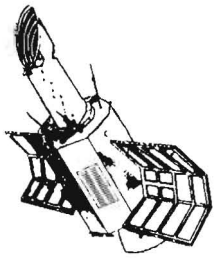

IUE esa NEWSLETTER

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NO.27 JANUARY 1987

IUE ESA NEWSLETTER
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OBSERVATORY CONTROLLER'S MESSAGE

For the IUE project the past year has been a time of consolidation after the upheavals caused by the loss of the fourth gyro in 1985. The spacecraft and science operations are esentially back to their original performance. The effects of this consolidation are nicely illustrated by the updated power constraints for 1987 (this issue p 7) The power conditions are in fact slightly better than in 1986. Obviously this is not a consequence of increased solar panel output, but rather reflects the revised minimum operational power positive S/C load and the lower than predicted degradation of the panels themselves.

In the ground system we have seen a major repair of the SATAN uplink antenna. Even though this obliged us to interupt IUE support for a week at VILSPA, thanks to the generous support of our colleagues at GSFC, no European science time was lost with an ESA Resident Astronomer supporting the VILSPA shift from the NASA IUE Observatory.

Personnel changes include the departure of F. Franco as Spacecraft Operations Engineer. This position has been taken up in the meantime by O. Ojanguren, well known to many of you as one of the few old-timers in the Control Area. We wish Oscar all the best in his new position.

In the general support area we are pleased to announce that it will be possible for Guest Observers to do some data reduction at VILSPA from April 15. From that date a workstation in the MIDAS software environment will be accessible to Guest Observers. It is recommended that GO's who apply to use this new facility have some familiarity with the MIDAS package. Details of the implementation of this service and its advance booking procedure will be sent to Guest Observers, scheduled to observe after April 15, together with their final scheduling information.

Another activity which reaches completion soon is the creation of the Uniform Low Dispersion Archive (ULDA). This compacted form of the low resolution data in the IUE archive has been approved as a new IUE output product for limited distribution. The details of this will be reported in a later Newsletter. It is expected that the availibility of the ULDA will significiently improve access to the IUE archive.

Further news on the Lyman Phase A study was to be included in this issue of the Newsletter. LYMAN was envisaged as a joint project between ESA and NASA. However,

due to the tragic accident with the Space Shuttle "Challenger" last year, NASA is now not able to commit itself to a new start earlier than 1992. This clearly has changed the situation for ESA and requires a revision of the LYMAN project. To analyse the possibilities in this context a "Tiger Team" has been requested to evaluate the requirements for an independent mission possibly in collaboration with other international partners.

Finally it rests with me to wish all of you success with your IUE applications in 1987 and also a Happy New Year on behalf of all the staff of the ESA IUE Observatory.

Willem Wamsteker

NEW PERSONNEL

OSCAR OJANGUREN has been associated with IUE since operations began at VILSPA. He joined the project as a Spacecraft Controller and Telescope Operator in 1977 and now takes over as Spacecraft Operations Engineer

After graduating from the Complutense University (Madrid) with a degree in electronics he took up a Research Fellowship with Shell Laboratory in Holland. Then followed work on a series of space projects, LANDSAT, APPOLLO 17, SKYLAB and the APOLLO-SOYUZ mission.

Oscar is very interested in tennis, sports cars and a zero gyro-3 axis control system. He is married with four children.

A native of Belgium, JACQUES VAN SANTVOORT joined the observatory at VILSPA as Resident Astronomer in September. In addition to normal duties, he will also assume responsibility for the scheduling of European proposals for the next round.

His Ph. D., obtained at the Institut d'Astrophysique of the Liege University, was mainly devoted to the determination of the oxygen chemical abundance in the peculiar B and A type stars by a non-LTE analysis of very high resolution spectra. His previous ultraviolet experience includes an extensive study carried out at the State University of Mons, of a high resolution mid-UV spectrum of the brightest northern Ap star, which was recorded by the Balloon-borne Ultraviolet Stellar Spectrograph.

At VILSPA Jacques intends to pursue his work on non-LTE related topics. He enjoys walking in the countryside and photography; other interest include Fine Art, classical music and jazz. He and his wife, MANON, have one son of about nine months old.

CARLOS URECH has recently been appointed as a Spacecraft Controller but he is no stranger to VILSPA having spent the past five years working in the Computer Department.

Prior to joining VILSPA he worked, from 1970, at the NASA Deep Space Network in Madrid. He was involved in different subsystems of the station and worked on the Pioneer, Voyager and Helios projects. Although he has specialised in real time operatons his other activities include programming and business interests.

During vacations he enjoys going to the seaside and indulging in his favourite sport of wind-surfing. Carlos is married with three daughters.

Departures

Fernando Franco has left VILSPA and ESA to join a specalist electronic components company based in Madrid. We wish him well in this new venture.

SPACECRAFT STATUS REPORT

1. GENERAL

The IUE spacecraft continues to support science operations normally and effectively in its 9th year of very successful in-orbit operations.

2. BATTERIES

The two on-board batteries are in good condition and perform satisfactorily.

Maximum depth of discharge was 61.8% for the Fall eclipse season (shadow n.18; Aug20-Sep11), from which IUE has emerged with no problems being noted.

3. SOLAR ARRAY

The nominal spacecraft power load has been recalculated to be 165 watts.Therefore the projected power positive Beta range has been improved.

Predictions of allowed Beta ranges (IUE power positive) until January 88 are summarized below:

MONTH	BETA RANGE
*****	**********
NOV86	25 - 116
DEC	24 - 117
JAN87	24 - 117
FEB	25 - 117
MAR	26 - 116
APR	27 - 115
MAY	28 - 113
JUN	29 - 112
JUL	30 - 112
AUG	30 - 112
SEP	29 - 112
OCT	28 - 113
NOV	27 - 114
DEC	26 - 115
JAN88	26 - 115

Restrictions imposed by "HOT OBC" conditions remain in force as usual. See ESA IUE Newsletter 26, p7

4. 2 GYRO-FSS SYSTEM

The Control System currently on-board IUE is performing excellently.

Some minor problems have been solved by reprogramming specific locations of the OBC memory, mainly in the Roll Control coding. As a result oscillations have not appeared again at low Beta angles.

Extensive work was carried out at GSFC in the ground software to use more efficiently the present capabilities on-board. This includes changes to allow manoeuvre calculations specifying YAW (sunline) slews, and removing the almost 5 minutes delay between manoeuvre generation and execution.

A new attitude hold mode has been used during the above mentioned Fall shadow season. Its performance can be rated as very good. It is power saving and does not allow the spacecraft to drift far from its initial position at eclipse start, (sun presence is needed to hold attitude). Thus the subsequent daily attitude recoveries are considerably improved.

5. 1 GYRO CONTROL SYSTEM

A control system using only one gyro, the FSS and the FES, has been coded by NASA. The system is presently under test but part of it, "unfiltered FES-only mode control", has already been checked against the satellite with good results.

6. CONCLUSIONS

After the refinements applied to the 2GYRO-FSS system,the present overall performance of IUE can be considered to be almost equal to the S/C performance before the failure of Gyro n.3 on August 17, 1985.

The solar pannels are degrading at a lower rate than expected and the power budget of the satellite is now less than with three gyros. Therefore it has been possible to enlarge by five degrees the power constraint-free beta range.

A backup control system, to be used if still another gyro fails, enhances the prospects of IUE useful life.

O. OJANGUREN

EUROPEAN SELECTION COMMITTEE FOR 10TH ROUND OF IUE

The proposals requesting IUE observing time are evaluated by a Selection Committee, which this year will meet in Paris in March. The list of successful European programs will be published (together with the corresponding NASA list) in ESA Newsletter No. 28, once the results have been communicated to the individual applicants. Below we give for your information, the complete members list of this year's ESA Selection Committee, together with the letter representing the research category code of the relevant proposal sub-group.

H. NUSSBAUMER/CHAIRMAN		ETH/ZENTRUM, ZURICH
R.F. CARSWELL/VICE-CHAIRMAN		CAMBRIDGE UNIVERSITY
J.L. BERTAUX	(S)	CNRS, VERRIERES, FRANCE
P.B. BYRNE	(C)	ARMAGH OBSERVATORY
I. BROWN	(Q)	JODRELL BANK, CHESHIRE
V. CASTELLANI	(E)	UNIVERSITA "LA SAPIENZA" ROMA
J. DANZIGER	(Q)	E.S.O., MUNICH
K.S. DE BOER	(M)	BONN UNIVERSITY
E. VAN DESSEL	(I)	KONINKLYLE STERREWACHT, BELGIUM
P.L. DUFTON	(A)	QUEEN'S UNIVERSITY, BELFAST
P. GONDHALEKAR	(E)	RAL, OXFORDSHIRE
B. HASSALL	(I)	OXFORD UNIVERSITY
K. VAN DER HUCHT	(A)	SPACE RESEARCH LABORATORY UTRECHT
D.W. HUGHES	(S)	SHEFFIELD UNIVERSITY
J. LEQUEUX	(E)	OBSERVATOIRE DE MARSEILLE
H.U. NORGAARD-NIELSEN	(Q)	COPENHAGEN UNIVERSITY
L. SMITH	(M)	UCL, LONDON
F. SPITE	(C)	OBSERVATOIRE DE MEUDON
R. STALIO	(C)	TRIESTE OBSERVATORY
E. TANZI	(I)	LABORATORIO DI FISICA COSMICA, MILANO
A. VIDAL-MADJAR	(M)	INSTITUT D'ASTROPHYSIQUE PARIS
B. WOLF	(A)	LANDESSTERNWARTE HEIDELBERG

Research Category Code:

S = Solar System
C = Cool Stars
E = Extragalactic
Q = Active Galaxies (QSO's, etc...)
M = Interstellar Medium
A = Hot Stars (Atmosphere)
I = Hot Stars (Interaction)
E = Galaxies (Stellar content, etc)

VILSPA Database - Remote Access and Dearchiving

A new version of the VILSPA Database has been implemented and is now available for users. This database is faster, more comprehensive and allows on-line entering of dearchiving requests.

The new system runs on the VAX 730 of the VILSPA Scientific Computer Center (VSCC) which is linked to the data networks of Europe either via IBERPAC or ESANET (private network of ESA).

With this installation the IUE database is expected to be available 24 hours a day unlike the former database on the PDP-11 machine which was often unavailable during spacecraft real time operations.

To connect to VILSPA using IBERPAC use the DTE number of VILSPA which is 0214 5212 022 029.

This will connect you to the VILSPA Network Control Center (NCC).

Through ESANET use the DATEX-P number which is 0262 4561 514 0054. This will establish a connection to the ESOC NCC, where entering VILSPADB will again connect you to the VILSPA NCC.

Once connected you should see something like:

```
#  CALL COMPLETED TO FFFF,0

01-23-1987  09:30:33

        ****************************************
        *   WELCOME TO VILSPA ESALAN SERVICES  *
        *                                      *
        *   Villafranca del Castillo - Madrid  *
        ****************************************

vilspa_dest:
```

To the prompt 'vilspa_dest:' enter VAX to access the VAX 730 holding the database (Hit <return> when you see to message CALL COMPLETED TO ...). Use as VAX username VILSPA and as password DB. As this is a general (catch-all) account you are asked to enter your codename (2-4 character) to identify yourself. One important reason for doing this is so your dearchiving requests which you can enter now during a query session can be sent to the right

person and address (simply enter DEarchive to the record currently displayed or type DE 301234 to request image 1234 of camera SWP). Hence you need to get registered which you can do by yourself. Choose your codename, enter your name, address and telephone number and there you go (Note that all registered user will receive a User's guide.)

What other new features can one enjoy beside the new dearchiving facility ?

First of all the response time is 50% faster than on the PDP-11 and a menu program will offer you different types of consultancy sessions.

Also "simple" database queries can be made: here the user does not have to open the files nor does he have to know the name of the keys - he just has to know the coordinates or the homogeneous object identification; here we are expecting the necessary information for the implementation of homogeneous object identifiers shortly but when this was written it was not yet available.

For "complex" queries the user can interrogate all files under the database individually or in parallel using any combination of keys like date of observation, camera and image number, dispersion, object class, etc. The command syntax of this type of query is very much the same used at the PDP-11. Hence veterans of this system will have no difficulties in using this facility.

Other features include the recalling of the last 20 commands and a MAIL facility where you can provide us with some feedback. Have information, have dearchivings, have fun !

M. Barylak

Contact me as usual or at the following electronic addresses:
EARN: LX@DDAESA10
SPAN: ECD1::323DEPABLO
IBERPAC: DTE 02145 212 022 029 (as described above)

Study of the performance of the new LWP ITF (ITF2)

A. Cassatella, C. Lloyd

1. Introduction

The performances of the new LWP ITFs (ITF2) are analyzed and compared with those of the current ITFs (ITF1). In particular, we study the linearity, the flux ratio ITF2/ITF1, the flux ratio of point with respect to trailed spectra, and the signal-to-noise ratio (S/N) of ITF1 and ITF2.

2. Linearity of ITF1 and ITF2

Linearity test data were obtained on Oct. 20, 1986 and processed with both ITF1 and ITF2. As shown in Table 1, several images of BD+28 4211 were obtained (both point and trailed), with exposure times ranging from 20% to 200% of the optimum exposure time (set, as usual, in the region of maximum sensitivity around 2700-2900Å).

The spectra from both ITF1 and ITF2, were averaged in four bands 100 A wide centered at 2300 A , 2500 A, 2800 A, and 3100 A. The flux ratio [FN/t]/[FN/t(opt)], taken as a measure of the non-linearity errors of ITF1 and ITF2, is plotted in Fig. 1 as a function of the percent of the

optimum exposure time near 2800 A, t/t(opt). The following conclusions can be drawn from the inspection of Fig. 1:

a) both ITF1 and ITF2 underestimate underexposed spectra and overestimate spectra exposed above the 100% level.

b) ITF2 is generally better than ITF1 as far as linearity is concerned. In fact, the maximum departure from linearity is about 3% for ITF2 compared with about 4-5% for ITF1. Only in one band (2300 A), there is a marginal indication that ITF1 could behave better than ITF2. However, at such short wavelengths, the S/N ratio from ITF1 spectra is lower than that from ITF2 (see following), so that the information derived from ITF1 data is comparably less accurate.

The above results are consistent with those reported by Harris (1984) for ITF1 and by Oliversen (1986) for ITF2.

It is worth mentioning that LWP ITF2 are considerably more linear than the test LWR ITFs (ITF2) (Cassatella 1985).

3. Fluxes from spectra processed with ITF2 and ITF1.

It is important to know how FNs obtained through ITF2 compare with those obtained through ITF1, especially at the moment of deciding whether the same absolute calibration

can be applied to both ITFs, or not.

To this purpose, we have compared the average of two pairs of point and trailed spectra of BD+28 4211 processed with ITF1, with the average of the same spectra processed with ITF2.

In Fig. 2, we show how the ratio FN(ITF2)/FN(ITF1) varies for point spectra (bottom of figure) and trailed spectra (top). Both sets of data give consistent results, although the data obtained from point spectra are more noisy than trailed spectra , as expected. The figure confirms that, as reported by Oliversen (1986), the flux ratio ITF2/ITF1 is not constant with wavelength. Note that a similar effect was shown to exist for LWR images processed with the LWR ITF2 and ITF1 (Cassatella 1985). In particular, the LWP ITF2 provide about 4% more flux than ITF1 in the region of maximum sensitivity (2700-2900 A), and about 8-9% around 3100A. On the contrary, ITF2 provide typically lower fluxes than ITF1 below about 2000 A. For convenience, the flux ratio FN(ITF2)/FN(ITF1) obtained from the trailed spectra in Fig. 2 is given also in Table 2, in 50 A bins.

4. Trailed vs. Point spectra

The problem of using trailed spectra for the determination of the IUE absolute calibration has been addressed recently in more than one occasion. In particular, it has been shown (Harris and Cassatella 1985) that the flux ratio of point to trailed spectra is not grey with wavelength when using LWP spectra processed with ITF1. We have used the data of BD+28 4211 in Table 1, together with other data of HD60753 obtained on Apr. 18, 1986, to study the flux ratio FN(Point)/FN(Trailed) as a function of wavelength. As the effective exposure times of trailed spectra are uncertain, the fluxes derived from trailed spectra were previously normalized to those from point spectra in the ragion 2600 - 2800 A.

The results of the test, shown in Fig. 3 and Table 3, can be summarized as follows:

a) the flux ratio of point to trailed spectra is wavelength dependent for both ITF1 and ITF2.

b) fluxes from point spectra processed with either ITF, are systematically lower than those derived from trailed spectra in the regions below about 2350 A and above 2950 A. The effect is large enough to explain most if not all the

SWP-LWP overlap discrepancy discussed by Harris and Cassatella (1985) and Cassatella (1984).

c) the ratio FN(Point)/FN(Trailed) is systematically noiser for ITF1 data. This is in agreement with the results reported in the next section.

5. Signal-to-noise ratio with ITF1 and ITF2.

We have tested the S/N ratio in data processed with ITF1 and ITF2 using the point and trailed spectra of BD+28 4211 and HD60753 listed at the bottom of Table 3. The S/N ratio was measured in three bands free from stellar or instrumental features: 1950-2150 A, 2530-2720 A and 2900-3000 A. In each band, we measured the r.m.s. deviation of any individual spectrum from the local continuum (estimated through a heavy smoothing of the spectrum itself), and normalized to the mean flux in the band. The results, given in Table 4, indicate that the S/N is generally better or comparable for data processed with ITF2. This is true for both trailed and point spectra.

In particular, the S/N ratio from ITF2 is better in the regions of of lower spectral sensitivity of the LWP. The effect shows up clearly in Fig. 4, where a point-by-point comparison is performed between one trailed and one point spectrum of BD+28 4211 processed with both

ITFs. We conclude that, as far as S/N characteristics are concerned, ITF2 offers important advantages over ITF1, which will hopefully contribute to solve the problem of the SWP-LWP overlap discrepancy.

Finally, we note that the S/N of the LWP camera is anyhow about a factor two better than the LWR camera, and comparable to that of the SWP camera, at least in the regions of maximum sensitivity (see Cassatella et al. 1984).

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Oliversen, N. 1986, Rep. 3 Agency Meeting, ESTEC, Jun. 1986

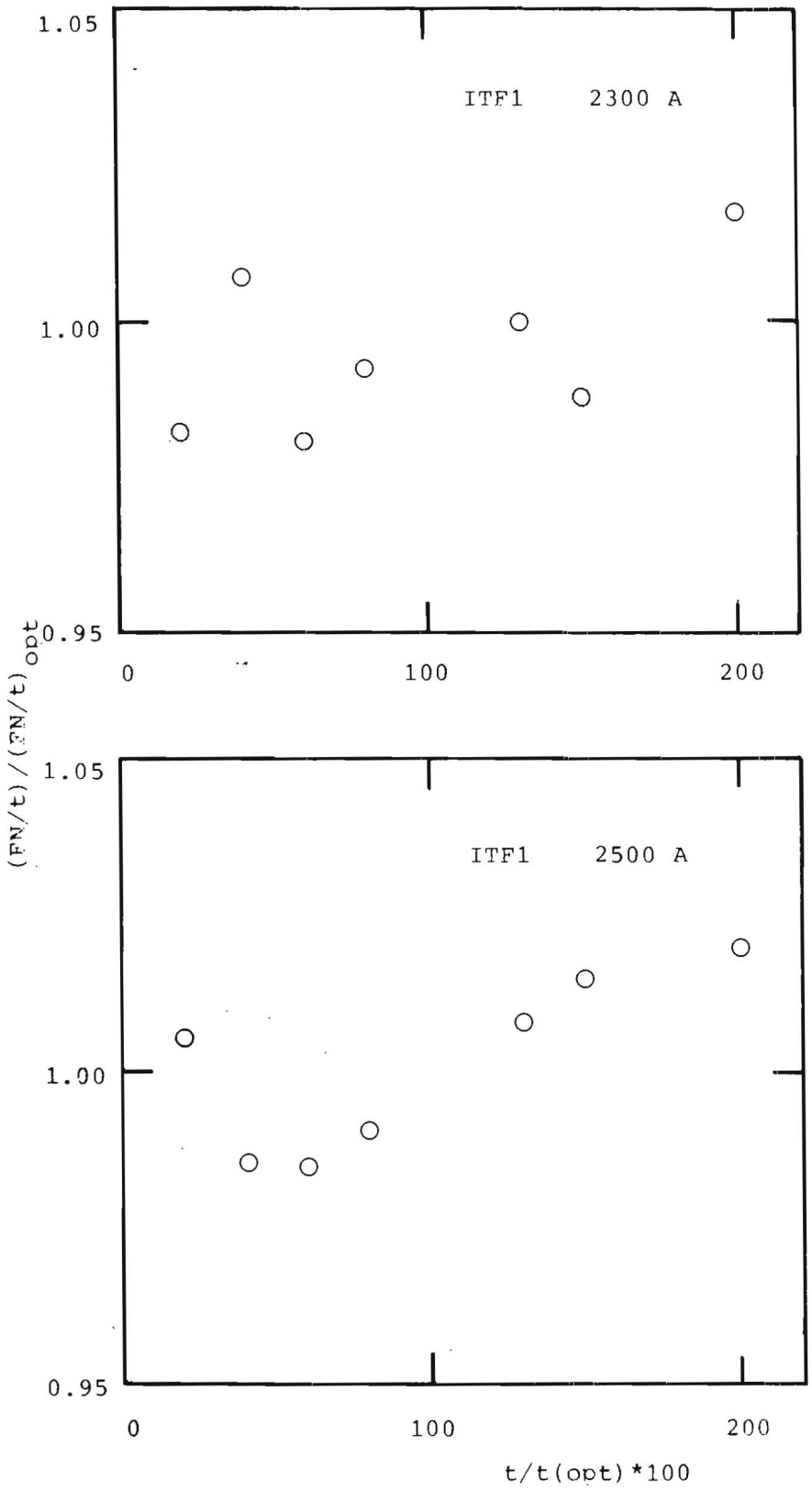

1.05
1.00
0.95
ITF1 2300 A
0
100
200
1.05
1.00
0.95
ITF1 2500 A
0
100
200
(FN/t) / (ΣN/t) opt
t/t(opt)*100

Fig. 1a

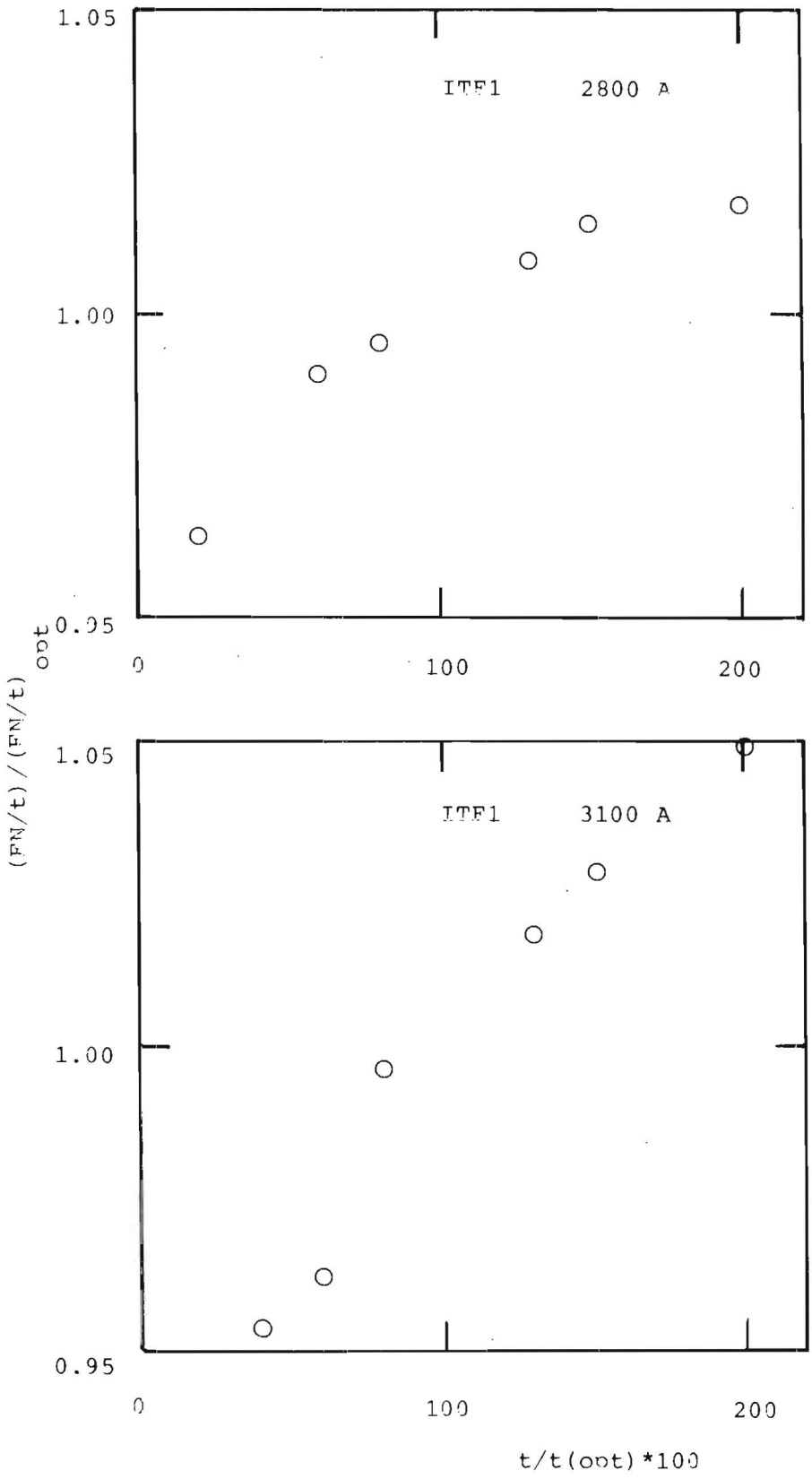

1.05
1.00
0.95
ITF1 2800 A
0
100
200
1.05
1.00
0.95
ITF1 3100 A
0
100
200
(FN/t)/(FN/t)opt
t/t(opt)*100

Fig. 1b

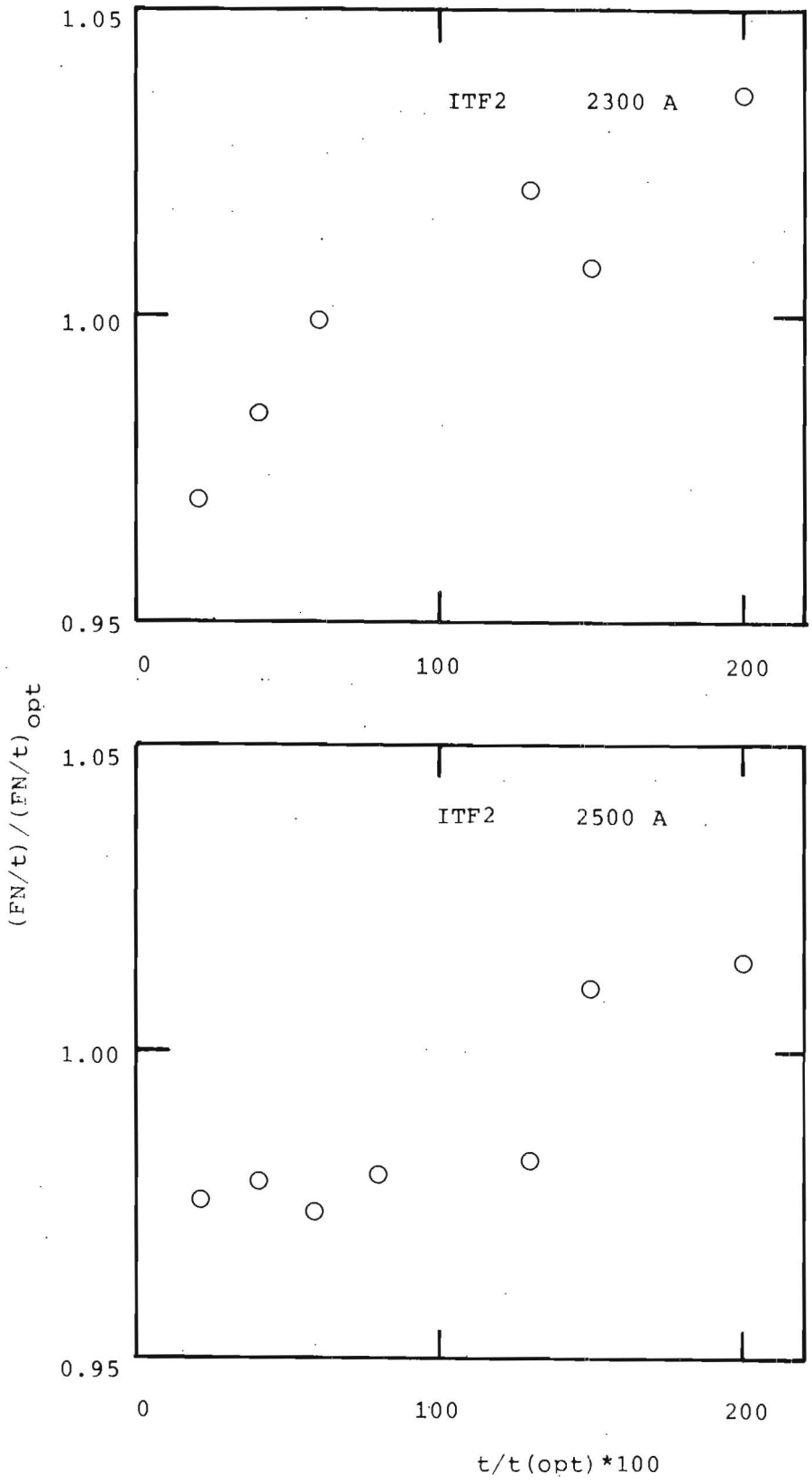

1.05
ITF2 2300 A
1.00
0.95
0
100
200
(FN/t) / (FN/t)opt
1.05
ITF2 2500 A
1.00
0.95
0
100
200
t/t(opt)*100

Fig. 1c

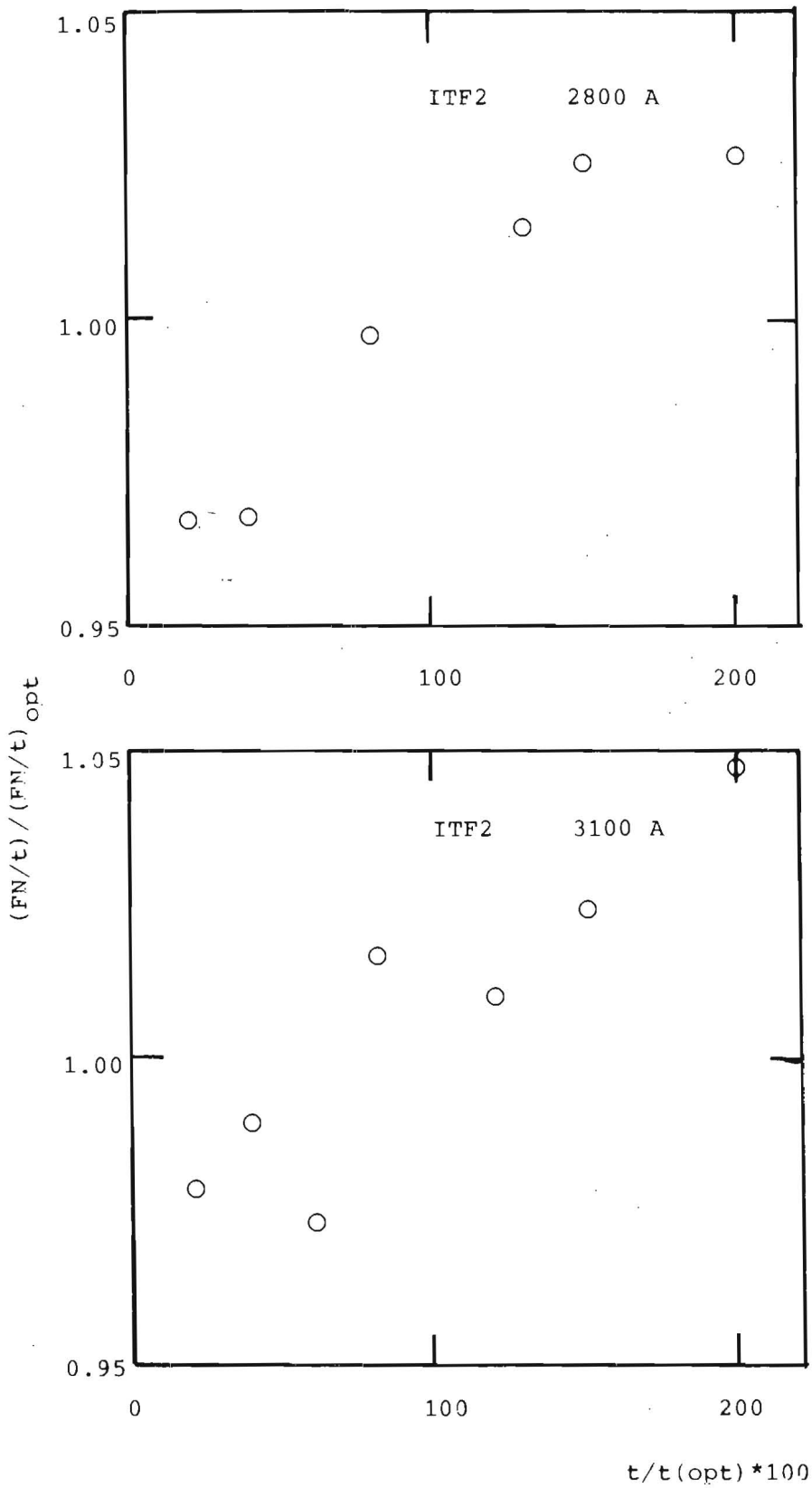
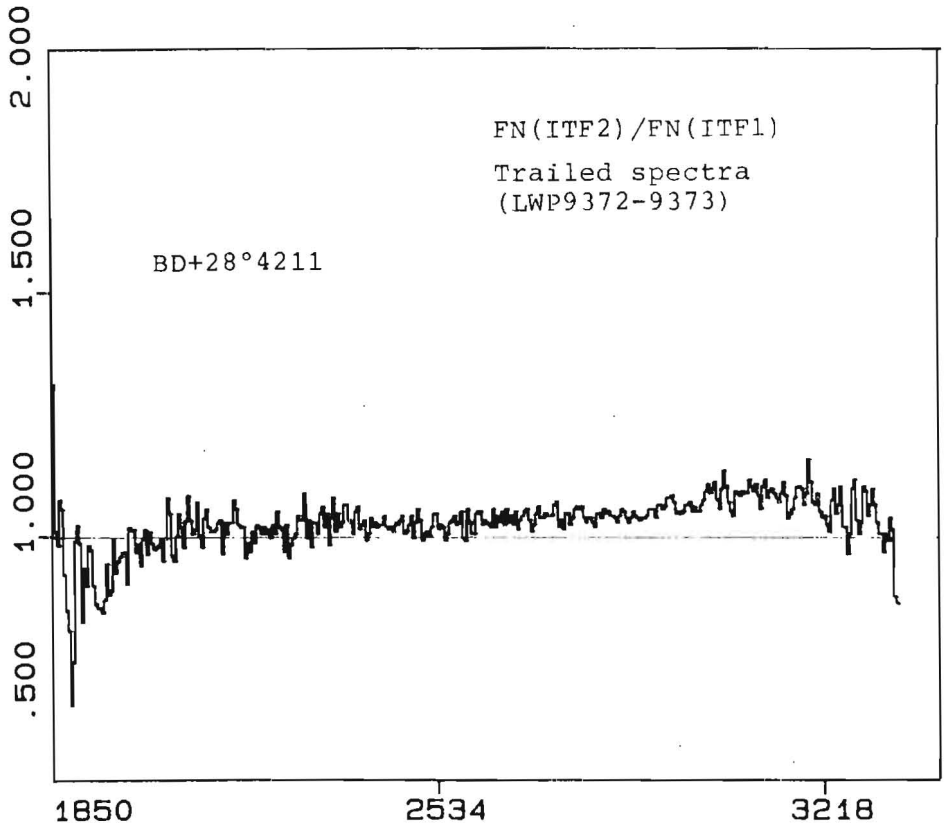

1.05
1.00
0.95
ITF2 2800 A
0
100
200
1.05
1.00
0.95
ITF2 3100 A
0
100
200
(FN/t) / (FN/t)opt
t/t(opt)*100

Fig. 1d


2.000
1.500
1.000
.500
FN(ITF2)/FN(ITF1)
Trailed spectra
(LWP9372-9373)
BD+28°4211
1850
2534
3218

