	40 00	UK001	06
HD 29139	46	.9	04 33 03	+16 24	H 3	3380	L 0	18NOV78	13 27 00	140 00	CB031	13
HD 29139	46	0.9	04 33 03	+16 25	H 3	3895	S C	12JAN79	08 42 51	30 00	CB031	03
HD 29139	46	0.8	04 33 03	+16 25	L 3	4032	L 0	25JAN79	12 46 03	90 00	UK001	37DI BAT
HD 29139	46	0.8	04 33 03	+16 25	L 3	4053	L 0	27JAN79	08 31 17	150 00	UK001	56
HD 29763	21	4.3	04 39 14	+22 52	H 2	2336	S C	12SEP78	20 09 28	3 00	UK027	40
HD 29763	21	4.3	04 39 14	+22 52	H 3	2637	S C	12SEP78	20 43 20	3 00	UK027	50
HD 30836	23	3.7	04 48 33	+05 31	H 2	2141	S C	22AUG78	01 08 04	1 20	PSD13	70
HD 30836	23	3.7	04 48 33	+05 31	H 3	2358	S C	22AUG78	00 40 05	1 10	PSD13	50WEAK AT 1550A
HD 30614	13	4.3	04 49 03	+66 15	H 2	3586	S C	26JAN79	15 25 29	3 10	KH014	60
HD 30614	13	4.3	04 49 03	+66 15	H 3	4044	S C	26JAN79	15 17 13	3 25	KH014	50
HD 30614	13	4.3	04 49 04	+66 16	H 2	2312	S C	09SEP78	16 48 09	7 00	FM050	70GOOD FOR BW
HD 30614	13	4.3	04 49 04	+66 16	H 3	2546	S C	08SEP78	16 17 39	3 00	FM050	50
HD 30614	13	4.3	04 49 04	+66 16	H 3	2547	S C	08SEP78	16 49 51	3 00	FM050	50
HD 30614	13	4.3	04 49 04	+66 16	H 3	2548	S C	08SEP78	17 22 06	3 00	FM050	50
HD 30614	13	4.3	04 49 04	+66 16	H 3	2549	S C	08SEP78	17 52 18	3 00	FM050	50
HD 30614	13	4.3	04 49 04	+66 16	H 3	2550	S C	08SEP78	18 23 12	3 00	FM050	50
HD 30614	13	4.3	04 49 04	+66 16	H 3	2551	S C	08SEP78	18 53 47	3 00	FM050	50
HD 30614	13	4.3	04 49 04	+66 16	H 3	2552	S C	08SEP78	19 25 38	3 00	FM050	50
HD 30614	13	4.3	04 49 04	+66 16	H 3	2553	S C	08SEP78	19 56 37	3 00	FM050	50
HD 30614	13	4.3	04 49 04	+66 16	H 3	2554	S C	08SEP78	20 27 22	3 00	FM050	50
HD 30614	13	4.3	04 49 04	+66 16	H 3	2555	S C	08SEP78	20 59 55	3 00	FM050	50ONLY PART IMAGE ARCH.
HD 30614	13	4.3	04 49 04	+66 16	H 3	2556	S C	08SEP78	21 37 25	3 00	FM050	50
HD 30614	13	4.3	04 49 04	+66 16	H 3	2557	S C	08SEP78	22 12 38	3 00	FM050	50
HD 30614	13	4.3	04 49 04	+66 16	H 3	2558	S C	08SEP78	23 02 00	3 00	FM050	50
HD 30614	13	4.3	04 49 04	+66 16	H 3	2559	S C	08SEP78	23 38 34	3 00	FM050	50
HD 30614	13	4.3	04 49 04	+66 16	H 3	2581	S C	09SEP78	16 15 55	3 00	FM050	50NOISY IMAGE
HD 30614	13	4.3	04 49 04	+66 16	H 3	2584	S C	09SEP78	20 15 15	3 00	FM050	50
HD 30614	13	4.3	04 49 04	+66 16	H 3	2585	S C	09SEP78	20 48 04	3 00	FM050	50
HD 30614	13	4.3	04 49 04	+66 16	H 3	2611	S C	10SEP78	15 46 10	3 00	FM050	50
HD 30614	13	4.3	04 49 04	+66 16	H 3	2614	S C	10SEP78	18 24 52	3 00	FM050	40
HD 30614	13	4.3	04 49 04	+66 16	H 3	2615	S C	10SEP78	18 57 09	3 00	FM050	50
HD 30614	13	4.3	04 49 04	+66 16	H 3	2618	S C	10SEP78	21 17 22	3 00	FM050	50
HD 30614	13	4.3	04 49 04	+66 16	H 3	2619	S C	10SEP78	21 50 43	3 00	FM050	50
HD 30614	13	4.3	04 49 04	+66 15	H 3	2944	S C	12OCT78	18 48 50	3 00	FM050	50
HD 30614	13	4.3	04 49 04	+66 15	H 3	4473	S C	04MAR79	09 39 01	3 00	FM050	55
HD 31293	26	7.2	04 52 34	+30 28	H 3	3682	L 0	23DEC78	14 07 24	220 00	NH051	67
HD 31726	20	6.1	04 55 27	-14 18	L 2	2465	L 0	25SEP78	23 15 00	3	PB030	60
HD 31726	20	6.1	04 55 27	-14 18	L 3	2764	L 0	25SEP78	23 20 00	2	PB030	30
HD 31726	20	6.1	04 55 27	-14 18	L 3	3445	L 0	25NOV78	13 30 59	3	PB029	60
HD 31726	20	6.1	04 55 27	-14 18	L 3	3445	S 0	25NOV78	13 26 42	3	PB029	40
HD 31964	33	3.0	04 58 22	+43 45	H 2	1339	S C	19APR78	05 15 00	60 00	MH802	A BIT OXP?TRACE PREV IMG
HD 31964	33	3.0	04 58 22	+43 45	L 3	1384	S C	19APR78	04 15 00	30 00	MH802	GOOD-UNDER 1600-2000
HD 31964	33	3.0	04 58 23	+43 45	H 2	2585	S C	12OCT78	19 23 33	33 00	FM050	60
HD 31964	33	3.0	04 58 23	+43 45	H 2	3924	L 0	04MAR79	08 29 38	25 00	FM050	77
HD 32633	36	7.1	05 02 51	+33 51	H 2	2895	S C	09NOV78	16 28 58	60 00	MM021	60
HD 32633	36	7.1	05 02 51	+33 51	L 2	2896	S C	09NOV78	18 48 57	3 00	MM021	70
HD 32633	36	7.1	05 02 51	+33 51	H 3	3284	S C	09NOV78	17 33 50	70 00	MM021	50
HD 32633	36	7.1	05 02 51	+33 51	L 3	3285	L 0	09NOV78	19 44 06	2 00	MM021	70
HD 32633	36	7.1	05 02 51	+33 51	L 3	3285	S C	09NOV78	19 35 30	4 30	MM021	80
FD 12	11	12.8	05 03 12	-66 45	L 2	3841	L 0	24FEB79	07 26 10	15 00	UK02A	55
FD 12	11	12.8	05 03 12	-66 45	L 3	4363	S 0	24FEB79	07 01 40	6 00	UK02A	34
FD 12	11	12.8	05 03 12	-66 45	L 3	4363	L 0	24FEB79	06 52 17	3 00	UK02A	33
FD 12	11	12.8	05 03 12	-66 45	L 3	4364	L 0	24FEB79	07 47 09	12 00	UK02A	55
FD 13	11	14.0	05 04 42	-70 07	L 2	3842	L 0	24FEB79	09 53 47	23 00	UK02A	30
FD 13	11	14.0	05 04 42	-70 07	L 3	4365	L 0	24FEB79	09 20 27	26 00	UK02A	35
HD 32990	20	5.5	05 05 04	+24 12	H 3	4002	S C	23JAN79	15 06 05	30 00	UK038	80
S-67 57	23	12.4	05 11 16	-67 20	L 2	1552	S C	24MAY78	04 01 38	120 00	UKPOP	OVEREXP 2700A
S-67 57	23	12.4	05 11 16	-67 20	L 3	1639	S C	23MAY78	01 50 40	120 00	UKPOP	VERY GOOD
S-67 57	23	12.3	05 11 58	-67 14	L 2	1709	L 0	21JUN78	23 23 54	45 00	UK024	VERY GOOD MAX DN 194
S-67 57	23	12.3	05 11 58	-67 14	L 3	1828	L 0	22JUN78	00 22 24	70 00	UK024	VERY GOOD MAX DN 230
HD 34085	25	0.3	05 12 06	-08 15	H 2	2259	S C	03SEP78	16 37 30	6	UK022	50
HD 34085	25	0.3	05 12 06	-08 15	H 3	2465	S C	03SEP78	17 32 00	16	UK022	60
HD 34085	25	.1	05 12 08	-08 15	H 2	2592	S C	13OCT78	14 50 56	7	FM050	70RIGEL
HD 34085	25	0.1	05 12 08	-08 15	H 2	3916	L 0	03MAR79	04 25 00	2	FM050	40
HD 34085	25	.1	05 12 08	-08 15	H 3	2957	S C	13OCT78	15 20 13	12	FM050	60
HD 34085	25	0.1	05 12 08	-08 15	H 3	4461	L 0	03MAR79	04 27 22	12	FM050	70
HD 34078	12	5.8	05 13 00	+34 15	H 2	3584	S C	26JAN79	13 32 09	16 00	KH014	70STRONGLY REDDENED
HD 34078	12	5.8	05 13 00	+34 15	H 2	3585	S C	26JAN79	14 20 00	9 00	KH014	50
HD 34078	12	5.9	05 13 00	+34 15	H 3	3999	S C	25JAN79	11 48 02	25 00	UK038	50
HD 34078	12	5.8	05 13 00	+34 15	H 3	4043	S C	26JAN79	12 57 10	18 20	KH014	60

OBJECT	CL	MAG	RT ASCN HR MN SC	DECLN DEG MN	DISP +CAM	IMAGE	APERT OR	LG	DATE	START HR MN SC	LENGTH MIN SC	PROG	COMMENT
HD 34364	36	5.8	05 15 06	+33 42	H 2	2580	S	C	11OCT78	20 23 53	22 00	UK025	40
HD 34364	36	5.8	05 15 06	+33 42	H 3	2923	S	C	11OCT78	21 14 41	25 00	UK025	40
HD 34503	24	3.7	05 15 11	-06 54	H 2	3404	S	C	06JAN79	12 06 48	1 17	AR020	30
HD 34503	24	3.7	05 15 11	-06 54	L 2	3405	S	O	06JAN79	13 27 59	2	AR020	40
HD 34503	24	3.7	05 15 11	-06 54	L 2	3405	L	O	06JAN79	13 24 35	1	AR020	50
HD 34503	24	3.7	05 15 11	-06 54	H 3	3825	S	C	06JAN79	12 02 30	1 49	AR020	40
HD 34503	24	3.7	05 15 11	-06 54	L 3	3826	L	O	06JAN79	13 07 49	2	AR020	60
HD 34503	24	3.7	05 15 11	-06 54	L 3	3826	S	C	06JAN79	12 57 22	2	AR020	40
HD280777	16	9.0	05 15 12	+37 42	L 3	4079	S	C	29JAN79	08 32 27	2 20	UK036	34
HD280777	16	9.0	05 15 12	+37 42	L 3	4079	L	O	29JAN79	08 25 39	1 30	UK036	34
HD 34656	12	6.8	05 17 19	+37 23	L 2	2470	S	C	26SEP78	22 06 00	30	PB030	700K AT 2200
HD 34656	12	6.8	05 17 19	+37 23	L 3	2776	S	C	26SEP78	21 30 47	10	PB030	30
HD 35343	32	9.2	05 18 36	-69 18	L 2	1658	L	O	12JUN78	00 45 00	20 00	BW019	OVEREXPOSED AT LONGNL
HD 35343	32	9.2	05 18 36	-69 18	L 3	1764	L	O	12JUN78	01 15 20	20 00	BW019	WEAK SPECTRUM SPLIT
S-69 108	23	12.1	05 20 22	-69 56	L 2	1726	L	O	25JUN78	01 23 00	45 00	UK028	GOOD MAX DN 200
S-69 108	23	12.1	05 20 22	-69 56	L 2	1727	L	O	25JUN78	04 02 07	90 00	UK028	GOOD BUT SOME SAT
S-69 108	23	12.1	05 20 22	-69 56	L 3	1853	L	O	25JUN78	02 28 30	80 00	UK028	WEAK MAX DN 100
S-67 111	23	12.6	05 20 58	-67 32	L 2	1710	S	C	22JUN78	02 36 00	20 00	UK028	GOOD MAX DN 175
S-67 111	23	12.6	05 20 58	-67 32	L 2	1711	S	C	22JUN78	04 05 00	35 00	UK028	GOOD MAX DN 190
S-67 111	23	12.6	05 20 58	-67 32	L 3	1829	S	C	22JUN78	03 33 00	20 00	UK028	GOOD MAX DN 150
IC 418	70	9.6	05 25 09	-12 44	L 2	3390	S	O	05JAN79	09 17 35	4 00	UK007	52
IC 418	70	9.6	05 25 09	-12 44	L 2	3390	L	O	05JAN79	09 11 39	1 00	UK007	43
IC 418	70	9.6	05 25 09	-12 44	L 2	3391	L	O	05JAN79	10 16 03	3 00	UK007	65
IC 418	70	9.6	05 25 09	-12 44	L 3	3810	L	O	05JAN79	09 35 51	2 00	UK007	55
IC 418	70	9.6	05 25 09	-12 44	L 3	3810	S	O	05JAN79	09 25 49	6 00	UK007	55
+34 1059	20	9.2	05 25 22	+34 58	L 2	2469	S	C	26SEP78	19 12 54	13 00	PB030	700K AT 2200
+34 1059	20	9.2	05 25 22	+34 58	L 3	2774	S	C	26SEP78	18 43 53	4 00	PB030	50
N 49	75	14.0	05 26 00	-66 08	L 3	1861	L	O	26JUN78	23 25 00	360 00	BD033	ALMOST NOTHING
N 49	75	14.0	05 26 00	-66 08	L 3	2115	L	O	26JUL78	21 14 21	385 00	BD033	OK
GW ORI	58	10.1	05 26 20	+11 50	L 2	2748	L	O	28OCT78	19 22 51	142 00	UK048	77
GW ORI	58	10.1	05 26 20	+11 50	L 3	3180	L	O	28OCT78	18 16 39	60 00	UK048	11
S-67 108	23	12.5	05 26 33	-67 40	L 2	1594	S	C	02JUN78	04 36 40	20 00	UKP0P	VERY GOOD
S-67 108	23	12.5	05 26 33	-67 40	L 3	1620	S	C	24MAY78	07 18 00	25 00	UKP0P	NO SPECTRUM
S-67 108	23	12.5	05 26 33	-67 40	L 3	1690	S	C	02JUN78	05 19 25	20 00	UKP0P	PERFECT
S-67 114	23	12.1	05 27 14	-67 29	L 2	1721	L	O	24JUN78	02 03 00	55 00	UK028	OK
S-67 114	23	12.1	05 27 14	-67 29	L 3	1845	L	O	24JUN78	03 15 47	131 00	UK028	GOOD BUT SOME SAT
HD 36166	20	5.8	05 27 19	+01 45	H 3	3538	S	C	05DEC78	17 19 02	4 30	PB013	50
+34 1079	20	8.9	05 28 51	+34 54	L 2	1275	S	C	03APR78	09 04 38	20	PB030	
+34 1079	20	8.8	05 28 51	+34 54	L 3	2775	S	C	26SEP78	20 26 06	2 30	PB030	50
HD 36486	13	2.2	05 29 27	-00 20	H 2	3570	S	C	24JAN79	14 20 00	11	KH014	50
HD 36486	13	2.2	05 29 27	-00 20	H 3	4018	S	C	24JAN79	13 40 00	11	KH014	60
HD 36371	24	4.8	05 29 28	+32 09	H 2	2586	S	C	12OCT78	21 07 20	25 00	FM050	70
HD 36371	24	4.8	05 29 28	+32 09	H 3	2945	S	C	12OCT78	20 26 56	33 00	FM050	60
HD 36486	13	2.2	05 29 28	-00 20	H 2	2241	S	C	01SEP78	22 56 30	20	UK022	70
HD 36486	13	2.2	05 29 28	-00 20	H 2	2242	S	C	01SEP78	23 40 00	10	UK022	50
HD 36486	13	2.2	05 29 28	-00 20	H 3	2436	S	C	01SEP78	22 56 30	12	UK022	70GOOD FOR SM
HD 36512	20	4.6	05 29 31	-07 20	L 2	2468	S	C	26SEP78	17 32 00	1	PB030	50
HD 36512	20	4.6	05 29 31	-07 20	H 2	3559	S	C	23JAN79	09 42 09	1 15	UK038	60

OBJECT	CL	MAG	RT ASCN HR MN SC	DECLN DEG MN	DISP +CAM	IMAGE	APERT OR	LG	DATE	START HR MN SC	LENGTH MIN SC	PROG	COMMENT
HD 36512	20	4.6	05 29 31	-07 20	L 3	2773	S	C	26SEP78	16 43 43	1	PB030	60
HD 36512	20	4.6	05 29 31	-07 20	H 3	3997	S	C	23JAN79	09 36 17	1 15	UK038	70
FD 37	10	14.4	05 30 18	-67 28	L 2	3843	L	O	24FEB79	11 34 30	44 00	UK02A	56
FD 37	10	14.4	05 30 18	-67 28	L 3	4366	L	O	24FEB79	10 59 37	29 00	UK02A	46
HD 36665	26	8.0	05 31 30	+28 01	H 2	3490	L	O	14JAN79	13 34 00	40 00	UK068	40
HD 36665	26	8.0	05 31 30	+28 01	H 3	3917	L	O	14JAN79	10 25 16	180 00	UK068	50
P0531+21	62	16.0	05 31 31	+21 59	L 2	3736	L	O	11FEB79	07 30 13	375 00	VILSP	30
P0531+21	62	16.0	05 31 31	+21 59	L 3	4225	L	O	11FEB79	07 52 03	180 00	VILSP	11
P0531+21	62	16.0	05 31 31	+21 59	L 3	4226	L	O	11FEB79	11 18 17	120 00	VILSP	11
M 42	72	10.0	05 32 00	-05 25	L 2	2680	S	O	22OCT78	15 57 57	15 00	MP02A	20OFFSET 34 SEC W THETC
M 42	72	10.0	05 32 00	-05 25	L 2	2680	L	O	22OCT78	15 57 57	15 00	MP02B	50OFFSET 34 SEC W THETC
HD 37022	12	5.1	05 32 00	-05 25	L 2	2681	L	O	22OCT78	17 40 00	3	MP02B	70
HD 37022	12	5.1	05 32 00	-05 25	L 2	2681	S	C	22OCT78	17 34 55	3	MP02B	50
M 42	72	10.0	05 32 00	-05 25	L 3	3101	L	O	22OCT78	14 47 31	25 00	MP02B	80OFFSET 34 SEC W THETC
M 42	72	10.0	05 32 00	-05 25	L 3	3101	S	O	22OCT78	14 47 31	25 00	MP02B	20OFFSET 34 SEC W THETC
M 42	72	10.0	05 32 00	-05 25	L 3	3102	S	O	22OCT78	15 39 00	11 00	MP02B	20OFFSET 34 SEC W THETC
M 42	72	10.0	05 32 00	-05 25	L 3	3102	L	O	22OCT78	15 39 00	11 00	MP02B	55OFFSET 34 SEC W THETC
HD 37022	12	5.1	05 32 00	-05 25	L 3	3103	L	O	22OCT78	17 00 58	2	MP02B	70
HD 37022	12	5.1	05 32 00	-05 25	L 3	3103	S	C	22OCT78	16 55 36	2	MP02B	50THETA 1 ORIONIS C
R 116	23	10.5	05 32 06	-68 35	L 2	1757	L	O	01JUL78	03 45 51	6 00	BW019	A BIT STRONG
R 116	23	10.5	05 32 06	-68 35	L 3	1893	L	O	01JUL78	04 00 17	11 00	BW019	GOOD
HD269696	16	11.1	05 32 08	-69 55	L 2	3309	S	C	28DEC78	11 08 11	4 00	UK017	50
HD269696	16	11.1	05 32 08	-69 55	L 2	3309	L	O	28DEC78	10 59 13	2 00	UK017	50
HD269696	16	11.1	05 32 08	-69 55	L 2	3310	S	C	28DEC78	12 31 57	4 00	UK017	50
HD269696	16	11.1	05 32 08	-69 55	L 2	3310	L	O	28DEC78	12 24 28	2 00	UK017	50
HD269696	16	11.1	05 32 08	-69 55	L 2	3311	S	C	28DEC78	13 24 49	4 00	UK017	50
HD269696	16	11.1	05 32 08	-69 55	L 2	3311	L	O	28DEC78	13 17 07	2 00	UK017	50
HD269696	16	11.1	05 32 08	-69 55	L 2	3312	S	C	28DEC78	14 48 44	4 00	UK017	50
HD269696	16	11.1	05 32 08	-69 55	L 2	3312	L	O	28DEC78	14 22 20	2 00	UK017	50
HD269696	16	11.1	05 32 08	-69 55	L 2	3313	S	C	28DEC78	15 42 00	4 00	UK017	50
HD269696	16	11.1	05 32 08	-69 55	L 2	3313	L	O	28DEC78	15 32 51	2 00	UK017	50
HD269696	16	11.1	05 32 08	-69 55	L 2	3314	S	C	28DEC78	16 34 42	4 00	UK017	50
HD269696	16	11.1	05 32 08	-69 55	L 2	3315	S	C	28DEC78	17 24 41	4 00	UK017	50
HD269696	16	11.1	05 32 08	-69 55	L 2	3315	L	O	28DEC78	17 18 09	2 00	UK017	50
HD269696	16	11.1	05 32 08	-69 55	H 2	3327	L	O	30DEC78	11 24 50	200 00	UK017	60SEVEN EXPOSURES ADDED
HD269696	16	11.1	05 32 08	-69 55	L 3	3728	L	O	28DEC78	11 29 05	2 30	UK017	70
HD269696	16	11.1	05 32 08	-69 55	L 3	3728	S	C	28DEC78	11 18 33	5 00	UK017	70SM SAT
HD269696	16	11.1	05 32 08	-69 55	H 3	3729	L	O	28DEC78	12 43 13	178 00	UK017	60SEVEN EXPOSURES ADDED
HD269696	16	11.1	05 32 08	-69 55	L 3	3743	S	C	30DEC78	11 14 28	3 30	UK017	40
HD269696	16	11.1	05 32 08	-69 55	L 3	3743	L	O	30DEC78	11 00 59	1 45	UK017	60
HD269696	16	11.1	05 32 08	-69 55	L 3	3744	S	C	30DEC78	12 04 54	4 00	UK017	60
HD269696	16	11.1	05 32 08	-69 55	L 3	3744	L	O	30DEC78	11 55 12	1 35	UK017	60
HD269696	16	11.1	05 32 08	-69 55	L 3	3745	S	C	30DEC78	12 56 32	3 45	UK017	50
HD269696	16	11.1	05 32 08	-69 55	L 3	3745	L	O	30DEC78	12 49 48	1 25	UK017	60
HD269696	16	11.1	05 32 08	-69 55	L 3	3746	S	C	30DEC78	13 39 51	3 45	UK017	60
HD269696	16	11.1	05 32 08	-69 55	L 3	3746	L	O	30DEC78	13 32 55	1 20	UK017	50
HD269696	16	11.1	05 32 08	-69 55	L 3	3747	S	C	30DEC78	14 23 33	3 30	UK017	60
HD269696	16	11.1	05 32 08	-69 55	L 3	3747	L	O	30DEC78	14 16 29	1 15	UK017	50

OBJECT	CL	MAG	RT ASCN HR MN SC	DECLN DEG MN	DISP *CAM	IMAGE	APERT OR	LG	DATE	START HR MN SC	LENGTH MIN SC	PROG	COMMENT
HD269696	16	11.1	05 32 08	-69 55	L 3	3748	S	C	30DEC78	15 09 10	3 00	UK017	50
HD269696	16	11.1	05 32 08	-69 55	L 3	3748	L	D	30DEC78	15 00 09	1 15	UK017	50
HD269696	16	11.1	05 32 08	-69 55	L 3	3749	S	C	30DEC78	15 52 26	3 00	UK017	50
HD269696	16	11.1	05 32 08	-69 55	L 3	3749	L	D	30DEC78	15 45 31	1 15	UK017	50
HD269696	16	11.1	05 32 08	-69 55	L 3	3750	S	C	30DEC78	17 02 56	3 00	UK017	50
HD269696	16	11.1	05 32 08	-69 55	L 3	3750	L	D	30DEC78	16 56 23	1 15	UK017	50
HD269696	16	11.1	05 32 08	-69 55	L 3	3751	S	C	30DEC78	17 40 47	1 15	UK017	50
HD269696	16	11.1	05 32 08	-69 55	L 3	3751	L	D	30DEC78	17 31 33	3 00	UK017	50
HD 36861	12	3.6	05 32 23	+09 54	H 2	3583	S	C	26JAN79	12 24 01	44	KH014	60
HD 36861	12	3.6	05 32 23	+09 54	H 3	4042	S	C	26JAN79	11 58 01	36	KH014	60
LMC-X4	59	14.0	05 32 47	-66 24	L 3	2019	L	D	15JUL78	22 00 28	60 00	UKIXR	NO SPECTRUM
LMC X4	59	13.8	05 32 48	-66 24	L 2	1427	L	D	02MAY78	03 03 12	100 00	UKIXR	SLIGHTLY UNDEREXP WRONG
LMC X4	59	13.8	05 32 48	-66 24	L 2	1438	L	D	04MAY78	06 25 32	60 00	XRB01	GOOD
LMC X4	59	13.8	05 32 48	-66 24	L 3	1458	L	D	02MAY78	01 50 30	60 00	UKIXR	UNDEREXP WRONG STAR
LMC X4	59	13.8	05 32 48	-66 24	L 3	1459	L	D	02MAY78	04 56 23	150 00	UKIXR	1600A UNDEREXP WRONG ST
LMC X4	59	13.8	05 32 48	-66 24	L 3	1477	L	D	04MAY78	05 11 51	60 00	XRB01	GOOD
HD 37023	20	6.8	05 32 50	-05 25	H 2	1331	S	C	18APR78	08 42 00	15 00	UKPOP	
HD 37023	20	6.8	05 32 50	-05 25	H 5	1380	S	C	18APR78	09 55 00	15 00	UKPOP	OVEREXP.
HD 37041	13	5.2	05 32 55	-05 37	H 2	1345	S	C	20APR78	04 10 00	5 00	UKPOP	UNDEREXP.
HD 37041	13	5.2	05 32 55	-05 37	H 3	1391	S	C	20APR78	04 00 00	3 00	UKPOP	VERY GOOD THETA2 ORC
HD 37041	12	5.0	05 32 55	-05 26	H 2	2602	S	C	14OCT78	18 04 10	4 00	PB042	70NOISE
HD 37041	12	5.0	05 32 55	-05 26	H 2	2603	S	C	14OCT78	18 43 00	2 00	PB042	40
HD 37041	12	5.1	05 32 55	-05 27	H 2	2728	S	C	26OCT78	19 20 00	3 00	PB042	11
HD 37041	12	5.1	05 32 55	-05 26	H 2	3318	S	C	29DEC78	10 47 25	3 00	FC027	60
HD 37041	12	5.0	05 32 55	-05 26	H 3	2976	S	C	14OCT78	17 53 04	3 00	PB042	70
HD 37041	12	5.0	05 32 55	-05 26	H 3	2977	S	C	14OCT78	19 30 00	2 00	PB042	50
HD 37041	12	5.1	05 32 55	-05 27	H 3	3163	S	C	26OCT78	19 34 00	2 00	PB042	11
HD 37041	12	5.1	05 32 55	-05 26	H 3	3735	S	C	29DEC78	10 54 43	2 00	FC027	50
M 42	72	10.0	05 33 00	-05 27	L 2	2682	S	D	22OCT78	18 46 58	15 00	MP028	200FFSET 39 SEC W THE2A
M 42	72	10.0	05 33 00	-05 27	L 2	2682	L	D	22OCT78	18 46 58	15 00	MP028	500FFSET 39 SEC W THE2A
HD 37041	12	5.1	05 33 00	-05 27	L 2	2683	L	D	22OCT78	20 03 25	3	MP028	70
HD 37041	12	5.1	05 33 00	-05 27	L 2	2683	S	D	22OCT78	19 59 21	3	MP028	50
M 42	72	10.0	05 33 00	-05 27	L 3	3104	S	D	22OCT78	17 55 43	13 00	MP028	200FFSET 39 SEC W THE2A
M 42	72	10.0	05 33 00	-05 27	L 3	3104	L	D	22OCT78	17 55 43	13 00	MP028	650FFSET 39 SEC W THE2A
HD 37041	12	5.1	05 33 00	-05 27	L 3	3105	L	D	22OCT78	19 54 41	2	MP028	70
HD 37041	12	5.1	05 33 00	-05 27	L 3	3105	S	C	22OCT78	17 48 37	2	MP028	50THETA 2 ORIONIS A
HD 37061	20	6.8	05 33 04	-05 18	L 2	2435	L	D	22SEP78	18 55 00	3 00	UK019	80
HD 37061	20	6.8	05 33 04	-05 18	L 2	2435	S	D	22SEP78	18 48 56	1 00	UK019	70
HD 37061	20	6.8	05 33 04	-05 18	L 3	2732	S	C	22SEP78	19 04 09	4 00	UK019	90
HD 37128	23	1.7	05 33 40	-01 14	H 2	2238	S	C	01SEP78	20 32 30	16	UK022	70GOOD FOR SW
HD 37128	23	1.7	05 33 40	-01 14	H 2	2239	S	C	01SEP78	21 42 40	12	UK022	70
HD 37128	23	1.7	05 33 40	-01 14	H 2	2240	S	C	01SEP78	22 11 20	8	UK022	50
HD 37128	23	1.7	05 33 40	-01 14	H 3	2435	S	C	01SEP78	21 14 22	10	UK022	60
HD 37128	13	1.7	05 33 41	-01 14	H 2	3119	S	C	07DEC78	10 34 06	6	HH043	50
HD 37128	13	1.7	05 33 41	-01 14	H 3	3536	S	C	05DEC78	15 16 34	7	HH043	50
V380 ORI	58	10.5	05 34 00	-06 45	L 2	2742	L	D	28OCT78	18 40 26	60 00	UK044	77
V380 ORI	58	10.5	05 34 00	-06 45	L 2	2743	L	D	28OCT78	17 12 03	15 00	UK044	55
V380 ORI	58	10.5	05 34 00	-06 45	L 3	3179	L	D	28OCT78	16 01 43	60 00	UK044	44

