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**IUE ESA NEWSLETTER**

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OBSERVATORY CONTROLLERS MESSAGE

This Newsletter will reach you after the IUEAC has finished its deliberations on the observing time assignments for the next year - the 15th round! - of IUE observing. Although the science program has been defined for a full year we face again the annual struggle for continued funding of IUE. To evaluate the future of IUE, ESA's Astronomical Working Group has formed an IUE Review Team to evaluate the scientific merit and need for the continuation of IUE. This Team has just had its first meeting at VILSPA to familiarize itself with the various aspects of the IUE Project and its scientific importance. The Team is expected to report in late May, during the Capri meeting, to the SSAC after which the Science Programme committee will make the final decision.

The current S/C condition remains good even though a few months ago we lost the Flux Particle Monitor (FPM) which was normally used to establish the expected background level in the science images. The most recent shadow season (#29) has passed without any problems and the good news is that this time, contrary to the summer shadow, no evidence is present for a further increase in the FES background level. Although the cause of this is still something of a mystery it appears that at present the, partially temperature driven, increase has come to a halt. However the FES background does have an impact on observing, in particular on target acquisition, and all observers are requested to read the article by Richard Monier in this Newsletter.

Preparations for the replacement of the EDS systems have now proceeded quite well with a new communications S/W and display control developed at GSFC. We hope finally to be able to retire some of the more classical pieces of the IUE ground system (do not think that all will be replaced!). A back up S/C control mode has been developed at VILSPA allowing some form emergency back-up capability through VILSPA for GSFC in case of problems on their side. Of course this is only applicable when IUE is above the VILSPA horizon.

The observatory staff is again complete and operational, and we hope that the time for training of both new R.A.'s and new T.O.'s has not been too perturbing for your programs. I welcome all of them together with the other new IUE support staff and hope they will find, as many before them, that they will realize their professional capabilities in full.

You will find in this Newsletter that although the Final Archive (IUEFA) production has been somewhat delayed, through unforeseen (still!) peculiarities in IUE's SEC Cameras, a firm start is foreseen in the near future. All VILSPA R.A.'s are



currently struggling to assure correctness of the headers for the IUEFA, the CDI verification process. (If you are curious, ask your R.A. for details!).

Another new tool which we hope will be really helpful for the planning of your observations has recently been put on line: RTOPS will give you first-hand information on observability and other importance aspects of IUE observation preparation, as well as a few general tools for astronomy. An interesting aspect of RTOPS is that the S/W core was originally developed for EINSTEIN, brought to the IUE Project by a NASA RA who keeps switching frequencies and finally made user friendly by a SERC VILSPA Resident Astronomer. In this respect I think it is a classical example of the spirit of IUE. I hope you will find it useful. If you wish to comment on the facility (either good or bad) please inform Domitilla de Martino (VILSPA::DDM) who is currently responsible for the package or Michael Barylak (VILSPA::MB) who is supposed to assure satisfactory communicability of VILSPA.

Finally let me wish you all successful observing in the 15th. year of IUE.

PERSONNEL CHANGES



On 1st November 1991, Alejandro Peña joined the VILSPA IUE Spacecraft Controller team. He is a physics graduate from the Universidad Autonoma de Madrid. Prior to coming to VILSPA he had been working as a programmer for a year. He is interested in Astronomy and Egyptian history and likes travelling.

On 1st. October 1991, Pedro M. Rodriguez Pascual took up the post of Resident Astronomer. He obtained his degree in Physics at the University of Granada in 1989. The subject of his research has been the activity in galactic nuclei. He hopes to be able to fulfil his duties as Resident Astronomer and continue his own research work.



On 1st. November 1991 Constanze la Dous joined VILSPA as a Resident Astronomer. She got her Ph.D. from the University of Munich. After that, and before being able to enjoy the Spanish sun, she occupied offices at the University in Trieste and Cambridge (UK), as well as at the Goddard Space Flight Center (USA). Her scientific hunting grounds are cataclysmic variable, archival research, and stellar atmospheres.

Jose Julio Alhambra Garcia, 25 years old, joined VILSPA as a Data Bank Specialist in December 91. He studied computing at the Universidad Pontificia de Salamanca in Madrid and after graduating worked in the Instituto Microsoft and with INTI. He likes walking in the mountains and riding horses.



In November 91, Juan Piñeiro Garcia, 26, joined VILSPA as one of the IUE Spacecraft Controllers. Single, he is a graduate in Physics, specialising in Electronics from the Complutense University of Madrid. After leaving the Complutense he spent one year stimulating technological processes in Silicium in the University of Valladolid and another one with an investigation grant in the field of experimental Gamma Ray Astronomy. He likes long distance running and swimming.



## Important Note for Guest Observers

Richard Monier

March 2, 1992

Impact of the scattered light in the FES on IUE observations:

Since early February 1991, the field of view (FOV) of the Fine Error Sensor ( FES) is contaminated by a background scattered light whose origin is not well understood yet. Monitoring of this background revealed a strong dependence on the Beta angle: outside shadow season, the values range typically from 30 counts in SlowOverlap mode at low betas (30 to 40 degrees) to about 210 counts at the highest Beta angles (100 to 110 degrees). The background is higher during the shadow seasons. Roughly, 200 counts slowoverlap correspond to the brightness of a 12th magnitude star observed without background light.

Accordingly, the identification and acquisition of targets and guide stars fainter than 11th magnitude at beta angles larger than 50 degrees requires extensive preparation. Deep 5 kilobits/s fields formerly used to identify faint fields are now very noisy. The following guidelines should be followed when preparing your observations. 1950 coordinates accurate to 1 arcsecond should be provided for the target and as well for a guide star (which must be inside the 16 square arcmin FES field of view). The guide star coordinates can be found by searching the Hubble Space Telescope Guide Star Catalogue using the program STARCAT at ST-ECF , which can be accessed remotely either from your institution or from VILSPA. Alternately, coordinates can be measured on a chorodagraph available at VILSPA using neighbouring SAO stars. Another important requirement is that the guide be brighter than magnitude 12th to safely guide on it. During the training session, the location of the guide star in the FES field once the target is in the aperture can be calculated and will serve to check that the object is properly centered

in the aperture. One can actually distinguish 4 cases depending on the respective brightness of the target and guide star:

1) If both the target and another star in the FOV are brighter than magnitude 11, the acquisition will proceed normally. Prepare a finder field centered on the target. 2) If the target is brighter than magnitude 11 but no star brighter than 11th magnitude is available in the FOV, look for a star brighter than 12 within the FOV and provide its accurate 1950 coordinates. A finder field centered on the target is necessary. 3) If the target is fainter than 11th magnitude and another star brighter than  $V=11$ th is in the FOV, a blind offset will be performed from this star. Provide its accurate 1950 coordinates and prepare a finder field centered on this offset star. 4) If both the target and the candidate guide star are fainter than 11th magnitude, a blind offset will be performed from the nearest SAO star. If the latter is further than 20 arcmin from the target, a double blind offset should be prepared from the SAO to an offset star within 20 arcmin of the target and from that second offset to the target. Accurate 1950 coordinates are needed for all offset stars as well as finder fields centered on the first offset.

#### Remote access to RTOPS:

RTOPS is a set of programs designed to help the preparation of observations and optimize their real time execution. To help Guest observers prepare their observations in advance, RTOPS will be available remotely to Guest Observers from March 20th. The captive account for remote access is that of the VILSPA Database as defined in the ESA IUE Newsletter No 37. Guidelines for remote access to RTOPS are described in another article of this newsletter.

GUIDELINES FOR REMOTE ACCESS TO RTOPS

D. de Martino - IUE Observatory VILSPA

1.1 INTRODUCTION

RTOPS is a set of programs designed to help with the preparation of observations and optimize their real time execution. To help Guest observers prepare their observations in advance, RTOPS will be available remotely from March 20th.

1.2 HOW TO ACCESS RTOPS

Remote access to RTOPS will be available as an additional option in the query facility of the VILSPA database. The captive account for remote access is:

Username: VILSPA
Password: DB

The user will be prompted for DBQ (D), RTOPS (R) and ULDA (U). The latter option is only for spanish users. For details of how to connect to VILSPA see the article "Remote Interrogation of the IUE Database" in this Newsletter.

For RTOPS no registration is needed and the following menu will be displayed:

- (1) ANTENNA
(2) AD50FES
(3) IUEPOS
(4) IUEPRLX
(5) PRECESS
(6) DONDE?

These programs are explained in section 1.3. To Logoff or to Quit RTOPS the following options are available:

LOGOFF.....: 0
EXIT (Quit RTOPS)...: X

In the latter option the user will be back to the initial prompts: DBQ (D), RTOPS (R) and ULDA (U).

1.3 RTOPS PROGRAMS:

The RTOPS programs are run in an interactive way and results displayed on the screen. These use the most recent ephemeris and as such are valid only for the current year (1992).

Input data format convention is as follows:

Object coordinates ----- RA: HH MM SS
-----DEC: SDD MM SS

S/C Roll angle -----: DDD MM SS

Date of observation -----: DD-MON-YY (eg. 20-MAR-92)
or DOY: DDD (80 for 20 March 1992)

Time of observation (U.T.) -----: HH,MM

Guest Observer are reminded that target coordinates used for IUE observations are at 1950.0 epoch for which a precession coordinate program is available as option 5).

1.3.1 ANTENNA: It computes the spacecraft (S/C) angles (in degrees) for a date of the current year and for 8 hours (IUE shift duration).

Inputs: Object coordinates (RA and DEC at 1950.0 epoch).  
Date and start time (U.T.). Defaults are current date and start time of VILSPA shift.  
Object name

Outputs: For each hour the following angles will be computed:

THETA and PHI: IUE S-band antenna angles for telemetry from S/C. These give information on the signal strength from the S/C:

If THETA < 20 deg for all PHI angles, Earth Occultation will occur and images cannot be safely read; while for THETA > 90 deg for all PHIs, images can be read safely. Low signal regions are for 20<THETA<90 deg and 80<PHI<110 deg, and for 20<THETA<90 deg and 250<PHI<300 for which images can be read with some caution.

BETA: S/C angle with the anti-solar direction. This gives information on feasibility of IUE observations. "Hot" values are flagged implying On Board Computer (OBC) temperature may rise to the limit of 58.3 deg. "Power Constrained" Betas are flagged as forbidden.

ROLL: S/C angle between North and a Reference Vector such that Large Aperture Position Angle = 73deg - ROLL

MOON: Angular distance of the target to the moon.

1.3.2 AD50FES: It calculates offsets (Delta X; Delta Y) given (RA,DEC) start and end in the (X,Y) coordinate system of the Fine Error Sensor (FES). These can be used to check if another star in the FES field of view can be used for guiding. Offsets larger than 1000 FES units along both axis should be avoided.

Inputs: Object coordinates (RA and DEC at 1950 epoch)

Guide star coordinates (RA and DEC at 1950 epoch)

Current Roll angle in (DEG,MIN,SEC)

Outputs: Delta X and Delta Y offsets in FES units.  
(1 FES unit: approx 0.3 arcsec)

1.3.3 IUEPOS: Calculates IUE spacecraft coordinates (RA,DEC) at a given time.

Inputs: Date and time (U.T.) of interest. Defaults are current date and start time of VILSPA shift.

Outputs: IUE RA and DEC coordinates and altitude in Km.

1.3.4 IUEPRLX: Calculates the position (RA,DEC) of a nearby object corrected for the IUE parallax.

Inputs: Object coordinates (RA and DEC)



Equinox of object coordinates  
Object distance in AUs.

Outputs: Object coordinates (RA and DEC at 1950 epoch)  
corrected for the IUE parallax.

1.3.5 PRECESS : General precession of coordinates.

Inputs: Object coordinates (RA and DEC)  
Equinox of input coordinates and desired equinox.

Outputs: Precessed object coordinates.

1.3.6 DONDE? : Calculates the approximate position on Palomar or ESO  
plates given object (RA,DEC).

Inputs: Object name  
Object coordinates (RA and DEC)  
Equinox of input coordinates

Outputs: Palomar or ESO plate number and X,Y position  
on plate. Origin is at the plate left lower  
hand side corner with coordinates (X,Y)  
increasing in the North-West direction.

## IUE SPACECRAFT STATUS

JANUARY 1991

D. Hermoso, VILSPA

### 1. GENERAL

The spacecraft continued to support science operations normally and effectively in its fifteenth year of highly successful in-orbit operations. At the end of January 1992, a total of 23028 images had been collected from 9806 celestial objects (VILSPA only).

### 2. POWER SUBSYSTEM.

IUE's 28th Eclipse Season ran from July 29 to August 20, 1991. The maximum depths of discharge for the season were 50.83% for battery 1, and 52.07% for battery 2. The weekly charging routine for battery #1 continues in order to force some charge current into the battery. Ever since the end of Shadow Season 26 (August 1990) the charge current has been at 0.0 amps with the voltage at 24.72 volts. With the main charger on, the amount of charge current is regulated by the battery voltage. When the voltage reaches 24.72 volts, the charge current goes to zero. During the charging routine, the main charger is turned off and the battery receives a low trickle charge. This charge however, raises the battery voltage and must be removed before the voltage becomes too high. Each charge sequence lasts on the order of minutes before high battery voltage dictates that the charger be turned back on.

The projected maximum depths of discharge for shadow season 29 (January 21 through February 17, 1992) are 37.97% for battery 1 and 42.82% for battery 2.

### 3. SOLAR ARRAYS

The average reduction in power between August 1990 and August 1991 at  $\beta = 70^\circ$  was 3.18%. The average yearly degradation from 1978-1991 was 4.51%. The largest degradation took place during the years 1988-1991. This increased degradation may have been a result of the solar cycle maximum. Despite their degradation, enough power is supplied by the arrays to keep the spacecraft power positive over the range of beta angles between  $33^\circ$  and  $107^\circ$ . This range is based on a nominal power requirement of approximately 149.5 watts.

### 4. ATTITUDE CONTROL SYSTEM

The current on Gyro 5 remains at its 0-2 mamps. level. The current suddenly dropped from its normal value to 0 amps on February 5, 1991 and while no loss of maneuver accuracy has resulted, a significant change in the drift rate was noticed. In addition to that sudden change, the steady rise in drift rate remains. This overall change in drift rate is attributed to the degradation of the gyros health. The daily fluctuations, unless otherwise noted, are due to temperature changes in the gyro which in turn are directly related to the spacecraft sun angle. Gyro 4 continues to perform normally.

Two successful spacecraft tests on the One-Gyro system were performed on September 7 and September 23, 1991. The tests showed favorable spacecraft control in almost all hold/slew modes. Much work had been done before these tests to finetune the maneuvering capabilities of the spacecraft under this system and these tests seemed to show that maneuver accuracy is much improved. A new time delay constant in the processing of filtered FES data was also tested and found to be an improvement in stability over the last system.

Plans are being made for another spacecraft test on the One-Gyro system to allow for more science-oriented testing under this control mode.

On October 18, 1991 the IUE spacecraft successfully executed a 13.62 seconds orbit adjustment Delta-V maneuver with all systems performing nominally.

Selecting the most favorable momentum-wheel unload jet firings to counteract the westward drift of the spacecraft continues to extend the duration of the IUE orbital drift period.

**5. THERMAL**

In general the spacecraft temperatures remain stable.

OBC temperature operating limits were relaxed by eliminating the 55.8°C constraint zone; cooling of the OBC needs to take place only when its temperature glitches to 57.0°C.

The HOT OBC Beta region has changed as follows:

<u>MONTH</u>	<u>LOWER_LIMIT</u>	<u>UPPER_LIMIT</u>
JANUARY	65°	85°
FEBRUARY	70°	79°
MARCH	--	--
APRIL	--	--
MAY	--	--
JUNE	--	--
JULY	--	--
AUGUST	--	--
SEPTEMBER	--	--
OCTOBER	--	--
NOVEMBER	70°	79°
DECEMBER	65°	85°

## 6. ANOMALIES

The IUE spacecraft has performed satisfactorily well over the last months, only a few anomalies were encountered:

- On July 24, 1991 readings from the Flux Particle Monitor (FPM), which had been displaying noisy values for nearly two weeks, jumped up and remained at an elevated level. During the next two months (August and September 1991), the readings coming from the FPM became increasingly erratic and did not represent the true radiation environment. Therefore, it was concluded that the FPM is no longer a useful device and on October 4th was turned off.

- On 16 August a data block #14 with 11 commands did not take effect during the preparation of one camera.

- On 17 August a data block #21 with 25 commands did not take effect.

- On 18 August the OBC worker #13 (command delay worker or coded programme) remained on. The worker was manually turned off.

- On 6 November the SWP camera commanded to standby two ticks short of commanded exposure time.

- On 6 November the spacecraft lost attitude due to an OBC crash. Switched to emergency 4-k system.

## THE IUE FINAL ARCHIVE - III

A. Talavera, J.D. Ponz  
VILSPA

February 28, 1992

In the first article of this series (*ESA IUE Newsletter* No. 36) we gave a description of the different files which will compose the data of the Final Archive of the IUE. These files are produced by the new processing system called NEWSIPS (remember that the current system name is IUESIPS). We shall describe here some aspects of this new processing.

The main reasons for the new processing method are, first to improve the current system which is known to have some drawbacks, and second to homogenise all the data (images, spectra and related parameters - see *ESA IUE Newsletter* No. 38 for a description of the core data items) in the archive since IUESIPS has undergone an evolution during the life of the IUE project.

The improvements of the new system can be described in three main areas:

- photometric correction
- extraction of spectral data
- calibration

### 1 Photometric Correction

In IUE we call photometric correction the conversion of raw data coming from the detectors into a linear arbitrary flux scale. To perform this conversion we use the ITF (intensity transfer function). This consists of a series of flat field images of different exposure levels. It is similar to the flat fielding performed in most electronic detectors like a CCD or RETICON.

What makes the difference in IUE is that our "pixels" are not fixed physical portions of the detector, but readings of a scanning beam whose position across the detector varies depending on factors such as temperature and local charge level on the device. In other words, the science image has to be "moved" in order to find the proper correspondence between the pixels of the image and those of the ITF. To do this, the current IUESIPS uses a grid of "reseau marks" which are null sensitivity points regularly distributed on the detector.

In NEWSIPS the pixel displacements with respect to the ITF are measured by a cross-correlation technique applied in a number of points (140 points for low resolution and 500 for high). We achieve in this way better accuracy in the application of the ITF.

## 2 Extraction of Spectral Data

We include in this paragraph several corrections applied to the photometrically corrected data during the extraction of the spectrum from the 2-dimensional image.

The big improvement here is obtained in the spectral extraction itself. In the current system a box-car technique is used. This has the disadvantage that for a given wavelength the same weight is given to the central pixels of the spectrum, which are better exposed, and to the outer ones, which have lower signal. In the Final Archive a Signal Weighted Extraction Technique (SWET) will be applied. This will improve the Signal to Noise ratio, specially for underexposed spectra. The application of SWET takes into consideration a noise model for the IUE data, used for the weighting and also to derive a measurement of the flux error at each extracted point.

For high resolution data there will be several corrections prior to the extraction which are worth mentioning. First, instead of using the interorder background which overestimates the background at high orders, the background will be estimated by a polynomial fit based in regions of the image with no spectrum. In addition the orders will be de-splayed and de-tilted. These are two of the major instrumental effects of the echelle spectrographs when working at high spectral orders and previously they have not been corrected in IUE high resolution data. This will help in applying a better ripple correction which in turn will allow us to connect properly the orders thus achieving a single spectrum for the whole wavelength range of each camera.

## 3 Calibration

We have two calibrations applied at two different moments in the processing: wavelength and absolute flux calibration.

The line libraries for the wavelength calibration have been recompiled both for low and high resolution. The dispersion constants will be derived by Tchevitchev polynomials fitting.

A new flux calibration will be derived. The absolute scale will be set by the IUE standard stars. New observations of White Dwarfs will be used to derive the relative sensitivity of the cameras by comparing them with models. The final calibration will also include the correction for the time sensitivity degradation of the cameras.



## Archiving Data: A Must, but How?

Elizabeth Griffin

March 2, 1992

No scientist nowadays would disagree with the basic concept of storing observational data. The practice of keeping data together with pertinent records is as much a part of an astronomer's modus operandi as is his access to libraries of journals. Many astronomers have already benefited from free access to the observations conducted by others, both those published in the literature and also those made publicly available via an intricately engineered data storage and retrieval system such as the IUE ULDA. If by sufficient foresight and dedication a global system of archiving spectroscopic data could be satisfactorily set up and managed, then not only would many more so benefit but the archival information itself could yield results that are unobtainable within a single project.

The planning and maintenance of data storage across the world today is patchy in the extreme: some observatories operate fierce rules concerning the propriety of ownership and the release of data, some adopt a more laissez-faire attitude, while still others take the somewhat myopic view that data storage is a low-priority pursuit for which no local funding exists and is best left to the individual observer. All will be able to point to gaps in their data-banks that correspond to the starting-up of new instrumentation; any plans for uniformity and standardization, either nationally or internationally, may never have left the drawing-board.

There is of course a wealth of spectroscopic data stored on photographic plates; most plates are located in observatory plate vaults, but not a few are lodged "temporarily" with the observers who secured them in the first place. Though the techniques of making those spectra usefully available to the astronomical public differ so significantly from those associated with electronic data as to necessitate a separate approach altogether, the plates constitute a priceless astronomical heritage and their treatment as stored raw data has to be considered at the same time as that of digital data.

It does not take a pessimist to pronounce that the task of locating, ordering and cataloguing the various plate archives in the world is anything short of Herculean, or to doubt whether any significant steps towards achieving that public-spirited goal can be attempted in the absence of at least some financial support. Equally, it does not take a profound thinker to realize that the sit-

uation regarding electronic data is getting out of control, or even that it has been so since the recent beginning of that particular era. The mass of digital data that nowadays is accumulating daily is likely to appear trivial beside the plethora that will result from new installations in the not too distant future, and it would behoove the astronomical world to tackle the problem sympathetically now in order to be adequately armed as time progresses and data-banks swell. To that end two meetings, held under the auspices of IAU Commission 29 (Stellar Spectra) - in 1991 July (Buenos Aires) and in 1991 December (Rome) - accomplished a little progress: first an IAU Resolution (C 15) acknowledging the gravity of the situation and recommending the setting up of an IAU Working Group that is to establish agreed means of archiving and distributing spectroscopic data, and latterly the nomination of a small core of members (among them the author of this letter) to that proposed Working Group.

While individual people may perceive the usefulness of archiving spectra from a variety of specific perspectives, the overall philosophy is a matter for general concern and was summarized by the Rome meeting in the following way:-

\* \* \* \* \*

Modern astronomy with its large telescopes and electronic detectors has generated a need for radical changes in the way new astronomical data are safeguarded. Besides the important task of maintaining photographic plate sets from the first part of the 20th century, a more urgent need is arising for the creation of well-managed astronomical archives where electronic data can be consulted during the coming decades. The motivation extends well beyond the obvious studies of variable phenomena.

Astronomical observations are the building blocks of astrophysics. The accumulation of observational data throughout the presently accessible electromagnetic spectrum has enabled the development of an apparently consistent theory of stellar evolution within the framework of fundamental physics. This has encouraged the formulation of cosmological theories, not only to interpret cosmological observations but also to connect general astrophysics with high-energy physics. These cosmological and theoretical considerations point to the existence of an interval of some  $1.5(10)$  years, between the present state of the Universe and its beginnings, which has to be spanned by theory; at the foundation of this theoretical bridge lies the concept that the Universe is relatively static, and that variations take place in only two modes: secular ones, on time-scales comparable with those of stellar evolution itself, or strictly periodic ones.

The combination of modern observations with the very limited available archival records has now demonstrated that the power spectrum of variability in astrophysics contains much more energy in the higher frequencies - time-scales of the order of weeks to decades - than was previously suspected. This implies that the foundations of the theoretical bridge that connects the current

epoch with the early stages of the Universe may contain serious errors. The size of its span could be reduced empirically by one to two orders of magnitude, if access to past observations through well-defined archiving procedures were an everyday practicality.

To be able to study archival data at the same time that the borders of the observable Universe are pushed outward - closer to the early phases - also enables a two-pronged attack on our understanding of the Universe. In this way we will accumulate the necessary observational evidence to support our current concepts about the Universe, while archiving itself will supply a major tool to maintain consistency between high-energy physics and cosmology in the future.

FOR THESE REASONS THE ORGANIZATION OF ARCHIVING OF ASTROPHYSICAL OBSERVATIONS HAS AN IMPORTANCE WHICH DESERVES AND REQUIRES URGENT INTERNATIONAL RECOGNITION AND ATTENTION.

\* \* \* \* \*

A preliminary assessment of the local situations concerning the archiving of spectroscopic data has been culled from questionnaires circulated last year to many observatories. Those initial contacts are to be followed up by further enquiries, but in the meantime individual people who would be interested in sharing their ideas, their time and their experiences in this field are encouraged to contact the author.

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# Influence of the Solar and Terrestrial Magnetic Field on the Flux Particle Monitor

E.Solano.

ESA-IUE Observatory.Vilspa.

## ABSTRACT

Fourier analysis of the centimetric solar radiation (10.7cm.) and of the daily peak radiation measured by the Flux Particle Monitor (hereafter FPM) on board the International Ultraviolet Explorer (hereafter IUE) has been performed in order to establish relations between the periodic variations of the Solar activity and the incident radiation on the satellite.

## 1.- OBSERVATIONS AND DATA ANALYSIS

In this work, two sets of data will be analyzed:

### a) 10.7 cm. Solar Flux Index:

Supplied by the National Geophysical Center, Colorado (USA). There are daily values available since 1947. Together with the sunspot blocking function, the Zurich sunspot number and the Ca II plage index, it is one of the indicators of the solar activity.

This 10.7 cm. flux is emitted from the upper chromosphere-transition region and corona. According to Tapping (1987), solar centimetric emission comprises two primary components: gyroemission from compact, bright cores associated with sunspots, and thermal bremsstrahlung from fainter and more

diffuse "halo" regions.

b) FPM Daily Maximum:

The FPM on board IUE is sensitive to particles with energy  $\geq 960$  Kev. for electrons and  $\geq 15$  Mev. for protons. One measurement is stored in NSSDC every five minutes. In this paper the Maximum Daily Peak has been used.

Although the solar flux data are available since 1947, the FPM data are restricted to the time since IUE's launch. Since we are interested in the correlation between them, this study only covers a period of eleven years, from February 1978 to February 1989.

A frequency analysis has been done using the Cooley-Tukey algorithm (FFT) (Gray 1976) in order to obtain the Fourier transforms of our data. The condition imposed by this algorithm is that the number of data must be a power of two, in our case 4096. Since these data are finite and discrete their respective transforms will be the results of convolving the following three functions:

$$s(t) = b(t) * III(t) * f(t) \text{ where:}$$

$b(t)$  = Transform of the Box Function. The Box Function is defined by:

$$\begin{aligned} W(t) &= 0 \text{ for } T/2 \leq t \leq -T/2 \\ W(t) &= 1 \text{ for } -T/2 \leq t \leq T/2 \end{aligned}$$

where  $T$  is the interval between two consecutive data.

$f(t)$  = Fourier Transform of an infinite, continuous function which reproduces  $s(t)$ .

$III(t)$  = Transform of a Shah function. This Shah function is an infinite array of delta functions spaced at equal intervals  $\Delta t$ .

In order to avoid overlapping problems which arise when using Shah functions, the Nyquist Theorem will be used (Gray 1976). In our case (daily data) the highest frequency with physical sense takes the value of  $0.5 \text{ days}^{-1}$ .

To separate real frequencies from noise, filtering has to be done. Two different methods were used:

The first, and simplest one, arises from the physical concept of frequency, which clearly implies a particular data distribution. Therefore, a random change in the data will produce a new frequency distribution in the Fourier space or, most likely, a random distribution which can be defined as the Noise Level.

In the second, and more complete method, the Noise Level was chosen by using the Clean method (Roberts et al. 1987). This method performs a nonlinear deconvolution in the frequency domain, forming residual spectra (whose value depend on the spectral window chosen) and subtracting them from the original spectrum. This algorithm is especially suitable for functions whose spectra are dominated by a small number of components at discrete frequencies, as is our case.

For our purposes, the identification of known frequencies in the Solar radiation spectrum and the comparison with those which appear in the FPM spectrum, is equivalent to using either of the two methods, i.e. the frequencies found are the same.

In Figures 1A to 1D we can see the FPM and 10.7 cm. radiation spectra before and after cleaning using the Clean's method. The peaks surrounded by a square are discussed in the following section. The formula which converts frequencies into days is the following:

$$\mathbf{T(days) = 4096 * freq}$$

## 2.- RESULTS AND CONCLUSIONS

Once the spectra have been filtered, the resulting frequencies need to be identified. Due to the features of the IUE orbit three parameters are mainly responsible for this frequency distribution: Sun and Earth magnetic fields and intrinsic variations of the satellite's orbit. According to this the following periods due to the solar activity have been identified.

### a.- 150-160 days:

A period between 150-160 days was first found by Rieger (1984) studying data from SMM's  $\gamma$ -Ray spectrometer. Later, other authors obtained similar periodicities: Ichimoto(1985) 153-160, Woll(1983) 155, Kiplinger (1984) 158 days; the differences are mainly due to the different sets of data chosen.

However, the physical meaning is not clear. For instance, Wolff (1983) suggests that the rotation of active bands generated by g-mode oscillations with spherical harmonics  $l=2$ ,  $l=3$  may cause this period. Bogart (1985) attributes it to different active regions rotating with different velocities, Ichimoto (1985) suggests that it originates from strong "magnetized streams" which last for several rotations. Recently, Lean (1989), by using periodograms of the last three solar cycles, has proposed an explanation based on strong magnetic fields located in certain zones on the solar disk.

### b.-320-330 days:

This appears in Delarche(1985), Akioka(1985) and Lean(1989). It could be an harmonic of the 150-160 days periodicity, although Lean (1989) suggest that it should be different due to the distinct temporal distribution.

### c.-25-30 days

A strong presence of periods between 25-30 days are a constant in Figures 1C-1D. These are related to the different synodic rotation periods at different Solar latitudes, between  $\pm 40$  degrees, which are the limits of the region where the sunspots appear. The relation comes from the Howard & Harvey's formula (see NASA SP-450 (1981)):



$T = (2 * \pi / 86400) * 2.78(\pm 0.003) - 0.351(\pm 0.03) * \sin^2 \beta - 0.443(\pm 0.05) * \sin^4 \beta \mu\text{rads}^{-1}$ . Where:

T: Period in days.

$\beta$ : Solar latitude in degrees.

#### **d.-8-15 days**

These periods seem not to have a solar origin, because the power intensity in the solar spectrum is practically zero at these frequencies. It may be considered an harmonic of the 25-30 days periodicities.

#### **e.- Correlation Analysis**

An anticorrelation between the 10.7cm. solar flux and the FPM daily Maximum has been found. As Imhoff has suggested (Imhoff 1985) this may indicate that the eleven-year solar cycle could play a role in the long-term trends in IUE's radiation. However, a more extended set of data is necessary to probe this hypothesis.

Two methods have been used in this correlation analysis. The former is based on the Cross Correlation method given by Gaskell and Peterson (1987), which involves translating one of the functions over the other one and calculating the lag between them. In our case, a lag of a half of the solar cycle (5.5 years) in a set of data which comprises a full solar cycle is an evidence for the existence of an anticorrelation. (Figure 2A)

The second method consists in calculating, for each year, firstly the mean value of the 10.7 cm. solar flux radiation, secondly the number of the days in which the FPM output was over 2.4 volts and thirdly the number of days with radiation below 1.7 volts (Imhoff.1985). We can see that the behaviour of the solar activity coincides with the behaviour of the low intensity FPM radiation while the profile of the high intensity radiation is inverted. (Figures 2B-2C-2D)

#### **f.-Seasonal variations**

Unlike Imhoff(1985), who did not find repeatability of any annual variation of the FPM radiation, we think that the Earth's Magnetic Field, mainly the outer layers of the Van Allen belts, is also an important modulator of the

radiation arriving to the FPM, and produces a seasonal variation. Following Arquilla (1989), this modulation can be studied by calculating an "average year" from the mean value for each day of the year during the solar cycle. Figure 3 indicates that the radiation reaches higher values during the latter part of the year than during the first part.

Although the radiation arriving at the FPM is a complicated function of the satellite's altitude, the orbit and the spatial distribution of charged particles, a simplified model can be built taking into account the relative variation between the spacecraft's orbit and the terrestrial magnetosphere: In its orbit, IUE crosses the outer part of Van Allen's belts once a day. During the first part of the year, due to the solar wind, the Earth's magnetic field lines are compressed producing a high density of particles in the inner belts and a low density in the outer belts. This explains the low amount of particles detected by the FPM during this period of time. The opposite happens during the last months when the magnetic lines are extended producing a higher particle flux.

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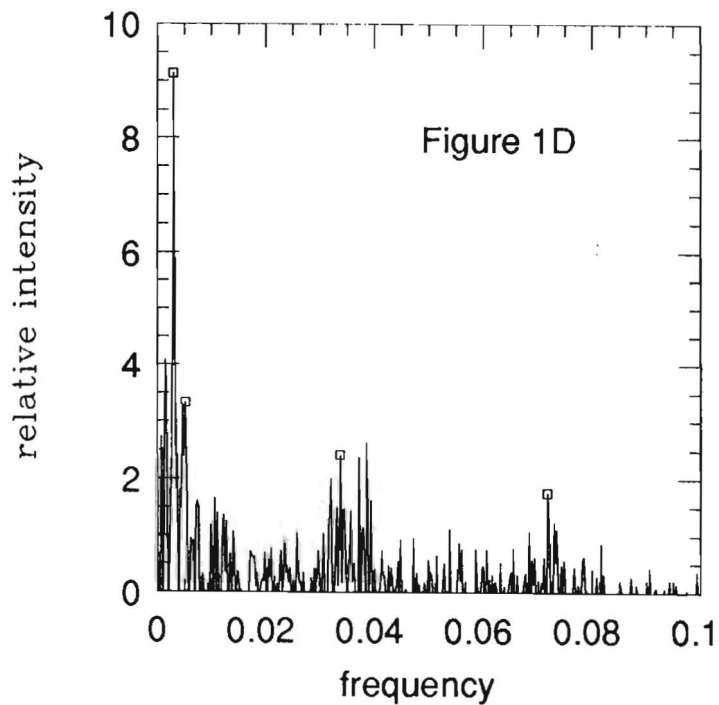
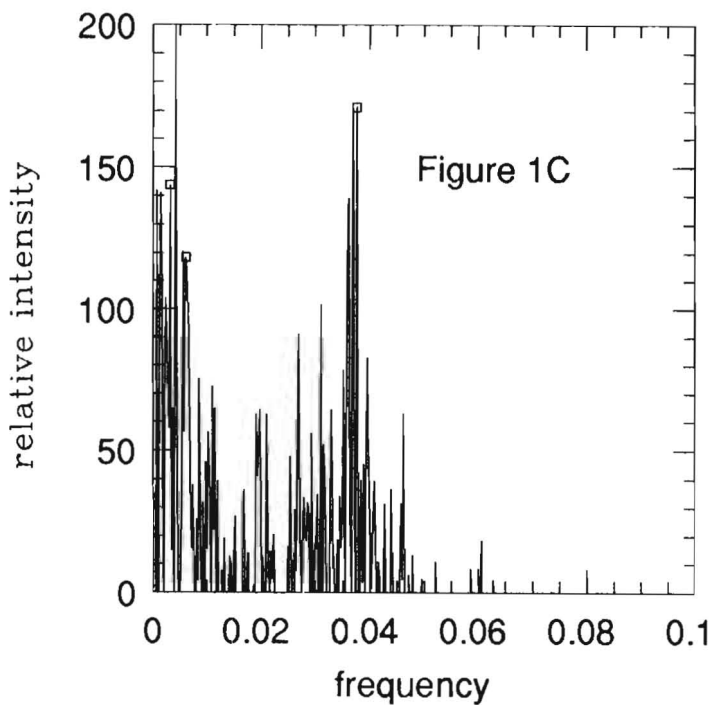
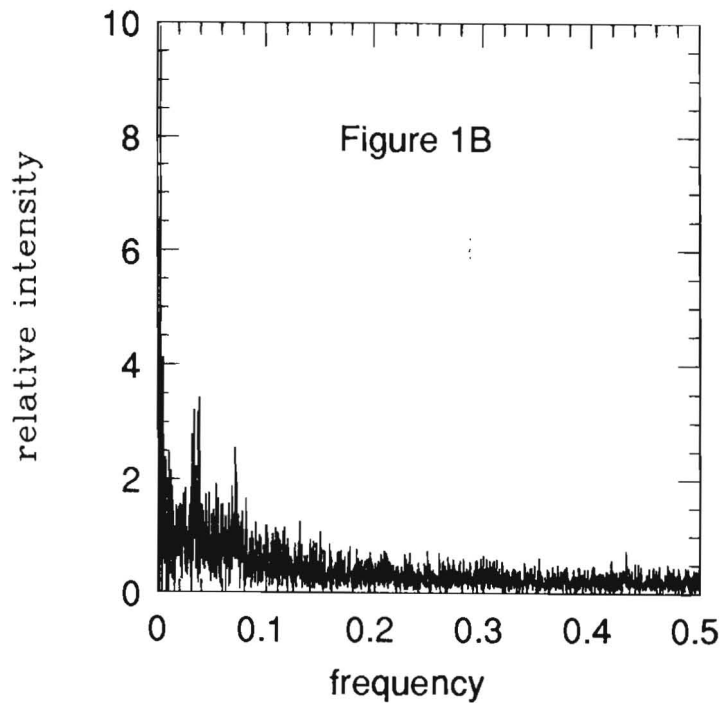
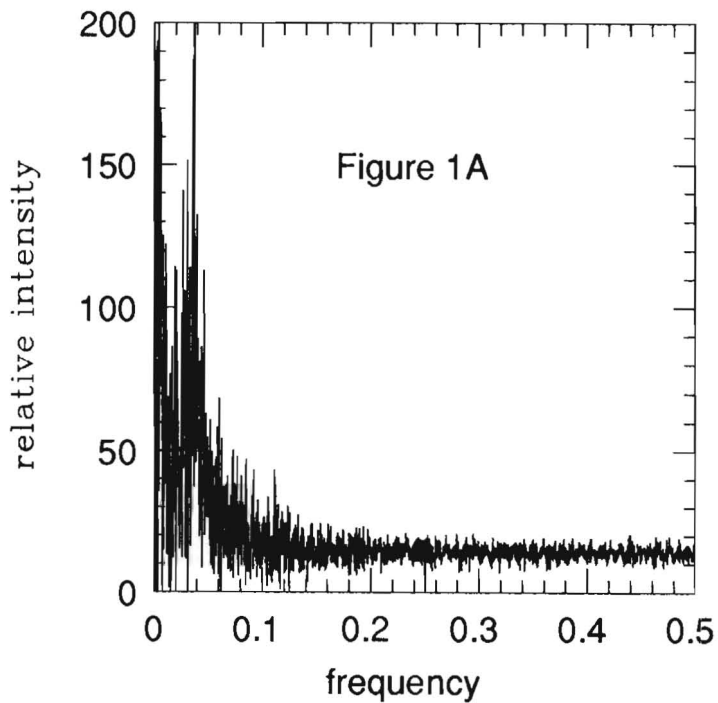
## FIGURES

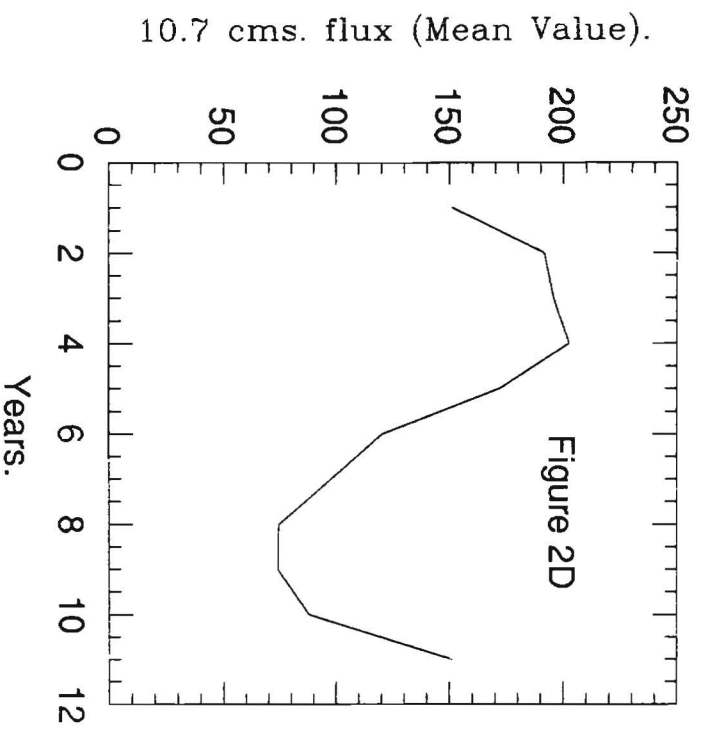
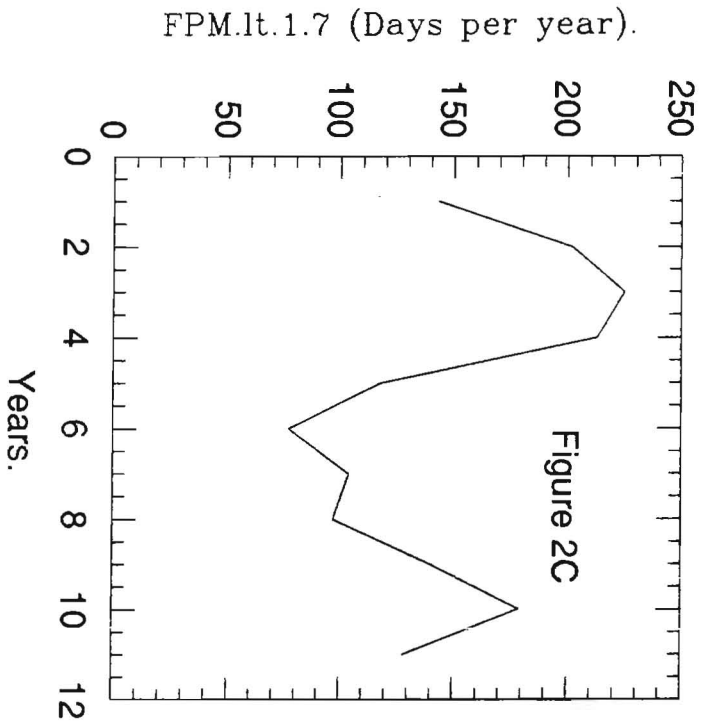
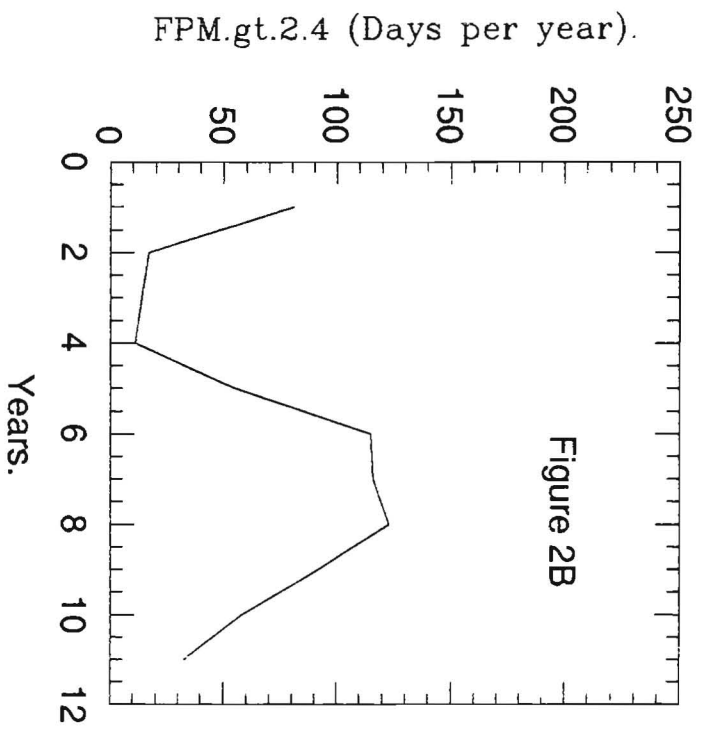
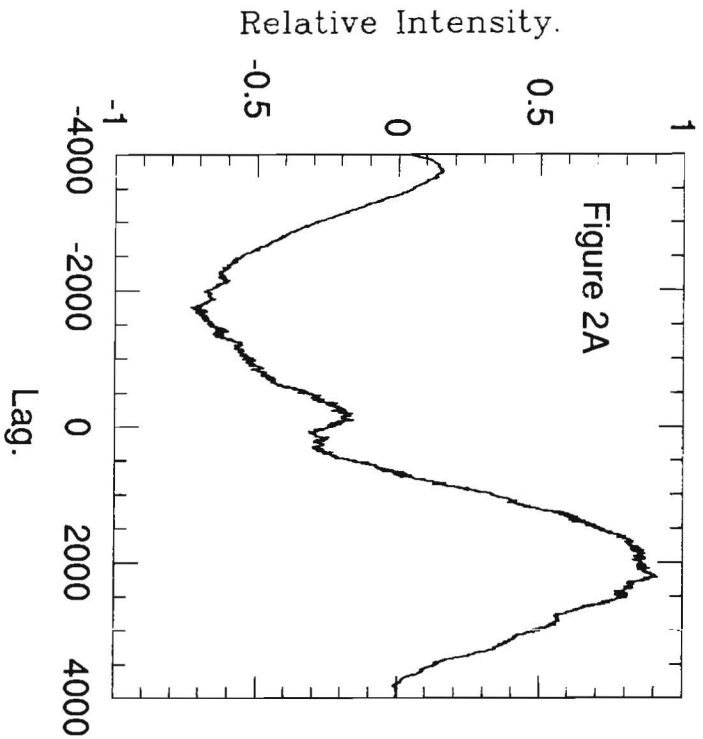
-**Figures 1A-1B** correspond to the 10.7 cm. solar radiation and the FPM output before noise filtering and **Figures 1C-1D** after noise filtering. The peaks marked with a square are discussed in the text.

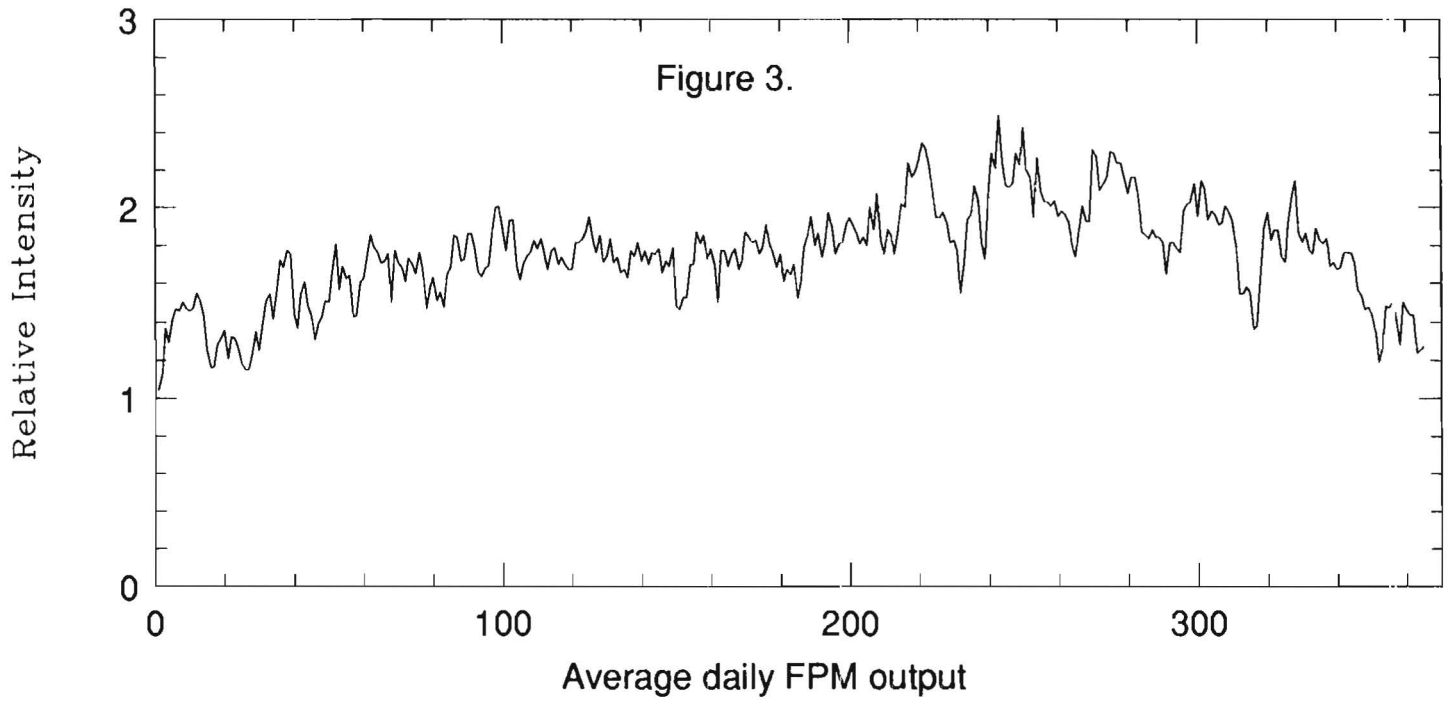
-**Figure 2A.** Cross correlation function between the 10.7 cms. solar flux and the FPM output. The shift is half a solar cycle.

-**Figures 2B-2C-2D** show a comparison between the intensity of the FPM radiation and the solar activity. The low intensity FPM radiation is well-correlated with the solar activity.

-**Figure 3.** Annual variation of the FPM radiation. The maximum value is reached during the latter part of the year.









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Coordinated Multiwavelength Observations of Late Stages in the Outbursts		
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Target of Opportunity Observations of Galactic Novae in Outburst		
Dr. Robert E. Stencel U Colorado - CASA	U Colorado - CASA	VVNRS
Ultraviolet Monitoring of VV Cephei		
Dr. Paula Szkody U Washington	U Washington	CVNPS
An IUE Study of Two Interesting New Novalikes		

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Dr. Terry J. Teays CSC - IUE Observatory The Blazhko Effect	CSC - IUE Observatory	RRNTT
Dr. Silvia Torres-Peimbert UNAM Carbon Abundances of Halo Planetary Nebulae	UNAM	PNNST
Dr. David A. Turnshek U Pittsburgh UV Studies of Abundances in BAL QSOs	U Pittsburgh	QSNST
Dr. David A. Turnshek U Pittsburgh Damped Lyman-alpha Absorption From Low to Moderate Redshift Galaxies	U Pittsburgh	LANDT
Dr. Bruce Twarog U Kansas IUE Observations of Extremely Metal-Deficient Red Giants	U Kansas	RGNBT
Dr. C. Megan Urry ST Sci Intensive Multifrequency Monitoring of PKS 2155-204	ST Sci	BLNCU
Dr. Stephane Vennes U Delaware The Phase Variation of the Ultraviolet Spectrum of Feige 24	U Delaware	WDNSV
Dr. Daniel E. Welty U Chicago UV Extinction in High Latitude Clouds. II	U Chicago	EXNDW
Dr. Barbara A. Whitney Harvard CFA - SAO The Role of Pulsational Shock Waves in the R CrB Behavior of RY Sgr	Harvard CFA - SAO	RYNBW
Dr. Barbara A. Whitney Harvard CFA - SAO Comprehensive Coverage of an R CrB Dust Ejection Cycle	Harvard CFA - SAO	RCNBW
Dr. D. Mark Whittle U Virginia Anisotropic Continuum Emission in Seyferts	U Virginia	AGNDW
Dr. Lee Anne Willson Iowa State University Polarization and Dust Nucleation in Mass-losing Red Giants	Iowa State University	RGNLW
Dr. Chi-Chao Wu CSC - ST Sci Augmentation of the IUE Ultraviolet Spectral Atlas	CSC - ST Sci	SANCW

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**PUBLISHED 1 MAY 1991 - 31 DECEMBER 1991**

This list contains all papers that have appeared between the above dates in major refereed journals (Mon. Not. R. astr. Soc., Astron. & Astrophys., Astrophys. J.) and which make reference to IUE data.

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 possibilities.