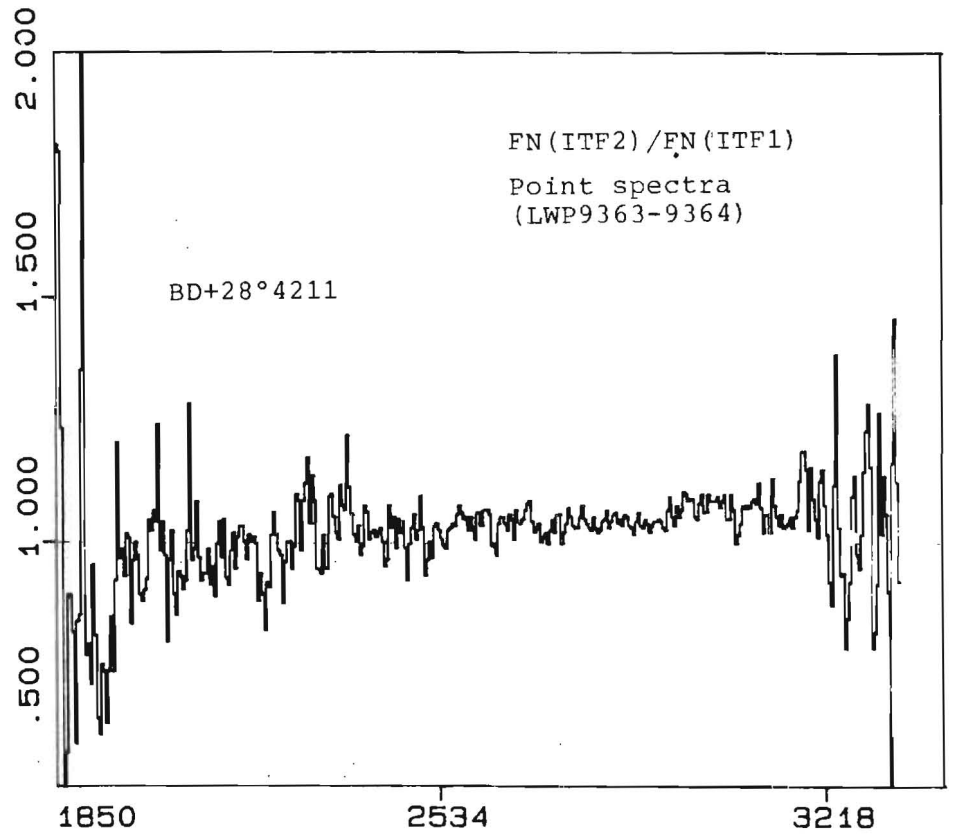
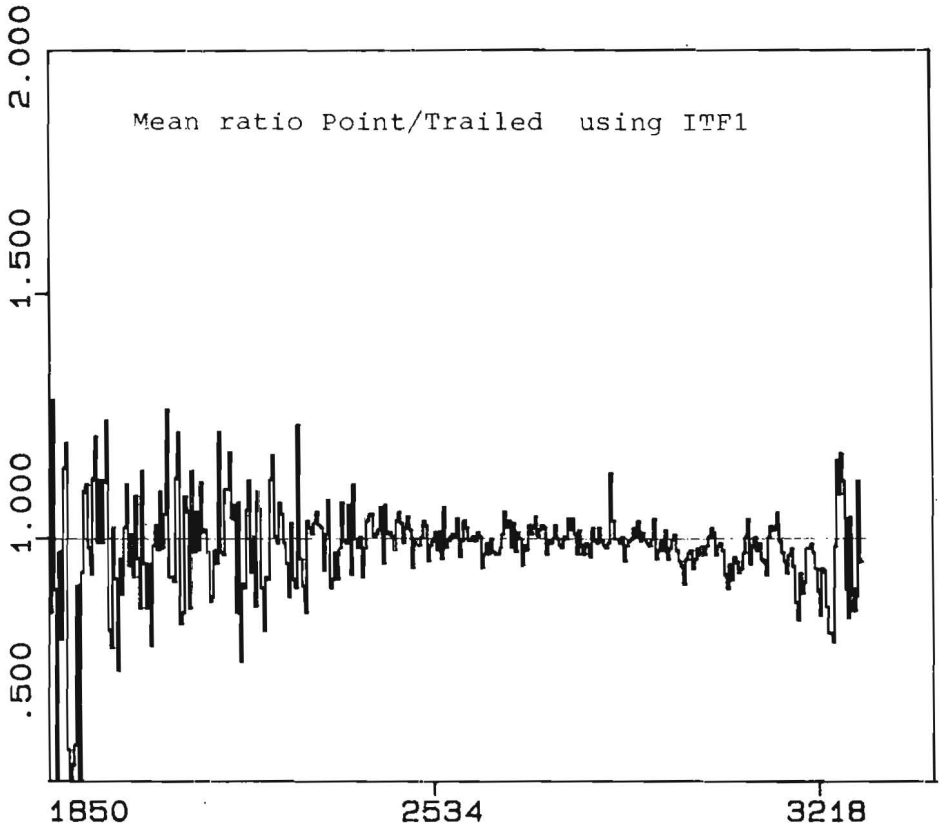

2.000
1.500
1.000
.500
FN(ITF2)/FN(ITF1)
Point spectra
(LWP9363-9364)
BD+28°4211
1850
2534
3218

Fig. 2


Mean ratio Point/Trailed using ITF1
2.000
1.500
1.000
.500
1850
2534
3218

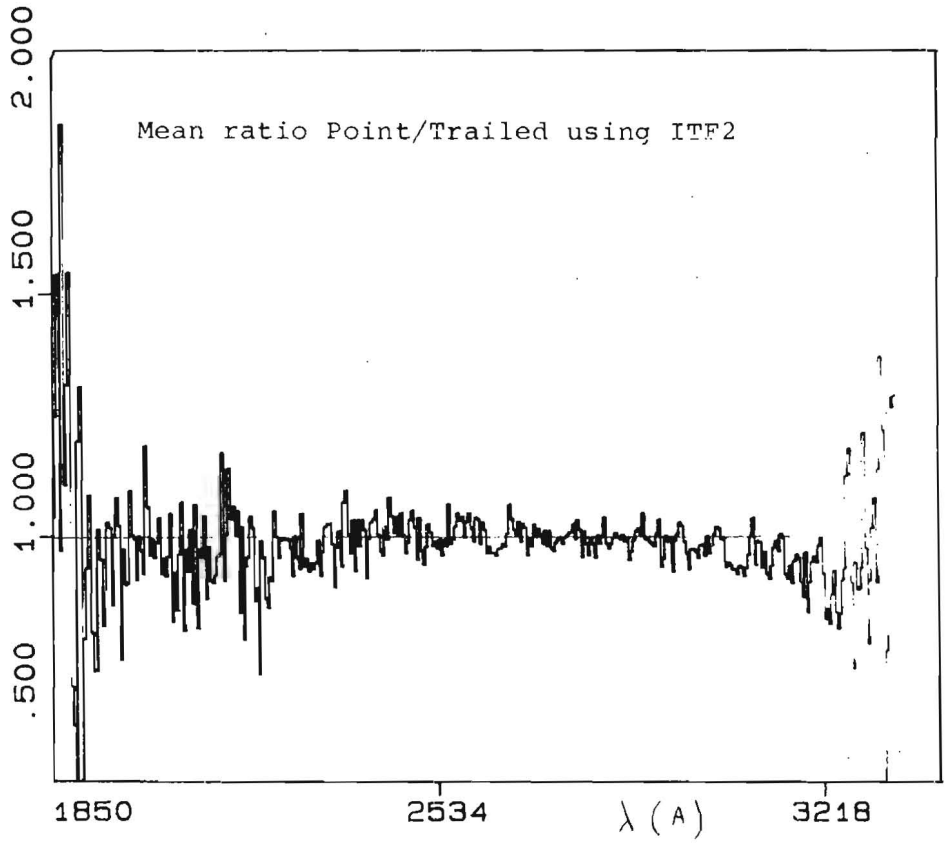

Mean ratio Point/Trailed using ITF2
2.000
1.500
1.000
.500
1850
2534
λ (A)
3218

Fig. 3

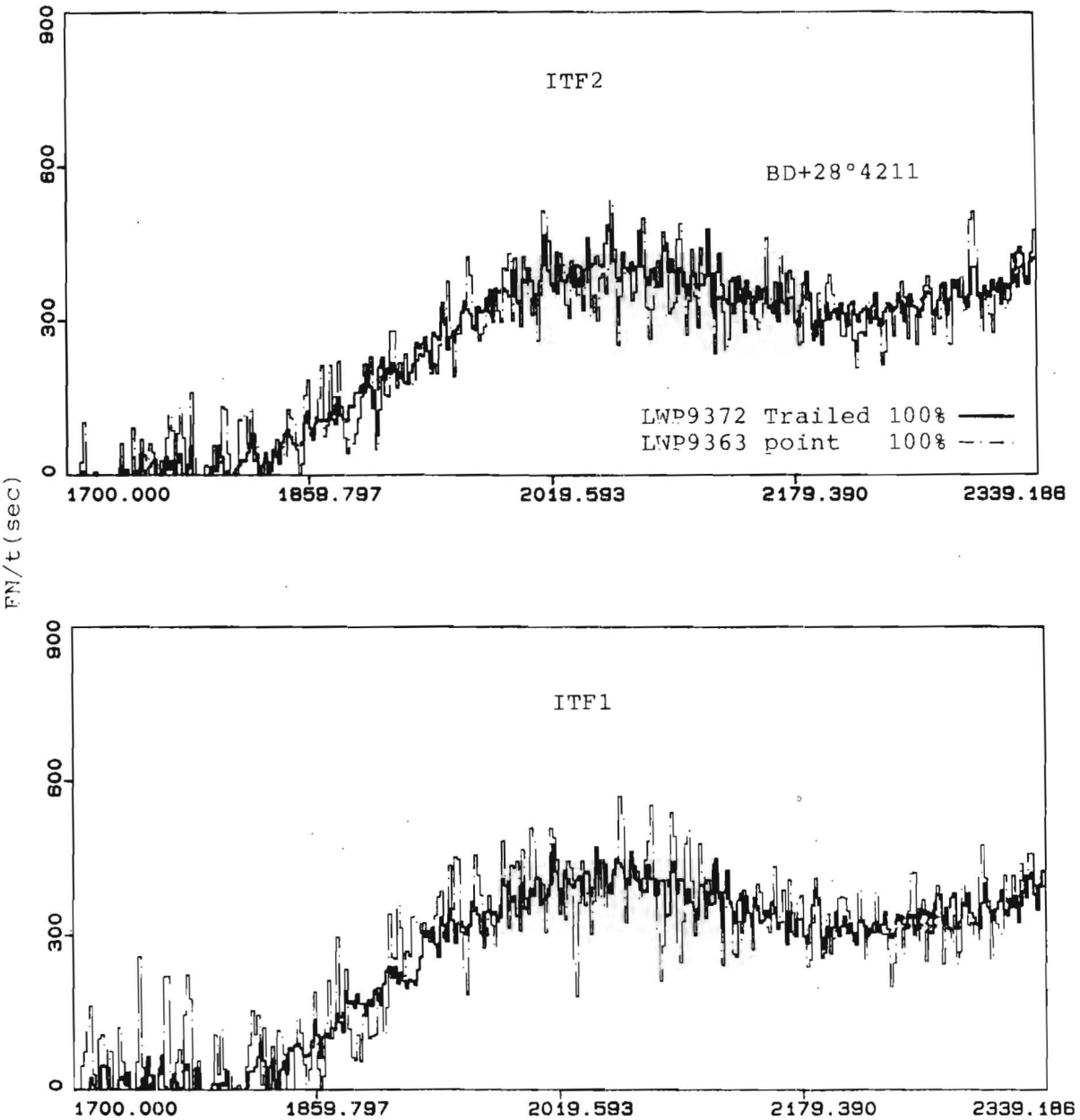

ITF2
BD+28°4211
LWP9372 Trailed 100%
LWP9363 point 100%
FN/t(sec)
900
600
300
0
1700.000
1859.797
2019.593
2179.390
2339.186
ITF1
900
600
300
0
1700.000
1859.797
2019.593
2179.390
2339.186

Fig. 4a

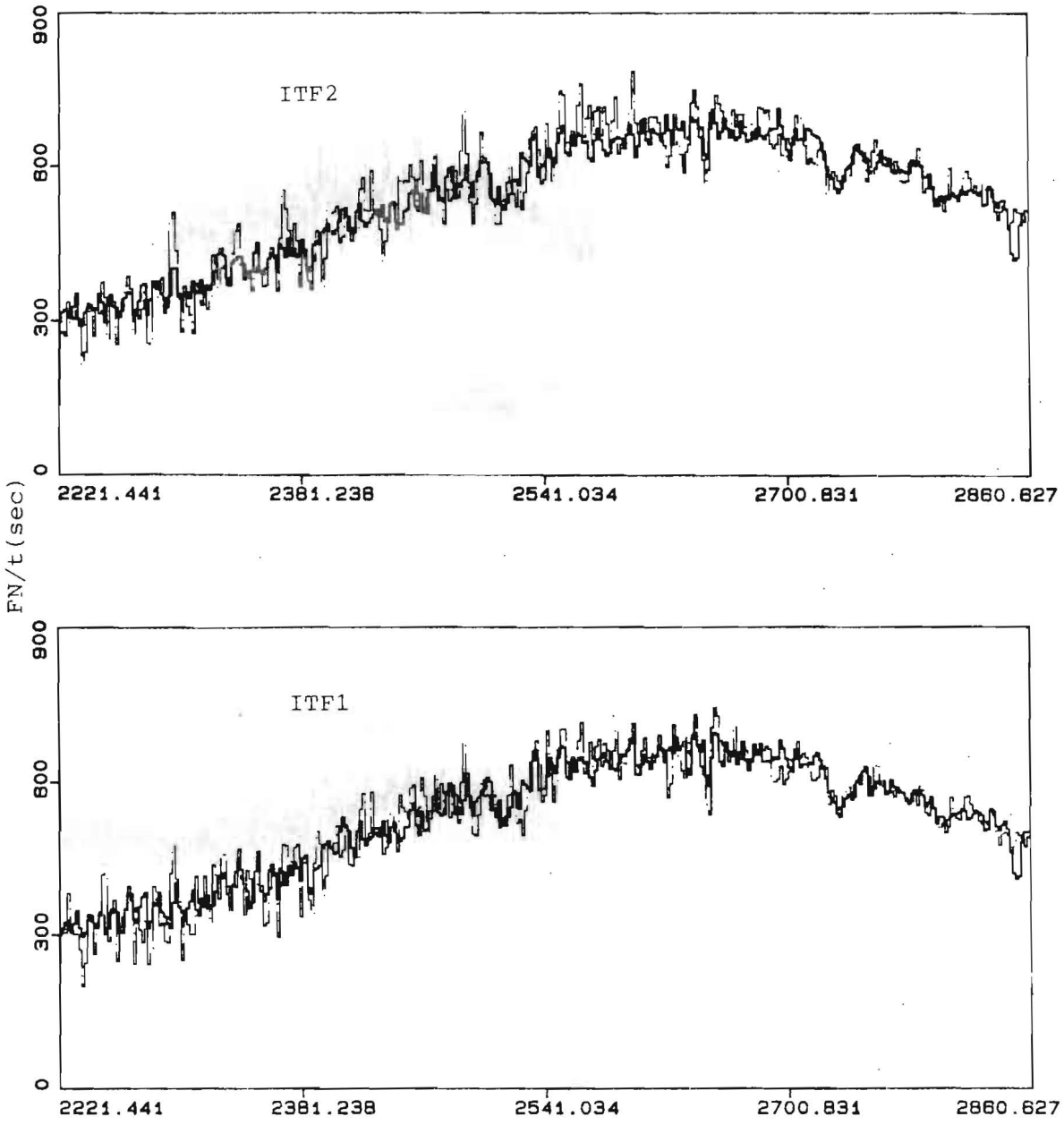

ITF2
ITF1
FN/t(sec)
900
600
300
0
2221.441
2381.238
2541.034
2700.831
2860.627

Fig. 4b

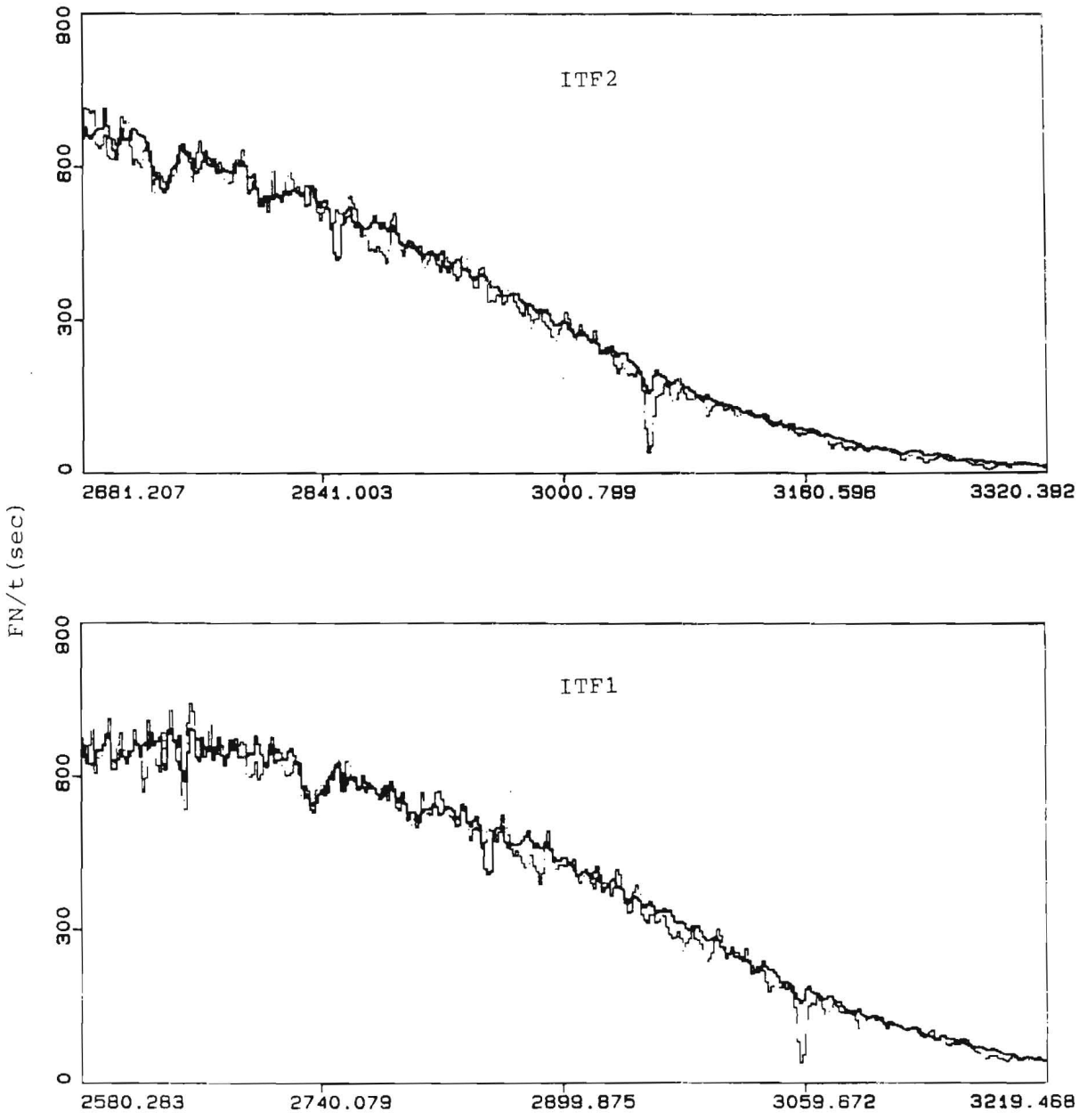

ITF2
800
600
300
0
2681.207
2841.003
3000.799
3160.596
3320.392
FN/t(sec)
ITF1
800
600
300
0
2580.283
2740.079
2899.875
3059.672
3219.468

Fig. 4c

Table 1: Linearity test data with BD+28 4211
(Oct. 20, 1986)

LWP	t(sec)	THDA	Exposure Level	Type
9363	50	8.5	100%	Point
9364	50	8.8	100	"
9365	10	9.2	20	"
9366	20	9.5	40	"
9367	30	9.5	60	"
9368	40	9.5	80	"
9369	65	9.5	130	"
9370	75	9.8	150	"
9371	100	9.5	200	"
9372	200	9.5	100	Trailed
9373	200	9.5	100	"
9374	400	9.5	200	"

Table 4: S/N ratio for LWP spectra processed
with ITF1 and ITF2

Point spectra

Range:	1950-2150	2530-2720	2900-3000 A
ITF1	5.1	16.3	18.7
ITF2	6.0	16.0	22.2

Trailed spectra

Range:	1950-2150	2530-2720	2900-3000 A
ITF1	14.0	28.6	41.8
ITF2	13.7	32.5	48.9

Table 2 : Ratio of FNs ITF2/ITF1
from trailed spectra

Lambda (A)	FN ratio ITF2/ITF1
1900	.9242896E+00
1950	.9035311E+00
2000	.9832344E+00
2050	.9918675E+00
2100	.1026933E+01
2150	.1021261E+01
2200	.1003799E+01
2250	.1004139E+01
2300	.1024477E+01
2350	.1038624E+01
2400	.1024679E+01
2450	.1023444E+01
2500	.1016528E+01
2550	.1026055E+01
2600	.1027509E+01
2650	.1034724E+01
2700	.1037318E+01
2750	.1039952E+01
2800	.1042750E+01
2850	.1043112E+01
2900	.1042791E+01
2950	.1062625E+01
3000	.1072499E+01
3050	.1083504E+01
3100	.1093354E+01
3150	.1078025E+01
3200	.1075074E+01
3250	.1050883E+01
3300	.1041354E+01

Images used: LWP9372, 9373
(100% exposures)

Table 3 : Ratio of point to trailed spectra using ITF1 and ITF2

Lambda (A)	Point/Trail ITF1	Lambda (A)	Point/Trail ITF2
1900	.8669380E+00	1900	.9438553E+00
1950	.1003872E+01	1950	.9343773E+00
2000	.9754965E+00	2000	.9938627E+00
2050	.9945741E+00	2050	.9524280E+00
2100	.1017580E+01	2100	.9524647E+00
2150	.1015736E+01	2150	.9984446E+00
2200	.9724541E+00	2200	.9362233E+00
2250	.9977539E+00	2250	.9592748E+00
2300	.9804302E+00	2300	.9628739E+00
2350	.9895957E+00	2350	.9962213E+00
2400	.1010803E+01	2400	.1004624E+01
2450	.1019123E+01	2450	.1014246E+01
2500	.10050000+01	2500	.9998342E+00
2550	.1001284E+01	2550	.1005772E+01
2600	.9972594E+00	2600	.1013378E+01
2650	.9973902E+00	2650	.9976212E+00
2700	.1003152E+01	2700	.1003370E+01
2750	.1001376E+01	2750	.9964696E+00
2800	.9990942E+00	2800	.9933304E+00
2850	.1009784E+01	2850	.9978050E+00
2900	.1000652E+01	2900	.9993277E+00
2950	.9853023E+00	2950	.9916177E+00
3000	.9665020E+00	3000	.9771503E+00
3050	.9628000E+00	3050	.9604443E+00
3100	.9738176E+00	3100	.9637702E+00
3150	.9858748E+00	3150	.9607075E+00
3200	.9224113E+00	3200	.9213114E+00
3250	.9596367E+00	3250	.9158193E+00

LWP images used:

9363, 9364	(Point)	BD+28°4211
9372, 9373	(Trail)	BD+28°4211
6904, 6315 5874, 5313	(Point)	HD60753
8052, 8053 8054	(Trail)	HD60753

LWR flare development

C. Lloyd

The LWR flare is a bright patch near the bottom edge of the camera and is generally thought to be due to a discharge in the uv to visible converter. The intensity of the flare has been increasing since it was first seen in April 1983 and the problem led to the introduction of the LWP as the main operational longwave camera late in 1983. By April 1985 the intensity of the flare had reached such a level that the UVC voltage was reduced from 5 kv to 4.5 kv with an attendent drop in sensitivity by about a factor of 1.37. Maintanence images have continued to be obtained at 5 kv to monitor the development of the flare. When last reported in this newsletter the flare rate was about 2 DN/min and on full shift exposures the flare was still not visible at 4.5 kv.

Five approximately 30 minute exposures with the LWR at 5 kv were obtained in June, October and November 1986. The gross intensity in the flare was about 200 DN in all images. The flare rate was measured using the procedure described by Harris (1984) in which the average null and scaled average background are removed before calculating the true flare rate.

The flare has continued to develop at an increasing rate as is shown in figure 1. However the rate of increase is not as great as that suggested by either of the fits given by Harris (1985b). In table 1 the linear rates of increase are given for different periods. Although the general trend is probably exponential there is considerable scatter. With exposures longer than 2 hours the scatter is reduced suggesting that the flare intensity is variable on a time scale of an hour or shorter. However, for images obtained in the same shift the latest results are remarkably consistant for exposures of 30 mins but there is significient variation over some months. In percentage terms this recent variation is small in comparison with that seen in the past but it is

Table 1
Rate of increase of flare rate

Day	Date	Rate of increase	
<400	1983	0.0022	+.0002
400-700	1984	0.0041	+.0006
>700	1985/6	0.0057	+.0012

possible that the character of the variation has changed as the flare has increased in intensity.

At 4.5 kv the flare has appeared for the first time. On a 345 min exposure taken at VILSPA on 6 May 1986 the flare intensity reached a peak of 79 DN. The flare rate was measured in the usual way and yielded a value of 0.130 DN/min which is just above the adopted threshold rate of 0.114 DN/min. A scan through the flare is shown in figure 2. In the study of the variation of flare threshold voltage with time Harris (1985a) estimated that the flare would become visible at 4.5 kv between August 1986 and May 1987. Although it has appeared somewhat earlier than expected it

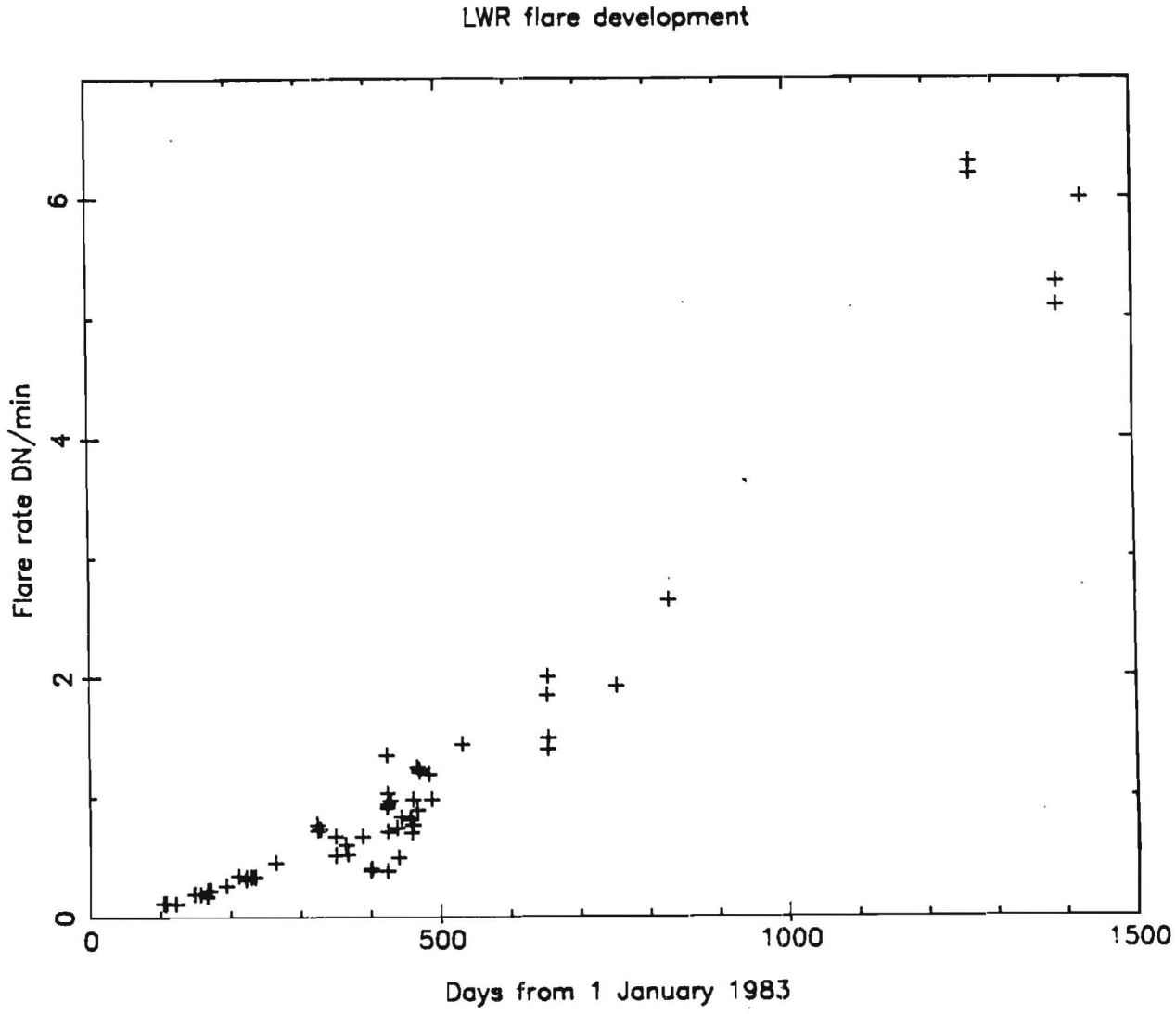


Figure 1, LWR flare development at 5 kv. All results are shown.

is consistant with with the relatively small amount of data used in the prediction. However on two images taken at VILSPA on 6 and 9 Nov 1986 with exposures of 374 and 228 mins the flare was barely measurable. This is completely at odds with the early development of the flare at 5 kv and further suggests that the behaviour of the flare has undergone some change. The November 28 image at 5 kv yielded a "normal" rate of 6 DN/min.

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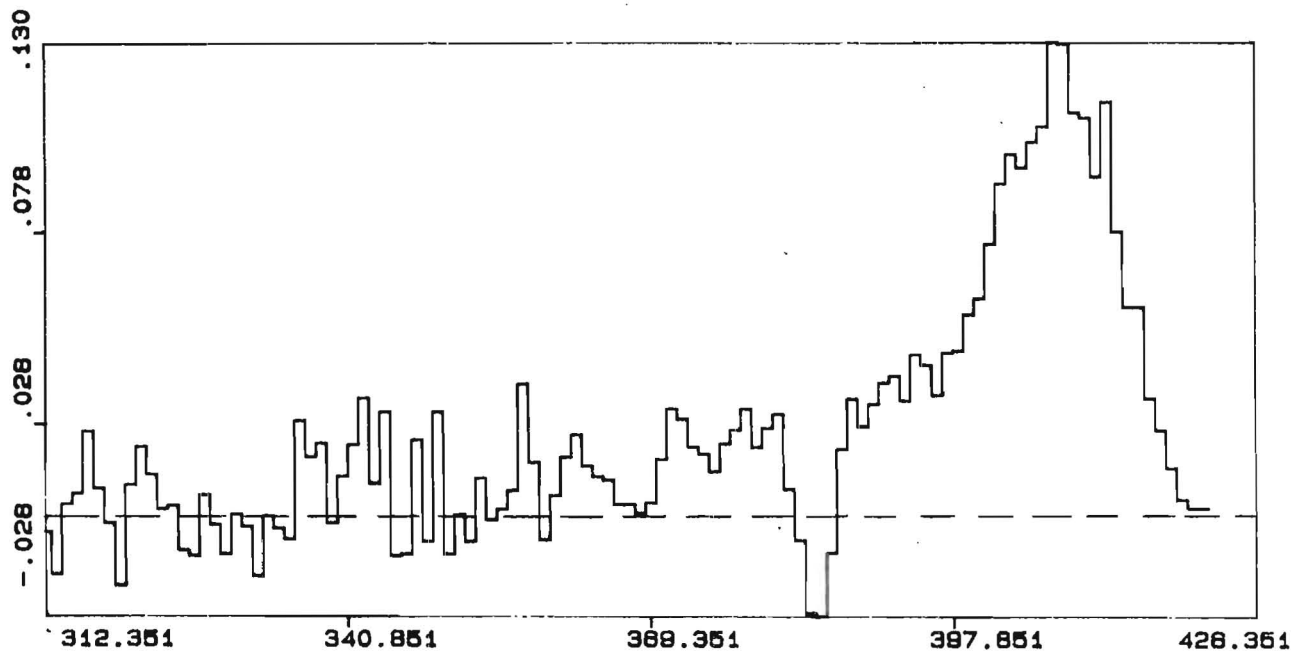

Figure 2; A scan through the flare showing the first detection at 4.5 kv.

VILSPA PUBLICATIONS LIST

IN MAIN JOURNALS

Published 1 January - 30 June 1986

This list contains all Vilspa papers that have appeared betweeen the above dates in major refereed journals (Mon. Not. R. astr. Soc., Astron. Astrophys., Astrophys. J.) and which originate from Europe. While the origin of the data is the main criterion for inclusion in this list, the affiliation of the authors is also taken into consideration. Underlining of an author's name indicates membership of the Vilspa Observatory staff, and papers by Observatory staff on topics not involving IUE data are marked by '(Obs)' after the entry.

We remind users that, in any publications resulting from IUE data, whether it be from their own allocated shifts or data released from the Archive, they should acknowledge the use of the IUE Satellite and the Agency - ESA, NASA or SERC as appropriate, in a footnote on the title page. The following are examples of some of the possibilities.

Based on observations by the International Ultraviolet Explorer, collected at Villafranca Satellite Tracking Station of the European Space Agency. (In the case of one's own observations).

Based on data from the International Ultraviolet Explorer, de-archived from the Villafranca Data Archive of the European Space Agency. (In the case of archive data).

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########################################
#                                      #
#  MERGED LOG OF IUE OBSERVATIONS      #
#                                      #
#     1 January - 30 April 1986        #
#                                      #
########################################
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The merged log of Vilspa and Goddard images for the above dates is listed in order of right ascension. (For non-standard images the information given can be incomplete.)

The programme reference codes (column 1) identifying the ESA and NASA programmes for the seventh round can be found in ESA IUE Newsletter No.19 p17 and p23 for ESA and NASA respectively, and for the eighth round in ESA IUE Newsletter No.23 p11 and 17.

The Object Classification Codes (column 3) and the Vilspa Exposure Classification Codes (column 16) are listed overleaf.

EXPOSURE CLASSIFICATION CODES
##############################

The exposure levels of Vilspa images are described by a 3-digit code listed in column 16 in the merged log.

DIGIT 1: EXPOSURE LEVEL OF CONTINUUM
DIGIT 2: EXPOSURE LEVEL OF EMISSION LINES
DIGIT 3: BACKGROUND LEVEL

The CONTINUUM and EMISSION are both classified as follows:-

0: NOT APPLICABLE
1: NO SPECTRUM VISIBLE
2: FAINT SPECTRUM: MAX DN < 20 ABOVE LOCAL BACKGROUND
3: UNDEREXPOSED: MAX DN < 100 ABOVE LOCAL BACKGROUND
4: WEAK: MAX DN BETWEEN 100 AND 150 ABOVE LOCAL BACKGROUND
5: GOOD: NO SATURATION BUT MAX DN OVER 150 ABOVE LOCAL 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

The BACKGROUND is classified in terms of a standard region of each camera outside the area affected by the high resolution orders. The value used is the mean DN given by a subset histogram approximately 10 pixels in width.

The BACKGROUND classification codes are:- (limits inclusive)

0 DN<20
1 21<DN<30
2 31<DN<40
3 41<DN<50
4 51<DN<60
5 61<DN<70
6 71<DN<80
7 81<DN<90
8 91<DN<100
9 DN>101
X SATURATED

NOTES

1) No exposure classification code was assigned to VILSPA images before 1 August 1978.

2) Prior to 1 Sept 1979, the BACKGROUND digit was not included and the ECC occupied the first two places in the comment line.

3) The Goddard images are described in the comments by the gross DN of the CONTINUUM (C), EMISSION LINES (E) and BACKGROUND (B).