OBJECT	CL	MAG	RT ASCN HR MN SC	DECLN DEG MN	DISP *CAM	IMAGE	APERT OR	LG	DATE	START HR MN SC	LENGTH MIN SC	PROG	COMMENT
HD 37202	26	3.0	05 34 39	+21 07	H 2	2139	S	C	21AUG78	22 09 21	1 00	PSD13	70SAT 2700 TO 3000A
HD 37202	26	3.0	05 34 39	+21 07	L 2	2140	L	U	21AUG78	23 43 20	1	PSD13	70
HD 37202	26	3.0	05 34 39	+21 07	L 2	2140	S	C	21AUG78	23 38 12	1	PSD13	70
HD 37202	26	3.0	05 34 39	+21 07	H 2	3084	S	C	01DEC78	16 15 00	50	PSD13	70
HD 37202	26	3.0	05 34 39	+21 07	H 2	3085	S	C	01DEC78	17 35 38	30	PSD13	50SOME DATA LOST
HD 37202	26	3.0	05 34 39	+21 07	H 3	2356	S	C	21AUG78	21 09 53	35	PSD13	50
HD 37202	26	3.0	05 34 39	+21 07	H 3	2357	S	C	21AUG78	22 16 13	50	PSD13	70MEAN 100 DN AT 1500A
HD 37202	26	3.0	05 34 39	+21 07	H 3	3506	S	C	01DEC78	16 10 06	40	PSD13	50
N 63 A	75	15.0	05 35 48	-66 08	L 3	3490	L	D	29NOV78	13 08 00	395 00	BD033	64
HD245770	20	9.4	05 35 48	+26 17	L 2	3321	L	D	29DEC78	17 10 38	30 00	FC027	80
HD245770	20	9.0	05 35 48	+26 17	L 3	2858	S	C	04OCT78	20 43 00	60 00	PB042	60
HD 37742	13	2.0	05 38 14	-01 58	H 2	3571	S	C	24JAN79	15 19 00	9	KH014	50
HD 37742	13	2.0	05 38 14	-01 58	H 3	4019	S	C	24JAN79	15 24 00	9	KH014	60
HD 37742	13	2.0	05 38 15	-01 59	H 2	2235	S	C	01SEP78	18 26 20	8	UK022	50
HD 37742	13	2.0	05 38 15	-01 59	H 2	2236	S	C	01SEP78	19 22 20	15	UK022	60
HD 37742	13	2.0	05 38 15	-01 59	H 2	2237	S	C	01SEP78	19 50 33	12	UK022	50
HD 37742	13	2.0	05 38 15	-01 59	H 3	2434	S	C	01SEP78	16 54 00	9	UK022	50
HD 37805	31	8.6	05 38 32	-02 20	L 2	2425	L	D	21SEP78	18 00 00	2 15	UK019	60
HD 37805	31	8.6	05 38 32	-02 20	L 2	2425	S	C	21SEP78	17 45 09	45	UK019	30
HD 37805	31	8.6	05 38 32	-02 20	L 3	2719	S	C	21SEP78	17 15 30	1 30	UK019	20
HD 37805	31	8.6	05 38 32	-02 20	L 3	2720	S	C	21SEP78	18 38 36	4 00	UK019	70
HD 37805	31	8.6	05 38 32	-02 20	L 3	2720	L	D	21SEP78	18 27 40	4 00	UK019	30
S-69 239	23	10.2	05 38 34	-69 08	L 3	1830	L	D	22JUN78	05 25 00	12 00	UK024	NO SPECTRUM
HD 38268	11	9.7	05 39 00	-69 08	L 2	3844	S	C	24FEB79	13 29 07	1 30	UK02A	33
HD 38268	11	9.7	05 39 00	-69 08	L 3	4367	S	C	24FEB79	13 25 18	1 12	UK02A	33
HD 37903	20	7.8	05 39 07	-02 17	L 2	2436	S	D	22SEP78	21 41 48	40	UK019	40
HD 37903	20	7.8	05 39 07	-02 17	L 2	2437	L	D	22SEP78	22 22 53	1 30	UK019	60
HD 37903	20	7.8	05 39 07	-02 17	L 2	2437	S	C	22SEP78	22 15 50	40	UK019	50
HD 37903	20	7.8	05 39 07	-02 17	L 3	2733	S	D	22SEP78	22 52 00	1 00	UK019	50
FD 70	11	11.1	05 39 12	-69 04	L 2	3844	L	D	24FEB79	13 11 03	2 48	UK02A	34
FD 70	11	11.1	05 39 12	-69 04	L 3	4367	L	D	24FEB79	13 06 03	1 48	UK02A	34
S-69 247	25	10.4	05 39 19	-69 32	L 2	1720	L	D	23JUN78	23 34 04	15 00	UK024	GOOD MAX DN 250
S-69 247	25	10.4	05 39 19	-69 32	L 3	1844	L	D	24JUN78	00 27 22	12 00	UK024	WEAK MAX DN 80
S-69 247	25	10.4	05 39 19	-69 32	L 3	1852	L	D	25JUN78	00 07 44	30 00	UK024	GOOD MAX DN 200
FU ORI	58	9.0	05 42 38	+09 03	L 2	3933	L	D	05MAR79	06 20 41	60 00	UK044	47
FU ORI	58	9.0	05 42 38	+09 03	L 2	3934	L	D	05MAR79	08 33 00	15 00	UK044	35
FU ORI	58	9.0	05 42 38	+09 03	L 3	4495	L	D	05MAR79	07 28 22	60 00	UK044	10
HD 38666	12	5.2	05 44 08	-32 19	H 2	3581	S	C	26JAN79	08 54 21	2 00	KH014	60
HD 38666	12	5.2	05 44 08	-32 19	H 3	4039	S	C	26JAN79	08 25 54	2 00	KH014	70
S-67 297	23	12.7	05 44 58	-69 22	L 2	1692	S	D	19JUN78	02 46 59	45 00	UK024	NO SPECTRUM
S-67 297	23	12.7	05 44 58	-69 22	L 3	1812	S	D	19JUN78	04 00 48	80 00	UK024	NO SPECTRUM
HD 38771	23	2.0	05 45 24	-09 41	H 2	2233	S	C	01SEP78	16 17 05	14	UK022	50
HD 38771	23	2.0	05 45 24	-09 41	H 2	2234	S	C	01SEP78	17 37 51	30	UK022	70GOOD FOR SW
HD 38771	23	2.0	05 45 24	-09 41	H 3	2433	S	C	01SEP78	17 00 00	15	UK022	50
HD247967	16	9.0	05 46 23	+20 34	L 3	4080	S	C	29JAN79	09 41 41	3 25	UK036	50
HD247967	16	9.0	05 46 23	+20 34	L 3	4080	L	U	29JAN79	09 49 10	2 20	UK036	50
HD 39801	48	.9	05 52 28	+07 28	H 2	2622	S	C	16OCT78	16 46 53	6 00	UK020	23
HD 39801	48	.9	05 52 28	+07 28	H 2	2623	S	C	16OCT78	17 25 02	30 00	UK020	37

OBJECT	CL	MAG	RT ASCN HR MN SC	DECLN DEG MN	DISP +CAM	IMAGE	APERT OR LG	DATE	START HR MN SC	LENGTH MIN SC	PROG	COMMENT
HD 39801	48	.9	05 52 28	+07 24	H 2	2624	S C	16OCT78	18 48 00	10 00	UK020	36
HD 39801	48	0.8	05 52 28	+07 24	L 3	1379	S C	18APR78	06 20 00	40 00	UKPOP	GOOD
IC 2149	70	10.5	05 52 41	+46 06	L 2	2684	L O	22OCT78	20 59 01	9 00	MP028	61
IC 2149	70	10.5	05 52 41	+46 06	L 3	3073	L O	20OCT78	14 54 14	30 00	MP028	90ND EMISSION VISIBLE
IC 2149	70	10.5	05 52 41	+46 06	L 3	3106	S O	22OCT78	21 42 00	5 00	MP028	21
IC 2149	70	10.5	05 52 41	+46 06	L 3	3106	L O	22OCT78	21 32 33	5 00	MP028	44
HD 40136	40	3.7	05 54 08	-14 10	L 2	2761	L O	30OCT78	17 25 11	35	RB039	60REFERS TO 2100
HD 40136	40	3.7	05 54 08	-14 10	H 2	2762	S C	30OCT78	18 00 01	26 00	RB039	40REFERS TO 2100
HD 40111	23	4.8	05 54 53	+25 57	H 2	3491	L O	14JAN79	15 12 45	35	UK068	40
HD 40111	23	4.8	05 54 53	+25 57	H 2	3745	L O	12FEB79	10 51 02	1 10	UK021	50
HD 40111	23	4.8	05 54 53	+25 57	H 3	3918	L O	14JAN79	15 06 20	2 10	UK068	50
HD 40111	23	4.8	05 54 53	+25 57	H 3	4235	L O	12FEB79	10 57 27	2 40	UK021	60
HD 40312	36	2.7	05 56 19	+37 13	H 3	4884	S C	01MAR79	07 34 26	5 00	RB041	70OK AT SW
HD 40312	36	2.7	05 56 19	+37 13	H 3	4885	S C	01MAR79	08 08 41	15 00	RB041	80OK AT 1300A
HD 41117	23	4.5	06 00 57	+20 08	H 2	2282	S C	05SEP78	16 40 20	9 00	UK021	80SAT DUE TO HIGH BGD
HD 41117	23	4.5	06 00 57	+20 08	H 2	2283	S C	05SEP78	17 21 35	7 00	UK021	60OK BUT HIGH BGD STILL
HD 41117	23	4.5	06 00 57	+20 08	H 3	2499	S C	05SEP78	17 59 00	40 00	UK021	70OK FOR SWJ STILL BGD
HD 41335	26	5.2	06 01 48	-06 42	H 2	2138	S C	21AUG78	20 00 08	6 00	PSD13	70SAT ABOVE 2700A
HD 41335	26	5.2	06 01 48	-06 42	H 2	2727	S C	26OCT78	16 49 00	6 00	PSD13	50
HD 41335	26	5.2	06 01 48	-06 42	H 2	3083	S C	01DEC78	14 48 53	6 00	PSD13	70
HD 41335	26	5.2	06 01 48	-06 42	H 2	3110	S C	05DEC78	16 22 40	6 00	PSD13	70
HD 41335	26	5.2	06 01 48	-06 42	H 3	2355	S C	21AUG78	19 39 16	5 00	PSD13	50
HD 41335	26	5.2	06 01 48	-06 42	H 3	3162	S C	26OCT78	17 30 00	5 30	PSD13	50
HD 41335	26	5.2	06 01 48	-06 42	H 3	3505	S C	01DEC78	14 38 14	5 30	PSD13	50
HD 41335	26	5.2	06 01 48	-06 42	H 3	3537	S C	05DEC78	16 10 30	5 30	PSD13	50
HD 41511	39	4.9	06 02 45	-16 29	H 2	4144	L O	29MAR79	05 21 15	25 00	MHA02	56
HD 41511	39	4.9	06 02 45	-16 29	H 3	4790	L O	29MAR79	04 28 25	50 00	MHA02	56
HD 42087	23	5.7	06 06 42	+23 07	H 2	2527	S C	02OCT78	20 01 28	25 00	RD016	70
HD 42087	23	5.7	06 06 42	+23 07	H 3	2639	S C	02OCT78	20 33 25	60 00	RD016	60
HD 43378	38	4.5	06 15 13	+59 02	H 2	3951	L O	07MAR79	10 16 18	5 01	LHB07	50
HD 43378	38	4.5	06 15 13	+59 02	H 3	4523	L O	07MAR79	09 53 12	5 30	LHB07	45
HD 45348	40	-.7	06 22 50	-52 40	H 2	2916	L O	11NOV78	18 46 53	15	FP047	60
HD 45348	40	-.7	06 22 50	-52 40	H 3	3308	L O	11NOV78	18 26 05	45	RB041	60
HD 45348	40	-.7	06 22 50	-52 40	H 3	3309	L O	11NOV78	19 17 58	30 00	RB041	80OK ONLY NEAR 1550A
HD 45348	40	-0.7	06 22 51	-52 00	H 2	3761	S C	13FEB79	13 25 42	25	FM050	11MISSED APERTURE
HD 45348	40	-0.8	06 22 51	-52 40	H 2	3919	L O	03MAR79	07 19 39	9	FM050	50
HD 45348	40	-0.7	06 22 51	-52 00	H 3	4250	L O	13FEB79	13 36 08	50	FM050	70LWSAT
HD 45677	26	8.5	06 25 59	-13 01	L 2	2416	S C	20SEP78	16 48 50	10 00	PSA13	80
HD 45677	26	8.5	06 25 59	-13 01	L 2	2416	L O	20SEP78	16 42 10	1 30	PSA13	70
HD 45677	26	8.5	06 25 59	-13 01	H 2	2417	L O	20SEP78	17 54 14	75 00	PSA13	58
HD 45677	26	8.5	06 25 59	-13 01	H 2	2418	L O	20SEP78	19 43 10	12 00	PSA13	
HD 45677	26	8.5	06 25 59	-13 01	L 3	2707	L O	20SEP78	17 43 51	2 00	PSA13	60
HD 45677	26	8.6	06 25 59	-13 01	H 3	4761	L O	27MAR79	05 58 53	110 00	MHA02	56
HS 45910	26	7.0	06 27 52	+05 54	H 2	4131	L O	27MAR79	08 11 18	35 00	MHA02	56
HS 45910	26	7.0	06 27 52	+05 54	H 3	4762	L O	27MAR79	08 54 12	75 00	MHA02	56
HD 46300	32	4.5	06 30 11	+07 22	H 2	3757	S C	13FEB79	06 38 19	13 00	FM050	50
HD 46300	32	4.5	06 30 11	+07 22	H 3	4248	S C	13FEB79	07 05 46	33 00	FM050	50
HD 47129	15	6.1	06 34 43	+06 11	H 2	2938	S C	14NOV78	15 43 13	11 30	UK010	50
HD 47129	15	6.1	06 34 43	+06 11	H 3	3347	S C	14NOV78	15 15 58	15 00	UK010	50
HD 47240	23	6.1	06 35 13	+05 00	H 2	2939	S C	14NOV78	17 12 00	19 00	UK010	50
HD 47240	23	6.1	06 35 13	+05 00	H 2	4072	L O	20MAR79	04 53 25	9 30	UK028	50
HD 47240	23	6.1	06 35 13	+05 00	H 3	3348	S C	14NOV78	16 24 53	41 30	UK010	50
HD 47240	23	6.1	06 35 13	+05 00	L 3	4703	S C	20MAR79	04 47 09	1 00	UK028	60
HD 47240	23	6.1	06 35 13	+05 00	L 3	4703	L O	20MAR79	04 43 22	40	UK028	70
HD 47240	23	6.1	06 35 13	+05 00	H 3	4704	L O	20MAR79	05 22 11	63 00	UK028	70
HD 47917	20	7.0	06 36 06	+06 57	H 2	2937	S C	14NOV78	14 30 49	23 30	UK010	50
HD 47917	20	7.0	06 36 06	+06 57	H 3	3346	S C	14NOV78	13 52 33	31 30	UK010	50
HD 47917	20	7.0	06 36 06	+06 57	H 3	3350	S C	14NOV78	19 23 39	20 00	UK010	50A FEW LINES MISSING
R MON	58	11.7	06 36 26	+08 47	L 2	3935	L O	05MAR79	10 37 43	70 00	UK044	33
R MON	58	11.7	06 36 26	+08 47	L 3	4496	L O	05MAR79	09 32 01	60 00	UK044	22
HD 47839	12	4.8	06 38 14	+09 57	L 2	2471	S C	26SEP78	23 04 00	1	PB030	50
HD 47839	12	4.8	06 38 14	+09 57	L 3	2777	S C	26SEP78	23 01 00	1	PB030	50
HD 48099	12	6.3	06 39 18	+06 24	H 2	2936	S C	14NOV78	13 06 14	11 00	UK010	50
HD 48099	12	6.4	06 39 18	+06 24	L 2	3664	S C	03FEB79	13 23 00	3	MG012	40
HD 48099	12	6.4	06 39 18	+06 24	L 2	3664	L O	03FEB79	13 17 00	6	MG012	70
HD 48099	12	6.3	06 39 18	+06 24	H 3	3345	S C	14NOV78	12 44 59	11 30	UK010	50
HD 48099	12	6.4	06 39 18	+06 24	L 3	4133	S C	03FEB79	13 26 00	5	MG012	40
HD 48099	12	6.4	06 39 18	+06 24	L 3	4133	L O	03FEB79	13 19 00	5	MG012	50
HD 48977	20	5.9	06 43 49	+08 38	H 2	2940	S C	14NOV78	18 30 38	7 20	UK010	50TWO LINES MISSING
HD 48977	20	5.9	06 43 49	+08 38	H 3	3349	S C	14NOV78	18 03 22	7 00	UK010	50
HD 50138	26	6.4	06 45 07	-06 54	H 2	3967	L O	09MAR79	06 22 10	16 00	LHB07	50
HD 50138	26	6.4	06 45 07	-06 54	H 3	4557	L O	09MAR79	06 52 29	30 00	LHB07	50
HD 49798	16	8.6	06 46 35	-44 16	H 2	1603	S C	02JUN78	23 30 57	13 00	KH001	WEAK MEAN 83DN
HD 49798	16	8.6	06 46 35	-44 16	H 2	1604	S C	03JUN78	01 06 13	25 00	KH001	STILL A BIT WEAK MEAN112
HD 49798	16	8.6	06 46 35	-44 16	H 2	1620	S C	05JUN78	01 29 29	35 00	KH001	OK BUT HAS HIT 255
HD 49798	16	8.3	06 46 35	-44 16	H 3	1336	S C	09APR78	09 35 00	40 00	UKPOP	
HD 49798	16	8.6	06 46 35	-44 16	H 3	1698	S C	02JUN78	22 42 33	25 00	KH001	GOOD MAX DN 178
HD 49798	16	8.6	06 46 35	-44 16	H 3	1699	S C	03JUN78	00 20 00	35 00	KH001	GOOD LEVEL OF EXP
HD 49798	14	8.3	06 46 35	-44 16	L 3	4145	S C	04FEB79	07 45 38	12	UK036	50
HD 49798	14	8.3	06 46 35	-44 16	L 3	4145	L O	04FEB79	07 49 03	9	UK036	60
HD 50241	31	3.3	06 47 41	-61 53	H 2	1865	S C	21JUL78	03 11 00	10 01	AN053	VERY GOOD
HD 50138	26	6.6	06 49 07	-06 54	H 2	3225	S C	21DEC78	10 42 16	75 00	NH051	77
HD 50138	26	6.6	06 49 07	-06 54	L 2	3226	L O	21DEC78	12 31 18	1 00	NH051	77
HD 50138	26	6.6	06 49 07	-06 54	H 2	3227	S C	21DEC78	14 08 17	35 00	NH051	55
HD 50138	26	6.6	06 49 07	-06 54	L 2	3247	S C	23DEC78	10 42 31	35	NH051	56
HD 50138	26	6.6	06 49 07	-06 54	L 2	3247	L O	23DEC78	10 37 32	35	NH051	77
HD 50138	26	6.6	06 49 07	-06 54	H 3	3662	S C	21DEC78	12 39 23	80 00	NH051	57
HD 50138	26	6.6	06 49 07	-06 54	L 3	3663	L O	21DEC78	14 56 33	1 00	NH051	56
HD 50138	26	6.6	06 49 07	-06 54	L 3	3663	S C	21DEC78	14 50 28	1 00	NH051	55
HD 50707	20	4.8	06 51 23	-20 10	L 2	2426	S C	21SEP78	19 59 00	2	UK019	60
HD 50707	20	4.8	06 51 23	-20 10	L 2	2426	L O	21SEP78	19 55 00	5	UK019	80
HD 50707	20	4.8	06 51 23	-20 10	L 2	2434	S O	22SEP78	16 49 14	1	UK019	40
HD 50707	20	4.8	06 51 23	-20 10	L 3	2721	S O	21SEP78	20 09 24	4	UK019	80
HD 50707	20	4.8	06 51 23	-20 10	L 3	2731	S O	22SEP78	17 44 01	1	UK019	60
HD 50896	11	6.5	06 52 08	-23 52	H 2	1290	S C	09APR78	06 41 55	8 00	UKPOP	
HD 50896	11	6.9	06 52 08	-23 52	H 2	3602	S C	28JAN79	08 37 53	6 00	MH011	35

OBJECT	CL	MAG	RT ASCN HR MN SC	DECLN DEG MN	DISP *CAM	APERT IMAGE	OR LG	DATE	START HR MN SC	LENGTH MIN SC	PROG	COMMENT
HD 50896	11	6.9	06 52 08	-23 52	L 2	3603	L O	28JAN79	10 11 57	8	MH011	56
HD 50896	11	6.9	06 52 08	-23 52	L 2	3603	S C	28JAN79	10 07 49	4	MH011	45
HD 50896	11	6.5	06 52 08	-23 52	H 3	1335	S C	09APR78	06 13 00	8 00	UKPOP	
HD 50896	11	6.9	06 52 08	-23 52	L 3	4064	L O	28JAN79	08 32 26	10	MH011	77
HD 50896	11	6.9	06 52 08	-23 52	L 3	4064	S C	28JAN79	08 29 01	6	MH011	56
HD 50896	11	6.9	06 52 08	-23 52	H 3	4065	S C	28JAN79	09 19 04	14 00	MH011	57
HD 50975	16	8.2	06 53 04	+08 57	L 2	3613	L O	29JAN79	13 57 14	2 05	UK036	60
HD 50975	16	8.2	06 53 04	+08 57	L 2	3613	S C	29JAN79	13 49 02	3 10	UK036	50
HD 50975	16	8.2	06 53 04	+08 57	L 3	4082	S C	29JAN79	13 17 51	3 25	UK036	40
HD 50975	16	8.2	06 53 04	+08 57	L 3	4082	L O	29JAN79	13 10 17	2 20	UK036	50
HD 51585	26	11.2	06 55 41	+16 24	L 2	3966	L O	09MAR79	04 37 08	21 00	LH807	56
HD 51585	26	11.2	06 55 41	+16 24	L 3	4524	S C	07MAR79	11 22 58	25	LH807	11
HD 51585	26	11.2	06 55 41	+16 24	L 3	4524	L O	07MAR79	11 18 54	16	LH807	11
HD 51585	26	11.2	06 55 41	+16 24	L 3	4556	L O	09MAR79	05 06 05	30 00	LH807	55
HD 53138	23	3.0	07 00 56	-23 46	H 2	1322	S C	16APR78	06 45 00	4 00	MH802	BIT OXP LH
HD 53138	23	3.0	07 00 56	-23 46	H 3	1368	S C	16APR78	05 38 30	10 00	MH802	BIT OXP LH
HD 53244	25	4.1	07 01 30	-15 34	H 2	2593	S C	13OCT78	16 42 32	2 30	FM050	50
HD 53244	25	4.1	07 01 30	-15 34	H 3	2958	S C	13OCT78	16 09 14	3 20	FM050	40
HD 53244	25	4.1	07 01 30	-15 34	H 3	2959	S C	13OCT78	17 18 21	6 30	FM050	50
HD 53244	25	4.1	07 01 30	-15 34	H 3	3448	S C	25NOV78	17 01 26	3 20	FM050	40
HD 53974	23	5.4	07 04 20	-11 13	H 3	3998	S C	25JAN79	10 27 06	14 00	UK038	60WEAK AT 1500A
HD 54413	25	8.5	07 05 34	-28 10	L 3	4103	S C	31JAN79	11 27 40	40	UK036	40
HD 54413	25	8.5	07 05 34	-28 10	L 3	4103	L O	31JAN79	11 23 55	25	UK036	40
HD 54605	41	2.0	07 06 21	-26 18	L 2	2760	L O	30OCT78	16 32 59	24	RB039	30REFERS TO 2100
+34 1543	16	9.4	07 06 50	+34 30	L 2	2780	S C	31OCT78	19 02 05	5 30	UK036	40
+34 1543	16	9.4	07 06 50	+34 30	L 2	2780	L O	31OCT78	18 51 16	3 35	UK036	60
+34 1543	16	9.4	07 06 50	+34 30	L 3	3197	S C	31OCT78	18 08 37	3 10	UK036	50
+34 1543	16	9.4	07 06 50	+34 30	L 3	3197	L O	31OCT78	17 57 35	2 05	UK036	50
0711+22	16	10.0	07 11 31	+22 23	L 2	2781	L O	31OCT78	21 02 21	3 50	UK036	50
0711+22	16	10.0	07 11 31	+22 23	L 3	3198	S C	31OCT78	20 22 15	4 10	UK036	50
0711+22	16	10.0	07 11 31	+22 23	L 3	3198	L O	31OCT78	20 11 36	2 50	UK036	50
HD 55906	25	9.0	07 11 52	-27 12	L 3	4099	S C	31JAN79	08 25 12	1 10	UK036	50
HD 55906	25	9.0	07 11 52	-27 12	L 3	4099	L O	31JAN79	08 20 22	45	UK036	50
HD 56096	48	3.8	07 12 00	-44 34	H 2	2447	S C	23SEP78	16 52 00	53 00	UKFIL	11NOISY IMAGE
HD 56014	21	4.7	07 12 12	-26 16	H 2	2543	S C	060CT78	15 39 05	1 30	LH006	40
HD 56014	21	4.7	07 12 12	-26 16	H 3	2866	S C	060CT78	14 37 37	2 00	LH006	77
HD 56014	26	4.7	07 12 13	-26 16	H 2	3802	S C	06JAN79	10 09 54	1 38	AR020	50
HD 56014	26	4.7	07 12 13	-26 16	L 2	3803	L O	06JAN79	10 41 02	1	AR020	50
HD 56014	26	4.7	07 12 13	-26 16	L 2	3803	S C	06JAN79	10 37 48	3	AR020	60
HD 56014	26	4.7	07 12 13	-26 16	L 3	3822	L O	06JAN79	08 59 00	1	AR020	50
HD 56014	26	4.7	07 12 13	-26 16	L 3	3822	S O	06JAN79	08 53 14	2 01	AR020	90
HD 56014	26	4.7	07 12 13	-26 16	H 3	3823	S C	06JAN79	09 40 09	2 01	AR020	50
HD 56014	26	4.7	07 12 13	-26 16	H 3	3824	S C	06JAN79	11 08 23	3 00	AR020	60
HD 5590A	25	8.4	07 15 32	-24 44	L 3	4100	S C	31JAN79	09 12 13	20	UK036	60
HD 5590A	25	8.4	07 15 32	-24 44	L 3	4100	S C	31JAN79	09 08 30	30	UK036	50
HD 57150	21	4.7	07 16 32	-36 38	H 2	2544	S C	060CT78	17 36 00	2 00	LH006	50
HD 57150	21	4.7	07 16 32	-36 38	H 3	2867	S C	060CT78	16 29 00	1 20	LH006	40
HD 57150	21	4.7	07 16 32	-36 38	H 3	2868	S C	060CT78	17 01 00	2 00	LH006	40

OBJECT	CL	MAG	RT ASCN HR MN SC	DECLN DEG MN	DISP *CAM	APERT IMAGE	OR LG	DATE	START HR MN SC	LENGTH MIN SC	PROG	COMMENT
HD 57060	13	4.9	07 16 35	-24 28	H 2	1323	S C	16APR78	09 19 24	7 00	MH802	
HD 57060	13	4.9	07 16 35	-24 28	H 3	1369	S C	16APR78	08 10 00	7 00	MH802	QUITE GOOD
HD 57061	13	4.4	07 16 38	-24 51	H 2	3582	S C	26JAN79	10 12 15	2 40	KH014	50
HD 57061	13	4.4	07 16 38	-24 51	H 3	4040	S C	26JAN79	09 40 00	1 20	KH014	40
HD 57061	13	4.4	07 16 38	-24 51	H 3	4041	S C	26JAN79	10 52 23	1 40	KH014	40
HD 57503	24	8.9	07 18 31	-25 05	L 3	4101	S C	31JAN79	09 56 00	50	UK036	50
HD 57503	24	8.9	07 18 31	-25 05	L 3	4101	L O	31JAN79	09 52 00	30	UK036	50
HD 58010	24	8.7	07 20 41	-25 04	L 3	4102	L O	31JAN79	10 38 51	25	UK036	50
HD 58010	24	8.7	07 20 41	-25 04	L 3	4102	S C	31JAN79	10 35 36	40	UK036	50
HD 58350	24	2.4	07 22 07	-29 12	H 3	2960	S C	13OCT78	18 12 12	1 10	FM050	40
HD 58350	24	2.4	07 22 07	-29 12	H 3	4249	S C	13FEB79	10 03 12	2 00	FM050	70
HD 59612	33	4.9	07 27 00	-22 55	H 3	4443	L O	01MAR79	04 42 08	100 00	RB041	60GOOD LONG OF 1400A
HD 59612	33	4.8	07 27 44	-22 55	H 2	2913	S C	11NOV78	12 41 21	35 00	FP047	50
HD 59612	33	4.8	07 27 44	-22 55	H 3	3305	S C	11NOV78	13 22 44	90 00	RB041	50
HD 59612	33	4.8	07 27 45	-22 55	H 2	3758	S C	13FEB79	08 13 04	67 00	FM050	70
HD 59612	33	4.8	07 27 45	-22 55	H 2	3917	L O	03MAR79	05 26 49	20 00	FM050	50
HD 60414	57	5.0	07 31 30	-14 25	L 2	3786	S C	17FEB79	06 36 15	45	VB032	66
HD 60414	57	5.0	07 31 30	-14 25	L 2	3786	L O	17FEB79	06 41 06	2 00	VB032	88OK AT 2200A
HD 60414	57	5.0	07 31 30	-14 25	H 2	3787	L O	17FEB79	07 55 58	23 00	VB032	57
HD 60414	57	5.0	07 31 30	-14 25	H 2	3788	L O	17FEB79	09 12 19	10 00	VB032	46
HD 60414	57	5.0	07 31 30	-14 25	H 3	4284	L O	17FEB79	07 12 01	35 00	VB032	57
HD 60414	57	5.0	07 31 30	-14 25	L 3	4285	S O	17FEB79	08 45 09	30	VB032	22NOISE PATTERN
HD 60414	57	5.0	07 31 30	-14 25	L 3	4285	L O	17FEB79	08 39 22	2 00	VB032	88NOISE PATTERN
-31 4800	16	9.5	07 34 35	-32 06	L 2	1845	L O	18JUL78	01 11 37	150 00	UK003	A BIT STRONGISAT AT 2800
-31 4800	16	9.5	07 34 35	-32 06	L 3	2072	S O	21JUL78	21 00 45	5 40	UK003	OXP X3
-31 4800	16	9.5	07 34 35	-32 06	L 3	2072	L O	21JUL78	20 47 16	3 30	UK003	OXP X3
-31 4800	16	9.5	07 34 35	-32 06	L 3	2073	S O	21JUL78	21 49 00	1 30	UK003	GOOD MAX DN 170
-31 4800	16	9.5	07 34 35	-32 06	H 3	2074	S C	21JUL78	22 32 00	180 00	UK003	VERY GOOD A FEW PIX SAT
HD 61421	41	.3	07 36 41	+05 21	L 2	2763	L O	30OCT78	19 09 27	6	RB039	70REFERS TO 2100
HD 61421	41	.3	07 36 41	+05 21	H 2	2764	S C	30OCT78	19 42 07	6 00	RB039	60REFERS TO 2100
HD 61421	41	.3	07 36 41	+05 21	H 2	2765	S C	30OCT78	20 19 42	4 00	RB039	50REFERS TO 2100
HD 61421	41	.3	07 36 41	+05 21	L 2	2766	L O	30OCT78	21 09 00	3	RB039	50REFERS TO 2100
HD 61421	41	.3	07 36 41	+05 21	H 2	2767	S C	30OCT78	21 38 12	1 00	RB039	60
HD 61421	41	.3	07 36 41	+05 21	L 3	2802	L O	29SEP78	16 34 33	15 00	UK001	80
HD 61421	41	.3	07 36 41	+05 21	L 3	2803	L O	29SEP78	17 27 21	5 00	UK001	70
HD 61421	41	.3	07 36 41	+05 21	H 3	2804	L O	29SEP78	18 16 23	30 00	UK001	70
HD 61421	41	.3	07 36 41	+05 21	L 3	2826	L O	01OCT78	17 18 30	1 00	UK001	60LH SAT
NGC 2440	71	11.0	07 39 00	-18 05	L 2	2645	S O	18OCT78	14 58 00	25 00	MP028	22
NGC 2440	71	11.0	07 39 00	-18 05	L 3	3023	L O	18OCT78	16 01 24	40 00	MP028	06
NGC 2440	70	11.0	07 39 00	-18 05	L 3	3024	L O	18OCT78	17 13 49	50 00	MP028	37
HD 62509	46	1.2	07 42 15	+28 09	H 2	2631	S C	17OCT78	14 38 10	10 00	UK020	65
HD 64740	23	4.8	07 51 39	-49 29	H 2	1605	S C	03JUN78	03 15 42	2 24	KH001	OK HAS HIT 255
HD 64740	23	4.8	07 51 39	-49 29	H 3	1700	S C	03JUN78	02 11 39	2 24	KH001	OVEREXPOSED
HD 64740	23	4.8	07 51 39	-49 29	H 3	1701	S C	03JUN78	03 58 42	1 16	KH001	OK MAX DN 155
-03 2179	16	10.4	07 51 44	-03 50	H 3	4081	L O	29JAN79	11 12 18	65 00	UK036	50
HD 64760	23	4.2	07 51 50	-47 58	H 2	3710	L O	08FEB79	06 32 32	17	UK021	30
HD 64760	23	4.2	07 51 50	-47 58	H 2	3711	L O	08FEB79	07 32 06	30	UK021	50
HD 64760	23	4.2	07 51 50	-47 58	H 3	4192	L O	08FEB79	06 35 58	1 00	UK021	60