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

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**MERGED LOG OF IUE OBSERVATIONS**  
**1 MAY 1991 - 30 NOVEMBER 1991**

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

## EXPOSURE CLASSIFICATION CODES

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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

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- 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 M	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-V (FROM 1FEB79)	94	
45	G I-III (FROM 1FEB79)	95	
46	K (TO 1FEB79); K IV-V (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

PFO	Object	CL	MAG	R.A.	DEC	D C	Image A	FES	MD	Obs.date	Exptim	nummsst	ECC	Comment
NC195	NULL	99	99.99	000000	+000000	L 1	20379 L	00000		91051600	000000	000000		V
PHCAL	NULL	99	99.99	000000	+000000	L 1	20640 L	00000		91062001	014639	000000		000 V
AGMB	MKN 335	84	13.8	0003452	+195529	L 3	41961 L	90	SD	91063006	061200	008000		301 G G=95,B=25
AGMB	MKN 335	84	13.8	0003452	+195529	L 1	20716 L	93	SD	91063007	074100	004000		342 G B=154,G=127,B=40
AGMB	MKN 335	84	13.8	0003452	+195529	L 3	41962 L	93	SD	91063008	083000	008000		3X1 G B=1.5X,G=85,B=22
AGMB	MKN 335	84	13.8	0003452	+195529	L 1	20717 L	91	SD	91063010	100000	004000		342 G B=149,G=121,B=38
AGMB	MKN 335	84	13.8	0003452	+195529	L 3	41963 L	91	SD	91063010	104900	008000		3X1 G B=1.5X,G=86,B=25
AGMB	MKN 335	84	13.8	0003452	+195529	L 1	20718 L	91	SD	91063012	121800	003500		332 G B=136,G=112,B=40
SANOW	HD	432	40	2.28	0006296	+585225	L 1 20862 L	2415	FU	91072212	120700	000005		502 G G=218,B=40
SANOW	HD	432	40	2.28	0006296	+585225	L 1 20862 S	2405	FU	91072212	121600	000015		X02 G G=5X,B=40
SANOW	HD	432	40	2.28	0006297	+585226	L 3 42113 L	2442	FU	91072211	114500	000045		500 G G=240,B=15
SANOW	HD	432	40	2.28	0006297	+585226	L 3 42113 S	2416	FU	91072211	115500	000005		X00 G G=5X,B=15
MI073	NGC 40	70	10.88	0010165	+721439	L 3	42187 L	00181	FO	91080619	194722	001000		452 V
FNSH	NGC 40	70	10.7	0010165	+721439	L 3	43240 L	132	FO	91112805	052400	002000		4X3 G B=1.5X,G=180,B=45
MI073	NGC 40	70	10.89	0010165	+721439	L 1	20967 L	00180	FO	91080620	200318	000800		452 V
FNSH	NGC 40	70	10.7	0010165	+721439	L 1	21867 L	131	FO	91112806	060200	002000		X06 G G=2X,B=75
MI073	NGC 40	70	10.87	0010165	+721439	H 3	42188 L	00183	FO	91080620	204428	032300		333 V
FNSH	NGC 40	70	10.7	0010165	+721439	L 3	43241 L	132	FO	91112806	063000	002000		4X1 G B=1.5X,G=145,B=30
NQ055	0016+16	90	20.00	0015583	+160937	E 9	02474 2	00000		91072020	200000	016000		V SWP 42108
DMCB	00016+16	90	0.0	0015583	+160937	L 3	42108 L	EO		91072020	204200	044000		04 G B=55
NQ055	1558+41	90	20.00	0015583	+160937	E 9	02475 2	00000		91072119	194000	016000		V SWP 42112
MI073	HD 1563	46	06.98	0017210	+155825	L 3	42179 L	05828	FO	91080522	221213	005500		302 V NO GUIDE
MI073	HD 1563	46	06.95	0017210	+155825	L 1	20959 S	05966	FO	91080521	220418	000400		302 V
MI073	HD 1563	46	06.95	0017210	+155825	L 1	20959 L	05966	FO	91080521	215548	000400		402 V
SUNEG	HD	1835	44	6.4	0020180	-122915	H 1 21823 L	6794	FO	91112306	062200	006500		437 G B=186,G=225,B=90
SUNEG	HD	1835	44	6.4	0020180	-122915	L 3 43188 L	6838	FO	91112307	073800	010500		332 G B=76,G=102,B=35
PHCAL	NULL	99		0020180	-122915	H 1	21824 L			91112308	080500	000000		02 G B=35
PHCAL	NULL	99		0020180	-122915	H 1	21825 L			91112308	083000	000000		02 G B=35
SUNEG	HD	1835	44	6.4	0020180	-122915	L 3 43207 L	6946	FO	91112405	051700	011000		339 G B=175,G=208,B=123
PHCAL	NULL	99		0020180	-122915	H 1	21830 L			91112405	054500	000000		02 G B=35
PHCAL	NULL	99		0020180	-122915	H 1	21831 L			91112406	061100	000000		02 G B=35
SUNEG	HD	1835	44	6.4	0020180	-122915	H 1 21832 L	6918	FO	91112407	071600	005000		433 G B=132,G=176,B=50
DCNE	TU Cas	53	8.0	0023370	+510012	L 1	21395 L	1798	FO	91100306	061400	001000		502 G G=236,B=32
DCNE	TU Cas	53	8.0	0023370	+510012	L 3	42607 L	1777	FO	91100306	063300	004500		300 G G=50,B=18
EFNSA	HD	2421	30	5.2	0025324	+440704	L 3 42717 L	20643	FO	91101411	114400	000052		500 G G=191,B=18
EFNSA	HD	2421	30	5.2	0025324	+440704	L 1 21491 L	20371	FO	91101411	115600	000024		502 G G=196,B=33
EFNSA	HD	2421	30	5.2	0025324	+440704	L 3 42718 L	20661	FO	91101412	124000	000100		X00 G G=4X,B=18
EFNSA	HD	2628	33	5.2	0027300	+292834	L 1 21226 L	19825	FO	91091309	094200	000052		502 G G=202,B=37
EFNSA	HD	2628	33	5.2	0027300	+292834	L 3 42452 L	19826	FO	91091309	095800	000439		501 G G=211,B=22
ME030	NGC 176	83	13.00	0033580	-732630	L 3	42011 L	00000	EO	91070520	203345	037400		403 V
ME030	NGC 176	83	13.00	0033580	-732630	L 1	20766 L	00000	EO	91070720	204839	035900		703 V
PHCAL	HD	3360	20	3.7	0034103	+533719	H 1 20748 L	894	FU	91070511	113300	000021		502 G G=220,B=40
PHCAL	HD	3360	20	3.7	0034103	+533719	H 3 42002 L	888	FU	91070511	113900	000024		402 G G=170,B=32
PHCAL	NULL	99		0034103	+533719	H 2	18577 L			91072611	114100	000000		03 G B=49
PHCAL	HD	3360	21	3.68	0034103	+533719	H 2 18578 L	861	FU	91072612	121400	000029		501 G G=210,B=30
PHCAL	HD	3360	21	3.7	0034103	+533719	H 3 42175 L	899	FU	91080513	133400	000024		501 G G=200,B=30
PHCAL	HD	3360	21	3.7	0034103	+533719	H 1 20954 L	910	FU	91080513	134000	000000		X06 G G=5X,B=75
PHCAL	HD	3360	21	3.7	0034103	+533719	H 1 20955 L	931	FU	91080514	143900	000021		502 G G=220,B=40
PHCAL	HD	3360	21	3.7	0034103	+533719	H 1 21239 L	886	FU	91091414	143900	000021		502 G G=222,B=40
PHCAL	HD	3360	21	3.7	0034103	+533719	H 3 42485 L	872	FU	91091712	122500	000024		402 G G=180,B=33

PRO	Object	CL	MAG	R.A.	DEC	D C	Image A	FES	MD	Obs.date	Exptim	mmmsst	ECC	Comment
FHCAL HD	3360	21	3.7	0034103	+533719	H 3	42780 L	864	FU	91102207	072700	000024	402	G=C=170,B=35
FHCAL HD	3360	21	3.7	0034103	+533719	H 1	21546 L	860	FU	91102207	073200	000021	503	G=C=210,B=42
FHCAL HD	3360	20	3.7	0034103	+533719	H 2	18605 L	843	FU	91102911	114600	000029	502	G=C=200,B=32
WNEB	0037+312	37	14.7	0037114	+311602	L 3	42196 S		EO	91080814	140400	004000	302	G=C=122,B=32
WNEB	0037+312	37	14.7	0037114	+311602	L 1	20974 L		EO	91080814	145400	006000	503	G=C=250,B=43
NM139 SMA		70	18.00	0038566	-753246	L 3	42614 L	00000	EO	91100319	190541	010000	120	V
NCL17 EG AND		57	07.50	0041527	+402423	L 3	42346 S	03664	FO	91082818	184247	000700	250	V
NCL17 EG AND		57	07.50	0041527	+402423	L 3	42346 L	03664	FO	91082818	180246	001500	370	V
NCL17 EG AND		57	07.51	0041527	+402423	L 1	21103 S	03651	FO	91082819	193856	001500	361	V
NCL17 EG AND		57	07.51	0041527	+402423	L 1	21103 L	03651	FO	91082819	190025	003000	681	V
NCL17 EG AND		57	07.50	0041527	+402423	L 3	42347 L	03677	FO	91082820	200519	004500	580	V
FGNET HD -38	245	45	12.0	0044120	-375606	L 1	21544 L	240	SD	91102200	005100	024000	404	G=C=170,B=60
NA175 NEC 246		16	11.76	0044328	-120843	L 3	41998 L	00329	SD	91070402	023142	000120	501	V FHEAD
NA175 NEC 246		16	11.76	0044328	-120843	L 1	20735 L	00331	SD	91070323	231836	000330	501	V FHEAD
NA175 NEC 246		16	11.77	0044328	-120843	H 3	41997 L	00328	SD	91070323	233952	012000	402	V
NA175 NEC 246		16	11.77	0044328	-120843	L 1	20736 L	00328	SD	91070401	014855	000330	501	V FHEAD
NA175 NEC246		16	11.78	0044328	-120843	L 3	42028 L	00325	SD	91070823	235126	000120	500	V EX=14;EY=4 AFTER RT
NA175 NEC246		16	11.78	0044328	-120843	L 1	20775 L	00323	SD	91070900	002843	000330	500	V
NA175 NEC246		16	11.80	0044328	-120843	L 3	42029 L	00318	SD	91070900	003713	000120	500	V EX=1;EY=1;AFTER RT
NA175 NEC246		16	11.78	0044328	-120843	L 1	20776 L	00325	SD	91070901	014013	000330	500	V
NA175 NEC246		16	11.79	0044328	-120843	L 3	42030 L	00321	SD	91070901	014922	000120	500	V EX=2;EY=1;AFTER RT
NA175 NEC246		16	11.77	0044328	-120843	L 1	20777 L	00327	SD	91070902	023619	000600	700	V
NA175		00	99.99	0044328	-120843	L 1	20846	00000		91072000	000000	000000	500	V
NA175 NEC246		16	11.67	0044328	-120843	H 3	42104 L	00359	SD	91072000	001423	015000	501	V
FHCAL NEC246		16	11.66	0044328	-120843	H 3	42247 L	00362	SD	91081400	001401	012000	501	V
FHCAL NEC246		10	11.69	0044328	-120843	L 1	21019 L	00350	SD	91081500	005417	000330	500	V
FHCAL NEC246		10	11.81	0044328	-120843	L 1	21020 L	00317	SD	91081501	013919	000330	500	V
FHCAL NEC246		16	11.71	0044328	-120843	H 3	42214 L	00345	SD	91081022	224352	015000	501	V
FHCAL NEC246		16	11.67	0044328	-120843	L 1	20987 L	00359	SD	91081101	014507	000330	500	V
FHCAL NEC246		16	11.67	0044328	-120843	L 3	42215 L	00357	SD	91081101	015231	000120	500	V
FHCAL NEC246		16	11.71	0044328	-120843	L 3	42225 L	00344	SD	91081201	010524	000120	500	V
FHCAL NEC246		16	11.72	0044328	-120843	L 3	42226 L	00342	SD	91081201	013544	000120	500	V
NA132 NEC 246		70	11.70	0044353	-120903	H 3	42068 L	00349	SD	91071323	230616	022300	600	V
MA107 NEC 246		70	11.71	0044353	-120903	H 3	42073 L	00346	SD	91071500	005304	011500	500	V
EGMAD NEC	253	80	8.7	0045047	-253256	L 3	41768 L		EO	91060408	080200	018000	303	G=C=85,B=41
EGMAD NEC	253	80	8.13	0045070	-253354	L 3	41767 L		EO	91060405	054700	009000	00	G=B=18
EGMAD NEC	253	80	8.13	0045070	-253354	L 1	20516 L		EO	91060407	072500	018000	307	G=C=122,B=81
EGMAD NEC	253	80	8.13	0045156	-253349	L 1	20517 L		EO	91060411	110800	010000	304	G=C=100,B=60
CR82K AV 20		32	12.1	0045401	-731758	L 3	42509 L	305	SD	91091910	102600	002500	301	G=C=51,B=22
MINFM AV 20		32	12.0	0045401	-731758	L 1	21313 L	296	SD	91092223	235700	002000	302	G=C=90,B=35
MINFM AV 20		32	12.0	0045401	-731758	L 3	42539 L	292	SD	91092300	002600	008000	300	G=C=77,B=20
MINFM AV 20		32	12.0	0045401	-731758	L 1	21314 L	293	SD	91092301	015500	006500	402	G=C=180,B=40
MINFM AV 20		32	12.0	0045401	-731758	L 1	21315 L	289	SD	91092304	044200	006500	402	G=C=178,B=40
MINFM AV 20		32	12.0	0045401	-731758	L 3	42540 L	296	SD	91092305	055400	005500	201	G=C=40,B=21
NO27 GD 657		40	13.80	0049037	-382835	L 1	21036 L	00000	EO	91081820	201126	000000	110	V
MINFM AV 126		23	13.5	0050456	-725547	L 1	21279 L	184	SD	91091900	002000	006000	XX2	G=C=1.5X,G=1.5X,B=40
MINFM AV 126		23	13.5	0050456	-725547	L 3	42506 L	182	SD	91091901	012900	005500	XX0	G=C=1.5X,B=18
MINFM AV 126		23	13.5	0050456	-725547	L 1	21280 L	184	SD	91091902	023200	009000	XX3	G=C=2X,G=2X,B=45
ASFB HD	5277	32	10.9	0051201	-732308	L 1	20964 L	157	FO	91080609	090600	002000	442	G=C=1.63,G=1.68,B=35
ASFB HD	5277	32	10.9	0051201	-732308	L 3	42183 L	160	FO	91080609	093500	007200	301	G=C=118,B=23



IFO	Object	CL	MAG	R.A.	DEC	D C	Image A	FES	MD	Obs.date	Exptim	numscst	ECC	Comment
ASNEB HD	5277	65	10.5	0051353	-732244	L 1	20963 L			91080607	072800	002000		302 G G=72,B=35
MA096 AV178		20	14.40	0055061	-724459	L 1	20693 L	00000	EO	91062602	025122	003000		301 V
MA096 AV178		20	14.40	0055061	-724459	L 3	41920 L	00000	EO	91062603	032804	007900		400 V
MA096 AV196		20	13.90	0056129	-734355	L 1	20692 L	00000	EO	91062600	005643	003000		401 V
MA096 AV196		20	13.90	0056129	-724355	L 3	41919 L	00000	EO	91062601	013300	006000		300 V
MA096 AV218		20	13.80	0057240	-723550	L 1	20691 L	00000	EO	91062522	224403	003000		401 V
MA096 AV218		20	13.80	0057241	-723550	L 3	41918 L	00000	EO	91062523	233853	006000		400 V
PHCAL SKY HCGD		07		0057321	-722609	L 1	21220 L			91091201	011000	001000		01 G B=30
WRNIA HD	5980	11	11.9	0057456	-722546	L 3	42445 L	148	FO	91091123	235700	002200		451 G E=187,G=155,B=25
WRNIA HD	5980	11	11.3	0057456	-722546	H 3	42446 L	150	FO	91091200	004600	033000		446 G E=219,G=210,B=75
WRNIA HD	5980	11	11.3	0057456	-722546	L 3	42469 L	143	FO	91091600	001600	000500		550 G E=197,G=190,B=20
WRNIA HD	5980	11	11.3	0057456	-722546	H 3	42470 L	146	FO	91091600	005200	035500		4X6 G E=3X,G=218,B=75
WRNIA HD	5980	11	11.3	0057456	-722546	L 3	42693 L	125	FO	91101121	215500	000500		5X0 G E=3X,G=200,B=18
WRNIA HD	5980	11	11.3	0057456	-722546	H 3	42694 L	125	FO	91101122	223900	033000		4X7 G E=2X,G=220,B=85
WRNIA HD	5980	11	11.3	0057456	-722546	L 3	42695 L	125	FO	91101204	043400	000200		450 G E=174,G=126,B=18
WRNIA HD	5980	11	11.3	0057456	-722546	F 9	02496 2			91101221	213900	016000		G
WRNIA HD	5980	11	11.3	0057456	-722546	L 3	42701 L	138	FO	91101221	215000	000500		5X0 G E=2X,G=190,B=18
WRNIA HD	5980	11	11.3	0057456	-722546	H 3	42702 L	138	FO	91101222	221900	034500		4X7 G E=3X,G=220,B=85
WRNIA HD	5980	11	11.3	0057456	-722546	L 3	42703 L	138	FO	91101304	042700	000300		550 G E=243,G=176,B=18
WRNIA HD	5980	11	11.3	0057456	-722546	F 9	02497 2			91101321	212400	016000		G
WRNIA HD	5980	11	11.3	0057456	-722546	L 3	42710 L	139	FO	91101322	221100	000500		5X0 G E=3X,G=180,B=18
WRNIA HD	5980	11	11.3	0057456	-722546	H 3	42711 L	139	FO	91101322	224000	033000		4X6 G E=3X,G=220,B=75
WRNIA HD	5980	11	11.3	0057456	-722546	L 3	42712 L	13	FO	91101404	043400	000300		5X0 G E=1.5X,G=178,B=18
WRNIA HD	5980	11	11.3	0057456	-722546	L 3	42720 L	139	FO	91101421	215400	000500		5X0 G E=3X,G=180,B=20
WRNIA HD	5980	11	11.9	0057456	-722546	H 3	42721 L	139	FO	91101422	222500	033000		4X6 G E=3X,G=220,B=75
WRNIA HD	5980	11	11.9	0057456	-722546	L 3	42722 L	139	FO	91101504	042000	000300		5X0 G E=1.5X,G=181,B=20
FMEM	SMC25	70	13.2	0057593	-715428	L 3	42031 L		EO	91070903	034500	004500		00 G B=18
FMEM	SMC25	70	13.2	0057593	-715428	L 3	42032 L		EO	91070904	045500	035500		03 G B=50
FMEM	SMC25	70	13.2	0057593	-715428	F 9	02472 2			91070905	052600	016000		G
USSES HD	6130	40	5.9	0100311	+604825	L 3	43250 S	10181	FO	91112904	042500	000240		300 G G=86,B=17
USSES HD	6130	40	5.9	0100311	+604825	L 3	43250 L	10296	FO	91112904	043100	000400		500 G G=185,B=17
USSES HD	6130	40	5.9	0100311	+604825	H 1	21882 L	10305	FO	91112904	044200	002600		302 G G=135,B=40
IANDT QSO	0100-270	85	17.0	0100317	-270241	L 1	21857 L		EO	91112620	200500	040500		309 G G=170,B=115
MA011 SK108		11	12.29	0101480	-722249	H 3	41784 L	00206	SO	91060623	232500	032200		502 V
IANDT QSO	0105-293	85	16.3	0105198	-291947	L 3	43222 L		EO	91112520	200200	038200		06 G B=80
ASNEB HD	7583	32	10.2	0112063	-733556	L 1	20962 L	317	FO	91080606	060100	001200		552 G E=228,G=237,B=34
ASNEB HD	7583	32	10.2	0112063	-733556	L 3	42182 L	315	FO	91080606	062000	003500		400 G G=146,B=20
IENFP	GG CAS	66	10.1	0113060	+560348	L 1	21471 L	296	FO	91101006	060100	000700		302 G G=126,B=32
IENFP	GG CAS	66	10.1	0113060	+560348	L 3	42677 L	295	FO	91101006	061700	001000		300 G G=56,B=18
IENFP	GG CAS	66	10.1	0113060	+560348	L 1	21472 L	297	FO	91101006	065400	001130		402 G G=169,B=33
IENFP	GG CAS	66	10.1	0113060	+560348	L 3	42678 L	303	FO	91101007	072900	003000		400 G G=135,B=18
AGNC FAIRFALL9		84	14.0	0121512	-590359	L 1	21473 L	143	SO	91101010	100100	005000		304 G G=142,B=52
AGNC FAIRFALL9		84	14.0	0121512	-590359	L 3	42680 L	146	SO	91101010	105600	004000		331 G E=94,G=53,B=21
AGNC FAIRFALL9		84	14.0	0121512	-590359	L 1	21474 L	146	SO	91101011	114500	006000		452 G E=197,G=154,B=40
MA011 SK188		10	12.82	0130028	-734043	H 1	20515 L	00128	SO	91060400	004946	023700		303 V
SCMA	P/EAYE	06	11.0	0130541	+141142	S 9	02490 2			91091323	234900	002000		G
SCMA	P/EAYE	06	11.0	0130541	+141142	L 1	21234 L		73 SO	91091400	001500	031000		335 G E=143,G=113,B=70
SCMA	P/EAYE	06	12.0	0130541	+141142	D 9	02491 2			91091400	004900	002000		G
MMNB HD	9562	44	5.8	0131118	-071649	L 3	42017 L	11708	FO	91070703	033900	043000		X03 G G=4X,B=41
NO027 GD	984	37	13.50	0131579	-162230	L 1	21037 L	00000	EO	91081822	223218	002500		400 V

FPO	Object	CL	MAG	R.A.	DEC	D C	Image A	FES	MD	Obs.date	Exptim	mmmsst	ECC	Comment
NC027 GD 984		37	13.50	0131579	-162230	L 3	42284 L	00000	BD	91081821	215719	001500	500 V	
NC027 GD 984		37	13.50	0131579	-162230	L 3	42285 L	00000	BD	91081823	230404	002200	500 V	
NA193 PHL1079		28	13.30	0135515	+032427	L 1	21098 L	00000	BD	91082721	210552	003000	501 V	
NA193 PHL1079		28	13.65	0135515	+032427	L 3	42338 L	00061	SD	91082721	214549	003500	600 V	
IRNH ED +71 092 22		22	10.4	0137270	+714236	L 1	21021 L	274	FO	91081513	133100	001300	503 G G=242,B=45	
IRNH ED +71 092 22		22	10.4	0137270	+714236	L 3	42258 L	278	FO	91081514	143300	007500	X00 G G=1.5X,B=20	
IRNH ED +71 092 22		22	10.4	0137270	+714236	L 3	42266 L	291	FO	91081618	183500	001600	300 G G=88,B=18	
NI085 AX FER		57	10.80	0138118	+535945	L 1	20927 L	00194	FO	91080120	204600	001000	343 V	
NI085 AX FER		57	10.77	0138118	+535945	L 3	42153 L	00200	FO	91080121	212552	002000	251 V	
FNNIB 650 71		71	9.8	0139087	+511903	L 3	42139 L			91072913	130400	013500	47 G E=223,B=90	
FNNIB NEC 650 71		71	9.8	0139087	+511903	L 3	42139 L		EO	91072913	130400	013500	47 G E=223,B=90	
FNNIB NEC 650 71		71	9.8	0139087	+511903	L 1	20907 L		EO	91072915	152500	020000	334 G E=125,G=90,B=60	
FHCAL SKYBKND 07		07		0139105	+511759	L 1	20906 L			91072914	142200	002000	03 G B=48	
FHCAL SKYBKND 07		07		0139106	+511800	L 1	20905 L			91072913	131100	003000	05 G B=65	
FHCAL SKYBKND 07		07		0139106	+511800	L 1	20905 L			91072913	131100	003000	05 G B=65	
FHCAL NEC 71		71	9.8	0139113	+511925	S 9	02480 2			91073004	045000	002000	G	
FNNIB NEC 650 71		71	9.8	0139113	+511934	L 3	42142 L		EO	91073011	115100	020000	247 G E=190,G=105,B=90	
FHCAL SKY BKND 07		07		0139113	+511804	L 1	20911 L			91073012	122800	003000	03 G B=50	
FNNIB NEC 650 71		71	9.8	0139113	+511934	L 1	20912 L		EO	91073015	155700	017000	303 G G=90,B=50	
FNNIB NEC 650 71		71	9.8	0139113	+511916	L 1	20915 L		EO	91073105	053300	020000	333 G E=73,G=110,B=50	
FNNIB NEC 650 71		71	9.8	0139113	+511916	L 3	42144 L		EO	91073109	090200	024000	345 G E=207,G=95,B=70	
FHCAL SKY BKND 07		07		0139121	+512107	L 3	42141 L			91073006	061900	028500	02 G B=35	
FHCAL SKY BKND 07		07		0139132	+511813	L 1	20916 L			91073111	115200	003000	03 G B=45	
FHCAL SKYBKND 07		07		0139138	+512110	L 1	20904 L			91072910	104400	003000	02 G B=35	
FNNIB NEC 650 71		71	9.8	0139139	+512005	L 3	42138 L		EO	91072903	031500	045000	34 G E=153,B=60	
FNNIB NEC 650 71		71	9.8	0139139	+512005	L 1	20910 L		EO	91073005	053200	036000	335 G E=104,G=100,B=70	
FHCAL SKY BKND 07		07		0139158	+511902	L 1	20903 L			91072906	065800	006000	02 G B=38	
CONIA HD 10476 46		46	5.24	0139468	+200131	L 3	42186 L	16625	FO	91080616	160900	016000	331 G E=74,G=85,B=23	
SANOW HD 10486 46		46	6.34	0140132	+450415	L 1	20864 L	7293	FO	91072216	162100	001500	502 G G=220,B=35	
SANOW HD 10486 46		46	6.34	0140132	+450415	L 1	20864 S	7239	FO	91072216	163600	000500	202 G G=50,B=35	
IRNH CR463 18 22		22	10.4	0140597	+712325	L 3	42265 L	295	FO	91081615	152800	007100	400 G G=159,B=20	
IRNH CR463 18 22		22	10.4	0140597	+712325	L 1	21027 L	289	FO	91081616	165100	001330	502 G G=199,B=38	
MNEB HD 10700 44		44	3.5	0141397	-161124	L 3	42012 L	794	FU	91070604	040200	040500	??2 G E=15X,G=15X,B=40	
FHCAL SKY BKND 07		07		0141411	-161225	L 1	20753 L			91070604	040300	037000	305 G G=95,B=65	
IRNH ED +70 131 22		22	10.1	0142370	+711930	L 1	21011 L	386	FO	91081411	110400	000900	402 G G=182,B=40	
IRNH ED +70 131 22		22	10.1	0142370	+711930	L 3	42251 L	394	FO	91081412	120700	004400	401 G G=169,B=25	
IRNH CR463 5 22		22	10.4	0142370	+713041	L 1	21022 L	256	FO	91081516	162100	001330	502 G G=220,B=38	
IRNH CR463 5 22		22	10.4	0142370	+713041	L 3	42259 L	261	FO	91081517	172700	007000	501 G G=218,B=22	
GHUC HD 232522 23		23	8.7	0142461	+550455	L 1	21109 L	1039	FO	91082911	114100	000348	X02 G G=3X,B=40	
GHUC HD 232522 23		23	8.7	0142461	+550455	L 3	42353 L	1062	FO	91082911	114800	000318	500 G G=190,B=18	
GHUC HD 232522 23		23	8.7	0142461	+550455	L 1	21109 L	1057	FO	91082911	115500	000118	502 G G=240,B=35	
MONFM SK 194 25		25	11.7	0144175	-744631	L 1	21281 L	366	SD	91091906	060800	004000	302 G G=79,B=38	
MONFM SK 194 25		25	11.7	0144176	-744631	L 3	42507 L	362	SD	91091907	071500	003000	300 G G=107,B=18	
MONFM SK 194 25		25	11.7	0144176	-744631	L 1	21282 L	362	SD	91091907	075800	004500	X02 G G=1.5X,B=40	
MONFM SK 194 25		25	11.7	0144176	-744631	L 3	42508 L	366	SD	91091908	085000	003000	G c=1.5x,b=40	
MONFM SK 194 25		25	11.7	0144176	-744631	L 1	21283 L	368	SD	91091909	093400	001800	503 G G=218,B=42	
IRNH ED ED+71 10 22		22	9.6	0145220	+712929	L 3	42249 L	554	FO	91081407	072800	003500	500 G G=200,B=18	
IRNH ED ED+71 10 22		22	9.6	0145220	+712929	L 1	21010 L	538	FO	91081408	083600	000500	402 G G=170,B=35	
IRNH ED ED+71 10 22		22	9.6	0145220	+712929	L 3	42250 L	539	FO	91081409	091900	003500	501 G G=214,B=21	
NC027 GD 1401 37		37	14.30	0145489	-254739	L 1	21038 L	00000	BD	91081823	235833	008000	501 V	



PRO	Object	CL	MAG	R.A.	DEC	D C	Image A	FES	MD	Obs.date	Exptim	nummsst	ECC	Comment
NO07	GD 1401	37	14.30	0145489	-254739	L 3	42286 L	00000	FO	91081901	012602	004200	400	V
MI073	HD 11171	47	04.88	0147076	-105559	L 1	20961 L	27106	FO	91080601	014403	000010	602	V
MI073	HD 11171	47	04.90	0147076	-105559	L 3	42181 L	26749	FO	91080601	014908	001800	801	V
DCNE	Alp UMi	53	2.0	0148490	+890144	L 1	21388 L			91100209	090600	000003		G
DCNE	Alp UMi	53	2.0	0148490	+890144	L 3	42600 L			91100209	091100	000500		G
DCNE	Alp UMi	53	2.0	0148490	+890144	L 3	42608 L	2996	FU	91100307	075800	000300	500	G G=206,B=18
DCNE	Alp UMi	53	2.0	0148490	+890144	L 1	21396 L	3023	FU	91100308	080600	000002	502	G G=188,B=32
NI085	V741 PER	57	12.54	0155329	+523915	L 3	42152 L	00164	SO	91080119	194531	003000	151	V
COMB	HD 12311	40	2.9	0157120	-614900	H 3	41614 L	1469	FU	91051215	154200	031500	309	G G=30X,B=120
COMB	HD 12311	40	2.9	0157120	-614900	H 1	20360 L	1454	FU	91051218	180700	000400	X02	G G=1.5X,B=40
GNJC	HD 12323	12	8.9	0159074	+552301	L 1	21108 L	890	FO	91082909	094200	000348	X02	G G=3X,B=40
GNJC	HD 12323	12	8.9	0159074	+552301	L 3	42352 L	895	FO	91082909	094900	000042	400	G G=140,B=18
GNJC	HD 12323	12	8.9	0159074	+552301	L 1	21108 S	890	FO	91082909	095600	000112	402	G G=160,B=35
NO07	GD 1072	17	14.50	0200381	-124326	L 3	42276 L	00000	FO	91081720	203707	033000	301	V
USSES	HD 12534	30	5.1	0200492	+420527	H 1	20968 L	3756	FU	91080702	024400	000700	502	G G=208,B=40
USSES	HD 12534	30	5.1	0200492	+420527	H 3	42759 L	3921	FU	91101811	111600	001200	X03	G G=1.5X,B=45
USSES	HD 12534	30	5.1	0200492	+420527	H 3	42760 L	2180	FU	91101812	120500	002500	X06	G G=3X,B=75
NIL20	TT ARI	55	11.18	0204099	+150327	L 3	42488 L	00138	FO	91091716	164123	000700	500	V
NIL20	TT ARI	55	11.03	0204099	+150327	L 3	42489 L	00158	FO	91091717	172021	000700	500	V
NIL20	TT ARI	55	10.99	0204099	+150327	L 3	42490 L	00164	FO	91091718	181143	000700	500	V
NIL20	TT ARI	55	11.22	0204099	+150327	L 3	42491 L	00134	FO	91091718	185736	000700	500	V
NIL20	TT ARI	55	11.25	0204099	+150327	L 3	42487 L	00130	FO	91091715	155755	001300	700	V
NIL20	TT ARI	55	11.00	0204099	+150327	L 3	42492 L	00163	FO	91091719	195010	000600	500	V
NIL20	TT ARI	55	11.18	0204099	+150327	L 3	42493 L	00139	FO	91091720	202941	000700	500	V
NIL20	TT ARI	55	11.05	0204099	+150327	L 3	42494 L	00156	FO	91091721	210745	000700	500	V
NIL20	TT ARI	55	10.98	0204099	+150327	L 3	42495 L	00165	FO	91091721	214453	000700	500	V
NIL20	TT ARI	55	11.09	0204099	+150327	L 3	42496 L	00150	FO	91091722	222256	000700	500	V
CD95Y	TT ARI	63	11.0	0204100	+150326	L 3	42147 L	162	FO	91080112	124900	001000	500	G G=240,B=18
CD95Y	TT ARI	63	11.0	0204100	+150326	L 1	20922 L	163	FO	91080113	130500	000300	402	G G=170,B=35
CD95Y	TT ARI	63	11.0	0204100	+150326	L 3	42148 L	150	FO	91080113	134200	000830	500	G G=220,B=18
CD95Y	TT ARI	63	11.0	0204100	+150326	L 1	20923 L	178	FO	91080114	141700	000400	502	G G=225,B=37
CD95Y	TT ARI	63	11.0	0204100	+150326	L 3	42149 L	161	FO	91080115	150800	000800	500	G G=240,B=18
CD95Y	TT ARI	63	11.0	0204100	+150326	L 1	20924 L	172	FO	91080115	154200	000340	502	G G=210,B=35
CD95Y	TT ARI	63	11.0	0204100	+150326	L 3	42150 L	156	FO	91080116	161800	000700	500	G G=240,B=18
CD95Y	TT ARI	63	11.0	0204100	+150326	L 1	20925 L	158	FO	91080116	165400	000340	502	G G=240,B=35
CD95Y	TT ARI	63	11.0	0204100	+150326	L 3	42151 L	159	FO	91080117	173100	000530	500	G G=210,B=18
CD95Y	TT ARI	63	11.0	0204100	+150326	L 1	20926 L	158	FO	91080118	181100	000300	502	G G=200,B=35
SANW	HD 12953	32	5.7	0205099	+581113	L 1	21249 S	12573	FO	91091513	135600	001000	502	G G=206,B=39
SANW	HD 12953	32	5.7	0205099	+581113	L 1	21249 L	12464	FO	91091514	142700	000255	502	G G=227,B=39
SANW	HD 12953	32	5.7	0205099	+581113	L 1	21478 L	13442	FO	91101208	085000	001500	X06	G G=3X,B=80
SANW	HD 12953	32	5.7	0205099	+581113	L 3	42698 S	13602	FO	91101209	092300	000500	301	G G=61,B=25
SANW	HD 12953	32	5.7	0205099	+581113	L 3	42698 L	13582	FO	91101209	095700	000400	401	G G=140,B=25
SANW	HD 13041	31	4.83	0205277	+373722	L 3	42114 L	25875	FO	91072213	134400	000210	X04	G G=2X,B=55
SANW	HD 13041	31	4.83	0205277	+373722	L 3	42114 S	25951	FO	91072213	135800	000600	X04	G G=5X,B=55
SANW	HD 13041	31	4.83	0205277	+373722	L 1	20863 L	26121	FO	91072214	142100	000030	505	G G=235,B=65
SANW	HD 13041	31	4.83	0205277	+373722	L 1	20863 S	25991	FO	91072214	143200	000120	X05	G G=5X,B=65
SANW	HD 13041	31	4.83	0205277	+373722	L 3	42115 L	26139	FO	91072215	151400	000050	400	G G=145,B=20
COMB	HD 13421	44	5.6	0208428	+082008	L 3	42323 L	13264	FO	91082605	052100	018500	302	G G=10X,B=35
SANW	HD 14357	23	8.5	0217384	+563814	L 1	21477 S	1191	FO	91101206	064400	001000	X02	G G=3X,B=40
SANW	HD 14357	23	8.5	0217384	+563814	L 1	21477 L	1193	FO	91101206	065900	000140	502	G G=244,B=40

FRO	Object	CL	MAG	R.A.	DEC	D C	Image A	FES	MD	Obs.date	Exptim	mmmsstt	ECC	Comment
SNOW HD	14357	23	8.5	0217384	+563814	L 3	42697 S	1204	FO	91101207	072200	001000	403 G	G=156,B=48
SNOW HD	14357	23	8.5	0217384	+563814	L 3	42697 L	1202	FO	91101207	074400	000800	503 G	G=253,B=48
WINDH IB 1628		37	13.5	0229045	-480841	L 3	42934 L			91102904	043900	002000	500 G	G=194,B=18MD BO
PHCAL	NULL	99		0229045	-480841	L 2	18597 L			91102904	044200	000000	02 G	B=33
WNSV FEIGE 24		37	12.5	0232309	+033051	L 3	42083 L	265	SD	91071704	042300	000340	500 G	G=230,B=18
WNSV FEIGE24		37	12.6	0232309	+033051	H 3	42084 L	262	SD	91071704	045100	036000	505 G	G=253,B=70
WNSV FEIGE24		37	12.6	0232309	+033051	L 3	42088 S	270	SD	91071803	035700	000530	500 G	G=185,B=18
WNSV FEIGE24		37	12.6	0232309	+033051	L 3	42088 L	265	SD	91071804	040800	000300	500 G	G=220,B=18
WNSV FEIGE24		37	12.6	0232309	+033051	H 3	42089 L	268	SD	91071804	044300	036800	406 G	G=230,B=80
WNSV FEIGE24		37	12.6	0232309	+033051	L 3	42094 S	254	SD	91071903	035400	000530	400 G	G=136,B=18
WNSV FEIGE24		37	12.6	0232309	+033051	L 3	42094 L	251	SD	91071904	040600	000300	500 G	G=212,B=18
WNSV FEIGE24		37	12.6	0232309	+033051	H 3	42095 L	244	SD	91071904	044100	037000	406 G	G=220,B=78
WNSV FEIGE 24		37	12.6	0232309	+033051	H 3	42105 L	257	SD	91072003	034700	042500	407 G	G=225,B=85
WNSV FEIGE24		37	12.6	0232309	+033051	L 3	42127 L	229	SD	91072603	034900	000300	500 G	G=189,B=18
WNSV FEIGE24		37	12.6	0232309	+033051	L 3	42127 S	222	SD	91072604	040000	000530	500 G	G=183,B=18
WNSV FEIGE24		37	12.6	0232309	+033051	H 3	42128 L	221	SD	91072604	044100	037000	X05 G	G=1.5X,B=65
PHCAL SKYFKGD		07		0232319	+032947	L 1	20836 L			91071804	045100	032000	06 G	B=75
PHCAL SKYFKGD		07		0232319	+032947	L 1	20842 L			91071904	045300	032000	06 G	B=72
PHCAL SKY FKGD		07		0232319	+032947	L 1	20847 L			91072003	035400	037000	306 G	G=120,B=75
PHCAL SKY FKGD		07		0232319	+032947	L 1	20887 L			91072605	052400	031500	06 G	B=72
PHCAL SKYFKGD		07		0232320	+032904	L 1	20827 L			91071704	045600	031500	205 G	G=85,B=70
CONIA HD	16160	46	5.82	0233203	+063853	L 3	42211 L	10811	FO	91081015	154000	018500	31 G	E=64,B=25
NC168 HD16082		39	07.62	0233212	+514439	L 3	42431 L	03309	FO	91090922	222512	000500	400 V	
PHCAL TIFLOOD		98	5.36	0235583	+214447	L 1	20930 S			91080213	133800	000025	??8 G	E=60X,G=60X,B=100
PHCAL WAWCAL		98	5.36	0235583	+214447	L 1	20930 S			91080213	134200	000001	??8 G	E=10X,G=10X,B=100
PHCAL TIFLOOD		98	5.36	0235583	+214447	L 1	20931 S			91080214	141400	000025	??8 G	E=60X,G=60X,B=100
PHCAL WAWCAL		98	5.36	0235583	+214447	L 1	20931 S			91080214	141600	000016	??8 G	E=60X,G=60X,B=100
PHCAL TIFLOOD		98	5.36	0235583	+214447	H 1	20932 S			91080215	150400	000025	?8 G	E=60X,B=100
PHCAL WAWCAL		98	5.36	0235583	+214447	H 1	20932 S			91080215	150600	000016	?8 G	E=60X,B=100
PHCAL TIFLOOD		98	5.36	0235583	+214447	L 3	42157 S			91080215	152000	000005	?8 G	E=10X,B=100
PHCAL WAWCAL		98	5.36	0235583	+214447	L 3	42157 S			91080215	152200	000002	?8 G	E=10X,B=100
PHCAL WAWCAL		98	5.36	0235583	+214447	H 3	42158 S			91080215	155300	000005	?9 G	E=60X,B=110
PHCAL WAWCAL		98	5.36	0235583	+214447	H 3	42158 S			91080215	155600	000200	?9 G	E=60X,B=110
PHCAL WAWCAL		99	5.36	0235583	+214447	H 2	18587 S			91080216	161000	000000	00 G	B=10
PHCAL TIFLOOD		98	5.36	0235583	+214447	L 2	18588 S			91080216	163900	000010	?6 G	E=10X,B=80
PHCAL WAWCAL		98	5.36	0235583	+214447	L 2	18588 S			91080216	164200	000001	?6 G	E=10X,B=80
PHCAL TIFLOOD		98	5.36	0235583	+214447	H 2	18589 S			91080217	171200	000010	?9 G	E=60X,B=120
PHCAL WAWCAL		98	5.36	0235583	+214447	H 2	18589 S			91080217	171400	000022	?9 G	E=60X,B=120
AFNIS HD	17093	33	5.18	0242138	+121411	L 3	42318 L	19425	FO	91082511	112700	003000	233 G	E=76,G=40X,B=45
USSES HD	17543	21	5.3	0246298	+171527	H 3	42210 L	20009	FO	91081013	134900	000457	502 G	G=202,B=40
USSES HD	17918	41	6.3	0250243	+161650	L 3	42501 L	7917	FO	91091813	131400	003500	X00 G	G=1.5X,B=20
USSES HD	19476	47	3.8	0306075	+444000	H 1	21275 L	165	FU	91091814	141800	002500	532 G	E=138,G=210,B=39
RSNEG HD	21242	46	6.6	0323320	+283232	L 3	42405 L	7071	FO	91090609	094900	003500	333 G	E=86,G=88,B=48
RSNEG HD	21242	46	6.6	0323320	+283232	H 1	21171 L	7062	FO	91090610	102900	001800	339 G	E=179,G=156,B=105
RSNEG HD	21242	46	6.6	0323320	+283232	L 3	42416 L	6474	FO	91090809	095100	004000	336 G	E=156,G=115,B=72
RSNEG HD	21242	46	6.6	0323320	+283232	H 1	21187 L	6533	FO	91090810	104100	001000	336 G	E=127,G=119,B=72
RSNEG HD	21242	46	6.6	0323320	+283232	H 1	21200 L	6821	FO	91090909	093700	001800	332 G	E=115,G=82,B=32
RSNEG HD	21242	46	6.6	0323320	+283232	L 3	42427 L	6860	FO	91090910	101000	004000	332 G	E=83,G=82,B=35
RSNEG UK ART		46	6.6	0323320	+283232	H 1	21208 L	6356	FO	91091009	091400	001800	342 G	E=146,G=75,B=38
RSNEG UK ART		46	6.6	0323320	+283232	L 3	42435 L	6500	FO	91091009	094600	004000	330 G	E=87,G=62,B=20

FPO	Object	CL	MAG	R.A.	DEC	D C Image A	FES	MD	Obs.date	Exptim	mmmsstt	ECC	Comment
RSNEG HD	21242	46	6.6	0323320	+283232	H 1 21222 L	6715	FO	91091209	090800	002300	342	G E=154,G=80,B=40
RSNEG HD	21242	46	6.6	0323320	+283232	L 3 42448 L	6825	FO	91091209	094100	004000	3X1	G E=1.5X,G=60,B=26
RSNEG HD	21242	46	6.6	0323320	+283232	H 1 21236 L	7291	FO	91091409	092300	002300	343	G E=160,G=90,B=43
RSNEG HD	21242	46	6.6	0323320	+283232	L 3 42461 L	7158	FO	91091409	095400	004000	343	G E=151,G=85,B=44
AGMFB H323+022		87	16.0	0323380	+021447	L 3 42317 L		FO	91082501	015700	041000	303	G G=82,B=50
NC007 GL142		46	08.79	0325371	-195838	H 1 21250 L	01164	FO	91091516	161835	005000	111	V
IDMIS HE917		44	10.9	0327155	+474310	H 1 21515 L	128	FO	91101721	215200	042000	307	G G=110,B=62
IRNH NL342 HB		22	10.3	0328100	+370902	L 1 21007 L	315		91081315	153800	001600	503	G G=194,B=41
IRNH NL342 HB		22	10.3	0328100	+370902	L 3 42243 L	316	FO	91081316	162800	006700	401	G G=158,B=28
IRNH ED +36 710		22	8.8	0328277	+370944	L 1 20998 L	1065	FO	91081211	113900	000630	402	G G=178,B=38
IRNH ED +36 710		22	8.8	0328277	+370944	L 3 42231 L	1062	FO	91081212	122000	001500	300	G G=98,B=18
IRNH ED +36 710		22	8.8	0328277	+370944	L 3 42241 L	1032	FO	91081311	113600	001100	400	G G=167,B=18
IRNH ED +37 781		22	9.2	0328475	+372045	L 1 21006 L	698	FO	91081313	130800	000400	402	G G=165,B=34
IRNH ED +37 781		22	9.2	0328475	+372045	L 3 42242 L	705	FO	91081313	134400	002500	501	G G=185,B=22
FGNEB HD	21770	41	5.3	0328578	+455321	L 3 42775 L	16513	FO	91102107	073900	008000	X00	G G=5X,B=18
CSMIA HD	22049	46	3.8	0330344	-093735	L 3 42234 L	738	FU	91081216	162600	003000	331	G E=119,G=68,B=28
FNEH NGC	1360	70	11.4	0331070	-260221	L 1 21866 L	122	FO	91112803	033900	000045	302	G G=121,B=33
FNEH NGC	1360	70	11.4	0331071	-260221	L 3 43238 L	120	FO	91112803	033400	000045	500	G G=185,B=17
FNEH NGC	1360	70	11.4	0331071	-260221	L 3 43239 L	125	FO	91112804	040900	000100	500	G G=213,B=17
HENP HD	37202	26	3.0	0332555	+480141	H 1 21428 L	464	FU	91100705	055200	000100	502	G G=200,B=40
HENP HD	37202	26	3.0	0332555	+480141	H 1 21428 L	464	FU	91100705	055200	000100	502	G G=200,B=40
HENP HD	22192	26	4.2	0332555	+480141	H 3 42633 L	460	FU	91100706	060000	000210	502	G G=193,B=35
HENP HD	22192	26	4.2	0332555	+480141	H 1 21430 L	466	FU	91100708	081800	000100	502	G G=198,B=40
HENP HD	22192	26	4.2	0332555	+480141	H 3 42635 L	466	FU	91100708	082300	000210	502	G G=198,B=35
HENP HD	22192	26	4.2	0332555	+480141	H 1 21432 L	465	FU	91100710	104400	000100	502	G G=199,B=40
HENP HD	22192	26	4.2	0332555	+480141	H 3 42637 L	463	FU	91100710	104900	000210	502	G G=195,B=35
HENP HD	22192	26	4.2	0332555	+480141	H 3 42645 L	474	FU	91100722	220800	000230	502	G G=210,B=38
HENP HD	22192	26	4.2	0332555	+480141	H 1 21440 L	471	FU	91100722	221600	000110	503	G G=210,B=42
HENP HD	22192	26	4.2	0332555	+480141	H 3 42647 L	470	FU	91100800	004000	000230	502	G G=211,B=38
HENP HD	22192	26	4.2	0332555	+480141	H 1 21442 L	471	FU	91100800	004600	000110	502	G G=210,B=40
HENP HD	22192	26	4.2	0332555	+480141	H 3 42649 L	473	FU	91100803	031800	000230	502	G G=210,B=38
HENP HD	22192	26	4.2	0332555	+480141	H 1 21444 L	478	FU	91100803	032700	000110	502	G G=207,B=40
HENP HD	22192	26	4.2	0332555	+480141	H 3 42651 L	473	FU	91100805	054800	000230	502	G G=210,B=36
HENP HD	22192	26	4.2	0332555	+480141	H 1 21446 L	472	FU	91100805	055500	000110	503	G G=206,B=41
HENP HD	22192	26	4.2	0332555	+480141	H 3 42653 L	475	FU	91100808	083100	000230	502	G G=210,B=40
HENP HD	22192	26	4.2	0332555	+480141	H 1 21448 L	473	FU	91100808	083700	000110	502	G G=209,B=40
HENP HD	22192	26	4.2	0332555	+480141	H 3 42655 L	471	FU	91100811	110400	000230	502	G G=212,B=37
HENP HD	22192	26	4.2	0332555	+480141	H 1 21450 L	469	FU	91100811	111100	000110	502	G G=207,B=40
HENP HD	22192	26	4.2	0332555	+480141	H 3 42663 L	469	FU	91100822	221500	000240	502	G G=219,B=39
HENP HD	22192	26	4.2	0332555	+480141	H 1 21458 L	478	FU	91100822	222200	000110	502	G G=213,B=40
HENP HD	22192	26	4.2	0332555	+480141	H 3 42665 L	470	FU	91100901	010600	000240	502	G G=210,B=40
HENP HD	22192	26	4.2	0332555	+480141	H 1 21460 L	469	FU	91100901	011600	000120	502	G G=220,B=40
HENP HD	22192	26	4.2	0332555	+480141	H 3 42667 L	473	FU	91100903	034700	000240	502	G G=210,B=35
HENP HD	22192	26	4.2	0332555	+480141	H 1 21462 L	469	FU	91100903	035400	000110	502	G G=215,B=40
HENP HD	22192	26	4.2	0332555	+480141	H 3 42669 L	473	FU	91100906	061700	000240	502	G G=225,B=40
HENP HD	22192	26	4.2	0332555	+480141	H 1 21464 L	466	FU	91100906	062400	000110	502	G G=218,B=40
HENP HD	22192	26	4.2	0332555	+480141	H 3 42671 L	477	FU	91100908	084000	000240	502	G G=223,B=40
HENP HD	22192	26	4.2	0332555	+480141	H 1 21466 L	479	FU	91100908	084700	000110	502	G G=214,B=40
HENP HD	22192	26	4.2	0332555	+480141	H 3 42673 L	475	FU	91100911	110500	000240	502	G G=220,B=38
HENP HD	22192	26	4.2	0332555	+480141	H 1 21468 L	472	FU	91100911	111200	000110	503	G G=209,B=42

PRO	Object	CL	MAG	R.A.	DEC	D C	Image A	FES	MD	Obs.date	Exptim	mmmsstt	ECC	Comment
RSNEG HD	22468 46		5.9	0334132	+002533	L 3	42404 L	11553	FO	91090608	080100	003100	330	G E=115,G=58,B=18
RSNEG HD	22468 46		5.9	0334132	+002533	H 1	21170 L	11626	FO	91090608	084100	001300	342	G E=148,G=80,B=35
RSNEG HD	22468 46		5.7	0334132	+002533	L 3	42415 L	10946	FO	91090807	074400	003500	340	G E=134,G=67,B=18
RSNEG HD	22468 46		5.7	0334132	+002533	H 1	21186 L	10670	FO	91090808	083500	001500	342	G E=157,G=79,B=32
RSNEG HD	22468 46		5.7	0334132	+002533	H 1	21199 L	11160	FO	91090907	075300	001500	342	G E=157,G=79,B=35
RSNEG HD	22468 46		5.7	0334132	+002533	L 3	42426 L	11234	FO	91090908	081600	003500	340	G E=125,G=56,B=18
RSNEG V711 TAU	46		5.7	0334132	+002533	H 1	21207 L	10549	FO	91091007	073700	001500	352	G E=197,G=76,B=35
RSNEG V711 TAU	46		5.7	0334132	+002533	L 3	42434 L	10448	FO	91091008	080100	003500	350	G E=170,G=70,B=18
RSNEG HD	22468 46		5.7	0334132	+002533	H 1	21221 L	11191	FO	91091207	072900	001400	342	G E=150,G=75,B=38
RSNEG HD	22468 46		5.7	0334132	+002533	L 3	42447 L	11258	FO	91091207	075100	003300	340	G E=138,G=60,B=18
RSNEG HD	22468 46		5.7	0334132	+002533	H 1	21235 L	11354	FO	91091407	074500	001400	342	G E=150,G=79,B=38
RSNEG HD	22468 46		5.7	0334132	+002533	L 3	42460 L	11435	FO	91091408	080800	003300	330	G E=102,G=62,B=20
CONIA HD	22484 41		4.3	0334192	+001434	L 3	42341 L	404	FU	91082806	065200	012000	?40	G E=157,G=10K,B=80
QSDT Q80	0335-339 85		16.5	0335239	-333902	L 1	21865 L		BO	91112720	200300	040500	07	G B=85
CD91Y SAO	76071 30		7.3	0337352	+283649	S 9	02481 2			91081006	061700	004000		G
FGNIA HR	1105 66		5.1	0337477	+630325	L 1	21655 L	21847	FO	91110703	035400	000700	342	G E=175,G=80,B=35
FGNIA HR	1105 66		5.1	0337477	+630325	L 3	43027 L	22030	FO	91110704	040600	009000	330	G E=66,G=44,B=19
FGNIA HR	1105 66		5.1	0337477	+630325	H 1	21656 L	22445	FO	91110705	054100	007000	346	G E=207,G=125,B=80
CD91Y P/S-W 1	06		12	0337520	+284721	L 1	20984 L		BO	91081007	073400	022500	309	G C=160,B=115
CD91Y P/S-W 1	06		12	0337520	+284721	L 3	42209 L		BO	91081007	074400	022000	06	G B=80
CD91Y COMET SW	06		12	0337520	+284721	F 9	02482 2			91081009	094900	004000		G
NA035 HII 158	31		08.59	0340445	+241306	L 3	42513 L	01398	FO	91091917	170834	000800	400	V
NA035 HII 470	41		09.36	0340445	+241306	L 3	42514 L	00700	FO	91091919	190414	002000	300	V
NA035 HII 158	31		08.58	0340445	+241306	L 1	21287 L	01407	FO	91091917	174723	000300	500	V
NCL68 HD23089	39		05.17	0341387	+631121	H 3	42430 L	23105	FO	91090920	202521	006000	500	V
NCL68 HD23089	39		05.17	0341387	+631121	H 1	21204 L	23077	FO	91090921	213347	001800	502	V
ISNDM HD	23288 22		5.6	0341494	+240801	H 3	42750 L	17323	FO	91101709	091900	000800	402	G C=188,B=40
ISNDM HD	23288 22		5.6	0341494	+240801	H 1	21509 L	17371	FO	91101709	094500	000500	403	G C=190,B=42
ISNDM HD	23288 22		5.6	0341494	+240801	H 3	42751 L	17693	FO	91101710	102000	000930	502	G C=208,B=40
ISNDM HD	23288 22		5.6	0341494	+240801	H 1	21510 L	17653	FO	91101710	105200	000540	503	G C=201,B=42
ISNDM HD	23338 22		4.3	0342136	+241843	H 3	42752 L	458	FU	91101711	115600	000200	402	G C=170,B=35
ISNDM HD	23338 22		4.3	0342136	+241843	H 1	21511 L	455	FU	91101712	120200	000115	502	G C=193,B=40
ISNDM HD	23338 22		4.3	0342136	+241843	H 1	21512 L	451	FU	91101712	124400	000130	502	G C=211,B=40
NA035 HII 627	43		10.14	0342246	+244354	L 1	21286 L	00351	FO	91091916	160915	001500	400	V
ISNDM HD	23408 25		3.9	0342499	+241246	H 3	42754 L	664	FU	91101805	053800	000200	402	G C=155,B=38
ISNDM HD	23408 25		3.9	0342499	+241246	H 1	21516 L	657	FU	91101805	054600	000115	402	G C=164,B=40
ISNDM HD	23408 25		3.9	0342499	+241246	H 3	42755 L	662	FU	91101806	064400	000245	502	G C=212,B=38
ISNDM HD	23408 25		3.9	0342499	+241246	H 1	21517 L	659	FU	91101806	065100	000150	503	G C=229,B=45
ISNDM HD	23408 25		3.9	0342499	+241246	H 3	42756 L	665	FU	91101807	074900	000245	502	G C=220,B=40
ISNDM HD	23408 25		3.9	0342499	+241246	H 1	21518 L	667	FU	91101807	075600	000140	503	G C=240,B=42
ISNDM HD	23408 25		3.9	0342499	+241246	H 3	42757 L	662	FU	91101808	083900	000245	502	G C=215,B=40
NA035 HII 1384	30		08.02	0344248	+242609	L 3	42515 L	02326	FO	91091920	204023	000500	400	V
NA035 HII 1425	30		08.10	0344286	+233133	L 3	42512 L	02159	FO	91091915	154547	000600	500	V
NA165 HD23630	23		03.03	0344304	+235708	H 3	42303 L	01716	FU	91082120	204801	000050	500	V
FGNEB HD	23754 41		4.2	0344417	-232347	L 3	42776 L	431	FU	91102109	095500	008000	X30	G E=113,G=5X,B=18
NA035 HII 1766	41		09.55	0345166	+250346	L 1	21289 L	00593	FO	91091921	213047	000700	500	V
USSBS HD	23850 25		3.6	0346109	+235407	H 1	20972 L	912	FU	91080802	023900	000050	502	G C=195,B=40
NA165 HD23862	23		05.24	0346123	+235906	H 3	42301 L	22206	FO	91082118	180704	001000	600	V
NA165 HD23862	23		05.26	0346123	+235906	H 1	21050 L	21923	FO	91082118	184731	000415	502	V
NA165 HD23862	23		05.26	0346124	+235907	L 3	42302 L	21865	FO	91082119	191824	000005	500	V



PRO	Object	CL	MAG	R.A.	DEC	D C	Image A	FES	MD	Cos.date	Exptim	nummsst	ECC	Comment
NA165	HD23862	23	05.26	0346124	+235907	L 1	21051 L	21934	FO	91082119	195538	000003	600	V
NA035	HII 2195	30	08.46	0346137	+234410	L 3	42516 L	01562	FO	91091922	221010	000800	400	V
MIL70	V471 TAU	37	09.59	0347334	+170546	H 1	20971 L	00574	FO	91080721	212055	012000	331	V SIFONG FES SCATTERED
MIL70	V471 TAU	37	09.59	0347334	+170546	H 3	42193 L	00574	FO	91080723	232938	015700	301	V SIFONG FES SCATTERED
MIL70	V471 TAU	37	09.62	0347334	+170546	L 1	20970 L	00557	FO	91080720	200119	002000	600	V SIFONG FES SCATTERED
MIL70	V471 TAU	37	09.61	0347334	+170546	L 3	42192 L	00563	FO	91080720	204951	001500	500	V SIFONG FES SCATTERED
MIL70	V471 TAU	37	09.63	0347334	+170546	L 1	20975 L	00553	FO	91080819	195702	002000	400	V SIFONG FES SCATTERED
MIL70	V471 TAU	37	09.61	0347334	+170546	L 3	42199 L	00561	FO	91080820	203210	001500	500	V SIFONG FES SCATTERED
MIL70	V471 TAU	37	09.61	0347334	+170546	L 1	20976 L	00563	FO	91080821	210948	001500	500	V SIFONG FES SCATTERED
MIL70	V471 TAU	37	09.59	0347334	+170546	L 3	42200 L	00573	FO	91080821	215551	001500	500	V SIFONG FES SCATTERED
MIL70	V471 TAU	37	09.56	0347334	+170546	H 1	20977 L	00587	FO	91080822	223535	021100	332	V SIFONG FES SCATTERED
DCNE	FW Cam	53	8.6	0350150	+583024	L 3	42605 L	887	FO	91100221	213800	026000	402	G G=179,B=40
DCNE	FW Cam	53	8.6	0350150	+583024	L 1	21393 L	891	FO	91100222	221400	003500	502	G G=200,B=40
SANOW	HD 24432	24	6.82	0351458	+485342	L 3	42468 L	4840	FO	91091512	120000	000320	300	G G=112,B=18
SANOW	HD 24432	24	6.82	0351458	+485342	L 3	42468 S	4839	FO	91091512	120800	000320	300	G G=63,B=18
SANOW	HD 24432	24	6.82	0351458	+485342	L 1	21248 L	4854	FO	91091512	123300	000400	X02	G G=2X,B=40
SANOW	HD 24432	24	6.82	0351458	+485342	L 1	21248 L	4854	FO	91091512	123900	000400	X02	G G=6X,B=40
SANOW	HD 24432	24	6.8	0351458	+485342	L 1	21479 L	5044	FO	91101210	105200	001000	?02	G G=10X,B=40
SANOW	HD 24432	24	6.8	0351458	+485342	L 1	21479 S	5032	FO	91101211	111600	000040	302	G G=130,B=40
SANOW	HD 24432	24	6.8	0351458	+485342	L 3	42699 L	4937	FO	91101211	112500	000900	500	G G=219,B=18
IGMIS	HD 232862	45	9.5	0353359	+504244	L 3	42306 L	441	FO	91082206	063200	024000	332	G E=70,G=68,B=40
IGMIS	SKY 07			0353362	+504139	L 1	21053 L			91082207	073000	002000	02	G B=35
CENUN	HD 24912	12	4.0	0355427	+353856	H 3	42791 L	591	FU	91102303	034000	000110	502	G G=205,B=40
CENUN	HD 24912	12	4.0	0355428	+353856	H 3	42788 L	585	FU	91102300	004800	000110	502	G G=219,B=39
CENUN	HD 24912	12	4.0	0355428	353856	H 3	42880 L	595	FU	91102605	052300	000110	552	G E=200,G=210,B=40
CENUN	HD 24912	12	4.0	0355428	+353856	H 3	42883 L	596	FU	91102607	073800	000110	552	G E=209,G=210,B=40
CENUN	HD 24912	12	4.0	0355428	+353856	H 3	42888 L	589	FU	91102611	113400	000110	552	G E=208,G=210,B=40
CENUN	HD 24912	12	4.0	0355428	+353856	H 3	42900 L	586	FU	91102621	210600	000110	552	G E=216,G=224,B=38
CENUN	HD 24912	12	4.0	0355428	+353856	H 3	42903 L	585	FU	91102623	232800	000110	553	G E=242,G=230,B=41
CENUN	HD 24912	12	4.0	0355428	+353856	H 3	42906 L	592	FU	91102701	014100	000110	552	G E=232,G=229,B=40
CENUN	HD 24912	12	4.0	0355428	+353856	H 3	42910 L	594	FU	91102704	043900	000110	552	G E=231,G=230,B=40
CENUN	HD 24912	12	4.0	0355428	+353856	H 3	42913 L	592	FU	91102707	070000	000110	552	G E=215,G=230,B=40
CENUN	HD 24912	12	4.0	0355428	+353856	H 3	42918 L	587	FU	91102710	105100	000110	552	G E=222,G=220,B=40
CENUN	HD 24912	14	4.0	0355430	+353900	H 3	42795 L	591	FU	91102307	070700	000110	502	G G=220,B=40
CENUN	HD 24912	12	4.0	0355430	+353900	H 3	42798 L	585	FU	91102309	095800	000110	502	G G=210,B=40
CENUN	HD 24912	12	4.0	0355430	+353856	H 3	42812 L	589	FU	91102322	222100	000110	502	G G=225,B=40
CENUN	HD 24912	12	4.0	0355430	+353856	H 3	42815 L	593	FU	91102401	010800	000110	502	G G=210,B=40
CENUN	HD 24912	12	4.0	0355430	+353856	H 3	42819 L	612	FU	91102404	042200	000110	502	G G=213,B=40
CENUN	HD 24912	12	4.0	0355430	+353856	H 3	42822 L	586	FU	91102406	064600	000110	552	G E=200,G=210,B=38
CENUN	HD 24912	12	4.0	0355430	+353856	H 3	42827 L	588	FU	91102410	105100	000110	552	G E=200,G=210,B=40
CENUN	HD 24912	12	4.0	0355430	+353856	H 3	42853 L	601	FU	91102507	074900	000110	552	G E=200,G=210,B=40
CENUN	HD 24912	12	4.0	0355430	+353900	H 3	42858 L	594	FO	91102511	114000	000110	552	G E=210,G=220,B=40
CENUN	HD 24912	12	4.0	0355430	+353856	H 3	42870 L	588	FU	91102521	213600	000110	502	G G=208,B=40
CENUN	HD 24912	12	4.0	0355430	+353856	H 3	42873 L	584	FU	91102600	000500	000110	502	G G=215,B=40
CENUN	HD 24912	12	4.0	0355430	+353856	H 3	42876 L	585	FU	91102602	022500	000110	502	G G=210,B=39
COMB	HD 25621	41	5.4	0401322	+024125	L 3	42322 L	16362	FO	91082601	013500	018000	?31	G E=101,G=20X,B=23
CONB	HD 26462	41	5.72	0408404	+052340	L 1	21530 L	13183	FO	91101910	105200	000135	502	G G=225,B=38
CONB	HD 26462	41	5.72	0408404	+052340	L 1	21530 S	13183	FO	91101911	110400	000040	502	G G=220,B=38
CONIS	HD 284163	46	9.38	0408559	+233029	L 3	42305 L	534	FO	91082201	014400	024000	232	G E=85,G=58,B=38
AFNIS	HD 284163	46	9.4	0408560	+233030	D 9	02483 2			91082116	162000	016000	G	