CLASSIFICATION OF OBJECTS USED IN THE JOINT ESA/SERC 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	GIANT RED SPOT	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	STELLAR OBJECT NOT INCLUDED ABOVE
15	OF	65	MISIDENTIFIED TARGETS
16	SD O	66	INTERACTING BINARIES
17	WD O	67	
18		68	
19	UV-STRONG	69	
20	B0-B2 V-IV	70	PLANETARY NEBULAR+CENTRAL STAR
21	B3-B5 V-IV	71	PLANETARY NEBULAR-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 (ABSORPTION 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	WDA	87	BL LACERTAE OBJECT
38	HORIZONTAL BRANCH	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 1FEB79); GIV-VI (FROM 1FEB79)	94	
45	G I-II (FROM 1FEB79)	95	
46	K (TO 1FEB79); K IV-VI (FROM 1FEB79)	96	
47	K I-III (FROM 1FEB79)	97	
48	M (TO 1FEB79); M DWARFS (FRM 1FEB79)	98	WAVELENGTH CALIBRATION (NASA LOG)
49	M I-III (FROM 1 FEB79)	99	NULLS AND FLAT FIELDS (NASA LOG)

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

PRO	OBJECT	CL	MAG	R.A.	DEC	D	C	IMAGE	A	DATE	EXP.SMALL	EXP.LARGE	ECC	COMMENT
BA048	NULL	99	0218	0000000	000000	H	3	27606	L	86012610	000000	000000	101723	000004	008	V
HC004	NULL	99	9999	0000000	-000000	H	1	07932		86040105	000000	000000	050200	000000	002	V SAFETY READ
HC004	NULL	99	9999	0000000	-000000		2	17875		86040101	014300	000000	000000	000000	003	V LWR:4.5KV,SAFETY REA
PHCAL	NULL	99	9999	0000000	000000	L	3	28024		86032509	000000	000000	093500	000000	000	V
PHCAL	NULL	99	9999	0000000	000000	L	3	28023		86032509	000000	000000	091000	000000	000	V HIGH GAIN READ
PHCAL	NULL	99	9999	0000000	000000	L	3	28022		86032508	000000	000000	083000	000000	000	V SECOND READ
PHCAL	160% CALUV	99	9999	0000000	000000	L	3	28021		86032508	000000	000000	081051	000451	000	V UVF=44
PHCAL	100% TFLOO	99	9999	0000000	000000	L	3	28020		86032507	000000	000000	074036	000016	000	V
PHCAL	60% CALUV	99	9999	0000000	000000	L	3	28019		86032507	000000	000000	071217	000149	000	V UVF=35
PHCAL	120% CALUV	99	9999	0000000	000000	L	3	28018		86032506	000000	000000	064158	000338	000	V UVF=39
PHCAL	20% CALUV	99	9999	0000000	000000	L	3	28017		86032506	000000	000000	061541	000036	000	V UVF=32
PHCAL	60% CALUV	99	9999	0000000	000000	L	3	28016		86032505	000000	000000	054814	000149	000	V UVF=35
PHCAL	NULL	99	9999	0000000	000000	L	3	28015		86032505	000000	000000	051700	000000	000	V HIGH GAIN READ
PHCAL	NULL	99	9999	0000000	000000	L	1	07862		86032408	000000	000000	085000	000000	000	V
PHCAL	NULL	99	9999	0000000	000000	L	1	07861		86032407	000000	000000	071000	000000	000	V HIGH GAIN READ
PHCAL	100%TFLOOD	99	9999	0000000	000000	L	1	07859		86032405	000000	000000	055230	000140	000	V
PHCAL	NULL	99	9999	0000000	000000	L	1	07858		86032405	000000	000000	050800	000000	000	V HI GAIN READ
PHCAL	00 TFLOOD	99	0000	0000000	000000	L	1	07600	L	86013105	000000	000000	051200	000140		G B=1X
PHCAL	00 TFLOOD	99	0000	0000000	000000	L	1	07599	L	86013104	000000	000000	044200	000030		G B=117
PHCAL	00 NULL	99	0000	0000000	000000	L	1	07598	L	86013103	000000	000000	034100	000000		G B=15
PHCAL	00 WAVECAL	98	0000	0000000	000000	H	2	17860	S	86013000	000300	000022	000000	000000		G E=60X,B=135
PHCAL	NULL	99	9999	0000000	000000	L	1	08055		86041805	000000	000000	053000	000000	002	V
PHCAL	00 WAVECAL	98	0000	0000000	000000	L	2	17859	S	86012923	233700	000001	000000	000000		G E=10X,B=90
FEHTA	HD 432	40	0230	0006298	+585227	L	3	27680	L	86020801	000000	000000	013900	001003		G C=20X,B=70
HC004	HD2151	44	0320	0023093	-773208	H	2	17876	L	86040102	000000	000000	023322	002030	772	V LWR:4.5KV
HC004	HD2151	44	0319	0023093	-773208	H	2	17877	L	86040103	000000	000000	032240	002030	772	V LWR:4.5KV
HC004	HD2151	44	0316	0023093	-773208	H	2	17878	L	86040104	000000	000000	040949	002030	772	V LWR:4.5KV
HC004	HD2151	44	0315	0023093	-773208	H	2	17879	L	86040104	000000	000000	045955	002030	772	V LWR:4.5KVAD
PHCAL	HD 3360	20	0370	0034103	+533719	L	1	07529	L	86011905	000000	000000	054100	000002		G C=2X,B=36
PHCAL	HD 3360	20	0370	0034103	+533719	H	2	17854	L	86012202	000000	000000	025700	000021		G C=200,B=34
PHCAL	HD 3360	20	0370	0034103	+533719	H	1	07523	L	86011806	000000	000000	060200	000021		G C=232,B=45
PHCAL	HD 3360	20	0370	0034103	+533719	H	1	07649	L	86021101	000000	000000	014800	000021		G C=223,B=45
PHCAL	HD 3360	20	0370	0034103	+533719	H	3	27697	L	86021101	000000	000000	015800	000024		G C=186,B=33
PHCAL	HD 3360	20	0370	0034103	+533719	H	2	17870	L	86021303	000000	000000	033800	000029		G C=185,B=29
PHCAL	HD 3360	20	0370	0034103	+533719	H	3	27543	L	86011806	000000	000000	060600	000024		G C=190,B=35
PHCAL	HD 3360	20	0370	0034103	+533719	H	3	27544	L	86011806	000000	000000	064300	000024		G C=190,B=36
PHCAL	HD 3360	20	0370	0034103	+533719	L	1	07528	L	86011905	000000	000000	050200	000001		G C=218,B=35
PHCAL	HD 3360	20	0370	0034103	+533719	L	1	07530	L	86011906	000000	000000	061900	000002		G C=2X,B=36
GCHAC	00 G73	83	1500	0038116	+412459	L	1	07607	L	86020113	000000	000000	133600	030000		G C=186,B=147
GCHAC	00 S257	83	1510	0041143	+411354	L	1	07622	L	86020314	000000	000000	140400	036000		G C=187,B=145
GCHAC	00 S272	83	1480	0041298	+410255	L	1	07638	L	86020713	000000	000000	135100	042000		G B=170
GCHAC	00 G302	83	1520	0042404	+404959	L	1	07613	L	86020214	000000	000000	140600	030000		G C=173,B=134
OBHCG	00 AU 15	12	1320	0044533	-734118	L	3	28141	L	86041019	000000	000000	192300	002400		G C=187,B=20
OBHCG	00 AU 15	12	1320	0044533	-734118	L	1	07998	L	86041017	000000	000000	175800	001900		G C=208,B=38

PRO	OBJECT	CL	MAG	R.A.	DEC	D	C	IMAGE	A	DATE	EXP.SMALL	EXP.LARGE	ECC	COMMENT
HQ063	MK348	84	9999	0046048	314102	L	3	27580	L	86012408	000000	000000	082136	036800 334 U
MCHJH	OOSMC N 25	12	1400	0046206	-733041	L	3	28169	L	86041411	000000	000000	114500	012000 G C=222,B=31
MCHJH	00 SMC N25	12	1500	0046206	-733041	L	1	08026	L	86041410	000000	000000	103400	006000 G C=219,B=41
HM162	AZ56	27	1146	0048044	-731202	L	1	07941	L	86040205	000000	000000	052904	000800 503 U
OBHCG	00 AV 61	12	1370	0048130	-722745	L	1	08007	L	86041115	000000	000000	151700	003000 G C=218,B=42
OBHCG	00 AV 61	12	1370	0048130	-722745	L	3	28148	L	86041115	000000	000000	155500	003800 G C=240,B=21
HM162	AZ62	27	1420	0048136	-731129	L	3	28082	L	86040203	000000	000000	034924	009000 501 U
HM162	AZ62	27	1421	0048136	-731129	L	1	07940	L	86040202	000000	000000	021226	009000 604 U
OBHCG	00 AV 69	12	1330	0048304	-730948	L	3	28142	L	86041021	000000	000000	212400	002730 G C=170,B=26
OBHCG	00 AV 69	12	1330	0048304	-730948	L	1	07999	L	86041020	000000	000000	203500	002200 G C=205,B=41
OBHCG	00 AV 75	12	1280	0048457	-730854	L	1	07979	L	86040822	000000	000000	225300	001600 G C=239,B=40
OBHCG	00 AV 75	12	1280	0048457	-730854	L	3	28130	L	86040823	000000	000000	233700	002000 G C=173,B=17
MCHJH	00 SMC N45	12	1400	0049540	-733026	L	3	28156	L	86041215	000000	000000	155000	005500 G C=55,B=26
MCHJH	00 SMC N45	12	1400	0049553	-733004	L	1	08013	L	86041210	000000	000000	105800	004000 G C=95,B=44
MCHJH	00 SMC N45	12	1400	0049553	-733004	L	3	28155	L	86041212	000000	000000	120500	010000 G C=133,B=44
MCHJH	00 SMC N45	12	1500	0049553	-733004	L	3	28154	L	86041210	000000	000000	101200	004000 G C=42,B=20
HM162	AZ139	23	1402	0051110	-732930	L	3	28090	L	86040307	000000	000000	073209	007500 301 U
HM162	AZ139	27	1410	0051111	-732931	L	1	07942	L	86040207	000000	000000	071624	006000 503 U
HM162	AZ139	23	1402	0051111	-732931	L	3	28088	L	86040302	000000	000000	020634	009000 301 U
MCHJH	00 SMC L47	12	9999	0051198	-733659	L	3	28175	L	86041515	000000	000000	152200	009000 G C=65,B=25
HA048	HD5394	14	0216	0053403	602647	H	3	27607	L	86012612	000000	000000	122458	000008 500 U
HA048	HD5394	14	0229	0053403	602647	H	1	07573	L	86012612	000000	000000	122751	000006 502 U
HA048	HD 5394	20	0227	0053403	602647	H	1	07634	L	86020605	000000	000000	053427	000006 601 U
HA048	HD5394	20	0229	0053403	602647	H	3	27669	L	86020605	000000	000000	053826	000008 500 U
OBHCG	00 AV 177	12	1460	0055009	-721944	L	3	28137	L	86041010	000000	000000	101700	008500 G C=230,B=25
OBHCG	00 AV 177	12	1460	0055009	-721944	L	1	07995	L	86041011	000000	000000	115100	006800 G C=220,B=45
OBHCG	00 AV 186	12	1400	0055459	-724925	L	1	07996	L	86041014	000000	000000	140400	004300 G C=205,B=41
OBHCG	00 AV 186	12	1400	0055459	-724925	L	3	28138	L	86041013	000000	000000	131100	004400 G C=150,B=20
OBHCG	00 AV 186	12	1400	0055459	-724925	L	3	28139	L	86041014	000000	000000	145600	006500 G C=189,B=27
MCHJH	OOSMC L 56	12	1400	0055469	-723214	L	3	28170	L	86041415	000000	000000	150300	006000 G C=245,B=28
MCHJH	00 SMC L56	12	1200	0055469	-723214	L	1	08027	L	86041414	000000	000000	142000	003000 G C=205,B=40
OBHCG	00 AV 207	12	1440	0056512	-721157	L	1	07974	L	86040810	000000	000000	101000	005500 G C=230,B=41
OBHCG	00 AV 207	12	1440	0056512	-721157	L	3	28125	L	86040811	000000	000000	111300	006900 G C=200,B=35
HM162	AZ211	25	1187	0057013	-724223	L	1	07949	L	86040305	000000	000000	054501	001800 501 U
HM162	AZ 211	25	1181	0057013	-724223	L	3	28089	L	86040306	000000	000000	061512	002200 301 U
OBHCG	00 AV 220	13	1450	0057291	-722158	L	1	07975	L	86040812	000000	000000	123300	006300 G C=250 B=42
OBHCG	00 AV 220	13	1450	0057291	-722158	L	3	28126	L	86040813	000000	000000	134400	007400 G C=240,B=22
OBHCG	00 AV 282	12	1480	0100117	-722922	L	1	08005	L	86041110	000000	000000	103000	007600 G C=215,B=46
OBHCG	00 AV 282	12	1480	0100120	-722915	L	3	28146	L	86041111	000000	000000	115900	009500 G C=220,B=24
CSHDB	HD 6203	46	0540	0100308	-050613	L	1	07537	L	86012005	000000	000000	051200	000700 G C=165,B=35
CSHDB	HD 6203	46	0540	0100308	-050613	L	1	07536	L	86012004	000000	000000	040100	000800 G C=126,B=40
SMHWB	X 0102-722	75	0000	0102259	-721804	L	3	27926	L	86031604	000000	000000	040500	006500 G E=197,B=160
SMHWB	X 0102-72	75	9999	0102259	-721804	L	1	07845	L	86032104	000000	000000	042500	004000 G E=222,C=210,B=185
SMHWB	00 H II	72	9999	0102259	-721804	L	3	27971	L	86032104	000000	000000	045000	007000 G E=189,C=190,B=145
HM001	1E0102.2-7	75	1550	0102259	-721804	E	9	01788	2	86032104	000000	000000	040000	016000 U FOR LWP7845

PRO	OBJECT	CL	MAG	R.A.	DEC	D	C	IMAGE	A	DATE	EXP.SMALL	EXP.LARGE	ECC	COMMENT
SNEWB	X 0102-722	75	0000	0102259	-721804	L	1	07803	L	86031604	000000	000000	040700	085200		G C=215,B=169
BM001	1E0102.2-7	75	1550	0102260	-721804	D	9	01780	2	86031604	000000	000000	040000	002000		U FOR SWP27926
OBHCG	00 AU	377	12	1480	0103341	-730421	L	3	28127	L	86040816	000000	000000	163100	007900		G C=255,B=27
OBHCG	00 AU	377	12	1480	0103341	-730421	L	1	07976	L	86040815	000000	000000	151500	006400		G C=235,B=45
OBHCG	00 AU	388	12	1410	0104056	-724528	L	1	07977	L	86040818	000000	000000	180900	004400		G C=223,B=41
OBHCG	00 AU	388	12	1410	0104056	-724528	L	3	28128	L	86040819	000000	000000	190700	005500		G C=238,B=25
OBHCG	00 AU	411	12	1380	0105273	-722917	L	3	28140	L	86041016	000000	000000	165500	003800		G C=251,B=22
OBHCG	00 AU	411	12	1380	0105273	-722917	L	1	07997	L	86041016	000000	000000	161300	003000		G C=212,B=42
OBHCG	00 AU	424	24	1310	0106110	-722506	L	1	08006	L	86041113	000000	000000	135100	001600		G C=178,B=37
OBHCG	00 AU	424	24	1310	0106110	-722509	L	3	28147	L	86041114	000000	000000	142500	002000		G C=139,B=19
OBHCG	00 AU	451	12	1420	0108561	-723925	L	3	28129	L	86040821	000000	000000	213100	005600		G C=1.3X,B=44
OBHCG	00 AU	451	12	1420	0108561	-723925	L	1	07978	L	86040820	000000	000000	203400	004500		G C=1.1X,B=52
IQ138	FAIRALL 9	84	1418	0121511	-590358	L	1	08080	L	86042203	000000	000000	031322	005000	341	U
IQ138	FAIRALL 9	84	1421	0121511	-590358	L	3	28212	L	86042202	000000	000000	021620	005000	340	U
IQ138	FAIRALL 9	84	1424	0121512	-590359	L	1	08081	L	86042206	000000	000000	064930	011500	562	U
HQ112	FAIRALL 9	84	1427	0121512	-590359	L	3	28160	L	86041302	000000	000000	021911	007000	351	U
HE189	FAIRALL 9	00	1300	0121512	-590359	L	1	08017	L	86041302	000000	000000	035005	007000	453	U
IQ138	FAIRALL 9	84	1424	0121512	-590359	L	3	28213	L	86042204	000000	000000	041125	015000	461	U
EGHCB	OOMINK.OBJ	88	1750	0123226	-013751	L	3	27635	L	86013016	000000	000000	162100	018000		G C=135,B=112
OBHPM	SA 54783	30	9999	0130480	+300759	D	9	01762	L	86020503	000000	000000	031600	016000		G NO COMMENTS
OBHPM	OOM33FIELD	13	9999	0130551	+301628	L	1	07630	L	86020505	000000	000000	051100	085600		G C=236,B=178
OBHPM	00 M33WF1	13	1730	0130551	+301628	L	3	27660	L	86020505	000000	000000	051000	086000		G C=209,B=137
CSHDB	HD 10380	47	0440	0138495	+051406	L	1	07535	L	86012002	000000	000000	023700	002100		G E=255,C=205,B=40
CSHDB	HD 10380	47	0440	0138496	+051407	L	1	07534	L	86012001	000000	000000	013000	001030		G E=166,C=125,B=37
WDHGW	00 LFT158	37	1390	0141360	-673200	L	3	28179	L	86041610	000000	000000	104100	001450		G B=17
WDHGW	00 LFT158	37	1390	0142289	-673107	L	3	28180	L	86041612	000000	000000	124100	003500		G B=18
WDHGW	00 LFT158	37	1390	0142289	-673107	L	1	08040	L	86041611	000000	000000	112200	007000		G B=38
HE109	ABELL 262	81	1300	0149500	355422	L	3	27464	L	86010607	000000	000000	074830	018000	112	U
HC135	HD15144	30	0616	0223370	-153354	H	1	07507	L	86011513	000000	000000	133824	002100	513	U
SGHJM	NG 931	84	0000	0225166	+310515	L	3	27723	L	86021513	000000	000000	133500	024000		G B=79
SGHJM	NG 931	84	1400	0225166	+310515	L	3	27724	L	86021518	000000	000000	180400	010000		G E=136,B=90
EGHSS	NG 931	84	1390	0225180	+310518	L	1	07544	L	86012116	000000	000000	160200	009000		G C=65,B=55
EGHSS	NG 931	84	1390	0225180	+310518	L	3	27553	L	86012117	000000	000000	173600	012000		G B=30
SGHJM	OOMKN 372	84	1400	0246313	+190549	L	3	27728	L	86021612	000000	000000	124000	036000		G E=157,C=135,B=96
SGHJM	OOMKN 372	84	1480	0246313	+190549	L	3	27733	L	86021712	000000	000000	121000	039000		G E=156,C=133,B=90
SRHLW	00 R HOR	51	0700	0252130	-500539	L	1	07452	L	86010402	000000	000000	023500	001000		G E=192,B=70
SRHLW	00 R HOR	51	0700	0252130	-500539	L	1	07680	L	86021823	000000	000000	234500	001500		G E=148,B=42
SRHLW	00 R HOR	51	0700	0252130	-500539	L	1	07448	L	86010322	000000	000000	220400	003000		G E=1.5X,B=105
SRHLW	00 R HOR	51	0700	0252130	-500539	L	1	07469	L	86010901	000000	000000	012300	001500		G E=211,C=58,B=45
GE149	CPD-71 172	41	1105	0253140	-713438	H	3	27490	L	86011011	000000	000000	115046	017700	402	U
OD53K	HD 19356	66	0220	0304543	+404552	H	3	27786	L	86022422	000000	000000	224000	000025		G C=230,B=40
OD53K	HD 19356	66	0220	0304543	+404552	H	3	27785	L	86022422	000000	000000	221200	000025		G C=235,B=40
OD53K	HD 19356	66	0220	0304543	+404552	H	3	27784	L	86022421	000000	000000	212700	000025		G C=230,B=40
OD53K	HD 19356	66	0220	0304543	+404552	H	3	27783	L	86022420	000000	000000	205700	000025		G C=230,B=40
OD53K	HD 19356	66	0220	0304543	+404552	H	3	27781	L	86022419	000000	000000	193600	000025		G C=225,B=40

PRO	OBJECT	CL	MAG	R.A.	DEC	D	C	IMAGE	A	DATE	EXP.SMALL	EXP.LARGE	ECC	COMMENT
OD53K	HD 19356	66	0220	0304543	+404552	H	1	07717	L	86022419	000000	000000	194300	000013	G	C=220,B=45
OD53K	HD 19356	66	0220	0304543	+404552	H	3	27782	L	86022420	000000	000000	202800	000025	G	C=230,B=40
OD53K	HD 19356	66	0220	0304555	+404530	H	3	27832	L	86030301	000000	000000	011600	000023	G	C=201,B=40
OD53K	HD 19356	66	0220	0304555	+404530	H	3	27831	L	86030300	000000	000000	004700	000023	G	C=220,B=40
OD53K	HD 19356	66	0220	0304555	+404530	H	3	27830	L	86030223	000000	000000	235100	000023	G	C=210,B=40
OD53K	HD 19356	66	0220	0304555	+404530	H	1	07738	L	86030223	000000	000000	235700	000012	G	C=207,B=42
HA168	HD19510	51	1001	0305480	101523	L	1	07702	L	86022206	000000	000000	063455	001700	503	U REF. PNT. (2, -212)
HA168	HD19510	51	1006	0305480	101523	L	1	07704	L	86022208	000000	000000	085054	003800	503	U 2 REF PNTS (2,-212)
HA168	HD19510	51	0990	0305480	101523	L	1	07701	L	86022205	000000	000000	052107	003200	503	U 2 R. P. (2, -212) &
HA168	HD19510	51	1009	0305480	101523	L	1	07705	L	86022210	000000	000000	101312	002000	503	U
HA168	HD19510	51	0991	0305480	101523	L	1	07700	L	86022204	000000	000000	041031	003100	503	U 2 REF. PNTS. (2, -21
HA168	HD19510	51	1008	0305480	101523	L	1	07703	L	86022207	000000	000000	072313	003600	503	U 2 REF PNT (2,-212) &
HA168	HD19510	51	1024	0305480	101523	L	3	27761	L	86022104	000000	000000	042153	006000	201	U
HA168	HD19510	51	1035	0305480	101523	L	1	07693	L	86022105	000000	000000	052934	001700	503	U
HA168	HD19510	51	0978	0305480	101524	L	1	07694	L	86022106	000000	000000	063620	002000	503	U
HA168	HD19510	51	0936	0305480	101524	L	1	07695	L	86022108	000000	000000	081310	001430	502	U 2 REF PNTS =(2,-212)
HA168	HD19510	51	0935	0305480	101524	L	3	27762	L	86022107	000000	000000	071442	002000	300	U
HA168	HD19510	51	0942	0305480	101524	L	1	07696	L	86022109	000000	000000	091121	001730	402	U 2 REF. PNTS. (2,-212
HA168	HD19510	51	0960	0305480	101523	L	1	07697	L	86022110	000000	000000	101806	001200	502	U REF. PNT. (2,-212) 0
HE109	NGC1275	81	1270	0316287	411953	L	1	07461	L	86010611	000000	000000	115549	017200	314	U
HE109	NGC1275	81	1270	0316288	411954	L	3	27453	L	86010508	000000	000000	080056	040600	234	U OFFSET FM NUCLEUS: 9
HE109	NGC1275	81	1270	0316314	412003	L	3	27444	L	86010408	000000	000000	084541	036200	133	U 23"OFFSET FM NUCLEUS
KGHJL	HD 20644	47	0447	0317184	+285206	H	1	07672	L	86021719	000000	000000	190400	006000	G	E=188,C=119,B=70
KGHJL	HD 20644	47	0450	0317185	+285207	H	1	07515	L	86011708	000000	000000	005300	003000	G	E=87,C=77,B=40
KGHJL	HD 20644	47	0450	0317185	+285207	L	3	27537	L	86011700	000000	000000	001500	003000	G	B=19
OD77K	OO MRK 607	84	1400	0322180	-031303	L	1	07432	L	86010021	000000	000000	215400	013500	G	C=200,B=163
PHCAL	OO WAVECAL	98	9999	0328577	+455320	H	1	07667	S	86021601	013600	000016	000000	000000	G	E=60X,B=110
PHCAL	OO WAVECAL	98	9999	0328577	+455320	L	1	07666	S	86021601	010600	000001	000000	000000	G	E=20X,B=104
HC071	HD22468	46	0620	0334130	002532	L	3	27655	L	86020312	000000	000000	123630	001500	230	U
HC071	HD22468	46	0627	0334130	002532	H	1	07621	L	86020312	000000	000000	121747	001500	352	U
LGHBP	HD 22649	50	0530	0337477	+630325	L	3	27677	L	86020702	000000	000000	022400	002000	G	E=33,C=40,B=19
LGHBP	HD 22649	50	0530	0337477	+630325	L	3	27678	L	86020703	000000	000000	032200	008700	G	E=110,C=65,B=45
BEHCG	HD 23016	26	0570	0339256	+193230	H	1	07478	L	86011201	000000	000000	014700	000700	G	C=200,B=45
BEHCG	HD 23016	26	0570	0339256	+193230	H	3	27668	L	86020604	000000	000000	040700	000910	G	C=140,B=35
BEHCG	HD 23016	26	0570	0339256	+193230	H	3	27512	L	86011201	000000	000000	010900	001500	G	C=198,B=40
BEHCG	HD 23016	26	0570	0339256	+193230	H	3	27511	L	86011200	000000	000000	001300	000930	G	C=141,B=33
BEHCG	HD 23016	26	0570	0339256	+193230	H	1	07477	L	86011200	000000	000000	002900	000700	G	C=205,B=47
ACHEB	OOH II 344	31	0840	0341269	+241419	L	3	27842	L	86030411	000000	000000	115900	035500	G	C=20X,B=66
BEHCG	HD 23302	26	0370	0341540	+235728	H	1	07633	L	86020603	000000	000000	032000	000100	G	C=243,B=45
BEHCG	HD 23302	26	0370	0341540	+235728	H	1	07480	L	86011204	000000	000000	040700	000105	G	C=228,B=45
BEHCG	HD 23302	26	0370	0341540	+235728	H	3	27513	L	86011202	000000	000000	025900	000104	G	C=161,B=33
BEHCG	HD 23302	26	0370	0341540	+235728	H	1	07479	L	86011203	000000	000000	030500	000103	G	C=225,B=45
BEHCG	HD 23302	26	0370	0341540	+235728	H	3	27514	L	86011204	000000	000000	040100	000130	G	C=208,B=38
BEHCG	HD 23302	26	0370	0341540	+235728	H	3	27667	L	86020603	000000	000000	031500	000104	G	C=173,B=35
ACHEB	OOH II 697	31	0860	0342355	+241829	L	3	27889	L	86031011	000000	000000	114900	032000	G	C=20X,B=105

PRO	OBJECT	CL	MAG	R.A.	DEC	D	C	IMAGE	A	DATE	EXP.SMALL	EXP.LARGE	ECC	COMMENT
SDHFW	PG0342+026	28	1100	0342580	+023838	L	1	07462	L	86010700	000000	000000	002200	000240		G C=175,B=35
SBHFW	PG0342+026	28	1100	0342580	+023838	H	3	27466	L	86010621	000000	000000	210300	016000		G C=145,B=50
SDHFW	PG0342+026	28	1100	0342580	+023838	L	3	27467	L	86010700	000000	000000	003500	000150		G C=115,B=18
BEHCG	HD 23480	26	0420	0343212	+234739	H	3	27515	L	86011205	000000	000000	051400	000140		G C=145,B=29
BEHCG	HD 23480	26	0420	0343212	+234739	H	1	07481	L	86011205	000000	000000	052100	000140		G C=223,B=43
BEHCG	HD 23480	26	0420	0343212	+234739	H	3	27516	L	86011206	000000	000000	062000	000230		G C=181,B=35
BEHCG	HD 23480	26	0420	0343212	+234739	H	1	07632	L	86020602	000000	000000	021300	000138		G C=250,B=55
BEHCG	HD 23480	26	0420	0343212	+234739	H	3	27666	L	86020602	000000	000000	020800	000140		G C=150,B=38
BEHCG	HD 23480	26	0420	0343212	+234739	H	1	07482	L	86011206	000000	000000	062600	000140		G C=218,B=44
HC135	HD23817	46	0435	0343340	-645750	H	1	07505	L	86011507	000000	000000	074755	004000	332	U
ACHEB	OOHII 1993	31	0840	0345460	+230628	L	3	27834	L	86030311	000000	000000	115100	035500		G C=20X,B=90
LDHFW	000471 TAU	37	1050	0347339	+170623	L	3	27878	L	86030821	000000	000000	214200	002345		G C=125,B=44
LDHFW	000471 TAU	37	1050	0347339	+170623	L	3	27865	L	86030722	000000	000000	220800	003000		G C=232,B=28
LDHFW	000471 TAU	37	1050	0347340	+170624	L	3	27876	L	86030819	000000	000000	192300	003000		G C=255,B=65
LDHFW	000471 TAU	37	1050	0347340	+170624	L	3	27864	SL	86030720	211400	002000	203900	002625		G C=112,B=25
LDHFW	000471 TAU	37	1050	0347340	+170624	L	3	27863	L	86030719	000000	000000	194100	002325		G C=105,B=20
LDHFW	000471 TAU	37	1050	0347340	+170624	L	3	27877	L	86030820	000000	000000	204100	002440		G C=118,B=25
MLHPC	HD 24912	14	0400	0355429	+353859	H	3	27988	L	86032218	000000	000000	185100	000110		G C=235,B=40
MLHPC	HD 24912	14	0400	0355430	+353900	H	3	27932	L	86031720	000000	000000	200500	000110		G C=235,B=40
IMHCI	HD 283367	22	1030	0407210	+283721	L	1	07513	L	86011606	000000	000000	061300	002500		G C=196,B=39
IMHCI	HD 283367	22	1030	0407210	+283721	L	1	07508	L	86011515	000000	000000	155800	021000		G C=7X,B=80
IMHCI	HD 283367	22	1030	0407210	+283721	L	3	27534	L	86011519	000000	000000	193400	018500		G C=207,B=53
IMHCI	HD 283367	22	1030	0407210	+283721	L	1	07511	L	86011603	000000	000000	031400	002500		G C=210,B=50
IMHCI	HD 283367	22	1030	0407210	+283721	L	1	07512	L	86011604	000000	000000	042000	007000		G C=3X,B=67
PNHTB	NG 1535	71	1080	0411565	-125251	L	3	27791	S	86022514	143400	015000	000000	000000		G E=133,B=75
PNHTB	NG 1535	71	1080	0411565	-125251	L	1	07719	S	86022511	114800	015000	000000	000000		G C=80,B=59
PNHTB	NG 1535	71	1080	0411569	-125241	L	3	27800	S	86022619	191700	007000	000000	000000		G E=244,C=205,B=165
PNHTB	NG 1535	71	1080	0411570	-125242	L	1	07720	S	86022517	172300	011000	000000	000000		G B=205
PNHTB	NG 1535	71	1080	0411570	-125242	L	3	27792	S	86022519	192700	008000	000000	000000		G E=216,B=158
PNHTB	NG 1535	71	1080	0411570	-125242	L	1	07714	S	86022323	233900	003000	000000	000000		G C=220,B=174
PNHTB	NG 1535	71	1080	0411570	-125242	L	3	27777	S	86022322	220800	008000	000000	000000		G E=226,C=170,B=145
PNHTB	NG 1535	71	1080	0411570	-125242	L	1	07709	S	86022301	012700	001500	000000	000000		G B=95
PNHTB	NG 1535	71	1080	0411570	-125242	L	1	07726	L	86022622	000000	000000	222400	002000		G C=146,B=108
PNHTB	NG 1535	71	1080	0411570	-125242	L	3	27793	S	86022522	222200	003500	000000	000000		G E=189,B=145
PNHTB	NG 1535	71	1080	0411570	-125242	L	3	27801	S	86022621	211300	006000	000000	000000		G E=208,B=139
PNHTB	NG 1535	71	1080	0411570	-125242	L	1	07722	SL	86022523	231400	000600	230400	000300		G C=219,B=113
PNHTB	NG 1535	71	1080	0411570	-125242	L	1	07721	S	86022520	205900	007000	000000	000000		G B=178
LGHSB	HD 27371	47	0370	0416566	+153030	L	3	27912	L	86031416	000000	000000	163500	012000		G E=124,C=139,B=52
LGHSB	HD 27371	47	0370	0416567	+153031	H	1	07795	L	86031415	000000	000000	155700	002500		G E=172,C=210,B=40
ACHEB	HD 27397	31	0560	0417085	+135458	H	1	07755	L	86030814	000000	000000	140600	003000		G C=1.5X,B=50
ACHEB	HD 27397	31	0560	0417085	+135458	L	3	27874	L	86030814	000000	000000	145700	010000		G C=60X,B=32
TTHJL	HD 283571	58	1080	0418507	+281933	L	1	07671	L	86021702	000000	000000	020300	000600		G E=167,C=100,B=73
ODB4K	HD 283751	58	1080	0418507	+281933	L	1	07843	L	86032018	000000	000000	183200	001400		G E=204,C=70,B=42
ODB4K	HD 283571	58	1080	0418507	+281933	L	1	07847	L	86032218	000000	000000	181100	001200		G E=174,C=67,B=45
ODB4K	HD 283751	58	1080	0418508	+281934	L	1	07842	L	86032012	000000	000000	120300	001000		G E=145,C=61,B=38

PRO	OBJECT	CL	MAG	R.A.	DEC	D	C	IMAGE	A	DATE	EXP.SMALL	EXP.LARGE	ECC	COMMENT
OD84K	HD 283751	58	1000	0418508	+281934	L	3	27962	L	86032012	000000	000000	122300	036000		G E=129,E=80
TTHJL	HD 283751	58	1000	0418508	+281934	L	1	07892	L	86032719	000000	000000	190600	001000		G E=157,C=75,B=47
OD84K	HD 283571	58	1000	0418508	+281934	H	1	07846	L	86032211	000000	000000	113000	034500		G E=202,C=170,B=125
HQ235	NG 1566	84	1260	0418527	-550323	L	1	07483	L	86011220	000000	000000	205800	011500		G E=146,C=120,B=81
HQ235	NG 1566	84	1260	0418527	-550323	L	3	27518	L	86011215	000000	000000	152000	032000		G E=110,C=120,B=83
LGHSB	HD 27697	47	0380	0420028	+172537	L	3	27911	L	86031412	000000	000000	124200	018000		G E=137,C=158,B=54
LGHSB	HD 27697	47	0380	0420028	+172537	H	1	07794	L	86031412	000000	000000	121000	002500		G E=134,C=210,B=36
PMHGB	00 DF TAU	58	1170	0423596	+253543	H	1	07532	L	86011915	000000	000000	154100	042500		G E=160,C=145,B=105
PMHGB	00 DG TAU	58	1160	0424006	+255935	H	1	07525	L	86011815	000000	000000	154700	042000		G E=209,C=160,B=105
LGHSB	HD 28305	47	0350	0425416	+190416	L	3	27910	L	86031408	000000	000000	085200	018000		G E=117,C=122,B=50
LGHSB	HD28305	47	0396	0425416	190416	H	1	07793	L	86031408	000000	000000	082100	002500	563	V
LGHSB	HD28305	47	0397	0425416	190416	E	9	01778	2	86031409	000000	000000	094000	016000		V FES FIELD FOR SWP 27
LGHSB	HD28307	47	0357	0425428	155109	H	1	07792	L	86031404	000000	000000	042226	002500	463	V
LGHSB	HD28307	47	0424	0425429	155110	L	3	27909	L	86031404	000000	000000	045507	018000	762	V
TTHGB	OOUX TAU A	58	1130	0427097	+180721	L	1	07658	L	86021321	000000	000000	210300	004500		G E=170,C=177,B=139
TTHGB	OOUX TAU A	58	1130	0427098	+180722	L	1	07657	L	86021319	000000	000000	191500	005500		G C=200,B=158
ACHEB	HD 28556	31	0540	0427483	+133702	H	1	07740	L	86030318	000000	000000	181200	002500		G C=1.5X,B=85
ACHEB	HD 28556	31	0540	0427483	+133702	L	3	27873	L	86030811	000000	000000	113500	012000		G C=65X,B=29
ACHEB	HD 28556	31	0540	0427483	+133702	L	3	27843	L	86030418	000000	000000	183400	000130		G C=187,B=18
HHHJS	00 HH-29	64	1600	0428332	+180000	L	3	27471	L	86010716	000000	000000	164900	058000		G C=170,B=132
TTHGB	X 0429+18	46	1180	0429228	+181352	L	1	07540	L	86012018	000000	000000	185200	023500		G E=188,C=107,B=80
TTHGB	X 0430+24	46	1200	0430109	+242757	L	1	07539	L	86012015	000000	000000	154000	012000		G E=122,C=76,B=55
HQ226	3C120	86	1445	0430315	051500	L	3	27634	L	86013012	000000	000000	125704	011000	231	V
HQ111	3C120	84	1479	0430316	051500	L	3	27709	L	86021309	000000	000000	094117	018600	332	V
IMHCI	HD 28975	31	0900	0431485	+240830	L	3	27535	L	86011600	000000	000000	000500	012000		G C=100,B=43
IMHCI	HD 28975	31	0900	0431485	+240830	L	1	07509	L	86011523	000000	000000	230700	005000		G C=2X,B=41
IMHCI	HD 28975	31	0900	0431485	+240830	L	1	07510	L	86011602	000000	000000	021200	002000		G C=180,B=41
ACHEB	HD 29499	31	0540	0436235	+074624	H	1	07756	L	86030817	000000	000000	170700	003000		G C=2X,B=70
ACHEB	HD 29499	31	0540	0436235	+074624	L	3	27875	L	86030817	000000	000000	174400	005000		G C=30X,B=45
ACHEB	HD 29499	31	0540	0436235	+074624	H	1	07768	L	86031017	000000	000000	173600	003000		G C=1.5X,B=90
ACHEB	HD 29499	31	0540	0436235	+074624	L	3	27890	SL	86031018	192400	000300	181700	006000		G C=40X,B=65
HM080	HD29722	30	0564	0439211	431619	H	1	07762	L	86030908	000000	000000	083321	001500	701	V
PNHRF	OOLSU46	21 70	1230	0439405	+463628	L	3	27581	L	86012420	000000	000000	201000	000700		G C=2X,B=20
PNHRF	OOLSU46	21 70	1230	0439405	+463628	H	1	07560	L	86012416	000000	000000	160400	023500		G C=217,B=130
PNHRF	OOLSU46	21 70	1230	0439406	+463629	H	3	27558	L	86012217	000000	000000	170700	031500		G C=222,B=105
PNHRF	OOLSU46	21 70	1230	0439406	+463629	L	1	07547	L	86012222	000000	000000	223100	001000		G C=2X,B=39
MLHCW	HD 30076	26	0590	0441409	-083543	H	3	27495	L	86011020	000000	000000	200100	000600		G C=200,B=39
MLHCW	HD 30076	26	0590	0441409	-083543	H	3	27477	L	86010918	000000	000000	184600	000600		G C=195,B=37
MLHCW	HD 30076	26	0590	0441409	-083543	H	3	27492	L	86011016	000000	000000	162900	000600		G C=210,B=38
MLHCW	HD 30076	26	0590	0441409	-083543	H	3	27505	L	86011105	000000	000000	055100	000600		G C=198,B=38
MLHCW	HD 30076	26	0590	0441409	-083543	H	3	27474	L	86010915	000000	000000	155100	000600		G C=193,B=38
MLHCW	HD 30076	26	0590	0441409	-083543	H	3	27500	L	86011101	000000	000000	010900	000600		G C=200,B=37
MLHCW	HD 30076	26	0590	0441409	-083543	H	3	27482	L	86011000	000000	000000	002100	001000		G C=1.5X,B=47
MLHCW	HD 30076	26	0590	0441409	-083543	H	3	27460	L	86010602	000000	000000	025600	000600		G C=235,B=70
MLHCW	HD 30076	26	0590	0441409	-083543	H	3	27486	L	86011004	000000	000000	042900	000600		G C=205,B=45