OBJECT	CL	MAG	RT ASCN HR MN SC	DECLN DEG MN	DISP +CAM	IMAGE	APERT OB	LG	DATE	START HR MN SC	LENGTH MIN SC	PROG	COMMENT
OI 090 A	87	14.0	07 54 22	+10 05	L 2	4146	L	0	30MAR79	09 39 56	120 00	UK040	30
OI 090 A	87	14.0	07 54 22	+10 05	L 3	4146	L	0	30MAR79	05 22 05	240 00	UK040	30
-03 2179	16	10.4	07 59 44	-03 50	L 2	2806	L	0	02NOV78	16 17 31	2 00	UK036	60
-03 2179	16	10.4	07 59 44	-03 50	L 2	2806	S	C	02NOV78	16 47 06	1 20	UK036	50
-03 2179	16	10.4	07 59 44	-03 50	L 3	3209	S	0	02NOV78	16 17 31	1 20	UK036	50
-03 2179	16	10.4	07 59 44	-03 50	L 3	3209	L	0	02NOV78	16 11 42	50	UK036	60
HD 66454	39	6.8	08 00 30	-27 24	L 3	4146	S	C	04FEB79	08 38 50	2 05	UK036	10
HD 66454	39	6.8	08 00 30	-27 24	L 3	4146	L	0	04FEB79	08 35 10	1 25	UK036	20
HD 66811	13	2.3	08 01 49	-39 51	H 3	1547	S	C	15MAY78	04 20 00	7	KH052	GOOD
+75 325	16	9.5	08 04 43	+75 07	L 2	1520	S	C	20MAY78	02 17 51	3 00	UKPOP	OVEREXP
+75 325	16	9.5	08 04 43	+75 07	L 2	1520	L	0	20MAY78	02 05 00	3 00	UKPOP	OVEREXP
+75 325	16	9.5	08 04 43	+75 07	L 2	1522	L	0	20MAY78	07 39 20	1 00	UKPOP	QUITE GOOD
+75 325	16	9.5	08 04 43	+75 07	L 2	1522	S	C	20MAY78	07 27 00	1 00	UKPOP	QUITE GOOD
+75 325	16	9.0	08 04 43	+75 07	L 2	1838	S	0	16JUL78	21 11 52	30	UK003	UXP
+75 325	16	9.0	08 04 43	+75 07	L 2	1838	L	0	16JUL78	21 00 13	30	UK003	WEAK MAX ON 155
+75 325	16	9.0	08 04 43	+75 07	H 2	2794	S	C	01NOV78	15 58 05	85 00	KH001	60
+75 325	16	9.5	08 04 43	+75 07	L 2	3282	S	C	26DEC78	10 53 05	55	UKCAL	40
+75 325	16	9.5	08 04 43	+75 07	L 2	3282	L	0	26DEC78	10 49 23	35	UKCAL	50
+75 325	16	9.5	08 04 43	+75 07	H 2	3283	S	C	26DEC78	11 38 11	50 00	UKCAL	50TWO EXPOSURES OF 25MIN
+75 325	16	9.5	08 04 43	+75 07	H 2	3548	L	0	22JAN79	12 19 28	40 00	UKCAL	50
+75 325	16	9.5	08 04 43	+75 07	L 2	3549	L	0	22JAN79	13 51 54	35	UKCAL	50
+75 325	16	9.5	08 04 43	+75 07	L 2	3549	S	0	22JAN79	13 46 20	55	UKCAL	50
+75 325	16	9.5	08 04 43	+75 07	L 2	3921	L	0	04MAR79	05 12 53	24	VILSP	50
+75 325	16	9.5	08 04 43	+75 07	L 2	3921	S	C	04MAR79	05 17 50	41	VILSP	50
+75 325	16	9.5	08 04 43	+75 07	L 2	3922	L	0	04MAR79	05 46 58	2 00	VILSP	80
+75 325	16	9.5	08 04 43	+75 07	L 2	4099	S	0	24MAR79	05 10 17	48	UKCAL	50
+75 325	16	9.5	08 04 43	+75 07	L 2	4099	L	0	24MAR79	05 06 58	24	UKCAL	40
+75 325	16	9.5	08 04 43	+75 07	L 3	1581	L	0	20MAY78	01 30 00	1 00	UKPOP	OVEREXP
+75 325	16	9.5	08 04 43	+75 07	L 3	1581	S	C	20MAY78	01 24 00	1 00	UKPOP	OVEREXP
+75 325	16	9.5	08 04 43	+75 07	L 3	1583	S	C	20MAY78	07 19 58	30	UKPOP	GOOD
+75 325	16	9.5	08 04 43	+75 07	L 3	1583	L	0	20MAY78	07 16 40	30	UKPOP	GOOD
+75 325	16	9.0	08 04 43	+75 07	L 3	2031	S	0	16JUL78	21 24 07	20	UK003	GOOD
+75 325	16	9.0	08 04 43	+75 07	L 3	2031	L	0	16JUL78	21 18 49	20	UK003	GOOD MAX ON 230
+75 325	16	9.0	08 04 43	+75 07	H 3	3205	S	C	01NOV78	14 45 58	65 00	KH001	50
+75 325	16	9.5	08 04 43	+75 07	H 3	3710	S	C	26DEC78	10 58 19	35 00	UKCAL	40
+75 325	16	9.5	08 04 43	+75 07	L 3	3711	S	C	26DEC78	12 11 26	24	UKCAL	50
+75 325	16	9.5	08 04 43	+75 07	L 3	3711	L	0	26DEC78	12 07 54	15	UKCAL	50
+75 325	16	9.5	08 04 43	+75 07	L 3	3983	L	0	22JAN79	12 09 18	15	UKCAL	50
+75 325	16	9.5	08 04 43	+75 07	L 3	3983	S	0	22JAN79	12 05 27	24	UKCAL	50
+75 325	16	9.5	08 04 43	+75 07	H 3	3984	L	0	22JAN79	13 06 24	35 00	UKCAL	50
+75 325	16	9.5	08 04 43	+75 07	L 3	4470	L	0	04MAR79	04 33 51	14	VILSP	50
+75 325	16	9.5	08 04 43	+75 07	L 3	4470	S	C	04MAR79	04 29 49	24	VILSP	50
+75 325	16	9.5	08 04 43	+75 07	L 3	4736	S	0	24MAR79	05 17 30	23	UKCAL	50
+75 325	16	9.5	08 04 43	+75 07	L 3	4736	L	0	24MAR79	05 14 15	14	UKCAL	40
HD 68273	10	1.8	08 07 59	-47 11	H 2	1315	S	C	14APR78	06 08 12	5	KH052	GAM2 VEL, OK
HD 68273	10	1.8	08 07 59	-47 11	H 2	1316	S	C	14APR78	08 03 03	8	KH052	GAM2 VEC, OK
HD 68273	10	1.8	08 07 59	-47 11	H 2	1396	S	C	27APR78	03 58 10	7	KH052	GAM2 VEL
HD 68273	10	1.8	08 07 59	-47 11	H 2	1497	S	C	15MAY78	01 39 00	7	KH052	GOOD

OBJECT	CL	MAG	RT ASCN HR MN SC	DECLN DEG MN	DISP +CAM	IMAGE	APERT OB	LG	DATE	START HR MN SC	LENGTH MIN SC	PROG	COMMENT
HD 68273	10	1.8	08 07 59	-47 11	H 2	1498	S	C	15MAY78	03 04 00	8	KH052	GOOD
HD 68273	10	1.8	08 07 59	-47 11	H 2	1543	S	C	23MAY78	01 53 39	7	UKPOP	GOOD MAX ON 240
HD 68273	10	1.8	08 07 59	-47 11	H 2	1651	S	C	10JUN78	23 47 00	7	UK002	GAMMA VEL GOOD EXP
HD 68273	10	1.8	08 07 59	-47 11	H 2	1691	S	C	19JUN78	00 42 52	7	UK002	GOOD
HD 68273	10	1.8	08 07 59	-47 11	H 3	1358	S	C	14APR78	05 05 59	3	KH052	GAM2 VEL, SLIGHTLY UXP,
HD 68273	10	1.8	08 07 59	-47 11	H 3	1359	S	C	14APR78	08 24 59	6	KH052	GAM2 VEL, GOOD FOR CONT,
HD 68273	10	1.8	08 07 59	-47 11	H 3	1413	S	C	25APR78	05 56 00	5	KH052	GOOD
HD 68273	10	1.8	08 07 59	-47 11	H 3	1425	S	C	27APR78	05 10 00	5	KH052	GOOD
HD 68273	10	1.8	08 07 59	-47 11	H 3	1545	S	C	15MAY78	00 52 00	5	KH052	GOOD
HD 68273	10	1.8	08 07 59	-47 11	H 3	1546	S	C	15MAY78	02 23 00	6	KH052	GOOD
HD 68273	10	1.8	08 07 59	-47 11	H 3	1605	S	C	23MAY78	01 04 40	5	UKPOP	GOOD GAM2 VEL
HD 68273	10	1.8	08 07 59	-47 11	H 3	1606	S	C	23MAY78	02 38 12	5	UKPOP	GOOD, 1909 BAT
HD 68273	10	1.8	08 07 59	-47 11	H 3	1761	S	C	10JUN78	23 00 13	5	UK002	GAMMA VEL GOOD EXP
HD 68273	10	1.8	08 07 59	-47 11	H 3	1811	S	C	19JUN78	00 53 38	5	UK002	GOOD
JUPITER	03	-2.1	08 08 16	+20 56	L 2	3901	S	0	02MAR79	05 09 19	15	UK043	50
JUPITER	03	-2.1	08 08 16	+20 56	L 2	3902	S	0	02MAR79	05 41 58	15	UK043	50
JUPITER	03	-2.1	08 08 16	+20 56	L 2	3903	S	0	02MAR79	06 22 35	15	UK043	50
JUPITER	03	-2.1	08 08 16	+20 56	L 2	3904	S	0	02MAR79	06 53 10	15	UK043	50
JUPITER	03	-2.1	08 08 16	+20 56	L 2	3905	S	0	02MAR79	07 24 35	1 30	UK043	70
JUPITER	03	-2.1	08 08 16	+20 56	L 2	3906	L	0	02MAR79	07 57 10	1 30	UK043	70
JUPITER	03	-2.1	08 08 16	+20 56	L 2	3906	S	0	02MAR79	07 57 10	1 30	UK043	70
JUPITER	03	-2.1	08 08 16	+20 56	L 2	3907	L	0	02MAR79	08 28 44	15	UK043	60
JUPITER	03	-2.1	08 08 16	+20 56	L 2	3907	S	0	02MAR79	08 28 44	15	UK043	50
JUPITER	03	-2.1	08 08 16	+20 56	L 2	3908	S	0	02MAR79	09 00 08	15	UK043	10MISSED
JUPITER	03	-2.1	08 08 16	+20 56	L 2	3909	S	0	02MAR79	09 33 30	15	UK043	50
JUPITER	03	-2.1	08 08 16	+20 56	L 2	3910	L	0	02MAR79	10 03 30	15	UK043	30
JUPITER	03	-2.1	08 08 16	+20 56	L 2	3910	S	0	02MAR79	10 03 30	15	UK043	50
JUPITER	03	-2.1	08 08 16	+20 56	L 2	3911	S	0	02MAR79	10 33 58	15	UK043	10MISSED
JUPITER	03	-2.1	08 08 16	+20 56	L 2	3912	S	0	02MAR79	11 09 34	15	UK043	50
HD 69190	26	8.5	08 12 28	-41 33	L 2	2395	L	0	18SEP78	16 29 32	4 00	PSA13	40ND SPECTRUM BLUEOF2400
HD 69190	26	8.5	08 12 28	-41 33	L 3	2684	L	0	18SEP78	16 58 42	45 00	PSA13	30UXP X2
PUP A	59	16.0	08 22 33	-42 49	L 2	3039	L	0	26NOV78	14 40 00	91 00	UK037	110FFSET FROM XRAY POSN
PUP A	59	16.0	08 22 33	-42 49	L 3	3460	L	0	26NOV78	14 38 00	60 00	UK037	17IN XRAY POSITION
0832-01	16	10.0	08 32 01	-01 45	L 2	2807	L	0	02NOV78	18 54 40	2 45	UK036	50
0832-01	16	10.0	08 32 01	-01 45	L 2	2807	S	C	02NOV78	18 45 08	4 10	UK036	40
0832-01	16	10.0	08 32 01	-01 45	L 3	3210	S	C	02NOV78	18 08 38	3 20	UK036	50
0832-01	16	10.0	08 32 01	-01 45	L 3	3210	L	0	02NOV78	17 38 33	2 10	UK036	60
HD 73340	36	5.8	08 34 23	-50 47	H 2	1780	S	C	05JUL78	03 03 18	20 00	VILSP	OXP AT LONG NL
HD 73340	36	5.8	08 34 23	-50 47	H 3	1916	S	C	05JUL78	02 25 09	30 00	VILSP	OXP AT LONG NL
HD 73340	36	5.8	08 34 23	-50 47	H 3	1917	S	C	05JUL78	04 13 06	10 00	VILSP	OK AT LONG NL
HD 73634	33	4.1	08 35 53	-42 49	H 2	3918	L	0	03MAR79	06 30 41	12 00	FM050	60
HD 73634	33	4.1	08 35 54	-42 48	H 2	3759	S	C	13FEB79	10 42 11	26 00	FM050	70
0837-120	85	15.8	08 37 28	-12 04	L 3	4292	L	0	18FEB79	07 14 28	392 00	UK016	35
HD 74272	33	4.8	08 39 35	-47 08	H 2	3760	S	C	13FEB79	11 58 55	41 00	FM050	60
HD 74442	46	4.1	08 41 51	+18 20	H 2	3414	S	C	07JAN79	11 01 49	112 00	UKFIL	80
JUPITER	03	-2.0	08 43 26	+18 41	L 2	3133	L	0	10DEC78	11 36 22	2 00	UK043	20MAGNETOSPHERE?
JUPITER	03	-2.0	08 43 26	+18 41	L 2	3133	S	0	10DEC78	11 36 22	2 00	UK043	70EQUATOR,CENTRAL MERID
JUPITER	03	-2.0	08 43 26	+18 41	L 2	3134	S	0	10DEC78	12 19 06	15	UK043	50EQUATOR,CENTRAL MERID

OBJECT	CL	MAG	RT ASCN HR MN SC	DECLN DEG MN	DISP +CAM		IMAGE	APERT OR	LG	DATE	START HR MN SC	LENGTH MIN SC	PROG	COMMENT
JUPITER	03	-2.0	08 43 26	+18 41	L	2	3135	S	0	10DEC78	12 58 40	15	UK043	50EQUATOR,EAST LIMB
JUPITER	03	-2.0	08 43 26	+18 41	L	2	3136	S	0	10DEC78	13 25 48	15	UK043	10MISSED WEST LIMB
JUPITER	03	-2.0	08 43 26	+18 41	L	2	3137	L	0	10DEC78	13 59 00	15	UK043	70SOUTH POLE AT END L AP
JUPITER	03	-2.0	08 43 26	+18 41	L	2	3137	S	0	10DEC78	13 59 00	15	UK043	30NORTH POLE
JUPITER	03	-2.0	08 43 26	+18 41	L	2	3138	S	0	10DEC78	14 41 30	15	UK043	50EQUATOR,MID LONGITUDE
JUPITER	03	-2.0	08 43 26	+18 41	L	2	3139	S	0	10DEC78	15 16 17	15	UK043	10MISSED SOUTH POLE
JUPITER	03	-2.0	08 43 26	+18 41	L	3	3568	L	0	10DEC78	11 46 13	20 00	UK043	02LYMAN ALPHA
JUPITER	03	-2.0	08 43 26	+18 41	L	3	3568	S	0	10DEC78	11 46 13	20 00	UK043	42EQUATOR,CENTRAL MERID
GANYMEDE	04	5.0	08 43 43	+18 40	L	2	3140	L	0	10DEC78	16 00 51	1 00	UK043	50
GANYMEDE	04	5.0	08 43 43	+18 40	L	2	3140	S	0	10DEC78	15 52 01	4 00	UK043	70
HD 75311	20	8.0	08 45 25	-56 35	H	2	2545	S	C	06OCT78	18 56 00	3 10	LH006	60
HD 75311	20	8.0	08 45 25	-56 35	H	3	2869	S	C	06OCT78	18 16 00	2 50	LH006	40
HD 77581	59	6.9	09 00 13	-40 21	H	2	1418	L	0	30APR78	06 43 00	70 00	XR801	GOOD FEW PIX OVEREXP.
HD 77581	23	6.9	09 00 13	-40 21	H	2	3120	L	0	07DEC78	13 34 00	50 00	HH043	40
HD 77581	59	6.9	09 00 13	-40 21	H	3	1442	L	0	30APR78	03 28 50	180 00	XR801	GOOD
HD 77581	59	6.5	09 00 13	-40 21	H	3	3510	L	0	02DEC78	16 11 10	90 00	UK037	40VELA X-1
HD 77581	59	6.9	09 00 13	-40 21	H	3	3519	L	0	03DEC78	15 21 40	140 00	HH043	50
HD 77581	23	6.9	09 00 13	-40 21	H	3	3550	L	0	07DEC78	11 09 15	140 00	HH043	40
0900-02	16	10.0	09 04 37	-02 54	L	3	3211	S	C	02NOV78	19 29 13	4 20	UK036	50
0900-02	16	10.0	09 04 37	-02 54	L	3	3211	L	0	02NOV78	19 19 27	2 50	UK036	60
HD 78316	36	5.1	09 05 2	+10 52	H	2	1303	S	C	11APR78	06 20 00	20 00	UKP0P	SOME BAT LN
HD 78316	36	5.1	09 05 02	+10 52	H	3	1349	S	C	11APR78	04 53 00	35 00	UKP0P	
HD 80836	30	10.3	09 18 44	-45 23	L	2	1844	L	0	17JUL78	22 03 00	5 00	UK003	2 EXP.ONE BAT,ONE OK
HD 80836	30	10.3	09 18 44	-45 23	L	3	2038	L	0	17JUL78	21 15 00	5 00	UK003	2 EXP NOT WELL SEP. UXP
+37 1977	16	9.5	09 21 18	+36 56	L	2	2779	S	0	31OCT78	16 59 17	1 30	UK036	50
+37 1977	16	9.5	09 21 18	+36 56	L	2	2779	L	0	31OCT78	16 53 17	1 00	UK036	50
+37 1977	16	9.5	09 21 18	+36 56	L	3	3196	S	0	31OCT78	16 21 42	1 00	UK036	50
+37 1977	16	9.5	09 21 18	+36 56	L	3	3196	L	0	31OCT78	16 16 55	40	UK036	50
HD 83183	24	4.1	09 33 00	-59 00	H	3	2963	S	C	13OCT78	21 29 04	12 00	FM050	70
HD 83183	24	4.1	09 33 00	-59 00	H	3	3451	S	C	25NOV78	19 38 00	6 00	FM050	60
HD 83618	47	3.9	09 37 18	-00 54	H	2	3653	S	C	02FEB79	06 48 15	100 00	UKFIL	35BACKGROUND AT 65DN
HD 83618	47	3.9	09 37 18	-00 54	L	3	4122	S	0	02FEB79	09 24 00	108 00	UKFIL	11FOCUS POOR-ONLY LYA
TITAN	04	8.0	09 46 28	+15 00	L	2	1521	S	C	20MAY78	04 25 00	30 00	UKP0P	UNDEREXP MAXDN 120
TITAN	04	8.0	09 46 28	+15 00	L	3	1582	S	C	20MAY78	05 05 00	30 00	UKP0P	NO SPECTRUM
HD 86161	11	8.4	09 53 15	-57 29	L	2	3827	L	0	22FEB79	09 03 53	58	UK02A	55
HD 86161	11	8.4	09 53 15	-57 29	L	2	3827	S	C	22FEB79	08 58 51	1 56	UK02A	55
HD 86161	11	8.4	09 53 15	-57 29	L	3	4333	S	C	22FEB79	08 53 17	2 40	UK02A	55
HD 86161	11	8.4	09 53 15	-57 29	L	3	4333	L	0	22FEB79	08 48 35	1 20	UK02A	44
HD 86248	24	9.6	09 54 21	-31 12	H	2	4073	L	0	20MAR79	09 14 50	75 00	UK02H	50
HD 86248	24	9.6	09 54 21	-31 12	H	3	4705	L	0	20MAR79	07 11 31	120 00	UK02H	60
HD 86248	24	9.6	09 54 21	-31 12	L	3	4706	L	0	20MAR79	10 33 23	1 50	UK02B	60
HD 86440	24	3.5	09 55 07	-54 21	H	3	3449	S	C	25NOV78	17 54 00	2 20	FM050	50
HD 87141	41	5.7	10 01 18	+54 08	H	2	1653	S	C	11JUN78	05 09 36	30 00	UK02C	WEAK MAX DN 110
HD 87737	32	3.5	10 04 36	+17 00	H	2	2914	S	C	11NOV78	16 30 26	2 30	FP047	50
HD 87737	32	3.5	10 04 36	+17 00	H	2	2915	S	C	11NOV78	17 15 48	7 30	FP047	70
HD 87737	32	3.5	10 04 36	+17 00	H	3	3306	S	C	11NOV78	15 44 43	5 01	RB041	50
HD 87737	32	3.5	10 04 36	+17 00	H	3	3307	S	C	11NOV78	16 46 00	15 00	RB041	70
HD 88015	21	6.7	10 05 37	-48 01	L	2	1894	L	0	26JUL78	03 36 00	15	VILSP	A BIT BAT
HD 88015	21	6.7	10 05 37	-48 01	L	2	1894	S	0	26JUL78	03 39 33	15	VILSP	GOOD
HD 87901	22	1.3	10 05 43	+12 13	H	2	3422	S	C	08JAN79	08 57 53	13	AR020	40
HD 87901	22	1.3	10 05 43	+12 13	H	3	3839	S	C	08JAN79	08 14 51	21	AR020	50
Q1011+25	85	15.4	10 11 06	+25 04	L	2	2986	L	0	20NOV78	15 04 17	280 00	UK13A	34BACKGROUND 60DN
Q1011+25	85	15.6	10 11 06	+25 04	L	2	3126	L	0	08DEC78	11 37 59	368 00	UK13A	33
SKY	07	00.0	10 11 06	+25 04	L	3	3394	L	0	20NOV78	15 07 22	265 00	UK13A	00ONLY GEOCORONA
Q1011+25	85	15.4	10 11 06	+25 04	L	3	3434	L	0	24NOV78	13 53 00	350 00	UK13A	20
HD 89890	21	4.6	10 19 03	-55 47	H	2	2546	S	C	06OCT78	20 42 00	6 00	LH006	50
HD 89890	21	4.6	10 19 03	-55 47	H	3	2870	S	C	06OCT78	19 41 00	5 40	LH006	40
HD 89890	21	4.6	10 19 03	-55 47	H	3	2871	S	C	06OCT78	20 22 00	11 00	LH006	70
HD 89822	36	4.9	10 20 33	+65 49	H	2	2579	S	C	11OCT78	18 53 43	12 00	UK025	60
HD 89822	36	4.9	10 20 33	+65 49	H	3	2922	S	C	11OCT78	19 12 54	15 00	UK025	50
NGC 3242	70	11.0	10 22 22	-18 23	L	2	3031	S	0	25NOV78	14 52 52	3 00	PB029	20
NGC 3242	70	11.0	10 22 22	-18 23	L	2	3031	L	0	25NOV78	14 36 36	3 00	PB029	43
NGC 3242	70	11.0	10 22 22	-18 23	L	3	3446	L	0	25NOV78	15 16 02	2 00	PB029	34
NGC 3242	71	11.0	10 22 22	-18 23	L	3	3447	L	0	25NOV78	15 49 10	5 00	PH029	25NUCLEUS NOT QUITE OUT
-24 9052	19	10.0	10 23 30	-24 38	L	3	4147	S	C	04FEB79	09 55 02	4 50	UK036	50
-24 9052	19	10.0	10 23 30	-24 38	L	3	4147	L	0	04FEB79	10 05 08	3 20	UK036	50
HD 91316	23	3.9	10 30 11	+09 34	L	2	1274	S	C	03APR78	05 05 15	5	PB030	GOOD
HD 91316	23	3.9	10 30 11	+09 34	L	3	1303	S	C	03APR78	05 40 13	3	PB030	GOOD
HD 91316	23	3.8	10 30 11	+09 34	H	3	3046	S	C	19OCT78	14 31 17	1 20	UK041	20MISSED APERT
HD 91316	23	3.8	10 30 11	+09 34	H	3	3047	S	C	19OCT78	15 03 58	5 00	UK041	80
HD 91316	23	3.8	10 30 11	+09 34	H	3	3970	S	C	21JAN79	11 31 58	1 30	UK026	70
1032+40	16	10.0	10 32 26	+40 36	L	2	2778	S	C	31OCT78	15 30 29	5 05	UK036	60
1032+40	16	10.0	10 32 26	+40 36	L	2	2778	L	0	31OCT78	15 19 53	3 25	UK036	50
1032+40	16	10.0	10 32 26	+40 36	L	3	3195	L	0	31OCT78	14 46 09	2 40	UK036	50
1032+40	16	10.0	10 32 26	+40 36	L	3	3195	S	C	31OCT78	14 33 55	4 05	UK036	50
+10 2179	21	10.0	10 36 17	+10 19	L	2	2795	S	C	01NOV78	19 28 25	8 00	KH001	60
+10 2179	21	10.0	10 36 17	+10 19	L	2	2795	L	0	01NOV78	18 55 03	8 00	KH001	70
+10 2179	24	9.0	10 36 17	+10 19	L	3	1702	S	0	03JUN78	05 38 40	5 00	KH001	NO SPECTRUM
+10 2179	24	9.0	10 36 17	+10 19	L	3	1702	L	0	03JUN78	05 19 25	8 00	KH001	SPECTRUM TRAILED
+10 2179	24	9.0	10 36 17	+10 19	L	3	1721	L	0	05JUN78	04 47 02	14 00	KH001	OVEREXPOSED X 2
+10 2179	24	9.0	10 36 17	+10 19	L	3	1721	S	C	05JUN78	04 29 19	7 00	KH001	OK BUT MAB HIT 255
+10 2179	21	10.0	10 36 17	+10 19	L	3	3206	L	0	01NOV78	19 37 19	6 00	KH001	60
HD 92740	11	6.4	10 39 23	-59 25	L	2	3604	L	0	28JAN79	12 13 33	10	MH011	66
HD 92740	11	6.4	10 39 23	-59 25	L	2	3604	S	C	28JAN79	12 10 02	6	MH011	45
HD 92740	11	6.4	10 39 23	-59 25	H	2	3605	S	C	28JAN79	13 42 40	12 00	MH011	55
HD 92740	11	6.4	10 39 23	-59 25	L	3	4066	L	0	28JAN79	11 13 36	10	MH011	56
HD 92740	11	6.4	10 39 23	-59 25	L	3	4066	S	C	28JAN79	11 10 05	6	MH011	34
HD 92740	11	6.4	10 39 23	-59 25	H	3	4067	S	C	28JAN79	11 41 56	15 00	MH011	56
HD 93131	11	6.5	10 41 57	-59 51	L	2	3825	S	C	22FEB79	06 29 18	5	UK02A	45
HD 93131	11	6.5	10 41 57	-59 51	L	2	3825	L	0	22FEB79	06 26 22	3	UK02A	45
HD 93131	11	6.5	10 41 57	-59 51	H	2	3826	L	0	22FEB79	07 35 45	5 00	UK02A	55
HD 93131	11	6.5	10 41 57	-59 51	L	3	4331	L	0	22FEB79	06 22 55	3	UK02A	34
HD 93131	11	6.5	10 41 57	-59 51	L	3	4331	S	C	22FEB79	06 19 14	5	UK02A	34
HD 93131	11	6.5	10 41 57	-59 51	H	3	4332	L	0	22FEB79	07 23 02	4 00	UK02A	45
HD 93128	12	7.5	10 42 01	-59 17	L	3	2651	I	0	14SEP78	21 50 00	6 12	PS813	01STAR NOT IN AP.
HD 93162	11	8.1	10 42 14	-59 27	L	2	2419	L	0	20SEP78	22 07 00	2 00	PS813	

