

NEWSLETTER

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January 1989

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IUE ESA NEWSLETTER

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Personnel Changes

Manuel J. Sansegundo Chamorro joined VILSPA in June to train as a spacecraft controller. Prior to this he worked for three years at NASA's Robledo de Chavela complex as an operator of RF and digital equipment.

Married, with two sons, he is in the final year of study for a degree in physics (computer science). In his spare time left over from that he enjoys music and sport.

SPACECRAFT STATUS REPORT, JULY 1988

O. OJANGUREN, VILSPA

1. GENERAL

The spacecraft continued to support science operations normally and effectively in its eleventh year of very successful in-orbit operations. At the end of June 1988, a total of 17459 images had been collected from 7742 celestial object since launch (VILSPA only).

2. BATTERIES

Continue to perform well despite their questionable health. During IUE Shadow Season #21 (February 8 to March 4) the maximum depth of discharges were 49.6% and 49.4% for batteries 1 and 2 respectively.

3. SOLAR ARRAY

Both arrays are performing quite well; their current output has decreased only by 3.3% over the last year. For the 11th episode the average power positive range should be from Beta = 30 to Beta = 115 .

4. ATTITUDE CONTROL SUBSYSTEM

Gyroscopes 4 and 5 are performing nominally. Gyro 5 drift rate is slowly increasing while Gyro 4 drift rate holds steady. A DELTA-V (orbit adjustment) maneuver is currently scheduled for September 8.

5. THERMAL

The HOT OBC Beta region has changed as follows:

MONTH	LOWER LIMIT	UPPER LIMIT
JANUARY	55.0	105.0
FEBRUARY	55.0	100.0
MARCH	60.0	100.0
APRIL	65.0	95.0
MAY	-	-
JUNE	-	-

MONTH	LOWER LIMIT	UPPER LIMIT
JULY	-	-
AUGUST	-	-
SEPTEMBER	70.0	90.0
OCTOBER	65.0	95.0
NOVEMBER	60.0	100.0
DECEMBER	55.0	105.0

Be aware that if during summer months - MAY, JUNE, JULY, AUGUST -, IUE is kept for extended periods of time at intermediate Betas, the OBC might heat up to the red line temperature limit. If this happens, the S/C should be maneuvered to 30 Beta 40 to cool down the OBC.

6. ANOMALIES

IUE has performed well during the last six months. On March 28 the first OBC crash since February 1985 occurred while unloading the inertia wheels. The reason for this crash is still under investigation. On March 9, April 8 and June 26, the Fine Sun Sensor gave corrupted data to the On-Board-Computer. On April 19, a Data Block 21 (group of commands) was not executed by the OBC. All anomalies were corrected on a routine basis and had no impact on the spacecraft health.

7. SOFTWARE

The engineering testing of the One-Gyro Attitude Control System has been completed at GSFC. The system is ready for Science testing.

(Following a slightly larger than predicted degradation of the solar panels August 87 to August 88 the normal operating beta-angle range has been reduced to:

$$28^{\circ} \leq \text{beta} \leq 113^{\circ}$$

Ed.).

Requesting G.O. Data Tape in FITS Format

J. R. Muñoz Peiró IGCS/VILSPA
November 1988

From the beginning of December 1988, IUE data will be available in FITS format. The writing of this format is performed by the IUE Image Processing activity and as such is considered an IUE Standard Output Product. It is intended that in the near future a similar task could be performed off-line (that is, separate from the normal IUE Image Processing activity), leading to exactly the same products.

This note describes the output products obtained when the FITS format option is chosen in the Image Processing Request.

Before choosing the FITS format option, please read this note in order to know exactly what you will get, bearing in mind that in the future this option will exclude the generation of the Standard G.O. Tape. For the time being, when selecting the FITS format option, IUE Data will be delivered on two sets of magnetic tapes : one set in the Standard G.O. format and another set in FITS format.

Please pay attention to the High Dispersion case, because most FITS reading programs don't handle more than one TABLE Extension.

If your observation has been performed using LOW Dispersion and the Epsilons are not a critical item for you, IUEFITS format is a good choice for carrying your data to most of the Data Reduction Systems.

A full description of both IMAGE Extension and Merged Extracted High Dispersion FITS format can be found in the References.

How to request IUE Data in FITS Format

The IUE Image Processing Request contains a section labelled as : (Fig. 1)

DATA OUTPUT OPTIONS :

at the bottom of this section, the following is shown :

FITS FORMAT LIST

In order to get FITS format, mark the **small square alongside the "FITS FORMAT"** statement. The default is NOT to generate FITS format but only to produce the standard GO Tape format.

The FITS Headers are dumped to the PRINT file, so if you want to have a hardcopy of them the LIST option must be also chosen. For Merged Extracted High Dispersion the Main FITS Header and first TABLE Extension Header only are printed.

GO FITS Format Tape

When selecting the FITS format as the Data Output Option, the following files will be generated :

Raw Images

A single Standard FITS format file is generated. Pixels use 8-bit unsigned bytes. The FITS Header will contain the whole IUE Label (both printable and binary Label sections).

Photometrically Corrected Images

A single Standard FITS format file is generated. Pixels use 16-bit signed halfwords. The FITS Header will contain only the printable section of the IUE Label.

FES Images

A single Standard FITS format file is generated. Pixels use 8-bit unsigned bytes. The whole IUE Label will be coded into the FITS Header.

IMAGE PROCESSING REQUEST		SEQUENCE NO.: _____
		CAMERA : _____
		IMAGE NO.: _____
Observer, address, program ID, as in REQUEST No.: _____		
NAME: _____		PROGRAM ID: _____
Mailing address: _____		
TARGET ID: _____		
Exposure Classification Code(s): _____		
Large Aperture Status: _____		
SCHEME OPTIONS:		DATA OUTPUT OPTIONS:
-----		-----
DO NOT PROCESS-ARCHIVE ONLY <input type="checkbox"/>		PHOTOWRITES: PRINTS/TRANSPAR.
CAMERA: 1(LWP)/2(LWR)/3(SWP)/4(SWR)		RAW IMAGE PHOTOWRITE ONLY <input type="checkbox"/>
DISPERSION: Low/High		NO PRINTS <input type="checkbox"/> NO PLOTS <input type="checkbox"/>
APERTURE: Small/Large/Both		TAPE DENSITY: 1600 BPI <input type="checkbox"/>
LAP SOURCE: Point/Extend/Trail/Mult		FITS FORMAT <input type="checkbox"/> LIST <input type="checkbox"/>
REGISTRATION: Auto/Manual		
PLOT SCALE (SW Only): No Lyman		
SPECIAL PROCESSING REQUIREMENTS:		

Plot only the range from LMIN= _____ to LMAX= _____ (only HI disp)		
Duplicates for (available only for R.A.)		
TAPE <input type="checkbox"/>	PHOTOWRITES <input type="checkbox"/>	PLOTS <input type="checkbox"/>
Others:		
.....(Signed VISITOR)		
RESIDENT	RAW TAPE:	FILE: 1 +
ASTRONOMER	DATE:	R.A. SIGNATURE:
IMAGE	SCHEMES RECEIVED-DATE:	
PROCESSING	PHOTOLAB WORK ORDER NO.:	
SPECIALIST	COMMENTS:	
	SIGNED I.P.S.:	
DATA LIBRARIAN	LISTING DATE:	
	PRINTS DATE:	
	OUTPUTS DISPATCHED DATE:	
	TAPE DATE:	
	PLOTS DATE:	
	SIGNED D.L.:	

Fig. 1

LBL Spectra

A single Standard FITS format file is generated. Pixels use 16-bit signed halfwords. The FITS Header will contain only the printable section of the IUE Label.

Epsilons are coded as an IMAGE Extension appended to the LBL flux data.

MELO Spectra

Four Standard FITS format files are generated : GROSS, BACKGROUND, NET and ABNET. Pixels use 32-bit signed words. FITS Headers will contain only the printable section of the IUE Label.

Epsilons are coded as an IMAGE Extension appended to the file containing the GROSS Spectrum (first file for the MELO).

MEHI Spectra

A single FITS format file is generated, containing a number of FITS TABLE Extensions equal to the number of orders (camera dependent), that is, each order uses a FITS TABLE Extension.

The FITS Main Header will contain only the printable section of the IUE Label.

The columns on each TABLE represent :

Wavelength, Quality Factors, Gross Spectrum, Smoothed Interorder Background Spectrum, Net Spectrum, Ripple Corrected Net Spectrum and Absolutely Calibrated Net Spectrum.

The values in the TABLE are scaled and the corresponding scale factors are placed in the Header of each TABLE Extension

NUMBER OF FILES GENERATED

According to the above description, the following number of files are generated when requesting FITS format :

LOW Dispersion Images :

<i>Single Aperture</i>	Raw Image
	Photometrically Corrected Image
7 FITS files	Line By Line Spectrum
	Gross Spectrum
	Background Spectrum
	Net Spectrum
	Absolutely Calibrated Net Spectrum

<i>Double Aperture</i>	Raw Image
	Photometrically Corrected Image
12 FITS files	Line By Line Spectrum (Large Ap.)
	Gross Spectrum (Large Ap.)
	Background Spectrum (Large Ap.)
	Net Spectrum (Large Ap.)
	AbNet Spectrum (Large Ap.)
	Line By Line Spectrum (Small Ap.)
	Gross Spectrum (Small Ap.)
	Background Spectrum (Small Ap.)
	Net Spectrum (Small Ap.)
	AbNet Spectrum (Small Ap.)

HIGH Dispersion Images :

3 FITS files	Raw Image
	Photometrically Corrected Image
	Merged Extracted

FES Image :

1 FITS file	FES Image
-------------	-----------

Examples

The accompanying article : (**IUE data in FITS format**, Muñoz Peiró, this volume) contains a number of printouts of sample FITS headers.

References

- IUESIPS Information Manual. Version 2.0 (New Software). European Edition. February 1987.
- IUESIPS User's and Operator's Manual. IGCS/SW/IPS-009
- Greisen & Harten : "An Extension of FITS for Groups of Small Arrays of Data". Astron. Astrophys. Suppl. Ser. **44** (1981).
- Harten, Grosbol, Greisen & Wells : "The FITS Tables Extension". Mem. S.A. It. **56** (1985)
- Muñoz Peiró : " IUE Data in FITS Format". ESA IUE Newsletter **31** November 1988.
- Wells, Greisen & Harten : "FITS : A Flexible Image Transport System". Astron. Astrophys. Suppl. Ser. **44** (1981).
- Grosbol, Harten, Greisen & Wells: "Generalized extensions and blocking factors for FITS". Astron. Astrophys. Suppl. Ser. **73** (1988).
- Harten, Grosbol, Greisen & Wells: "The FITS tables extension". Astron. Astrophys. Suppl. Ser. **73** (1988).

IUE DATA IN FITS FORMAT

J. R. Muñoz Peiro
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IUE DATA IN FITS FORMAT

1.0 INTRODUCTION

=====

FITS (Flexible Image Transport System) ([2],[6]) is a general purpose format for the interchange of astronomical data. In the last few years, this format has been adopted by a large number of institutions for data transfer as an alternative to the "on site" specific format.

The original FITS was designed for the transfer of regularly gridded astronomical image data and the basic parameters required to describe the data characteristics (keywords). Provisions were made in order to allow the transmission of new kinds of data structures (FITS Extensions) and the definition of new keywords.

Two types of FITS "extensions" have been defined in past years, being now accepted as Standards : Random Group Extension [1] (GROUP format) and TABLE Extension [3],[4]. At the same time, the basic set of keywords used in [4] was also adopted as the Standard set of keywords.

The main FITS features are summarized in Appendix A. For a more detailed description of the format, the reader should consult the given References.

This report describes how IUE (International Ultraviolet Explorer) data, usually distributed in G.O. format ([5],[7]) can be accommodated to FITS.

The FITS flexibility for defining new extensions has been incorporated for IUE data : A new "FITS Extension" is defined (IMAGE Extension), its particular purpose being the coding of the IUE Quality Flags (Epsilons).

Appendix B contains a description of this new Extension, including its general purpose and the kind of data that can be coded.

On the other hand, provisions have been made in order to produce new keywords describing IUE parameters, currently not supported by the basic keywords. Some of the newly defined keywords will be IUE Project supported, the others being a recommendation for users wanting to write their IUE data in FITS format as well as indicating the non supported parameters. The list of proposed IUE keywords is given in Section 2.3.

Notice that this is not a re-definition of FITS, just a summary of how IUE data will conform to the FITS rules.

2.0 FITS KEYWORDS =====

FITS keywords are used to define the structure and coordinate system of the data arrays contained in the file as well as to provide additional information related to the data.

According to what they describe, FITS keywords can be classified in different categories :

- Required keywords, which are the ones that basically define the data structure in order to be understood by a computer. These keywords are a FITS Standard and must appear in any FITS Header (Mandatory).
- Optional keywords, provide additional information, such as coordinate and instrumental features, for a better understanding of what is coded into the FITS file.

By optional it is meant that they are not necessary for the FITS format definition (given by the mandatory keywords). However, a minimum set of information is required for an unambiguous interpretation of the data. The minimum set of needed keywords for this interpretation is what FITS describes as highly recommended keywords, actually adopted as Standard, having a common meaning for all FITS users.

The description of additional parameters, specifically related to the origin of the data, are envisaged by FITS through the basic philosophy that keywords may be created when needed. These new generated keywords are optional, but not Standard (Instrument or Project dependent)

Two kind of optional FITS keywords are considered for the IUE Project :

- 1) FITS Standard keywords; its usage will agree with the basic FITS.
- 2) IUE defined keywords, used for those IUE parameters not covered by the FITS Standards. Its creation should take into account the basic guidelines provided by the IAU FITS Working Group.

- GROUP Structure keywords, required when the data are coded in the GROUP format (Standard); also called "Random-Group" Extension.
- TABLE Extension keywords, used to describe the TABLE data structure. TABLE Extension is used to transfer data in tabular format, such as catalogues.
- IMAGE Extension keywords, used to describe this new type of Extension, adopted for IUE to code the Quality Flags.

The following sections describe in more detail the keywords used. The format for keyword values is given under column F, with the following code values :

C	ASCII Character	L	Logical	I	Integer Number
N	None (free)	F	Floating or Real Number		

2.1 IUE Provided and Recommended Keywords

IUE data distributed in FITS format by the Agencies will always contain a given set of keywords. These keywords, of any category, will be referred to as "Project Provided".

Not all described or newly defined keywords in this paper will be coded in the IUE FITS Header. This group will be referred to as "Recommended".

Recommended keywords should be considered as a guideline for IUE users exchanging their own written IUE data in FITS format containing additional parameters of particular interest. Notice that extra keywords may be user defined, but, until further revisions, they will not be considered as either Project Provided or Project Recommended.

2.2 Required Keywords

This set of keywords must appear always in a Standard FITS Header, also referred to as the Main Header.

<u>Keyword</u>	<u>F</u>	<u>Meaning & Comments</u>
1) SIMPLE	(L)	Indicates if file conforms to Standard FITS
2) BITPIX	(I)	Number of bits on tape for each pixel value 8 bits unsigned 16 bits twos complement integers 32 bits twos complement integers 8 bits ASCII character code
3) NAXIS	(I)	Number of axes 0 -> 999 If NAXIS = 0, then no main data array, only extensions (if any)
4) NAXISn	(I)	Number of pixels on axis n (n : 1 -> NAXIS) n = 1 for fastest varying axis, n = 2 for second varying axis, etc... If n = 0 then no NAXISn keywords
5) END	(N)	Indicates the end of the logical header. It must be always the last "card" of a Header (Standard or Extension Header) Remainder of header record is padded with blanks.

These keywords will be always IUE Project Provided.

2.3 Optional Keywords (Standard)

These keywords have been accepted as FITS standards; their usage and ordering are optional. In the IUE case, most of them will be always present, their appearance depending on the availability of the related values.

<u>Keyword</u>	<u>F</u>	<u>Meaning & Comments</u>
1) OBJECT	(C)	Image identifier. Object ID as given at Observation time
2) TELESCOP	(C)	Data acquisition Telescope 'IUE'
3) DATE-OBS	(C)	Date of Observation as 'DD/MM/YY'. When two apertures are used, then, non extracted data files (Raw and Phot.) will have coded in this field the first of DATOB-XX keywords.
4) BSCALE	(F)	Scale factor to convert tape pixels values to true values True Value = Tape Value * BSCALE + BZERO (see below)
5) BZERO	(F)	Offset applied to true pixel values (see above)
6) BUNIT	(C)	Data units. IUE data units (DN, FN or FLUX)
7) CRVALn	(F)	Physical coordinate on axis n at reference pixel
8) CRPIXn	(F)	Array location of reference pixel along axis n
9) CDELTn	(F)	Increment in physical coordinates along axis n
10) CTYPEn	(C)	Type of physical coordinate on axis n
11) COMMENT	(N)	Columns 9-80 of keyword are a comment
12)'	'(N)	Columns 9-80 are a comment
13) HISTORY	(N)	History of image. Equivalent to COMMENT. Usually used to show the set of operations performed to generate the file. For IUE files, the portion of the Header Label coded in "printable" format, i.e.: Lines 1-32 + 36-37 + 83-85 + 101 onwards. For the binary portion of Header, see IUEBHDR keyword.
14) ORIGIN	(C)	Tape writing location, 'GODDARD ' or 'VILSPA '
15) DATE	(C)	Date tape was written in FITS as 'DD/MM/YY'
16) DATAMAX	(F)	Maximum data value
17) DATAMIN	(F)	Minimum data value

- 18) EXTEND (L) Indicates that extension(s) may exist. Its appearance does not indicate that extension(s) exist, only that they may exist. In our case, it will indeed indicate its existence.
- 19) OBSERVER (C) Observer's name
- 20) RA (F) Object's Right Ascension in degrees
- 21) DEC (F) Object's Declination in degrees
- 22) EPOCH (F) Epoch for coordinates
- 23) TARGET (C) Homogeneous Object ID
- 24) AUTHOR (C) Data originator (person or institute). Used to indicate the Observing Station
- 25) BLOCKED (L) Indicates that FITS records may be blocked (multiples of 2880 bytes). The blocking factor is not explicitly given. If used, must appear in the first logical record (2880 bytes). Maximum allowed blocking factor is 10.

IUE Project Provided

OBJECT	COMMENT *	TELESCOP	HISTORY
DATE-OBS	ORIGIN	BSCALE *	DATE
BZERO *	DATAMIN *	BUNIT	DATAMAX *
CRVALnn	EXTEND *	CRPIXnn	RA
CDELAnn	DEC	CTYPEnn	EPOCH
TARGET	AUTHOR	BLOCKED *	

- (*) BSCALE and BZERO will not be coded when default values are used :
BSCALE = 1.0 , BZERO = 0.0
- DATAMIN and DATAMAX will only be used for extracted data
- COMMENT is preferred over '
- EXTEND will only appear when Extension(s) do exist
- Blocking factors of 1 or 2

2.4 Optional Keywords (IUE)

These keywords have been specifically defined for IUE data. They give information about some IUE parameters of high interest that cannot be coded using the standard keywords.

They have been labelled as optional in the FITS environment, this is, they are not needed in order to access the data, but, from the IUE point of view, some of them will be considered as required keywords (necessary to

identify the astronomical data) and will always be provided.

Keyword	F	Meaning & Comments
1) CAMERA	(I)	Camera number 1=LWP 2=LWR 3=SWP 4=SWR 8=FES1 9=FES2
2) IMAGE	(I)	Image number
3) FILENAME	(C)	File name 'FtypACImage' where Ftyp = File type (RAWI,PHT1,FESI,LBLS,ELBL,MELO,MEHI) A = Aperture (L,S,B or 1,2 for FES) C = Camera Number I = Image Number
4) APERTURE	(C)	Aperture used: LARGE, SMALL, LARGE-SMALL, FES1 or FES2
5) DISPERSN	(C)	Dispersion HIGH, LDW or FES
6) IUE-CLAS	(C)	IUE object class
7) PGM-ID	(C)	IUE Program ID
8) DATE-PRO	(C)	Processing date as 'DD/MM/YY'
9) THDA-RES	(C)	Temperature of Head Amplifier for reseau motion
10) THDA-SPE	(C)	Temperature of Head Amplifier for spectral motion
11) LAPSTAT	(C)	Large Aperture Status : 'OPEN ' or 'CLOSED '
12) DATOB-LG	(C)	Large Aperture or FES Observation date (Exposure start) as 'DD/MM/YY/HH:MM:SS' in UT
13) JDATE-LG	(F)	Start exposure Julian Date (Large Ap. or FES) in days
14) EXPTM-LG	(F)	Large Aperture or FES exposure time in seconds
15) DATOB-SM	(C)	Small Aperture Observation date (Exposure start) as 'DD/MM/YY/HH:MM:SS' in UT
16) JDATE-SM	(F)	Start exposure Julian Date (Small Aperture) in days
17) EXPTM-SM	(F)	Small Aperture exposure time in seconds
18) EXPTM-FL	(F)	Exposure time, in seconds, for Flood Lamp exposures
19) SLITHGHT	(F)	Slit height for each extracted order in pixels. Only used for High Dispersion Data in the Table Extension Header.
20) EXPCC-LG	(C)	Exposure Classification Code for Large Ap.

- 21) EXPCC-SM (C) Exposure Classification Code for Small Ap.
- 22) IUEBHDR (N) Binary portion of IUE Header Label includes lines : 33-35, 38-82 and 86-100.
The binary format is converted to hexadecimal, in a byte-to-byte basis. Each Label line will be split into 2 FITS lines, e.g.:
IUEBHDR FFFFFFFFFFFFFFFFFFFFFFFFFF FFFFFFFF 80*1
IUEBHDR FFFFFFFFFFFFFFFFFFFFFFFFFF FFFFFFFF 80*2
where each FF pair represents the hexadecimal value of the Binary Label bytes (66 bytes per Label Line).
- 23) EXP-MODE (C) Exposure Mode ('TRAILED' or 'MULTIPLE')

IUE Project Provided		Recommended	
CAMERA	IMAGE	DATE-PRO	IUEBHDR
FILENAME	APERTURE	THDA-SPE	THDA-RES
DISPERSN	IUE-CLAS	LAPSTAT	JDATE-XX
PGM-ID	DATOB-XX	EXPCC-XX	EXP-MODE
EXPTM-XX		SLITHGHT	

All date and time keywords must be determined through the use of the IUE Label Appendage generated at processing time.

2.5 Group Structure Keywords

The usage of the so called "Group format" has been accepted as a FITS standard ([1] and [2]).

In order to indicate this structure, the following keywords are used :

Keyword	F	Meaning & Comments
1) GROUPS	(L)	Indicates that the file has a group format
2) GCOUNT	(I)	Number of groups present if GROUPS is true
3) PCOUNT	(I)	Number of random parameters. In the IUE case, always zero. In this situation, PTYPE, PSCAL and PZERO keywords will never be used.

These keywords will be always IUE Project provided when Group format or TABLE Extensions are used.

2.6 TABLE Extension Keywords

The so called "Table Extension" has been accepted as a standard. As the name indicates, this type of extension is used to transport tabular data, that is, tables, catalogues, etc.. or data arrays which normally are not regularly gridded.

<u>Keyword</u>	<u>F</u>	<u>Meaning & Comments</u>
1) XTENSION	(C)	Type of extension ('TABLE '), must be the first keyword in the extension
2) BITPIX	(I)	Bits per pixel in table extension: 8 bit ASCII characters
3) NAXIS	(I)	Number of axes in extension , always 2
4) NAXIS1	(I)	Number of characters per row
5) NAXIS2	(I)	Number of rows
6) GCOUNT	(I)	Group counter, always 1 for table extension
7) PCOUNT	(I)	Random parameters counter, always 0 for table extension
8) EXTNAME	(C)	Extension name
9) EXTVER	(I)	Extension version (Order number)
10) TFIELDS	(I)	Number of fields per row
11) TBCOLnnn	(I)	Starting column for field n
12) TFORMnnn	(C)	Fortran format of field n . The allowed formats are : A, I, F, E and D
13) TTYPEnnn	(C)	Heading (label) of field n
14) TUNITnnn	(C)	Units of field n
15) TSCALnnn	(F)	Scale factor for field n , where True value of field n = Tape Value of field n * TSCALn + TZEROn
16) TZEROnnn	(F)	Offset for field n

These set of keywords will be always IUE Project provided for TABLE format.

2.7 IMAGE Extension Keywords

This type of extension has been generated for writing the IUE Quality Flags (epsilons). The basic idea is to keep the quality flags in the same tape file but not mixed with the main data, i.e.: code them as an extension and in a format similar to the standard one.

As with any kind of extension it is coded in separate records, following Standard data records (if any), with its own header records.

The internal format of the data is equivalent to the normal FITS data, the only difference being that it is an extension and for this reason the XTENSION keyword must appear instead of the standard SIMPLE keyword.

Appendix B contains a description of its structure.

<u>Keyword</u>	<u>F</u>	<u>Meaning & Comments</u>
1) XTENSION (C)		Type of extension ('IMAGE '), must be the first keyword in the extension. It is suggested to code 'IMAGE-IUE' until a final decision about this type of extension.

The following keywords have the same meaning as in the case of a Standard or Extension FITS header :

2) BITPIX	(I)	Bits per pixel
3) BSCALE	(F)	Scale factor
4) BZERO	(F)	Offset
5) BUNIT	(C)	Data units
6) NAXIS	(I)	Number of axes
7) NAXISn	(I)	Number of pixels on axis n, never n=0
8) CRVALn	(F)	Physical coordinate on axis n at reference pixel
9) CRPIXn	(F)	Array location of reference pixel along axis n
10) CDELTn	(F)	Increment in physical coordinates along axis n
11) CTYPEn	(C)	Type of physical coordinate on axis n
12) GROUPS	(L)	Indicates Group format
13) GCOUNT	(I)	Group counter
14) PCOUNT	(I)	Random parameters counter
15) EXTNAME	(C)	Extension name
16) EXTVER	(I)	Extension version

For the Data Flags coding, no Group format will be used in the Extension.
BSCALE and BZERO are not provided (default values)
EXTVER will not be used (recommended).

The coded data in this IMAGE extension are the IUE Quality Flags (epsilons) that, in the New IUESIPS Software, may have the following possible values :

100	no special condition (normal pixel)
-200	extrapolated pixel at end of ITF
-220	pixel affected by microphonics noise
-300	pixel affected by bright spot
-800	pixel affected by a reseau mark
-1600	saturated pixel
-3200	pixel outside photometrically corrected region

For the previous IUESIPS versions the reader should refer to [7].

3.0 IUE DATA IN FITS FORMAT

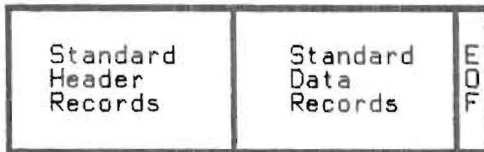
=====

The following section gives an example for each of the IUE G.O. tape files. The examples contain a small description of the FITS structure for the file and a listing of most of the provided keywords.

3.1 Raw Images

FITS file structure :

- 2-Dimensional Image
- No Group Structure
- No Extensions



Standard Header :

	1	2	3	4	5	6	7	8
	1234567890	1234567890	1234567890	1234567890	1234567890	1234567890	1234567890	1234567890
SIMPLE =			T	/	Standard FITS format			
BITPIX =			8	/	1 byte unsigned			
NAXIS =			2	/	Number of Axes			
NAXIS1 =			768	/	Number of pixels/row (X-axis)			
NAXIS2 =			768	/	Number of pixels/column (Y-axis)			
CRVAL1 =			1.0000	/	Coordinate ref.pixel X-axis			
CRPIX1 =			1.0	/	Reference pixel location X-axis			
CDELTA1 =			1.000000	/	Increment along X-axis			
CTYPE1 =	'PIXEL'			/	Pixels			
CRVAL2 =			1.0000	/	Coordinate ref. pixel Y-axis			
CRPIX2 =			1.0	/	Reference pixel location Y-axis			
CDELTA2 =			1.000000	/	Increment along Y-axis			
CTYPE2 =	'PIXEL'			/	Pixels			
BLOCKED =			T	/	Records may be blocked			
TELESCOP =	'IUE'			/	IUE			
OBJECT =	'NGC3516'			/	Image Identifier. Object ID			
CAMERA =			3	/	Camera number			
IMAGE =			26811	/	Image number			
APERTURE =	'LARGE'			/	Aperture			
FILENAME =	'RAWIL326811'			/	File Name			
DISPERSN =	'LOW'			/	Dispersion			
DATE-OBS =	'30/09/85'			/	Observation date as DD/MM/YY			
BUNIT =	'DN'			/	Data numbers			
RA =			165.844999	/	Right Ascension in degrees			

DEC = 72.839999 / Declination in degrees
EPOCH = 1950.0 / Epoch for coordinates
IUE-CLAS= '84 ' / IUE Object class
DATOB-LG= '30/09/85/16:27:11' / Observation date as DD/MM/YY/HH:MM:SS
EXPTM-LG= 15600.00 / Large Ap. exposure time (seconds)
PGM-ID = 'HQ067 ' / Program ID
HISTORY 0001000107680768 1 1 023126811 #101 1 C
HISTORY 99* 3*30SEP-1 * * * 1714* * * * * * * * * * * 2 C
HISTORY NGC3516,SWP26811,LRES,LAP,260MOS,16:27:11 3 C
HISTORY 850930,SPREP,MAXG,LOREAD,HQ067,PENSTON 4 C
HISTORY 84,92,50,9.2 5 C
HISTORY 6 C
HISTORY 7 C
HISTORY 8 C
HISTORY 9 C
HISTORY 85273205920* 9 * 219 *OPS2PR02*155842 MODTIME 3 251 0 * 10 C
HISTORY 125245 CAMINIT *155914 TLM,LWPROM * 11 C
HISTORY 125252 6830 17781 26810 1181 *155951 READPREP 1 IMAGE 6831 * 12 C
HISTORY 125903 S/C MANEUVERING *160023 SCAN READLO SS 1 G3 47 * 13 C
HISTORY 125958 TLM,LWPROM *160037 X 53 Y 71 G1 97 HT 106 * 14 C
HISTORY 130504 SPREP 1 *162412 TLM,FES2ROM * 15 C
HISTORY 132223 STOP 1 EMERGENCY *162501 STOP 3 EMERGENCY * 16 C
HISTORY 132322 TLM,FES2ROM *162611 MODE SWL * 17 C
HISTORY 132929 TLM,FES2ROM .500000E 01 *162713 EXPOBC 3 250 0 MAXG NOL * 18 C
HISTORY 133631 FESIMAGE 0 0 113 *162842 MODTIME 3 210 0 * 19 C
HISTORY 134225 MODE LWL *162949 MODTIME 3 220 0 * 20 C
HISTORY 134313 TARGET IN LWLA *195236 MODTIME 3 260 0 * 21 C
HISTORY 134634 TLM,FES2ROM .200000E 02 *205859 TLM,SWPROM * 22 C
HISTORY 134748 FESTRK R ON FSS *205923 READ 3 IMAGE 26811 * 23 C
HISTORY 134848 EXPOBC 1 120 0 MAXG NOL *205956 SCAN READLO SS 1 G3 44 * 24 C
HISTORY 134942 TLM,SWPROM *210009 X 60 Y 76 G1 82 HT 105 * 25 C
HISTORY 135211 SPREP 3 *205949 * 26 C
HISTORY 141533 TLM,FES2ROM *210009 * 27 C
HISTORY 154850 FIN 1 T 7199 S 97 U 108 * * 28 C
HISTORY 155113 TARGET FROM LWLA * * 29 C
HISTORY 155404 TARGET IN SWLA * * 30 C
HISTORY 155532 FESTRK R ON FSS * * 31 C
HISTORY 155642 EXPOBC 3 292 0 MAXG NOL * * 32 C
HISTORY HQ067* * *PENSTON * * * * * * * * * * * 36 C
HISTORY 1103228+725024* 0* * * * * * * * * * * 37 C
HISTORY 2445795.5 .0 42158.0 .208815 29.1145160.5140303.9917 31.224 83 C
HISTORY 107153306 054164-70353934910 9 107165559 544 83-321926 651048 84 C
HISTORY 107174129 8 4431+75 647 805633 107191133 1045335+3750 3 491517 85 C
HISTORY 85093016326811L LO 08510018604010000000000000162711026000333V 1APC
HISTORY HQ067VNGC3516 841103228725024 9.200092S03 1319 2APC
HISTORY PENSTON 000000000000 3APC
HISTORY *INSERT 01:20Z OCT 01,'85 HC
HISTORY ***** RAW IMAGE ***** C
HISTORY *ARCHIVE 01:20Z OCT 01,'85 HL
DATE = '15/09/86' / Date this file was written (DD/MM/YY)
ORIGIN = 'VILSPA ' / Tape writing location
AUTHOR = 'VILSPA ' / Observing Station
END

3.2 Photometrically Corrected Images

FITS file structure :

- 2-Dimensional Image
- No Group Structure
- No Extensions



Standard Header :

	1	2	3	4	5	6	7	8
	1234567890	1234567890	1234567890	1234567890	1234567890	1234567890	1234567890	1234567890
SIMPLE =			T	/	Standard FITS format			
BITPIX =			16	/	2 bytes twos-compl. integers			
NAXIS =			2	/	Number of Axes			
NAXIS1 =			768	/	Number of pixels/row (X-axis)			
NAXIS2 =			768	/	Number of pixels/column (Y-axis)			
CRVAL1 =			1.0000	/	Coordinate ref.pixel X-axis			
CRPIX1 =			1.0	/	Reference pixel location X-axis			
CDEL1 =			1.000000	/	Increment along X-axis			
CTYPE1 =			'PIXEL'	/	Pixels			
CRVAL2 =			1.0000	/	Coordinate ref. pixel Y-axis			
CRPIX2 =			1.0	/	Reference pixel location Y-axis			
CDEL2 =			1.000000	/	Increment along Y-axis			
CTYPE2 =			'PIXEL'	/	Pixels			
BLOCKED =			T	/	Records may be blocked			
TELESCOP =			'IUE'	/	IUE			
OBJECT =			'NGC3516'	/	Image Identifier. Object ID			
CAMERA =			3	/	Camera number			
IMAGE =			26811	/	Image number			
APERTURE =			'LARGE'	/	Aperture			
FILENAME =			'PHTIL326811'	/	File Name			
DISPERSN =			'LOW'	/	Dispersion			
DATE=OBS =			'30/09/85'	/	Observation date as DD/MM/YY			
BSCALE =			.1000000E+01	/	True = (Tape * BSCALE) + BZERO			
BZERO =			.0000000E+00	/	Bias			
BUNIT =			'FN'	/	Flux numbers			
RA =			165.844999	/	Right Ascension in degrees			
DEC =			72.839999	/	Declination in degrees			
EPOCH =			1950.0	/	Epoch for coordinates			
IUE-CLAS =			'84'	/	IUE Object class			
DATOB-LG =			'30/09/85/16:27:11'	/	Observation date as DD/MM/YY/HH:MM:SS			
EXPTM-LG =			15600.00	/	Large Ap. exposure time (seconds)			
PGM-ID =			'HQ067'	/	Program ID			
HISTORY				0001000101662048	1 1	023126811	#101	1 C
HISTORY	99*	3*30SEP-1 *	*	* * 1714*	*	* * * * * * * *	*	2 C

```

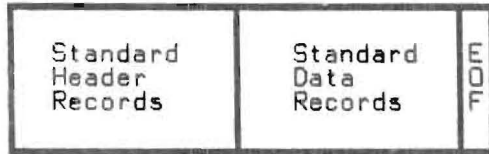
HISTORY NGC3516,SWP26811,LRES,LAP,260MOS,16:27:11      3  C
HISTORY 850930,SPREP,MAXG,LOREAD,HQ067,PENSTON         4  C
HISTORY 84,92,SO,9.2                                    5  C
HISTORY                                                  6  C
HISTORY                                                  7  C
HISTORY                                                  8  C
HISTORY                                                  9  C
HISTORY 85273205920* 9 * 219 *OPS2PR02*155842 MODTIME 3 251 0 * 10 C
HISTORY 125245 CAMINIT *155914 TLM,LWPROM * 11 C
HISTORY 125252 6830 17781 26810 1181 *155951 READPREP 1 IMAGE 6831 * 12 C
HISTORY 125903 S/C MANEUVERING *160023 SCAN READLO SS 1 G3 47 * 13 C
HISTORY 125958 TLM,LWPROM *160037 X 53 Y 71 G1 97 HT 106 * 14 C
HISTORY 130504 SPREP 1 *162412 TLM,FES2ROM * 15 C
HISTORY 132223 STOP 1 EMERGENCY *162501 STOP 3 EMERGENCY * 16 C
HISTORY 132322 TLM,FES2ROM *162611 MODE SWL * 17 C
HISTORY 132929 TLM,FES2ROM .500000E 01 *162713 EXPOBC 3 250 0 MAXG NOL * 18 C
HISTORY 133631 FESIMAGE 0 0 113 *162842 MODTIME 3 210 0 * 19 C
HISTORY 134225 MODE LWL *162949 MODTIME 3 220 0 * 20 C
HISTORY 134313 TARGET IN LWLA *195236 MODTIME 3 260 0 * 21 C
HISTORY 134634 TLM,FES2ROM .200000E 02 *205859 TLM,SWPROM * 22 C
HISTORY 134748 FESTRK R ON FSS *205923 READ 3 IMAGE 26811 * 23 C
HISTORY 134848 EXPOBC 1 120 0 MAXG NOL *205956 SCAN READLO SS 1 G3 44 * 24 C
HISTORY 134942 TLM,SWPROM *210009 X 60 Y 76 G1 82 HT 105 * 25 C
HISTORY 135211 SPREP 3 *205949 * 26 C
HISTORY 141533 TLM,FES2ROM *210009 * 27 C
HISTORY 154850 FIN 1 T 7199 S 97 U 108 * * 28 C
HISTORY 155113 TARGET FROM LWLA * * 29 C
HISTORY 155404 TARGET IN SWLA * * 30 C
HISTORY 155532 FESTRK R ON FSS * * 31 C
HISTORY 155642 EXPOBC 3 292 0 MAXG NOL * * 32 C
HISTORY HQ067* * *PENSTON * * * * * * * * * * * * * * 36 C
HISTORY 1103228+725024* 0* * * * * * * * * * * * * * 37 C
HISTORY 2445795.5 .0 42158.0 .208815 29.1145160.5140303.9917 31.224 83 C
HISTORY 107153306 054164-70353934910 9 107165559 544 83-321926 651048 84 C
HISTORY 107174129 8 4431+75 647 805633 107191133 1045335+3750 3 491517 85 C
HISTORY 85093016326811L LO 0851001860401000000000000000162711026000333U 1APC
HISTORY HQ067UNGC3516 841103228725024 9.200092503 1319 2APC
HISTORY PENSTON 000000000000 3APC
HISTORY *INSERT 01:20Z OCT 01,'85 HC
HISTORY ***** PHOTOMETRICALLY CORRECTED IMAGE ***** C
HISTORY ***** SCHEME NAME: F3LLMC, VILSPA RELEASE: R14 ***** C
HISTORY PCF C/** DATA REC. 11 1 1 1 768 8448 5 3 6.1 5.0 2536 .00000 1PC
HISTORY 0 1684 3374 6873 9091 10586 1PC
HISTORY 14371 17745 21524 25105 28500 1PC
HISTORY 11.000 11.000 11.000 11.000 11.000 11.000 11.000 1PC
HISTORY 11.000 11.000 11.000 11.000 11.000 11.000 1PC
HISTORY TUBE 3 SEC EHT 6.1 ITT EHT 5.0 WAVELENGTH 2536 DIFFUSER 0 1PC
HISTORY C MODE : FACTOR .178E 00 1PC
HISTORY *PHOTOM 01:20Z OCT 01,'85 HC
HISTORY *ARCHIVE 01:20Z OCT 01,'85 HL
DATE = '23/07/86' / Date this file was written (DD/MM/YY)
ORIGIN = 'VILSPA ' / Tape writing location
AUTHOR = 'VILSPA ' / Observing Station
END

```


3.3 FES Images

FITS file structure :

- 2-Dimensional Image
- No Group Structure
- No Extensions



Standard Header :

	1	2	3	4	5	6	7	8	
1234567890	1234567890	1234567890	1234567890	1234567890	1234567890	1234567890	1234567890	1234567890	
SIMPLE =			T	/	Standard FITS format				
BITPIX =			16	/	2 bytes twos-compl. integers				
NAXIS =			2	/	Number of Axes				
NAXIS1 =			113	/	Number of pixels/row (X-axis)				
NAXIS2 =			113	/	Number of pixels/column (Y-axis)				
CRVAL1 =			1.0000	/	Coordinate ref. pixel X-axis				
CRPIX1 =			1.0	/	Reference pixel location X-axis				
CDELTA1 =			1.000000	/	Increment along X-axis				
CTYPE1 =	'PIXEL'			/	Pixels				
CRVAL2 =			1.0000	/	Coordinate ref. pixel Y-axis				
CRPIX2 =			1.0	/	Reference pixel location Y-axis				
CDELTA2 =			1.000000	/	Increment along Y-axis				
CTYPE2 =	'PIXEL'			/	Pixels				
BLOCKED =			T	/	Records may be blocked				
TELESCOP =	'IUE'			/	IUE				
OBJECT =	'1302-102'			/	Image Identifier. Object ID				
CAMERA =			9	/	Camera number				
IMAGE =			1845	/	Image number				
APERTURE =	'FES2'			/	Aperture				
DISPERSN =	'FES'			/	FES Image				
FILENAME =	'FES12901845'			/	File Name				
DATE-OBS =	'25/07/86'			/	Observation date as DD/MM/YY				
BUNIT =	'DN'			/	Data numbers				
RA =			195.732490	/	Right Ascension in degrees				
DEC =			-10.288611	/	Declination in degrees				
EPOCH =			1950.0	/	Epoch for coordinates				
IUE-CLAS =	'85'			/	IUE Object class				
DATOB-LG =	'25/07/86/23:14:00'			/	Observation date as DD/MM/YY/HH:MM:SS				
EXPTM-LG =			9600.00	/	Exposure time (seconds)				
PGM-ID =	'IQ140'			/	Program ID				
HISTORY					0001000101130113	5	2	1290 1845	1 C
HISTORY	99*	3*25JUL-1	*	*	*15,000*	*	*	* * * * *	* 2 C
HISTORY	1302-102,	FES1845,	ERES,	2AP,	160MOS,	23:14:00			3 C

```
HISTORY 860725,,,,,IQ140,CLAUEL(S.O.) 4 C
HISTORY 85,15.2,80,9.5,,,66D38M57S,-565,463,544,FO 5 C
HISTORY FES FOR SWP28750 6 C
HISTORY 7 C
HISTORY 8 C
HISTORY 9 C
HISTORY 86206223815* 10 * 218 * * * 10 C
HISTORY 191138 CAMINIT * * 11 C
HISTORY 191142 8731 17929 28748 1181 * * 12 C
HISTORY 223409 FIN 3 T 14999 S 0 U 0 * * 13 C
HISTORY 223726 GDE R/S X -665 Y 457 * * 14 C
HISTORY 223751 TLM,SWPROM * * 15 C
HISTORY 223816 READPREP 3 IMAGE 28749 * * 16 C
HISTORY 223856 SCAN READLO SS 1 G3 44 * * 17 C
HISTORY 223909 X 60 Y 76 G1 82 HT 105 * * 18 C
HISTORY 224933 SPREP 3 * * 19 C
HISTORY 230618 TLM,FES2ROM * * 20 C
HISTORY 231011 GDE R/S X -566 Y 463 * * 21 C
HISTORY 231117 EXPOBC 3 250 0 MAXG NOL * * 22 C
HISTORY 231544 FESIMAGE 0 0 113 * * 23 C
HISTORY 232246 GDE R/S X -565 Y 463 * * 24 C
HISTORY 231542 * * 25 C
HISTORY 232232 * * 26 C
HISTORY * * 27 C
HISTORY * * 28 C
HISTORY * * 29 C
HISTORY * * 30 C
HISTORY * * 31 C
HISTORY * * 32 C
HISTORY IQ140* * *WAMSTEKER * * * * * * * * 36 C
HISTORY 1302558-101719* 0* * * * * * * * * * 37 C
HISTORY 2445795.5 .0 42158.0 .208815 29.1145160.5140303.9917 31.224 83 C
HISTORY 107153306 054164-70353934910 9 107165559 544 83-321926 651048 84 C
HISTORY 107174129 8 4431+75 647 805633 107191133 1045335+3750 3 491517 85 C
HISTORY *PIXMAL2 11:30Z JUL 27,'86 HC
HISTORY ***** FES IMAGE ***** (NOT PROCESSED) ***** C
HISTORY *ARCHIVE 11:30Z JUL 27,'86 HL
DATE = '15/09/86' / Date this file was written (DD/MM/YY)
ORIGIN = 'VILSPA ' / Tape writing location
AUTHOR = 'VILSPA ' / Observing Station
END
```

3.4 Line By Line Spectra

FITS file structure :

- 2-Dimensional Image
- No Group Structure
- One 2-Dimensional Image Extension

Standard Header Records	Standard Data Records	Extension Header Records	Extension Data Records	FOOT
-------------------------------	-----------------------------	--------------------------------	------------------------------	------

Standard Header :

	1	2	3	4	5	6	7	8
	1234567890	1234567890	1234567890	1234567890	1234567890	1234567890	1234567890	1234567890
SIMPLE =			T					
BITPIX =			16					
NAXIS =			2					
NAXIS1 =			823					
NAXIS2 =			110					
CRVAL1 =		987.5678						
CRPIX1 =		1.0						
CDELTA1 =		1.674511						
CTYPE1 =	'LAMBDA'							
CRVAL2 =		1.0000						
CRPIX2 =		1.0						
CDELTA2 =		1.000000						
CTYPE2 =	'SCAN'							
BLOCKED =			T					
EXTEND =			T					
TELESCOP =	'IUE'							
OBJECT =	'NGC3516'							
CAMERA =			3					
IMAGE =			26811					
APERTURE =	'LARGE'							
FILENAME =	'ELBLL326811'							
DISPERSN =	'LOW'							
DATE-OBS =	'30/09/85'							
BSCALE =		.5467035E+04						
BZERO =		-.8756233E+02						
BUNIT =	'FN'							
RA =		165.844999						
DEC =		72.839999						
EPOCH =		1950.0						
IUE-CLAS =	'84'							
DATOB-LG =	'30/09/85/16:27:11'							
EXPTM-LG =		15600.00						

PGM-ID = 'HQ067' / Program ID
HISTORY 0001000101662048 1 1 023126811 #101 1 C
HISTORY 99* 3*30SEP-1 * * * 1714* * * * * * * * * * * 2 C
HISTORY NGC3516,SWP26811,LRES,LAP,260MOS,16:27:11 3 C
HISTORY 850930,SPREP,MAXG,LOREAD,HQ067,PENSTON 4 C
HISTORY 84,92,SO,9.2 5 C
HISTORY 6 C
HISTORY 7 C
HISTORY 8 C
HISTORY 9 C
HISTORY 85273205920* 9 * 219 *OPS2PR02*155842 MODTIME 3 251 0 * 10 C
HISTORY 125245 CAMINIT *155914 TLM,LWPROM * 11 C
HISTORY 125252 6830 17781 26810 1181 *155951 READPREP 1 IMAGE 6831 * 12 C
HISTORY 125903 S/C MANEUVERING *160023 SCAN READLO SS 1 G3 47 * 13 C
HISTORY 125958 TLM,LWPROM *160037 X 53 Y 71 G1 97 HT 106 * 14 C
HISTORY 130504 SPREP 1 *162412 TLM,FES2ROM * 15 C
HISTORY 132223 STOP 1 EMERGENCY *162501 STOP 3 EMERGENCY * 16 C
HISTORY 132322 TLM,FES2ROM *162611 MODE SWL * 17 C
HISTORY 132929 TLM,FES2ROM .500000E 01 *162713 EXPOBC 3 250 0 MAXG NOL * 18 C
HISTORY 133631 FESIMAGE 0 0 113 *162842 MODTIME 3 210 0 * 19 C
HISTORY 134225 MODE LWL *162949 MODTIME 3 220 0 * 20 C
HISTORY 134313 TARGET IN LWLA *195236 MODTIME 3 260 0 * 21 C
HISTORY 134634 TLM,FES2ROM .200000E 02 *205859 TLM,SWPROM * 22 C
HISTORY 134748 FESTRK R ON FSS *205923 READ 3 IMAGE 26811 * 23 C
HISTORY 134848 EXPOBC 1 120 0 MAXG NOL *205956 SCAN READLO SS 1 G3 44 * 24 C
HISTORY 134942 TLM,SWPROM *210009 X 60 Y 76 G1 82 HT 105 * 25 C
HISTORY 135211 SPREP 3 *205949 * 26 C
HISTORY 141533 TLM,FES2ROM *210009 * 27 C
HISTORY 154850 FIN 1 T 7199 S 97 U 108 * * 28 C
HISTORY 155113 TARGET FROM LWLA * * 29 C
HISTORY 155404 TARGET IN SWLA * * 30 C
HISTORY 155532 FESTRK R ON FSS * * 31 C
HISTORY 155642 EXPOBC 3 292 0 MAXG NOL * * 32 C
HISTORY HQ067* * *PENSTON * * * * * * * * * * * 36 C
HISTORY 1103228+725024* 0* * * * * * * * * * * 37 C
HISTORY 2445795.5 .0 42158.0 .208815 29.1145160.5140303.9917 31.224 83 C
HISTORY 107153306 054164-70353934910 9 107165559 544 83-321926 651048 84 C
HISTORY 107174129 8 4431+75 647 805633 107191133 1045335+3750 3 491517 85 C
HISTORY 85093016326811L LO 08510018604010000000000000162711026000333V 1APC
HISTORY HQ067UNGC3516 841103228725024 9.200092SO3 1319 2APC
HISTORY PENSTON 000000000000 3APC
HISTORY *INSERT 01:20Z OCT 01,'85 HC
HISTORY ***** PHOTOMETRICALLY CORRECTED IMAGE ***** C
HISTORY ***** SCHEME NAME: F3LLMC, VILSPA RELEASE: R14 ***** C
HISTORY PCF C/** DATA REC. 11 1 1 1 768 8448 5 3 6.1 5.0 2536 .00000 1PC
HISTORY 0 1684 3374 6873 9091 10586 1PC
HISTORY 14371 17745 21524 25105 28500 1PC
HISTORY 11.000 11.000 11.000 11.000 11.000 11.000 1PC
HISTORY 11.000 11.000 11.000 11.000 11.000 11.000 1PC
HISTORY TUBE 3 SEC EHT 6.1 ITT EHT 5.0 WAVELENGTH 2536 DIFFUSER 0 1PC
HISTORY C MODE : FACTOR .178E 00 1PC
HISTORY *PHOTOM 01:20Z OCT 01,'85 HC
HISTORY ***** DATA FROM LARGE APERTURE ***** C
HISTORY *SPECLO 01:20Z OCT 01,'85 C
HISTORY OBSERVATION DATE(GMT): YR=85 DAY=273 HR= 0 MIN= 0 C
HISTORY TARGET COORD (1950) : RT. ASC.=11 3 22.8 DECL.= 72 50 24 C
HISTORY OPTIONS :HT= 9, HBACK= 5, DISTANCE= 11.0, OMEGA= 81.0 C

```

HISTORY MEAN RESEAU (GMT= 78.085-79.334 NO. FF= 18 SIGS= .134 SIGL= .138 PX) C
HISTORY MEAN DC (GMT= 78.274-84.071 NO. WLC= 107 SIGS= .254 SIGL= .231 PX) C
HISTORY B 1= -.282109122253D 03 B 2= .376216681767D 00 B 3= .000000000000D 00C
HISTORY A 1= .967691332100D 03 A 2= -.466574767462D 00 A 3= .000000000000D 00C
HISTORY THDA FOR RESEAU MOTION = 10.84 C
HISTORY THDA FOR SPECTRUM MOTION = 10.84 (AT TIME OF READ) C
HISTORY THERMAL SHIFTS: LINE = .914 SAMPLE = 1.769 C
HISTORY REGISTRATION SHIFTS: LINE = .000 SAMPLE = .000 MANUAL C
HISTORY ***** LINE-BY-LINE SPECTRUM, SPATIALLY RESOLVED ***** C
HISTORY *ARCHIVE 01:20Z OCT 01,'85 HL
DATE = '15/09/86' / Date this file was written (DD/MM/YY)
ORIGIN = 'VILSPA ' / Tape writing location
AUTHOR = 'VILSPA ' / Observing Station
END