PRO	Object	CL	MAG	R.A.	DEC	D C	Image A	FES	MD	Obs.date	Exptim	mmmsst	ECC	Comment
CCNIS HD	284163	46	9.38	0408560	+233030	L 1	21049 L	473	FO	91082116	163400	001500	342	G E=151,G=78,B=35
CCNIS HD	26756	44	8.46	0411358	+143000	H 1	21079 L	1154	FO	91082514	140400	016000	334	G E=116,G=130,B=52
CCNIS	VA68	46	10.7	0412039	+125550	L 1	21523 L	162	FO	91101901	014900	008000	333	G E=111,G=65,B=42
CCNIS	VA72	48	11.6	0412208	+141628	L 1	21060 L	109	FO	91082308	080300	010500	233	G E=108,G=63,B=48
CCNIS SKY BKGD		07		0413346	+214812	L 3	42763 L			91102003	030000	006000	00	G B=18
CCNIS	VE21	46	9.1	0413350	+214707	H 1	21535 L	615	FO	91102001	014700	025000	335	G E=101,G=108,B=62
CCNIS HD	285663	46	10.0	0415288	+171805	L 1	21054 L	321	FO	91082210	105500	005000	343	G E=149,G=98,B=48
NCI00 SAC239463		47	04.82	0415366	-592512	L 1	20895 L	00348	FU	91072722	220145	000100	400	V
NCI00 SAC239463		47	04.82	0415366	-592512	L 1	20896 L	00348	FU	91072722	224251	000100	400	V
CCNIS	VA 146	48	11.9	0415589	+131446	L 1	21077 L	314	SO	91082509	093000	009000	36	G E=117,B=80
USBS HD	27383	41	7.0	0417030	+162414	L 3	42586 L	4948	FO	91093011	114800	005000	301	G G=110,B=25
CCNIS HD	27483	41	6.17	0418038	+134447	H 1	21055 L	8823	FO	91082213	131300	003000	402	G G=188,B=40
CCNIS	L 33	48	9.81	0419395	+111123	L 1	21078 L	370	FO	91082512	122400	006000	337	G E=172,G=128,B=88
CCNIS	VB43	46	9.4	0420270	+193237	H 1	21046 L	533	FO	91082102	021700	036000	335	G E=145,G=112,B=64
CCNIS	VB43	46	9.4	0420270	+193237	L 1	21048 L	514	FO	91082113	134500	001700	332	G E=96,G=116,B=35
IMCI HD	27778	21	6.4	0420586	+241110	L 1	21254 L	7809	FO	91091607	074500	000045	502	G G=194,B=35
MIL12 M4-18		70	13.40	0421312	+600025	L 3	42313 L	00000	EO	91082317	175658	020000	341	V
MIL12 M4-18		70	13.40	0421312	+600025	L 1	21064 L	00000	EO	91082321	212345	010000	461	V
AENIS HD	27946	33	5.3	0422260	+220514	L 3	42298 L	18070	FO	91082108	085100	006000	331	G E=61,G=50X,B=22
AENIS HD	27946	33	5.3	0422260	+220514	L 3	42764 L	18471	FO	91102006	061000	009000	331	G E=109,G=75X,B=22
CR86K	VA383	48	12.2	0423141	+145546	L 1	21534 L	197	SO	91101922	221800	015000	234	G E=103,G=68,B=55
CCNIS HD	28034	41	7.49	0423147	+152444	H 1	21521 L	2803	FO	91101822	220500	009000	532	G E=87,G=197,B=40
CCNIS HD	285766	46	10.2	0425046	+182324	L 1	21524 L	253	FO	91101903	035200	006000	332	G E=135,G=90,B=40
CCNIS	VA472	46	9.0	0425151	+134529	H 1	21508 L	668	FO	91101701	010000	023000	334	G E=117,G=105,B=60
PHCAL SKYBKGD		07		0425345	+173614	L 3	42311 L			91082310	104800	003000	04	G B=60
CCNIS	VA486	48	12.2	0425350	+173512	L 1	21061 L	391	SO	91082310	104000	006000	39	G E=251,B=185
CCNIS	VB69	46	8.6	0425410	+193753	H 1	21059 L	1035	FO	91082303	032800	021000	333	G E=131,G=125,B=50
CCNIS	VA502	48	12.0	0426007	+155222	L 1	21047 L	116	FO	91082110	102600	007500	34	G E=78,B=52
ENDW HD	28475	21	6.8	0426579	+102442	L 1	21418 L	5642	FO	91100609	095700	000014	502	G G=223,B=35
ENDW HD	28475	21	6.8	0426579	+102442	L 3	42630 L	5546	FO	91100610	100200	000030	500	G G=209,B=18
ENDW HD	28475	21	6.8	0426579	+102442	L 1	21419 L	5682	FO	91100611	110000	000140	X02	G G=6X,B=38
CCNIS	VA559	48	12.8	0427028	+164823	L 1	21500 L	132	SO	91101601	010900	022000	234	G E=157,G=75,B=60
IMCI HD	28482	25	7.2	0427218	+232851	L 1	21257 L	3729	FO	91091610	105400	000045	402	G G=155,B=32
IMCI HD	28482	25	7.2	0427218	+232851	L 3	42471 L	3662	FO	91091611	110200	000430	400	G G=142,B=18
IMCI HD	28482	25	7.2	0427218	+232851	L 1	21258 L	3722	FO	91091612	120400	000520	X02	G G=4.5X,B=37
CCNIS	VA622	46	11.8	0428352	+173646	L 1	21499 L	254	SO	91101522	223500	010500	233	G E=97,G=64,B=45
CCNIS HD	286839	46	11.0	0429370	+130028	L 1	21062 L	170	FO	91082313	132200	007500	355	G E=218,G=105,B=65
CCNB HD	28910	33	4.7	0431004	+144427	L 1	21525 L	293	FU	91101905	053800	000038	502	G G=251,B=38
CCNB HD	28910	33	4.7	0431004	+144427	L 1	21525 S	26505	FU	91101905	054700	000020	X02	G G=1.5X,B=38
CCNB HD	28910	33	4.7	0431004	+144427	L 1	21531 L	289	FU	91101912	120000	000031	502	G G=220,B=38
CCNB HD	28910	33	4.7	0431004	+144427	L 1	21531 S	296	FU	91101912	121000	000320	502	G G=205,B=38
CCNB HD	28910	33	4.7	0431004	+144427	L 3	42761 L	296	FU	91101912	122400	000320	X00	G G=1.5X,B=20
IGNIH SKY BKGD		07		0431342	-084158	L 1	21470 L		EO	91100922	220700	024000	05	G B=65
IGNIH NGC	1614	88	13.3	0431357	-084057	L 3	42676 L		EO	91100922	220400	040500	305	G G=95,B=70
BNSS ED	+26 730	46	8.4	0433420	+270200	D 9	02486 2			91082901	011200	016000		G
BNSS ED	+26 730	46	8.4	0433426	+270156	L 3	42350 L	1614	FO	91082901	014700	018000	342	G E=141,G=84,B=35
BNSS ED	+26 730	46	8.4	0433426	+270156	L 1	21106 L	1606	FO	91082902	024600	000600	352	G E=184,G=78,B=32
BNSS ED	+26 730	46	8.4	0433426	+270156	L 1	21107 L	1618	FO	91082905	051600	000700	352	G E=199,G=84,B=32
BNSS ED	+26 730	46	8.4	0433426	+270156	L 3	42351 L	1641	FO	91082905	054500	018500	342	G E=145,G=90,B=40
AENIS HD	29391	40	5.2	0435050	-023419	L 3	42307 L	18902	FO	91082212	120600	004000	201	G G=40X,B=25

FRO	Object	CL	MAG	R.A.	DEC	D C	Image A	FES	MD	Obs.date	Exptim	mmmsstt	ECC	Comment
CCNB	ED	+15 661	40	5.8 0435175	+155605	L 1	21526 L	12051	FO	91101906	063900	000135	502 G	G=216,B=38
CCNB	ED	+15 661	40	5.8 0435175	+155605	L 1	21526 S	11907	FO	91101906	065600	000050	X2 G	E=1.5X,B=38
CCNIS	HD	285947	46	10.2 0435313	+172640	L 1	21056 L	301	FO	91082214	143200	005000	332 G	E=93,G=74,B=39
IMCI	HD	29631	25	9.4 0437573	+235039	L 1	21259 L	515	FO	91091612	125500	000500	402 G	G=153,B=35
IMCI	HD	29631	25	9.4 0437573	+235039	L 3	42472 L	516	FO	91091613	131600	002500	400 G	G=120,B=18
IMCI	HD	29631	25	9.4 0437573	+235039	L 1	21260 L	510	FO	91091613	135800	004800	X02 G	G=6X,B=40
SANOW	HD	29875	40	4.44 0438569	-415729	L 1	20865 L	381	FU	91072218	183600	000027	502 G	G=220,B=38
SANOW	HD	29875	40	4.44 0438569	-415729	L 1	20865 S	378	FU	91072218	184700	000115	X02 G	G=5X,B=38
SANOW	HD	29875	40	4.44 0438569	-415729	L 3	42467 S	364	FU	91091510	102200	000900	X03 G	G=5X,B=42
SANOW	HD	29875	40	4.44 0438569	-415729	L 3	42467 L	369	FU	91091510	103900	000320	503 G	G=225,B=42
CCNIS	HD	29896	46	9.85 0440228	+165836	L 1	21057 L	370	FO	91082216	160400	004500	342 G	E=158,G=118,B=38
AENIS	HD	30034	40	5.4 0441394	+110316	L 3	42299 L	16466	FO	91082112	120800	007000	332 G	E=69,G=60X,B=32
CCNB	HD	30034	40	5.4 0441394	+110316	L 1	21529 L	16779	FO	91101909	094600	000100	502 G	G=216,B=38
CCNB	HD	30034	40	5.4 0441394	+110316	L 1	21529 S	16815	FO	91101909	095600	000025	502 G	G=212,B=38
CCNB	HD	30210	33	5.4 0443147	+113657	L 1	21528 S	17264	FO	91101908	084900	000032	502 G	G=201,B=38
CCNB	HD	30210	33	5.4 0443147	+113657	L 1	21528 L	17176	FO	91101908	085600	000104	502 G	G=220,B=38
IMCI	HD	282485	22	9.9 0443292	+291342	L 1	21255 L	354	FO	91091608	084700	001000	502 G	G=215,B=39
IMCI	HD	282485	22	9.9 0443292	+291342	L 1	21256 L	354	FO	91091609	093100	004000	X08 G	G=4X,B=95
CCNIS	HD	30264	46	9.58 0443552	+173935	L 1	21522 L	423	FO	91101900	002500	003500	332 G	E=129,G=111,B=38
CCNIS	L 95	48	11.0 0445076	+165806	L 1	21063 L		1.64	FO	91082315	152200	008600	343 G	E=177,G=65,B=42
IRNH	N1662 H5	22	9.1 0445295	+105544	L 1	21035 L		730	FO	91081817	171800	000830	502 G	G=234,B=34
IRNH	N1662 H5	22	9.1 0445295	+105544	L 3	42283 L		720	FO	91081818	180900	004000	500 G	G=195,B=20
IRNH	ED	+10 637	22	9.5 0445390	+104955	L 3	42274 L	566	FO	91081716	162300	007500	X01 G	G=1.5X,B=22
IRNH	ED	+10 637	22	9.5 0445390	+104955	L 1	21032 L	554	FO	91081717	174300	001000	502 G	G=226,B=38
IRNH	ED	+10 637	22	9.5 0445390	+104955	L 3	42275 L	558	FO	91081718	181900	003000	400 G	G=141,B=18
IRNH	ED	+10 641	22	9.0 0445485	+105131	L 1	21030 L	887	FO	91081713	133900	001300	X04 G	G=1.5X,B=58
IRNH	ED	+10 641	22	9.0 0445485	+105131	L 3	42273 L	904	FO	91081714	142300	006500	X01 G	G=1.5X,B=25
IRNH	ED	+10 641	22	9.0 0445485	+105131	L 1	21031 L	864	FO	91081715	153200	000500	402 G	G=177,B=38
IRNH	N1662 H6	22	9.3 0445560	+104648	L 1	21034 L		684	FO	91081815	152600	000900	502 G	G=192,B=35
IRNH	N1662 H6	22	9.3 0445560	+104648	L 1	21034 L		684	FO	91081815	152600	000900	502 G	G=192,B=35
IRNH	N1662 H6	22	9.3 0445560	+104648	L 3	42282 L		674	FO	91081816	161400	004500	400 G	G=143,B=20
IRNH	N1662 H6	22	9.3 0445560	+104648	L 3	42291 L		689	FO	91081916	163600	006000	400 G	G=170,B=20
IRNH	N1662 H7	22	9.4 0445588	+104809	L 1	21033 L		661	FO	91081814	140200	000800	403 G	G=178,B=42
IRNH	N1662 H7	22	9.4 0445588	+104809	L 3	42281 L		668	FO	91081814	143200	004500	501 G	G=182,B=21
DCNE	SV Per	53	8.9 0446170	+421212	L 1	21394 L		581	FO	91100303	031100	003000	502 G	G=206,B=38
DCNE	SV Per	53	8.9 0446170	+421212	L 3	42606 L		586	FO	91100303	034700	010000	400 G	G=139,B=18
IRNH	ED	+10 649	22	9.1 0446406	+105408	L 1	21042 L	762	FO	91081918	180100	000800	502 G	G=220,B=34
USBS	HD	30836	24	3.7 0448324	+053116	H 1	21316 L	856	FU	91092307	073100	000019	502 G	G=198,B=40
CCNB	HD	31236	40	6.4 0452018	+192422	L 1	21527 S	7483	FO	91101907	074500	000100	502 G	G=196,B=38
CCNB	HD	31236	40	6.4 0452018	+192422	L 1	21527 L	7506	FO	91101907	075200	000235	502 G	G=218,B=38
NA188	HD35187	30	08.20 0452344	+302822	H 1	21122 L		01974	FO	91083020	204323	010000	451 V	
CCNAB	HD	31398	47	2.7 0453440	+330520	H 1	21407 L	1680	FU	91100511	115700	001000	342 G	E=165,G=76,B=35
CCNAB	HD	31398	47	2.7 0453440	+330520	H 1	21408 L	1672	FU	91100512	124100	001000	341 G	E=164,G=68,B=28
NA101	HD31648	34	08.00 0455360	+294606	L 3	42438 L		02368	FO	91091015	154944	006000	630 V	
CR81K	SK-68	19	11	13.7 0459096	-685236	L 3	41715 L		BC	91052822	220800	002900	5X0 G	E=1.5X,G=180,B=15
FRNR	HD	32918	47	8.1 0459520	-752110	L 1	21123 L	1651	FO	91083101	013600	000700	352 G	E=252,G=131,B=33
FRNR	HD	32918	47	8.1 0459520	-752110	L 3	42364 L	1649	FO	91083101	015300	015500	4X2 G	E=2X,G=180,B=40
FRNR	HD	32918	47	8.1 0459520	-752110	H 1	21124 L	1750	FO	91083104	043800	008000	342 G	E=163,G=80,B=40
FRNR	HD	32918	47	8.1 0459520	-752110	L 3	42365 L	1672	FO	91083106	060700	014000	241 G	E=153,G=50,B=30
FRNR	HD	32918	47	8.1 0459520	-752110	L 1	21125 L	1688	FO	91083107	072600	000500	3X1 G	E=1.5X,G=100,B=30

FPO	Object	CL	MAG	R.A.	DEC	D C	Image A	FES	MD	Obs.date	Exptim	mmmsst	ECC	Comment	
EKFR HD	32918	47	8.1	0459520	-752110	L 1	21132 L	1499	FO	91090213	131300	000400	342	G E=167, G=85, B=35	
EKFR HD	32918	47	8.1	0459520	-752110	L 3	42374 L	1518	FO	91090213	132300	006000	231	G E=55, G=40, B=25	
EKFR HD	32918	47	8.10	0459520	-752110	L 1	21148 L	1486	FO	91090323	234800	000400	342	G E=138, G=72, B=35	
EKFR HD	32918	47	8.10	0459520	-752110	L 3	42388 L	1496	FO	91090323	235700	011000	231	G E=75, G=40, B=30	
EKFR HD	32918	47	8.1	0459520	-752110	L 1	21154 L	1620	FO	91090412	124000	000400	342	G E=146, G=76, B=40	
EKFR HD	32918	47	8.1	0459520	-752110	L 3	42394 L	1614	FO	91090412	125300	006000	32	G E=58, B=32	
EKFR HD	32918	47	8.10	0459520	-752110	L 3	42399 L	1601	FO	91090423	234800	015000	232	G E=92, G=60, B=40	
EKFR HD	32918	47	8.10	0459520	-752110	L 1	21159 L	1568	FO	91090501	010800	000400	342	G E=153, G=72, B=35	
EKFR HD	32918	47	8.10	0459520	-752110	H 1	21160 L	1550	FO	91090502	023700	010000	333	G E=130, G=80, B=45	
EKFR HD	32918	47	8.10	0459520	-752110	L 3	42400 L	1502	FO	91090504	042200	014600	331	G E=89, G=60, B=25	
MI073 SK-7036	59	13.20	0501387	-703808	L 1	20404	L	00000	EO	91051923	234945	004500	500	V	
MI073 SK-7036	59	13.20	0501387	-703808	L 3	41666	L	00000	EO	91052000	004019	006000	500	V	
ASNEB HD	268993	32	12.0	0503038	-704503	L 1	20965	L	115	FO	91080611	112100	004000	X04	G G=1.5X, B=55
NONSS SKY BKGD	07		0504022	-702255	L 1	21555	L			91102810	103500	003000	02	G B=35	
NONSS SKY BKGD	07		0504023	-702255	L 1	21556	L			91102812	120000	003000	02	G B=35	
MI000 N IMC 901	55	12.64	0504125	-702216	L 3	41580	L	00151	SO	91050600	004329	003000	341	V HEAD	
MI000 N IMC 901	55	99.99	0504125	-702216	L 1	20317	L	00000		91050600	002740	001200	352	V	
MI000 N IMC 901	55	99.99	0504125	-702216	L 1	20318	L	00000		91050601	012834	003000	562	V	
MI000 N IMC 901	55	99.99	0504125	-702216	L 3	41581	L	00000		91050602	020713	005300	451	V	
MI000 NOVA IMC91	55	15.00	0504125	-702216	L 1	20428	L	00000	EO	91052303	033916	018500	251	V	
MI000 NOVA IMC91	55	15.00	0504125	-702216	L 3	41675	L	00000	EO	91052300	002247	019000	260	V	
MI000 NOVA IMC91	55	16.00	0504125	-702216	L 1	20638	L	00000	EO	91061822	223129	030000	332	V	
MI000 NOVA IMC91	55	16.00	0504125	-702216	L 3	41870	L	00000	EO	91061903	033628	007500	240	V HEAD	
MA118 NOVA IMC91	55	99.99	0504127	-702216	E 9	02476	2	00000		91072220	204000	016000		V IMP 20866	
NONSS N IMC 91	55		0504127	-702216	L 1	20289	L	280	SO	91050216	162800	000330	342	G E=179, G=90, B=35	
NONSS N IMC 91	55		0504127	-702216	L 3	41550	L	280	SO	91050216	164000	001600	330	G E=118, G=90, B=20	
NONSS NOVA IMC	55	14	0504127	-702216	L 3	41829	L		EO	91061309	095300	017500	51	G E=210, B=30	
NONSS N IMC 91	55	16.0	0504127	-702216	L 1	20867	L		EO	91072220	201300	048000	337	G E=172, G=130, B=85	
NONSS N IMC 91	55	16.0	0504127	-702216	L 3	42116	L		EO	91072304	044100	036000	2X4	G E=2.5X, G=80, B=60	
NONSS NOVA IMC	55	14	0504127	-702216	L 3	42123	L		EO	91072510	102700	010500	56	G E=232, B=72	
NONSS IMC 91	55		0504127	-702216	L 3	42294	L		EO	91082010	103700	008000	41	G E=165, B=30	
NONSS N IMC 91	55		0504127	-702216	L 3	42369	L		EO	91090111	115100	010000	44	G E=178, B=60	
NONSS N IMC 91	55		0504127	-702216	L 3	42581	L		EO	91092904	044500	012000	251	G E=189, G=40, B=30	
NONSS IMC 1991	55	15	0504127	-702216	L 3	42927	L		EO	91102810	100700	016000	52	G E=192, B=38	
EGNFD NGC	1808	81	11.0	0505524	-373022	D 9	02479 2			91072716	161800	002000		G	
EGNFD NGC	1808	81	11.0	0505585	-373446	L 3	42135	L	212	SO	91072807	070600	092500	308	G G=125, B=92
PHCAL SKY BKGD	07		0506016	-373539	L 1	20897	L			91072804	042800	006000	03	G B=41	
PHCAL SKY BKGD	07		0506016	-373539	L 1	20898	L			91072806	065800	006000	03	G B=41	
ASNEB SK-6744	32	9.1	0506093	-675656	L 3	42184	L	739	FO	91080612	122700	003000	52	G E=186, B=32	
PENCG HD	33949	22	4.36	0510552	-125957	H 1	21848	L	412	FU	91112603	035000	000137	502	G G=202, B=40
PENCG HD	33949	22	4.36	0510552	-125957	H 3	43223	L	411	FU	91112604	042600	000357	502	G G=230, B=40
PENCG HD	33949	22	4.36	0510552	-125957	H 1	21852	L	413	FU	91112609	091800	000145	502	G G=220, B=40
PENCG HD	33949	22	4.36	0510552	-125957	H 3	43227	L	421	FU	91112609	092600	000347	502	G G=233, B=40
NCL34 14 AUR-C	64	07.50	0512079	+323745	L 3	42551	L	00000	EO	91092516	160853	001000	400	V R.P. (-130, -180) & (	
NCL34 14 AUR-B	64	11.10	0512079	+323745	L 3	42552	L	00000	EO	91092516	165736	001000	700	V R.P. (-130, -180) &	
NCL34 14 AUR-E	64	15.00	0512079	+323745	L 3	42553	L	00000	EO	91092517	174209	001000	300	V R.P. (-130, -180) &	
PHCAL HD	34816	20	4.3	0517162	-131337	H 3	42484	L	539	FU	91091711	110200	000022	402	G G=175, B=35
PHCAL HD	34816	20	4.3	0517162	-131337	H 1	21265	L	525	FU	91091711	110700	000022	503	G G=218, B=42
PHCAL HD	34816	20	4.3	0517162	-131337	H 2	18600	L	526	FU	91102907	073700	000035	501	G G=217, B=30
NA090 R85	24	10.75	0518170	-691907	H 1	20682	L	00203	FO	91062322	223050	037600	403	V	



PRO	Object	CL	MAG	R.A.	DEC	D C	Image A	FES	MD	Obs.date	Exptim	mmmsst	ECC	Comment	
NCL17	UV AUR	57	08.85	0518333	+322751	L 3	21104 L	01106	FO	91082822	220306	006000	891	V	
NCL17	UV AUR	57	08.83	0518333	+322751	L 3	42348 L	01127	FO	91082823	231109	005000	500	V	
NCL17	UV AUR	57	08.70	0518333	+322751	L 1	21105 L	00000	EO	91082900	000612	001500	551	V	
NCL17	UV AUR	57	08.70	0518333	+322751	L 3	42349 L	00000	EO	91082900	003742	001200	300	V HEAD	
FGNIA	HD	35155	66	6.77	0519548	-084247	L 1	21647 L	5803	FO	91110603	034000	000800	352	G E=226,C=85,B=32
FGNIA	HD	35155	66	6.77	0519548	-084247	L 3	43020 L	5822	FO	91110603	035600	008000	550	G E=183,C=190,B=20
FGNIA	HD	35155	66	6.77	0519548	-084247	H 1	21648 L	6016	FO	91110605	052000	008000	334	G E=153,C=105,B=60
FGNIA	HD	35155	66	6.8	0519548	-084247	L 1	21861 L	5810	FO	91112707	073100	000800	402	G E=1.5X,C=171,B=40
FGNIA	HD	35155	66	6.8	0519548	-084247	L 3	43233 L	5826	FO	91112707	074300	005000	501	G C=252,B=25
FGNIA	HD	35155	66	6.8	0519548	-084247	H 1	21862 L	5750	FO	91112708	083900	012900	354	G E=223,C=105,B=52
FGNIA	HD	35155	66	6.8	0519548	-084247	L 1	21868 L	6297	FO	91112807	074900	000500	342	G E=157,C=84,B=33
FGNIA	HD	35155	66	6.8	0519548	-084247	L 3	43242 L	6307	FO	91112808	080100	002500	300	G C=114,B=17
NC007	GL201	46	08.33	0520440	+171642	H 1	21251 L	01760	FO	91091518	182823	008000	141	V	
NA188	HD35187	30	08.21	0520567	+245454	L 3	42362 L	01965	FO	91083018	182931	002500	700	V	
NA188	HD35187	30	08.22	0520567	+245454	H 1	21120 L	01943	FO	91083019	190330	009000	401	V	
NA188	HD35187	30	08.17	0520567	+245454	L 1	21121 S	02039	FO	91083022	225510	000500	300	V	
NA188	HD35187	30	08.17	0520567	+245454	L 1	21121 L	02039	FO	91083022	222947	001000	700	V	
NA188	HD35187	30	08.20	0520567	+245454	L 3	42363 S	01974	FO	91083020	230703	002000	501	V	
NA188	HD35187	30	08.20	0520567	+245454	L 3	42363 L	01974	FO	91083020	204323	010000	731	V	
CGNIA	HD	36079	45	2.8	0526061	-204757	L 3	42340 L	1456	FU	91082801	015700	025000	X42	G E=135,C=5X,B=32
ME038	NGC1947	81	12.00	0526280	-634803	L 3	41545 L	00000	EO	91050200	002840	037900	102	V	
WMFC	WS 27	11	13.4	0528032	-691222	L 1	20462 L	117	SO	91052818	181800	002600	503	G C=210,B=48	
ISNDM	HD	36486	12	2.2	0529269	-002003	H 3	42747 L	3490	FU	91101707	072400	000005	542	G E=180,C=215,B=38
ISNDM	HD	36486	12	2.2	0529269	-002003	H 3	42748 L	3423	FU	91101707	075300	000005	542	G E=186,C=205,B=38
ISNDM	HD	36486	12	2.2	0529269	-002003	H 3	42749 L	3428	FU	91101708	082200	000005	542	G E=186,C=205,B=38
ISNDM	HD	36485	20	6.9	0529270	-001911	H 3	42744 L	5805	FO	91101705	052200	001100	502	G C=190,B=32
ISNDM	HD	36485	20	6.9	0529270	-001911	H 3	42745 L	5968	FO	91101706	060200	001200	502	G C=202,B=38
ISNDM	HD	36485	20	6.9	0529270	-001911	H 3	42746 L	6018	FO	91101706	064300	001300	502	G C=215,B=40
NENFD	NGC	1976-2	72	0532416	-052120	L 3	42617 L		EO	91100410	102600	006000	440	G E=130,C=157,B=18	
NENFD	NGC	1976-2	72	0532416	-052121	L 3	42617 L		EO	91100410	102700	006000	300	G C=46,B=18	
NENFD	NGC	1976-2	72	0532416	-052121	L 1	21400 S		EO	91100411	113400	006000	302	G C=66,B=40	
NENFD	NGC	1976-2	72	0532416	-052121	L 1	21400 L		EO	91100411	113400	006000	442	G E=151,C=185,B=40	
NENFD	NGC	1976-1	72	0532463	-052146	L 3	42616 L		EO	91100408	080700	006000	546	G E=200,C=225,B=72	
NENFD	NGC	1976-1	72	0532463	-052146	L 3	42616 S		EO	91100408	080700	006000	346	G E=200,C=100,B=72	
NENFD	NGC	1976-1	72	0532463	-052146	L 1	21399 L		EO	91100409	091500	006000		G E=1.5X,B=2X,B=167	
NENFD	NGC	1976-1	72	0532463	-052146	L 1	21399 S		EO	91100409	091600	006000	309	G C=210,B=167	
USSES	HD	37020	12	6.8	0532483	-052504	H 1	21274 L		EO	91091812	122900	000600	503	G C=218,B=42
USSES	HD	37018	20	4.6	0532551	-045211	H 1	21273 L	413	FU	91091811	113500	000035	502	G C=210,B=40
AFNIS	HD	37077	40	5.3	0533114	-045314	L 3	42312 L	18347	FO	91082312	121300	004500	?07	G C=40K,B=90
ASNEB	HD	269781	32	9.87	0534196	-670356	H 1	20969 L	439	FO	91080706	060400	034000	X09	G C=1.5X,B=105
NML39	SMP 77	70	18.00	0534295	-692810	L 3	42613 L	00000	EO	91100316	164453	009000	230	V	
BENGP	HD	37202	26	3.0	0534393	+210650	H 1	21429 L	1628	FU	91100707	070800	000015	502	G C=238,B=40
BENGP	HD	37202	26	3.0	0534393	+210650	H 3	42634 L	1622	FU	91100707	071200	000030	X02	G C=1.5X,B=40
BENGP	HD	37202	26	3.0	0534393	+210650	H 1	21431 L	1616	FU	91100709	093100	000015	502	G C=223,B=40
BENGP	HD	37202	26	3.0	0534393	+210650	H 3	42636 L	1630	FU	91100709	093600	000030	X02	G C=1.5X,B=40
BENGP	HD	37202	26	3.0	0534393	+210650	H 1	21433 L	1639	FU	91100711	115600	000015	502	G C=238,B=40
BENGP	HD	37202	26	3.0	0534393	+210650	H 3	42638 L	1667	FU	91100712	120100	000030	X02	G C=1.5X,B=40
BENGP	HD	37202	26	3.0	0534393	+210650	H 1	21439 L	1625	FU	91100720	201500	000015	503	G C=225,B=42
BENGP	HD	37202	26	3.0	0534393	+210650	H 3	42646 L	1771	FU	91100723	232000	000025	X02	G C=1.5X,B=40
BENGP	HD	37202	26	3.0	0534393	+210650	H 1	21441 L	1684	FU	91100723	232500	000015	503	G C=239,B=42

PRO	Object	CL	MAG	R.A.	DEC	D C	Image A	FES	MD	Obs.date	Exptim	mmunestt	ECC	Comment
HENP HD	37202	26	3.0	0534393	+210650	H 3	42648 L	1650	FU	91100802	020000	000022	502 G	G=232,B=36
HENP HD	37202	26	3.0	0534393	+210650	H 1	21443 L	1665	FU	91100802	020600	000015	503 G	G=239,B=42
HENP HD	37202	26	3.0	0534393	+210650	H 3	42650 L	1680	FU	91100804	043500	000022	502 G	G=220,B=33
HENP HD	37202	26	3.0	0534393	+210650	H 1	21445 L	1677	FU	91100804	044100	000015	502 G	G=236,B=40
HENP HD	37202	26	3.0	0534393	+210650	H 3	42652 L	1705	FU	91100807	070700	000022	502 G	G=207,B=33
HENP HD	37202	26	3.0	0534393	+210650	H 1	21447 L	1667	FU	91100807	071200	000015	502 G	G=234,B=40
HENP HD	37202	26	3.0	0534393	+210650	H 3	42654 L	1658	FU	91100809	094900	000022	502 G	G=218,B=33
HENP HD	37202	26	3.0	0534393	+210650	H 1	21449 L	1657	FU	91100809	095500	000015	503 G	G=237,B=50
HENP HD	37202	26	3.0	0534393	+210650	H 3	42656 L	1626	FU	91100812	122200	000022	502 G	G=214,B=32
HENP HD	37202	26	3.0	0534393	+210650	H 3	42662 L	1673	FU	91100820	205400	000020	502 G	G=210,B=35
HENP HD	37202	26	3.0	0534393	+210650	H 1	21457 L	1665	FU	91100820	205900	000014	502 G	G=220,B=40
HENP HD	37202	26	3.0	0534393	+210650	H 3	42664 L	1671	FU	91100823	233600	000020	502 G	G=201,B=35
HENP HD	37202	26	3.0	0534393	+210650	H 1	21459 L	1684	FU	91100823	234100	000014	502 G	G=225,B=40
HENP *4*	3.0*	26	4.2	0534393	+210650	H 3	42666 L	1645	FU	91100902	022400	000020	502 G	G=210,B=35
HENP HD	37202	26	3.00	0534393	+210650	H 1	21461 L	1665	FU	91100902	023000	000014	502 G	G=220,B=40
HENP HD	37202	26	3.0	0534393	+210650	H 3	42668 L	1642	FU	91100905	050900	000020	502 G	G=200,B=32
HENP HD	37202	26	3.0	0534393	+210650	H 1	21463 L	1631	FU	91100905	051400	000014	502 G	G=226,B=40
HENP HD	37202	26	3.0	0534393	+210650	H 3	42670 L	1650	FU	91100907	072900	000022	502 G	G=212,B=31
HENP HD	37202	26	3.0	0534393	+210650	H 1	21465 L	1635	FU	91100907	073400	000015	502 G	G=234,B=40
HENP HD	37202	26	3.0	0534393	+210650	H 3	42672 L	1654	FU	91100909	095300	000022	502 G	G=210,B=33
HENP HD	37202	26	3.0	0534393	+210650	H 1	21467 L	1635	FU	91100909	095800	000015	503 G	G=232,B=42
HENP HD	37202	26	3.0	0534393	+210650	H 3	42674 L	1663	FU	91100912	122100	000022	502 G	G=216,B=33
HENP HD	37202	26	3.0	0534393	+210650	H 1	21469 L	1636	FU	91100912	122600	000015	503 G	G=232,B=41
NA101 EF CRT		34	09.99	0534472	-063646	L 3	42439 L	00399	FO	91091018	180952	003000	500 V	
SNGS SK-69203		23	12.2	0535488	-691539	D 9	02507 2			91110708	081700	002000	G	
SNGS SN 1987A		56	17	0535500	-691758	L 3	41802 L		BO	91060905	054700	029000	404 G	G=205,B=55
SNGS SN 1987A		56	17	0535500	-691758	L 1	20553 L		BO	91060910	104200	012500	504 G	G=220,B=55
SNGS SN 1987A		56	17	0535500	-691758	L 3	42174 L		BO	91080506	060700	027000	402 G	G=170,B=40
SNGS SN 1987A		56	17	0535500	-691758	L 1	20953 L		BO	91080510	104500	010000	309 G	G=230,B=140
SNGS SN 1987A		56	17.0	0535500	-691758	L 1	21115 L		BO	91083002	021000	014000	403 G	G=182,B=48
SNGS SN 1987A		56	17.0	0535500	-691758	L 1	21116 L		BO	91083004	045800	023000	X04 G	G=1.5X,B=55
SNGS SN 1987A		56	17.0	0535500	-691758	D 9	02487 2			91090114	140400	016000	G	
SNGS SN 1987A		56	17	0535500	-691758	H 3	42370 L		BO	91090114	144100	096000	309 G	G=190,B=120
SNGS SN 1987A		56	17.0	0535500	-691758	L 1	21657 L		BO	91110708	083700	011500	404 G	G=190,B=58
ME16L SN1987A		56	16.00	0535502	-691759	L 3	41891 L	00000	BO	91062200	004643	024000	401 V	
ME16L SN1987A		56	16.00	0535502	-691759	L 1	20661 L	00000	BO	91062122	222047	014000	501 V	
SNGS SKY BKGD		07		0535520	-691901	L 1	21129 L		BO	91090114	144400	092000	309 G	G=180,B=130
WRMFC MG 2		11	15.4	0536197	-673644	L 1	20463 L		BO	91052819	194000	012000	333 G	B=89,G=90,B=48
MA094 RL27		52	09.16	0537059	-693149	H 1	20685 L	00838	FO	91062422	221225	039200	402 V	
KUNCA HD	37394	46	6.2	0537168	+532748	L 1	21729 L	7736	FO	91111407	074300	000200	502 G	G=245,B=35
KUNCA HD	37394	46	6.2	0537168	+532748	L 3	43100 L	7765	FO	91111407	074900	018000	332 G	F=104,G=80,B=40
KUNCA HD	37394	46	6.2	0537168	+532748	H 1	21806 L	8125	FO	91112207	073500	004000	342 G	F=16L,G=110,B=40
KUNCA HD	37394	46	6.2	0537168	+532748	L 3	43182 L	8167	FO	91112208	082100	014500	332 G	F=99,G=80,B=32
MA011 BREY72		10	11.54	0538100	-690646	L 1	20526 L	00402	SO	91060504	042809	002200	700 V	
MA011 BREY 72		10	11.54	0538100	-690646	L 1	20535 L	00401	SO	91060622	222548	001000	500 V	
MA011 IH99#3		15	12.98	0538128	-691124	L 1	20514 L	00111	SO	91060322	222802	004000	501 V	
MA011 IH99#3		15	99.99	0538128	-691124	L 3	41766 L	00000		91060323	231300	004000	330 V	
MA011 IH99#3		15	13.60	0538128	-691124	L 3	41775 L	00000	BO	91060503	033147	005000	430 V	
XENAC ITC X-3		59	16.6	0538398	-640636	L 3	42526 L			91092100	002000	039000	G	
XENAC CX-3		59	16.6	0538399	-640637	L 3	42314 L		BO	91082401	014500	042500	304 G	G=98,B=60

FPO	Object	CL	MAG	R.A.	DEC	D C	Image A	FES	MD	Obs.date	Exptim	mmunsst	ECC	Comment
PHCAL	SKY BKED	07		0538431	-640738	L 1	21066 L			91082402	025800	031000	06	G B=72
NENEC	30 DCR	72	9.5	0539035	-690735	L 3	41991 L	573	FO	91070312	120900	000500	440	G E=122, G=160, B=18
NENEC	30 DCR	72	9.5	0539035	-690735	L 3	41992 L	576	FO	91070313	131000	001500	341	G E=138, G=120, B=25
NENEC	30 DCR	72	9.5	0539035	-690735	L 3	41993 L	579	FO	91070315	154400	002000	320	G E=37, G=50, B=18
NENEC	30 DCR	72	9.5	0539035	-690735	L 3	41994 L			91070316	165000	001500	540	G E=151, G=210, B=18
NENEC	30 DCR	72	9.5	0539035	-690735	L 3	41995 L			91070318	182600	000500	430	G E=107, G=130, B=18
NENEC	30 DCR	72	9.50	0539035	-690735	L 3	41999 L		EO	91070403	034700	033300	543	G E=156, G=210, B=50
ASNEB	SK-67246	32	11.8	0542090	-672239	L 3	42189 L	554	SO	91080712	121200	004000	305	G G=120, B=62
ENMEM	IMC88	70	13.3	0543085	-703043	L 3	42042 L		EO	91071104	041300	039500	306	G G=102, B=72
PHCAL	HD 38666	12	5.17	0544084	-321927	H 1	21801 L	21897	FO	91112123	233300	000042	502	G G=200, B=40
PHCAL	HD 38666	12	5.17	0544084	-321927	H 3	43177 L	21265	FO	91112123	233900	000051	502	G G=190, B=35
HENCG	HD 39060	60	3.85	0546054	-510501	H 3	41896 L	621	FU	91062215	154200	001000	503	G G=215, B=45
HENCG	HD 39060	60	3.85	0546054	-510501	H 1	20664 L	618	FU	91062216	161700	000650	X04	G G=2X, B=58
NM095	HD39060	31	04.17	0546058	-510501	H 1	20793 L	00623	FU	91071202	020126	000400	500	V
HENCG	HD 39060	60	3.8	0546058	-510501	H 1	20876 L	643	FU	91072412	120800	000325	403	G G=190, B=45
NM095	HD39060	31	04.16	0546058	-510501	H 3	42047 L	00627	FU	91071202	021158	001000	500	V
HENCG	HD 39060	60	3.8	0546058	-510501	H 3	42120 L	635	FU	91072412	122000	001000	504	G G=210, B=52
NM095	HD39060	31	04.15	0546058	-510501	H 3	42457 L	00633	FU	91091319	191625	001000	500	V
HENCG	HD 39060	60	3.8	0546058	-510501	H 1	20877 L	632	FU	91072412	125700	000630	X05	G G=2X, B=70
NM095	HD39060	31	04.24	0546058	-510501	H 1	21232 L	00581	FU	91091319	194009	000400	500	V
HENCG	HD 39060	60	3.8	0546058	-510501	H 1	20880 L	660	FU	91072417	173000	000325	503	G G=220, B=42
NM095	HD39060	31	04.21	0546058	-510501	H 3	42458 L	00598	FU	91091320	203800	001000	500	V
HENCG	HD 39060	60	3.8	0546058	-510501	H 3	42121 L	638	FU	91072417	174200	001000	502	G G=210, B=32
NM095	HD39060	31	04.06	0546058	-510501	H 1	21233 L	00683	FU	91091322	221043	001000	601	V
HENCG	HD 39060	60	3.8	0546058	-510501	H 1	20881 L	649	FU	91072418	181800	000630	X03	G G=2X, B=48
NM095	HD39060	31	04.09	0546058	-510501	H 3	42459 L	00664	FU	91091322	222728	001000	500	V
HENCG	HD 39060	60	3.85	0546059	-510501	H 1	20613 L	638	FU	91061617	174400	000325	503	G G=220, B=45
HENCG	HD 39060	60	3.85	0546059	-510501	H 3	41848 L	625	FU	91061618	180500	001000	502	G G=200, B=40
HENCG	HD 39060	60	3.9	0546059	-510501	H 1	20614 L	626	FU	91061618	184000	000650	X03	G G=2X, B=50
HENCG	HD 39060	60	3.85	0546059	-510501	H 1	20663 L	618	FU	91062215	153100	000325	503	G G=235, B=45
HENCG	HD 39060	60	3.85	0546059	-510501	H 1	20696 L	636	FU	91062618	180800	000325	502	G G=220, B=40
HENCG	HD 39060	60	3.85	0546059	-510501	H 3	41923 L	637	FU	91062618	181900	001000	502	G G=210, B=35
HENCG	HD 39060	60	3.85	0546059	-510501	H 1	20697 L	627	FU	91062618	185400	000650	X03	G G=2X, B=45
HENCG	HD 39060	60	3.85	0546059	-510501	H 1	20721 L	642	FU	91063017	172200	000325	502	G G=220, B=40
HENCG	HD 39060	60	3.85	0546059	-510501	H 3	41967 L	633	FU	91063017	173200	001000	502	G G=220, B=32
HENCG	HD 39060	60	3.85	0546059	-510501	H 1	20722 L	632	FU	91063018	180800	000630	X03	G G=2X, B=48
HENCG	HD 39060	60	3.9	0546059	-510501	H 1	20751 L	627	FU	91070517	174400	000325	502	G G=210, B=40
HENCG	HD 39060	60	3.9	0546059	-510501	H 3	42010 L	622	FU	91070517	175500	001000	502	G G=200, B=35
HENCG	HD 39060	60	3.9	0546059	-510501	H 1	20752 L	624	FU	91070518	183200	000650	X03	G G=2X, B=48
HENCG	HD 39060	60	3.9	0546059	-510501	H 1	20756 L	628	FU	91070615	152000	000325	502	G G=220, B=40
HENCG	HD 39060	60	3.9	0546059	-510501	H 3	42015 L	617	FU	91070615	153000	001000	502	G G=210, B=35
HENCG	HD 39060	60	3.9	0546059	-510501	H 1	20757 L	618	FU	91070616	160900	000650	X03	G G=2X, B=50
HENCG	HD 39060	60	3.85	0546059	-510501	H 1	20764 L	625	FU	91070715	155300	000325	502	G G=230, B=40
HENCG	HD 39060	60	3.85	0546059	-510501	H 3	42019 L	618	FU	91070716	160500	001000	502	G G=208, B=35
HENCG	HD 39060	60	3.85	0546059	-510501	H 1	20765 L	614	FU	91070716	164100	000630	X03	G G=2X, B=48
HENCG	HD 39060	60	3.85	0546059	-510501	H 1	20768 L	621	FU	91070812	125700	000325	502	G G=213, B=40
HENCG	HD 39060	60	3.85	0546059	-510501	H 3	42024 L	631	FU	91070813	130800	001000	502	G G=210, B=35
HENCG	HD 39060	60	3.85	0546059	-510501	H 1	20769 L	620	FU	91070813	134400	000650	X03	G G=2X, B=50
HENCG	HD 39060	60	3.8	0546059	-510501	H 1	20831 L	629	FU	91071715	155200	000325	502	G G=217, B=40
HENCG	HD 39060	60	3.8	0546059	-510501	H 3	42086 L	633	FU	91071716	160300	001000	502	G G=205, B=38

FPO	Object	CL	MAG	R.A.	DEC	D C	Image A	FES	MD	Obs.date	Exptim	mmmsst	ECC	Comment
BENG HD	39060	60	3.8	0546059	-510501	H 1	20832 L	621	FU	91071716	163800	000650	X03	G C=2X,B=47
WNUH WD00548+	37		14.8	0548037	+000505	L 3	42933 S		EO	91102902	025000	006000	431	G E=93,G=152,B=25
LSNPD HD	39801	49	0.5	0552280	+072358	H 1	21269 L	14302	FU	91091803	032400	000245	351	G E=178,G=80,B=25
LSNPD HD	39801	49	0.5	0552280	+072358	H 3	42498 L	14346	FU	91091803	033500	021000	254	G E=246,G=70,B=52
LSNPD HD	39801	49	0.5	0552280	+072358	H 1	21270 L	14434	FU	91091807	071600	004500	X24	G E=18X,G=4X,B=55
LSNPD HD	39801	49	0.5	0552280	+072358	L 3	42499 L	14372	FU	91091808	080600	001230	340	G E=144,G=54,B=20
LSNPD HD	39801	49	0.5	0552280	+072358	H 1	21270 L	14481	FU	91091808	082600	003000	X24	G E=18X,G=4X,B=55
LSNPD HD	39801	49	0.5	0552280	+072358	L 3	42500 L	14433	FU	91091809	090300	005000	3X4	G E=4X,G=149,B=55
LSNPD HD	39801	49	0.5	0552280	+072358	L 1	21271 L	14422	FU	91091809	095800	000005	342	G E=142,G=74,B=32
LSNPD HD	39801	49	0.5	0552280	+072358	H 1	21272 L	14689	FU	91091810	104100	000245	342	G E=181,G=74,B=40
LSNPD HD	39801	49	+0.5	0552280	+072358	L 3	42739 L	14377	FU	91101605	051800	001230	340	G E=145,G=54,B=18
LSNPD HD	39801	49	0.5	0552280	+072358	H 1	21501 L	14254	FU	91101605	054500	007500	2?4	G E=18X,G=56X,B=55
LSNPD HD	39801	49	0.5	0552280	+072358	L 3	42740 L	14091	FU	91101607	070800	005000	3X2	G E=4X,G=124,B=32
LSNPD HD	39801	49	0.5	0552280	+072358	H 1	21502 L	14016	FU	91101608	080300	000245	342	G E=161,G=60,B=35
LSNPD HD	39801	49	0.5	0552280	+072358	L 1	21503 L	14214	FU	91101608	083600	000005	342	G E=141,G=66,B=35
LSNPD ALPHACRI	49		+0.5	0552280	+072358	H 1	21640 L	13585	FU	91110503	034500	000245	352	G E=183,G=70,B=32
LSNPD ALPHACRI	49		+0.5	0552280	+072358	L 3	43012 L	13552	FU	91110503	035200	002500	4X0	G E=4X,G=125,B=20
LSNPD ALPHACRI	49		+0.5	0552280	+072358	L 1	21641 L	13481	FU	91110504	042800	000005	342	G E=151,G=65,B=33
LSNPD ALPHACRI	49		+0.5	0552280	+072358	H 1	21642 L	13590	FU	91110505	051300	007500	X24	G E=18X,G=5X,B=60
LSNPD ALPHACRI	49		+0.5	0552280	+072358	L 3	43013 L	13500	FU	91110506	063600	001230	340	G E=139,G=65,B=17
LSNPD HD	39801	49	0.5	0552280	+072358	H 1	21803 L	13476	FU	91112203	032600	000245	342	G E=163,G=68,B=33
LSNPD HD	39801	49	0.5	0552280	+072358	L 3	43180 L	13474	FU	91112203	033700	002500	4X0	G E=4X,G=150,B=20
LSNPD HD	39801	49	0.5	0552280	+072358	L 1	21804 L	13440	FU	91112204	041000	000005	342	G E=138,G=73,B=34
LSNPD HD	39801	49	0.5	0552280	+072358	H 1	21805 L	13521	FU	91112204	045100	007500	X24	G E=18X,G=5X,B=60
LSNPD HD	39801	49	0.5	0552280	+072358	L 3	43181 L	13526	FU	91112206	061500	001230	340	G E=141,G=80,B=17
SCNEF P/HARIL2	06		9.6	055300	+282608	D 9	02485 2			91082702	021900	004000		G
SCNEF P/HARIL2	06		9.6	0553000	+282608	L 1	21092 L	387	SO	91082702	024100	020000	344	G E=162,G=90,B=60
SCNEF P/HARIL2	06		9.6	0553000	+282608	L 1	21092 S	380	SO	91082703	032700	001500	3X4	G E=4X,G=90,B=60
SCNEF P/HARIL2	06		9.6	0553230	+282514	L 3	42333 L	348	SO	91082708	081100	000500	240	G E=129,G=30,B=18
NA094 I06562	70		14.00	0556148	-033703	L 1	21373 L	00000	EO	91093017	174924	002000	110	V
DONE CO Aur	53		7.8	0557070	+351824	L 1	21387 L			91100207	071900	000700		G
DONE CO Aur	53		7.8	0557070	+351824	L 3	42599 L			91100207	073500	004000		G
OD03Z 17 IEP	66		4.9	0602452	-162847	H 3	43014 L	24057	FO	91110507	073400	006000	X04	G C=2X,B=55
OD03Z 17 IEP	66		4.9	0602452	-162847	H 1	21643 L	23894	FO	91110508	084300	001000	452	G E=198,G=165,B=40
OD03Z 17 IEP	66		4.9	0602452	-162847	H 3	43015 L	23719	FO	91110509	091500	009000	X04	G C=3X,B=58
BFNSA HD	41692	21	5.4	0604100	-041120	L 1	21225 L	19255	FO	91091308	080100	000009	502	G C=197,B=33
BFNSA HD	41692	21	5.4	0604100	-041120	L 3	42451 L	19436	FO	91091308	081200	000017	500	G C=221,B=19
DFNUH G104-27	37		13.4	0612238	+174458	H 3	42921 L		EO	91102713	134500	073500	309	G C=180,B=130
NCL68 HD43246	39		07.74	0613117	+285212	H 3	42429 L	02967	FO	91090916	160937	015000	501	V
NCL68 HD43246	39		07.75	0613117	+285212	H 1	21203 L	02955	FO	91090918	184722	006000	503	V
NCL68 HD43246	39		07.74	0613117	+285212	H 3	42524 L	02971	FO	91092016	163529	015000	501	V
NCL68 HD43246	39		07.78	0613117	+285212	H 1	21297 L	02883	FO	91092019	191741	006000	501	V
SUNEG HD	44594	44	6.6	0618471	-484250	H 1	21829 L	5764	FO	91112402	024300	011000	X33	G E=94,G=1.5X,B=50
IBNRP HD	44743	23	1.98	0620298	-175552	H 3	42724 L	4041	FU	91101508	080700	000002	401	G C=142,B=30
IBNRP HD	44743	23	1.98	0620298	-175552	H 3	42725 L	4076	FU	91101508	083900	000003	502	G C=200,B=38
NCL68 HD45166	11		09.85	0623360	+080018	L 3	42523 L	00454	FO	91092015	152751	000200	500	V
NML39 SMP100	70		00.18	0623468	-720557	L 3	42612 L	00000	EO	91100314	141722	009000	130	V
DFNUH S20	133853	44	9.0	0651371	-014531	D 9	02501 2			91102802	023800	016000		G
WNUH G 80	37		14.8	0651424	-020529	L 3	42922 L		EO	91102802	025700	003000	500	G C=172,B=17
WNUH G 80	37		14.8	0651424	-020529	L 3	42923 S		EO	91102803	035800	005500	500	G C=182,B=18



PRO	Object	CL	MAG	R.A.	DEC	D C	Image A	FES	MD	Obs.date	Exptim	mmmsst	ECC	Comment
SCNF P/HARIL2		06		0655280	+244908	D 9	02488 2			91090708	084500	004000		G
SCNF P/HARIL2		06		0655280	+244908	L 1	21178 L	121	FO	91090708	085900	003500		X4 G E=1.5X,B=60
SCNF P/HARIL2		06		0655280	+244908	L 3	42410 L	119	FO	91090709	095300	000600		50 G E=1.66,B=15
SCNF P/HARIL2		06		0655280	+244908	L 1	21179 L	112	FO	91090712	122200	005500		X3 G E=3X,B=50
NA094 I06562		70	14.00	0656148	-033703	L 3	42588 L	00000	BO	91093016	161804	008000		110 V
RGNDW I2 Pup		51	4.0	0712030	-443326	L 1	21858 L	505	FU	91112703	034000	003000		303 G G=83,B=50
RGNDW I2 Pup		51	4.0	0712030	-443326	L 1	21859 L	507	FU	91112704	044300	005800		X09 G G=1.5X,B=220
RGNDW I2 Pup		51	4.0	0712030	-443326	L 1	21860 L	503	FU	91112706	061500	003500		309 G G=1.98,B=150
PHCAL SKY BKGD		07		0712079	-443246	L 3	43232 L			91112704	044800	003000		09 G B=105
RSNLR AR MN		39	8.6	0718200	-050954	H 1	21367 L	960	FO	91092911	114800	022000		334 G E=1.46,G=1.10,B=55
BEBSA HD	58142	30	4.6	0722565	+491839	L 3	42716 L	327	FU	91101410	101100	000035		500 G G=216,B=18
BEBSA HD	58142	30	4.6	0722565	+491839	L 1	21490 L	330	FU	91101410	102200	000014		502 G G=1.98,B=40
EINFM MAC 560		57	9.4	0723279	-073735	L 1	21365 L	435	FO	91092900	000800	003000		X03 G G=4.5X,B=42
EINFM MAC 560		57	9.4	0723279	-073735	L 3	42579 L	434	FO	91092900	004400	012000		X01 G G=4X,B=24
EINFM MAC 560		57	9.4	0723279	-073735	L 1	21366 L	391	FO	91092902	025100	001000		X02 G G=1.5X,B=33
EINFM MAC 560		57	9.4	0723279	-073735	L 3	42580 L	403	FO	91092903	032100	002300		500 G G=1.88,B=20
EINFM MAC 560		57	10.1	0723279	-073735	L 3	42627 L	362	FO	91100605	055100	002000		400 G G=1.36,B=18
EINFM MAC 560		57	10.1	0723279	-073735	L 1	21415 L	354	FO	91100606	062000	000800		5X2 G E=1.5X,G=253,B=35
EINFM MAC 560		57	10.1	0723279	-073735	L 3	42628 L	345	FO	91100606	065200	002000		400 G G=1.54,B=18
EINFM MAC 560		57	10.1	0723279	-073735	L 1	21416 L	366	FO	91100607	072700	000800		XX2 G E=1.5X,G=1.5X,B=32
EINFM MAC 560		57	10.1	0723279	-073735	L 3	42629 L	352	FO	91100607	075900	003000		500 G G=210,B=18
EINFM MAC 560		57	10.1	0723279	-073735	L 1	21417 L	362	FO	91100608	083800	000800		5X2 G E=1.5X,G=248,B=38
RMBE U MN		52	6.0	0728242	-094015	H 1	20354 L	6905	FO	91051017	175600	006000		334 G E=1.23,G=1.10,B=55
RGNTA HD	59643	66	7.80	0728527	+243638	L 3	43021 L	1876	FO	91110607	071100	005000		335 G E=1.22,G=1.06,B=65
RGNTA HD	59643	66	7.80	0728527	+243638	L 1	21649 L	1912	FO	91110608	080600	001500		343 G E=1.86,G=1.05,B=45
RGNTA HD	59643	66	7.8	0728527	+243638	L 1	21869 L	1986	FO	91112809	091200	002000		352 G E=2.24,G=1.31,B=38
RGNTA HD	59643	66	7.8	0728527	+243638	L 3	43243 L	2026	FO	91112809	094000	006800		451 G E=2.17,G=1.35,B=28
PHCAL NULL		99		0728527	+243638	L 1	21870 L			91112810	101900	000000		02 G B=35
MNEB HD	60098	21	6.7	0729371	-360245	H 1	21542 L	6311	FO	91102112	121700	001000		503 G G=230,B=43
MNEB HD	60098	21	6.7	0729371	-360245	H 3	42777 L	6355	FO	91102112	123500	001500		502 G G=210,B=40
PHCAL HD60753		21	06.87	0732081	-502829	L 3	42212 L	06407	FO	91081019	195803	000011		500 V
PHCAL HD	60753	21	6.69	0732081	-502829	L 3	41551 L	6328	FO	91050217	175200	000010		500 G G=1.95,B=18
PHCAL HD60753		21	06.87	0732081	-502829	H 1	20985 L	06407	FO	91081020	200341	001200		600 V
PHCAL HD	60753	21	6.69	0732081	-502829	L 3	41551 S	6348	FO	91050218	180000	000030		X02 G G=1.5X,B=35
PHCAL HD60753		21	06.87	0732081	-502829	H 3	42213 L	06388	FO	91081020	203521	001800		500 V
PHCAL HD	60753	21	6.69	0732081	-502829	L 1	20290 L	6374	FO	91050218	180500	000006		502 G G=204,B=35
PHCAL HD60753		21	06.91	0732081	-502829	L 1	20986 L	06175	FO	91081021	210933	000007		500 V
PHCAL HD	60753	21	6.69	0732081	-502829	L 1	20290 S	6344	FO	91050218	181000	000018		X02 G G=1.5X,B=35
PHCAL HD60753		21	06.83	0732081	-502829	L 3	42411 L	06605	FO	91090720	204536	000011		500 V
PHCAL HD	60753	21	6.69	0732081	-502829	L 1	20291 L			91050219	191200	000025		502 G G=1.95,B=40
PHCAL HD60753		21	06.83	0732081	-502829	H 1	21181 L	06601	FO	91090720	205049	000007		500 V HEAD
PHCAL HD	60753	21	6.69	0732081	-502829	L 3	41552 L	6491	FO	91050219	192300	000041		501 G G=1.84,B=25
PHCAL HD60753		21	06.83	0732081	-502829	H 3	42412 L	06611	FO	91090721	212907	001000		500 V
PHCAL HD	60753	21	6.7	0732081	-502829	L 3	41773 L	6312	FO	91060419	193400	000041		500 G G=200,B=18
PHCAL HD60753		21	06.80	0732081	-502829	H 1	21182 L	06765	FO	91090722	222107	001200		502 V
PHCAL HD	60753	21	6.69	0732081	-502829	L 1	20522 L	6188	FO	91060419	194500	000026		502 G G=1.90,B=35
PHCAL HD60753		21	06.86	0732081	-502828	L 3	42455 L	06464	FO	91091315	155709	000011		500 V
PHCAL HD	60753	21	6.7	0732081	-502829	L 1	20523 L	6384	FO	91060420	202500	000006		501 G G=210,B=30
PHCAL HD60753		21	06.86	0732081	-502828	L 1	21230 L	06464	FO	91091316	160120	000007		500 V
PHCAL HD	60753	21	6.7	0732081	-502829	L 1	20523 S	6371	FO	91060420	203100	000018		501 G G=200,B=30

FRO	Object	CL	MAG	R.A.	DEC	D C	Image A	FES	MD	Obs.date	Exptim	mmmsst	ECC	Comment
PHCAL HD60753		21	06.89	0732081	-502828	H 3	42456 L	06289	FO	91091317	170125	001800	500 V	
PHCAL HD	60753	21	6.69	0732081	-502829	L 3	41776 L	6946	FO	91060514	143000	000010	500 G G=170,B=18	
PHCAL HD60753		21	06.84	0732081	-502828	H 1	21231 L	06551	FO	91091317	173349	001200	500 V	
PHCAL HD	60753	21	6.7	0732081	-502829	L 3	41777 S	6860	FO	91060514	145800	000030	500 G G=200,B=18	
PHCAL HD	60753	21	6.7	0732081	-502829	L 2	18568 L	6868	FO	91060515	152300	000043	501 G G=200,B=25	
PHCAL HD	60753	21	6.7	0732081	-502829	L 2	18569 L	6819	FO	91060516	160300	000009	401 G G=160,B=22	
PHCAL HD	60753	21	6.7	0732081	-502829	L 2	18569 S	6764	FO	91060516	160800	000029	501 G G=220,B=25	
PHCAL HD	60753	21	6.7	0732081	-502829	H 1	20720 L	6376	FO	91063015	151800	000900	504 G G=221,B=54	
PHCAL HD	60753	21	6.7	0732081	-502829	H 3	41965 L	6406	FO	91063015	153400	001300	403 G G=195,B=45	
PHCAL HD	60753	21	6.7	0732081	-502829	L 3	41966 S	6308	FO	91063016	163200	000030	X00 G G=1.5X,B=20	
PHCAL HD	60753	21	6.7	0732081	-502829	L 3	41966 L	6332	FO	91063016	163600	000010	500 G G=190,B=20	
PHCAL HD	60753	21	6.7	0732081	-502829	L 1	20729 L	6581	FO	91070211	115500	000009	X02 G G=1.5X,B=35	
PHCAL HD	60753	21	6.7	0732081	-502829	L 1	20729 S	6492	FO	91070212	120000	000029	X01 G G=1.5X,B=30	
PHCAL HD	60753	21	6.7	0732081	-502829	L 1	20730 L	6718	FO	91070212	124600	000026	402 G G=180,B=35	
PHCAL HD	60753	21	6.7	0732081	-502829	L 3	41975 L	6519	FO	91070212	125600	000041	500 G G=190,B=18	
PHCAL HD	60753	21	6.7	0732081	-502829	L 3	41978 L	6529	FO	91070304	041000	000041	500 G G=191,B=18	
PHCAL HD	60753	21	6.7	0732081	-502829	L 3	41979 L	6599	FO	91070304	044700	000016	300 G G=105,B=18	
PHCAL HD	60753	21	6.7	0732081	-502829	L 3	41980 L	6651	FO	91070305	052200	000049	500 G G=214,B=19	
PHCAL HD	60753	21	6.7	0732081	-502829	L 3	41981 L	6595	FO	91070305	055800	000105	X00 G G=1.5X,B=18	
PHCAL	NULL	99		0732081	-502829	L 3	41982 L			91070306	062800	000000	00 G B=18	
PHCAL HD	60753	21	6.7	0732081	-502829	L 3	41983 L	6653	FO	91070306	065700	000045	500 G G=208,B=18	
PHCAL HD	60753	21	6.7	0732081	-502829	L 3	41984 L	6578	FO	91070307	073900	000018	400 G G=120,B=18	
PHCAL HD	60753	21	6.7	0732081	-502829	L 3	41985 L	6635	FO	91070308	081300	000053	500 G G=243,B=18	
PHCAL HD	60753	21	6.7	0732081	-502829	L 3	41986 L	6626	FO	91070308	084900	000041	500 G G=202,B=18	
PHCAL HD	60753	21	6.7	0732081	-502829	L 3	41987 L	6651	FO	91070309	092200	000011	500 G G=217,B=18	
PHCAL HD	60753	21	6.7	0732081	-502829	L 3	41988 L	6653	FO	91070309	095000	000005	300 G G=97,B=18	
PHCAL HD	60753	21	6.7	0732081	-502829	L 3	41989 L	6590	FO	91070310	101800	000014	500 G G=232,B=18	
PHCAL HD	60753	21	6.7	0732081	-502829	L 3	41990 L	6615	FO	91070310	104700	000011	500 G G=200,B=18	
PHCAL HD	60753	21	6.69	0732081	-502829	L 3	42096 L	6438	FO	91071914	142400	000020	500 G G=185,B=15	
PHCAL HD	60753	21	6.69	0732081	-502829	L 3	42097 L	6380	FO	91071915	150400	000020	500 G G=190,B=15	
PHCAL HD	60753	21	6.69	0732081	-502829	L 3	42098 L	6404	FO	91071915	154200	000020	500 G G=205,B=15	
PHCAL HD	60753	21	6.69	0732081	-502829	L 3	42099 L	6292	FO	91071916	162500	000020	X00 G G=1.5X,B=15	
PHCAL HD	60753	21	6.69	0732081	-502829	L 3	42100 L	6202	FO	91071917	172100	000020	X00 G G=2X,B=15	
PHCAL HD	60753	21	6.69	0732081	-502829	L 1	20966 L	6487	FO	91080613	135800	000006	502 G G=214,B=35	
PHCAL HD	60753	21	6.69	0732081	-502829	L 1	20966 S	6370	FO	91080614	140500	000018	502 G G=244,B=35	
PHCAL HD	60753	21	6.69	0732081	-502829	L 3	42185 L	6310	FO	91080614	141300	000010	500 G G=209,B=18	
PHCAL HD	60753	21	6.69	0732081	-502829	L 3	42185 S	6250	FO	91080614	141900	000030	X00 G G=1.5X,B=18	
PHCAL HD	60753	21	6.7	0732081	-502829	L 3	42482 L	6336	FO	91091708	080500	000010	500 G G=192,B=18	
PHCAL HD	60753	21	6.7	0732081	-502829	L 3	42482 S	6263	FO	91091708	081100	000030	X00 G G=1.5X,B=18	
PHCAL HD	60753	21	6.7	0732081	-502829	L 1	21263 L	6285	FO	91091708	081600	000006	502 G G=208,B=32	
PHCAL HD	60753	21	6.7	0732081	-502829	L 1	21263 S	6342	FO	91091708	082200	000018	X02 G G=1.5X,B=32	
PHCAL HD	60753	21	6.7	0732081	-502829	L 3	42483 L	6512	FO	91091709	092400	000041	500 G G=199,B=18	
PHCAL HD	60753	21	6.7	0732081	-502829	L 1	21264 L	6517	FO	91091709	093900	000026	502 G G=193,B=38	
PHCAL HD	60753	21	6.7	0732081	-502829	L 2	18598 L	6426	FO	91102906	060100	000043	501 G G=199,B=25	
PHCAL HD	60753	21	6.7	0732081	-502829	L 2	18599 L	6431	FO	91102906	064700	000009	401 G G=167,B=25	
PHCAL HD	60753	21	6.7	0732081	-502829	L 2	18599 S	6363	FO	91102906	065200	000029	501 G G=242,B=25	
PHCAL HD	60753	21	6.69	0732081	-502829	L 3	43087 L	6131	FO	91111309	095900	000010	500 G G=196,B=20	
PHCAL HD	60753	21	6.69	0732081	-502829	L 3	43087 S	6197	FO	91111310	100500	000030	G B=1.5X	
PHCAL HD	60753	21	6.69	0732081	-502829	H 3	43179 L	6342	FO	91112202	023100	001300	502 G G=185,B=33	
PHCAL HD	60753	21	6.7	0732081	-502829	L 3	43194 L	6227	FO	91112319	194400	000041	500 G G=190,B=18	