OBJECT	CL	MAG	RT ASCN HR MN SC	DECLN DEG MN	DISP +CAM	IMAGE	APERT OR	APERT LG	DATE	START HR MN SC	LENGTH MIN SC	PROG	COMMENT
HD 93162	11	8.1	10 42 14	-59 27	L 3	2708	L	0	20SEP78	21 00 00	5 30	PS813	99
HD 93162	11	8.1	10 42 14	-59 27	L 3	2708	S	C	20SEP78	21 13 04	6 00	PS813	99
HD 93162	11	8.1	10 42 14	-59 27	L 3	2709	S	C	20SEP78	22 35 20	2 00	PS813	55
HD 93162	11	8.1	10 42 14	-59 27	L 3	2709	L	0	20SEP78	22 25 46	2 00	PS813	66
HD 93206	23	6.2	10 42 27	-59 44	H 2	4074	L	0	20MAR79	11 47 31	9 00	UK028	60
HD 93206	23	6.2	10 42 27	-59 44	H 3	4707	L	0	20MAR79	11 16 57	15 15	UK028	60
HD 93205	12	7.7	10 42 37	-59 28	L 3	2710	L	0	20SEP78	23 29 11	20	PS813	
HD 93205	12	7.7	10 42 37	-59 28	L 3	2710	S	C	20SEP78	23 23 30	40	PS813	
HD 93205	12	7.7	10 42 37	-59 28	H 3	3164	S	C	26OCT78	20 51 40	50 00	PS813	70
HD 93308	61	6.0	10 43 07	-59 25	H 2	1592	L	0	01JUN78	23 47 33	20 00	UKPOP	SOME EM LINES SAT.
HD 93308	61	6.2	10 43 07	-59 25	H 2	3890	L	0	28FEB79	09 55 44	5 30	VA032	35
HD 93308	61	6.2	10 43 07	-59 25	L 2	3891	S	C	28FEB79	11 52 00	1 00	VA032	67
HD 93308	61	6.2	10 43 07	-59 25	L 2	3891	L	0	28FEB79	11 47 52	25	VA032	67
HD 93308	61	6.0	10 43 07	-59 25	L 3	1687	L	0	01JUN78	23 19 00	2 00	UKPOP	EM LINES SAT, MEAN 1500N
HD 93308	61	6.0	10 43 07	-59 25	H 3	1688	L	0	02JUN78	01 04 42	40 00	UKPOP	VERY WEAK
HD 93308	61	6.2	10 43 07	-59 25	H 3	4433	L	0	28FEB79	09 29 50	15 00	VA032	26
HD 93308	61	6.2	10 43 07	-59 25	H 3	4434	L	0	28FEB79	10 24 30	80 00	VA032	48
HD303308A	12	8.1	10 43 09	-59 24	L 2	2356	L	0	14SEP78	17 37 04	48	PS813	66
HD303308A	12	8.1	10 43 09	-59 24	L 2	2356	S	C	14SEP78	17 31 49	1 36	PS813	66
HD303308	12	8.1	10 43 09	-59 24	L 3	2650	L	0	14SEP78	17 17 33	48	PS813	44
HD303308A	12	8.1	10 43 09	-59 24	L 3	2650	S	C	14SEP78	17 11 23	1 36	PS813	55
HD 93308	23	8.0	10 43 11	-59 47	H 2	1537	S	C	22MAY78	06 20 00	35 00	VA032	GOOD
HD 93308	23	8.0	10 43 11	-59 47	H 2	1556	S	C	25MAY78	03 11 38	35 00	VA032	NOT THE TARGET
HD 93308	23	8.0	10 43 11	-59 47	L 3	1600	L	0	22MAY78	05 54 00	5 00	VA032	OVEREXP LW
HD 93308	23	8.0	10 43 11	-59 47	L 3	1600	S	C	22MAY78	05 38 00	1 30	VA032	QUITE GOOD
HD 93308	23	8.0	10 43 11	-59 47	H 3	1629	S	C	25MAY78	00 59 17	120 00	VA032	NOT THE TARGET
HD 93308	23	8.0	10 43 11	-59 47	H 3	1630	S	C	25MAY78	04 15 17	120 00	VA032	GOOD
NGC 3379	81	9.7	10 45 11	+12 51	L 2	2960	L	0	17NOV78	12 39 31	425 00	FB024	55
HD 93521	12	6.9	10 45 34	+37 50	H 2	1504	S	C	11APR78	09 30 00	25 00	UKPOP	SAT LW
HD 93521	12	6.9	10 45 34	+37 50	H 2	1544	S	C	25MAY78	05 43 37	10 00	UKPOP	GOOD
HD 93521	12	7.0	10 45 34	+37 50	L 2	3547	S	C	22JAN79	09 05 06	5	UKCAL	40
HD 93521	12	7.0	10 45 34	+37 50	L 2	3547	L	0	22JAN79	08 59 23	3	UKCAL	40
HD 93521	12	7.0	10 45 34	+37 50	L 2	3923	L	0	04MAR79	07 06 40	3	VILSP	50
HD 93521	12	7.0	10 45 34	+37 50	L 2	3923	S	C	04MAR79	07 04 20	5	VILSP	40
HD 93521	12	6.9	10 45 34	+37 50	H 3	1350	S	C	11APR78	08 15 00	30 00	UKPOP	OVER,OK NEAR 1200+1500
HD 93521	12	6.9	10 45 34	+37 50	H 3	1607	S	C	23MAY78	05 07 24	10 00	UKPOP	VERY GOOD
HD 93521	12	7.0	10 45 34	+37 50	L 3	3980	S	C	22JAN79	10 05 44	5	UKCAL	50
HD 93521	12	7.0	10 45 34	+37 50	L 3	3980	L	0	22JAN79	09 57 19	3	UKCAL	50
HD 93521	12	7.0	10 45 34	+37 50	L 3	3981	L	0	22JAN79	10 31 55	9	UKCAL	50MEDIUM GAIN
HD 93521	12	7.0	10 45 34	+37 50	L 3	3982	L	0	22JAN79	10 58 48	30	UKCAL	50MINIMUM GAIN
HD 93521	12	7.0	10 45 34	+37 50	L 3	4471	L	0	04MAR79	06 32 47	3	VILSP	50
HD 93521	12	7.0	10 45 34	+37 50	L 3	4471	S	C	04MAR79	06 36 25	5	VILSP	50
HD 93521	12	7.0	10 45 34	+37 50	H 3	4472	L	0	04MAR79	07 24 00	5 00	VILSP	50
HD 94878	26	8.7	10 53 58	-60 07	L 2	2396	S	C	18SEP78	18 55 37	60 00	PSA13	77
HD 94878	26	8.7	10 53 58	-60 07	L 2	2396	L	0	18SEP78	18 36 44	30 00	PSA13	77
HD 94878	26	8.7	10 53 58	-60 07	L 2	2397	L	0	18SEP78	20 41 52	2 00	PSA13	56
HD 94878	26	8.7	10 53 58	-60 07	L 3	2685	L	0	18SEP78	20 03 43	30 00	PSA13	88
HD 94878	26	8.7	10 53 58	-60 07	L 3	2686	L	0	18SEP78	21 29 02	4 00	PSA13	45

OBJECT	CL	MAG	RT ASCN HR MN SC	DECLN DEG MN	DISP +CAM	IMAGE	APERT OR	APERT LG	DATE	START HR MN SC	LENGTH MIN SC	PROG	COMMENT
HD 93521	12	7.0	10 54 34	+37 50	L 2	4102	L	0	24MAR79	10 04 52	3	UKCAL	40
HD 93521	12	7.0	10 54 34	+37 50	L 2	4102	S	0	24MAR79	10 02 19	5	UKCAL	40
HD 93521	12	7.0	10 54 34	+37 50	L 2	4103	L	0	24MAR79	10 31 21	30	UKCAL	50MING
HD 93521	12	7.0	10 54 34	+37 50	L 2	4104	L	0	24MAR79	11 02 55	9	UKCAL	50MEDG
HD 93521	12	7.0	10 54 34	+37 50	H 2	4105	L	0	24MAR79	11 35 23	5 01	UKCAL	50
HD 93521	12	7.0	10 54 34	+37 50	L 3	4738	L	0	24MAR79	09 58 13	3	UKCAL	50
HD 93521	12	7.0	10 54 34	+37 50	L 3	4738	S	0	24MAR79	09 56 11	5	UKCAL	50
HD 95689	46	1.8	11 00 40	+62 01	H 2	1318	S	C	15APR78	05 54 00	30 00	UKPOP	GOOD
HD 95689	46	1.8	11 00 40	+62 01	H 2	1319	S	C	15APR78	08 42 00	15 00	UKPOP	GOOD
HD 95689	46	1.8	11 00 40	+62 01	H 3	1362	S	C	15APR78	07 36 00	30 00	UKPOP	UXP SW
HD 95689	46	1.8	11 00 40	+62 01	L 3	1363	S	C	15APR78	09 30 00	35 00	UKPOP	SAT, LW
Q1101-26	85	16.1	11 01 00	-26 29	L 2	2982	L	0	19NOV78	13 18 00	386 00	UK13B	30BACKGROUND AT 1000N
Q1101-26	85	16.1	11 01 00	-26 29	L 2	3974	L	0	10MAR79	05 03 12	405 00	UK13B	20
Q1101-26	85	16.1	11 01 00	-26 29	L 3	3295	L	0	10NOV78	13 05 45	400 00	UK13B	11
MKN 421	87	13.5	11 01 40	+38 29	L 2	4133	L	0	28MAR79	04 45 07	210 00	UK040	70
NGC 3516	84	13.6	11 03 23	+72 50	L 2	1669	S	0	14JUN78	23 22 18	120 00	SL034	UNDEREXP MAX DN 110
NGC 3516	84	13.6	11 03 23	+72 50	L 2	1703	L	0	21JUN78	04 50 00	50 00	MU009	WEAK MAX DN 84
NGC 3516	84	13.6	11 03 23	+72 50	L 3	1706	S	0	15JUN78	01 39 22	240 00	SL034	UNDEREXP MAX DN 83
NGC 3516	84	13.6	11 03 23	+72 50	L 3	1821	L	0	20JUN78	23 38 01	300 00	MU009	OK MAX DN 130
NGC 3516	84	13.6	11 03 23	+72 50	L 3	1840	L	0	22JUN78	23 06 00	390 00	MU009	GOOD MAX DN 160
HD 96548	11	7.8	11 04 18	-65 14	H 2	3606	L	0	28JAN79	13 55 47	20 00	MH011	44
HD 96548	11	7.8	11 04 18	-65 14	L 2	3607	L	0	28JAN79	15 30 23	40	MH011	66
HD 96548	11	7.8	11 04 18	-65 14	L 2	3607	S	C	28JAN79	15 34 00	20	MH011	44
HD 96548	11	7.8	11 04 18	-65 14	L 3	4068	L	0	28JAN79	13 50 15	30	MH011	55
HD 96548	11	7.8	11 04 18	-65 14	L 3	4068	S	C	28JAN79	13 46 51	15	MH011	33
HD 96548	11	7.8	11 04 18	-65 14	H 3	4069	L	0	28JAN79	14 28 12	45 00	MH011	56
HD 97991	20	7.4	11 13 39	-03 12	H 2	1739	S	C	28JUN78	01 05 00	17 00	UK06A	GOOD
HD 97991	20	7.4	11 13 39	-03 12	H 3	1870	S	C	27JUN78	23 39 00	13 00	UK06A	ABIT WEAK MAX DN 135
COM1978M	06	7.0	11 21 33	-67 39	L 2	2646	S	C	18OCT78	19 27 00	137 00	VILSP	05
COM1978M	06	7.0	11 21 33	-67 39	L 2	2646	L	0	18OCT78	19 27 00	137 00	VILSP	08
COM1978M	06	7.0	11 21 33	-67 39	L 3	3025	S	0	18OCT78	19 25 48	180 00	VILSP	??READ AT GSFC
COM1978M	06	7.0	11 21 33	-67 39	L 3	3025	L	0	18OCT78	19 25 48	180 00	VILSP	??READ AT GSFC
MKN 170	82	14.8	11 23 55	+64 25	L 3	4206	L	0	09FEB79	07 14 00	200 00	FB024	11
HD100841	25	3.1	11 33 28	-62 45	H 2	2594	S	C	13OCT78	19 33 54	2 30	FM050	30
HD100841	25	3.1	11 33 28	-62 45	H 2	2595	S	C	13OCT78	20 42 45	4 00	FM050	50
HD100841	25	3.1	11 33 28	-62 45	H 3	2961	S	C	13OCT78	18 58 41	6 00	FM050	30
HD100841	25	3.1	11 33 28	-62 45	H 3	2962	S	C	13OCT78	19 59 11	24 00	FM050	70
HD100841	25	3.1	11 33 28	-62 45	H 3	3450	S	C	25NOV78	18 45 19	5 01	FM050	50
NGC 3783	84	13.0	11 36 33	-37 28	L 2	3040	L	0	26NOV78	17 57 00	60 00	UK037	34
NGC 3783	84	13.0	11 36 33	-37 28	L 2	3092	L	0	02DEC78	14 25 04	60 00	UK037	35
NGC 3783	84	13.0	11 36 33	-37 28	L 3	3461	L	0	26NOV78	17 11 40	40 00	UK037	23
NGC 3783	84	13.0	11 36 33	-37 28	L 3	3462	L	0	26NOV78	19 03 00	44 00	UK037	23
NGC 3783	84	13.0	11 36 33	-37 28	L 3	3509	L	0	02DEC78	11 02 03	180 00	UK037	37CIV SAT
$0251595	20	9.0	11 45 34	-61 56	L 2	1413	S	C	29APR78	07 25 00	5 00	UK1XR	GOOD
$0251595	20	9.0	11 45 34	-61 55	L 2	2536	S	C	04OCT78	16 56 48	25 00	PB042	70
$0251595	20	8.9	11 45 34	-61 55	L 2	2600	L	0	14OCT78	14 46 03	5 00	PB042	70
$0251595	20	8.9	11 45 34	-61 55	L 2	2601	L	0	14OCT78	15 48 58	1 30	PB042	50
$0251595	20	8.9	11 45 34	-61 55	L 2	2601	S	C	14OCT78	15 36 08	4 30	PB042	70

OBJECT	CL	MAG	RT ASCN HR MN SC	DECLN DEG MN	DISP +CAM	IMAGE	APERT OR LG	DATE	START HR MN SC	LENGTH MIN SC	PROG	COMMENT
S0251595	20	9.0	11 45 34	-61 56	L 3	1435	S C	29APR78	06 40 00	5 00	UK1XR	A BIT UXP MAXON 120
S0251595	20	9.0	11 45 34	-61 55	L 3	2852	S C	04OCT78	16 21 30	15 00	PR042	80
S0251595	20	9.0	11 45 34	-61 55	L 3	2853	S C	04OCT78	17 00 00	6 00	PR042	50
S0251595	20	9.0	11 45 34	-61 55	L 3	2853	L O	04OCT78	16 53 43	2 00	PR042	50
HD102870	41	3.6	11 48 06	+20 03	H 2	3192	S C	17DEC78	15 15 54	15 00	CR031	60BETA VIR
HD102870	41	3.6	11 48 06	+20 03	L 3	3624	L O	17DEC78	16 12 23	3 00	CR031	30
HD102870	41	3.6	11 48 06	+20 03	L 3	3624	S C	17DEC78	16 05 40	3 00	CR031	30
HD104337	20	5.3	11 58 18	-19 23	H 3	3969	S C	21JAN79	10 46 06	4 00	UK026	70
NGC 4051	84	14.0	12 00 36	+44 49	L 3	1911	L O	03JUL78	22 29 55	20 00	UK005	NO SPECTRUM
NGC 4051	84	14.0	12 00 36	+44 49	L 3	1912	L O	04JUL78	03 17 26	85 00	UK005	UNDEREXPOSED
NGC 4051	84	14.0	12 00 36	+44 49	L 3	1938	L O	08JUL78	00 03 05	240 00	UK005	A BIT WEAK
HD105183	34	10.0	12 04 06	+11 57	L 2	3191	L O	17DEC78	14 02 31	11 00	CR031	50
HD105183	34	10.0	12 04 06	+11 57	L 3	3623	L O	17DEC78	14 30 32	16 00	CR031	50
NGC 4151	84	11.7	12 08 00	+39 41	L 2	1856	S C	08MAY78	05 19 00	60 00	XGAL	NO SPECTRUM
NGC 4151	84	11.7	12 08 00	+39 41	L 2	1863	S C	09MAY78	06 41 00	60 00	XGAL	
NGC 4151	84	11.0	12 08 00	+39 42	L 2	1876	S C	12MAY78	03 23 01	120 00	XGAL	
NGC 4151	84	11.0	12 08 00	+39 41	L 2	1885	L O	24JUL78	20 29 28	30 00	UK016	GOOD MITB 255 IN MGII
NGC 4151	84	11.4	12 08 00	+39 41	L 2	2650	L O	19OCT78	18 02 43	25 00	UK041	55
NGC 4151	84	11.4	12 08 00	+39 41	L 2	2651	L O	19OCT78	19 07 07	25 00	UK041	55
NGC 4151	84	12.0	12 08 00	+39 41	L 2	3129	L O	09DEC78	11 10 33	30 00	PI037	56
NGC 4151	84	12.0	12 08 00	+39 41	L 2	3130	L O	09DEC78	13 30 09	60 00	PI037	56
NGC 4151	84	11.5	12 08 00	+39 41	L 2	3538	L O	21JAN79	12 36 31	25 00	UK026	45
NGC 4151	84	11.5	12 08 00	+39 41	L 2	3539	L O	21JAN79	14 52 21	25 00	UK026	45
NGC 4151	84	11.7	12 08 00	+39 41	L 3	1504	S C	08MAY78	03 00 00	60 00	XGAL	NO SPECTRUM
NGC 4151	84	11.7	12 08 00	+39 41	L 3	1505	S C	08MAY78	07 00 00	40 00	XGAL	GOOD
NGC 4151	84	11.0	12 08 00	+39 42	L 3	1518	S C	11MAY78	01 14 00	240 00	XGAL	CONTIN. OVEREXP
NGC 4151	84	11.0	12 08 00	+39 42	L 3	1519	S C	11MAY78	06 40 00	60 00	XGAL	
NGC 4151	84	11.0	12 08 00	+39 42	L 3	1523	S C	12MAY78	01 12 07	120 00	XGAL	GOOD
NGC 4151	84	11.0	12 08 00	+39 42	L 3	1524	S C	12MAY78	05 37 00	120 00	XGAL	
NGC 4151	84	11.0	12 08 00	+39 41	L 3	2098	L O	24JUL78	22 24 00	30 00	UK016	GOOD
NGC 4151	84	11.0	12 08 00	+39 41	L 3	2098	S O	24JUL78	21 16 00	60 00	UK016	GOOD
NGC 4151	84	11.7	12 08 00	+39 41	H 3	2170	L O	01AUG78	20 18 00	300 00	UK13B	23
NGC 4151	84	11.7	12 08 00	+39 41	L 3	2171	L O	02AUG78	02 08 18	30 00	UK13B	45
NGC 4151	84	11.4	12 08 00	+39 41	L 3	3048	L O	19OCT78	17 25 17	30 00	UK041	45
NGC 4151	84	11.4	12 08 00	+39 41	L 3	3048	S O	19OCT78	16 18 08	60 00	UK041	35
NGC 4151	84	11.4	12 08 00	+39 41	L 3	3049	L O	19OCT78	18 34 27	25 00	UK041	35
NGC 4151	84	11.4	12 08 00	+39 41	H 3	3114	L O	23OCT78	14 27 21	433 00	UK041	23BACKGROUND AT 1000N
NGC 4151	84	12.0	12 08 00	+39 41	L 3	3557	S C	09DEC78	12 23 45	60 00	PI037	25
NGC 4151	84	12.0	12 08 00	+39 41	L 3	3557	L O	09DEC78	11 46 32	30 00	PI037	36
NGC 4151	84	11.5	12 08 00	+39 41	H 3	3704	L O	25DEC78	11 05 20	400 00	UK033	23
NGC 4151	84	11.5	12 08 00	+39 41	L 3	3971	S O	21JAN79	13 47 03	60 00	UK026	56
NGC 4151	84	11.5	12 08 00	+39 41	L 3	3971	L O	21JAN79	13 15 13	25 00	UK026	35
NGC 4151	84	11.5	12 08 00	+39 41	L 3	3972	L O	21JAN79	15 22 05	25 00	UK026	35
MKN 205	85	14.5	12 19 37	+75 35	L 2	1346	L O	20APR78	09 30 00	30 00	UKP0P	UNDEREXP
MKN 205	85	14.5	12 19 37	+75 35	L 2	3158	L O	12DEC78	11 43 00	360 00	UK13A	44
MKN 205	85	14.5	12 19 37	+75 35	L 3	1392	L O	20APR78	07 16 00	90 00	UKP02	UNDEREXP
MKN 205	85	14.5	12 19 37	+75 35	L 3	2261	L O	10AUG78	20 18 15	320 00	UK13A	55
01225+31	85	15.9	12 26 13	+31 48	L 3	3413	L O	22NOV78	16 06 20	220 00	UK13A	11

OBJECT	CL	MAG	RT ASCN HR MN SC	DECLN DEG MN	DISP +CAM	IMAGE	APERT OR LG	DATE	START HR MN SC	LENGTH MIN SC	PROG	COMMENT
HD108662	36	5.3	12 26 25	+26 11	H 2	2848	S C	07NOV78	13 00 37	15 00	GM045	40
HD108662	36	5.3	12 26 25	+26 11	H 2	2849	S C	07NOV78	14 14 44	22 00	GM045	50
HD108662	36	5.3	12 26 25	+26 11	H 2	2850	S C	07NOV78	15 20 12	21 00	GM045	60
HD108662	36	5.3	12 26 25	+26 11	H 2	2894	S C	09NOV78	14 26 18	20 00	GM045	60
HD108662	36	5.3	12 26 25	+26 11	L 3	3248	S C	07NOV78	13 52 04	3 30	GM045	80SW PART OK
HD108662	36	5.3	12 26 25	+26 11	L 3	3249	S C	07NOV78	15 10 40	2 30	GM045	80SW PART OK
HD108662	36	5.3	12 26 25	+26 11	L 3	3250	S C	07NOV78	16 21 47	2 10	GM045	80SW PART OK
HD108662	36	5.3	12 26 25	+26 11	H 3	3283	S C	09NOV78	14 55 00	52 00	GM045	70
3C 273	85	13.0	12 26 33	+ 2 20	L 2	1447	S O	06MAY78	05 54 20	105 00	XGAL	GOOD
3C 273	85	13.0	12 26 33	+ 2 20	L 2	1450	S O	07MAY78	01 47 00	240 00	XGAL	
3C 273	85	12.8	12 26 33	+02 20	H 2	3996	L O	12MAR79	04 57 57	410 00	UK13B	20
3C 273	85	13.0	12 26 33	+ 2 20	L 3	1492	S O	06MAY78	02 40 56	180 00	XGAL	GOOD LYALF+CIV SATUR.
3C 273	85	13.0	12 26 33	+ 2 20	L 3	1498	S O	07MAY78	06 26 00	60 00	XGAL	
3C 273	85	13.0	12 26 33	+ 2 20	L 3	1509	S C	09MAY78	02 48 00	180 00	XGAL	
3C 273	85	12.8	12 26 36	+02 20	L 2	1886	L O	24JUL78	23 41 00	50 00	UK016	GOOD
3C 273	85	12.8	12 26 36	+02 20	L 2	1887	L O	25JUL78	01 41 04	40 00	UK016	GOOD
3C 273	85	12.8	12 26 36	+02 20	L 3	2099	L O	25JUL78	00 40 41	50 00	UK016	GOOD JUST SAT IN LY ALFA
3C 273	85	12.8	12 26 36	+02 20	L 3	2100	S O	25JUL78	02 31 30	70 00	UK016	VERY GOOD
M 87 GAL	86	9.0	12 28 17	+12 40	L 2	1876	L O	22JUL78	21 26 48	340 00	PI037	NO SPECTRUM
M 87 JET	86	12.0	12 28 17	+12 40	L 2	3159	L O	13DEC78	11 13 40	390 00	PI037	21
SKY	07	00.0	12 28 17	+12 40	L 2	3799	L O	19FEB79	07 31 40	300 00	GP031	11
M 87	86	10.0	12 28 17	+12 40	L 2	3818	L O	21FEB79	07 01 09	230 00	PI037	21
M 87 JET	86	13.0	12 28 17	+12 40	L 3	2085	L O	22JUL78	21 22 30	383 00	PI037	GOOD BUT NOISY IMAGE
M 87 JET	86	12.0	12 28 17	+12 40	L 3	3571	L O	11DEC78	11 37 00	370 00	PI037	20
M 87	86	12.0	12 28 17	+12 40	L 3	3580	L O	13DEC78	11 16 19	360 00	PI037	11ONLY GEOCORONA
M 87	86	10.0	12 28 17	+12 40	L 3	4299	L O	19FEB79	07 27 12	430 00	GP036	21
M 87	86	10.0	12 28 18	+12 40	L 3	2157	L O	30JUL78	20 59 00	400 00	FB824	UNDEREXP EX AT LONG WL
HD108945	36	5.5	12 28 30	+24 51	H 2	4043	L O	17MAR79	05 07 22	23 00	GM045	50
HD108945	36	5.5	12 28 30	+24 51	H 3	4668	L O	17MAR79	04 42 07	20 00	GM045	4021 COM
HD108945	36	5.5	12 28 30	+24 51	L 3	4669	S C	17MAR79	06 03 12	1 30	GM045	50
HD108945	36	5.5	12 28 30	+24 51	L 3	4669	L O	17MAR79	05 59 46	30	GM045	70
HD108945	36	5.5	12 28 31	+24 51	H 2	2851	S C	07NOV78	17 03 37	36 00	GM045	50
HD108945	36	5.5	12 28 31	+24 51	H 2	2852	S C	07NOV78	18 26 19	36 00	GM045	60
HD108945	36	5.5	12 28 31	+24 51	H 2	2893	S C	09NOV78	12 52 45	36 00	GM045	50
HD108945	36	5.5	12 28 31	+24 51	H 2	3467	S C	12JAN79	12 14 33	45 00	MG045	70
HD108945	36	5.5	12 28 31	+24 51	L 3	3251	L O	07NOV78	18 19 10	1 30	GM045	70
HD108945	36	5.5	12 28 31	+24 51	L 3	3251	S C	07NOV78	18 11 46	3 00	GM045	70
HD108945	36	5.5	12 28 31	+24 51	L 3	3252	L O	07NOV78	19 35 30	1 30	GM045	70
HD108945	36	5.5	12 28 31	+24 51	L 3	3252	S C	07NOV78	19 22 50	3 00	GM045	70
HD108945	36	5.5	12 28 31	+24 51	L 3	3281	L O	09NOV78	12 45 39	1 30	GM045	70
HD108945	36	5.5	12 28 31	+24 51	L 3	3281	S C	09NOV78	12 39 34	1 30	GM045	40
HD108945	36	5.5	12 28 31	+24 51	L 3	3282	L O	09NOV78	13 42 32	1 30	GM045	70
HD108945	36	5.5	12 28 31	+24 51	L 3	3282	S C	09NOV78	13 35 27	2 00	GM045	70
HD108945	36	5.5	12 28 31	+24 51	H 3	3897	S C	12JAN79	11 34 48	30 00	MG045	40
HD108945	36	5.5	12 28 31	+24 51	L 3	3898	L O	12JAN79	13 09 00	30	MG045	50
HD108945	36	5.5	12 28 31	+24 51	L 3	3898	S C	12JAN79	13 04 25	1 30	MG045	60
HD108387	26	3.8	12 31 21	+70 04	H 2	4132	L O	27MAR79	11 10 23	1 05	MHA02	50
HD108387	26	3.8	12 31 21	+70 04	H 3	4763	L O	27MAR79	11 06 08	1 10	MHA02	55

OBJECT	CL	MAG	RT ASCN HR MN SC	DECLN DEG MN	DISP +CAM	IMAGE	APERT OR LG		DATE	START HR MN SC	LENGTH MIN SC	PROG	COMMENT
HD109358	44	4.3	12 31 54	+41 38	H 2	1748	S	C	06JUL78	22 10 53	40 00	MR003	A BIT STRONG
HD109358	44	4.3	12 31 54	+41 38	L 3	1925	S	C	06JUL78	22 59 42	50 00	MR003	UNDEREXPOSED
HD110066	36	6.3	12 36 51	+36 14	H 2	3982	L	O	11MAR79	09 08 30	55 00	MHC02	50
HD110379	40	3.6	12 39 07	-01 11	H 2	3468	S	C	12JAN79	15 19 08	5 00	CR031	40
HD110379	40	3.6	12 39 09	-01 11	H 2	3193	S	C	17DEC78	17 02 51	2 00	CR031	30GAMMA VIR
HD110379	40	3.6	12 39 09	-01 11	H 3	3625	S	C	17DEC78	17 08 53	30 00	CR031	30
HD110813	50	8.0	12 41 46	+61 22	L 2	4120	L	O	26MAR79	01 50 06	25 00	KU026	11
HD110813	50	8.0	12 41 46	+61 22	L 3	4758	L	O	26MAR79	11 20 02	27 00	UK026	11
EX HYA	54	13.0	12 49 42	-28 59	L 2	3435	L	O	09JAN79	15 10 16	35 00	UK035	55
EX HYA	54	13.0	12 49 42	-28 59	L 3	3458	L	O	09JAN79	14 18 57	45 00	UK035	45
+52 1661	25	11.3	12 52 18	+52 01	L 2	3304	L	O	27DEC78	16 16 14	27 00	FC027	10
+52 1661	25	11.3	12 52 18	+52 01	L 3	3727	L	O	27DEC78	16 48 07	55 00	FC027	10
HD112244	13	5.4	12 52 59	-56 34	H 2	3712	L	O	08FEB79	08 22 09	2 20	UK021	50
HD112244	13	5.4	12 52 59	-56 34	H 3	4193	L	O	08FEB79	08 31 23	5 01	UK021	6781 IV BAT
HD112413	25	2.9	12 53 41	+38 35	H 2	1477	S	C	12MAY78	08 41 54	1 00	VILSP	NO SPECTRUM
MKN 231	84	14.0	12 54 05	+57 09	L 2	3185	L	O	16DEC78	11 35 50	370 00	UK033	23
MKN 231	84	14.0	12 54 05	+57 09	L 2	4017	L	O	18MAR79	07 38 38	257 00	UK13B	11
MKN 231	84	14.0	12 54 05	+57 09	L 2	4053	L	O	18MAR79	04 55 28	412 00	UK13B	33
MKN 231	84	14.0	12 54 05	+57 09	L 3	3670	L	O	22DEC78	11 28 36	380 00	UK033	22
MKN 59	88	14.0	12 56 42	+35 08	L 2	1641	L	O	09JUN78	04 16 19	85 00	UK042	OK MAX ON 136
MKN 59	88	14.0	12 56 42	+35 08	L 3	1748	L	O	09JUN78	02 45 56	80 00	UK042	UNDEREXPOSED X 2
HD113904	10	5.6	13 04 52	-65 02	H 2	1535	S	C	22MAY78	02 15 12	8 30	KH052	QUITE GOOD
HD113904	10	5.6	13 04 52	-65 02	H 2	1536	S	C	22MAY78	03 32 07	5 00	KH052	QUITE GOOD
HD113904	10	5.5	13 04 52	-65 02	H 2	1652	S	C	11JUN78	01 33 16	7 00	UK02C	THETA MUS GOOD EXP
HD113904	10	5.5	13 04 52	-65 02	H 2	1659	S	C	12JUN78	03 56 53	8 30	KH052	A BIT STRONG
HD113904	10	5.6	13 04 52	-65 02	H 2	1697	S	C	20JUN78	01 13 00	8 30	KH052	GOOD FEW PIX SAT
HD113904	10	5.5	13 04 52	-65 02	H 2	1762	S	C	01JUL78	22 11 00	8 30	KH052	OK BUT HAS HIT 255
HD113904	10	5.5	13 04 52	-65 02	H 2	1763	S	C	01JUL78	23 58 16	12 00	KH052	OVEREXPOSED
HD113904	10	5.6	13 04 52	-65 02	H 3	1599	S	C	22MAY78	01 16 33	6 30	KH052	GUOD THETA MUS
HD113904	10	5.5	13 04 52	-65 02	H 3	1762	S	C	11JUN78	01 21 06	6 00	UK02C	THETA MUS GOOD EXP
HD113904	10	5.5	13 04 52	-65 02	H 3	1769	S	C	12JUN78	03 11 39	6 30	KH052	GOOD
HD113904	10	5.5	13 04 52	-65 02	H 3	1770	S	C	12JUN78	05 04 34	8 00	KH052	GOOD
HD113904	10	5.6	13 04 52	-65 02	H 3	1816	S	C	20JUN78	01 45 00	6 30	KH052	A BIT WEAK
HD113904	10	5.5	13 04 52	-65 02	H 3	1899	S	C	01JUL78	21 56 00	6 30	KH052	GOOD
HD113904	10	5.5	13 04 52	-65 02	H 3	1900	S	C	01JUL78	23 35 30	10 50	KH052	SLIGHTLY OVEREXPOSED
HD114710	44	4.3	13 09 32	+28 08	H 2	1764	S	C	02JUL78	01 24 33	34 00	MR003	OVEREXPOSED AT LONG WL
HD114710	44	4.3	13 09 32	+28 08	L 3	1901	S	C	02JUL78	02 07 10	32 00	MR003	WEAK
VENUS	03	-4.0	13 14 21	-09 57	L 2	2200	S	C	28AUG78	19 50 00	15 00	UK043	IOWRONG COORDS
HD116658	20	1.0	13 22 33	-10 54	H 3	3968	S	C	21JAN79	10 01 31	4	UK026	60ALPHA VIR
HD116658	20	1.0	13 22 42	-10 54	H 2	2222	S	C	30AUG78	22 48 25	5	UK022	60
HD116658	20	1.0	13 22 42	-10 54	H 2	2223	S	C	30AUG78	23 37 26	7	UK022	70
HD116658	20	1.0	13 22 42	-10 54	H 3	2418	S	C	30AUG78	23 19 00	5	UK022	60
BV CEN	54	13.0	13 28 09	-54 43	L 2	3434	L	O	09JAN79	12 26 33	50 00	UK035	34
BV CEN	54	13.0	13 28 09	-54 43	L 3	3857	L	O	09JAN79	11 23 25	50 00	UK035	20
Q1331+17	85	16.0	13 31 10	+17 04	L 3	3544	L	O	06DEC78	11 27 15	378 00	UK13A	11BLIND OFFSET - FAILED?
HD118022	36	4.9	13 31 36	+03 54	H 2	3981	L	O	11MAR79	07 26 10	15 00	MHC02	60
HD118022	36	4.9	13 31 36	+03 54	H 3	4589	L	O	11MAR79	06 53 50	25 00	MHC02	10
HD118022	36	4.9	13 31 36	+03 54	H 3	4698	L	O	19MAR79	08 46 15	25 00	MHC02	60