```

Extension Header :

```

      1         2         3         4         5         6         7         8
1234567890123456789012345678901234567890123456789012345678901234567890

```

```

XTENSION= 'IMAGE-IUE' / Image extension
BITPIX = 16 / 2 bytes twos-compl. integers
NAXIS = 2 / Number of Axes
NAXIS1 = 823 / Number of pixels/row (X-axis)
NAXIS2 = 110 / Number of pixels/column (Y-axis)
CRVAL1 = 987.5678 / Wavelength at reference pixel
CRPIX1 = 1.0 / Reference pixel location X-axis
CDELTA1 = 1.674511 / Wavelength increment
CTYPE1 = 'LAMBDA ' / Wavelength in Angstroms
CRVAL2 = 1.0000 / Coordinate ref. pixel Y-axis
CRPIX2 = 1.0 / Reference pixel location Y-axis
CDELTA2 = 1.000000 / Increment along Y-axis
CTYPE2 = 'SCAN ' / Y-axis are scan lines
EXTNAME = 'EPSILONS' / Extension contains epsilons
COMMENT
COMMENT PIXEL EPSILONS ARE CODED USING THE FOLLOWING VALUES :
COMMENT
COMMENT NORMAL PIXELS (100) EXTRAPOLATED ITF (-200)
COMMENT MICROPHONICS NOISE (-220) BRIGHT SPOT (-300)
COMMENT RESEAU MARK (-800) SATURATED PIXEL (-1600)
COMMENT OUTSIDE PHOTOMETRICALLY CORRECTED REGION (-3200)
COMMENT
END

```

3.5 MELO Spectra

Two alternatives are adopted for the MELO case :

- A single FITS file, using GROUP format with an IMAGE Extension. (Recommended for Archive purposes)
- Four FITS files : GROSS, BACKGROUND, NET and ABNET with an IMAGE Extension attached to the GROSS Spectrum (Recommended for Guest Observers delivery)

FITS file structure (Case 1):

- 1-Dimensional Image
- Group Structure (4 Groups)
- One 1-Dimensional Image Extension

Standard Header Records	Standard Data Records *	Extension Header Records	Extension Data Records	E O F
-------------------------------	-------------------------------	--------------------------------	------------------------------	-------------

* = Group format

Standard Header :

	1	2	3	4	5	6	7	8
	12345678901234567890123456789012345678901234567890123456789012345678901234567890							
SIMPLE =			T	/	Standard FITS format			
BITPIX =			16	/	2 bytes twos-compl. integers			
NAXIS =			1	/	Number of Axes			
NAXIS1 =			823	/	Number of pixels/row (X-axis)			
CRVAL1 =		987.5678		/	Wavelength at reference pixel			
CRPIX1 =		1.0		/	Reference pixel location X-axis			
CDELTA1 =		1.674511		/	Wavelength increment			
CTYPE1 =	'LAMBDA'			/	Wavelength in Angstroms			
BLOCKED =			T	/	Records may be blocked			
GROUPS =			T	/	Group structure			
GCOUNT =			4	/	Number of groups			
COMMENT	Group 1 is Gross spectrum							
COMMENT	Group 2 is Background							
COMMENT	Group 3 is Net Spectrum							
COMMENT	Group 4 is Absolutely Calibrated Spectrum * 10**14							
EXTEND =			T	/	File has extension			
TELESCOP=	'IUE'			/	IUE			
OBJECT =	'NGC3516'			/	Image Identifier. Object ID			
CAMERA =			3	/	Camera Number			
IMAGE =			26811	/	Image number			
APERTURE=	'LARGE'			/	Aperture			

```

FILENAME= 'MELOL326811 ' / File Name
DISPERSN= 'LOW ' / Dispersion
DATE-OBS= '30/09/85' / Observation date as DD/MM/YY
BSCALE = .5298710E+05 / True = ( Tape * BSCALE ) + BZERO
BZERO = .3987688E+01 / Bias
BUNIT = 'FN ' / Flux numbers
RA = 165.844999 / Right Ascension in degrees
DEC = 72.839999 / Declination in degrees
EPOCH = 1950.0 / Epoch for coordinates
IUE-CLAS= '84 ' / IUE Object class
DATOB-LG= '30/09/85/16:27:11' / Observation date as DD/MM/YY/HH:MM:SS
EXPTM-LG= 15600.00 / Large Ap. exposure time (seconds)
PGM-ID = 'HQ067 ' / Program ID
HISTORY 0001000100072048 1 1 023126811 #101 1 C
HISTORY 99* 3*30SEP-1 * * * 1714* * * * * * * * * 2 C
HISTORY NGC3516,SWP26811,LRES,LAP,260MOS,16:27:11 3 C
HISTORY 850930,SPREP,MAXG,LOREAD,HQ067,PENSTON 4 C
HISTORY 84,92,SO,9.2 5 C
HISTORY 6 C
HISTORY 7 C
HISTORY 8 C
HISTORY 9 C
HISTORY 85273205920* 9 * 219 *OPS2PR02*155842 MODTIME 3 251 0 * 10 C
HISTORY 125245 CAMINIT *155914 TLM,LWPROM * 11 C
HISTORY 125252 6830 17781 26810 1181 *155951 READPREP 1 IMAGE 6831 * 12 C
HISTORY 125903 S/C MANEUVERING *160023 SCAN READLO SS 1 G3 47 * 13 C
HISTORY 125958 TLM,LWPROM *160037 X 53 Y 71 G1 97 HT 106 * 14 C
HISTORY 130504 SPREP 1 *162412 TLM,FES2ROM * 15 C
HISTORY 132223 STOP 1 EMERGENCY *162501 STOP 3 EMERGENCY * 16 C
HISTORY 132322 TLM,FES2ROM *162611 MODE SWL * 17 C
HISTORY 132929 TLM,FES2ROM .500000E 01 *162713 EXPOBC 3 250 0 MAXG NOL * 18 C
HISTORY 133631 FESIMAGE 0 0 113 *162842 MODTIME 3 210 0 * 19 C
HISTORY 134225 MODE LWL *162949 MODTIME 3 220 0 * 20 C
HISTORY 134313 TARGET IN LWLA *195236 MODTIME 3 260 0 * 21 C
HISTORY 134634 TLM,FES2ROM .200000E 02 *205859 TLM,SWPROM * 22 C
HISTORY 134748 FESTRK R ON FSS *205923 READ 3 IMAGE 26811 * 23 C
HISTORY 134848 EXPOBC 1 120 0 MAXG NOL *205956 SCAN READLO SS 1 G3 44 * 24 C
HISTORY 134942 TLM,SWPROM *210009 X 60 Y 76 G1 82 HT 105 * 25 C
HISTORY 135211 SPREP 3 *205949 * 26 C
HISTORY 141533 TLM,FES2ROM *210009 * 27 C
HISTORY 154850 FIN 1 T 7199 S 97 U 108 * * 28 C
HISTORY 155113 TARGET FROM LWLA * * 29 C
HISTORY 155404 TARGET IN SWLA * * 30 C
HISTORY 155532 FESTRK R ON FSS * * 31 C
HISTORY 155642 EXPOBC 3 292 0 MAXG NOL * * 32 C
HISTORY HQ067* * *PENSTON * * * * * * * * * * * * * 36 C
HISTORY 1103228+725024* 0* * * * * * * * * * * * * 37 C
HISTORY 2445795.5 .0 42158.0 .208815 29.1145160.5140303.9917 31.224 83 C
HISTORY 107153306 054164-70353934910 9 107165559 544 83-321926 651048 84 C
HISTORY 107174129 8 4431+75 647 805633 107191133 1045335+3750 3 491517 85 C
HISTORY 85093016326811L LO 08510018604010000000000000162711026000333U 1APC
HISTORY HQ067VNGC3516 841103228725024 9.200092503 1319 2APC
HISTORY PENSTON 000000000000 3APC
HISTORY *INSERT 01:20Z OCT 01,'85 HC
HISTORY ***** PHOTOMETRICALLY CORRECTED IMAGE ***** C
HISTORY ***** SCHEME NAME: F3LLMC, VILSPA RELEASE: R14 ***** C
HISTORY PCF C/** DATA REC. 11 1 1 1 768 8448 5 3 6.1 5.0 2536 .00000 1PC
HISTORY 0 1684 3374 6873 9091 10586 1PC
HISTORY 14371 17745 21524 25105 28500 1PC

```



```

HISTORY      11.000      11.000      11.000      11.000      11.000      11.000      1PC
HISTORY      11.000      11.000      11.000      11.000      11.000      11.000      1PC
HISTORY TUBE   3 SEC EHT  6.1 ITT EHT  5.0 WAVELENGTH 2536 DIFFUSER 0      1PC
HISTORY      C      MODE : FACTOR  .178E 00      1PC
HISTORY *PHOTOM  01:20Z OCT 01,'85      HC
HISTORY ***** DATA FROM LARGE APERTURE *****      C
HISTORY *SPECLO  01:20Z OCT 01,'85      C
HISTORY OBSERVATION DATE(GMT): YR=85 DAY=273 HR= 0 MIN= 0      C
HISTORY TARGET COORD (1950) : RT. ASC.=11 3 22.8 DECL.= 72 50 24      C
HISTORY OPTIONS :HT= 9, HBACK= 5, DISTANCE= 11.0, OMEGA= 81.0      C
HISTORY MEAN RESEAU (GMT= 78.085-79.334 NO. FF= 18 SIGS= .134 SIGL= .138 PX) C
HISTORY MEAN DC (GMT= 78.274-84.071 NO. WLC= 107 SIGS= .254 SIGL= .231 PX) C
HISTORY B 1= -.282109122253D 03 B 2= .376216681767D 00 B 3= .000000000000D 00C
HISTORY A 1= .967691332100D 03 A 2= -.466574767462D 00 A 3= .000000000000D 00C
HISTORY THDA FOR RESEAU MOTION = 10.84      C
HISTORY THDA FOR SPECTRUM MOTION = 10.84 (AT TIME OF READ)      C
HISTORY THERMAL SHIFTS: LINE = .914 SAMPLE = 1.769      C
HISTORY REGISTRATION SHIFTS: LINE = .000 SAMPLE = .000 MANUAL      C
HISTORY *POSTLO  01:20Z OCT 01,'85      HC
HISTORY *****MERGED SPECTRA- GROSS, BACKGROUND, NET, & ABS. CALIB. NET      C
HISTORY *ARCHIVE  01:20Z OCT 01,'85      HL
DATE      = '15/09/86'      / Date this file was written (DD/MM/YY)
ORIGIN    = 'VILSPA '      / Tape writing location
AUTHOR    = 'VILSPA '      / Observing Station
END

```

Extension Header :

```

      1      2      3      4      5      6      7      8
1234567890123456789012345678901234567890123456789012345678901234567890

```

```

XTENSION= 'IMAGE-IUE'      / Image extension
BITPIX   =      16      / 2 bytes twos-compl. integers
NAXIS    =      1      / Number of Axes
NAXIS1   =     823      / Number of pixels/row (X-axis)
EXTNAME  = 'EPSILONS'      / Extension contains epsilons
CRVAL1   =    1842.6745   / Wavelength at reference pixel
CRPIX1   =      1.0      / Reference pixel location X-axis
CDELTA1  =     2.5432     / Wavelength increment
CTYPE1   = 'LAMBDA '      / Wavelength in Angstroms
COMMENT
COMMENT   PIXEL EPSILONS ARE CODED USING THE FOLLOWING VALUES :
COMMENT
COMMENT   NORMAL PIXELS      (100)      EXTRAPOLATED ITF (-200)
COMMENT   MICROPHONICS NOISE (-220)     BRIGHT SPOT      (-300)
COMMENT   RESEAU MARK        (-800)     SATURATED PIXEL (-1600)
COMMENT   OUTSIDE PHOTOMETRICALLY CORRECTED REGION      (-3200)
COMMENT
END

```


3.6 MEHI Spectra

FITS file structure :

- No Image Data
- No Group Structure
- N Table Extensions (N = Number of extracted orders)

Standard Header Records	Extension Header Records 1	Extension Data Records 1	Extension Header Records n	Extension Data Records n	EOF
-------------------------	----------------------------	--------------------------	------	----------------------------	--------------------------	-----

Notice that there are no data arrays (NAXIS=0). The first extension will start immediately after the last Standard Header record.

Standard Header :

```

      1      2      3      4      5      6      7      8
123456789012345678901234567890123456789012345678901234567890
-----
SIMPLE =                T / Standard FITS format
BITPIX =                8 / 8 bits ASCII characters
NAXIS  =                0 / No image data
BLOCKED =              T / Records may be blocked
EXTEND =                T / File has extension
TELESCOP= 'IUE          ' / IUE
OBJECT  = 'HD224085     ' / Image Identifier. Object ID
CAMERA  =                1 / Camera number
IMAGE   =                9079 / Image number
APERTURE= 'LARGE        ' / Aperture
FILENAME= 'MEHIL109079 ' / File Name
DISPERSN= 'HIGH         ' / Dispersion
DATE-OBS= '14/09/86'    / Observation date as DD/MM/YY
RA      =                358.121230 / Right Ascension in degrees
DEC     =                28.355000 / Declination in degrees
EPOCH   =                1950.0 / Epoch for coordinates
IUE-CLAS= '46          ' / IUE Object class
DATOB-LG= '14/09/86/17:40:33' / Observation date as DD/MM/YY/HH:MM:SS
EXPTM-LG=                4200.00 / Large Ap. exposure time (seconds)
PGM-ID  = 'IC164       ' / Program ID
HISTORY 0001000103252048 1 2 0210 9079 #101 1 C
HISTORY 99* 3*14SEP-1 * * * 4200* * * * * * * * * * * 2 C
HISTORY HD224085,LWP9079,HRES,LAP,70M00S,17:40:33 3 C
HISTORY 860914,XSPREP,MAXG,LOREAD,IC164,RODONO-BYRNE 4 C
HISTORY 46 3117,FO,10.8 5 C
HISTORY 6 C
HISTORY 7 C
HISTORY 8 C
HISTORY 9 C
HISTORY 86257185806* 10 * 218 * *172032 GDE R/S X -687 Y -1345 * 10 C
HISTORY 185843 SCAN READLO SS 1 G3 47 *173402 FIN 3 T 4199 S 97 U 109 * 11 C

```

HISTORY 185857 X 53 Y 71 G1 97 HT 106 *173531 MODE LWH * 12 C
HISTORY 185836 *173611 TARGET FROM SWLA * 13 C
HISTORY 185857 *173739 FES CTS 3117 0 0 512 * 14 C
HISTORY 152003 SPREP 3 *173803 TARGET IN LWLA * 15 C
HISTORY 153249 TLM,FES2ROM *173829 FESCT 3117 IN 13 0 0 * 16 C
HISTORY 154241 FESIMAGE 0 0 113 *173945 GDE R/S X -885 Y -1209 * 17 C
HISTORY 155234 S/C MANEUVERING *174034 EXPOBC 1 70 0 MAXG NOL * 18 C
HISTORY 155331 TLM,LWPROM *174141 TLM,SWPROM * 19 C
HISTORY 155459 XPREP 1 *174213 READPREP 3 IMAGE 29214 * 20 C
HISTORY 161035 TLM,FES2ROM *174245 SCAN READLO SS 1 G3 44 * 21 C
HISTORY 161637 FESIMAGE 0 0 113 *174260 X 60 Y 76 G1 82 HT 105 * 22 C
HISTORY 161831 ACQ STARTED *180208 TLM,FES2ROM * 23 C
HISTORY 162110 FES CTS 3086 0 0 512 *185037 FIN 1 T 4199 S 97 U 108 * 24 C
HISTORY 162136 TARGET IN SWLA *185220 TARGET FROM LWLA * 25 C
HISTORY 162150 FESCT 3086 IN 9 0 0 *185421 FES CTS 2859 0 0 512 * 26 C
HISTORY 162312 GDE R/S X -686 Y -1348 *185445 TARGET IN SWLA * 27 C
HISTORY 162400 EXPOBC 3 70 0 MAXG NOL *185500 FESCT 2859 IN 10 0 0 * 28 C
HISTORY 162442 TLM,LWPROM *185606 GDE R/S X -690 Y -1351 * 29 C
HISTORY 163008 SPREP 1 *185656 EXPOBC 3 180 0 MAXG NOL * 30 C
HISTORY 164518 TLM,FES2ROM *185740 TLM,LWPROM * 31 C
HISTORY 170945 GDE R/S X -682 Y -1362 *185807 READPREP 1 IMAGE 9079 * 32 C
HISTORY IC164*0* 1*BYRNE * 1* 1*H* 224085*0*1*1* 36 C
HISTORY 2352291+282118*999*K2*1* 99 * 99 * .00E 00* 0* .00* 0* 37 C
HISTORY 2445795.5 .0 42158.0 .208815 29.1145160.5140303.9917 31.224 83 C
HISTORY 107153306 054164-70353934910 9 107165559 544 83-321926 651048 84 C
HISTORY 107174129 8 4431+75 647 805633 107191133 1045335+3750 3 491517 85 C
HISTORY 86091417109079L HO 0860914870401000000000000174033007000353V 1APC
HISTORY IC164VHD224085 462352291282118 00000 1 9999 2APC
HISTORY RODOND-BYRNE 000000000000 3APC
HISTORY ***** PHOTOMETRICALLY CORRECTED IMAGE ***** C
HISTORY ***** SCHEME NAME: F1HLMC, VILSPA RELEASE: R14 ***** C
HISTORY PCF C/** DATA REC. 12 1 1 1 768 768 5 1 6.1 5.0 2536 0.00000 1PC
HISTORY 0 2300 3969 6062 7790 10256 1PC
HISTORY 12982 14850 17900 20562 23379 32973 1PC
HISTORY 17.000 17.000 17.000 17.000 17.000 17.000 1PC
HISTORY 17.000 17.000 17.000 17.000 17.000 17.000 1PC
HISTORY TUBE 1 SEC EHT 6.1 ITT EHT 5.0 WAVELENGTH 2536 DIFFUSER 0 1PC
HISTORY C MODE : FACTOR .283E 00 1PC
HISTORY *PHOTOM 00:28Z SEP 15,'86 HC
HISTORY ***** DATA FROM LARGE APERTURE ***** C
HISTORY *SPECHI 00:28Z SEP 15,'86 HC
HISTORY MEAN RESEAU (GMT= 80.122-80.138 NO. FF= 3 SIGS= .088 SIGL= .107 PX) C
HISTORY MEAN DC (GMT= 80.168-84.071 NO. WLC= 50 SIGS= .193 SIGL= .373 PX) C
HISTORY B 1= .174305296343D 04 B 2= -.152529155998D 00 B 3= .623410714765D-06C
HISTORY B 4= .219544783408D-02 B 5= .311670260341D 00 B 6= .52195243335D-07C
HISTORY B 7= -.282512962878D-06 B 8= .000000000000D 00 B 9= .000000000000D 00C
HISTORY A 1= .589239083032D 04 A 2= -.172285838396D 00 A 3= .655536956005D-06C
HISTORY A 4= .159542889306D 02 A 5= .359345742636D 00 A 6= -.687223291400D-04C
HISTORY A 7= -.278334751984D-05 A 8= .000000000000D 00 A 9= .000000000000D 00C
HISTORY THDA FOR RESEAU MOTION = 11.84 MEAN RESEAU USED C
HISTORY THDA FOR SPECTRUM MOTION = 11.84 C
HISTORY THERMAL SHIFTS: LINE = 1.118 SAMPLE = .209 C
HISTORY REGISTRATION SHIFTS: LINE = .984 SAMPLE = -1.181 MANUAL C
HISTORY *SORTH1 00:28Z SEP 15,'86 C
HISTORY RIPPLE CONSTANTS: K= 230701.0+ 5.573*M +.0000*M**2 A= .896 C
HISTORY OBSERVATION DATE(GMT): YR=86 DAY=257 HR=18 MIN=16, (JD): 2446688.2611 C
HISTORY TARGET COORD, (1950): RT. ASC.=23 52 29.1 DECL.= 28 21 18 C
HISTORY IUE VELOCITY (KM/S): UX= 1.4 UY= -2.2 UZ= 1.3 C
HISTORY EARTH VELOCITY (KM/S): UX= 3.8 UY= 26.9 UZ= 11.7 C

```

HISTORY NET VELOCITY CORRECTION TO HELIOCENTRIC COORD.= 10.0
HISTORY *ARCHIVE 00:28Z SEP 15,'86
DATE = '15/09/86' / Date tape was written as DD/MM/YY
ORIGIN = 'VILSPA ' / Tape writing location
AUTHOR = 'VILSPA ' / Observing Station
END

```

C
HL

Extension Header :

Extension starts after the Main Data records. In this case, there are no Main Data records, so, the first extension comes immediately after the last Main Header record.

The Extension Header for each of the extracted orders is similar to that listed below, the only differences being the NAXIS2, EXTVER, SLITHGHT, TSCAL001 and TZERO001 values.

Next extension (Header + Data) starts on a new record.

	1	2	3	4	5	6	7	8
1234567890123456789012345678901234567890123456789012345678901234567890								

```

XTENSION= 'TABLE ' / Table extension
BITPIX = 8 / 8 bits ASCII characters
NAXIS = 2 / 2 dim. character matrix
NAXIS1 = 40 / Characters per row
NAXIS2 = 654 / Number of rows
GCOUNT = 1 / Only one group
PCOUNT = 0 / No random parameters
TFIELDS = 7 / Number of fields
EXTNAME = 'ORDER ' / Extension is an order
SLITHGHT= 4.45982 / Slit height (pixels)
EXTVER = 116 / Order number
TTYPE001= 'WAVELENG' / Wavelength
TBCOL001= 1 / Starting column
TFORM001= 'I5 ' / Integer number format
TUNIT001= 'ANGSTROM' / Angstroms
TSCAL001= 0.0020 / Scale factor
TZERO001= 1845.00 / Offset wavelength
TTYPE002= 'EPSILON ' / Epsilons (quality flags)
TBCOL002= 6 / Starting column
TFORM002= 'I5 ' / Integer number format
TUNIT002= ' ' / Unitless
TTYPE003= 'GROSS ' / Gross spectrum
TBCOL003= 11 / Starting column
TFORM003= 'I6 ' / Real number format
TSCAL003= 0.5623451E+04 / Scale factor
TUNIT003= 'FN ' / Flux numbers
TTYPE004= 'INTERORD' / Interorder spectrum (Smoothed Background)
TBCOL004= 17 / Starting column
TFORM004= 'I6 ' / Real number format
TSCAL004= 0.2260239E+04 / Scale factor
TUNIT004= 'FN ' / Flux numbers

```

```
TTYPER005= 'NET      ' / Net spectrum
TBCOL005=      23 / Starting column
TFORM005= 'I6      ' / Real number format
TSCAL005= 0.8900344E+06 / Scale factor
TUNIT005= 'FN      ' / Flux numbers
TTYPER006= 'RNET    ' / Net ripple corrected spectrum
TBCOL006=      29 / Starting column
TFORM006= 'I6      ' / Real number format
TSCAL006= 0.4988231E+04 / Scale factor
TUNIT006= 'FN      ' / Flux numbers
TTYPER007= 'ABNET   ' / Absolutely Calibrated spectrum
TBCOL007=      35 / Starting column
TFORM007= 'I6      ' / Real number format
TSCAL007= 0.5871067E+12 / Scale factor
TUNIT007= 'FLUX    ' / Flux numbers
END
```

4.0 REFERENCES

=====

- [1] Greisen, E.W. and Harten, R.H., 1981, Astron. Astrophys. Suppl. 44, 371
"An Extension of FITS for groups of small arrays of data"
- [2] Grosbol, P., Harten, R.H., Greisen, E.W. and Wells, D.C.
1988, Astron. Astrophys. Suppl. Ser. 73, 359. "Generalized extensions
and blocking factors for FITS".
- [3] Grosbol, P., Harten, R.H., Greisen, E.W. and Wells, D.C.
1988, Astron. Astrophys. Suppl. Ser. 73, 365. "The FITS tables
extension".
- [4] Harten, R.H., Grosbol, P., Tritton, K.P., Greisen, E.W. and Wells, D.C.
1984, Astronomical Image Processing Circular No. 10, 14.
1985, Memorie della Societa Astronomica Italiana 56, 437.
"Generalized FITS extensions with applications to Tables"
- [5] Muñoz, J.R., 1985, NASA-IUE Newsletter 27, 27
"Generation of the new Extended Line By Line"
- [6] Wells, D.C., Greisen, E.W. and Harten, R.H., 1981, Astron. Astrophys.
Suppl., 44, 363.
"FITS : A Flexible Image Transport System"
- [7] International Ultraviolet Explorer, Image Processing Information Manual.
Version 2.0 (New Software), 1984, Computer Sciences Corporation.

Appendix A

FITS Format

" A Flexible Image Transport System "

This Appendix summarizes some of the FITS characteristics. For a detailed description, the References (section 4) must be consulted.

- PURPOSE (uniform format)

Communication of n-dimensional data arrays
Communication of detailed parameters describing such arrays
Communication of text
Communication of tables

- PHYSICAL MEDIUM

ANSI Standard Magnetic Tape. 7 or 9 track (800,1600,6250 bpi).
No tape labels

- DATA RECORDS (physical records)

All records of 23040 bits in length (one record per physical block)

- LOGICAL STRUCTURE (order within image) (Fig. 1) :

One or more Main Header records
Zero or more Main Data array records
Zero or more Extensions, each one as :
One or more Header records (Extension Header)
Zero or more Data records (Extension Data)
One tapemark (EOF)

Main Header and Extension Header records : 2880 8-bit characters

Zero or more Data records (Extension Data)
One tapemark (EOF)

Main Header and Extension Header records : 2880 8-bit characters

Character ASCII code
Organized as 36 80-character card images
Keywords use 8 first characters (left justified)
'=' in columns 9 or 10 (except comment cards)
Parameters in ANSI Fortran 77 list-directed read format :

Logical : T or F in column 30
Integer : right justified in columns 11-30
Floating : right justified in columns 11-30
Character : surrounded by character ('). Open in column 11
None : directed read format anywhere in columns 11-80
'/' - optional - used as field terminator
Comment - optional - after the '/'
Last block padded with blanks

Main Data array records : 23040 bits in length

Binary integers : 8 bits unsigned or 16/32 bits twos complement
Decreasing significance (no byte swapping)
Scale and bias given in Header
Group structure supported
Last block padded with zeroes

Extension data records (TABLE Extension) : 23040 bits in length

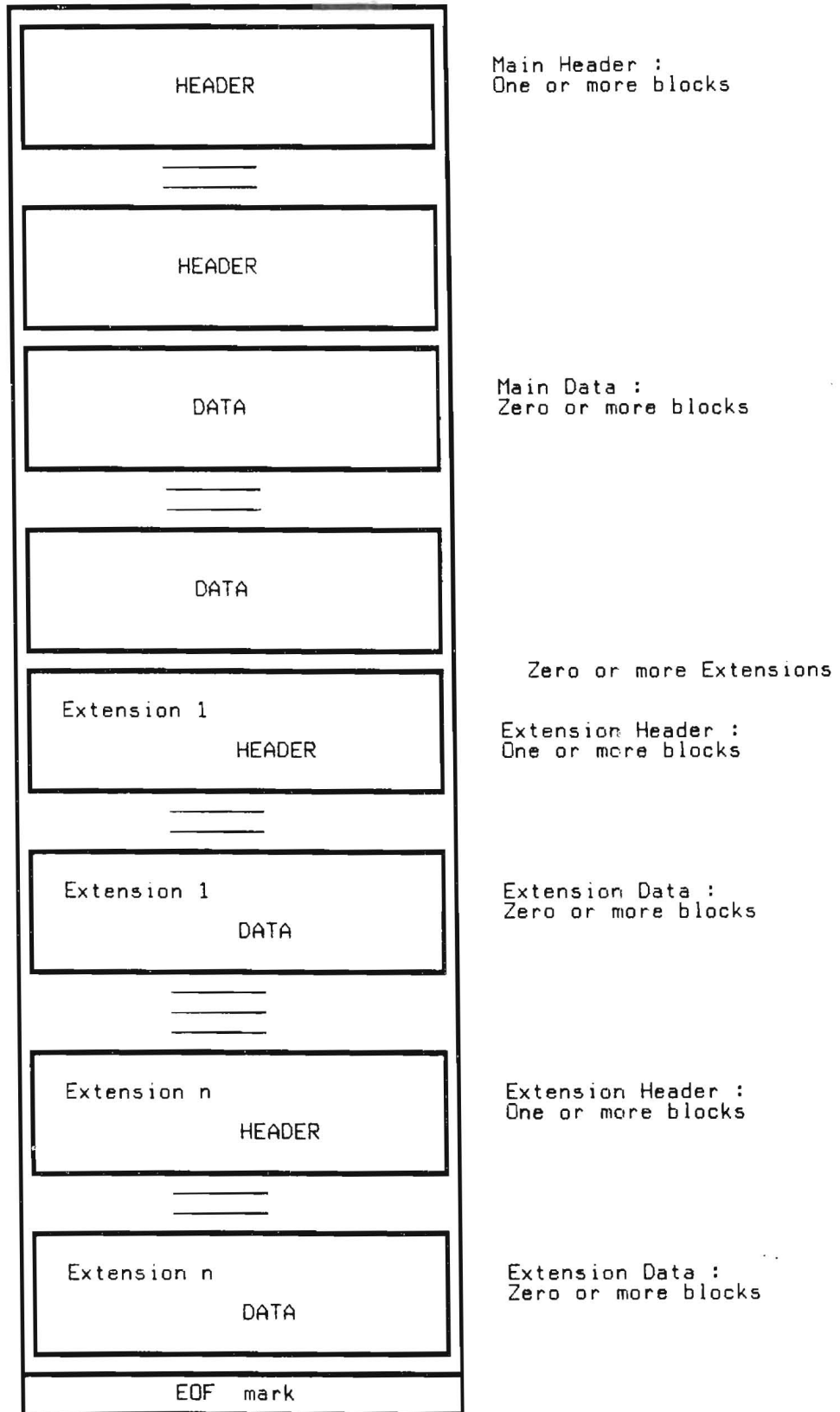
8-bit characters. ANSI code. (2880 characters per record)
Last block padded with blanks
Format defined via keywords

Extension data records (IMAGE Extension) : 23040 bits in length

Refer to Appendix B

In the future, different block sizes will be allowed (Long Block proposal) using the BLOCKED keyword. Only integer numbers, 10 at maximum, of the basic FITS block (record) are accepted. In the IUE case, as a first attempt, only blocking factors of 1 and 2 will be allowed.

Fig. 1 : FITS FILE STRUCTURE



Appendix B

"IMAGE" Extension

When the first attempts were made to convert IUE data into FITS format, several points were noticed :

- 1 - IUE Quality Flags have been considered, in many cases, as auxiliary information that should not be mixed with the main data, but having a close connection; i.e.: must be coded in the same file.
- 2 - Concerning the ULDA project, the distribution of Absolutely Calibrated data merged with epsilons was impossible using the group format (BSCALE could not be used for both data). In the general IUE case for the MELO Spectra, the group format has been adopted, by coding the Abnet Spectra in 10^{**14} units (that is, the real values are multiplied by 10^{**14}). In any case, the use of this type of Extension allows the coding of non-overlapping (in range values) data in the same file.
- 3 - Current FITS does not support the transfer of two related images of different sizes, e.g.: Image and PSF, in the same file.

Point 1 suggests that Group format or an extension can be used, but Point 2 and the desire of not having mixed data discarded Group format.

The basic requirement that extensions must be coded in separate records is a good solution for point 1, but the only Standard Extension existing now is the Tabular one, which is not suitable for the Epsilons.

These reasons lead to the creation of the "IMAGE Extension" to FITS, which takes into account point 3 and, in particular, provides a clear way for the coding of the IUE Quality Flags.

This new FITS Extension fulfill the requirements described in [2] for the generation of new FITS Extensions.

The so called IMAGE Extension presents the following features :

- Coding of data in separate records (compatible with existing FITS).
- Data are structured, within the extension, as the normal FITS data array (well known structure and easily accessible).
- As each extension is independent, different data ranges and sizes can be written into the same file.

The IMAGE Extension Header

The Main FITS Header must include the logical keyword EXTEND, indicating the possible existence of Extension(s) [2] :

A typical Main Header with associated data :

```
      1      2      3      4      5      6
123456789012345678901234567890123456789012345678901234567890123...
-----
SIMPLE =                T
BITPIX =                16
NAXIS  =                2
NAXIS1 =               512
EXTEND =                T / Extension may exist
....
END
```

It is not recommended to use NAXIS = 0 (no main data) because it makes no sense to extend a non-existing image with an image, just use the Main FITS structure to code the image.

The IMAGE Extension Header includes the Standard XTENSION keyword, having the value :

```
XTENSION= 'IMAGE-IUE' / IMAGE Extension
```

The rest of the Extension Header has the same characteristics as the Main FITS Header (See section 2.6) :

```
      1      2      3      4      5      6
1234567890123456789012345678901234567890123456789012345678901234...
-----
XTENSION= 'IMAGE-IUE' / IMAGE Extension
BITPIX  =                16 / 2 bytes twos complement integers
NAXIS   =                2 / Number of Axes
NAXIS1  =                48 / Pixels on first axis
NAXIS2  =                32 / Pixels on second axis
EXTNAME = 'PSF#1 '
GROUPS  =                T / Groups allowed
....
END
```

Notice that no EXTEND keyword is allowed in an Extension Header, i.e : no Extension inside an Extension.

The IMAGE Extension Data

The data array is coded exactly as the basic FITS data array, pixel values having the same format, i.e.: binary integers (8-bit unsigned, 16-bit and 32-bit twos complement in order of decreasing significance).

The first IMAGE Extension record follows the last Extension Header record. Last data record is padded with zeroes.

According to this description, FITS reading programs could handle the new Extension just by checking if it exists and if so, loop back to create a new file (provisions should be made for naming conventions)

IUE Data Reduction

Wavelength correction for recent low-dispersion LWR and SWP Spectra

Randy Thompson
IUE Observatory, GSFC

(Reprinted from NASA IUE Newsletter, 35)

As described in the following paper, the time correction for shifts in the location of the spectral format implemented in production processing at VILSPA on October 17, 1984 caused an error in the low dispersion wavelength assignments that gradually increased with time. The error affected all low dispersion long wavelength redundant (LWR) and short wavelength prime (SWP) spectra obtained at VILSPA between the above date and September 14, 1988 when the new dispersion relations were implemented. Note different end dates will apply to data obtained at Goddard. Wavelength errors appear to be as large as 5 angstroms too high for recent LWR spectra and 3 angstroms too low for recent SWP spectra. Long wavelength prime (LWP) spectra were not affected by this error since a time correction is not used for this camera.

A comparison was made of the old and new dispersion constants and correlation coefficients using software available at the IUE RDAF at GSFC. The differences in predicted line and sample positions for a given wavelength and THDA (i.e. camera temperature) were calculated as a function of time. These values were converted to differences along the dispersion direction and scaled to be in units of angstroms. The scale factors used were 1.67 angstroms/pixel for SWP and 2.65 angstroms/pixel for LWR as derived from the recently implemented mean dispersion constants.

The results are shown in Figures 1 and 2. The differences in the wavelength assignments between the old and new dispersion relations are plotted for 3 different THDA values as a function of time. The 3 temperatures represent the minimum, maximum, and mean THDA values for each set of WAVECAL images used in deriving the current dispersion constants. In both figures, the middle curve represents the average THDA for each camera (13.3 degrees for LWR and 8.9 degrees for SWP). As is shown, the wavelength error is fairly independent of temperature. Similar plots showed that the error was even less dependent on wavelength. As expected, the plots basically reflect the difference in the 2nd-order time corrections used in the old and new dispersion relations.

Users interested in correcting the wavelength assignments for recent LWR and SWP low dispersion spectra can use the following relation:

$$\text{DELTAW} = \text{AO} + \text{A1} * \text{DELTAT} + \text{A2} * \text{DELTAT}^2$$

where

DELTAW = correction factor in angstroms to be SUBTRACTED from the previous assigned wavelengths

DELTAT = date of observation - 1984.0 in decimal years (e.g., 1987.6 - 1984.0 = 3.6)

and the coefficients are:

	AO	A1	A2
LWR	0.55	0.55	0.0976
SWP	-0.091	-0.31	-0.0697

The above equations simply represent the difference between the old and new dispersion relations (using mean temperatures and wavelengths) and transformed to a coordinate system which runs along the dispersion direction. It should be emphasized that the correction is only appropriate for low dispersion LWR and SWP spectra processed with the dispersion relations previously implemented in IUE production processing. This corresponds to images processed at Goddard between 6/20/84 and 4/1/88. Since different end dates apply for images processed at VILSPA, the image processing history portion of the image header label should be examined for a line which begins "MEAN DC". This line would show that for images processed with the old set of dispersion relations, less than 110 wavelength calibration images (WLC) were used (i.e. 105 for SWP and 107 for LWR). Any other number appearing in this line would indicate that the above correction is not appropriate for that image.

An IUE RDAF procedure called DCCOR was written for correcting wavelength assignments as described above and is available to anyone upon request.

Figure 1

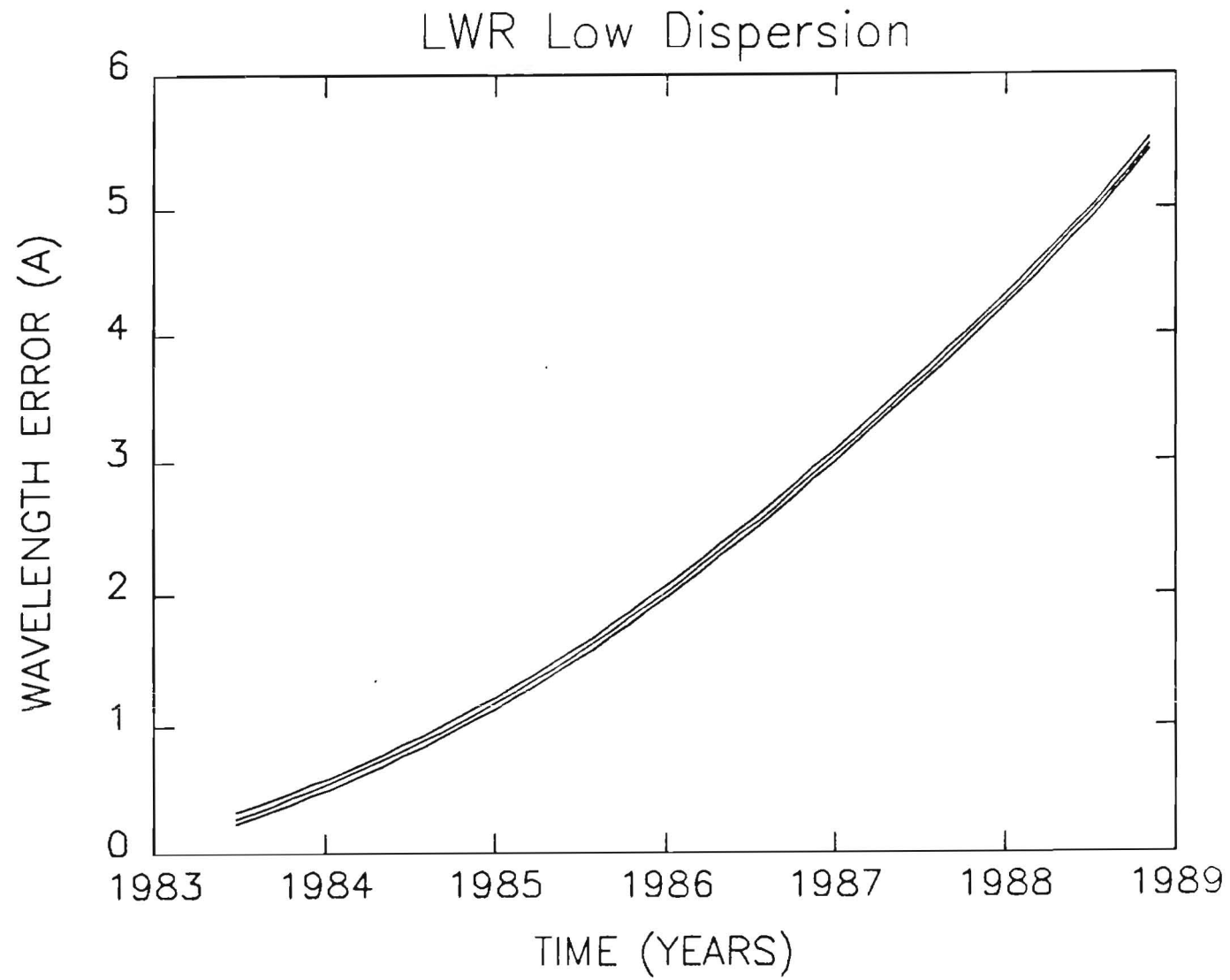
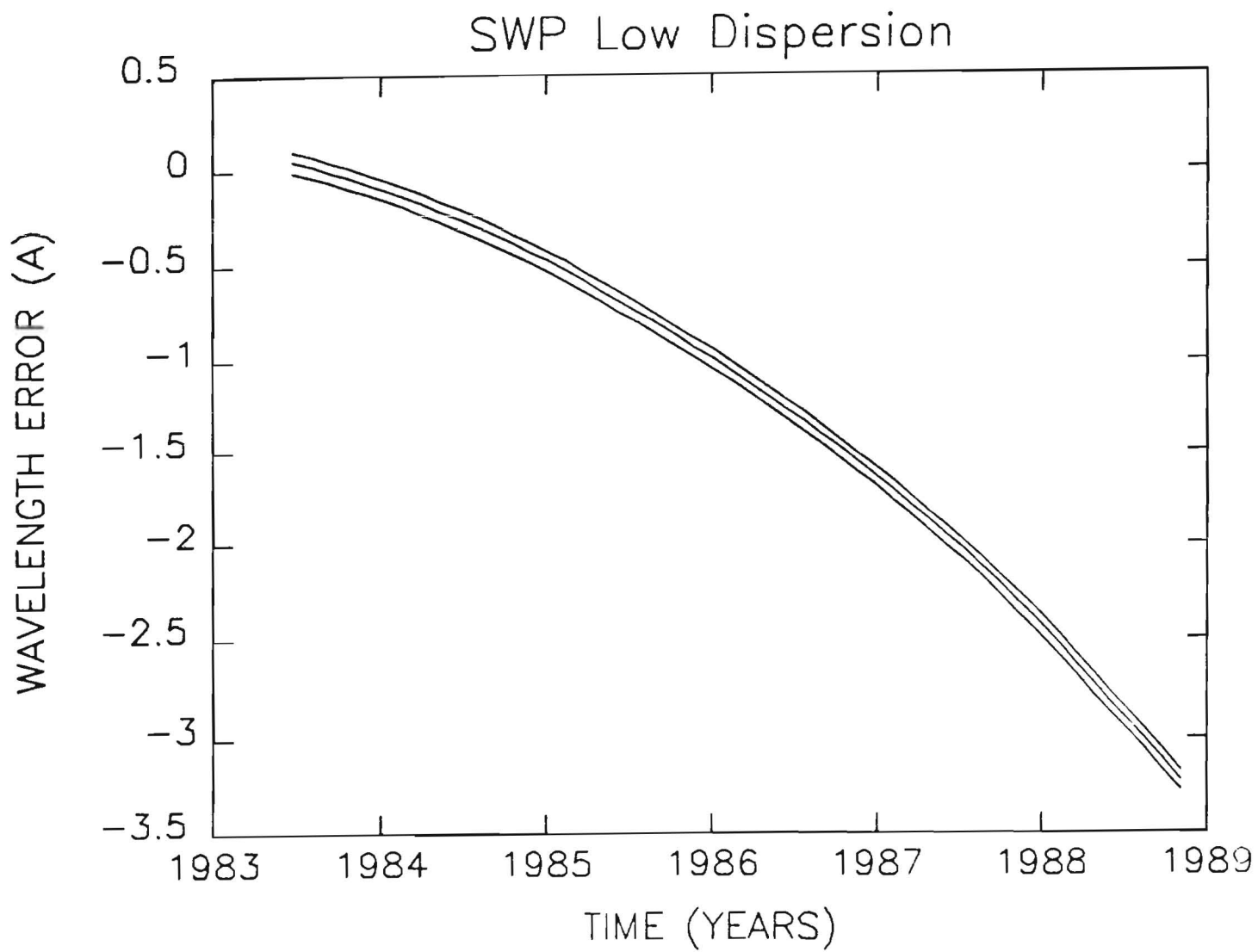


Figure 2



IUE Data Reduction

Implementation of new dispersion constants

Randy Thompson
IUE Observatory, GSFC

(Reprinted from NASA IUE Newsletter, 35)

On April 1, 1988 (GMT 92:23:00) updated dispersion constants and correlation coefficients were implemented in production processing at Goddard Space Flight Center for the long wavelength prime (LWP), long wavelength redundant (LWR), and short wavelength prime (SWP) cameras. These files replace those originally implemented on June 20, 1984.

The new calibration files were primarily implemented to update the second-order time corrections used for low dispersion LWR and SWP spectra. The previous time correction resulted in a systematic wavelength error that has gradually increased in magnitude since 1984. WAVECAL spectra obtained in the fall of 1987 showed that the low dispersion wavelength assignments had become approximately 2.5 angstroms too low for SWP and approximately 5 angstroms too high for LWR. High dispersion wavelength assignments appeared to have smaller systematic errors which were approximately 5 km/sec too high for LWR and 3 km/sec too high for SWP.

Table 1 shows statistics for the new dispersion constants and standard deviations before and after the corrections are applied. Table 2 lists the actual dispersion constants and correlation coefficients as implemented on the effective date shown above. The dispersion constants (A and B) given in Table 2 relate the wavelength in angstroms (W) and the order number (M) to the line (L) and sample (S) pixel location in geometrically-correct space by the following expression:

$$S = A1 + A2MW + A3(MW)**2 + A4M + A5W + A6W(M)**2 + A7M(W)**2 \quad (1)$$

$$L = B1 + B2MW + B3(MW)**2 + B4M + B5W + B6W(M)**2 + B7M(W)**2 \quad (2)$$

For low dispersion (m=1) only the first two terms are used.

Shifts in the location of the spectral format as a function of temperature and time are compensated for using the terms W(S) and W(L) which are added to the A1 and B1 terms, respectively. These are computed from the relations

$$W = W1 + W2T + W3t + W4t**2 \quad (3)$$

where

T = head amplifier temperature (C) and
t = number of days since January 1, 1978.

The correlation coefficients W are defined such that the mean time and temperature correspond to a correction of zero. For the LWP camera $W3 = 0$ and $W4 = 0$, since no time correction is applied. Results of a study to compare various correlations using time and temperature are shown in table 3. The numbers represent the total RMS scatter for the various corrections to the mean dispersion constants. It can be seen that the 2nd order time correction reduced the standard deviations for the LWR and SWP cameras but not for the LWP.

The errors described above and the improvement found using the new dispersion relations are shown in the plots below. The plots basically represent the scatter in the position of a particular wavelength assignment (about the mean) as a function of time. The 'x' symbols represent wavelength positions that were derived from dispersion relations generated from WAVECAL images (i.e. Pt-Ne lamp plus TFLOOD exposures) that have been obtained approximately every two weeks since launch, and are shown in a coordinate system which runs along and perpendicular to the dispersion direction. The '+' symbols connected by a jagged line represent the same positions minus a correction for spacecraft temperature (THDA). The curved line represents the additional 2nd-order correction for time. (Note for the LWP plots just a 1st-order time correction is shown.) The temperature and time corrections were derived from correlations using the data points designated by the '+' symbols. An error in the correlations is evident when the smooth curve (time correction) does not correspond to the jagged line (difference between the raw data points and the temperature correction).

Figures 1 through 6 show how the previous dispersion relations model the wavelength assignments for recent WAVECAL images for each camera and dispersion. As seen in the low dispersion LWR and SWP plots (figures 2 and 3), the smooth line deviates from the jagged line starting around 1984 (i.e., 2190 days since 1/1/78), indicating that a systematic error was introduced that has increased with time. Tests on spectra obtained in December 1987 verified the magnitude of these errors in low dispersion. No systematic errors are seen in the LWP plots.

Figures 7 through 12 show the same type of data as in figures 1 through 6 using the updated dispersion relations and correlation coefficients. As shown, the time correction no longer introduces a systematic error in the wavelength assignments for the LWR and SWP images (figures 8 and 9). The plot for low dispersion LWP (figure 7) shows a small possible time dependence amounting to a correction of about .15 pixels/year. Since the dependence is so small however, it was decided to continue applying only a correction for temperature in production processing.