PRO	OBJECT	CL	MAG	R.A.	DEC	D	C	IMAGE	A	DATE	EXP.SMALL	EXP.LARGE	ECC	COMMENT
PLHNE	HD 30282	53	0750	0444250	+363805	L	3	27541	L	86011723	000000	000000	233800	007000		G C=148,B=22
PLHNE	HD 30282	53	0750	0444250	+363805	L	1	07520	L	86011801	000000	000000	012800	001130		G C=185,B=35
PLHNE	HD 30282	53	0750	0444250	+363805	L	1	07519	L	86011800	000000	000000	001800	000800		G C=150,B=35
HQ063	NGC 1672	80	1248	0444550	-592010	L	3	27590	L	86012508	000000	000000	081656	018000	402	U
HQ063	NGC 1672	80	1248	0444550	-592010	L	3	27591	L	86012511	000000	000000	114600	018100	402	U
LGHBP	HD 30959	49	0520	0449421	+141008	L	3	28044	L	86032819	000000	000000	195600	006000		G C=140,B=115
LGHBP	HD 30959	49	0520	0449421	+141008	L	1	07900	L	86032821	000000	000000	211000	006000		G E=1.5X,C=1.5X,B=190
LGHBP	HD 30959	49	0520	0449421	+141008	L	3	28045	L	86032821	000000	000000	214900	002300		G C=180,B=148
LGHBP	HD 30959	49	0520	0449421	+141008	L	3	28087	L	86040223	000000	000000	233000	007800		G C=119,B=90
LGHBP	HD 30959	49	0520	0449421	+141008	L	3	28086	L	86040221	000000	000000	214000	006000		G C=198,B=148
LGHBP	HD 30959	49	0520	0449421	+141008	L	1	07901	L	86032822	000000	000000	223800	001500		G E=2X,C=240,B=190
LGHBP	HD 30959	49	0520	0449421	+141008	L	1	07948	L	86040222	000000	000000	225000	003000		G E=2X,C=220,B=133
HM080	HD31069	30	0637	0451156	435853	H	1	07761	L	86030906	000000	000000	065801	003000	702	U
EGHRD	00 NULL	99	9999	0452017	+192421	L	3	27867	L	86030800	000000	000000	000100	000000		G B=15
EGHRD	00 NULL	99	9999	0452017	+192421	L	3	27870	L	86030801	000000	000000	011200	000000		G B=15
EGHRD	00 NULL	99	9999	0452017	+192421	L	3	27866	L	86030723	000000	000000	233600	000000		G B=15
EGHRD	00 TFLOOD	99	9999	0452017	+192421	L	3	27869	L	86030800	000000	000000	004700	000007		G B=133
EGHRD	00 NULL	99	9999	0452017	+192421	L	3	27868	L	86030800	000000	000000	002400	000007		G B=133
ACHEB	HD 31236	31	0640	0452018	+192422	H	1	07769	L	86031019	000000	000000	194500	003000		G C=227,B=95
ACHEB	HD 31236	31	0640	0452018	+192422	L	3	27891	SL	86031020	213000	000500	202300	006000		G C=10X,B=133
NGHRD	00 LMC N4A	72	1050	0452052	-670012	L	3	27823	L	86030120	000000	000000	205400	010100		G B=98
OD72K	X 0449-550	48	1050	0452315	-555627	L	1	07485	L	86011304	000000	000000	042700	002000		G E=174,C=80,B=60
OD72K	X 0449-550	48	1050	0452315	-555627	L	3	27521	L	86011304	000000	000000	045900	008000		G B=47
OD72K	X 0449-550	48	1050	0452315	-555627	L	1	07486	L	86011306	000000	000000	062700	002000		G E=146,B=36
OD72K	X 0449-550	48	1050	0452315	-555627	L	3	27520	L	86011302	000000	000000	025000	009000		G B=90
OD72K	X 0449-550	48	0000	0452315	-555627	L	1	07484	L	86011300	000000	000000	001700	002000		G E=212,C=76,B=41
OD72K	X 0449-550	48	0000	0452315	-555627	L	3	27519	L	86011223	000000	000000	233800	003000		G B=20
HA240	HD 31293	34	0700	0452341	+302821	H	1	07514	L	86011622	000000	000000	225800	003000		G E=202,C=158,B=47
HA240	HD 31293	34	0700	0452341	+302821	H	3	27536	L	86011607	000000	000000	073300	090000		G C=20X,B=255
HA246	HD31293	34	0732	0452342	302822	H	1	07531	L	86011908	000000	000000	080239	003800	452	U
HA246	HD31293	34	0737	0452342	302822	H	1	07524	L	86011808	000000	000000	081412	003000	442	U
HA240	HD31293	34	0731	0452342	302822	E	9	01759	2	86011607	000000	000000	072500	016000		U FES FOR SWP27536
HA246	HD31293	34	0728	0452342	302822	H	3	27548	L	86011907	000000	000000	072506	039000	702	U TWO EXP: 30 MIN AT 0
HA246	HD31293	34	0733	0452342	302822	H	3	27549	L	86012008	000000	000000	083245	037400	702	U
HA246	HD31293	34	0722	0452342	302822	H	1	07543	L	86012107	000000	000000	075103	004000	454	U
HA246	HD 31293	34	0734	0452342	302822	H	3	27552	L	86012108	000000	000000	083829	037000	703	U
HA246	HD 31293	34	0727	0452342	302822	H	1	07538	L	86012007	000000	000000	074222	004000	551	U
HA246	HD31293	34	0740	0452342	302822	H	3	27545	L	86011808	000000	000000	085440	035300	703	U
LGHJL	HD 31398	47	0270	0453440	+330520	H	1	07669	L	86021623	000000	000000	232500	003000		G E=3X,C=174,B=100
LGHJL	HD 31398	47	0270	0453440	+330520	H	1	07893	L	86032720	000000	000000	201100	001000		G E=181,C=90,B=50
LGHJL	HD 31398	47	0270	0453440	+330520	H	1	07516	L	86011704	000000	000000	041800	003500		G E=2X,C=120,B=53
QSHDY	Q 0454+039	85	9999	0454088	+035615	L	1	07433	L	86010116	000000	000000	164500	035500		G E=230,C=200,B=160
QSHDY	OOSKY BKGD	07	9999	0454088	+035615	L	3	27433	L	86010116	000000	000000	165600	032500		G B=98
QSHDY	OOSKY BKGD	07	9999	0454088	+035615	L	3	27435	L	86010216	000000	000000	163800	023500		G B=93
QSHDY	Q 0454+039	85	1650	0454089	035615	L	1	07440	L	86010216	000000	000000	163200	024000		G E=216,C=190,B=135

PRO	OBJECT	CL	MAG	R.A.	DEC	D	C	IMAGE	A	DATE	EXP.SMALL	EXP.LARGE	ECC	COMMENT
UVHRC	HD 31964	39	0300	0458225	+434505	H	3	28078	L	86040114	000000	000000	140200	016000	G	C=3X,B=90
UVHRC	HD 31964	39	0300	0458225	+434505	H	1	07933	L	86040109	000000	000000	095400	000700	G	C=227,B=35
UVHRC	HD 31964	39	0300	0458225	+434505	L	3	28075	L	86040110	000000	000000	102600	000220	G	C=201,B=20
UVHRC	HD 31964	39	0300	0458225	+434505	L	3	28077	L	86040113	000000	000000	130800	001500	G	E=47,C=5X,B=21
UVHRC	HD 31964	39	0300	0458225	+434505	L	1	07935	L	86040112	000000	000000	125900	000007	G	C=242,B=34
UVHRC	HD 31964	39	0300	0458225	+434505	L	3	28076	L	86040111	000000	000000	114200	000400	G	C=1.5X,B=22
UVHRC	HD 31964	39	0300	0458225	+434505	L	1	07934	L	86040111	000000	000000	113400	000035	G	C=3X,B=34
ISHEF	OOSK 21-65	23	1200	0501119	-654601	L	3	28143	L	86041023	000000	000000	230700	001000	G	C=187,B=17
ISHEF	OOSK 21-65	23	1200	0501119	-654601	L	1	08000	L	86041023	000000	000000	234900	000700	G	C=187,B=35
ISHEF	OOSK 21-65	23	1200	0501119	-654601	L	3	28144	L	86041100	000000	000000	002600	001220	G	C=216,B=18
OBHDB	HD 32686	22	0600	0502242	-030627	L	1	07549	L	86012303	000000	000000	030500	000006	G	C=1.5X,B=37
OBHDB	HD 32686	22	0600	0502242	-030627	L	3	27561	L	86012302	000000	000000	025900	000008	G	C=220,B=17
PHCAL	HD 32630	21	0320	0503002	+411008	L	1	07885	L	86032621	000000	000000	214900	000002	G	C=2X,B=52
PHCAL	HD 32630	21	0320	0503002	+411008	L	1	07886	L	86032622	000000	000000	222700	000001	G	C=3X,B=38
PHCAL	HD 32630	21	0320	0503002	+411008	L	1	07887	L	86032622	000000	000000	225900	000001	G	C=3X,B=38
OBHDB	HD 32867	22	0750	0503461	+023626	L	1	07550	L	86012304	000000	000000	041200	000030	G	C=1.5,B=38
OBHDB	HD 32867	22	0750	0503461	+023626	L	3	27562	L	86012304	000000	000000	040700	000045	G	C=200,B=18
ISHFB	HD 33111	27	0290	0505232	-050858	H	1	07917	S	86033012	122700	000500	000000	000000	G	C=1.5X,B=42
HSHRP	HD 33599	26	0890	0506407	-615207	H	3	28217	L	86042220	000000	000000	202100	008500	G	C=215,B=59
MLHCW	HD 33328	26	0430	0506449	-084859	H	3	28039	L	86032718	000000	000000	181800	000048	G	C=210,B=37
MLHCW	HD 33328	26	0430	0506450	-084900	H	3	27759	L	86022100	000000	000000	004000	000048	G	C=210,B=40
MLHCW	HD 33328	26	0430	0506450	-084900	H	3	27461	L	86010604	000000	000000	040100	000048	G	C=220,B=45
HC087	HD33802B	44	0990	0509577	-115527	L	3	27522	S	86011308	084318	012000	000000	000000	331	V APER CLOSED
HC087	HD33802B	44	0990	0509577	-115527	L	1	07487	S	86011308	080503	003000	000000	000000	333	V APER CLOSED
MCHJH	OOLMC N026	12	1400	0510437	-670813	L	1	08029	L	86041421	000000	000000	215400	005000	G	C=163,B=75
MCHJH	OOLMC N026	12	1400	0510437	-670813	L	3	28172	L	86041422	000000	000000	225100	011500	G	C=205,B=37
PTHTA	OO WAVECAL	98	9999	0512594	+455657	H	3	27449	S	86010503	032400	000018	000000	000000	G	E=20X,B=115
PTHTA	HD 34029	41	0010	0512595	+455658	H	1	07457	S	86010421	213400	000430	000000	000000	G	E=1.2X,C=3.0X,B=58
PTHTA	HD 34029	41	0010	0512595	+455658	H	3	27447	S	86010422	220400	004500	000000	000000	G	E=255,C=255,B=122
PTHTA	TFLOOD	99	9999	0512595	+455658	H	1	07458	S	86010423	233500	000005	000000	000000	G	E=60X,B=105
PTHTA	HD 34029	41	0010	0512595	+455658	H	3	27448	S	86010500	001900	009000	000000	000000	G	E=215,C=2.0X,B=2.0X
PTHTA	HD 34029	41	0010	0512595	+455658	H	3	27452	L	86010505	000000	000000	055200	001500	G	E=226,C=200,B=105
PTHTA	HD 34029	41	0010	0512595	+455658	L	3	27451	L	86010505	000000	000000	050300	000120	G	E=255,C=1.5X,B=110
PTHTA	HD 34029	41	0010	0512595	+455658	H	3	27446	L	86010419	000000	000000	192600	009000	G	E=6X,C=10X,B=160
PTHTA	HD 34029	41	0010	0512595	+455658	H	1	07456	L	86010419	000000	000000	191500	000130	G	E=2X,C=3X,B=48
PTHTA	HD 34029	41	0010	0512595	+455658	H	3	27445	L	86010417	000000	000000	170300	009000	G	E=5X,C=5X,B=93
PTHTA	HD 34029	41	0010	0512595	+455658	L	3	27450	L	86010504	000000	000000	042100	000100	G	E=239,C=230,B=36
PTHTA	HD 34029	41	0010	0512595	+455658	H	1	07455	L	86010416	000000	000000	165100	000130	G	E=1.5X,C=2X,B=46
FEHTA	HD 34029	41	0100	0512597	+455642	L	3	27729	L	86021619	000000	000000	195000	001000	G	E=1.3X,C=5X,B=80
FEHTA	HD 34029	41	0100	0512597	+455642	L	3	27807	L	86022719	000000	000000	194900	001003	G	E=2.5X,C=5X,B=81
FEHTA	HD 34029	41	0097	0512597	+455642	L	3	27725	L	86021520	000000	000000	202900	001003	G	E=1.1X,C=5X,B=47
FEHTA	HD 34029	41	0097	0512597	+455642	L	3	27711	L	86021322	000000	000000	224500	001003	G	E=252,C=5X,B=49
FEHTA	HD 34029	41	0097	0512597	+455642	L	3	27844	L	86030419	000000	000000	193600	001003	G	E=1.2X,C=5X,B=90
FEHTA	HD 34029	41	0100	0512597	+455642	L	3	27735	L	86021723	000000	000000	234900	001000	G	E=247,C=5X,B=58
FEHTA	HD 34029	41	0100	0512597	+455642	L	3	27855	L	86030523	000000	000000	233300	001003	G	E=3X,C=5X,B=76

PRO	OBJECT	CL	MAG	R.A.	DEC	D	C	IMAGE	A	DATE	EXP.SMALL	EXP.LARGE	ECC	COMMENT
FEHTA	HD 34029	41	0100	0512598	+455643	L	3	27787	L	86022423	000000	000000	232600	001000		G E=230,C=5X,B=70
FEHTA	HD 34029	41	0100	0512598	+455643	H	3	28064	L	86033101	000000	000000	013800	003503		G E=5X,C=1.5X,B=85
FEHTA	HD 34029	41	0100	0512598	+455643	H	3	28063	L	86033100	000000	000000	002600	003502		G E=5X,C=1.5X,B=93
FEHTA	HD 34029	41	0100	0512598	+455643	L	3	27755	L	86022020	000000	000000	203300	001000		G E=234,C=5X,B=80
FEHTA	HD 34029	41	0100	0512598	+455643	L	3	27769	L	86022123	000000	000000	233600	001000		G E=252,C=5X,B=75
FEHTA	HD 34029	41	0100	0512598	+455643	L	3	27756	L	86022021	000000	000000	212700	001000		G E=255,C=5X,B=88
FEHTA	HD 34029	41	0100	0512598	+455643	L	3	28062	L	86033023	000000	000000	233200	000317		G E=5X,C=5X,B=70
FEHTA	HD 34029	41	0100	0512598	+455643	L	3	28061	L	86033022	000000	000000	224200	000317		G E=5X,C=5X,B=80
FEHTA	HD 34029	41	0100	0512598	+455643	L	3	28060	L	86033021	000000	000000	214900	000336		G E=5X,C=5X,B=81
FEHTA	HD 34029	41	0100	0512598	+455643	L	3	28059	L	86033020	000000	000000	205200	000357		G E=5X,C=5X,B=50
FEHTA	HD 34029	41	0100	0512598	+455643	H	3	28058	L	86033019	000000	000000	194100	003501		G E=5X,C=5X,B=90
FEHTA	HD 34029	41	0100	0512598	+455643	L	3	27802	L	86022623	000000	000000	233100	001001		G E=2X,C=5X,B=73
FEHTA	HD 34029	41	0100	0512598	+455643	L	3	27718	L	86021501	000000	000000	014300	001001		G E=230,C=5X,B=51
FEHTA	HD 34029	41	0100	0512598	+455643	L	3	27700	L	86021201	000000	000000	013400	001003		G E=223,C=5X,B=73
FEHTA	HD 34029	41	0100	0512598	+455643	L	3	27813	L	86022819	000000	000000	193800	001003		G E=3X,C=5X,B=80
FEHTA	HD 34029	41	0100	0512598	+455643	L	3	27681	L	86020803	000000	000000	032600	001003		G E=245,C=5X,B=78
FEHTA	HD 34029	41	0100	0512598	+455643	L	3	27835	L	86030319	000000	000000	194000	001003		G E=2X,C=5X,B=80
FEHTA	HD 34029	41	0100	0512598	+455643	L	3	27701	L	86021202	000000	000000	022600	001003		G E=242,C=5X,B=80
FEHTA	HD 34029	41	0100	0512598	+455643	L	3	27696	L	86021100	000000	000000	005000	001003		G E=235,C=5X,B=75
FEHTA	HD 34029	41	0100	0512598	+455643	L	3	27860	L	86030623	000000	000000	230900	001003		G E=252,C=5X,B=75
FEHTA	HD 34029	41	0100	0512598	+455643	L	3	27706	L	86021222	000000	000000	223500	001003		G E=237,C=5X,B=83
AGHGF	OO AKN 120	84	1300	0513378	-001215	L	3	27674	L	86020615	000000	000000	152300	008000		G E=182,C=93,B=43
OD66K	OOMKN 1095	84	1450	0513378	-001215	L	3	27930	L	86031715	000000	000000	154900	016600		G E=172,C=142,B=60
AGHGF	OO AKN 120	84	1300	0513378	-001215	L	1	07636	L	86020616	000000	000000	165300	012000		G E=221,C=141,B=69
AGHGF	OO AKN 120	84	1300	0513378	-001215	L	3	27675	L	86020619	000000	000000	192700	008000		G E=183,C=103,B=40
HM153	CGO 81	12	1171	0516339	385141	L	1	07921	S	86033103	032153	002500	000000	000000	402	U
HM153	CGO 81	12	1165	0516339	385141	L	3	28054	L	86033007	000000	000000	074617	011400	501	U
HM153	CGO 81	12	1165	0516339	385141	L	1	07915	L	86033009	000000	000000	094500	005000	702	U
HM080	HD34557	30	0583	0516439	410213	H	1	07760	L	86030905	000000	000000	053626	002000	601	U
PHCAL	OO WAVECAL	98	0000	0517161	-131336	H	2	17852	S	86012201	013000	000016	000000	000000		G E=60X,B=139
PHCAL	OO WAVECAL	98	0000	0517161	-131336	L	2	17851	S	86012201	010400	000001	000000	000000		G E=10X,B=87
PHCAL	OO NULL	99	0000	0517161	-131336		2	17850	L	86012123	000000	000000	231600	000000		G B=23
PHCAL	HD 34816	20	0430	0517162	-131337	L	3	27956	L	86031922	000000	000000	220600	000002		G C=2X,B=18
PHCAL	HD 34816	20	0430	0517162	-131337	L	3	27954	L	86031920	000000	000000	204700	000001		G C=232,B=15
PHCAL	HD 34816	20	0430	0517162	-131337	H	3	27628	L	86012905	000000	000000	051500	000022		G C=180,B=35
PHCAL	OO TFLOOD	99	9999	0517162	-131337	H	3	27953	SL	86031920	200400	000005	200600	000200		G E=60X,B=125
PHCAL	HD 34816	20	0430	0517162	-131337	H	2	17853	L	86012202	000000	000000	021200	000026		G C=205,B=33
PHCAL	HD 34816	20	0430	0517162	-131337	L	3	27955	L	86031921	000000	000000	212700	000001		G C=205,B=17
PHCAL	HD 34816	20	0430	0517162	-131337	H	1	07590	L	86012905	000000	000000	051000	000022		G C=208,B=47
PHCAL	HD 34816	20	0430	0517162	-131337	L	3	28035	L	86032700	000000	000000	001000	000002		G C=2X,B=27
PHCAL	HD 34816	20	0430	0517162	-131337	H	2	17864	L	86013003	000000	000000	034100	000035		G C=198,B=33
PHCAL	HD 34816	20	0430	0517162	-131337	L	3	28034	L	86032623	000000	000000	233600	000001		G C=2X,B=22
PHCAL	OO WAVECAL	98	9999	0517162	-131337	L	3	27952	S	86031919	193700	000002	000000	000000		G E=30X,B=100
HM080	HD34759	21	0543	0518158	414525	H	1	07759	L	86030904	000000	000000	042748	000320	601	U
HM080	HD34759	21	0546	0518158	414525	H	3	27881	L	86030904	000000	000000	044815	000700	700	U

PRO	OBJECT	CL	MAG	R.A.	DEC	D	C	IMAGE	A	DATE	EXP.SMALL	EXP.LARGE	ECC	COMMENT
HM080	HD34904	30	0593	0519194	405856	H	1	07763	L	86030909	000000	000000	094336	002500 601 V
HM080	HD34904	30	0592	0519194	405856	H	3	27882	L	86030910	000000	000000	101309	002400 300 V
NPHSM	00 LMCJ35	70	1700	0521580	-684212	L	3	28241	L	86043011	000000	000000	110400	030000 G E=108,B=76
MLHCW	HD 35439	26	0470	0522089	+014806	H	3	27493	L	86011017	000000	000000	173700	000110 G C=195,B=35
MLHCW	HD 35439	26	0470	0522089	+014806	H	3	27506	L	86011106	000000	000000	064300	000110 G C=200,B=34
MLHCW	HD 35439	26	0470	0522089	+014806	H	3	27475	L	86010916	000000	000000	165700	000110 G C=183,B=33
MLHCW	HD 35439	26	0470	0522089	+014806	H	3	28038	L	86032717	000000	000000	174000	000110 G C=187,B=36
MLHCW	HD 35439	26	0470	0522089	+014806	H	3	27478	L	86010919	000000	000000	194300	000110 G C=195,B=35
MLHCW	HD 35439	26	0470	0522089	+014806	H	3	27483	L	86011001	000000	000000	012900	000200 G C=1.5X,B=45
MLHCW	HD 35439	20	0470	0522089	+014806	H	3	27462	L	86010604	000000	000000	044800	000110 G C=210,B=45
MLHCW	HD 35439	26	0470	0522089	+014806	H	3	27501	L	86011102	000000	000000	020100	000110 G C=193,B=35
MLHCW	HD 35439	26	0470	0522089	+014806	H	3	27487	L	86011005	000000	000000	054100	000110 G C=190,B=32
MCHJH	OOLMC N130	12	1400	0522592	-701203	L	1	08028	L	86041416	000000	000000	165600	004500 G C=80,B=45
MCHJH	OOLMC N130	12	1400	0522592	-701203	L	3	28171	L	86041417	000000	000000	175100	020000 G C=120,B=79
CSHDB	HD 35620	47	0510	0524198	+342607	L	1	07533	L	86011923	000000	000000	234400	003300 G E=210,C=177,B=37
HM147	N 49	75	0000	0525593	-660739	L	3	28236	L	86042802	000000	000000	020106	038804 343 V
HM147	N49	75	1600	0526003	-660735	L	3	28238	L	86042902	000000	000000	020203	039000 343 V
OBHDB	HD 36046	21	0810	0526195	-003832	L	3	27615	L	86012704	000000	000000	041600	000100 G C=210,B=18
OBHDB	HD 36046	21	0810	0526195	-003832	L	1	07579	L	86012704	000000	000000	042200	000025 G C=218,B=38
HC241	W MEN	42	1413	0527052	-711338	L	1	07468	L	86010808	000000	000000	080849	039800 416 V
OBHDB	HD 36312	22	0810	0528149	-000030	L	1	07576	L	86012700	000000	000000	000700	000039 G C=210,B=35
OBHDB	HD 36312	22	0810	0528149	-000030	L	3	27613	L	86012701	000000	000000	015200	000140 G C=222,B=18
OBHDB	HD 36312	22	0810	0528149	-000030	L	1	07577	L	86012701	000000	000000	015900	000040 G C=230,B=38
OBHDB	HD 36341	22	0830	0528183	-022412	L	3	27575	L	86012401	000000	000000	014700	000150 G C=215,B=18
OBHDB	HD 36341	22	0830	0528183	-022412	L	1	07556	L	86012401	000000	000000	015400	000055 G C=1.2X,B=38
OBHDB	HD 36393	22	0850	0528492	-020103	L	3	27576	L	86012402	000000	000000	025700	000120 G C=220,B=19
OBHDB	HD 36393	22	0850	0528492	-020103	L	1	07557	L	86012403	000000	000000	030500	000050 G C=1.5X,B=40
CSHJL	00 WAVECAL	98	9999	0529167	+183331	H	1	07627	S	86020419	190900	000016	000000	000000 G E=60X,B=106
CSHJL	HD 36389	49	0440	0529167	+183331	H	1	07626	L	86020405	000000	000000	050900	080000 G E=6X,C=223,B=165
CSHJL	HD 36389	49	0440	0529167	+183331	L	1	07628	L	86020420	000000	000000	202600	002000 G B=3X,C=135,B=45
CSHJL	HD 36389	49	0440	0529168	+183332	L	3	27658	L	86020403	000000	000000	034300	003000 G B=80
CSHJL	HD 36389	49	0440	0529168	+183332	L	3	27656	L	86020322	000000	000000	224300	012000 G C=122,B=98
HC059	HD36389	49	9999	0529168	183332	E	9	01761	2	86020406	000000	000000	065800	016000 V FOR LWP7626
CSHJL	HD 36389	49	0440	0529168	+183332	L	3	27657	L	86020402	000000	000000	024100	003000 G B=153
CSHJL	HD 36389	49	0440	0529168	+183332	L	1	07625	L	86020401	000000	000000	015700	000100 G E=75,C=55,B=40
CSHJL	HD 36389	49	0440	0529168	+183332	L	1	07624	L	86020400	000000	000000	005200	002000 G E=6X,C=188,B=98
CSHJL	HD 36389	49	0440	0529168	+183332	H	1	07623	L	86020321	000000	000000	211900	007500 G E=185,B=127
BIHTS	HD 36408	26	0550	0529205	+170115	H	3	28103	L	86040519	000000	000000	190100	001730 G C=227,B=47
NPHSM	OOLMCHEN54	70	1700	0529260	-671607	L	3	28222	L	86042315	000000	000000	152200	009800 G E=52,C=58,B=38
MLHPC	HD 36486	14	0220	0529269	-002003	H	3	27963	L	86032020	000000	000000	200900	000005 G C=210,B=39
MLHPC	HD 36486	14	0220	0529269	-002003	H	3	27920	L	86031522	000000	000000	221100	000005 G C=210,B=35
MLHPC	HD 36486	14	0220	0529269	-002003	H	3	27998	L	86032302	000000	000000	023700	000005 G C=210,B=35
MLHPC	HD 36486	14	0220	0529269	-002003	H	3	27994	L	86032223	000000	000000	231900	000005 G C=210,B=35
MLHPC	HD 36486	14	0220	0529269	-002003	H	3	27990	L	86032220	000000	000000	201700	000005 G C=210,B=36
HA169	HD36486	13	0220	0529270	-002004	H	3	27982	L	86032204	000000	000000	042326	000005 500 V

PRO	OBJECT	CL	MAG	R.A.	DEC	D	C	IMAGE	A	DATE	EXP.SMALL	EXP.LARGE	ECC	COMMENT
HA169	HD36486	13	0230	0529270	-002004	H	3	28001	L	86032305	000000	000000	055156	000005 501 U
MLHPC	HD 36486	14	0220	0529270	-002004	H	3	27979	L	86032201	000000	000000	011400	000005 G C=210,B=35
MLHPC	HD 36486	14	0220	0529270	-002004	H	3	27931	L	86031719	000000	000000	192500	000005 G C=210,B=38
MLHPC	HD 36486	14	0220	0529270	-002004	H	3	27975	L	86032121	000000	000000	215800	000005 G C=210,B=36
MLHPC	HD 36486	14	0220	0529270	-002004	H	3	28028	L	86032522	000000	000000	223200	000005 G C=200,B=35
HA169	HD36486	13	0226	0529270	-002004	H	3	27985	L	86032207	000000	000000	074406	000005 500 U
NPHSM	OOLMCHEN54	70	1700	0529273	-671534	L	3	28239	L	86042910	000000	000000	102400	038000 G E=168,C=148,B=90
OBHDB	BD-00 0984	22	0840	0529320	-002800	L	3	27612	L	86012701	000000	000000	011100	000150 G C=202,B=18
OBHDB	BD-00 0984	22	0840	0529320	-002800	L	3	27611	L	86012700	000000	000000	000200	000118 G C=155,B=18
OBHDB	HD 36526	21	0830	0529412	-013809	L	1	07578	L	86012703	000000	000000	030900	000035 G C=240,B=38
OBHDB	HD 36526	21	0830	0529412	-013809	L	3	27614	L	86012703	000000	000000	030100	000140 G C=230,B=18
OBHDB	HD 36628	22	0800	0530314	-011631	L	3	27595	L	86012602	000000	000000	020200	000200 G C=210,B=18
OBHDB	HD 36628	22	0800	0530314	-011631	L	3	27594	L	86012601	000000	000000	010000	000400 G C=2X,B=18
OBHDB	HD 36628	22	0800	0530314	-011631	L	1	07568	L	86012601	000000	000000	010900	000045 G C=240,B=33
HM142	SK-66/117	23	1268	0530360	-664900	H	3	27896	L	86031104	000000	000000	043606	036100 203 U
HM142	SK-66 118	23	1210	0530540	-665500	H	3	28100	L	86040502	000000	000000	021457	038000 344 U
OBHDB	HD 36760	22	0760	0531291	-003034	L	1	07580	L	86012706	000000	000000	060200	000020 G C=230,B=35
OBHDB	HD 36760	22	0760	0531291	-003034	L	3	27616	L	86012705	000000	000000	055700	000045 G C=220,B=18
OBHDB	HD 36827	21	0670	0531445	-025451	L	1	07555	L	86012400	000000	000000	002800	000006 G C=1.5X,B=37
OBHDB	HD 36827	21	0670	0531445	-025451	L	3	27574	L	86012400	000000	000000	001900	000006 G C=215,B=18
OBHDB	HD 36826	21	0820	0531466	-022505	L	3	27596	L	86012602	000000	000000	024700	000130 G C=210,B=18
OBHDB	HD 36826	21	0820	0531466	-022505	L	1	07569	L	86012602	000000	000000	025300	000040 G C=250,B=39
HM162	S 121	23	1420	0532089	-682844	L	3	28226	L	86042406	000000	000000	061256	012000 300 U
OBHDB	HD 36915	22	0800	0532275	-005051	L	3	27593	L	86012523	000000	000000	235000	000130 G C=200,B=18
OBHDB	HD 36915	22	0800	0532275	-005051	L	1	07567	L	86012523	000000	000000	235500	000040 G C=238,B=37
OBHDB	HD 36935	21	0752	0532350	-001804	L	1	07583	L	86012801	000000	000000	012700	000015 G C=210,B=35
OBHDB	HD 36935	21	0750	0532358	-001804	L	3	27617	L	86012706	000000	000000	063800	000026 G C=205,B=18
OBHDB	HD 36954	21	0700	0532399	-004601	L	1	07558	L	86012404	000000	000000	041400	000007 G C=220,B=37
OBHDB	HD 36954	21	0700	0532399	-004601	L	3	27577	L	86012404	000000	000000	040800	000010 G C=210,B=18
OBHDB	HD 37000	21	0740	0532440	-055730	L	3	27622	SL	86012802	023000	000018	022100	000018 G C=212,B=18
OBHDB	HD 37000	21	0740	0532442	-055730	L	1	07584	SL	86012802	024300	000015	023700	000015 G C=1.2X,B=40
OBHDB	HD 37025	21	0720	0532490	-060351	L	1	07586	L	86012805	000000	000000	054200	000010 G C=252,B=30
OBHDB	HD 37025	21	0720	0532490	-060351	L	3	27624	L	86012805	000000	000000	053700	000015 G C=235,B=18
HA085	HD36910	40	1084	0532541	244304	L	1	07973	L	86040808	000000	000000	082720	002000 332 U
HA085	HD36910	40	1075	0532541	244304	L	3	28124	L	86040805	000000	000000	052159	018000 332 U
OBHDB	HD 37037	22	0850	0533010	+000404	L	1	07582	SL	86012800	002400	000040	001900	000040 G C=153,B=38
OBHDB	HD 37037	22	0850	0533010	+000404	L	3	27621	SL	86012723	001000	000230	235900	000230 G C=168,B=17
HA085	NU ORI	31	1036	0533040	-053506	L	1	07972	L	86040804	000000	000000	042246	002000 332 U CONTAMINATED BY NEBU
HA085	NU ORI	31	1036	0533040	-053506	L	3	28123	L	86040801	000000	000000	014652	015000 302 U CONTAMINATED BY NEBU
DCHDM	HD 37350	53	0380	0533113	-623120	H	1	08033	L	86041517	000000	000000	171000	003000 G E=138,C=1.2X,B=50
OBHDB	HD 37112	22	0800	0533307	-004839	L	3	27589	L	86012506	000000	000000	062700	000046 G C=200,B=18
OBHDB	HD 37112	22	0800	0533307	-004839	L	1	07566	L	86012506	000000	000000	063400	000024 G C=205,B=37
OBHDB	HD 37151	22	0740	0533411	-072536	L	3	27623	L	86012803	000000	000000	034700	000040 G C=200,B=18
OBHDB	HD 37151	22	0740	0533412	-072537	L	1	07585	L	86012803	000000	000000	035500	000020 G C=235,B=35
HHWJS	00 HH-1F	64	1550	0533544	-064656	L	3	27443	L	86010316	000000	000000	162500	029000 G E=155,C=158,B=118

PRO	OBJECT	CL	MAG	R.A.	DEC	D	C	IMAGE	A	DATE	EXP.SMALL	EXP.LARGE	ECC	COMMENT
OBHDB	HD 37173	21	0790	0533591	-020050	L	3	27597	L	86012603	000000	000000	035800	000044		G C=230,B=18
OBHDB	HD 37173	21	0790	0533591	-020050	L	1	07570	L	86012604	000000	000000	040400	000023		G C=244,B=38
MCHJH	OOLMC N150	12	1400	0533599	-684629	L	1	08032	L	86041513	000000	000000	130900	005000		G C=70,B=41
OBHDB	HD 37187	22	0810	0534045	-010329	L	1	07563	L	86012501	000000	000000	014200	000055		G C=240,B=39
OBHDB	HD 37187	22	0810	0534045	-010329	L	3	27585	L	86012501	000000	000000	013400	000120		G C=142,B=19
OBHDB	HD 37187	22	0810	0534045	-010329	L	3	27586	L	86012502	000000	000000	025600	000200		G C=200,B=21
OBHDB	HD 37235	22	0820	0534244	-004354	L	3	27587	L	86012503	000000	000000	034000	000055		G C=178,B=19
OBHDB	HD 37235	22	0820	0534244	-004354	L	1	07564	L	86012503	000000	000000	035000	000040		G C=1.2X,B=39
OBHDB	HD 37272	21	0790	0534427	-014149	L	3	27598	L	86012605	000000	000000	051400	000036		G C=220,B=18
OBHDB	HD 37272	21	0790	0534427	-014149	L	1	07571	L	86012605	000000	000000	052000	000020		G C=230,B=37
HM148	SK-67?206	23	1220	0534480	-670300	H	3	27888	L	86031005	000000	000000	052925	030800	302	V
OBHDB	HD 37332	21	0760	0535130	-004824	L	1	07565	L	86012505	000000	000000	051600	000015		G C=230,B=37
OBHDB	HD 37332	21	0760	0535130	-004824	L	3	27588	L	86012505	000000	000000	050600	000024		G C=200,B=18
HHHJS	OO HH- 43	64	1650	0535454	-071104	L	3	27472	L	86010816	000000	000000	161000	050000		G C=173,B=153
HI215	HDE 245770	59	0949	0535480	261717	L	1	07784	L	86031305	000000	000000	051214	000330	502	V
HI215	HDE 245770	59	0948	0535480	261718	H	3	27915	L	86031503	000000	000000	035911	038300	304	V EXPOS IN 2 PARTS: 23
HI215	HDE245770	59	0940	0535480	261718	L	1	07802	L	86031504	000000	000000	042821	000330	502	V
HI215	HDE 245770	59	0948	0535480	261717	H	3	27907	L	86031304	000000	000000	043939	034200	303	V EXPOSURE IN 2 PARTS,
II143	HDE 245770	59	0942	0535480	261717	H	3	28046	L	86032903	000000	000000	035341	039000	303	V
HI215	HDE245770	59	0938	0535480	261718	H	3	27626	L	86012807	000000	000000	075105	037700	304	V
HI215	HDE245770	59	0945	0535480	261718	L	1	07587	L	86012808	000000	000000	084226	000330	502	V
II143	HDE 245770	59	0945	0535480	261717	L	1	07906	L	86032905	000000	000000	052805	000200	402	V
ISHJS	HD 37468	12	0375	0536140	-023737	H	1	08016	L	86041300	000000	000000	004200	000012		G C=197,B=44
MCHJH	OOLMC C233	12	1170	0536209	-691138	L	1	08031	L	86041510	000000	000000	100900	003000		G C=243,B=40
MCHJH	OOLMC C223	12	1170	0536209	-691139	L	3	28174	L	86041510	000000	000000	104400	006000		G C=150,B=20
NPHSM	OO LMC P35	70	1570	0536259	-671949	L	1	08083	L	86042311	000000	000000	110100	024000		G E=208,C=110,B=79
NPHSM	OO LMC P35	70	1570	0536259	-671949	L	3	28221	L	86042310	000000	000000	101000	004500		G E=55,B=20
OBHDB	HD 37525	21	0810	0536308	-024034	H	3	27579	L	86012406	000000	000000	060100	005000		G C=205,B=45
OBHDB	HD 37525	21	0810	0536308	-024034	L	1	07559	L	86012405	000000	000000	053000	000025		G C=225,B=36
OBHDB	HD 37525	21	0810	0536308	-024034	L	3	27578	L	86012405	000000	000000	052400	000035		G C=190,B=18
MLHCW	HD 37490	26	0450	0536326	+040541	H	3	27760	L	86022101	000000	000000	012000	000210		G C=240,B=40
HCHBB	HD 37453	39	0820	0536443	+300337	L	3	27550	L	86012100	000000	000000	001800	001500		G C=130,B=18
HCHBB	HD 37453	39	0820	0536443	+300337	L	1	07541	L	86012100	000000	000000	000400	000412		G C=172,B=35
HA196	R127	23	0961	0537097	-693127	L	1	08044	L	86041701	000000	000000	015936	001000	802	V
HA196	R127	23	0961	0537097	-693127	H	1	08045	L	86041702	000000	000000	025110	032000	706	V
HA196	R127	23	0958	0537097	-693127	L	3	28183	L	86041702	000000	000000	021539	001500	500	V
OBHDB	HD 37641	22	0760	0537260	-015700	L	3	27599	SL	86012606	063600	000054	062400	000054		G APE=L:C=240,B=18;
OBHDB	HD 37641	22	0760	0537260	-015700	L	1	07572	L	86012606	000000	000000	063000	000020		G C=210,B=37
OBHDB	HD 37699	21	0760	0537492	-022740	L	3	27560	SL	86012301	020200	000030	015300	000015		G C=180,B=18
OBHDB	HD 37699	21	0760	0537492	-022740	L	3	27559	SL	86012223	000100	000410	235500	000205		G C=6X,B=38
OBHDB	HD 37699	21	0760	0537492	-022740	H	3	27625	L	86012806	000000	000000	062300	002530		G C=200,B=40
OBHDB	HD 37699	21	0760	0537492	-022740	L	1	07548	SL	86012300	004200	000035	001600	000017		G C=153,B=38
BIHTS	HD 37795	26	0260	0537502	-340559	H	3	28120	L	86040700	000000	000000	000700	000104		G C=2X,B=53
BIHTS	HD 37795	26	0260	0537502	-340559	H	3	28121	L	86040700	000000	000000	003900	000100		G C=2X,B=52
OBHDB	HD 37806	22	0800	0538317	-024429	L	1	07551	L	86012305	000000	000000	053500	000040		G C=160,B=35