OBJECT	CL	MAG	RT ASCN HR MN SC	DECLN DEG MN	DISP +CAM	IMAGE	APERT OR LG		DATE	START HR MN SC	LENGTH MIN SC	PROG	COMMENT
FEIGE 86	23	9.2	13 36 06	+29 37	L 2	1327	S	C	17APR78	07 55 00	15 00	MHD02	QUITE OVEREXP
+30 2431	21	10.0	13 36 06	+29 37	L 2	3303	S	C	27DEC78	15 01 04	3 00	FC027	50
+30 2431	21	10.0	13 36 06	+29 37	L 2	3303	L	O	27DEC78	14 55 14	3 00	FC027	60
FEIGE 86	23	9.2	13 36 06	+29 37	L 3	1374	S	C	17APR78	05 45 00	12 00	MHD02	
+30 2431	21	10.0	13 36 06	+29 37	L 3	3723	L	O	27DEC78	15 13 51	4 00	FC027	50
+30 2431	21	10.0	13 36 06	+29 37	L 3	3723	S	C	27DEC78	15 06 33	4 00	FC027	40
+30 2431	21	10.0	13 36 06	+29 37	H 3	4616	L	O	13MAR79	05 25 27	270 00	MHD02	40
HD118716	20	2.3	13 36 42	-53 13	H 2	3836	S	C	23FEB79	09 36 48	13	LS044	60
HD118716	20	2.3	13 36 42	-53 13	H 2	3837	S	C	23FEB79	10 28 04	6	LS044	400K NEAR 2700A
HD118716	20	2.3	13 36 42	-53 13	H 3	4347	S	C	23FEB79	10 02 53	10	LS044	50
NGC 5253	88	12.7	13 37 05	-31 23	L 2	3131	L	O	09DEC78	16 00 16	105 00	PT037	50
NGC 5253	88	12.7	13 37 05	-31 23	L 3	3558	L	O	09DEC78	15 22 26	30 00	PT037	23
HD120315	21	1.9	13 45 34	+49 34	H 2	3479	S	O	15JAN79	14 09 13	9	UKCAL	50
HD120315	21	1.9	13 45 34	+49 34	H 2	3480	L	O	13JAN79	14 39 25	7	UKCAL	50
HD120315	21	1.9	13 45 34	+49 34	H 3	3909	S	O	13JAN79	13 43 36	10	UKCAL	50
HD120315	21	1.9	13 45 34	+49 34	H 3	3910	L	O	13JAN79	14 35 50	7	UKCAL	50
VV 68	70	8.3	13 50 11	-66 16	L 2	3819	L	O	21FEB79	13 51 40	25 00	LS044	50
VV 68	70	10.0	13 50 11	-66 16	H 2	3835	L	O	23FEB79	06 25 48	120 00	LS044	23
VV 68	70	8.3	13 50 11	-66 16	L 3	4324	L	O	21FEB79	14 21 01	27 00	LS044	45
VV 68	70	10.0	13 50 11	-66 16	H 3	4346	L	O	23FEB79	08 31 55	29 00	LS044	11
MKN 279	88	15.0	13 51 52	+69 33	L 2	3073	L	O	30NOV78	16 28 00	160 00	UK037	23NOT QUITE IN APERTURE?
MKN 279	88	15.0	13 51 52	+69 33	L 3	3497	L	O	30NOV78	13 21 13	180 00	UK037	34
HD121370	44	2.7	13 52 18	+18 39	H 2	2161	S	C	23AUG78	20 57 00	24 00	GG005	70SAT AT LW
HD121370	44	2.7	13 52 18	+18 39	H 2	2162	S	C	23AUG78	21 58 00	6 00	GG005	40
HD122563	46	6.2	14 00 05	+09 56	L 2	2175	L	O	25AUG78	18 46 00	15 00	FG004	70
HD123299	36	3.6	14 03 02	+64 37	H 2	3423	S	C	08JAN79	10 31 16	3 03	AR020	50
HD123299	36	3.6	14 03 02	+64 37	L 2	3424	L	O	08JAN79	11 40 17	4	AR020	70
HD123299	36	3.6	14 03 02	+64 37	L 2	3424	S	C	08JAN79	11 36 00	6	AR020	70
HD123299	36	3.6	14 03 02	+64 37	H 3	3840	S	C	08JAN79	09 52 51	6 28	AR020	60
HD123299	36	3.6	14 03 02	+64 37	L 3	3841	L	O	08JAN79	11 09 09	3	AR020	50
HD123299	36	3.6	14 03 02	+64 37	L 3	3841	S	C	08JAN79	11 05 23	5	AR020	50
HD124224	36	4.9	14 09 44	+02 39	H 2	3443	L	O	10JAN79	09 43 31	2 30	HM021	50
HD124224	36	4.9	14 09 44	+02 39	H 2	3444	L	O	10JAN79	10 41 17	3 00	HM021	50
HD124224	36	4.9	14 09 44	+02 39	H 2	3445	L	O	10JAN79	11 40 20	3 00	HM021	50
HD124224	36	4.9	14 09 44	+02 39	H 2	3446	L	O	10JAN79	12 45 36	3 00	HM021	50
HD124224	36	4.9	14 09 44	+02 39	H 2	3447	L	O	10JAN79	13 48 11	2 30	HM021	50
HD124224	36	4.9	14 09 44	+02 39	H 2	3448	L	O	10JAN79	14 46 56	2 30	HM021	50
HD124224	36	4.9	14 09 44	+02 39	H 2	3449	L	O	10JAN79	15 24 40	2 30	HM021	50
HD124224	36	4.9	14 09 44	+02 39	H 2	4044	L	O	17MAR79	07 05 14	2 30	HM021	50CU VIR
HD124224	36	4.9	14 09 44	+02 39	H 2	4045	L	O	17MAR79	08 04 21	2 30	HM021	50
HD124224	36	4.9	14 09 44	+02 39	H 2	4046	L	O	17MAR79	09 03 21	2 30	HM021	50
HD124224	36	4.9	14 09 44	+02 39	H 2	4047	L	O	17MAR79	10 00 29	2 30	HM021	50
HD124224	36	4.9	14 09 44	+02 39	H 2	4048	L	O	17MAR79	10 59 43	2 30	HM021	50
HD124224	36	4.9	14 09 44	+02 39	H 3	3864	L	O	10JAN79	09 51 05	5 01	HM021	50
HD124224	36	4.9	14 09 44	+02 39	H 3	3865	L	O	10JAN79	10 49 10	5 01	HM021	50
HD124224	36	4.9	14 09 44	+02 39	H 3	3866	L	O	10JAN79	11 49 37	4 30	HM021	50
HD124224	36	4.9	14 09 44	+02 39	H 3	3867	L	O	10JAN79	12 51 45	4 30	HM021	50
HD124224	36	4.9	14 09 44	+02 39	H 3	3868	L	O	10JAN79	13 53 59	3 40	HM021	50

OBJECT	CL	MAG	RT ASCN HR MN SC	DECLN DEG MN	DISP +CAM	IMAGE	APERT OB	LG	DATE	START HR MN SC	LENGTH MIN SC	PROG	COMMENT
HD124224	36	4.9	14 09 44	+02 39	H 3	3869	L	0	10JAN79	14 53 27	3 40	HM021	50
HD124224	36	4.9	14 09 44	+02 39	H 3	3963	L	0	10JAN79	09 09 25	5 01	HM021	50
HD124224	36	4.9	14 09 44	+02 39	H 3	4670	L	0	17MAR79	07 10 41	3 40	HM021	50
HD124224	36	4.9	14 09 44	+02 39	H 3	4671	L	0	17MAR79	08 11 17	3 40	HM021	50
HD124224	36	4.9	14 09 44	+02 39	H 3	4672	L	0	17MAR79	09 08 57	3 40	HM021	50
HD124224	36	4.9	14 09 44	+02 39	H 3	4673	L	0	17MAR79	10 06 00	3 40	HM021	50
HD124224	36	4.9	14 09 44	+02 39	H 3	4674	L	0	17MAR79	11 07 05	3 40	HM021	50
HD124448	27	10.0	14 11 47	-46 03	L 2	3347	S	C	01JAN79	09 20 17	5 00	UK017	50
HD124448	27	10.0	14 11 47	-46 03	L 2	3347	L	0	01JAN79	09 11 01	3 00	UK017	50
HD124448	27	10.0	14 11 47	-46 03	H 2	3348	L	0	01JAN79	10 31 38	290 00	UK017	70BACKGROUND 100DN
HD124448	27	10.0	14 11 47	-46 03	L 3	3769	L	0	01JAN79	09 43 31	3 00	UK017	40
HD124448	27	10.0	14 11 47	-46 03	L 3	3769	S	C	01JAN79	09 30 31	5 00	UK017	40
HD124448	27	10.0	14 11 47	-46 03	L 3	3770	L	0	01JAN79	15 29 42	6 00	UK017	50
HD128620	44	.3	14 13 11	-60 37	L 2	2758	S	0	30OCT78	14 48 13	6 00	RB039	400K FOR 2100A
HD128620	44	.3	14 13 11	-60 37	L 2	2758	L	0	30OCT78	14 38 00	1 54	RB039	70AFFECTED BY SAP EXP
HD128620	44	.3	14 13 11	-60 37	L 2	2759	L	0	30OCT78	15 40 36	2 30	RB039	600K FOR 2100A
HD124897	46	-0.1	14 13 23	+19 26	L 3	1608	S	C	23MAY78	06 57 14	40 00	UKPOP	QUITE GOOD
1419+09	19	11.8	14 19 59	+09 04	L 3	4148	S	C	04FEB79	11 26 40	5 05	UK036	40
1419+09	19	11.8	14 19 59	+09 04	L 3	4148	L	0	04FEB79	11 18 20	3 25	UK036	50
HD127493	16	9.5	14 29 31	+22 26	L 3	1720	L	0	05JUN78	03 15 48	1 45	KH001	OK AROUND 1650A OXP
HD127493	16	9.5	14 29 31	+22 26	L 3	1720	S	C	05JUN78	03 05 55	3 30	KH001	OK AROUND 1650A OXP
HD127762	33	3.0	14 30 04	+38 32	H 2	1312	S	C	13APR78	05 42 59	20 00	AR040	GAM 800, OVER LN
HD127762	33	3.0	14 30 04	+38 32	H 2	1313	S	C	13APR78	08 53 57	15 00	AR040	GAM 800, UNDEREXP.
HD127762	33	3.0	14 30 04	+38 32	H 2	1314	S	C	13APR78	09 48 21	2 00	AR040	77CAMERA NOT PREPPED
HD127762	33	3.0	14 30 04	+38 31	H 2	3852	L	0	25FEB79	07 02 31	5 00	AR040	60GAMMA 800
HD127762	33	3.0	14 30 04	+38 31	H 2	3853	L	0	25FEB79	08 15 34	6 00	AR040	60
HD127762	33	3.0	14 30 04	+38 31	H 2	3854	L	0	25FEB79	08 48 19	6 00	AR040	60
HD127762	33	3.0	14 30 04	+38 31	H 2	3855	L	0	25FEB79	09 21 05	6 00	AR040	60
HD127762	33	3.0	14 30 04	+38 31	H 2	3856	L	0	25FEB79	09 52 46	6 00	AR040	60
HD127762	33	3.0	14 30 04	+38 31	H 2	3857	L	0	25FEB79	10 26 22	6 00	AR040	60
HD127762	33	3.0	14 30 04	+38 31	H 2	3858	L	0	25FEB79	10 59 21	6 00	AR040	60
HD127762	33	3.0	14 30 04	+38 31	H 2	3859	L	0	25FEB79	11 32 42	6 00	AR040	60
HD127762	33	3.0	14 30 04	+38 31	H 2	3860	L	0	25FEB79	12 03 53	6 00	AR040	60
HD127762	33	3.0	14 30 04	+38 31	H 2	3861	L	0	25FEB79	12 36 16	6 00	AR040	60
HD127762	33	3.0	14 30 04	+38 31	H 2	3862	L	0	25FEB79	13 10 07	6 00	AR040	60
HD127762	33	3.0	14 30 04	+38 31	H 2	3863	L	0	25FEB79	13 40 17	6 00	AR040	60
TON 209	20	12.5	14 33 00	+24 00	L 2	3302	L	0	27DEC78	13 07 04	14 00	FC027	50
TON 209	20	12.5	14 33 00	+24 00	L 3	3722	L	0	27DEC78	13 40 36	13 00	FC027	70
HD128620	44	0.0	14 35 11	-60 38	H 2	1515	S	C	19MAY78	06 05 38	3 00	FG004	NO SPECTRUM
HD128620	44	0.0	14 36 11	-60 38	H 2	1467	S	C	10MAY78	07 35 00	1 00	FG004	
HD128620	44	0.0	14 36 11	-60 38	H 2	1506	S	C	17MAY78	02 24 21	1 00	UKPOP	START OUT AP
HD128620	44	0.0	14 36 11	-60 38	H 2	1516	S	C	19MAY78	07 27 08	10 00	FG004	NO SPECTRUM
HD128620	44	0.0	14 36 11	-60 38	H 2	2810	S	C	03NOV78	14 03 15	1 00	FG004	11
URANUS	03	5.7	14 39 03	-15 05	L 2	1770	S	0	02JUL78	23 51 04	30 00	UK043	OVEREXPOSED AT LONG WL
URANUS	03	5.7	14 39 03	-15 05	L 2	1771	S	0	03JUL78	01 33 49	15 00	UK043	RATHER OVEREXPOSED
URANUS	03	5.7	14 39 03	-15 05	L 2	1772	S	0	03JUL78	02 42 35	5 00	UK043	GOOD MAX DN 233
URANUS	03	5.7	14 39 03	-15 05	L 3	1908	S	0	03JUL78	00 27 07	60 00	UK043	WEAK SPECTRUM AT LONG WL
+10 2910	22	12.0	14 39 24	+18 07	L 2	3301	L	0	27DEC78	11 12 29	31 00	FC027	10

OBJECT	CL	MAG	RT ASCN HR MN SC	DECLN DEG MN	DISP +CAM	IMAGE	APERT OB	LG	DATE	START HR MN SC	LENGTH MIN SC	PROG	COMMENT
+10 2910	22	12.0	14 39 24	+18 07	L 3	3721	L	0	27DEC78	11 53 17	44 00	FC027	10
URANUS	03	6.0	14 40 52	-15 16	L 3	2410	S	C	28AUG78	23 31 00	120 00	UK043	02
+07 2899	16	9.5	15 05 54	+07 25	L 3	4149	S	C	04FEB79	12 22 31	8 40	UK036	50
+07 2899	16	9.5	15 05 54	+07 25	L 3	4149	L	0	04FEB79	12 34 50	5 50	UK036	60
HD138679	23	8.9	15 32 31	-60 23	L 2	1871	S	0	22JUL78	02 58 00	2 00	UK003	GOOD MEAN DN 180
HD138679	23	8.9	15 32 31	-60 23	L 2	1871	L	0	22JUL78	02 50 00	1 30	UK003	GOOD MAX DN 200
HD138679	23	8.9	15 32 31	-60 23	L 3	2075	S	0	22JUL78	03 26 00	1 40	UK003	VERY GOOD
HD138679	23	8.9	15 32 31	-60 23	L 3	2075	L	0	22JUL78	03 20 00	1 00	UK003	VERY GOOD MAX DN 200
HD142669	20	3.9	15 33 47	-29 04	L 2	1489	S	C	14MAY78	08 10 00	1 00	UKPOP	QUITE GOOD
HD142669	20	3.9	15 33 47	-29 04	L 2	1490	S	C	14MAY78	07 03 42	12 00	UKPOP	GOOD
HD142669	20	3.9	15 33 47	-29 04	L 2	1540	S	C	16MAY78	08 00 00	3 00	UKPOP	QUITE GOOD
HD140283	41	7.2	15 40 22	-10 46	L 2	2380	S	C	16SEP78	23 21 03	4 30	PSC13	66
HD140283	41	7.2	15 40 22	-10 46	L 2	2380	L	0	16SEP78	23 10 00	4 30	PSC13	77
HD140283	41	7.2	15 40 22	-10 46	L 3	2665	L	0	16SEP78	22 31 09	30 00	PSC13	70
HD141527	42	5.8	15 46 31	+28 19	L 2	1587	L	0	01JUN78	01 07 16	70 00	VILSP	R CRB OVEREXP RED OF2500
HD141527	42	5.8	15 46 31	+28 18	L 2	2999	L	0	21NOV78	18 30 35	15 00	VILSP	70EXP TIME UNCERTAIN
HD141527	42	6.2	15 46 31	+28 19	L 2	4081	L	0	21MAR79	04 36 05	5 00	VILSP	70
HD141527	42	6.2	15 46 31	+28 19	H 2	4112	L	0	25MAR79	06 56 00	110 00	VILSP	60R CRB
HD141527	42	6.2	15 46 31	+28 19	L 2	4113	L	0	25MAR79	09 39 00	2 20	VILSP	60
HD141527	42	5.8	15 46 31	+28 19	L 3	1681	L	0	31MAY78	23 58 54	60 00	VILSP	R CRB GOOD RED OF 1600
HD141527	42	5.8	15 46 31	+28 18	L 3	3409	L	0	21NOV78	18 59 00	47 00	VILSP	50
HD141527	42	6.2	15 46 31	+28 19	L 3	4749	L	0	25MAR79	08 54 52	40 00	VILSP	50
HD141795	35	3.7	15 48 19	+04 37	L 3	4809	S	C	27FEB79	08 09 48	1 00	RBA01	70
HD141795	35	3.7	15 48 19	+04 37	L 3	4809	L	0	27FEB79	08 57 27	6 00	RBA01	80EPSILON SER
+33 2642	23	10.8	15 49 57	+33 06	H 3	4791	L	0	29MAR79	07 05 26	282 00	MHA02	50
HD141891	40	2.8	15 50 43	-63 17	H 2	1860	S	C	20JUL78	20 42 00	7 00	BN053	OXP BUT OK FOR MGII
HD141891	40	2.8	15 50 43	-63 17	H 2	3697	L	0	07FEB79	06 31 49	4 12	BN053	70
HD141891	40	2.8	15 50 43	-63 17	H 2	3704	L	0	07FEB79	13 25 25	2 40	BN053	50
HD141891	40	2.8	15 50 43	-63 17	L 3	4184	L	0	07FEB79	13 32 30	2 00	BN053	70
RU LUP	58	11.0	15 53 22	-37 40	L 2	1466	S	C	10MAY78	04 00 00	120 00	GG005	GOOD
RU LUP	58	10.0	15 53 22	-37 40	L 3	1570	L	0	18MAY78	04 41 30	180 00	GG005	QUITE GOOD
HD142669	20	3.9	15 53 48	-29 04	L 2	1563	S	C	26MAY78	03 45 18	2	UKPOP	GOOD
HD142669	20	4.2	15 53 48	-29 04	L 2	2408	L	0	19SEP78	19 56 00	3	UK019	50MIN GAIN USED
HD142669	20	4.2	15 53 48	-29 04	L 2	2408	S	C	19SEP78	19 31 55	1	UK019	50
HD142669	20	3.9	15 53 48	-29 04	L 3	1640	S	C	26MAY78	03 36 02	2	UKPOP	OVEREXP FACT 2
HD142669	20	4.2	15 53 48	-29 04	L 3	2698	S	C	19SEP78	20 34 46	1	UK019	50
HD142669	20	4.2	15 53 48	-29 04	L 3	2698	L	0	19SEP78	20 29 16	2	UK019	40MIN GAIN USED
HD142983	21	4.8	15 55 23	-14 08	H 2	3425	S	C	08JAN79	13 11 15	3 22	AR020	40
HD142983	21	4.8	15 55 23	-14 08	L 2	3426	S	C	08JAN79	14 32 19	4	AR020	50
HD142983	21	4.8	15 55 23	-14 08	L 2	3426	L	0	08JAN79	14 29 13	2	AR020	50
HD142983	21	4.8	15 55 23	-14 08	H 3	3842	S	C	08JAN79	12 36 30	4 07	AR020	40
HD142983	21	4.8	15 55 23	-14 08	H 3	3843	S	C	08JAN79	13 38 43	6 00	AR020	60
HD142983	21	4.8	15 55 23	-14 08	L 3	3844	L	0	08JAN79	14 25 38	3	AR020	50
HD142983	21	4.8	15 55 23	-14 08	L 3	3844	S	C	08JAN79	14 22 08	4	AR020	50
HD142983	21	4.8	15 55 23	-14 08	H 3	3845	S	C	08JAN79	15 25 08	5 00	AR020	50
HD142983	25	4.8	15 55 23	-14 08	H 3	3899	S	C	12JAN79	14 23 49	4 30	PSD13	50
HD143275	20	3.3	15 57 23	-22 29	H 2	2220	S	C	30AUG78	20 55 45	20	UK022	50
HD143275	20	3.3	15 57 23	-22 29	H 2	2221	S	C	30AUG78	21 51 24	40	UK022	700K FOR SW PART

OBJECT	CL	MAG	RT ASCN HR MN SC	DECLN DEG MN	DISP +CAM	IMAGE	APERT OR	APERT LG	DATE	START HR MN SC	LENGTH MIN SC	PROG	COMMENT
HD143275	20	3.3	15 57 23	+22 29	H 3	2417	S	C	30AUG78	21 22 16	16	UK022	50
HD143454	63	10.0	15 57 24	+26 04	L 2	4082	L	O	21MAR79	05 29 16	45 00	VILSP	35
T CRB	63	10.0	15 57 24	+26 04	L 3	2412	S	C	29AUG78	23 40 20	120 00	VILSP	568N CONT A BIT WEAK
HD143454	63	10.0	15 57 25	+26 04	L 3	4750	L	O	25MAR79	10 33 00	71 00	MHA02	34
HD143807	36	5.0	15 59 26	+30 00	H 2	3654	S	O	02FEB79	13 00 39	12 00	UKCAL	60
HD144197	35	4.7	16 02 57	+45 02	L 3	4411	L	O	27FEB79	11 39 36	15 00	RBA41	70
HD144197	35	4.7	16 02 57	+45 02	L 3	4411	S	C	27FEB79	11 26 03	3 00	RBA41	80
MKN 297	88	13.2	16 03 01	+20 40	L 2	1585	L	O	31MAY78	01 26 07	310 00	CC038	NO SPECTRUM
NGC 6052	88	13.2	16 03 01	+20 41	L 3	1648	L	O	27MAY78	02 42 57	300 00	CC038	UNDEREXP MAXDN=110
HD144668	33	6.9	16 05 13	+38 58	L 2	1442	L	O	05MAY78	06 05 20	10 00	VB032	QUITE GOOD
HD144668	33	6.9	16 05 13	+38 58	L 2	1442	S	C	05MAY78	05 53 00	5 00	VB032	
HD144668	33	6.9	16 05 13	+38 58	L 2	1465	S	C	10MAY78	01 40 00	5 00	GG005	A BIT UNDEREXP.
HD144668	33	6.9	16 05 13	+38 58	L 2	1511	L	O	18MAY78	02 46 56	8 00	GG005	GOOD
HD144668	33	6.9	16 05 13	+38 58	L 2	1511	S	C	18MAY78	02 31 33	4 00	GG005	GOOD
HD144668	33	6.9	16 05 13	+38 58	L 2	1558	S	C	25MAY78	07 32 00	6 00	VB032	??
HD144667	22	6.7	16 05 13	+38 57	H 2	3979	L	O	11MAR79	04 22 43	17 00	MHC02	50
HD144668	30	6.4	16 05 13	+38 58	H 2	3980	L	O	11MAR79	05 26 10	50 00	MHC02	40
HD144668	30	7.0	16 05 13	+38 58	H 2	4067	L	O	19MAR79	09 49 06	118 00	MHC02	50
HD144668	33	6.9	16 05 13	+38 58	L 3	1486	L	O	05MAY78	07 04 00	20 00	VB032	OVEREXP OVER 1600
HD144668	33	6.9	16 05 13	+38 58	L 3	1514	S	C	10MAY78	01 54 53	20 00	GG005	A BIT UNDEREXP
HD144668	33	6.9	16 05 13	+38 58	L 3	1569	L	O	18MAY78	01 36 30	16 00	GG005	GOOD
HD144668	33	6.9	16 05 13	+38 58	L 3	1569	S	C	18MAY78	01 02 12	8 00	GG005	GOOD
HD144667	22	6.7	16 05 13	+38 57	H 3	4586	L	O	11MAR79	04 47 10	25 00	MHC02	50
HD145389	36	4.3	16 07 12	+45 04	H 2	2577	S	C	11OCT78	16 38 00	3 30	UK025	40
HD145389	36	4.3	16 07 12	+45 04	H 2	2578	S	C	11OCT78	17 29 19	7 00	UK025	60
HD145389	36	4.3	16 07 12	+45 04	H 3	2921	S	C	11OCT78	17 16 35	5 01	UK025	50
HD145502	20	4.0	16 09 05	+19 20	H 2	3714	L	O	08FEB79	13 25 38	1 00	UK021	50
HD145502	20	4.0	16 09 05	+19 20	H 3	4214	L	O	10FEB79	06 41 58	1 30	UK021	50
SCO X1	59	13.0	16 17 04	-15 31	L 2	1431	L	O	03MAY78	02 07 09	40 00	UKIXR	GOOD
SCO X1	59	13.0	16 17 04	-15 31	L 2	1432	L	O	03MAY78	03 47 27	40 00	UKIXR	GOOD
SCO-X1	59	13.0	16 17 04	-15 31	L 2	1604	L	O	10JUL78	00 48 18	40 00	UKIXR	A BIT WEAK
SCO X1	59	13.0	16 17 04	-15 31	L 2	4028	L	O	15MAR79	09 39 08	40 00	GH141	50
SCO X1	59	13.0	16 17 04	-15 31	L 2	4029	L	O	15MAR79	11 32 19	16 00	GH141	33
SCO X1	59	13.0	16 17 04	-15 31	L 3	1467	L	O	03MAY78	01 10 23	40 00	UKIXR	VERY GOOD
SCO X1	59	13.0	16 17 04	-15 31	L 3	1468	L	O	03MAY78	03 00 18	40 00	UKIXR	GOOD
SCO-X1	59	13.0	16 17 04	-15 31	L 3	1955	L	O	09JUL78	23 55 00	40 00	UKIXR	UNDEREXPOSED MAX DN 80
SCO-X1	59	13.0	16 17 04	-15 31	L 3	1958	L	O	10JUL78	02 12 00	90 00	UKIXR	STILL WEAK
SCO X1	59	13.0	16 17 04	-15 31	L 3	4041	L	O	15MAR79	08 54 05	40 00	GH141	45
SCO X1	59	13.0	16 17 04	-15 31	L 3	4042	L	O	15MAR79	10 40 08	40 00	GH141	45
HD147701	20	8.4	16 21 19	-24 54	L 2	2427	L	O	21SEP78	22 44 56	30 00	UK019	90
HD147701	20	8.4	16 21 19	-24 54	L 2	2427	S	C	21SEP78	22 13 23	10 00	UK019	70
HD147701	20	8.4	16 21 19	-24 54	L 3	2722	S	C	21SEP78	23 25 26	18 00	UK019	50MICROPHONIC NOISE
HD147889	20	7.9	16 22 23	-24 21	L 2	1488	S	C	16MAY78	01 29 00	6 00	UKPOP	QUITE GOOD
HD147889	20	7.9	16 22 23	-24 21	L 2	2409	S	C	19SEP78	21 51 45	6 00	UK019	50
HD147889	20	7.9	16 22 23	-24 21	L 2	2410	S	C	19SEP78	23 25 14	7 00	UK019	60
HD147889	20	7.9	16 22 23	-24 21	L 2	2410	L	O	19SEP78	22 48 23	20 00	UK019	80
HD147889	20	7.9	16 22 23	-24 21	L 3	1519	S	C	18MAY78	01 12 00	9 00	UKPOP	QUITE GOOD
HD147889	20	7.9	16 22 23	-24 21	L 3	2699	S	C	19SEP78	22 12 50	12 00	UK019	50

OBJECT	CL	MAG	RT ASCN HR MN SC	DECLN DEG MN	DISP +CAM	IMAGE	APERT OR	APERT LG	DATE	START HR MN SC	LENGTH MIN SC	PROG	COMMENT
HD148184	20	4.4	16 24 07	-18 21	H 2	1969	S	C	03AUG78	20 45 52	12 00	LS044	30
HD148184	20	4.4	16 24 07	-18 21	H 2	1970	S	C	03AUG78	22 05 05	35 00	LS044	70OXP IN LW PART
HD148184	20	4.4	16 24 07	-18 21	H 3	2187	S	C	03AUG78	21 16 00	15 00	LS044	60
HD148184	20	4.4	16 24 07	-18 21	H 3	2188	S	C	03AUG78	22 50 00	9 00	LS044	50
HD148367	35	4.6	16 25 05	-08 16	L 3	4410	S	C	27FEB79	10 31 11	2 00	RBA41	70
HD148367	35	4.6	16 25 05	-08 16	L 3	4410	L	O	27FEB79	10 13 20	10 00	RBA41	80NU OPH
HD147675	46	3.9	16 25 42	-78 47	H 2	2609	S	C	15OCT78	10 30 00	45 00	UK020	35
HD148379	20	5.4	16 26 04	-46 08	H 2	1562	S	C	26MAY78	01 06 06	60 00	UKPOP	QUITE GOOD,SAT 2800A
HD148379	23	5.4	16 26 04	-46 08	H 2	1564	S	C	26MAY78	05 31 34	25 00	UKPOP	A BIT WEAK
HD148379	23	5.4	16 26 04	-46 08	H 3	4194	L	O	08FEB79	09 43 39	100 00	UK021	66
HD148379	23	5.3	16 26 06	-46 08	H 3	4349	S	C	23FEB79	12 26 40	85 00	LS044	44
HD148478	20	5.5	16 26 20	-26 20	H 3	2687	L	O	18SEP78	21 44 16	10 00	PSA13	77ALFA 8CO 8
HD148478	20	5.5	16 26 20	-26 20	H 3	2688	L	O	18SEP78	23 22 55	3 00	PSA13	55
-9 4395	22	9.4	16 26 51	-09 13	L 3	1737	S	O	07JUN78	05 34 00	12 00	KH001	UNDEREXPOSED X 2
VESTA	05	5.7	16 28 06	-17 15	L 2	1772	L	O	03JUL78	03 44 05	20 00	UK043	OVEREXPOSED
HD148688	23	5.3	16 28 13	-41 43	H 2	1740	S	C	28JUN78	03 43 51	12 30	UK06A	GOOD MAX DN 220
HD148688	23	5.3	16 28 13	-41 43	H 3	1871	S	C	28JUN78	02 38 01	80 00	UK06A	GOOD
HD149404	13	5.5	16 32 52	-42 45	H 2	1971	S	C	08AUG78	00 20 07	60 00	LS044	50UXP IN SW PART
HD149404	13	5.5	16 32 52	-42 45	H 3	2189	S	C	08AUG78	01 25 37	75 00	LS044	600XP IN LW PART
HD149404	13	5.8	16 32 52	-42 45	H 3	4322	S	C	21FEB79	11 58 20	30 00	LS044	50
HD149757	12	2.6	16 38 28	-10 28	H 3	2186	S	C	03AUG78	19 58 16	1 20	LS044	50
HD149881	23	6.6	16 38 41	+18 35	H 3	3967	S	C	21JAN79	08 45 32	23 00	UK026	70
HD150288	21	8.7	16 38 38	-46 55	L 3	2763	S	O	25SEP78	22 00 00	4 00	PB030	50
HD151932	11	6.6	16 48 48	-41 46	H 2	2305	S	C	07SEP78	22 01 00	105 00	MH011	77ABOUT A THIRD SAT
HD151932	11	6.6	16 48 48	-41 46	H 2	3828	L	O	22FEB79	10 38 05	13 00	UK02A	55
HD151932	11	6.6	16 48 48	-41 46	L 2	3829	S	C	22FEB79	11 41 22	15	UK02A	45
HD151932	11	6.6	16 48 48	-41 46	L 2	3829	L	O	22FEB79	11 35 10	7	UK02A	34
HD151932	11	6.6	16 48 48	-41 46	H 3	4334	L	O	22FEB79	10 13 28	19 00	UK02A	55
HD151932	11	6.6	16 48 48	-41 46	L 3	4335	S	C	22FEB79	11 38 42	22	UK02A	45
HD151932	11	6.6	16 48 48	-41 46	L 3	4335	L	O	22FEB79	11 31 39	11	UK02A	34
VESTA	05	7.0	16 48 55	-22 03	L 2	2201	L	O	28AUG78	22 23 00	15 00	UK043	20
HD152236	23	4.8	16 50 28	-42 16	L 2	1755	S	C	30JUN78	23 28 12	30	BW019	SATURATED THROUGHOUT
HD152236	23	4.8	16 50 28	-42 16	L 2	1755	L	O	30JUN78	23 10 06	3 30	BW019	THROUGHOUT
HD152236	23	4.8	16 50 28	-42 16	H 2	1756	S	C	01JUL78	00 46 13	7 00	BW019	GOOD
HD152236	23	4.8	16 50 28	-42 17	H 2	2151	S	C	22AUG78	19 20 00	10 00	UK031	50UXP BELOW 2300 X4
HD152236	23	4.8	16 50 28	-42 17	H 2	2152	S	C	22AUG78	20 24 05	40 00	UK031	70STILL WEAK BELOW 2300A
HD152236	23	4.8	16 50 28	-42 17	H 2	2290	S	C	06SEP78	16 43 00	11 00	UK021	55
HD152236	23	4.7	16 50 28	-42 17	H 3	1872	S	C	28JUN78	05 10 42	30 00	UK06A	GOOD AT LONG WL
HD152236	23	4.8	16 50 28	-42 16	L 3	1891	L	O	30JUN78	23 56 03	20	BW019	GOOD
HD152236	23	4.8	16 50 28	-42 16	L 3	1891	S	C	30JUN78	23 50 22	16	BW019	UNDEREXPOSED
HD152236	23	4.8	16 50 28	-42 16	H 3	1892	S	C	01JUL78	01 19 43	60 00	BW019	
HD152236	23	4.8	16 50 28	-42 17	H 3	2368	S	C	22AUG78	18 28 00	45 00	UK031	60
HD152236	23	4.8	16 50 28	-42 17	H 3	2507	S	C	06SEP78	17 00 00	91 00	UK021	70K AT SW
-41 7727	20	9.4	16 50 38	-41 43	L 2	2462	L	O	25SEP78	17 44 42	9 00	PB030	800K AT 2200
-41 7727	20	9.4	16 50 38	-41 43	L 2	2463	L	O	25SEP78	18 28 00	4 00	PB030	700K TO 2600
-41 7727	20	9.4	16 50 38	-41 43	L 3	2761	L	O	25SEP78	16 48 15	2 28	PB030	40
-41 7753	20	9.8	16 51 05	-41 48	L 2	2464	S	O	25SEP78	20 41 35	15 00	PB030	60
-41 7753	20	9.8	16 51 05	-41 48	L 2	2464	L	O	25SEP78	20 11 26	15 00	PB030	700K AT 2200