Figures 13 to 18 show the difference in the predicted positions of the Pt-Ne lines, for each camera and dispersion, using the old and new mean dispersion relations. The diamond-shaped symbols represent the positions predicted by the old dispersion relations and the scaled

Table 1
Dispersion Constant Statistics

	LWP		LWR		SWP	
	<u>Low</u>	<u>High</u>	<u>Low</u>	<u>High</u>	<u>Low</u>	<u>High</u>
No. of D.C.	125	124	149	147	181	183
Mean time	9/27/84	11/15/84	10/20/82	11/13/82	4/30/83	4/16/83
Start	6/16/80	6/16/80	7/16/78	10/1/78	10/1/78	9/12/78
End	8/10/87	8/10/87	10/21/87	10/21/87	8/10/87	8/10/87
Mean THDA(°C)	9.2	9.5	13.3	13.6	8.9	9.0
Lowest	6.2	6.2	8.8	9.5	5.1	5.1
Highest	13.8	14.2	18.3	18.3	13.2	13.2
Slope (DL/DS)	-.8594	1.20*	.7466	-1.38*	-.8061	1.28*
"Plate" Scale (pixel ⁻¹)	2.64Å	7.22 km/sec	2.65Å	7.23 km/sec	1.67Å	7.70 km/sec
Raw scatter (1 in pixels)						
Parallel	.39	.70	.36	1.49	.99	1.18
Perpendicular	.66	.38	1.76	.32	1.16	.55
Scatter after correction [THDA only]						
Parallel	.29	.36	.29	.42	.23	.26
Perpendicular	.39	.22	.42	.25	.30	.15

* average slope for order 100

Table 2. Coefficients Defining the Dispersion Relations For
The Small Aperture (1 of 2)

DISPERSION CONSTANTS

	LWP LAW	LWP LAW	SWP LAW
A1	1.046761751474290E 03	-2.996629722540309E 02	9.842537704680175E 02
A2	-2.868001123699011E-01	3.022883838744345E-01	-4.666079542464260E-01
A3			
A4			
A5			
A6			
A7			
B1	-2.719730910826736E 02	-2.643542338472613E 02	-2.630561357770229E 02
B2	2.464817837517009E-01	2.257008693375577E-01	3.761477738077073E-01
B3			
B4			
B5			
B6			
B7			

CORRELATION COEFFICIENTS

W1(S)	-8.791381716728210E-01	5.767917633056641E 00	-4.013411521911621E 00
W2(S)	9.590029716491699E-02	-2.406980395317078E-01	-8.571829646825790E-03
W3(S)		-2.169568324461579E-03	3.169863950461149E-03
W4(S)		3.144138531752105E-07	-4.454670374798297E-07
W1(L)	-3.502341270446777E 00	-8.896263122558594E 00	-2.038312911987305E 00
W2(L)	3.814837932586670E-01	4.788957238197327E-01	1.484615206718445E-01
W3(L)		2.082946710288525E-03	7.285187020897865E-04
W4(L)		-2.835006398527185E-07	-1.499050767961307E-07

Table 2. Coefficients Defining the Dispersion Relations For
The Small Aperture (2 of 2)

DISPERSION CONSTANTS

	LWP HIGH	LWP HIGH	SWP HIGH
A1	4.803657002963457E 03	-4.692199700079563E 03	1.631454641827589E 02
A2	-1.644785837005490E-01	1.456544391180930E-01	-1.65967977725873E-01
A3	6.417917757320172E-07	-5.486889310991500E-07	1.251129072284586E-06
A4	1.765972022959533E 01	4.210961364595948E-02	1.431417433419038E-01
A5	4.293822686782681E-01	2.794913241835652E-01	-4.456618951605544E-01
A6	-7.610870340777773E-05	-1.235455019355905E-07	-1.016828512840550E-06
A7	-3.086632847872316E-06	1.001362711452285E-07	-1.557535090051680E-07
B1	1.707191128477559E 03	1.574206920842157E 04	-7.235787738562120E 03
B2	-1.524320940545044E-01	-2.803452890142334E-01	-1.170159622288736E-01
B3	6.232836317562505E-07	9.140342957564075E-07	1.217535534619699E-06
B4	1.862659356576263E-01	6.052784971102065E-02	-1.218766071519810E-01
B5	3.133576774038163E-01	2.255877040558232E-01	3.905721994031134E-01
B6	-7.369889159816985E-07	-1.302666030513332E-08	8.920912742277709E-07
B7	-2.897738952325312E-07	6.585438728256127E-09	-1.133312364675460E-07

CORRELATION COEFFICIENTS

W1(S)	-8.979568481445313E-01	5.822890281677246E 00	-3.485797882080078E 00
W2(S)	9.507745504379272E-02	-2.920082807540894E-01	5.037758871912956E-02
W3(S)		-1.580609008669853E-03	2.452150452882051E-03
W4(S)		2.399144705123035E-07	-3.681943212541228E-07
W1(L)	-4.343306541442871E 00	-8.799000740051270E 00	-3.268136024475098E 00
W2(L)	4.589727520942688E-01	5.368530154228210E-01	2.289363741874695E-01
W3(L)		1.171087380498648E-03	9.673056192696095E-04
W4(L)		-1.444790314053535E-07	-1.419936666025023E-07

Table 3.

Total* RMS Scatter (1σ in pixels) for Various Corrections to the Mean Dispersion Constants

	HIGH DISPERSION		
	<u>LWP</u>	<u>LWR</u>	<u>SWP</u>
Raw Scatter	0.79	1.52	1.30
1st Order THDA	0.42	0.99	1.09
1st Order Time	0.78	1.15	0.59
THDA & Time	0.41	0.53	0.43
THDA & 2nd order Time	0.41	0.49	0.30
No. of Points	124	147	183
Mean Time ($l = 1/1/78$)	2510	1777	1931

	LOW DISPERSION		
	<u>LWP</u>	<u>LWR</u>	<u>SWP</u>
Raw Scatter	0.77	1.79	1.52
1st Order THDA	0.48	1.48	1.42
1st Order Time	0.72	1.13	0.59
THDA & Time	0.43	0.61	0.53
THDA & 2nd order Time	0.43	0.51	0.38
No. of Points	125	149	181
Mean Time ($l = 1/1/78$)	2461	1754	1945

* Perpendicular and parallel components combined.

Figure 1

Old Low Dispersion

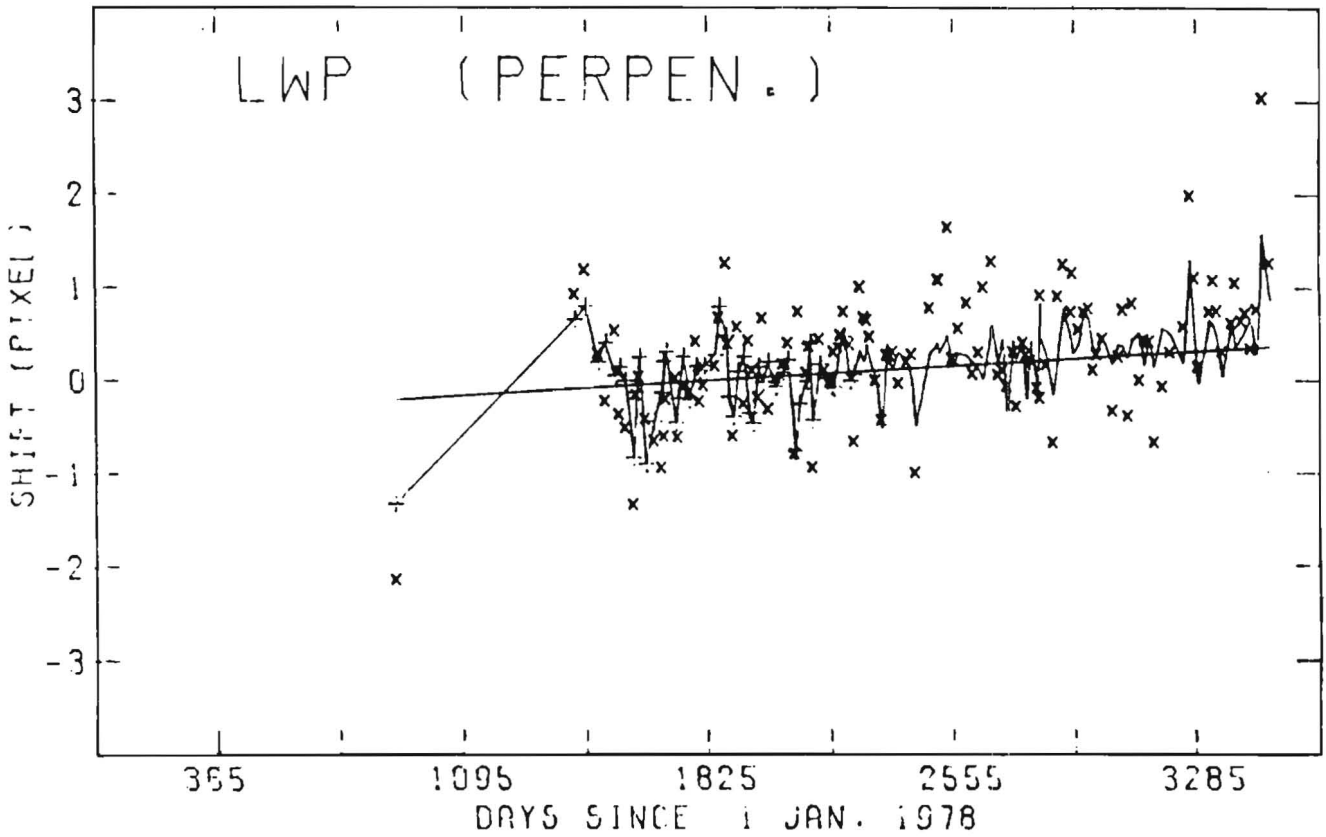
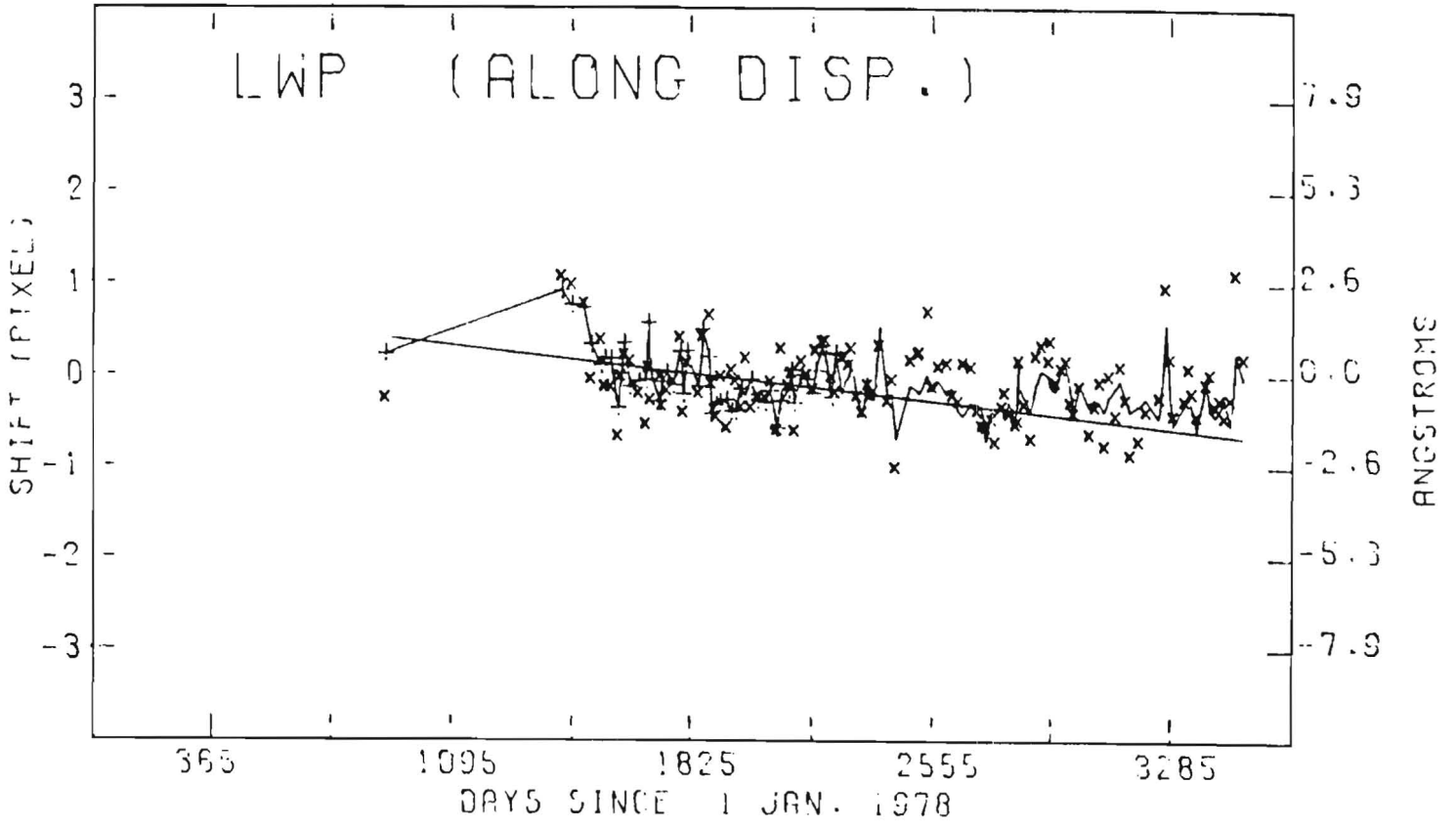


Figure 2

Old Low Dispersion

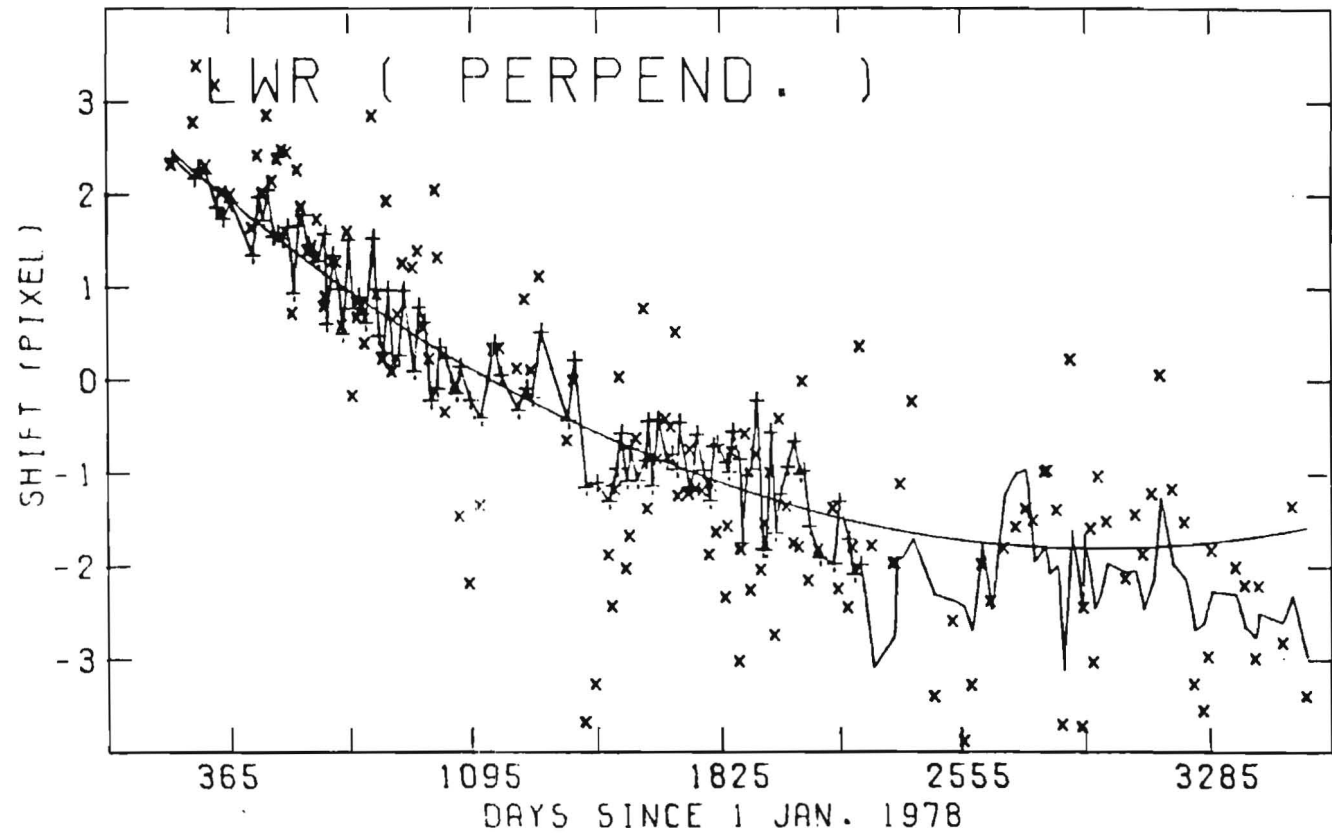
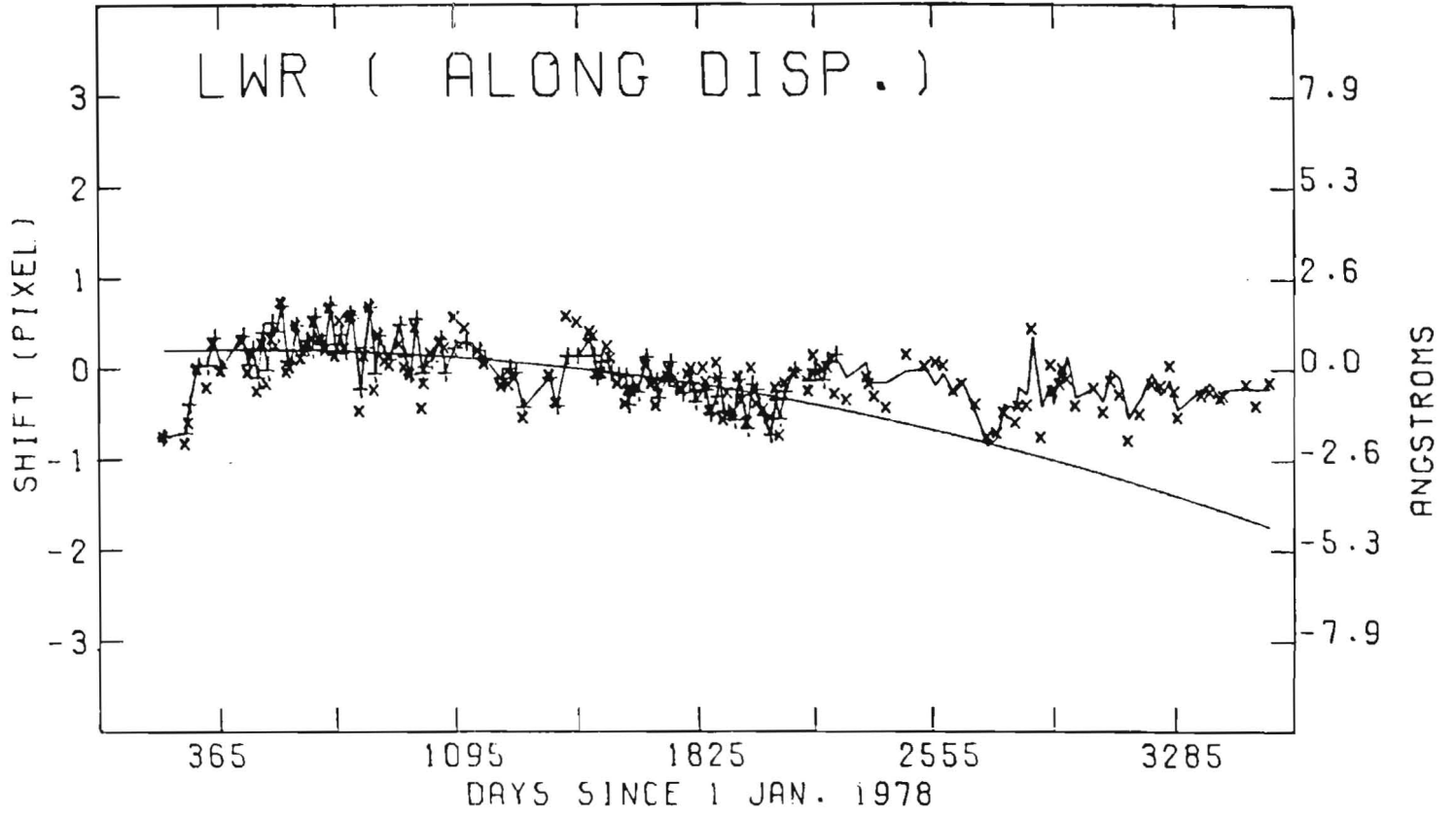


Figure 3

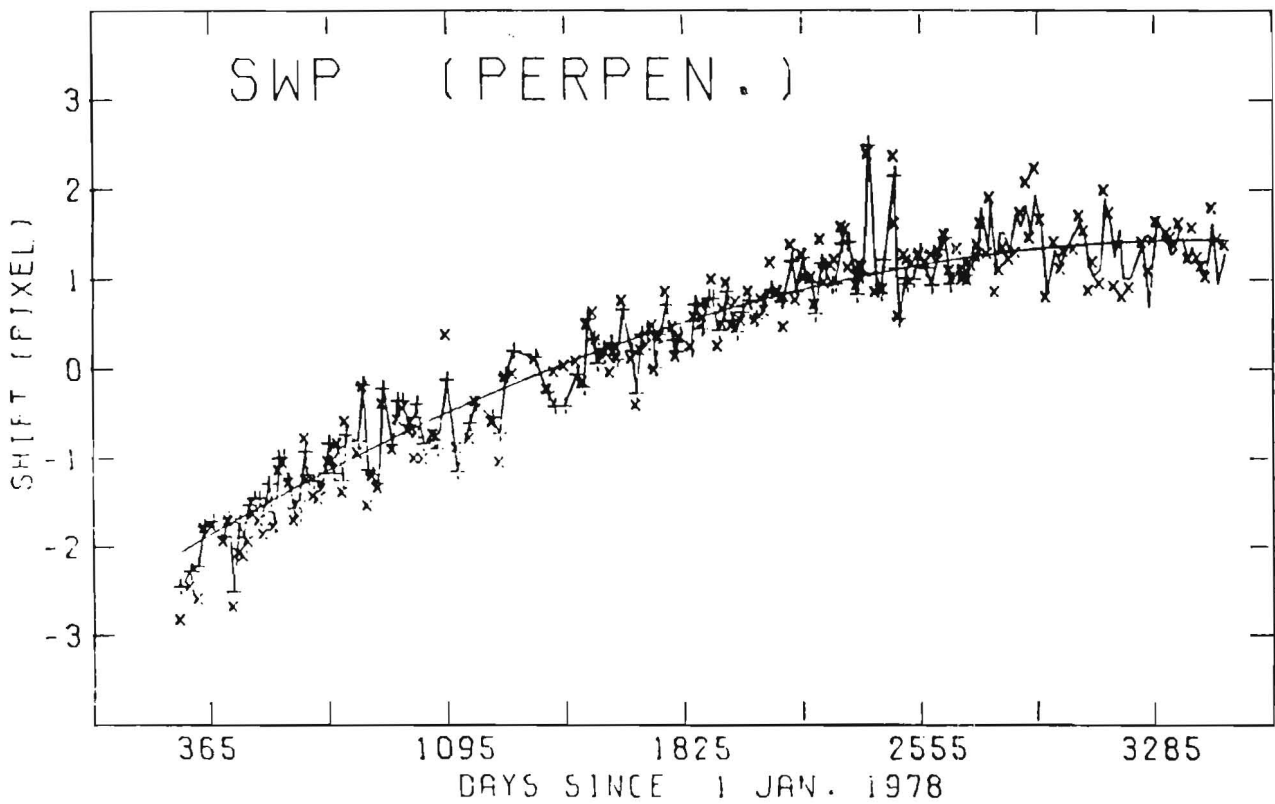
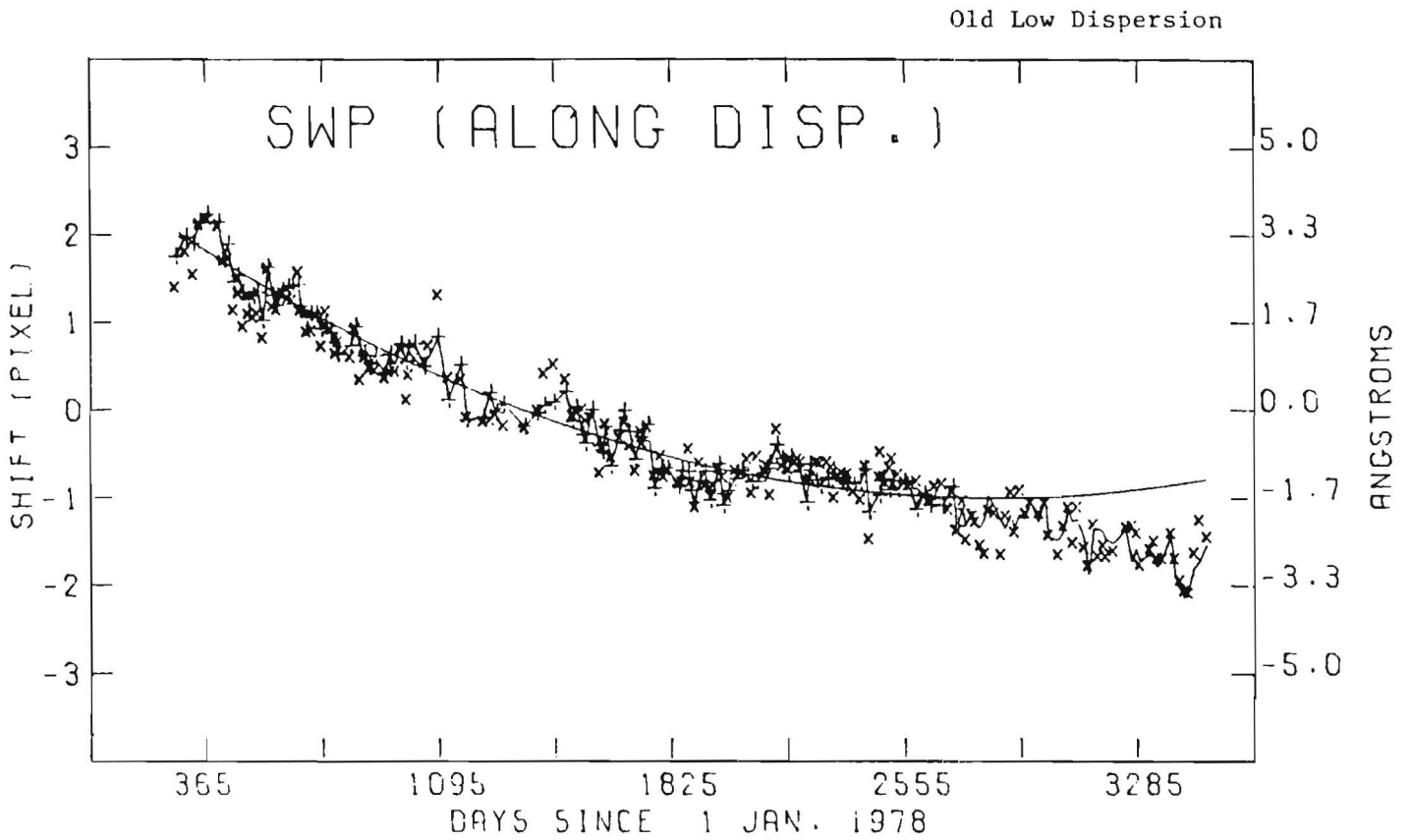


Figure 4

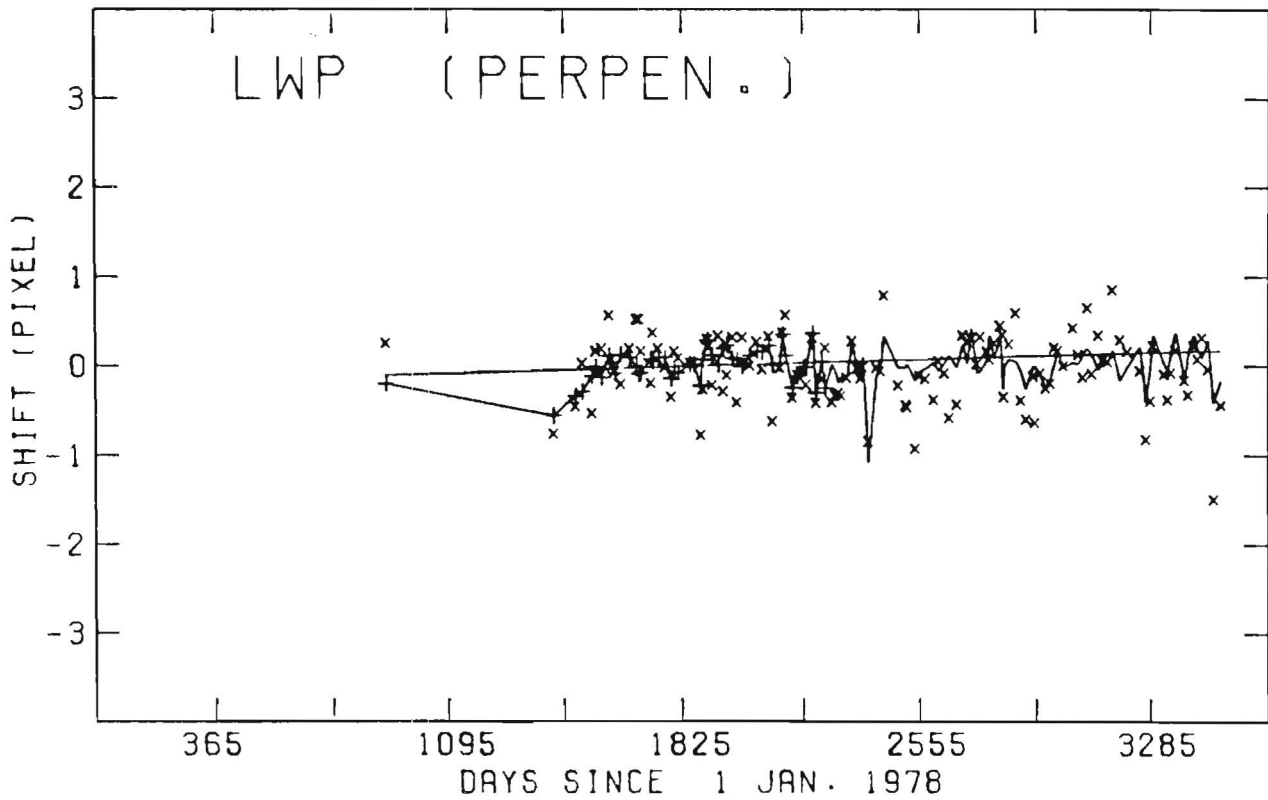
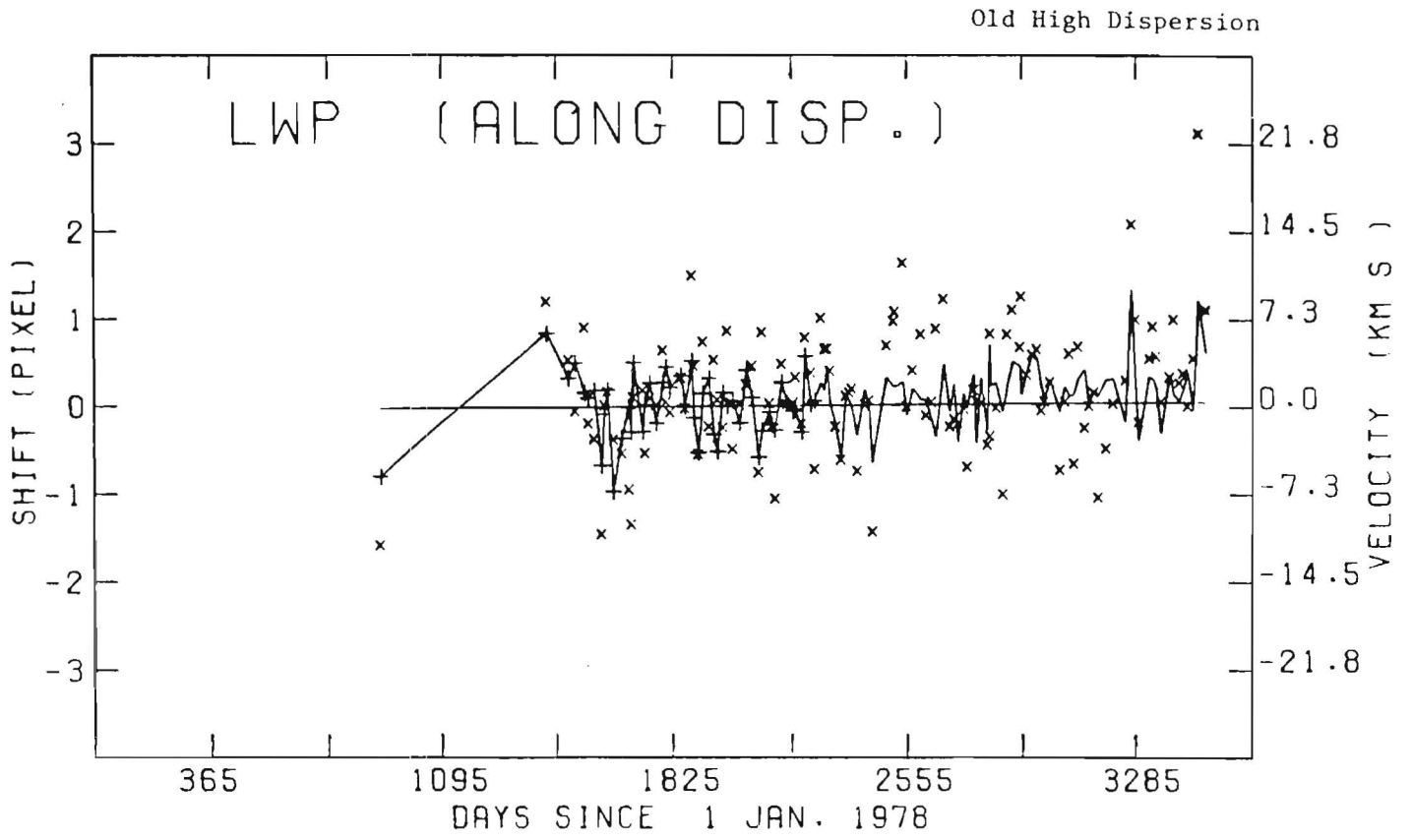


Figure 5

Old High Dispersion

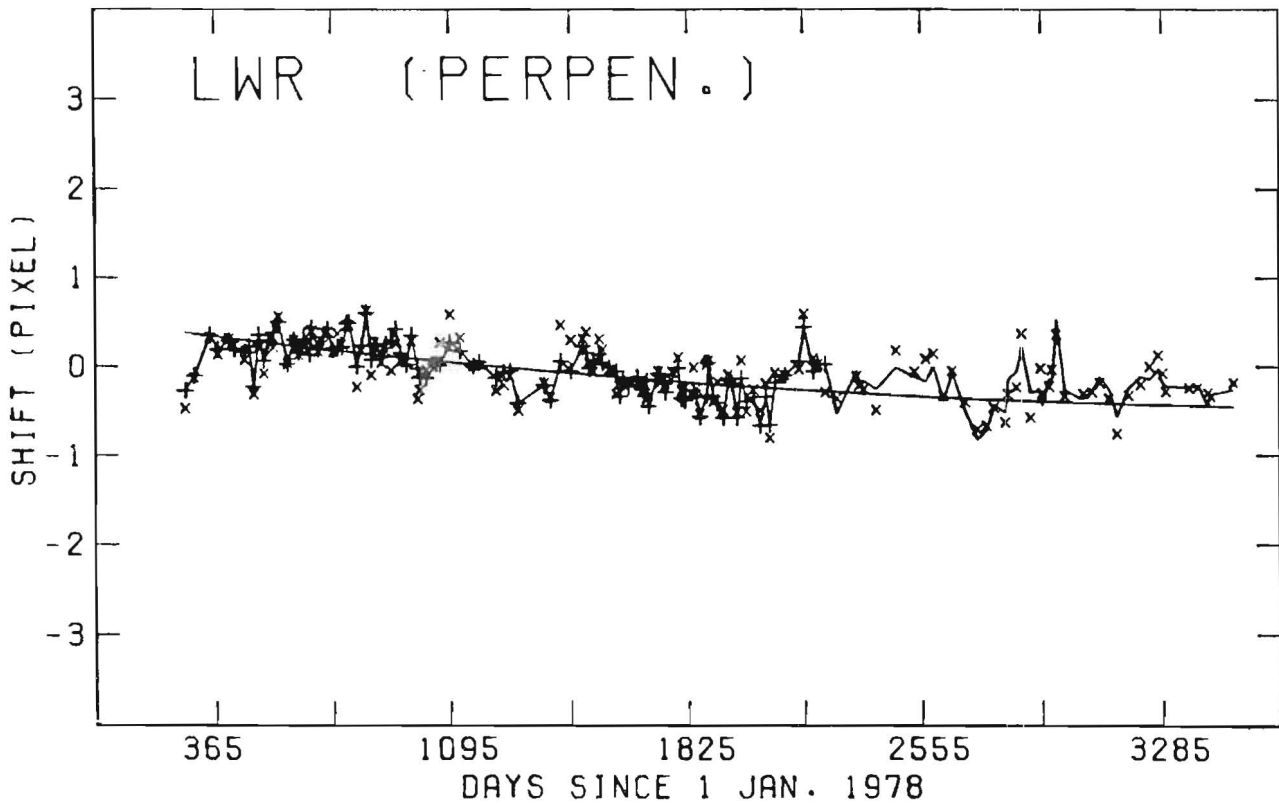
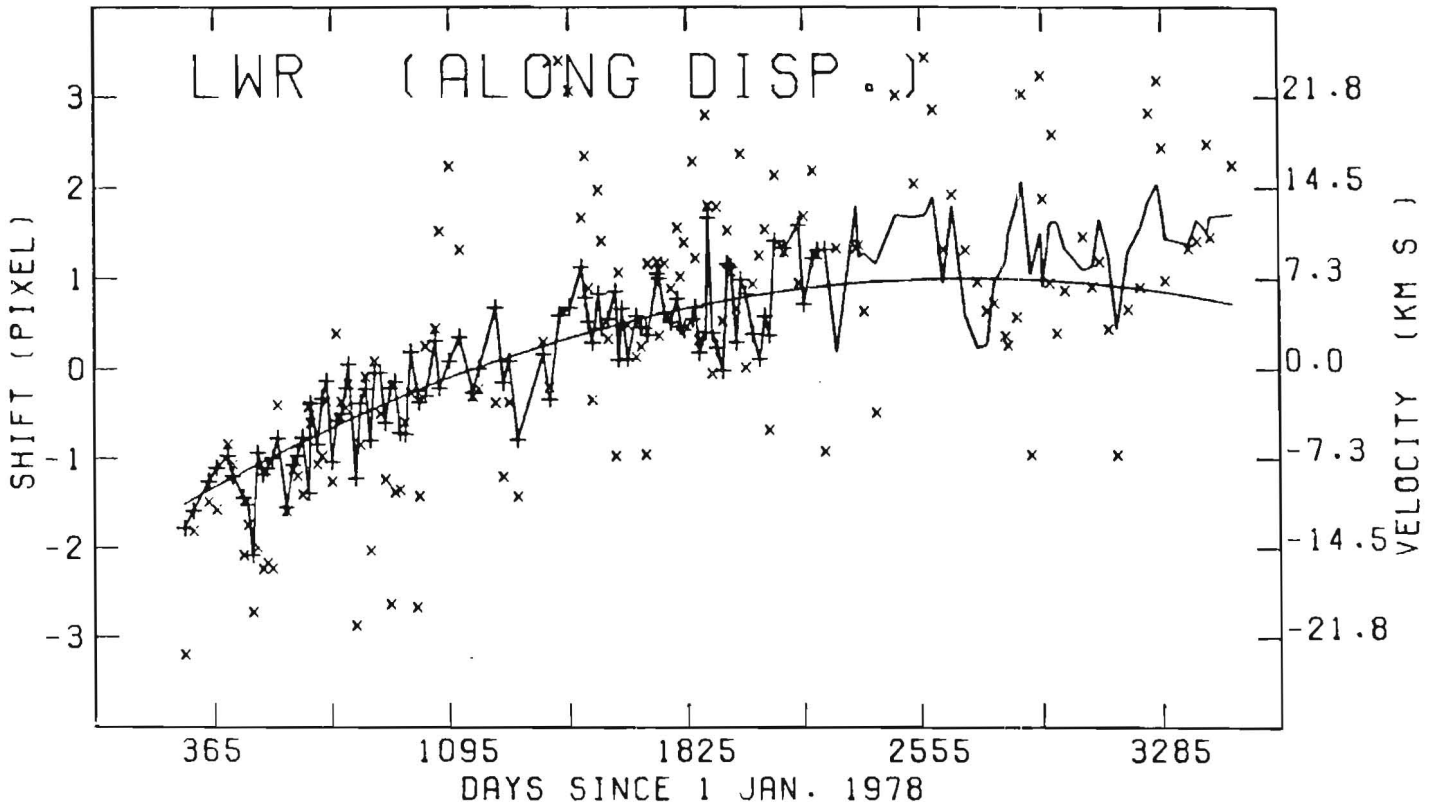


Figure 6

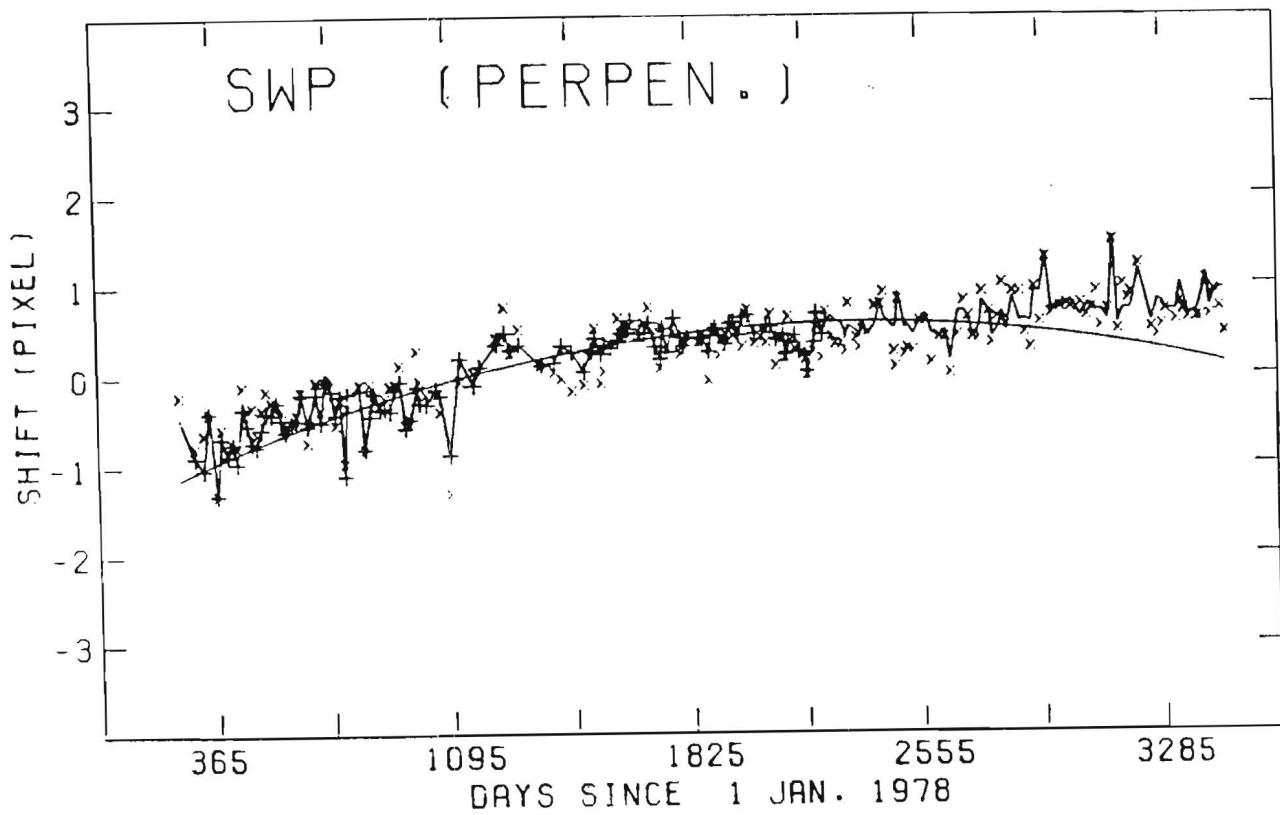
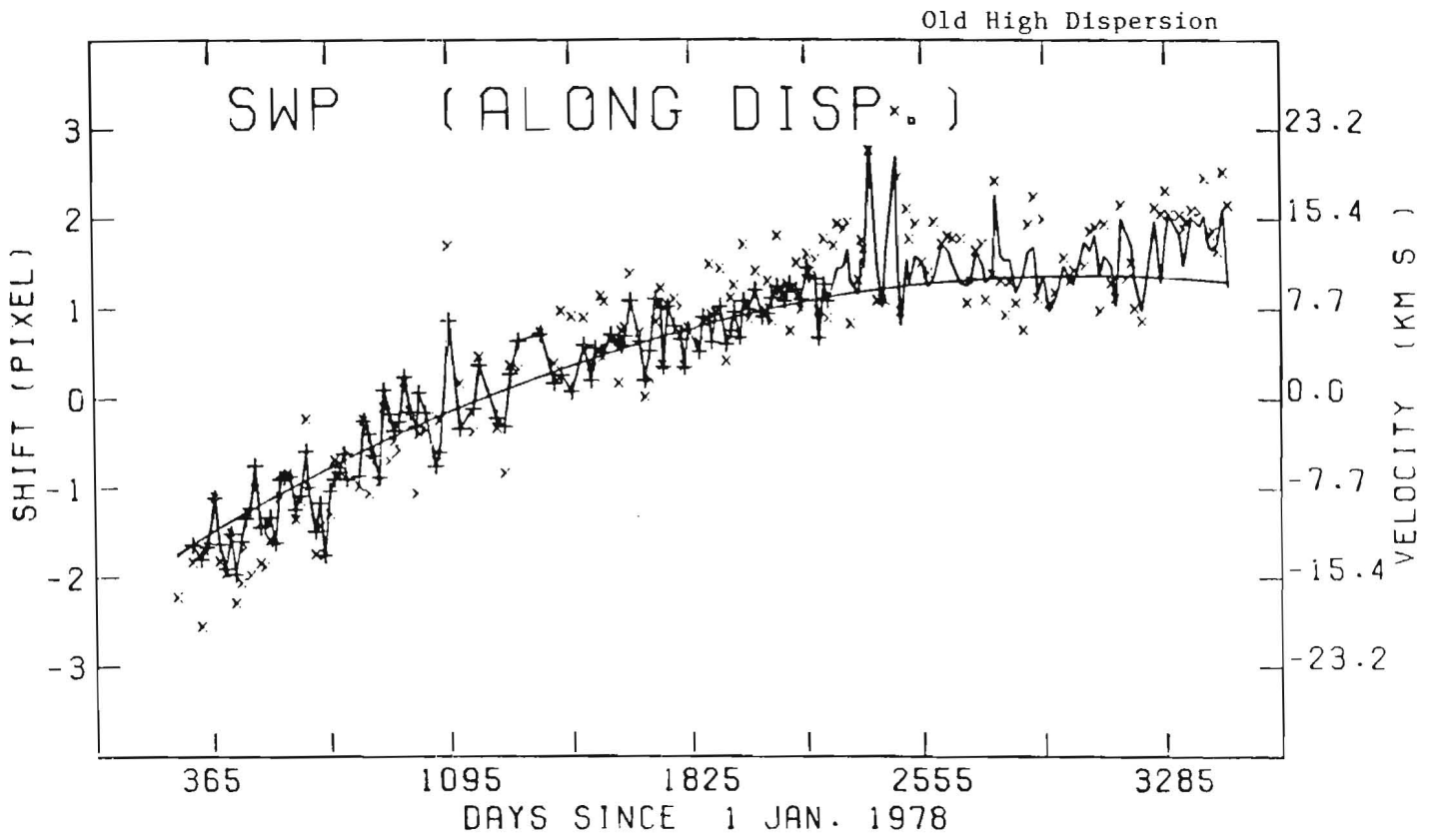


Figure 7

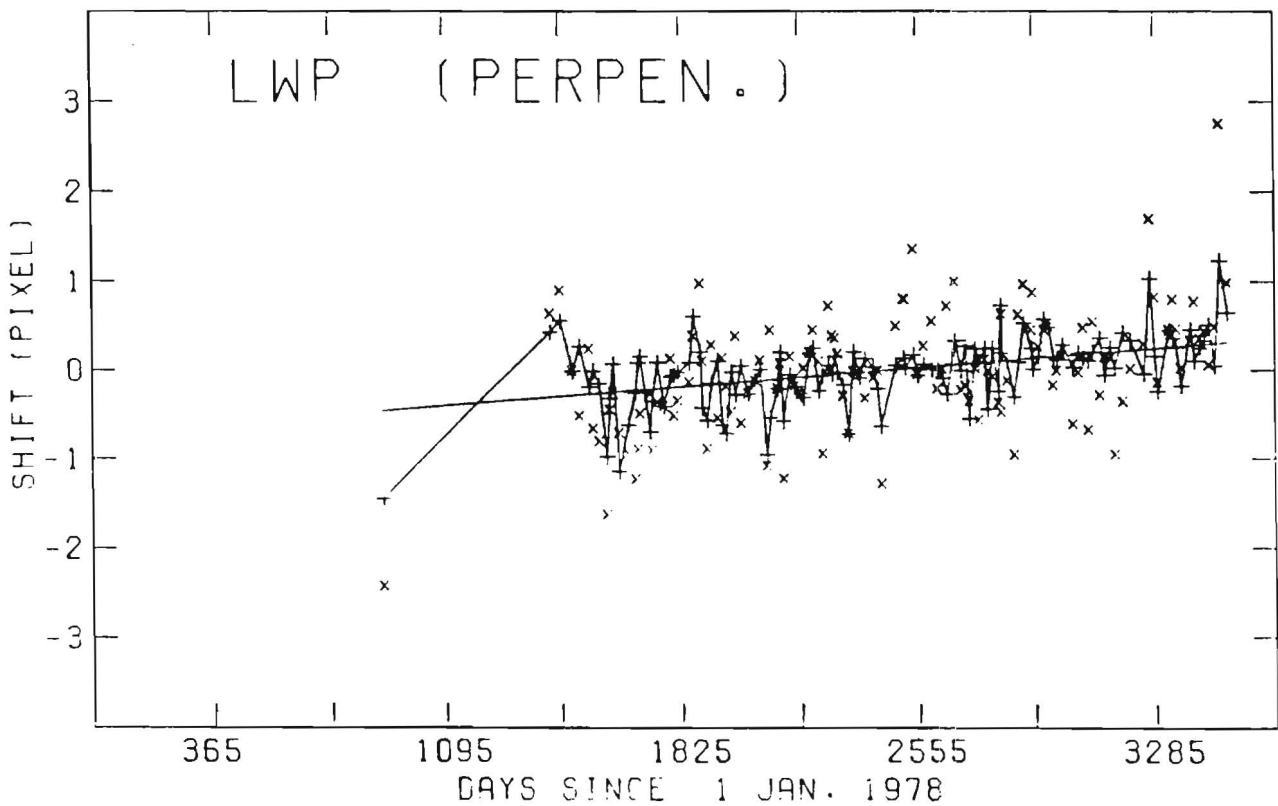
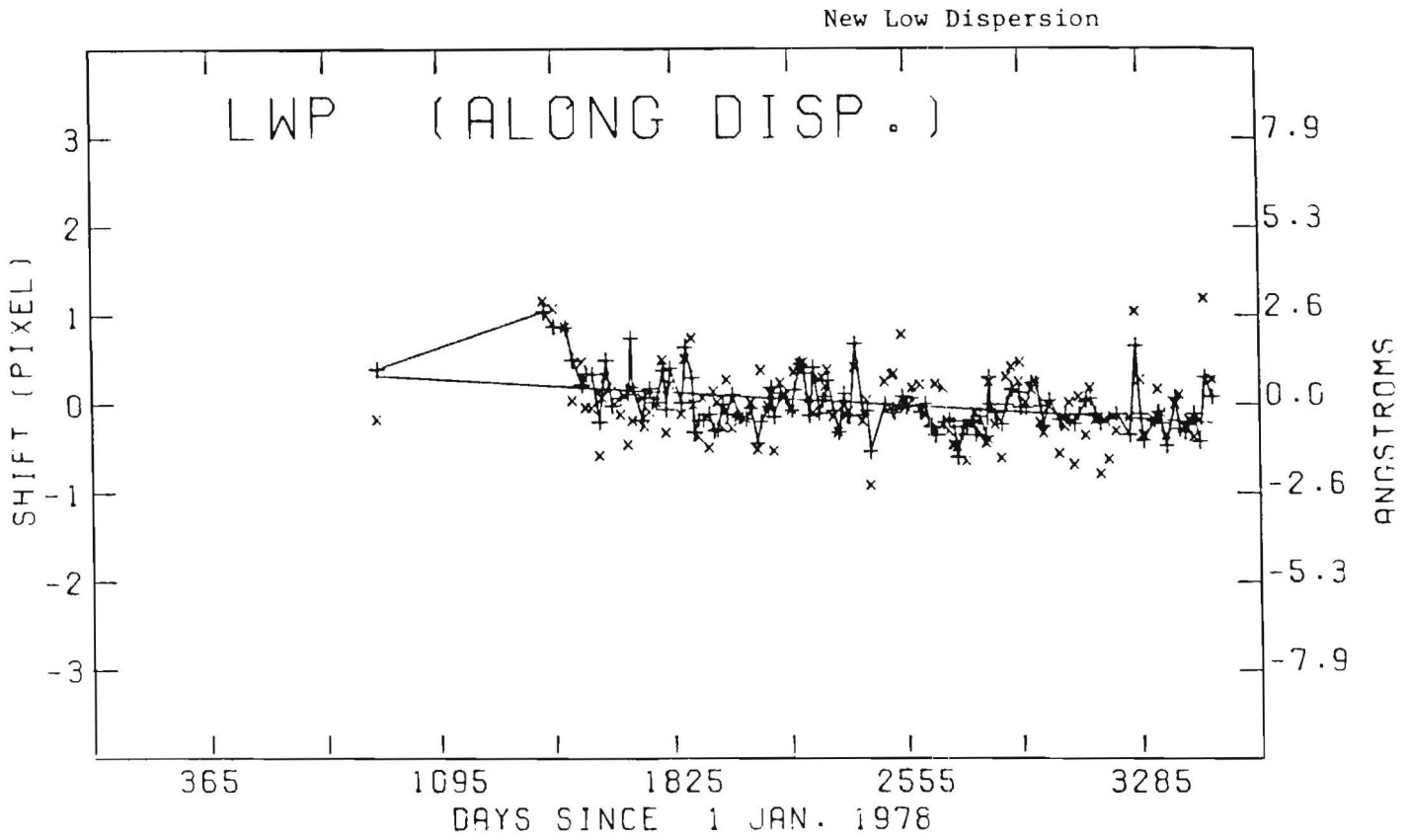