PRO	OBJECT	CL	MAG	R.A.	DEC	D	C	IMAGE	A	DATE	EXP.SMALL	EXP.LARGE	ECC	COMMENT
OBHDB	HD 37806	22	0800	0538317	-024429	L	3	27564	SL	86012306	062900	000910	060900	000910	G	C=3X,B=24
OBHDB	HD 37806	22	0800	0538317	-024429	L	3	27563	L	86012305	000000	000000	053000	000055	G	C=64,B=23
HA085	HD37806	34	0818	0538317	-024429	H	1	07980	L	86040901	000000	000000	015727	009000	554	V
HA085	HD37806	34	0817	0538317	-024429	L	3	28131	L	86040903	000000	000000	030923	000500	500	V
HI112	LMC X-3	66	1600	0538401	-640636	L	3	27872	L	86030805	000000	000000	055618	028100	332	V
HI112	LMC X-3	66	1600	0538401	-640636	L	1	07753	L	86030704	000000	000000	041507	038200	303	V
OBHDB	HD 37927	22	0840	0539223	-024920	L	1	07562	L	86012500	000000	000000	002500	000050	G	C=1.2,B=39
OBHDB	HD 37927	22	0840	0539223	-024920	L	3	27584	L	86012500	000000	000000	001800	000120	G	C=210,B=18
GCHAC	00 LMC X-1	83	1250	0540053	-694603	L	3	27648	L	86020120	000000	000000	200700	004000	G	C=127,B=95
GCHAC	00 LMC X-1	83	1250	0540054	-694603	L	3	27653	L	86020220	000000	000000	201400	003600	G	C=92,B=41
ISHFB	HD 39060	31	0384	0546058	-510500	H	1	07918	L	86033013	000000	000000	131700	000325	G	C=238,B=41
HQ226	NGC8-11-11	84	1445	0551096	462550	L	1	07637	L	86020710	000000	000000	100528	016100	342	V
HQ111	MCG+8-11-1	84	1438	0551096	462550	L	3	27790	L	86022507	000000	000000	070020	021500	332	V
HQ111	NGC8-11-11	84	1438	0551096	462550	L	1	07718	L	86022504	000000	000000	045622	012000	342	V
LSHAD	HD39801	49	0048	0552279	072357	L	3	27903	L	86031204	000000	000000	042137	001000	340	V
LSHAD	HD39801	49	0047	0552279	072357	L	3	27904	L	86031205	000000	000000	052526	005000	471	V
LSHAD	HD39801	49	0051	0552279	072357	H	1	07778	S	86031206	062233	004500	000000	000000	364	V
PHCAL	00 WAVECAL	98	0000	0552279	+072357	H	3	27530	S	86011505	054100	000200	000000	000000	G	E=60,B=123
PHCAL	00 WAVECAL	98	0000	0552279	+072357	L	1	07503	S	86011504	044400	000001	000000	000000	G	E=20X,B=102
LSHAD	HD39801	49	0051	0552279	072357	L	1	07776	LS	86031204	040418	000035	040051	000005	352	V 562$
PHCAL	00 WAVECAL	98	0000	0552279	+072357	H	1	07504	S	86011505	054700	000016	000000	000000	G	E=60X,B=106
PHCAL	00 WAVECAL	98	0000	0552279	+072357	L	3	27529	S	86011504	043900	000002	000000	000000	G	E=20X,B=103
LSHAD	HD39801	49	0047	0552279	072357	H	1	07777	L	86031205	000000	000000	051817	000215	353	V
LSHAD	HD39801	49	0052	0552279	072357	H	3	27905	L	86031207	000000	000000	071536	015000	251	V
LSHAD	HD39801	49	0052	0552279	072357	H	1	07779	L	86031209	000000	000000	095013	003500	573	V
LSHAD	HD 39801	49	0050	0552280	+072358	L	3	28093	L	86040318	000000	000000	182700	005000	G	E=4X,C=147,B=40
LSHAD	HD 39801	49	0050	0552280	+072358	H	1	07501	S	86011500	004100	004500	000000	000000	G	E=10X,C=145,B=50
LSHAD	HD 39801	49	0050	0552280	+072358	L	3	27527	L	86011500	000000	000000	000200	001000	G	E=145,C=51,B=26
LSHAD	HD 39801	49	0050	0552280	+072358	H	1	07500	L	86011423	000000	000000	235000	000215	G	E=186,C=80,B=33
LSHAD	HD 39801	49	0050	0552280	+072358	H	1	07951	L	86040319	000000	000000	192300	000215	G	E=191,C=79,B=37
LSHAD	HD 39801	49	0050	0552280	+072358	L	3	27528	L	86011502	000000	000000	020100	005000	G	E=4X,C=157,B=50
LSHAD	HD 39801	49	0050	0552280	+072358	H	1	07950	S	86040317	173500	004500	000000	000000	G	E=10X,C=148,B=52
LSHAD	HD 39801	49	0050	0552280	+072358	H	1	07661	L	86021421	000000	000000	213100	000215	G	E=190,C=62,B=34
LSHAD	HD 39801	49	0050	0552280	+072358	L	3	27716	L	86021421	000000	000000	214100	005000	G	E=4X,C=170,B=61
LSHAD	HD 39801	49	0050	0552280	+072358	L	1	07502	SL	86011502	030900	000035	025800	000005	G	E=185,C=66,B=32
LSHAD	HD 39801	49	0050	0552280	+072358	L	1	07662	SL	86021423	230800	000035	230200	000005	G	E=181,C=60,B=31
LSHAD	HD 39801	49	0050	0552280	+072358	L	3	27717	L	86021423	000000	000000	231400	001000	G	E=141,C=73,B=30
LSHAD	HD 39801	49	0050	0552280	+072358	H	1	07608	L	86020122	000000	000000	221200	000200	G	E=173,C=79,B=40
LSHAD	HD 39801	49	0050	0552280	+072358	L	3	27649	L	86020122	000000	000000	223400	000500	G	E=96,C=53,B=32
LSHAD	HD 39801	49	0050	0552280	+072358	H	1	07609	S	86020123	231600	002500	000000	000000	G	E=5X,C=182,B=109
LSHAD	HD 39801	49	0050	0552280	+072358	L	3	27650	L	86020123	000000	000000	235000	003000	G	E=4X,C=185,B=106
LSHAD	HD 39801	49	0050	0552280	+072358	H	1	07735	S	86030200	005200	002500	000000	000000	G	E=8X,C=2X,B=2X
LSHAD	HD 39801	49	0050	0552280	+072358	L	3	27824	L	86030123	000000	000000	235200	003500	G	E=215,C=3X,B=235
LSHAD	HD 39801	49	0050	0552280	+072358	H	1	07734	L	86030123	000000	000000	234300	000200	G	E=175,C=83,B=50
LSHAD	HD 39801	49	0050	0552280	+072358	H	1	08036	L	86041521	000000	000000	214000	000215	G	E=180,C=60,B=40

PRO	OBJECT	CL	MAG	R.A.	DEC	D	C	IMAGE	A	DATE	EXP.SMALL	EXP.LARGE	ECC	COMMENT
LSHAD	HD 39801	49	0050	0552280	+072358	L	3	28176	L	86041521	000000	000000	214700	001000		G E=136,C=55,B=22
LSHAD	HD 39801	49	0050	0552280	+072358	H	1	08037	S	86041522	222700	004500	000000	000000		G E=10X,C=240,B=58
LSHAD	HD 39801	49	0050	0552280	+072358	L	3	28177	L	86041523	000000	000000	231800	005000		G E=4X,C=140,B=35
LSHAD	HD 39801	49	0050	0552280	+072358	L	3	27651	L	86020201	000000	000000	011600	000500		G E=125,C=80,B=59
LSHAD	HD 39801	49	0050	0552280	+072358	L	1	07610	SL	86020200	004300	000030	003600	000005		G E=178,C=75,B=36
LSHAD	HD 39801	49	0050	0552280	+072358	L	1	08038	SL	86041600	002100	000035	001400	000005		G E=206,C=80,B=30
LSHAD	HD 39801	49	0050	0552280	+072358	H	1	07663	S	86021500	001000	002200	000000	000000		G E=199,B=110
LSHAD	HD 39801	49	0050	0552280	+072358	L	1	07952	SL	86040320	203400	000035	202900	000005		G E=175,C=67,B=32
LSHAD	HD 39801	49	0050	0552280	+072358	L	3	28094	L	86040319	000000	000000	195500	001000		G E=135,C=60,B=25
BIHTS	HD 42054	26	0580	0605155	-341816	H	3	28117	L	86040621	000000	000000	214500	001502		G C=2X,B=61
ISHJS	HD 42087	23	0580	0606418	+230724	H	1	08011	L	86041123	000000	000000	233600	000500		G C=185,B=42
PHCAL	00 WAVECAL	98	9999	0621145	-531831	H	3	27902	S	86031200	005600	000200	000000	000000		G E=60X,B=130
PHCAL	00 WAVECAL	98	9999	0621145	-531831	H	1	07775	S	86031200	010100	000016	000000	000000		G E=60X,B=106
PHCAL	00 WAVECAL	98	9999	0621145	-531831	L	3	27901	S	86031123	235400	000002	000000	000000		G E=20X,B=96
PHCAL	00 WAVECAL	98	9999	0621145	-531831	L	1	07774	S	86031123	235000	000001	000000	000000		G E=20X,B=100
HA173	HD45166	11	1013	0623360	080018	H	1	07664	L	86021505	000000	000000	055749	007000	303	V
HA173	HD45166	11	1011	0623360	080018	H	1	07653	L	86021205	000000	000000	055349	008000	403	V
HA173	HD45166	11	1014	0623360	080018	H	3	27721	L	86021507	000000	000000	071357	009000	331	V
HA173	HD45166	11	1009	0623360	080018	H	1	07665	L	86021508	000000	000000	084926	007000	303	V
HA173	HD45166	11	1013	0623360	080018	H	3	27722	L	86021510	000000	000000	100456	010200	441	V
HA173	HD45166	11	1016	0623360	080018	H	1	07674	L	86021804	000000	000000	041559	007000	403	V
HA173	HD45166	11	1015	0623360	080018	H	3	27703	L	86021207	000000	000000	071934	009500	301	V
HA173	HD45166	11	1007	0623361	080018	H	1	07656	L	86021307	000000	000000	075104	006900	303	V
HA173	HD45166	11	1016	0623361	080018	H	3	27737	L	86021805	000000	000000	053518	010000	431	V
HA173	HD45166	11	1019	0623361	080018	H	3	27796	L	86022606	000000	000000	060645	007500	301	V
HA173	HD45166	11	1003	0623361	080018	H	3	27713	L	86021406	000000	000000	060746	009000	331	V
HA173	HD45166	11	1012	0623361	080018	H	1	07659	L	86021407	000000	000000	074934	007000	304	V
HA173	HD45166	11	1005	0623361	080018	H	3	27708	L	86021306	000000	000000	060616	009500	331	V
HA173	HD45166	11	1022	0623361	080018	H	1	07723	L	86022605	000000	000000	050110	006000	403	V
BEHCG	HD 45542	26	0410	0625595	+201443	H	3	27663	L	86020523	000000	000000	232700	000145		G C=205,B=39
BIHTS	HD 45542	26	0410	0625595	+201443	H	3	28104	L	86040520	000000	000000	200300	000419		G C=2X,B=59
BEHCG	HD 45542	26	0410	0625596	+201444	H	1	07631	L	86020522	000000	000000	223000	000135		G C=1.5X,B=47
BEHCG	HD 45542	26	0410	0625596	+201444	H	3	27662	L	86020522	000000	000000	222300	000137		G C=190,B=35
BIHTS	HD 45725	26	0460	0626234	-065957	H	3	28106	L	86040521	000000	000000	215200	000402		G C=4X,B=100
BIHTS	HD 45725	26	0460	0626235	-065958	H	3	28119	L	86040623	000000	000000	233000	000300		G C=3X,B=78
ISHJS	HD 46149	12	0760	0629128	+050411	H	1	08010	L	86041122	000000	000000	223200	002000		G C=200,B=52
SNHJS	HD 46149	12	0760	0629129	+050412	H	3	28200	L	86041923	000000	000000	232100	004400		G C=180,B=40
ISHJS	HD 46149	12	0760	0629129	+050412	H	3	28151	L	86041121	000000	000000	214100	004400		G C=187,B=55
SNHJS	HD 46149	12	0760	0629129	+050412	H	1	08072	L	86042000	000000	000000	001600	003400		G C=1.2X,B=50
SNHJS	HD 46223	15	0730	0629299	+045138	H	1	08065	L	86041900	000000	000000	001900	002600		G C=250,B=50
HA085	HD259431	26	0903	0630194	102138	L	1	07981	L	86040904	000000	000000	045241	000130	501	V
HA085	HD259431	26	0909	0630194	102138	H	3	28132	L	86040904	000000	000000	041847	025800	402	V
SNHJS	HD 46485	12	0830	0631120	+043354	H	1	08067	L	86043009	000000	000000	095800	009000		G C=255,B=39
SNHJS	HD 46485	12	0830	0631120	+043354	L	3	28197	L	86041915	000000	000000	151200	000230		G C=170,B=18
SNHJS	HD 46485	12	0830	0631120	+043354	L	1	08068	L	86041915	000000	000000	150600	000120		G C=2X,B=38

PRO	OBJECT	CL	MAG	R.A.	DEC	D	C	IMAGE	A	DATE	EXP.SMALL	EXP.LARGE	ECC	COMMENT
SNHJS	HD 46485	12	0830	0631120	+043354	H	3	28196	L	86041911	000000	000000	113400	018000		G C=215,B=63
HA146	N2251-1	20	0947	0631510	082343	L	3	27961	L	86032007	000000	000000	070555	000400	500	U
HA146	N2251-1	20	0944	0631510	082343	L	1	07840	L	86032007	000000	000000	075531	000140	501	U
SNHJS	HD 46660	20	0800	0632136	+110954	L	3	28199	L	86041920	000000	000000	203400	000215		G C=195,B=17
SNHJS	HD 46660	20	0800	0632136	+110954	H	1	08069	L	86041916	000000	000000	162100	008400		G C=1.2X,B=65
SNHJS	HD 46660	20	0800	0632136	+110954	H	3	28198	L	86041917	000000	000000	175000	013000		G C=190,B=60
SNHJS	HD 46660	20	0800	0632136	+110954	L	1	08070	L	86041920	000000	000000	202900	000115		G C=1.5X,B=35
SNHJS	HD 46883	20	0780	0633230	+101937	H	1	08071	L	86041921	000000	000000	212500	010200		G C=1.5X,B=60
SNHJS	HD 46966	12	0690	0633451	+060732	L	1	08062	L	86041820	000000	000000	204700	000008		G C=1.5X,B=35
OSHCG	HD 46966	12	0680	0633451	+060732	H	3	27918	L	86031520	000000	000000	202700	000900		G C=162,B=34
SNHJS	HD 46966	12	0690	0633451	+060732	H	1	08061	L	86041819	000000	000000	190500	000900		G C=245,B=50
OSHCG	HD 46966	12	0680	0633451	+060732	H	3	27934	L	86031721	000000	000000	213500	001230		G C=220,B=40
SNHJS	HD 46966	12	0690	0633451	+060732	H	3	28191	L	86041819	000000	000000	194100	001000		G C=182,B=35
SNHJS	HD 46966	12	0690	0633451	+060732	L	3	28192	L	86041820	000000	000000	204200	000009		G C=190,B=16
SNHJS	HD 47088	23	0760	0634297	+060609	L	1	08020	L	86041319	000000	000000	194200	000017		G C=1.3X,B=32
SNHJS	HD 47088	23	0760	0634297	+060609	H	3	28162	L	86041318	000000	000000	182800	002400		G C=190,B=38
SNHJS	HD 47088	23	0760	0634297	+060609	H	1	08019	L	86041318	000000	000000	180100	001900		G C=250,B=50
SNHJS	HD 47088	23	0760	0634297	+060609	L	3	28163	L	86041319	000000	000000	194600	000022		G C=230,B=15
SNHJS	HD 47107	23	0800	0634339	+055058	H	1	08021	L	86041320	000000	000000	203400	002400		G C=227,B=55
SNHJS	HD 47107	23	0800	0634339	+055058	L	3	28165	L	86041322	000000	000000	222100	000027		G C=176,B=14
SNHJS	HD 47107	23	0800	0634339	+055058	L	1	08022	L	86041322	000000	000000	221200	000020		G C=210,B=32
SNHJS	HD 47107	23	0800	0634339	+055058	H	3	28164	L	86041321	000000	000000	211000	003000		G C=107,B=46
SNHJS	HD 47382	23	0710	0635495	+043908	L	3	28194	L	86041823	000000	000000	233700	000031		G C=180,B=17
SNHJS	HD 47382	23	0710	0635495	+043908	H	3	28193	L	86041822	000000	000000	223000	003400		G C=190,B=40
SNHJS	HD 47382	23	0710	0635495	+043908	H	1	08063	L	86041821	000000	000000	215200	002400		G C=1.2X,B=60
SNHJS	HD 47382	23	0710	0635495	+043908	L	1	08064	L	86041823	000000	000000	234000	000022		G C=1.5X,B=35
SNHJS	HD 47417	20	0690	0636062	+065650	H	1	08023	L	86041323	000000	000000	232300	000900		G C=215,B=45
SNHJS	HD 47417	20	0690	0636062	+065650	H	3	28166	L	86041323	000000	000000	235500	001000		G C=138,B=29
SNHJS	HD 47417	20	0690	0636062	+065650	L	1	08024	L	86041400	000000	000000	003000	000008		G C=230,B=34
SNHJS	HD 47417	20	0690	0636062	+065650	H	3	28190	L	86041818	000000	000000	183000	001500		G C=180,B=35
SNHJS	HD 47417	20	0690	0636062	+065650	L	3	28189	L	86041818	000000	000000	180000	000009		G C=110,B=18
OSHCG	HD 47839	12	0460	0638134	+095636	H	3	27993	L	86032222	000000	000000	224300	000045		G C=238,B=40
OSHCG	HD 47839	12	0460	0638135	+095637	H	3	27935	L	86031722	000000	000000	222500	000043		G C=220,B=40
OSHCG	HD 47839	12	0460	0638135	+095637	H	3	27977	L	86032123	000000	000000	231700	000045		G C=225,B=40
OSHCG	HD 47839	12	0460	0638135	+095637	H	3	27964	L	86032020	000000	000000	205800	000045		G C=230,B=40
OSHCG	HD 47839	12	0460	0638135	+095637	H	3	27919	L	86031521	000000	000000	211900	000040		G C=215,B=38
HI022	BT MON	55	1500	0641159	-015806	L	3	27732	L	86021704	000000	000000	042319	037400	332	U
HI022	BT MON	55	1500	0641159	-015806	L	1	07668	L	86021604	000000	000000	043149	035600	335	U
BIHTS	HD 48917	26	0520	0642341	-310104	H	3	28108	L	86040523	000000	000000	232800	000423		G C=2X,B=49
SNHRF	HD 49798	16	0860	0646347	-441532	L	3	27582	L	86012421	000000	000000	214200	000008		G C=210,B=15
SNHRF	HD 49798	16	0860	0646347	-441532	L	1	07561	L	86012421	000000	000000	214600	000010		G C=250,B=35
BIHTS	HD 50123	26	0570	0648299	-313848	H	3	28109	L	86040600	000000	000000	001100	000600		G C=140,B=29
BIHTS	HD 50123	26	0570	0648299	-313848	H	3	28118	L	86040622	000000	000000	224000	000730		G C=160,B=35
HA146	N2301-4	22	0891	0649029	002946	L	1	07832	L	86031904	000000	000000	045243	000130	501	U
HA146	N2301-4	22	0891	0649029	002946	L	3	27948	L	86031904	000000	000000	044730	000300	400	U

PRO	OBJECT	CL	MAG	R.A.	DEC	D	C	IMAGE	A	DATE	EXP.SMALL	EXP.LARGE	ECC	COMMENT
HA146	N2301-8	22	0937	0649069	002415	L	1	07837	L	86032003	000000	000000	034405	000300 501 V
HA146	N2301-2	22	0851	0649069	002646	L	3	27947	L	86031903	000000	000000	034535	000130 400 V
HA146	N2301-2	22	0851	0649069	002646	L	1	07831	L	86031903	000000	000000	035101	000045 501 V
HA146	N2301-8	22	0942	0649070	002416	L	3	27949	L	86031905	000000	000000	052009	000600 400 V
HA146	N2301-7	22	0935	0649120	003337	L	1	07838	L	86032004	000000	000000	042624	000140 501 V
HA146	N2301-7	22	0937	0649120	003337	L	3	27959	L	86032004	000000	000000	043744	000230 400 V
HA146	N2301-6	22	0923	0649130	003237	L	1	07839	L	86032006	000000	000000	063041	000140 501 V
HA146	N2301-6	22	0923	0649130	003237	L	3	27960	L	86032005	000000	000000	054230	000300 400 V RED GIANT AT 20"
MLHTS	HD 50707	23	0480	0651231	-200940	H	3	27758	L	86022023	000000	000000	235800	000120 G C=250,B=40
MLHTS	HD 50707	23	0480	0651231	-200940	H	3	27664	L	86020600	000000	000000	001100	000137 G C=1.5X,B=43
HM153	S285-6	20	1157	0652442	-002946	L	3	28053	L	86033003	000000	000000	035531	012000 901 V
HM153	S285-6	20	1158	0652442	-002946	L	3	28065	L	86033104	000000	000000	042645	008000 901 V
HM153	S285-6	20	1155	0652442	-002946	L	1	07914	LS	86033006	060112	002000	062640	004000 504 V 704$
MLHTS	HD 52918	23	0500	0700257	-040955	H	3	27665	L	86020600	000000	000000	005000	000223 G C=1.5X,B=45
MLHTS	HD 52918	23	0500	0700257	-040955	H	3	27757	L	86022023	000000	000000	231600	000223 G C=1.5X,B=45
DCHDM	HD 52973	53	0390	0701086	+203843	H	1	08035	L	86041520	000000	000000	200700	004800 G E=185,C=2X,B=62
OSHCG	HD 53755	20	0650	0702199	-103458	H	3	27974	L	86032120	000000	000000	205700	000945 G C=200,B=36
OSHCG	HD 53975	12	0650	0704161	-121855	H	3	27921	L	86031523	000000	000000	230200	000530 G C=199,B=37
OSHCG	HD 53975	12	0650	0704162	-121856	H	3	27936	L	86031723	000000	000000	230600	000630 G C=205,B=45
BIHTS	HD 54309	26	0570	0705171	-234540	H	3	28107	L	86040522	000000	000000	224200	000750 G C=2X,B=55
NGHMF	00 S301	72	0000	0707413	-182622	L	3	27799	L	86022616	000000	000000	161300	012500 G B=114
HSHRD	00 HQ MON	66	1420	0708590	+005720	L	3	27753	L	86022017	000000	000000	172500	005000 G C=200,B=20
HSHRD	00 HQ MON	66	1420	0708590	+005720	L	1	07692	L	86022016	000000	000000	164200	003500 G C=214,B=40
SRHLW	00 L2 PUP	51	0400	0712007	-443326	L	1	07465	L	86010803	000000	000000	033100	002000 G C=145,B=60
SRHLW	00 L2 PUP	51	0400	0712007	-443326	L	1	07681	L	86021901	000000	000000	010300	004500 G C=250,B=130
SRHLW	00 L2 PUP	51	0400	0712007	-443326	L	1	07970	L	86040723	000000	000000	230400	001500 G E=78,C=57,B=40
SRHLW	00 L2 PUP	51	0400	0712007	-443326	L	1	07434	L	86010123	000000	000000	235500	002000 G E=145,C=93,B=40
SRHLW	00 L2 PUP	51	0400	0712007	-443326	L	1	07435	L	86010201	000000	000000	010200	003500 G E=200,C=140,B=50
SRHLW	00 L2 PUP	51	0400	0712007	-443326	L	1	07808	L	86031702	000000	000000	022800	001200 G E=193,C=46,B=35
ISHFB	HD 56537	33	0360	0715131	+163755	H	1	07916	S	86033011	113000	000500	000000	000000 G C=197,B=39
GI110	BX MON	57	1081	0722529	-032951	L	1	07724	L	86022607	000000	000000	075550	004000 663 V
GI110	BX MON	57	1079	0722529	-032951	L	3	27797	L	86022608	000000	000000	084235	006000 301 V
BIHTS	HD 58715	26	0290	0724263	+082329	H	3	28105	L	86040521	000000	000000	210100	000156 G C=2X,B=53
MLHCW	HD 58978	26	0550	0724521	-225902	H	3	27488	L	86011006	000000	000000	064100	000400 G C=1.5X,B=45
MLHCW	HD 58978	26	0550	0724521	-225902	H	3	27504	L	86011105	000000	000000	050900	000240 G C=205,B=40
MLHCW	HD 58978	26	0550	0724521	-225902	H	3	27484	L	86011002	000000	000000	023000	000240 G C=210,B=36
MLHCW	HD 58978	26	0550	0724521	-225902	H	3	27499	L	86011100	000000	000000	001100	000240 G C=215,B=37
MLHCW	HD 58978	26	0550	0724522	-225903	H	3	27459	L	86010601	000000	000000	015600	000200 G C=220,B=45
MLHCW	HD 58978	26	0550	0724522	-225903	H	3	27479	L	86010920	000000	000000	204000	000240 G C=205,B=37
MLHCW	HD 58978	26	0550	0724522	-225903	H	3	27496	L	86011020	000000	000000	205100	000240 G C=215,B=38
PNHTB	NG 2392	71	0970	0726130	+210101	L	3	27776	S	86022319	195300	007500	000000	000000 G E=188,C=135,B=78
PNHTB	NG 2392	71	9999	0726131	+210039	L	1	07706	SL	86022214	140800	012000	140900	012000 G C=90,B=62
PNHTB	NG 2392	71	9999	0726131	+210039	L	3	27771	S	86022211	115400	012000	000000	000000 G E=161,B=40
PNHTB	NG 2392	71	9999	0726132	+210107	L	3	27772	S	86022216	162200	012000	000000	000000 G E=137,C=80,B=62
PNHTB	NG 2392	71	0970	0726132	+210100	L	3	27768	S	86022120	202400	014000	000000	000000 G C=6.5X,B=60

PRO	OBJECT	CL	MAG	R.A.	DEC	D	C	IMAGE	A	DATE	EXP.SMALL	EXP.LARGE	ECC	COMMENT
PNHTB	NG	2392	71	9999	0726132	+210046	L	1	07712	SL	86022312	120900	015000	121000	015000	G E=123,C=88,B=80
PNHTB	NG	2392	71	9999	0726132	+210046	L	3	27775	SL	86022314	145500	015000	145600	015000	G E=194,B=75
PNHTB	NG	2392	71	0970	0726133	+210057	L	1	07707	S	86022218	183600	012000	000000	000000	G E=178,C=160,B=118
PNHTB	NG	2392	71	0970	0726133	+210057	L	3	27773	S	86022221	211200	008300	000000	000000	G E=165,C=76,B=55
PNHTB	NG	2392	71	0970	0726133	+210057	L	1	07699	SL	86022119	200100	000200	195100	000100	G C=185,B=35
PNHTB	NG	2392	71	0970	0726133	+210057	L	1	07713	S	86022317	174300	012000	000000	000000	G E=228,C=215,B=170
PNHTB	NG	2392	71	0970	0726133	+210057	L	3	27774	S	86022300	000800	002500	000000	000000	G E=97,C=75,B=58
PNHTB	NG	2392	71	0970	0726133	+210057	L	1	07708	S	86022223	231400	004000	000000	000000	G E=87,C=100,B=65
HSHRD	000728+053	19	1590	0728350	+053013	L	3	27752	L	86022012	000000	000000	120900	024000	G C=210,B=50
DMHJR	00	YY GEM	48	0920	0731255	+315844	L	3	27750	L	86022000	000000	000000	003300	007000	G E=119,B=93
DMHJR	00	YY GEM	48	0920	0731262	+315849	L	1	07691	L	86021923	000000	000000	235900	000800	G E=171,B=43
DMHJR	00	YY GEM	48	0920	0731262	+315849	L	3	27749	L	86021922	000000	000000	225000	006000	G E=79,B=50
DMHJR	00	YY GEM	48	0920	0731262	+315849	L	1	07690	L	86021922	000000	000000	221900	000800	G E=193,B=38
DMHJR	00	YY GEM	48	0920	0731262	+315849	L	3	27748	L	86021921	000000	000000	211200	006000	G E=62,B=39
DMHJR	00	YY GEM	48	0920	0731262	+315849	L	1	07689	L	86021920	000000	000000	204100	000800	G E=209,B=38
DMHJR	00	YY GEM	48	0920	0731262	+315849	L	3	27747	L	86021919	000000	000000	191900	006000	G E=92,B=40
DMHJR	00	YY GEM	48	0920	0731262	+315849	L	1	07688	L	86021918	000000	000000	184900	000800	G E=157,B=38
DMHJR	00	YY GEM	48	0920	0731262	+315849	L	3	27746	L	86021917	000000	000000	173800	006000	G E=58,B=39
DMHJR	00	YY GEM	48	0920	0731262	+315849	L	1	07687	L	86021917	000000	000000	170900	000800	G E=202,C=57,B=32
DMHJR	00	YY GEM	48	0920	0731262	+315849	L	3	27745	L	86021915	000000	000000	155800	006000	G E=63,B=25
DMHJR	00	YY GEM	48	0920	0731262	+315849	L	1	07686	L	86021915	000000	000000	152700	000700	G E=191,C=50,B=32
DMHJR	00	YY GEM	48	0920	0731262	+315849	L	3	27767	L	86022117	000000	000000	174900	005500	G C=60,B=40
DMHJR	00	YY GEM	48	0920	0731262	+315849	L	3	27766	L	86022116	000000	000000	163200	005000	G E=40,B=38
DMHJR	00	YY GEM	48	0920	0731262	+315849	L	3	27744	L	86021914	000000	000000	141700	006000	G E=71,B=25
DMHJR	00	YY GEM	48	0920	0731262	+315849	L	3	27765	L	86022115	000000	000000	150200	006000	G E=58,B=35
DMHJR	00	YY GEM	48	0920	0731262	+315849	L	1	07685	L	86021913	000000	000000	133600	001500	G E=1.5X,C=74,B=35
DMHJR	00	YY GEM	48	0920	0731262	+315849	L	1	07698	L	86022114	000000	000000	143000	000800	G E=204,B=35
DMHJR	00	YY GEM	48	0920	0731262	+315849	L	3	27764	L	86022113	000000	000000	132200	006000	G E=71,B=32
DMHJR	00	YY GEM	48	0920	0731262	+315849	L	3	27763	L	86022111	000000	000000	115000	006000	G E=57,B=32
DMHJR	00	YY GEM	48	0920	0731262	+315849	L	3	27743	L	86021912	000000	000000	122700	006000	G E=54,B=25
OBHJS	HD	60479	13	0841	0731331	-275204	L	3	28159	L	86041221	000000	000000	213500	000600	G C=227,B=16
HM029	HD60532		41	0483	0731549	-221115	H	1	07474	L	86011108	000000	000000	085939	001800	601 V
PHCAL	HD60753		21	0678	0732080	-502829	L	1	08057	L	86041806	000000	000000	060003	000005	302 V TRAIL R=3.90
PHCAL	HD60753		21	0673	0732080	-502829	L	1	08053	L	86041804	000000	000000	042251	000041	503 V TRAIL R=0.49
PHCAL	00	WAVECAL	98	0000	0732080	-502828	L	2	17872	S	86030920	201200	000001	000000	000000	G E=20X,B=70
PHCAL	HD60753		21	0670	0732080	-502829	L	1	08054	L	86041805	000000	000000	050123	000026	503 V TRAIL R=0.78
PHCAL	HD60753		21	0679	0732080	-502829	L	1	08058	L	86041807	000000	000000	071506	000019	402 V TRAIL R=1.04
PHCAL	HD60753		21	0682	0732080	-502829	L	1	08059	L	86041808	000000	000000	080022	000021	502 V TRAIL R=0.78
PHCAL	00	WAVECAL	98	0000	0732080	-502828	H	2	17873	S	86030920	204000	000016	000000	000000	G E=50X,B=107
PHCAL	HD60753		21	0668	0732080	-502829	L	1	08056	L	86041805	000000	000000	055836	000015	402 V TRAIL R=1.30
PHCAL	HD60753		21	0684	0732080	-502829	L	1	08050	L	86041802	000000	000000	023720	000026	502 V TRAIL R=0.78
PHCAL	HD60753		21	0680	0732080	-502829	L	1	08060	L	86041808	000000	000000	084023	000005	302 V TRAIL R=3.90
PHCAL	HD60753		21	9999	0732080	-502829	L	1	08051	L	86041803	000000	000000	031650	000010	302 V TRAIL R=1.95
PHCAL	00	WAVECAL	98	0000	0732080	-502828	H	2	17849	S	86010106	061200	000016	000000	000000	G E=60X,B=136
PHCAL	HD60753		21	0674	0732080	-502829	L	1	08052	L	86041803	000000	000000	034925	000031	503 V TRAIL R=0.65

PRO	OBJECT	CL	MAG	R.A.	DEC	D	C	IMAGE	A	DATE	EXP.SMALL	EXP.LARGE	ECC	COMMENT
PHCAL	OO WAVECAL	98	0000	0732080	-502828	L	2	17848	S	86010105	054600	000001	000000	G E=10X,B=87
PHCAL	OO NULL	21	0000	0732081	-502829	L	3	27644	L	86020103	000000	000000	032900	G B=16
PHCAL	OO TFLOOD	99	0000	0732081	-502829	L	3	27645	L	86020104	000000	000000	040100	G B=99
PHCAL	OO TFLOOD	99	0000	0732081	-502829	L	3	27646	L	86020104	000000	000000	043000	G B=1X
PHCAL	HD 60753	21	0670	0732081	-502829	L	2	17874	L	86030921	000000	000000	211600	G C=147,B=21
PHCAL	HD 60753	21	0670	0732081	-502829	L	1	07591	L	86012906	000000	000000	063500	G C=205,B=35
PHCAL	HD 60753	21	0670	0732081	-502829	L	2	17847	SL	86010105	051700	000029	051200	G C=158,B=25
PHCAL	HD 60753	21	0670	0732081	-502829	L	2	17857	L	86012206	000000	000000	062900	G C=180,B=22
PHCAL	HD 60753	21	0670	0732081	-502829	L	3	27643	L	86020103	000000	000000	030100	G C=150,B=17
PHCAL	HD 60753	21	0670	0732081	-502829	L	1	07629	L	86020421	000000	000000	215900	G C=195,B=35
PHCAL	HD 60753	21	0670	0732081	-502829	L	2	17866	L	86013005	000000	000000	052400	G C=188,B=22
PHCAL	HD 60753	21	0670	0732081	-502829	L	2	17865	SL	86013004	045000	000029	043700	G C=162,B=22
PHCAL	HD 60753	21	0670	0732081	-502829	L	3	27629	L	86012906	000000	000000	062900	G C=1.5X,B=17
PHCAL	HD 60753	21	0670	0732081	-502829	L	3	27659	L	86020421	000000	000000	214400	G C=197,B=18
AGHAB	OO MRK 9	84	1460	0732421	+585256	L	3	27916	L	86031513	000000	000000	134400	G E=254,C=140,B=70
AGHAB	OOMRK 9	84	1460	0732421	+585256	L	1	07875	L	86032512	000000	000000	124500	G C=3X,B=211
AGHAB	OOMRK 9	84	1460	0732422	+585256	L	3	28037	L	86032715	000000	000000	150400	G E=156,C=120,B=82
AGHAB	OOMRK 9	84	1460	0732422	+585256	L	1	07891	L	86032711	000000	000000	115100	G E=213,C=168,B=75
OSHCG	HD 60848	12	0680	0734133	+170101	H	3	27976	L	86032122	000000	000000	223700	G C=240,B=42
OSHCG	HD 60848	14	0680	0734133	+170101	H	3	27995	L	86032223	000000	000000	235300	G C=254,B=55
OSHCG	HD 60848	12	0680	0734133	+170101	H	3	27989	L	86032219	000000	000000	193800	G C=243,B=45
OSHCG	HD 60848	14	0680	0734134	+170102	H	3	27917	L	86031519	000000	000000	193300	G C-255,B=42
OSHCG	HD 60848	12	0680	0734134	+170102	H	3	28029	L	86032523	000000	000000	230900	G C=1.5X,B=86
HA169	HD60848	14	0704	0734134	170102	H	3	28002	L	86032306	000000	000000	064319	000800 501 V
HA169	HD60848	14	0704	0734134	170102	H	3	27981	L	86032203	000000	000000	031118	000800 501 V
HA169	HD60848	14	0687	0734134	170102	H	3	27986	L	86032208	000000	000000	084137	000800 500 V
OSHCG	HD 60848	12	0680	0734134	+170102	H	3	27965	L	86032021	000000	000000	213800	000800 G C=245,B=45
OSHCG	HD 60848	12	0680	0734134	+170102	H	3	27933	L	86031720	000000	000000	205200	000800 G C=245,B=42
PHCAL	CD-31 4800	16	1050	0734344	-320546	L	1	08120	L	86042821	000000	000000	212600	000410 G C=198,B=35
PHCAL	OO WAVECAL	98	0000	0736393	+052039	H	1	07732	S	86030100	004600	000016	000000	000000 G E=60X,B=114
PHCAL	OO WAVECAL	98	0000	0736393	+052039	L	1	07731	S	86030100	001500	000001	000000	000000 G E=10X,B=101
FEHTA	HD 61421	41	0040	0736393	+052039	L	3	27754	L	86022019	000000	000000	192300	001000 G C=20X,B=105
FEHTA	HD 61421	41	0040	0736393	+052039	L	3	27837	L	86030322	000000	000000	221000	001003 G E=242,C=20X,B=59
FEHTA	HD 61421	41	0038	0736393	+052039	L	3	27726	L	86021522	000000	000000	221000	001003 G E=226,C=20X,B=46
FEHTA	HD 61421	41	0038	0736393	+052039	L	3	27727	L	86021523	000000	000000	230900	001003 G E=234,C=20X,B=47
FEHTA	HD 61421	41	0040	0736393	+052039	L	3	27789	L	86022501	000000	000000	013300	000320 G E=202,C=5X,B=90
FEHTA	HD 61421	41	0040	0736393	+052039	L	3	27736	L	86021801	000000	000000	011700	001000 G E=224,C=20X,B=49
FEHTA	HD 61421	41	0040	0736393	+052039	L	3	27731	L	86021622	000000	000000	222300	000320 G E=227,C=20X,B=62
PHCAL	OO WAVECAL	98	0000	0736393	+052039	L	3	27816	S	86022823	231700	000002	000000	000000 G E=10X,B=103
PHCAL	OO WAVECAL	98	0000	0736393	+052039	H	3	27817	S	86022823	234800	000200	000000	000000 G E=60X,B=135
PHCAL	OO WAVECAL	98	9999	0736393	+052039	H	2	17869	S	86021302	021600	000022	000000	000000 G E=60X,B=133
FEHTA	HD 61421	41	0040	0736394	+052040	L	3	27730	L	86021621	000000	000000	212800	001000 G E=244,C=20X,B=55
FEHTA	HD 61421	41	0040	0736394	+052040	L	3	27845	L	86030421	000000	000000	210000	001003 G E=225,C=20X,B=97
PHCAL	OO WAVECAL	98	9999	0736394	+052040	L	2	17868	S	86021301	014800	000001	000000	000000 G E=20X,B=87
FEHTA	HD 61421	41	0040	0736394	+052040	L	3	27846	L	86030422	000000	000000	220700	000323 G E=241,C=20X,B=92