OBJECT	CL	MAG	RT ASCN HR MN SC	DECLN DEG MN	DISP +CAM	IMAGE	APERT OR	LG	DATE	START HR MN SC	LENGTH MIN SC	PROG	COMMENT
+41 7753	20	9.8	16 51 05	-41 48	L 3	2762	L	O	25SEP78	19 28 00	18 00	PB030	60
MKN 501	87	13.0	16 52 12	+39 50	L 2	1377	L	O	24APR78	05 02 34	150 00	UKPOP	MAX DN 40
MKN 501	87	13.0	16 52 12	+39 50	L 3	1407	L	O	24APR78	08 21 37	110 00	UKPOP	MAX DN 70
MKN 501	87	14.0	16 52 12	+39 50	L 3	4757	L	O	26MAR79	05 24 16	300 00	UK040	40
HD152667	59	6.2	16 53 07	-40 45	H 2	1818	S	C	12JUL78	01 46 0A	20 00	UKIXR	GOOD MAX DN 230
HD152667	59	6.2	16 53 07	-40 45	H 3	1952	S	C	09JUL78	21 22 46	50 00	UKIXR	GOOD
HD152667	59	6.2	16 53 07	-40 45	H 3	1977	S	C	12JUL78	00 3[illegible] 05	50 00	UKIXR	GOOD, A FEW PIX BAT.
HD152667	59	6.2	16 53 07	-40 45	H 3	1978	L	O	12JUL78	02 45 00	55 00	UKIXR	OXP BUT OK FOR SHORT WL
HD152667	59	6.2	16 53 07	-40 45	H 3	2011	S	C	14JUL78	20 58 50	50 00	UKIXR	GOOD MAX DN 250
HZ HER	59	14.0	16 56 02	+35 25	L 2	1405	L	O	24APR78	07 49 00	130 00	UKIXR	
HZ HER	59	13.0	16 56 02	+35 25	L 2	1411	L	O	10JUL78	22 15 38	40 00	UKIXR	GOOD
HZ HER	59	14.0	16 56 02	+35 25	L 2	1426	L	O	13JUL78	01 52 38	40 00	XRB02	OXP X 2 MAX DN 166
HZ HER	59	14.0	16 56 02	+35 25	L 3	1432	L	O	26APR78	08 49 06	150 00	UKIXR	
HZ HER	59	13.0	16 56 02	+35 25	L 3	1962	L	O	10JUL78	21 22 27	45 00	UKIXR	UNDEREXPOSED X2 IN CONT
HZ HER	59	13.0	16 56 02	+35 25	L 3	1963	L	O	10JUL78	23 06 22	80 00	UKIXR	VERY GOOD
HZ HER	59	14.0	16 56 02	+35 25	L 3	1988	L	O	13JUL78	02 40 23	60 00	XRB02	OXP X 2 AVG DN 70
HZ HER	59	13.5	16 56 02	+35 25	L 3	3524	S	O	04DEC78	11 07 29	180 00	UK037	55
NEPTUNE	03	7.7	16 59 33	-21 12	L 2	1769	S	O	02JUL78	21 49 55	15 00	UK003	GOOD MAX DN 249
NEPTUNE	03	7.7	16 59 33	-21 12	L 3	1907	S	O	02JUL78	22 12 04	30 00	UK003	NO SPECTRUM
HD153919	59	6.6	17 00 32	-37 46	H 2	1437	S	C	08MAY78	03 06 59	30 00	XRB01	A BIT UNDEREXP.
HD153919	59	6.6	17 00 32	-37 46	H 3	1876	S	C	08MAY78	02 18 25	40 00	XRB01	GOOD
HD153919	59	6.6	17 00 33	-37 46	H 2	1817	S	C	11JUL78	20 23 05	40 00	XRB02	OVEREXPOSED
HD153919	59	6.6	17 00 33	-37 46	H 2	1824	S	C	12JUL78	20 32 27	33 00	XRB02	OXP AT LONG WL
HD153919	59	6.6	17 00 33	-37 46	H 2	1825	S	C	12JUL78	22 13 17	20 00	XRB02	GOOD MAX DN 198
HD153919	59	6.6	17 00 33	-37 46	H 2	1827	S	C	14JUL78	03 16 16	24 00	XRB02	GOOD MAX DN 210
HD153919	59	6.6	17 00 33	-37 46	H 3	1975	S	C	11JUL78	21 18 37	60 00	XRB02	OXP AT LONG WL
HD153919	59	6.6	17 00 33	-37 46	L 3	1976	L	O	11JUL78	23 12 50	30	XRB02	3 EXP IN LARGE SLOT
HD153919	59	6.6	17 00 33	-37 46	L 3	1985	L	O	12JUL78	20 20 00	15	XRB02	2 EXP IN LARGE SLOT OK
HD153919	59	6.6	17 00 33	-37 46	H 3	1986	S	C	12JUL78	21 18 21	48 00	XRB02	GOOD MAX DN 226
HD153919	59	6.6	17 00 33	-37 46	H 3	1987	S	C	12JUL78	23 04 49	35 00	XRB02	GOOD MAX DN 220
HD153919	59	6.6	17 00 33	-37 46	L 3	1996	L	O	13JUL78	21 00 00	16	XRB02	2 EXP IN LARGE SLOT OK
HD153919	59	6.6	17 00 33	-37 46	L 3	1997	L	O	13JUL78	21 55 00	16	XRB02	2 EXP IN LARGE SLOT OK
HD153919	59	6.6	17 00 33	-37 46	L 3	1998	L	O	13JUL78	22 53 00	16	XRB02	2 EXP IN LARGE SLOT OK
HD153919	59	6.6	17 00 33	-37 46	L 3	1999	L	O	13JUL78	23 50 00	16	XRB02	2 EXP IN LARGE SLOT OK
HD153919	59	6.6	17 00 33	-37 46	L 3	2000	L	O	14JUL78	00 42 00	16	XRB02	2 EXP IN LARGE SLOT OK
HD153919	59	6.6	17 00 33	-37 46	L 3	2001	L	O	14JUL78	01 41 20	16	XRB02	1 EXP
HD153919	59	6.6	17 00 33	-37 46	H 3	2002	S	C	14JUL78	02 29 03	40 00	XRB02	GOOD MAX DN 200
NEPTUNE	03	7.7	17 07 43	-21 25	L 2	1286	L	O	08APR78	10 10 00	30 00	UKPOP	
HD154368	13	6.2	17 08 08	-35 23	H 2	2291	S	C	06SEP78	1A 58 00	43 00	UK021	50
HD154368	13	6.2	17 08 08	-35 23	H 3	2508	S	C	06SEP78	19 47 00	238 00	UK021	700XP X2 AT LW
HD155385	10	7.8	17 15 49	-45 35	H 2	1353	S	C	21APR78	06 20 27	20 00	UKPOP	QUITE GOOD
HD156385	10	7.4	17 15 49	-45 35	H 2	2304	S	C	07SEP78	20 27 00	35 00	MH011	56
HD156385	10	7.4	17 15 49	-45 35	L 2	3830	L	O	22FEB79	12 51 38	10	UK02A	46
HD156385	10	7.4	17 15 49	-45 35	L 2	3830	S	C	22FEB79	12 45 34	21	UK02A	46
HD156385	10	7.8	17 15 49	-45 35	H 3	1395	S	C	21APR78	05 09 21	20 00	UKPOP	SLIGHTLY UNDEREXP.
HD156385	10	7.4	17 15 49	-45 35	H 3	2519	S	C	07SEP78	21 05 00	30 00	MH011	56
HD156385	10	7.4	17 15 49	-45 35	L 3	4336	L	O	22FEB79	12 48 56	9	UK02A	45
HD156385	10	7.4	17 15 49	-45 35	L 3	4336	S	C	22FEB79	12 43 04	18	UK02A	46

OBJECT	CL	MAG	RT ASCN HR MN SC	DECLN DEG MN	DISP +CAM	IMAGE	APERT OR	LG	DATE	START HR MN SC	LENGTH MIN SC	PROG	COMMENT
HD156359	13	9.7	17 16 36	-62 52	H 2	4092	L	O	23MAR79	07 50 47	65 00	UK028	50
HD156359	13	9.7	17 16 36	-62 52	H 3	4733	L	O	23MAR79	08 59 21	168 00	UK028	70
HD159532	40	1.9	17 33 43	-42 58	H 2	3776	L	O	15FEB79	13 22 02	3 00	FM050	60THETA BCO
HD159532	40	1.9	17 33 43	-42 58	H 3	4268	L	O	15FEB79	13 28 00	10 00	FM050	60
HD159492	31	5.2	17 33 59	-54 28	L 2	3880	L	O	27FEB79	13 41 3A	15	RBA41	50
HD159492	31	5.2	17 33 59	-54 28	L 2	3880	S	C	27FEB79	13 36 0A	1 00	RBA41	60
HD159492	31	5.2	17 33 59	-54 28	L 3	4412	S	C	27FEB79	13 13 39	4 00	RBA41	60
HD159492	31	5.2	17 33 59	-54 28	L 3	4412	L	O	27FEB79	12 48 52	17 00	RBA41	70
1735+22	19	11.5	17 35 20	+22 11	L 3	4150	S	C	04FEB79	13 35 00	4 40	UK036	50
1735+22	19	11.5	17 35 20	+22 11	L 3	4150	L	O	04FEB79	13 28 00	3 05	UK036	50
HD160641	13	9.8	17 38 55	-.7 53	L 3	1396	S	C	21APR78	09 57 00	13 00	UKPOP	NOPREP
HD160578	20	2.2	17 39 01	-39 00	H 2	3838	S	C	23FEB79	11 27 05	12	LS044	60
HD160578	20	2.2	17 39 01	-39 00	H 2	3839	S	C	23FEB79	11 53 40	10	LS044	50
HD160578	20	2.2	17 39 01	-39 00	H 3	4348	S	C	23FEB79	11 11 28	12	LS044	50
HD160578	20	2.4	17 39 02	-39 00	H 3	4323	S	C	21FEB79	13 19 34	15	LS044	70
HD161291	23	8.9	17 42 42	-27 10	L 3	1343	S	C	10APR78	09 13 00	60 00	PB030	UNDEREXP.
HD161797	44	3.4	17 44 30	+27 45	H 2	3014	S	C	23NOV78	18 34 14	23 00	CB031	50
HD161797	44	3.4	17 44 30	+27 45	H 3	3428	S	C	23NOV78	18 02 17	13 00	CB031	10
HD161797	44	3.4	17 44 30	+27 45	L 3	3429	L	O	23NOV78	19 41 53	4 00	CB031	30
HD161797	44	3.4	17 44 30	+27 45	L 3	3429	S	O	23NOV78	19 23 03	13 00	CB031	30
HD161797	44	3.4	17 44 30	+27 45	L 3	3652	L	O	20DEC78	13 43 22	20 00	CB031	23MU HER
+39 3226	16	10.2	17 44 52	+39 20	L 2	1577	S	C	29MAY78	05 12 00	2 00	UKPOP	GOOD
+39 3226	16	9.8	17 44 52	+39 20	L 2	1856	L	O	20JUL78	03 14 00	2 20	UK003	A BIT OXP
+39 3226	16	9.8	17 44 52	+39 20	L 2	1856	S	O	20JUL78	03 04 00	2 20	UK003	OK
+39 3226	16	10.2	17 44 52	+39 20	L 3	1663	S	C	29MAY78	05 05 01	1 00	UKPOP	VERY WEAK
+39 3226	16	9.8	17 44 52	+39 20	L 3	4312	S	C	20FEB79	12 08 06	1 00	UK02A	60
+39 3226	16	9.8	17 44 52	+39 20	L 3	4312	L	O	20FEB79	12 04 05	40	UK02A	70
HD162978	13	6.2	17 51 49	-24 52	H 2	3713	L	O	08FEB79	12 05 20	6 00	UK021	50
HD162978	13	6.2	17 51 49	-24 52	H 3	4195	L	O	08FEB79	12 24 13	10 00	UK021	66
HD163506	42	5.2	17 53 24	+26 03	H 2	1751	S	C	30JUN78	04 34 10	65 00	UK06A	A BIT WEAK
HD164032	23	7.5	17 57 15	-29 48	L 2	1296	S	C	10APR78	06 30 00	10 00	PB030	GOOD
HD164032	23	7.5	17 57 15	-29 48	L 3	1342	S	C	10APR78	04 52 00	7 00	PB030	GOOD, BAD FOCUS
HD164353	24	4.0	17 58 08	+02 56	H 2	2153	S	C	22AUG78	22 22 03	4 30	UK031	70
HD164353	24	4.0	17 58 08	+02 56	H 3	2369	S	C	22AUG78	22 12 00	6 00	UK031	70
HD164353	24	4.0	17 58 08	+02 56	H 3	4267	L	O	15FEB79	12 45 44	2 00	FM050	50
HD164270	10	9.0	17 58 26	-32 43	L 2	3A74	S	O	26FEB79	13 34 59	2 00	UK02A	56
HD164270	10	9.0	17 58 26	-32 43	L 2	3A74	L	O	26FEB79	13 29 15	1 00	UK02A	56
HD164270	10	9.0	17 58 26	-32 43	L 3	4337	S	C	22FEB79	13 37 16	3 00	UK02A	45
HD164270	10	9.0	17 58 26	-32 43	L 3	4337	L	O	22FEB79	13 32 30	1 30	UK02A	34
NGC 6543	70	9.0	17 58 36	+66 38	L 3	1711	S	O	04JUN78	05 13 04	5 00	UK008	OK MAX DN 156
M 8	73	14.0	18 00 37	-24 23	L 2	1983	L	O	04AUG78	22 32 45	30 00	LS017	22RADIO PEAK
M 8	73	14.0	18 00 37	-24 23	L 3	2203	L	O	04AUG78	21 39 57	12 00	LS017	22RADIO PEAK
M 8	73	14.0	18 00 37	-24 23	L 3	2204	L	O	04AUG78	23 16 09	60 00	LS017	20RADIO PEAK
HD164794	14	5.9	18 00 48	-24 22	H 2	1982	S	C	04AUG78	20 49 39	26 00	LS017	760XP IN LW PART
HD164794	14	5.9	18 00 48	-24 22	H 2	1984	S	C	05AUG78	00 32 10	12 00	LS017	40
HD164794	13	6.0	18 00 48	-24 22	H 2	2508	S	C	30SEP78	20 32 00	18 00	RD016	70LW BAT
HD164794	13	6.0	18 00 48	-24 22	H 2	2510	S	C	30SEP78	22 49 03	11 00	RD016	50
HD164794	14	5.9	18 00 48	-24 22	H 3	2202	S	C	04AUG78	19 40 29	17 00	LS017	760XP IN LW PART

OBJECT	CL	MAG	RT ASCN HR MN SC	DECLN DEG MN	DISP +CAM	IMAGE	APERT OB	APERT LG	DATE	START HR MN SC	LENGTH MIN SC	PROG	COMMENT
HD164794	14	5,9	18 00 48	-24 22	H 3	2205	S	C	05AUG78	01 00 02	8 00	LS017	80
HD164794	13	6,0	18 00 48	-24 22	H 3	2815	S	C	30SEP78	21 06 15	12 00	RD016	60
HD164794	13	6,0	18 00 48	-24 22	H 3	2816	S	C	30SEP78	22 17 37	9 00	RD016	50
HD164816	13	7,1	18 00 53	-24 19	H 2	2507	S	C	30SEP78	19 05 42	41 00	RD016	708AT AT LW
HD164816	13	7,1	18 00 53	-24 19	H 2	2509	S	C	30SEP78	21 39 10	30 00	RD016	60
HD164816	13	7,1	18 00 53	-24 19	H 3	2818	S	C	30SEP78	19 52 17	30 00	RD016	60
HD165908	41	5,0	18 05 08	+30 33	L 2	2379	S	C	16SEP78	21 40 32	50	PSC13	66
HD165908	41	5,0	18 05 08	+30 33	L 2	2379	L	O	16SEP78	21 34 30	50	PSC13	77
HD165763	10	8,2	18 05 22	-21 16	H 2	2303	S	C	07SEP78	18 38 00	30 00	MH011	45
HD165763	10	8,2	18 05 22	-21 16	H 3	2518	S	C	07SEP78	19 13 00	20 00	MH011	45
HD165763	10	8,0	18 05 23	-21 16	L 2	3809	S	C	20FEB79	13 09 49	14	UK02A	35
HD165763	10	8,0	18 05 23	-21 16	L 2	3809	L	O	20FEB79	13 06 07	9	UK02A	35
HD165763	10	8,0	18 05 23	-21 16	L 3	4313	L	O	20FEB79	13 02 41	6	UK02A	45
HD165763	10	8,0	18 05 23	-21 16	L 3	4313	S	C	20FEB79	12 59 10	9	UK02A	34
NGC 6572	70	9,0	18 09 42	+06 51	L 2	2271	L	O	04SEP78	17 53 00	10 00	MH011	55
NGC 6572	70	9,0	18 09 42	+06 51	L 3	2485	L	O	04SEP78	17 34 53	10 00	MH011	37
NGC 6572	70	9,0	18 09 42	+06 51	L 3	2486	L	O	04SEP78	18 26 00	3 00	MH011	35
AM HER	59	12,5	18 14 59	+49 51	L 2	1433	L	O	03MAY78	06 48 28	30 00	XRB01	GOOD
AM HER	59	13,0	18 14 59	+49 51	L 2	1812	L	O	11JUL78	02 11 19	30 00	UKIXR	GOOD
AM HER	59	12,8	18 14 59	+49 51	L 3	1458	S	C	01MAY78	04 37 28	180 00	XRB01	GOOD
AM HER	59	12,5	18 14 59	+49 51	L 3	1469	S	C	03MAY78	05 47 45	45 00	XRB01	GOOD
AM HER	59	13,0	18 14 59	+49 51	L 3	1964	L	O	11JUL78	01 44 00	20 00	UKIXR	GOOD
AM HER	59	13,0	18 14 59	+49 51	L 3	1965	S	O	11JUL78	03 16 18	25 00	UKIXR	OK
AM HER	59	13,0	18 14 59	+49 51	L 3	1965	L	O	11JUL78	02 58 10	5 00	UKIXR	UNDEREXPOSED
HD168476	27	9,4	18 18 59	-56 39	L 2	1507	S	C	17MAY78	03 52 10	10 00	UKPOP	OK SW OXP LW
HD168476	27	9,4	18 18 59	-56 39	L 3	1557	S	C	16MAY78	06 44 54	45 00	UKPOP	OVEREXP
HD168476	27	9,4	18 19 00	-56 39	H 2	1664	S	C	14JUN78	01 16 00	40 00	UK017	VERY WEAK
HD168476	27	9,4	18 19 00	-56 39	H 2	1665	S	C	14JUN78	03 36 29	120 00	UK017	UNDEREXP MAX ON 120
HD168476	27	9,4	18 19 00	-56 39	H 3	1702	S	C	14JUN78	02 05 09	80 00	UK017	VERYWEAK
HD168733	36	5,4	18 19 30	-36 42	H 2	2861	S	C	08NOV78	19 03 16	12 00	MH021	70
HD168733	36	5,4	18 19 30	-36 42	H 3	3270	S	C	08NOV78	18 37 31	15 00	MH021	70
HD168905	21	5,2	18 20 40	-44 08	L 2	1893	L	O	25JUL78	21 13 00	4	VILSP	A BIT SAT.
HD168905	21	5,2	18 20 40	-44 08	L 2	1893	S	O	25JUL78	21 11 44	4	VILSP	GOOD
HD168905	21	5,2	18 20 40	-44 08	L 3	2107	L	O	25JUL78	21 19 00	3	VILSP	GOOD
HD168905	21	5,2	18 20 40	-44 08	L 3	2107	S	O	25JUL78	21 17 13	3	VILSP	GOOD
3C 382	86	14,5	18 31 12	+32 39	L 3	1530	L	O	13MAY78	04 56 31	165 00	UKPOP	UNDEREXP
3C 382	86	14,5	18 33 12	+32 39	L 2	1479	L	O	13MAY78	01 08 25	180 00	UKPOP	MAXDN@130
3C 382	86	14,7	18 33 12	+32 39	L 2	1915	L	O	29JUL78	22 06 00	120 00	UK016	A BIT WEAK MAX DN 120
3C 382	88	14,7	18 33 12	+32 39	L 3	4817	L	O	31MAR79	05 19 00	390 00	UK016	34
ANON	31	12,0	18 37 46	-22 57	L 2	3948	L	O	07MAR79	04 57 28	35 00	LHB07	30
ANON	31	12,0	18 37 46	-22 57	L 2	3949	L	O	07MAR79	06 22 59	70 00	LHB07	50
V34A SGR	26	12,0	18 37 46	-22 57	L 2	3969	L	O	09MAR79	10 31 32	76 00	LHR07	40
ANON	31	12,0	18 37 46	-22 57	L 3	4521	L	O	07MAR79	05 39 20	39 00	LHB07	20
3C 390,3	86	15,0	18 45 31	+79 43	L 2	3057	L	O	28NOV78	16 48 40	190 00	UK037	34READ DOWN AT GSFC
3C 390,3	86	15,0	18 45 31	+79 43	L 3	3478	L	O	28NOV78	13 27 20	180 00	UK037	34
3C 390,3	86	15,0	18 45 38	+79 43	L 3	4276	L	O	16FEB79	07 10 40	397 00	UK016	25BLIND OFFSET
HD174638	25	3,4	18 48 14	+33 19	H 2	1328	S	C	17APR78	09 54 45	4 00	MHA02	
HD174638	25	3,4	18 48 14	+33 19	H 2	1397	S	C	27APR78	07 30 00	2	MHA02	GOOD

OBJECT	CL	MAG	RT ASCN HR MN SC	DECLN DEG MN	DISP +CAM	IMAGE	APERT OB	APERT LG	DATE	START HR MN SC	LENGTH MIN SC	PROG	COMMENT
HD174638	25	3,4	18 48 14	+33 19	H 3	1375	S	C	17APR78	08 55 00	8 00	MHA02	OXP LW
HD174638	25	3,4	18 48 14	+33 19	H 3	1386	S	C	19APR78	09 33 00	2 00	MHA02	GOOD
HD174638	25	3,4	18 48 14	+33 19	H 3	1426	S	C	27APR78	06 45 00	2	MHA02	GOOD
HD174933	36	5,4	18 50 08	+21 22	H 2	2576	S	C	11OCT78	14 36 58	14 00	UK025	60
HD174933	36	5,4	18 50 08	+21 22	H 3	2920	S	C	11OCT78	14 57 45	25 00	UK025	70
NGC 6720	70	9,0	18 51 44	+32 58	L 2	2272	L	O	04SEP78	20 24 38	10 00	MH011	22BLIND OFFSET
NGC 6720	70	9,0	18 51 44	+32 58	L 2	2273	L	O	04SEP78	21 47 40	30 00	MH011	23
NGC 6720	70	9,0	18 51 44	+32 58	L 3	2487	L	O	04SEP78	21 02 30	10 00	MH011	23
NGC 6720	70	9,0	18 51 44	+32 58	L 3	2488	L	O	04SEP78	22 32 00	60 00	MH011	35
HD175191	20	2,1	18 52 12	-26 22	H 2	2218	S	C	30AUG78	18 37 00	8	UK022	40
HD175191	20	2,1	18 52 12	-26 22	H 2	2219	S	C	30AUG78	19 06 45	12	UK022	50
HD175191	20	2,1	18 52 12	-26 22	H 3	2416	S	C	30AUG78	19 58 54	25	UK022	70
HD175754	12	7,0	18 54 39	-19 13	H 2	2506	S	C	30SEP78	16 26 08	36 00	RD016	60
HD175754	12	7,0	18 54 39	-19 13	H 3	2813	S	C	30SEP78	17 31 52	40 00	RD016	70SAT AT LW
S CR A	58	11,5	18 57 48	-37 01	L 2	1645	L	O	10JUN78	00 22 00	80 00	BW019	GOOD BUT HG OXP
S CR A	58	11,5	18 57 48	-37 01	L 3	1755	L	O	10JUN78	02 14 49	200 00	BW019	WEAK
HD177566	23	10,2	19 03 35	-41 48	H 3	4726	L	O	22MAR79	10 37 11	70 00	UK028	50
HD181615	36	4,6	19 18 52	-16 03	H 2	1361	S	C	22APR78	06 24 26	10 00	MHA02	GOOD U BGR
HD181615	36	4,6	19 18 52	-16 03	H 2	1528	S	C	21MAY78	02 15 00	10 00	MHA02	OK LHJ NU SGR
HD181615	34	4,6	19 18 52	-16 03	H 2	1909	S	C	28JUL78	23 05 00	10 00	MHA02	
HD181615	34	4,6	19 18 52	-16 03	H 2	1910	S	C	29JUL78	01 52 00	20 00	MHA02	
HD181615	36	4,6	19 18 52	-16 03	H 3	1398	S	C	22APR78	04 44 12	60 00	MHA02	GOOD U BGR
HD181615	36	4,6	19 18 52	-16 03	H 3	1592	S	C	21MAY78	02 35 00	60 00	MHA02	GOOD
HD181615	34	4,6	19 18 52	-16 03	H 3	1856	S	C	25JUN78	23 37 31	60 00	MHC02	OK MAX DN 150
HD181615	34	4,6	19 18 52	-16 03	H 3	2136	S	C	28JUL78	23 35 00	60 00	MHA02	
HD181615	34	4,6	19 18 52	-16 03	H 3	2137	S	C	29JUL78	02 20 00	75 00	MHA02	
HD182917	39	6,0	19 23 14	+50 08	L 2	3983	S	C	11MAR79	11 33 45	8 00	MHC02	70
HD182917	39	6,0	19 23 14	+50 08	L 2	3983	L	O	11MAR79	11 15 45	12 00	MHC02	80
HD182917	39	6,0	19 23 14	+50 08	H 2	4066	L	O	19MAR79	04 56 10	180 00	MHC02	78
HD182917	39	6,0	19 23 14	+50 08	H 2	4111	L	O	25MAR79	04 32 52	45 00	MHA02	57
HD182917	57	7,0	19 23 14	+50 09	L 3	1399	S	C	22APR78	09 00 00	45 00	MHA02	GOOD CH CYG
HD182917	48	7,0	19 23 14	+50 08	L 3	2163	L	O	31JUL78	23 35 00	20 00	MHA02	GOOD
HD182917	39	6,0	19 23 14	+50 08	L 3	4590	L	O	11MAR79	10 46 23	13 00	MHC02	67
HD185144	46	4,7	19 32 31	+69 34	H 2	2632	S	C	17OCT78	15 55 06	100 00	UK020	66
HM SGE	71	10,8	19 39 48	+16 38	L 2	2248	L	O	02SEP78	18 45 01	10 00	DF010	27
HM SGE	71	10,8	19 39 48	+16 38	L 2	2249	L	O	02SEP78	20 49 36	6 00	DF010	16
HM SGE	71	10,8	19 39 48	+16 38	L 3	2452	L	O	02SEP78	18 30 15	5 00	DF010	14
HM SGE	71	10,8	19 39 48	+16 38	L 3	2453	L	O	02SEP78	19 20 10	9 00	DF010	15
HM SGE	71	10,8	19 39 48	+16 38	L 3	2454	S	C	02SEP78	20 01 51	40 00	DF010	02
NGC 6826	70	9,7	19 43 27	+50 24	H 2	2702	L	O	24OCT78	21 05 00	8 00	MP028	60
NGC 6826	70	9,7	19 43 27	+50 24	L 2	2702	S	C	24OCT78	20 48 27	4 00	MP028	60
NGC 6826	70	9,7	19 43 27	+50 24	L 2	2702	L	O	24OCT78	20 35 52	4 00	MP028	60
NGC 6826	70	9,7	19 43 27	+50 24	H 3	3132	L	O	24OCT78	21 32 58	8 00	MP028	50
NGC 6826	70	9,7	19 43 27	+50 24	L 3	3132	S	O	24OCT78	21 26 19	2 00	MP028	50
NGC 6826	70	9,7	19 43 27	+50 24	L 3	3132	L	O	24OCT78	21 19 43	2 00	MP028	50
HD187282	11	10,6	19 46 18	+18 04	L 2	3873	S	O	26FEB79	12 31 43	2 30	UK02A	33
HD187282	11	10,6	19 46 18	+18 04	L 2	3873	L	O	26FEB79	12 26 30	1 15	UK02A	34
HD187282	11	10,6	19 46 18	+18 04	L 3	4398	S	O	26FEB79	12 17 40	4 00	UK02A	45