FRO	Object	CL	MAG	R.A.	DEC	D C	Image A	FES	MD	Obs.date	Exptim	mmmsstt	ECC	Comment
PHCAL HD	60753 21		6.7	0732081	-502829	L 3	43195 L	6223	FO	91112320	202100	000016	300 G	C=109,B=18
PHCAL HD	60753 21		6.7	0732081	-502829	L 3	43196 L	6246	FO	91112320	205400	000049	500 G	C=220,B=18
PHCAL HD	60753 21		6.7	0732081	-502829	L 3	43197 L	6288	FO	91112321	213700	000105	X00 G	C=1.5X,B=18
PHCAL	NULL	99		0732081	-502829	L 3	43198 L			91112322	220600	000000	00 G	B=18
PHCAL HD	60753 21		6.69	0732081	-502829	L 3	43199 L	6215	FO	91112322	223300	000045	500 G	C=200,B=18
PHCAL HD	60753 21		6.69	0732081	-502829	L 3	43200 L	6200	FO	91112323	230800	000018	300 G	C=110,B=18
PHCAL HD	60753 21		6.69	0732081	-502829	L 3	43201 L	6242	FO	91112323	234400	000053	500 G	C=230,B=18
PHCAL HD	60753 21		6.69	0732081	-502829	L 3	43202 L	6314	FO	91112400	002000	000041	500 G	C=190,B=18
PHCAL HD	60753 21		6.69	0732081	-502829	L 3	43203 L	6341	FO	91112400	005600	000011	500 G	C=190,B=18
PHCAL HD	60753 21		6.69	0732081	-502829	L 3	43204 L	6408	FO	91112401	012300	000005	300 G	C=110,B=18
PHCAL HD	60753 21		6.69	0732081	-502829	L 3	43205 L	6520	FO	91112401	015100	000014	500 G	C=228,B=18
PHCAL HD	60753 21		6.69	0732081	-502829	L 3	43206 L	6350	FO	91112402	021900	000011	500 G	C=208,B=18
PHCAL -31	4800	16	10.5	0734344	-320546	L 1	21802 L	256	FO	91112201	010200	000057	502 G	C=190,B=35
PHCAL -31	4800	16	10.5	0734344	-320546	L 3	43178 L	251	FO	91112201	010900	000045	500 G	C=209,B=18
PENCG HD	61429 22		4.70	0736131	-251500	H 3	43224 L	338	FU	91112605	051600	000346	402 G	C=190,B=40
PENCG HD	61429 22		4.70	0736131	-251500	H 1	21849 L	340	FU	91112605	054900	000206	503 G	C=206,B=47
PENCG HD	61556 21		4.62	0736468	-264120	H 3	43225 L	1034	FU	91112606	064300	000156	503 G	C=250,B=42
PENCG HD	61556 21		4.62	0736468	-264120	H 1	21850 L	1016	FU	91112607	071400	000100	502 G	C=226,B=40
SCNEF SPO	79623 44		8.2	0739185	+210543	S 9	02492 2			91091700	003300	004000	G	
SCNEF P/HARILY	06		12.0	0740449	+210124	L 1	21261 L	114	FO	91091701	011700	002000	351 G	E=200,G=57,B=25
SCNEF P/HARILY	06			0740550	+210042	D 9	02493 2			91091700	005600	004000	G	
SCNEF P/HARILY	06		12.0	0740550	+210042	L 1	21262 L	118	FO	91091703	033400	009500	3X3 G	E=4X,G=71,B=41
SCNEF P/HARILY	06		12.0	0740550	+210042	L 3	42481 L	118	FO	91091706	061000	000600	50 G	E=180,B=10
NEMC GUM P5-1	75			0741232	-420839	L 3	41738 L			91060107	071000	018000	01 G	B=30
USSES HD	62345 45		3.57	0741258	+243110	L 3	43254 L	752	FU	91112908	081400	015500	432 G	E=120,G=141,B=40
NEMC GUM NEB	75			0741286	-420839	L 3	41733 L			91053108	081100	018000	32 G	E=69,B=32
NEMC GUM NEB	75			0741289	-420018	L 1	20480 L			91053013	131800	003000	33 G	E=72,B=42
NEMC GUM NEB	75			0741289	-420018	L 3	41726 L			91053013	135400	005500	21 G	E=42,B=30
NEMC GUM NEB	75			0741340	-420839	L 3	41734 L			91053111	114300	018500	02 G	B=38
NEMC GUM P7	75			0741475	-421354	L 3	41739 L			91060110	105100	019500	02 G	B=32
NEMC GUM NEB	75			0741579	-421657	L 3	41844 L			91061506	063200	037500	G	B=5X
NEMC GUM NEB	75			0742032	-421656	L 3	41724 L			91053007	075600	003000	00 G	B=18
NEMC GUM NEB	75			0742032	-421656	L 1	20479 L			91053008	083300	003000	322 G	E=53,G=70,B=40
NEMC GUM NEB	75			0742032	-421656	L 3	41725 L			91053009	090800	024000	304 G	C=85,B=57
SEMNE NEC	2447-26 39		9.88	0742300	-234500	L 3	41576 L	347	FO	91050515	155500	006900	504 G	C=228,B=60
SEMNE NEC	2447-26 39		9.88	0742300	-234500	L 1	20313 L	351	FO	91050517	171200	002300	X07 G	C=1.5X,B=68
SEMNE NEC	2447-42 39		9.78	0742300	-234500	L 3	41577 L	368	FO	91050517	174800	003500	309 G	C=195,B=104
SEMNE NEC	2447-42 39		9.78	0742300	-234500	L 1	20314 L	376	FO	91050518	183200	001700	X09 G	C=2X,B=112
SEMNE NEC	2447-38 39		9.84	0742300	-234500	L 1	20315 L	359	FO	91050519	193400	001100	406 G	C=198,B=78
SEMNE NEC	2447-38 39		9.84	0742300	-234500	L 3	41578 L	356	FO	91050519	195000	005500	408 G	C=240,B=100
SEMNE NEC	2447-25 39		9.88	0742300	-234500	L 1	20316 L	322	FO	91050520	205600	004500	503 G	C=200,B=42
SEMNE NEC	2447-38 39		9.84	0742300	-234500	L 3	41579 L	350	FO	91050521	214700	005800	401 G	C=170,B=22
PENCG HD	63118 22		6.03	0743417	-433747	H 1	21853 L	10761	FO	91112610	102800	000434	402 G	C=150,B=40
IGMIS HD	65228 41		4.2	0754425	-224444	L 3	42738 L	478	FU	911101521	211700	003000	540 G	E=140,G=204,B=18
VENSA HR	3173 30		4.8	0804418	+513903	L 1	21484 L	26469	FO	911101311	113500	000019	502 G	C=199,B=33
PHCAL ED+75	325 16		09.70	0804430	+750648	H 3	42593 L	00521	FO	91100113	135101	002400	400 V	
PHCAL ED+75	325 16		09.68	0804430	+750648	H 1	21379 L	00529	FO	91100114	142429	002800	501 V	
PHCAL ED+75	325 16		09.69	0804430	+750648	L 3	42594 L	00525	FO	91100115	151227	000016	500 V	
PHCAL ED+75	325 16		09.68	0804430	+750648	H 1	21380 L	00529	FO	91100115	154520	005600	601 V	
PHCAL ED+75	325 16		09.69	0804430	+750648	H 3	42595 L	00522	FO	91100116	164819	004800	600 V	



PRO	Object	CL	MAG	R.A.	DEC	D C Image A	FES	MD	Obs.date	Exptim	runmsstt	ECC	Comment
PHCAL	ED	+75 325 16	9.54	0804432	+750648	L 1 20282 L	600	FO	91050120	200000	000020	402 G	G=176,B=35
PHCAL	ED	+75 325 16	9.54	0804432	+750648	L 1 20282 S	594	FO	91050120	200700	000100	302 G	G=130,B=35
PHCAL	ED	+75 325 16	9.54	0804432	+750648	L 3 41543 L	597	FO	91050120	201400	000014	400 G	G=165,B=15
PHCAL	ED	+75 325 16	9.54	0804432	+750648	L 3 41543 S	597	FO	91050120	203000	000042	500 G	G=190,B=15
PHCAL	ED	+75 325 16	9.54	0804432	+750648	L 1 20287 L	570	FO	91050211	114600	000140	502 G	G=208,B=35
PHCAL	ED	+75 325 16	9.54	0804432	+750648	L 3 41546 L	575	FO	91050212	120000	000100	500 G	G=186,B=18
PHCAL	ED	+75 325 16	9.5	0804432	+750648	L 1 21237 L	622	FO	91091411	114200	000020	402 G	G=172,B=33
PHCAL	ED	+75 325 16	9.5	0804432	+750648	L 1 21237 S	627	FO	91091411	114700	000100	502 G	G=228,B=33
PHCAL	ED	+75 325 16	9.5	0804432	+750648	L 3 42462 L	626	FO	91091411	115300	000014	500 G	G=171,B=18
PHCAL	ED	+75 325 16	9.5	0804432	+750648	L 3 42462 S	627	FO	91091411	115800	000042	500 G	G=240,B=18
PHCAL	ED	+75 325 16	9.5	0804432	+750648	L 1 21238 L	627	FO	91091412	125700	000140	502 G	G=208,B=35
PHCAL	ED	+75 325 16	9.5	0804432	+750648	L 3 42463 L	616	FO	91091413	131100	000043	400 G	G=155,B=18
PHCAL	ED	+75 0325 16	9.5	0804432	+750648	L 1 21552 L	566	FO	91102805	054500	000140	502 G	G=212,B=38
PHCAL	ED	+75 0325 16	9.5	0804432	+750648	L 3 42924 L	573	FO	91102805	055900	000043	400 G	G=151,B=18
PHCAL	ED	+75 0325 16	9.5	0804432	+750648	L 1 21553 L	559	FO	91102806	065700	000020	502 G	G=187,B=35
PHCAL	ED	+75 0325 16	9.5	0804432	+750648	L 1 21553 S	568	FO	91102807	070200	000100	X02 G	G=1.5X,B=35
PHCAL	ED	+75 0325 16	9.5	0804432	+750648	L 3 42925 L	572	FO	91102807	070700	000014	500 G	G=185,B=18
PHCAL	ED	+75 0325 16	9.5	0804432	+750648	L 3 42925 S	567	FO	91102807	071300	000042	500 G	G=235,B=18
PHCAL	ED	+75 0325 16	9.5	0804432	+750648	D 9 02502 2			91102909	094800	016000	G	
PHCAL	ED	+75 0325 16	9.5	0804432	+750648	L 2 18603 L	561	FO	91102910	100700	000142	401 G	G=163,B=25
PHCAL	ED	+75 0325 16	9.5	0804432	+750648	L 2 18604 L	553	FO	91102910	105200	000033	501 G	G=208,B=25
PHCAL	ED	+75 0325 16	9.5	0804432	+750648	L 2 18604 S	547	FO	91102910	105700	000138	501 G	G=237,B=25
PHCAL	ED	+75 325 16	9.54	0804432	+750648	H 3 43011 L	582	FO	91110502	022400	002500	402 G	G=172,B=36
PENTG	HD	67797 21	4.40	0806476	-190551	H 3 43226 L	460	FU	91112607	075700	000139	502 G	G=205,B=38
PENTG	HD	67797 21	4.40	0806476	-190551	H 1 21851 L	457	FU	91112608	082900	000058	502 G	G=215,B=40
SMEW	FUPPIS A	75		0820004	-422838	L 3 41676 L		EO	91052307	075100	038000	03 G	B=50
SMEW	CT	75		0820040	-422746	D 9 02465 2			91052207	074500	002000	G	
SMEW	FUPPIS A	75		0820040	-422746	L 3 41674 L		EO	91052207	075700	042000	03 G	B=50
SMEW	FUPPIS A	75		0820040	-422746	L 1 20429 L		EO	91052307	074900	042000	306 G	G=115,B=80
SMEW	FUPPIS A	75		0820040	-422746	D 9 02466 2			91052308	080000	002000	G	
PHCAL	WAVCAL	98		0823133	-423622	L 1 20498 S			91060114	145700	002500	28 G	F=10X,B=100
PHCAL	WAVCAL	98		0823133	-423622	H 1 20499 S			91060115	153600	000041	28 G	F=60X,B=100
PHCAL	NULL	99		0823133	-423622	H 2 18565 S			91060116	161200	000000	02 G	B=40
PHCAL	WAVCAL	98		0823133	-423622	L 3 41740 S			91060116	164000	000005	28 G	F=10X,B=100
PHCAL	WAVCAL	98		0823133	-423622	H 3 41741 S			91060117	172800	000005	29 G	F=60X,B=120
PHCAL	WAVCAL	98		0823133	-423622	L 2 18566 S			91060117	173500	000011	26 G	F=10X,B=80
PHCAL	WAVCAL	98		0823133	-423622	H 2 18567 S			91060118	180600	000010	29 G	F=60X,B=105
ENDW	HD	71634 25	6.7	0824230	-575807	L 3 42034 L	6655	FO	91071011	115000	000012	300 G	G=109,B=18
ENDW	HD	71634 25	6.7	0824230	-575807	L 1 20779 L	6781	FO	91071011	115500	000009	502 G	G=185,B=32
ENDW	HD	71634 25	6.7	0824230	-575807	L 3 42035 L	6596	FO	91071012	125100	000035	500 G	G=240,B=18
ENDW	HD	71634 25	6.7	0824230	-575807	L 1 20780 L	6558	FO	91071012	125600	000035	X02 G	G=3X,B=35
SMM	JUPIER	03	-2.1	0829265	+194741	L 3 41562 L			91050415	154800	001500	X51 G	F=201,G=5X,B=22
SMM	JUPIER	03	-2.1	0829265	+194741	L 3 41563 L			91050416	163900	001500	X51 G	F=200,G=5X,B=24
SMM	JUPIER	03	-2.1	0829265	+194741	L 3 41564 L			91050417	172500	001500	X51 G	F=177,G=5X,B=22
SMM	JUPIER	03	-2.1	0829265	+194741	L 3 41565 L			91050418	181000	001500	X44 G	F=176,G=5X,B=54
SMM	SKYBKND	07		0829265	+194741	L 3 41565 L			91050418	185400	003000	29 G	F=125,B=105
SMM	JUPIER	03	-2.1	0829265	+194741	L 3 41567 L			91050419	195100	001800	X44 G	F=190,G=5X,B=55
SMM	JUPIER	03	-2.1	0829265	+194741	L 3 41568 L			91050420	203700	001800	X52 G	F=184,G=5X,B=32
SMM	JUPIER	03	-2.1	0829348	+194711	L 3 41569 L			91050421	212200	002000	X51 G	F=221,G=6X,B=22
SMM	JUPIER	03	-2.1	0829348	+194711	L 3 41570 L			91050422	220800	001700	X50 G	F=189,G=5X,B=20



FID	Object	CL	MAG	R.A.	DEC	D C Image A	FES	MD	Obs.date	Exptim	mountstt	ECC	Comment
NC168	AL VEL	39	08.96	0829353	-472946	H 1 20760 L	01003	FO	91070619	195527	041500	445	V
SUNEG	HD 72905	44	5.6	0834466	+651144	H 1 21820 L	12515	FO	91112303	031400	002800	542	G E=16L,G=210,B=40
SUNEG	HD 72905	44	5.6	0834466	+651144	L 3 43187 L	12451	FO	91112303	035300	008500	542	G E=145,G=216,B=40
FHCAL	NULL	99		0834466	+651144	H 1 21821 L			91112304	042200	000000	02	G B=35
FHCAL	NULL	99		0834466	+651144	H 1 21822 L			91112304	044800	000000	02	G B=35
SUNEG	HD 72905	44	5.6	0834466	+651144	L 3 43208 L	12963	FO	91112409	090000	007000	530	G E=112,G=171,B=18
FHCAL	NULL	99		0834466	+651144	H 1 21833 L			91112409	092800	000000	02	G B=35
SUNEG	HD 72905	44	5.6	0834466	+651144	H 1 21834 L	12982	FO	91112410	101900	002800	542	G E=178,G=204,B=40
BOME	HD 73502	53	7.1	0835177	-435621	L 3 41560 L	2849	FO	91050320	205400	009000	01	G B=25
BOME	HD 73502	53	7.4	0835177	-435621	L 1 20305 L	2847	FO	91050322	223000	002500	302	G G=125,B=35
BOME	HD 73678	53	8.0	0836034	-471110	L 1 20303 L	1501	FO	91050319	190500	001600	409	G G=205,B=105
SANOW	HD 74272	33	4.76	0839346	-470816	L 3 41700 L	26131	FO	91052615	155100	011500	400	G G=145,B=18
SANOW	HD 74272	33	4.76	0839346	-470816	L 3 41700 S	26352	FO	91052616	160700	000510	500	G G=245,B=18
SANOW	HD 74272	33	4.76	0839346	-470816	L 1 20450 L	26392	FO	91052616	162000	000050	503	G G=210,B=45
SANOW	HD 74272	33	4.76	0839346	-470816	L 1 20450 S	26567	FO	91052616	163100	000215	X03	G G=5X,B=45
SANOW	HD 74272	33	4.8	0839346	-470816	L 3 41796 L	25946	FO	91060819	190700	000350	500	G G=230,B=18
SANOW	HD 74272	33	4.8	0839346	-470816	L 3 41796 S	25997	FO	91060819	193100	001000	X00	G G=3X,B=18
SANOW	HD 74272	33	4.8	0839346	-470816	L 3 42696 L	26428	FO	91101205	052800	000320	500	G G=205,B=18
SCNOW	HD 74371	25	5.3	0840147	-451350	L 3 43215 L	19336	FO	91112506	065500	000110	500	G G=229,B=18
SCNOW	HD 74371	25	5.3	0840147	-451350	L 3 43215 S	19090	FO	91112507	070600	000020	500	G G=204,B=18
SCNOW	HD 74371	25	5.3	0840147	-451350	L 1 21842 L	19044	FO	91112507	071300	000020	502	G G=215,B=40
SCNOW	HD 74371	25	5.3	0840147	-451350	L 1 21842 S	19152	FO	91112507	072100	000010	X02	G G=1.5X,B=40
VENA	HR 3173	30	4.8	0844418	+513903	L 3 42708 L	26411	FO	91101311	114500	000046	500	G G=203,B=18
EMEB	K2-15	70	11.7	0846512	-424244	L 3 41914 L	278	SO	91062505	054100	025000	3x2	G E=1.5X,G=120,B=35
EMEB	K2-15	70	11.7	0846512	-424244	L 1 20688 L	295	SO	91062516	162100	002000	309	G G=180,B=135
EMEB	BACKGRD	07	11.7	0846563	-424212	L 1 20686 L			91062506	060700	006000	02	G B=38
FINCU	QJ287	84	14.9	0851573	+201759	L 1 21646 L		FO	91110600	001700	005000	302	G G=70,B=40
FINCU	QJ287	84	14.9	0851573	+201759	L 3 43019 L		FO	91110601	011300	009500	301	G G=49,B=21
AFMP	HD 76534	21	8.0	0853210	-431629	H 1 20660 L	1848	FO	91062120	200300	004500	403	G G=190,B=48
USSES	HD 76644	31	3.2	0855475	+481421	H 1 21883 L	1156	FU	91112905	055200	000200	502	G G=235,B=40
USSES	HD 76644	31	3.2	0855475	+481421	H 3 43251 L	1162	FU	91112905	055800	000440	402	G G=170,B=35
MC149	HD76644	31	03.46	0855476	+481422	H 3 41612 L	01164	FU	91051123	235746	040000	844	V
COMEB	HD 76644	31	3.2	0855480	+481400	H 3 41613 L	1167	FU	91051207	071700	042000	209	G G=65,B=135
COMEB	HD 76644	31	3.2	0855480	+481400	H 1 20359 L	1168	FU	91051214	142600	000400	X03	G G=2X,B=50
SANOW	HD 799402	41	4.60	0913449	-371214	L 1 20451 L	298	FU	91052617	172900	000053	X04	G G=1.5X,B=60
SANOW	HD 799402	41	4.60	0913449	-371214	L 1 20451 S	27570	FU	91052617	173900	000205	X04	G G=5X,B=60
SANOW	HD 79940	41	4.60	0913449	-371214	L 1 20453 L	27186	FO	91052622	222000	000040	502	G G=185,B=32
BOME	HD 81222	53	7.8	0920454	-554447	L 1 20302 L	1825	FO	91050317	173800	001500	505	G G=240,B=65
RMEB	R CAR	51	8.0	0930592	-623401	L 1 20439 L	12151	FO	91052418	183900	002500	332	G E=82,G=125,B=40
SANOW	HD 83058	20	5.0	0932246	-510156	L 1 21841 L	23591	FO	91112505	052300	000004	502	G G=219,B=40
SANOW	HD 83058	20	5.0	0932246	-510156	L 1 21841 S	23632	FO	91112505	053100	000004	402	G G=162,B=40
SANOW	HD 83058	20	5.0	0932246	-510156	L 3 43214 L	23600	FO	91112505	054000	000004	X00	G G=1.5X,B=18
SANOW	HD 83058	20	5.0	0932246	-510156	L 3 43217 L	24161	FO	91112510	103800	000003	500	G G=216,B=18
CUMT	PG 0935+075	63	13.0	0935579	+072833	L 1 20369 L		FO	91051416	160300	003000	322	G E=46,G=62,B=35
CUMT	PG 0935+075	63	13.0	0935579	+072833	L 3 41626 L		FO	91051416	164200	012000	322	G E=52,G=60,B=32
MC099	GL358	48	10.90	0937490	-405042	L 1 20367 L	00178	FO	91051402	022735	004500	141	V
MC099	GL358	48	10.92	0937490	-405042	L 3 41622 L	00175	FO	91051403	031858	004000	110	V
IGML	HD 84748	49	7.05	0944522	+113942	L 1 20284 L	5436	FO	91050207	074600	006000	3x2	G E=1.5X,G=74,B=39
IGML	HD 84748	49	5.8	0944522	+113942	H 1 20288 L	5390	FO	91050213	130600	015000	44	G E=163,B=60
FHCAL	TEFLOD	99		0944522	+113942	L 3 41547 L			91050213	133500	000002	04	G B=58

FFO	Object	CL	MAG	R.A.	DEC	D C	Image A	FES	MD	Obs.date	Exptim	mmmsst	ECC	Comment
PHCAL	TFLOOD	99		0944522	+113942	L 3	41548 L			91050214	140700	000007		09 G B=138
PHCAL	TFLOOD	99		0944522	+113942	L 3	41549 L			91050214	143600	000005		09 G B=105
IGMIL	HD	84748	49	7.27	0944522	+113942	H 1 20374 L	4493	FO	91051515	155200	008500		32 G E=113,B=40
IGMIL	HD	84748	49	7.27	0944522	+113942	L 1 20375 L	4449	FO	91051517	175900	006000		3X2 G E=2X,G=75,B=40
IGMIL	HD	84748	49	7.27	0944522	+113942	L 1 20376 L	4515	FO	91051519	194000	002000		242 G E=152,G=48,B=35
CUMIT	FG	948+344	63	14.6	0948510	+342134	L 1 20370 L		EO	91051419	195300	003000		302 G G=89,B=35
CUMIT	FG	948+344	63	14.6	0948510	+342134	L 3 41627 L		EO	91051420	203200	008500		300 G G=107,B=18
CUMIT	FG	948+344	63	14.6	0948510	+342134	L 3 41628 L		EO	91051422	222100	002500		300 G G=45,B=18
AENP	HD	85567	21	8.50	0948590	-604353	L 1 20659 L	1182	FO	91062119	191400	000500		X02 G G=2X,B=35
M0099	GL375		48	11.29	0956340	-461042	L 1 20366 L	00125	FO	91051400	001700	005000		350 V
M0099	GL375		48	11.30	0956340	-461042	L 3 41621 L	00124	FO	91051401	011710	004000		110 V
AGME	MN 1243		84	14.0	0957140	+131700	L 3 41686 L		EO	91052412	125800	011000		301 G G=42,B=21
AGME	MN 1243		84	14.5	0957140	+131700	L 1 20443 L		EO	91052512	120700	016000		304 G G=85,B=55
AENP	HD	87643	26	8.5	1002497	-582516	H 1 20595 L	940	FO	91061405	054300	025000		4X6 G E=1.5X,G=220,B=72
EMFD	NGC	3132	71	6.7	1004544	-401030	L 1 20385 L		EO	91051620	203500	013500		03 G B=45
EMFD	NGC	3132	70	10.1	1004551	-401129	L 3 41644 L	320	FO	91051618	184800	003000		500 G G=184,B=18
EMFD	NGC	3132	71	6.7	1004553	-401149	L 3 41652 L		EO	91051718	183000	005000		341 G E=138,G=55,B=30
EMFD	WAVECAL		98		1004553	-401149	L 1 20391 L			91051719	192300	000000		?1 G E=15X,B=30
EMFD	WAVECAL		98		1004553	-401149	L 1 20391 S			91051719	192400	000000		?1 G E=15X,B=30
EMFD	NGC	3132	71	6.7	1004553	-401149	L 3 41652 S		EO	91051719	192900	005000		341 G E=138,G=55,B=30
EMFD	NGC	3132	71	6.7	1004553	-401149	L 1 20392 L		EO	91051720	202700	009000		334 G E=124,G=110,B=58
EMFD	WAVECAL		98		1004553	-401149	L 3 41653 L			91051721	215900	000000		X0 G E=6X,B=18
EMFD	WAVECAL		98		1004553	-401149	L 3 41653 S			91051722	220000	000000		X0 G E=6X,B=18
EMFD	NGC	3132	71	6.7	1004553	-401149	L 1 20392 S		EO	91051722	220500	009000		334 G E=124,G=110,B=58
HENG	HD	88195	60	5.9	1007384	-080943	H 1 20615 L	11762	FO	91061619	193100	002000		503 G G=240,B=50
HENG	HD	88195	60	5.9	1007384	-080943	H 3 41849 L	11821	FO	91061620	200600	003500		402 G G=170,B=35
RMEB	S CAR		51	5.0	1007462	-611814	H 1 20353 L	7520	FO	91051015	154300	009000		302 G G=100,B=40
CCMB	HD	89388	47	3.4	1015246	-610455	H 1 20575 L	934	FU	91061118	184500	001100		336 G E=162,G=125,B=72
CCMB	HD	89388	47	3.4	1015246	-610455	H 1 20576 L	926	FU	91061119	194000	002000		346 G E=220,G=140,B=80
MCL63	AD IEO		48	09.43	1016525	+200717	L 3 41591 L	00661	FO	91050803	034406	006000		030 V TWO SPECIFA
MCL63	AD IEO		48	09.50	1016525	+200717	H 1 20333 L	00620	FO	91050805	050601	005000		031 V
MCL63	AD IEO		48	09.46	1016525	+200717	L 3 41592 L	00643	FO	91050806	060415	003000		030 V
MCL63	AD IEO		48	09.48	1016525	+200717	E 9 02462 2	00633	FO	91050806	064500	016000		V FES FOR IWP20334
MCL63	AD IEO		48	09.48	1016525	+200717	L 3 41602 L	00630	FO	91050900	003535	004000		030 V TWO SPECIFA
MCL63	AD IEO		48	09.47	1016525	+200717	L 3 41603 L	00636	FO	91050902	021638	004000		030 V TWO SPECIFA
MCL63	AD IEO		48	09.46	1016525	+200717	L 3 41604 L	00643	FO	91050903	035131	004200		030 V TWO SPECIFA
MCL63	AD IEO		48	09.47	1016525	+200717	L 3 41605 L	00636	FO	91050905	053025	003500		030 V
MCL63	AD IEO		48	09.44	1016525	+200717	L 3 41601 L	00653	FO	91050822	224620	005000		030 V TWO SPECIFA
MCL63	AD IEO		48	09.47	1016525	+200717	H 1 20339 L	00636	FO	91050823	235555	003000		031 V
MCL63	AD IEO		48	09.47	1016525	+200717	H 1 20340 L	00638	FO	91050901	013558	003000		031 V
MCL63	AD IEO		48	09.45	1016525	+200717	H 1 20341 L	00647	FO	91050903	031211	003100		031 V
MCL63	AD IEO		48	09.46	1016525	+200717	H 1 20342 L	00642	FO	91050904	045004	003000		031 V
MCL63	AD IEO		48	09.48	1016525	+200717	H 1 20343 L	00633	FO	91050906	061505	003200		031 V
IBM0	HR CAR		23	8.0	1021073	-592217	L 1 20406 L	2915	FO	91052016	160100	002000		X02 G G=3X,B=38
IBM0	HR CAR		27	8.0	1021073	-592217	H 1 20456 L	3138	FO	91052718	184400	008000		305 G G=145,B=65
WINDH	FG	1026+454	37	16.4	1026456	+452227	I, 3 42931 L		EO	91102821	214400	012000		501 G G=215,B=28
WINDH	GD	123	37	13.2	1033262	+462404	L 3 42930 L		EO	91102819	190200	002400		500 G G=195,B=19
WINDH	GD	123	37	13.2	1033262	+462404	L 3 42930 S		EO	91102819	193300	004800		300 G G=111,B=19
SNOW	HD	92207	32	5.5	1035323	-582823	L 3 43216 S	15263	FO	91112508	083800	000400		500 G G=221,B=18
SNOW	HD	92207	32	5.5	1035323	-582823	L 3 43216 L	14829	FO	91112508	084700	000300		X00 G G=1.5X,B=18

FEO	Object	CL	MAG	R.A.	DEC	D C	Image A	FES	MD	Obs.date	Exptim	nummsst	ECC	Comment
SONW HD	92207	32	5.5	1035323	-582823	L 1	21843 L	14763	FO	91112509	091800	000120	502 G	G=231,B=40
SONW HD	92207	32	5.5	1035323	-582823	L 1	21843 S	14387	FO	91112509	093200	000500	X02 G	G=4X,B=40
GNPB HD	92449	45	4.28	1037187	-552033	L 3	41856 L	386	FU	91061720	200200	004500	330 G	B=56,G=80,B=18
USSES HD	92964	20	5.4	1040440	-585700	H 1	20843 L	15877	FO	91071918	182300	000630	X03 G	G=1.5X,B=42
USSES HD	93027	12	9.0	1041183	-595240	H 3	42025 L	1042	FO	91070816	164400	004400	402 G	G=1.65,B=35
USSES HD	93027	12	9.0	1041183	-595240	H 1	20772 L	1038	FO	91070817	173900	002600	402 G	G=1.65,B=40
ENNM TR16-17	20	11.0	1042326	-592526	L 1	20839 L		186	FO	91071815	153400	001800	X04 G	G=1.5X,B=55
ENNM TR16-17	20	11.0	1042326	-592526	L 3	42092 L		181	FO	91071816	162000	002800	500 G	G=1.75,B=20
ECME HD	93203	53	7.5	1042330	-571808	L 1	20304 L	3600	FO	91050320	200700	001700	X04 G	G=1.5X,B=60
ENNM TR16-21	20	10.9	1042380	-593204	L 1	20817 L		154	FO	91071516	164800	003000	X03 G	G=1.5X,B=43
ENNM TR16-21	20	10.9	1042380	-593204	L 3	42080 L		157	FO	91071517	175600	004800	501 G	G=230,B=22
ENNM TR16-20	20	10.2	1042397	-593303	L 3	42078 L		300	FO	91071515	150600	000300	300 G	G=1.05,B=20
ENNM TR16-20	20	10.2	1042397	-593303	L 1	20816 L		292	FO	91071515	154300	000900	503 G	G=201,B=45
ENNM TR16-20	20	10.2	1042397	-593303	L 3	42079 L		291	FO	91071516	161000	000600	500 G	G=1.87,B=18
ENNM TR16-15	20	11.3	1042451	-592404	L 1	20840 L		132	FO	91071817	171200	003600	X02 G	G=1.5X,B=38
ENNM TR16-15	20	11.3	1042451	-592404	L 3	42093 L		130	FO	91071817	175900	003300	500 G	G=213,B=18
ENNM TR16-22	12	11.0	1043060	-593056	L 3	42076 L		170	FO	91071511	114300	003500	500 G	G=220,B=20
ENNM TR16-22	12	11.0	1043060	-593056	L 1	20815 L		168	FO	91071512	122600	003600	X07 G	G=1.5X,B=85
LEMD EIA_CAR	61	7.0	1043068	-592515	L 3	41707 S		14763	FO	91052716	163000	000300	XX1 G	B=1.5X,G=2.5X,B=22
LEMD EIA_CAR	61	7.0	1043069	-592516	L 1	20402 L		14696	FO	91051920	203700	000010	X01 G	G=2X,B=30
LEMD EIA_CAR	61	7.0	1043069	-592516	L 1	20402 S		14761	FO	91051920	204200	000015	X01 G	G=1.5X,B=30
LEMD EIA_CAR	61	7.0	1043069	-592516	L 3	41664 S		14785	FO	91051920	204700	000100	350 G	B=181,G=70,B=20
LEMD EIA_CAR	61	7.0	1043069	-592516	L 3	41664 L		14796	FO	91051920	205300	000030	340 G	B=167,G=70,B=20
LEMD EIA_CAR	61	7.0	1043069	-592516	H 1	20403 S		14854	FO	91051921	213000	002500	XX3 G	B=2.5X,G=2.5X,B=42
LEMD EIA_CAR	61	7.0	1043069	-592516	H 3	41665 L		14897	FO	91051922	220900	004000	5X2 G	B=2X,G=190,B=35
LEMD EIA_CAR	61	7.0	1043069	-592516	H 1	20407 S		14275	FO	91052018	185700	000800	352 G	B=229,G=130,B=40
LEMD EIA_CAR	61	7.0	1043069	-592516	H 3	41670 S		14386	FO	91052019	193500	003000	351 G	B=216,G=90,B=25
LEMD EIA_CAR	61	7.0	1043069	-592516	L 1	20408 S		14424	FO	91052020	201400	000045	X02 G	G=4.5X,B=32
LEMD EIA_CAR	61	7.0	1043069	-592516	L 1	20408 L		14488	FO	91052020	201900	000005	5X2 G	B=1.5X,G=200,B=32
LEMD EIA_CAR	61	7.0	1043069	-592516	L 3	41707 L		14765	FO	91052716	162200	000300	401 G	G=1.55,B=22
LEMD EIA_CAR	61	7.0	1043069	-592516	L 3	41708 L		14952	FO	91052717	171200	000200	X01 G	G=3X,B=25
ENNM HD	93343	65	9.7	1043079	-593003	L 3	42077 L	538	FO	91071513	132400	000900	X03 G	G=4X,B=50
ENNM TR16-24	20	11.6	1043079	-592858	L 1	20837 L		102	FO	91071812	120600	002400	504 G	G=221,B=55
ENNM TR16-24	20	11.6	1043079	-592858	L 3	42090 L		431	SO	91071812	124600	001800	401 G	G=1.53,B=30
ENNM TR16-23	12	10.0	1043079	-593003	L 1	20838 L		322	FO	91071813	133900	001000	X06 G	G=1.5X,B=75
ENNM TR16-23	12	10.0	1043079	-593003	L 3	42091 L		326	FO	91071814	142500	001800	405 G	G=201,B=70
USSES HD	303308	12	8.1	1043090	-592400	H 1	20771 L	1719	FO	91070815	154200	004000	503 G	G=230,B=50
PHCAL HD	93521	12	7.04	1045336	+375004	L 1	20281 L	4976	FO	91050117	173400	000003	502 G	G=1.85,B=32
PHCAL HD	93521	12	7.04	1045336	+375004	L 3	41541 L	4977	FO	91050117	174000	000003	500 G	G=1.80,B=15
PHCAL HD	93521	12	7.04	1045336	+375004	H 3	41542 L	5162	FO	91050118	185400	000430	403 G	G=1.70,B=45
PHCAL HD	93521	12	7.0	1045336	+375004	L 3	41770 L	4967	FO	91060414	145800	000003	500 G	G=1.70,B=18
PHCAL HD	93521	12	7.04	1045336	+375004	L 1	20519 L	4988	FO	91060415	150400	000003	501 G	G=1.90,B=30
PHCAL HD	93521	12	7.0	1045336	+375004	L 2	18572 L	5215	FO	91060519	193100	000004	401 G	G=1.40,B=22
PHCAL HD	93521	12	7.0	1045336	+375005	L 1	21554 L	5018	FO	91102808	082500	000011	402 G	G=1.80,B=35
PHCAL HD	93521	12	7.0	1045336	+375004	L 3	42926 L	4973	FO	91102808	083900	000012	500 G	G=1.78,B=18
PHCAL HD	93521	12	7.0	1045336	+375004	L 2	18601 L	5056	FO	91102908	083100	000016	401 G	G=1.74,B=25
PHCAL HD	93521	12	7.0	1045336	+375004	L 2	18602 L	5182	FO	91102909	091400	000005	501 G	G=2.00,B=25
CCNB HD	94028	41	8.2	1048478	+203257	L 1	20607 L	1414	FO	91061519	195400	000300	X03 G	G=1.5X,B=42
CCNB HD	94028	41	8.2	1048478	+203257	L 1	20607 S	1418	FO	91061520	200400	000400	502 G	G=2.10,B=40
CCNB HD	94028	41	8.2	1048478	+203257	L 1	20608 L	1402	FO	91061520	204700	000200	502 G	G=2.10,B=35



FRO	Object	CL	MAG	R.A.	DEC	D C Image A	FES	MD	Obs.date	Exptim	mmmsstt	ECC	Comment
AENP HD	94509	30	9.1	1051250	-580925	L 3 41841 L	702	FO	91061410	100800	003000	X00	G C=2.5X,B=20
AENP HD	94509	32	9.1	1051250	-580925	H 1 20596 L	695	FO	91061410	104300	013000	404	G C=160,B=58
LEMD HE3 519	23	11.0	1051598	-601044	L 1 20401 L	146	FO	91051915	153300	008000	503	G C=209,B=45	
LEMD HE3 519	23	11.0	1051598	-601044	L 3 41663 L	145	FO	91051916	165700	018000	302	G C=80,B=40	
LEMD HE3 519	23	11.0	1051598	-601044	L 3 41669 L	140	FO	91052016	163600	012000	341	G E=150,G=60,B=27	
LEMD HE3 519	23	11.0	1051598	-601044	L 3 41671 L	142	FO	91052021	210400	010500	301	G C=55,B=25	
LEMD HE3 519	27	11.0	1051598	-601044	L 3 41709 L	151	FO	91052720	202100	015000	331	G E=69,G=70,B=28	
USSES HD	95418	30	2.4	1058507	+563904	H 3 43252 L	2413	FU	91112906	064200	000109	502	G C=200,B=35
USSES HD	95418	30	2.4	1058507	+563904	H 3 43253 L	2418	FU	91112907	071100	000400	X05	G C=3X,B=65
ML16 QU CAR	54	11.40	1103488	-682145	L 3 41793 L	00114	FO	91060804	040709	001000	500	V HEAD	
ML16 QU CAR	54	11.40	1103488	-682145	L 1 20543 L	00114	FO	91060804	044145	001000	700	V HEAD	
ML15 QU CAR	54	11.59	1103488	-682145	L 3 41950 L	00383	SO	91062901	011115	001200	500	V	
ML15 QU CAR	54	11.60	1103488	-682145	L 1 20709 L	00380	SO	91062901	013137	000700	401	V	
ML15 QU CAR	54	11.61	1103488	-682145	L 3 41951 L	00377	SO	91062902	021237	002400	500	V 2 SPECTRA	
ML15 QU CAR	54	11.64	1103488	-682145	L 3 41952 L	00368	SO	91062903	031738	002400	500	V 2 SPECTRA	
ML15 QU CAR	54	11.63	1103488	-682145	L 3 41953 L	00370	SO	91062904	041533	002600	500	V 2 SPECTRA	
ML16 QU CAR	54	11.67	1103489	-682146	L 3 41806 L	00359	SO	91060922	221817	001000	500	V HEAD	
ML16 QU CAR	54	11.60	1103489	-682146	L 1 20558 L	00382	SO	91060922	225723	000600	501	V	
ML16 QU CAR	54	11.56	1103489	-682146	L 3 41925 L	00394	SO	91062622	222255	001000	500	V	
ML16 QU CAR	54	99.99	1103489	-682146	L 1 20699 L	00000		91062622	223727	000600	401	V	
ML16 QU CAR	54	11.61	1103489	-682146	L 3 41926 L	00377	SO	91062623	230929	002400	500	V TWO SPECTRA	
ML16 QU CAR	54	11.59	1103489	-682146	L 3 41927 L	00384	SO	91062700	001048	002400	540	V 2 SPECTRA	
ML16 QU CAR	54	11.59	1103489	-682146	L 3 41928 L	00385	SO	91062701	012544	002400	540	V 2 SPECTRA	
ML16 QU CAR	54	11.66	1103489	-682146	L 3 41929 L	00363	SO	91062702	024327	002400	540	V 2 SPECTRA	
ML16 QU CAR	54	11.66	1103489	-682146	L 3 41930 L	00361	SO	91062703	035829	001200	540	V HEAD	
ML16 QU CAR	54	99.99	1103489	-682146	L 1 20700 L	00000		91062704	043018	000700	501	V HEAD	
MM167 HD96675	22	07.95	1104279	-755136	L 3 41716 L	02470	FO	91052823	234229	000200	500	V	
MM167 HD96675	22	07.95	1104279	-755136	L 1 20464 L	02464	FO	91052823	234839	000100	500	V	
MM167 HD96675	22	07.92	1104279	-755136	L 1 20465 L	02532	FO	91052901	010453	000230	601	V	
MM167 HD96675	22	07.94	1104279	-755136	H 3 41717 L	02486	FO	91052900	001956	024000	601	V TWO SEGMENTS	
MC030 HD96918	45	04.28	1106268	-584214	L 3 42131 L	00564	FU	91072701	013537	006000	300	V	
MI037 SS29	57	15.00	1106273	-653102	L 3 41702 L	00000	EO	91052700	003100	015200	201	V EXPOSURE TIME UNCERT	
NA101 HD97048	34	08.75	1106396	-772301	H 1 21212 L	01209	FO	91091019	193457	019300	502	V	
NQ149 Q1107+4847	85	16.00	1107481	+484732	L 3 41845 L	00000	EO	91061522	223643	037000	005	V NO SPECTRUM	
NQ149 SKY	07	99.99	1107482	+484732	L 1 20577 L	00000		91061123	235010	001000	002	V TARGET IN SWIA	
NQ149 SKY	07	99.99	1107482	+484732	L 1 20578 L	00000		91061201	015421	003000	002	V TARGET IN SWIA	
NQ149 SKY	07	99.99	1107482	+484732	L 1 20579 L	00000		91061203	030612	004000	002	V TARGET IN SWIA	
NQ149 Q1107+48	85	16.00	1107482	+484732	L 3 41823 L	00000	EO	91061122	225711	032000	106	V NO SPECTRUM	
GNUC HD	97175	23	8.9	1107528	-700549	L 3 42358 L	922	FO	91083009	094400	000233	500	G C=190,B=18
GNUC HD	97175	23	8.9	1107529	-700549	L 1 21117 L	920	FO	91083010	101800	000524	502	G C=220,B=35
GNUC HD	97175	23	8.9	1107529	-700549	L 1 21117 L	920	FO	91083010	101800	000524	X02	G C=3X,B=35
NQ148 FGL116+215	85	14.60	1116301	+213543	L 1 20619 L	00000	EO	91061703	032029	009000	404	V	
NQ148 FG 1116+21	85	14.60	1116302	+213543	L 3 41744 L	00000	EO	91060201	011510	007500	340	V	
SACW HD	98664	22	4.1	1118335	+061813	L 1 20548 L	543	FU	91060820	203000	000007	502	G C=220,B=38
SACW HD	98664	22	4.1	1118335	+061813	L 1 20548 S	542	FU	91060820	204000	000010	502	G C=220,B=35
AENP HD	98922	25	6.70	1120120	-530543	H 1 20655 L	5622	FO	91062113	133800	002500	453	G E=222,G=190,B=45
BNCG HD	99022	60	5.79	1120509	-563017	H 1 20723 L	12339	FO	91063019	190900	001500	502	G C=232,B=40
BNCG HD	99022	60	5.79	1120509	-563017	H 1 20724 L	12412	FO	91063020	201100	003000	G	
BNCG HD	99022	60	5.7	1120510	-563018	H 1 20698 L	12636	FO	91062619	195600	002000	X03	G C=1.5X,B=47
BNCG HD	99022	60	5.7	1120510	-563018	H 3 41924 L	13106	FO	91062620	202600	002500	402	G C=175,B=32

IFO	Object	CL	MAG	R.A.	DEC	D C	Image A	FES	MD	Obs.date	Exptim	numres	stt	ECC	Comment
HENG HD	99022	60	5.79	1120510	-563018	H 3	41968 L	12448	FO	91063019	193400	003000		502 G	G=222,B=40
HENG HD	99022	60	5.8	1120510	-563018	H 3	42016 L	12204	FO	91070617	174700	003000		502 G	G=210,B=35
HENG HD	99022	60	5.8	1120510	-563018	H 1	20759 L	12271	FO	91070618	182400	001500		502 G	G=220,B=40
HENG HD	99022	60	5.79	1120510	-563018	H 1	20770 L	13062	FO	91070814	143900	001400		503 G	G=220,B=45
HENG HD	99022	60	5.8	1120510	-563018	H 1	20833 L	12798	FO	91071717	172300	001500		503 G	G=238,B=42
HENG HD	99022	60	5.8	1120510	-563018	H 3	42087 L	12976	FO	91071717	175500	003000		502 G	G=218,B=40
HENG HD	99022	60	5.8	1120510	-563018	H 1	20834 L	12563	FO	91071718	182900	002100		X03 G	G=1.5X,B=46
HENG HD	99022	60	5.8	1120570	-563018	H 1	20758 L	12512	FO	91070617	171100	003000		X03 G	G=2X,B=50
NM095 HD99211		31	04.35	1122228	-172433	H 1	20792 L	00527	FU	91071200	000557	000500		500 V	
NM095 HD99211		31	04.34	1122228	-172433	H 3	42046 L	00534	FU	91071200	001833	001230		400 V	
MIT00 N MJS91		55	15.00	1124185	-682402	L 1	20277 L	00000	EO	91050105	051039	002000		110 V	
MIT00 N MJS91		55	15.00	1124185	-682402	L 3	41532 L	00000	EO	91050105	053930	007000		110 V	HEAD
NIZ05 NVA MJS91		55	17.00	1124185	-682402	L 3	42126 L	00000	EO	91072520	200014	040700		111 V	
MC099 GL431		48	11.53	1129230	-404618	L 1	20368 L	00405	SO	91051404	044103	007000		351 V	
MC099 GL431		48	11.63	1129230	-404618	L 3	41623 L	00093	FO	91051405	055642	005000		110 V	
NI014 SY MJS		57	10.67	1129550	-650836	L 3	42056 L	00218	FO	91071300	001036	001000		240 V	
NI014 SY MJS		57	10.67	1129550	-650836	L 1	20797 L	00218	FO	91071300	002336	001000		101 V	
NI014 SY MJS		57	10.64	1129550	-650836	L 3	42057 L	00224	FO	91071300	005417	003000		360 V	
NI014 SY MJS		57	10.64	1129550	-650836	L 1	20798 L	00224	FO	91071301	013052	002500		451 V	
NI014 SY MJS		57	10.64	1129550	-650836	H 3	42058 L	00224	FO	91071302	020012	004700		130 V	
NI014 SY MJS		57	10.49	1129550	-650836	L 3	42171 L	00256	FO	91080420	201244	000800		151 V	
NI014 SY MJS		57	10.50	1129550	-650836	L 1	20950 L	00253	FO	91080420	202808	000800		343 V	
NI014 SY MJS		57	10.52	1129550	-650836	L 3	42172 L	00250	FO	91080421	210343	003000		363 V	
NI014 SY MJS		57	10.52	1129550	-650836	L 1	20951 L	00250	FO	91080421	214423	002500		563 V	
NI014 SY MJS		57	10.53	1129550	-650836	H 3	42173 L	00248	FO	91080422	221749	005000		142 V	
NCL17 SY MJS		57	10.39	1129550	-650836	L 3	42320 L	00280	FO	91082521	210801	001500		260 V	
NCL17 SY MJS		57	10.39	1129550	-650836	L 1	21081 L	00280	FO	91082521	213541	001500		461 V	
NCL17 SY MJS		57	10.42	1129550	-650836	L 3	42321 L	00274	FO	91082522	221118	007000		561 V	
NCL17 SY MJS		57	10.40	1129550	-650836	L 1	21082 L	00278	FO	91082523	233300	006000		661 V	
NCL17 SY MJS		57	10.25	1129550	-650836	L 3	42207 L	00319	FO	91081000	004135	002000		360 V	
NCL17 SY MJS		57	10.25	1129550	-650836	L 1	20982 L	00319	FO	91081001	010848	001500		350 V	
NCL17 SY MJS		57	10.24	1129550	-650836	L 3	42208 L	00322	FO	91081001	013803	003000		370 V	
AENP HD	100546	25	6.70	1131140	-695503	H 1	20656 L	6044	FO	91062114	144400	001500		404 G	G=180,B=55
CMPS FSV1132		54	15.5	1132150	-112853	L 1	20298 L		EO	91050307	075500	009000		333 G	E=94,G=89,B=48
CMPS FSV1132		54	15.5	1132150	-112853	L 3	41558 L		EO	91050309	093500	018000		324 G	E=70,G=90,B=59
CMPS FSV1132		54	15.5	1132150	-112853	L 1	20299 L		EO	91050312	124300	012700		335 G	E=130,G=98,B=68
CMPS FSV1132		54	16.0	1132150	-112853	L 1	20311 L		EO	91050508	082300	009000		333 G	E=79,G=82,B=42
CMPS FSV1132		54	16.0	1132150	-112853	L 3	41575 L		EO	91050510	100200	018000		332 G	E=87,G=68,B=35
CMPS FSV1132		54	16.0	1132150	-112853	L 1	20312 L		EO	91050513	131000	010000		333 G	E=91,G=78,B=50
GHUC HD	101008	65	9.1	1134365	-630715	L 1	21110 L	903	FO	91082914	140000	000630		02 G	B=32
GHUC UNKNOWN		65	9.14	1134365	-630715	L 3	42354 L	907	FO	91082914	140700	000312		00 G	B=18
GHUC HD	101008	65	9.1	1134365	-630715	L 1	21110 S	907	FO	91082914	141500	000100		02 G	B=32
FHCAL	NULL	99		1137092	+660425	L 1	21813 L			91112223	230800	000000		02 G	B=35
FHCAL	NULL	99		1137092	+660425	L 1	21815 L			91112300	000700	000000		02 G	B=35
FHCAL	NULL	99		1137092	+660425	L 1	21816 L			91112300	003300	000000		02 G	B=36
FHCAL	NULL	99		1137092	+660425	L 1	21818 L			91112301	012500	000000		02 G	B=36
AGMFG	3C 263	85	15.4	1137093	+660426	L 3	43186 L		EO	91112221	214300	030000		342 G	E=141,G=110,B=40
FHCAL	NULL	99		1137093	+660426	L 1	21814 L			91112223	233400	000000		02 G	B=35
FHCAL	NULL	99		1137093	+660426	L 1	21817 L			91112301	010000	000000		02 G	B=35
FHCAL	NULL	99		1137093	+660426	L 1	21819 L			91112301	015300	000000		02 G	B=36

FO	Object	CL	MAG	R.A.	DEC	D C	Image A	FES	MD	Obs.date	Exptim	nummsst	ICC	Comment
AENP HD	101412	25	9.2	1137220	-595349	L 1	20657 L	590	FO	91062115	154600	000600	503 G	G=225,B=45
MM167 HD102065		22	06.87	1141340	-801220	L 1	20459 L	06408	FO	91052802	021927	000312	600 V	
MM167 HD102065		22	06.84	1141340	-801220	L 3	41710 L	06575	FO	91052800	000516	000148	600 V	
MM167 HD102065		22	06.74	1141340	-801220	L 1	20457 L	07145	FO	91052800	001017	000034	601 V	
MM167 HD102065		22	06.86	1141340	-801220	L 1	20458 L	06433	FO	91052801	012238	000136	700 V	
MM167 HD102065		22	06.84	1141340	-801220	H 3	41711 L	06535	FO	91052800	004433	018000	601 V	
MM167 HD102065		22	06.86	1141340	-801220	L 3	41712 L	06472	FO	91052804	044555	000050	500 V	
MM167 HD103536		21	09.27	1152299	-804340	L 3	41721 L	00761	FO	91053002	024750	000820	500 V	
MM167 HD103536		21	09.28	1152299	-804340	L 1	20475 L	00754	FO	91053003	033006	000320	501 V	
MM167 HD103536		21	09.27	1152299	-804340	L 1	20476 L	00759	FO	91053004	040554	001300	701 V	
IGMPJ HD	103681	49	7.9	1153542	+580859	L 1	20355 L	3296	FO	91051019	195100	004500	332 G	E=102,C=75,B=40
IGMPJ HD	103681	49	7.9	1153542	+580859	L 1	20481 L	3706	FO	91053015	155500	004000	339 G	E=228,C=210,B=185
IGMPJ HD	103681	49	7.9	1153542	+580859	L 1	20649 L	5670	FO	91062017	170800	005000	335 G	E=122,C=88,B=63
MM167 HD103875		21	07.71	1154510	-801308	L 3	41719 L	03045	FO	91052906	063401	000500	500 V	
MM167 HD103875		21	07.69	1154510	-801308	L 1	20474 L	03100	FO	91053001	013442	000800	801 V	
MM167 HD103875		21	07.66	1154510	-801308	L 1	20472 L	03202	FO	91053000	000508	000110	401 V	
MM167 HD103875		21	07.67	1154510	-801308	L 1	20473 L	03160	FO	91053000	004053	000440	701 V	
HAMAB HD	104237	31	6.6	1157335	-775451	L 3	41588 L	6218	FO	91050620	200500	000900	X30 G	E=60,C=3X,B=20
HAMAB HD	104237	31	6.6	1157335	-775451	H 1	20324 L	6430	FO	91050620	203500	001200	353 G	E=216,C=120,B=50
HAMAB HD	104237	31	6.6	1157335	-775451	H 3	41589 L	6441	FO	91050707	075900	035000	X39 G	E=169,C=4X,B=115
HAMAB HD	104237	31	6.6	1157335	-775451	H 1	20325 L	6393	FO	91050713	135800	001200	342 G	E=171,C=120,B=35
HAMAB HD	104237	31	6.6	1157335	-775451	L 3	41590 L	6480	FO	91050714	143800	001500	X30 G	E=62,C=5X,B=18
HAMAB HD	104237	31	6.6	1157335	-775451	H 1	20574 L	6150	FO	91061117	171500	000900	347 G	E=193,C=125,B=85
HAMAB HD	104237	31	6.6	1157335	-775451	L 3	41821 L	6131	FO	91061117	174600	001000	X40 G	E=133,C=3X,B=18
HAMAB HD	104237	31	6.6	1157335	-775451	L 3	41822 L	6191	FO	91061120	202700	001500	X50 G	E=197,C=5X,B=18
NA175 FGL159-035		16	15.00	1159123	-032857	L 3	42026 L	00000	EO	91070820	200756	002000	500 V	
PHCAL FG	1159-035	17	14.8	1159123	-032857	L 1	20280 L	36	SO	91050114	140500	007600	X03 G	G=2X,B=45
NA175 FGL159-035		16	15.00	1159123	-032857	L 3	42027 L	00000	EO	91070821	211430	002000	500 V	
PHCAL FG	1159-035	17	14.8	1159123	-032857	L 3	41540 L	36	SO	91050115	153100	006000	X01 G	G=3X,B=30
NA175 FGL159-035		16	15.00	1159123	-032857	L 1	20773 L	00000	EO	91070820	203147	003700	500 V	
NA175 FGL159-035		16	15.00	1159123	-032857	L 1	20774 L	00000	EO	91070821	214843	004000	500 V	
NQ063 NEC 4051		84	13.50	1200364	+444900	L 1	20497 L	00000	EO	91060101	011604	007000	331 V	106 CTS S/O
NQ063 NEC 4051		84	13.50	1200364	+444900	L 3	41737 L	00000	EO	91060102	023051	022000	331 V	HEAD
NQ148 CQ COM		85	16.00	1202089	+281053	L 3	41889 L	00000	EO	91062021	215533	012000	330 V	
NQ148 CQ COM		85	16.00	1202089	+281053	L 1	20651 L	00000	EO	91062100	000151	006000	201 V	
MA011 HD104994		11	10.93	1202428	-614626	H 3	41778 L	00173	FO	91060521	215104	020000	351 V	
MA011 HD104994		11	10.91	1202428	-614626	H 1	20528 L	00177	FO	91060601	012410	019700	403 V	
EAJDW HD	105435	20	2.6	1205455	-502638	L 3	42040 L	2407	FU	91071018	183500	000001	X00 G	G=1.5X,B=18
ME169 BST10		82	14.80	1206519	+135114	L 3	41654 L	00000	EO	91051800	002542	038300	302 V	
ME169 BST 22		82	16.00	1207513	+132658	L 3	41673 L	00000	EO	91052200	001511	039200	212 V	
MQ046 NEC 4151		84	11.90	1208004	+394102	L 3	41742 L	00291	SO	91060121	215817	004000	460 V	
MQ046 NEC 4151		84	11.89	1208004	+394102	L 3	41743 L	00294	SO	91060123	230835	004000	460 V	
MQ046 NEC 4151		84	11.91	1208004	+394102	L 3	41745 L	00290	SO	91060203	032449	003000	450 V	
MQ046 NEC 4151		84	11.92	1208004	+394102	L 3	41746 L	00285	SO	91060204	042325	002400	350 V	
MQ046 N4151		84	10.25	1208004	+394101	L 1	20616 L	00319	FO	91061621	214526	002000	562 V	
MQ046 N4151		84	10.23	1208004	+394102	L 3	41850 L	00324	FO	91061622	222325	003000	350 V	
ME169 BST24		82	15.00	1208025	+120222	L 1	20396 L	00000	EO	91051900	002627	036000	112 V	SERENDIPITY EXPOSURE
ME169 BST24		82	15.00	1208025	+120222	L 3	41660 L	00000	EO	91051900	002320	038000	301 V	
MIL16 MJ CEN		54	13.13	1210169	-441135	L 3	41799 L	00097	SO	91060900	005454	006000	400 V	
MIL16 MJ CEN		54	13.12	1210169	-441135	L 3	41797 L	00098	SO	91060821	215421	003500	300 V	