Figure 8

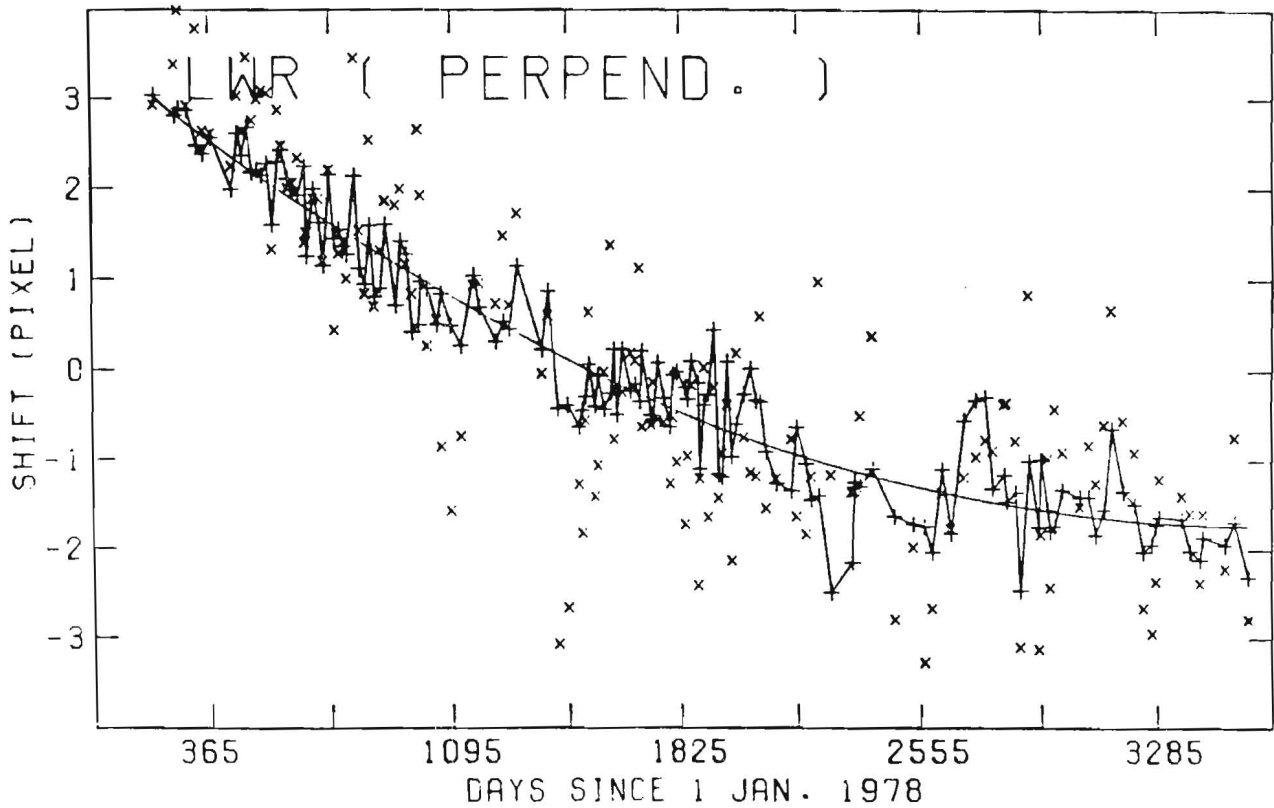
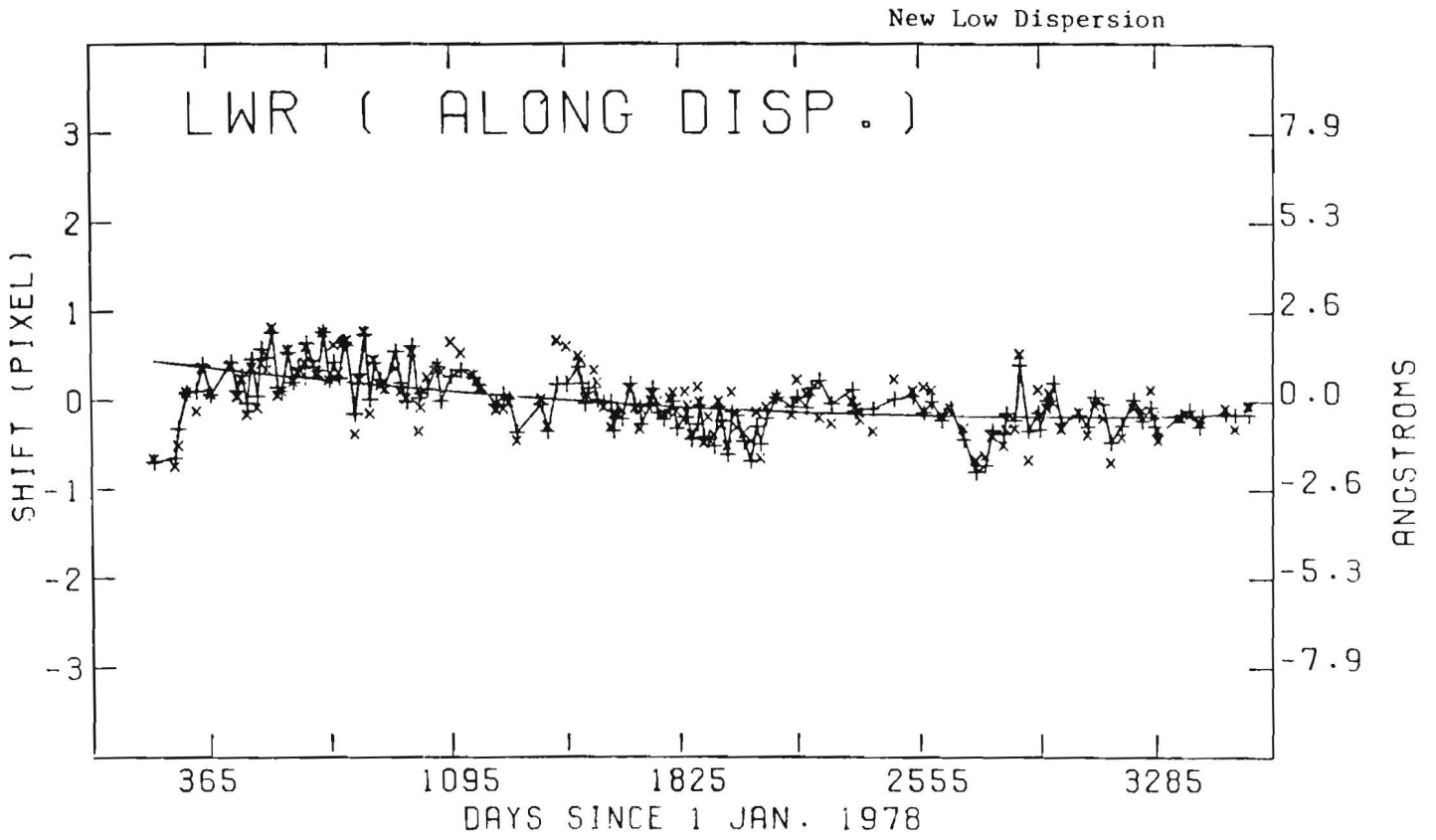


Figure 9

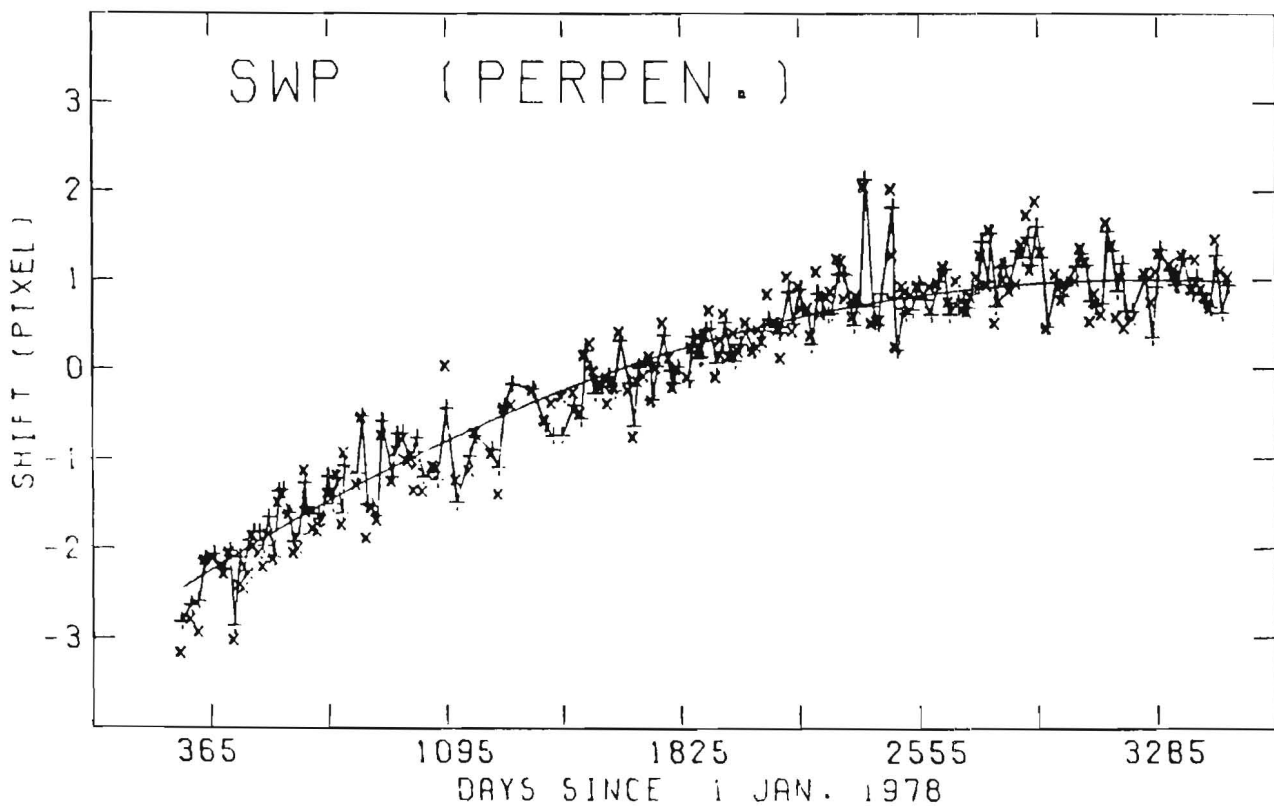
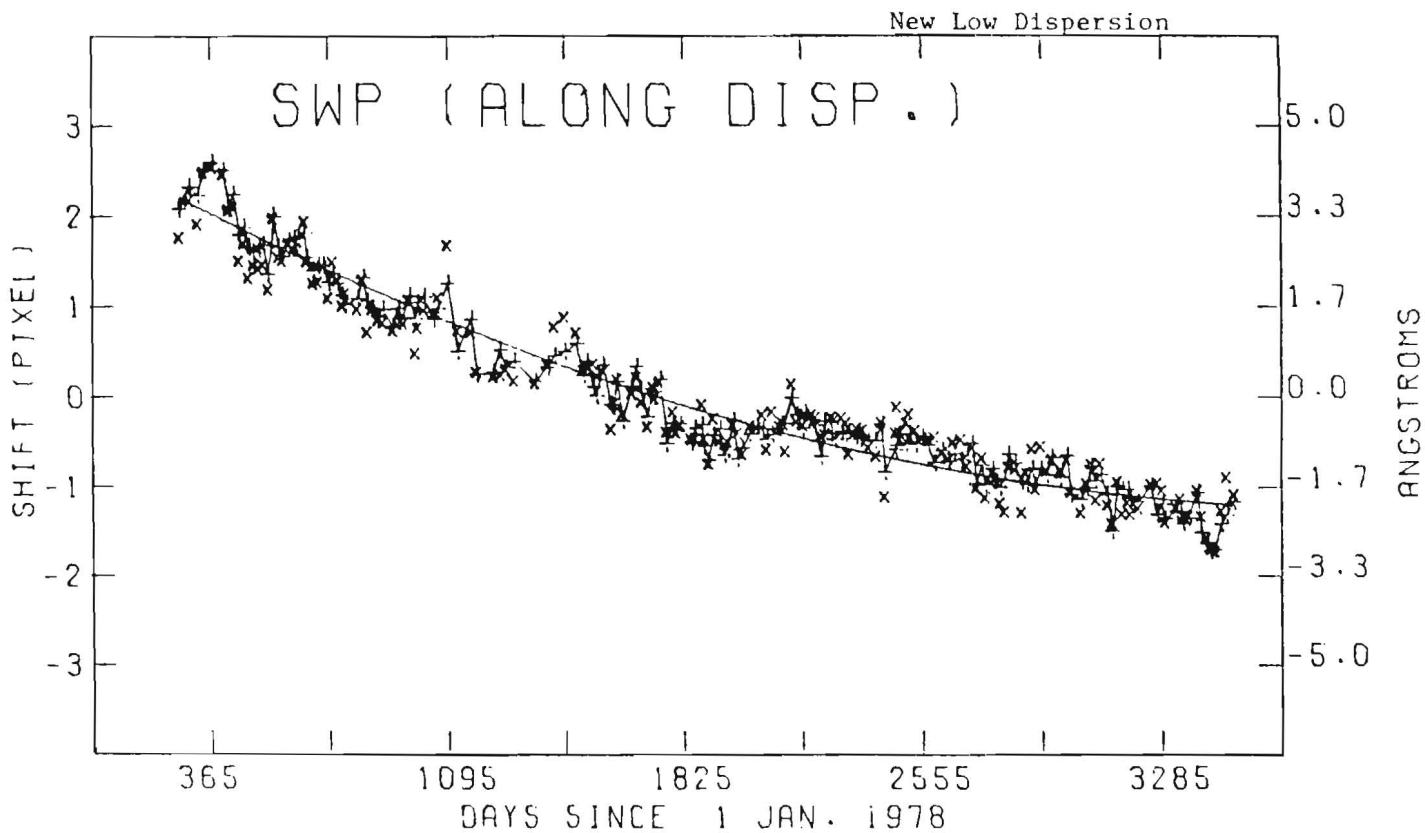


Figure 10

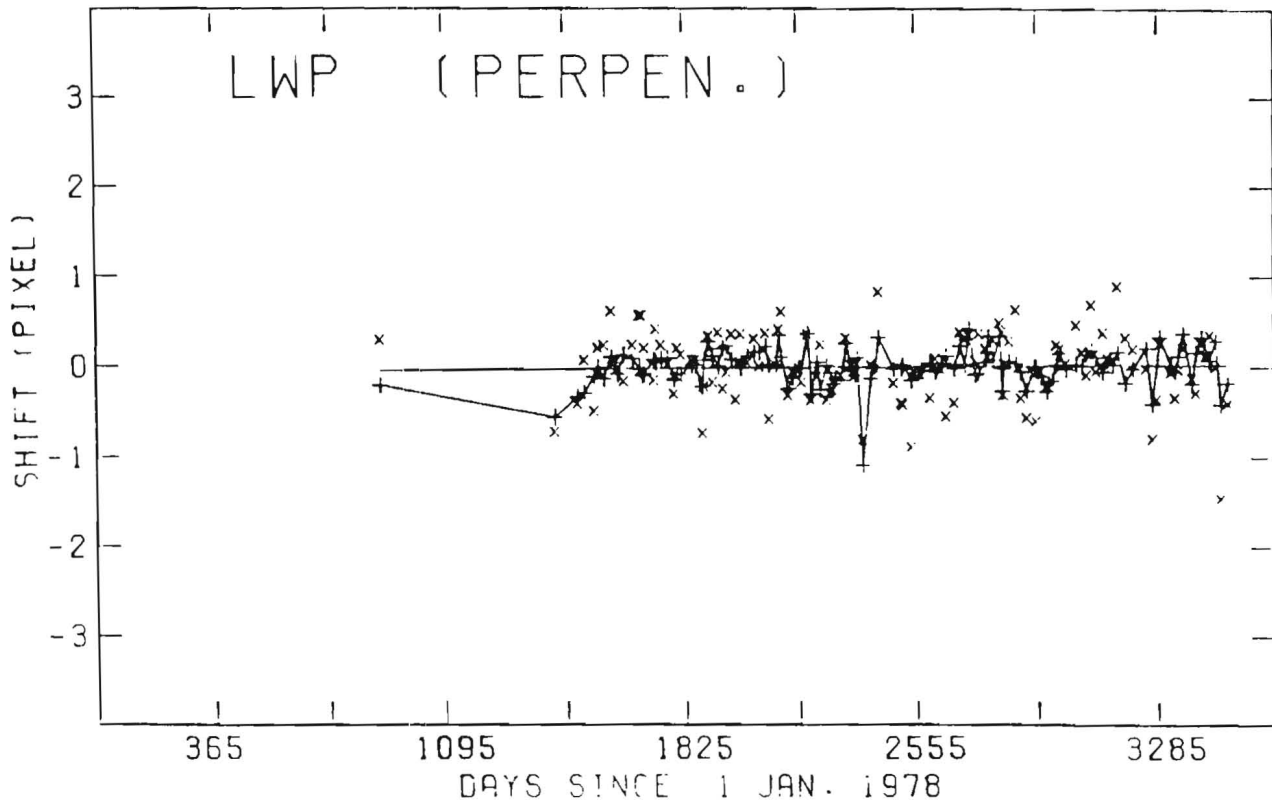
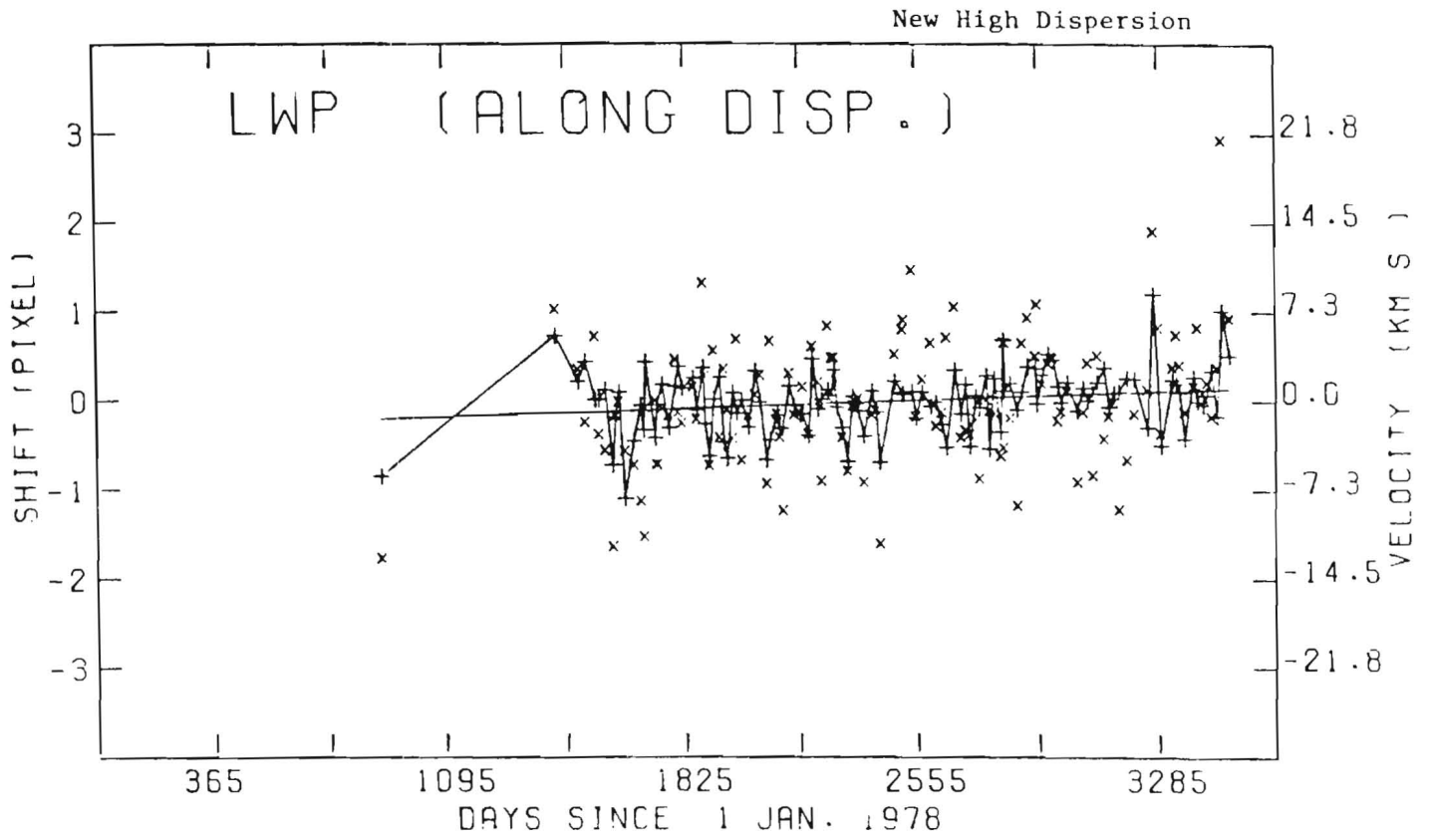


Figure 11

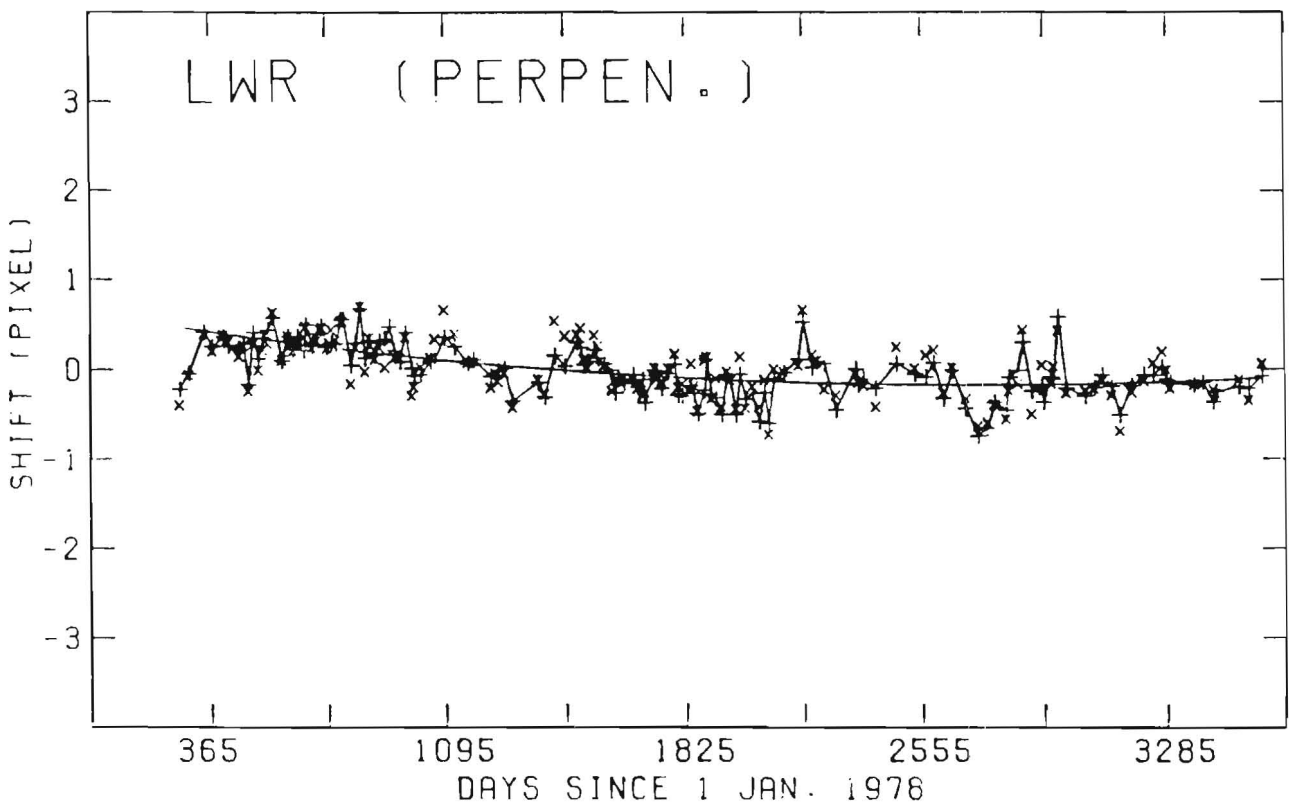
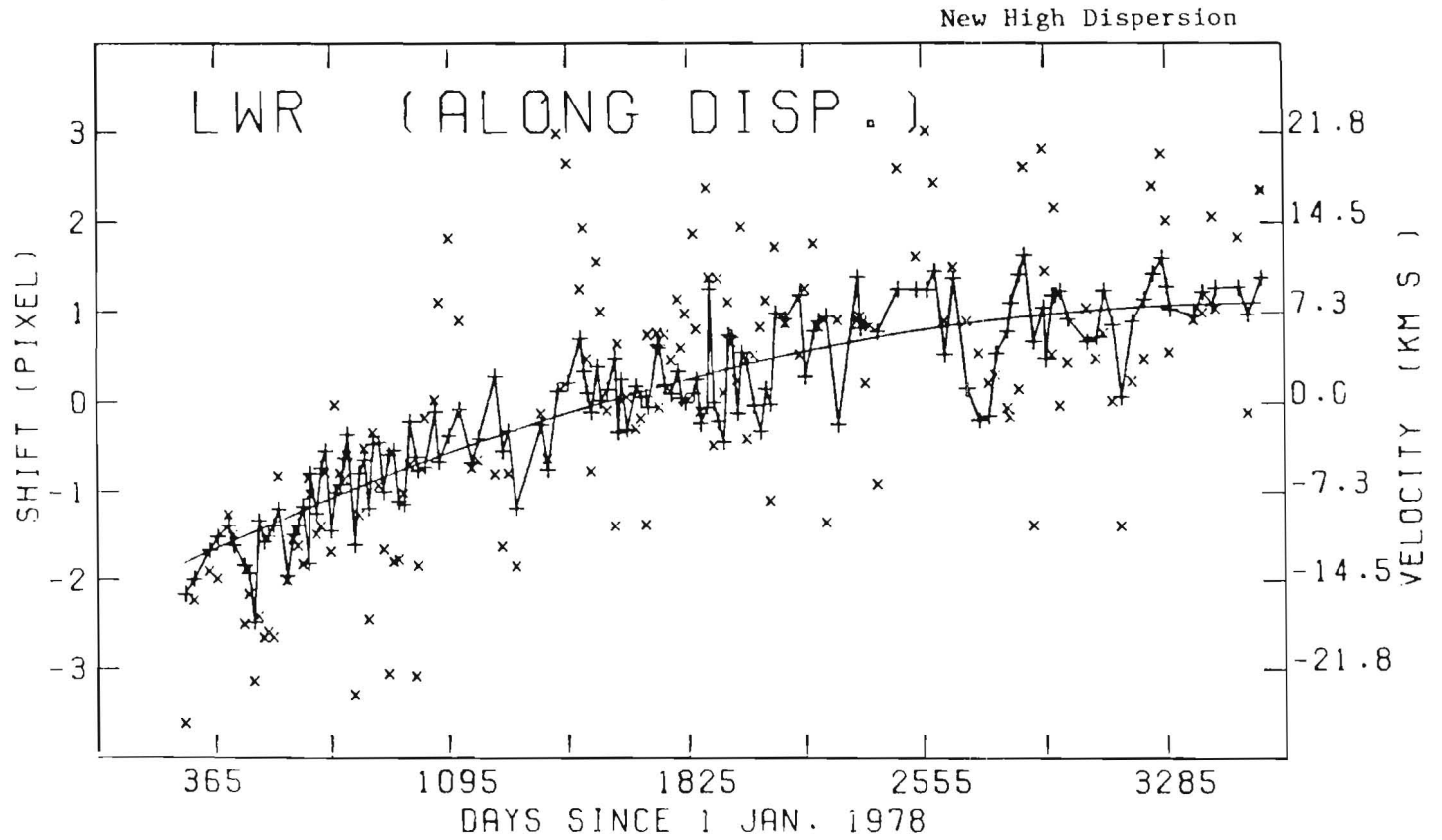


Figure 12

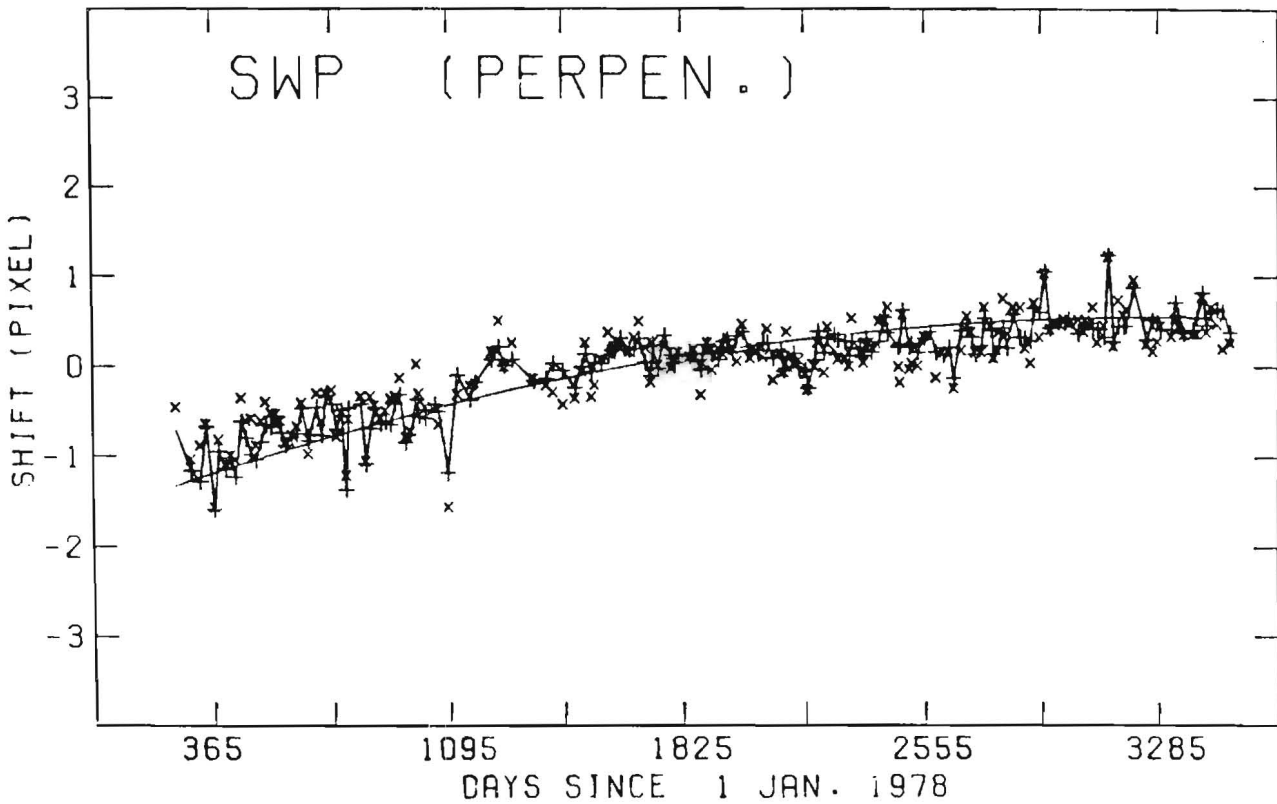
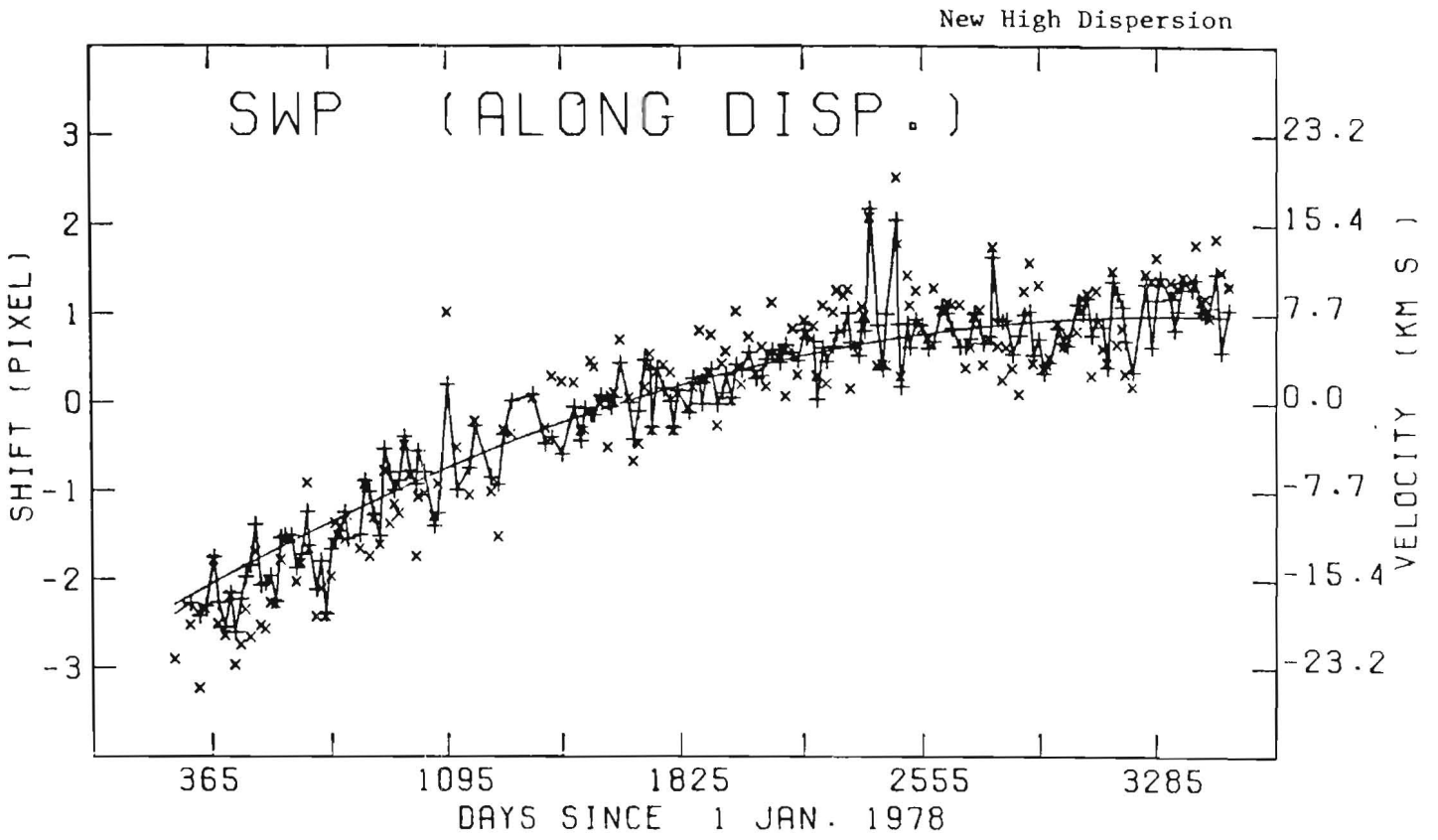
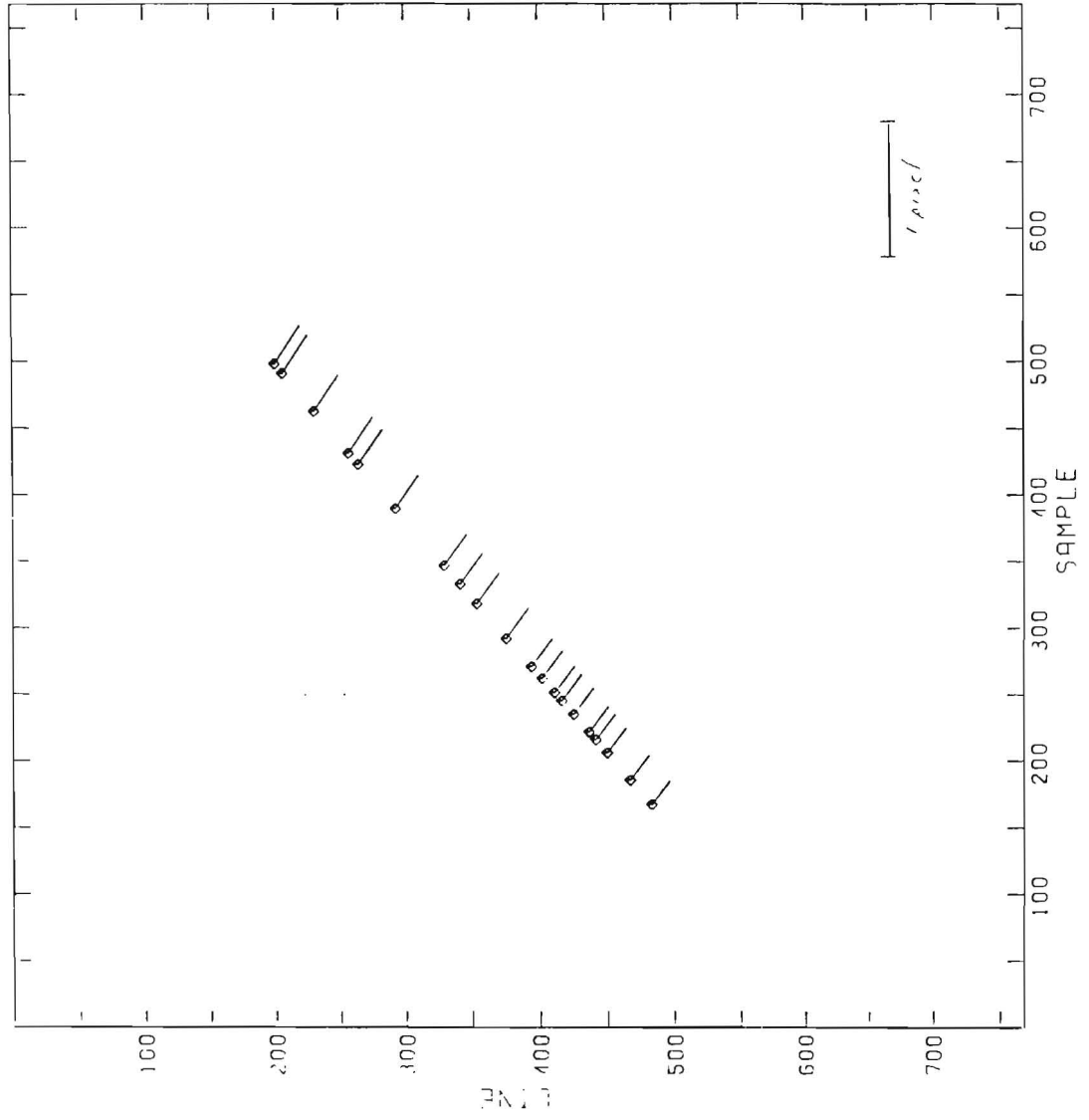


Figure 13



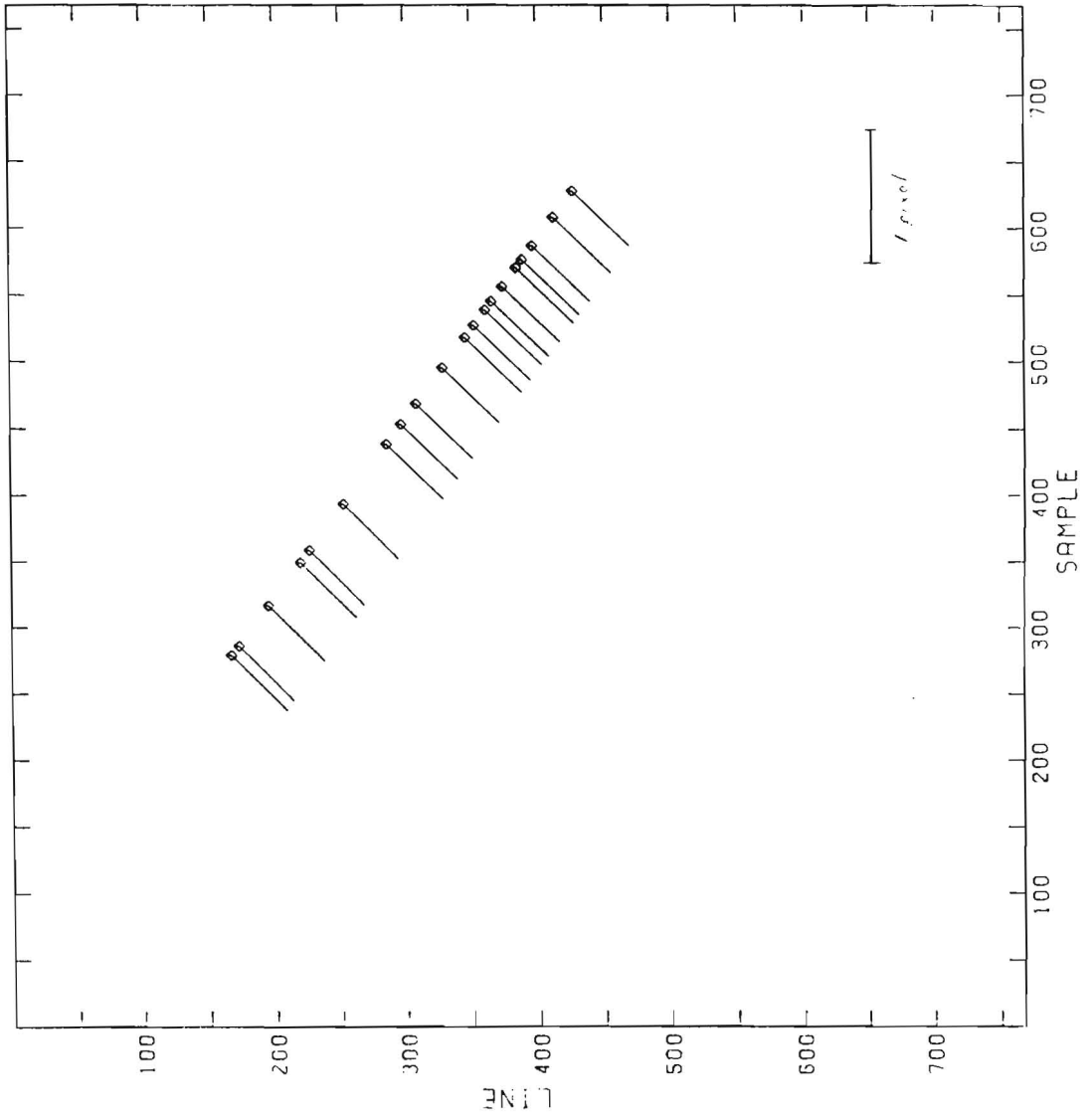
Low Dispersion

LWP CAMERA

MEAN

1.0000

Figure 14



Low Dispersion
LWR CAMERA

REFN

19:10 DEC 22, '87

Figure 15

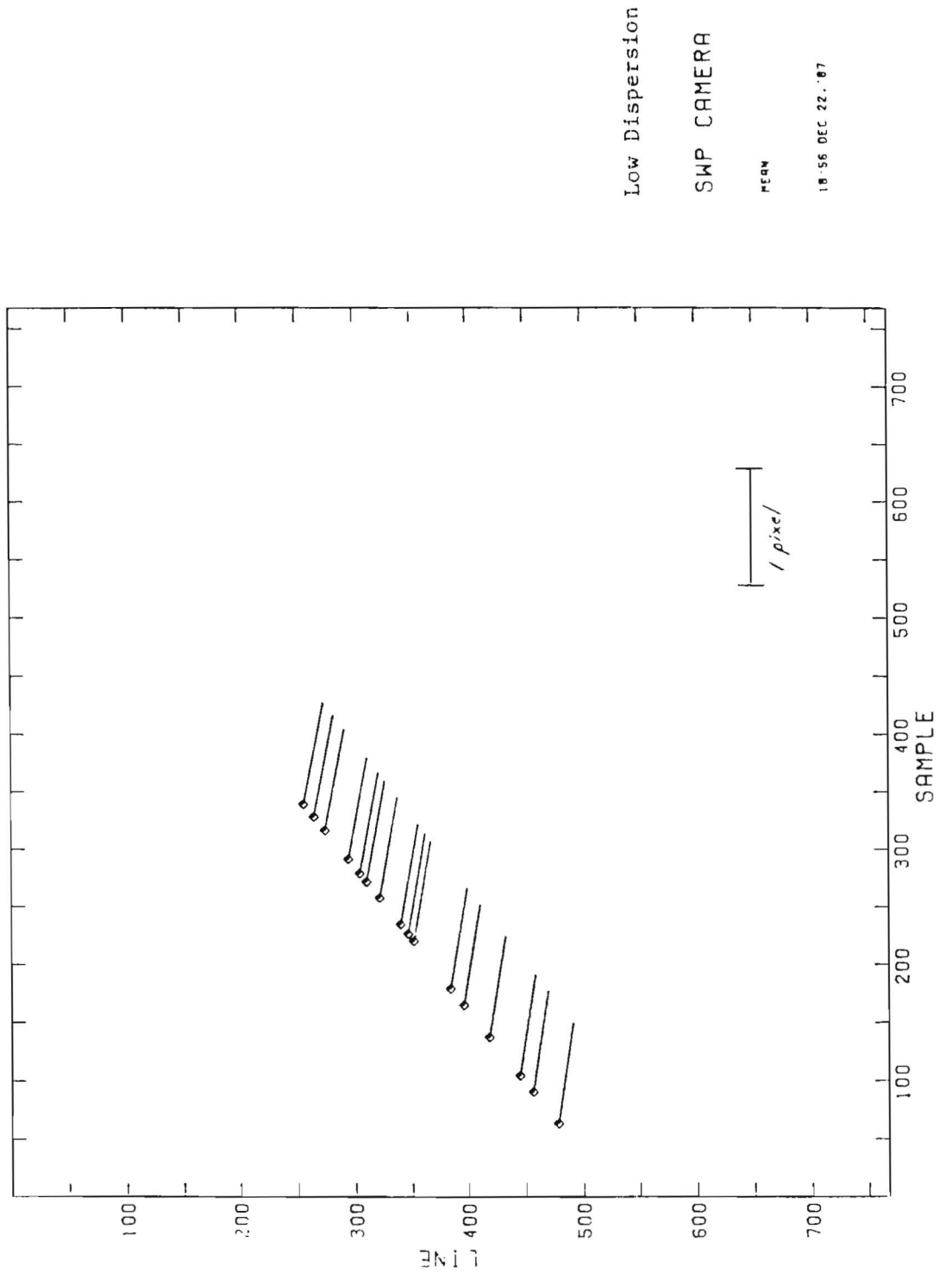


Figure 16

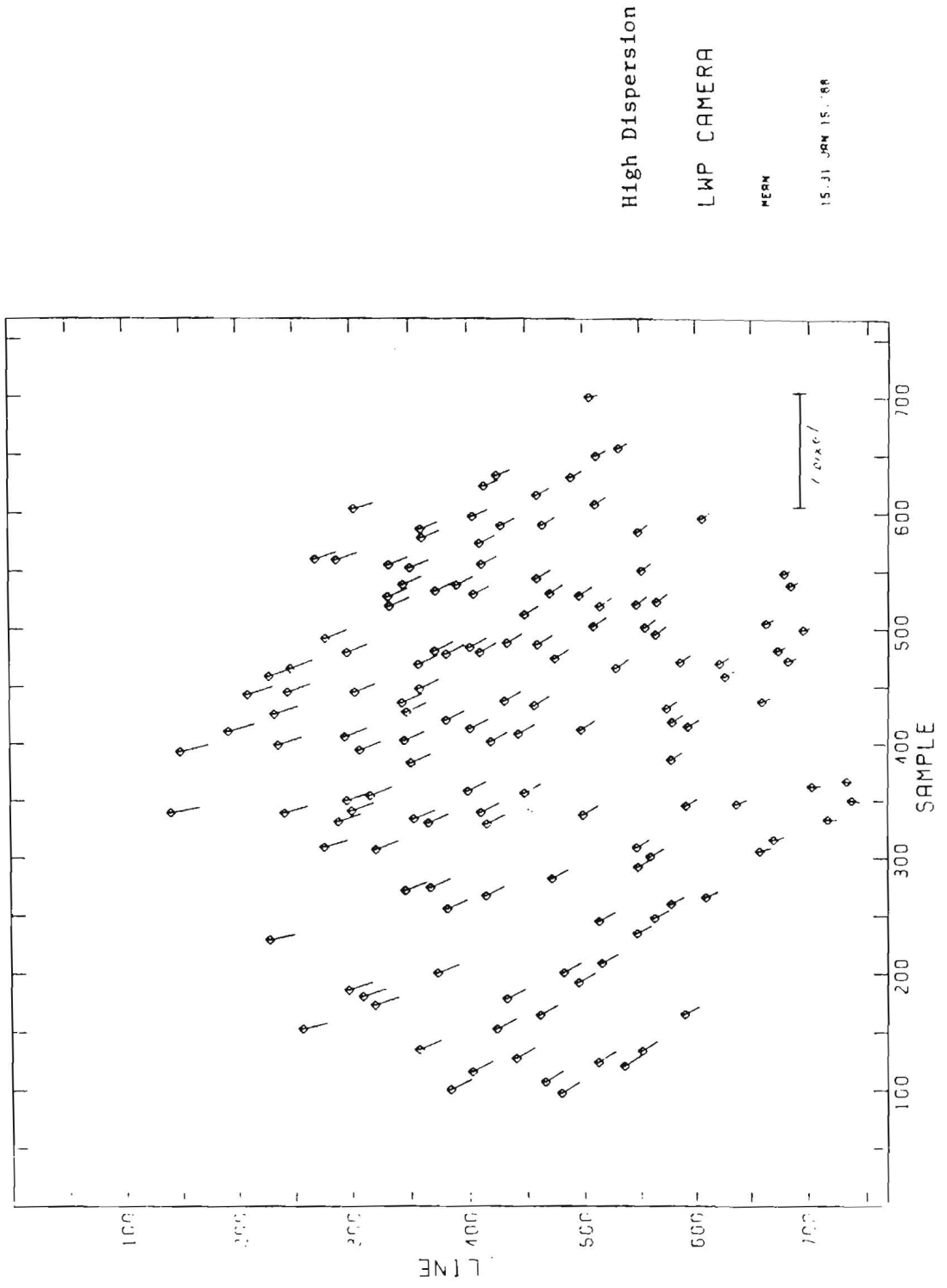


Figure 17

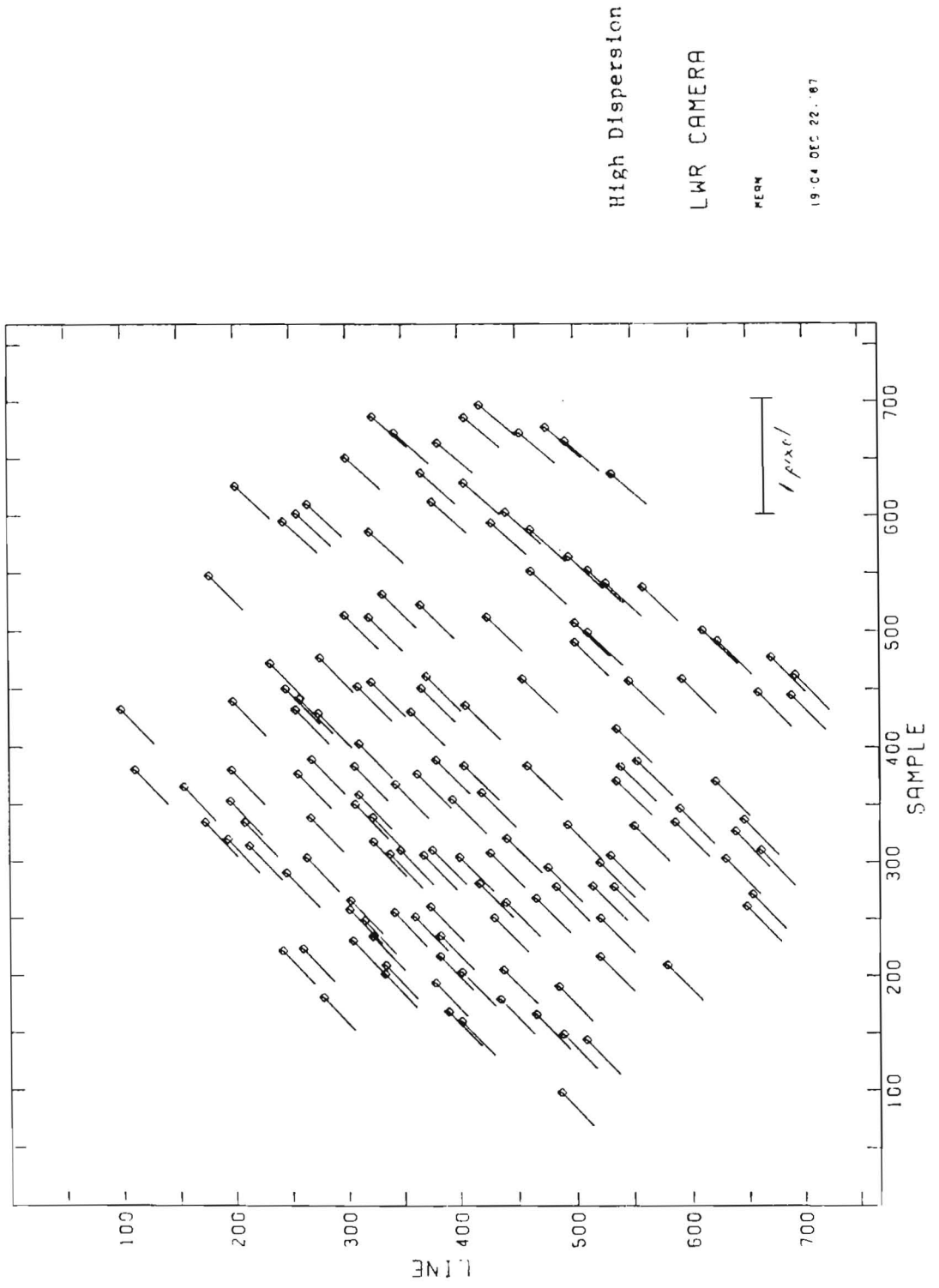
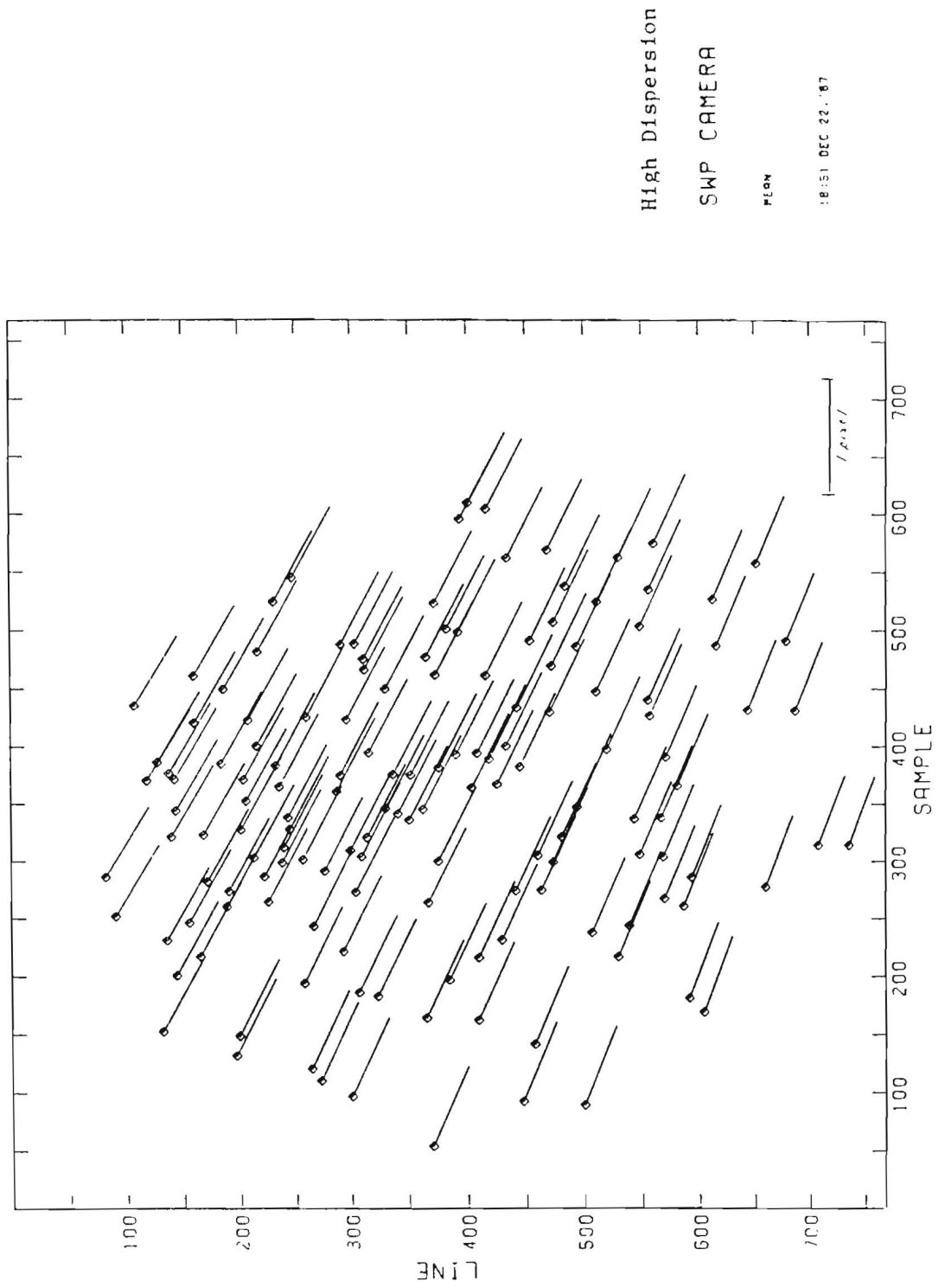


Figure 18



MERGED LOG OF IUE OBSERVATIONS

1 APRIL 1988 - 31 OCTOBER 1988

The merged log of Vilspa and Goddard images for the above dates is listed in order of right ascension. (For non-standard images the information given can be incomplete).