OBJECT	CL	MAG	RT ASCN HR MN SC	DECLN DEG MN	DISP +CAM	APERT IMAGE	OB	LG	DATE	START HR MN SC	LENGTH MIN SC	PROG	COMMENT
HD187282	11	10.6	19 46 18	+18 04	L 3	4198	L	0	26FEB79	12 10 36	2 00	UK02A	45
HD187642	31	.A	19 48 20	+08 44	H 2	3012	S	C	23NOV78	13 20 00	1 00	C8031	70
HD187642	31	0.7	19 48 20	+08 44	L 3	1654	S	C	28MAY78	04 40 00	100 00	UKPOP	VERY OVEREXP
HD187642	31	.A	19 48 20	+08 44	H 3	3426	S	C	23NOV78	13 40 19	1 00	C8031	50
HD187642	31	.A	19 48 20	+08 44	H 3	3427	L	0	23NOV78	14 15 03	100 00	C8031	90TOO MUCH SCATTER LIGHT
V1016CYG	57	9.0	19 55 18	+39 41	H 2	2227	S	C	31AUG78	18 14 08	60 00	DF010	15
V1016CYG	57	9.0	19 55 18	+39 41	H 2	2228	L	0	31AUG78	19 55 22	35 00	DF010	16
V1016CYG	57	9.0	19 55 18	+39 41	L 2	2229	L	0	31AUG78	21 46 49	40 00	DF010	79
V1016CYG	57	9.0	19 55 18	+39 41	H 3	2425	S	C	31AUG78	19 20 46	20 00	DF010	14
V1016CYG	57	9.0	19 55 18	+39 41	H 3	2426	S	C	31AUG78	20 39 14	60 00	DF010	16
V1016CYG	57	9.0	19 55 18	+39 41	L 3	2427	L	0	31AUG78	22 36 20	40 00	DF010	49
V1016CYG	57	11.0	19 55 20	+39 41	H 2	1581	S	C	30MAY78	06 12 25	30 00	MH011	UXP
V1016CYG	57	11.5	19 55 20	+39 41	L 2	2011	L	0	08AUG78	01 59 00	40 00	VB032	10
V1016CYG	57	11.0	19 55 20	+39 41	H 3	1669	S	C	30MAY78	05 08 24	40 00	MH011	UXP CONT
HD226868	13	8.9	19 56 29	+35 04	L 2	3094	L	0	03DEC78	12 32 18	60 00	MM043	80
HD226868	59	8.9	19 56 29	+35 04	L 2	3109	L	0	05DEC78	13 13 10	20 00	MM043	70
HD226868	59	8.9	19 56 29	+35 04	L 2	3121	L	0	07DEC78	15 35 27	10 00	MM043	50
HD226868	13	8.9	19 56 29	+35 04	L 3	3518	L	0	03DEC78	11 01 18	53 18	MM043	50
HD226868	59	8.9	19 56 29	+35 04	L 3	3535	L	0	05DEC78	11 58 55	60 00	MM043	50
SC 405	R6	16.2	19 57 44	+40 36	L 3	4257	L	0	14FEB79	10 41 12	185 00	UK016	11BLIND OFFSET
HD189849	35	4.7	19 59 02	+27 37	L 3	4407	L	0	27FEB79	06 [illegible] 09	10 00	RBA41	80
HD189849	35	4.7	19 59 02	+27 37	L 3	4407	S	C	27FEB79	06 36 31	2 45	RBA41	7015 VUL
HD189849	35	4.7	19 59 02	+27 37	L 3	4408	S	C	27FEB79	07 37 14	30 00	RBA41	80
HR TEL	57	9.8	20 00 19	-55 52	L 2	1698	S	0	20JUN78	05 25 00	15 00	VILSP	GOOD
RR TEL	57	9.8	20 00 19	-55 52	L 2	1698	L	0	20JUN78	03 05 00	135 00	VILSP	OVEREXP
RR TEL	57	9.8	20 00 20	-55 52	L 2	1850	S	0	19JUL78	00 53 48	10 00	VILSP	OK BUT MG II SAT
RR TEL	57	10.7	20 00 20	-55 52	H 2	2021	L	0	08AUG78	20 17 24	150 00	VILSP	46
RR TEL	57	10.7	20 00 20	-55 52	L 2	2022	L	0	09AUG78	02 12 17	5 00	VILSP	56
RR TEL	57	10.0	20 00 20	-55 52	H 2	2893	L	0	26SEP78	23 01 17	43 00	VILSP	11
RR TEL	57	10.0	20 00 20	-55 52	H 2	2995	L	0	21NOV78	13 34 53	24 25	VILSP	07
RR TEL	57	10.0	20 00 20	-55 52	H 2	2996	L	0	21NOV78	14 39 59	5 01	VILSP	05
RR TEL	63	10.3	20 00 20	-55 52	H 2	3888	L	0	28FEB79	06 58 28	20 00	VILSP	06
RR TEL	63	10.3	20 00 20	-55 52	H 2	3889	S	C	28FEB79	08 11 57	40 00	VILSP	06
RR TEL	57	9.8	20 00 20	-55 52	L 3	2046	L	0	19JUL78	01 56 18	10 01	VILSP	EM LINES SAT
RR TEL	57	9.8	20 00 20	-55 52	L 3	2046	S	0	19JUL78	01 43 07	5 00	VILSP	EM LINES SAT
RR TEL	57	9.8	20 00 20	-55 52	L 3	2047	L	0	19JUL78	03 09 15	2 00	VILSP	3 EM LINES SAT
RR TEL	57	9.8	20 00 20	-55 52	H 3	2108	S	C	25JUL78	22 56 00	210 00	VILSP	NO SPECTRUM
RR TEL	57	10.7	20 00 20	-55 52	H 3	2207	L	0	08AUG78	22 54 22	180 00	VILSP	36
RR TEL	57	10.0	20 00 20	-55 52	H 3	3405	L	0	21NOV78	12 52 49	36 00	VILSP	07
RR TEL	57	10.0	20 00 20	-55 52	H 3	3406	L	0	21NOV78	14 07 41	7 30	VILSP	06
RR TEL	57	10.0	20 00 20	-55 52	H 3	3407	L	0	21NOV78	15 18 00	1 30	VILSP	04
RR TEL	63	10.3	20 00 20	-55 52	H 3	4031	L	0	28FEB79	06 33 02	20 00	VILSP	06
RR TEL	63	10.3	20 00 20	-55 52	H 3	4032	S	C	28FEB79	07 26 58	40 00	VILSP	06
HD190248	44	3.6	20 03 50	-66 19	H 2	2190	S	C	27AUG78	20 20 00	40 00	BN053	60
HD190248	44	3.6	20 03 50	-66 19	H 2	3698	L	0	07FEB79	07 19 19	22 00	BN053	65
HD190248	44	3.6	20 03 50	-67 19	H 2	1861	S	C	20JUL78	22 01 00	41 00	BN053	WELL EXP AT LONG WL
HD190248	44	3.5	20 03 51	-66 19	L 2	2520	L	0	01OCT78	19 16 12	10 00	UK001	70
HD190248	44	3.5	20 03 51	-66 19	L 3	2827	L	0	01OCT78	18 23 21	40 00	UK001	40

OBJECT	CL	MAG	RT ASCN HR MN SC	DECLN DEG MN	DISP +CAM	APERT IMAGE	OB	LG	DATE	START HR MN SC	LENGTH MIN SC	PROG	COMMENT
HD190248	44	3.5	20 03 51	-66 19	L 3	2828	L	0	01OCT78	19 51 28	110 00	UK001	60
WZ SGE	54	10.0	20 05 18	+17 33	L 2	3166	S	0	14DEC78	11 34 15	2 00	UK035	30
WZ SGE	54	10.0	20 05 18	+17 33	L 2	3167	L	0	14DEC78	11 26 25	4 00	UK035	70
WZ SGE	54	10.0	20 05 18	+17 33	L 2	3168	S	0	14DEC78	12 41 01	4 00	UK035	50
WZ SGE	54	10.0	20 05 18	+17 33	L 2	3168	L	0	14DEC78	12 26 16	2 00	UK035	50
WZ SGE	54	10.0	20 05 18	+17 33	L 2	3169	S	0	14DEC78	14 36 47	4 00	UK035	30PROB DRIFTED OUT
WZ SGE	54	10.0	20 05 18	+17 33	L 2	3169	L	0	14DEC78	13 24 37	2 00	UK035	50
WZ SGE	54	11.0	20 05 18	+17 33	H 2	3261	L	0	24DEC78	11 20 04	120 00	UK007	45FIVE EXPOSURES ADDED
WZ SGE	54	11.0	20 05 18	+17 33	L 2	3262	L	0	24DEC78	15 57 00	2 00	UK007	40
WZ SGE	54	11.0	20 05 18	+17 33	L 2	3262	S	0	24DEC78	16 06 23	4 00	UK007	40
WZ SGE	54	8.5	20 05 18	+17 33	H 3	3527	L	0	04DEC78	17 11 00	35 00	UK100	43
WZ SGE	54	10.0	20 05 18	+17 33	L 3	3591	L	0	14DEC78	10 57 25	4 00	UK035	45
WZ SGE	54	10.0	20 05 18	+17 33	L 3	3591	S	0	14DEC78	10 50 00	2 00	UK035	34
WZ SGE	54	10.0	20 05 18	+17 33	L 3	3592	S	0	14DEC78	12 48 53	8 00	UK035	67
WZ SGE	54	10.0	20 05 18	+17 33	L 3	3592	L	0	14DEC78	12 31 19	4 00	UK035	55
WZ SGE	54	10.0	20 05 18	+17 33	L 3	3593	S	0	14DEC78	14 11 06	6 00	UK035	23DRIFTED OUT
WZ SGE	54	10.0	20 05 18	+17 33	L 3	3593	L	0	14DEC78	14 04 08	3 30	UK035	55
WZ SGE	54	10.0	20 05 18	+17 33	L 3	3594	S	0	14DEC78	15 55 55	6 00	UK035	55NOISY IMAGE
WZ SGE	54	10.0	20 05 18	+17 33	L 3	3594	L	0	14DEC78	15 24 10	15 00	UK035	23SET TO TRAIL TOO FAST
WZ SGE	54	10.0	20 05 18	+17 33	H 3	3595	L	0	14DEC78	16 43 21	62 00	UK035	33CROSSED BY LOW RES SP
WZ SGE	54	10.0	20 05 18	+17 33	L 3	3595	L	0	14DEC78	16 39 40	2 00	UK035	55DURATION APPROX ONLY
WZ SGE	54	11.0	20 05 18	+17 33	L 3	3687	S	0	24DEC78	11 07 28	8 00	UK007	55
WZ SGE	54	11.0	20 05 18	+17 33	L 3	3687	L	0	24DEC78	10 37 02	20 00	UK007	55SINGLE TRAIL
WZ SGE	54	11.0	20 05 18	+17 33	L 3	3688	L	0	24DEC78	12 00 30	4 00	UK007	55
WZ SGE	54	11.0	20 05 18	+17 33	L 3	3688	S	0	24DEC78	11 49 33	6 00	UK007	45
WZ SGE	54	11.0	20 05 18	+17 33	L 3	3689	L	0	24DEC78	12 53 14	4 00	UK007	55
WZ SGE	54	11.0	20 05 18	+17 33	L 3	3689	S	0	24DEC78	12 41 07	7 00	UK007	55
WZ SGE	54	11.0	20 05 18	+17 33	L 3	3690	L	0	24DEC78	13 44 38	4 00	UK007	55
WZ SGE	54	11.0	20 05 18	+17 33	L 3	3690	S	0	24DEC78	13 32 37	7 00	UK007	55
WZ SGE	54	11.0	20 05 18	+17 33	L 3	3691	L	0	24DEC78	14 34 56	4 00	UK007	55
WZ SGE	54	11.0	20 05 18	+17 33	L 3	3691	S	0	24DEC78	14 22 45	7 00	UK007	55
WZ SGE	54	11.0	20 05 18	+17 33	H 3	3692	L	0	24DEC78	15 14 41	120 00	UK007	33TWO EXPOSURES ADDED
WZ SGE	54	8.5	20 05 19	+17 33	H 2	3108	L	0	05DEC78	10 45 56	30 00	VILSP	40
HD191765	11	8.3	20 08 22	+36 02	L 2	3624	S	C	30JAN79	13 00 26	1 00	MH011	47
HD191765	11	8.3	20 08 22	+36 02	L 2	3624	L	0	30JAN79	12 54 09	2 00	MH011	35
HD191765	11	8.3	20 08 22	+36 02	H 2	3625	L	0	30JAN79	14 29 04	50 00	MH011	47
HD191765	11	8.3	20 08 22	+36 02	L 2	3626	L	0	30JAN79	15 44 26	4 00	MH011	67
HD191765	11	8.3	20 08 22	+36 02	L 3	4087	S	C	30JAN79	13 10 23	2 00	MH011	57
HD191765	11	8.3	20 08 22	+36 02	L 3	4087	L	0	30JAN79	13 04 38	1 00	MH011	36
HD191765	11	8.3	20 08 22	+36 02	H 3	4088	L	0	30JAN79	13 37 44	45 00	MH011	45
HD191877	23	6.2	20 09 10	+21 44	H 2	2526	S	C	02OCT78	16 56 47	16 00	RD016	60
HD191877	23	6.2	20 09 10	+21 44	H 3	2837	S	C	02OCT78	17 27 10	38 00	RD016	70
HD192103	10	8.5	20 10 01	+36 03	L 2	3622	L	0	30JAN79	09 38 37	2 00	MH011	57
HD192103	10	8.5	20 10 01	+36 03	L 2	3622	S	C	30JAN79	09 31 35	1 00	MH011	23
HD192103	10	8.5	20 10 01	+36 03	H 2	3623	L	0	30JAN79	10 12 03	50 00	MH011	45
HD192103	10	8.5	20 10 01	+36 03	L 3	4085	S	C	30JAN79	09 25 12	1 40	MH011	35
HD192103	10	8.5	20 10 01	+36 03	L 3	4085	L	0	30JAN79	09 13 12	1 40	MH011	57
HD192103	10	8.5	20 10 01	+36 03	H 3	4086	L	0	30JAN79	11 08 01	60 00	MH011	46

OBJECT	CL	MAG	RT ASCN HR MN SC	DECLN DEG MN	DISP +CAM	IMAGE	APERT OB LG	DATE	START HR MN SC	LENGTH MIN SC	PROG	COMMENT
NGC 6888	76	12.0	20 10 15	+38 16	L 2	3872	L O	26FEB79	08 33 37	150 00	UK02A	11
NGC 6888	76	12.0	20 10 15	+38 16	L 3	4397	L O	26FEB79	08 31 52	150 00	UK02A	11
HD192163	11	7.7	20 10 17	+38 12	H 2	1580	S C	30MAY78	02 45 40	100 00	MH011	GOOD
HD192163	11	7.7	20 10 17	+38 12	L 2	3806	S C	20FEB79	06 37 27	4 00	UK02A	77
HD192163	11	7.7	20 10 17	+38 12	L 2	3806	L O	20FEB79	06 22 52	30	UK02A	56
HD192163	11	7.7	20 10 17	+38 12	H 3	1668	S C	30MAY78	01 41 47	40 00	MH011	UNDEREXP
HD192163	57	7.7	20 10 17	+38 12	H 3	2424	S C	31AUG78	16 40 06	60 00	DF010	99SATURATED BACKGROUND
HD192163	11	7.7	20 10 17	+38 12	H 3	2517	S C	07SEP78	16 32 00	60 00	MH011	50HIGH RADN BACKGROUND
HD192163	11	7.7	20 10 17	+38 12	L 3	4309	L O	20FEB79	06 48 14	18	UK02A	36
HD192163	11	7.7	20 10 17	+38 12	L 3	4309	S C	20FEB79	06 44 48	28	UK02A	35
NGC 6888	76	12.0	20 10 25	+38 17	L 3	4396	L O	26FEB79	06 45 46	60 00	UK02A	11
HD192909	46	3.9	20 13 55	+47 34	H 3	1427	S C	27APR78	09 00 00	30 00	MHA02	UNDEREXP.
HD192273	25	8.9	20 14 00	-69 37	H 2	4134	S C	28MAR79	11 21 07	28 00	UK026	30
HD192273	25	8.9	20 14 00	-69 37	H 3	4783	S C	28MAR79	09 43 46	90 00	UK026	50
HD193237	23	5.8	20 15 50	+37 52	L 2	1932	S O	01AUG78	00 58 00	20	VILSP	A BIT STRONG
HD193237	23	5.8	20 15 50	+37 52	L 2	1932	L O	01AUG78	00 53 00	20	VILSP	A BIT STRONG
HD193237	23	5.8	20 15 50	+37 52	L 3	2164	S O	01AUG78	01 35 00	40	VILSP	GOOD
HD193237	23	5.8	20 15 50	+37 52	L 3	2164	L O	01AUG78	01 30 00	40	VILSP	A BIT STRONG
HD193237	23	5.0	20 15 56	+37 53	H 2	1371	S C	23APR78	08 35 03	35 00	VILSP	OVEREXP LW
HD193237	27	4.8	20 15 56	+37 53	H 2	2229	S C	31AUG78	00 46 45	12 40	UK022	56
HD193237	23	5.0	20 15 56	+37 53	L 3	1404	S C	23APR78	06 01 12	1 30	VILSP	OVEREXP LW
HD193237	23	5.0	20 15 56	+37 53	H 3	1593	S C	21MAY78	05 10 00	60 00	VILSP	GOOD
HD193237	27	4.8	20 15 56	+37 53	H 3	2419	S C	31AUG78	01 05 16	20 00	UK022	34
HD193237	23	5.0	20 15 57	+37 52	H 2	2997	L O	21NOV78	16 05 44	9 00	VILSP	77
HD193237	23	5.0	20 15 57	+37 52	H 2	2998	L O	21NOV78	17 04 59	2 30	VILSP	45
HD193237	60	4.8	20 15 57	+37 53	L 2	3370	S O	03JAN79	08 46 39	12	VILSP	60
HD193237	60	4.8	20 15 57	+37 53	L 2	3370	L O	03JAN79	08 43 37	4	VILSP	50
HD193237	23	5.0	20 15 57	+37 52	L 3	3408	L O	21NOV78	16 35 57	35	VILSP	66
HD193322	15	5.8	20 16 21	+40 35	H 2	2130	S C	20AUG78	23 57 33	12 00	UK031	60
HD193322	15	5.8	20 16 21	+40 35	H 2	2131	S C	21AUG78	01 20 42	20 00	UK031	70SAT ABOVE 2800A
HD193322	15	5.8	20 16 21	+40 35	H 3	2345	S C	20AUG78	23 10 23	40 00	UK031	80
HD193322	15	5.8	20 16 21	+40 35	H 3	2346	S C	21AUG78	00 10 02	25 00	UK031	70SAT ABOVE 1700A
V444 CYG	11	8.3	20 17 42	+38 34	L 2	2346	L O	13SEP78	21 08 51	3 20	UK028	70
V444 CYG	11	8.3	20 17 42	+38 34	L 2	2346	S O	13SEP78	21 00 00	50	UK028	40
V444 CYG	11	8.3	20 17 42	+38 34	L 3	2644	L O	13SEP78	20 19 21	1 40	UK028	33
V444 CYG	11	8.3	20 17 42	+38 34	L 3	2644	S O	13SEP78	20 14 52	25	UK028	33
V444 CYG	11	8.3	20 17 42	+38 34	L 3	2645	S O	13SEP78	21 48 48	6 40	UK028	45
V444 CYG	11	8.4	20 17 43	+38 34	H 2	1529	S C	21MAY78	06 38 00	35 00	VILSP	UXP XS
V444 CYG	11	8.4	20 17 43	+38 34	H 3	1594	S C	21MAY78	07 28 00	30 00	VILSP	NO SPECTRUM
IC 4997	70	11.2	20 17 51	+16 34	L 2	2247	L O	02SEP78	17 08 00	10 00	DF010	24HIGH BACKGROUND
IC 4997	70	11.2	20 17 51	+16 34	L 2	2250	L O	02SEP78	22 26 45	15 00	DF010	34
IC 4997	70	11.2	20 17 51	+16 34	L 3	2451	L O	02SEP78	16 45 00	10 00	DF010	27VERY HIGH BACKGROUND
IC 4997	70	11.2	20 17 51	+16 34	L 3	2455	L O	02SEP78	21 47 40	5 00	DF010	15
IC 4997	70	11.2	20 17 51	+16 34	L 3	2456	S C	02SEP78	22 59 20	45 00	DF010	05
HD193495	41	3.1	20 18 12	-14 56	H 2	2189	S C	27AUG78	18 50 00	15 00	BN053	60
HD195455	23	9.2	20 29 17	-24 14	H 2	4088	L O	22MAR79	06 30 34	58 00	UK02B	50
HD195455	23	9.2	20 29 17	-24 14	H 3	4723	L O	22MAR79	04 54 33	90 00	UK02B	60
HD195455	23	9.2	20 29 17	-24 14	L 3	4724	S C	22MAR79	07 39 46	2 14	UK02B	60

OBJECT	CL	MAG	RT ASCN HR MN SC	DECLN DEG MN	DISP +CAM	IMAGE	APERT OB LG	DATE	START HR MN SC	LENGTH MIN SC	PROG	COMMENT
HD195455	23	9.2	20 29 17	-24 14	L 3	4724	L O	22MAR79	07 32 48	3 18	UK02B	80
AE AQR	54	11.1	20 37 33	-01 03	L 2	2366	L O	15SEP78	20 51 29	15 00	UK028	35
AE AQR	54	11.1	20 37 33	-01 03	L 2	2367	L O	15SEP78	22 21 11	15 00	UK028	35
AE AQR	54	11.1	20 37 33	-01 03	L 3	2646	S O	13SEP78	23 35 27	10 00	UK028	
AE AQR	54	11.1	20 37 33	-01 03	L 3	2656	L O	15SEP78	19 38 25	35 00	UK028	34
AE AQR	54	11.1	20 37 33	-01 03	L 3	2657	L O	15SEP78	21 43 48	30 00	UK028	34
AE AQR	54	11.1	20 37 33	-01 03	L 3	2658	L O	15SEP78	23 05 20	40 00	UK028	34
HD197345	32	1.3	20 39 43	+45 06	H 2	2926	S C	13NOV78	12 46 13	40	FP047	50
HD197345	32	1.3	20 39 43	+45 06	H 2	2927	S C	13NOV78	13 55 25	2 00	FP047	70SW OK
HD197345	32	1.3	20 39 43	+45 06	H 3	3330	S C	13NOV78	12 50 58	1 30	FP047	50
HD197345	32	1.3	20 39 43	+45 06	H 3	3331	S C	13NOV78	13 22 50	9 00	FP047	70SW OK
HD197345	32	1.2	20 39 44	+45 06	H 2	2583	S C	12OCT78	15 19 06	1 20	FM050	70
HD197345	32	1.2	20 39 44	+45 06	H 3	2940	S C	12OCT78	14 28 02	7 00	FM050	70
HD197345	32	1.2	20 39 44	+45 06	H 3	2941	S C	12OCT78	15 27 29	1 00	FM050	50
MKN 509	84	13.0	20 41 26	-10 54	L 2	1309	L O	12APR78	08 13 00	110 00	UKPOP	GOOD, A BIT SAT
MKN 509	84	13.0	20 41 26	-10 54	L 2	1636	L O	08JUN78	01 10 02	50 00	UK042	VERY GOOD MAX DN 199
MKN 509	84	13.1	20 41 26	-10 54	L 2	1783	L O	05JUL78	20 00 00	37 00	Q02AB	OK/US IMAGE/APPROX START
MKN 509	84	13.0	20 41 26	-10 54	L 3	1355	L O	12APR78	05 11 45	165 00	UKPOP	OVEREXP.
MKN 509	84	13.0	20 41 26	-10 54	L 3	1742	L O	07JUN78	23 46 00	60 00	UK042	VERY GOOD MAX DN 225
MKN 509	84	13.0	20 41 26	-10 54	L 3	1743	S O	08JUN78	02 24 02	35 00	UK042	WEAK 45PC LOST IN AP
HD197989	46	2.6	20 44 12	+33 47	H 2	2612	S C	15OCT78	20 25 17	12 00	UK020	33
HD197989	46	2.6	20 44 12	+33 47	H 2	2635	S C	17OCT78	21 00 51	44 00	UK020	65
HD198149	46	3.4	20 44 16	+61 39	H 2	2634	S C	17OCT78	19 37 15	30 00	UK020	54
HD199081	21	4.7	20 51 29	+44 13	H 2	2129	S C	20AUG78	21 53 26	4 00	UK031	70SAT 2400 TO 2800A
HD199081	21	4.7	20 51 29	+44 13	H 3	2344	S C	20AUG78	22 07 33	5 00	UK031	70SAT ABOVE 1800A
CYG LOOP	75	14.0	20 54 15	+31 33	L 2	1284	L O	07APR78	09 35 00	57 00	BD033	UNDEREXPOSED CII
CYG LOOP	75	14.0	20 54 15	+31 33	L 3	1327	L O	07APR78	05 53 00	180 00	BD033	
CYG LOOP	72	14.0	20 54 46	+30 56	L 3	1877	L O	29JUN78	00 29 48	315 00	BD033	GOOD
HD200120	20	4.8	20 58 07	+47 19	H 2	3217	S C	20DEC78	15 07 20	2 00	NH051	22TRIPLE SYSTEM
HD200120	20	4.8	20 58 07	+47 19	H 2	3218	S C	20DEC78	16 58 00	4 00	NH051	66
HD200120	26	4.8	20 58 07	+47 19	H 2	3228	L O	21DEC78	17 23 49	1 10	NH051	55
HD200120	26	4.8	20 58 07	+47 19	L 2	3248	L O	23DEC78	12 58 01	1	NH051	55
HD200120	26	4.8	20 58 07	+47 19	L 2	3248	S C	23DEC78	12 50 17	1	NH051	33
HD200120	20	4.8	20 58 07	+47 19	H 3	3653	S C	20DEC78	15 42 17	3 00	NH051	2259 CYG
HD200120	20	4.8	20 58 07	+47 19	H 3	3654	S C	20DEC78	16 19 35	10 30	NH051	88
HD200120	20	4.8	20 58 07	+47 19	H 3	3655	S C	20DEC78	17 48 47	5 00	NH051	22
HD200120	26	4.8	20 58 07	+47 19	H 3	3664	L O	21DEC78	16 50 48	1 40	NH051	56
HD200120	26	4.8	20 58 07	+47 19	L 3	3665	S C	21DEC78	17 36 41	2	NH051	44
HD200120	26	4.8	20 58 07	+47 19	L 3	3665	L O	21DEC78	17 30 33	3	NH051	88
HD200120	26	4.8	20 58 07	+47 19	L 3	3681	L O	23DEC78	13 03 01	1	NH051	33
HD200120	26	4.8	20 58 07	+47 19	L 3	3681	S C	23DEC78	12 54 02	1	NH051	55
HD200775	20	7.0	21 00 59	+67 58	L 2	2009	S O	07AUG78	21 12 00	8 00	VB032	70GOOD AT 2200A
HD200775	20	7.0	21 00 59	+67 58	L 2	2010	L O	07AUG78	23 15 00	2 00	VB032	30
HD200775	20	7.0	21 00 59	+67 58	L 3	2232	S O	07AUG78	22 30 00	10 01	VB032	10CAMERA NOT PREPPED
HD200775	20	7.0	21 00 59	+67 58	L 3	2232	L O	07AUG78	22 00 00	5 00	VB032	50CAMERA NOT PREPPED
HD200775	20	7.0	21 00 59	+67 58	L 3	2233	L O	08AUG78	01 01 00	7 00	VH032	10FES PROBLEM?
NGC 7009	70	8.0	21 01 28	-11 34	L 2	1611	L + O	03JUN78	23 02 06	20 00	UK008	VERY GOOD
NGC 7009	70	9.0	21 01 28	-11 34	L 2	2701	L O	24OCT78	15 01 10	18 00	MP028	75

OBJECT	CL	MAG	RT ASCN HR MN SC	DECLN DEG MN	DISP +CAM	IMAGE	APERT OR	LG	DATE	START HR MN SC	LENGTH MIN SC	PROG	COMMENT
NGC 7009	70	8.0	21 01 28	-11 34	L 3	1709	L	0	03JUN78	23 54 00	10 00	UK008	VERY GOOD
NGC 7009	70	9.0	21 01 28	-11 34	L 3	3128	L	0	24OCT78	15 30 41	8 00	MP028	5(
NGC 7009	70	9.0	21 01 28	-11 34	L 3	3129	L	0	24OCT78	16 46 00	13 00	MP028	35
HD201091	46	5.2	21 04 40	+38 30	K 2	3175	L	0	15DEC78	14 08 27	30 00	CB031	26
HD201091	46	5.2	21 04 40	+38 30	L 3	3622	L	0	17DEC78	11 08 49	120 00	CB031	0361 CYG A
NGC 7027	71	9.0	21 05 09	+42 02	L 3	3077	L	0	20OCT78	20 03 00	20 00	MP028	05
NGC 7027	70	9.0	21 05 12	+42 01	H 2	2571	L	0	10OCT78	15 16 49	300 00	VILSP	26
NGC 7027	71	9.5	21 05 12	+42 01	H 3	4716	L	0	21MAR79	06 59 58	287 00	VILSP	06
NGC 7027	71	9.5	21 05 12	+42 01	H 3	4748	L	0	25MAR79	05 34 02	35 00	VILSP	03
V1500CYG	55	14.6	21 09 53	+47 57	L 3	3911	L	0	13JAN79	16 27 00	20 00	UKFTL	01
HD202850	25	4.2	21 15 27	+39 11	H 2	2584	S	C	12OCT78	16 18 37	10 00	FM050	70
HD202850	25	4.2	21 15 27	+39 11	H 2	3728	L	0	10FEB79	07 33 09	4 00	UK021	60
HD202850	25	4.2	21 15 27	+39 11	H 3	2942	S	C	12OCT78	16 48 04	33 00	FM050	70
HD202850	25	4.2	21 15 27	+39 11	H 3	4215	L	0	10FEB79	08 01 00	23 00	UK021	700K SHORT OF 1600
HD204076	20	8.8	21 24 01	-32 09	H 3	4725	L	0	22MAR79	08 31 42	68 00	UK028	50
2126-158	85	17.3	21 26 27	-15 54	L 2	2586	L	0	09OCT78	16 21 22	840 00	UK13A	77READ AT G8FC
2126-158	85	17.3	21 26 27	-15 54	L 3	2882	L	0	07OCT78	16 42 36	840 00	UK13A	77READ AT G8FC
NGC 7078	85	6.4	21 27 36	+11 57	L 3	1691	S	0	26MAY78	7 12 00	32 00	UKP0P	FAINT TRACES CONT LM
IIZW 136	84	14.0	21 30 01	+09 55	L 3	3637	L	0	18DEC78	11 03 29	120 00	UK033	35
P2135-10	85	15.0	21 35 01	-10 46	L 3	2128	L	0	27JUL78	03 20 00	17 00	UK016	NO SPECTRUM
HD206165	23	4.7	21 36 34	+61 52	H 2	2169	S	C	24AUG78	22 08 00	20 00	UK031	70STRONG GRADIENT IN EXP
HD206165	23	4.7	21 36 34	+61 52	H 3	2392	S	C	28AUG78	21 11 00	50 00	UK031	60
NOVA CYG	55	7.0	21 40 38	+43 48	L 2	2323	L	0	11SEP78	16 42 00	5 00	UKT00	77
NOVA CYG	55	7.0	21 40 38	+43 48	L 2	2323	S	0	11SEP78	16 35 00	1 00	UKT00	34
NOVA CYG	55	7.0	21 40 38	+43 48	L 2	2335	L	0	12SEP78	18 37 00	3 00	UKT00	66GOOD
NOVA CYG	55	7.0	21 40 38	+43 48	L 2	2335	S	0	12SEP78	17 58 40	15 00	UKT00	77OK FOR SMI MK IN 2200
NOVA CYG	55	7.0	21 40 38	+43 48	L 2	2357	S	0	14SEP78	23 47 11	4 00	VILSP	56
NOVA CYG	55	7.0	21 40 38	+43 48	L 2	2357	L	0	14SEP78	23 24 00	18 00	VILSP	78
NOVA CYG	55	7.0	21 40 38	+43 48	L 2	2365	S	0	15SEP78	18 20 00	3 00	UKT00	56
NOVA CYG	55	7.0	21 40 38	+43 48	L 2	2365	L	0	15SEP78	17 47 27	18 00	UKT00	77
NOVA CYG	55	8.0	21 40 38	+43 48	L 2	2407	L	0	19SEP78	17 45 21	10 01	UKT00	77GOOD FOR 2200 REGION
NOVA CYG	55	8.0	21 40 38	+43 48	L 2	2407	S	0	19SEP78	17 37 44	2 00	UKT00	56
NOVA CYG	55	8.5	21 40 38	+43 48	L 2	2408	S	0	23SEP78	23 11 58	2 00	UKT00	56
NOVA CYG	55	8.5	21 40 38	+43 48	L 2	2408	L	0	23SEP78	22 56 00	8 00	UKT00	77GOOD FOR 2200
NOVA CYG	55	8.2	21 40 38	+43 48	H 2	2491	L	0	28SEP78	16 48 54	40 00	VILSP	47SAT AT MG II
NOVA CYG	55	8.2	21 40 38	+43 48	H 2	2492	L	0	28SEP78	18 10 42	12 00	VILSP	35
NOVA CYG	55	9.5	21 40 38	+43 48	L 2	2633	S	0	17OCT78	18 32 18	1 00	UKT00	35
NOVA CYG	55	9.5	21 40 38	+43 48	L 2	2633	L	0	17OCT78	18 24 32	4 00	UKT00	58
NOVA CYG	55	10.0	21 40 38	+43 48	H 2	2709	S	C	25OCT78	15 31 00	15 00	UKT00	12
NOVA CYG	55	10.0	21 40 38	+43 48	H 2	2710	S	C	25OCT78	16 37 00	100 00	UKT00	24
NOVA CYG	55	10.5	21 40 38	+43 48	L 2	2751	L	0	29OCT78	21 07 54	6 00	UKT00	67
NOVA CYG	55	10.5	21 40 38	+43 48	L 2	2751	S	0	29OCT78	21 02 20	1 30	UKT00	35
NOVA CYG	55	11.0	21 40 38	+43 48	L 2	2841	S	0	06NOV78	14 24 00	2 00	UKT00	35
NOVA CYG	55	11.0	21 40 38	+43 48	L 2	2841	L	0	06NOV78	14 09 22	6 00	UKT00	57
NOVA CYG	55	11.0	21 40 38	+43 48	L 2	2946	L	0	16NOV78	14 00 28	2 00	UKT00	45
NOVA CYG	55	11.0	21 40 38	+43 48	L 2	2946	S	C	16NOV78	13 50 05	4 00	UKT00	56
NOVA CYG	55	11.0	21 40 38	+43 48	H 2	2947	L	0	16NOV78	14 55 58	90 00	UKT00	34
NOVA CYG	55	11.0	21 40 38	+43 48	H 2	2948	L	0	16NOV78	19 19 32	25 00	UKT00	47