FRO	Object	CL	MFG	R.A.	DEC	D C	Image A	FES	MD	Obs.date	Exp	tim	mm	res	stt	FCC	Comment
M116	MJ CEN	54	13.10	1210169	-441135	L 1	20549 L	00100	SD	91060822	223719	002500				301 V	
M116	MJ CEN	54	13.08	1210169	-441135	L 3	41798 L	00102	SD	91060823	231013	006000				400 V	
M116	MJ CEN	54	13.11	1210169	-441135	L 1	20550 L	00099	SD	91060900	002117	002500				301 V	
M116	MJ CEN	54	13.14	1210169	-441135	L 1	20551 L	00096	SD	91060902	020236	002500				301 V	
M116	MJ CEN	54	13.16	1210169	-441135	L 3	41800 L	00095	SD	91060902	023615	006000				400 V	
M116	MJ CEN	54	13.12	1210169	-441135	L 1	20552 L	00098	SD	91060903	034332	002500				301 V	
M116	MJ CEN	54	99.99	1210169	-441135	L 3	41801 L	00000		91060904	041348	003500				300 V	
M116	MJ CEN	54	11.68	1210169	-441135	L 3	41807 L	00089	FO	91061000	000648	006000				300 V	
M116	MJ CEN	54	99.99	1210169	-441135	L 3	41808 L	00000		91061001	014037	007000				401 V	
M116	MJ CEN	54	99.99	1210169	-441135	L 3	41809 L	00000		91061003	032202	008500				401 V	
M116	MJ CEN	54	99.99	1210169	-441135	L 1	20559 L	00000		91061001	011210	002500				301 V	
M116	MJ CEN	54	99.99	1210169	-441135	L 1	20560 L	00000		91061002	025345	002500				301 V	
M116	MJ CEN	54	13.30	1210179	-441041	L 3	41790 L	00000	EO	91060722	223208	003500				110 V	NO SPECTRUM
M116	MJ CEN	54	13.30	1210179	-441041	L 1	20541 L	00000	EO	91060723	231922	002500				110 V	NO SPECTRUM
M116	MJ CEN	54	13.30	1210179	-441041	L 3	41791 L	00000	EO	91060800	001848	003500				110 V	NO SPECTRUM
M116	MJ CEN	54	13.30	1210179	-441041	L 1	20542 L	00000	EO	91060801	011418	002500				110 V	NO SPECTRUM
M116	MJ CEN	54	13.30	1210179	-441041	L 3	41792 L	00000	EO	91060802	021931	003500				110 V	NO SPECTRUM
USSES	HD 106983	21	4.1	1215426	-634330	H 1	20983 L	694	FO	91081002	025300	000038				502 G	G=225,B=40
CCNB	ED +29 2280	33	6.7	1217199	+284431	L 1	20605 L	5736	FO	91061518	180600	000045				X02 G	G=1.5X,B=40
CCNB	ED +29 2280	33	6.7	1217199	+284431	L 1	20605 S	5686	FO	91061518	181100	000100				502 G	G=210,B=35
CANGS	1217-18	54	13	1217486	-181023	L 3	41842 L	76	SD	91061414	142500	003000				301 G	G=79,B=23
CANGS	1217-18	54	13	1217486	-181023	L 1	20597 L	78	SD	91061415	150500	002000				304 G	G=111,B=58
CANGS	1217-18	54	13	1217486	-181023	L 3	41843 L	80	SD	91061415	153800	007500				308 G	G=175,B=98
CCNB	ED +25 2495	33	7.4	1218558	+251628	L 1	20604 L	2890	FO	91061517	171000	000140				X03 G	G=1.5X,B=45
CCNB	ED +25 2495	33	7.4	1218558	+251628	L 1	20604 S	2906	FO	91061517	171600	000200				402 G	G=190,B=40
M155	SS VIR	51	08.23	1222460	+010428	L 1	20332 L	01932	FO	91050801	015820	006000				110 V	
N182	SS VIR	50	08.24	1222460	+010428	L 1	20652 L	01901	FO	91062102	022403	006000				111 V	NO SPECTRUM
ME014	IC3370	81	12.00	1224574	-390340	L 3	41969 L	00000	EO	91063021	212843	040000				102 V	NO SPECTRUM
MQ044	3C273	85	12.67	1226332	+021943	L 1	20617 L	00146	SD	91061623	235631	003000				503 V	
MQ044	3C273	85	12.69	1226332	+021943	L 3	41851 L	00144	SD	91061700	004917	003000				450 V	
MQ044	3C273	85	12.69	1226332	+021943	L 1	20618 L	00144	SD	91061701	012923	003000				503 V	
MQ044	3C273	85	12.67	1226332	+021943	L 3	41852 L	00146	SD	91061702	020557	003000				450 V	
MQ044	3C273	85	12.92	1226333	+021942	L 3	41582 L	00117	SD	91050604	040222	003000				350 V	
MQ044	3C273	85	12.90	1226333	+021942	L 1	20319 L	00119	SD	91050604	044008	003000				501 V	
MQ044	3C273	85	12.91	1226333	+021942	L 3	41583 L	00118	SD	91050605	052234	005500				561 V	
MQ044	3C273	85	99.99	1226333	+021942	L 1	20320 L	00000		91050606	062053	002700				501 V	
MQ044	3C 273	85	12.80	1226333	+021942	L 1	20371 L	00131	SD	91051423	235018	003000				500 V	
MQ044	3C 273	85	12.83	1226333	+021942	L 3	41629 L	00127	SD	91051500	003202	003000				450 V	
MQ044	3C 273	85	12.83	1226333	+021942	L 1	20372 L	00127	SD	91051501	011843	003000				500 V	
MQ044	3C 273	85	12.80	1226333	+021942	L 3	41630 L	00131	SD	91051501	015640	006000				560 V	
MQ044	3C273	85	12.65	1226333	+021942	L 3	41703 L	00149	SD	91052704	040240	003000				350 V	
MQ044	3C273	85	12.61	1226333	+021942	L 1	20454 L	00155	SD	91052704	044052	003000				500 V	
MQ044	3C273	85	99.99	1226333	+021942	L 3	41704 L	00000		91052705	051452	005500				460 V	
MQ044	3C273	85	99.99	1226333	+021942	L 1	20455 L	00000		91052706	061924	002800				500 V	
EXNDW	HD 108769	23	8.7	1227240	-341322	L 3	42036 L	837	FO	91071014	141000	000035				400 G	G=153,B=18
EXNDW	HD 108769	23	8.7	1227240	-341322	L 1	20781 L	823	FO	91071014	141500	000035				502 G	G=208,B=38
EXNDW	HD 108769	23	8.7	1227240	-341332	L 3	42037 L	843	FO	91071015	151000	000130				X00 G	G=1.5X,B=18
EXNDW	HD 108769	23	8.7	1227240	-341322	L 1	20782 L	817	FO	91071015	151600	000230				X03 G	G=3X,B=50
M1167	HD108927	22	08.02	1229041	-775504	L 3	41713 L	02327	FO	91052805	053542	000240				600 V	
M1167	HD108927	22	08.01	1229041	-775504	L 1	20460 L	02348	FO	91052806	062633	000100				600 V	

FRO	Object	CL	MAG	R.A.	DEC	D	C	Image A	FES	MD	Obs.date	Exptim	numms	stt	ECC	Comment
MM167	HD108927	22	08.00	1229041	-775504	L	3	41718 L	02357	FO	91052905	051131	000120		500 V	
MM167	HD108927	22	08.00	1229041	-775504	L	1	20466 L	02362	FO	91052905	051725	000040		500 V	
MM167	HD108927	22	08.00	1229041	-775504	L	1	20467 L	02371	FO	91052906	061915	000200		601 V	
SNMK	SN 1991T	56	13	1231369	+025628	L	1	20587 L		BO	91061305	055000	018000		305 G	G=90,B=65
SNMK	SN 1991T	56	14	1231369	+025628	L	1	20646 L		BO	91062006	062400	038500		309 G	G=152,B=110
FNSH	IC3568	70	11.6	1231466	+825022	L	3	41849 L	127	FO	91061820	200500	001500		550 G	F=182,G=200,B=18
MM167	HD110336	22	99.99	1239385	-770439	L	1	20478 L	00000		91053006	062524	002000		701 V	HEAD
MM167	HD110336	22	99.99	1239385	-770439	L	3	41723 L	00000		91053005	054842	002000		500 V	
MM167	HD 110336	22	08.97	1239385	-770439	L	3	41722 L	00997	FO	91053004	043905	001200		400 V	
MM167	HD110336	22	08.95	1239385	-770439	L	1	20477 L	01012	FO	91053005	053844	000500		500 V	
COND	HD 111980	41	8.4	1250353	-181423	L	1	20602 L	1167	FO	91061515	150500	000412		X05 G	G=1.5X,B=70
COND	HD 111980	41	8.4	1250353	-181423	L	1	20602 S	1178	FO	91061515	151300	000400		404 G	G=170,B=60
CD96Y	3C 279	85	14.5	1253359	-053108	L	1	20890 L	134	SO	91072704	040500	006000		303 G	G=95,B=41
CD96Y	3C 279	85	14.5	1253359	-053108	L	3	42132 L	134	SO	91072705	051800	024000		302 G	G=91,B=35
CD96Y	3C 279	85	14.5	1253359	-053108	L	1	20891 L	131	SO	91072709	092900	009000		305 G	G=145,B=70
NI090	SKY	07	99.99	1258116	+183828	L	1	20585 L	00000		91061222	221046	003000		002 V	SERENDIPITY
COND	HD 113083	44	8.1	1258453	-270612	L	1	20601 L	1602	FO	91061513	134400	000800		X07 G	G=2X,B=90
COND	HD 113083	44	8.1	1258453	-270612	L	1	20601 S	1587	FO	91061514	140300	000800		X07 G	G=2X,B=90
COND	HD 113083	44	8.0	1258453	-270612	L	1	20603 L	1545	FO	91061516	161000	000400		X03 G	G=1.5X,B=50
COND	HD 113083	44	8.0	1258453	-270612	L	1	20606 L	1555	FO	91061518	185700	000200		502 G	G=190,B=35
IGNID	HD 113378	22	9.4	1259597	+680143	L	3	41933 L	1153	FO	91062712	124100	000600		300 G	G=40,B=18
NI090	GP COM	54	16.00	1303147	+181709	L	1	20586 L	00000	BO	91061300	002025	024000		303 V	
ME014	SKY	07	99.99	1312434	-160747	L	1	20715 L	00000		91062922	221833	030000		002 V	SERENDIPITY
ME014	NGC5044	81	12.00	1312434	-160747	L	3	41960 L	00000	BO	91062922	221643	039000		101 V	NO SPECTRUM
IGRJ	HD 115898	49	7.5	1317171	+454722	L	1	20356 L	8700	FO	91051021	212500	008500		332 G	F=127,G=90,B=40
IGRJ	HD 115898	49	7.5	1317171	+454722	L	1	20482 L	5622	FO	91053021	210300	009000		343 G	F=158,G=67,B=42
IGRJ	HD 115898	49	7.5	1317171	+454722	L	1	20650 L	4765	FO	91062018	183800	009000		343 G	F=156,G=75,B=45
IGRJ	HD 115898	49	7.54	1317171	+454722	L	1	20860 L	2684	FO	91072117	172400	008300		233 G	F=83,G=60,B=42
USSBS	HD 116656	30	2.3	1321549	+551109	H	3	41888 L	7697	FU	91062020	204000	000115		502 G	G=218,B=38
CD89Y	NEC 5139	83		1323407	-471044	L	1	20352 L		BO	91051012	120900	013500		303 G	G=105,B=50
CD89Y	SERENDIP	83		1323420	-471035	L	1	20400 L		BO	91051913	131500	007500		303 G	G=75,B=42
CD89Y	NEC 5139	83		1323449	-471134	L	3	41609 L		BO	91051012	120700	016000		X01 G	G=2X,B=25
CD89Y	NEC 5139	83		1323449	-471134	L	3	41662 L		BO	91051913	134000	006800		401 G	G=170,B=22
CD89Y	SERENDIP	83		1323497	-471311	L	1	20399 L		BO	91051908	082200	018000		304 G	G=135,B=58
CD89Y	O CEN	83		1323526	-471409	L	3	41661 L		BO	91051907	075500	031000		503 G	G=240,B=45
FGNEB	SKY	07		1326074	+785411	L	1	21541 L			91102102	022100	006000		02 G	B=40
FGNEB	HD 117566	45	5.77	1326300	+785407	L	3	42773 L	12663	FO	91102021	214400	042000		X36 G	F=146,G=5X,B=60
FSMEG	HD 117555	45	8.1	1328247	+242924	H	1	20349 L	1540	FO	91050921	215000	006000		332 G	F=95,G=100,B=40
FSMEG	HD 117555	45	8.1	1328247	+242924	L	1	20358 L	1545	FO	91051122	224700	000200		332 G	F=134,G=75,B=35
SOMA	CERES	05	8.0	1329455	+015416	L	1	20468 L			91052908	081500	045000		X09 G	G=4X,B=155
SOMA	CERES	05	8.0	1329456	+015417	L	1	20469 L	2117	FO	91052916	165200	000600		404 G	G=190,B=60
SOMA	CERES	05	8.0	1329456	+015417	L	1	20470 L	2071	FO	91052917	173400	001000		X09 G	G=3X,B=150
FNSH	NEC 5189	70	14.1	1330016	-654319	L	3	41913 L		BO	91062419	195500	005500		00 G	B=18
SRNJ	HD 119090	49	6.05	1338532	-332042	L	1	20501 L	8420	FO	91060214	140200	004000		342 G	F=1.5X,G=128,B=40
GAND	ED +2 2711	20	10.4	1339460	+014525	L	3	41931 L	253	FO	91062705	054400	000242		400 G	G=168,B=18
GAND	ED +2 2711	20	10.4	1339460	+014525	H	3	41932 L	251	FO	91062706	062400	033500		X05 G	G=1.5X,B=65
ME038	NGC5266	81	12.30	1339563	-475506	L	1	20350 L	00000	BO	91051000	004044	035600		304 V	
MA011	WR58	11	12.70	1345244	-652659	L	3	41774 L	00143	SO	91060500	005311	006000		350 V	
MA011	WR58	11	12.77	1345244	-652659	L	1	20524 L	00134	SO	91060422	221515	015000		772 V	
MA011	WR58	11	12.70	1345244	-652659	L	1	20525 L	00143	SO	91060502	020200	005000		451 V	



PRO	Object	CL	MAG	R.A.	DEC	D C	Image A	FES	MD	Obs.date	Exptim	nummsst	ECC	Comment
PHCAL	EIA UMA	21	1.84	1345343	+493344	H 1	20292 L	4179	FU	91050220	205100	000005	503	G G=210,B=42
PHCAL	HD 120315	21	1.8	1345343	+493344	H 3	41771 L	4154	FU	91060416	161200	000006	401	G G=170,B=30
PHCAL	HD 120315	21	1.8	1345343	+493344	H 1	20520 L	4170	FU	91060416	161700	000005	502	G G=220,B=40
PHCAL	HD 120315	21	1.8	1345343	+493344	H 2	18571 L	4235	FU	91060518	181100	000008	502	G G=210,B=35
PHCAL	HD 120315	21	1.8	1345343	+493344	L 1	20556 L	4224	FU	91060917	175300	000000	502	G G=192,B=37
PHCAL	HD 120315	21	1.8	1345343	+493344	L 3	41803 L	4167	FU	91060918	180900	000000	500	G G=207,B=18
PHCAL	EIA UMA	21	1.84	1345343	+493344	L 3	41895 L	4185	FU	91062213	134300	000001		G G=2X
PHCAL	EIA UMA	21	1.84	1345343	+493344	L 3	41895 S	4185	FU	91062213	134300	000001	400	G G=150,B=18
PHCAL	EIA UMA	21	1.84	1345343	+493344	L 1	20662 L	4110	FU	91062213	135700	000000	X02	G G=2X,B=36
PHCAL	HD 120315	21	1.84	1345343	+493344	L 3	41916 S	4232	FU	91062517	174500	000000	300	G G=90,B=15
PHCAL	HD 120315	21	1.84	1345343	+493344	L 3	41916 L	4232	FU	91062517	174500	000000	500	G G=200,B=15
PHCAL	HD 120315	21	1.84	1345343	+493344	L 1	20689 L	4193	FU	91062518	180200	000000	502	G G=190,B=32
PHCAL	HD 120315	21	1.84	1345343	+493344	L 3	41917 S	4233	FU	91062519	191300	000001	X00	G G=1.5X,B=18
PHCAL	HD 120315	21	1.84	1345343	+493344	L 3	41917 L	4233	FU	91062519	191300	000001	X00	G G=5X,B=18
PHCAL	HD 120315	21	1.84	1345343	+493344	L 1	20690 L	4180	FU	91062519	192500	000001	X02	G G=5X,B=40
PHCAL	HD 120315	21	1.8	1345343	+493344	H 1	20731 L	4374	FU	91070214	142300	000005	502	G G=220,B=40
PHCAL	HD 120315	21	1.8	1345343	+493344	H 3	41976 L	4182	FU	91070214	142800	000006	401	G G=170,B=30
PHCAL	HD 120315	21	1.8	1345343	+493344	H 2	18579 L	4212	FU	91072613	132000	000008	501	G G=220,B=30
PHCAL	EIA UMA	21	1.84	1345345	+493344	H 3	41553 L	4194	FU	91050220	205600	000006	402	G G=170,B=35
AGNS	MRK 279	84	14.5	1351536	+693313	L 3	41970 L		HD	91070105	050800	015000	352	G E=236,G=132,B=35
AGNS	MRK 279	84	14.5	1351536	+693313	L 1	20725 L		HD	91070107	075000	007500	553	G E=230,G=193,B=41
AGNS	MRK 279	84	14.5	1351536	+693313	L 3	41971 L		HD	91070109	091600	015000	442	G E=1.5X,G=135,B=35
ENMB	SJW 2	70	12.0	1352159	-590759	L 3	41915 L	229	SO	91062510	105400	022500	309	G G=225,B=170
ENMB	SJW 2	70	12.0	1352159	-590759	L 1	20687 L	246	SO	91062514	144800	002500		G B=1.5X
ENDW	HD 121483	20	6.9	1353406	-460831	L 3	42038 L	5071	FO	91071016	162700	000012	X00	G G=1.5X,B=18
ENDW	HD 121483	20	6.9	1353406	-460831	L 1	20783 L	5076	FO	91071016	163100	000007	502	G G=228,B=32
ENDW	HD 121483	20	6.9	1353406	-460831	L 3	42039 L	5116	FO	91071017	172600	000009	500	G G=217,B=18
ENDW	HD 121483	20	6.9	1353406	-460831	L 1	20784 L	5020	FO	91071017	173100	000022	X02	G G=3X,B=35
MED48	NGC8929	88	15.10	1358485	+212845	E 9	02464 2	00000	BD	91051023	234000	004000		V SWP 41610
AGSL	UGC 8929	88	14.8	1358485	+212844	L 3	41610 L		BD	91051107	074500	041000	308	G G=120,B=95
NPO26	HD122408	30	04.46	1359059	+014709	H 3	41902 L	00478	FU	91062303	033743	005000	700	V
NPO26	HD122408	30	04.55	1359059	+014709	H 1	20673 L	00441	FU	91062304	043400	001200	700	V
NPO26	HD122408	30	04.36	1359059	+014708	H 3	42222 L	00524	FU	91081119	195445	001400	500	V
NPO26	HD122408	30	04.35	1359059	+014708	H 1	20993 L	00527	FU	91081120	201634	000500	501	V
AGMG	3C 263	85	15.4	13709.	+660426	L 1	21812 L		BD	91112219	195900	010000	334	G E=118,G=90,B=52
IRMEW	Q 1402+436	85	16.50	1402377	+434127	L 1	20600 L	00000	BD	91061422	225124	035600	362	V
USSES	HD 122980	20	4.4	1402590	-405627	H 3	42106 L	468	FU	91072015	150000	000055	502	G G=210,B=38
GNIC	HD 122831	23	9.6	1403000	-681949	L 1	21101 L	485	FO	91082812	123100	001212	X02	G G=3X,B=40
GNIC	HD 122831	23	9.6	1403000	-681949	L 1	21101 S	488	FO	91082812	124300	001212	502	G G=200,B=38
GNIC	HD 122831	23	9.6	1403000	-681949	L 3	42343 L	479	FO	91082813	131500	000600	400	G G=125,B=18
BNSA	HD 123299	32	3.65	1403020	+643654	L 3	42715 L	801	FU	91101408	083200	000011	500	G G=211,B=18
BNSA	HD 123299	32	3.65	1403020	+643654	L 1	21489 L	805	FU	91101408	084200	000500	502	G G=196,B=40
NQ149	PG1404+226	85	15.80	1404027	+223758	L 3	42041 L	00000	BD	91071020	200018	026700	331	V
NQ149	PG 1404+22	85	15.80	1404027	+223758	L 1	20785 L	00000	BD	91071100	003533	013300	301	V
GNID	HD 123884	25	9.4	1407485	-174520	H 3	41921 L	592	FO	91062605	054800	042700	408	G G=200,B=95
GNID	HD 123884	25	9.4	1407485	-174520	H 3	41944 L	614	FO	91062805	054100	043000	408	G G=204,B=98
SFNU	HD 124304	49	7.2	1410272	-133734	L 1	20502 L	6980	FO	91050215	153800	003500	333	G E=120,G=86,B=50
IGFU	HD 124304	49	7.2	1410272	-133734	L 1	20555 L	6444	FO	91060916	162100	003500	343	G E=155,G=102,B=47
IGFU	HD 124304	49	7.20	1410272	-133734	L 1	20859 L	5635	FO	91072115	155400	003500	333	G E=108,G=70,B=42
NPO0	HD125162	36	04.47	1414289	+461902	H 3	42081 L	00474	FU	91071602	024220	001000	500	V

FRO	Object	CL	MAG	R.A.	DEC	D C	Image A	FES	MD	Obs.date	Exptim	mmmsstt	ECC	Comment
AGMC NEC	5548	84	13.5	1415435	+252201	L 3	41897 L	100	SO	91062217	174400	006000	351	G E=187,C=72,B=30
AGMC NEC	5548	84	13.5	1415435	+252201	L 1	20665 L	96	SO	91062218	185000	004500	442	G E=189,C=180,B=40
AGMC NEC	5548	84	13.5	1415435	+252201	L 3	41898 L	92	SO	91062219	194000	006000	351	G E=190,C=70,B=25
IRNEW Q801419+48	85	15.00	1419386	+480105	L 1	20818	L	00000	EO	91071520	205408	033000	452	V
NC002 GL 553	48	09.67	1428120	-082518	L 1	20919	L	00534	FO	91073121	215708	003500	231	V
SONMA IOPUS	05	17.0	1430231	-532028	L 1	21370	L		EO	91093000	002800	039000	306	G G=120,B=80
SONMA IOPUS	05	17.0	1430231	-532028	D 9	02494	2			91093002	022100	004000		G
SONMA IOPUS	05	17.0	1430231	-532028	D 9	02495	2			91093003	033300	004000		G
NC002 UNKNOW	65	11.31	1431350	-121836	L 1	20909	L	00123	FO	91072923	234845	007000	201	V WRONG TARGET; HEAD
RCNEW V854 CEN	52	10.3	1431414	-392012	L 1	21126	L	302	FO	91083109	094900	018000	335	G E=138,C=130,B=70
RCNEW V854 CEN	52	13.2	1431415	-392013	L 1	20527	L		EO	91060506	065500	036000	3X9	G E=1.5X,C=165,B=130
RCNEW V854 CEN	52	14.0	1431415	-392013	L 3	41954	L		EO	91062906	061100	024000	36	G E=108,B=72
RCNEW V854 CEN	52	14.0	1431415	-392013	L 1	20710	L		EO	91062910	102200	015000	X9	G E=1.5X,B=107
RCNEW V854 CEN	52	13.8	1431415	-392013	L 1	20899	L	77	SO	91072812	122700	006000	37	G E=133,B=90
RCNEW V854 CEN	52	13.8	1431415	-392013	L 3	42136	L		EO	91072814	140900	006500	32	G E=59,B=35
RCNEW V854 CEN	52	13.8	1431415	-392013	L 1	20900	L	84	SO	91072815	152000	021000	444	G E=187,C=175,B=58
RCNEW V854 CEN	52	10.3	1431415	-392013	L 3	42366	L	285	FO	91083113	132200	020500	232	G E=73,C=50,B=35
MI074 V842 CEN	55	14.00	1432135	-572431	L 1	20405	L	00000	EO	91052002	023141	002000	220	V
MI074 V842 CEN	55	14.00	1432135	-572431	L 3	41667	L	00000	EO	91052002	025731	023000	331	V
MAL18 V842CEN	55	15.00	1432137	-572432	E 9	02478	2	00000		91072419	193700	016000		V SWP42122
GNSS V842 CEN	55	14	1432137	-572432	L 3	42122	L		EO	91072420	200300	079000	337	G E=177,C=145,B=90
GNSS SKY HEAD	07		1432156	-572328	L 1	20881	L			91072503	033600	006000	02	G B=40
CSMTA HD	128621	46	1.3	1435500	-603728	L 3	42233 L			91081215	152100	002000	450	G E=184,C=137,B=18
CSMTA HD	128620	44	0.1	1435515	-603712	L 3	42232 L			91081214	143000	001300	XX0	G E=2X,C=5X,B=18
SMEG HD	129333	44	7.53	1437563	+643025	H 1	20330 L	2484	FO	91050720	202900	009000	343	G E=151,C=120,B=50
SMEG HD	129333	44	7.5	1437563	+643025	H 1	20348 L	2494	FO	91050919	193700	009000	443	G E=169,C=150,B=50
SMEG HD	129333	44	7.53	1437563	+643025	L 3	41611 L	2629	FO	91051115	155100	028000	434	G E=118,C=160,B=60
SMEG HD	129333	44	7.53	1437563	+643025	H 1	20357 L	2613	FO	91051117	175600	008000	337	G E=173,C=160,B=90
SJNEG HD	129333	44	7.5	1437563	+643025	L 3	41890 L	2459	FO	91062105	053600	030000	333	G E=143,C=140,B=50
SJNEG HD	129333	44	7.5	1437563	+643025	H 1	20654 L	2408	FO	91062110	104300	008000	342	G E=150,C=130,B=40
NA202 HD128898	40	03.45	1438277	-644526	H 3	42502	L	01174	FU	91091816	161328	001300	700	V
NA202 HD 128898	40	03.45	1438277	-644526	E 1	21276	L	01180	FU	91091816	164409	000400	700	V
NA202 HD128898	40	03.46	1438277	-644526	E 3	42503	L	01172	FU	91091818	180054	001000	600	V
NA202 HD 128898	40	03.44	1438278	-644527	E 3	42504	L	01189	FU	91091818	185007	001000	600	V
NA202 HD 128898	40	03.45	1438378	-644527	H 1	21277	L	01175	FU	91091818	181538	000200	600	V
MEO48 MN478	84	14.60	1440045	+353907	L 1	20441	L	00000	EO	91052503	032912	006000	301	V WRONG COORDINATES
MEO48 MN478	84	14.60	1440045	+353907	L 3	41693	L	00000	EO	91052504	043421	007500	350	V
MEO48 MN478	84	14.60	1440045	+353907	L 1	20442	L	00000	EO	91052505	055402	005500	300	V
MEO48 MN478	84	14.60	1440054	+353907	L 3	41692	L	00000	EO	91052501	012301	007500	110	V WRONG COORDINATES
MEO48 MN478	84	14.60	1440059	+353907	E 9	02467	2	00000	EO	91052423	233000	016000		V WRONG COORDINATES
MEO48 MN478	84	14.60	1440059	+353907	L 1	20440	L	00000	EO	91052423	234333	009000	110	V
USSES HD 129988	30	5.1	1442479	+271707	H 3	42111	L	2171	FU	91072114	143900	001500	X06	G G=2X,B=75
NC156 HD129926	46	05.24	1443060	-251355	L 1	20944	S	22141	FO	91080401	011852	000010	302	V
NC156 HD129926	46	05.24	1443060	-251355	L 1	20944	L	22141	FO	91080401	011312	000010	502	V
NC156 HD129926	46	05.24	1443060	-251355	L 3	42166	L	22137	FO	91080401	014104	002000	801	V
CD94Y V553 CEN	53	8.4	1443322	-315742	L 1	20848	L	1334	FO	91072011	115300	002000	X02	G G=1.5X,B=35
CD94Y V553 CEN	53	8.4	1443322	-315742	L 1	20849	L	1295	FO	91072012	125100	001000	503	G G=215,B=45
CD94Y V553 CEN	53	8.4	1443322	-315742	L 1	20883	L	937	FO	91072515	151500	001100	504	G G=208,B=52
CD94Y V553 CEN	53	8.4	1443322	-315742	L 3	42125	L	938	FO	91072517	170400	006000	301	G G=48,B=22
CD94Y V553 CEN	53	8.4	1443322	-315742	L 1	20885	L	938	FO	91072517	173900	001100	502	G G=217,B=34

FO	Object	CL	MAG	R.A.	DEC	D C	Image A	EES	MD	Obs.date	Exptim	mmmsst	ECC	Comment
CD94Y	V553 CEN	53	8.4	1443322	-315742	L 1	20886 L	956	FO	91072518	183600	001200	502 G	G=213,B=38
SRNJ	HD 132112	49	7.2	1455025	-121414	L 1	20554 L	7678	FO	91060914	140300	006000	333 G	B=143,G=80,B=45
ML12	HE2-113	70	11.80	1456147	-540614	L 3	42315 L	00320	SO	91082418	181455	018000	330 V	
ML12	HE2-113	70	11.78	1456147	-540614	L 1	21075 L	00323	SO	91082421	212243	009000	561 V	
SAMEG	HD 135262	44	8.2	1509570	+640342	L 1	20329 L	1180	FO	91050719	192600	000530	402 G	G=180,B=40
RSNR	SS EOO	46	10.3	1511390	+384511	L 1	20598 L	231	FO	91061417	174700	007500	X54 G	B=239,G=1.5X,B=60
RSNR	SS EOO	46	10.3	1511390	+384511	L 1	20599 L	229	FO	91061419	193600	006000	X52 G	B=193,G=1.5X,B=40
RSNR	SS EOO	46	10.3	1511390	+384514	L 1	20820 L	250	FO	91071613	130900	002000	309 G	G=221,B=155
RSNR	SS EOO	46	10.3	1511390	+384511	L 1	20821 L	246	FO	91071614	140200	002000	309 G	G=248,B=185
RSNR	SS EOO	46	10.3	1511390	+384511	L 1	20822 L	246	FO	91071614	145700	002000	309 G	G=254,B=186
RSNR	SS EOO	46	10.3	1511390	+384512	L 1	20823 L	239	FO	91071615	154900	003000	449 G	B=210,G=223,B=105
RSNR	SS EOO	46	10.3	1511390	+384512	L 1	20824 L	230	FO	91071616	165200	004000	543 G	B=157,G=205,B=41
RSNR	SS EOO	46	10.3	1511390	+384512	L 1	20825 L	231	FO	91071618	180500	004500	543 G	B=167,G=220,B=41
RSNR	SS EOO	46	10.3	1511390	+384512	L 1	20851 L	260	FO	91072015	154000	005500	X03 G	G=1.5X,B=45
RSNR	SS EOO	46	10.3	1511390	+384512	L 1	20852 L	233	FO	91072017	172200	005500	502 G	G=245,B=40
EWJW	HD 135485	21	8.1	1512584	-143030	L 3	42328 L	1718	FO	91082615	152500	000200	X00 G	G=2X,B=18
EWJW	HD 135485	21	8.1	1512584	-143030	L 1	21087 L	1713	FO	91082615	153200	000200	G	G=3X
PHCAL	FG 1516+020	37	15.6	1516008	+020545	L 3	41904 L		EO	91062406	060100	000900	200 G	G=30,B=18
PHCAL	FG 1516+020	37	15.6	1516008	+020545	L 3	41905 L		EO	91062406	065900	009000	441 G	B=151,G=140,B=30
PHCAL	FG 1516+020	37	15.6	1516008	+020545	L 3	41906 L		EO	91062408	085600	006730	340 G	B=141,G=110,B=18
PHCAL	FG 1516+020	37	15.6	1516008	+020545	L 3	41907 L		EO	91062410	103100	004500	340 G	B=130,G=80,B=18
PHCAL	FG 1516+020	37	15.6	1516008	+020545	L 3	41908 L		EO	91062411	114300	002230	330 G	B=108,G=50,B=18
PHCAL	HD 137389	36	5.9	1521410	+621328	H 3	42542 L	11252	FO	91092309	091400	002500	502 G	G=195,B=40
PHCAL	HD 137389	36	5.9	1521410	+621328	H 1	21318 L	11177	FO	91092309	094900	001300	503 G	G=215,B=50
NCO2	GL 588	48	09.46	1528580	-410536	L 1	20918 L	00643	FO	91073119	194611	006500	351 V	
PNSH	HE2-131	70	10.3	1531540	-714459	L 3	41912 L	334	FO	91062418	182700	000600	500 G	G=220,B=18
PNSH	HE2-131	70	10.3	1531540	-714459	L 1	20684 L	333	FO	91062418	184300	000900	X02 G	G=2X,B=32
PENG	HD 139006	60	2.21	1532341	+265255	L 3	42168 L	2785	FU	91080413	134100	000005	X00 G	G=1.5X,B=18
PENG	HD 139006	60	2.21	1532341	+265255	L 1	20946 L	2810	FU	91080413	135300	000002	502 G	G=240,B=35
PENG	HD 139006	60	2.21	1532341	+265255	L 3	42169 L	2633	FU	91080414	145500	000002	500 G	G=170,B=18
WONB	1532+033	37	16.0	1532390	+032111	L 3	42202 S		EO	91080907	074700	019500	402 G	G=158,B=40
WONB	1532+033	37	15.9	1532391	+032111	L 3	42201 L		EO	91080905	054800	009000	501 G	G=205,B=22
MNSB	HD 141004	44	4.4	1544008	+073031	L 3	42022 L	349	FU	91070803	034400	042000	?32 G	B=127,G=15X,B=40
CONA	HD 141004	44	4.4	1544009	+073035	L 3	42220 L	428	FU	91081113	133100	012500	X02 G	G=2X,B=35
ROMEW	R CRB	52	5.8	1546307	+281832	L 1	20495 L	9998	FO	91053119	195000	001500	X02 G	G=2.3X,B=38
ROMEW	R CRB	52	5.8	1546307	+281832	L 1	20495 S	10160	FO	91053120	200200	000500	X02 G	G=1.5X,B=38
ROMEW	R CRB	52	6.3	1546307	+281832	L 3	41736 L	10178	FO	91053120	203500	006000	300 G	G=112,B=20
AEIMP	HD 141569	30	6.9	1547202	-034611	H 1	20658 L	4078	FO	91062117	172200	004000	403 G	G=180,B=48
IRNH	HD 141637	20	4.6	1547579	-253603	L 1	20988 L	414	FU	91081105	054900	000003	402 G	G=180,B=35
IRNH	HD 141637	20	4.6	1547579	-253603	L 3	42216 L	419	FU	91081106	060700	000005	500 G	G=200,B=20
PHCAL	HD +33 2642	20	10.8	1550019	+330528	L 1	20365 L	159	FO	91051320	201800	000310	502 G	G=240,B=32
PHCAL	HD +33 2642	20	10.8	1550019	+330528	L 3	41619 L	158	FO	91051320	202800	000400	500 G	G=195,B=18
PHCAL	HD +33 2642	20	10.8	1550019	+330528	L 3	41772 L	162	FO	91060417	173000	000400	500 G	G=190,B=18
PHCAL	HD +33 2642	20	10.8	1550019	+330528	L 1	20521 L	160	FO	91060417	173800	000310	501 G	G=230,B=30
PHCAL	HD +33 2642	20	10.8	1550019	+330528	L 2	18573 L	167	FO	91060520	202500	000420	401 G	G=170,B=25
PHCAL	HD +33 2642	20	10.8	1550019	+330528	L 1	20730 L	164	FO	91070218	184700	000310	502 G	G=230,B=35
PHCAL	HD +33 2642	20	10.8	1550019	+330528	L 3	42107 L	165		91072018	184000	000400	500 G	G=170,B=15
PHCAL	HD +33 2642	20	10.8	1550019	+330528	L 2	18581 L	161	FO	91072615	152800	000420	501 G	G=200,B=30
PHCAL	HD +33 2642	20	10.8	1550019	+330528	L 1	20979 L	255	FO	91080913	133200	000310	502 G	G=231,B=40
PHCAL	HD +33 2642	20	10.8	1550019	+330528	L 3	42204 L	250	FO	91080913	134200	000400	500 G	G=190,B=18



FRO	Object	CL	MAG	RA	DEC	D C	Image A	FRES	MD	Obs.date	Exptim	mmmsstt	ECC	Comment	
FHAL	ED	+33 2642	20	10.8 1550019	+330528	L 1	21211 L	215	FO	91091013	135800	000310	502	G C=234,B=32	
FHAL	ED	+33 2642	20	10.8 1550019	+330528	L 3	42437 L	214	FO	91091014	141100	000400	500	G C=188,B=18	
ENDW	HD	142096	20	5.0 1550258	-200103	L 3	42326 L	22125	FO	91082613	133300	000002	500	G C=210,B=18	
ENDW	HD	142096	20	5.0 1550258	-200103	L 1	21086 L	22350	FO	91082614	140500	000006	X02	G C=3X,B=35	
ENDW	HD	142096	20	5.0 1550258	-200103	L 3	42327 L	22242	FO	91082614	141000	000005	X00	G C=2.5X,B=18	
IRNH	HD	142165	22	5.4 1550543	-242309	L 1	20989 L	18390	FO	91081107	072500	000009	402	G C=185,B=35	
IRNH	HD	142165	22	5.4 1550543	-242309	L 3	42217 L	18715	FO	91081107	074200	000018	500	G C=200,B=18	
IRNH	HD	142883	21	5.8 1554448	-205022	L 1	20990 L	13075	FO	91081109	090400	000016	502	G C=235,B=35	
IRNH	HD	142883	21	5.8 1554448	-205022	L 3	42218 L	12790	FO	91081109	092100	000024	500	G C=220,B=18	
IRNH	HD	142990	21	5.4 1555346	-244120	L 1	20991 L	18075	FO	91081110	104700	000010	X02	G C=1.5X,B=35	
IRNH	HD	142990	21	5.4 1555346	-244120	L 3	42219 L	18084	FO	91081110	105300	000015	X00	G C=1.5X,B=18	
IRNH	HD	142990	20	5.4 1555346	-244120	L 3	42227 L	19067	FO	91081205	054000	000012	500	G C=200,B=18	
IRNH	HD	142990	20	5.4 1555346	-244120	L 1	20996 L	18354	FO	91081205	055800	000007	502	G C=230,B=35	
USSES	HD	143118	21	3.4 1556480	-381520	H 3	42117 L	1190	FU	91072318	184300	000018	402	G C=185,B=35	
DMNB	C1558+41		90	20.0 1558560	+413902	L 3	42112 L		EO	91072119	195600	082000	307	G C=120,B=85	
FHAL	NULL		99	1559077	+332712	L 1	20747 L			91070504	043100	000000		06	G B=8
MNSB	HD	143761	44	5.4 1559078	+332712	L 3	42001 L	15780	FO	91070503	033500	043000	X03	G B=5X,C=5X,B=50	
FHAL	NULL		99	1559078	+332712	L 1	20745 L			91070503	034800	000000		02	G B=36
FHAL	NULL		99	1559078	+332712	L 1	20746 L			91070504	041100	000000		00	G B=10
AENIS	HD	143474	33	4.6 1559270	-573811	L 3	42310 L	485	FU	91082302	020400	002000	300	G C=40X,B=18	
SRNE	HD	144205	49	5.7 1601080	+472236	L 1	20513 L	15701	FO	91060320	201400	003000	352	G B=212,C=70,B=35	
SRNE	HD	144205	49	5.93 1601080	+472236	L 1	20592 L	13724	FO	91061317	175200	003000	352	G B=195,C=69,B=38	
SRNE	HD	144205	49	5.7 1601080	+472236	L 1	20679 L	12578	FO	91062318	180100	003000	242	G B=185,C=55,B=38	
SRNE	HD	144205	49	5.7 1601080	+472236	L 1	20742 L	12719	FO	91070417	171600	003000	242	G B=172,C=55,B=35	
SRNE	HD	144205	49	5.7 1601080	+472236	L 1	20873 L	15078	FO	91072316	163000	003000	242	G B=150,C=50,B=35	
SRNE	HD	144205	49	5.7 1601080	+472236	L 1	20949 L	17214	FO	91080418	182400	002400	232	G B=128,C=50,B=35	
SRNE	HD	144205	49	5.7 1601080	+472236	L 1	21016 L	16323	FO	91081417	173600	003000	352	G B=250,C=70,B=38	
SRNE	HD	144205	49	5.7 1601080	+472236	L 1	21070 L	16349	FO	91082412	123500	002000	348	G B=217,C=120,B=94	
SRNE	HD	144205	49	5.7 1601080	+472236	L 1	21167 L	16692	FO	91090513	134700	003000	352	G B=216,C=65,B=38	
BOHE	U TRA		53	8.2 1602500	-624645	L 1	20300 L	1386	FO	91050315	154300	000500	302	G C=130,B=35	
BOHE	U TRA		53	8.2 1602500	-624645	L 3	41559 L	1379	FO	91050315	155300	004500	201	G C=40,B=30	
BOHE	U TRA		53	8.2 1602500	-624645	L 1	20301 L	1367	FO	91050316	164400	000800	502	G C=192,B=40	
FHAL	HD	144579	44	6.7 1603112	+391728	L 1	20879 L	5772	FO	91072414	145400	000100	302	G C=130,B=38	
IRNH	HD	144470	20	4.0 1603527	-203207	L 1	20992 L	707	FU	91081112	123000	000002	502	G C=190,B=32	
IRNH	HD	144470	20	4.0 1603527	-203207	L 3	42228 L	712	FU	91081207	070400	000003	400	G C=140,B=18	
AENP	HD	144668	34	7.1 1605128	-385823	L 1	21267 L	5331	FO	91091800	000300	000200	X02	G B=1.5X,C=1.5X,B=35	
AENP	HD	144668	34	7.1 1605128	-385823	L 3	42497 L	5400	FO	91091800	001300	001000	530	G B=80,C=253,B=18	
AENP	HD	144668	34	7.1 1605128	-385823	H 1	21268 L	5386	FO	91091801	010200	008000	543	G B=194,C=220,B=45	
FHAL	HD	145454	30	5.4 1606107	+675630	H 3	42522 L	16460	FO	91092013	133500	001700	502	G C=210,B=40	
FHAL	HD	145454	30	5.4 1606107	+675630	H 1	21296 L	16664	FO	91092014	142000	000700	503	G C=209,B=42	
FHAL	HD	145454	30	5.4 1606107	+675630	L 3	42541 L	16847	FO	91092308	082200	000015	500	G C=180,B=18	
FHAL	HD	145454	30	5.4 1606107	+675630	H 1	21317 L	17090	FO	91092308	082600	000006	502	G C=218,B=35	
NQ042	3C 330		86	18.00 1609139	+660423	E 9	02469 2	00000	EO	91070119	193000	016000		V SWP 41974	
IANK	3C330		86	18.0 1609139	+660422	L 3	41974 L		EO	91070120	200400	085000	238	G B=139,C=110,B=100	
COMPB	HD	145544	45	3.9 1610521	-633337	H 1	20571 L			91061113	135400	004900		G	
COMPB	HD	145544	45	3.8 1610521	-633337	H 1	20572 L	568	FU	91061115	151200	001000	338	G B=165,C=175,B=100	
IRNH	HD	146284	22	6.70 1613260	-240932	L 1	20997 L	6108	FO	91081208	082900	000115	502	G C=230,B=35	
IRNH	HD	146284	22	5.9 1613260	-240932	L 3	42229 L	6169	FO	91081208	084800	000230	X00	G C=1.5X,B=18	
IRNH	HD	146284	22	6.70 1613260	-240932	L 3	42230 L	6245	FO	91081209	093400	000230	500	G C=186,B=18	
EMK	1615-579		70	19.0 1615004	-575139	L 3	41561 L		EO	91050400	001700	078500	209	G C=150,B=130	

FRO	Object	CL	MAG	R.A.	DEC	D C	Image A	EES	MD	Obs.date	Exptim	mmmsstt	ECC	Comment
MP013	ENL1615579	70	19.00	1615005	-575140	L 1	20306 L	00000	FO	91050404	041132	006000	201	V
ENMK	CFC 523	06	12.1	1615057	-575109	S 9	02461 2			91050409	091200	016000		G
IMPAW	IC 4601	73		1617055	-195633	L 3	42167 L			91080405	053300	040500	304	G G=100,B=55
IMPAW	IC 4601	73		1617068	-195531	L 1	20945 L		FO	91080405	055700	041000	309	G G=150,B=110
IRNH	HD 147009	22	8.08	1617083	-195531	L 1	21004 L	1789	FO	91081307	070600	000120	402	G G=144,B=35
IRNH	HD 147009	22	8.08	1617083	-195531	L 3	42239 L	1811	FO	91081307	072600	000340	400	G G=125,B=18
IRNH	HD 147196	21	7.03	1618189	-233523	L 1	21003 L	4514	FO	91081302	025300	000033	502	G G=230,B=35
IRNH	HD 147196	21	7.03	1618189	-233523	L 3	42238 L	4660	FO	91081305	051200	000125	500	G G=205,B=18
IRNH	HD 147196	24	7.0	1618189	-233523	L 1	21026 L	4565	FO	91081612	125900	000030	502	G G=216,B=38
NC002	GL 620	48	10.47	1620070	-243506	L 1	20913 L	00260	FO	91073020	205946	010000	341	V
PHCAL	CD-3810980	37	11.10	1620100	-390649	L 3	42296 L	00149	FO	91082018	183708	000200	500	V
PHCAL	38 10980	37	10.9	1620100	-390649	H 1	20279 L	137	FO	91050108	085700	022000	506	G G=235,B=80
PHCAL	CD-3810980	37	11.09	1620100	-390649	H 1	21045 L	00150	FO	91082018	184452	024000	505	V
PHCAL	T FLOOD	99		1620100	-390649	H 3	41534 L			91050109	092400	000007	39	G B=190,B=135
PHCAL	CD-3810980	37	11.07	1620100	-390649	H 3	42297 L	00153	FO	91082022	225253	011300	500	V
PHCAL	T FLOOD	99		1620100	-390649	H 3	41535 L			91050109	095300	000002	34	G B=100,B=60
PHCAL	CD-3810980	37	11.14	1620100	-390649	L 3	42308 L	00144	FO	91082218	180743	000200	600	V
PHCAL	T FLOOD	99		1620100	-390649	H 3	41536 L			91050110	102400	000005	38	G B=150,B=100
PHCAL	CD-3810980	37	11.12	1620100	-390649	H 1	21058 L	00146	FO	91082218	181905	024000	503	V
PHCAL	T FLOOD	99		1620100	-390649	H 3	41537 L			91050110	104900	000007	39	G B=190,B=140
PHCAL	CD-3810980	37	11.09	1620100	-390649	H 3	42309 L	00150	FO	91082222	222834	013900	400	V
PHCAL	T FLOOD	99		1620100	-390649	H 3	41538 L			91050111	111300	000009	39	G B=240,B=175
PHCAL	CD-3810980	37	11.00	1620100	-390649	H 3	42260 L	00000	FO	91081520	201550	020000	501	V
PHCAL	T FLOOD	99		1620100	-390649	H 3	41539 L			91050111	114700	000012	X9	G B=1.5X,B=200
SOMA	C/IEVY	06	4.0	1621111	-351832	D 9	02360 2			91091814	143000	002000		G
MI073	HD 148374	45	06.11	1623069	+614816	L 3	42180 L	12075	FO	91080600	001632	003000	101	V NO GUIDE SUPR
MI073	HD 148374	45	06.11	1623069	+614816	L 1	20960 L	12120	FO	91080600	000232	000115	402	V
IRNH	HD 148579	22	7.34	1626566	-250221	L 1	21005 L	3409	FO	91081309	090200	000105	502	G G=240,B=35
IRNH	HD 148579	22	7.34	1626566	-250221	L 3	42240 L	3396	FO	91081309	093200	000340	X00	G G=1.5X,B=18
IRNH	HD 148579	22	7.3	1626566	-250221	L 3	42248 L	3584	FO	91081405	052400	000240	500	G G=210,B=18
SRNE	HD 148783	49	5.0	1626590	+415930	L 1	20511 L	507	FU	91060318	182600	000500	351	G B=229,G=65,B=30
SRNE	HD 148783	49	4.42	1626590	+415930	L 1	20591 L	482	FU	91061317	170400	000500	342	G B=1.5X,G=82,B=38
SRNE	HD 148783	49	5.0	1626590	+415930	L 1	20678 L	438	FU	91062317	170400	000500	342	G B=1.5X,G=65,B=35
SRNE	HD 148783	49	5.0	1626590	+415930	L 1	20741 L	423	FU	91070416	161700	000500	352	G B=200,G=60,B=35
SRNE	HD 148783	49	5.0	1626590	+415930	L 1	20809 L	426	FU	91071415	154700	000500	352	G B=242,G=70,B=37
SRNE	HD 148783	49	5.0	1626590	+415930	L 1	20870 L	421	FU	91072313	134600	000500	345	G B=1.5X,G=100,B=68
SRNE	HD 148783	49	5.0	1626590	+415930	L 1	20939 L	423	FU	91080315	154600	000500	352	G B=254,G=60,B=35
SRNE	HD 148783	49	5.0	1626590	+415930	L 1	21012 L	511	FU	91081413	132900	000500	352	G B=207,G=70,B=34
SRNE	HD 148783	49	5.0	1626590	+415930	L 1	21069 L	499	FU	91082411	114700	000500	343	G B=1.5X,G=85,B=50
SRNE	HD 148783	49	5.04	1626590	+415930	L 1	21165 L	511	FU	91090511	114700	000500	354	G B=214,G=68,B=58
SMPW	HD 148703	23	4.24	1628065	-343550	L 3	42466 L	557	FU	91091509	091100	000002	500	G G=218,B=18
SMPW	HD 148703	23	4.24	1628065	-343550	L 1	21247 L	553	FU	91091509	092200	000002	502	G G=210,B=38
CD94Y	RT TFA	53	9.8	1629540	-630200	L 1	20850 L	362	FO	91072013	134700	001800	309	G G=180,B=115
CD94Y	RT TFA	53	9.8	1629540	-630200	L 1	20884 L	371	FO	91072516	160900	003000	502	G G=206,B=38
CENES	WFC1631	37	13.0	1631308	+781102	H 3	42033 L	201	SO	91071004	041300	039500	306	G G=160,B=72
PHCAL	TFU SCO	20	2.84	1632459	-280651	H 3	41533 L	1956	FU	91050107	075300	000006	402	G G=180,B=35
PHCAL	TFU SCO	20	2.84	1632459	-280651	H 1	20278 L	1956	FU	91050107	075900	000006	502	G G=210,B=40
PHCAL	HD 149438	20	2.8	1632459	-280651	H 3	42009 L	1915	FU	91070516	162100	000006	501	G G=210,B=30
PHCAL	HD 149438	20	2.8	1632459	-280651	H 1	20750 L	1916	FU	91070516	162600	000006	402	G G=170,B=40
PHCAL	HD 149438	20	2.8	1632459	-280651	H 2	18580 L	1908	FU	91072614	142400	000008	501	G G=208,B=30

FEO	Object	CL	MAG	R.A.	DEC	D C	Image A	FES	MD	Obs.date	Exptim	mmmsstt	FIC	Comment
FHDAL HD	149438	20	2.8	1632459	-280651	H 1	20978 L	1993	FU	91080911	115300	000006	502 G	G=210,B=40
FHDAL HD	149438	20	2.8	1632459	-280651	H 3	42203 L	1997	FU	91080912	120000	000006	502 G	G=222,B=35
FHDAL	TFU SC	20	2.84	1632459	-280651	H 1	21217 L	1955	FU	91091113	133200	000006	503 G	G=215,B=41
FHDAL	TFU SCO	20	2.84	1632459	-280651	H 3	42444 L	1904	FU	91091113	133700	000006	502 G	G=189,B=35
CD87Y	R AFA	66	6.3	1635347	-565356	H 3	41937 L	5691	FO	91062720	200600	003200	402 G	G=165,B=35
CD87Y	R AFA	66	6.60	1635348	-565356	H 3	41934 L	4930	FO	91062714	140800	003000	X09 G	G=1.5X,B=144
CD87Y	R AFA	66	6.60	1635348	-565356	H 1	20701 L	5312	FO	91062714	144800	001500	X09 G	G=2X,B=170
CD87Y	R AFA	66	6.3	1635348	-565356	H 3	41936 L	5564	FO	91062718	183500	005000	503 G	G=222,B=42
CD87Y	R AFA	66	6.3	1635348	-565356	H 1	20703 L	5628	FO	91062719	193500	002200	503 G	G=230,B=48
CD87Y	R AFA	66	6.20	1635348	-565356	H 3	41955 L	5341	FO	91062913	133000	002300	407 G	G=185,B=84
CD87Y	R AFA	66	6.20	1635348	-565356	L 1	20711 L	5324	FO	91062914	140400	000026	502 G	G=220,B=35
CD87Y	R AFA	66	6.20	1635348	-565356	L 3	41956 L	5242	FO	91062914	144300	000040	400 G	G=142,B=18
CD87Y	R AFA	66	6.20	1635348	-565356	L 1	20712 S	5216	FO	91062915	152400	000200	504 G	G=245,B=60
CD87Y	R AFA	66	6.20	1635348	-565356	L 1	20712 L	5222	FO	91062915	153100	000026	504 G	G=218,B=60
CD87Y	R AFA	66	6.20	1635348	-565356	L 3	41957 S	5222	FO	91062916	160400	000400	X03 G	G=1.5X,B=45
CD87Y	R AFA	66	6.20	1635348	-565356	L 3	41957 L	5248	FO	91062916	161300	000055	403 G	G=188,B=45
CD87Y	R AFA	66	6.20	1635348	-565356	H 1	20713 L	5252	FO	91062917	172000	001500	404 G	G=170,B=60
CD87Y	R AFA	66	6.20	1635348	-565356	H 3	41958 L	5230	FO	91062918	180000	004500	402 G	G=165,B=35
USSES HD	150680	44	2.8	1639240	+314132	H 1	20529 L	1468	FU	91060605	054900	000300	502 G	G=195,B=38
AGMW	3C 345	85	15.0	1641176	+395411	L 1	20461 L		BO	91052807	074600	040500	337 G	B=160,G=150,B=82
AGMW	3C 345	85	16.0	1641176	+395411	L 3	41779 L		BO	91060606	061300	016500	301 G	G=68,B=30
M115 AH HER		54	12.78	1642060	+252031	L 3	41948 L	00133	SO	91062821	215106	003500	400 V	
M115 AH HER		54	12.79	1642060	+252031	L 1	20708 L	00132	SO	91062822	223423	003000	500 V	
M115 AH HER		54	12.78	1642060	+252031	L 3	41949 L	00133	SO	91062823	231714	004500	400 V	
M116 AH HER		54	12.50	1642061	+252031	L 3	41938 L	00170	SO	91062722	222735	003000	400 V	
M116 AH HER		54	12.53	1642061	+252031	L 1	20704 L	00165	SO	91062723	231514	002500	501 V	
M116 AH HER		54	12.47	1642061	+252031	L 3	41939 L	00175	SO	91062723	235536	003000	500 V	
M116 AH HER		54	12.50	1642061	+252031	L 3	41940 L	00170	SO	91062801	011729	003000	500 V	
M116 AH HER		54	12.42	1642061	+252031	L 3	41941 L	00183	SO	91062802	021904	003000	500 V	
M116 AH HER		54	12.49	1642061	+252031	L 3	41942 L	00172	SO	91062803	032114	003000	500 V	
M116 AH HER		54	12.48	1642061	+252031	L 3	41943 L	00173	SO	91062804	042458	002300	400 V	
N115 HD150798		47	02.27	1643210	-685620	H 1	21240 L	03362	FU	91091416	161302	000800	160 V	
N115 HD150798		47	02.22	1643210	-685620	H 1	21241 L	03512	FU	91091416	165630	003300	561 V	
N115 HD150798		47	02.25	1643210	-685620	H 1	21242 L	03439	FU	91091418	180644	009000	661 V	
N115 HD150798		47	02.32	1643210	-685620	H 1	21243 L	03224	FU	91091421	210030	000800	160 V	
N115 HD150798		47	02.32	1643210	-685620	L 3	42464 L	03228	FU	91091419	194423	007000	460 V	
N115 HD150798		47	02.29	1643210	-685620	H 1	21244 L	03297	FU	91091421	214257	003300	561 V	
COMB HD	150798	47	1.9	1643211	-685620	L 3	41820 L	3304	FU	91061115	154700	002500	355 G	B=226,G=133,B=65
COMB HD	150798	47	1.9	1643211	-685620	H 1	20573 L	3317	FU	91061116	162200	000400	344 G	B=200,G=110,B=55
NA193 FGL647+253		16	14.10	1647051	+251515	L 1	21089 L	00000	BO	91082619	190748	002000	301 V	
NA193 FGL647+253		16	14.10	1647051	+251515	L 3	42330 L	00000	BO	91082619	193842	002000	300 V	
NA026 HD152107		36	05.00	1647463	+460410	H 3	42235 L	25399	FO	91081219	193548	002200	500 V	
NA026 HD 152107		36	04.98	1647463	+460410	H 1	21000 L	25652	FO	91081220	200605	000800	501 V	
NA026 HD 152107		36	04.99	1647463	+460410	L 3	42236 L	25638	FO	91081221	211335	000025	500 V	
NA026 HD152107		36	04.98	1647463	+460410	L 1	21001 L	25764	FO	91081221	211949	000006	501 V	
NA026 HD152107		36	04.98	1647463	+460410	H 3	42237 L	25655	FO	91081221	215340	004500	601 V	
NA026 HD152107		36	05.04	1647463	+460410	H 3	42244 L	24888	FO	91081319	194346	002200	500 V	
NA026 HD152107		36	05.01	1647463	+460410	H 1	21008 L	25300	FO	91081320	201426	000800	501 V	
NA026 HD152107		36	04.97	1647463	+460410	L 3	42245 L	25873	FO	91081321	213213	000025	500 V	
NA026 HD152107		36	04.97	1647463	+460410	L 1	21009 L	25881	FO	91081321	213801	000006	501 V	