The programme reference codes (column 1) identifying the ESA and NASA proposals for the tenth round are listed in ESA IUE Newsletter, 28, 17, 1987.

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

00	SUN	50	R, N OR S TYPES
01	EARTH	51	LONG PERIOD VARIABLE STARS
02	MOON	52	IRREGULAR VARIABLES
03	PLANET	53	REGULAR VARIABLES
04	PLANETARY SATELLITE	54	DWARF NOVAE
05	MINOR PLANET	55	CLASSICAL NOVAE
06	COMET	56	SUPERNOVAE
07	INTERPLANETARY MEDIUM	57	SYMBIOTIC STARS
08	GIANT RED SPOT	58	T TAURI
09		59	X-RAY
10	W C	60	SHELL STAR
11	W N	61	ETA CARINAE
12	MAIN SEQUENCE O	62	PULSAR
13	SUPERGIANT O	63	NOVA-LIKE
14	OE	64	STELLAR OBJECT NOT INCLUDED ABOVE
15	OF	65	MISIDENTIFIED TARGETS
16	SD O	66	INTERACTING BINARIES
17	WD O	67	
18		68	
19	UV-STRONG	69	HERBIG-HARO OBJECTS
20	B0-B2 V-IV	70	PLANETARY NEBULAR+CENTRAL STAR
21	B3-B5 V-IV	71	PLANETARY NEBULAR-CENTRAL STAR
22	B6-B9,5 V-IV	72	H II REGION
23	B0-B2 III-I	73	REFLECTION NEBULA
24	B3-B5 III-I	74	DARK CLOUD (ABSORPTION SPECTRUM)
25	B6-B9,5 III-I	75	SUPERNOVA REMNANT
26	BE	76	RING NEBULA (SHOCK-IONISED)
27	BP	77	
28	SDB	78	
29	WDB	79	
30	A0-A3 V-IV	80	SPIRAL GALAXY
31	A4-A9 V-IV	81	ELLIPTICAL GALAXY
32	A0-A3 III-I	82	IRREGULAR GALAXY
33	A4-A9 III-I	83	GLOBULAR CLUSTER
34	AE	84	SEYFERT GALAXY
35	AM	85	QUASAR
36	AP	86	RADIO GALAXY
37	WDA	87	BL LACERTAE OBJECT
38	HORIZONTAL BRANCH	88	EMISSION LINE GALAXY (NON-SEYFERT
39	COMPOSITE	89	
40	F0-F2	90	INTERGALACTIC MEDIUM
41	F3-F9	91	
42	FP	92	
43	LATE TYPE DEGENERATE STARS	93	
44	G (TO 1FEB79); GIV-VI (FROM 1FEB79)	94	
45	G I-II (FROM 1FEB79)	95	
46	K (TO 1FEB79); K IV-VI (FROM 1FEB79)	96	
47	K I-III (FROM 1FEB79)	97	
48	M (TO 1FEB79); M DWARFS (FRM 1FEB79)	98	WAVELENGTH CALIBRATION (NASA LOG)
49	M I-III (FROM 1 FEB79)	99	NULLS AND FLAT FIELDS (NASA LOG)

THE CLASSIFICATION IS SUPPLIED BY D STICKLAND FOR USE ONLY WITHIN THE PROJECT
 (Please note the introduction of a new class 69. Ed)

EXPOSURE CLASSIFICATION CODES

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

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

The CONTINUUM and EMISSION are both classified as follows:-

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

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

The BACKGROUND classification codes are:- (limits inclusive)

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

NOTES

- 1) No exposure classification code was assigned to VILSPA images before 1 August 1978.
- 2) Prior to 1 Sept 1979, the BACKGROUND digit was not included and the ECC occupied the first two places in the comment line.
- 3) The Goddard images are described in the comments by the gross DN of the CONTINUUM (C), EMISSION LINES (E) and BACKGROUND (B).

PRO	Object	CL	MAG	R.A.	DEC	D C Image A	FES MD	Obs.date	Exptim	mmmsstt	ECC	Comment
PHCAL	T-FLOOD	98		000000	000000	L 3 34006 S		88080115 151700	000005		?9 G	E=10X,B=104
PHCAL	WAVECAL	98		000000	000000	L 3 34006 S		88080115 151900	000002		?9 G	E=10X,B=104
PHCAL	T-FLOOD	98		000000	000000	H 3 34007 S		88080115 154900	000005		?9 G	E=60X,B=111
PHCAL	WAVECAL	98		000000	000000	H 3 34007 S		88080115 155000	000200		?9 G	E=60X,B=111
PHCAL	T-FLOOD	98		000000	000000	L 1 13772 S		88080116 161900	000025		?9 G	E=10X,B=103
PHCAL	WAVECAL	98		000000	000000	L 1 13772 S		88080116 162000	000001		?9 G	E=10X,B=103
PHCAL	T-FLOOD	98		000000	000000	H 1 13773 S		88080116 164900	000025		?5 G	E=60X,B=68
PHCAL	WAVECAL	98		000000	000000	H 1 13773 S		88080116 165000	000016		?5 G	E=60X,B=68
JQ045	NULL	99	99.99	0000000	-000000	H 1 12986		88040503 000000	000000		003 U	
PHCAL	NULL	99	0.0	0000000	000000	L 3 33198 L		88040116 160000	000000		00 G	B=20
PHCAL	NULL	99	99.99	0000000	+000000	L 1 13023		88041302 025600	000000		004 U	
PHCAL	T-FLOOD	98	0.0	0000000	000000	L 1 13045 S		88041417 172700	000025		?5 G	E=10X,B=66
PHCAL	60% CALUV	99	99.99	0000000	+000000	L 1 13024 L		88041303 034332	000204		005 U	UVF TEMP=38
PHCAL	WAVCAL	98	0.0	0000000	000000	L 1 13045 S		88041417 172900	000001		?5 G	E=10X,B=66
PHCAL	20% CALUV	99	99.99	0000000	+000000	L 1 13025 L		88041304 041710	000041		002 U	UVF TEMP=37
PHCAL	T-FLOOD	98	0.0	0000000	000000	H 1 13046 S		88041418 180100	000025		?9 G	E=60X,B=107
PHCAL	120% CALUV	99	99.99	0000000	+000000	L 1 13026 L		88041304 045053	000000		009 U	UVF TEMP=42
PHCAL	WAVCAL	98	0.0	0000000	000000	H 1 13046 S		88041418 180300	000016		?9 G	E=60X,B=107
PHCAL	60% CALUV	99	99.99	0000000	+000000	L 1 13027 L		88041305 052912	000204		005 U	UVF TEMP=39
PHCAL	SAFETY	99	0.0	0000000	000000	H 2 18180 S		88041418 183700	000000		00 G	B=13
PHCAL	100% TFLOO	99	99.99	0000000	+000000	L 1 13028 L		88041305 055740	000140		009 U	
PHCAL	WAVCAL	98	0.0	0000000	000000	L 3 33282 S		88041419 190300	000002		?9 G	E=10X,B=101
PHCAL	100% TFLOO	99	99.99	0000000	+000000	L 1 13029		88041306 064527	000140		009 U	INSTEAD OF 160% CALU
PHCAL	T-FLOOD	98	0.0	0000000	000000	L 3 33282 S		88041419 190300	000005		?9 G	E=10X,B=101
PHCAL	2ND READ	99	99.99	0000000	+000000	L 1 13030		88041306 065920	000000		003 U	INSTEAD OF 160% CALU
PHCAL	T-FLOOD	98	0.0	0000000	000000	H 3 33283 S		88041419 193000	000005		?9 G	E=60X,B=126
PHCAL	NULL	99	99.99	0000000	+000000	L 1 13031		88041307 073640	000000		004 U	
PHCAL	WAVCAL	98	0.0	0000000	000000	H 3 33283 S		88041419 193100	000200		?9 G	E=60X,B=126
PHCAL	NULL	99	99.99	0000000	+000000	L 1 13032		88041308 080200	000000		001 U	
PHCAL	T-FLOOD	98	0.0	0000000	000000	L 2 18181 S		88041420 200400	000010		?7 G	E=10X,B=82
PHCAL	NULL	99	99.99	0000000	+000000	L 2 18191 L		88041801 013400	000000		U	4.5
PHCAL	WAVCAL	98	0.0	0000000	000000	L 2 18181 S		88041420 200600	000001		?7 G	E=10X,B=82
PHCAL	NULL	99	99.99	0000000	+000000	L 2 18192 L		88041802 020400	000000		007 U	4.5KV
PHCAL	T-FLOOD	98	0.0	0000000	000000	H 2 18182 S		88041420 203300	000010		?8 G	E=60X,B=99
PHCAL	60% CALUV	99	99.99	0000000	+000000	L 2 18193 L		88041802 023700	000234		006 U	4.5 KV
PHCAL	WAVCAL	98	0.0	0000000	000000	H 2 18182 S		88041420 203400	000022		?8 G	E=60X,B=99
PHCAL	20% CALUV	99	99.99	0000000	+000000	L 2 18194 L		88041803 030900	000051		002 U	LWR 4.5 KV
PHCAL	T-FLOOD	98	0.0	0000000	000000	H 2 18183 S		88041421 211100	000010		008 G	B=92
PHCAL	120% CALUV	99	99.99	0000000	+000000	L 2 18195 L		88041803 035500	000509		009 U	LWR 4.5 KV
PHCAL	T-FLOOD	98	0.0	0000000	000000	L 3 33284 S		88041422 220900	000005		009 G	B=103
PHCAL	60% CALUV	99	99.99	0000000	+000000	L 2 18196 L		88041804 044000	000234		006 U	LWR 4.5 KV
PHCAL	WAVCAL	98	0.0	0000000	000000	L 1 13047 S		88041422 223400	000025		009 G	B=103
PHCAL	100% TFLOO	99	99.99	0000000	+000000	L 2 18197 L		88041805 050700	000030		009 U	LWR 4.5 KV
PHCAL	NULL	99	0.0	0000000	000000	L 2 18184		88041717 172500	000000		00 G	B=11
PHCAL	160% CALUV	99	99.99	0000000	+000000	L 2 18198 L		88041805 053800	000652		009 U	LWR 4.5 KV -READ ONL

PRO	Object	CL	MAG	R.A.	DEC	D C Image A	FES	MD	Obs.date	Exptim	mmmsstt	ECC	Comment
PHCAL	NULL	99		0000000	-000000	1 13216			88051307	070100	000000		04 G B=55
PHCAL	2NDREAD	99	99.99	0000000	+000000	L 2 18199 L			88041806	063000	000000		001 V LWR 4.5 KV
PHCAL	NULL	99	0.0	0000000	000000	H 2 18213			88062813	131800	000000		03 G B=42
PHCAL	NULL	99	99.99	0000000	+000000	L 2 18200 L			88041807	071000	000000		005 V LWR 4.5 KV
PHCAL	T-FLOOD	98	0.0	0000000	000000	L 1 13545 L			88070113	131400	000025		05 G D=10X,B=65
PHCAL	NULL	99	99.99	0000000	+000000	L 2 18201 L			88041807	073200	000000		001 V
PHCAL	WAUCAL	98	0.0	0000000	000000	L 1 13545 L			88070113	131600	000001		?5 G E=10X,B=65
JET00	NULL	99	99.99	0000000	+000000	L 1 13068 L			88041807	075800	000000		001 V
PHCAL	T-FLOOD	98	0.0	0000000	000000	H 1 13546 L			88070113	135700	000025		?9 G E=60X,B=105
JM055	NULL	99	99.99	0000000	+000000	1 13094			88042202	021820	000000		202 V READ AFTER 70X LDC 0
PHCAL	WAUCAL	98	0.0	0000000	000000	H 1 13546 L			88070113	135900	000016		?9 G E=60X,B=105
JIT00	NULL	99	99.99	0000000	-000000	3 33363			88042601	013400	000000		V
PHCAL	T-FLOOD	98	0.0	0000000	000000	L 3 33842 S			88070115	151400	000005		?9 G E=10X,B=115
PHCAL	NULL	99	99.99	0000000	+000000	L 3 33384			88042802	023500	000000		000 V
PHCAL	WAUCAL	98	0.0	0000000	000000	L 3 33842 S			88070115	151600	000002		?9 G E=10X,B=115
PHCAL	60%CALUV	99	99.99	0000000	+000000	L 3 33385			88042803	031250	000149		001 V
PHCAL	T-FLOOD	98	0.0	0000000	000000	H 3 33843 S			88070115	154500	000005		?9 G E=60X,B=107
PHCAL	20%CALUV	99	99.99	0000000	+000000	L 3 33386			88042803	030421	000036		001 V
PHCAL	WAUCAL	98	0.0	0000000	000000	H 3 33843 S			88070115	154600	000200		?9 G E=60X,B=107
PHCAL	120%CALUV	99	99.99	0000000	+000000	L 3 33387			88042804	041994	000338		002 V
PHCAL	T-FLOOD	98	0.0	0000000	000000	L 2 18222 S			88070116	161800	000010		?9 G E=10X,B=140
PHCAL	60%CALUV	99	99.99	0000000	+000000	L 3 33388			88042804	045026	000149		001 V
PHCAL	WAUCAL	98	0.0	0000000	000000	L 2 18222 S			88070116	162000	000001		?9 G E=10X,B=140
PHCAL	100%TFLOOD	99	99.99	0000000	+000000	L 3 33389			88042805	051842	000016		009 V
PHCAL	T-FLOOD	98	0.0	0000000	000000	H 2 18223 S			88070116	164700	000010		?09 G C=60X,B=137
PHCAL	160% CALUV	99	99.99	0000000	+000000	L 3 33390			88042805	054600	000451		009 V
PHCAL	WAUCAL	98	0.0	0000000	000000	H 2 18223 S			88070116	164900	000022		?09 G C=60X,B=137
PHCAL	2ND READ	99	99.99	0000000	+000000	L 3 33391			88042806	061200	000000		000 V
PHCAL	T-FLOOD	99	0.0	0000000	000000	H 1 13547			88070117	175100	000025		08 G B=97
PHCAL	NULL	99	99.99	0000000	+000000	L 3 33392			88042806	063100	000000		000 V
PHCAL	TFLOOD	99	0.0	0000000	000000	L 3 33844 S			88070118	182300	000005		09 G B=111
PHCAL	NULL	99	99.99	0000000	+000000	L 3 33393			88042806	065200	000000		000 V
PHCAL	T-FLOOD	98	0.0	0000000	000000	L 1 13977 S			88090207	074800	000025		?8 G E=10X,B=100
PHCAL	NULL	99	99.99	0000000	+000000	L 1 13564			88070420	203200	000000		001 V
PHCAL	WAUCAL	98	0.0	0000000	000000	L 1 13977 S			88090207	075000	000001		?8 G E=10X,B=100
KQTOO	NULL	99	99.99	0000000	+000000	L 2 18224			88071520	205500	000000		000 V
PHCAL	T-FLOOD	98	0.0	0000000	000000	H 1 13978 S			88090208	082000	000025		?9 G E=60,B=104
KQTOO	NULL	99	99.99	0000000	+000000	L 1 13655			88071602	022500	000000		000 V
PHCAL	WAUCAL	98	0.0	0000000	000000	H 1 13978 S			88090208	082200	000016		?9 G E=60X,B=104
KC214	100% TFLOO	99	99.99	0000000	+000000	H 3 34146			88082915	153729	000016		009 V
PHCAL	NULL	99	0.0	0000000	000000	H 2 18227			88090208	085300	000000		G
KC214	50%TFLOOD	99	99.99	0000000	+000000	H 3 34147			88082916	160214	000000		007 V
PHCAL	T-FLOOD	98	0.0	0000000	000000	L 3 34171 S			88090209	091800	000005		?9 G E=10X,B=104
KC214	30%TFLOOD	99	99.99	0000000	+000000	H 3 34148			88082917	174717	000005		004 V
PHCAL	WAUCAL	98	0.0	0000000	000000	L 3 34171 S			88090209	092000	000002		?9 G E=10X,B=104

PRO	Object	CL	MAG	R.A.	DEC	D C Image A	FES	MD	Obs.date	Exptim	mmmsstt	ECC	Comment
KC214	18%TFLOOD	99	99.99	0000000	+000000	H 3 34149			88082918	181319	000003	002	U
PHCAL	T-FLOOD	98	0.0	0000000	000000	H 3 34172 S			88090209	094500	000005	?9	G E=60X,B=118
KC214	TFLOOD	99	99.99	0000000	+000000	H 3 34453			88101115	150611	000005	003	U
PHCAL	WAUCAL	98	0.0	0000000	000000	H 3 34172 S			88090209	094700	000200	?9	G E=60X,B=118
KC214	TFLOOD	99	99.99	0000000	+000000	H 3 34454			88101115	153749	000005	004	U
PHCAL	T-FLOOD	98	0.0	0000000	000000	L 2 18228 S			88090210	100600	000010	?8	G E=10X,B=95
KC214	TFLOOD	99	99.99	0000000	+000000	H 3 34455			88101116	160240	000005	004	U
PHCAL	WAUCAL	98	0.0	0000000	000000	L 2 18228 S			88090210	100800	000001	?8	G E=10X,B=95
KC214	TFLOOD	99	99.99	0000000	+000000	H 3 34456			88101116	162826	000005	004	U
PHCAL	T-FLOOD	98	0.0	0000000	000000	H 2 18229 S			88090210	103300	000010	09	G E=60X,B=122
KC214	TFLOOD	99	99.99	0000000	+000000	H 3 34457			88101116	165437	000005	004	U
PHCAL	WAUCAL	98	0.0	0000000	000000	H 2 18229 S			88090210	103500	000022	?9	G E=60X,B=122
KM106	NULL	99	99.99	0000000	+000000	L 1 14266 L			88101713	134500	000000	000	U
PHCAL	TFLOOD	99	0.0	0000000	000000	H 2 18230			88090211	110900	000010	09	G B=130
KM106	NULL	99	99.99	0000000	+000000	L 3 34492 L			88101813	130600	000000	000	U
PHCAL	TFLOOD	99	0.0	0000000	000000	H 1 13979			88090212	123600	000025	09	G B=103
KC091	NULL	99	99.99	0000000	+000000	1 14316			88102613	130300	000000		U TO CHECK AND ERASE P
PHCAL	TFLOOD	99	0.0	0000000	000000	H 3 34173			88090212	123800	000005	09	G B=105
PHCAL	NULL	99	99.99	0000000	+000000	L 3 34644			88103116	164500	000000		U
PHCAL	60% CALUV	99	99.99	0000000	+000000	L 3 34645 L			88103117	172514	000149		U FINAL UVF T=34
PHCAL	20% CALUV	99	99.99	0000000	+000000	L 3 34646			88103117	175442	000036		U FINAL UVF =32
PHCAL	120% CALUV	99	99.99	0000000	+000000	L 3 34647			88103118	182831	000338		U FINAL UVF=38
PHCAL	60% CALUV	99	99.99	0000000	+000000	L 3 34648			88103118	185839	000149		U FINAL UVF=36
PHCAL	160% CALUV	99	99.99	0000000	+000000	L 3 34649			88103119	192905	000451		U READ ONLY
PHCAL	2ND READ	99	99.99	0000000	+000000	L 3 34650			88103119	194700	000000		U READPREP
DCKNE	HD	358	2.06	0005479	+284859	L 3 34109 L	3208	FU	88082009	093200	000000	500	G C=168,B=14
DCKNE	HD	358	2.06	0005479	+284859	L 1 13881 L	3208	FU	88082009	093800	000000	X02	G C=2X,B=32
KM191	HD432	41	02.73	0006297	+585227	E 9 02081 2	2231	FU	88071920	205100	016000		U
ISKRH	HD	432	4.0	0006323	+585220	H 3 33945 S	2231	FU	88072004	041200	077200	?37	G E=134,C=50X,B=88
CEKTS	BD +63	3	3.9	0006477	+634031	L 1 13537 L	1525	FO	88063013	135100	003000	4X6	G E=1.5X,C=204,B=80
BCKTT	HD	2207	5.3	0023367	+510013	H 1 13849 L	1428	FO	88081422	225300	029700	407	G C=216,B=82
BCKTT	HD	2207	5.3	0023367	+510013	H 1 13850 L	1941	FO	88081506	064400	021000	X06	G C=1.5X,B=79
DCKTT	NGC	129A	4.1	0027100	+595606	L 1 13872 L	667	FO	88081809	093800	005300	X03	G C=1.5X,B=48
HCKEB	NGC	129-105	25	0027124	+595532	L 1 14308 L			88102309	090600	002000	309	G C=203,B=105
HCKEB	NGC	129-105	25	0027124	+595532	L 3 34556 L	410	SO	88102309	093900	003000	305	G C=101,B=62
HCKEB	NGC	129-170	41	0027178	+595230	L 3 34469 L	663	FO	88101321	214100	018000	304	G C=100,B=55
NCKPH	N	3	7.2	0029384	-740418	L 3 33809 L		BO	88062418	181000	009500	400	G C=140,B=20
NCKPH	N	3	7.2	0029384	-740418	L 1 13497 L			88062419	195300	005500	303	G C=125,B=42
GKLD	HD	3175	2.1	0032078	-632014	H 3 34067 L	552	FO	88081002	022100	030000	X09	G C=3X,B=105
PHCAL	HD3360	20	03.91	0034103	+533720	L 1 13614 L	783	FU	88071023	235003	000000	601	U
PHCAL	HD	3360	2.0	0034103	+533719	H 2 18215 L	804	FU	88062814	144900	000029	502	G C=205,B=32
PHCAL	HD3360	20	03.89	0034103	+533720	L 1 13615 L	793	FU	88071100	002042	000000	601	U
PHCAL	HD	3360	2.0	0034103	+533719	L 3 33860 L	801	FU	88070416	162100	000024	?05	G C=60X,B=65
PHCAL	HD3360	20	03.89	0034103	+533720	L 1 13616 L	793	FU	88071100	005228	000000	601	U
PHCAL	HD	3360	2.0	0034103	+533719	L 1 13563 L	805	FU	88070416	162600	000021	?07	G C=60X,B=88

PRO	Object	CL	MAG	R.A.	DEC	D C	Image A	FES	MD	Obs.date	Exptim	mmmsstt	ECC	Comment
PHCAL	HD3360	20	03.89	0034103	+533720	L 1	13617 L	799	FU	88071101	012429	000000	501	U
PHCAL	HD	3360	20	3.68	0034103	+533719	H 3 33883 L	819	FO	88070911	113700	000024	402	G C=184,B=35
PHCAL	HD3360	20	03.88	0034103	+533720	L 1	13618 L	802	FU	88071101	015324	000001	701	U
PHCAL	HD	3360	20	3.7	0034103	+533719	H 1 13596 L	822	FU	88070911	114200	000021	503	G C=217,B=43
PHCAL	HD3360	20	03.91	0034103	+533720	L 1	13619 L	783	FU	88071102	022209	000001	701	U
PHCAL	HD	3360	20	3.7	0034103	+533719	H 1 13659 L	815	FU	88071611	115200	000021	503	G C=225,B=44
PHCAL	HD3360	20	03.88	0034103	+533720	L 1	13620 L	801	FU	88071102	025253	000001	701	U PREAD
PHCAL	HD	3360	20	3.7	0034103	+533719	H 1 13662 L	792	FU	88071615	151800	000042	X04	G C=2X,B=58
PHCAL	HD 3360	20	03.86	0034103	+533719	L 1	13638 L	820	FU	88071422	224739	000000	501	U
PHCAL	HD	3360	20	3.7	0034103	+533719	H 1 13663 L	790	FU	88071615	155100	000129	X06	G C=4X,B=75
PHCAL	HD 3360	20	03.86	0034103	+533719	L 1	13639 L	820	FU	88071423	232907	000000	501	U
PHCAL	HD	3360	20	3.7	0034103	+533719	H 1 13664 L	860	FU	88071616	164900	000021	503	G C=230,B=43
PHCAL	HD 3360	20	03.82	0034103	+533719	L 1	13640 L	847	FU	88071500	000035	000000	501	U
PHCAL	HD	3360	20	3.7	0034103	+533719	H 1 13687 L	823	FU	88071811	114700	000021	503	G C=220,B=43
PHCAL	HD 3360	20	03.81	0034103	+533719	L 1	13641 L	856	FU	88071500	004149	000000	501	U
PHCAL	HD	3360	20	3.7	0034103	+533719	H 1 13688 L	826	FU	88071812	122000	000042	X03	G C=2X,B=45
PHCAL	HD 3360	20	03.80	0034103	+533719	L 1	13642 L	863	FU	88071501	011110	000001	701	U
PHCAL	HD	3360	20	3.7	0034103	+533719	H 1 13689 L	809	FU	88071812	125800	000124	X06	G C=4X,B=73
PHCAL	HD 3360	20	03.82	0034103	+533719	L 1	13643 L	848	FU	88071501	014451	000001	701	U PREAD
PHCAL	HD	3360	20	3.7	0034103	+533719	H 1 13723 L	808	FU	88072311	115400	000021	503	G C=235,B=44
PHCAL	HD 3360	20	03.77	0034103	+533719	L 1	13644 L	886	FU	88071502	021400	000001	701	U PREAD
PHCAL	HD	3360	20	3.7	0034103	+533719	H 1 13724 L	794	FU	88072312	122800	000042	X04	G C=2X,B=52
PHCAL	HD 3360	20	03.83	0034103	+533719	L 1	13645 L	840	FU	88071502	024742	000001	701	U PREAD
PHCAL	HD	3360	20	3.7	0034103	+533719	H 1 13725 L	811	FU	88072313	130000	000124	X06	G C=4X,B=72
PHCAL	HD3360	20	03.90	0034103	+533720	L 1	13829 L	788	FU	88081215	153040	000000	603	U
PHCAL	HD	3360	20	3.7	0034103	+533719	H 1 13726 L	794	FU	88072313	135900	000021	503	G C=238,B=50
PHCAL	HD3360	20	03.90	0034103	+533720	L 1	13830 L	790	FU	88081216	160129	000000	602	U
PHCAL	HD	3360	20	3.7	0034103	+533719	H 1 13727 L	795	FU	88072314	143000	000124	X05	G C=2X,B=70
PHCAL	HD3360	20	03.90	0034103	+533720	L 1	13831 L	789	FU	88081216	163124	000000	603	U
PHCAL	HD	3360	20	3.7	0034103	+533719	H 1 13728 L	810	FU	88072315	150400	000124	X08	G C=4X,B=100
PHCAL	HD3360	20	03.89	0034103	+533720	L 1	13832 L	799	FU	88081217	175518	000000	602	U
PHCAL	HD	3360	20	3.7	0034103	+533719	H 1 13748 L	801	FU	88072715	155600	000021	503	G C=240,B=42
PHCAL	HD3360	20	03.89	0034103	+533720	L 1	13833 L	793	FU	88081218	182603	000001	702	U
PHCAL	HD	3360	20	3.7	0034103	+533719	H 3 33973 L	806	FU	88072716	160200	000024	502	G C=195,B=34
PHCAL	HD3360	20	03.90	0034103	+533720	L 1	13834 L	792	FU	88081219	190757	000001	703	U
PHCAL	HD	3360	20	3.7	0034103	+533719	H 3 34025 L	787	FU	88080514	140400	000024	402	G C=180,B=37
PHCAL	HD3360	20	03.88	0034103	+533720	L 1	13835 L	801	FU	88081219	194000	000001	703	U
PHCAL	HD	3360	20	3.7	0034103	+533719	H 1 13793 L	796	FU	88080514	140800	000021	503	G C=209,B=42
PHCAL	HD3360	20	03.88	0034103	+533720	L 1	13836 L	804	FU	88081220	202249	000001	703	U
PHCAL	HD	3360	20	3.7	0034103	+533719	H 3 34026 L	801	FU	88080515	150900	000024	502	G C=191,B=34
PHCAL	HD3360	20	03.87	0034103	+533720	L 1	13926 L	809	FU	88082619	194043	000000	600	U
PHCAL	HD	3360	20	3.7	0034103	+533719	H 1 13794 L	900	FU	88080515	151400	000021	503	G C=230,B=43
PHCAL	HD3360	20	03.87	0034103	+533720	L 1	13927 L	864	FU	88082620	200956	000000	601	U
PHCAL	HD	3360	20	3.7	0034103	+533719	H 3 34027 L	949	FU	88080516	161200	000024	502	G C=187,B=33
PHCAL	HD3360	20	03.87	0034103	+533720	L 1	13928 L	851	FU	88082620	203932	000000	601	U

PRO	Object	CL	MAG	R.A.	DEC	D C	Image	A	FES	MD	Obs.date	Exptim	mmmsstt	ECC	Comment	
PHCAL	HD	3360	20	3.7	0034103	+533719	H	1	13795	L	947	FU	88080516	161700	000021	503 G C=207,B=41
PHCAL	HD3360	20	03.87	0034103	+533720	L	1	13929	L	873	FU	88082621	210849	000001	601 U	
PHCAL	HD	3360	20	3.7	0034103	+533719	H	1	13955	L	794	FU	88083003	031200	000021	503 G C=233,B=46
PHCAL	HD3360	20	03.87	0034103	+533720	L	1	13930	L	893	FU	88082621	214446	000001	601 U	
PHCAL	HD	3360	20	3.7	0034103	+533719	H	1	13956	L	795	FU	88083003	035000	000021	502 G C=233,B=40
PHCAL	HD	3360	20	3.7	0034103	+533719	H	3	34151	L	801	FU	88083003	035400	000024	502 G C=188,B=36
PHCAL	HD	3360	20	3.7	0034103	+533719	H	3	34272	L	827	FU	88091909	094000	000024	402 G C=182,B=33
PHCAL	HD	3360	20	3.7	0034103	+533719	H	1	14093	L	826	FU	88091909	094400	000021	503 G C=220,B=42
PHCAL	HD	3360	20	3.7	0034103	+533719	H	1	14094	L	811	FU	88091910	103200	000021	503 G C=205,B=43
USSBS	HD	3627	47	3.21	0036387	+303514	H	1	13884	L	937	FU	88082014	141100	001500	305 G C=115,B=70
KA059	OB10-WR1	13	99.99	0041254	+411627	E	9	02070	2		BO	88062702	020400	004000	U FES FOR SWP 33815	
HLJPM	OB10-WR1	10	19	0041254	+411627	L	9	02069	2			88062620	202900	000240	G	
HLJPM	OB10-WR1	10	19	0041254	+411627	L	3	33815	L		BO	88062709	093600	099900	309 G C=207,C=200,B=160	
HLJPM	SKY	07		0041254	+411627	L	1	13506	L			88062709	093800	017000	G C=1.5X	
WRJPC	AZ2A	11	15.0	0041508	-734520	L	3	33456	L		BO	88050515	155200	015000	29 G E=127,B=120,B=58	
KA059	OB 48-444	13	99.99	0042302	+412123	E	9	02068	2		BO	88062602	020000	004000	U	
MLKPM	SKY	07		0042302	+412123	H	3	34286	L			88092113	134600	003800	00 G B=17	
OX56K	SKY BKGD	07	*	0042302	+412123	L	3	34287	L			88092123	230200	086000	09 G B=120	
MLKPM	OB48-444	23	18.9	0042302	+412123	L	1	14111			BO	88092203	034400	099900	309 G C=224,B=175	
MLJPM	OB48-444	23	18.9	0042303	+412123	L	3	33811	L		BO	88062609	093600	099900	309 G C=182,B=125	
HLJPM	SKY	07		0042303	+412123	L	1	13502	L			88062609	093800	099900	309 G C=213,B=161	
NCKPH	SMC N90	72	0.0	0043356	-733924	L	1	13485	L		BO	88062116	163000	003000	309 G C=180,B=110	
NCKPH	SMC N90	72	0.0	0043356	-733924	L	3	33796	L			88062117	170800	003000	303 G C=95,B=50	
NCKPH	N 12 B	72	0.0	0043398	-732113	L	1	13494	L			88062314	143800	006000	309 G C=155,B=105	
NCKPH	N 12 B	72	0.0	0043398	-732113	L	3	33805	L		BO	88062318	184600	012000	303 G C=83,B=42	
OSJCG	AU26	13	12.6	0046000	-732435	L	3	33576	L	130	SO	88051922	220300	001600	400 G C=160,B=20	
OSJCG	AU26	13	12.6	0046000	-732435	L	1	13273	L	142	SO	88051922	222700	001200	502 G C=245,B=36	
NCKPH	N 22	72	0.0	0046168	-733236	L	1	13491	L		BO	88062213	134200	012000	X09 G C=1.5X,B=120	
NCKPH	N 22	72	0.0	0046168	-733236	L	3	33802	L		BO	88062218	182600	014000	502 G C=230,B=38	
NCKPH	N 25	72	0.0	0046213	-733037	L	3	33801	L		BO	88062215	155800	004000	306 G C=140,B=72	
NCKPH	N 25	72	0.0	0046213	-733037	L	1	13492	L			88062217	170600	005000	409 G C=250,B=105	
KQ182	PKS0048-09	87	15.00	0048099	-094524	L	3	34022	L		BO	88080319	194417	030300	302 U	
WRJPC	AZ60A	11	15.0	0048136	-733833	L	3	33457	L		BO	88050519	190700	010000	454 G E=241,C=170,B=56	
DCKNE	BM CAS	53	8.8	0051410	+634848	L	1	13871	L	702	FO	88081807	074000	007000	503 G C=210,B=46	
DCKNE	BM CAS	66	8.8	0051410	+634848	L	1	14055	L	715	FO	88091512	123400	002000	309 G C=158,B=103	
DCKNE	BM CAS	66	8.8	0051410	+634848	L	1	14056	L	753	FO	88091513	133000	006000	404 G C=190,B=55	
DCKNE	BM CAS	53	8.8	0051410	+634848	L	3	34276	L	694	FO	88091923	235600	041500	306 G C=127,B=77	
DCKNE	BM CAS	66	8.8	0051410	+634848	L	1	14112	L	743	FO	88092207	074400	006000	403 G C=180,B=46	
PRKCG	HD	5394	26	2.1	0053402	+602646	H	3	34604	L	3112	FU	88102606	063800	000008	502 G C=207,B=39
NRKAW	HD	5394	20	2.5	0053403	+602647	L	1	13605	L	3022	FU	88071012	125800	000000	402 G C=175,B=35
NRKAW	HD	5394	20	2.5	0053403	+602647	L	3	33892	L	3526	FU	88071013	131800	000000	400 G C=159,B=18
NRKAW	HD	5394	20	2.5	0053403	+602647	L	1	13606	L	3079	FU	88071014	142700	000000	403 G C=182,B=41
NRKAW	HD	5394	20	2.5	0053403	+602647	L	3	33893	L	3640	FU	88071014	144600	000000	500 G C=168,B=17
NRKAW	HD	5394	20	2.5	0053403	+602647	L	1	13607	L	3008	FU	88071015	155300	000000	X03 G C=2X,B=41
NRKAW	HD	5394	20	2.5	0053403	+602647	L	3	33894	L	3159	FU	88071016	160600	000000	X00 G C=1.5X,B=20

PRO	Object	CL	MAG	R.A.	DEC	D C Image A	FES	MD	Obs.date	Exptim	mmmsstt	ECC	Comment	
NRKAW	HD	5394	20	2.5	0053403	+602647 L 1	13608	L	3015	FU	88071017	171200	000000	502 G C=210,B=36
NRKAW	HD	5394	20	2.5	0053403	+602647 L 3	33895	L	3358	FU	88071017	173000	000000	500 G C=209,B=18
NRKAW	HD	5394	20	2.5	0053403	+602647 L 1	13609	L	3025	FU	88071018	182800	000000	502 G C=242,B=34
KA066	NGC330/3	23	14.13	0054264	-724412 L 3	33729	L		40	SO	88060822	222314	015000	501 U PREAD
KA066	NGC 330/3	23	14.13	0054264	-724412 L 1	13389	L		40	SO	88060900	005805	023000	702 U
KA066	NGC1818/12	23	14.02	0054264	-724412 L 3	33735	L		44	SO	88061000	000258	010000	501 U
KA066	NGC 330/3	23	14.22	0054264	-724412 L 1	13395	L			BO	88061003	032900	006000	402 U
NRKAW	IC	59	73	0054395	+604848 L 1	13604	L			BO	88071004	040200	024000	306 G C=105,B=72
NRKAW	IC	59	73	0054395	+604848 L 3	33891	L			BO	88071008	080700	024000	204 G C=76,B=60
NRKAW	IC	63	73	0055580	+603707 L 3	33898	L				88071103	034800	042000	304 G C=143,C=120,B=55
NCKPH	N	64A	72	0.0	0056472	-725602 L 3	33804	L		BO	88062316	160300	008000	309 G C=180,B=135
NCKPH	N	64A	72	0.0	0056472	-725602 L 1	13495	L			88062317	173000	005000	307 G C=140,B=88
JAI36	N66Z	12	13.30	0057302	-722611 L 3	33262	L			BO	88041207	073820	005000	400 U CENTER OF LIGHT ON S
KA038	AU 243	13	12.39	0058290	-730321 E 9	02084	L		47	FO	88072400	005700	016000	U SWP 33961
MLKCG	AU 243	12	13.9	0058290	-730322 H 3	33961	L		47	SO	88072317	173300	087000	X09 G C=1.5X,B=162
MLKCG	AU 243	12	13.9	0058290	-730322 H 9	02083	2				88072318	183500	000240	G
MLKCG	AU 243	12	13.9	0058290	-730322 L 3	33962	L		43	SO	88072408	085500	004500	402 G C=187,B=40
MLKCG	AU 243	12	13.9	0058290	-730322 L 3	33963	L		43	SO	88072410	101100	003800	402 G C=160,B=36
PHCAL	FEIGE 11	28	12.1	0101420	+035800 L 1	14018	L		195	SO	88090809	090100	000242	302 G C=110,B=35
PHCAL	FEIGE 11	28	12.1	0101420	+035800 L 3	34202	L		198	SO	88090809	090800	000242	400 G C=120,B=12
PHCAL	FEIGE 11	28	12.1	0101420	+035800 L 1	14019	L		203	SO	88090810	102100	000500	403 G C=158,B=41
PHCAL	FEIGE 11	28	12.1	0101420	+035800 L 3	34203	L		200	SO	88090810	103100	000445	500 G C=187,B=17
PHCAL	FEIGE 11	28	12.1	0101420	+035800 L 1	14020	L		199	SO	88090811	112900	000645	403 G C=195,B=50
PHCAL	FEIGE 11	28	12.1	0101420	+035800 L 3	34204	L		237	SO	88090812	120200	000520	500 G C=207,B=18
J1153	AU 336A	59	13.29	0101585	-721925 L 3	33300	L		84	SO	88041702	022120	002500	550 U
J1153	AU 336A	59	13.29	0101586	-721925 L 1	13064	L		84	SO	88041702	025147	002500	601 U
USSBS	BETA PHE	45	3.30	0103511	-465909 H 1	13816	L		882	FU	88080916	163500	000000	302 G C=64,B=35
KA038	AU 388	12	14.04	0104056	-724529 E 9	02086	2		43	SO	88072501	011000	004000	U SWP 33964
MLKCG	AU 388	12	14.1	0104056	-724529 H 3	33964	L		43	SO	88072508	085400	092000	X09 G C=1.5X,B=168
MLKCG	AU 388	12	14.1	0104056	-724529 L 3	33965	L		35	SO	88072510	100900	004000	401 G C=170,B=27
MLKCG	AU 388	12	14.1	0104056	-724529 H 3	33968	L		33	SO	88072603	035400	041500	309 G C=200,B=110
MLKCG	AU 388	12	14.1	0104070	-724525 H 9	02085	2				88072418	184200	000240	G
KI209	SA074521	40	08.06	0106408	+223834 H 1	14045	L		2240	FO	88091321	215820	004500	332 U
NCKPH	N	80	72	0.0	0106545	-721609 L 3	33808	L		BO	88062414	140700	012000	307 G C=160,B=85
NCKPH	N	80	72	0.0	0106545	-721609 L 1	13496	L			88062416	161300	009000	309 G C=235,B=158
WDJHS	PG 0112+104	29	15.4	0112000	+102512 L 3	34163	S			BO	88090103	033800	009800	302 G C=63,B=32
KE142	ES02961G11	88	16.00	0117431	-413006 E 9	02098	2			BO	88090219	193000	002000	U
EGKAD	E296-G11	88	17.0	0117431	-413006 H 9	02099	2				88090202	025200	000020	G
EGKAD	E296-G11	88	17.0	0117431	-413006 L 1	13984	L			BO	88090300	004700	039626	309 G C=146,B=110
KQ085	FAIRALL 9	84	13.92	0121512	-590359 L 3	34052	L		48	SO	88080717	175044	006000	360 U
KQ085	FAIRALL 9	84	14.10	0121512	-590359 L 1	13799	L		41	SO	88080718	185842	006000	451 U
KQ085	FAIRALL 9	84	14.21	0121512	-590359 L 3	34053	L		37	SO	88080720	200622	009000	361 U
KQ085	F-9	84	13.69	0121512	-590359 L 1	14217	L		59	SO	88101314	142713	002500	342 U
KQ085	F-9	84	12.93	0121512	-590359 L 3	34466	L		116	SO	88101315	150107	005000	350 U EARTH SCATTERED LIGH
NPKSM	SMC	28	70	17.0	0123009	-741800 L 1	13845	L		BO	88081322	224800	018000	305 G C=110,B=62