OBJECT	CL	MAG	RT ASCN HR MN SC	DECLN DEG MN	DISP +CAM	IMAGE	APERT OR	LG	DATE	START HR MN SC	LENGTH MIN SC	PROG	COMMENT
NOVA CYG	55	12.0	21 40 38	+43 48	L 2	3100	L	0	04DEC78	16 19 41	12 00	UKT00	37
NOVA CYG	55	12.0	21 40 38	+43 48	L 2	3100	S	0	04DEC78	16 09 14	5 00	UKT00	25
NOVA CYG	55	12.0	21 40 38	+43 48	L 2	3285	S	0	26DEC78	16 16 17	5 00	UKT00	24
NOVA CYG	55	12.0	21 40 38	+43 48	L 2	3285	L	0	26DEC78	15 55 50	15 00	UKT00	37
NOVA CYG	55	12.0	21 40 38	+43 48	L 2	3478	L	0	13JAN79	12 17 36	45 00	UKT00	27
NOVA CYG	55	12.0	21 40 38	+43 48	L 2	3478	S	0	13JAN79	11 50 02	6 00	UKT00	13
NOVA CYG	55	13.0	21 40 38	+43 48	L 2	3942	L	0	06MAR79	06 36 09	8 00	UKT00	23
NOVA CYG	55	13.0	21 40 38	+43 48	L 2	3942	S	0	06MAR79	05 59 34	30 00	UKT00	23
NOVA CYG	55	13.0	21 40 38	+43 48	L 2	4100	L	0	24MAR79	06 06 50	32 00	UKT00	23
NOVA CYG	55	13.0	21 40 38	+43 48	L 2	4101	L	0	24MAR79	07 19 48	96 00	UKT00	35
NOVA CYG	55	7.0	21 40 38	+43 48	L 3	2627	L	0	11SEP78	17 29 00	3 00	UKT00	33
NOVA CYG	55	7.0	21 40 38	+43 48	L 3	2627	S	0	11SEP78	17 20 00	1 00	UKT00	22
NOVA CYG	55	7.0	21 40 38	+43 48	L 3	2636	S	0	12SEP78	17 46 00	5 00	UKT00	22
NOVA CYG	55	7.0	21 40 38	+43 48	L 3	2636	L	0	12SEP78	17 12 48	25 00	UKT00	34
NOVA CYG	55	7.0	21 40 38	+43 48	L 3	2655	L	0	15SEP78	17 04 58	35 00	UKT00	56
NOVA CYG	55	8.0	21 40 38	+43 48	L 3	2697	L	0	19SEP78	18 38 29	2 00	UKT00	23
NOVA CYG	55	8.0	21 40 38	+43 48	L 3	2697	S	0	19SEP78	18 03 10	30 00	UKT00	57
NOVA CYG	55	8.5	21 40 38	+43 48	L 3	2742	L	0	23SEP78	23 43 00	3 00	UKT00	45
NOVA CYG	55	8.5	21 40 38	+43 48	L 3	2742	S	0	23SEP78	23 20 00	20 00	UKT00	77
NOVA CYG	55	9.0	21 40 38	+43 48	L 3	2902	L	0	10OCT78	21 32 46	3 00	VILSP	67
NOVA CYG	55	9.0	21 40 38	+43 48	L 3	2902	S	0	10OCT78	20 47 18	20 00	VILSP	77
NOVA CYG	55	9.2	21 40 38	+43 48	L 3	2990	L	0	15OCT78	21 41 12	1 00	UKT00	35
NOVA CYG	55	9.2	21 40 38	+43 48	L 3	2990	S	C	15OCT78	21 25 57	10 00	UKT00	56
NOVA CYG	55	9.5	21 40 38	+43 48	L 3	3011	S	0	17OCT78	18 47 08	3 00	UKT00	24
NOVA CYG	55	9.5	21 40 38	+43 48	L 3	3011	L	0	17OCT78	18 37 33	5 00	UKT00	36
NOVA CYG	55	10.5	21 40 38	+43 48	L 3	3190	L	0	29OCT78	20 27 50	6 00	UKT00	46
NOVA CYG	55	10.5	21 40 38	+43 48	L 3	3190	S	0	29OCT78	20 21 16	3 00	UKT00	38
NOVA CYG	55	11.0	21 40 38	+43 48	H 3	3237	L	0	06NOV78	14 46 00	240 00	UKT00	27
NOVA CYG	55	11.0	21 40 38	+43 48	L 3	3238	S	0	06NOV78	19 39 39	3 00	UKT00	15
NOVA CYG	55	11.0	21 40 38	+43 48	L 3	3238	L	0	06NOV78	19 26 39	9 00	UKT00	27
NOVA CYG	55	11.0	21 40 38	+43 48	L 3	3362	L	0	16NOV78	14 24 30	9 00	UKT00	36
NOVA CYG	55	11.0	21 40 38	+43 48	L 3	3362	S	C	16NOV78	14 14 44	4 00	UKT00	46
NOVA CYG	55	12.0	21 40 38	+43 48	L 3	3526	L	0	04DEC78	15 51 37	9 00	UKT00	27
NOVA CYG	55	12.0	21 40 38	+43 48	L 3	3526	S	0	04DEC78	15 42 52	3 00	UKT00	15
NOVA CYG	55	12.0	21 40 38	+43 48	L 3	3714	L	0	26DEC78	16 30 56	12 00	UKT00	27
NOVA CYG	55	12.0	21 40 38	+43 48	L 3	3714	S	0	26DEC78	16 23 53	3 00	UKT00	15
NOVA CYG	55	12.0	21 40 38	+43 48	L 3	3908	L	0	13JAN79	11 07 29	40 00	UKT00	27
NOVA CYG	55	12.0	21 40 38	+43 48	L 3	3908	S	0	13JAN79	10 58 17	3 30	UK100	12
NOVA CYG	55	13.0	21 40 38	+43 48	L 3	4505	L	0	06MAR79	05 44 32	10 00	UK100	14
NOVA CYG	55	13.0	21 40 38	+43 48	L 3	4505	S	0	06MAR79	04 39 34	60 00	UK100	26
NOVA CYG	55	13.0	21 40 38	+43 48	L 3	4737	L	0	24MAR79	06 47 49	25 00	UKT00	15
88 CYGNI	54	12.0	21 40 44	+43 21	L 2	1571	L	0	28MAY78	03 19 30	25 00	UKP0P	MG2 SAT,MAXDN=180 AT2800
88 CYGNI	54	12.0	21 40 44	+43 21	L 2	3452	L	0	11JAN79	10 22 37	25 00	UK035	56
88 CYGNI	54	12.0	21 40 44	+43 21	L 2	3453	L	0	11JAN79	11 29 57	19 00	UK035	56
88 CYGNI	54	12.0	21 40 44	+43 21	L 2	3454	L	0	11JAN79	12 28 59	15 00	UK035	36
88 CYGNI	54	12.0	21 40 44	+43 21	L 2	3455	L	0	11JAN79	13 42 41	12 00	UK035	45
88 CYGNI	54	12.0	21 40 44	+43 21	L 2	3456	L	0	11JAN79	14 59 54	12 00	UK035	45
88 CYGNI	54	12.0	21 40 44	+43 21	L 3	1653	S	C	28MAY78	02 05 07	25 00	UKP0P	VERY UNDEREXP

OBJECT	CL	MAG	RT ASCN HR MN SC	DECLN DEG MN	DISP +CAM	IMAGE	APERT OB	APERT LG	DATE	START HR MN SC	LENGTH MIN SC	PROG	COMMENT
SS CYG	3A	12.0	21 40 44	+43 21	L 3	1664	S	C	29MAY78	06 26 58	70 00	UKPOP	QUITE WEAK, NOISY IMAGE
SS CYGNI	5A	12.0	21 40 44	+43 21	L 3	3880	L	0	11JAN79	09 59 46	16 00	UK035	35
SS CYGNI	5A	12.0	21 40 44	+43 21	L 3	3881	L	0	11JAN79	11 01 00	16 00	UK035	35
SS CYGNI	5A	12.0	21 40 44	+43 21	L 3	3882	L	0	11JAN79	11 58 23	16 00	UK035	35
SS CYGNI	5A	12.0	21 40 44	+43 21	L 3	3883	L	0	11JAN79	13 00 53	16 00	UK035	35
SS CYGNI	5A	12.0	21 40 44	+43 21	L 3	3884	L	0	11JAN79	14 11 08	40 00	UK035	56
SS CYGNI	5A	12.0	21 40 44	+43 21	L 3	3885	L	0	11JAN79	15 28 23	16 00	UK035	45
HD206860	4A	5.9	21 42 09	+14 33	H 2	2967	L	0	18NOV78	17 36 00	44 00	CB031	44
HD206860	4A	5.8	21 42 09	+14 33	H 2	3013	L	0	23NOV78	16 27 37	52 00	CB031	50
HD206860	4A	5.9	21 42 09	+14 33	H 2	3174	L	0	15DEC78	10 38 00	52 00	CB031	60
HD206860	4A	5.9	21 42 09	+14 33	H 2	3215	L	0	20DEC78	10 22 51	48 00	CB031	66
HD206860	4A	6.0	21 42 09	+14 33	H 2	3320	L	0	29DEC78	14 18 41	48 00	FC027	60
HD206860	4A	5.9	21 42 09	+14 33	L 3	3381	L	0	18NOV78	16 27 42	77 00	CR031	40
HD206860	4A	5.9	21 42 09	+14 33	L 3	3608	L	0	15DEC78	11 40 40	100 00	CB031	70
+28 4211	12	10.5	21 48 56	+28 38	L 2	3286	S	0	26DEC78	17 15 09	1 00	UKCAL	50
+28 4211	12	10.5	21 48 56	+28 38	L 2	3286	L	0	26DEC78	17 11 13	1 00	UKCAL	50
+28 4211	12	10.5	21 48 56	+28 38	L 2	3477	L	0	13JAN79	09 44 51	1 00	UKCAL	50
+28 4211	12	10.5	21 48 56	+28 38	L 2	3477	S	0	13JAN79	09 39 36	1 40	UKCAL	50
+28 4211	12	10.5	21 48 56	+28 38	L 3	3907	L	0	13JAN79	09 34 10	30	UKCAL	50
+28 4211	12	10.5	21 48 56	+28 38	L 3	3907	S	0	13JAN79	09 28 13	50	UKCAL	30FOCUS POOR
HD208501	2S	5.8	21 53 12	+56 22	H 2	3746	L	0	12FEB79	12 41 22	55 00	UK021	50
HD208501	2S	5.8	21 53 12	+56 22	H 3	4217	L	0	10FEB79	10 29 40	200 00	UK021	40
HD208816	4B	4.9	21 55 12	+63 23	L 2	1750	S	C	30JUN78	02 18 51	2 30	UK045	OK
HD208816	4B	4.9	21 55 12	+63 23	L 2	1750	L	0	30JUN78	02 07 58	5 00	UK045	OK
HD208816	4B	4.9	21 55 12	+63 23	L 3	1883	S	C	30JUN78	01 28 59	8 00	UK045	A BIT WEAK
HD208816	4B	4.9	21 55 12	+63 23	L 3	1883	L	0	30JUN78	00 55 11	15 00	UK045	BAT AT LW
HD208816	4B	4.9	21 55 14	+63 23	L 2	1285	S	C	08APR78	07 24 00	20 00	UKPOP	VV CEP
HD208816	4B	4.9	21 55 14	+63 23	L 2	1631	L	0	07JUN78	07 35 00	6 00	MH802	VV CEP GOOD
HD208816	4B	4.9	21 55 14	+63 23	L 2	1631	S	C	07JUN78	01 25 00	4 00	MH802	VV CEP GOOD
HD208816	4B	4.9	21 55 14	+63 23	L 2	1732	L	0	26JUN78	01 51 27	4 00	MHC02	OVEREXP X 30PC
HD208816	4B	5.7	21 55 14	+63 23	H 2	1931	S	C	31JUL78	21 09 00	113 00	MHA02	A BIT WEAK AT SHORT WL
HD208816	4B	4.8	21 55 14	+63 23	H 2	2109	S	C	18AUG78	18 56 38	120 00	UK045	46MAG II BAT
HD208816	3B	5.7	21 55 14	+63 23	H 2	4007	L	0	13MAR79	10 39 00	30 00	MHA02	45NO SPNEP (XPNEP ONLY)
HD208816	5S	5.7	21 55 14	+63 23	L 3	1385	S	C	19APR78	07 30 00	6 00	MHA02	NO SPECTRUM
HD208816	5S	5.7	21 55 14	+63 23	L 3	1385	L	0	19APR78	07 45 00	1 00	MHA02	NO SPECTRUM
HD208816	4B	4.9	21 55 14	+63 23	L 3	1736	L	0	07JUN78	00 26 37	12 00	MH802	VV CEP GOOD SOME EM BAT
HD208816	4B	4.9	21 55 14	+63 23	L 3	1736	S	C	07JUN78	00 15 08	1 00	MH802	VV CEP
HD208816	4B	5.7	21 55 14	+63 23	L 3	2162	L	0	31JUL78	20 58 00	2 00	MHA02	GOOD AT LONG WL
HD208816	4B	5.7	21 55 14	+63 23	L 3	2162	S	0	31JUL78	20 54 00	1 00	MHA02	A BIT WEAK
HD208816	3B	5.7	21 55 14	+63 23	L 3	4617	S	C	13MAR79	11 3A 35	30	MHA02	11
HD208816	3B	5.7	21 55 14	+63 23	L 3	4617	L	0	13MAR79	11 15 09	1 30	MHA02	23
HD208816	4B	4.9	21 55 15	+63 23	H 2	2923	L	0	12NOV78	13 14 50	30 00	UK045	47
HD208816	4B	4.9	21 55 15	+63 23	H 2	2924	L	0	12NOV78	18 43 17	60 00	UK045	57
HD208816	4B	4.9	21 55 15	+63 23	L 3	3321	S	0	12NOV78	13 01 00	7 00	UK045	50
HD208816	4B	4.9	21 55 15	+63 23	L 3	3321	L	0	12NOV78	12 35 35	10 00	UK045	70
HD208816	4B	4.9	21 55 15	+63 23	L 3	3322	L	0	12NOV78	13 56 08	270 00	UK045	67
-03 5357	1G	10.0	21 58 01	-02 59	L 2	1855	L	0	20JUL78	01 07 00	10 01	UK003	OK
-03 5357	1G	10.0	21 58 01	-02 59	L 2	1855	S	0	20JUL78	00 43 00	14 35	UK003	OK

OBJECT	CL	MAG	RT ASCN HR MN SC	DECLN DEG MN	DISP +CAM	IMAGE	APERT OB	APERT LG	DATE	START HR MN SC	LENGTH MIN SC	PROG	COMMENT
-03 5357	1G	10.0	21 58 01	-02 59	L 3	2054	L	0	20JUL78	00 23 00	13 20	UK003	OXP
-03 5357	1G	10.0	21 58 01	-02 59	L 3	2054	S	0	19JUL78	22 54 00	16 50	UK003	SLIGHT OXP
-03 5357	1G	10.0	21 58 01	-02 59	L 3	2055	L	0	20JUL78	02 09 00	6 00	UK003	OK
2158+380	8G	14.0	21 58 17	+38 01	L 3	3644	L	0	19DEC78	11 43 25	120 00	UK033	13
HD209100	4G	4.7	21 59 47	+57 01	H 2	2611	S	C	15OCT78	17 45 00	85 00	UK020	75
HD209481	1Z	5.5	22 00 24	+57 46	H 2	3729	L	0	10FEB79	09 25 05	4 00	UK021	70
HD209481	1Z	5.5	22 00 24	+57 46	H 3	4216	L	0	10FEB79	09 34 00	9 00	UK021	50
HD209481	1Z	5.5	22 00 34	+57 46	H 3	4236	L	0	12FEB79	12 16 43	7 00	UK021	50
HD209750	4A	2.9	22 03 13	-00 34	H 2	3216	S	C	20DEC78	12 11 03	30 00	CB031	66
HD209750	4A	2.9	22 03 13	-00 34	L 3	3651	L	0	20DEC78	11 40 01	22 00	CB031	44ALPHA AQR
HD209750	4A	2.9	22 03 14	-00 34	L 3	3609	L	0	15DEC78	17 41 30	5 00	CB031	10
HD209750	4A	2.9	22 03 14	-00 34	L 3	3609	S	C	15DEC78	17 32 46	5 00	CB031	20
2204-408	8S	17.5	22 04 33	-40 51	L 2	2539	L	0	05OCT78	17 00 00	840 00	UK13A	??READ DOWN AT GSFC
Q2204	8S	17.5	22 04 33	-40 52	L 3	2227	L	0	06AUG78	21 12 00	327 00	UK13A	1102204-408
Q2204	8S	17.5	22 04 33	-40 52	L 3	2251	L	0	09AUG78	19 50 51	350 00	UK13A	1102204-408
2204-408	8S	17.5	22 04 33	-40 51	L 3	2849	L	0	03OCT78	16 52 53	840 00	UK13A	??READ DOWN AT GSFC
HD210839	1S	5.0	22 09 49	+59 18	H 2	2128	S	C	20AUG78	18 58 27	10 00	UK031	70OK BELOW 2550A
HD210839	1S	5.0	22 09 49	+59 10	H 2	3566	L	0	24JAN79	09 10 12	10 00	KH014	70
HD210839	1S	5.0	22 09 49	+59 10	H 2	3567	L	0	24JAN79	09 50 11	2 30	KH014	40
HD210839	1S	5.0	22 09 49	+59 18	H 3	2383	S	C	20AUG78	19 40 39	40 00	UK031	77SAT ABOVE 1700A
HD210839	1S	5.0	22 09 49	+59 10	H 3	4015	L	0	24JAN79	08 28 30	13 00	KH014	70
HD212076	2G	5.0	22 19 03	+11 57	H 2	3806	S	C	06JAN79	15 11 00	2 27	AR020	50
HD212076	2G	5.0	22 19 03	+11 57	H 3	3827	S	C	06JAN79	14 31 00	2 57	AR020	30
HD212076	2G	5.0	22 19 03	+11 57	H 3	3828	S	C	06JAN79	15 28 35	2 57	AR020	50
HD212593	2S	4.6	22 22 29	+49 13	H 2	3775	L	0	15FEB79	11 42 37	6 00	FM050	60
HD212593	2S	4.6	22 22 29	+49 13	H 3	4266	L	0	15FEB79	11 14 44	17 00	FM050	50100DN AT 1550A
HD212571	2G	4.6	22 22 43	+01 07	H 2	3383	S	C	04JAN79	13 41 55	1 36	AR020	50
HD212571	2G	4.6	22 22 43	+01 07	L 2	3384	S	0	04JAN79	14 51 32	2	AR020	50
HD212571	2G	4.6	22 22 43	+01 07	L 2	3384	L	0	04JAN79	14 45 37	1	AR020	50
HD212571	2G	4.6	22 22 43	+01 07	H 3	3802	S	C	04JAN79	14 15 00	2 02	AR020	50
HD212571	2G	4.6	22 22 43	+01 07	L 3	3803	S	0	04JAN79	15 12 59	2	AR020	50
HD212571	2G	4.6	22 22 43	+01 07	L 3	3803	L	0	04JAN79	15 09 44	1	AR020	50
HD212571	2G	4.6	22 22 43	+01 07	H 3	3804	S	C	04JAN79	15 39 41	3 00	AR020	60
HD 21808	0Z	06.8	22 33 24	-16 39	H 3	1562	S	C	17MAY78	05 30 37	30 00	UKPOP	GOOD
HD210680	2S	6.8	22 33 25	-16 39	H 3	1555	S	C	16MAY78	01 05 58	50 00	UKPOP	GOOD SHORT OF 1550R
HD210680	1Z	4.9	22 37 01	+38 47	H 2	3568	S	C	24JAN79	11 10 04	2 00	KH014	50
HD210680	1Z	4.9	22 37 01	+38 47	H 3	4016	S	C	24JAN79	10 48 00	2 10	KH014	60
DI CEP	5B	11.5	22 54 00	+58 24	L 2	1514	L	0	19MAY78	02 26 06	60 00	GG005	QUITE GOOD
DI CEP	5B	11.3	22 54 06	+58 24	L 2	2176	L	0	26AUG78	00 50 00	50 00	FG004	30
DI CEP	5B	11.3	22 54 06	+58 24	L 3	2379	L	0	23AUG78	23 35 00	125 00	GG005	40
DI CEP	5B	11.3	22 54 06	+58 24	L 3	2398	L	0	25AUG78	20 38 00	246 00	FG004	04
HD217050	2G	5.4	22 54 52	+48 25	H 2	3081	S	C	01DEC78	11 29 37	10 30	PSD13	70
HD217050	2G	5.4	22 54 52	+48 25	H 3	3503	S	C	01DEC78	11 16 31	7 30	PSD13	50
HD217476	4A	5.0	22 57 58	+56 41	L 2	1933	L	0	01AUG78	03 15 00	1 30	VILSP	UNDEREXPOSED
HD217476	4A	5.0	22 57 58	+56 41	L 2	1933	S	0	01AUG78	02 50 00	20 00	VILSP	GOOD
HD217476	4A	5.0	22 57 59	+56 41	L 3	2092	S	0	24JUL78	02 42 00	60 00	UKFIL	A BIT STRONG AT LONG WL
MKN 313	8B	13.0	22 59 30	+15 42	L 3	1744	L	0	06JUN78	05 04 06	36 00	UK042	VERY WEAK
HD217675	2Z	4.7	22 59 37	+42 03	H 2	2171	S	C	25AUG78	01 17 00	2 00	UK031	50

OBJECT	CL	MAG	RT ASCN HR MN SC	DECLN DEG MN	DISP +CAM	IMAGE	APERT OR	LG	DATE	START HR MN SC	LENGTH MIN SC	PROG	COMMENT
HD217675	25	3.6	22 59 37	+42 03	H 2	3466	S	C	12JAN79	10 02 30	2 10	PSD13	70
HD217675	22	4.7	22 59 37	+42 03	H 3	2393	S	C	25AUG78	01 11 00	2 30	UK031	60
HD217675	25	3.6	22 59 37	+42 03	H 3	3896	S	C	12JAN79	10 07 30	2 20	PSD13	60
NGC 7469	84	13.8	23 00 44	+08 36	L 2	1680	S	O	16JUN78	23 44 45	120 00	SL034	MG II GOOD
NGC 7469	84	13.8	23 00 44	+08 36	L 3	1798	S	O	17JUN78	02 00 36	210 00	SL034	GOOD MAX DN 174
NGC 7469	84	14.0	23 00 59	+08 32	L 3	1920	L	O	06JUL78	00 37 37	57 00	UK005	NO SPECTRUM
HD218915	13	7.2	23 08 52	+52 47	H 3	1884	S	C	30JUN78	03 02 00	55 00	UK06A	OVEREXPOSED X 1.5
HD219188	23	6.9	23 11 28	+04 43	H 2	1749	S	C	29JUN78	23 29 21	16 00	UK06A	GOOD
HD219188	23	6.9	23 11 28	+04 43	H 3	1882	S	C	29JUN78	22 55 56	20 00	UK06A	GOOD MAX DN 240
HD219188	23	6.9	23 11 28	+04 43	H 3	3050	S	C	19OCT78	20 56 58	25 00	UK041	50
NGC 7582	88	14.0	23 15 38	-42 39	L 2	3051	L	O	27NOV78	17 16 02	150 00	VILSP	27
NGC 7582	88	12.0	23 15 38	-42 39	L 2	3471	L	O	03JAN79	10 13 01	372 00	VILSP	30BACKGROUND BODN
NGC 7582	88	14.0	23 15 38	-42 39	L 3	3471	L	O	27NOV78	13 08 54	240 00	VILSP	22
-5 23174	20	12.5	23 17 24	-05 26	L 3	3737	L	O	29DEC78	15 55 16	10 00	FC027	90
NGC 7662	70	9.0	23 23 30	+42 16	L 2	1572	S	O	28MAY78	07 21 00	20 00	UKPOP	UNDEREXP
NGC 7662	70	9.0	23 23 30	+42 16	L 2	1576	L	O	29MAY78	01 59 02	28 00	UKPOP	GOOD
NGC 7662	71	8.6	23 23 30	+42 16	H 2	1612	S	C	04JUN78	01 21 00	30 00	UK008	A FEW LINES 6SEC OFFSET
NGC 7662	71	8.6	23 23 30	+42 16	L 2	1613	S	O	04JUN78	03 23 33	12 00	UK008	WEAK
NGC 7662	71	8.6	23 23 30	+42 16	L 2	1623	S	C	06JUN78	00 43 00	12 00	UK008	WEAK E 6SEC FROM STAR
NGC 7662	71	8.6	23 23 30	+42 16	L 2	1624	S	C	06JUN78	02 12 00	12 00	UK008	WEAK W 4SEC FROM STAR
NGC 7662	71	8.6	23 23 30	+42 16	H 2	1625	S	C	06JUN78	03 11 00	75 00	UK008	GOOD W 4SEC FROM STAR
NGC 7662	70	10.0	23 23 30	+42 17	L 2	2657	L	O	20OCT78	20 55 24	29 00	MP028	57NE IV BAT
NGC 7662	70	11.8	23 23 30	+42 16	L 2	3392	L	O	05JAN79	13 18 00	15 00	UK007	56
NGC 7662	70	11.8	23 23 30	+42 16	L 2	3392	S	C	05JAN79	12 28 16	40 00	UK007	34NOT ON STAR
NGC 7662	70	11.8	23 23 30	+42 16	L 2	3393	L	O	05JAN79	14 13 30	7 00	UK007	35
NGC 7662	70	9.0	23 23 30	+42 16	L 3	1661	L	O	29MAY78	00 45 38	60 00	UKPOP	OVEREXP, NOISY IMAGE
NGC 7662	70	9.0	23 23 30	+42 16	L 3	1662	S	C	29MAY78	03 17 00	20 00	UKPOP	GOOD
NGC 7662	71	8.6	23 23 30	+42 16	L 3	1710	S	O	04JUN78	02 12 57	40 00	UK008	A FEW EM LINES
NGC 7662	71	8.6	23 23 30	+42 16	L 3	1729	S	C	06JUN78	04 45 18	60 00	UK008	OK W 5SEC FROM STAR
NGC 7662	70	10.0	23 23 30	+42 17	L 3	3078	L	O	20OCT78	21 30 18	17 00	MP028	58
NGC 7662	70	10.0	23 23 30	+42 17	L 3	3130	L	O	24OCT78	18 13 25	25 00	MP028	28
NGC 7662	70	10.0	23 23 30	+42 17	L 3	3131	L	O	24OCT78	19 23 00	6 00	MP028	16
NGC 7662	70	11.8	23 23 30	+42 16	L 3	3811	S	C	05JAN79	11 41 11	40 00	UK007	56
NGC 7662	70	11.8	23 23 30	+42 16	L 3	3811	L	O	05JAN79	11 27 14	8 00	UK007	37
NGC 7662	70	11.8	23 23 30	+42 16	L 3	3812	L	O	05JAN79	14 03 54	5 00	UK007	36
Z AND	57	10.0	23 31 15	+48 33	L 2	1661	L	O	13JUN78	03 59 37	105 00	VB032	OVEREXP RED OF 2400A
Z AND	57	10.0	23 31 15	+48 33	H 2	3789	L	O	17FEB79	10 39 48	30 00	VB032	01
Z AND	57	10.0	23 31 15	+48 33	L 2	3790	L	O	17FEB79	13 19 58	27 00	VB032	56
Z AND	57	10.8	23 31 15	+48 32	L 3	1485	L	O	05MAY78	02 22 00	60 00	VB032	GOOD
Z AND	57	10.0	23 31 15	+48 33	H 3	4286	L	O	17FEB79	11 16 58	110 00	VB032	06
HD222404	46	3.2	23 37 16	+77 21	L 3	4030	L	O	25JAN79	08 28 28	120 00	UK001	30
HD223640	36	5.2	23 48 46	-19 11	H 2	2860	S	C	08NOV78	16 25 54	16 00	GH045	70
HD223640	36	5.2	23 48 46	-19 11	H 3	3268	S	C	08NOV78	16 10 33	10 00	GH045	50
HD223640	36	5.2	23 48 46	-19 11	H 3	3269	S	C	08NOV78	17 12 39	20 00	GH045	70
HD224014	41	4.4	23 51 33	+57 14	L 3	3713	L	O	26DEC78	14 14 58	45 00	UKFIL	11
HD224014	41	4.4	23 51 53	+57 14	L 2	3476	L	O	13JAN79	08 20 57	20 00	UKFIL	60
HD224014	41	4.4	23 51 53	+57 14	L 3	4506	L	O	06MAR79	10 13 59	81 00	UKFIL	11

Table of Contents