PRO	Object	CL	MAG	R.A.	DEC	D C	Image A	FES	MD	Obs.date	Exptim	numscstt	EQC	Comment
NRC26	HD152107	36	04.96	1647463	+460410	H 3	42246 L	25975	FO	91081322	221021	004500	600 V	
NRC26	HD152107	36	04.99	1647463	+460410	H 3	42253 L	25513	FO	91081419	195720	002200	500 V	
NRC26	HD152107	36	04.98	1647463	+460410	H 1	21017 L	25690	FO	91081420	202740	000800	500 V	
NRC26	HD152107	36	04.95	1647463	+460410	L 3	42254 L	26170	FO	91081421	214818	000025	500 V	
NRC26	HD152107	36	04.96	1647463	+460410	L 1	21018 L	25914	FO	91081421	215333	000006	500 V	
NRC26	HD152107	36	04.97	1647463	+460410	H 3	42255 L	25889	FO	91081422	222943	004500	600 V	
NRC26	HD152107	36	05.02	1647463	+460410	H 3	42223 L	25159	FO	91081121	213555	001800	500 V	
NRC26	HD152107	36	05.01	1647463	+460410	H 1	20994 L	25231	FO	91081122	221356	000800	501 V	
NRC26	HD152107	36	04.99	1647463	+460410	L 3	42224 L	25610	FO	91081123	231142	000025	500 V	
NRC26	HD152107	36	04.99	1647463	+460410	L 1	20995 L	25654	FO	91081123	231721	000006	501 V	
MM176	FGL648+536	28	14.00	1648523	+533636	H 1	20826 L	00000	EO	91071620	201738	039000	302 V	
GNUC	HD 152096	23	9.4	1649451	-411719	L 1	21094 L	520	FO	91082712	123400	000430	X03 G G=3X,B=45	
GNUC	HD 152096	23	9.4	1649451	-411719	L 1	21094 S	551	FO	91082712	124600	000430	502 G G=20,B=40	
GNUC	HD 152096	23	9.4	1649451	-411719	L 3	42335 L	519	FO	91082713	131800	000336	X00 G G=1.5X,B=18	
GNUC	HD 152096	23	9.4	1649451	-411719	L 3	42335 L	551	FO	91082713	132800	000336	X00 G G=1.5X,B=18	
GNUC	HD 152096	23	9.42	1649451	-411719	L 3	42345 L	504	FO	91082816	163000	000536	500 G G=200,B=18	
NA155	EK325-121	70	12.06	1649494	-640935	L 1	21169 L	00252	SO	91090521	215448	001500	V	
NA155	EK325-121	70	12.50	1649494	-640935	L 3	42402 L	00000	EO	91090522	221527	003200	V	
NC002	GL643	48	11.76	1652450	-081347	L 1	20901 L	00332	SO	91072819	195409	017500	134 V	
NA193	FGL656+318	16	14.10	1656237	+314608	L 1	21090 L	00000	EO	91082620	204021	003000	401 V	
NA193	FGL656+318	16	14.10	1656237	+314608	L 3	42331 L	00000	EO	91082621	211805	004000	500 V	
NA193	FGL701+359	28	13.38	1701348	+355257	L 1	21097 L	00078	SO	91082718	181249	002000	501 V	
NA193	FGL701+359	28	13.33	1701348	+355257	L 3	42337 L	00081	SO	91082718	184150	002500	600 V	
ISMIS	HD 154368	13	6.1	1703085	-352305	H 3	42074 L	9213	FO	91071503	035800	014000	X05 G G=2X,B=65	
ISMIS	HD 154368	13	6.1	1703085	-352305	H 1	20813 L	9675	FO	91071506	062700	006000	X04 G G=3X,B=60	
ISMIS	HD 154368	13	6.1	1703085	-352305	H 3	42075 L	9669	FO	91071507	073600	014000	X04 G G=2X,B=60	
ISMIS	HD 154368	13	6.1	1703085	-352305	H 1	20814 L	10167	FO	91071510	100600	004200	X03 G G=2X,B=50	
MI112	CFD-568032	70	11.23	1704475	-565058	L 1	21065 L	00133	FO	91082400	003240	001500	351 V	
MI112	CFD-568032	70	11.25	1704475	-565058	L 3	42316 L	00130	FO	91082423	232044	006000	340 V	
MI112	CFD-568032	70	11.25	1704475	-565058	L 1	21076 L	00130	FO	91082500	002421	002500	560 V	
MM176	FGL705+537	28	13.00	1705090	+533924	H 1	20835 L	00000	EO	91071720	202554	038200	302 V	
MA130	FGL705+537	38	13.00	1705091	+533925	L 1	20307 L	00000	EO	91050423	235653	002500	402 V	FFWD
FHCAL	HD 155763	25	3.17	1708382	+654634	L 3	41688 L	1233	FU	91052420	205800	000001	500 G G=180,B=15	
FHCAL	HD 155763	25	3.17	1708382	+654634	L 3	41689 L	1232	FU	91052421	213200	000001	500 G G=180,B=15	
FHCAL	HD 155763	25	3.17	1708382	+654634	L 3	41690 L	1241	FU	91052422	220100	000001	500 G G=178,B=15	
FHCAL	HD 155763	25	3.17	1708382	+654634	L 3	41691 L	1229	FU	91052422	223000	000001	500 G G=190,B=15	
FHCAL	HD 155763	25	3.2	1708382	+654634	L 3	41727 L	1270	FU	91053017	173500	000001	500 G G=190,B=18	
FHCAL	HD 155763	25	3.2	1708382	+654634	L 3	41728 L	1246	FU	91053018	180600	000001	500 G G=195,B=18	
FHCAL	HD 155763	25	3.2	1708382	+654634	L 3	41729 L	1263	FU	91053018	183600	000001	X00 G G=1.5X,B=18	
FHCAL	HD 155763	25	3.2	1708382	+654634	L 3	41730 L	1265	FU	91053019	190700	000001	X00 G G=1.5X,B=18	
FHCAL	HD 155763	25	3.2	1708382	+654634	L 3	41731 L	1255	FU	91053019	193600	000002	X00 G G=2X,B=18	
FHCAL	HD 155763	25	3.2	1708382	+654634	L 3	41732 L	1250	FU	91053020	200900	000002	X00 G G=2X,B=18	
NI173	HD 155603B	11	00.00	1710590	-394220	L 3	42529 L	00000	EO	91092116	162046	002500	350 V	
NI173	HD 155603B	11	00.00	1710590	-394220	L 1	21304 L	00000	EO	91092117	170049	002500	661 V	
NI173	HD155603B	11	00.00	1710590	-394220	H 3	42530 L	00000	EO	91092117	173419	031200	241 V	
NI173	HD155603B	11	00.00	1710590	-394220	L 1	21303	00000	EO	91092100	000000	000000	501 V	
ERNW	HD 156110	21	7.4	1712002	+452545	L 1	21088 L	2927	FO	91082616	163900	000079	502 G G=217,B=35	
ERNW	HD 156110	21	7.4	1712002	+452545	L 3	42329 L	2892	FO	91082617	171800	000015	500 G G=254,B=18	
IGMS	HR 6406	49	3.48	1712220	+142650	H 1	20344 L	1984	FU	91050915	152900	000930	352 G E=223,G=100,B=38	
IGMS	HR 6406	49	3.48	1712220	+142650	L 1	20345 L	1986	FU	91050916	161400	000040	X02 G E=1.5X,G=1.5X,B=38	

PRO	Object	CL	MAG	R.A.	DEC	D C	Image A	FES	MD	Obs.date	Exptim	mmmsst	ECC	Comment
NC011	HDL56015	45	05.40	1712223	+142644	L 3	42045 L	00000	EO	91071119	193839	003000	700 V	ALPHA HER A AT X-94
NC011	HDL56015	45	05.40	1712223	+142644	H 1	20790 L	00000	EO	91071120	201656	010000	772 V	ALPHA HER AT X-106
NC011	HDL56015	45	05.40	1712223	+142644	H 1	20791 L	00000	EO	91071122	223232	003000	341 V	ALPHA HER A AT X-10
NA026	HDL56164	30	03.29	1712586	+245349	H 3	42261 L	01363	FU	91081601	010548	000600	500 V	
NA026	HDL56164	30	03.33	1712586	+245349	H 1	21023 L	01318	FU	91081601	011701	000200	500 V	
NA026	HDL56164	30	03.29	1712586	+245349	H 3	42262 L	01361	FU	91081602	020222	000600	500 V	
MAL30	FGL718+519	28	13.70	1718355	+515555	L 3	41571 L	00000	EO	91050501	010032	000730	300 V	
MAL30	FGL718+519	28	13.70	1718355	+515507	L 1	20308 L	00000	EO	91050501	013157	002000	302 V	
NA193	FGL722+286	16	12.77	1722141	+283806	L 1	21091 L	00134	SO	91082623	233818	001000	401 V	
NA193	FGL722+286	16	12.89	1722141	+283806	L 3	42332 L	00120	SO	91082700	000849	001500	500 V	
CCNB	182-7	46	8.1	1723006	+380458	L 1	20853 L	1576	FO	91072104	045800	000800	502 G	G=240, B=35
CSMA	HD 159181	45	2.99	1729181	+522015	L 3	42190 L	1564	FU	91080714	141500	002000	550 G	B=177, G=245, B=18
CSMA	HD 159181	45	2.99	1729181	+522015	L 3	42190 L	1564	FU	91080714	144500	002000	540 G	B=164, G=229, B=18
CCNB	170-47	44	8.9	1730382	+234619	L 1	20854 L	739	FO	91072106	064500	004500	X02 G	G=1.5X, B=40
CCNB	170-47	44	8.9	1730382	+234619	L 1	20861 L	736	FO	91072210	101500	000300	302 G	G=115, B=32
USSBS	HD 159110	24	7.5	1731085	-411727	H 1	21218 L	2830	FO	91091114	142700	002215	503 G	G=245, B=45
COMB	HD 159332	41	5.6	1731123	+191729	L 3	41780 L	13356	FO	91060609	094100	019000	702 G	G=25X, B=35
USSBS	HD 159176	12	5.7	1731262	-323255	H 1	21024 L	14338	FO	91081603	031400	000308	502 G	G=215, B=40
SRVE	HD 159354	49	6.5	1731265	+145233	L 1	20512 L	8904	FO	91060319	191700	002000	352 G	B=225, G=80, B=35
SRVE	HD 159354	49	6.37	1731265	+145233	L 1	20594 L	9490	FO	91061320	200300	002000	352 G	B=242, G=69, B=35
SRVE	HD 159354	49	6.5	1731265	+145233	L 1	20680 L	8191	FO	91062319	192000	002000	352 G	B=237, G=80, B=32
SRVE	HD 159354	49	6.5	1731265	+145233	L 1	20743 L	8706	FO	91070418	182800	002000	352 G	B=219, G=75, B=35
SRVE	HD 159354	49	6.5	1731265	+145233	L 1	20810 L	9066	FO	91071416	164500	002000	352 G	B=232, G=70, B=36
SRVE	HD 159354	49	6.5	1731265	+145233	L 1	20874 L	5595	FO	91072317	174800	002000	352 G	B=239, G=65, B=35
SRVE	HD 159354	49	6.5	1731265	+145233	L 1	20948 L	9107	FO	91080417	172500	002000	352 G	B=216, G=65, B=35
SRVE	HD 159354	49	6.5	1731265	+145233	L 1	21013 L	8363	FO	91081414	142200	002000	352 G	B=212, G=75, B=37
SRVE	HD 159354	49	6.5	1731265	+145233	L 1	21071 L	8891	FO	91082413	133500	002000	353 G	B=226, G=83, B=50
SRVE	HD 159354	49	6.5	1731265	+145233	L 1	21166 L	8971	FO	91090512	124300	002000	352 G	B=219, G=74, B=40
HENA	HD 159834	31	6.10	1733513	+210141	L 1	21229 L	9855	FO	91091314	142700	000145	502 G	G=204, B=35
FENG	HD 159492	60	5.4	1733590	-542809	L 1	20947 L	18632	FO	91080416	161700	000050	502 G	G=230, B=40
FENG	HD 159492	60	5.4	1733590	-542809	L 3	42170 L	18512	FO	91080416	163000	000207	500 G	G=180, B=18
NI085	RT SER	57	13.50	1737041	-115504	L 3	42160 L	00000	EO	91080221	213909	009000	111 V	
HENA	HD 160762	21	3.80	1738031	+460158	L 1	21228 L	766	FU	91091313	130400	000002	502 G	G=210, B=35
HENA	HD 160762	21	3.80	1738031	+460158	L 3	42454 L	762	FU	91091313	131600	000002	X00 G	G=1.5X, B=18
MAL30	FGL739+489	38	13.10	1739046	+485526	L 3	41572 L	00000	EO	91050502	023249	000500	300 V	
MAL30	FGL739+489	38	13.10	1739046	+485526	L 1	20309 L	00000	EO	91050503	030657	001200	402 V	
GNES	HD 161653	23	7.2	1745021	-380702	H 3	42257 L	4144	FO	91081511	111600	006000	X07 G	G=5X, B=88
GNES	HD 161653	23	7.2	1745021	-380702	H 3	42279 L	4167	FO	91081811	113500	001200	305 G	G=167, B=70
CANS	RS CEP	55	11.5	1747315	-064148	L 3	42293 L	513	SO	91082005	050500	027500	302 G	G=105, B=40
USSBS	HD 163588	47	3.7	1752397	+565248	H 1	21378 L			91100112	122100	002800	G	
COMB	HD 163770	47	3.86	1754320	+371522	H 1	20622 L	568	FU	91061713	133800	002500	343 G	B=185, G=100, B=50
FNSH	NC 6543	70	9.5	1758341	+663804	L 3	41866 L	777	FO	91061816	162600	000200	550 G	B=248, G=210, B=18
FNSH	NC 6543	70	9.5	1758342	+663805	L 3	41864 L	797	FO	91061814	142600	000400	X00 G	B=2X, G=1.5X, B=18
FNSH	NC 6543	70	9.5	1758342	+663805	L 1	20634 L	792	FO	91061814	143900	002500	703 G	G=10X, B=45
FNSH	NC 6543	70	9.5	1758342	+663805	L 3	41865 L	787	FO	91061815	151400	000300	5X0 G	B=1.5X, G=252, B=18
FNSH	NC 6543	70	9.5	1758342	+663805	L 1	20635 L	784	FO	91061815	155300	001200	X02 G	G=5X, B=40
FNSH	NC 6543	70	9.5	1758342	+663805	L 1	20636 L	783	FO	91061817	170400	000300	X02 G	G=1.5X, B=35
GNES	HD 164637	23	7.3	1800000	-224313	H 3	42272 L	6424	FO	91081711	115400	002500	X09 G	G=4X, B=115
GNES	HD 164637	23	7.3	1800000	-224313	H 3	42280 L	6178	FO	91081812	122700	000700	404 G	G=183, B=55
WNUH	FUM18+68	37	14.7	1800267	+683555	L 3	41892 L	67	SO	91062206	062400	004000	500 G	G=220, B=18



PRO	Object	CL	MAG	R.A.	DEC	D C	Image A	BES	MD	Obs.date	Exptim	mmmsstt	FCC	Comment
WINDH	KUJ18+68	37	14.7	1800267	+683555	L 3	41893 L	67	SO	91062207	073600	008000		G E=130
WINDH	KUJ18+68	37	14.7	1800267	+683555	L 3	41893 S	67	SO	91062207	073600	008000	500	G G=240,B=20
NA094	FK 4-3.1	70	16.00	1803332	-265518	L 3	42589 L	00000	EO	91093019	193028	008000	200	V
NA094	FK 4-3.1	70	16.00	1803332	-265518	L 1	21374 L	00000	EO	91093020	205917	002500	200	V
GNES	HD 165582	23	9.4	1804476	-343500	H 3	42256 L	600	FO	91081505	052700	030000	X06	G G=1.5X,B=75
USSES	HD 166182	20	4.4	1806370	+204818	H 1	20630 L	458	FU	91061806	060900	000048	503	G G=225,B=45
USSES	HD 166182	20	4.4	1806370	+204818	H 3	41861 L	456	FU	91061806	061800	000103	402	G G=185,B=38
SAMDW	HD 166596	23	5.46	1809402	-412059	L 3	42465 L	17664	FO	91091507	074200	000008	500	G G=190,B=18
SAMDW	HD 166596	23	5.46	1809402	-412059	L 1	21246 L	17630	FO	91091507	075400	000006	502	G G=195,B=38
FNIA	NEC 6572	70	9.0	1809406	+065025	L 1	20786 L	1045	FO	91071112	120700	004500	X85	G E=3X,G=3X,B=68
FNIA	NEC 6572	70	9.0	1809406	+065025	L 3	42043 L	1065	FO	91071113	130100	003000	5X1	G E=2X,G=246,B=25
FNIA	NEC 6572	70	9.0	1809406	+065025	L 1	20787 L	1071	FO	91071113	134200	001200	X56	G E=244,G=1.5X,B=80
FNIA	NEC 6572	70	9.0	1809406	+065025	H 1	20789 L	1009	FO	91071116	165500	011500	354	G E=227,G=110,B=55
FNIA	NEC 6572	70	9.0	1809406	+065025	H 3	42059 L	1042	FO	91071304	042300	038500	3X6	G E=3X,G=145,B=80
FNIA	SFO 123243	40	8.7	1809549	+065100	F 9	02473 2			91071303	035300	016000		G
CMSS	N SGR 91	55		1810581	-321323	L 1	21043 L		EO	91082003	030800	003000	3X2	G E=3X,G=80,B=35
CMSS	NOVA SGR	55		1810581	-321323	L 1	21044 L		EO	91082012	125000	000800	352	G E=207,G=64,B=36
CMSS	NOVA SGR	55		1810581	-321323	L 3	42295 L		EO	91082016	165300	003500	340	G E=130,G=66,B=18
NONSS	N SGR 91	55		1810581	-321323	L 1	21083 L		EO	91082609	092900	000900	242	G E=158,G=55,B=35
NONSS	N SGR 91	55		1810581	-321323	L 3	42324 L		EO	91082609	094400	006000	42	G E=153,B=38
NONSS	N SGR 91	55		1810581	-321323	L 1	21084 L		EO	91082610	104900	002500	3X5	G E=2X,G=108,B=70
NONSS	N SGR 91	55		1810581	-321323	L 3	42325 L			91082611	112000	006000	47	G E=182,B=82
NONSS	N SGR 91	55		1810581	-321323	L 1	21085 L		EO	91082612	122400	002500	355	G E=250,G=92,B=70
NONSS	N SGR 91	55		1810581	-321323	L 3	42361 L		EO	91083016	160500	004500	231	G E=85,G=35,B=25
NONSS	N SGR 91	55		1810581	-321323	L 3	42449 L		EO	91091211	114400	015000	332	G E=91,G=68,B=33
NONSS	N SGR 91	55		1810581	-321323	L 1	21223 L		EO	91091214	142000	003000	332	G E=97,G=61,B=34
PHCAL	WAVCAL	98		1811468	+660716	L 1	20726 S			91070112	124400	000025	?8	G E=10X,B=98
PHCAL	WAVCAL	98		1811468	+660716	H 1	20727 S			91070113	131500	000025	?9	G E=60X,B=106
PHCAL	NULL	99		1811468	+660716	H 2	18574 S			91070113	133700	000000	301	G G=50,B=24
PHCAL	WAVCAL	98		1811468	+660716	L 3	41972 S			91070114	140200	000005	?9	G E=10X,B=106
PHCAL	WAVCAL	98		1811468	+660716	H 3	41973 S			91070114	143000	000005	?9	G E=60X,B=121
PHCAL	WAVCAL	98		1811468	+660716	L 2	18575 S			91070114	143600	000010	?7	G E=10X,B=86
PHCAL	WAVCAL	98		1811468	+660716	H 2	18576 S			91070115	150700	000010	?9	G E=60X,B=135
GNES	HD 167402	23	9.0	1813061	-300834	H 3	42270 L	836	FO	91081705	052900	016000	X04	G G=1.5X,B=55
GNES	HD 167402	23	9.0	1813061	-300834	H 3	42271 L	866	FO	91081708	084000	014000	X07	G G=1.5X,B=85
GNES	HD 167402	23	9.0	1813061	-300834	H 3	42277 L	831	FO	91081805	053700	012000	503	G G=220,B=50
GNES	HD 167402	23	9.0	1813061	-300834	H 3	42288 L	886	FO	91081909	095200	014000	505	G G=252,B=67
GNUC	HD 167402	23	8.9	1813061	-300834	L 1	21095 L	806	FO	91082714	145100	000206	502	G G=210,B=40
GNUC	HD 167402	23	8.9	1813061	-300834	L 1	21095 L	799	FO	91082715	150000	000206	X02	G G=3X,B=35
GNUC	HD 167402	23	8.9	1813061	-300834	L 3	42336 L	781	FO	91082715	152500	000112	500	G G=200,B=18
GNUC	HD 167402	23	8.9	1813061	-300834	L 3	42336 L	793	FO	91082715	153400	000112	500	G G=200,B=18
FNIB	7-32	70	16.0P	1814438	-240348	L 3	42145 L		EO	91073114	145100	024000	302	G G=80,B=40
PHCAL	SKY EKED	07		1814441	-240242	L 1	20917 L			91073116	160300	003000	02	G B=35
MA056	HD168206	10	09.46	1816198	-113916	H 1	21002 L	00643	FO	91081223	232137	017000	301	V
NA094	SFO161375	38	08.62	1818263	-162353	L 3	42590 L	01356	FO	91093021	214522	002200	200	V
GNES	HD 168750	23	8.3	1819141	-262630	H 3	4227? L	1670	FO	91081808	083100	014000	X08	G G=2X,B=100
GNUC	HD 168750	23	8.3	1819141	-262630	L 1	21102 L	1586	FO	91082814	144800	000330	X02	G G=3X,B=40
GNUC	HD 168750	23	8.3	1819141	-262630	L 3	42344 L	1565	FO	91082814	145400	000300	500	G G=220,B=18
GNUC	HD 168750	23	8.3	1819141	-262630	L 1	21102 L	1553	FO	91082815	150300	000330	502	G G=190,B=32
GNES	HD 168941	13	9.3	1820180	-265846	H 3	42263 L	611	FO	91081605	052100	022000	X05	G G=1.5X,B=65

PRO	Object	CL	MAG	R.A.	DEC	D C Image A	FES	MD	Obs.date	Exptim	mmrestt	ECC	Comment
GNES HD	168941	13	9.3	1820180	-265846	H 3 42264 L	609	FO	91081609	093500	016500	X09	G G=2X, B=150
PHCAL SAFETY R	99			1820180	-265846	H 1 21025 L			91081610	101000	000000		02 G B=40
GNES HD	168941	13	9.3	1820180	-265846	H 3 42287 L	586	FO	91081905	053300	020000		504 G G=240, B=60
USSES HD	169414	47	3.8	1821348	+214434	H 1 20633 L	566	FU	91061811	110000	006000		452 G B=225, G=170, B=40
ISNM HD	170867	22	5.6	1829561	-384552	H 3 42558 L	14763	FO	91092607	071900	001200		502 G G=190, B=35
ISNM HD	170867	22	5.6	1829561	-384552	H 3 42559 L			91092607	075400	001330		502 G G=210, B=40
ISNM HD	170867	22	5.6	1829561	-384552	H 3 42560 L			91092608	083300	001500		503 G G=230, B=42
ISNM HD	170867	22	5.6	1829561	-384552	H 3 42561 L			91092609	091200	001500		503 G G=240, B=42
ISNM HD	170868	32	6.3	1829561	-384528	H 3 42562 L	8465	FO	91092610	100400	003600		502 G G=200, B=40
ISNM HD	170868	32	6.3	1829561	-384528	H 3 42563 L			91092611	110300	004000		503 G G=210, B=42
ISNM HD	170868	32	6.3	1829561	-384528	H 3 42564 L			91092612	120500	004200		503 G G=215, B=42
ISNM HD	170868	32	6.3	1829561	-384528	H 3 42565 L			91092613	131000	004400		503 G G=220, B=42
NCL56 HD171391	45	05.52	1832156	-110104	L 1 20943 S	18611	FO	91080323	230938	000030			202 V
NCL56 HD171391	45	05.52	1832156	-110104	L 1 20943 L	18611	FO	91080323	230429	000040			402 V
NCL56 HD171391	45	05.51	1832156	-110104	L 3 42165 L	18741	FO	91080323	231939	005000			202 V
NQ072 3C382	86	14.00	1833120	+323917	L 3 42567 L		EO	91092616	161142	039500			353 V
PHCAL HD	172167	30	0.0	1835147	+384409	H 3 42521 L	16555	FU	91092012	124600	000009		502 G G=216, B=35
PHCAL HD	172167	30	0.0	1835147	+384409	H 1 21295 L	16756	FU	91092012	125100	000004		502 G G=212, B=40
PHCAL HD	172883	36	6.0	1838438	+520854	H 3 42519 L	11219	FO	91092009	093300	002100		503 G G=229, B=50
PHCAL HD	172883	36	6.0	1838438	+520854	H 1 21293 L	11226	FO	91092010	101000	001000		504 G G=230, B=54
PHCAL HD	172883	36	6.0	1838438	+520854	L 3 42520 L	10863	FO	91092011	111500	000019		500 G G=197, B=18
PHCAL HD	172883	36	6.0	1838438	+520854	L 1 21294 L	10930	FO	91092011	112100	000007		502 G G=221, B=35
SSNM URAUS	03	5.7	1840522	-232854	L 3 42625 L	11347	FO	91100521	215100	018000			452 G B=187, G=175, B=32
SSNM URAUS	03	5.7	1840522	-232854	L 3 42626 L	11176	FO	91100601	012100	020500			551 G B=220, G=202, B=23
MAL18 NOVA HER91	55	14.00	1844119	+121045	E 9 02477 2	00000			91072319	194200	016000		V IWP 20875, SWP 42118
NOMES NOVA HER	55	13	1844119	+121045	L 1 20447 L	63	SO	91052519	195200	005000			302 G G=78, B=40
NOMES NOVA HER	55	13	1844119	+121045	L 3 41696 L	58	SO	91052520	205100	004900			230 G B=52, G=38, B=18
NOMES NOVA HER	55	13	1844119	+121045	L 1 20448 L				91052521	215500	005500		302 G G=80, B=40
NOMES NOVA HER	55	14	1844119	+121045	L 3 41747 L				91060205	055300	022000		343 G B=161, G=85, B=45
NOMES NOVA HER	55	14	1844119	+121045	L 1 20500 L				91060209	093800	019000		333 G B=117, G=105, B=50
NOMES NOVA HER	55	14	1844119	+121045	L 3 41824 L				91061206	062800	022000		335 G B=139, G=135, B=62
NOMES NOVA HER	55	14	1844119	+121045	L 1 20580 L				91061210	101400	015500		X39 G B=247, G=1.5X, B=215
CMES N HER 91	55	14.0	1844119	+121045	L 1 20875 L				91072320	204000	024000		304 G G=100, B=60
CMES N HER 91	55	14.0	1844119	+121045	L 3 42118 L				91072401	010400	015000		221 G B=50, G=50, B=30
CMES N HER 91	55	14.0	1844119	+121045	L 3 42119 L				91072404	040500	039500		334 G B=95, G=95, B=52
NOMES NOVA SCT	55	11.1	1844265	-082411	L 3 42368 L	138	FO	91090109	095300	002000			00 G B=18
NOMES NOVA SCT	55	11.1	1844265	-082412	L 1 21128 L	138	FO	91090110	103500	002000			303 G G=100, B=50
NQ072 3C 390.3	86	14.40	1845379	+794306	L 3 42367 L		EO	91083118	181951	038700			362 V
NIL20 V603 AQL	55	12.00	1846213	+003135	L 3 42473 L		EO	91091616	162034	001500			550 V
NIL20 V603 AQL	56	12.00	1846213	+003135	L 3 42474 L		EO	91091617	171223	001500			550 V
NIL20 V603 AQL	55	12.00	1846213	+003135	L 3 42475 L		EO	91091618	180728	001500			550 V
NIL20 V603 AQL	55	12.00	1846213	+003135	L 3 42476 L		EO	91091619	190548	001500			330 V
NIL20 V603 AQL	55	12.00	1846213	+003135	L 3 42477 L		EO	91091619	195536	001500			550 V
NIL20 V603 AQL	55	12.00	1846213	+003135	L 3 42478 L		EO	91091620	204657	001500			550 V
NIL20 V603 AQL	55	12.00	1846213	+003135	L 3 42479 L		EO	91091621	214122	001500			550 V
NIL20 V603 AQL	55	12.00	1846213	+003135	L 3 42480 L		EO	91091622	222829	001500			330 V
IRMEW Q1850-782	85	15.50	1850485	-781550	L 1 20841 L		EO	91071819	194533	042700			412 V
FRMD NEC	6720	71	7.3	1851394	+325901	L 3 41650 L			91051712	124500	006500		00 G B=20
FRMD NEC	6720	71	7.3	1851414	+325844	L 3 41642 L			91051612	124300	007000		00 G B=20
FRMD NEC	6720	71	7.3	1851416	+325812	L 1 20390 L			91051715	154800	010000		343 G B=152, G=105, B=47

FFO	Object	CL	MAG	R.A.	DEC	D C	Image A	FES	MD	Cbs.date	Exptim	mmmsstt	ECC	Comment
RMFD NCC	6720	71	7.3	1851416	+325812	L 1	20390 S	EO	91051715	154900	010000	343	G E=152, G=105, B=47	
RMFD NCC	6720	71	7.3	1851422	+325839	L 3	41640 L	EO	91051609	095200	006800	00	G B=20	
RMFD NCC	6720	71	7.3	1851423	+325812	L 3	41649 L	EO	91051711	114100	003000	230	G E=100, G=30, B=15	
RMFD NCC	6720	71	7.3	1851423	+325807	L 1	20389 L	EO	91051712	121800	012000	343	G E=160, G=112, B=47	
RMFD NCC	6720	71	7.3	1851423	+325807	L 1	20389 S	EO	91051712	121900	012000	343	G E=160, G=112, B=47	
RMFD NCC	6720	71	7.3	1851423	+325807	L 3	41651 L	EO	91051714	142300	008000	242	G E=186, G=49, B=38	
RMFD NCC	6720	71	7.3	1851423	+325807	L 3	41651 S	EO	91051714	142400	008000	242	G E=186, G=49, B=38	
RMFD NCC	6720	71	7.3	1851427	+325833	L 3	41648 L	EO	91051710	100100	004000	30	G E=60, B=18	
RMFD NCC	6720	71	7.3	1851427	+325833	L 3	41648 S	EO	91051710	100200	004000	30	G E=60, B=18	
RMFD NCC	6720	71	7.3	1851430	+325801	L 3	41655 L	EO	91051807	074600	010000	452	G E=189, G=145, B=35	
RMFD NCC	6720	71	7.3	1851430	+325801	L 3	41655 S	EO	91051807	074700	010000	452	G E=189, G=145, B=35	
RMFD NCC	6720	71	7.3	1851430	+325801	L 1	20393 L	EO	91051809	093100	012000	433	G E=96, G=170, B=45	
RMFD NCC	6720	71	7.3	1851430	+325801	L 1	20393 S	EO	91051809	093200	012000	433	G E=96, G=170, B=45	
RMFD NCC	6720	70	15	1851436	+325755	L 1	20384 L	EO	91051616	162300	003000	302	G G=115, B=38	
RMFD NCC	6720	71	9.3	1851441	+325758	L 1	20382 L	EO	91051609	092600	012000	343	G E=153, G=100, B=45	
RMFD NCC	6720	71	9.3	1851442	+325749	L 1	20383 L	EO	91051612	121600	012000	333	G E=97, G=95, B=50	
RMFD NCC	6720	71	7.3	1851442	+325749	L 3	41643 L	EO	91051614	142300	009000	341	G E=176, G=60, B=30	
RMFD NCC	6720	71	9.3	1851449	+325744	L 3	41639 L	EO	91051607	075900	008000	350	G E=193, G=45, B=20	
RMFD NCC	6720	71	9.3	1851450	+375738	L 3	41641 L	EO	91051611	113800	003200	230	G E=105, G=35, B=15	
RMFD NCC	6720	71	9.3	1851456	+325739	L 3	41647 L	EO	91051707	074900	010000	350	G E=230, G=50, B=20	
RMFD NCC	6720	71	9.3	1851456	+325739	L 1	20388 L	EO	91051709	093500	012000	343	G E=162, G=100, B=45	
FHCAL HD	17588	49	4.3	1852451	+365003	L 1	21319 L	EO	91092315	152500	000052	342	G E=158, G=56, B=32	
FGNEB HD	175824	41	5.8	1853279	+484747	L 3	42774 L	10905	EO	91102105	053100	008000	X00	G G=5X, B=18
IGML HD	175865	49	4.0	1853487	+435246	H 1	20285 L	777	FU	91050209	095400	001800	352	G E=205, G=78, B=38
IGML HD	175865	49	4.0	1853487	+435246	L 1	20286 L	771	FU	91050210	104800	000500	442	G E=3X, G=165, B=35
IGML HD	175865	49	4.0	1853487	+435246	H 1	20377 L	757	FU	91051521	211400	001800	351	G E=200, G=70, B=25
IGML HD	175865	49	4.0	1853487	+435246	L 1	20378 L	753	FU	91051522	221000	000500	342	G E=3X, G=117, B=32
NA155 APELL	51	70	15.40	1858063	-181632	L 1	21168 L	00000	EO	91090515	154452	018000	554	V
NA155 APELL	70	70	15.40	1858063	-181632	L 3	42401 L	00000	EO	91090518	185425	013000	552	V
NA155 FK 36-11	70	70	14.00	1859289	+020450	L 3	42387 L	00000	EO	91090318	182920	005000	V	
NA155 FK 36-11	70	70	14.00	1859289	+020450	L 1	21146 L	00000	EO	91090315	153304	015000	334	V
MI074 QV VUL	55	55	14.50	1902321	+214139	L 3	41672 L	00000	EO	91052101	014308	030400	111	V
FHCAL HD	177724	30	3.0	1903066	+134715	L 1	21291 L	1389	FU	91092007	073300	000001	502	G G=203, B=32
FHCAL HD	177724	30	3.0	1903066	+134715	L 3	42517 L	1385	FU	91092007	073900	000003	500	G G=220, B=18
FHCAL HD	177724	30	3.0	1903066	+134715	H 3	42518 L	1417	FU	91092008	083900	000245	502	G G=222, B=40
FHCAL HD	177724	30	3.0	1903066	+134715	H 1	21292 L	1400	FU	91092008	084600	000100	502	G G=210, B=40
GNUC HD	177989	23	9.3	1904411	-184815	L 1	21100 L	625	FO	91082810	100600	000230	X02	G G=3X, B=35
GNUC HD	177989	23	9.3	1904411	-184815	L 1	21100 S	635	FO	91082810	101600	000230	402	G G=170, B=35
GNUC HD	177989	23	9.3	1904411	-184815	L 3	42342 L	645	FO	91082811	110300	000300	400	G G=161, B=18
GNUC HD	177989	23	9.3	1904411	-184815	L 3	42342 L	636	FO	91082811	110300	000300	400	G G=161, B=18
SSNM SKY BKGD	07	07		1904558	-403353	H 3	42690 L			91101110	100100	003000	42	G E=151, B=35
SSNM SKY BKGD	07	07		1904558	-403353	L 3	42691 L			91101111	115800	005200	51	G E=191, B=21
FNNIB NCC	6765	71	15.0	1909108	+302753	L 1	20921 L		EO	91080105	054400	035500	336	G E=141, G=110, B=60
GNUC HD	179407	23	9.4	1910049	-124005	L 1	21093 S	524	FO	91082710	100700	000430	233	G E=72, G=60, B=41
GNUC HD	179407	23	9.4	1910049	-124005	L 1	21093 L	515	FO	91082710	100700	000430	X03	G G=3X, B=42
GNUC HD	179407	23	9.4	1910049	-124005	L 3	42334 L	510	FO	91082710	105400	000242	400	G G=150, B=18
GNUC HD	179407	23	9.4	1910049	-124005	L 3	42334 L	529	FO	91082711	110300	000242	400	G G=150, B=18
GNUC HD	179407	23	9.4	1910049	-124005	L 1	21096 L	510	FO	91082716	162600	000118	502	G G=210, B=35
GNUC HD	179407	23	9.4	1910049	-124005	L 1	21096 L	533	FO	91082716	163400	000118	502	G G=210, B=35
FHCAL WAWCAL	98	98		1913160	-333640	L 1	21214 S			91091107	072000	000001	??	G E=10X, B=34



PRO	Object	CL	MAG	R.A.	DEC	D C	Image A	FES	MD	Obs.date	Exptim	mmmsst	ECC	Comment
PHCAL	TEFOOD	99		1913160	-333640	L 1	21215 S			91091107	074800	000025		09 G B=108
PHCAL	WAVCAL	98		1913160	-333640	H 1	21216 S			91091108	081600	000016		22 G B=60X,B=40
PHCAL	WAVCAL	98		1913160	-333640	L 3	42441 S			91091108	084000	000002		30 G B=10X,B=18
PHCAL	SAFETY	99		1913160	-333640	H 2	18590 S			91091109	090400	000000		04 G B=55
PHCAL	TEFOOD	99		1913160	-333640	L 3	42442 S			91091109	093200	000005		09 G B=105
PHCAL	WAVCAL	98		1913160	-333640	L 2	18591 S			91091110	102400	000001		21 G B=10X,B=22
PHCAL	TEFOOD	99		1913160	-333640	L 2	18592 S			91091110	105400	000010		09 G B=130
PHCAL	WAVCAL	99		1913160	-333640	H 2	18593 S			91091111	112200	000022		31 G B=60X,B=30
PHCAL	WAVCAL	98		1913168	-333640	H 3	42443 S			91091109	095700	000200		22 G B=60X,B=40
RNEW	RY SGR	52	6.5	1913169	-333641	H 1	21127 L	6029	FO	91090101	015000	042000		X36 G B=102,C=2X,B=75
RNEW	RY SGR	52	6.2	1913169	-333641	H 1	21177 L	7101	FO	91090700	002500	038500		X07 G G=3X,B=82
RNEW	RY SGR	52	6.5	1913169	-333641	H 1	21213 L	6404	FO	91091023	234300	042500		X07 G G=3X,B=90
RNEW	RY SGR	52	6.5	1913169	-333641	H 1	21245 L	6608	FO	91091423	232200	044700		X39 G B=145,C=3X,B=105
RNEW	RY SGR	52	6.5	1913169	-333640	H 1	21290 L	6265	FO	91092000	000200	041000		X38 G B=122,C=3X,B=95
RNEW	RY SGR	52	6.5	1913169	-333641	H 1	21338 L	5783	FO	91092523	234800	042000		X36 G B=158,C=3X,B=80
RNEW	RY SGR	52	6.5	1913169	-333641	H 1	21375 L	5278	FO	91093023	230600	042500		X37 G B=125,C=3X,B=90
RNEW	RY SGR	52	6.5	1913169	-333641	H 1	21427 L	4970	FO	91100621	213500	043500		X08 G G=3X,B=100
RMBW	RY SGR	52	6.8	1913170	-333641	H 1	20427 L	6098	FO	91052215	154400	042000		X07 G G=3X,B=90
RMBW	RY SGR	52	6.2	1913170	-333641	L 1	20494 L	5264	FO	91053115	154900	006000		X03 G G=2.3X,B=48
RMBW	RY SGR	52	7.0	1913170	-333641	L 3	41735 L	5363	FO	91053117	170500	009000		301 G G=70,B=25
RMBW	RY SGR	52	6.2	1913170	-333641	L 1	20496 L	5430	FO	91053122	224300	000500		402 G G=159,B=32
PHCAL	SKY BKGD	07	0.0	1913175	-333745	L 3	42440 L			91091023	234900	006000		00 G B=18
IENFP	V342 AQL	66	8.7	1914399	+091513	L 3	42679 L	935	FO	91101008	085500	001000		300 G G=75,B=19
IENFP	V342 AQL	66	8.7	1914399	+091513	L 1	21494 L	935	FO	91101505	052200	001800		X02 G G=4.5X,B=38
IENFP	V342 AQL	66	8.7	1914399	+091513	L 3	42723 L	928	FO	91101505	054600	003500		X01 G G=1.5X,B=22
IENFP	V342 AQL	66	8.7	1914399	+091513	L 1	21495 L	905	FO	91101506	062900	000600		X02 G G=1.5X,B=35
IENFP	V342 AQL	66	8.7	1914399	+091513	L 3	42779 L	865	FO	91102205	054100	003000		500 G G=200,B=20
IENFP	V342 AQL	66	8.7	1914399	+091513	L 1	21545 L	749	FO	91102206	061600	000430		402 G G=175,B=37
MIO74	FK26-11.1	70	14.00	1915334	-111143	L 1	20409 L	00000	EO	91052100	003009	002500		130 V
USBS	HD 181276	45	3.8	1915568	+531637	H 1	20728 L	627	FU	91070118	181100	003000		X02 G G=1.5X,B=40
ISNM	HD 181869	22	4.0	1920250	-404243	H 3	42566 L	632	FU	91092614	143900	000230		502 G G=235,B=40
PHCAL	WAVCAL	98		1920475	-434914	H 3	42592			91100109	090400	000005		G
PHCAL	WAVCAL	98		1920475	-434914	H 3	42592			91100109	090600	000200		G
PHCAL	WAVCAL	98		1920475	-434914	L 2	18595			91100109	092500	000010		G
PHCAL	WAVCAL	98		1920475	-434914	L 2	18595			91100109	092700	000001		G
PHCAL	WAVCAL	98		1920476	-434915	L 1	21376 S			91100107	070000	000026		28 G B=10X,B=100
PHCAL	WAVCAL	98		1920476	-434915	H 1	21377 S			91100107	073200	000041		29 G B=60X,B=105
PHCAL	SAFETYFD	99		1920476	-434915	H 2	18594 S			91100108	080700	000000		G
PHCAL	WAVCAL	98		1920476	-434915	L 3	42591 S			91100108	083600	000007		28 G B=10X,B=100
PHCAL	WAVCAL	98		1920476	-434915	H 3	42592 S			91100109	090400	000005		29 G B=60X,B=122
PHCAL	WAVCAL	98		1920476	-434915	L 2	18595 S			91100109	092500	000010		27 G B=10X,B=82
PHCAL	WAVCAL	98		1920476	-434915	H 2	18596 S			91100110	100200	000010		27 G B=60X,B=85
MIO21	HF C/G	57	11.02	1921550	+293434	H 1	20276 L	00161	FO	91050101	012426	010000		362 V
MIO21	HF C/G	57	11.00	1921550	+293434	L 1	20275 L	00163	FO	91050100	000637	000500		362 V
MIO21	HF C/G	57	10.96	1921550	+293434	L 3	41530 L	00168	FO	91050100	003133	002200		260 V
MIO21	HF C/G	57	11.00	1921550	+293434	L 3	41531 L	00163	FO	91050103	031400	003500		370 V
NIO15	HF C/GNI	57	11.37	1921550	+293434	H 3	41858 L	00468	SO	91061800	002506	009000		060 V
NIO15	HF C/G	57	11.33	1921550	+293434	L 1	20627 L	00121	FO	91061802	020242	000500		340 V
NIO15	HF C/GNI	57	11.34	1921550	+293434	L 3	41859 L	00481	SO	91061802	023501	001000		260 V
NIO15	HF C/G	57	11.36	1921550	+293434	L 1	20628 L	00118	FO	91061803	031123	002500		460 V

FO	Object	CL	MAG	R.A.	DEC	D C	Image A	FES	MD	Obs.date	Exptim	mmmsstt	ECC	Comment
NI015	EF CNG	57	11.39	1921550	+293434	L 3	41860 L	00461	SO	91061803	035032	003000	370	V
NI015	EF CNG	57	99.99	1921550	+293434	H 1	20629 L	00117	FO	91061804	042644	002000	110	V
NI015	EF CNG	57	11.28	1921550	+293434	L 3	42355 L	00127	FO	91082920	201516	001000	360	V
NI015	EF CNG	57	11.28	1921550	+293434	L 1	21113 L	00127	FO	91082921	210239	001500	460	V
NI015	EF CNG	57	11.29	1921550	+293434	L 3	42356 L	00126	FO	91082921	213847	003000	370	V
NI015	EF CNG	57	11.29	1921550	+293434	L 1	21114 L	00126	FO	91082922	222026	002500	570	V
PHCAL	HD 182572	44	5.2	1922351	+115009	H 1	20892 L	17632	FO	91072712	121300	003000	X39	G B=169, O=1.5X, B=11
MO030	CH CNG	57	07.59	1923142	+500831	L 1	20889 L	03387	FO	91072623	233223	000400	340	V
MO030	CH CNG	57	07.59	1923142	+500831	L 3	42130 L	03384	FO	91072700	000515	001800	340	V
FRMIT	FR LXR	53	7.6	1923520	+424112	L 3	42060 L	1862	FO	91071311	114300	006000	401	G O=145, B=22
FRMIT	FR LXR	49	7.6	1923521	+424112	L 1	20346 L	2177	FO	91050917	171400	000210	502	G O=210, B=35
FRMIT	FR LXR	49	7.6	1923521	+424112	L 1	20347 L	2101	FO	91050918	181100	000300	X02	G O=1.5X, B=35
FRMIT	FR LXR	53	7.6	1923521	+424112	L 1	20410 L	1725	FO	91052107	072600	000610	502	G O=192, B=35
FRMIT	FR LXR	53	7.6	1923521	+424112	L 1	20411 L	1733	FO	91052108	082300	000610	502	G O=185, B=32
FRMIT	FR LXR	53	7.6	1923521	+424112	L 1	20412 L	1633	FO	91052109	092200	000640	502	G O=198, B=35
FRMIT	FR LXR	53	7.6	1923521	+424112	L 1	20413 L	1961	FO	91052110	102100	000440	502	G O=215, B=35
FRMIT	FR LXR	53	7.6	1923521	+424112	L 1	20414 L	2729	FO	91052111	110900	000210	402	G O=175, B=35
FRMIT	FR LXR	53	7.6	1923521	+424112	L 1	20415 L	3574	FO	91052111	115200	000200	402	G O=185, B=35
FRMIT	FR LXR	53	7.6	1923521	+424112	L 1	20416 L	3364	FO	91052112	124200	000320	502	G O=230, B=35
FRMIT	FR LXR	53	7.6	1923521	+424112	L 1	20417 L	2883	FO	91052113	133400	000400	502	G O=222, B=35
FRMIT	FR LXR	53	7.6	1923521	+424112	L 1	20418 L	2526	FO	91052114	143600	000440	502	G O=238, B=32
FRMIT	FR LXR	53	7.6	1923521	+424112	L 1	20419 L	2331	FO	91052115	152800	000455	502	G O=225, B=35
FRMIT	FR LXR	53	7.6	1923521	+424112	L 1	20420 L	2157	FO	91052116	162900	000500	502	G O=215, B=34
FRMIT	FR LXR	53	7.6	1923521	+424112	L 1	20421 L	1965	FO	91052117	173200	000520	502	G O=206, B=32
FRMIT	FR LXR	53	7.6	1923521	+424112	L 1	20422 L	1852	FO	91052118	182700	000530	502	G O=211, B=34
FRMIT	FR LXR	53	7.6	1923521	+424112	L 1	20423 L	1771	FO	91052119	192600	000540	502	G O=197, B=32
FRMIT	FR LXR	53	7.6	1923521	+424112	L 1	20424 L	1677	FO	91052120	202700	000600	502	G O=220, B=34
FRMIT	FR LXR	53	7.6	1923521	+424112	L 1	20425 L	1680	FO	91052121	212800	000600	502	G O=229, B=35
FRMIT	FR LXR	53	7.6	1923521	+424112	L 1	20426 L	1662	FO	91052122	222600	000600	502	G O=218, B=35
FRMIT	FR LXR	53	7.6	1923521	+424112	L 3	41677 L	1564	FO	91052316	161300	006000	X01	G O=2X, B=25
FRMIT	FR LXR	53	7.6	1923521	+424112	L 3	41678 L	3356	FO	91052317	174700	001200	X00	G O=2X, B=20
FRMIT	FR LXR	53	7.6	1923521	+424112	L 3	41679 L	3701	FO	91052318	183400	000900	500	G O=215, B=18
FRMIT	FR LXR	53	7.6	1923521	+424112	L 1	20430 L	3567	FO	91052318	184900	000110	502	G O=213, B=32
FRMIT	FR LXR	53	7.6	1923521	+424112	L 3	41680 L	3252	FO	91052319	192500	002500	X00	G O=1.5X, B=18
FRMIT	FR LXR	53	7.6	1923521	+424112	L 3	41681 L	2775	FO	91052320	202600	002800	500	G O=220, B=20
FRMIT	FR LXR	53	7.6	1923521	+424112	L 1	20431 L	2579	FO	91052321	210100	000210	502	G O=228, B=32
FRMIT	FR LXR	53	7.6	1923521	+424112	L 3	41682 L	2397	FO	91052321	214100	003500	500	G O=182, B=20
FRMIT	FR LXR	53	7.6	1923521	+424112	L 1	20432 L	2265	FO	91052322	222400	000230	502	G O=214, B=32
FRMIT	FR LXR	53	7.6	1923521	+424112	L 3	41720 L	1743	FO	91052920	204600	009000	X00	G O=3X, B=20
FRMIT	FR LXR	53	7.6	1923521	+424112	L 1	20471 L	2017	FO	91052922	222400	000210	401	G O=165, B=30
FRMIT	FR LXR	53	8.26	1923521	+424112	L 1	20562 L	1894	FO	91061013	132800	000240	502	G O=194, B=32
FRMIT	FR LXR	53	8.28	1923521	+424112	L 3	41811 L	1866	FO	91061013	134100	006000	501	G O=176, B=23
FRMIT	FR LXR	53	8.33	1923521	+424112	L 1	20563 L	1776	FO	91061015	151800	000250	502	G O=214, B=32
FRMIT	FR LXR	53	8.33	1923521	+424112	L 3	41812 L	1796	FO	91061015	153100	006000	501	G O=210, B=30
FRMIT	FR LXR	53	8.28	1923521	+424112	L 3	41813 L	1848	FO	91061017	171000	006000	X02	G O=3X, B=40
FRMIT	FR LXR	53	8.39	1923521	+424112	L 1	20564 L	1696	FO	91061018	181600	000250	502	G O=216, B=32
FRMIT	FR LXR	53	7.98	1923521	+424112	L 1	20565 L	2442	FO	91061019	195700	000130	502	G O=218, B=35
FRMIT	FR LXR	53	7.75	1923521	+424112	L 3	41814 L	2839	FO	91061020	201600	001500	X00	G O=2X, B=18
FRMIT	FR LXR	53	7.75	1923521	+424112	L 3	41814 S	3293	FO	91061020	204300	000900	500	G O=215, B=18
FRMIT	FR LXR	53	7.6	1923521	+424112	L 3	42049 L	1859	FO	91071211	113400	005500	503	G O=212, B=47

FBO	Object	CL	MAG	R.A.	DEC	D C	Image A	FES	MD	Obs.date	Exptim	mmmsstt	EC	Comment
FRNT	FR LXR	53	7.6	1923521	+424112	L 1	20794 L	1811	FO	91071212	123700	000310		503 G G=199,B=41
FRNT	FR LXR	53	7.6	1923521	+424112	L 3	42050 L	1774	FO	91071213	131500	002500		406 G G=194,B=72
FRNT	FR LXR	53	7.6	1923521	+424112	L 3	42051 L	2863	FO	91071214	141800	000900		502 G G=224,B=32
FRNT	FR LXR	53	7.6	1923521	+424112	L 3	42052 L	3822	FO	91071215	150000	000730		501 G G=226,B=27
FRNT	FR LXR	53	7.6	1923521	+424112	L 3	42053 L	3445	FO	91071215	154700	000830		401 G G=158,B=25
FRNT	FR LXR	53	7.6	1923521	+424112	L 3	42054 L	2998	FO	91071216	163500	002000		500 G G=209,B=20
FRNT	FR LXR	53	7.6	1923521	+424112	L 3	42055 L	2650	FO	91071217	174000	002300		400 G G=162,B=18
FRNT	FR LXR	53	7.6	1923521	+424112	L 1	20795 L	2439	FO	91071218	181200	000200		502 G G=201,B=32
FRNT	FR LXR	53	7.6	1923521	+424112	L 1	20799 L	1877	FO	91071311	113200	000240		402 G G=146,B=34
FRNT	FR LXR	53	7.6	1923521	+424112	L 3	42061 L	1810	FO	91071313	131600	012000		X01 G G=3K,B=30
FRNT	FR LXR	53	7.6	1923521	+424112	L 1	20800 L	1737	FO	91071315	154600	000255		502 G G=210,B=32
FRNT	FR LXR	53	7.6	1923521	+424112	L 3	42062 L	1723	FO	91071315	155700	003500		400 G G=162,B=18
FRNT	FR LXR	53	7.6	1923521	+424112	L 3	42063 L	2192	FO	91071317	170500	001100		500 G G=180,B=18
FRNT	FR LXR	53	7.6	1923521	+424112	L 1	20801 L	3408	FO	91071317	174500	000110		502 G G=230,B=33
FRNT	FR LXR	53	7.6	1923521	+424112	L 3	42064 L	3549	FO	91071317	175200	000830		500 G G=249,B=18
FRNT	FR LXR	53	7.6	1923521	+424112	L 3	42065 L	3589	FO	91071318	183200	000800		500 G G=172,B=18
CONA	HD	185144	46	4.68	1932274	+693433	L 3 42191 L	24432	FO	91080716	163500	013500		430 G B=117,G=133,B=18
FNSH	ED	30 3639	70	9.6	1932475	+302420	L 3 41867 L	521	FO	91061817	175700	000500		5X0 G B=2K,G=170,B=18
FNSH	ED	30 3639	70	9.6	1932475	+302420	L 1 20637 L	528	FO	91061818	183300	000300		5X2 G B=2K,G=215,B=34
FNSH	ED	30 3639	70	9.6	1932475	+302420	L 3 41868 L	529	FO	91061819	190900	000500		5X0 G B=2K,G=170,B=18
HNSA	HD	185395	41	4.48	1935060	+500619	L 1 21227 L	367	FU	91091311	112600	000031		502 G G=250,B=35
HNSA	HD	185395	41	4.48	1935060	+500619	L 3 42453 L	365	FU	91091311	113700	000451		501 G G=181,B=25
USSES	HD	186155	41	5.0	1939176	+452420	L 3 41805 L	20381	FO	91080920	204100	000200		300 G G=87,B=18
N1085	HM SCE		57	11.69	1939414	+163733	L 3 42154 L	00353	SO	91080122	225157	001000		150 V
N1085	HM SCE		57	11.70	1939414	+163733	L 1 20928 L	00347	SO	91080123	231158	001000		252 V
N1119	HM SCE		57	11.68	1939414	+163733	L 1 21329 L	00355	SO	91092416	161515	000800		351 V
N1119	HM SCE		57	11.72	1939414	+163733	L 3 42547 L	00341	SO	91092416	163114	001200		150 V
N1119	HM SCE		57	11.67	1939414	+163733	L 1 21330 L	00358	SO	91092417	171230	006000		461 V
N1119	HM SCE		57	11.65	1939414	+163733	L 3 42548 L	00364	SO	91092418	181813	012000		360 V
N1119	HM SCE		57	11.70	1939414	+163733	H 1 21331 L	00348	SO	91092420	202425	014300		151 V
CMAB	HD	186185	41	5.49	1940425	-153515	L 3 41764 L	15422	FO	91080305	052800	015000		232 G B=130,G=20K,B=32
NA155	A65		70	15.90	1943348	-231535	L 1 21147 L	00000	EO	91090320	200313	016700		444 V
CMAB	HD	186791	47	2.72	1943529	+102924	H 1 20326 L	1604	FU	91050716	162200	004000		3X3 G B=3K,G=120,B=50
CMAB	HD	186791	47	2.72	1943529	+102924	H 1 20327 L	1663	FU	91050717	173800	001000		342 G B=189,G=80,B=40
CMAB	HD	186791	47	2.72	1943529	+102924	H 1 20328 L	1729	FU	91050718	182400	001000		353 G B=208,G=100,B=45
CMAB	HD	186791	47	2.7	1943529	+102924	L 3 41854 L	1628	FU	91061714	144200	005200		341 G B=160,G=66,B=30
CMAB	HD	186791	47	2.72	1943529	+102924	H 1 20623 L	1643	FU	91061715	152200	001000		342 G B=152,G=70,B=35
CMAB	HD	186791	47	2.7	1943529	+102924	H 1 21402 L	1605	FU	91100505	053000	003500		3X2 G B=3K,G=100,B=32
CMAB	HD	186791	47	2.7	1943529	+102924	L 3 42622 L	1614	FU	91100506	061400	006000		340 G B=166,G=50,B=18
CMAB	HD	186791	47	2.7	1943529	+102924	H 1 21403 L	1617	FU	91100506	065300	001100		341 G B=159,G=70,B=28
GNUC	HD	225757	23	10.6	1944492	+343148	L 1 21111 L	185	FO	91082916	163200	000600		502 G G=190,B=35
GNUC	HD	225757	23	10.6	1944492	+343148	L 1 21111 L	183	FO	91082916	164200	000300		502 G G=190,B=35
GNUC	HD	225757	23	10.6	1944492	+343148	L 1 21118 L	194	FO	91083011	115900	001800		X02 G G=2K,B=40
GNUC	HD	225757	23	10.6	1944492	+343148	L 3 42359 L	197	FO	91083012	123100	001300		300 G G=90,B=18
NQ072	HSL946+769	85	15.70	1946410	+765826	L 1 20734 L		00000	EO	91070223	232124	020500		112 V
N156	HD187614	45	06.85	1947523	+265728	L 1 20942	S	05502	FO	91090319	194956	000100		301 V
N156	HD187614	45	06.85	1947523	+265728	L 1 20942	L	05502	FO	91090319	194337	000200		401 V
N156	HD187614	45	06.85	1947523	+265728	L 3 42164	L	06489	FO	91080319	191159	016000		301 V
CONB	HD	188510	44	8.8	1952471	+103615	L 1 20855 L	787	FO	91072108	085200	003000		X02 G G=1.5K,B=35
HNSA	HD	188728	30	5.3	1953521	+111727	L 3 42714 L	19713	FO	91101407	070300	000104		500 G G=196,B=18



FRO	Object	CL	MAG	R.A.	DEC	D C Image A	FES	MD	Obs.date	Exptim	mmmsstt	ICC	Comment	
FNNSA HD	188728	30	5.3	1953521	+111727	L 1	21488	L	19486	FO	91101407	071600	000027	502 G G=201, B=36
USSES	1889474	47	3.9	1954257	+345657	H 1	20632	L	547	FU	91061809	093000	004000	543 G B=150, G=230, B=42
NID85	V1016CMG	57	10.91	1955198	+394130	L 3	42161	L	00176	FO	91080300	000456	000600	361 V
NID85	V1016 CMG	57	10.94	1955198	+394130	L 1	20934	L	00172	FO	91080300	001849	000200	352 V
PHCAL	V1016CMG	57	10.8	1955199	+394139	L 3	41825	L	186	FO	91061213	134900	000200	350 G B=235, G=40, B=18
PHCAL	V1016CMG	57	10.8	1955199	+394139	L 3	41825	S	182	FO	91061214	140400	000400	350 G B=214, G=42, B=18
PHCAL	V1016CMG	57	10.8	1955199	+394139	L 1	20581	S	183	FO	91061214	141900	003000	G G=8X, B=8X
PHCAL	V1016CMG	57	10.8	1955199	+394139	L 3	41826	L	183	FO	91061214	145800	001000	349 G B=6X, G=202, B=165
PHCAL	V1016CMG	57	10.8	1955199	+394139	L 3	41826	S	188	FO	91061215	151700	002000	349 G B=6X, G=198, B=165
PHCAL	V1016CMG	57	10.8	1955199	+394139	L 1	20581	L	193	FO	91061215	154600	001500	350 G B=211, G=42, B=18
PHCAL	V1016CMG	57	10.8	1955199	+394139	L 3	41827	L	184	FO	91061216	165500	000200	244 G B=1.5X, G=79, B=60
PHCAL	V1016CMG	57	10.8	1955199	+394139	L 3	41827	S	183	FO	91061217	170400	000400	244 G B=1.5X, G=80, B=60
PHCAL	V1016CMG	57	10.8	1955199	+394139	L 1	20582	L	178	FO	91061218	180300	000300	343 G B=1.5X, G=86, B=47
PHCAL	V1016CMG	57	10.8	1955199	+394139	L 1	20582	S	177	FO	91061218	181600	000600	343 G B=1.5X, G=80, B=47
PHCAL	V1016CMG	57	10.8	1955199	+394139	H 3	41828	L	178	FO	91061218	183100	003000	X1 G B=1.5X, B=25
PHCAL	V1016CMG	57	10.8	1955199	+394139	H 1	20583	L	176	FO	91061219	191000	003000	342 G B=1.5X, G=66, B=40
PHCAL	V1016CMG	57	10.8	1955199	+394139	L 1	20584	L	177	FO	91061220	202000	000300	342 G B=1.5X, G=75, B=32
PHCAL	V1016CMG	57	10.8	1955199	+394139	L 1	20584	S	175	FO	91061220	203400	000600	342 G B=1.5X, G=74, B=32
FGNET HD	-18 5550	45	9.3	1955570	-182012	L 1	21543	L	558	FO	91102121	214300	003000	542 G B=1.77, G=217, B=38
USSES HD	189319	49	3.5	1956320	+192119	H 1	20631	L	859	FU	91061807	073400	002000	232 G B=137, G=50, B=38
FMFD NEC	6853	71	6.0	1957182	+223516	L 3	41657	L		FO	91051814	142700	008000	31 G B=52, B=22
FMFD NEC	6853	71	6.0	1957199	+223415	L 3	41656	L			91051812	121200	010000	340 G B=125, G=45, B=15
FMFD NEC	6853	71	6.0	1957199	+223415	L 3	41656	S			91051812	121300	010000	340 G B=125, G=45, B=15
FMFD NEC	6853	71	6.0	1957199	+223415	L 1	20395	L		FO	91051814	140100	013500	333 G B=121, G=90, B=50
FMFD NEC	6853	71	6.0	1957199	+223415	L 1	20395	S		FO	91051814	140200	013500	333 G B=121, G=90, B=50
FMFD NEC	6853	71	6.0	1957216	+223314	L 1	20394	L		FO	91051812	124300	004000	02 G B=32
FMFD WAVECAL	98			1957362	+223617	L 3	41659	L			91051821	213700	000000	30 G B=113, B=18
FMFD NEC	6853	71	6.0	1957363	+223618	L 1	20397	L		FO	91051820	203400	006000	333 G B=134, G=80, B=47
FMFD NEC	6853	71	6.0	1957363	+223618	L 1	20397	S		FO	91051821	214000	006700	333 G B=134, G=80, B=47
FMFD NEC	6853	71	6.0	1957376	+223540	L 3	41658	L		FO	91051816	162200	024000	43 G B=151, B=44
FMFD WAVECAL	98			1957376	+223540	L 1	20396	L			91051817	170900	000000	X2 G B=2X, B=32
FMFD WAVECAL	98			1957376	+223540	L 1	20396	S			91051817	171000	000000	X2 G B=2X, B=32
PHCAL	FR TEL	63	12.0	2000200	-555200	L 1	20537	L	157	FO	91060714	145000	000200	342 G B=190, G=80, B=40
PHCAL	FR TEL	63	12.0	2000200	-555200	L 1	20537	S	157	FO	91060714	145700	000400	351 G B=200, G=80, B=30
PHCAL	FR TEL	63	12.0	2000200	-555200	H 3	41786	L	159	FO	91060715	151000	002000	341 G B=3X, G=60, B=30
PHCAL	FR TEL	63	11.0	2000200	-555200	H 1	20538	L	163	FO	91060715	155000	002000	345 G B=3X, G=100, B=65
PHCAL	FR TEL	63	11.0	2000200	-555200	L 3	41787	L	159	FO	91060716	165500	000200	240 G B=1.5X, G=40, B=20
PHCAL	FR TEL	63	11.0	2000200	-555200	L 3	41787	S	159	FO	91060717	170200	000400	241 G B=1.5X, G=40, B=25
PHCAL	FR TEL	63	12.0	2000200	-555200	L 1	20539	L	159	FO	91060717	171300	001000	545 G B=5X, G=225, B=72
PHCAL	FR TEL	63	12.0	2000200	-555200	L 1	20539	S	158	FO	91060717	173300	002000	445 G B=5X, G=210, B=67
PHCAL	FR TEL	63	12.0	2000200	-555200	L 3	41788	L	159	FO	91060718	180800	001000	340 G B=5X, G=100, B=20
PHCAL	FR TEL	63	12.0	2000200	-555200	L 3	41788	S	159	FO	91060718	182800	001000	341 G B=5X, G=100, B=25
PHCAL	FR TEL	63	12.0	2000200	-555200	L 1	20540	L	159	FO	91060719	192700	000200	342 G B=1.5X, G=80, B=35
PHCAL	FR TEL	63	11.0	2000200	-555200	L 1	20540	S	159	FO	91060719	194200	000400	342 G B=1.5X, G=75, B=35
PHCAL	FR TEL	63	12.0	2000200	-555200	L 3	41789	L	158	FO	91060719	195000	000300	240 G B=1.5X, G=40, B=20
PHCAL	FR TEL	63	12.0	2000200	-555200	L 3	41789	S	157	FO	91060719	195700	000400	241 G B=1.5X, G=40, B=22
SNMM	SATURN	03	0.5	2007407	-204531	L 3	42684	L			91101020	201700	011000	X51 G B=195, G=5X, B=25
SNMM	SATURN	03	0.5	2007408	-204531	L 3	42685	L			91101022	223500	012000	X51 G B=197, G=5X, B=30
SNMM	SATURN	03	0.5	2007414	-204532	L 3	42686	L			91101101	010300	012000	X51 G B=208, G=5X, B=30
SNMM	SATURN	03	0.5	2007418	-204533	L 3	42687	L			91101103	033300	012000	X51 G B=213, G=3X, B=28