PRO	OBJECT	CL	MAG	R.A.	DEC	D	C	IMAGE	A	DATE	EXP.SMALL	EXP.LARGE	ECC	COMMENT
FEHTA	HD 61421	41	0040	0736394	+052040	L	3	27815	L	86022822	000000	000000	222400	000323		G E=236,C=20X,B=87
FEHTA	HD 61421	41	0040	0736394	+052040	L	3	27770	L	86022200	000000	000000	003800	001000		G E=226,C=20X,B=110
PHCAL	OO NULL	99	9999	0736394	+052040	L	2	17867	L	86021301	000000	000000	011300	000000		G B=32
FEHTA	HD 61421	41	0040	0736394	+052040	L	3	27707	L	86021300	000000	000000	004000	000320		G E=184,C=20X,B=34
FEHTA	HD 61421	41	0040	0736394	+052040	L	3	27712	L	86021401	000000	000000	012300	001003		G E=219,C=20X,B=45
FEHTA	HD 61421	41	0040	0736394	+052040	L	3	27702	L	86021204	000000	000000	041000	001003		G E=226,C=20X,B=60
FEHTA	HD 61421	41	0040	0736394	+052040	L	3	27814	L	86022821	000000	000000	210700	001003		G E=240,C=20X,B=90
FEHTA	HD 61421	41	0040	0736394	+052040	L	3	27836	L	86030321	000000	000000	210300	001003		G E=237,C=20X,B=65
FEHTA	HD 61421	41	0040	0736394	+052040	L	3	27695	L	86021023	000000	000000	231300	001003		G E=230,C=20X,B=75
FEHTA	HD 61421	41	0040	0736394	+052040	L	3	27808	L	86022721	000000	000000	213200	001003		G E=240,C=20X,B=87
FEHTA	HD 61421	41	0040	0736394	+052040	L	3	27803	L	86022700	000000	000000	005900	000321		G E=225,C=20X,B=60
FEHTA	HD 61421	41	0040	0736394	+052040	L	3	27694	L	86021022	000000	000000	220000	001003		G E=222,C20X,B-70
FEHTA	HD 61421	41	0040	0736394	+052040	L	3	27861	L	86030700	000000	000000	003600	001003		G E=229,C=20X,B=70
FEHTA	HD 61421	41	0040	0736394	+052040	L	3	27856	L	86030600	000000	000000	005000	001002		G E=240,C=20X,B=58
FEHTA	HD 61421	41	0040	0736394	+052040	L	3	27719	L	86021503	000000	000000	031300	001003		G E=204,C=20X,B=45
FEHTA	HD 61421	41	0040	0736394	+052040	L	3	27720	L	86021504	000000	000000	041300	001003		G E=231,C=20X,B=50
HC009	HD62001	30	0841	0739009	-185234	H	3	27679	L	86020705	000000	000000	055047	018500	302	U
PNHTB	NG 2440	71	1140	0739415	-180526	L	3	27778	S	86022401	011000	002000	000000	000000		G E=200,B=160
HA175	HD 62910	11	1040	0743017	-314710	H	3	27473	L	86010908	000000	000000	081932	036000	333	U
LGHBP	HD 64332	50	0810	0750436	-112939	L	3	27676	L	86020621	000000	000000	214400	020000		G B=60
HA169	HD66811	15	0224	0801494	-395140	H	3	27569	L	86012309	000000	000000	093035	000004	501	U
HA169	HD66811	15	0226	0801494	-395140	H	3	27565	L	86012307	000000	000000	073048	000004	501	U
HA169	HD66811	15	0224	0801494	-395140	H	3	27566	L	86012308	000000	000000	080146	000004	501	U
HA169	HD66811	15	0224	0801494	-395140	H	3	27568	L	86012309	000000	000000	090224	000004	501	U
HA169	HD66811	15	0223	0801494	-395140	H	3	27567	L	86012308	000000	000000	083108	000004	501	U
HA169	HD66811	15	0224	0801495	-395141	H	3	27570	L	86012310	000000	000000	101120	000004	501	U
HA169	HD66811	15	0218	0801496	-395141	H	3	27602	L	86012608	000000	000000	084940	000004	501	U
HA169	HD66811	15	0229	0801496	-395141	H	3	27600	L	86012607	000000	000000	074931	000004	501	U
HA169	HD66811	15	0218	0801496	-395141	H	3	27605	L	86012610	000000	000000	101723	000004	501	U
HA169	HD66811	15	0226	0801496	-395141	H	3	27601	L	86012608	000000	000000	081538	000004	501	U
HA169	HD66811	15	0222	0801496	-395141	H	3	27604	L	86012609	000000	000000	094130	000004	501	U
HA169	HD66811	15	0221	0801496	-395141	H	3	27603	L	86012609	000000	000000	091643	000004	501	U
MLHCW	HD 67536	26	0630	0804000	-624132	H	3	27491	L	86011015	000000	000000	153600	001000		G C=239,B=42
MLHCW	HD 67536	26	0630	0804000	-624132	H	3	27503	L	86011104	000000	000000	041700	000810		G C=220,B=47
MLHCW	HD 67536	26	0630	0804003	-624132	H	3	27476	L	86010917	000000	000000	175500	000810		G C=205,B=38
MLHCW	HD 67536	26	0630	0804003	-624132	H	3	27457	L	86010523	000000	000000	235500	000810		G C=225,B=55
XQHME	PG0804+761	85	1490	0804354	+761132	L	3	27640	L	86013121	000000	000000	212100	004500		G E=148,C=151,B=123
XQHME	PG0804+761	85	1490	0804354	+761132	L	1	07604	L	86013120	000000	000000	203400	004000		G C=214,B=167
XQHME	PG0804+761	85	1490	0804354	+761132	L	3	27639	L	86013119	000000	000000	191000	007500		G E=215,C=190,B=150
PHCAL	BD+75325	16	0954	0804430	750648	L	1	07924	L	86033109	000000	000000	092840	000020	502	U
PHCAL	BD+75 325	16	0969	0804430	750648	L	1	07736	LS	86030210	104135	000100	103724	000020	613	U 513$
PHCAL	BD+75 325	16	0957	0804430	750648	L	3	27825	LS	86030209	094149	000042	093738	000014	510	U 510$
PHCAL	BD+75325	16	0954	0804430	750648	L	3	28067	L	86033109	000000	000000	093147	000014	500	U
QSHDY	BD +75 325	16	0950	0804431	+750647	L	3	27438	L	86010302	000000	000000	022600	000013		G C=152,B=17
QSHDY	BD +75 325	16	0950	0804431	+750647	L	3	27439	L	86010302	000000	000000	025900	000013		G C=145,B=18

PRO	OBJECT	CL	MAG	R.A.	DEC	D	C	IMAGE	A	DATE	EXP.SMALL	EXP.LARGE	ECC	COMMENT
QSHDY	BD +75 325	16	0950	0804431	+750647	L	3	27441	L	86010306	000000	000000	061200	000013		G C=156,B=17
QSHDY	BD +75 325	16	0950	0804431	+750647	L	1	07447	L	86010306	000000	000000	060600	000020		G C=180,B=36
QSHDY	BD +75 325	16	0950	0804431	+750647	L	1	07443	L	86010301	000000	000000	015600	000000		G C=4.0X,B=50
QSHDY	BD +75 325	16	0950	0804431	+750647	L	1	07445	L	86010304	000000	000000	042300	000020		G C=175,B=40
QSHDY	BD +75 325	16	0950	0804431	+750647	L	1	07444	L	86010303	000000	000000	035000	000020		G C=172,B=40
QSHDY	BD +75 325	16	0950	0804431	+750647	L	1	07446	L	86010305	000000	000000	050300	000020		G C=180,B=40
QSHDY	BD +75 325	16	0950	0804431	+750647	L	3	27440	L	86010305	000000	000000	050800	000013		G C=150,B=18
QSHDY	BD +75 325	16	0950	0804431	+750647	L	1	07441	L	86010222	000000	000000	224800	000020		G C=195,B=35
QSHDY	BD +75 325	16	0950	0804431	+750647	L	3	27436	L	86010222	000000	000000	225400	000013		G C=160,B=17
QSHDY	BD +75 325	16	0950	0804431	+750647	L	3	27437	L	86010223	000000	000000	235800	000013		G C=155,B=17
QSHDY	BD +75 325	16	0950	0804431	+750647	L	1	07442	L	86010300	000000	000000	005700	000020		G C=188,B=35
PHCAL	BD+75 0325	16	0950	0804432	+750648	L	1	07601	L	86013106	000000	000000	061000	000140		G C=205,B=34
PHCAL	BD+75 0325	16	0950	0804432	+750648	L	3	27810	L	86022801	000000	000000	012700	000014		G C=180,B=17
LSTIM	BD+75 0325	16	0950	0804432	+750648	L	3	27788	L	86022500	000000	000000	005300	003021		G E=193,C=5X,B=65
PHCAL	BD+75 0325	16	0950	0804432	+750648	L	3	27546	L	86011900	000000	000000	004400	000014		G C=160,B=17
PHCAL	BD+75 0325	16	0950	0804432	+750648	L	1	07526	L	86011900	000000	000000	003800	000020		G C=183,B=35
PHCAL	BD+75 0325	16	0950	0804432	+750648	L	1	07651	L	86021104	000000	000000	043800	000020		G C=180,B=33
PHCAL	BD+75 0325	16	0950	0804432	+750648	L	2	17863	SL	86013002	024300	000138	023500	000033		G C=183,B=35
NEHJR	00 DQ HER	55	1450	0806046	+455107	L	1	07730	L	86022817	000000	000000	170900	008500		G B=160
HI210	SU UMA	54	1450	0808052	624522	L	1	07643	L	86020908	000000	000000	080138	006000	342	V
CVHJE	00 SU UMA	54	1400	0808052	+624522	L	1	07646	L	86020919	000000	000000	193100	004500		G E=173,C=108,B=43
CVHJE	00 SU UMA	54	1100	0808052	+624522	L	1	07641	L	86020821	000000	000000	212500	006000		G E=229,C=147,B=40
CVHJE	00 SU UMA	54	1400	0808052	+624522	L	3	27689	L	86020917	000000	000000	174300	009000		G E=170,C=80,B=40
CVHJE	00 SU UMA	54	1470	0808052	+624522	L	3	27691	L	86021001	000000	000000	011700	007500		G E=208,C=102,B=60
CVHJE	00 SU UMA	54	1400	0808052	+624522	L	1	07645	L	86020916	000000	000000	160500	009000		G E=1.5X,C=170,B=45
CVHJE	00 SU UMA	54	1470	0808052	+624522	L	1	07647	L	86020922	000000	000000	221700	007000		G E=244,C=146,B=45
CVHJE	00 SU UMA	54	1470	0808052	+624522	L	1	07648	L	86021002	000000	000000	024000	005500		G E=219,C=145,B=67
CVHJE	SU UMA	54	9999	0808052	+624522	L	3	27688	L	86020913	000000	000000	134700	012000		G E=190,C=80,B=30
CVHJE	00 SU UMA	54	1100	0808052	+624522	L	1	07644	L	86020912	000000	000000	120300	008000		G E=220,C=135,B=40
CVHJE	00 SU UMA	54	1500	0808052	+624522	L	1	07642	L	86020903	000000	000000	030600	009000		G E=185,C=130,B=45
CVHJE	00 SU UMA	54	1450	0808052	+624522	L	3	27690	L	86020920	000000	000000	203800	009000		G E=186,C=80,B=30
CVHJE	00 SU UMA	54	1100	0808052	+624522	L	1	07640	L	86020818	000000	000000	182900	009000		G E=2.0X,C=200,B=60
CVHJE	00 SU UMA	54	1470	0808052	+624522	L	3	27692	L	86021003	000000	000000	034500	006500		G E=156,C=64,B=25
CVHJE	00 SU UMA	54	1500	0808052	+624522	L	3	27685	L	86020900	000000	000000	003100	012000		G E=212,C=95,B=45
CVHJE	00 SU UMA	54	1500	0808052	+624522	L	3	27684	L	86020820	000000	000000	200800	006000		G E=154,C=65,B=20
HI210	SU UMA	54	1522	0808053	624523	L	3	27687	L	86020909	000000	000000	093115	014500	351	V
HI210	SU UMA	54	1508	0808053	624523	E	9	01763	L	86020908	000000	000000	080000	004000		V
HI210	SU UMA	54	1450	0808053	624523	L	3	27686	L	86020904	000000	000000	045430	018000	351	V
HI210	SU UMA	54	1550	0808055	624522	L	3	27682	L	86020809	000000	000000	091305	010000	341	V
HI210	SU UMA	54	1550	0808056	624523	L	1	07639	L	86020811	000000	000000	110206	005000	342	V
NEHJR	00 CP PUP	55	1500	0809520	-351202	L	3	27806	L	86022712	000000	000000	120300	030000		G E=182,C=165,B=96
NEHJR	00 CP PUP	55	1500	0809520	-351202	L	1	07728	L	86022717	000000	000000	172000	008500		G C=238,B=170
OBHJS	HD 69106	13	0714	0812119	-364758	H	1	08014	L	86041219	000000	000000	192400	000600		G C=197,B=44
OBHJS	HD 69106	13	0714	0812119	-364758	H	3	28158	L	86041219	000000	000000	193700	000930		G C=177,B=35
PHCAL	00 WAVECAL	98	0000	0812123	-315917	H	3	27642	S	86020101	020100	000200	000000	000000		G E=60X,B=159

PRO	OBJECT	CL	MAG	R.A.	DEC	D	C	IMAGE	A	DATE	EXP.SMALL	EXP.LARGE	ECC	COMMENT
PHCAL	00 WAVECAL	98	0000	0818167	-224555	H	1	07606	S	86020100	005100	000016	000000	G E=60X,B=112
PHCAL	00 WAVECAL	98	0000	0818167	-224555	L	1	07605	S	86020100	001500	000001	000000	G E=10X,B=103
PHCAL	00 WAVECAL	98	0000	0818167	-224555	L	3	27641	S	86020101	013600	000002	000000	G E=10X,B=102
CVHRP	00 Z CAM	54	1220	0819398	+731623	L	1	08009	L	86041120	000000	000000	201600	002400 G C=2X,B=47
CVHRP	00 Z CAM	54	1220	0819399	+731624	L	3	28149	L	86041117	000000	000000	174900	001918 G C=209,B=20
CVHRP	00 Z CAM	54	1220	0819399	+731624	L	3	28150	SL	86041119	190000	004000	195000	001800 G E=88,C=107,B=32
CVHRP	00 Z CAM	54	1220	0819399	+731624	L	1	08008	L	86041118	000000	000000	182400	001200 G E=244,C=208,B=37
OD88K	00 AS 201	70	1200	0829367	-273519	L	3	27900	L	86031122	000000	000000	223100	003000 G E=1.5X,B=32
HITOO	SW UMA	54	1114	0832566	533904	L	1	07754	LS	86030804	041121	000300	040357	000300 501 V 301$
HITOO	SW UMA	54	1094	0832586	-533904	L	3	27871	LS	86030804	044255	000330	043258	000330 500 V 300$
LGHSB	HD 73598	47	0660	0836587	+194306	H	1	07785	L	86031311	000000	000000	112400	018000 G E=108,C=180,B=58
LGHSB	HD 73665	47	0640	0837139	+201107	H	1	07786	L	86031315	000000	000000	150800	021000 G E=123,C=215,B=76
LGHSB	HD 73710	47	0640	0837300	+195053	H	1	07780	L	86031211	000000	000000	115000	018000 G E=139,C=180,B=65
LGHSB	HD 73974	47	0690	0838578	+200312	H	1	07781	L	86031216	000000	000000	160700	015200 G E=162,C=167,B=86
HC135	HD75416	22	0564	0843051	-784658	H	3	27532	L	86011512	000000	000000	123802	001100 410 V
HC135	HD75416	22	0572	0843051	-784658	H	3	27533	L	86011514	000000	000000	143425	001100 610 V
QSHMM	OOTON 951	85	1400	0844338	+345608	L	1	07652	L	86021119	000000	000000	191700	009000 G C=176,B=68
HA193	LDS235B	29	1550	0845129	-184844	L	3	27442	L	86010309	000000	000000	092804	030700 403 V
HA193	LDS 235B	29	1550	0845132	-184848	L	3	27434	L	86010208	000000	000000	081956	036000 303 V
HA193	LDS 235B	29	1550	0845132	-184848	L	3	27432	L	86010109	000000	000000	094006	029000 402 V
HA146	M67-F81	22	1032	0848260	115648	L	3	27943	L	86031807	000000	000000	073632	001100 500 V
HA146	M67-F81	22	0998	0848260	115648	L	1	07813	L	86031807	000000	000000	071427	000430 501 V
HA146	M67-F153	30	1165	0848420	115509	L	3	27951	L	86031908	000000	000000	082916	012107 501 V
HA146	M67-F153	30	1175	0848420	115509	L	1	07833	L	86031907	000000	000000	075132	003000 502 V
HA146	M67-F156	30	1128	0848430	120308	L	3	27944	L	86031808	000000	000000	084619	007500 401 V
HA146	M67-F156	30	1124	0848430	120308	L	1	07814	L	86031808	000000	000000	081422	002000 501 V
HA146	M67-F190	31	1134	0848500	120221	L	1	07841	L	86032009	000000	000000	095103	003500 502 V
ISHJS	HD 75821	23	0510	0848516	-462029	H	1	08012	L	86041200	000000	000000	003200	000047 G C=210,B=41
ISHJS	HD 75821	23	0510	0848516	-462029	H	3	28152	L	86041200	000000	000000	002300	000145 G C=1.2X,B=45
HA146	M67-F280	30	1109	0849260	115527	L	3	27950	L	86031906	000000	000000	062103	007500 501 V
HA146	M67-F280	30	1105	0849260	115527	L	1	07815	L	86031810	000000	000000	101523	001400 401 V
OBHJS	HD 76341	13	0716	0852113	-421741	H	3	28157	L	86041217	000000	000000	174200	006600 G C=216,B=50
HA218	GD 99	37	1460	0858407	361903	L	1	08030	L	86041505	000000	000000	053401	015600 404 V
HA218	GD 99	37	1460	0858407	361903	L	3	28173	L	86041502	000000	000000	021704	021000 302 V
CVHES	00 CBS 2	17	1500	0901453	+314453	L	3	28092	L	86040316	000000	000000	160400	004500 G C=160,B=22
SDHFW	PG0909+276	28	1230	0909550	+273303	L	1	07464	L	86010705	000000	000000	055300	000730 G C=220,B=25
SDHFW	PG0909+276	28	1230	0909550	+273303	L	3	27469	L	86010705	000000	000000	053900	000500 G C=180,B=18
HE100	NGC2798	80	1377	0914097	421240	L	3	28036	L	86032703	000000	000000	035449	004030 303 V
HE100	N2798 OFF	80	1377	0914130	421329	L	1	07890	L	86032704	000000	000000	042028	036400 007 V
AGHAB	OOMRK 704	84	1480	0915394	+163058	L	1	07965	L	86040614	000000	000000	143500	013500 G E=183,C=142,B=58
AGHAB	OOMRK 704	84	1480	0915394	+163058	L	1	07964	L	86040610	000000	000000	103400	021000 G E=224,C=170,B=65
AGHAB	OOMRK 704	84	1480	0915394	+163058	L	3	28101	L	86040510	000000	000000	101700	039000 G E=225,C=135,B=85
GA009	0917-073	84	0000	0917231	-072257	L	1	08111	L	86042702	000000	000000	025105	012000 303 V
EGHRD	00 I ZW 18	82	1600	0930300	+552749	F	9	01766	L	86030218	000000	000000	182900	016000 G NO COMMENTS
EGHRD	00 I ZW 18	82	0100	0930300	+552749	L	1	07737	L	86030219	000000	000000	191500	012000 G C=212,B=162

PRO	OBJECT	CL	MAG	R.A.	DEC	D	C	IMAGE	A	DATE	EXP.SMALL	EXP.LARGE	ECC	COMMENT
EGHRD	00 I ZW 18	82	0100	0930300	+552749	L	3	27826	L	86030212	000000	000000	120100	037500		G C=187,B=118
EGHRD	00 NULL	82	0100	0930300	+552749	L	3	27827	L	86030220	000000	000000	205500	000000		G B=19
EGHRD	00 T-FLOOD	99	9999	0930300	+552749	L	3	27828	L	86030222	000000	000000	220200	000009		G B=153
EGHRD	00 T-FLOOD	99	9999	0930300	+552749	L	3	27829	L	86030222	000000	000000	222600	000005		G B=100
EGHRD	00 T-FLOOD	99	9999	0930300	+552749	L	3	27822	L	86030119	000000	000000	190300	000003		G B=62
EGHRD	00 T-FLOOD	99	9999	0930300	+552749	L	3	27821	L	86030118	000000	000000	183900	000007		G B=133
EGHRD	00 NULL	99	9999	0930300	+552749	L	3	27820	L	86030118	000000	000000	181800	000000		G B=17
EGHRD	00 NULL	99	9999	0930300	+552749	L	3	27819	L	86030117	000000	000000	175500	000000		G B=18
EGHRD	00 I ZW 18	82	1600	0930300	+552749	L	3	27818	L	86030112	000000	000000	122900	030000		G C=140,B=93
EGHRD	00 I ZW 18	82	1600	0930300	+552749	L	3	27850	L	86030512	000000	000000	120500	050000		G C=243,B=165
EGHRD	00 T-FLOOD	99	9999	0930300	+552749	L	3	27853	L	86030521	000000	000000	214200	000010		G B=120
EGHRD	00 NULL	99	9999	0930300	+552749	L	3	27851	L	86030520	000000	000000	205700	000000		G B=19
EGHRD	00 I ZW 18	82	0000	0930300	+552749	L	3	27862	L	86030712	000000	000000	120200	040000		G C=165,B=105
EGHRD	00 T-FLOOD	99	9999	0930300	+552749	L	3	27852	L	86030521	000000	000000	212000	000005		G B=100
EGHRD	00 TFLOOD	99	9999	0930300	+552749	L	1	07752	L	86030617	000000	000000	174000	000025		G B=105
EGHRD	00 NULL	99	9999	0930300	+552749	L	1	07751	L	86030617	000000	000000	171000	000000		G B=36
EGHRD	00SKY BACK	07	9999	0930300	+552749	L	1	07750	L	86030612	000000	000000	125300	018000		G B=69
EGHRD	00 I ZW 18	82	1600	0930300	+552749	L	3	27859	L	86030612	000000	000000	122600	058500		G C=225,B=118
EGHRD	00 T-FLOOD	99	9999	0930300	+552749	L	3	27854	L	86030522	000000	000000	221400	000010		G B=175
EGHRD	00 I ZW 18	82	0000	0930303	+552746	L	1	07746	L	86030520	000000	000000	203100	012000		G C=120,B=85
SRHLW	00 R HOR	51	0700	0930591	-623400	L	1	07449	L	86010323	000000	000000	231900	002000		G E=255,B=90
SRHLW	00 R CAR	51	0780	0930592	-623401	L	1	07466	L	86010804	000000	000000	043700	002000		G E=192,C=140,B=82
SRHLW	00 R CAR	51	0500	0930592	-623401	L	1	07436	L	86010202	000000	000000	022400	004500		G E=1.5X,C=180,B=72
SRHLW	00 R CAR	51	0500	0930592	-623401	L	1	07806	L	86031700	000000	000000	000800	002000		G E=154,C=105,B=65
SRHLW	00 R CAR	51	0500	0930592	-623401	L	1	07450	L	86010400	000000	000000	003000	002000		G E=219,C=130,B=72
SDHFW	PG0934+186	28	1330	0934290	+183841	L	1	07463	L	86010703	000000	000000	034900	003500		G C=1.5X,B=55
SDHFW	PG0934+186	28	1330	0934291	+183842	L	3	27468	L	86010703	000000	000000	031500	002500		G C=1.2X,B=18
DCHDM	HD 84810	53	0430	0943524	-621637	H	1	08034	L	86041518	000000	000000	182700	005000		G E=209,C=255,B=50
SRHLW	00 R LEO	51	0750	0944521	+113941	L	1	08015	L	86041222	000000	000000	224100	000030		G E=103,C=60,B=32
SRHLW	00 R LEO	51	0521	0944522	+113942	L	1	07467	L	86010806	000000	000000	060200	002000		G E=200,C=58,B=40
SRHLW	00 R LEO	51	0740	0944522	+113942	L	1	07969	L	86040721	000000	000000	215500	001500		G E=2X,C=95,B=49
SRHLW	00 R LEO	51	0740	0944522	+113942	L	1	07971	L	86040800	000000	000000	001100	000400		G E=2X,C=53,B=35
RRHRB	HD 84937	40	0830	0946119	+135848	L	1	07943	L	86040210	000000	000000	105000	000200		G C=185,B=35
RRHRB	HD 84937	40	0830	0946119	+135848	L	3	28083	L	86040211	000000	000000	110100	002000		G C=180,B=25
RRHRB	HD 84937	40	0830	0946119	+135848	L	1	07944	L	86040211	000000	000000	114600	000400		G C=2X,B=35
RRHRB	HD 84937	40	0830	0946129	+135848	H	1	07946	L	86040216	000000	000000	165200	015000		G C=1.5X,B=140
RRHRB	HD 84937	40	0830	0946129	+135848	L	3	28085	L	86040219	000000	000000	192900	002500		G C=210,B=34
RRHRB	HD 84937	40	0830	0946129	+135848	H	1	07947	L	86040220	000000	000000	200400	005000		G C=182,B=104
QCHBW	Q1004+130	85	1570	1004449	130337	L	1	07497	L	86011408	000000	000000	080714	012000	211	V JUMP: EFFECTIVE T=10
QCHBW	Q1004+130	85	1570	1004450	130238	L	1	07498	L	86011411	000000	000000	114330	012500	111	V
QCHBW	Q1004+130	85	1570	1004450	130338	L	3	27517	L	86011208	000000	000000	082949	031500	336	V
PHCAL	00 WAVECAL	98	9999	1005427	+121244	H	1	07834	L	86031911	000000	000000	112500	000002		G E=30X,B=46
PHCAL	00 WAVECAL	98	9999	1005427	+121244	H	1	07835	L	86031912	000000	000000	120000	000002		G E=30X,B=44
QCHBW	Q 1007+417	85	1620	1007260	+414725	L	1	07489	L	86011316	000000	000000	161000	035500		G E=255,C=205,B=110
PHCAL	00SKY BKGD	07	9999	1007260	+414725	L	3	27524	S	86011317	171400	029000	000000	000000		G B=58

PRO	OBJECT	CL	MAG	R.A.	DEC	D	C	IMAGE	A	DATE	EXP.SMALL	EXP.LARGE	ECC	COMMENT
QCHBW	Q 1007+417	85	1620	1007260	+414725	L	3	27510	L	86011116	000000	000000	164900	028500		G E=225,C=138,B=87
HC230	S CAR	51	0696	1007461	-611813	L	1	07873	L	86032504	000000	000000	041103	002500	362	V
SRHLW	00 S CAR	51	0600	1007462	-611814	L	1	07807	L	86031701	000000	000000	011400	003000		G E=1.2X,C=173,B=43 *
HC230	S CAR	05	0698	1007462	-611814	H	1	07874	L	86032505	000000	000000	050830	032900	073	V
SRHLW	00 S CAR	51	0600	1007462	-611814	L	1	07451	L	86010401	000000	000000	013200	002000		G E=107,C=110,B=75
HC230	S CAR	51	0583	1007462	-611814	L	1	07725	L	86022610	000000	000000	102857	000900	402	V
HC230	S CAR	51	0823	1007462	-611814	L	1	08095	L	86042502	000000	000000	024249	004000	341	V
SRHLW	00 S CAR	51	0600	1007462	-611814	L	1	07437	L	86010203	000000	000000	035000	001500		G C=210,B=170
QSHRG	00 TON 34	85	1580	1017076	+275906	L	3	28188	L	86041810	000000	000000	101800	039000		G C=110,B=70
HE100	NGC 3256	80	1339	1025430	-433850	L	1	07899	L	86032804	000000	000000	044244	003350	114	V SERENDIPITY. TARGET
HE100	NGC 3256	80	1339	1025431	-433851	L	3	28041	L	86032804	000000	000000	041433	003820	302	V SERENDIPITY. TARGET
XQHME	00 1028+31	84	1670	1028098	+311821	L	3	28214	L	86042210	000000	000000	102200	037500		G E=216,C=151,B=87
HM029	HD991120	22	0582	1028323	-131952	H	1	07475	L	86011110	000000	000000	100701	001000	501	V
HM029	HD91120	22	0572	1028323	-131952	H	3	27507	L	86011109	000000	000000	090848	005000	701	V
OSHCG	HD 91316	23	0380	1030107	+093352	H	3	28025	L	86032519	000000	000000	191900	000043		G C=220,B=36
HA196	HD93308	61	0604	1043069	-592459	H	3	27739	L	86021810	000000	000000	100659	003000	360	V
HA196	HD93308	61	0604	1043069	-592459	H	1	07675	L	86021808	000000	000000	082503	001200	000	V 60% LOST....IN ANTEN
HA196	HD93308	61	0604	1043069	-592459	H	1	07676	L	86021809	000000	000000	093409	001200	562	V
HA196	HD93308	61	0605	1043069	-592459	H	3	27738	L	86021808	000000	000000	084257	004500	460	V
HA196	HD93308	61	0583	1043070	-592500	H	1	08096	L	86042504	000000	000000	042759	002500	712	V
HA196	HD93308	61	0593	1043070	-592500	H	3	28228	L	86042503	000000	000000	034609	003000	370	V
HA196	HD93308	61	0594	1043070	-592500	H	3	28230	L	86042608	000000	000000	080309	003000	370	V
PHCAL	OOSAFE REA	99	9999	1045335	+375003	L	2	17858	L	86012922	000000	000000	225900	000000		G B=12
PHCAL	HD 93521	12	0700	1045336	+375004	L	2	17855	L	86012204	000000	000000	043600	000003		G C=165,B=22
PHCAL	HD 93521	12	0700	1045336	+375004	L	1	08048	L	86041721	000000	000000	211900	000003		G C=185,B=35
PHCAL	HD 93521	12	0700	1045336	+375004	L	2	17861	L	86013000	000000	000000	005600	000004		G C=155,B=20
PHCAL	HD 93521	12	0700	1045336	+375004	L	3	28186	L	86041721	000000	000000	212400	000003		G C=180,B=17
PHCAL	HD 93521	12	0700	1045336	+375004	L	2	17846	SL	86010103	040200	000012	035700	000004		G C=165,B=27
PHCAL	HD 93521	12	0700	1045336	+375004	L	3	28095	L	86040400	000000	000000	003900	000003		G C=153,B=17
PHCAL	HD93521	12	0722	1045340	375004	L	3	28066	L	86033106	000000	000000	064954	000003	500	V
HQ117	NGC3393	84	1402	1046000	-245348	L	1	07602	L	86013108	000000	000000	080550	036100	336	V
PHCAL	HD93521	12	0722	1047340	375004	L	1	07922	L	86033106	000000	000000	065400	000003	502	V
HE109	ABELL 1126	81	1400	1051106	170701	L	3	27470	L	86010708	000000	000000	081047	039600	113	V
CVHES	00 CBS 31	54	1600	1051454	+302230	L	3	28091	L	86040310	000000	000000	101700	028000		G B=60
WDHGW	00 LHS2333	37	1430	1055059	-071512	L	3	28182	L	86041620	000000	000000	203000	025500		G B=78
WDHGW	00 LHS2333	37	1430	1055050	-071512	L	1	08043	L	86041618	000000	000000	184200	009000		G C=120,B=55
SCHPF	OOP/HALLEY	06	0600	1059062	-192711	L	1	08121	L	86042918	000000	000000	183600	000500		G E=136,B=35
SCHPF	OOP/HALLEY	06	0600	1059062	-192711	D	9	01808	L	86042918	000000	000000	182900	002000		G NO COMMENTS
SCHPF	OOP/HALLEY	06	0600	1059062	-192711	L	1	08123	L	86042921	000000	000000	213100	015000		G E=10X,C=122,B=81
SCHPF	OOP/HALLEY	06	0600	1059062	-192711	L	3	28240	L	86042920	000000	000000	203700	001000		G E=158,B=22
SCHPF	OOP/HALLEY	06	0600	1059062	-192711	L	1	08122	L	86042919	000000	000000	192100	006000		G E=6X,C=140,B=59
WRHCG	HD 96548	11	0785	1104179	-651420	H	3	27661	L	86020520	000000	000000	203700	001500		G E=130,C=72,B=32
WRHCG	HD 96548	11	0780	1104180	-651421	H	3	28032	L	86032601	000000	000000	015200	004000		G C=235,B=40
HA169	HD96548	11	0771	1104180	-651421	H	3	27984	L	86032206	000000	000000	060209	004000	501	V
HA169	HD96548	11	0791	1104180	-651421	H	3	27999	L	86032303	000000	000000	034313	004000	501	V

PRO	OBJECT	CL	MAG	R.A.	DEC	D	C	IMAGE	A	DATE	EXP.SMALL	EXP.LARGE	ECC	COMMENT
WRHCG	HD 96548	11	0780	1104180	-651421	H	3	27968	L	86032100	000000	000000	001900	004000		G C=245,B=65
SBHFW	PG1104+243	28	1130	1104454	+241927	H	3	27465	L	86010616	000000	000000	161200	021000		G C=186,B=74
WDHGW	OO L970-30	37	1300	1105280	-045236	L	1	08046	L	86041712	000000	000000	120600	003500		G C=202,B=40
WDHGW	OO L970-30	37	1300	1105280	-045236	L	3	28184	L	86041711	000000	000000	112600	003200		G C=135,B=18
HC062	SZ 41	58	1190	1110502	-762045	L	1	07745	L	86030504	000000	000000	045000	006000	232	V BO TO AVOID FES CONF
HC062	SZ 41	58	1190	1110502	-762045	L	3	27849	L	86030505	000000	000000	055928	027800	232	V BO TO AVOID FES CONF
QSHMM	PG 1114+44	85	1570	1114205	+443001	L	1	07655	L	86021214	000000	000000	141100	016000		G C=122,B=75
QSHMM	PG 1114+44	85	1570	1114205	+443001	L	3	27705	L	86021217	000000	000000	175800	012000		G C=135,B=115
IM007	FB 72	21	1124	1118532	113544	H	1	08082	L	86042301	000000	000000	015914	040700	405	V
IM007	SKY BKG	07	1124	1118532	113544	H	3	28220	L	86042302	000000	000000	020044	032000	112	V SERENDIPITY WITH LWP
EGHSS	OO VV 150	84	1460	1129480	+531200	H	3	27554	L	86012121	000000	000000	212300	008600		G B=38
CVHJE	OO T LEO	54	1000	1135529	+033847	L	3	27683	L	86020814	000000	000000	145700	012000		G E=103,C=60,B=37
WDHGW	OO G148-7	37	1360	1143210	+320612	L	3	28185	L	86041713	000000	000000	134900	005000		G C=135,B=21
HI103	OONOVA MUS	55	1500	1149350	-665539	L	1	07499	L	86011420	000000	000000	201200	015000		G E=214,C=123,B=75
HI103	OONOVA MUS	55	1500	1149350	-665539	L	3	27526	L	86011416	000000	000000	160600	024000		G E=7X,C=95,B=61
HI103	OONOVA MUS	55	1500	1149350	-665539	L	3	27525	L	86011406	000000	000000	062900	002000		G E=157,B=20
SCHPF	OOP/HALLEY	06	0600	1155589	-312709	L	1	08077	L	86042022	000000	000000	220700	002000		G E=6X,C=160,B=45
SCHPF	OOP/HALLEY	06	0600	1155589	-312709	L	3	28206	L	86042018	000000	000000	185800	019500		G E=101,B=65
SCHPF	OOP/HALLEY	06	0600	1155589	-312709	L	1	08076	L	86042018	000000	000000	182800	000200		G E=164,B=30
SCHPF	OOP/HALLEY	06	0600	1155589	-312709	D	9	01807	L	86042018	000000	000000	180400	016000		G NO COMMENTS
SCHPF	OOP/HALLEY	06	0600	1155589	-312709	L	1	08078	L	86042100	000000	000000	000100	000200		G E=155,B=30
XQHMS	Q 1202+281	85	1630	1202088	+281052	L	3	28033	L	86032612	000000	000000	123600	013500		G E=110,C=78,B=52
XQHMS	Q 1202+281	85	0000	1202089	+281053	L	3	27710	L	86021314	000000	000000	144800	018000		G E=142,C=96,B=65
OSHCG	HD 105435	26	0260	1205453	-502637	H	3	27996	L	86032300	000000	000000	005200	000015		G C=240,B=40
OSHCG	HD 105435	26	0260	1205453	-502637	H	3	27966	L	86032022	000000	000000	223700	000015		G C=230,B=40
OSHCG	HD 105435	26	0260	1205453	-502637	H	3	27969	L	86032101	000000	000000	013800	000012		G C=210,B=35
OSHCG	HD 105435	26	0260	1205453	-502637	H	3	27978	L	86032200	000000	000000	000600	000015		G C=230,B=40
OSHCG	HD 105435	26	0260	1205453	-502637	H	3	27922	L	86031600	000000	000000	000400	000012		G C=201,B=36
OSHCG	HD 105435	26	0260	1205453	-502637	H	3	27992	L	86032221	000000	000000	215500	000015		G C=240,B=40
HA169	HD105435	26	0260	1205454	-502638	H	3	27983	L	86032205	000000	000000	051634	000015	501	V
HA169	HD105435	26	0265	1205454	-502638	H	3	28003	L	86032307	000000	000000	074450	000015	501	V
HA169	HD105435	26	0270	1205454	-502638	H	3	28000	L	86032305	000000	000000	050628	000015	501	V
OSHCG	HD 105435	26	0260	1205454	-502638	H	3	28026	L	86032521	000000	000000	210300	000015		G C=62,B=22
OSHCG	HD 105435	26	0260	1205454	-502638	H	3	28030	L	86032600	000000	000000	001500	000015		G C=240,B=40
HA169	HD105435	26	0266	1205454	-502638	H	3	27987	L	86032209	000000	000000	094918	000015	500	V
OSHCG	HD 105435	26	0260	1205454	-502638	H	3	27937	L	86031723	000000	000000	235300	000014		G C=220,B=40
OSHCG	HD 105435	26	0260	1205454	-502638	H	3	27973	L	86032120	000000	000000	200400	000012		G C=200,B=35
OD66K	NG 4151	84	1120	1208000	+394054	L	3	27929	L	86031712	000000	000000	124000	010500		G E=188,C=71,B=34
XQHME	PG1211+143	85	1410	1211448	+141953	L	1	07603	L	86013117	000000	000000	172000	006000		G C=155,B=71
XQHME	PG1211+143	85	1410	1211448	+141953	L	3	27638	L	86013115	000000	000000	152900	010000		G E=1.2X,C=93,B=44
IA011	FEIGE 59	38	1204	1214492	155138	L	3	28204	L	86042007	000000	000000	075321	005400	400	V
IA011	FEIGE 59	38	1197	1214492	155138	L	1	08075	L	86042007	000000	000000	072336	002200	501	V
IA011	FEIGE 59	38	1204	1214492	155138	L	3	28203	L	86042005	000000	000000	055613	008000	500	V
IA011	FEIGE 59	38	1201	1214492	155138	L	1	08074	L	86042005	000000	000000	051510	003000	601	V
IM007	HD+41B	21	1177	1220012	410612	H	1	08079	L	86042102	000000	000000	021216	039500	304	V