PRO	Object	CL	MAG	R.A.	DEC	D C	Image	A	FES	MD	Obs.date	Exptim	mmmsstt	ECC	Comment
NPKSM	SMC	28	70	17.0	0123009	-741800	L 3	34083	L		BO 88081402	020200	011000	222	G E=54,C=55,B=39
NPKSM	SMC	28	70	17.0	0123009	-741801	L 3	34084	L		BO 88081406	065300	029000	235	G E=118,C=85,B=69
NCKPH	SMC N90		72	0.0	0128290	-734923	L 3	33795	L		BO 88062114	142500	009000	206	G C=95,B=80
NCKPH	SMC N90		72	0.0	0128290	-734923	L 1	13486	L		BO 88062118	180300	016500	307	G C=145,B=90
USSBS	HD	9270	45	3.62	0128481	+150518	H 1	13883	L	665	FU 88082013	131500	001200	407	G C=200,B=82
PHCAL	HD	10144	21	0.5	0135512	-572925	H 1	13228	L	12396	FU 88051419	194400	000001	403	G C=188,B=42
PHCAL	HD	10144	21	0.5	0135512	-572925	H 3	33528	L	12518	FU 88051419	194800	000002	402	G C=173,B=34
CBKBH	TW CET		55	10.4	0146320	-210812	L 1	14136	L	172	FO 88093005	050600	003000	402	G C=146,B=40
PHCAL	HD	11636	31	2.6	0151523	+203352	H 3	34227	L	1657	FU 88091207	071600	000340	X02	G C=1.5X,B=37
PHCAL	HD	11636	31	2.6	0151523	+203352	H 1	14035	L	1671	FU 88091207	072400	000110	503	G C=225,B=42
PHCAL	HD	11636	31	2.6	0151523	+203352	L 3	34228	L	1733	FU 88091208	083800	000002	400	G C=130,B=14
PHCAL	HD	11636	31	2.6	0151523	+203352	L 1	14036	L	1697	FU 88091208	084200	000001	502	G C=204,B=35
PHCAL	HD	11636	31	2.6	0151523	+203352	L 3	34229	L	1705	FU 88091209	093700	000003	501	G C=200,B=25
PHCAL	HD	11636	31	2.6	0151523	+203352	H 3	34230	L	1665	FU 88091210	100900	000305	502	G C=221,B=37
CCJTS	HD	12311	40	2.9	0157117	-614845	L 3	33605	L	1381	FU 88052216	162100	001500	331	G E=71,C=90X,B=25
CAKTT	HD	12293	53	9.6	0157525	-163514	L 1	13851	L	372	FO 88081511	115800	000800	404	G C=187,B=55
CAKTT	HD	12293	53	9.6	0157525	-163514	L 3	34315	L	381	FO 88092600	001200	001600	301	G C=61,B=27
DPKDM	HD	12323	12	8.9	0159070	+552300	L 3	34155	L	902	FO 88083012	125700	000230	400	G C=164,B=18
DPKDM	HD	12323	12	8.9	0159070	+552300	L 1	13960	L	887	FO 88083013	131100	000145	502	G C=235,B=38
KC153	HD14528		49	99.99	0219151	+582134	E 9	02120	2		88092015	153600	016000	U	FES FOR LWP 14107
OD45Y	HD	14528	49	8.4	0219151	+582134	L 1	14107	L	2510	FO 88092023	230400	071500	09	G B=121
EJKB	NGC	1068	84		0240051	-001411	L 3	33882	L		BO 88070903	035900	041000	305	G C=128,B=63
LSKCC	HD	17506	49	3.8	0247019	+554122	L 3	34450	L	645	FU 88101022	220800	040200	3X6	G E=2X,C=130,B=72
OD42Y	SKY		07		0250242	+161649	L 1	13798	L		88080607	072800	008000	03	G B=42
OD42Y	SKY		07		0250242	+161649	L 3	34031	L		88080607	075500	005000	00	G B=19
GHKLD	F	29	21	10.3	0256060	-021124	L 3	34068	L	230	FO 88081008	082300	001000	X01	G C=1.5X,B=27
ICKAD	SAO	93339	30	8.1	0310109	+105646	H 3	34246	L	1633	FO 88091307	071200	018000	337	G E=144,C=160,B=90
ICKAD	SAO	93339	30	8.1	0310109	+105646	H 1	14041	L	1631	FO 88091310	101900	004500	309	G C=215,B=145
ICKAD	SAO	93375	22	7.6	0315299	+123832	H 3	34190	L	1889	FO 88090514	142800	002100	301	G C=54,B=26
KC055	HD 20630		44	05.37	0316442	+031117	H 1	13994	L	20541	FO 88090320	205707	007000	761	U
KC055	HD 20630		44	05.41	0316442	+031117	L 3	34180	L	19915	FO 88090322	221522	003300	230	U
KC055	HD 20630		44	05.38	0316442	+031117	H 1	14033	L	20313	FO 88091119	195600	005500	662	U
KC055	HD 20630		44	08.13	0316442	+031117	H 1	14061	L	20598	FO 88091521	212242	007000	771	U
ICKAD	SAO	93421	30	7.5	0322208	+104804	H 3	34446	L	3008	FO 88100921	214700	018000	X04	G C=1.5X,B=58
ICKAD	SAO	93422	30	7.5	0322253	+121837	H 3	34447	L	2796	FO 88101002	020300	018000	304	G C=135,B=57
KDKTS	AP	43	46	12.8	0322541	+485145	L 1	13931	L	84	SO 88082622	225500	024000	336	G E=153,C=136,B=74
RSKTA	HD	21242	46	6.5	0323330	+283232	H 1	14051	L	5274	FO 88091508	081400	005000	X9	G E=1.5X,B=110,B=42
RSKTA	HD	21242	46	6.5	0323330	+283232	H 1	14052	L	6303	FO 88091509	094100	002500	338	G E=195,C=148,B=100
RSKTA	HD	21242	46	6.5	0323330	+283232	H 1	14053	L	6491	FO 88091510	103700	001200	339	G E=154,C=144,B=102
RSKTA	HD	21242	46	6.5	0323330	+283232	H 1	14084	L	5993	FO 88091811	113100	002500	343	G E=179,C=95,B=42
RSKTA	HD	21242	46	6.5	0323330	+283232	H 1	14085	L	7051	FO 88091812	123200	002500	343	G E=181,C=88,B=42
RSKTA	HD	21242	46	6.5	0323330	+283232	H 1	14086	L	6356	FO 88091813	133900	006800	4X3	G E=2X,C=150,B=43
RSKTA	HD	21242	46	6.5	0323330	+283232	H 1	14130	L	5505	FO 88092807	072900	005000	3X4	G E=1.5X,C=116,B=51
RSKTA	HD	21242	46	6.5	0323330	+283232	H 1	14131	L	6322	FO 88092808	085600	002500	344	G E=165,C=102,B=56
RSKTA	HD	21242	46	6.5	0323330	+283232	H 1	14132	L	6446	FO 88092809	095900	005000	3X9	G E=1.5X,C=180,B=112

PRO	Object	CL	MAG	R.A.	DEC	D C	Image	A	FES	MD	Obs.date	Exptim	mmmsstt	ECC	Comment
RSKTA	HD	21242	46	6.5	0323330	+283232	H 1	14152	L	6082	FO	88100110	104000	002500	344 G E=204,C=107,B=60
RSKTA	HD	21242	46	6.5	0323330	+283232	H 1	14153	L	7348	FO	88100111	114300	002500	342 G E=170,C=88,B=40
RSKTA	HD	21242	46	6.5	0323330	+283232	H 1	14220	L	5906	FO	88101406	062400	005000	3X3 G E=1.5X,C=115,B=48
RSKTA	HD	21242	46	6.5	0323330	+283232	H 1	14221	L	7260	FO	88101407	075100	002500	336 G E=109,C=126,B=72
RSKTA	HD	21242	46	6.5	0323330	+283232	H 1	14222	L	6887	FO	88101408	085100	002500	347 G E=216,C=144,B=86
PHCAL	T-FLOOD	98			0323330	+283232	L 1	14223	L			88101409	095000	000025	?9 G E=10X,B=105
PHCAL	WAVECAL	98			0323330	+283232	L 1	14223	L			88101409	095200	000001	?9 G E=10X,B=105
PHCAL	T-FLOOD	98			0323330	+283232	H 1	14224	S			88101410	102000	000025	?9 G E=60X,B=108
PHCAL	WAVECAL	98			0323330	+283232	H 1	14224	S			88101410	102200	000016	?9 G E=60X,B=108
PHCAL	T-FLOOD	98			0323330	+283232	L 3	34471	S			88101410	102400	000005	?9 G E=10X,B=104
PHCAL	WAVECAL	98			0323330	+283232	L 3	34471	S			88101410	102600	000002	?9 G E=10X,B=104
PHCAL	T-FLOOD	98			0323330	+283232	H 3	34472	S			88101410	104900	000005	?9 G E=60X,B=125
PHCAL	WAVECAL	98			0323330	+283232	H 3	34472	S			88101410	105100	000200	?9 G E=60X,B=125
RSKTA	HD	21242	46	6.5	0323330	+283232	H 1	14263	L	6399	FO	88101709	094800	002500	343 G E=167,C=95,B=42
RSKTA	HD	21242	46	6.5	0323330	+283232	H 1	14264	L	6294	FO	88101710	104800	002500	342 G E=176,C=84,B=34
RSKTA	HD	21242	46	6.5	0323330	+283232	H 1	14265	L	5356	FO	88101711	115100	005800	3X3 G E=2.2X,C=124,B=44
KQ085	H0323+022	87	16.50		0323380	+021447	E 9	02093	2		BO	88081816	161100	002000	U FES FOR SWP34098 SWL
BLKCU	0323+022	87	16.0		0323380	+021447	L 3	34098			BO	88081823	232700	050000	306 G C=120,B=71
BLKCU	0323+022	87	16.0		0323380	+021447	L 1	13873	L		BO	88081900	003500	018400	305 G C=100,B=61
KDKTS	AP 56	46	13.0		0323510	+481200	L 1	13937	L	66	SO	88082722	224200	029500	337 G E=139,C=127,B=82
KDKTS	AP 78	46	13.1		0325518	+491018	L 1	13964	L	62	SO	88083023	232400	032000	337 G E=172,C=120,B=87
KI209	GKPER	57	13.36		0327476	+434404	L 3	34249	L	79	SO	88091316	160957	025500	332 U
CHKRS	HD	22049	46	3.7	0330343	-093734	L 1	13658	L	607	FU	88071608	080100	017000	345 G E=170,C=141,B=63
CHKRS	HD	22049	46	3.7	0330343	-093734	L 1	13658	S	607	FU	88071608	080100	017000	345 G E=170,C=141,B=63
CCKTA	HD	22049	46	3.7	0330344	-093735	L 1	14249	L	687	FU	88101608	082700	000015	332 G E=100,C=75,B=32
CCKTA	HD	22049	46	3.7	0330344	-093735	L 1	14250	L	664	FU	88101609	091600	000130	5X2 G E=2.5X,C=230,B=35
CCKTA	HD	22049	46	3.7	0330344	-093735	L 1	14251	L	675	FU	88101610	100400	000730	??3 G E=10X,C=10X,B=45
CCKTA	HD	22049	46	3.7	0330344	-093735	L 1	14252	L	660	FU	88101610	105900	001845	??4 G E=25X,C=25X,B=52
CCKTA	HD	22049	46	3.7	0330344	-093735	L 3	34483	L	616	FU	88101611	113900	007000	X9 G E=2X,B=105,B=32
SUJTS	VENUS	03	-4.0		0341507	+225753	H 1	12969	L			88040220	205800	001500	G
SUJTS	VENUS	03	-4.0		0341507	+225753	H 1	12970	S			88040221	215300	000300	08 G B=100
SUJTS	VENUS	03	-4.0		0341507	+225753	H 1	12971	S			88040222	223700	001000	G
GDKJC	HZ 708	41	10.1		0342369	+235543	H 1	13938	L	204	FO	88082806	063300	023000	307 G C=143,B=90
GDKJC	HZ 708	41	10.1		0342369	+235543	L 1	13942	L	199	FO	88082813	135900	002900	506 G C=252,B=73
GDKJC	HZ 727	41	9.7		0342411	+242822	H 1	13932	L	305	FO	88082706	062700	026000	308 G C=168,B=91
GDKJC	HZ 739	44	9.6		0342427	+244506	H 1	13947	L	362	FO	88082906	062800	018000	305 G C=158,B=65
SUJTS	VENUS	03	-4.3		0346070	+231532	H 1	12978	S			88040318	185200	000300	07 G B=90
SUJTS	VENUS	03	-4.3		0346070	+231532	H 1	12979	S			88040319	194900	001500	G
SUJTS	VENUS	03	-4.3		0346070	+231532	H 1	12980	S			88040320	205100	001000	G
OD47Y	HD	23862	25	5.2	0346123	+235902	H 3	34132	L	19548	FO	88082511	112800	001000	X03 G C=1.5X,B=47
OD47Y	HD	23862	25	5.2	0346123	+235902	H 1	13914	L	20945	FO	88082512	121000	000500	X04 G C=1.5X,B=55
OD47Y	HD	23862	25	5.2	0346123	+235902	L 3	34133	L	19897	FO	88082512	125000	000005	401 G C=157,B=23
OD47Y	HD	23862	25	5.2	0346123	+235902	L 1	13915	L	19872	FO	88082512	125600	000003	502 G C=225,B=36
OD47Y	HD	23862	25	5.2	0346123	+235902	H 3	34134	L	19747	FO	88082513	132900	000830	503 G C=251,B=42
OD47Y	HD	23862	25	5.2	0346123	+235902	H 1	13916	L	19367	FO	88082514	140300	000400	503 G C=240,B=45

PRO	Object	CL	MAG	R.A.	DEC	D	C	Image	A	FES	MD	Obs.date	Exptim	mmmsstt	ECC	Comment
KA041	HD23862	26	05.49	0346124	+235907	H	3	34111	L	18947	FO	88082015	152332	001000	500	V
KA041	HD23862	26	05.49	0346124	+235907	H	1	13885	L	19114	FO	88082015	155726	000500	502	V
KA187	HD24912	14	04.24	0355430	+353900	H	3	34533	L	585	FU	88102214	143256	000115	500	V
MLKJN	HD 24912	14	4.0	0355430	+353900	H	3	34524	L	555	FU	88102206	062900	000110	542	G E=156,C=208,B=40
KA187	HD24912	14	04.26	0355430	+353900	H	3	34536	L	574	FU	88102216	164040	000115	500	V
MLKJN	HD 24912	14	4.0	0355430	+353900	H	3	34527	L	642	FU	88102209	091500	000101	542	G E=163,C=208,B=39
KA187	HD24912	14	04.26	0355430	+353900	H	3	34539	L	572	FU	88102219	191915	000115	500	V
MLKJN	HD 24912	14	4.0	0355430	+353900	H	3	34530	L	552	FU	88102211	115100	000115	552	G E=196,C=240,B=40
KA187	HD24912	14	04.16	0355430	+353900	H	3	34559	L	624	FU	88102314	143848	000115	500	V
MLKJN	HD 24912	14	4.0	0355430	+353900	H	3	34542	L	561	FU	88102222	220000	000115	502	G C=233,B=40
KA187	HD 24912	14	04.33	0355430	+353900	H	3	34562	L	32767	FO	88102317	170457	000115	500	V
MLKJN	HD 24912	14	4.0	0355430	+353900	H	3	34545	L	563	FU	88102300	002800	000115	502	G C=230,B=40
KA187	HD 24912	14	04.33	0355430	+353900	H	3	34565	L	541	FU	88102319	192511	000115	500	V
MLKJN	HD 24912	14	4.0	0355430	+353900	H	3	34548	L	556	FU	88102302	025000	000115	502	G C=215,B=40
KA187	HD24912	14	04.15	0355430	+353900	H	3	34587	L	632	FU	88102413	134146	000115	500	V
MLKJN	HD 24912	14	4.0	0355430	+353900	H	3	34551	L	565	FU	88102305	052000	000115	543	G E=177,C=232,B=41
KA187	HD24912	14	04.28	0355430	+353900	H	3	34590	L	561	FU	88102416	160931	000115	500	V
MLKJN	HD 24912	14	4.0	0355430	+353900	H	3	34554	L	577	FU	88102307	073700	000115	543	G E=179,C=225,B=41
KA187	HD24912	14	04.22	0355430	+353900	H	3	34593	L	592	FU	88102419	195515	000115	500	V
MLKJN	HD 24912	14	4.0	0355430	+353900	H	3	34566	L	552	FU	88102321	211500	000115	503	G C=240,B=41
MLKJN	HD 24912	14	4.0	0355430	+353900	H	3	34569	L	561	FU	88102323	233200	000115	503	G C=240,B=41
MLKJN	HD 24912	14	4.0	0355430	+353900	H	3	34572	L	565	FU	88102401	015400	000115	503	G C=240,B=41
MLKJN	HD 24912	14	4.0	0355430	+353900	H	3	34575	L	562	FU	88102404	040700	000115	503	G C=233,B=41
MLKJN	HD 24912	14	4.0	0355430	+353900	H	3	34578	L	564	FU	88102406	062900	000115	503	G C=230,B=42
MLKJN	HD 24912	14	4.0	0355430	+353900	H	3	34581	L	560	FU	88102408	084900	000115	503	G C=221,B=44
MLKJN	HD 24912	14	4.0	0355430	+353900	H	3	34584	L	563	FU	88102411	111100	000115	502	G C=232,B=40
MLKJN	HD 24912	14	4.0	0355430	+353900	H	3	34597	L	559	FU	88102506	062800	000115	?9	G E=177,B=231,B=42
KS010	VENUS	03	-04.00	0359447	+240801	L	1	12997	S		BO	88040703	031058	000012	803	V
KS010	VENUS	03	-04.20	0359447	+240801	H	1	12998	S		BO	88040704	042633	002000	803	V
KS010	VENUS	03	-04.20	0359447	+240801	H	1	12999	S		BO	88040705	052840	000100	703	V
TTKFW	SAO 76411A	44	8.85	0359550	+215958	H	1	14227	L	759	FO	88101422	222200	018000	306	G C=149,B=80
TTKFW	SAO 76411A	44	8.85	0359550	+215958	L	3	34476	L	810	FO	88101501	013000	034500	308	G C=150,B=92
TTKFW	SAO 76411B	46	10.4	0359562	+215951	L	1	14228	L		BO	88101507	072500	006000	309	G C=148,B=110
SJKDS	JUPITER	03	-2.3	0400190	+193756	L	3	34038	L			88080702	022600	002000	X50	G E=211,C=4X,B=18
SJKDS	JUPITER	03	-2.3	0400190	+193756	L	3	34038	S			88080702	022600	002000	X50	G E=211,C=4X,B=18
SJKDS	JUPITER	03	-2.3	0400190	+193756	L	3	34039	L			88080703	031800	007500	???	G E=10X,C=15X,B=35
SJKDS	JUPITER	03	-2.3	0400190	+193756	L	3	34039	S			88080703	034800	007500	???	G E=10X,C=15X,B=35
SJKDS	JUPITER	03	-2.3	0400190	+193756	L	3	34040	L			88080705	051500	001500	X50	G E=196,C=3X,B=17
SJKDS	JUPITER	03	-2.3	0400190	+193756	L	3	34040	S			88080705	051600	001500	X50	G E=196,C=3X,B=17
SJKDS	JUPITER	03	-2.3	0400190	+193756	L	3	34041	L			88080706	060200	001500	X50	G E=206,C=3X,B=18
SJKDS	JUPITER	03	-2.3	0400190	+193756	L	3	34041	S			88080706	060300	001500	X50	G E=206,C=3X,B=18
SJKDS	JUPITER	03	-2.3	0400190	+193756	L	3	34042	L			88080706	064800	001500	X50	G E=190,C=3X,B=17
SJKDS	JUPITER	03	-2.3	0400190	+193756	L	3	34042	S			88080706	064900	001500	X50	G E=190,C=3X,B=17
SJKDS	JUPITER	03	-2.3	0400190	+193756	L	3	34043	L			88080707	073400	001500	X50	G E=186,C=3X,B=17
SJKDS	JUPITER	03	-2.3	0400190	+193756	L	3	34043	S			88080707	073500	001500	X50	G E=186,C=3X,B=17

PRO	Object	CL	MAG	R.A.	DEC	D C	Image	A	FES	MD	Obs.date	Exptim	mmmsstt	ECC	Comment
SJKDS	JUPITER	03	-2.3	0400190	+193756	L 3	34044	L			88080708	081900	001500	X50 G	E=201,C=5X,B=19
SJKDS	JUPITER	03	-2.3	0400190	+193756	L 3	34044	S			88080708	081900	001500	X50 G	E=201,C=5X,B=19
SJKDS	JUPITER	03	-2.3	0400190	+193756	L 3	34045	L			88080709	091100	007500	G	
SJKDS	JUPITER	03	-2.3	0400190	+193756	L 3	34045	S			88080709	094300	007500	G	
SJKDS	JUPITER	03	-2.5	0400190	+193756	L 3	34047	L			88080712	123300	001500	X51 G	E=195,C=5X,B=28
SJKDS	JUPITER	03	-2.5	0400190	+193756	L 3	34047	S			88080712	123400	001500	X51 G	E=195,C=5X,B=28
SJKDS	JUPITER	03	-2.5	0400190	+193756	L 3	34048	L			88080713	132000	001200	X51 G	E=186,C=5X,B=30
SJKDS	JUPITER	03	-2.5	0400190	+193756	L 3	34048	S			88080713	132100	001200	X51 G	E=186,C=5X,B=30
SJKDS	JUPITER	03	-2.5	0400190	+193756	L 3	34049	L			88080714	140800	001200	X42 G	E=178,C=5X,B=34
SJKDS	JUPITER	03	-2.5	0400190	+193756	L 3	34049	S			88080714	140900	001200	X42 G	E=178,C=5X,B=34
SJKDS	JUPITER	03	-2.5	0400190	+193756	L 3	34050	L			88080715	151800	001200	X51 G	E=182,C=5X,B=21
SJKDS	JUPITER	03	-2.5	0400190	+193756	L 3	34050	S			88080715	151900	001200	X51 G	E=182,C=5X,B=21
SJKDS	JUPITER	03	-2.5	0400190	+193756	L 3	34051	L			88080716	160400	002700	XX1 G	E=1.5X,C=5X,B=21
SJKDS	JUPITER	03	-2.5	0400190	+193756	L 3	34051	S			88080716	160500	002700	XX1 G	E=1.5X,C=5X,B=21
SJKDS	SKY BKGD	07		0400253	+193812	L 3	34046	L			88080711	111700	004000	31 G	E=70,B=24
SJKDS	SKY BKGD	07		0400253	+193812	L 3	34046	S			88080711	111800	004000	31 G	E=70,B=24
TTKFW	SAO 76428	41	9.46	0401312	+214755	L 3	34491	L	428	FO	88101721	214200	040400	306 G	C=161,B=76
TTKFW	SAO 76428	41	9.46	0401312	+214755	H 1	14268	L	507	FO	88101723	235800	024000	306 G	C=133,B=71
SIKJC	JUPITER	03	-2.2	0402095	+194243	L 3	34069	L			88081009	094200	001500	X42 G	E=136,C=3X,B=33
SIKJC	IO	04	4.0	0402095	+194243	L 1	13820	S			88081010	103300	000300	202 G	C=39,B=32
SIKJC	JUPITER	03	-2.2	0402095	+194243	H 3	34070	S			88081011	111400	010600	03 G	B=48
SIKJC	IO ECLPS	04	5	0402095	+194243	L 1	13821	S	18306	FO	88081015	152300	003400	302 G	C=84,B=37
RSKFW	HD 26337	44	7.1	0407132	-080157	H 1	14063	L	3407	FO	88091607	074400	012000	4X7 G	E=3X,C=215,B=84
KC136	HD26337	44	07.57	0407150	-080127	H 1	14098	L	3461	FO	88091915	153140	009000	353 U	
RSKFW	HD 26337	44	6.95	0407150	-080126	H 1	14088	L	3463	FO	88091821	212500	009000	453 G	E=207,C=153,B=46
KC136	HD26337	44	07.61	0407150	-080127	H 1	14099	L	3325	FO	88091918	180823	009000	353 U	
RSKFW	HD 26337	44	6.95	0407150	-080126	L 3	34269	L	3492	FO	88091823	231800	006000	501 G	C=235,C=74,B=21
RSKFW	HD 26337	44	6.95	0407150	-080126	H 1	14089	L	3435	FO	88091900	000200	009000	453 G	E=202,C=148,B=47
RSKFW	HD 26337	44	6.95	0407150	-080126	H 1	14090	L	3390	FO	88091902	022900	009000	453 G	E=213,C=150,B=47
RSKFW	HD 26337	44	6.95	0407150	-080126	L 3	34270	L	3457	FO	88091904	041600	004500	350 G	E=185,C=65,B=17
RSKFW	HD 26337	44	6.95	0407150	-080126	H 1	14091	L	3479	FO	88091905	051100	004500	453 G	E=205,C=150,B=50
KC136	HD26337	44	07.57	0407151	-080127	L 3	34261	L	3473	FO	88091713	134327	006000	350 U	EXPOSURE 2X30 MINUTE
RSKFW	HD 26337	44	6.95	0407151	-080126	L 3	34256	L	3564	FO	88091609	095100	004500	347 G	E=226,C=126,B=88
KC136	HD26337	44	07.58	0407151	-080127	H 1	14076	L	3439	FO	88091714	142051	009000	341 U	
RSKFW	HD 26337	44	6.95	0407151	-080126	L 1	14064	L	3560	FO	88091611	110500	000230	X03 G	C=1.5X,B=43
KC136	HD26337	44	07.56	0407151	-080127	H 1	14077	L	3483	FO	88091716	164016	009000	451 U	EXPOSURE 3X30 MIN.
RSKFW	HD 26337	44	6.95	0407151	-080126	L 1	14065	L	3507	FO	88091611	114700	000200	503 G	C=215,B=42
KC136	HD26337	44	07.58	0407151	-080127	H 1	14078	L	3437	FO	88091718	185806	009000	451 U	
RSKFW	HD 26337	44	6.95	0407151	-080126	H 1	14066	L	3486	FO	88091612	122800	009000	4X9 G	E=2X,C=225,B=123
KC136	HD26337	44	07.58	0407151	-080127	L 3	34262	L	3439	FO	88091718	182011	006000	360 U	EXPOSURE 2X30 MINUTE
RSKFW	HD 26337	44	6.95	0407151	-080126	H 9	02113	2			88091615	150400	000240	G	
KC136	HD26337	44	99.99	0407151	-080127	D 9	02116	2			88091721	215500	016000	U	FES FOR LWP 14079
RSKFW	HD 26337	44	7.1	0407151	-080126	L 3	34258	L	3215	FO	88091621	211500	006000	332 G	E=124,C=73,B=32
KC136	HD26337	44	07.62	0407151	-080127	H 1	14087	L	3313	FO	88091816	161750	009000	452 U	EXPOSE 2X45 MIN. 2ND
RSKFW	HD 26337	44	7.1	0407151	-080126	H 1	14070	L			88091622	222400	009000	454 G	E=240,C=163,B=52

PRO	Object	CL	MAG	R.A.	DEC	D C Image A	FES	MD	Obs.date	Exptim	mmmsstt	ECC	Comment
KC136	HD26337	44	99.99	0407151	-080127	D 9 02117 2			88091822	221500	016000		U FES FOR LWP14088
RSKFW	HD 26337	44	7.1	0407151	-080126	L 3 34259 L	3364	FO	88091700	000300	006000	3X0	G E=1.5X,C=77,B=20
KC136	HD26337	44	07.61	0407151	-080127	L 3 34275 L	3346	FO	88091917	172510	006000	332	U PREAD
RSKFW	HD 26337	44	7.1	0407151	-080126	H 1 14071 L	3309	FO	88091700	004300	009000	454	G E=243,C=156,B=53
KC136	HD26337	44	07.59	0407151	-080127	H 1 14100 L	3388	FO	88091922	220448	004200	333	U READ
RSKFW	HD 26337	44	7.1	0407151	-080126	L 3 34259 L			88091702	022200	003000		G
RSKFW	HD 26337	44	7.1	0407151	-080126	H 1 14072 L			88091703	030100	009000		G
RSKFW	HD 26337	44	6.95	0407151	-080126	L 3 34260 L			88091704	044600	003000		G
RSKFW	HD 26337	44	6.95	0407151	-080126	H 1 14073 L	3427	FO	88091705	052500	009000	454	G E=222,C=165,B=52
RSKFW	HD 26337	44	6.95	0407151	-080126	L 3 34260 L			88091707	070300	003000		G
RSKFW	HD 26337	44	6.95	0407151	-080126	H 1 14074 L			88091707	074100	001100		G
RSKFW	HD 26337	44	6.95	0407151	-080126	H 9 02115 2			88091712	121000	000240		G
RSKFW	HD 26337	44	6.95	0407151	-080126	H 1 14075 L	3504	FO	88091712	121800	007500	344	G E=183,C=145,B=51
RSKFW	HD 26337	44	7.1	0407151	-080126	H 1 14079 L	3502	FO	88091721	212500	009000	454	G E=227,C=168,B=54
RSKFW	HD 26337	44	7.1	0407151	-080126	L 3 34263 L	3523	FO	88091723	230600	006000	350	G E=224,C=78,B=17
RSKFW	HD 26337	44	7.1	0407151	-080126	H 1 14080 L	3593	FO	88091723	234500	009000	453	G E=213,C=161,B=50
RSKFW	HD 26337	44	7.1	0407151	-080126	H 1 14081 L	3665	FO	88091802	020700	009000	454	G E=225,C=159,B=54
RSKFW	HD 26337	44	7.1	0407151	-080126	L 3 34264 L	3684	FO	88091803	034600	007000	352	G E=228,C=82,B=32
RSKFW	HD 26337	44	7.1	0407151	-080126	H 1 14082 L	3676	FO	88091804	044000	009000	453	G E=226,C=157,B=48
KC136	HD26337	44	07.66	0407152	-080127	H 1 14067 L	3208	FO	88091614	144958	009000	551	U EXPOSURE STARTED IN
KC136	HD26337	44	07.64	0407152	-080127	L 3 34257 L	3239	FO	88091614	140829	009000	360	U EXPOSURE IN 3X30M SE
KC136	HD26337	44	07.63	0407152	-080127	H 1 14068 L	3279	FO	88091617	171318	009000	451	U
KC136	HD26337	44	07.66	0407152	-080127	H 1 14069 L	3207	FO	88091619	193457	009000	451	U
KC136	HD26337	44	07.65	0407152	-080127	D 9 02114 2	3215	FO	88091622	223800	016000		U FESFOR LWP14070 & SW
KS117	JUPITER	03	-02.30	0407404	+195713	L 3 34112 L		BO	88082016	165550	001600	740	U
OD42Y	DARKLIMB	02	-8.7	0407476	+215232	L 3 34028 L		BO	88080601	015300	004000	30	G E=70,B=18
CCKTT	HD 26574	53	4.0	0409252	-065802	H 1 13895 L	467	FU	88082210	102800	000530	503	G C=205,B=41
CCKTT	HD 26574	53	4.0	0409252	-065802	H 1 14031 L	529	FU	88091114	144300	000600	503	G C=220,B=41
CCKTT	HD 26574	53	4.0	0409253	-065803	H 1 14239 L	514	FU	88101521	211400	000940	X03	G C=1.6X,B=46
CCKTT	HD 26574	53	4.0	0409253	-065803	H 1 14240 L	488	FU	88101522	220300	001000	X03	G C=1.7X,B=47
CCKTT	HD 26574	53	4.0	0409253	-065803	H 1 14241 L	482	FU	88101522	225000	001100	X03	G C=1.8X,B=44
CCKTT	HD 26574	53	4.0	0409253	-065803	H 1 14242 L	492	FU	88101523	233900	001100	X03	G C=2X,B=50
CCKTT	HD 26574	53	4.0	0409253	-065803	H 1 14243 L	477	FU	88101600	003000	001100	X03	G C=2.5X,B=50
CCKTT	HD 26574	53	4.0	0409253	-065803	H 1 14244 L	495	FU	88101601	012200	001100	X03	G C=2.5X,B=47
CCKTT	HD 26574	53	4.0	0409253	-065803	H 1 14245 L	473	FU	88101602	021000	001100	X03	G C=1.7X,B=45
CCKTT	HD 26574	53	4.0	0409253	-065803	H 1 14246 L	486	FU	88101603	030500	001100	X03	G C=1.7X,B=48
CCKTT	HD 26574	53	4.0	0409253	-065803	H 1 14247 L	497	FU	88101603	035900	001100	X03	G C=1.5X,B=47
CCKTT	HD 26574	53	4.0	0409253	-065803	H 1 14248 L	485	FU	88101604	044400	000600	403	G C=188,B=42
KC004	HD26574	40	04.47	0409254	-065800	H 1 14231 L	475	FU	88101513	135527	000935	600	U
KC004	HD26574	40	04.49	0409254	-065800	L 3 34478 L	468	FU	88101514	141747	002500	700	U
KC004	HD26574	40	04.49	0409254	-065800	H 1 14232 L	468	FU	88101514	145507	001000	807	U
KC004	HD26574	40	04.47	0409254	-065800	L 3 34479 L	473	FU	88101515	153138	002000	700	U
KC004	HD26574	40	04.50	0409254	-065800	H 1 14233 L	462	FU	88101516	161045	000940	600	U
KC004	HD26574	40	04.47	0409254	-065800	H 1 14234 L	475	FU	88101517	170914	000940	600	U
KC004	HD26574	40	04.47	0409254	-065800	H 1 14235 L	476	FU	88101517	175812	000940	600	U

PRO	Object	CL	MAG	R.A.	DEC	D C Image A	FES	MD	Obs.date	Exptim	mmmsstt	ECC	Comment
KC004	HD26574	40	04.48	0409254	-065800	H 1 14236 L	471	FU	88101518	184505	000940	600	U
KC004	HD26574	40	04.49	0409254	-065800	H 1 14237 L	468	FU	88101519	193127	000940	600	U
KC004	HD26574	40	04.49	0409254	-065800	H 1 14238 L	468	FU	88101520	201723	000940	600	U
KH201	HD 26676	25	06.72	0410502	+100512	H 3 34223 L	7258	FO	88091115	155621	005000	700	U
CCKTA	HD 26965	46	4.4	0412582	-074346	L 1 14175 L	357	FU	88100310	102500	000300	X01	G C=2X,B=29
CCKTA	HD 26965	46	4.4	0412582	-074346	L 1 14176 L	358	FU	88100311	111700	000045	402	G C=152,B=32
CCKTA	HD 26965	46	4.4	0412582	-074346	L 1 14177 L	357	FU	88100312	121000	000500	?02	G C=10X,B=32
OD42Y	SKY	07		0413518	+231300	L 3 34029 L			88080603	033000	012000	39	G E=163,B=132
OD42Y	SKY	07		0413518	+231300	L 1 13797 L			88080603	035300	018000	305	G C=90,B=62
OD42Y	SKY	07		0413518	+231300	L 3 34030 L			88080605	055300	006000	30	G E=107,B=16
SIKJC	JUPITER	03	-2.5	0414140	+201152	H 3 34221 S			88091108	081600	012000	323	G E=66,C=81,B=48
SIKJC	JUPITER	03	-2.5	0414140	+201152	H 3 34221 L			88091109	093600	001500	X43	G E=191,C=3X,B=48
SIKJC	IO ECLPS	04	6.0	0414140	+201152	L 1 14030 S	19681	FO	88091111	115500	002800	24	G E=58,B=52,B=38
SIKJC	JUPITER	03	-2.5	0414140	+201152	L 3 34222 L			88091113	131800	001500	X42	G E=149,C=3X,B=33
SJKHM	JUPITER	03	-2.5	0415198	+201302	L 3 34344 L			88092906	060500	001500	X50	G E=203,C=3X,B=17
SJKHM	JUPITER	03	-2.5	0415198	+201302	L 3 34345 L			88092906	065400	001500	X50	G E=191,C=3X,B=18
SJKHM	JUPITER	03	-2.5	0415198	+201302	L 3 34346 L			88092907	074100	001500	X41	G E=167,C=4X,B=28
SJKHM	JUPITER	03	-2.5	0415198	+201302	H 3 34347 L			88092908	083500	001500	322	G E=45,C=82,B=32
SJKHM	JUPITER	03	-2.5	0415198	+201302	L 3 34348 L			88092909	092100	001500	X41	G E=167,C=3X,B=21
SJKHM	JUPITER	03	-2.5	0415198	+201302	L 3 34349 L			88092910	100800	001500	X41	G E=166,C=4X,B=24
SJKHM	JUPITER	03	-2.5	0415198	+201302	L 3 34350			88092911	110500	001500	X41	G E=164,C=4X,B=24
SJKHM	JUPITER	03	-2.5	0415198	+201302	L 3 34351			88092911	115400	001500	X40	G E=146,C=4X,B=20
SJKHM	JUPITER	03	-2.5	0415198	+201302	L 3 34352			88092912	124200	001500	X40	G E=156,C=4X,B=18
SJKHM	JUPITER	03	-2.5	0415198	+201302	L 3 34353			88092913	133000	001500	X40	G E=162,C=4X,B=18
SJKHM	JUPITER	03	-2.5	0415198	+201302	L 3 34354			88092914	141500	001500	X50	G E=180,C=4X,B=19
SIKHM	IO	04	5.0	0415222	+201311	L 3 34343 L	17763	FO	88092814	144800	079500	329	G E=137,C=163,B=133
SJKHM	JUPITER	03	-2.5	0415241	+201319	L 9 02124 2			88092714	145300	000240		G
SJKHM	JUPITER	03	-2.5	0415241	+201319	L 3 34342 L			88092811	113400	001500	X51	G E=202,C=5X,B=21
KS126	IO	04	05.59	0415242	+201320	E 9 02125 2	17763	FO	88092818	181200	016000		U FES FOR SWP34343
SIKHM	IO	04	5.0	0415246	+201324	L 3 34341 L			88092800	002300	081000	339	G E=194,C=183,B=125
KS126	IO	04	05.50	0415250	+201324	E 9 02123 2		BO	88092716	165300	016000		U FES FOR SWP34341
SJKHM	JUPITER	03	-2.5	0415266	+201331	L 3 34326 L			88092623	235400	001500	X43	G E=188,C=4X,B=41
SJKHM	JUPITER	03	-2.6	0415266	+201331	L 3 34328 L			88092701	015000	001500	X52	G E=209,C=4X,B=40
SJKHM	JUPITER	03	-2.6	0415266	+201331	L 3 34329 L			88092702	024000	001500	X42	G E=173,C=3X,B=36
SJKHM	JUPITER	03	-2.6	0415266	+201331	L 3 34330 L			88092703	033100	001500	X53	G E=206,C=4X,B=45
SJKHM	JUPITER	03	-2.6	0415266	+201331	L 3 34331 L			88092704	042000	001500	X43	G E=178,C=3X,B=41
SJKHM	JUPITER	03	-2.6	0415266	+201331	L 3 34332 L			88092705	050700	001500		G E=174,C=3X,C=38
SJKHM	JUPITER	03	-2.6	0415266	+201331	L 3 34333 L			88092705	055600	001500	X43	G E=164,C=3X,B=43
SJKHM	JUPITER	03	-2.6	0415266	+201331	L 3 34334			88092706	064600	001500	X40	G E=157,C=4X,B=18
SJKHM	JUPITER	03	-2.6	0415266	+201331	L 3 34335 L			88092707	074200	001500	X50	G E=180,C=5X,B=19
SJKHM	JUPITER	03	-2.6	0415266	+201331	L 3 34336 L			88092708	083500	001500		G E=36
SJKHM	JUPITER	03	-2.6	0415266	+201331	L 3 34337 L			88092709	092500	001500	X51	G E=193,C=5X,B=26
SJKRW	JUP.SP	03	-1.9	0415266	+201331	L 3 34338 L			88092710	102400	002500	X52	G E=223,C=6X,B=38
SJKRW	JUP.SP	03	-1.9	0415266	+201331	L 3 34339 L			88092711	112800	002500	X51	G E=227,C=6X,B=30
SJKRW	JUP.SP	03	-1.9	0415266	+201331	L 3 34340			88092712	122700	002500	X51	G E=225,C=6X,B=22

PRO	Object	CL	MAG	R.A.	DEC	D C Image A	FES	MD	Obs.date	Exptim	mmmsstt	ECC	Comment	
SJKJW	JUPITER	03	-2.5	0415281	+201337	L 3	34306		88092508	084600	002500	X02	G C=6X,B=36	
SJKJW	JUPITER	03	-2.5	0415281	+201337	L 3	34307		88092509	094100	002500	X04	G C=6X,B=54	
SJKJW	JUPITER	03	-2.5	0415281	+201337	L 3	34308 L		88092510	103700	002500	X35	G E=109,C=6X,B=64	
SJKJW	JUPITER	03	-2.5	0415281	+201337	L 3	34309		88092511	113300	002500	X33	G E=99,C=6X,B=48	
SJKJW	JUPITER	03	-2.5	0415281	+201337	L 3	34310		88092512	122900	002500	X02	G C=6X,B=33	
SJKJW	JUPITER	03	-2.5	0415281	+201337	L 3	34311		88092513	132200	002100	X31	G E=63,C=5X,B=28	
SJKJW	JUPITER	03	-2.5	0415281	+201337	L 3	34312		88092514	141200	002100	X32	G E=118,C=5X,B=32	
SJKRW	JUPITER	03	-1.9	0415284	+201338	L 3	34318 L		88092608	080800	002500	X01	G C=5X,B=24	
SJKRW	JUPITER	03	-1.9	0415284	+201338	L 3	34319 L		88092609	091700	002500	X33	G E=129,C=6X,B=46	
SJKRW	JUPITER	03	-1.9	0415284	+201338	L 3	34320		88092610	101700	002500	X36	G E=120,C=6X,B=75	
SJKRW	JUPITER	03	-1.9	0415284	+201338	L 3	34321		88092611	111300	002500	X35	G E=101,C=6X,B=61	
SJKRW	JUPITER	03	-1.9	0415284	+201338	L 3	34322		88092612	120900	002500	X02	G C=6X,B=40	
SJKRW	JUPITER	03	-1.9	0415284	+201338	L 3	34323		88092613	130400	002500	X32	G E=79,C=6X,B=34	
SJKRW	JUPITER	03	-1.9	0415284	+201338	L 3	34324		88092613	135800	002500	X02	G C=6X,B=35	
SJKJW	JUPITER	03	-2.5	0415295	+201349	L 3	34300 L		88092408	083900	003000	X53	G E=253,C=5X,B=42	
SJKJW	GANYMEDE	03	4.6	0415295	+201349	L 1	14119 L	22695	FO	88092410	101100	000130	X03	G C=1.5X,B=41
SJKJW	JUPITER	03	-2.0	0415295	+201349	L 3	34301 L		88092410	102900	002200	X05	G C=6X,B=65	
SJKJW	JUPITER	03	-2.0	0415295	+201349	L 3	34302 L		88092411	112400	002200	X04	G C=6X,B=54	
SJKJW	JUPITER	03	-2.0	0415295	+201349	L 3	34303		88092412	122400	002200	X32	G E=60,C=6X,B=35	
SJKJW	JUPITER	03	-2.0	0415295	+201349	L 3	34304		88092413	131700	002200	X32	G E=86,C=6X,B=32	
SJKJW	JUPITER	03	-2.0	0415295	+201349	L 3	34305		88092414	140900	002200	X32	G E=116,C=6X,B=33	
KS173	GANYMEDE	04	05.25	0415469	+201456	H 1	14120 L	22103	FO	88092415	155137	009400	643	V 90 MIN TRUE EXP TIME
KS173	GANYMEDE	04	99.99	0415469	+201456	E 9	02122 2		88092415	154000	016000		V FOR LWP14121	
SUKRW	GANYMEDE	04	4.6	0415502	+201458	1	14121 L	22103	FO	88092418	181200	026500	X08	G C=6X,B=100
TTKGB	BP TAU	58	12.6	0416086	+285916	L 1	14276 L	164	SO	88101911	113000	007900	3X3	G E=3X,C=142,B=49
GDKJC	HD 27383	41	6.9	0417030	+162414	H 1	13933 L	404	FO	88082711	113800	006000	X09	G C=1.5X,B=163
KC136	HD26337	44	07.62	0417151	-080127	L 3	34268 L	3316	FO	88091815	153849	006000	360	V EXPOSURE 2X30 MIN. 2
TTKGB	RY TAU	58	10.8	0418509	+281935	L 1	14274 L	282	FO	88101909	090400	002500	375	G E=1.5,C=139,B=69
OD48Y	TZ ERI	66	9.8	0419129	-060810	L 1	14261 L	202	FO	88101705	055800	001500	302	G C=130,B=34
OD48Y	TZ ERI	66	9.8	0419129	-060810	L 3	34490 L	168	FO	88101706	062000	006000	301	G C=58,B=26
OD48Y	TZ ERI	66	9.8	0419129	-060810	L 1	14262 L	187	FO	88101707	072900	005000	334	G E=127,C=93,B=52
GDKJC	HD 27691	44	7.0	0419540	+145625	L 1	13941 L	3800	FO	88082813	130500	000330	X03	G C=2X,B=46
GDKJC	HD 27859	44	7.8	0421360	+164621	H 1	13934 L	1773	FO	88082713	131900	006900	309	G C=204,B=125
GDKJC	HD 28034	41	7.5	0423150	+152444	L 1	13940 L	2427	FO	88082812	121900	000400	X03	G C=2X,B=49
KC004	HD28024	31	04.68	0423187	+224207	H 1	14253 L	392	FU	88101613	133745	001130	600	V
KC004	HD28024	31	04.70	0423187	+224207	L 3	34484 L	385	FU	88101614	140937	001405	700	V
KC004	HD28024	31	04.69	0423187	+224207	H 1	14254 L	390	FU	88101614	144709	001130	601	V
KC004	HD28024	31	04.72	0423187	+224207	L 3	34485 L	380	FU	88101615	153310	001405	700	V
KC004	HD28024	31	04.72	0423187	+224207	H 1	14255 L	380	FU	88101616	160754	001130	600	V
KC004	HD28024	31	04.72	0423187	+224207	L 3	34486 L	381	FU	88101616	163952	001200	700	V
KC004	HD28024	31	04.70	0423187	+224207	H 1	14256 L	386	FU	88101617	171424	001130	500	V
KC004	HD28024	31	04.70	0423187	+224207	L 3	34487 L	385	FU	88101617	174516	001400	700	V
KC004	HD28024	31	04.69	0423187	+224207	H 1	14257 L	390	FU	88101618	181934	001130	600	V
KC004	HD28024	31	04.71	0423187	+224207	L 3	34488 L	384	FU	88101618	184911	001405	700	V
KC004	HD28024	31	04.72	0423187	+224207	H 1	14258 L	379	FU	88101619	192812	001200	600	V

PRO	Object	CL	MAG	R.A.	DEC	D C Image A	FES	MD	Obs.date	Exptim	mmmsstt	ECC	Comment
KC004	HD28024	31	04.72	0423187	+224207	H 1 14259 L	381	FU	88101620	202039	001200	600	U
GDKJC	HD 28099	44	8.1	0423480	+163807	H 1 13948 L	1290	FO	88082910	102900	009000	308	G C=170,B=96
TTKGB	DF TAU	58	11.7	0423596	+253543	L 1 14273 L	161	SO	88101907	073100	004000	344	G E=184,C=85,B=55
USSBS	HD 28319	31	3.4	0425482	+154541	H 3 34285 L	854	FU	88092112	121200	001200	X03	G C=1.5X,B=50
USSBS	HD 28319	31	3.4	0425482	+154541	H 1 14326 L	873	FU	88102807	071400	000300	503	G C=207,B=42
KC214	GL169	48	08.84	0426020	+214842	H 1 13950 L	1119	FO	88082915	153220	006000	141	U
GDKTS	L 71	48	13.1	0426060	+183354	L 1 13912 L	75	SO	88082423	231800	018000	335	G E=160,C=95,B=64
GDKJC	HD 28363	41	6.6	0426080	+160301	L 1 13939 L	5243	FO	88082811	112000	000500	X03	G C=3X,B=49
GDKJC	HD 28363	41	6.6	0426080	+160301	H 1 13949 L	5206	FO	88082912	124700	009000	X09	G C=2X,B=117
TTKGB	DK TAU	58	12.2	0427403	+255459	L 1 14318 L	64	SO	88102706	065600	006000	345	G E=170,C=139,B=66
KM106	HH29	69	99.99	0428332	+175955	E 9 02129 2			88101814	140000	00004000		U FOR SWP 34493
KM106	HH29	69	15.00	0428333	+175956	L 1 14267 L		BO	88101714	144047	036700	133	U
TTKGB	GG TAU	58	12.3	0429371	+172522	L 1 14272 L	170	SO	88101905	052300	008000	3X3	G E=3X,C=124,B=43
TTKGB	UZ TAU	58	13.0	0429393	+254613	L 1 14340 L	117	SO	88102923	231900	009000	3X4	G E=1.5X,C=95,B=52
TTKGB	DL TAU	58	13.1	0430359	+251424	L 1 14353 L	63	SO	88103112	121700	003300		G
TTKGB	AA TAU	58	12.6	0431530	+242249	L 1 14319 L	91	SO	88102709	090000	006000	336	G E=132,C=99,B=73
GDKTS	L 86	48	13.5	0433090	+184718	L 1 13919 L	55	SO	88082523	231200	024000	346	G E=191,C=95,B=73
FSKSS	BD +26 730	46	8.4	0433420	+270200	L 1 14323 L	1217	FO	88102721	214000	000500	342	G E=145,C=65,B=32
FSKSS	BD +26 730	46	8.4	0433420	+270200	H 3 34614 L	1230	FO	88102721	215400	015000	253	G E=247,C=64,B=45
FSKSS	BD +26 730	46	8.4	0433420	+270200	L 1 14324 L	1239	FO	88102800	003400	000500	342	G E=162,C=68,B=32
FSKSS	BD +26 730	46	8.4	0433420	+270200	L 3 34615 L	1216	FO	88102801	010900	018000	3X3	G E=1.5X,C=85,B=50
FSKSS	BD +26 730	46	8.4	0433420	+270200	L 1 14325 L	1232	FO	88102804	041700	000500	342	G E=148,C=67,B=32
FSKSS	BD +26 730	46	8.4	0433420	+270200	L 1 14331 L	1180	FO	88102821	213900	000500	342	G E=161,C=65,B=33
FSKSS	BD +26 730	46	8.4	0433420	+270200	L 3 34621 L	1187	FO	88102821	215100	015000	2X3	G E=1.5X,C=64,B=47
FSKSS	BD +26 730	46	8.4	0433420	+270200	L 1 14332 L	1217	FO	88102900	002800	000500	342	G E=140,C=64,B=32
FSKSS	BD +26 730	46	8.4	0433420	+270200	L 3 34622 L	1210	FO	88102901	010100	020500	244	G E=160,C=74,B=56
FSKSS	BD +26 730	46	8.4	0433420	+270200	L 1 14333 L	1201	FO	88102902	025300	000500	342	G E=136,C=65,B=32
FSKSS	BD +26 730	46	8.4	0433420	+270200	L 1 14357 L	1177	FO	88103121	212600	000500	342	G E=153,C=70,B=34
FSKSS	BD +26 730	46	8.4	0433420	+270200	L 3 34652 L	1250	FO	88103121	213800	015000	2X3	G E=1.5X,C=65,B=50
PHCAL	NULL	99	0.0	0436099	-621031	L 3 33769 L			88061805	052300	000000	00	G B=18
PHCAL	SKY	07	0.0	0436099	-621031	L 3 33770 L			88061805	054500	036000	06	G B=72
CSKJH	HD 29712	49	5.4	0436100	-621032	L 1 13449 L	443	FU	88061719	195200	002000	232	G E=119,C=48,B=35
CSKJH	HD 29712	49	5.4	0436100	-621032	H 1 13450 L	444	FU	88061721	210900	093000	X9	G E=2X,B=190
KC166	HD29712	49	99.99	0436104	-621032	E 9 02065 L			88061720	205300	018000		U LWP 13450 TARG AT RP
TTKGB	DR TAU	58	12.0	0444132	+165324	L 1 14275 L	93	FO	88101910	102000	002000	342	G E=167,C=133,B=40
TTKGB	DS TAU	58	12.5	0444391	+291956	L 1 14342 L	147	SO	88103004	040800	004300	343	G E=173,C=87,B=41
URJPC	BR1	11	15.9	0445551	-702029	L 3 33443 L		BO	88050408	081500	036000	4X6	G E=5X,C=198,B=78
URJPC	BR1	11	15.9	0445551	-702029	L 3 33444 L		BO	88050414	145600	003000	231	G E=116,C=44,B=24
TTKGB	UY AUR	58	12.6	0448355	+304214	L 1 14341 L	151	SO	88103002	020900	007000	3X3	G E=2X,C=130,B=46
KC193	HD32068	47	04.11	0448586	+410018	H 1 14338 L	657	FU	88102916	165111	001000	660	U
KC193	HD32068	47	04.09	0448587	+410018	H 3 34626 L	669	FU	88102913	135449	002000	770	U
KC193	HD32068	47	04.09	0448587	+410018	H 1 14336 L	664	FU	88102914	142624	001000	660	U
KC193	HD32068	47	04.04	0448587	+410018	H 3 34627 L	694	FU	88102914	145937	001700	551	U
KC193	HD32068	47	04.08	0448587	+410018	H 1 14337 L	675	FU	88102915	153832	001000	660	U
KC193	HD32068	47	04.08	0448587	+410018	H 3 34628 L	675	FU	88102916	161708	001700	551	U