FRO	Object	CL	MAG	R.A.	DEC	D C	Image A	FES	MD	Obs.date	Exptim	mm	us	stt	ECC	Comment
SSNM	SATURN	03	0.5	2007422	-204535	L 3	42688 L		FO	91101106	060300	009000				X51 G B=194, G=3X, B=28
SSNM	SATURN	03	0.5	2007424	-204535	L 3	42689 L		FO	91101108	080200	006000				X53 G B=227, G=3X, B=50
NC007	GL783A	46	05.61	2007564	-361444	H 1	21253 L	17493	FO	91092522	224204	000600				311 V
IGMIS HD	192041	47	7.9	2009371	+384003	L 3	42743 L	1995	FO	91101623	231800	004000				00 G B=18
NCL38	FG SGE	41	09.62	2009430	+201054	L 1	20626 L	00555	FO	91061722	220523	011000				501 V
NCL38	FG SGE	41	09.68	2009430	+201054	L 1	20778 L	00529	FO	91071000	005629	011000				501 V
NCL38	FG SGE	41	09.72	2009430	+201054	L 1	20952 L	00508	FO	91080500	002913	009800				403 V
NCL38	FG SGE	41	09.62	2009430	+201054	L 1	21112 L	00555	FO	91082917	175552	011000				502 V
NA202	FG SGE	41	09.58	2009430	+201054	L 3	42505 L	00578	FO	91091822	221531	003000				110 V
NA202	FG SGE	41	09.54	2009430	+201054	L 1	21278 L	00601	FO	91091820	201528	011000				500 V
IGMIS HD192078		45	07.87	2009491	+384347	H 1	21052 L	02660	FO	91082122	225752	009000				331 V
CONIS HD	192078	45	7.6	2009491	+384347	D 9	02484 2			91082200	004800	016000				G
IGMIS HD192078		45	07.82	2009491	+384347	L 3	42304 L	02780	FO	91082120	200227	004500				400 V
IGMIS HD	192078	45	7.6	2009491	+384347	L 3	42742 L	2739	FO	91101621	214000	004500				500 G G=175, B=18
IGMIS HD	192078	45	7.6	2009491	+384347	L 1	21507 L	2762	FO	91101622	223400	001000				402 G G=148, B=35
IANUC	SATURN	03	0.0	2010238	-203559	H 3	42403 S		FO	91090523	233400	043500				442 G B=146, G=140, B=38
VENSA HR 7750		23	4.4	2010344	+773339	L 3	42707 L	436	FU	91101310	100700	000020				500 G G=205, B=15
VENSA HR 7750		23	4.4	2010344	+773339	L 1	21483 L	433	FU	91101310	101800	000009				502 G G=193, B=40
ISNIS HD	192281	12	7.6	2010450	+400651	L 1	21188 L	2710	FO	91090812	120100	001000				X04 G G=2X, B=60
ISNIS HD	192281	12	7.6	2010450	+400651	L 3	42417 L	2718	FO	91090812	122300	002000				?00 G G=2, B=18
ISNIS HD	192281	12	7.6	2010450	+400651	H 1	21189 L	2613	FO	91090813	131400	009500				X06 G G=2.5X, B=60
COMSB HD	192455	41	5.75	2010459	+615536	L 3	41765 L	13059	FO	91060308	084800	024000				?42 G B=159, G=20X, B=40
MCL55	RS C&G	51	07.77	2011345	+383436	L 1	20331 L	02905	FO	91050723	234504	006000				110 V
SRNE HD	192443	50	8.0	2011345	+383436	L 1	20510 L	3418	FO	91060317	171200	003000				07 G B=90
SRNE HD	192443	50	8.0	2011345	+383436	L 1	20681 L	3363	FO	91062320	202400	002500				01 G B=30
SRNE HD	192443	50	8.0	2011345	+383436	L 1	20808 L	4010	FO	91071414	142800	002000				07 G B=90
SRNE HD	192443	50	8.0	2011345	+383436	L 1	21074 L	3676	FO	91082416	162600	002000				02 G B=35
IEMIE HD	192577	47	3.7	2012033	+463520	H 1	20283 L	642	FU	91050121	215700	000500				402 G G=190, B=40
IEMIE HD	192577	47	3.7	2012033	+463520	H 3	41544 L	644	FU	91050122	221100	001200				503 G G=230, B=41
IEMIE HD	192577	47	3.73	2012033	+463520	H 1	20293 L	662	FU	91050221	215300	001000				XK3 G B=2X, G=2X, B=45
IENUE HD	192577	47	3.7	2012033	+463520	H 1	21209 L	661	FU	91091011	112500	000500				453 G B=207, G=192, B=42
IENUE HD	192577	47	3.7	2012033	+463520	H 3	42436 L	664	FU	91091011	113900	001200				503 G G=234, B=41
IENUE HD	192577	47	3.7	2012033	+463520	H 1	21210 L	737	FU	91091012	122000	001000				XK3 G B=2X, G=1.5X, B=50
MA064 HD192641		10	08.19	2012394	+363028	L 1	20888 L	02002	FO	91072620	202315	000040				500 V
MA064 HD192641		10	08.20	2012394	+363028	H 3	42129 L	01977	FO	91072620	202921	015000				401 V
NA170 HD192641		10	08.20	2012394	+363028	L 1	21369 L	01974	FO	91092919	195335	000040				550 V
NA170 HD192641		10	08.20	2012394	+363028	H 3	42583 L	01974	FO	91092919	195843	017000				552 V
ISMIS HD	192660	23	7.54	2012396	+401034	L 1	20505 L	2749	FO	91060219	195700	000200				X02 G G=2X, B=35
ISMIS HD	192660	23	7.54	2012396	+401034	L 3	41750 L	2695	FO	91060220	201400	001000				540 G B=163, G=230, B=20
AENIS HD	177482	40	5.5	2015030	-890818	L 3	42767 L	15939	FO	91102011	115000	005000				231 G B=105, G=35X, B=25
FGNIA HD	332077	50	8.6	2015111	+312356	L 1	21504 L	908	FO	91101610	100800	012000				335 G B=168, G=152, B=70
FGNIA HD	332077	50	8.6	2015111	+312356	L 1	21504 L	860	FO	91101612	121400	003500				335 G B=122, G=102, B=70
PCNIS HD	193237	23	4.80	2015565	+375236	H 1	20503 L	285	FU	91060217	172800	000415				552 G B=224, G=210, B=40
PCNIS HD	193237	23	4.80	2015565	+375236	H 3	41748 L	284	FU	91060217	174000	002500				X42 G B=154, G=1.5X, B=39
PCNIS HD	193237	23	4.80	2015565	+375236	H 1	20504 L	283	FU	91060218	181500	000415				553 G B=235, G=220, B=42
PCNIS HD	193237	23	4.80	2015565	+375236	H 3	41748 L	277	FU	91060218	184900	002500				X42 G B=172, G=1.5X, B=38
PCNIS HD	193237	23	4.8	2015565	+375236	H 1	21172 L	312	FU	91090311	115200	000415				5X4 G B=1.5X, G=226, B=55
PCNIS HD	193237	23	4.8	2015565	+375236	H 3	42406 L	26852	FO	91090612	122000	002200				4X2 G B=1.5X, G=160, B=40
PCNIS HD	193237	23	4.8	2015565	+375236	H 1	21173 L	26570	FO	91090612	125700	000415				5X2 G B=1.5X, G=221, B=40
PCNIS HD	193237	23	4.8	2015565	+375236	H 3	42407 L	26259	FO	91090613	133000	002200				4X1 G B=1.5X, G=154, B=25

PRO	Object	CL	MAG	R.A.	DEC	D C	Image A	FES	MD	Obs.date	Exptim	nummsst	ECC	Comment
PCNIS HD	193237	23	4.8	2015565	+375236	H 1	21174 L	25681	FO	91090614	140800	000415	5X2	G B=1.5X,G=220,B=38
PCNIS HD	193237	23	4.8	2015565	+375236	H 3	42408 L	25515	FO	91090614	144000	001000	341	G B=174,G=109,B=28
WNEG HD	193237	23	5.00	2015569	+375235	L 3	42543 L	25381	FO	91092323	233900	001330	351	G B=185,G=100,B=27
OR8CK HD	193237	23	5.00	2015570	+375236	H 1	21320 L	25545	FO	91092400	000600	000240	452	G B=211,G=176,B=35
WNEG HD	193237	23	5.0	2015570	+375236	H 3	42576 L	26503	FO	91092805	053700	001500	401	G G=180,B=30
WNEG HD	193237	23	5.0	2015570	+375236	H 1	21358 L	26422	FO	91092806	061500	000250	442	G B=175,G=180,B=40
PHCAL	NOIHING	07		2017176	+390755	L 1	21839 L			91112422	221400	006000	03	G B=45
ISNIS HD	193514	13	7.8	2017200	+390656	L 1	21201 L	3250	FO	91090911	113900	001000	X03	G G=2X,B=50
ISNIS HD	193514	13	7.8	2017200	+390656	L 3	42428 L	3214	FO	91090912	120600	003000	702	G G=3.5,B=40
ISNIS HD	193514	13	7.8	2017200	+390656	H 1	21202 L	3146	FO	91090913	132400	008500	X04	G G=1.5X,B=58
ISNIS HD	193514	13	7.75	2017200	+390656	H 1	21838 L	2997	FO	91112419	194400	010000	X05	G G=1.5X,B=70
ISNIS HD	193514	13	7.75	2017200	+390656	H 3	43212 L	2917	FO	91112421	213100	031500	X07	G G=1.5X,B=82
WRMS HD	193576	11	8.2	2017420	+383423	H 3	41584 L	1964	FO	91050607	075600	018000	345	G B=186,G=140,B=70 MD
WRMS HD	193576	11	8.2	2017420	+383423	H 3	41585 L	1976	FO	91050611	113000	020000	357	G B=252,G=180,B=90
WRMS HD	193576	11	8.3	2017425	+383423	H 3	41606 L	1915	FO	91050907	075200	019000	343	G B=190,G=120,B=50
WRMS HD	193576	11	8.3	2017425	+383423	H 3	41607 L	1925	FO	91050911	113500	019000	403	G G=170,B=50
WRMS HD	193576	11	8.3	2017425	+383423	H 3	41616 L	1940	FO	91051307	074700	018000	344	G B=190,G=130,B=55
WRMS HD	193576	11	8.3	2017425	+383423	H 3	41617 L	1976	FO	91051311	112000	021000	344	G B=202,G=150,B=55
WRMS HD	193576	11	8.3	2017425	+383423	H 3	41624 L	1689	FO	91051408	081100	018000	343	G B=150,G=110,B=45
WRMS HD	193576	11	8.3	2017425	+383423	H 3	41625 L	1913	FO	91051411	114400	018000	343	G B=171,G=125,B=45
WRMS HD	193576	11	8.3	2017425	+383423	H 3	41633 L	1934	FO	91051507	074400	019000	343	G B=188,G=120,B=50
WRMS HD	193576	11	8.3	2017425	+383423	H 3	41634 L	1979	FO	91051511	112900	021000	344	G B=186,G=140,B=52
FNLA IC	4997	70	11.3	2017507	+163433	H 3	41903 L	132	FO	91062305	055900	041000	3X6	G B=3X,G=140,B=75
FNLA IC	4997	70	11.3	2017507	+163433	L 1	20705 L	142	FO	91062813	135900	003000	X09	G B=2X,G=2X,B=145
FNLA IC	4997	70	11.3	2017507	+163433	L 3	41945 L	145	FO	91062814	143800	002500	3X9	G B=2X,G=175,B=122
FNLA IC	4997	70	11.3	2017507	+163433	L 1	20706 L	167	FO	91062815	152000	001000	339	G B=199,G=190,B=122
FNLA IC	4997	70	11.3	2017507	+163433	L 3	41946 L	628	FO	91062815	155500	000500	3X3	G B=1.5X,G=67,B=42
FNLA IC	4997	70	11.3	2017507	+163433	H 3	41947 L	136	FO	91062817	175500	004000	X1	G B=1.5X,B=24
FNLA IC	4997	70	11.3	2017507	+163433	H 1	20707 L	130	FO	91062818	184000	013000	352	G B=201,G=90,B=40
NCL82 U	CXG	50	08.72	2018032	+474410	L 1	20653 L	01240	FO	91062104	041411	003500	111	V FREAD NO SPECTRUM
NCL82 U	CXG	51	08.81	2018032	+474410	L 1	20796 L	01152	FO	91071219	195619	018000	101	V
NCL82 U	CXG	53	08.87	2018032	+474410	L 1	20981 L	01091	FO	91080919	194807	016600	111	V
MA064 HD	193793	10	07.16	2018467	+434143	L 1	20733 L	04979	FO	91070219	195342	000022	551	V
MA064 HD	193793	10	07.17	2018467	+434143	H 3	41977 L	04930	FO	91070220	200259	012000	540	V
MA064 HD	193793	10	07.15	2018467	+434143	H 3	42319 L	04994	FO	91082517	174456	012000	501	V
MA064 HD	193793	10	07.16	2018467	+434143	L 1	21080 L	04982	FO	91082519	194846	000022	501	V
NA170 HD	193793	10	07.16	2018467	+434143	L 1	21368 L	04955	FO	91092917	170524	000022	550	V
NA170 HD	193793	10	07.16	2018467	+434143	H 3	42582 L	04945	FO	91092917	171236	011000	552	V
NIL19 FU	VUL	57	10.99	2019011	+212443	L 1	21311 S	00164	FO	91092217	171454	000300	341	V
NIL19 FU	VUL	57	10.99	2019011	+212443	L 1	21311 L	00164	FO	91092217	172145	000500	461	V
NIL19 FU	VUL	57	11.03	2019011	+212443	H 3	42537 L	00158	FO	91092217	173354	007000	251	V
NIL19 FU	VUL	57	11.00	2019011	+212443	L 3	42536 S	00163	FO	91092216	163205	001000	350	V
NIL19 FU	VUL	57	11.00	2019011	+212443	L 3	42536 L	00163	FO	91092216	160706	001500	360	V
NIL19 FU	VUL	57	10.96	2019011	+212443	H 3	42538 L	00169	FO	91092219	195649	017100	261	V
FNNSH NCC	6905	70	13	2020085	+195639	L 3	41863 L	119	SD	91061813	131200	003000	450	G B=209,G=139,B=20
IMAW VDEL32	73			2022544	+421316	L 3	42167 L			91090305	051300	036000	304	G G=100,B=60
IMAW VDEL32	73			2023003	+421317	L 1	20935 L		BD	91090305	055300	041500	309	G G=200,B=150
SANOW HD	195810	25	4.0	2030494	+110755	L 1	21840 L	615	FU	91112503	034100	000003	502	G G=216,B=35
SANOW HD	195810	25	4.0	2030494	+110755	L 1	21840 S	602	FU	91112503	035000	000006	502	G G=249,B=35
SANOW HD	195810	25	4.0	2030494	+110755	L 3	43213 L	608	FU	91112503	035600	000006	500	G G=219,B=18

ERO	Object	CL	MAG	R.A.	DEC	D C	Image A	FES	MD	Obs.date	Exptim	mmmsstt	ECC	Comment
SSMC	SATURN	03	0.4	2031222	-191941	L 3	41878 L		EO	91061918	185300	002000	X50 G	E=177, G=1.5X, B=18
SSMC	SATURN	03	0.4	2031222	-191941	L 3	41879 L		EO	91061919	194300	005500	X50 G	E=217, G=5X, B=20
SSMC	SKY HKD	07		2031263	-191925	L 3	41877 L		EO	91061916	163700	003000	51 G	E=221, B=25
SSNM	SATURN	03	0.4	2031303	-191908	L 3	41871 L		EO	91061905	055300	009000	X41 G	E=174, G=5X, B=30
SSNM	SATURN	03	0.4	2031303	-191908	L 3	41872 L		EO	91061907	075100	010000	X51 G	E=195, G=5X, B=30
SSNM	SATURN	03	0.4	2031303	-191908	L 3	41873 L		EO	91061909	095800	009000	X41 G	E=175, G=5X, B=30
SSNM	SATURN	03	0.4	2031303	-191908	L 3	41874 L		EO	91061911	115500	010000	X51 G	E=201, G=5X, B=26
SSMC	SATURN	03	0.4	2031303	-191908	L 3	41875 L		EO	91061914	140800	006000	X51 G	E=179, G=5X, B=22
SSMC	SATURN	03	0.4	2031303	-191908	L 3	41876 L		EO	91061915	153900	003000	X41 G	E=157, G=3X, B=30
BSNE	N3C 6940-	84 39	10.9	2032080	+280409	L 1	21385 L			91100201	012600	015000	G	
BSNE	N3C 6940-100	39	10.4	2032169	+281120	L 1	21389 L			91100210	102700	008000	G	
BSNE	N3C 6940-100	39	10.4	2032169	+281120	L 3	42601 L			91100211	115800	005000	G	
USBS	HD 196379	33	6.2	2033230	+514051	L 3	42252 L	8885	FO	91081418	183300	001600	500 G	G=232, B=18
BSNE	N3C 6940-188	39	11.2	2033279	+281556	L 1	21386 L			91100204	043900	010000	G	
BSNE	N3C 6940-189	39	10.6	2033280	+280621	L 1	21384 L			91100122	220100	015000	G	
USBS	HD 196524	41	3.8	2035143	+142524	H 3	41862 L	746	FU	91061808	082200	004200	501 G	G=202, B=30
SRNE	HD 196610	49	6.3	2035378	+180530	L 1	20509 L	15957	FO	91060316	162000	000800	353 G	E=195, G=65, B=41
SRNE	HD 196610	49	5.76	2035378	+180530	L 1	20593 L	15352	FO	91061319	190500	000800	252 G	E=200, G=52, B=32
SRNE	HD 196610	49	6.3	2035378	+180530	L 1	20675 L	16562	FO	91062314	141600	000800	239 G	E=179, G=60, B=140
SRNE	HD 196610	49	6.3	2035378	+180530	L 1	20738 L	16059	FO	91070413	131500	000800	242 G	E=177, G=55, B=35
SRNE	HD 196610	49	6.3	2035378	+180530	L 1	20807 L	16854	FO	91071413	133600	000800	233 G	E=136, G=59, B=41
SRNE	HD 196610	49	6.3	2035378	+180530	L 1	20869 L	15977	FO	91072312	125100	000800	344 G	E=181, G=65, B=60
SRNE	HD 196610	49	6.3	2035378	+180530	L 1	20940 L	16215	FO	91080316	165300	000800	242 G	E=160, G=50, B=35
SRNE	HD 196610	49	6.3	2035378	+180530	L 1	21015 L	17231	FO	91081416	164100	000800	342 G	E=180, G=57, B=35
SRNE	HD 196610	49	6.3	2035378	+180530	L 1	21072 L	20144	FO	91082414	143700	000800	342 G	E=185, G=66, B=38
SRNE	HD 196610	49	6.25	2035378	+180530	L 1	21162 L	21442	FO	91090508	085400	000800	342 G	E=155, G=60, B=35
PHAL	HD 196519	22	5.1	2037234	-665621	H 1	20719 L	21177	FO	91063013	134300	000440	403 G	G=185, B=42
PHAL	HD 196519	22	5.1	2037234	-665621	H 3	41964 L	21301	FO	91063013	135600	001530	504 G	G=242, B=52
WNEG	HD W CEP	66	7.9	2038029	+752458	L 3	42527 L	3045	FO	91092107	075500	004500	232 G	E=79, G=60, B=40
WNEG	HD 197433	66	7.9	2038029	+752458	L 1	21299 L	2933	FO	91092108	084600	000500	552 G	E=234, G=228, B=35
WNEG	HD W CEP	66	7.9	2038029	+752458	L 1	21300 L	2362	FO	91092109	094700	000530	552 G	E=216, G=189, B=38
WNEG	HD 197433	66	7.9	2038029	+752458	L 3	42528 L	23	FO	91092110	103000	009000	333 G	E=101, G=75, B=50
WNEG	HD 197433	66	7.9	2038029	+752458	H 1	21301 L	2781	FO	91092112	121100	011000	333 G	E=129, G=100, B=44
WNEG	HD 197433	66	7.9	2038029	+752458	L 1	21302 L	2901	FO	91092114	143900	000500	552 G	E=237, G=253, B=32
WNEG	W CEP	66	7.9	2038029	+752458	H 1	21305 L	2825	FO	91092200	000300	009000	332 G	E=114, G=100, B=40
WNEG	W CEP	66	7.9	2038029	+752458	L 3	42531 L	2828	FO	91092201	014700	009000	330 G	E=63, G=50, B=18
WNEG	W CEP	66	7.9	2038029	+752458	H 1	21306 L	2851	FO	91092203	032600	009000	332 G	E=118, G=100, B=40
WNEG	W CEP	66	7.9	2038029	+752458	L 3	42532 L	2884	FO	91092205	050500	009000	231 G	E=63, G=43, B=25
WNEG	W CEP	66	7.9	2038029	+752458	L 1	21307 L	2929	FO	91092206	064600	000440	552 G	E=213, G=208, B=32
WNEG	HD 197433	66	7.9	2038029	+752458	L 3	42533 L	3214	FO	91092207	073000	009000	331 G	E=72, G=49, B=28
WNEG	HD 197433	66	7.9	2038029	+752458	L 1	21308 L	2223	FO	91092209	090500	000500	442 G	E=177, G=178, B=40
WNEG	HD 197433	66	7.9	2038029	+752458	L 3	42534 L	2790	FO	91092210	100700	009000	234 G	E=100, G=78, B=58
WNEG	HD 197433	66	7.9	2038029	+752458	L 1	21309 L	2689	FO	91092211	114500	000500	552 G	E=239, G=208, B=38
WNEG	HD 197433	66	7.9	2038029	+752458	L 3	42535 L	2276	FO	91092212	123600	009000	331 G	E=78, G=56, B=30
WNEG	HD 197433	66	7.9	2038029	+752458	L 1	21310 L	2958	FO	91092214	141500	000440	552 G	E=220, G=238, B=35
WNEG	W CEP	66	7.9	2038029	+752458	L 1	21311 L	2253	FO	91092401	012100	000440	442 G	E=173, G=163, B=35
WNEG	W CEP	66	7.9	2038029	+752458	L 1	21311 L	2466	FO	91092401	013700	000500	552 G	E=193, G=208, B=35
WNEG	W CEP	66	7.9	2038029	+752458	L 3	42544 L	2906	FO	91092402	022400	007000	330 G	E=110, G=44, B=18
WNEG	W CEP	66	7.9	2038029	+752458	H 1	21322 L	2858	FO	91092403	034400	010000	332 G	E=120, G=97, B=40
WNEG	W CEP	66	7.9	2038029	+752458	L 3	42545 L	2876	FO	91092405	053600	003000	231 G	E=68, G=50, B=30



HFO	Object	CL	MAG	R.A.	DEC	D C Image A	FES	MD	Obs.date	Exptim	mmmsstt	ECC	Comment
WNEG	VW CEP	66	7.9	2038029	+752458	L 1 21323 L	3099	FO	91092406	061600	000440	552	G B=228,G=220,B=37
WNEG	VW CEP	66	7.9	2038029	+752458	L 1 21324 L	2212	FO	91092407	075600	000500	552	G B=207,G=190,B=37
WNEG	VW CEP	66	7.9	2038029	+752458	L 1 21325 L	3039	FO	91092409	092700	000440	552	G B=226,G=220,B=38
WNEG	VW CEP	66	7.9	2038029	+752458	L 3 42546 L	3033	FO	91092409	095200	006000	332	G B=65,G=60,B=35
WNEG	VW CEP	66	7.9	2038029	+752458	L 1 21326 L	2398	FO	91092411	110200	000500	552	G B=216,G=200,B=35
WNEG	VW CEP	66	7.9	2038029	+752458	H 1 21327 L	2751	FO	91092412	120600	011000	533	G B=132,G=120,B=42
WNEG	VW CEP	66	7.9	2038029	+752458	L 1 21328 L	2195	FO	91092414	143300	001000	552	G B=203,G=190,B=35
MCL36	AT MIC	52	10.30	2038446	-323649	L 3 41554 L	00303	FO	91050223	235913	006000	220	V TWO SPECTRA
MCL36	AT MIC	52	10.28	2038446	-323649	L 1 20294 L	00308	FO	91050301	011250	002000	252	V
MCL36	AT MIC	52	10.30	2038446	-323649	L 3 41555 L	00305	FO	91050302	020458	003000	220	V
MCL36	AT MIC	52	10.30	2038446	-323649	L 1 20295 L	00305	FO	91050302	024256	001000	241	V
MCL36	AT MIC	52	10.30	2038446	-323649	L 3 41556 L	00303	FO	91050303	034000	006000	220	V TWO SPECTRA
MCL36	AT MIC	52	99.99	2038446	-323649	L 1 20296 L	00000		91050304	045344	001000	241	V
MCL36	AT MIC	52	99.99	2038446	-323649	L 3 41557 L	00000		91050305	052510	003000	220	V
MCL36	AT MIC	52	10.28	2038446	-323649	L 1 20297 L	00309	FO	91050306	060445	001000	241	V
AGMB	MKN 509	84	13.0	2041262	-105418	L 3 41608 L	70	SD	91051008	082900	009000	351	G B=208,G=80,B=28
AGMB	MKN 509	84	13.0	2041262	-105418	L 1 20351 L	68	SD	91051010	100600	004500	352	G B=210,G=130,B=40
FSIKC	HD 197481	48	8.6	2042038	-313105	L 3 42371 L	1000	FO	91090207	075300	005000	221	G B=35,G=40,B=30
FSIKC	HD 197481	48	8.6	2042038	-313105	L 1 21130 L	1011	FO	91090208	085900	002000	352	G B=211,G=60,B=35
FSIKC	HD 197481	48	8.6	2042038	-313105	L 3 42372 L	1016	FO	91090209	094100	005000	05	G B=65
FSIKC	HD 197481	48	8.6	2042038	-313105	L 1 21131 L	1033	FO	91090210	104500	002000	249	G B=227,G=130,B=120
FSIKC	HD 197481	48	8.6	2042038	-313105	L 3 42373 L	1043	FO	91090211	113100	004500	07	G B=90
FSIKC	HD 197481	48	8.6	2042038	-313105	L 1 21138 L	1109	FO	91090223	230500	002000	342	G B=186,G=61,B=38
FSIKC	HD 197481	48	8.6	2042038	-313105	L 3 42380 L	1111	FO	91090223	235000	005500	21	G B=41,B=22
FSIKC	HD 197481	48	8.6	2042038	-313105	L 1 21139 L	1107	FO	91090301	010200	002000	253	G B=193,G=59,B=42
FSIKC	HD 197481	48	8.6	2042038	-313105	L 3 42381 L	1145	FO	91090301	014400	004200	20	G B=32,B=20
FSIKC	HD 197481	48	8.6	2042038	-313105	L 1 21140 L	1158	FO	91090302	024300	002000	342	G B=170,G=60,B=38
FSIKC	HD 197481	48	8.6	2042038	-313105	L 3 42382 L	1178	FO	91090303	032900	004200	00	G B=20
FSIKC	HD 197481	48	8.6	2042038	-313105	L 1 21141 L	1180	FO	91090304	042600	002000	242	G B=165,G=60,B=40
FSIKC	HD 197481	48	8.6	2042038	-313105	L 3 42383 L	1202	FO	91090305	051600	006000	30	G B=43,B=18
FSIKC	HD 197481	48	8.6	2042038	-313105	L 1 21142 L	1203	FO	91090306	062800	001000	342	G B=157,G=67,B=35
FSIKC	HD 197481	48	8.6	2042038	-313105	L 1 21149 L	1045	FO	91090402	022800	002000	252	G B=187,G=50,B=35
FSIKC	HD 197481	48	8.6	2042038	-313105	L 3 42389 L	1064	FO	91090402	025600	006800	331	G B=74,G=50,B=25
FSIKC	HD 197481	48	8.6	2042038	-313105	L 1 21150 L	1086	FO	91090404	041800	002000	242	G B=139,G=52,B=35
FSIKC	HD 197481	48	8.6	2042038	-313105	L 3 42390 L	1131	FO	91090404	045900	004800	21	G B=32,B=22
FSIKC	HD 197481	48	8.6	2042038	-313105	L 1 21151 L	1107	FO	91090405	055800	002000	242	G B=158,G=55,B=40
FSIKC	HD 197481	48	8.6	2042038	-313105	L 1 21151 L	1131	FO	91090406	061800	002000	242	G B=146,G=58,B=40
FSIKC	HD 197481	48	8.6	2042038	-313105	L 3 42391 L	1100	FO	91090406	064000	004600	00	G B=18
FSIKC	HD 197481	48	8.6	2042038	-313105	L 1 21152 L	1112	FO	91090407	074600	002000	01	G B=23
FSIKC	HD 197481	48	8.6	2042038	-313105	L 3 42392 L	114	FO	91090408	083600	004200	00	G B=18
FSIKC	HD 197481	48	8.6	2042038	-313105	L 1 21153 L	1141	FO	91090409	093600	002000	347	G B=185,G=114,B=85
FSIKC	HD 197481	48	8.6	2042038	-313105	L 1 21153 L	1156	FO	91090410	100800	002000	337	G B=182,G=109,B=85
FSIKC	HD 197481	48	8.6	2042038	-313105	L 3 42393 L	1168	FO	91090410	103500	004400		G B=1.5X
N1015	HF CGG	57	11.29	2042040	-313105	H 3 42397 L	00126	FO	91082922	225831	010800	261	V
MCL11	AU MIC	48	08.99	2042040	-313105	L 1 21133 L	00977	FO	91090215	153653	001000	253	V 10 MIN FP (-130,-180)
MCL11	AU MIC	48	08.99	2042040	-313105	L 3 42375 L	00976	FO	91090216	163507	002500	001	V
MCL11	AU MIC	48	08.98	2042040	-313105	L 1 21134 L	00987	FO	91090217	171213	001000	253	V 10 MIN FP (-130,-180)
MCL11	AU MIC	48	08.95	2042040	-313105	L 3 42376 L	01012	FO	91090217	175623	002500	001	V
MCL11	AU MIC	48	08.94	2042040	-313105	L 1 21135 L	01021	FO	91090218	183841	001000	253	V 10 MIN FP (-130,-180)
MCL11	AU MIC	48	08.89	2042040	-313105	L 3 42377 L	01068	FO	91090219	192503	002500	001	V

PRO	Object	CL	MAG	R.A.	DEC	D C	Image A	FES	MD	Obs.date	Exp	tim	num	inst	ECC	Comment
MCL11	AU MIC	48	08.89	2042040	-31.3105	L 1	211.36 L	01068	FO	91090220	200558	001000			253 V	10 MIN RP (-130,-180)
MCL11	AU MIC	48	08.89	2042040	-31.3105	L 3	42378 L	01068	FO	91090220	204920	002500			001 V	
MCL11	AU MIC	48	08.87	2042040	-31.3105	L 1	211.37 L	01092	FO	91090221	212612	001000			253 V	10 MIN RP (-130,-180)
MCL11	AU MIC	48	08.85	2042040	-31.3105	L 3	42379 L	01112	FO	91090222	221038	002500			001 V	
MCL11	AU MIC	48	08.92	2042040	-31.3105	L 1	211.55 L	01042	FO	91090415	151259	001000			343 V	10 MIN RP (-130,-180)
MCL11	AU MIC	48	99.99	2042040	-31.3105	L 3	42395 L	00000		91090415	154649	002500			000 V	GUIDE STAR LOST
MCL11	AU MIC	48	08.94	2042040	-31.3105	L 1	211.56 L	01023	FO	91090419	190222	001000			343 V	10 MIS RP (-130,-180)
MCL11	AU MIC	48	08.94	2042040	-31.3105	L 3	42396 L	01024	FO	91090419	195703	002500			001 V	
MCL11	AU MIC	48	08.87	2042040	-31.3105	L 1	211.57 L	01085	FO	91090420	203600	001000			343 V	10 MIN RP (-130,-180)
MCL11	AU MIC	48	08.83	2042040	-31.3105	L 1	211.58 L	01123	FO	91090421	215120	001000			243 V	10 MIN RP (-130,-180)
MCL11	AU MIC	48	08.83	2042040	-31.3105	L 3	42398 L	01123	FO	91090422	223034	001700			001 V	
SRNE	HD	197812	49	6.4	2043108	+175426	L 1 20508 L	11824	FO	91060315	152300	001500			232 G	E=102,G=60,B=40
SRNE	HD	197812	49	6.13	2043108	+175426	L 1 20590 L	11524	FO	91061316	160200	002000			334 G	E=128,G=91,B=60
SRNE	HD	197812	49	6.4	2043108	+175426	L 1 20674 L	11951	FO	91062313	131000	002000			232 G	E=106,G=55,B=35
SRNE	HD	197812	49	6.4	2043108	+175426	L 1 20737 L	11268	FO	91070412	120200	002000			232 G	E=110,G=50,B=35
SRNE	HD	197812	49	6.4	2043108	+175426	L 1 20811 L	11171	FO	91071417	175500	002000			232 G	E=116,G=55,B=37
SRNE	HD	197812	49	6.4	2043108	+175426	L 1 20868 L	11745	FO	91072311	114600	002000			333 G	E=130,G=70,B=48
SRNE	HD	197812	49	6.4	2043108	+175426	L 1 20941 L	12263	FO	91080317	175000	002000			332 G	E=122,G=60,B=35
SRNE	HD	197812	49	6.4	2043108	+175426	L 1 21073 L	12604	FO	91082415	152600	002000			332 G	E=105,G=67,B=38
SRNE	HD	197812	49	6.38	2043108	+175426	L 1 21161 L	13518	FO	91090507	075000	002000			332 G	E=90,G=66,B=38
NI085	VL329 C&G	57	12.63	2049026	+352337	L 3	42155 L	00150	SO	91080200	002055	004500			250 V	
NI085	VL329 C&G	57	12.59	2049026	+352337	L 1	20929 L	00157	SO	91080201	011327	005500			353 V	
DNNE	T Val.	53	5.8	2049210	+280344	L 3	42609 L	11460	FO	91100308	085500	002000			300 G	G=104,B=18
DNNE	T Val.	53	5.8	2049210	+280344	L 1	21397 L	11410	FO	91100309	092700	000036			302 G	G=124,B=32
DNNE	T Val.	53	5.8	2049210	+280344	L 3	42610 L	11551	FO	91100310	100300	004500			402 G	G=176,B=40
DNNE	T Val.	53	5.8	2049210	+280344	L 3	42611 L	11551	FO	91100311	111200	009700			X01 G	G=1.5X,B=30
CINSC	C&G LOOP	75		2054140	+313653	L 3	41846 L		EO	91061606	062600	038000			347 G	E=202,G=120,B=90
CINSC	C&G LOOP	75		2054150	+313723	L 3	41853 L		EO	91061706	060200	041000			06 G	B=75
CINSC	CL SEREN	75		2054170	+313600	L 1	20609 L		EO	91061606	065000	033000			G	B=1.5X
CINSC	CL SEREN	75		2054181	+313631	L 1	20620 L		EO	91061706	060400	018000			307 G	G=115,B=83
CINSC	CL SEREN	75		2054181	+313631	L 1	20621 L		EO	91061709	093200	018000			207 G	G=110,B=90
CINWB	C&G LOOP	75		2054489	+305530	L 3	41794 L		EO	91060806	060200	041000			338 G	E=150,G=150,B=100
CINWB	C L SFUR	75		2054489	+305530	L 3	41818 L		EO	91061105	054700	030000			09 G	B=155
CINWB	C&G LOOP	75		2054492	+305540	L 3	41785 L		EO	91060705	054900	042000			248 G	E=205,G=120,B=100
CINWB	C&G LOOP	75		2054514	+305433	L 1	20544 L		EO	91060806	062700	034500			09 G	B=220
CINWB	CLSEREN	75		2054516	+305434	L 1	20570 L		EO	91061106	061200	024000			G	B=5X
CINWB	C&G LOOP	75		2054517	+305443	L 1	20536 L		EO	91060705	055200	038000			09 G	B=225
CINWB	C&G LOOP	75		2054531	+305503	L 3	41310 L		EO	91061006	060800	040000			334 G	E=144,G=80,B=57
CINWB	C&G LOOP	75		2054557	+305407	L 1	20561 L		EO	91061006	061200	036000			08 G	B=95
MI066	CD -43 143	57	11.69	2056486	-425034	L 3	41631 L	00351	SO	91051504	043328	001500			150 V	GUIDE ON FIDUCIAL
MI066	CD -43 143	57	11.76	2056486	-425034	L 1	20373 L	00329	SO	91051505	050235	003000			330 V	
MI066	CD -43 143	57	11.70	2056486	-425034	L 3	41632 L	00348	SO	91051505	054121	006700			361 V	GUIDE ON FIDUCIAL
GMR	NGC 7006	83	10.5	2059093	+155925	L 3	41668 L	129	SO	91052008	082000	039000			04 G	B=55
ERNEG	HD 200391	44	07.70	2100160	+273633	H 1	21347 L	03096	FO	91092714	141805	012000			431 V	
ERNEG	HD 200391	66	7.3	2100160	+273633	L 3	42568 L	2967	FO	91092623	235300	006000			331 G	E=62,G=95,B=26
ERNEG	HD200391	44	07.71	2100160	+273633	L 1	21348 L	03046	FO	91092717	173829	000520			500 V	MULTIPLE: 2*(2MOS)/R
ERNEG	HD 200391	66	7.3	2100160	+273633	L 1	21339 L	2840	FO	91092701	012300	000720			X52 G	E=194,G=1.5X,B=38
ERNEG	HD200391	44	07.81	2100160	+273633	L 1	21349 L	02805	FO	91092718	185509	000520			500 V	MULTIPLE: 2*(2MOS)/
ERNEG	HD 200391	66	7.3	2100160	+273633	L 3	42569 L	2912	FO	91092701	013200	008000			331 G	E=80,G=109,B=28
ERNEG	HD200391	44	07.71	2100160	+273633	L 3	42573 L	03047	FO	91092716	165129	010000			450 V	35+35+30 MIN

FPO	Object	CL	MAG	R.A.	DEC	D C	Image A	FES	MD	Obs.date	Exptim	numscstt	ECC	Comment
ERNEG HD	200391	66	7.3	21001.60	+273633	L 1	21340 L	3080	FO	91092703	031100	000640	X42	G B=182,G=1.5X,B=35
ERNEG HD	200391	44	07.73	21001.60	+273633	L 1	21350 L	02989	FO	91092719	195818	000520	500	V MULTIPLE: 2*(2MOS/R
ERNEG HD	200391	66	7.3	21001.60	+273633	L 3	42570 L	3083	FO	91092703	035500	008000	331	G B=84,G=120,B=26
ERNEG HD	200391	44	07.64	21001.60	+273633	L 1	21351 L	03265	FO	91092721	215328	000520	500	V MULTIPLE: 2*(2M:40S)
ERNEG HD	200391	66	7.3	21001.60	+273633	L 1	21341 L	3126	FO	91092704	044500	000620	X52	G B=211,G=1.5X,B=35
ERNEG HD	200391	66	7.3	21001.60	+273633	H 1	21342 L	3187	FO	91092705	054300	010000	433	G B=128,G=150,B=45
ERNEG HD	200391	66	7.3	21001.60	+273633	L 3	42571 L	3146	FO	91092707	074800	010000	432	G B=100,G=140,B=35
ERNEG HD	200391	66	7.3	21001.60	+273633	L 1	21343 L	3109	FO	91092708	085000	000600	X02	G G=1.5X,B=35
ERNEG HD	200391	66	7.3	21001.60	+273633	L 1	21344 L	2869	FO	91092710	101800	000600	X02	G G=1.5X,B=35
ERNEG HD	200391	66	7.3	21001.60	+273633	L 3	42572 L	2955	FO	91092711	112000	010000	431	G B=80,G=140,B=25
ERNEG HD	200391	66	7.3	21001.60	+273633	L 1	21345 L	3009	FO	91092712	120400	000600	X02	G G=1.5X,B=35
ERNEG HD	200391	66	7.3	21001.60	+273633	L 1	21346 L	3079	FO	91092713	131100	000600	X02	G G=1.5X,B=36
ERNEG HD	200391	66	7.3	21001.60	+273633	L 3	42574 L	3265	FO	91092720	205800	010000	431	G B=80,G=139,B=27
ERNEG HD	200391	66	7.3	21001.60	+273633	L 1	21352 L	3241	FO	91092722	225800	000520	X42	G B=183,G=1.5X,B=37
ERNEG HD	200391	66	7.3	21001.60	+273633	L 1	21353 L	3301	FO	91092723	235800	000500	X42	G B=180,G=1.5X,B=34
ERNEG HD	200391	66	7.3	21001.60	+273633	L 1	21354 L	3379	FO	91092801	013900	000500	542	G B=176,G=240,B=35
ERNEG HD	200391	66	7.3	21001.60	+273633	L 3	42575 L	3295	FO	91092801	015600	010000	431	G B=66,G=133,B=26
ERNEG HD	200391	66	7.3	21001.60	+273633	L 1	21355 L	3149	FO	91092802	023600	000500	542	G B=150,G=235,B=33
ERNEG HD	200391	66	7.3	21001.60	+273633	L 1	21356 L	3216	FO	91092803	034100	000500	542	G B=148,G=230,B=33
ERNEG HD	200391	66	7.3	21001.60	+273633	L 1	21357 L	3293	FO	91092804	043900	000500	542	G B=157,G=222,B=33
ERNEG HD	200391	66	7.3	21001.60	+273633	L 3	42577 L	3326	FO	91092807	072000	010000	335	G B=110,G=160,B=65
ERNEG HD	200391	66	7.3	21001.60	+273633	L 1	21359 L	3312	FO	91092808	080500	000500	502	G G=200,B=35
ERNEG HD	200391	66	7.3	21001.60	+273633	L 1	21360 L	3218	FO	91092809	091400	000500	502	G G=200,B=40
ERNEG HD	200391	66	7.3	21001.60	+273633	L 1	21361 L	3184	FO	91092810	103200	000500	502	G G=200,B=35
ERNEG HD	200391	66	7.3	21001.60	+273633	L 3	42578 L	2928	FO	91092811	114200	010000	431	G B=82,G=135,B=25
ERNEG HD	200391	66	7.3	21001.60	+273633	L 1	21362 L	3045	FO	91092812	122400	000500	502	G G=200,B=35
ERNEG HD	200391	66	7.3	21001.60	+273633	L 1	21363 L	3089	FO	91092813	133200	000500	502	G G=210,B=35
ERNEG HD	200391	66	7.3	21001.60	+273633	L 1	21364 L	3263	FO	91092814	142700	000230	502	G G=210,B=35
NCL95 HD	200391	44	07.68	21001.64	+273633	L 3	41635 L	03147	FO	91051523	232634	005000	330	V
NCL95 HD	200391	44	07.75	21001.64	+273633	L 3	41636 L	02944	FO	91051601	011552	005000	330	V
NCL95 HD	200391	44	07.69	21001.64	+273633	L 1	20380 L	03111	FO	91051602	021355	000400	561	V
NCL95 HD	200391	44	07.69	21001.64	+273633	L 3	41637 L	03098	FO	91051602	024823	010000	330	V DOUBLE EXPOSURE
NCL95 HD	200391	44	07.63	21001.64	+273633	H 1	20381 L	03284	FO	91051604	044618	007000	441	V
NCL95 HD	200391	44	07.63	21001.64	+273633	L 3	41638 L	03280	FO	91051606	060319	004400	330	V HEAD
NCL95 HD	200391	44	07.67	21001.64	+273633	H 1	20386 L	03160	FO	91051700	002356	008000	430	V
NCL95 HD	200391	44	07.73	21001.64	+273633	L 3	41645 L	03005	FO	91051701	015318	010000	430	V DOUBLE EXPOSURE
NCL95 HD	200391	44	07.70	21001.64	+273633	H 1	20387 L	03094	FO	91051703	035111	007000	340	V
NCL95 HD	200391	44	07.68	21001.64	+273633	L 3	41646 L	03133	FO	91051705	051127	010000	330	V DOUBLE EXPOSURE
MI037 V407 CYG		57	12.17	2100241	+453441	D 9	02468 2	00228	SD	91052523	235500	016000		V
MI037 V407 CYGNI		57	12.17	2100241	+453441	L 3	41697 L	00228	SD	91052600	000336	040500	201	V
RMEB T CEP		51	6.0	2108529	+681712	H 1	20438 L	3830	FO	91052415	153600	012000	39	G B=167,B=115
MAL30 FG2110+127		28	12.80	2110574	+124444	L 3	41573 L	00000	EO	91050504	044024	000500	300	V
MAL30 FG2110+127		28	12.80	2110574	+124444	L 1	20310 L	00000	EO	91050504	045054	001500	302	V HEAD
MAL30 FG2111+023		38	13.20	2111105	+022044	L 3	41574 L	00000	EO	91050506	060913	002600	300	V
NA155 A 74		70	16.90	2114387	+235942	L 1	21175 L	00000	EO	91090616	162425	007500	302	V
NA155 A 74		70	16.90	2114387	+235942	L 1	21175 L	00000	EO	91090618	183619	025100	302	V
NA155 A 74		70	16.90	2114387	+235942	L 3	42409 L	00000	EO	91090617	174605	004500	000	V
CENIN HD	203064	12	5.0	2116351	+434405	H 3	42787 L	23145	FO	91102223	234400	000220	502	G G=220,B=39
CENIN HD	203064	12	5.0	2116351	+434405	H 3	42790 L	23336	FO	91102302	023800	000220	502	G G=220,B=40
CENIN HD	203064	12	5.0	2116351	+434405	H 3	42794 L	23398	FO	91102306	061300	000220	502	G G=215,B=40



PRO	Object	CL	MAG	R.A.	DEC	D C	Image A	FES	MD	Obs.date	Exp.im	nummsst	ECC	Comment
CENIN HD	203064	12	5.0	2116351	+434405	H 3	42797 L	23022	FO	91102309	090600	000220	502 G	G=220,B=40
CENIN HD	203064	12	5.0	2116351	+434405	H 3	42811 L	22943	FO	91102321	212300	000220	502 G	G=225,B=39
CENIN HD	203064	12	5.0	2116351	+434405	H 3	42814 L	23616	FO	91102400	001600	000220	502 G	G=220,B=39
CENIN HD	203064	12	5.0	2116351	+434405	H 3	42818 L	23328	FO	91102403	033500	000220	503 G	G=225,B=41
CENIN HD	203064	12	5.0	2116351	+434405	H 3	42821 L	23530	FO	91102405	055300	000220	552 G	B=200,G=220,B=40
CENIN HD	203064	12	5.0	2116351	+434405	H 3	42826 L	23487	FO	91102409	095900	000220	552 G	B=200,G=220,B=40
CENIN HD	203064	12	5.0	2116351	+434405	H 3	42829 L	23216	FO	91102412	122400	000220	552 G	B=200,G=220,B=40
CENIN HD	203064	12	5.0	2116351	+434405	H 3	42857 L	23266	FO	91102510	104800	000220	552 G	B=210,G=210,B=40
CENIN HD	203064	12	5.0	2116351	+434405	H 3	42872 L	23382	FO	91102523	231600	000220	502 G	G=222,B=40
CENIN HD	203064	12	5.0	2116351	+434405	H 3	42875 L	23537	FO	91102601	013900	000220	502 G	G=220,B=40
CENIN HD	203064	12	5.0	2116351	+434405	H 3	42879 L	23442	FO	91102604	044000	000220	552 G	B=225,G=210,B=40
CENIN HD	203064	15	5.0	2116351	+434405	H 3	42882 L	23343	FO	91102606	065000	000220	552 G	B=210,G=220,B=40
CENIN HD	203064	14	5.0	2116351	+434405	H 3	42887 L	23273	FO	91102610	103900	000220	552 G	B=200,G=220,B=40
CENIN HD	203064	12	5.0	2116351	+434405	H 3	42902 L	23062	FO	91102622	224000	000220	553 G	B=212,G=229,B=41
CENIN HD	203064	12	5.0	2116351	+434405	H 3	42905 L	23334	FO	91102700	005200	000220	552 G	B=210,G=228,B=40
CENIN HD	203064	12	5.0	2116351	+434405	H 3	42909 L	23526	FO	91102703	035200	000220	503 G	G=220,B=41
CENIN HD	203064	12	5.0	2116351	+434405	H 3	42912 L	23508	FO	91102706	061100	000220	552 G	B=211,G=225,B=40
CENIN HD	203064	12	5.0	2116351	+434405	H 3	42917 L	23448	FO	91102710	100200	000220	552 G	B=201,G=222,B=40
CENIN HD	203064	12	5.0	2116351	+434405	H 3	42920 L	23202	FO	91102712	121700	000220	552 G	B=220,G=230,B=40
WINDH KUV21168		37	14.9	2116487	+733802	L 3	42932 L		BD	91102900	005500	003300	500 G	G=218,B=20
SFMOW HD	203156	41	5.83	2117224	+380131	L 1	20452 L	11501	FO	91052619	192700	000205	402 G	G=185,B=35
SFMOW HD	203156	41	5.83	2117224	+380131	L 1	20452 S	11526	FO	91052619	194000	000410	X02 G	G=5X,B=35
SFMOW HD	203156	41	5.83	2117224	+380131	L 3	41701 L	11498	FO	91052619	195100	000430	500 G	G=205,B=15
SFMOW HD	203156	41	5.83	2117224	+380131	L 3	41701 S	11642	FO	91052620	200300	000500	G	
SFMOW HD	203156	41	5.8	2117224	+380131	L 3	41795 L	11756	FO	91060816	160800	000130	500 G	G=240,B=18
MC149 HD203280		31	02.81	2117232	+622224	H 3	41615 L	02079	FU	91051222	225448	045000	845 V	STARTED AT GERC
CMFB HD	203280	31	2.44	2117239	+622225	H 1	20361 L			91051222	224400	000200	G	
BEMG HD	203467	26	5.4	2118201	+643934	H 3	42020 L	19881	FO	91070717	175400	000600	502 G	G=200,B=35
SRNE HD	203712	49	7.3	2120517	+404306	L 1	20506 L	8550	FO	91060313	131700	002000	242 G	B=165,G=50,B=35
SRNE HD	203712	49	6.45	2120517	+404306	L 1	20589 L	8964	FO	91061314	145600	002000	343 G	B=161,G=76,B=47
SRNE HD	203712	49	7.3	2120517	+404306	L 1	20676 L	9368	FO	91062315	150600	002000	346 G	B=199,G=110,B=78
SRNE HD	203712	49	7.3	2120517	+404306	L 1	20739 L	8353	FO	91070414	141000	002000	342 G	B=164,G=75,B=40
SRNE HD	203712	49	7.3	2120517	+404306	L 1	20806 L	8755	FO	91071412	123000	002000	342 G	B=147,G=60,B=36
SRNE HD	203712	49	7.3	2120517	+404306	L 1	20872 L	9837	FO	91072315	153100	002000	346 G	B=203,G=95,B=72
SRNE HD	203712	49	7.3	2120517	+404306	L 1	20938 L	10209	FO	91080314	144600	002000	342 G	B=170,G=60,B=37
SRNE HD	203712	49	7.3	2120517	+404306	L 1	21014 L	8401	FO	91081415	152800	002000	342 G	B=150,G=65,B=38
SRNE HD	203712	49	7.3	2120517	+404306	L 1	21068 L	8068	FO	91082410	104400	002000	346 G	B=186,G=100,B=72
SRNE HD	203712	49	7.3	2120517	+404306	L 1	21163 L	9068	FO	91090509	095100	002000	244 G	B=161,G=78,B=58
CENIN HD	205021	23	3.3	2128013	+702027	H 3	42785 L	1926	FU	91102221	215400	000014	502 G	G=205,B=35
CENIN HD	205021	23	3.3	2128013	+702027	H 3	42800 L	1939	FU	91102311	114000	000014	502 G	G=200,B=38
CENIN HD	205021	23	3.3	2128013	+702028	H 3	42825 L	2032	FU	91102409	091500	000015	502 G	G=200,B=35
CENIN HD	205021	23	3.3	2128013	+702027	H 3	42855 L	2060	FU	91102509	092500	000016	502 G	G=210,B=40
CENIN HD	205021	23	3.3	2128013	+702027	H 3	42885 L	2069	FU	91102609	091100	000017	502 G	G=220,B=40
CENIN HD	205021	23	3.3	2128013	+702027	H 3	42916 L	2062	FU	91102709	092300	000017	502 G	G=250,B=40
AAVND HD	204867	45	2.91	2128556	-054732	H 1	20323 L	1373	FU	91050618	181700	001200	X46 G	B=224,G=2X,B=80
AAVND HD	204867	45	2.91	2128556	-054732	L 3	41537 L	1409	FU	91050618	184600	002000	436 G	B=105,G=200,B=75
AAVND HD	204867	45	2.9	2128556	-054732	H 1	20364 L	1377	FU	91051318	183900	001330	X52 G	B=195,G=1.5X,B=35
AAVND HD	204867	45	2.91	2128556	-054732	H 1	20446 L	1383	FU	91052518	184300	001000	X42 G	B=163,G=2X,B=40
AAVND HD	204867	45	2.9	2128556	-054732	H 1	20532 L	1347	FU	91060616	162900	001130	X42 G	B=180,G=1.5X,B=40
AAVND HD	204867	45	2.9	2128556	-054732	H 1	20612 L	1394	FU	91061616	163600	001130	X45 G	B=189,G=2X,B=65



F0	Object	CL	MAG	R.A.	DEC	D C	Image A	FES	MD	Obs.date	Exptim	mmmsst	ECC	Comment
AAVD	HD 204867	45	2.9	2128556	-054732	H 1	20763 L	1333	FU	91070714	143900	001130	X42	G E=1.64, C=2X, B=35
AAVD	HD 204867	45	2.9	2128556	-054732	H 1	20830 L	1348	FU	91071714	143500	001030	X44	G E=1.64, C=1.5X, B=60
OD97Y	HD 204867	45	2.9	2128556	-054732	H 1	21549 L	1371	FU	91102212	122900	001300	X42	G E=1.55, C=2X, B=40
CCAB	HD 204867	45	2.91	2128557	-054732	H 1	20624 L	1371	FU	91061716	165000	003500	XX4	G E=2X, C=3X, B=55
CCAB	HD 204867	45	2.9	2128557	-054732	H 1	21404 L	1335	FU	91100508	081600	003500	XX4	G E=2X, C=3X, B=60
CCAB	HD 204867	45	2.9	2128557	-054732	H 1	21405 L	1332	FU	91100509	092900	001000	X32	G E=1.30, C=1.5X, B=40
CCNB	189-6	44	8.1	2130520	+300814	L 1	20856 L	1650	FO	91072110	102800	000900	502	G C=235, B=35
FNIA	HJ 1-2	70	12.5	2131069	+392440	L 3	42044 L	252	SO	91071115	150000	002500	338	G E=1.80, C=1.26, B=98
FNIA	HJ 1-2	70	12.5	2131069	+392440	L 1	20788 L	232	SO	91071115	153700	003000	337	G E=1.44, C=1.29, B=90
SRUE	HD 205730	49	5.5	2134082	+450900	L 1	20507 L	27248	FO	91060314	142200	001000	342	G E=1.69, C=70, B=35
SRUE	HD 205730	49	4.87	2134082	+450900	L 1	20588 L	321	FU	91061313	135800	001000	342	G E=1.46, C=67, B=35
SRUE	HD 205730	49	5.5	2134082	+450900	L 1	20677 L	322	FU	91062316	161000	001000	246	G E=2.25, C=95, B=75
SRUE	HD 205730	49	5.5	2134082	+450900	L 1	20740 L	25086	FO	91070415	152300	001000	352	G E=2.00, C=80, B=38
SRUE	HD 205730	49	5.5	2134082	+450900	L 1	20805 L	24853	FO	91071411	113600	001000	342	G E=1.50, C=63, B=34
SRUE	HD 205730	49	5.5	2134082	+450900	L 1	20871 L	21852	FO	91072314	143100	001000	348	G E=2.33, C=130, B=95
SRUE	HD 205730	49	5.5	2134082	+450900	L 1	20937 L	20365	FO	91080313	135000	001000	333	G E=1.33, C=75, B=45
SRUE	HD 205730	49	5.53	2134082	+450900	L 1	20999 L	18347	FO	91081217	174200	001000	332	G E=1.31, C=66, B=35
SRUE	HD 205730	49	5.5	2134082	+450900	L 1	21067 L	17374	FO	91082409	095000	001000	342	G E=1.51, C=64, B=40
SRUE	HD 205730	49	5.53	2134082	+450900	L 1	21164 L	17104	FO	91090510	105600	001000	337	G E=1.49, C=120, B=90
BBMG	HD 205637	26	4.7	2134170	-194128	H 3	41620 L	424	FU	91051322	223900	000150	X02	G C=1.5X, B=40
SACW	HD 207089	47	5.3	2143462	+224303	L 1	20545 L	16602	FO	91060813	134400	000412	5X3	G E=1.5X, C=200, B=45
SACW	HD 207089	47	5.3	2143462	+224303	L 1	20545 S	16635	FO	91060813	135400	000500	353	G E=213, C=130, B=45
NI085	AG FEG	57	08.70	2148362	+122327	L 3	42159 L	01258	FO	91080219	195134	000600	571	V
NI085	AG FEG	57	08.70	2148362	+122327	L 1	20933 L	01265	FO	91080220	200634	000600	772	V
NCL34	14 AUR-C	64	07.50	2148559	+283734	L 3	42554 L	00000	BO	91092518	182427	001200	500	V
PHCAL	ED+28/4211	16	10.59	2148560	+283735	L 1	20483 L	00235	FO	91053023	235911	000050	501	V
PHCAL	ED+28/4211	16	10.59	2148560	+283735	L 1	20484 L	00235	FO	91053100	004011	000050	501	V
PHCAL	ED+28/4211	16	10.60	2148560	+283735	L 1	20485 L	00233	FO	91053101	011212	000050	501	V
PHCAL	ED+28/4211	16	10.57	2148560	+283735	L 1	20486 L	00239	FO	91053101	015024	000050	501	V
PHCAL	ED+28/4211	16	10.57	2148560	+283735	L 1	20487 L	00238	FO	91053102	022314	000050	501	V
PHCAL	ED+28/4211	16	10.59	2148560	+283735	L 1	20488 L	00234	FO	91053103	030503	000050	501	V
PHCAL	ED+28/4211	16	10.59	2148560	+283735	L 1	20489 L	00234	FO	91053103	035247	000200	701	V
PHCAL	ED+28/4211	16	10.62	2148560	+283735	L 1	20490 L	00229	FO	91053103	033010	000200	701	V
PHCAL	ED +28/421	16	10.60	2148560	+283735	L 1	20491 L	00233	FO	91053105	050623	000200	701	V
PHCAL	ED +28/421	16	10.58	2148560	+283735	L 1	20492 L	00236	FO	91053105	055205	000200	701	V
PHCAL	ED+28/4211	16	10.55	2148560	+283735	L 1	20493 L	00243	FO	91053106	065013	000200	701	V
PHCAL	ED+28 4211	16	10.57	2148560	+283734	L 3	41751 L	00239	FO	91060221	215852	000027	500	V
PHCAL	ED+28 4211	16	10.55	2148560	+283734	L 3	41752 L	00242	FO	91060222	223510	000027	500	V
PHCAL	ED+28 4211	16	10.56	2148560	+283734	L 3	41753 L	00240	FO	91060223	230425	000027	500	V
PHCAL	ED+28 4211	16	10.56	2148560	+283734	L 3	41754 L	00241	FO	91060223	233440	000027	500	V
PHCAL	ED+28 4211	16	10.56	2148560	+283734	L 3	41755 L	00241	FO	91060300	000452	000027	500	V
PHCAL	ED+28 4211	16	10.57	2148560	+283734	L 3	41756 L	00239	FO	91060300	003601	000027	500	V
PHCAL	ED+28 4211	16	10.55	2148560	+283734	L 3	41757 L	00243	FO	91060301	010538	000027	500	V
PHCAL	ED+28 4211	16	10.56	2148560	+283734	L 3	41758 L	00240	FO	91060301	013519	000055	700	V
PHCAL	ED+28 4211	16	10.56	2148560	+283734	L 3	41759 L	00241	FO	91060302	021301	000100	700	V
PHCAL	ED+28 4211	16	10.55	2148560	+283734	L 3	41760 L	00243	FO	91060302	024507	000100	700	V
PHCAL	ED+28 4211	16	10.55	2148560	+283734	L 3	41761 L	00243	FO	91060302	031706	000100	700	V
PHCAL	ED+28 4211	16	10.54	2148560	+283734	L 3	41762 L	00245	FO	91060303	035844	000100	700	V
PHCAL	ED+28 4211	16	10.54	2148560	+283734	L 3	41763 L	00245	FO	91060304	042847	000100	700	V
PHCAL	ED+28 4211	16	99.99	2148560	+283734	E 9	02470 2	00000		91070321	212000	004000		V SWP 41996