PRO	OBJECT	CL	MAG	R.A.	DEC	D	C	IMAGE	A	DATE	EXP.SMALL	EXP.LARGE	ECC	COMMENT
IM007	SERENDIPIT	07	9990	1220012	410612	H	3	28207	L	86042102	000000	000000	023121	032000 002 V
HC087	HD108767B	86	0831	1227154	-161435	L	3	27523	S	86011312	122506	013700	000000	000000 311 V LAP CLOSED
HC087	HD108767B	86	0832	1227154	-161435	L	1	07488	S	86011311	114739	003000	000000	000000 312 V LAP CLOSED
MLHCW	HD 109387	26	0390	1231214	+700347	H	3	27463	L	86010606	000000	000000	060800	000125 G C=220,B=42
HA048	HD109387	26	0402	1231216	700349	H	3	28225	L	86042404	000000	000000	042834	000125 500 V
HA048	HD109387	26	0388	1231216	700349	H	1	08089	L	86042405	000000	000000	050156	000115 V
HQ002	NGC 4593	84	1338	1237047	-050410	L	3	27489	L	86011008	000000	000000	080157	018000 342 V
GE010	NGC 4621	81	1245	1239339	115528	L	1	08124	L	86043002	000000	000000	023845	033000 115 V NO SPECTRUM VISIBLE
OSHCG	HD 110432	26	0530	1239539	-624700	H	3	27991	L	86032221	000000	000000	211200	000900 G C=235,B=42
OSHCG	HD 110432	26	0530	1239539	-624700	H	3	27970	L	86032102	000000	000000	021000	000900 G C=230,B=40
OSHCG	HD 110432	26	0530	1239539	-624700	H	1	07844	L	86032102	000000	000000	022400	002030 G C=190,B=40
OSHCG	HD 110432	26	0530	1239539	-624700	H	3	27972	L	86032119	000000	000000	191500	000900 G C=220,B=40
OSHCG	HD 110432	26	0530	1239539	-624700	H	3	27997	L	86032301	000000	000000	014400	000900 G C=235,B=40
OSHCG	HD 110432	26	0530	1239540	-624700	H	1	07876	L	86032601	000000	000000	011000	000300 G C=205,B=47
OSHCG	HD 110432	26	0530	1239540	-624700	H	3	27923	L	86031600	000000	000000	005600	000700 G C=195,B=37
OSHCG	HD 110432	26	0530	1239540	-624700	H	3	28027	L	86032521	000000	000000	214000	000900 G C=240,B=59
OSHCG	HD 110432	26	0530	1239540	-624700	H	3	27938	L	86031800	000000	000000	003900	000830 G C=215,B=41
HA169	HD110432	26	0555	1239540	-624700	H	3	28004	L	86032308	000000	000000	083845	000900 501 V
OSHCG	HD 110432	26	0530	1239540	-624700	H	3	27967	L	86032023	000000	000000	233800	000900 G C=235,B=50
OSHCG	HD 110432	26	0530	1239540	-624700	H	3	27980	L	86032202	000000	000000	020800	000900 G C=225,B=40
OSHCG	HD 110432	26	0530	1239540	-624700	H	3	28031	L	86032600	000000	000000	005500	000900 G C=240,B=50
HC009	SA0138983	44	1018	1247033	-054822	L	3	27654	L	86020305	000000	000000	053127	015000 211 V
HC009	SA0138983	44	1024	1247033	-054822	L	1	07620	LS	86020306	062811	001000	060221	002000 513 V 313$
HI185	SS38	57	1400	1248218	-644337	L	3	27751	L	86022005	000000	000000	055826	028000 113 V
EGHDW	NG 4736	80	1100	1248302	+412327	L	3	28042	L	86032813	000000	000000	130300	017000 G C=95,B=70
EGHDW	NG 4736	80	1100	1248319	+412330	L	3	28043	L	86032816	000000	000000	162800	007000 G C=112,B=87
EGHDW	NG 4736	80	1100	1248337	+412334	L	1	07907	L	86032915	000000	000000	153800	014000 G C=225,B=168
EGHDW	NG 4736	80	1100	1248337	+412334	L	3	28047	L	86032912	000000	000000	122000	019000 G C=90,B=66
AVHEB	HD 112413	36	0290	1253414	+383516	H	3	27887	L	86031001	000000	000000	013000	000120 G C=255,B=44
AVHEB	HD 112413	36	0290	1253414	+383516	L	3	27895	L	86031101	000000	000000	012200	000002 G C=245,B=15
AVHEB	HD 112413	36	0290	1253414	+383516	L	3	27838	L	86030400	000000	000000	002400	000003 G C=191,B=20
AVHEB	HD 112413	36	0290	1253414	+383516	L	3	27848	SL	86030501	011300	000002	010600	000001 G C=138,B=18
AVHEB	HD 112413	36	0290	1253414	+383516	H	1	07741	L	86030401	000000	000000	011500	000002 G C=76,B=53
AVHEB	HD 112413	36	0290	1253414	+383516	H	3	27839	L	86030401	000000	000000	010700	000100 G C=223,B=38
AVHEB	HD 112413	36	0290	1253414	+383516	H	1	07758	L	86030901	000000	000000	011600	000033 G C=245,B=45
AVHEB	HD 112413	36	0290	1253415	+383517	H	3	27880	L	86030901	000000	000000	010600	000120 G C=1.2X,B=45
AVHEB	HD 112413	36	0290	1253415	+383517	L	1	07757	SL	86030900	000500	000004	000500	000001 G C=4X,B=35
AVHEB	HD 112413	36	0290	1253415	+383517	L	3	27879	SL	86030823	235400	000008	234600	000002 G C=1.5X,B=15
AVHEB	HD 112413	36	0290	1253415	+383517	L	3	27893	SL	86031023	232600	000006	232200	000002 G C=255,B=15
AVHEB	HD 112413	36	0290	1253415	+383517	L	3	27886	SL	86031000	003700	000006	003000	000002 G C=255,B=16
AVHEB	HD 112413	36	0290	1253415	+383517	L	1	07767	SL	86031000	004800	000004	004100	000001 G C=186,B=33
AVHEB	HD 112413	36	0290	1253415	+383517	H	3	27847	L	86030500	000000	000000	003200	000100 G C=210,B=40
AVHEB	HD 112413	36	0290	1253415	+383517	H	1	07771	L	86031100	000000	000000	004000	000033 G C=238,B=45
AVHEB	HD 112413	36	0290	1253415	+383517	H	1	07744	L	86030423	000000	000000	235100	000100 G C=1.5X,B=58
AVHEB	HD 112413	36	0290	1253415	+383517	H	3	27894	L	86031100	000000	000000	003500	000120 G C=255,B=43

PRO	OBJECT	CL	MAG	R.A.	DEC	D	C	IMAGE	A	DATE	EXP.SMALL	EXP.LARGE	ECC	COMMENT
AVHEB	HD 112413	36	0290	1253415	+383517	L	1	07770	SL	86031023	233700	000004	233100	000001		G C=200,B=35
AVHEB	OOSKY BKGD	99	9999	1253599	+383859	L	3	27892	L	86031022	000000	000000	224500	000040		G B=15
HC135	HD112409	22	0538	1254110	-505541	H	3	27531	L	86011509	000000	000000	090624	000900	510	U
GA009	CS1303	28	1600	1303001	-622231	L	1	08104	L	86042602	000000	000000	021833	016200	302	U
HZHMM	OOTON 155	85	1690	1318535	+290332	L	3	27693	L	86021006	000000	000000	061100	082000		G B=120
HQ123	TON 155	85	1550	1318535	290333	E	9	01764	2	86021006	000000	000000	061500	004000		U FIELD FOR SWP 27693
IM007	SERENDIPIT	07	9990	1321547	493809	H	3	28195	L	86041902	000000	000000	023222	032000	002	U
IM007	PB166	20	1275	1321547	493809	H	1	08066	L	86041902	000000	000000	020116	040600	305	U
SRHLW	OO R HYA	51	0500	1326585	-230124	L	1	07471	L	86010904	000000	000000	043300	001000		G E=3X,C=120,B=56
SRHLW	OO R HYA	51	0500	1326585	-230124	L	1	07454	L	86010406	000000	000000	062900	001500		G E=2.5X,C=150,B=65
SRHLW	OO R HYA	51	0500	1326585	-230124	L	1	07453	L	86010403	000000	000000	033800	001500		G E=5.0X,C=2.0X,B=2.0X
SRHLW	OO R HYA	51	0500	1326585	-230124	L	1	07679	L	86021821	000000	000000	210200	000200		G E=213,B=35
SRHLW	OO R HYA	51	0500	1326585	-230124	L	1	07472	L	86010904	000000	000000	045900	000300		G E=1.5X,C=75,B=43
HZHMM	PG1329 +41	85	1610	1329298	+411722	L	3	27699	L	86021109	000000	000000	091000	051500		G B=96
HQ123	PG 1329+41	85	1550	1329299	411723	E	9	01765	2	86021109	000000	000000	090000	004000		U FIELD FOR SWP 27699
QSHRG	PG1338+416	85	1610	1338519	+413821	L	3	28205	L	86042010	000000	000000	101400	037500		G E=10X,C=128,B=90
HM029	HD119921	30	0537	1344009	-360009	H	3	27508	L	86011111	000000	000000	112348	003000	700	U
PHCAL	HD120315	23	0189	1345340	493344	H	3	28074	L	86040108	000000	000000	084317	000006	401	U LWR:4.5KVAD
PHCAL	HD120315	23	0197	1345340	493344	H	1	07923	L	86033107	000000	000000	075821	000006	502	U
PHCAL	OO WAVECAL	98	0000	1345342	+493343	L	3	28050	S	86032923	233300	000002	000000	000000		G E=10X,B=105
PHCAL	OO WAVECAL	98	0000	1345342	+493343	H	3	28051	S	86032923	235900	000200	000000	000000		G E=60X,B=135
PHCAL	OO TFLOOD	99	0000	1345342	+493343	H	3	28052	L	86033000	000000	000000	002700	000005		G B=110
PHCAL	OO TFLOOD	99	0000	1345342	+493343	H	1	07912	L	86033002	000000	000000	020000	000025		G B=103
PHCAL	OO WAVECAL	98	0000	1345342	+493343	H	1	07911	S	86033001	011600	000016	000000	000000		G E=60X,B=111
PHCAL	OO WAVECAL	98	0000	1345342	+493343	L	1	07910	S	86033000	004700	000001	000000	000000		G E=10X,B=100
PHCAL	HD 120315	21	0180	1345343	+493344	H	1	07913	L	86033002	000000	000000	023300	000005		G C=220,B=42
PHCAL	HD 120315	21	0180	1345343	+493344	H	2	17871	L	86021304	000000	000000	043300	000008		G C=186,B=30
PHCAL	HD 120315	21	0180	1345343	+493344	H	3	27698	L	86021103	000000	000000	034400	000006		G C=180,B=33
PHCAL	HD 120315	21	0180	1345343	+493344	H	2	17862	L	86013001	000000	000000	014600	000008		G C=207,B=30
PHCAL	HD 120315	21	0180	1345343	+493344	H	1	07650	L	86021103	000000	000000	035000	000005		G C=212,B=45
BEHGP	OO MU CEN	26	0350	1346356	-421331	H	3	28218	L	86042222	000000	000000	224200	000020		G C=188,B=36
MLHCW	HD 120991	26	0600	1350499	-465259	H	3	27498	L	86011023	000000	000000	230400	000700		G C=238,B=41
MLHCW	HD 120991	26	0600	1350499	-465259	H	3	27458	L	86010600	000000	000000	005500	000630		G C=230,B=50
MLHCW	HD 120991	26	0600	1350499	-465259	H	3	27485	L	86011003	000000	000000	031800	000630		G C=208,B=45
HQTOO	PG1351+64	85	1445	1351461	640028	L	1	07654	L	86021210	000000	000000	101218	002500	312	U
HQTOO	PG1351+64	85	1438	1351461	640028	L	3	27704	L	86021210	000000	000000	104639	012000	341	U
HI115	1E 1405-45	59	1550	1405582	-450306	L	1	07747	L	86030604	000000	000000	045007	009700	331	U
HI115	1E 1405-45	59	1550	1405582	-450306	L	1	07749	L	86030610	000000	000000	100707	003000	231	U
HI115	1E 1405-45	59	1550	1405582	-450306	L	1	07748	L	86030600	000000	000000	072629	009700	332	U
HI115	1E 1405-45	59	1550	1405582	-450306	L	3	27857	L	86030606	000000	000000	063310	004800	230	U
HI115	1E 1405-45	59	1550	1405582	-450306	L	3	27858	L	86030609	000000	000000	091439	004800	230	U
IA011	FEIGE 92	38	1187	1409412	502109	L	3	28202	L	86042003	000000	000000	034905	002200	500	U
IA011	FEIGE 92	38	1184	1409412	502109	L	1	08073	LS	86042002	031645	002000	025430	001200	501	U 401$
SRHLW	OO R CEN	51	0598	1412569	-594055	L	1	07470	L	86010902	000000	000000	023100	003000		G E=107,C=100,B=79
HQ117	NGC 5548	84	1348	1415432	252159	L	3	27673	L	86020611	000000	000000	111215	009400	451	U

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PRO    OBJECT    CL  MAG    R.A.     DEC   D C IMAGE A    DATE      EXP.SMALL     EXP.LARGE    ECC    COMMENT
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HQ117 NGC 5548    84  1360 1415432  252200 L 1 07635 L  86020609 000000 000000 094818 007500 561 V
SNHRF HD 127 493 16  0940 1429308 -222611 L 1 07575 L  86012622 000000 000000 221800 000032     G C=185,B=35
SNHRF HD 127 493 16  1000 1429308 -222611 L 3 27610 L  86012622 000000 000000 222300 000032     G C=182,B=15
HA169 HD128220    14  0863 1432566  192558 H 3 28005 L  86032309 000000 000000 095725 004000 501 V
HC088 HD129456    47  0433 1440354 -345735 H 1 07879 L  86032606 000000 000000 063611 024100 475 V

HC088 HD129456    47  0439 1440354 -345735 H 1 07877 L  86032603 000000 000000 035409 007000 352 V
HC088 HD129456    41  0433 1440354 -345735 L 1 07878 L  86032605 000000 000000 053705 002000 772 V
STHRP 00 109 VIR 30  0370 1443431 +020609 L 1 07495 L  86011405 000000 000000 055100 000018     G C=3X,B=40
STHRP 00 109 VIR 30  0370 1443431 +020609 L 1 07496 L  86011406 000000 000000 062900 000001     G C=175,B=35
STHRP 00 109 VIR 30  0370 1443431 +020609 L 1 07493 L  86011404 000000 000000 042600 000005     G C=175,B=39

STHRP 00 109 VIR 30  0370 1443431 +020609 H 1 07492 L  86011403 000000 000000 034400 000122     G C=170,B=40
STHRP 00 109 VIR 30  0370 1443431 +020609 L 1 07494 L  86011405 000000 000000 050900 000008     G C=220,B=38
HS231 P/HALLEY    06  0483 1452260 -465851 H 1 08002 L  86041104 000000 000000 041059 003000 142 V
HS231 P/HALLEY    06  0488 1452260 -465851 H 1 08003 L  86041105 000000 000000 052532 004000 142 V SUNWARD 20"
HS231 P/HALLEY    06  0490 1452260 -465851 H 1 08004 L  86041107 000000 000000 070651 006000 152 V SUNWARD 40"

HS231 P/HALLEY    06  0482 1452261 -465852 L 1 08001 L  86041103 000000 000000 031846 000140 252 V ON NUCLEUS
HS231 P/HALLEY    06  9999 1452261 -465852 E 9 01806 2  86041108 000000 000000 082500 004000     V
HS231 P/HALLEY    06  0483 1452261 -465852 L 3 28145 L  86041103 000000 000000 032414 011500 132 V
CSHDB HD  132345 47  0587 1456110 -105638 L 1 07615 L  86020223 000000 000000 231700 001600     G C=210,B=59
SNHRF 00 SN 1006 16  1670 1459367 -414731 L 1 07589 L  86012821 000000 000000 210900 009000     G C=1.5X,B=210

SNHRF 00 SN 1006 16  1670 1459367 -414731 L 3 27592 L  86012516 000000 000000 160500 040000     G C=230,B=120
SNHRF 00 SN 1006 16  1670 1459367 -414731 L 3 27619 L  86012716 000000 000000 160600 033000     G C=212,B=125
SNHRF 00 SN 1006 16  1670 1459368 -414732 L 3 27627 L  86012820 000000 000000 200700 003000     G C=76,B=57
SNHRF 00 SN 1006 16  1670 1459368 -414732 L 1 07588 L  86012816 000000 000000 163000 017000     G C=193,B=130
SNHRF 00 SN 1006 16  1670 1459368 -414732 L 1 07574 L  86012616 000000 000000 161100 027000     G C=237,B=148

BIHTS HD  134481 26  0390 1508268 -483257 H 3 28116 L  86040620 000000 000000 204200 001100     G C=2X,B=81
GHHBS 00  UHB-M5 27  0000 1515454 +021535 H 3 28122 L  86040704 000000 000000 040800 071500     G C=227,B=160
WDHBM 001516+020 37  0000 1516007 +020546 L 1 07554 L  86012319 000000 000000 193400 012000     G C=215,B=90
WDHBM 001516+020 37  0000 1516007 +020546 L 3 27572 L  86012316 000000 000000 160000 021600     G C=1.2X,B=65
WDHBM 001516+020 37  0000 1516007 +020550 L 3 27573 L  86012321 000000 000000 213900 006000     G C=160,B=57

HM143 UVBS/M5     19  9999 1516009  021602 E 9 01802 2  86040702 000000 000000 023000 004000     V SWP28122
HM143 UVBS/M5     19  1040 1516009  021602 L 1 07966 L  86040703 000000 000000 033314 001000 301 V
OD89K 00   EARTH 01  9999 1517599 +304500 S 1 07908 L  86032919 000000 000000 194100 000020     G C=30X,B=42
OD89K 00   EARTH 01  9999 1517599 +304500 L 3 28048 SL 86032919 193800 000200 193700 000200     G E=51,C=98,B=22
HS231 P/HALLEY    06  0452 1519125 -472435 L 1 07993 L  86041006 000000 000000 063446 002500 272 V NUCLEUS AT 58,-155

HS231 P/HALLEY    06  0447 1519125 -472435 L 3 28136 L  86041003 000000 000000 033541 019500 032 V NUCLEUS AT 58,-155
HS231 P/HALLEY    06  0451 1519125 -472435 H 1 07992 L  86041005 000000 000000 053535 002400 032 V NUCLEUS AT 58,-155
HS231 P/HALLEY    06  0451 1519125 -472435 D 9 01805 2  86041104 000000 000000 041800 002000     V NUCLEUS AT 58,-155
HS231 P/HALLEY    06  0448 1519126 -472435 H 1 07991 L  86041004 000000 000000 041642 000800 031 V NUCLEUS AT 58,-155
HS231 P/HALLEY    06  0456 1519126 -472435 L 1 07994 L  86041007 000000 000000 074654 003000 372 V 30 ARC SEC FROM NUCL

HS231 P/HALLEY    06  0445 1519126 -472435 L 1 07990 L  86041003 000000 000000 030252 000140 241 V ON NUCLEUS
HS231 P/HALLEY    06  9999 1519126 -472435 E 9 01804 2  86041004 000000 000000 041700 004000     V
HA048 HD138749    14  0437 1530547  313136 H 3 27608 L  86012613 000000 000000 132152 000145 500 V
HA048 HD138749    26  0426 1530547  313136 H 3 28223 L  86042401 000000 000000 015536 000145 500 V
HA048 HD138749    22  0442 1530547  313136 H 3 27670 L  86020606 000000 000000 061848 000145 500 V
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PRO	OBJECT	CL	MAG	R.A.	DEC	D	C	IMAGE	A	DATE	EXP.SMALL	EXP.LARGE	ECC	COMMENT
OD70K	X 1533+147	59	1410	1533327	+144058	L	1	07593	L	86012920	000000	000000	204800	004500		G B=155
SCHPF	OOP/HALLEY	06	0870	1537039	-472757	L	1	07982	L	86040910	000000	000000	103000	000100		G E=128,B=32
SCHPF	OOP/HALLEY	06	0870	1537039	-472757	L	3	28133	L	86040910	000000	000000	104200	019500		G E=90,C=41
SCHPF	OOP/HALLEY	06	0870	1537039	-472757	L	3	28135	L	86041000	000000	000000	000100	000500		G E=154,B=16
SCHPF	OOP/HALLEY	06	0870	1537039	-472757	L	1	07989	L	86040923	000000	000000	230900	001800		G E=6X,C=125,B=39
SCHPF	OOP/HALLEY	06	0870	1537039	-472757	L	1	07984	L	86040913	000000	000000	133600	000130		G E=160,B=30
SCHPF	OOP/HALLEY	06	0870	1537039	-472757	L	1	07988	L	86040921	000000	000000	213800	003000		G E=10X,C=78,B=43
SCHPF	OOP/HALLEY	06	0870	1537039	-472757	L	1	07987	L	86040920	000000	000000	200300	000130		G E=153,C=49,B=31
SCHPF	OOP/HALLEY	06	0870	1537039	-472757	L	1	07983	L	86040911	000000	000000	114100	002000		G E=10X,C=165,B=40
SCHPF	OOP/HALLEY	06	0870	1537039	-472757	D	9	01803	L	86040910	000000	000000	101300	016000		G NO COMMENTS
SCHPF	OOP/HALLEY	06	0870	1537039	-472757	L	1	07986	L	86040916	000000	000000	161000	003000		G E=6X,C=65,B=42
SCHPF	OOP/HALLEY	06	0870	1537039	-472757	L	3	28134	L	86040916	000000	000000	160800	021000		G E=100,C=72,B=59
SCHPF	OOP/HALLEY	06	0870	1537039	-472757	L	1	07985	L	86040914	000000	000000	142700	000430		G E=188,B=31
RRHRB	HD 140283	40	0720	1540225	-104618	L	3	28084	L	86040215	000000	000000	153300	002000		G C=176,B=22
RRHRB	HD 140283	40	0720	1540225	-104618	H	1	07945	L	86040213	000000	000000	133200	010000		G C=1.2X,B=66
CSHDB	HD 140573	47	0260	1541482	+063454	L	1	07614	L	86020222	000000	000000	221400	000200		G C=190,B=42
PMHTS	OOLKH450-6	58	1390	1543326	-342117	L	1	08099	L	86042512	000000	000000	122500	012000		G E=109,C=90,B=61
PEHGW	HD 141004	44	0440	1544003	+073028	L	3	28187	SL	86041800	002300	000048	001400	000048		G B=16
PEHGW	HD 141004	44	0440	1544003	+073028	L	1	08049	SL	86041800	003800	000011	003000	000011		G C=215,B=30
PMHTS	OO SZ 77	58	1250	1548323	-354743	L	1	08098	L	86042510	000000	000000	103400	004000		G E=65,C=68,B=40
PHCAL	BD+33 2642	20	1080	1550019	+330528	L	3	27809	L	86022800	000000	000000	001000	000400		G C=193,B=58
PHCAL	BD+33 2642	20	1080	1550019	+330528	L	1	07729	L	86022800	000000	000000	002300	000310		G C=249,B=83
PHCAL	BD+33 2642	20	1080	1550019	+330528	L	1	08128	L	86043022	000000	000000	223000	000310		G C=220,B=35
PHCAL	BD+33 2642	20	1080	1550019	+330528	L	3	28245	L	86043022	000000	000000	221900	000400		G C=180,B=18
PHCAL	BD+33 2642	20	1080	1550019	+330528	L	3	27547	L	86011903	000000	000000	033000	000400		G C=157,B=17
PHCAL	BD+33 2642	20	1080	1550019	+330528	L	2	17856	L	86012205	000000	000000	052600	000310		G C=165,B=25
PHCAL	BD+33 2642	20	1080	1550019	+330528	L	1	07527	L	86011903	000000	000000	031600	000310		G C=208,B=35
QSHMM	PG 1552+08	85	1570	1552192	+083106	L	1	08119	L	86042810	000000	000000	105000	014000		G E=76,C=76,B=58
QSHMM	PG 1552+08	85	1570	1552192	+083106	L	3	28237	L	86042813	000000	000000	134000	017000		G E=93,C=71,B=50
PMHTS	OO TH 12	58	1220	1552510	-374720	L	1	08101	L	86042519	000000	000000	190700	007500		G E=154,C=88,B=66
PMHTS	OO TH-12	58	1220	1552510	-374720	L	1	08087	L	86042400	000000	000000	002200	002500		G E=71,C=50,B=38
HC062	RU LUP	58	1120	1553243	-374033	H	1	07743	L	86030406	000000	000000	065700	009500	361	U
HC062	RU LUP	58	1098	1553243	-374033	L	1	07742	L	86030404	000000	000000	042804	000500	463	U
HC062	RU LUP	58	1100	1553243	-374033	L	3	27840	L	86030404	000000	000000	045144	012000	461	U
HC062	RU LUP	58	1120	1553243	-374033	L	3	27841	L	86030408	000000	000000	083656	012000	461	U
HM029	HD 142926	21	0594	1553495	424238	H	3	27509	L	86011112	000000	000000	125106	002500	700	U
PMHTS	OO SZ-126	58	1410	1553572	-423124	L	1	08092	L	86042419	000000	000000	193800	007000		G E=218,C=105,B=70
CSHDB	HD 142980	46	0550	1554560	+143323	L	1	07617	L	86020301	000000	000000	015300	000515		G C=147,B=82
CSHDB	OO G257	46	0550	1554560	+143323	L	1	07619	L	86020303	000000	000000	035200	001200		G C=198,B=68
PMHTS	OO HE-1125	58	1360	1555505	-414840	L	1	08091	L	86042417	000000	000000	171000	009000		G E=156,C=116,B=90
HI185	T CRB	57	1004	1557239	260338	L	1	07546	L	86012212	000000	000000	121952	002000	452	U
HI185	T CRB	57	1001	1557239	260338	L	3	27556	L	86012211	000000	000000	111823	005000	352	U
HI185	T CRB	57	0997	1557240	260339	L	3	27557	L	86012213	000000	000000	130608	010100	772	U
HI185	T CRB	57	0991	1557245	260339	L	3	28229	L	86042506	000000	000000	061615	004700	330	U
HA218	G180-23	37	1450	1559328	365701	L	1	08039	L	86041602	000000	000000	020743	014000	302	U

PRO	OBJECT	CL	MAG	R.A.	DEC	D	C	IMAGE	A	DATE	EXP.SMALL	EXP.LARGE	ECC	COMMENT
HA218	G180-23	37	1450	1559328	365701	L	3	28178	L	86041604	000000	000000	043535	025000 302 V
PHCAL	00 WAVECAL	98	0000	1601229	+665624	L	3	28243	S	86043019	191100	000002	000000	000000 G E=10X,B=104
PHCAL	00 WAVECAL	98	0000	1601229	+665624	H	3	28244	S	86043019	193800	000200	000000	000000 G E=60X,B=125
PHCAL	00 WAVECAL	98	0000	1601229	+665624	H	1	08127	S	86043020	204100	000016	000000	000000 G E=60X,B=110
PHCAL	00 WAVECAL	98	0000	1601229	+665624	L	1	08126	S	86043020	201000	000001	000000	000000 G E=10X,B=98 T
ZAHNO	00 AG DRA	57	0950	1601230	+665625	L	3	27637	L	86013102	000000	000000	021700	000230 G E=1.5X,C=90,B=65
ZAHNO	00 AG DRA	57	0950	1601230	+665625	L	1	07597	L	86013102	000000	000000	025100	000130 G C=154,B=78
ZAHNO	00 AG DRA	57	0950	1601230	+665625	L	1	07522	SL	86011803	044900	000200	035700	000600 G C=123,B=33(APE:S);
ZAHNO	00 AG DRA	57	0950	1601230	+665625	L	3	27542	SL	86011804	043600	000200	041800	001000 G E=5X,C=143,B=23
ZAHNO	00 AG DRA	57	0950	1601230	+665625	L	1	08125	L	86043017	000000	000000	175200	000500 G E=255,C=195,B=35
ZAHNO	00 AG DRA	57	0950	1601230	+665625	L	3	28242	SL	86043017	174300	000400	170700	001200 G E=4X,C=82,B=28
HITOO	AG DRA	57	0950	1601240	665630	L	1	07660	LS	86021412	122834	000300	122211	000200 442 V 342$
HITOO	AG DRA	57	0954	1601240	665630	L	3	27714	LS	86021412	121620	000200	120854	000300 361 V 221$
PMHTS	00 TH-18	58	1360	1603390	-385418	L	3	28227	L	86042412	000000	000000	125900	021000 G E=114,C=111,B=90
PMHTS	00 TH-18	58	1360	1603394	-385419	L	1	08090	L	86042411	000000	000000	112000	008500 G E=4X,C=160,B=58
PMHTS	00 SZ-96	58	1370	1604510	-390032	L	1	08086	L	86042321	000000	000000	215600	007500 G E=125,C=78,B=54
PMHTS	00 SZ-98	58	1240	1605007	-385648	L	1	08084	L	86042318	000000	000000	181100	004000 G E=221,C=83,B=43
PMHTS	00 SZ-108	58	1320	1605210	-385820	L	1	08085	L	86042319	000000	000000	194700	007000 G B=61
PMHTS	00 TH-33	58	1450	1605316	-392950	L	1	08094	L	86042423	000000	000000	231500	009000 G E=69,C=69,B=52
PMHTS	00 TH-33	58	1450	1605316	-392950	L	1	08093	L	86042422	000000	000000	221500	002000 G B=42
CSHDB	HD 145148	46	0600	1606433	+063112	L	1	07618	L	86020303	000000	000000	030400	000330 G C=183,B=65
CSHDB	HD 145148	46	0600	1606433	+063112	L	1	07616	L	86020300	000000	000000	001900	001500 G C=1.5X,B=82
PMHTS	00 TH 43	58	1310	1608311	-385432	L	1	08100	L	86042516	000000	000000	161200	009000 G E=107,B=59
LGHJL	HD 145544	45	0385	1610520	-633336	H	1	07673	L	86021720	000000	000000	205800	004500 G E=1.5X,C=1.3X,B=65
LGHJL	HD 145544	45	0380	1610521	-633337	H	1	07894	L	86032721	000000	000000	213300	001600 G E=232,C=210,B=110
LGHJL	HD 145544	45	0380	1610521	-633337	H	1	08118	L	86042800	000000	000000	000200	004500 G E=1.5X,C=230,B=44
HM153	HD146919	23	0897	1617295	-525458	L	3	27740	L	86021904	000000	000000	042900	001900 501 V
HM153	HD146919	23	0896	1617295	-525458	L	1	07682	L	86021904	000000	000000	045523	001200 802 V
OD70K	X 1617+175	59	1520	1617563	+173129	L	3	27630	L	86012915	000000	000000	153500	025500 G E=251,C=228,B=165
HQ076	1617.9+173	85	1530	1617564	173129	L	1	07592	L	86012908	000000	000000	081302	039400 636 V
PMHSS	00 H1-1	58	1330	1618307	-260524	L	1	08110	L	86042623	000000	000000	230200	009000 G E=178,C=87,B=57
HM153	HD147331	23	0908	1620042	-521057	L	3	27741	L	86021905	000000	000000	053931	000900 501 V
HM153	HD147331	23	0908	1620042	-521057	L	1	07683	LS	86021906	064600	000300	061347	000600 802 V 502$
HM153	HD330684	23	1021	1621509	-492245	L	3	27742	L	86021907	000000	000000	071903	013000 701 V
HM153	HD330684	23	1017	1621509	-492245	L	1	07684	L	86021909	000000	000000	093651	006000 802 V
PMHSS	00 ROX-3	58	1320	1622470	-244411	L	1	08108	L	86042618	000000	000000	180900	006000 G C=72,B=55
PMHSS	00 SR 4	58	1280	1622543	-241358	L	1	08105	L	86042610	000000	000000	100000	007500 G E=188,C=80,B=48
PMHSS	00D0 AR 21	58	1410	1623020	-241643	L	1	08106	L	86042612	000000	000000	124400	006000 G B=45
PMHSS	00 SR 12	58	1330	1624173	-243504	L	1	08107	L	86042615	000000	000000	153500	006000 G E=70,B=50
PMHSS	00 SR 9	58	1130	1624383	-241521	L	1	08102	L	86042521	000000	000000	214900	005000 G E=173,C=90,B=53
PMHSS	00 SR 10	58	1410	1624537	-241940	L	1	08113	L	86042710	000000	000000	100700	012000 G E=167,C=100,B=54
PMHSS	00 SR 13	58	1310	1625432	-242143	L	1	08103	L	86042523	000000	000000	234600	006000 G E=129,C=65,B=42
SUHHM	00 SATURN	03	0060	1627366	-194203	L	3	28211	L	86042121	000000	000000	211800	011600 G C=10X,B=40
SUHHM	00 SATURN	03	0020	1627367	-194203	L	3	28210	L	86042118	000000	000000	180100	012000 G C=10X,B=43
SUHHM	00 SATURN	03	0020	1627411	-194214	L	3	28208	L	86042110	000000	000000	103400	012000 G E=93,C=10X,B=59

PRO	OBJECT	CL	MAG	R.A.	DEC	D	C	IMAGE	A	DATE	EXP.SMALL	EXP.LARGE	ECC	COMMENT
SUHHM	00 SATURN	03	0020	1627411	-194214	L	3	28209	L	86042113	000000	000000	135200	012000		G C=10X,B=40
HM121	NGC6153	71	1400	1628050	-400850	L	1	07715	L	86022408	000000	000000	084550	011100	332	V
HM121	NGC6153	71	1400	1628050	-400850	L	3	27779	L	86022405	000000	000000	051110	021000	232	V
PMHSS	00 DOAR 44	58	1260	1628313	-242118	L	1	08109	L	86042620	000000	000000	203500	007500		G E=181,C=104,B=72
PMHSS	00 DOAR 51	58	1360	1629095	-243359	L	1	08114	L	86042714	000000	000000	144800	010500		G E=109,C=91,B=67
OSHCG	HD 149038	13	0490	1630313	-435629	H	3	27939	L	86031801	000000	000000	011800	000340		G C=235,B=40
OSHCG	HD 149038	13	0490	1630313	-435629	H	3	27924	L	86031601	000000	000000	013600	000340		G C=236,B=39
SSHJC	00 SATURN	03	0200	1630410	-195057	L	3	28080	L	86040121	000000	000000	215600	000800		G C=187,B=35
SSHJC	00 SATURN	03	0200	1630410	-195057	L	1	07939	L	86040123	000000	000000	235400	000730		G C=15X,B=150
SSHJC	00 SATURN	03	0200	1630410	-195057	L	3	28079	L	86040120	000000	000000	203700	002700		G C=3X,B=33
SSHJC	00 SATURN	03	0200	1630410	-195057	L	1	07938	L	86040122	000000	000000	223800	000230		G C=10X,B=85
SSHJC	00 SATURN	03	0200	1630410	-195057	L	1	07936	S	86040119	190500	003000	000000	000000		G B=62
SSHJC	00 SATURN	03	0200	1630410	-195057	L	3	28081	L	86040123	000000	000000	231600	001200		G C=222,B=48
SSHJC	00 SATURN	03	0200	1630410	-195057	L	1	07937	L	86040121	000000	000000	211900	000115		G C=10X,B=52
SNHRF	HD 149382	16	0870	1631452	-035440	L	3	27620	L	86012722	000000	000000	222500	000017		G C=225,B=15
SNHRF	HD 149382	16	0860	1631452	-035440	L	3	27583	L	86012422	000000	000000	224200	000017		G C=230,B=18
SNHRF	HD 149382	16	0870	1631452	-035440	L	1	07581	L	86012722	000000	000000	222100	000017		G C=220,B=28
PHCAL	HD 149438	20	0280	1632458	-280650	H	3	27883	S	86030912	123200	000009	000000	000000		G C=180,B=30
PHCAL	HD 149438	20	0280	1632459	-280651	H	3	27897	L	86031111	000000	000000	113800	000006		G C=180,B=35
PHCAL	HD 149438	20	0280	1632459	-280651	H	1	07764	S	86030911	115200	000011	000000	000000		G C=200,B=40
HC052	HD150798	47	0226	1643210	-685620	H	1	07612	L	86020207	000000	000000	075555	027500	775	V
HC052	HD150798	47	0225	1643210	-685620	L	3	27652	L	86020206	000000	000000	064843	006000	361	V
HC052	HD 150798	47	0227	1643210	-685620	H	1	07611	L	86020206	000000	000000	060813	000800	353	V
LGHJL	HD 150798	47	0190	1643211	-685620	H	1	08117	L	86042722	000000	000000	223300	002500		G E=2X,C=180,B=42
LGHJL	HD 150798	47	0190	1643211	-685620	L	3	28235	L	86042723	000000	000000	230500	003000		G E=241,C=104,B=29
LGHJL	HD 150798	47	0190	1643211	-685620	H	1	07670	L	86021701	000000	000000	010200	000430		G E=239,C=110,B=59
LGHJL	HD 150798	47	0190	1643211	-685620	H	1	07895	L	86032722	000000	000000	223300	000400		G E=211,C=123,B=78
LGHJL	HD 150798	47	0190	1643211	-685620	H	1	07897	L	86032801	000000	000000	011900	002500		G E=3X,C=190,B=40
LGHJL	HD 150798	47	0190	1643211	-685620	H	1	07896	L	86032723	000000	000000	233300	000400		G E=223,C=120,B=72
LGHJL	HD 150798	47	0190	1643211	-685620	L	3	28040	L	86032722	000000	000000	224500	001500		G E=192,C=167,B=123
HA158	LSE 259	16	1267	1649462	-555700	L	1	07739	L	86030304	000000	000000	044746	001400	612	V BO TO AVOID FES CONF
HA158	LSE 259	16	1294	1649462	-555700	H	3	27833	L	86030305	000000	000000	052910	030800	313	V
HM143	I33/M10	19	9999	1654299	-040059	E	9	01799	2	86040407	000000	000000	070000	004000		V SWP28097
HM143	I33 IN M10	19	1404	1654305	-040120	L	1	07953	L	86040402	000000	000000	025121	001000	000	V
HM143	I33/M10	19	1320	1654305	-040120	L	1	07955	L	86040405	000000	000000	052950	003000	000	V
HM143	I33/M10	19	1324	1654305	-040120	L	3	28096	L	86040406	000000	000000	063333	001000	300	V PREVIOUSLY EXPOSED 3
HM143	I33-M10	19	9999	1654305	-040120	L	1	07954	L	86040404	000000	000000	043535	001000	000	V I33 IN M10
GHHBS	00I33/M 10	19	1320	1654307	-035923	D	9	01800	L	86040409	000000	000000	093800	002000		G NO COMMENTS
GHHBS	00I33/M 10	19	1320	1654307	-035923	H	3	28097	L	86040414	000000	000000	144100	055400		G C=240,B=112
WDHGW	00 LHS3254	37	1410	1655010	+213142	L	1	08047	L	86041716	000000	000000	161900	003000		G E=89,B=42
HI022	V2051OPH	54	1490	1705139	-254439	L	1	07733	L	86030104	000000	000000	044734	035000	564	V
HI022	V2051OPH	54	1490	1705139	-254439	L	3	27811	L	86022804	000000	000000	045502	033800	353	V
GA009	JL 1	29	1522	1708173	-870706	L	3	28232	L	86042707	000000	000000	074120	006500	301	V
PNHTB	NG 6302	71	1280	1710211	-370244	L	3	27795	L	86022601	000000	000000	012700	000800		G B=128
PNHTB	NG 6302	71	1280	1710211	-370244	L	3	27794	L	86022600	000000	000000	004400	000700		G B=122