PRO	Object	CL	MAG	R.A.	DEC	D C Image A	FES	MD	Obs.date	Exptim	mmmsstt	ECC	Comment
KA080	AB AUR	34	07.47	0452342	+302822	H 1 14287 L	3795	FO	88102017	175511	003500	451	U
ABKTS	AB AUR	30	7.2	0452342	+302822	L 9 02130 2			88102005	052200	000240		G
KA080	AB AUR	34	07.44	0452342	+302822	L 3 34504 L	3879	FO	88102018	183802	000300	501	U
ABKTS	AB AUR	30	7.2	0452342	+302822	H 1 14279 L	3618	FO	88102005	053500	003000	443	G E=168,C=154,B=43
KA080	AB AUR	34	07.44	0452342	+302822	H 1 14288 L	3890	FO	88102019	191548	003500	451	U
ABKTS	AB AUR	30	7.2	0452342	+302822	L 3 34497 L	3674	FO	88102006	065500	000300	501	G C=202,B=26
KA080	AB AUR	34	07.44	0452342	+302822	L 3 34505 L	3873	FO	88102019	195656	000300	501	U
ABKTS	AB AUR	30	7.2	0452342	+302822	H 1 14280 L	3616	FO	88102007	070600	003000	445	G E=173,C=179,B=65
KA080	AB AUR	34	07.46	0452342	+302822	H 1 14289 L	3807	FO	88102020	203124	003500	451	U
ABKTS	AB AUR	30	7.2	0452342	+302822	L 3 34498 L	3839	FO	88102008	080900	000300	501	G C=202,B=27
ABKTS	AB AUR	30	7.2	0452342	+302822	L 3 34499 L	3862	FO	88102009	094700	000300	501	G C=204,B=27
ABKTS	AB AUR	30	7.2	0452342	+302822	H 1 14281 L	3858	FO	88102010	100600	003000	446	G E=180,C=184,B=71
ABKTS	AB AUR	30	7.2	0452342	+302822	H 1 14282 L	3844	FO	88102011	111000	003000	443	G E=161,C=170,B=48
ABKTS	AB AUR	30	7.2	0452342	+302822	H 1 14283 L	3614	FO	88102012	121900	003000	443	G E=176,C=165,B=46
ABKTS	AB AUR	30	7.2	0452342	+302822	L 3 34506 L	3858	FO	88102021	215300	000300	500	G C=211,B=19
ABKTS	AB AUR	30	7.2	0452342	+302822	H 1 14290 L	3877	FO	88102022	220400	003500	443	G E=190,C=162,B=50
ABKTS	AB AUR	30	7.2	0452342	+302822	L 3 34507 L	4015	FO	88102023	231100	000300	500	G C=190,B=19
ABKTS	AB AUR	34	7.2	0452342	+302822	H 1 14291 L	3990	FO	88102023	232400	003500	454	G E=207,C=168,B=52
ABKTS	AB AUR	34	7.2	0452342	+302822	L 3 34508 L	3924	FO	88102100	003300	000300	500	G C=200,B=19
ABKTS	AB AUR	34	7.2	0452342	+302822	H 1 14292 L	3903	FO	88102100	004400	003500	444	G E=194,C=169,B=53
ABKTS	AB AUR	34	7.2	0452342	+302822	L 3 34509 L	3816	FO	88102101	015200	000300	500	G C=201,B=19
ABKTS	AB AUR	34	7.2	0452342	+302822	H 1 14293 L	3806	FO	88102102	020200	003500	444	G E=194,C=168,B=52
ABKTS	AB AUR	34	7.2	0452342	+302822	L 3 34510 L	3806	FO	88102103	030900	000300	500	G C=196,B=20
ABKTS	AB AUR	34	7.2	0452342	+302822	H 1 14294 L	3860	FO	88102103	031900	003500	453	G E=202,C=164,B=45
ABKTS	AB AUR	34	7.2	0452342	+302822	L 3 34511 L	4014	FO	88102104	042600	000300	500	G C=195,B=19
ABKTS	AB AUR	34	7.2	0452342	+302822	H 1 14295 L	3917	FO	88102104	043700	003500	443	G E=188,C=165,B=48
ABKTS	AB AUR	34	7.2	0452342	+302822	L 3 34512 L	4137	FO	88102105	054400	000300	501	G C=200,B=25
ABKTS	AB AUR	34	7.2	0452342	+302822	H 1 14296 L	4004	FO	88102105	055400	003500	444	G E=186,C=180,B=51
ABKTS	AB AUR	34	7.2	0452342	+302822	L 3 34513 L	4176	FO	88102107	070300	000300	501	G C=205,B=27
ABKTS	AB AUR	34	7.2	0452342	+302822	H 1 14297 L	4104	FO	88102107	071300	003500	449	G E=230,C=220,B=108
ABKTS	AB AUR	34	7.2	0452342	+302822	L 3 34514 L	3956	FO	88102108	082100	000300	502	G C=208,B=31
ABKTS	AB AUR	34	7.2	0452342	+302822	H 1 14298 L	3875	FO	88102108	083100	002000	339	G E=209,C=210,B=131
ABKTS	AB AUR	34	7.2	0452342	+302822	L 3 34515 L	4056	FO	88102109	093200	000300	502	G C=215,B=31
ABKTS	AB AUR	34	7.2	0452342	+302822	H 1 14299 L	3833	FO	88102109	094200	003000	349	G E=221,C=215,B=117
ABKTS	AB AUR	34	7.2	0452342	+302822	L 3 34516 L	4144	FO	88102110	104400	000300	501	G C=211,B=27
ABKTS	AB AUR	34	7.2	0452342	+302822	H 1 14300 L	3853	FO	88102110	105400	003500	454	G E=207,C=182,B=56
ABKTS	AB AUR	34	7.2	0452342	+302822	H 1 14301 L	3900	FO	88102112	121400	003500	443	G E=197,C=176,B=49
KA080	AB AUR	34	07.49	0452344	+302820	H 1 14284 L	3659	FO	88102013	135921	003000	442	U
KA080	AB AUR	34	07.51	0452344	+302820	L 3 34500 L	3651	FO	88102013	131926	000300	510	U
KA080	AB AUR	34	07.49	0452344	+302820	L 3 34501 L	3711	FO	88102014	143432	000300	510	U
KA080	AB AUR	34	07.47	0452344	+302820	H 1 14285 L	3778	FO	88102015	151112	003000	442	U
KA080	AB AUR	34	07.49	0452344	+302820	L 3 34502 L	3721	FO	88102015	154711	000300	510	U
KA080	AB AUR	34	07.48	0452344	+302820	H 1 14286 L	3758	FO	88102016	163218	003000	442	U
KA080	AB AUR	34	07.46	0452344	+302820	L 3 34503 L	3814	FO	88102017	170912	000300	510	U
KA080	AB AUR	34	07.46	0452344	+302820	H 1 14302 L	3820	FO	88102113	134359	003500	441	U

PRO	Object	CL	MAG	R.A.	DEC	D C	Image	A	FES	MD	Obs.date	Exptim	mmmsstt	ECC	Comment
KA080	AB AUR	34	07.45	0452344	+302820	L 3	34517	L	3845	FO	88102113	131033	000300	510	V
KA080	AB AUR	34	07.44	0452344	+302820	L 3	34518	L	3865	FO	88102114	142524	000300	510	V
KA080	AB AUR	34	07.47	0452344	+302820	H 1	14303	L	3790	FO	88102115	150129	003500	441	V
KA080	AB AUR	34	07.45	0452344	+302820	L 3	34519	L	3855	FO	88102115	154259	000300	510	V
KA080	AB AUR	34	07.46	0452344	+302820	H 1	14304	L	3817	FO	88102116	162455	004500	551	V
KA080	AB AUR	34	07.45	0452344	+302820	H 1	14305	L	3830	FO	88102117	175221	004000	551	V
KA080	AB AUR	34	07.46	0452344	+302820	L 3	34520	L	3796	FO	88102117	171617	000300	510	V
TTKGB	SU AUR	58	9.2	0452481	+302920	L 1	14351	L	593	FO	88103110	100400	001500	452	G E=208,C=166,B=34
WRJPC	BR3	11	14.8	0452523	-664604	L 3	33445	L	BO	88050416	161500	012000	453	G E=235,C=158,B=48	
WRJPC	BR3	11	14.8	0452523	-664604	L 3	33446	L	BO	88050418	184200	002000	231	G E=79,C=50,B=30	
WRJGK	SK-67 18	11	11.8	0455175	-671600	L 3	33268	L	212	SO	88041220	202300	000600	401	G C=159,B=27
WRJGK	SK-67 18	11	11.8	0455176	-671519	L 3	33214	L	206	SO	88040520	203500	000500	400	G C=150,B=18
WRJGK	SK-67 18	11	11.8	0455176	-671519	L 3	33218	L	200	SO	88040618	184100	000800	540	G E=159,C=215,B=17
WRJGK	SK-67 18	11	11.8	0455176	-671519	L 3	33234	L	220	SO	88040819	190800	000800	550	G E=238,C=215,B=16
WRJGK	SK-67 18	11	11.8	0455176	-671519	L 3	33235	L	218	SO	88040819	194600	000900	XX1	G E=1.5X,C=1.5X,B=21
WRJGK	SK-67 18	11	11.8	0455176	-671519	L 3	33244	L	206	SO	88041020	204100	000800	X51	G E=226,C=1.5X,B=26
WRJGK	SK-67 18	11	11.8	0455176	-671519	L 3	33256	L	207	SO	88041119	194500	000600	451	G E=207,C=145,B=22
FSKJL	G1 182	48	9.6	0456590	+014236	L 1	14277	L	309	FO	88101922	225400	003000	332	G E=128,C=66,B=40
FSKJL	GL 182	48	9.6	0456590	+014236	L 3	34495	L	298	FO	88101923	231800	012000	03	G B=43
FSKJL	G1 182	48	9.6	0456590	+014236	L 1	14278	L	294	FO	88102002	020200	004000	343	G E=152,C=70,B=43
FSKJL	G1 182	48	9.6	0456590	+014236	L 3	34496	L	294	FO	88102002	023600	010500	?3	G E=40,B=47
JA136	SK-66 41	12	11.86	0457369	-663203	L 3	33251	L	303	SO	88041103	034105	001000	500	V
JA136	SK-66 41	12	11.84	0457370	-663204	L 3	33250	L	307	SO	88041102	022332	001300	600	V
JA136	SK-66 41	12	11.85	0457370	-663204	L 1	13014	L	304	SO	88041102	024800	000900	700	V
JA136	W00 599	12	13.80	0457379	-663218	L 3	33252	L	BO	88041104	043709	006000	600	V	
CMKRS	HD 32068	47	3.8	0458587	+410018	L 1	13974	L	717	FU	88090203	034800	007500	303	G C=130,B=50
CMKRS	HD 32068	47	3.8	0458587	+410018	L 3	34170	L	714	FU	88090205	051100	003000	201	G C=45,B=27
CMKRS	HD 32068	47	3.8	0458587	+410018	L 1	13975	L	658	FU	88090205	054800	000005	502	G C=220,B=35
KI063	SK -7036	59	13.56	0501386	-703808	L 1	13901	L	66	SO	88082315	154422	005000	601	V
J1153	SK -70 36	59	13.62	0501387	-703809	L 3	33301	L	63	SO	88041704	040151	006500	500	V
J1153	SK -70 36	59	13.62	0501387	-703809	L 1	13065	L	63	SO	88041705	051133	005000	501	V
KI060	SK-7036	59	13.20	0501387	-703809	L 3	33935	L	BO	88071719	194403	006000	400	V	
KI060	SK-7036	59	13.20	0501387	-703809	L 1	13683	L	BO	88071720	204836	005000	501	V	
KI060	SK -70 36	59	13.73	0501387	-703809	L 3	33947	L	57	SO	88072100	003737	006500	500	V
KI060	SK -70 36	59	13.73	0501387	-703809	L 1	13708	L	57	SO	88072101	014805	005000	501	V
KI060	SK-7036	59	13.50	0501387	-703808	L 3	33982	L	BO	88072919	195050	006500	500	V	
KI060	SK-7036	59	13.20	0501387	-703808	L 1	13758	L	BO	88072921	210559	005000	603	V	
KI063	SK-7036	59	13.20	0501387	-703808	L 3	34125	L	BO	88082316	164412	006500	500	V	
J1153	HV 2289	59	14.70	0501538	-703746	L 3	33302	L	24	SO	88041706	062141	008000	500	V PREAD
J1153	HV 2289	59	14.70	0501538	-703746	L 1	13066	L	24	SO	88041707	074724	004000	401	V PREAD
OD81K	HD 32656	21	6.6	0502474	+262147	H 1	12990	L	5621	FO	88040515	154900	003500	05	G B=68
KA066	NGC1818/12	23	13.92	0503576	-662959	L 1	13393	L	48	SO	88060921	215458	012000	702	V
KA066	NGC1818/12	23	13.92	0503576	-662959	L 1	13394	L	BO	88061000	004737	003000	402	V	
WRJPC	BR14	11	14.4	0504376	-700756	L 3	33458	L	80	88050521	214900	005700	342	G E=177,C=118,B=34	
TTKGB	RW AUR	58	10.2	0504377	+302014	L 1	14352	L	143	FO	88103111	110500	001500	4X2	G E=2X,C=178,B=34

PRO	Object	CL	MAG	R.A.	DEC	D C Image A	FES	MD	Obs.date	Exptim	mmmsstt	ECC	Comment				
PRKCG	HD	33328	26	4.3	0506450	-084900	H 3	34211	L	472	FU	88090912	125700	000048	502	G	C=230,B=38
PRKCG	HD	33328	26	4.3	0506450	-084900	H 3	34605	L	471	FU	88102607	072700	000048	502	G	C=200,B=36
CUKSS	N LMC 2	55	13.5	0508139	-684122	L 1	14320	L	71	SO	88102711	111600	000500	342	G	E=173,C=69,B=33	
CUKSS	N LMC 2	55	13.5	0508139	-684122	L 3	34609	L	63	SO	88102711	112900	004500	351	G	E=190,C=73,B=22	
KIT00	NOVA LMC88	55	00.00	0508140	-684122	L 1	14225	L		BO	88101414	144712	001200	351	V	PREAD	
KIT00	NOVA LMC88	55	11.39	0508140	-684122	L 3	34473	L		115	FO	88101415	150717	001000	210	V	PREAD
KIT00	N LMC 88#2	55	13.02	0508140	-684123	L 1	14306	L		107	SO	88102119	194656	001500	570	V	
KIT00	N LMC 88#2	55	13.02	0508140	-684123	L 3	34521	L		107	SO	88102120	201319	002903	340	V	PREAD
KIT00	N LMC 88#2	55	13.02	0508140	-684123	L 1	14307	L		107	SO	88102120	204804	000400	350	V	PREAD
KIT00	N LMC NO.2	55	14.52	0508140	-684123	L 1	14354	L		28	SO	88103114	143152	000500	231	V	
KIT00	N LMC NO.2	55	13.73	0508140	-684123	L 3	34643	L		57	SO	88103114	144647	003000	401	V	
KIT00	N LMC NO.2	55	13.60	0508140	-684123	L 1	14355	L		64	SO	88103115	152435	002500	471	V	
KIT00	N LMC N.2	55	13.48	0508140	-684123	H 1	14356	L		71	SO	88103116	162924	021800	232	V	
KA069	HD269128	20	11.17	0510370	-685000	E 9	02091	2		140	FO	88081615	153000	004000		V	FES 5 KBS FOR SWP340
KA069	HD269128	20	11.17	0510370	-685000	L 3	34093	L		140	FO	88081615	155818	001500	500	V	
KA069	HD269128	20	11.14	0510370	-685000	L 1	13865	L		143	FO	88081616	162048	000500	502	V	
KA069	HD269128	20	11.10	0510370	-685000	L 3	34096	L		149	FO	88081718	184500	001700	500	V	
KA069	HD269128	20	11.10	0510370	-685000	E 9	02092	2		149	FO	88081718	182800	004000		V	FES FOR LWP13870
KA069	HD269128	20	11.12	0510370	-685000	L 1	13869	L		146	FO	88081719	192618	000500	502	V	
HSKCG	HD	269128	52	10.5	0510440	-684947	H 3	34094	L	145	FO	88081622	224400	063000	X09	G	C=1.5X,B=118
HSKCG	HD	269128	52	10.5	0510440	-684947	H 1	13870	L	148	FO	88081720	200800	042000	X09	G	C=1.5X,B=105
HSKCG	HD	269128	52	10.5	0510440	-684947	L 3	34097	L	164	FO	88081803	031700	004300	X00	G	C=7X,B=17
LGKTA	HD	34029	45	0.2	0512597	+455641	L 3	34480	L	2760	FU	88101605	054000	000100	451	G	E=179,C=161,B=25
LGKTA	HD	34029	45	0.2	0512597	+455641	L 3	34480	S	6692	FU	88101605	054500	000200	431	G	E=104,C=161,B=25
LGKTA		45	0.2	0512597	+455641	L 3	34481	S	14296	FU	88101606	063300	000240	X79	G	E=202,C=1.5X,B=251	
LGKTA		45	0.2	0512597	+455641	L 3	34481	L		FO	88101606	063900	000120	X51	G	E=247,C=1.5X,B=25	
LGKTA	HD	34029	45	0.2	0512597	+455641	L 3	34482	S	14169	FU	88101607	071600	000240	X51	G	E=207,C=1.5X,B=28
LGKTA	HD	34029	45	0.2	0512597	+455641	L 3	34482	L	14169	FU	88101607	072300	000120	X51	G	E=219,C=1.5X,B=28
ISKRH	HD	34029	45	0.1	0512598	+455642	H 3	34164	S	14347	FU	88090107	072800	012000	302	G	C=75,B=34
ISKRH	HD	34029	45	0.1	0512598	+455642	H 3	34165	S	14811	FU	88090110	101400	009000	304	G	C=107,C=158,B=59
ISKRH	HD	34029	45	0.1	0512598	+455642	H 3	34166	S	14233	FU	88090112	124900	010000	X07	G	C=3X,B=81
WRJPC	BR19	11	14.6	0514326	-692245	L 3	33447	L		BO	88050419	195700	010000	474	G	E=6,C=152,B=52	
WRJPC	BR19	11	14.6	0514326	-692245	L 3	33448	L		BO	88050422	220500	001500	231	G	E=66,C=45,B=27	
WRJPC	BR19	11	14.6	0514326	-692245	L 1	13165	L		BO	88050422	222600	002300	342	G	E=150,C=80,B=37	
PHCAL	HD	34816	20	4.3	0517162	-131337	H 3	33192	L	488	FU	88040100	003400	000022	402	G	C=170,B=35
PHCAL	HD	34816	20	4.3	0517162	-131337	H 1	12961	L	491	FU	88040100	003800	000022	503	G	C=205,B=41
KA069	R88	20	09.49	0518352	-691802	H 1	13868	L		624	FO	88081715	151210	018000	887	V	
NPKSM	LMC	47	70	17.0	0520180	-693400	L 3	34085	L		88081412	125200	003000	335	G	E=119,C=88,B=67	
NPKSM	LMC	47	70	17.0	0520180	-693400	L 3	34086	L		BO	88081414	140100	002700	233	G	E=95,C=68,B=50
PHCAL	HD	35580	22	6.1	0521268	-561051	L 1	13093	L	9278	FO	88042200	002700	000800	707	G	C=70X,B=83
PHCAL	HD	35580	22	6.1	0521268	-561051	H 3	33335	L	9904	FO	88042200	004200	001100	402	G	C=170,B=35
PHCAL	HD	35580	22	6.1	0521268	-561051	H 3	33343	L	9102	FO	88042317	175500	000009	400	G	C=160,B=20
PHCAL	HD	35580	22	6.1	0521268	-561051	H 1	13110	L	9081	FO	88042318	180500	000800	503	G	C=201,B=45
PHCAL	HD	35580	22	6.1	0521268	-561051	H 3	33344	L	9531	FO	88042318	183700	001400	503	G	C=205,B=42
PHCAL	HD	35580	22	6.1	0521268	-561051	L 1	13111	L	9429	FO	88042319	191000	000007	502	G	C=215,B=35

PRO	Object	CL	MAG	R.A.	DEC	D C Image A	FES	MD	Obs.date	Exptim	mmmsstt	ECC	Comment
JAI36	N44Z3	12	14.00	0522085	-680005	L 3 33260 L		BO	88041202	022312	011000	801	V GUIDING ON N44C-2
JAI36	N44Z3	12	14.00	0522085	-680005	L 1 13020 L		BO	88041204	041852	004000	501	V GUIDING ON N44C-2
JAI36	N44Z3	12	14.00	0522085	-680005	L 3 33261 L		BO	88041205	051029	004000	500	V GUIDING ON N44C-2. T
PRKCG	HD 35439	26	4.7	0522089	+014806	H 3 34213 L	280	FU	88090914	144800	000130	502	G C=243,B=40
WRJPC	BR25	11	15.5	0522136	-680151	L 3 33454 L		BO	88050508	083400	030000	3X6	G E=4X,C=166,B=73
WRJPC	BR25	11	15.5	0522136	-680151	L 3 33455 L		BO	88050514	141100	004500	332	G E=69,C=58,B=34
JAI36	N44C2	12	13.90	0522231	-680118	L 3 33253 L		BO	88041107	070954	004000	450	V
JAI36	N44 C2	12	13.90	0522231	-680118	L 1 13015 L		BO	88041107	075856	003000	401	V
JAI36	N44C-STAR2	12	12.57	0522231	-680118	L 1 13021 L	160	SO	88041206	060813	004000	501	V OFFSET 4 ARCSEC NORT
WRJGK	HD 36402	10	11.5	0526120	-673213	L 3 33217 L	333	SO	88040617	174400	000400	440	G E=165,C=160,B=17
WRJGK	HD 36402	10	11.5	0526120	-673213	L 3 33226 L			88040718	184000	000600	550	G E=219,C=215,B=18
WRJGK	HD 36402	10	11.5	0526120	-673213	L 3 33233 L	351	FO	88040818	181200	000500	550	G E=190,C=170,B=16
WRJGK	HD 36402	10	11.5	0526120	-673213	L 3 33236 L	362	FO	88040820	205300	000700	552	G E=249,C=230,B=35
WRJGK	HD 36402	10	11.5	0526120	-673213	L 3 33257 L	341	SO	88041120	204200	000500	451	G E=187,C=150,B=25
WRJGK	HD 36402	10	11.5	0526120	-673213	L 3 33264 L	315	SO	88041217	173600	000500	450	G E=198,C=153,B=20L
WRJGK	HD 36402	10	11.5	0526120	-673213	L 3 33265 L	316	SO	88041218	181400	000500	451	G E=202,C=151,B=22
WRJGK	HD 36402	10	11.5	0526120	-673213	L 3 33266 L	316	SO	88041218	184900	000600	551	G E=230,C=185,B=23
WRJGK	HD 36402	10	11.5	0526120	-673213	L 3 33267 L	317	SO	88041219	192600	000600	551	G E=237,C=183,B=23
OBKCG	LH58:14	12	14.1	0526439	-685106	L 1 13584 L	35	SO	88070714	143600	003800	307	G C=142,B=88
OBKCG	LH58:14	12	14.1	0526439	-685106	L 3 33877 L	36	SO	88070715	152600	003500	305	G C=99,B=68
OBKCG	LH58:52A	12	12.4	0526449	-685051	L 3 33754 L	141	SO	88061414	141700	002100	500	G C=198,B=18
OBKCG	LH58:52A	12	12.4	0526449	-685051	L 1 13425 L	144	SO	88061414	144600	001700	502	G C=240,B=38
OBKCG	LH58:30	12	13.5	0526559	-685204	L 3 33755 L	61	SO	88061415	153300	003500	500	G C=233,B=18
OBKCG	LH58:10	12	13.7	0526559	-685042	L 1 13583 L	62	SO	88070712	121300	003800	03	G B=41
OBKCG	LH58:10	12	13.7	0526559	-685042	L 3 33876 L		SO	88070713	131000	002000	00	G B=18
OBKCG	LH58:30	12	13.5	052656	-685205	L 1 13426 L	63	SO	88061416	161700	002800	502	G C=226,B=40
OBKCG	LH58:10A	12	13.1	052659	-685112	L 1 13427 L	104	SO	88061419	194200	002000	302	G C=123,B=35
OBKCG	LH58:10A	12	13.1	052659	-685112	L 3 33757 L			88061420	201000	003200	400	G C=131,B=18
OBKCG	LH58:16	12	12.9	0527049	-685117	L 3 33756 L			88061418	182800	003000	300	G C=58,B=18
KE138	NGC1984	83	10.94	0527540	-690800	H 3 33776 L	171	FO	88061821	215954	040700	403	V
KE138	NGC1984	83	10.43	0527540	-690800	H 1 13548 L	271	FO	88070119	195051	035000	604	V
LDKCA	ROSS137B	48	13.0	0528356	-652904	L 1 13717 L		BO	88072204	043800	003000	232	G E=80,C=52,B=39
LDKCA	ROSS137B	48	13.0	0528356	-652904	L 3 33957 L		BO	88072205	055200	038500	327	G E=101,C=110,B=82
LDKCA	ROSS137B	48	13.0	0528356	-652904	L 1 13718 L		BO	88072212	122500	006000	235	G E=129,C=90,B=70
LDKCA	ROSS137B	48	13.0	0528356	-652904	L 1 13719 L		BO	88072214	141500	003500	39	G E=214,B=170
BEKTS	HD 36576	26	5.7	0530357	+183023	H 1 14029 L	11815	FO	88091013	135600	000310	503	G C=205,B=43
BEKTS	HD 36576	26	5.7	0530357	+183023	H 3 34219 L	11836	FO	88091014	140600	000745		G C=215,B=38
KI115	SAO 234034	40	10.61	0533516	-574341	L 1 13909 L	234	FO	88082415	153554	001500	501	V
KI115	H0534-581	59	14.38	0534033	-580333	L 3 34130 L	32	SO	88082420	201119	006800	351	V
KI115	H0534-581	59	14.07	0534033	-580333	L 1 13911 L	42	SO	88082421	211917	003000	441	V PREAD
CUJSS	NOVA LMC	55	14.00	0535019	-702315	L 3 33422 L	47	SO	88050117	175100	000145	X04	G C=2X,C=160,B=55
IGKFB	SK-69203	23	12.3	0535470	-691553	L 3 33942 L	145	SO	88071913	135800	005000	307	G C=186,B=90
IGKFB	SK-69203	23	12.3	0535470	-691553	H 1 13709 L	141	SO	88072105	050100	035000	307	G C=160,B=90
SNKRK	SN 1987A	56	8.7	0535499	-691758	H 3 34024	1004	FO	88080507	073800	095200	309	G C=236,B=149
SNKRK	SKYBKOND	07		0535499	-691758	L 1 13789			88080507	074000	092000	309	G C=216,B=161

PRO	Object	CL	MAG	R.A.	DEC	D C	Image	A	FES	MD	Obs.date	Exptim	mmmsstt	ECC	Comment
SNKRK	SN 1987A	56	7.5	0535500	-691757	L 3	33800	L	2043	FO	88062210	103800	008000	532	G E=128,C=200,B=40
SNKRK	SN 1987A	56	7.5	0535500	-691758	L 1	13624	L	1543	FO	88071212	122200	013500		G C=186,B=35
JET00	SN 1987A	56	07.31	0535501	-691759	L 1	12993	L	4348	FO	88040600	005612	046500	305	U PREAD
SNJRK	SN 1987A	56	7.29	0535501	-691759	L 9	02053	2			88040500	003000	000240		G
JET00	SN1987A	56	07.55	0535501	-691758	L 1	13148	L	3509	FO	88050100	001454	000330	501	U
SNJRK	SN 1987A	56	7.29	0535501	-691759	L 1	12991	L	4441	FO	88040522	224100	000330	503	G C=205,B=42
JET00	SN1987A	56	07.56	0535501	-691758	L 1	13149	L	3483	FO	88050101	010119	033000	305	U BGD SERENDIPITY
SNJRK	SN 1987A	56	7.29	0535501	-691759	L 1	12992	L	4490	FO	88040523	232000	001200	03	G B=41
JET00	SN1987A	56	07.68	0535501	-691758	L 1	13193	L	3131	FO	88050923	235422	000400	502	U
SNJRK	SN 1987A	56	7.3	0535501	-691759	H 3	33215	L	4348	FO	88040600	002400	088000	X39	G E=204,C=1.5X,B=161
JET00	SN1987A	56	07.68	0535501	-691758	L 3	33496	L	3131	FO	88051000	002258	007000	501	U
SNJRK	LMC SN87	56	4.3	0535501	-691759	L 1	13035	L	3931	FO	88041314	141100	000330	502	G C=205,B=37
JET00	SN1987A	56	07.71	0535501	-691758	L 1	13194	L	3067	FO	88051001	014110	003000	702	U
SNJRK	SN 1987A	56	7.10	0535501	-691759	L 3	33331	L	3828	FO	88042110	102100	024000	X03	G C=2.5X,B=50
JET00	SN1987A	56	07.70	0535501	-691758	L 3	33497	L	12372	SO	88051002	021918	024000	702	U
SNJRK	SN 1987A	56	4.3	0535501	-691759	L 1	13087	L	375	FO	88042112	122600	000330	502	G C=187,B=35
JET00	SN1987A	56	07.71	0535501	-691758	L 1	13195	L	3053	FO	88051006	062532	002000	702	U
SNJRK	SN 1987A	56	4.3	0535501	-691759	L 1	13088	L	3807	FO	88042114	144100	001200	X02	G C=3X,B=37
KE179	SN1987A	56	07.98	0535501	-691758	L 3	33741	L	2404	FO	88061021	213727	008000	541	U
SNJRK	SN 1987A	56	7.10	0535501	-691759	L 3	33332	L	3778	FO	88042115	151500	007500	533	G E=127,C=200,B=41
KE179	SN1987A	56	07.99	0535501	-691758	L 1	13402	L	2384	FO	88061022	221317	000400	402	U
SNJRK	SN 1987A	56	7.3	0535501	-691759	L 3	33423	L	3261	FO	88050120	205500	008000	533	G E=136,C=210,B=43
KE179	SN1987A	56	07.99	0535501	-691758	L 1	13403	L	2387	FO	88061023	232210	006000	702	U
SNJRK	SN 1987A	56	4.3	0535501	-691759	L 1	13153	L	3258	FO	88050121	212900	000400	502	G C=225,B=37
KE179	SN1987A	56	08.01	0535501	-691758	L 3	33742	L	2335	FO	88061100	002937	023500	772	U
SNJRK	SN 1987A	56	7.3	0535501	-691759	L 1	13154	L	3252	FO	88050122	223600	001200	X02	G C=3X,B=35
KE179	SN1987A	56	08.00	0535501	-691758	L 1	13404	L	2359	FO	88061104	042931	002000	702	U PREAD
SNJRK	SN 1987A	56	7.5	0535501	-691759	L 1	13188	L	3262	FO	88050821	211000	000400	502	G C=192,B=40
KE179	SN 1987A	56	08.37	0535501	-691758	L 1	13498	L	1703	FO	88062421	215734	000400	501	U
SNJRK	SN 1987A	56	7.5	0535501	-691759	L 3	33492	L	3295	FO	88050821	212100	008000	434	G E=129,C=200,B=51
KE179	SN 1987A	56	08.36	0535501	-691758	E 9	02066	2	1710	FO	88062421	214500	016000		U
SNJRK	SN 1987A	56	7.5	0535501	-691759	L 1	13217	L	2990	FO	88051307	075300	000400	502	G C=200,B=38
KE179	SN 1987A	56	08.46	0535501	-691758	L 1	13573	L	1567	FO	88070519	195900	000430	502	U
SNJRK	SN 1987A	56	7.5	0535501	-691759	L 3	33519	L	2979	FO	88051308	080500	024000	XX6	G E=2X,C=3X,B=72
KE179	SN 1987A	56	08.46	0535501	-691758	E 9	02074	2	1567	FO	88070520	200000	004000		U
SNJRK	SN 1987A	56	7.5	0535501	-691759	L 1	13218	L	2920	FO	88051312	121300	001200	X02	G C=3X,B=40
KE179	SN 1987A	56	08.46	0535501	-691758	L 3	33868	L	1567	FO	88070520	201303	009000	500	U
SNJRK	SN 1987A	56	7.5	0535501	-691759	L 3	33520	L	2924	FO	88051312	124700	008000	534	G E=145,C=216,B=58
KE179	SN 1987A	56	08.48	0535501	-691758	L 1	13574	L	1542	FO	88070521	215408	006000	703	U
SNJRK	SN 1987A	56	7.5	0535501	-691759	L 1	13236	L	3106	FO	88051520	204700	000400		G
KE179	SN 1987A	56	08.48	0535501	-691758	L 3	33869	L	1534	FO	88070523	230145	019500	601	U
SNJRK	SN 1987A	56	7.5	0535501	-691759	L 1	13237	L	3061	FO	88051521	212600	001200	X02	G C=3X,B=36
KE179	SN 1987A	56	08.47	0535501	-691758	L 1	13575	L	1557	FO	88070602	022401	002300	702	U
SNJRK	SN 1987A	56	4.3	0535501	-691759	L 1	13238	L			88051522	223200	084000	X09	G C=5X,B=178
KE179	SN 1987A	56	08.79	0535501	-691758	L 1	13741	L	1172	FO	88072519	195733	000430	501	U

PRO	Object	CL	MAG	R.A.	DEC	D C	Image	A	FES	MD	Obs.date	Exptim	mmmsstt	ECC	Comment
SNJRK	SN 1987A	56	7.5	0535501	-691759	L 9	02057	2			88051522	223900	000240		G
KE179	SN 1987A	56	08.79	0535501	-691758	L 3	33966	L	1167	FO	88072520	200924	009000		531 U
SNJRK	SN 1987A	56	4.3	0535501	-691759	H 3	33536	L	3003	FO	88051609	093900	090000		X39 G E=198,C=1.2X,B=145
KE179	SN 1987A	56	08.77	0535501	-691758	L 1	13742	L	1189	FO	88072521	214539	004000		703 U
SNJRK	SN 1987A	56	4.3	0535501	-691759	L 1	13239	L	2902	FO	88051614	140800	004000		X33 G E=104,C=8X,B=46
KE179	SN 1987A	56	08.76	0535501	-691758	L 3	33967	L	1196	FO	88072522	223503	025100		602 U
SNKRK	SN 1987A	56	0.0	0535501	-691758	L 9	02058	2			88052522	223600	000240		G
KE179	SN1987A	56	09.68	0535501	-691758	L 1	14038	L	530	FO	88091216	160439	000430		401 U
SNKRK	SN 1987A	56	7.5	0535501	-691758	L 1	13310	L	2661	FO	88052613	131500	001200		X02 G C=3X,B=34
SNKRK	SN 1987A	56	7.4	0535501	-691758	L 3	33644	L	2885	FO	88052613	134500	008000		?9 G E=120,B=200,B=38
SNKRK	SN 1987A	56	7.5	0535501	-691758	L 1	13311	L	2743	FO	88052614	143000	000400		502 G C=200,B=32
SNKRK	SN 1987A	56	7.50	0535501	-691758	L 1	13387	L	2186	FO	88060816	164700	000400		502 G C=205,B=35
SNKRK	SN 1987A	56	7.50	0535501	-691758	L 3	33725	L	2193	FO	88060816	165900	008000		532 G E=128,C=202,B=38
SNKRK	SN 1987A	56	7.50	0535501	-691758	L 1	13388	L	2197	FO	88060818	182700	001200		X02 G C=3X,B=39
SNKRK	SN 1987A	56	7.5	0535501	-691758	L 1	13452	L	1984	FO	88061816	163800	000400		?09 G C=205,B=3809
SNKRK	SN 1987A	56	7.5	0535501	-691758	L 1	13489	L	1964	FO	88062205	055100	000400		502 G C=184,B=33
SNKRK	SN 1987A	56	7.5	0535501	-691758	L 3	33799	L	2043	FO	88062206	060100	024000		X03 G C=3X,B=46
SNKRK	SN 1987A	56	7.5	0535501	-691758	L 1	13490	L	2008	FO	88062210	100800	001200		X02 G C=3X,B=35
SNKRK	SN 1987A	56	7.5	0535501	-691758	H 3	33810	L	1710	FO	88062505	052800	085000		339 G E=201,C=213,B=138
SNKRK	SKY	07		0535501	-691758	L 1	13499	L			88062506	060000	079000		309 G C=198,B=150
SNKRK	SN 1987A	56	7.50	0535501	-691758	L 1	13528	L	1755	FO	88062913	133700	006000		?02 G C=12X,B=31
SNKRK	SN 1987A	56	7.50	0535501	-691758	L 3	33832	L	1822	FO	88062914	144600	006500		302 G C=85,B=32
SNKRK	SN 1987A	56	7.50	0535501	-691758	L 1	13529	L	1778	FO	88062915	154000	000400		542 G E=162,C=195,B=37
SNKRK	SN 1987A	56	8.5	0535501	-691758	L 3	33899	L	1525	FO	88071212	123300	008000		434 G E=120,C=199,B=57
SNKRK	SN 1987A	56	8.5	0535501	-691758	L 1	13625	L	1555	FO	88071214	140100	001500		X04 G C=4X,B=55
SNKRK	SN 1987A	56	7.5	0535501	-691758	L 1	13684	L	1413	FO	88071803	034200	000430		542 G E=154,C=201,B=33
SNKRK	SN 1987A	56	7.5	0535501	-691758	L 3	33937	L	1409	FO	88071803	035400	024000		X05 G C=3X,B=65
SNKRK	SN 1987A	56	7.5	0535501	-691758	L 1	13685	L	1451	FO	88071808	080300	001300		XX2 G E=3X,C=3X,B=37
SNKRK	SN 1987A	56	7.50	0535501	-691758	L 3	33938	L	1493	FO	88071808	083500	008000		433 G E=117,C=181,B=41
SNKRK	SN 1987A	56	7.5	0535501	-691758	L 1	13686	L	1365	FO	88071810	100400	001000		X02 G C=2X,B=38
SNKRK	SN 1987A	56	8.2	0535501	-691758	L 1	13743	L	1243	FO	88072611	114300	000430		402 G C=184,B=35
SNKRK	SN 1987A	56	8.2	0535501	-691758	L 3	33969	L	1275	FO	88072611	115600	005700		406 G C=177,B=76
SNKRK	SN 1987A	56	8.2	0535501	-691758	L 1	13744	L	1332	FO	88072613	130000	001300		X56 G E=250,C=3X,B=75
SNKRK	SN 1987A	56	8.2	0535501	-691758	L 1	13787	L	1057	FO	88080415	151900	000500		503 G C=206,B=41
SNKRK	SN 1987A	56	8.2	0535501	-691758	L 1	13788	L	1099	FO	88080415	155900	001500		X02 G C=2X,B=39
SNKRK	SN 1987A	56	8.2	0535501	-691758	L 9	02089	2			88080417	171200	000240		G
SNKRK	SN 1987A	56	8.20	0535501	-691758	L 1	13813	L	1003	FO	88080901	015200	000500		G C=182,B=34
SNKRK	SN 1987A	56	8.2	0535501	-691758	L 3	34057	L	1005	FO	88080902	020400	024000		X03 G C=2X,B=44
SNKRK	SN 1987A	56	8.2	0535501	-691758	L 1	13814	L	1043	FO	88080906	061100	001500		X02 G C=2X,B=35
SNKRK	SN 1987A	56	8.2	0535501	-691758	L 3	34058	L	1133	FO	88080906	065200	008000		401 G C=162,B=26
SNKRK	SN 1987A	56	8.2	0535501	-691758	L 1	13815	L	1011	FO	88080908	081900	001000		X02 G C=3X,B=36
SNKRK	SN 1987A	56	8.5	0535501	-691758	L 1	13866	L	894	FO	88081707	070100	000600		502 G C=210,B=34
SNKRK	SN 1987A	56	8.5	0535501	-691758	L 3	34095	L	897	FO	88081707	071400	011000		03 G C0200,B=42
SNKRK	SN 1987A	56	8.5	0535501	-691758	L 1	13867	L	804	FO	88081709	091300	001800		X03 G C=3X,B=44
SNKRK	SN 1987A	56	9.00	0535501	-691758	L 1	13896	L	769	FO	88082211	115600	000600		502 G C=200,B=34

PRO	Object	CL	MAG	R.A.	DEC	D C Image A	FES	MD	Obs.date	Exptim	mmmsstt	ECC	Comment
SNKRK	SN 1987A	56	9.00	0535501	-691758	L 1 13897 L	764	FO	88082212	123800	001800	X02 G	C=3X,B=40
SNKRK	SN 1987A	56	9.00	0535501	-691758	L 1 13898 L	768	FO	88082213	132800	006000	X02 G	C=9X,B=31
SNKRK	SN 1987A	56	9	0535501	-691758	L 3 34193 L	597	FO	88090705	051600	012000	?9 G	E=157,B=205,B=43
SNKRK	SN 1987A	56	9.00	0535501	-691758	L 1 14007 L	579	FO	88090707	072400	000630	502 G	C=227,B=35
SNKRK	SN 1987A	56	9.00	0535501	-691758	L 1 14008 L	571	FO	88090708	080900	001800	X03 G	C=3X,B=42
SNKRK	SN 1987A	56	9.00	0535501	-691758	L 1 14009 L	583	FO	88090709	090300	008000	?07 G	C=10X,B=83
SNKRK	SN 1987A	56	9.9	0535501	-691758	L 1 14126 L	438	FO	88092601	015600	000630	402 G	C=184,B=35
SNKRK	SN 1987A	56	9.9	0535501	-691758	L 3 34316 L	444	FO	88092602	021100	012000	543 G	E=155,C=209,B=47
SNKRK	SN 1987A	56	9.9	0535501	-691758	L 1 14127 L	449	FO	88092604	041900	001800	X02 G	C=3X,B=39
SNKRK	SN 1987A	56	9.9	0535501	-691758	L 3 34317 L	478	FO	88092604	044900	011000	433 G	E=126,C=188,B=41
SNKRK	SN 1987A	56	10	0535501	-691758	H 3 34420 L	349	FO	88100521	212000	076000	329 G	E=154,C=190,B=142
SNKRK	SKY	07		0535501	-691758	L 1 14185 L			88100521	212100	074000	309 G	C=175,B=128
SNKRK	SN 1987A	56	10	0535501	-691758	L 1 14229 L	331	FO	88101510	100700	000730	403 G	C=180,B=48
SNKRK	SN 1987A	56	10	0535501	-691758	L 3 34477 L	328	FO	88101510	102200	011000	403 G	C=190,B=50
SNKRK	SN 1987A	56	10	0535501	-691758	L 1 14230 L	360	FO	88101510	105900	002500	X03 G	C=3X,B=50
SNKRK	SN 1987A	56	10.5	0535501	-691758	L 1 14348 L	969	SO	88103023	231500	001200	502 G	C=230,B=35
SNKRK	SN 1987A	56	10.5	0535501	-691758	L 3 34640 L	244	FO	88103023	233500	024000	X53 G	E=225,C=2X,B=50
SNKRK	SN 1987A	56	10.5	0535501	-691758	L 1 14349 L	279	FO	88103103	034300	006000	X03 G	C=3X,B=46
JET00	SN 1987A	54	07.37	0535502	-691759	L 1 13041 L	4127	FO	88041403	034106	000330	500 U	
JET00	SN1987A	54	07.38	0535502	-691759	L 3 33279 L	4099	FO	88041403	035205	006000	530 U	
JET00	SN 1987A	54	07.38	0535502	-691759	L 1 13042 L	4103	FO	88041404	045939	002200	701 U	
JET00	SN 1987A	54	07.38	0535502	-691759	L 3 33280 L	4133	FO	88041405	052913	020000	761 U	
JET00	SN1987A	54	07.38	0535502	-691759	L 1 13069 L	4078	FO	88041808	084459	000330	501 U	
JET00	SN 1987 A	54	07.30	0535502	-691759	L 1 13075 L	3839	FO	88041904	045628	000330	500 U	
JET00	SN1987A	56	07.62	0535502	-691759	L 1 13189 L	3315	FO	88050823	230219	000400	501 U	
KE179	SN 1987A	56	09.18	0535502	-691759	L 1 13846 L	824	FO	88081415	151445	000430	502 U	
KE179	SN 1987A	56	09.19	0535502	-691759	L 3 34087 L	817	FO	88081415	153912	006000	400 U	
KE179	SN 1987A	56	09.16	0535502	-691759	L 1 13847 L	837	FO	88081416	164607	003000	702 U	
KE179	SN 1987A	56	09.15	0535502	-691759	L 3 34088 L	850	FO	88081417	172253	020000	600 U	
KE179	SN 1987A	56	09.10	0535502	-691759	L 1 13848 L	886	FO	88081420	205244	005500	702 U	
KE179	SN 1987A	56	09.68	0535502	-691759	L 3 34231 L	530	FO	88091216	162112	008000	430 U	
KE179	SN1987A	56	09.66	0535502	-691759	L 1 14039 L	539	FO	88091217	174908	002500	761 U	
KE179	SN1987A	56	09.65	0535502	-691759	L 3 34232 L	541	FO	88091218	182916	020000	761 U	
KE179	SN1987A	56	09.69	0535502	-691759	L 1 14040 L	523	FO	88091221	215838	004500	761 U	
KA179	SN1987A	56	10.01	0535502	-691759	L 1 14154 L	394	FO	88100113	135347	000800	502 U	
KE179	SN1987A	56	99.99	0535502	-691759	E 9 02129 2			88100513	132700	016000		U FOR SWP34420
KE179	SN1987A	56	10.18	0535502	-691759	L 1 14190 L	338	FO	88100816	160156	000800	502 U	
KE179	SN1987A	56	10.17	0535502	-691759	L 3 34440 L	341	FO	88100816	161756	008000	340 U	
KE179	SN1987A	56	10.18	0535502	-691759	L 1 14191 L	337	FO	88100817	174547	002500	762 U	
KE179	SN1987A	56	10.21	0535502	-691759	L 3 34441 L	329	FO	88100818	181758	015000	541 U	
JET00	SN 1987A	56	15.00	0535538	-691724	E 9 02059 2			B0 88052600	004500	004000		U SN1987A IS THE GUIDE
SNKRK	SERENDIP	07		0535538	-691724	L 1 13309 L			88052601	013400	044000	307 G	C=138,B=90
SNKRK	SN ECHO	07		0535538	-691723	L 3 33643			B0 88052608	082200	087000	502 G	C=190,B=36
SNKRK	SN 1987A	07		0535538	-691723	L 9 02060 2			88052613	135200	000020	G	
JET00	SN1987A(CEC	56	18.00	0535539	-691724	L 3 33418 L			B0 88050100	002924	038000	203 U	OFFSET 40";PA 30 DEG

PRO	Object	CL	MAG	R.A.	DEC	D C Image A	FES	HD	Obs.date	Exptim	mmmsstt	ECC	Comment
SNKRR	SN87ECHO	07	*	0535545	-691717	L 3 34192 L		BO	88090700	003600	068000	309 G	C=150,B=103
SNKRR	SKY	07		0535545	-691717	L 1 14006 L		BO	88090700	003900	067500	309 G	C=175,B=137
KE179	SN1987A	56	09.39	0535546	-691718	E 9 02106 2		BO	88090616	164000	016000		U FES FOR SWP34192
SNJRK	SKY	07		0536018	-702314	L 1 12994			88040609	092600	037500	309 G	C=177,B=126
CUJSS	NOVA LMC	55	12.00	0536018	-702314	L 3 33216 L	149	SO	88040616	160800	004500	332 G	E=133,C=102,B=40
CUJSS	NOVA LMC	55	13.5	0536018	-702314	L 3 33274 L	56	SO	88041314	143600	006000	342 G	E=177,C=115,B=40
CUJSS	NOVA LMC	55	14.0	0536018	-702315	L 3 33662 L	23	SO	88052821	215800	005000	331 G	E=120,C=50,B=27
CUKSS	NOVA LMC	55	15.00	0536018	-702315	L 3 34023 L	24	SO	88080413	133100	002000	45 G	E=175,B=70
J1082	NOVA LMC88	63	12.71	0536019	-702315	L 3 33224 L	142	SO	88040707	070253	006000	341 U	NO XPREP PERFORMED A
CUJSS	NOVA LMC	55	14.00	0536019	-702315	L 3 33421 L	44	SO	88050116	160500	006000	352 G	E=237,C=105,B=35
J1000	NOVA LMC1988	55	13.67	0536019	-702315	L 3 33271 L	60	SO	88041302	025010	018000	461 U	PREAD
CUJSS	NOVA LMC	55	14.00	0536019	-702315	L 1 13151 L	45	SO	88050117	171300	003000	4X2 G	E=1.2X,C=165,B=38
J1000	NOVA LMC1988	55	13.79	0536019	-702315	L 1 13033 L	54	SO	88041308	083544	001500	351 U	PREAD
CUJSS	NOVA LMC	55	14.00	0536019	-702315	L 1 13152 L	47	SO	88050119	194300	001800	353 G	E=201,C=110,B=43
J1082	NOVA LMC1988	55	13.20	0536019	-702315	L 3 33312 L	90	SO	88041905	051935	015000	570 U	
CUJSS	NOVA LMC	55	14.00	0536019	-702315	L 3 33534 L	31	SO	88051515	154800	010000	4X4 G	E=2X,C=162,B=56
J1082	NOVA LMC1988	55	13.20	0536019	-702315	L 1 13076 L	90	SO	88041907	075620	003000	561 U	
CUJSS	NOVA LMC	55	14.00	0536019	-702315	L 1 13234 L	35	SO	88051517	173800	001800	334 G	E=135,C=96,B=51
J1000	NOVA LMC88	55	13.75	0536019	-702315	L 3 33364 L	56	SO	88042602	024528	005000	451 U	
CUJSS	NOVA LMC	55	14.00	0536019	-702315	L 3 33535 L	34	SO	88051518	181100	004000	345 G	E=162X,C=112,B=62
J1000	NOVA LMC88	55	13.75	0536019	-702315	L 1 13128 L	56	SO	88042603	034142	002000	561 U	
CUJSS	NOVA LMC	55	14.00	0536019	-702315	L 1 13235 L	36	SO	88051519	190200	003000	347 G	E=188,C=150,B=82
J1000	NOVA LMC88	55	13.75	0536019	-702315	H 3 33365 L	56	SO	88042604	042403	025000	222 U	
CUJSS	NOVA LMC	55	14.00	0536019	-702315	L 3 33771 L	22	SO	88061813	132600	010000	2X3 G	E=3X,C=62,B=50
J1000	NOVA LMC88	55	13.60	0536019	-702315	H 1 13133 L	64	SO	88042802	023400	035600	336 U	
CUJSS	NOVA LMC	55	14	0536019	-702315	L 1 13451 L		BO	88051815	151800	003000	334 G	E=117,C=85,B=59
J1082	NOVA LMC88	55	14.27	0536019	-702315	L 3 33459 L	35	SO	88050523	235912	003000	350 U	
CUJSS	NOVA LMC	55	14	0536019	-702315	L 3 33772 L		BO	88061815	155800	001000	31 G	E=85,B=29
J1082	NOVA LMC88	55	14.18	0536019	-702315	L 1 13167 L	38	SO	88050523	233047	001500	342 U	
CUKSS	NOVA LMC88	55	14	0536019	-702315	L 3 33948 L		BO	88072111	115000	009000	2X3 G	E=3X,C=48,B=42
J1082	NOVA LMC88	55	14.27	0536019	-702315	L 1 13168 L	35	SO	88050600	003423	004500	562 U	
CUKSS	NOVA LMC	55	14	0536019	-702315	L 1 13710 L		BO	88072113	132500	006000	237 G	E=164,C=105,B=90
J1082	NOVA LMC88	55	14.27	0536019	-702315	L 3 33460 L	35	SO	88050601	012503	008000	560 U	
CUKSS	NOVA LMC	55	14	0536019	-702315	L 3 33949 L		BO	88072114	142900	002000	42 G	E=160,B=32
JET00	N LMC 88	55	14.65	0536019	-702315	L 3 33612 L	25	SO	88052302	022009	004500	331 U	
JET00	N LMC 88	55	14.70	0536019	-702315	L 1 13299 L	24	SO	88052303	031327	004500	441 U	
JET00	N LMC 88	55	14.65	0536019	-702315	L 3 33613 L	25	SO	88052304	040722	016000	562 U	
J1000	NOVA LMC 8	55	14.90	0536019	-702315	L 1 13379 L	20	SO	88060622	223445	004500	331 U	
J1000	NOVA LMC 8	55	14.90	0536019	-702315	L 3 33717 L	20	SO	88060623	232435	006000	250 U	
J1000	NOVA LMC 8	55	14.90	0536019	-702315	L 1 13380 L	20	SO	88060700	002928	009000	351 U	
J1000	NOVA LMC 8	55	14.90	0536019	-702315	L 3 33718 L	20	SO	88060702	020404	016300	361 U	
K1000	NOVA LMC88	55	14.90	0536019	-702315	L 3 33862 L	20	SO	88070420	202500	008000	350 U	
K1000	NOVA LMC88	55	14.90	0536019	-702315	E 9 02073 2	20	SO	88070421	213700	004000		U TARGET IN SW LARGE A
K1000	NOVA LMC88	55	14.00	0536019	-702315	L 1 13565 L		BO	88070421	215223	008000	353 U	
K1000	NOVA LMC88	55	14.00	0536019	-702315	L 3 33863 L		BO	88070423	232119	020600	361 U	