FRO	Object	CL	MAG	R.A.	DEC	D C	Image A	FES	MD	Obs.date	Exptim	nummsst	ECC	Comment
PHCAL	ED+284211	16	99.99	2148560	+283734	E 9	0247. 2	00000		91070322	221000	016000		V SWP 41996
PHCAL	ED+284211	16	10.55	2148560	+283734	H 3	41996 L	00243	FO	91070321	212755	004000		501 V
PHCAL	ED+28 4211	16	10.56	2148560	+283734	L 3	42101. L	00241	FO	91071920	201542	000027		500 V
PHCAL	ED+284211	16	10.58	2148560	+283734	L 1	20844 L	00237	FO	91071920	202041	000050		500 V
PHCAL	ED+28 4211	16	10.59	2148560	+283734	L 3	42102 L	00235	FO	91071921	212437	000027		500 V
PHCAL	ED+28 4211	16	10.57	2148560	+283734	L 1	20845 L	00238	FO	91071921	214049	000050		500 V
PHCAL	ED+28 4211	16	10.55	2148560	+283734	H 3	42103 L	00244	FO	91071922	221700	005000		501 V
PHCAL	ED+28 4211	16	10.65	2148560	+283735	L 3	42555 L	00222	FO	91092519	195641	000027		500 V
PHCAL	ED+28 4211	16	10.66	2148560	+283735	H 1	21336 L	00220	FO	91092520	200401	006500		501 V
PHCAL	ED+28 4211	16	10.61	2148560	+283735	H 3	42556 L	00231	FO	91092521	211824	004500		400 V
PHCAL	ED+28 4211	16	10.63	2148560	+283735	L 1	21337 L	00226	FO	91092522	220923	000050		500 V
PHCAL	ED+28 4211	16	10.59	2148560	+283735	L 3	42557 L	00234	FO	91092522	224749	000027		500 V
PHCAL	ED +28 4211	16	10.5	2148574	+283734	L 3	41769 L	235	FO	91060413	133800	000026		500 G G=200,B=18
PHCAL	ED +28 4211	16	10.5	2148574	+283734	L 1	20518 L	237	FO	91060413	134300	000050		502 G G=200,B=35
PHCAL	ED +28 4211	16	10.5	2148574	+283734	L 2	18570 L	244	FO	91060517	171600	000122		401 G G=170,B=25
PHCAL	ED +28 4211	16	10.5	2148574	+283734	L 3	42003 L	245	FO	91070512	125600	000026		500 G G=190,B=18
PHCAL	ED +28 4211	16	10.5	2148574	+283734	L 1	20749 L	238	FO	91070513	130200	000050		502 G G=200,B=35
PHCAL	NULL	99		2148574	+283734	L 3	42004 L			91070513	135000	000000		200 G G=25,B=10
PHCAL	NULL	99		2148574	+283734	L 3	42005 L			91070514	140000	000000		00 G B=10
PHCAL	NULL	99		2148574	+283734	L 3	42006 L			91070514	144200	000000		00 G B=20
PHCAL	NULL	99		2148574	+283734	L 3	42007 L			91070514	145800	000000		00 G B=10
PHCAL	NULL	99		2148574	+283734	L 3	42008 L			91070515	152300	000000		03 G B=5
PHCAL	ED +28 4211	16	10.5	2148574	+283734	L 2	18582 L	229	FO	91072616	163500	000122		501 G G=205,B=25
PHCAL	NULL	99		2148574	+283734	L 2	18583 L			91072617	171600	000000		01 G B=25
PHCAL	NULL	99		2148574	+283734	L 2	18584 L			91072617	174700	000000		05 G B=7
PHCAL	NULL	99		2148574	+283734	L 2	18585 L			91072618	180300	000000		02 G B=4
PHCAL	ED +28 4211	16	10.5	2148574	+283734	L 2	18586 L	235	FO	91072618	183400	000122		501 G G=205,B=22
PHCAL	ED +28 4211	16	10.5	2148574	+283734	L 3	42205 L	239	FO	91080916	161500	000026		500 G G=233,B=18
PHCAL	ED +28 4211	16	10.5	2148574	+283734	L 1	20980 L	235	FO	91080916	161900	000050		502 G G=225,B=32
PHCAL	ED +28 4211	16	10.5	2148574	+283734	L 3	42486 L	227	FO	91091713	132300	000026		500 G G=219,B=18
PHCAL	ED +28 4211	16	10.5	2148574	+283734	L 1	21266 L	229	FO	91091713	133000	000050		502 G G=224,B=32
PHCAL	ED +28 4211	16	10.5	2148574	+283734	L 3	42781 L	249	FO	91102208	063400	000026		500 G G=190,B=18
PHCAL	ED +28 4211	16	10.5	2148574	+283734	L 2	18606 L	248	FO	91102912	123400	000122		501 G G=207,B=25
WNRS	O W Cep	66	4.8	2155140	+632312	H 3	41782 L	22549	FO	91060617	172000	009000		453 G B=201,G=160,B=45
WNRS	O W Cep	66	4.8	2155140	+632312	H 1	20533 L	263	FU	91060619	190200	003000		5X3 G B=1.5X,G=210,B=50
WNRS	O W Cep	66	4.8	2155140	+632312	L 3	41783 L	252	FU	91060620	200800	000300		550 G B=207,G=170,B=18
WNRS	O W Cep	66	4.8	2155140	+632312	L 1	20534 L	256	FU	91060620	201600	000030		551 G B=249,G=200,B=30
WNRS	W Cep	66	4.8	2155140	+632312	H 3	41886 L	23221	FO	91062013	133700	004500		347 G B=206,G=160,B=85
WNRS	W Cep	66	4.8	2155140	+632312	L 1	20647 L	22915	FO	91062014	142600	000030		552 G B=253,G=198,B=33
WNRS	W Cep	66	4.8	2155140	+632312	H 1	20648 L	22509	FO	91062015	153100	002500		4X9 G B=2X,G=215,B=110
WNRS	W Cep	66	4.8	2155140	+632312	L 3	41887 L	22484	FO	91062016	160400	000300		450 G B=202,G=150,B=20
WNRS	W Cep	66	4.8	2155140	+632312	L 1	20754 L	23533	FO	91070611	113600	000021		352 G B=187,G=120,B=35
WNRS	W Cep	66	4.8	2155140	+632312	H 3	42013 L	23480	FO	91070611	114600	009000		342 G B=162,G=110,B=38
WNRS	W Cep	66	4.8	2155140	+632312	H 1	20755 L	23121	FO	91070613	132300	002000		3X2 G B=1.5X,G=120,B=40
WNRS	W Cep	66	4.8	2155140	+632312	L 3	42014 L	23078	FO	91070613	135600	000300		340 G B=165,G=100,B=20
WNRS	W Cep	66	4.8	2155140	+632312	H 3	42109 L	23169	FO	91072111	111900	009000		446 G B=217,G=190,B=80
WNRS	W Cep	66	4.8	2155140	+632312	L 1	20857 L	23306	FO	91072112	120900	000030		552 G B=240,G=220,B=35
WNRS	W Cep	66	4.8	2155140	+632312	H 1	20858 L	23769	FO	91072113	131200	002000		3X9 G B=2X,G=210,B=115
WNRS	W Cep	66	4.8	2155140	+632312	L 3	42110 L	23737	FO	91072113	134100	000300		451 G B=213,G=150,B=25
WNRS	W Cep	66	4.8	2155140	+632312	H 3	42176 L	22761	FO	91080515	153800	009000		342 G B=161,G=120,B=35

FFO	Object	CL	MAG	R.A.	DEC	D C	Image A	FES	MD	Obs.date	Exptim	numstt	ECC	Comment
WNFS	W CEP	66	4.8	2155140	+632312	L 1	20956 L	23134	FO	91080516	162900	000030	452 G	F=251,G=180,B=35
WNFS	W CEP	66	4.8	2155140	+632312	H 1	20957 L	23358	FO	91080517	173500	002000	4x2 G	F=1.5X,G=160,B=40
WNFS	W CEP	66	4.8	2155140	+632312	L 3	42177 L	23253	FO	91080518	181500	000300	341 G	F=161,G=100,B=25
WNFS	W Cep	66	4.8	2155140	+632312	L 1	21040 L	22832	FO	91081913	131600	000030	552 G	F=251,G=185,B=34
WNFS	W Cep	66	4.8	2155140	+632312	H 3	42289 L	22711	FO	91081913	132500	009000	342 G	F=170,G=118,B=38
WNFS	W Cep	66	4.8	2155140	+632312	H 1	21041 L	21958	FO	91081915	150700	002000	4x2 G	F=1.5X,G=150,B=38
WNFS	W Cep	66	4.8	2155140	+632312	L 3	42290 L	22042	FO	91081915	153800	000300	450 G	F=190,G=130,B=18
WNFS	W CEP	66	4.8	2155140	+632312	H 3	42384 L	24592	FO	91090307	075900	009000	307 G	G=165,B=87
WNFS	W CEP	66	4.8	2155140	+632312	H 1	21143 L	24425	FO	91090308	085300	002000	452 G	F=250,G=145,B=40
WNFS	W CEP	66	4.8	2155140	+632312	L 1	21144 L	24122	FO	91090310	101200	000030	452 G	F=220,G=170,B=35
WNFS	W Cep	66	4.8	2155140	+632312	L 3	42510 L	21707	FO	91091912	120000	000300	500 G	G=228,B=18
WNFS	W Cep	66	4.8	2155140	+632312	H 1	21284 L	21686	FO	91091912	121300	002000	4x3 G	F=1.5X,G=172,B=42
WNFS	W Cep	66	4.8	2155140	+632312	H 3	42511 L	21579	FO	91091912	124500	004500	402 G	G=160,B=40
WNFS	W Cep	66	4.8	2155140	+632312	L 1	21285 L	21169	FO	91091913	133400	000030	xx2 G	F=1.5X,G=1.5X,B=32
WNFS	W CEP	66	4.8	2155140	+632312	L 3	42584 L	21625	FO	91093008	082100	000300	450 G	F=194,G=130,B=18
WNFS	W CEP	66	4.8	2155140	+632312	H 1	21371 L	21393	FO	91093008	083200	002000	4x5 G	F=1.5X,G=165,B=65
WNFS	W CEP	66	4.8	2155140	+632312	H 3	42585 L	21644	FO	91093009	090600	009000	xx9 G	F=1.5X,G=1.5X,B=170
WNFS	W CEP	66	4.8	2155140	+632312	L 1	21372 L	21605	FO	91093009	095600	000030	452 G	F=254,G=180,B=35
WNFS	W CEP	66	4.8	2155140	+632312	H 3	42587 L	21056	FO	91093013	132600	008000	342 G	F=183,G=110,B=35
WNFS	W Cep	66	4.8	2155140	+632312	L 3	42726 L	21190	FO	91101509	093600	000300	450 G	F=194,G=125,B=18
WNFS	W Cep	66	4.8	2155140	+632312	H 1	21496 L	21105	FO	91101509	095900	002000	3x3 G	F=1.5X,G=130,B=45
WNFS	W Cep	66	4.8	2155140	+632312	H 3	42727 L	21195	FO	91101510	104000	009000	342 G	F=1551,G=132,B=40
WNFS	W Cep	66	4.8	2155140	+632312	L 1	21497 L	21097	FO	91101511	113100	000030	552 G	F=246,G=193,B=35
FINCU PKS	2155-304	87	13.2	2155580	-302753	L 3	43026 L	156	SO	91110701	012100	005500	400 G	G=120,B=18
FINCU PKS	2155-304	87	13.2	2155581	-302754	L 1	21644 L	172	SO	91110519	195200	002500	402 G	G=140,B=35
FINCU PKS	2155-304	87	13.2	2155581	-302754	L 3	43017 L	177	SO	91110520	202700	005500	300 G	G=110,B=20
FINCU PKS	2155-304	87	13.2	2155581	-302754	L 1	21645 L	170	SO	91110521	214000	002500	402 G	G=140,B=35
FINCU PKS	2155-304	87	13.2	2155581	-302754	L 3	43018 L	176	SO	91110522	221600	005500	300 G	G=110,B=20
FINCU PKS	2155-304	87	13.2	2155581	-302754	L 1	21652 L	159	SO	91110619	193100	002500	402 G	G=157,B=38
FINCU PKS	2155-304	87	13.2	2155581	-302754	L 3	43025 L	159	SO	91110623	233800	005500	400 G	G=124,B=18
FINCU PKS	2155-304	87	13.2	2155581	-302754	L 1	21653 L	159	SO	91110700	004400	002500	402 G	G=145,B=35
FINCU PKS	2155-304	87	13.2	2155581	-302754	L 1	21654 L	157	SO	91110702	022800	002500	302 G	G=125,B=37
FINCU PKS	2155-304	87	13.2	2155581	-302754	L 3	43083 L	174	SO	91111303	033600	005100	400 G	G=124,B=18
FINCU PKS	2155-304	87	13.2	2155581	-302754	L 1	21714 L	176	SO	91111304	043200	002500	402 G	G=170,B=38
FINCU PKS	2155-304	87	13.2	2155581	-302754	L 3	43084 L	176	SO	91111305	050500	005500	400 G	G=132,B=20
FINCU PKS	2155-304	87	13.2	2155581	-302754	L 3	43085 L	177	SO	91111306	064300	005500	401 G	G=135,B=25
FINCU PKS	2155-304	87	13.2	2155581	-302754	L 1	21716 L	174	SO	91111307	074400	002500	402 G	G=174,B=40
FINCU PKS	2155-304	87	13.2	2155581	-302754	L 3	43086 L	172	SO	91111308	081400	006500	401 G	G=152,B=22
FINCU PKS	2155-304	87	13.2	2155581	-302754	L 3	43092 L	168	SO	91111317	175700	005200	400 G	G=146,B=20
FINCU PKS	2155-304	87	13.2	2155581	-302754	L 1	21721 L	174	SO	91111318	185500	002600	402 G	G=168,B=37
FINCU PKS	2155-304	87	13.2	2155581	-302754	L 3	43093 L	175	SO	91111319	192800	005600	401 G	G=146,B=22
FINCU PKS	2155-304	87	13.2	2155581	-302754	L 1	21722 L	168	SO	91111320	203000	002700	402 G	G=170,B=35
FINCU PKS	2155-304	87	13.2	2155581	-302754	L 3	43094 L	165	SO	91111321	210300	005700	401 G	G=154,B=21
FINCU PKS	2155-304	87	13.2	2155581	-302754	L 1	21723 L	166	SO	91111322	220600	002700	502 G	G=190,B=37
FINCU PKS	2155-304	87	13.2	2155581	-302754	L 3	43095 L	165	SO	91111322	224400	005200	400 G	G=153,B=20
FINCU PKS	2155-304	87	13.2	2155581	-302754	L 1	21724 L	165	SO	91111323	234200	002700	502 G	G=198,B=37
FINCU PKS	2155-304	87	13.2	2155581	-302754	L 3	43096 L	162	SO	91111400	001500	005700	401 G	G=152,B=22
FINCU PKS	2155-304	87	13.2	2155581	-302754	L 1	21725 L	163	SO	91111401	011700	002700	402 G	G=186,B=37
FINCU PKS	2155-304	87	13.2	2155581	-302754	L 3	43097 L	161	SO	91111401	015000	005700	400 G	G=130,B=20
FINCU PKS	2155-304	87	13.2	2155581	-302754	L 1	21726 L	162	SO	91111402	025300	002700	402 G	G=176,B=38



FRO	Object	CL	MAG	R.A.	DEC	D C	Image A	FES	MD	Obs.date	Exptim	nummsst	ECC	Comment
HINCU FKS	2155-304	87	13.2	2155581	-302754	L 3	43098 L	163	SD	91111403	032600	005700	400 G	G=130,B=20
HINCU FKS	2155-304	87	13.2	2155581	-302754	L 1	21727 L	183	SD	91111404	043200	002500	402 G	G=170,B=38
HINCU FKS	2155-304	87	13.2	2155581	-302754	L 3	43099 L	167	SD	91111405	050600	005300	400 G	G=124,B=20
HINCU FKS	2155-304	87	13.2	2155581	-302754	L 1	21728 L	169	SD	91111406	060600	003000	402 G	G=184,B=40
HINCU FKS	2155-304	87	13.2	2155581	-302754	L 1	21877 L	336	SD	91112819	195800	002500	402 G	G=175,B=40
HINCU FKS	2155-304	87	13.2	2155581	-302754	L 3	43246 L	33	SD	91112820	203500	004500	400 G	G=120,B=20
HINCU FKS	2155-304	87	13.2	2155581	-302754	L 1	21878 L	334	SD	91112821	212800	002500	402 G	G=165,B=35
HINCU FKS	2155-304	87	13.5	2155581	-302754	L 3	43247 L	333	SD	91112822	220300	004500	300 G	G=110,B=20
HINCU FKS	2155-304	87	13.2	2155582	-302753	L 1	21715 L	178	SD	91111306	061100	002500	402 G	G=165,B=40
SAMCW HD	209166	41	5.6	2158391	+125246	L 1	20546 L	13750	FO	91060815	150700	000225	X04 G	G=3X,B=55
SAMCW HD	209166	41	5.6	2158391	+125246	L 1	20546 S	13724	FO	91060815	152100	000430	X4 G	B=5X,B=55
SAMCW HD	209166	41	5.6	2158391	+125246	L 1	20547 L	13678	FO	91060817	173300	000100	402 G	G=170,B=40
SAMCW HD	209166	41	5.6	2158391	+125246	L 1	20547 S	13631	FO	91060817	174300	000020	402 G	G=150,B=35
NC007 GL845		46	05.00	2159522	-570113	H 1	21252 L	25452	FO	91091521	213009	002000	351 V	
USSBS HD	209481	12	5.7	2200235	+574531	H 1	21039 L	15462	FO	91081903	030900	000240	502 G	G=200,B=40
VENSA HR	8404	23	5.8	2200567	+110342	L 1	21482 L	13414	FO	91101308	083400	000032	503 G	G=208,B=41
VENSA HR	8404	23	5.8	2200567	+110842	L 3	42706 L	13328	FO	91101308	084500	000112	500 G	G=212,B=20
CD93Y FKS	2201+044	87	15.5	2201460	+042527	L 1	20819 L		EO	91071604	043100	024000	09 G	B=110
CD93Y FKS	2201+044	87	15.5	2201460	+042527	L 3	42082 L		EO	91071608	083500	013500	05 G	B=70
NI014 HD	209791	45	04.34	2202191	-642303	L 1	20958 S	00534	FU	91080519	200435	000200	302 V	
NI014 HD	209791	45	04.34	2202191	-642303	L 1	20958 L	00534	FU	91080519	195747	000200	802 V	
MI073 HD	209791	45	04.34	2202191	-642303	L 3	42178 L	00535	FU	91080520	201245	004000	802 V	
AAVAD HD	209750	45	3.30	2203129	-003349	H 1	20521 L	1269	FU	91050615	153600	003000	X05 G	B=3X,G=3X,B=65
AAVAD HD	209750	45	3.30	2203129	-003349	L 3	41586 L	1284	FU	91050616	161100	006000	X36 G	B=103,G=2X,B=80
AAVAD HD	209750	45	3.30	2203129	-003349	H 1	20522 L	1301	FU	91050617	171900	001200	X55 G	B=229,G=1.5X,B=65
AAVAD HD	209750	45	2.9	2203129	-003349	H 1	20362 L	1269	FU	91051315	152900	004500	X03 G	B=4.5X,G=4.5X,B=50
AAVAD HD	209750	45	2.9	2203129	-003349	L 3	41618 L	1276	FU	91051316	162500	007500	X01 G	B=1.5X,G=1.5X,B=25
AAVAD HD	209750	45	2.9	2203129	-003349	H 1	20363 L	1287	FU	91051317	171900	001330	X52 G	B=232,G=1.5X,B=32
AAVAD HD	209750	45	2.90	2203129	-003349	H 1	20444 L	1265	FU	91052515	154900	004500	X45 G	B=167,G=4.5X,B=65
AAVAD HD	209750	45	2.90	2203129	-003349	L 3	41695 L	1258	FU	91052516	164500	003000	X33 G	B=112,G=1.5X,B=50
AAVAD HD	209750	45	2.90	2203129	-003349	H 1	20445 L	1280	FU	91052517	173800	001130	X53 G	B=221,G=1.5X,B=48
AAVAD HD	209750	45	2.9	2203129	-003349	H 1	20530 L	1281	FU	91060613	133100	004500	X04 G	B=4.5X,G=4.5X,B=55
AAVAD HD	209750	45	2.9	2203129	-003349	L 3	41781 L	1261	FU	91060614	142200	007500	X51 G	B=216,G=1.5X,B=25
AAVAD HD	209750	45	2.9	2203129	-003349	H 1	20531 L	1262	FU	91060615	151600	001230	X52 G	B=203,G=1.5X,B=40
AAVAD HD	209750	45	2.9	2203129	-003349	H 1	20610 L	1265	FU	91061613	132400	004500	X07 G	B=4X,G=4X,B=85
AAVAD HD	209750	45	2.9	2203129	-003349	L 3	41847 L	1288	FU	91061614	141700	004500	X37 G	B=173,G=2X,B=90
AAVAD HD	209750	45	2.9	2203129	-003349	H 1	20611 L	1277	FU	91061615	151100	001130	554 G	B=225,G=240,B=60
AAVAD HD	209750	45	2.90	2203129	-003349	H 1	20694 L	1269	FU	91062614	140000	004500	X09 G	B=2X,G=5X,B=210
AAVAD HD	209750	45	2.90	2203129	-003349	L 3	41922 L	1260	FU	91062614	145400	003100	X39 G	B=212,G=1.5X,B=175
AAVAD HD	209750	45	2.90	2203129	-003349	H 1	20695 L	1279	FU	91062615	155300	000600	407 G	G=200,B=85
AAVAD HD	209750	45	2.9	2203129	-003349	H 1	20761 L	1250	FU	91070711	113500	004500	X03 G	B=4X,G=4X,B=45
AAVAD HD	209750	45	2.9	2203129	-003349	L 3	42018 L	1234	FU	91070712	123200	007500	X50 G	B=222,G=1.5X,B=18
AAVAD HD	209750	45	2.9	2203129	-003349	H 1	20762 L	1250	FU	91070713	132600	001230	552 G	B=189,G=240,B=32
AAVAD HD	209750	45	2.9	2203129	-003349	H 1	20828 L	1264	FU	91071711	113900	004500	X04 G	B=4X,G=4X,B=60
AAVAD HD	209750	45	2.9	2203129	-003349	L 3	42085 L	1249	FU	91071712	123200	007500	X48 G	B=236,G=2X,B=95
AAVAD HD	209750	45	2.9	2203129	-003349	H 1	20829 L	1261	FU	91071713	132700	001130	X44 G	B=186,G=1.5X,B=55
CQVAB HD	209750	45	3.0	2203129	-003349	H 1	21406 L	1250	FU	91100510	104100	001000	542 G	B=160,G=200,B=32
CD97Y HD	209750	45	2.9	2203129	-003349	H 1	21547 L	1284	FU	91102209	092900	004500	X03 G	B=6X,G=6X,B=50
CD97Y HD	209750	45	2.9	2203129	-003349	L 3	42782 L	1301	FU	91102210	102300	007500	X31 G	B=70,G=2X,B=25
CD97Y HD	209750	45	2.9	2203129	-003349	H 1	21548 L	1271	FU	91102211	111700	001200	542 G	B=166,G=200,B=37

FO	Object	CL	MAG	R.A.	DEC	D C	Image A	FES	MD	Obs.date	Exptim	mmmsstt	ECC	Comment
CENIN HD	209975 14		5.1	2203363	+620210	H 3	42792 L	21861	FO	91102304	043100	000530	502 G	G=230,B=40
CENIN HD	209975 14		5.1	2203363	+620210	H 3	42792 L	21861	FO	91102304	043100	000530	502 G	G=230,B=40
CENIN HD	209975 14		5.1	2203363	+620210	H 3	42799 L	21657	FO	91102310	104700	000530	502 G	G=230,B=40
CENIN HD	209975 13		5.1	2203363	+620210	H 3	42816 L	21824	FO	91102401	015600	000530	503 G	G=240,B=41
CENIN HD	209975 13		5.1	2203363	+620210	H 3	42824 L	22341	FO	91102408	083000	000530	552 G	B=200,G=230,B=40
CENIN HD	209975 13		5.1	2203363	+620210	H 3	42856 L	21911	FO	91102510	100400	000530	552 G	B=200,G=230,B=40
CENIN HD	209975 13		5.1	2203363	+620210	H 3	42878 L	21898	FO	91102603	035800	000530	552 G	B=210,G=240,B=40
CENIN HD	209975 13		5.1	2203363	+620210	H 3	42886 L	21792	FO	91102609	095400	000530	552 G	B=200,G=230,B=40
CENIN HD	209975 13		5.1	2203363	+620210	H 3	42908 L	21810	FO	91102703	031200	000530	553 G	B=221,G=250,B=41
CENIN HD	209975 13		5.1	2203363	+620210	H 3	42915 L	21961	FO	91102708	084100	000530	552 G	B=211,G=245,B=40
CENIN HD	210839 13		5.0	2209486	+591003	H 3	42786 L	20868	FO	91102222	224300	001000	502 G	G=220,B=40
CENIN HD	210839 13		5.0	2209486	+591003	H 3	42789 L	21267	FO	91102301	014100	001000	502 G	G=230,B=39
CENIN HD	210839 13		5.0	2209486	+591003	H 3	42793 L	22094	FO	91102305	051900	001000	502 G	G=220,B=40
CENIN HD	210839 13		5.0	2209486	+591003	H 3	42796 L	21402	FO	91102308	080500	001000	502 G	G=220,B=40
CENIN HD	210839 15		5.0	2209486	+591003	H 3	42801 L	21151	FO	91102312	123300	001000	552 G	B=219,G=230,B=40
CENIN HD	210839 13		5.0	2209486	+591003	H 3	42813 L	21045	FO	91102323	230600	001000	503 G	G=235,B=41
CENIN HD	210839 13		5.0	2209486	+591003	H 3	42817 L	21774	FO	91102402	024600	001000	502 G	G=230,B=40
CENIN HD	210839 13		5.0	2209486	+591003	D 9	02498 2			91102404	045400	016000	G	
CENIN HD	210839 13		5.0	2209486	+591003	H 3	42820 L	21862	FO	91102405	050700	001000	552 G	B=200,G=220,B=40
CENIN HD	210839 13		5.0	2209486	+591003	H 3	42823 L	21834	FO	91102407	073200	001000	552 G	B=200,G=220,B=40
CENIN HD	210839 13		5.0	2209486	+591003	H 3	42828 L	21296	FO	91102411	113900	001000	552 G	B=200,G=220,B=40
CENIN HD	210839 13		5.0	2209486	+591003	H 3	42854 L	21767	FO	91102508	083700	001000	552 G	B=230,G=220,B=40
CENIN HD	210839 13		5.0	2209486	+591003	P 9	02499 2			91102512	122600	016000	G	
CENIN HD	210839 13		5.0	2209486	+591003	H 3	42859 L	21407	FO	91102512	123400	001000	552 G	B=200,G=230,B=40
CENIN HD	210839 13		5.0	2209486	+591003	H 3	42871 L	21487	FO	91102522	222900	001000	503 G	G=235,B=41
CENIN HD	210839 13		5.0	2209486	+591003	H 3	42874 L	21689	FO	91102600	005100	001000	503 G	G=230,B=41
CENIN HD	210839 13		5.0	2209486	+591003	H 3	42877 L	21640	FO	91102603	030700	001000	552 G	B=205,G=230,B=40
CENIN HD	210839 15		5.0	2209486	+591002	H 3	42881 L	21794	FO	91102606	060900	001000	552 G	B=216,G=220,B=40
CENIN HD	210839 13		5.0	2209486	+591002	H 3	42884 L	21504	FO	91102608	082400	001000	552 G	B=200,G=220,B=40
CENIN HD	210839 13		5.0	2209486	+591002	H 3	42889 L	21260	FO	91102612	121900	001000	552 G	B=211,G=230,B=40
CENIN HD	210839 13		5.0	2209486	+591002	H 3	42901 L	21212	FO	91102621	215300	001000	553 G	B=211,G=237,B=42
CENIN HD	210839 13		5.0	2209486	+591002	H 3	42904 L	21207	FO	91102700	000700	001000	553 G	B=221,G=231,B=41
CENIN HD	210839 13		5.0	2209486	+591002	H 3	42907 L	21534	FO	91102702	022300	001000	552 G	B=218,G=236,B=40
CENIN HD	210839 13		5.0	2209486	+591003	H 3	42911 L	21597	FO	91102705	052300	001000	552 G	B=199,G=230,B=40
CENIN HD	210839 13		5.0	2209486	+591003	H 3	42914 L	217	FO	91102707	075200	001000	552 G	B=214,G=230,B=40
CENIN HD	210839 13		5.0	2209486	+591003	H 3	42919 L	21177	FO	91102711	113300	001000	552 G	B=209,G=238,B=40
PHCAL SKY BKGD	07			2212386	-460514	L 1	21224 L		FO	91091223	234900	006000	02 G	B=32
NEO71 NEC7233	88	13.30		2212440	-460548	L 1	21219 L	00000	FO	91091116	164120	036500	334 V	
SGNAD NEC	7233 88	13.4		2212440	-460548	L 3	42450 L		FO	91091216	161200	087000	309 G	G=190,B=105
NEO71 NEC7233	88	13.30		2212440	-460548	F 9	02489 2	00000	FO	91091215	154000	004000	V WITH SWP	42450
NI075 CP IAC	55	15.00		2213506	+552203	L 1	20744 L	00000	FO	91070420	200529	013000	303 V	
NI075 CP IAC	55	15.00		2213506	+552203	L 3	42000 L	00000	FO	91070420	222048	026700	332 V	
WRMFC HD	211564 11		11.7	2214332	+552236	L 3	41714 L	427	SO	91052815	153600	000500	230 G	B=92,G=25,B=15
FRNSH IC	5217 70		10.5	2221556	+504252	L 3	41909 L	259	SO	91062414	141600	003000	335 G	B=152,G=105,B=65
CD92Y HD	212571 26		4.7	2222434	+010723	H 3	41804 L	678	FU	91060919	193200	000115	501 G	G=210,B=30
CD92Y HD	212571 26		4.7	2222434	+010723	H 1	20557 L	621	FU	91060919	193700	000045	502 G	G=200,B=40
CD92Y HD	212571 26		4.7	2222434	+010722	H 3	42021 L	27124	FO	91070712	184800	000130	502 G	G=205,B=35
CD92Y HD	212571 26		4.7	2222434	+010722	H 3	42023 L	28078	FO	91070811	113100	000120	502 G	G=218,B=35
CD92Y HD	212571 26		4.7	2222434	+010722	H 1	20767 L	28101	FO	91070811	114100	000045	402 G	G=180,B=40
GNUC ED	+52 3210 65		10.7	2224567	+532323	L 3	42360 L	115	FO	91083014	142700	001000	200 G	G=30,B=18

PRO	Object	CL	MAG	R.A.	DEC	D C	Image A	FES	MD	Obs.date	Exptim	mmmsst	ECC	Comment
GHUC	HD +52 3210	65	10.7	2224567	+532323	L 1	21119 L	113	FO	91083014	145000	001100	302	G G=70,B=35
GHUC	HD +52 3210	20	10.7	2224567	+532323	L 1	21119 S	122	FO	91083015	151400	000730	201	G G=50,B=30
PHCAL	HD 212943	47	4.8	2225196	+042627	L 1	20678 L	24299	FO	91072414	140100	000130	402	G G=180,B=40
NENFD	NGC 7293-SW3	71		2226418	-210907	L 1	21401 L		EO	91100421	215500	038000	306	G G=110,B=72
NENFD	NGC 7293-SW3	71		2226440	-211005	L 3	42621 L		EO	91100421	214700	042000	333	G B=97,G=105,B=50
NAL32	NGC 7293	70	13.35	2226548	-210541	L 3	42066 L	00080	SO	91071320	202436	000600	500	V CENTRAL STAR
NAL32	NGC 7293	71	99.99	2226548	-210541	L 3	42067 L	00000		91071321	210231	006000	300	V NEBULA; 8 ARCSEC FFO
NAL32	NGC 7293	71	99.99	2226548	-210541	L 1	20602 L	00000		91071321	213934	005000	101	V SERENDIPITY SWP42067
MA107	NGC 7293	71	99.99	2226548	-210541	L 3	42072 L	00000		91071420	200802	023000	331	V NEBULA; 11 ARCSEC
MA107	NGC 7293	71	99.99	2226548	-210541	L 1	20612 L	00000		91071420	204752	019000	301	V SERENDIPITY SWP42072
NENFD	NGC 7293-NEK	71		2226595	-210148	L 1	21398 L		EO	91100322	225400	047000	327	G B=91,G=120,B=62
NENFD	NGC 7293-NEK	71		2227017	-210245	L 3	42615 L		EO	91100321	215400	052000	336	G B=115,G=110,B=75
BFNSA	HD 213320	30	4.8	2228000	-105602	L 3	42713 L	25544	FO	91101405	053100	000032	500	G G=214,B=18
BFNSA	HD 213320	30	4.8	2228000	-105602	L 1	21487 L	25587	FO	91101405	054200	000014	502	G G=200,B=35
VENSA	HR 8576	30	4.3	2228398	-323609	L 3	42704 L	435	FU	91101305	052400	000023	500	G G=211,B=18
VENSA	HR 8576	30	4.3	2228398	-323609	L 1	21480 L	436	FU	91101305	053600	000010	502	G G=195,B=35
AFNIS	HD 214454	33	4.6	2235188	+511712	L 3	42765 L	304	FU	91102008	083900	003500	332	G B=88,G=60X,B=32
MCL51	GL866	48	11.91	2235519	-153338	L 1	20566 L	00290	SO	91061022	221657	006000	033	V TWO SPECTRA
MCL51	GL866	48	11.91	2235519	-153338	L 1	20567 L	00310	SO	91061100	001600	006000	033	V TWO SPECTRA
MCL51	GL866	48	11.87	2235519	-153338	L 1	20568 L	00298	SO	91061102	020824	006000	033	V TWO SPECTRA
MCL51	GL866	48	99.99	2235519	-153338	L 1	20569 L	00000		91061104	040132	004000	036	V TWO SPECTRA
MCL51	GL866	48	11.87	2235519	-153338	L 3	41815 L	00300	SO	91061023	233338	003000	030	V
MCL51	GL866	48	11.87	2235519	-153338	L 3	41816 L	00300	SO	91061101	012938	003000	030	V
MCL51	GL866	48	11.86	2235519	-153338	L 3	41817 L	00301	SO	91061103	032302	003000	030	V
MCL51	HD 214479	48	09.26	2236025	-205251	L 1	20433 L	00767	FO	91052400	000621	004000	250	V TWO EXPOSURES
MCL51	HD 214479	48	09.28	2236025	-205251	L 3	41683 L	00753	FO	91052401	010300	004000	110	V TWO EXPOSURES
MCL51	HD 214479	48	09.30	2236025	-205251	L 1	20434 L	00744	FO	91052402	020302	004000	250	V TWO EXPOSURES
MCL51	HD 214479	48	09.31	2236025	-205251	L 3	41684 L	00738	FO	91052403	030327	004000	110	V TWO EXPOSURES
MCL51	HD 214479	48	09.29	2236025	-205251	L 1	20435 L	00748	FO	91052404	041349	004000	261	V TWO EXPOSURES
MCL51	HD 214479	48	09.29	2236025	-205251	L 3	41685 L	00750	FO	91052405	051616	003000	110	V
MCL51	HD 214479	48	09.29	2236025	-205251	L 1	20436 L	00748	FO	91052405	055607	004000	260	V TWO EXPOSURES
PHCAL	HD 214680	16	4.88	2237008	+384722	L 1	20893 L	25856	FO	91072713	132900	000001	402	G G=164,B=38
PHCAL	HD 214680	16	4.88	2237008	+384722	L 3	42133 L	25836	FO	91072713	133300	000001	400	G G=156,B=18
PHCAL	HD 214680	16	4.88	2237008	+384722	H 1	20894 L	25948	FO	91072714	143300	000050	X03	G G=1.5X,B=44
PHCAL	HD 214680	16	4.88	2237008	+384722	H 3	42134 L	26013	FO	91072714	143700	000036	401	G G=174,B=30
PHCAL	HD214680	12	04.95	2237010	+384722	L 3	41830 L	26100	FO	91061322	223658	000000	400	V 1 CBC THICK
PHCAL	HD214680	12	04.87	2237010	+384722	L 3	41831 L	27223	FO	91061323	231422	000000	400	V 1 CBC THICK
PHCAL	HD214680	12	04.88	2237010	+384722	L 3	41832 L	27072	FO	91061323	235108	000000	400	V 1 CBC THICK
PHCAL	HD214680	12	04.87	2237010	+384722	L 3	41833 L	27171	FO	91061400	003611	000000	400	V 1 CBC THICK
PHCAL	HD214680	12	04.89	2237010	+384722	L 3	41834 L	26908	FO	91061401	011340	000000	400	V 1 CBC THICK
PHCAL	HD214680	12	04.88	2237010	+384722	L 3	41835 L	27090	FO	91061401	014619	000000	400	V 1 CBC THICK
PHCAL	HD214680	12	04.86	2237010	+384722	L 3	41836 L	27301	FO	91061402	022131	000000	400	V 1 CBC THICK
PHCAL	HD214680	12	04.87	2237010	+384722	L 3	41837 L	27193	FO	91061403	030031	000001	500	V
PHCAL	HD214680	12	04.89	2237010	+384722	L 3	41838 L	26976	FO	91061403	033405	000001	500	V
PHCAL	HD214680	12	04.88	2237010	+384722	L 3	41839 L	27144	FO	91061404	040628	000001	500	V
PHCAL	HD214680	12	04.88	2237010	+384722	L 3	41840 L	27069	FO	91061404	043441	000001	500	V
PHCAL	HD214680	12	04.86	2237010	+384722	L 3	41839 L	27304	FO	91061402	223132	000001	600	V
PHCAL	HD214680	12	04.89	2237010	+384722	L 3	41881 L	00326	FU	91061923	230938	000001	500	V
PHCAL	HD214680	12	04.89	2237010	+384722	L 3	41882 L	00327	FU	91061923	234601	000001	600	V
PHCAL	HD214680	12	04.89	2237010	+384722	L 3	41883 L	00325	FU	91062000	001723	000001	500	V



FHO	Object	CL	MAG	R.A.	DEC	D C	Image A	FES	MD	Obs.date	Exptim	mmmsst	ECC	Comment
PHCAL	HD214680	12	04.90	2237010	+384722	L 3	41884 L	00323	FU	91062000	004717	000001	700 V 3	OEC TICKS
PHCAL	HD214680	12	04.91	2237010	+384722	L 3	41885 L	00321	FU	91062001	012104	000001	700 V 3	OEC TICKS
PHCAL	HD214680	12	04.90	2237010	+384722	L 1	20641 L	00324	FU	91062002	021849	000001	800 V 3	OEC TICKS
PHCAL	HD214680	12	04.91	2237010	+384722	L 1	20642 L	00321	FU	91062002	025213	000001	800 V 3	OEC TICKS
PHCAL	HD214680	12	04.91	2237010	+384722	L 1	20643 L	00320	FU	91062003	033555	000001	500 V	
PHCAL	HD214680	12	04.90	2237010	+384722	L 1	20644 L	00323	FU	91062004	040953	000001	800 V 3	OEC TICKS
PHCAL	HD214680	12	04.93	2237010	+384722	L 1	20645 L	00316	FU	91062004	044728	000001	500 V	
PHCAL	HD214680	13	05.00	2237010	+384722	L 3	41899 L	25412	FO	91062221	213548	000001	500 V	
PHCAL	HD214680	13	04.96	2237010	+384722	L 3	41900 L	26030	FO	91062222	221936	000001	500 V	
PHCAL	HD214680	13	04.88	2237010	+384722	L 3	41901 L	27050	FO	91062222	225532	000001	500 V	
PHCAL	HD214680	13	04.96	2237010	+384722	L 1	20666 L	26040	FO	91062223	231433	000001	600 V	
PHCAL	HD214680	13	04.94	2237010	+384722	L 1	20667 L	26211	FO	91062223	234746	000001	600 V	
PHCAL	HD214680	13	04.91	2237010	+384722	L 1	20668 L	26720	FO	91062300	001809	000001	600 V	
PHCAL	HD214680	13	04.92	2237010	+384722	L 1	20669 L	26510	FO	91062300	004925	000001	600 V	
PHCAL	HD214680	13	04.99	2237010	+384722	L 1	20670 L	25596	FO	91062301	013840	000002	700 V	
PHCAL	HD214680	13	04.98	2237010	+384722	L 1	20671 L	25718	FO	91062302	020855	000002	700 V	
PHCAL	HD214680	13	04.98	2237010	+384722	L 1	20672 L	25677	FO	91062302	024050	000002	700 V	
PHCAL	HD214680	13	05.01	2237010	+384722	L 3	42418 L	25264	FO	91090815	153134	000001	600 V	
PHCAL	HD214680	13	05.00	2237010	+384722	L 3	42419 L	25445	FO	91090816	162038	000001	600 V	
PHCAL	HD214680	13	04.94	2237010	+384722	L 3	42420 L	26268	FO	91090816	164908	000001	600 V	
PHCAL	HD214680	13	04.94	2237010	+384722	L 3	42421 L	26279	FO	91090817	171849	000001	600 V	
PHCAL	HD214680	13	04.97	2237010	+384722	L 3	42422 L	25858	FO	91090817	174604	000001	600 V	
PHCAL	HD214680	13	04.96	2237010	+384722	L 3	42423 L	26032	FO	91090818	182229	000001	600 V	
PHCAL	HD214680	13	04.94	2237010	+384722	L 1	21190 L	26254	FO	91090819	190148	000001	601 V	
PHCAL	HD214680	13	04.94	2237010	+384722	L 1	21191 L	26284	FO	91090819	193425	000001	601 V	
PHCAL	HD214680	13	04.93	2237010	+384722	L 1	21192 L	26391	FO	91090820	200950	000001	601 V	
PHCAL	HD214680	13	04.93	2237010	+384722	L 1	21193 L	26329	FO	91090820	204202	000001	601 V	
PHCAL	HD214680	13	04.93	2237010	+384722	L 1	21194 L	26439	FO	91090821	211447	000001	601 V	
PHCAL	HD214680	13	04.96	2237010	+384722	L 1	21195 L	26011	FO	91090821	215341	000001	601 V	
PHCAL	HD214680	13	04.92	2237010	+384722	L 1	21196 L	26474	FO	91090822	222458	000001	601 V	
AGME	2237+07	84	14.0	2237465	+074733	L 1	20437 L		BD	91052408	081500	016500	334 G	F=140,G=120,B=55
AGME	QSO 2237+07	84	14.3	2237465	+074733	L 3	41694 L		BD	91052508	080700	016500	332 G	F=131,G=64,B=35
USSES	HD 214923	25	3.4	2238579	+103411	H 3	42071 L	998	FU	91071418	184600	000127	402 G	G=183,B=34
EMDW	HD 214993	23	5.3	2239140	+395750	L 1	21420 L	19906	FO	91100612	122100	000004	502 G	G=193,B=35
EMDW	HD 214993	23	5.3	2239140	+395750	L 3	42631 L	19754	FO	91100612	123100	000006	500 G	G=205,B=18
USSES	HD 214952	49	2.2	2239414	-470848	H 1	20639 L	3841	FU	91061918	181400	000500	342 G	F=179,G=70,B=35
USSES	HD 215182	39	2.9	2240391	+295733	H 3	43249 L	1294	FU	91112903	030800	003800	402 G	G=190,B=40
NC008	EV IAC	48	10.29	2244398	+440434	L 3	42267 L	00307	FO	91081620	201203	009000	130 V 2	EXPOSURES
NC008	EV IAC	48	10.25	2244398	+440434	L 1	21028 L	00319	FO	91081621	215547	001500	241 V	
NC008	EV IAC	48	10.25	2244398	+440434	L 3	42268 L	00319	FO	91081622	222928	009000	120 V 2	EXPOSURES
NC008	EV IAC	48	10.25	2244398	+440434	L 1	21029 L	00319	FO	91081700	001202	002000	341 V	
NC008	EV IAC	48	10.27	2244398	+440434	L 3	42269 L	00312	FO	91081700	005230	007500	020 V 2	EXPOSURES
NC168	HD216572	39	07.84	2250471	-603902	L 3	42525 L	02712	FO	91092021	210724	000500	501 V	
NC168	HD216572	39	07.84	2250471	-603902	H 1	21298 L	02727	FO	91092222	221012	003800	401 V	
VENA	HR 8717	30	4.9	2252378	+083258	L 3	42705 L	24822	FO	91101307	070300	000039	500 G	G=185,B=18
VENA	HR 8717	30	4.9	2252378	+083258	L 1	21491 L	24668	FO	91101307	071600	000018	502 G	G=215,B=35
USSES	HD 216956	30	1.2	2254533	-295314	H 3	42124 L	6747	FU	91072514	140700	000037	502 G	G=210,B=37
AGME	NGC 7469	84	13.1	2300445	+083618	L 3	43248 L	224	SO	91112623	234400	012000	452 G	F=237,G=135,B=32
PHCAL	NULL	99		2300445	+083618	L 1	21879 L			91112900	001700	000000	02 G	B=32
PHCAL	NULL	99		2300445	+083618	L 1	21880 L			91112900	005200	000000	02 G	B=32



PRO	Object	CL	MAG	R.A.	DEC	D C	Image A	FES	MD	Obs.date	Exptim	num	stat	ECC	Comment
AGMB NEC	7469	84	13.1	2300445	+083618	H 1	21831 L	219	SO	91112901	015300	005500		453 G	E=249,G=190,B=45
AGMB MCG25822		84	13.8	2302072	-085719	L 1	21800 L	154	SO	91112119	194100	006000		342 G	E=156,G=110,B=40
AGMB MCG25822		84	13.8	2302072	-085719	L 3	43176 L	159	SO	91112120	205100	012000		352 G	E=212,G=79,B=40
USSES HD	218045	25	2.6	2302161	+145609	H 3	41819 L	2183	FU	91061112	123600	000106		502 G	G=190,B=35
USSES HD	218045	25	2.6	2302161	+145609	H 1	21519 L	2194	FU	91101809	095800	000045		502 G	G=215,B=40
USSES HD	218045	25	2.6	2302161	+145609	H 3	42758 L	2184	FU	91101810	100400	000400		X04 G	G=3X,B=52
M1074 NOVA AND		55	14.00	2309476	+471201	L 3	42292 L	00000	EO	91081919	195520	037200		201 V	
NGC36 SZ PSC		46	07.73	2310510	+022410	L 3	42137 L	02996	FO	91072823	235040	008000		332 V	
NGC36 SZ PSC		46	07.71	2310510	+022410	H 1	20902 L	03058	FO	91072901	012307	004400		333 V	
NGC36 SZ PSC		46	07.86	2310510	+022410	L 3	42140 L	02680	FO	91072919	194318	008000		330 V	
NGC36 SZ PSC		46	07.95	2310510	+022410	H 1	20908 L	02469	FO	91072921	211257	005500		331 V	
NGC36 SZ PSC		46	07.82	2310510	+022410	L 3	42146 L	02774	FO	91073123	234059	007500		330 V	
NGC36 SZ PSC		46	07.82	2310510	+022410	H 1	20920 L	02769	FO	91080101	010317	006400		331 V	
NGC36 SZ PSC		46	07.77	2310510	+022410	L 3	42143 L	02892	FO	91073023	234329	008000		330 V	
NGC36 SZ PSC		46	07.77	2310510	+022410	H 1	20914 L	02896	FO	91073101	010939	005800		331 V	
CONIA HD	219134	46	5.6	2310523	+565332	L 3	42221 L	13464	FO	91081116	162600	014000		302 G	G=63,B=40
PHAL HD	219150	40	7.4	2311077	+015550	L 3	41687 L	3845	FO	91052420	200900	000700		300 G	G=110,B=15
SOMA COM IEVY		06		2314401	+264256	D 9	02343 2			91080322	224500	002000		G	
SOMA COM IEVY		06		2314401	+264256	L 1	18514 L	196	FO	91080323	235800	016500		4X4 G	E=5X,G=200,B=55
KINCA HD	220140	46	7.89	2317490	+784343	L 3	42424 L	2613	FO	91090823	233300	010000		231 G	E=66,G=48,B=28
KINCA HD	220140	46	7.5	2317505	+784344	L 1	21183 L	2549	FO	91090800	000800	001000		X52 G	E=245,G=1.5X,B=35
KINCA HD	220140	46	7.5	2317505	+784344	L 3	42413 L	2540	FO	91090800	003300	006000		221 G	E=45,G=30,B=25
KINCA HD	220140	46	7.5	2317505	+784343	H 1	21184 L	2558	FO	91090801	013900	010000		353 G	E=231,G=100,B=42
KINCA HD	220140	46	7.5	2317505	+784343	L 3	42414 L	2545	FO	91090803	032500	010000		231 G	E=59,G=41,B=28
KINCA HD	220140	46	7.5	2317505	+784344	H 1	21185 L	2487	FO	91090805	051100	005000		342 G	E=152,G=60,B=35
KINCA HD	220140	46	7.89	2317505	+784344	H 1	21197 L	2714	FO	91090901	011900	009000		353 G	E=197,G=100,B=45
KINCA HD	220140	46	7.89	2317505	+784344	L 3	42425 L	2735	FO	91090902	025500	012000		231 G	E=72,G=49,B=30
KINCA HD	220140	46	7.5	2317505	+784344	H 1	21198 L	2671	FO	91090905	050200	009500		352 G	E=218,G=102,B=40
KINCA HD	220140	46	7.5	2317505	+784344	L 3	42432 L	2441	FO	91090923	234400	010000		331 G	E=72,G=48,B=25
KINCA HD	220140	46	7.5	2317505	+784343	H 1	21205 L	2452	FO	91091001	013100	009500		353 G	E=226,G=105,B=42
KINCA HD	220140	46	7.5	2317505	+784343	L 3	42433 L	2443	FO	91091003	031100	010000		330 G	E=61,G=42,B=20
KINCA HD	220140	46	7.5	2317505	+784343	H 1	21206 L	2411	FO	91091004	045800	009500		353 G	E=230,G=100,B=45
NA193 FG2318+239		38	13.50	2318372	+235413	L 1	21099 L	00000	EO	91082723	231720	004000		401 V	
NA193 FG2318+239		38	13.50	2318372	+235413	L 3	42339 L	00000	EO	91082800	000336	004800		300 V	HEAD
FNSH NEC	7662	70	10.0	2323294	+421536	L 3	41910 L	402	FO	91062415	153800	000500		353 G	E=237,G=85,B=45
FNSH NEC	7662	70	10.0	2323294	+421536	L 1	20683 L	404	FO	91062415	154900	000500		336 G	E=147,G=125,B=75
FNSH NEC	7662	70	10.0	2323294	+421536	L 3	41911 L	400	FO	91062416	162600	000500		352 G	E=223,G=75,B=38
IGNIH NEC	7714	88	12.5	2333406	+015242	L 3	42048 L	120	SO	91071203	035700	041000		406 G	G=222,B=72
IGNIH NEC	7714	88	12.5	2333406	+015242	L 3	42156 L	89	SO	91080205	052200	044000		404 G	G=210,B=60
RSNEG HD	222107	44	3.85	2335064	+461113	H 1	20702 L	635	FU	91062716	163600	000330		353 G	E=202,G=100,B=50
RSNEG HD	222107	44	3.85	2335064	+461113	L 3	41935 L	639	FU	91062716	164500	001500		334 G	E=131,G=75,B=52
CSMIA HD	222107	45	4.0	2335065	+461114	L 3	42206 L	675	FU	91080917	171100	004500		350 G	E=242,G=84,B=20
CSMIA HD	222107	45	4.0	2335065	+461114	L 3	42206 L	668	FU	91080918	180500	004500		350 G	E=241,G=93,B=20
RSNEG HD	222107	44	3.9	2335065	+461114	H 1	21826 L	619	FU	91112310	101000	000350		352 G	E=200,G=76,B=32
RSNEG HD	222107	44	3.9	2335065	+461114	L 3	43189 L	616	FU	91112310	101800	003200		350 G	E=190,G=64,B=18
AFNIS HD	222345	40	5.0	2337115	-142954	L 3	42765 L	22423	FO	91102010	101700	004800		341 G	E=164,G=60X,B=28
GSNFB HD	222574	45	4.82	2339100	-180538	H 1	20535 L	22903	FO	91051720	200200	004500		X42 G	E=146,G=1.5X,B=40
GSNFB HD	222574	45	4.82	2339101	-180538	L 3	41855 L	248	FU	91061718	180200	003000		320 G	E=25,G=60,B=18
ZANK RAQR-JET		57		2341137	-153352	L 3	41706 L		EO	91052710	102900	026000		3X2 G	E=1.5X,G=70,B=40
ZANK RAQR-HII		57	8.5	2341142	-153342	L 1	20449 L	1453	FO	91052613	130700	004000		5X2 G	E=2X,G=200,B=40

FO	Object	CL	MAG	R.A.	DEC	D C	Image A	FES	MD	Obs.date	Exptim	nummsst	ECC	Comment
ZANK	RQR HII	57	8.5	2341142	-153342	L 3	41699 L	1427	FO	91052613	135500	005000	340	G B=2X, G=55, B=18
RANK	RQR	57	9.0	2341142	-153342	L 1	20803 L	953	FO	91071403	032700	005000	442	G B=4X, G=180, B=38
RANK	RQR	57	9.0	2341142	-153342	L 3	42069 L	977	FO	91071404	042600	015000	341	G B=6X, G=120, B=24
RANK	RQR	57	9.0	2341142	-153342	L 1	20804 L	990	FO	91071407	071000	006000	542	G B=4X, G=195, B=38
RANK	RQR	57	9.0	2341142	-153342	L 3	42070 L	997	FO	91071408	081900	015000	441	G B=6X, G=145, B=30
NI085	RQR	57	08.86	2341143	-153343	L 3	42162 L	01100	FO	91080301	012037	002000	251	V
NI085	RQR	57	08.87	2341143	-153343	L 1	20935 L	01089	FO	91080301	015206	001500	363	V
ZANK	RQR-JET	57		2341145	-153335	L 3	41698 L		EO	91052607	075600	030000	344	G B=4X, G=120, B=55
ZANK	RQR-JET	57		2341145	-153335	L 3	41705 L		EO	91052708	082400	007500	340	G B=1.5X, G=50, B=20
RSNEG	HD 224085	46	7.40	2352290	+282117	L 1	20714 L	2757	FO	91062919	195000	000024	232	G B=60, G=45, B=32
RSNEG	HD 224085	46	7.40	2352290	+282117	L 3	41959 L	2770	FO	91062919	195500	005200	341	G B=160, G=45, B=22
WNCB	2353+026	37	15.8	2353541	+024025	L 3	42194 S		EO	91080806	065000	015000	01	G B=25
WNCB	2353+026	37	15.8	2353541	+024025	L 1	20973 L		EO	91080809	092400	015000	409	G G=228, B=120
WNCB	2353+026	37	15.8	2353541	+024025	L 3	42195 L		EO	91080812	120400	005000	308	G G=170, B=98
WNCB	2357+296	37	15.1	2357335	+294019	L 3	42197 L		EO	91080816	162000	004000	500	G G=225, B=18
WNCB	2357+296	37	15.1	2357335	+294019	L 3	42198 S		EO	91080817	173600	007500	500	G G=218, B=18
NC182	UCXG	51	08.90	9018032	+474410	L 1	21180 L	01058	FO	91090715	150821	018000	112	V

## REMOTE INTERROGATION OF THE IUE DATABASE

The IUE database is installed on the Microvax II of the VILSPA Scientific Computing Center, which is linked to the major European packet switching networks including SPAN.

On this Microvax a dedicated captive account has been created. It can be accessed via the following prompt and answer sequence:

```
$SET HOST VILSPA (or 28843, or 28845)
```

```
$SET HOST/X29 2145 213 021 3328
```

```
Username: VILSPA
```

```
Password: DB
```

If your institute is not connected to SPAN, you can use the normal PTT links. Check with your site manager that your computer is actually linked to the international X.25 packet switching network operated by the national PTT. If this is the case, then it is easy to get connected to VILSPA via the Spanish section of the network i.e. IBERPAC. Simply call the X.25 PDN (Public Data Network) number:

```
0214 213 021 3323
```

Once connected, you will be welcome by the VILSPA ESA Local Area Network-Network Control Center (LAN-NCC), prompting you for the NAME of the service requested. Answer:

```
VAX
```

Upon seeing the message "CALL COMPLETED TO . . .", hit <RETURN> (once or twice). To login, use the same Username and Password as above.

The database menu selection program will then automatically be activated. Among various options, it offers the possibility of issuing **on-line IUE data dearchiving requests**. Therefore, you should register carefully the first time you login to the VILSPA database. In particular, make sure to give your correct address; it will be used to mail the data you have asked for. To register as a new user, type in NEW to the codename prompt. Then, enter a CODENAME of your choice, with between 2 and 4 characters, together with your real name and address. On subsequent calls to the database, simply give the codename under which you registered the first time. The rest of the procedure is self-explanatory. Moreover, the HELP command will allow you to get easily acquainted with the system. Under the first menu branch you have also access to the database via the standard structured query language SQL. A complete description of the VILSPA Database can be found in the "VILSPA Database User's Guide" (M. Barylak, 1991, *ESA IUE Newsletter No. 37*) which is available upon request.