PRO	OBJECT	CL	MAG	R.A.	DEC	D	C	IMAGE	A	DATE	EXP.SMALL	EXP.LARGE	ECC	COMMENT
BIHTS	HD 157042	26	0520	1719305	-472515	H	3	28114	L	86040619	000000	000000	192400	000500		G C=2X,B=49
KGHJL	HD 157244	47	0285	1721082	-552905	L	3	27734	L	86021722	000000	000000	221100	003000		G E=156,C=57,B=30
LGHAD	HD 122563	47	0620	1723585	-050238	H	1	07677	L	86021811	000000	000000	114500	039000		G E=145,C=3X,B=104
SCHPF	OOP/HALLEY	06	1340	1724239	-435143	L	1	07956	L	86040419	000000	000000	191000	000200		G E=198,B=35
SCHPF	OOP/HALLEY	06	9999	1724239	-435143	L	1	07960	L	86040500	000000	000000	001900	000200		G E=205,B=35
SCHPF	HALLEY	06	9999	1724239	-435143	L	3	28099	L	86040423	000000	000000	234500	000500		G E=190,B=17
SCHPF	OOP/HALLEY	06	1340	1724239	-435143	L	1	07959	L	86040423	000000	000000	231700	001500		G E=5X,C=127,B=64
SCHPF	OOP/HALLEY	06	1340	1724239	-435143	D	9	01801	L	86040418	000000	000000	185500	016000		G NO COMMENTS
SCHPF	OOP/HALLEY	06	1340	1724239	-435143	L	1	07958	L	86040422	000000	000000	223100	000200		G E=202,B=40
SCHPF	OOP/HALLEY	06	1340	1724239	-435143	L	1	07957	L	86040421	000000	000000	211400	001500		G E=5X,C=125,B=85
SCHPF	OOP/HALLEY	06	1340	1724239	-435143	L	3	28098	L	86040419	000000	000000	191900	009000		G E=10X,B=48
BIHTS	HD 158427	26	0290	1727583	-495019	H	3	28115	L	86040620	000000	000000	200300	000035		G C=2X,B=49
BIHTS	HD 158643	26	0480	1728216	-235532	H	3	28113	L	86040618	000000	000000	180000	003600		G C=2X,B=69
OD69K	K1 14	70	1400	1740293	+212817	L	3	27899	L	86031119	000000	000000	195000	007000		G C=158,B=95
HA048	HD 162732	22	0694	1748447	482425	H	3	27672	L	86020608	000000	000000	082855	002000	500	U
HA048	HD162732	26	0687	1748447	482425	H	1	08088	L	86042402	000000	000000	023345	001200	501	U
OSHCG	HD 162978	15	0610	1751493	-245244	H	1	07810	L	86031802	000000	000000	022700	000900		G C=1.5X,B=50
OSHCG	HD 162978	15	0610	1751493	-245244	H	3	27925	L	86031602	000000	000000	022100	000740		G C=205,B=37
OSHCG	HD 162978	15	0610	1751493	-245244	H	3	27940	L	86031802	000000	000000	021200	000830		G C=215,B=40
BEHGP	OO 66 OPH	26	0450	1757470	+042210	H	3	28219	L	86042300	000000	000000	000200	000210		G C=220,B=40
HM121	NGC6543	70	0921	1758339	663804	H	1	07710	L	86022305	000000	000000	050129	021000	665	U
HM121	NGC6543	70	0920	1758339	663804	H	1	07711	L	86022309	000000	000000	090848	009000	444	U
NEHJR	OO DQ HER	55	1450	1806046	+455107	L	3	27812	L	86022811	000000	000000	115900	030500		G C=135,B=105
HM029	HD168151	41	0525	1813338	642247	H	1	07476	L	86011113	000000	000000	134256	001000	421	U
HM083	FK SER	46	1092	1817376	-101248	L	3	27928	L	86031704	000000	000000	042003	037700	242	U
HM083	FK SER	46	1091	1817376	-101248	L	1	07809	L	86031703	000000	000000	035420	002000	352	U
ISHFB	HD 169022	25	0185	1820511	-342436	H	1	07919	S	86033014	141600	000100	000000	000000		G C=1.5X,B=42
SCHPF	OOP/HALLEY	06	0420	1822281	-382747	L	1	07931	L	86033123	000000	000000	233900	001000		G E=60X,B=65
SCHPF	OOP/HALLEY	06	0420	1822281	-382747	L	3	28073	L	86033123	000000	000000	230200	000200		G E=204,B=35
SCHPF	OOP/HALLEY	06	0420	1823399	-382747	L	1	07930	L	86033122	000000	000000	222600	000100		G E=204,C=60,B=40
SCHPF	OOP/HALLEY	06	0420	1823399	-382747	L	3	28072	L	86033121	000000	000000	211900	006000		G E=20,C=230,B=185
SCHPF	OOP/HALLEY	06	0420	1823399	-382747	L	3	28071	L	86033119	000000	000000	192800	006000		G E=20X,C=90,B=65
SCHPF	OOP/HALLEY	06	0420	1823399	-382747	L	1	07929	L	86033120	000000	000000	204800	002000		G E=10X,C=5X,B=85
SCHPF	OOP/HALLEY	06	0420	1823399	-382747	L	1	07928	L	86033119	000000	000000	191900	000040		G E=145,B=30
SCHPF	OOP/HALLEY	06	0420	1823399	-382747	D	9	01798	L	86033119	000000	000000	190900	016000		G NO COMMENTS
HA146	BD+5 3841	30	1009	1835074	053943	L	1	07811	L	86031804	000000	000000	042546	000800	501	U
HA146	BD+5 3841	30	1011	1835074	053943	L	3	27941	L	86031803	000000	000000	034849	003000	500	U
STHRP	OOALPH LYR	30	0000	1835146	+384410	L	1	07905	L	86032902	000000	000000	023400	000001		G C=7X,B=39
STHRP	OOALPH LYR	30	0000	1835146	+384410	L	1	07904	L	86032901	000000	000000	015500	000001		G C=2X,B=39
STHRP	OOALPH LYR	30	0000	1835146	+384410	H	1	07490	L	86011323	000000	000000	233300	000004		G C=200,B=42
STHRP	OOALPH LYR	30	0000	1835146	+384410	L	1	07902	L	86032900	000000	000000	001900	000001		G C=2X,B=48
STHRP	OOALPH LYR	30	0000	1835146	+384410	L	1	07903	L	86032901	000000	000000	010800	000001		G C=2X,B=40
PHCAL	HD 172167	30	0000	1835147	+384409	L	1	07889	L	86032702	000000	000000	021800	000000		G C=210,B=38
PHCAL	HD 172167	30	0000	1835147	+384409	L	1	07888	L	86032701	000000	000000	012500	000000		G C=210,B=38
SCHJH	SA 210394	22	0860	1835182	-370244	L	3	28057	L	86033018	000000	000000	182800	000330		G C=220,B=22

PRO	OBJECT	CL	MAG	R.A.	DEC	D	C	IMAGE	A	DATE	EXP.SMALL	EXP.LARGE	ECC	COMMENT
SCHJH	SA 210394	22	0860	1835182	-370244	L	3	28055	L	86033016	000000	000000	162400	000350		G C=225,B=17
SCHJH	SA 210394	22	0860	1835182	-370244	F	9	01797	L	86033018	000000	000000	181600	016000		G NO COMMENTS
SCHJH	SA 210394	22	0860	1835182	-370244	L	3	28056	L	86033017	000000	000000	173800	000330		G C=220,B=17
HA146	BD+5 3847	30	1043	1835230	052708	L	3	27942	L	86031805	000000	000000	050403	003500	500	U
HA146	BD+5 3847	30	1041	1835230	052708	L	1	07812	L	86031805	000000	000000	054447	001000	401	U
OD89K	OO EARTH	01	9999	1835599	+241959	L	3	28049	SL	86032921	212600	000600	212500	000600		G E=128,C=210,B=41
OD89K	OO EARTH	01	9999	1835599	+241959	S	1	07909	L	86032921	000000	000000	213300	000001		G C=190,B=30
HQ063	NGC 6764	88	1490	1907013	505107	L	3	27619	L	86012708	000000	000000	084057	035900	313	U
SCHJH	SA 211030	30	0880	1908281	-321112	L	1	07884	L	86032620	000000	000000	203200	000600		G E=179,C=195,B=59
SCHJH	SA 211030	30	0880	1908281	-321112	L	1	07883	L	86032619	000000	000000	194400	000600		G E=145,C=190,B=52
SCHJH	SA 211030	30	0880	1908281	-321112	L	1	07920	L	86033015	000000	000000	150100	000600		G C=205,B=35
SCHJH	SA 211030	30	0880	1908281	-321112	L	1	07882	L	86032618	000000	000000	184400	000600		G E=5X,C=195,B=54
SCHJH	OO 211030	30	0880	1908281	-321112	L	1	07880	L	86032616	000000	000000	165000	000600		G C=170,B=45
SCHJH	SA 211030	30	0880	1908281	-321112	D	9	01795	L	86032617	000000	000000	173700	016000		G NO COMMENTS
SCHJH	SA 211030	30	0880	1908281	-321112	L	1	07881	L	86032617	000000	000000	174300	000600		G E=134,C=180,B=48
SCHJH	SA 211030	30	0880	1908281	-321112	D	9	01796	L	86032618	000000	000000	182900	016000		G NO COMMENTS
SHHWJ	OOC HALLEY	06	0000	1922300	-294729	L	1	07870	SL	86032423	234500	003000	234400	003000		G E=10X,B=139
SHHWJ	OOC HALLEY	06	0000	1922300	-294729	S	9	01794	L	86032501	000000	000000	014900	004000		G NO COMMENTS
SHHWJ	OOC HALLEY	06	0000	1922300	-294729	L	3	28014	L	86032501	000000	000000	015900	000100		G E=74,B=15
SHHWJ	OOC HALLEY	06	0000	1922300	-294729	L	1	07871	SL	86032501	010500	000040	010400	000040		G E=190,B=32
SHHWJ	OOC HALLEY	06	0000	1922300	-294729	L	1	07872	SL	86032501	013900	000700	013800	000700		G E=7X,C=140,B=35
SHHWJ	OOC HALLEY	06	0000	1922309	-294729	L	1	07863	L	86032412	000000	000000	121300	001000		G E=10X,C=182,B=36
SHHWJ	OOC HALLEY	06	9999	1922309	-294729	L	1	07868	S	86032420	202700	004500	000000	000000		G E=20X,C=20X,B=83
SHHWJ	OOC HALLEY	06	0000	1922309	-294729	L	1	07869	SL	86032422	223600	003000	223500	003000		G 10X,B=160
SHHWJ	OOC HALLEY	06	0000	1922309	-294729	L	3	28013	SL	86032420	212300	006000	205900	006000		G E=10X,B=95
SHHWJ	OOC HALLEY	06	0000	1922309	-294729	S	9	01793	L	86032420	000000	000000	206700	004000		G NO COMMENTS
SHHWJ	OOC HALLEY	06	0000	1922309	-294729	L	1	07868	L	86032419	000000	000000	195900	004500		G E=60X,C=20X,B=83
SHHWJ	OOC HALLEY	06	0000	1922309	-294729	L	1	07867	L	86032418	000000	000000	184300	001500		G E=20X,C=2X,B=50
SHHWJ	OOC HALLEY	06	0000	1922309	-294729	L	1	07866	L	86032418	000000	000000	180000	000400		G E=10X,C=107,B=38
SHHWJ	OOC HALLEY	06	0000	1922309	-294729	L	1	07865	L	86032417	000000	000000	172200	000030		G E=171,B=32
SHHWJ	OOC HALLEY	06	0000	1922309	-294729	H	3	28012	S	86032413	131300	015000	000000	000000		G B=50
SHHWJ	OOC HALLEY	06	0000	1922309	-294729	H	1	07864	S	86032413	131200	018000	000000	000000		G E=10X,C=140,B=92
SHHWJ	OOC HALLEY	06	0000	1922309	-294729	D	9	01792	L	86032412	000000	000000	121700	016000		G NO COMMENTS
HA191	CH CYG	57	0711	1923140	500831	L	3	28010	L	86032403	000000	000000	033924	001200	561	U
HA191	CH CYG	57	0708	1923140	500831	H	3	28011	L	86032404	000000	000000	043024	036700	273	U
HA191	HD182917	57	0688	1923140	500831	H	1	07553	L	86012313	000000	000000	132020	008700	462	U
HA191	HD182917	57	0695	1923140	500831	L	3	27571	LS	86012312	125839	001500	121123	002500	761	U 331$
HA191	CH CYG	57	0708	1923140	500831	L	1	07857	L	86032403	000000	000000	035923	000140	562	U
HA191	HD182917	57	0695	1923140	500831	L	1	07552	L	86012312	000000	000000	120008	000140	461	U
IBHSK	OO CH CYG	57	0700	1923142	+500831	L	1	07836	L	86032000	000000	000000	002900	000100		G E=1.5X,C=147,B=35
IBHSK	OO CH CYG	57	0700	1923142	+500831	H	3	27958	L	86032000	000000	000000	003600	012100		G C=137,B=79
IBHSK	OO CH CYG	57	0700	1923142	+500831	L	3	27957	L	86031923	000000	000000	234700	001000		G C=190,B=35
CVHSS	OONOVAVUL1	55	1380	1924034	+271554	L	1	07925	L	86033113	000000	000000	130900	008000		G E=94,C=80,B=51
CVHSS	OONOVAVUL1	55	1380	1924034	+271554	L	3	28068	L	86033111	000000	000000	115200	007000		G E=65,C=45,B=26
GA009	JL 22	70	1289	1927318	-743924	L	3	28231	L	86042706	000000	000000	061359	001500	400	U

PRO	OBJECT	CL	MAG	R.A.	DEC	D	C	IMAGE	A	DATE	EXP.SMALL	EXP.LARGE	ECC	COMMENT
GA009	JL 22	70	1285	1927319	-743925	L	1	08112	L	86042706	000000	000000	063525	001500 303 U
SCHPF	OOP/HALLEY	06	0430	1927359	-285027	L	1	07856	L	86032402	000000	000000	021700	000110 G C=198,B=30
SCHPF	OOP/HALLEY	06	0430	1927359	-285027	L	1	07855	L	86032400	000000	000000	005300	004800 G C=98,B=68
SCHPF	OOP/HALLEY	06	0430	1927369	-285028	S	9	01791	L	86032401	000000	000000	010200	004000 G NO COMMENTS
SCHPF	OOP/HALLEY	06	0430	1927369	-285028	L	3	28009	L	86032322	000000	000000	225000	000200 G B=17
SCHPF	OOP/HALLEY	06	0430	1927369	-285028	L	1	07854	L	86032323	000000	000000	234300	003000 G E=5X,C=175,B=140
SCHPF	OOP/HALLEY	06	0430	1927369	-285028	F	9	01790	L	86032323	000000	000000	235100	016000 G NO COMMENTS
SCHPF	OOP/HALLEY	06	0430	1927379	-285029	L	1	07850	L	86032318	000000	000000	181000	003000 G E=144
SCHPF	OOP/HALLEY	06	0430	1927379	-285029	L	1	07851	L	86032319	000000	000000	195200	001500 G E=5X,C=65,B=45
SCHPF	OOP/HALLEY	06	0430	1927379	-285029	L	3	28008	L	86032321	000000	000000	211400	000200 G E=106,B=17
SCHPF	OOP/HALLEY	06	0430	1927379	-285029	L	1	07852	L	86032321	000000	000000	212300	000200 G E=1.2X,B=35
SCHPF	OOP/HALLEY	06	0430	1927379	-285029	L	1	07853	L	86032322	000000	000000	220700	003000 G E=5X,B=125
SCHPF	OOP/HALLEY	06	0430	1927379	-285029	L	3	28007	L	86032316	000000	000000	164800	012000 G E=15X,B=78
SCHPF	OOP/HALLEY	06	0430	1927379	-285029	D	9	01789	L	86032314	000000	000000	143300	002000 G NO COMMENTS
SCHPF	OOP/HALLEY	06	0430	1927379	-285029	L	3	28006	L	86032313	000000	000000	131800	011500 G E=15X,B=37
SCHPF	OOP/HALLEY	06	0430	1927379	-285029	L	1	07849	SL	86032313	513900	014000	131600	014000 G E=50X,C=5X B=67
SCHPF	OOP/HALLEY	06	0430	1927379	-285029	L	1	07848	L	86032312	000000	000000	123800	000040 G E=131,B=35
WDHGW	00 G185-32	37	1300	1935219	+273630	L	1	08042	L	86041616	000000	000000	161500	003500 G C=185,B=41
HM159	NGC6826	70	0984	1943272	502410	H	1	07727	L	86022708	000000	000000	080741	015000 643 U
HM159	NGC6826	70	0976	1943272	502410	H	3	27805	L	86022705	000000	000000	053232	015000 572 U
HM159	NGC6826	70	0988	1943272	502410	L	3	27804	L	86022704	000000	000000	045527	000536 661 U
LGHJL	HD 186791	47	0270	1943529	+102924	H	1	07898	L	86032802	000000	000000	023000	000900 G E=173,C=70,B=35
LGHJL	HD 186791	47	0270	1943529	+102924	H	1	08115	L	86042717	000000	000000	174100	003500 G E=2X,C=117,B=44
SCHPF	OOC HALLEY	06	9999	1947269	-245153	D	9	01787	L	86031902	000000	000000	020600	016000 G NO COMMENTS
SCHPF	OOC HALLEY	06	9999	1947269	-245153	L	1	07830	L	86031902	000000	000000	020200	000030 G E=156,B=30
SCHPF	OOC HALLEY	06	9999	1947279	-245154	D	9	01786	L	86031823	000000	000000	235400	016000 G NO COMMENTS
SCHPF	OOC HALLEY	06	9999	1947279	-245154	L	3	27946	L	86031823	000000	000000	230000	000130 G E=81,B=40
SCHPF	OOC HALLEY	06	9999	1947279	-245154	L	1	07826	L	86031822	000000	000000	224700	000600 G E=136,B=38
SCHPF	OOC HALLEY	06	9999	1947279	-245154	L	1	07827	L	86031900	000000	000000	000600	000130 G E=126,B=35
SCHPF	OOC HALLEY	06	9999	1947279	-245154	L	1	07828	L	86031900	000000	000000	004300	000130 G E=126,B=30
SCHPF	OOC HALLEY	06	9999	1947279	-245154	L	1	07829	L	86031901	000000	000000	012600	000130 G E=131,B=35
SCHPF	OOC HALLEY	06	9999	1947285	-245155	L	1	07820	L	86031816	000000	000000	163100	000600 G E=144,B=35
SCHPF	OOC HALLEY	06	9999	1947285	-245155	L	1	07819	L	86031815	000000	000000	153600	000430 G E=234,B=35
SCHPF	OOC HALLEY	06	9999	1947285	-245155	F	9	01783	L	86031814	000000	000000	144400	004000 G NO COMMENTS
SCHPF	OOC HALLEY	06	9999	1947285	-245155	D	9	01784	L	86031820	000000	000000	205700	016000 G NO COMMENTS
SCHPF	OOC HALLEY	06	9999	1947285	-245155	L	1	07821	L	86031817	000000	000000	172500	001200 G E=118,B=38
SCHPF	OOC HALLEY	06	9999	1947285	-245155	L	1	07824	L	86031820	000000	000000	203500	001500 G E=10X,C=220,B=55
SCHPF	OOC HALLEY	06	9999	1947285	-245155	L	1	07818	L	86031814	000000	000000	142800	000300 G E=248,B=33
SCHPF	OOC HALLEY	06	9999	1947285	-245155	L	1	07822	L	86031818	000000	000000	182900	002000 G B=58
SCHPF	OOC HALLEY	06	9999	1947285	-245155	L	1	07823	L	86031819	000000	000000	195600	000030 G E=152,B=50
SCHPF	OOC HALLEY	06	9999	1947285	-245155	L	1	07817	L	86031813	000000	000000	134400	000090 G E=209,B=34
SCHPF	OOC HALLEY	06	9999	1947285	-245155	L	3	27945	L	86031812	000000	000000	125400	019000 G E=175,C=90,B=65
SCHPF	OOC HALLEY	06	9999	1947285	-245155	D	9	01782	L	86031812	000000	000000	122900	016000 G NO COMMENTS
SCHPF	OOC HALLEY	06	9999	1947285	-245155	L	1	07816	L	86031812	000000	000000	124100	000030 G E=178,B=35
SCHPF	OOC HALLEY	06	9999	1947285	-245155	D	9	01785	L	86031822	000000	000000	220700	016000 G NO COMMENTS

PRO	OBJECT	CL	MAG	R.A.	DEC	D	C	IMAGE	A	DATE	EXP.SMALL	EXP.LARGE	ECC	COMMENT
SCHPF	OOC HALLEY	06	9999	1947285	-245155	L	1	07825	L	86031821	000000	000000	215300	000600	G	E=130,B=35
SRHLW	00 CHI CYG	51	0600	1948385	+324712	L	1	07473	L	86010906	000000	000000	060000	001500	G	E=81,B=50
SRHLW	00 CHI CYG	51	0750	1948385	+324712	L	1	07967	L	86040719	000000	000000	190900	003000	G	B=42
SCHPF	OOP/HALLEY	06	0700	1952449	-234201	L	1	07805	L	86031622	000000	000000	220900	001500	G	E=10X,C=222,B=50
SCHPF	OOP/HALLEY	06	0700	1952458	-234202	D	9	01781	L	86031619	000000	000000	195400	016000	G	NO COMMENTS
SCHPF	OOP/HALLEY	06	0700	1952458	-234202	L	1	07804	L	86031620	000000	000000	200500	000030	G	E=161,C=48,B=33
SCHPF	OOP/HALLEY	06	0700	1952459	-234202	L	3	27927	L	86031620	000000	000000	201100	009000	G	E=114,C=62,B=43
HS231	00 HALLEY	06	0700	1957599	-223000	L	3	27914	SL	86031501	015000	004100	014900	004100	G	E=121,B=22
HS231	00 HALLEY	06	0700	1957599	-203000	L	1	07801	SL	86031501	011300	000500	011200	000500	G	E=15X,C=178,B=39
HS231	00 HALLEY	06	0700	1957599	-223000	D	9	01779	L	86031420	000000	000000	200300	016000	G	NO COMMENTS
HS231	00 HALLEY	06	0700	1957599	-203000	H	1	07800	L	86031500	000000	000000	001800	001000	G	E=202,B=43
HS231	00 HALLEY	06	0700	1957599	-203000	H	1	07799	L	86031423	000000	000000	232500	001000	G	E=177,B=40
HS231	00 HALLEY	06	0700	1957599	-223000	H	1	07797	L	86031421	000000	000000	212800	001000	G	E=173,B=30
HS231	00 HALLEY	06	0700	1957599	-223000	H	1	07798	L	86031422	000000	000000	223200	001000	G	E=177,B=35
HS231	00 HALLEY	06	0700	1957599	-223000	L	1	07796	SL	86031420	203300	000015	203200	000015	G	E=141,C=43,B=31
HS231	00 HALLEY	06	0700	1957599	-203000	H	3	27913	L	86031420	000000	000000	204100	019000	G	E=156,B=120
HS231	00 HALLEY	06	0700	2000000	-220000	D	9	01776	L	86031320	000000	000000	203600	016000	G	NO COMMENTS
HS231	00 HALLEY	06	0700	2000000	-220000	L	1	07787	SL	86031321	210600	000030	210500	000030	G	E=197,C=51,B=32
HS231	00 HALLEY	06	0700	2000000	-220000	H	1	07791	S	86031401	012900	003800	000000	000000	G	E=1.1X,B=39
HS231	00 HALLEY	06	0700	2000000	-220000	L	3	27908	SL	86031321	211700	007000	211600	007000	G	E=101,C=55,B=26
HS231	00 HALLEY	06	0700	2000000	-220000	L	1	07788	SL	86031322	220300	000300	220200	000300	G	E=244,C=45,B=32
HS231	00 HALLEY	06	0700	2000000	-220000	L	1	07790	SL	86031323	235900	000600	235800	000600	G	E=15X,C=103,B=36
HS231	00 HALLEY	06	0700	2000000	-220000	L	1	07789	SL	86031322	225500	000400	225400	000400	G	E=10X,C=70,B=35
HS231	00 HALLEY	06	0700	2000000	-220000	S	9	01777	L	86031400	000000	000000	001800	004000	G	NO COMMENTS
HI215	P/HALLEY	06	9999	2002050	-213021	E	9	01775	SL	86031301	014452	002000	014452	002000	U	P.R. IMAGE
HS231	P/HALLEY	06	9999	2002500	-213021	D	9	01774	SL	86031301	013545	016000	013545	016000	U	
HS231	00 HALLEY	06	0700	2002599	-212459	L	1	07782	L	86031220	000000	000000	205300	000025	G	E-209,B=32
HS231	00 HALLEY	06	0700	2002599	-212459	D	9	01772	L	86031220	000000	000000	202700	004000	G	NO COMMENTS
HS231	00 HALLEY	06	0700	2002599	-212459	D	9	01773	L	86031222	000000	000000	220700	004000	G	NO COMMENTS
HS231	00 HALLEY	06	0700	2002599	-212459	L	1	07783	L	86031300	000000	000000	003000	000800	G	E=20X,C=195,B=68
HS231	00 HALLEY	06	0700	2002599	-212459	L	3	27906	SL	86031221	215700	003000	210200	003000	G	E=146,C=100,B=79
SCHPF	OOP/HALLEY	06	0490	2005480	-204927	L	1	07773	L	86031117	000000	000000	175700	001500	G	E=20X,C=70,B=53
SCHPF	OOP/HALLEY	06	0490	2005480	-204927	D	9	01771	L	86031117	000000	000000	174200	004000	G	NO COMMENTS
SCHPF	OOP/HALLEY	06	0490	2006192	-204349	D	9	01769	L	86031113	000000	000000	130400	004000	G	NO COMMENTS
SCHPF	OOP/HALLEY	06	0490	2006192	-204349	L	3	27898	L	86031113	000000	000000	133100	012000	G	E=40X,B=40
SCHPF	OOP/HALLEY	06	0490	2006192	-204349	L	1	07772	L	86031113	000000	000000	131900	000300	G	E=4X,C=62,B=40
SCHPF	OOP/HALLEY	06	0490	2006192	-204349	S	9	01770	L	86031113	000000	000000	134100	004000	G	NO COMMENTS
WDHGW	00 LTT7987	37	1220	2007540	-302200	L	3	28181	L	86041614	000000	000000	145800	001500	G	C=140,B=18
WDHGW	00 LTT7987	37	1220	2007540	-302200	L	1	08041	L	86041614	000000	000000	142900	001700	G	C=229,B=38
SCHPF	OOP/HALLEY	06	0490	2010144	-195004	L	3	27885	L	86030917	000000	000000	175700	000130	G	E=149,B=15
SCHPF	OOP/HALLEY	06	0490	2010144	-195004	D	9	01768	L	86030917	000000	000000	171600	004000	G	NO COMMENTS
SCHPF	OOP/HALLEY	06	0490	2010144	-195004	L	1	07766	L	86030918	000000	000000	180500	001500	G	E=30X,C=255,B=45
SCHPF	OOP/HALLEY	06	0490	2010260	-194800	L	1	07765	L	86030914	000000	000000	142100	000015	G	E=176,B=40
SCHPF	OOP/HALLEY	06	0490	2010260	-194800	L	3	27884	L	86030914	000000	000000	143500	004500	G	E=10X,C=66,B=30
SCHPF	OOP/HALLEY	06	0490	2010319	-194657	D	9	01767	L	86030914	000000	000000	140400	004000	G	NO COMMENTS

PRO	OBJECT	CL	MAG	R.A.	DEC	D	C	IMAGE	A	DATE	EXP.SMALL	EXP.LARGE	ECC	COMMENT
HA194	HD192640	10	0824	2012394	363028	L	1	07963	LS	86040607	072312	000300	071627	000100 560 U 660$
HA194	HD192640	10	0821	2012394	363028	H	3	28112	L	86040605	000000	000000	051208	019500 452 U
HA199	HD193237	23	0504	2015565	375236	H	1	08097	L	86042508	000000	000000	083511	000500 561 U
HA194	HD193793	10	0714	2018467	434143	L	3	28110	LS	86040602	021707	000400	020811	000140 560 U 330$
HA194	HD193793	10	0716	2018467	434143	H	3	28111	L	86040603	000000	000000	030800	007000 441 U
HA194	HD193793	10	0713	2018467	434143	L	1	07961	LS	86040602	023534	000050	022827	000020 501 U 501$
HA194	HD193793	10	0712	2018467	434143	H	1	07962	L	86040604	000000	000000	042424	002500 402 U
BIHTS	HD 193911	26	0550	2019543	+241708	H	3	28102	L	86040517	000000	000000	174700	001800 G C=2X,B=69
HSHRD	002022+531	19	1610	2022370	+531658	L	3	27715	L	86021413	000000	000000	135100	026000 G C=200,B=115
CVHSS	00NOVAVUL2	55	1070	2024407	+274041	L	1	07927	L	86033117	000000	000000	172000	000600 G E=173,C=68,B=36
CVHSS	00NOVAVUL2	55	1070	2024407	+274041	L	3	28069	L	86033115	000000	000000	151200	002200 G E=221,C=44,B=20
CVHSS	00NOVAVUL2	55	1070	2024407	+274041	L	3	28070	L	86033116	000000	000000	162200	005000 G E=2X,C=80,B=37
CVHSS	00NOVAVUL2	55	1070	2024407	+274041	L	1	07926	L	86033115	000000	000000	154800	000300 G E=2X,C=55,B=34
HI136	HVB475	57	1305	2049026	352337	L	1	08025	L	86041403	000000	000000	032659	006500 452 U
HI136	HBV475	57	1308	2049026	352337	H	3	28168	L	86041404	000000	000000	043657	025000 132 U
HI136	HBV475	57	1302	2049026	352337	L	3	28167	L	86041402	000000	000000	020541	007500 351 U
NSHJR	00CYG LOOP	75	9999	2055128	+305051	L	3	28161	L	86041310	000000	000000	102100	039000 G E=220,C=100,B=80
HA048	HD200120	14	0470	2058074	471930	H	3	27609	L	86012614	000000	000000	140911	000130 500 U
HA048	HD200120	20	0491	2058074	471930	H	3	27671	L	86020607	000000	000000	071719	000130 500 U
MLHCW	HD 200120	26	0450	2058074	+471930	H	3	27481	L	86010923	000000	000000	231000	000120 G C=200,B=35
HA048	HD200120	26	0451	2058074	471930	H	3	28224	L	86042403	000000	000000	033236	000130 500 U
SRHLW	00 T CEP	51	0490	2108529	+681712	L	1	07968	L	86040720	000000	000000	203200	001500 G C=53,B=40
SRHLW	00 T CEP	51	0700	2108529	+681712	L	1	07678	L	86021819	000000	000000	194100	003000 G E=67,B=42
SRHLW	00 T CEP	51	0700	2108529	+681712	L	1	07438	L	86010205	000000	000000	051400	000500 G B=90
SRHLW	00 T CEP	51	0700	2108529	+681712	L	1	07439	L	86010206	000000	000000	061500	003000 G E=183,C=130,B=90
MLHCW	HD 203467	26	0540	2118201	+643934	H	3	27480	L	86010922	000000	000000	221100	000600 G C=220,B=39
MLHCW	HD 203467	26	0540	2118201	+643934	H	3	27497	L	86011022	000000	000000	220400	000700 G C=245,B=43
MLHCW	HD 203467	26	0540	2118201	+643934	H	3	27502	L	86011103	000000	000000	030400	000700 G C=245,B=45
MLHCW	HD 203467	26	0540	2118201	+643934	H	3	27494	L	86011018	000000	000000	184200	000700 G C=250,B=41
NGHMF	00 S285	72	0000	2126599	+542314	L	1	07716	L	86022416	000000	000000	163900	012500 G B=190
NGHMF	00 S127	72	0000	2126599	+542314	L	3	27780	L	86022411	000000	000000	115300	018000 G B=51
LGHJL	HD 204867	45	0290	2128557	-054732	L	3	28234	L	86042720	000000	000000	204200	002641 G E=126,C=195,B=38
NGHMF	00 S128	72	0000	2130358	+553840	L	3	27798	L	86022612	000000	000000	121600	015000 G B=50
BEHGP	00 EPS CAP	26	0470	2134169	-194127	H	3	28216	L	86042219	000000	000000	190700	000120 G C=180,B=33
CVHRP	00 SS CYG	54	1200	2140449	+432121	L	3	28215	L	86042217	000000	000000	175500	002800 G E=216,C=62,B=27
HCHBB	HD 207739	39	0860	2147597	+434353	H	1	07542	L	86012102	000000	000000	021300	003700 G E=90,C=103,B=50
HCHBB	HD 207739	39	0860	2147598	+434354	L	3	27551	L	86012101	000000	000000	014500	001400 G E=230,C=180,B=26
STHRP	BD+28 4211	16	1050	2148574	+283734	L	1	07491	L	86011400	000000	000000	004900	000200 G
PHCAL	BD+28 4211	16	1050	2148574	+283734	L	2	17845	L	86010102	000000	000000	025400	000122 G C=185,B=121
PHCAL	BD+28 4211	16	1050	2148574	+283734	F	9	01758	L	86010102	000000	000000	022400	016000 G NO COMMENTS
HE189	NGC7196	81	1325	2202418	-502147	L	3	28153	L	86041202	000000	000000	023254	037500 204 U
HE189	NGC7196	81	1327	2202418	-502147	L	1	08018	L	86041306	000000	000000	062902	013800 204 U
LGHJL	HD 209750	45	0300	2203129	-003349	H	1	08116	L	86042719	000000	000000	193900	003000 G E=2X,C=2X,B=60
LGHJL	HD 209750	45	0300	2203129	-003349	L	3	28233	L	86042719	000000	000000	190100	003000 G E=158,C=150,B=35
HC135	HD217014	44	0571	2255012	203042	H	1	07506	L	86011510	000000	000000	101943	009000 513 U

PRO	OBJECT	CL	MAG	R.A.	DEC	D	C	IMAGE	A	DATE	EXP.SMALL	EXP.LARGE	ECC	COMMENT
OD86K	00 Z AND	57	0950	2331149	+483231	L	3	27456	L	86010522	000000	000000	222800	001000	G	E=207,C=90,B=35
HITOO	HD221650	57	0931	2331149	483230	H	3	27647	L	86020106	000000	000000	060056	040600 374	V	
HI185	Z AND	57	0934	2331150	483231	L	3	27631	L	86013008	000000	000000	081308	003000 571	V	
OD86K	00 Z AND	57	0950	2331150	+483232	L	1	07460	L	86010521	000000	000000	215100	000500	G	C=218,B=40
OD86K	00 Z AND	57	0950	2331150	+483232	L	3	27455	SL	86010521	210300	001000	212200	001500	G	E=2X,C=141,B=50
HI185	Z AND	57	0938	2331150	483231	H	3	27633	L	86013010	000000	000000	102725	004000 231	V	
HI185	Z AND	57	0936	2331150	483231	L	3	27632	L	86013009	000000	000000	095008	000800 351	V	
HI185	Z AND	57	0924	2331150	483231	L	1	07594	L	86013008	000000	000000	080019	000700 563	V	
OD86K	00 Z AND	57	0950	2331150	+483232	H	1	07459	L	86010518	000000	000000	185300	012000	G	E=1.5X,C=185,B=123
ZAHNO	00 Z AND	57	0950	2331150	+483232	L	3	27636	SL	86013023	000400	001000	234200	001500	G	E=1.5X,C=177,B=68
OD86K	00 Z AND	57	0950	2331150	+483232	H	3	27454	L	86010515	000000	000000	154700	018000	G	E=1.2X,C=103,B=58
ZAHNO	00 Z AND	57	0950	2331150	+483232	L	1	07596	L	86013100	000000	000000	002900	000500	G	C=225,B=58
HI185	Z AND	57	0937	2331150	483231	L	1	07595	L	86013008	000000	000000	085941	002500 773	V	
HI185	HD53150	31	0933	2331256	482442	L	1	07545	L	86012207	000000	000000	075951	002000 603	V	
HI185	HD53150	31	0925	2331256	482442	L	3	27555	L	86012208	000000	000000	082735	006000 402	V	
CGHTS	HD 223460	45	0580	2347096	+360852	L	3	27538	L	86011702	000000	000000	021200	009000	G	E=132,C=130,B=59
CGHTS	HD 223460	45	0580	2347096	+360852	H	1	07517	L	86011705	000000	000000	053700	003000	G	E=130,C=117,B=42
CGHTS	HD 223460	45	0580	2347096	+360852	D	9	01760	L	86011706	000000	000000	061000	016000	G	NO COMMENTS
CGHTS	HD 223460	45	0580	2347096	+360852	H	1	07518	L	86011721	000000	000000	215500	004500	G	E=175,C=150,B=43
CGHTS	00 WAVECAL	98	0580	2347096	+360852	H	3	27540	S	86011721	214900	000018	000000	000000	G	E=8X,B=105
CGHTS	HD 223460	45	0580	2347096	+360852	H	3	27539	L	86011718	000000	000000	181300	088500	G	C=250,B=160
DCHNE	HD 224165	45	0610	2353015	+470439	L	1	07521	L	86011802	000000	000000	022700	001200	G	C=227,B=37

Errors in Foregoing VILSPA Log

Please inform us by post of all errors or omissions in the log reproduced in this issue. Detach this page, fold and staple it leaving the mailing address (verso) visible.

CAMERA & IMAGE	DISPERSION	APERTURE	TARGET	DATE OF OBSERVATION	WRONG FIELD CONTENTS	CORRECT INFORMATION

UK Resident Astronomer
Villafranca Satellite Tracking Station
Apartado 54065
Madrid, Spain

TAPE ARCHIVE RETRIEVAL

DATA TAPE:

TAPE DENSITY ◯ 1600 bpi (default) ◯ 800 bpi

REQUESTED DATA ◯ Raw Data Only

◯ Complete: Raw image + Extracted Spectra

◯ Extracted Spectra Only

CAM #	IMAGE #	CAM #	IMAGE #	CAM #	IMAGE #	CAM #	IMAGE #

CAMERA NUMBERS: 1 = LWP / 2 = LWR / 3 = SWP / 4 = SWR

REASON DATA IS ACCESSIBLE:

◯ Normal Release (6 month rule)

◯ Special Release ◯ data from my programme .....

◯ maintenance data

◯ others (give details) .....

.....

REQUESTED BY: ..... DATE OF REQUEST: .....

MAILING ADDRESS: .....

.....

.....

DATA BANK R.A.

....

Dr. A. Cassatella,
Data Bank Resident Astronomer,
Villafranca Satellite Tracking Station
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