PRO	Object	CL	MAG	R.A.	DEC	D C Image A	FES	MD	Obs.date	Exptim	mmmsst	ECC	Comment
KIT00	NOVA LMC88	55	15.00	0536019	-702315	L 3	33881	L	BO 88070900	003105	004000	050	U
KIT00	NOVA LMC88	55	15.00	0536019	-702315	L 1	13595	L	BO 88070901	011711	009000	353	U
JIT00	NOVA LMC B	55	14.90	0536019	-702315	H 3	33903	L	20 SO 88071220	201144	039600	133	U
JIT00	NOVA LMC B	55	99.99	0536019	-702315	E 9	02080	2	88071300	000300	004000		U NOVA IN SWLA
KI145	NOVA LMC 1	55	14.80	0536019	-702315	L 3	34081	L	22 SO 88081318	183242	004000	150	U
KI145	NOVA LMC 1	55	14.80	0536019	-702315	L 1	13844	L	BO 88081319	191914	010000	343	U
KI145	NOVA LMC 1	55	99.99	0536019	-702315	E 9	02090	2	BO 88081321	210700	004000		U
KI145	NOVA LMC 1	55	14.80	0536019	-702315	L 3	34082	L	BO 88081321	210600	004200	150	U
IGXFB	SK-69209	11	12.2	0536169	-691352	L 3	33678	L	376 SO 88053018	183100	001600	301	G C=96,C=140,B=25
IGXFB	SK-69209	11	12.2	0536170	-691352	H 3	33941	L	92 FO 88071903	034600	054500	309	G C=230,B=146
KC202	SK-96 211	32	10.75	0536300	-692600	H 1	13761	L	204 SO 88073023	233927	018800	304	U
KM201	HD37490	21	04.73	0536326	+040541	H 1	14032	L	377 FU 88091117	174543	000130	602	U
HSJGP	HD 37490	26	4.5	0536326	+040541	H 3	33223	L	392 FU 88040700	001300	000200	502	G C=210,B=40
KM201	HD 37490	21	04.73	0536326	+040541	H 3	34224	L	377 FU 88091118	182421	000400	700	U
KM201	HD 37490	21	04.53	0536326	+040541	H 3	34225	L	450 FU 88091119	190030	000700	801	U
WRJPC	BR 66	11	16.4	0536547	-691100	L 3	33622	L	BO 88052408	082700	006000	332	G E=102,C=70,B=32
WRJPC	BR 66	11	16.4	0536547	-691100	L 3	33623	L	BO 88052409	095300	029500	4X6	G E=2X,C=200,B=73
MLKCG	S-66 172	12	13.1	0536590	-662350	L 3	33970	L	89 SO 88072615	155800	002600	504	G C=219,B=51
MLKCG	S-66 172	12	13.1	0536590	-662350	L 9	02087	2	88072618	181100	000240		G
MLKCG	S-66 172	12	13.1	0536590	-662350	H 3	33971	L	77 SO 88072703	034200	099900	X09	G C=2X,B=177
MLKCG	S-66 172	12	13.1	0536590	-662350	H 3	33981	L	75 SO 88072904	041700	039300	308	G C=185,B=100
KA068	R127	23	09.37	0537096	-693126	L 1	13435	L	695 FO 88061522	222533	000300	551	U
KA068	R 127	23	09.37	0537096	-693126	L 3	33765	L	699 FO 88061522	223945	001500	551	U
KA068	R 127	23	09.37	0537097	-693127	H 1	13436	L	697 FO 88061523	232202	018000	552	U
OD40Y	X 0548+608	66	15.0	0538158	+605002	L 3	33205	L	BO 88040410	101100	010000	332	G E=96,C=64,B=39
OD40Y	X 0548+608	66	15.0	0538158	+605002	L 1	12982	L	BO 88040412	120600	006000	334	G E=118,C=94,B=60
OD40Y	X 0548+608	66	15.0	0538158	+605002	L 3	33206	L	BO 88040412	125300	010000	334	G E=120,C=77,B=53
OD40Y	X 0548+608	66	15.0	0538158	+605002	L 3	33207	L	BO 88040415	151900	006000	334	G E=90,C=79,B=58
KI115	H0538+608	59	15.00	0538159	+605003	L 3	34139	L	BO 88082715	154801	006000	330	U
KI115	H0538+608	59	15.00	0538159	+605003	L 1	13935	L	BO 88082715	155547	006000	301	U
KI115	H0538+608	59	15.00	0538159	+605003	L 3	34140	L	BO 88082718	180424	006000	330	U
KI115	H0538+608	59	15.00	0538159	+605003	L 1	13936	L	BO 88082719	191328	006000	301	U
KI115	H0538+608	59	15.00	0538159	+605003	L 3	34141	L	BO 88082720	202827	006000	330	U
KI115	H 0538+608	59	15.00	0538159	+605003	L 3	34636	L	BO 88103013	135932	006000	332	U
KI115	H 0538+608	59	15.00	0538159	+605003	L 1	14346	L	BO 88103015	150519	006000	332	U
KI115	H 0538+608	59	15.00	0538159	+605003	L 3	34637	L	BO 88103016	161130	006000	332	U
KI115	H0542-407	59	15.08	0541445	-410313	L 3	34129	L	17 SO 88082416	163453	009500	340	U
KI115	H0542-407	59	15.08	0541445	-410333	L 1	13910	L	17 SO 88082418	181723	006400	331	U
KI060	LHG83	59	16.20	0543490	-682336	L 3	33936	L	BO 88071722	220641	028100	331	U
KI063	LHG 83	59	16.20	0543490	-682336	L 1	13902	L	BO 88082318	181453	021500	302	U PREAD
SKKAM	LMC ANON	57	17.0	0546026	-711713	L 3	34122	L	BO 88082223	232600	034200	332	G E=118,C=72,B=40
KM191	HD39060	31	04.26	0546059	-510502	H 1	13700	L	570 FU 88071919	195625	001400	701	U
DAJZH	EG289	37	15.1	0548034	+000508	L 3	33194	S	BO 88040110	101100	007000	301	G C=49,B=27
DAJZH	EG289	37	15.1	0548034	+000508	L 3	33194	L	BO 88040111	113300	003300	500	G C=214,B=20
OBKCG	LH117:16	12	13.8	0549112	-700518	L 1	13586	L	45 SO 88070718	181800	003000	402	G C=159,B=38

PRO	Object	CL	MAG	R.A.	DEC	D	C	Image	A	FES	MD	Obs.date	Expim	mmmsstt	ECC	Comment	
OBKCG	LH117:16	12	13.8	0549300	-700630	L	1	13271	L	46	SO	88051917	173700	003600	408	G C=223,B=100	
OBKCG	LH117:16	12	13.8	0549300	-700630	L	3	33574	L	49	SO	88051918	182200	004800	309	G C=196,B=106	
OBKCG	LH117:13	12	14.2	0549390	-700353	L	1	13585	L	55	SO	88070716	163800	003000	405	G C=189,B=66	
OBKCG	LH117:13	12	14.2	0549390	-700353	L	3	33878	L	46	SO	88070717	171800	004400	401	G C=159,B=23	
OBKCG	LH117:43	12	14.1	0549391	-700354	L	1	13272	L	56	SO	88051919	192400	003500	X09	G C=1.5X,B=117	
OBKCG	LH117:43	12	14.1	0549391	-700354	L	3	33575	L	50	SO	88051920	200700	004400	403	G C=167,B=50	
OBKCG	LH117:11	12	13.1	0549500	-700600	L	1	13270	L	69	SO	88051916	160900	002300	503	G C=240,B=46	
OBKCG	LH117:11	12	13.1	0549500	-700600	L	3	33573	L	73	SO	88051916	164000	002800	502	G C=222,B=39	
CMKRS	HD	39801	49	0.8	0552270	+072330	L	1	13976	L	10804	FU	88090206	062700	002300	342	G E=144,C=58,B=36
LSKAD	HD	39801	49	0.5	0552279	+072357	L	1	14042	L	10058	FU	88091311	114600	000005	352	G E=202,C=65,B=34
LSKAD	HD	39801	49	0.5	0552279	+072357	L	1	14042	S	10058	FU	88091311	115100	000035	3X2	G E=1.5X,C=96,B=31
LSKAD	HD	39801	49	0.5	0552279	+072357	L	3	34247	L	10355	FU	88091311	115900	001230	352	G E=202,C=75,B=38
LSKAD	HD	39801	49	0.5	0552279	+072357	H	1	14043	L	10200	FU	88091312	125600	000245	352	G E=220,C=83,B=36
LSKAD	HD	39801	49	0.5	0552279	+072357	L	3	34248	L	10168	FU	88091313	130500	005000	4X1	G E=4X,C=163,B=29
LSKAD	HD	39801	49	0.5	0552279	+072357	H	1	14044	L	10475	FU	88091314	140300	004500	544	G E=156X,C=220,B=52
LSJAD	HD	39801	49	0.5	0552280	+072358	H	1	12983	L	13694	FU	88040421	213100	000245	353	G E=205,C=70,B=42
LSJAD	HD	39801	49	0.5	0552280	+072358	L	3	33209	L	13427	FU	88040421	214000	001230	343	G E=176,C=75,B=45
LSJAD	HD	39801	49	0.5	0552280	+072358	L	1	12984	L	13238	FU	88040422	221500	000005	02	G B=35
LSJAD	HD	39801	49	0.5	0552280	+072358	L	1	12984	S	13238	FU	88040422	222000	000035	302	G C=130,B=35
LSJAD	HD	39801	49	0.5	0552280	+072358	H	1	12985	L	13578	FU	88040423	232900	007500	06	G B=80
LSJAD	HD	39801	49	0.5	0552280	+072358	H	1	13017	L	13505	FU	88041121	212800	000230	342	G E=190,C=75,B=40
LSJAD	HD	39801	49	0.5	0552280	+072358	L	3	33258	L	13629	FU	88041121	214300	001200	343	G E=183,C=90,B=48
LSJAD	HD	39801	49	0.5	0552280	+072358	L	3	33259	L	13740	FU	88041122	224100	004500	434	G E=96,C=200,B=52
LSJAD	HD	39801	49	0.5	0552280	+072358	L	1	13018	L	13319	FU	88041123	230200	000005	342	G E=168,C=70,B=32
LSJAD	HD	39801	49	0.5	0552280	+072358	H	1	13019	L	14053	FU	88041123	234700	006500		G E=15X,C=3X
LSKAD	HD	39801	49	0.5	0552280	+072358	H	1	13986	L	9943	FU	88090312	121500	000230	343	G E=186,C=81,B=46
LSKAD	HD	39801	49	0.5	0552280	+072358	L	3	34178	L	10033	FU	88090312	122300	004000	3X8	G E=4X,C=178,B=94
LSKAD	HD	39801	49	0.5	0552280	+072358	L	1	13987	L	10078	FU	88090313	130400	000005	342	G E=161,C=67,B=35
LSKAD	HD	39801	49	0.5	0552280	+072358	H	1	13988	L	9984	FU	88090314	140000	005000	?9	G E=15X,B=220
LSKAD	HD	39801	49	0.5	0552280	+072358	H	3	34255	L	10161	FU	88091523	231800	021200	3X4	G E=1.5X,C=104,B=54
LSKAD	HD	39801	49	0.5	0552280	+072358	L	1	14104	L	10090	FU	88092011	112800	000005	342	G E=180,C=64,B=34
LSKAD	HD	39801	49	0.5	0552280	+072358	H	1	14105	L	10199	FU	88092012	120300	000220	353	G E=201,C=75,B=42
LSKAD	HD	39801	49	0.5	0552280	+072358	L	3	34280	L	10236	FU	88092012	121300	001000		G E=159,C=51,B=24
LSKAD	HD	39801	49	0.5	0552280	+072358	H	1	14106	L	10418	FU	88092012	124800	006800	4?5	G E=17X,C=199,B=68
LSKAD	HD	39801	49	0.5	0552280	+072358	L	3	34281	L	10058	FU	88092013	135600	005000	4X1	G E=4X,C=152,B=24
LSKAD	HD	39801	49	+0.5	0552280	+072358	H	1	14200	L	10345	FU	88101005	054500	006000	5?3	G E=15X,C=215,B=50
LSKAD	HD	39801	49	+0.5	0552280	+072358	L	3	34448	L	10367	FU	88101006	065600	006000	5X2	G E=4X,C=229,B=35
LSKAD	HD	39801	49	+0.5	0552280	+072358	H	1	14201	L	10351	FU	88101007	074500	000220	342	G E=160,C=60,B=37
LSKAD	HD	39801	49	+0.5	0552280	+072358	L	1	14202	L	10386	FU	88101008	082700	000006	342	G E=161,C=60,B=35
LSKAD	HD	39801	49	0.5	0552280	+072358	H	1	14314	L	10588	FU	88102609	094200	000240	352	G E=216,C=64,B=36
LSKAD	HD	39801	49	0.5	0552280	+072358	L	3	34607	L	10524	FU	88102609	095600	001230	351	G E=179,C=53,B=22
LSKAD	HD	39801	49	0.5	0552280	+072358	H	1	14315	L	11206	FU	88102610	103300	006000	X?4	G E=14X,C=4X,B=51
LSKAD	HD	39801	49	0.5	0552280	+072358	L	3	34608	L	10579	FU	88102611	114100	006000	4X1	G E=4X,C=173,B=28
BEJGP	HD	41335	26	5.2	0601475	-064218	H	3	33220	L	16964	FO	88040621	213100	000330	503	G C=210,B=43
BEJGP	HD	41335	26	5.2	0601475	-064218	H	1	12995	L	16797	FO	88040621	213800	000130	503	G C=200,B=45

PRO	Object	CL	MAG	R.A.	DEC	D C	Image	A	FES	MD	Obs.date	Exptim	mmmsstt	ECC	Comment
BEKGP	HD	41335	26	5.2	0601475	-064218	H 1	14024	L	17548	FO	88090913	134600	000130	503 G C=201,B=43
BEKGP	HD	41335	26	5.2	0601475	-064218	H 3	34212	L	17756	FO	88090913	135100	000330	503 G C=225,B=41
BEKGP	HD	41335	26	5.2	0601475	-064218	H 3	34267	L	18054	FO	88091810	102900	000330	502 G C=210,B=40
BEKGP	HD	41335	26	5.2	0601475	-064218	H 1	14344	L	18307	FO	88103009	093600	000130	403 G C=184,B=43
BEKGP	HD	41335	26	5.2	0601475	-064218	H 3	34633	L	18432	FO	88103009	094200	000330	502 G C=215,B=40
DCKNE	HD	44415	53	8.4	0619219	+144211	L 1	14054	L	842	FO	88091511	113600	001200	309 G C=160,B=105
LSKKC	HD	44537	49	4.9	0621029	+491857	L 3	34299	L	23507	FO	88092323	233300	043500	336 G E=126,C=103,B=79
PHCAL	HD	45057	24	6.9	0621145	-531831	L 1	13229	L	4626	FO	88051420	205700	000008	502 G C=235,B=33
PHCAL	HD	45057	24	6.9	0621145	-531831	L 3	33529	L	4617	FO	88051421	210200	000013	500 G C=218,B=17
PHCAL	HD	45057	24	6.9	0621145	-531831	H 1	13230	L	5090	FO	88051421	213600	000920	503 G C=196,B=45
PHCAL	HD	45057	24	6.9	0621145	-531831	H 3	33530	L	5483	FO	88051422	220700	001800	503 G C=213,B=41
PHCAL	HD	45557	30	5.8	0623366	-601510	L 1	13205	L	11985	FO	88051120	200800	000010	502 G C=199,B=36
PHCAL	HD	45557	30	5.8	0623366	-601510	L 3	33509	L	11967	FO	88051120	201300	000020	400 G C=155,B=17
PHCAL	HD	45557	30	5.8	0623366	-601510	H 1	13206	L	11917	FO	88051121	211500	001200	503 G C=209,B=44
PHCAL	HD	45557	30	5.8	0623366	-601510	H 3	33510	L	11787	FO	88051121	213400	002900	503 G C=221,B=45
BEJTS	HD	47054	26	5.5	0634076	-051005	H 3	33311	L	14398	FO	88041823	234100	001000	503 G C=203,B=41
BEJTS	HD	47054	26	5.5	0634076	-051005	H 1	13074	L	13947	FO	88041900	002700	000500	503 G C=218,B=41
KI146	RR PIC	55	12.90	0635098	-623549	L 3	34325	L	119	SO	88092616	160057	002700	560 U	
KI146	RR PIC	55	12.68	0635100	-623549	L 1	14128	L	145	SO	88092616	163528	002200	773 U	
USSBS	HD	47670	25	3.17	0636137	-430903	H 1	13106	L	1161	FU	88042221	210500	000040	503 G C=224,B=43
USSBS	HD	47670	25	3.17	0636137	-430903	H 3	33338	L	1161	FU	88042221	211000	000100	502 G C=190,B=35
USSBS	HD	47670	25	3.17	0636137	-430903	H 3	33339	L	1164	FU	88042222	220800	000300	X05 G C=3X,B=63
KC194	HD47667	47	05.32	0636595	-140558	L 3	34610	L	21122	FO	88102714	140522	006000	111 U	
XQJME	PKS 0637-75	85	15.8	0637233	-751338	L 1	13013	L		BO	88041015	151000	012000	335 G E=145,C=104,B=66	
XQJME	PKS 0637-75	85	15.8	0637233	-751338	L 1	13016	L		BO	88041115	151000	010500	335 G E=151,C=108,B=70	
XQJME	PKS 0637-75	85	15.8	0637233	-751338	L 1	13022	L		BO	88041215	150300	012000	338 G E=165,C=139,B=97	
PHCAL	HD	48915	30	-1.4	0642566	-163845	L 3	33269	L		88041222	220800	000003	?01 G C=17X,B=28	
PHCAL	HD	48915	30	-1.4	0642566	-163845	L 3	33270	L		88041223	231700	002500	X01 G C=2X,B=30	
PHCAL	SIRIUS	30	-1.4	0642566	-163845	L 1	13092	L			88042122	222000	000000	X01 G C=2X,B=23	
PHCAL	SIRIUS	30	-1.4	0642566	-163845	L 3	33334	L			88042123	231400	000000	X01 G C=2X,B=21	
JM055	S 289-13	20	11.92	0644009	-072554	L 1	13138	L	287	SO	88043001	015957	001700	702 U	
JM055	S 289-13	20	11.89	0644009	-072554	L 3	33406	L	293	SO	88043002	072330	003500	600 U	
JM055	S 289-13	20	11.89	0644010	-072555	L 1	13139	L	295	SO	88043003	030540	004500	702 U	
BEJTS	HD	50123	26	5.70	0648298	-313847	H 1	13204	L	12262	FO	88051117	175100	000700	504 G C=251,B=57
BEJTS	HD	50123	26	5.70	0648298	-313847	H 3	33507	L	13073	FO	88051118	180700	001030	504 G C=216,B=52
BEJTS	HD	50123	26	5.7	0648299	-313848	H 3	33309	L	11788	FO	88041820	204300	001030	504 G C=232,B=54
BEJTS	HD	50123	26	5.7	0648299	-313848	H 1	13072	L	12589	FO	88041821	211700	000730	505 G C=249,B=64
BEKTS	HD	50123	26	5.7	0648299	-313848	H 3	34218	L	11206	FO	88091011	115700	001030	503 G C=210,B=46
BEKTS	HD	50123	26	5.7	0648299	-313848	H 1	14028	L	11689	FO	88091012	122900	000700	X04 G C=1.5X,B=54
CBKGP	HD	50846	66	8.5	0652225	-011841	H 3	34265	L	1164	FO	88091807	073200	009000	503 G C=205,B=46
CBKGP	HD	50846	66	8.5	0652225	-011841	L 1	14083	L	1137	FO	88091809	092900	000035	402 G C=163,B=32
CBKGP	HD	50846	66	8.5	0652225	-011841	L 3	34266	L	1140	FO	88091809	093300	000105	500 G C=182,B=18
CBKGP	HD	50846	66	8.5	0652225	-011841	L 1	14114	L	1248	FO	88092212	121900	000045	500 G C=189,B=17
CBKGP	HD	50846	66	8.5	0652225	-011841	L 3	34289	L	1256	FO	88092212	122900	000115	500 G C=203,B=18
CBKGP	HD	50846	66	8.5	0652225	-011841	H 3	34290	L	1253	FO	88092213	130300	009000	504 G C=211,B=51

PRO	Object	CL	MAG	R.A.	DEC	D C	Image	A	FES	MD	Obs.date	Exptim	mmmsstt	ECC	Comment
CBKGP	HD	50846	66	8.5	0652225	-011841	L 3	34366	L	542	FO	88100100	001500	000400	500 G C=200,B=17
CBKGP	HD	50846	66	8.5	0652225	-011841	L 1	14146	L	542	FO	88100100	002400	000145	502 G C=190,B=32
JM131	HD	52382	23	06.91	0658160	-090753	H 3	33293	L	6151	FO	88041604	042817	004300	600 U
SAJGW	HD	52877	49	3.43	0659435	-275142	L 1	12977	L	866	FU	88040316	165800	000200	302 G C=127,B=36
JC049	HD	53179	26	10.05	0701226	-112836	L 1	13049	L	379	FO	88041502	020626	004000	451 U
JM131	HD	53367	20	07.52	0702020	-102300	H 3	33292	L	3628	FO	88041602	020916	007400	400 U
JM131	HD	53367	20	07.53	0702020	-102300	H 1	13059	L	3572	FO	88041603	033440	003600	501 U
ICKAD	HD	56456	22	4.9	0713154	-481101	H 1	14000	L	281	FU	88090512	120200	000200	403 G C=180,B=47
ICKAD	HD	56456	22	4.9	0713154	-481101	H 3	34188	L	282	FU	88090512	121000	000500	503 G C=209,B=47
ICKAD	HD	56456	22	4.9	0713154	-481101	H 1	14001	L	286	FU	88090513	131000	000240	404 G C=203,B=58
ICKAD	HD	56456	22	4.9	0713154	-481101	H 3	34189	L	284	FU	88090513	132300	000715	X04 G C=1.5X,B=53
KC194	HD51802	49	05.37	0717506	+870735	L 3	34613	L	20484	FO	88102720	201529	003600	110 U PREAD	
BEJGP	HD	58978	26	5.5	0724522	-225903	H 3	33221	L	13194	FO	88040622	224300	000250	503 G C=215,B=42
BEJGP	HD	58978	26	5.5	0724522	-225903	L 1	12996	L	13502	FO	88040623	231600	000001	502 G C=210,B=34
BEJGP	HD	58978	26	5.5	0724522	-225903	L 3	33222	L	13569	FO	88040623	232100	000002	500 G C=220,B=17
PRJCG	HD	58978	26	5.5	0724522	-225903	H 3	33245	L	14256	FO	88041021	212700	000240	503 G C=205,B=41
PRJCG	HD	58978	26	5.5	0724522	-225903	H 3	33315	L	14185	FO	88041919	193200	000250	503 G C=217,B=41
PRJCG	HD	58978	26	5.5	0724522	-225903	H 3	33508	L	14204	FO	88051118	185600	000250	503 G C=217,B=46
BEJGP	HD	58978	26	5.5	0724522	-225903	H 3	33616	L	13867	FO	88052315	153000	000250	502 G C=240,B=37
BEJGP	HD	58978	26	5.5	0724522	-225903	L 3	33617	L	13921	FO	88052316	160400	000002	500 G C=205,B=17
BEJGP	HD	58978	26	5.5	0724522	-225903	L 1	13301	L	13923	FO	88052316	160900	000001	502 G C=190,B=35
PRKCG	HD	58978	26	5.5	0724522	-225903	H 3	33640	L	14811	FO	88052518	184400	000250	502 G C=220,B=40
BEKGP	HD	58978	26	5.5	0724522	-225903	H 3	34288	L	14577	FO	88092211	113200	000250	503 G C=226,B=43
PRKCG	HD	58978	26	5.5	0724522	-225903	H 3	34606	L	13894	FO	88102608	083700	000250	503 G C=220,B=41
JM055	HD60479	13	08.88	0731330	-275205	L 1	13096	L	1082	FO	88042203	033209	000500	803 U	
JM055	HD60479	13	08.90	0731330	-275205	L 1	13095	L	1063	FO	88042203	030011	000131	503 U	
PHCAL	HD	60753	21	07.10	0732079	-502828	L 1	13983	L	5251	FO	88090218	181652	000006	500 U
PHCAL	NULL	98	0.0	073208	-502829	H 2	18221	L			88070114	144800	000000	00 G B=15	
PHCAL	HD60753	21	07.06	0732080	-502829	L 1	13610	L	5433	FO	88071019	194551	000006	501 U	
PHCAL	HD	60753	21	6.69	0732080	-502828	L 1	13144	L	5984	FO	88043017	174400	000006	402 G C=163,B=35
PHCAL	HD60753	21	07.03	0732080	-502829	L 1	13611	L	5570	FO	88071020	203848	000015	701 U PREAD	
PHCAL	HD	60753	21	6.69	0732080	-502828	L 3	33413	L	5986	FO	88043017	174800	000010	400 G C=162,B=18
PHCAL	HD60753	21	07.04	0732080	-502829	L 3	33896	L	5537	FO	88071020	203454	000010	500 U	
PHCAL	NULL	99		0732080	-502828	L 2	18202				88050915	155500	000000	02 G B=32	
PHCAL	HD60753	21	07.09	0732080	-502829	H 3	34175	L	5265	FO	88090215	152032	001300	400 U	
PHCAL	NULL	99	0.0	0732080	-502828	L 1	13470	L			FO	88062009	092800	000000	02 G B=35
PHCAL	HD	60753	21	07.09	0732080	-502829	L 3	34176	S	5265	FO	88090216	164527	000030	U
PHCAL	HD	60753	21	06.7	0732080	-502828	H 3	34091	L	5448	FO	88081603	030900	001400	502 G C=215,B=36
PHCAL	HD	60753	21	07.09	0732080	-502829	L 3	34176	L	5265	FO	88090216	164915	000010	500 U
PHCAL	HD	60753	21	06.7	0732080	-502828	L 1	13857	L	5806	FO	88081603	033700	000006	502 G C=199,B=35
PHCAL	HD60753	21	07.09	0732080	-502829	H 1	13981	L	5266	FO	88090216	160303	000900	501 U	
PHCAL	HD	60753	21	6.69	0732080	-502828	L 1	13905	L	5387	FO	88082402	024400	000006	502 G C=199,B=33
PHCAL	HD60753	21	07.09	0732080	-502829	L 1	13982	L	5251	FO	88090217	173927	000015	700 U	
PHCAL	HD	60753	21	6.69	0732080	-502828	L 1	13906	L	5396	FO	88082403	031600	000006	502 G C=209,B=34
PHCAL	HD	60753	21	6.69	0732080	-502828	L 3	34126	L	5397	FO	88082403	032000	000010	500 G C=177,B=18

PRO	Object	CL	MAG	R.A.	DEC	D C Image A	FES	MD	Obs.date	Exptim	mmmsstt	ECC	Comment
PHCAL HD	60753	21	06.95	0732081	-502829	L 1 13367 L	5945	FO	88060521	215744	000006	402	V
PHCAL HD	60753	21	6.7	0732081	-502829	L 3 33366 L	5352	FO	88042609	094300	000041	500	G C=186,B=17
PHCAL HD	60753	21	06.95	0732081	-502829	L 3 33710 L	5946	FO	88060521	215306	000010	500	V
PHCAL HD	60753	21	6.7	0732081	-502829	L 3 33367 L	5296	FO	88042610	101900	000016	300	G C=100,B=17
PHCAL HD	60753	21	06.96	0732081	-502829	L 1 13368 L	5926	FO	88060522	223140	000015	702	V
PHCAL HD	60753	21	6.7	0732081	-502829	L 3 33368 L	5275	FO	88042610	105100	000049	500	G C=210,B=17
PHCAL HD	60753	21	6.7	0732081	-502829	L 3 33369 L	5249	FO	88042611	112600	000105	X00	G C=1.5X,B=18
PHCAL	NULL	99		0732081	-502829	L 3 33370 L			88042611	115400	000000	00	G B=17
PHCAL HD	60753	21	6.7	0732081	-502829	L 3 33371 L	5298	FO	88042612	122100	000045	500	G C=202,B=18
PHCAL HD	60753	21	6.7	0732081	-502829	L 3 33372 L	5341	FO	88042612	125400	000018	300	G C=107,B=17
PHCAL HD	60753	21	6.7	0732081	-502829	L 3 33373 L	5380		88042613	132900	000053	500	G C=222,B=17
PHCAL HD	60753	21	6.7	0732081	-502829	L 3 33374 L	5353	FO	88042614	140500	000041	500	G C=200,B=18
PHCAL HD	60753	21	6.7	0732081	-502829	L 3 33375 L	5385	FO	88042614	143600	000011	500	G C=208,B=18
PHCAL HD	60753	21	6.7	0732081	-502829	L 3 33376 L	5373	FO	88042615	152200	000005	300	G C=105,B=17
PHCAL HD	60753	21	6.7	0732081	-502829	L 3 33377 L	5366	FO	88042615	155700	000014	500	G C=224,B=17
PHCAL HD	60753	21	6.7	0732081	-502829	L 3 33378 L	5393	FO	88042616	162500	000011	500	G C=210,B=17
PHCAL HD	60753	21	6.7	0732081	-502829	L 2 18203 L	5692	FO	88050916	162400	000009	401	G C=160,B=23
PHCAL HD	60753	21	6.7	0732081	-502829	L 2 18209 S	6014	FO	88050922	225000	000027	401	G C=170,B=23
PHCAL HD	60753	21	6.7	0732081	-502829	L 1 13200 L	5468	FO	88051019	195300	000006	502	G C=189,B=35
PHCAL HD	60753	21	6.7	0732081	-502829	L 3 33500 L	5488	FO	88051019	195700	000010	500	G C=171,B=18
PHCAL HD	60753	21	6.7	0732081	-502829	L 1 13201 L	5503	FO	88051020	205200	000030	500	G C=190,B=18
PHCAL HD	60753	21	6.7	0732081	-502829	L 3 33501 L	5503	FO	88051020	205900	000030	500	G C=190,B=18
PHCAL HD	60753	21	6.7	0732081	-502829	L 3 33502 L	5629	FO	88051021	214100	000041	500	G C=190,B=18
PHCAL HD	60753	21	6.7	0732081	-502829	L 3 33593 L	5737	FO	88052115	153800	000011	501	G C=200,B=25
PHCAL HD	60753	21	6.7	0732081	-502829	L 1 13287 L	5717	FO	88052115	154200	000006	402	G C=181,B=34
PHCAL HD	60753	21	6.7	0732081	-502829	L 3 33594 L	5734	FO	88052116	164400	000005	300	G C=95,B=19
PHCAL HD	60753	21	6.7	0732081	-502829	L 1 13288 L	5758	FO	88052116	164900	000002	302	G C=162,B=33
PHCAL HD	60753	21	6.7	0732081	-502829	L 3 33595 L	5826	FO	88052117	174300	000014	501	G C=230,B=26
PHCAL HD	60753	21	6.7	0732081	-502829	L 1 13289 L	5776	FO	88052117	174700	000007	502	G C=215,B=35
PHCAL HD	60753	21	6.7	0732081	-502829	L 3 33596 L	5742	FO	88052118	184800	000018	X01	G C=1.6X,B=25
PHCAL HD	60753	21	6.7	0732081	-502829	L 1 13290 L	5745	FO	88052118	185200	000010	502	G C=254,B=35
PHCAL	NULL	99		0732081	-502829	L 1 13291 L			88052119	194100	000000	02	G B=36
PHCAL	NULL	99		0732081	-502829	L 3 33597 L			88052120	200600	000000	00	G B=17
PHCAL HD	60753	21	6.7	0732081	-502829	L 3 33598 L	6094	FO	88052120	203000	000011	501	G C=210,B=25
PHCAL HD	60753	21	6.7	0732081	-502829	L 1 13292 L	5711	FO	88052120	203400	000006	402	G C=181,B=34
PHCAL HD	60753	21	6.7	0732081	-502829	L 1 13315 L	5376	FO	88052718	182400	000006	502	G C=201,B=34
PHCAL HD	60753	21	6.7	0732081	-502829	L 1 13316 L	5402	FO	88052719	190000	000018	502	G C=208,B=32
PHCAL HD	60753	21	6.7	0732081	-502829	L 1 13317 L	5622	FO	88052719	194500	000026	502	G C=192,B=36
PHCAL HD	60753	21	6.7	0732081	-502829	L 3 33655 L	5519	FO	88052720	201600	000010	500	G C=190,B=11
PHCAL HD	60753	21	6.7	0732081	-502829	L 3 33656 L	5454	FO	88052720	204900	000030	401	G C=170,B=24
PHCAL HD	60753	21	6.7	0732081	-502829	L 3 33657 L	559	FO	88052721	212700	000041	501	G C=191,B=22
PHCAL HD	60753	21	6.7	0732081	-502829	L 1 13318 L	5524	FO	88052722	221200	000006	502	G C=190,B=38
PHCAL HD	60753	21	6.7	0732081	-502829	L 1 13319 L	6806	FO	88052722	224300	000006	502	G C=200,B=38
PHCAL HD	60753	21	6.7	0732081	-502829	L 1 13465 L	5750	FO	88062006	061500	000026	502	G C=190,B=32
PHCAL HD	60753	21	6.7	0732081	-502829	L 1 13466 L	5806	FO	88062006	065500	000010	302	G C=125,B=32

PRO	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 1 13467	L	5891	FO	88062007	073400	000031	502 G	C=205,B=32
PHCAL HD	60753 21	6.7	0732081	-502829	L 1 13468	L	6322	FO	88062008	081600	000041	502 G	C=245,B=37
PHCAL HD	60753 21	6.7	0732081	-502829	L 1 13469	L	5988	FO	88062008	085500	000026	502 G	C=192,B=35
PHCAL HD	60753 21	6.7	0732081	-502829	L 1 13471	L	5780	FO	88062010	100600	000015	402 G	C=145,B=35
PHCAL HD	60753 21	6.7	0732081	-502829	L 1 13472	L	5708	FO	88062010	105500	000005	302 G	C=90,B=33
PHCAL HD	60753 21	6.7	0732081	-502829	L 1 13473	L	5676	FO	88062011	114000	000051	X02 G	C=2X,B=38
PHCAL HD	60753 21	6.7	0732081	-502829	L 1 13474	L	5711	FO	88062012	122200	000025	502 G	C=198,B=36
PHCAL HD	60753 21	6.7	0732081	-502829	L 2 18218	L	553	FO	88062017	173900	000009	401 G	C=164,B=20
PHCAL HD	60753 21	6.7	0732081	-502829	L 2 18219	L	5569	FO	88062018	182500	000043	501 G	C=185,B=26
PHCAL HD	60753 21	6.7	0732081	-502829	L 2 18220	S	5534	FO	88062019	190700	000029	501 G	C=210,B=25
PHCAL HD	60753 21	6.7	0732081	-502829	L 3 33858	L	5935	FO	88070413	132100	000010	500 G	C=198,B=18
PHCAL HD	60753 21	6.7	0732081	-502829	L 1 13561	L	5919	FO	88070413	132600	000006	403 G	C=170,B=46
PHCAL HD	60753 21	6.7	0732081	-502829	L 1 13599	L	5258	FO	88070917	171100	000026	502 G	C=187,B=36
PHCAL HD	60753 21	6.7	0732081	-502829	L 3 33886	L	5358	FO	88070917	172200	000041	500 G	C=189,B=17
PHCAL HD	60753 21	6.7	0732081	-502829	L 3 33887	S	6086	FO	88070918	182000	000030	500 G	C=243,B=17
PHCAL HD	60753 21	6.7	0732081	-502829	L 1 13600	S	5510	FO	88070918	182500	000018	501 G	C=230,B=30
PHCAL HD	60753 21	6.7	0732081	-502829	L 1 13746	L	5603	FO	88072713	130800	000006	502 G	C=185,B=33
PHCAL HD	60753 21	6.7	0732081	-502829	L 3 33972	L	5608	FO	88072713	131500	000010	500 G	C=180,B=18
PHCAL HD	60753 21	6.7	0732081	-502829	L 1 13980	L	5410	FO	88090214	140500	000006	502 G	C=200,B=32
PHCAL HD	60753 21	6.7	0732081	-502829	L 3 34174	L	5412	FO	88090214	140900	000010	500 G	C=185,B=17
PHCAL HD	60753 21	6.69	0732081	-502828	L 3 34201	L	5241	FO	88090723	233200	042005	307 G	C=150,B=83
PHCAL HD	60753 21	6.69	0732081	-502828	L 1 14017	L	5217	FO	88090723	233600	042003	309 G	C=200,B=105
PHCAL HD	60753 21	6.7	0732081	-502829	L 3 34233	L	5328	FO	88091223	233700	000041	501 G	C=179,B=23
PHCAL HD	60753 21	6.7	0732081	-502829	L 3 34234	L	5321	FO	88091300	001300	000016	301 G	C=93,B=22
PHCAL HD	60753 21	6.7	0732081	-502829	L 3 34235	L	5354	FO	88091300	005000	000049	500 G	C=211,B=18
PHCAL HD	60753 21	6.7	0732081	-502829	L 3 34236	L	5438	FO	88091301	012400	000105	X00 G	C=1.5X,B=18
PHCAL HD	NULL 21	6.7	0732081	-502829	L 3 34237			FO	88091301	015300	000000	01 G	B=21
PHCAL HD	60753 21	6.7	0732081	-502829	L 3 34238	L	5375	FO	88091302	022200	000041	500 G	C=202,B=18
PHCAL HD	60753 21	6.7	0732081	-502829	L 3 34239	L	5417	FO	88091302	025600	000045	500 G	C=206,B=18
PHCAL HD	60753 21	6.7	0732081	-502829	L 3 34240	L	5625	FO	88091303	033200	000018	300 G	C=109,B=19
PHCAL HD	60753 21	6.7	0732081	-502829	L 3 34241	L	5869	FO	88091304	040700	000053	500 G	C=240,B=18
PHCAL HD	60753 21	6.7	0732081	-502829	L 3 34242	L	6007	FO	88091304	044200	000041	500 G	C=197,B=18
PHCAL HD	60753 21	6.7	0732081	-502829	L 3 34243	L	6076	FO	88091305	051500	000011	500 G	C=195,B=17
PHCAL HD	60753 21	6.7	0732081	-502829	L 3 34244	L	5625	FO	88091305	054500	000005	300 G	C=100,B=17
PHCAL HD	60753 21	6.7	0732081	-502829	L 3 34245	L	5668	FO	88091306	061300	000011	500 G	C=192,B=17
PHCAL HD	60753 21	6.7	0732081	-502829	L 3 34274	L	5518	FO	88091913	133200	000010		G
PHCAL HD	60753 21	6.7	0732081	-502829	L 1 14096	L	554	FO	88091913	133700	000006	502 G	C=184,B=32
PHCAL HD	60753 21	6.7	0732081	-502829	L 1 14097	L	5556	FO	88091914	142300	000026	502 G	C=190,B=34
PHCAL HD	60753 21	6.7	0732081	-502829	L 1 14108	L	5744	FO	88092107	075100	000006	402 G	C=182,B=36
PHCAL HD	60753 21	6.7	0732081	-502829	L 1 14109	L	5698	FO	88092108	082400	000006	502 G	C=189,B=35
PHCAL HD	60753 21	6.7	0732081	-502829	L 1 14110	L	5677	FO	88092108	085700	000006	402 G	C=182,B=35
PHCAL HD	60753 21	6.7	0732081	-502829	L 3 34282	L	5678	FO	88092109	090200	000010	500 G	C=185,B=17
PHCAL HD	60753 21	6.7	0732081	-502829	L 3 34283	L	5642	FO	88092109	093400	000010	500 G	C=199,B=17
PHCAL HD	60753 21	6.7	0732081	-502829	L 3 34284	L	5595	FO	88092110	100400	000010	500 G	C=204,B=19
PHCAL HD	60753 21	6.7	0732081	-502829	L 3 34419	L	6049	FO	88100507	075700	000010	500 G	C=181,B=15

PRO	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	1	14184	L	5842	FO	88100508	080300	000006	402 G C=170,B=36
MLKJN	HD	60848	15	6.8	0734134	+170102	H	3	34596	L	4896	FO	88102505	053400	000800	533 G E=122,C=240,B=43
PHCAL	-31 4800	16	10.5	0734344	-320546	L	3	33237	L	199	FO	88040821	213800	000046	500 G C=185,B=16	
PHCAL	-31 4800	16	10.5	0734344	-320546	L	1	13003	L	198	FO	88040821	214200	000051	402 G C=170,B=36	
PHCAL	HD	61421	41	0.34	073641	+052116	H	3	33412	L	11726	FU	88043016	162000	000214	X02 G C=1.5X,B=35
PHCAL	HD	61421	41	0.3	0736411	+052116	H	1	13112	L	11835	FU	88042320	202200	000016	X03 G C=1.5X,B=41
PHCAL	HD	61421	41	0.3	0736411	+052116	H	3	33345	L	11660	FU	88042320	202700	000251	X02 G C=2X,B=37
PHCAL	HD	61421	41	0.34	0736411	052116	H	1	13143	L	11638	FU	88043016	161500	000009	502 G C=198,B=40
FEJRR	MKN 382	84	15.4	0752033	+391907	L	3	33313	L		BO	88041910	105500	020000	204 G C=65,B=57	
FEJRR	MKN 382	84	15.4	0752033	+391907	L	1	13077	L		BO	88041914	142000	015300	06 G B=72	
FEJRR	MKN 382	84	15.4	0752033	+391907	L	9	02055	2			88041914	145500	000240	G	
BCJEB	AQ PUP	53	8.8	0756206	-285936	L	3	33615	L	950	FO	88052310	102800	026000	306 G C=95,B=71	
CBJMP	HD	65607	66	8.2	0756500	-072200	L	1	13162	L	988	FO	88050220	202800	000500	X02 G C=2X,B=36
CBJMP	HD	65607	66	8.2	0756500	-072200	L	1	13162	S	988	FO	88050220	204100	000300	402 G C=153,B=35
CBJMP	HD	65607	66	8.2	0756500	-072200	L	3	33432	L	1041	FO	88050220	205100	001500	X00 G C=2X,B=18
CBJMP	HD	65607	66	8.2	0756500	-072200	L	3	33432	S			88050221	212400	001200	01 G B=21
CBKJE	BD +15 1733	47	8.9	0759415	+151907	L	1	14167	L	757	FO	88100211	110800	001000	333 G E=93,C=66,B=41	
CBKJE	BD +15 1733	47	8.9	0759415	+151907	L	1	14168	L	790	FO	88100211	115900	003000	343 G E=186,C=82,B=41	
CBKJE	BD +15 1733	47	8.9	0759415	+151907	L	1	14205	L	616	FO	88101012	121800	003000	342 G E=163,C=73,B=39	
PHCAL	HD	66811	13	2.3	0801496	-395141	H	1	13207	L	3229	FU	88051122	223700	000003	403 G C=190,B=41
PHCAL	HD	66811	13	2.3	0801496	-395141	H	3	33538	L	3129	FU	88051617	171800	000003	502 G C=205,B=35
PHCAL	BD+75 325	16	09.84	0804430	+750648	L	1	14057	L	459	FO	88091515	154137	000020	500 U	
PHCAL	BD+75 325	16	09.83	0804430	+750648	L	1	14058	L	464	FO	88091516	161256	000045	700 U	
PHCAL	BD+75 325	16	09.84	0804430	+750648	L	3	34253	S	458	FO	88091516	165619	000042	500 U	
PHCAL	BD+75 325	16	09.84	0804430	+750648	L	3	34253	L	458	FO	88091516	165148	000014	500 U	
PHCAL	BD+75 325M	16	09.83	0804430	+750648	H	1	14059	L	461	FO	88091517	170402	003000	501 U	
PHCAL	BD+75 325	16	09.85	0804430	+750648	H	3	34254	L	454	FO	88091517	174124	002500	500 U	
PHCAL	BD +75 3251	16	9.54	0804431	+750647	L	3	33414	L	502	FO	88043019	190800	000014	400 G C=160,B=18	
PHCAL	BD +75 325	16	9.54	0804431	+750647	L	1	13145	L	487	FO	88043019	191300	000020	402 G C=172,B=36	
PHCAL	BD +75 325	16	9.5	0804432	+750648	L	3	33228	L	462	FO	88040722	222200	000014	400 G C=165,B=17	
PHCAL	BD +75 325	16	9.5	0804432	+750648	L	1	13000	L	475	FO	88040722	222700	000020	502 G C=185,B=33	
PHCAL	BD +75 325	16	9.5	0804432	+750648	L	2	18188	L	448	FO	88041720	203100	000033	501 G C=182,B=23	
PHCAL	BD +75 325	16	9.5	0804432	+750648	L	2	18189	L	443	FO	88041721	210300	000142	401 G C=157,B=26	
PHCAL	BD +75 325	16	9.5	0804432	+750648	L	2	18205	L	464	FO	88050919	192000	000033	401 G C=165,B=26	
PHCAL	BD +75 0325	16	9.5	0804432	+750648	L	3	34183	L	474	FO	88090411	114800	000014	400 G C=163,B=17	
PHCAL	BD +75 0325	16	9.5	0804432	+750648	L	1	13997	L	484	FO	88090411	115400	000020	402 G C=180,B=35	
CMKRS	HD	68273	10	1.9	0807594	-471118	L	1	13570	L	4563	FU	88070516	162000	000130	X03 G C=1.5X,B=46
CMKRS	HD	68273	10	1.9	0807594	-471118	L	3	33867	L	5189	FU	88070516	162500	000130	X51 G E=233,C=1.5X,B=21
BCJEB	RS PUP	53	7.8	0811090	-342536	L	3	33498	L	5087	FO	88051010	104900	024000	07 G B=84	
BEJTS	HD	68980	26	4.8	0811362	-354451	H	3	33314	L	362	FU	88041917	174700	000130	502 G C=220,B=40
BEJTS	HD	68980	26	4.8	0811362	-354451	H	1	13078	L	350	FU	88041917	175300	000100	X03 G C=1.5X,B=43
ZAKMK	RX PUP	57	10.7	0812282	-413318	H	3	34594	L	99	FO	88102422	220000	001500	41 G E=132,B=24	
ZAKMK	RX PUP	57	10.7	0812282	-413318	L	1	14309	L	107	FO	88102422	222300	001500	352 G E=219,C=64,B=38	
ZAKMK	RX PUP	57	10.7	0812282	-413318	H	3	34595	L	400	SO	88102422	225200	029000	3X7 G E=1.5X,C=113,B=86	
ZAKMK	RX PUP	57	10.7	0812282	-413318	H	1	14310	L	103	FO	88102503	034900	006000	33 G E=122,B=44	

PRO	Object	CL	MAG	R.A.	DEC	D C	Image	A	FES	MD	Obs.date	Exptim	mmmsstt	ECC	Comment
CUJPS	Z CAM	54	11.6	0819398	+731623	L 3	33420	L	300	SO	88050114	143600	001500	500	G C=200,B=18
NSKPW	PUPPIS A	75	0.0	0821001	-424203	L 3	33879	L		BO	88070620	200700	087500	309	G C=153,B=111
NSKPW	PUPPIS A	75	0.0	0821001	-424203	L 1	13582	L		BO	88070704	042300	082500	309	G C=199,B=152
NSKPW	PUPPIS A	75	0.0	0821001	-424203	1 9	02077	2			88070804	043000	000020		G
KM050	PUPPIS-A	75	17.00	0821002	-424204	E 9	02075	2		BO	88070620	204200	004000		U
KM050	PUPPIS A	75	17.00	0821002	-424204	E 9	02076	2		BO	88070719	194800	004000		U
KC194	HD71129	47	02.21	0821294	-592053	H 1	14321	L	3553	FU	88102713	132636	000100	501	U
KM195	HH47	72	99.99	0824227	-504959	E 9	02082	2			88072219	194000	004000		U SWP 33960
HHKKB	H-H 47	69	16.0	0824228	-505000	L 3	33960	L	13	SO	88072303	033900	087000	329	G E=161,C=190,B=148
CBKJE	47 2347	47	8.6	0829354	-472947	L 3	33700	L	686	FO	88060405	054500	002000	221	G E=34,C=32,B=27
CBKJE	47 2347	47	8.6	0829354	-472947	H 1	13350	L	697	FO	88060406	061200	035000	338	G E=180,C=145,B=99
CBKJE	47 2347	47	8.6	0829354	-472947	L 1	13351	L	680	FO	88060412	123800	001000	342	G E=141,C=67,B=35
CBKJE	47 2347	47	8.6	0829354	-472947	L 3	33730	L	911	FO	88060905	053100	002000	501	G C=200,B=22
CBKJE	47 2347	47	8.6	0829354	-472947	H 1	13390	L	926	FO	88060905	055900	035000	407	G C=204,B=90
CBKJE	47 2347	47	8.6	0829354	-472947	L 1	13391	L	894	FO	88060912	122400	000700	502	G C=217,B=36
CBKJE	47 2347	47	8.6	0829354	-472947	L 3	33767	L	908	FO	88061606	060100	002000	501	G C=196,B=21
CBKJE	47 2347	47	8.6	0829354	-472947	H 1	13437	L		FO	88061606	062800	034000	408	G C=220,B=99
CBKJE	47 2347	47	8.6	0829354	-472947	L 1	13438	L	964	FO	88061612	124400	000700	502	G C=220,B=38
CBKJE	47 2347	47	8.6	0829354	-472947	L 3	33768	L	904	FO	88061718	182600	002000	501	G C=205,B=25
CBKJE	47 2347	47	8.6	0829354	-472947	L 1	13448	L	1044	FO	88061718	185300	000800	X02	G C=1.5X,B=38
KA114	AL VEL	22	09.18	0829360	-472948	H 3	33974	L	825	FO	88072720	202348	016000	301	U
KA114	ALVEL	39	09.02	0829360	-472948	L 3	34401	L	953	FO	88100213	132639	001000	300	U
KA114	AL VEL	39	09.08	0829360	-472948	H 1	14169	L	901	FO	88100214	141251	017000	303	U
JE161	NGC2623	80	14.00	0835252	+255550	L 3	33341	L		BO	88042302	025410	035300	113	U
PHCAL	HD 74280	21	4.3	0840367	+033446	H 1	13113	L	468	FU	88042321	214000	000040	503	G C=205,B=43
PHCAL	HD 74280	21	4.3	0840367	+033446	H 3	33346	L	464	FU	88042321	214500	000050	502	G C=190,B=35
IPJRP	AC UMA	66	10.2	0851332	+650951	L 3	33276	L	271	SO	88041320	203000	002000	303	G C=81,B=44
IBKJN	HD 77137	44	6.8	0857340	-273711	H 1	13347	L	4002	FO	88060219	191000	003500	333	G E=93,C=105,B=48
IBKJN	HD 77137	44	6.8	0857340	-273711	H 1	13386	L	4329	FO	88060805	055400	003000	333	G E=85,C=90,B=41
IBKJN	HD 77137	44	6.8	0857340	-273711	H 3	33723	L	4352	FO	88060806	063000	038000	377	G E=78,C=125,B=83
AMKEB	HD 78362	35	4.7	0906491	+634307	L 3	33515	L	278	FU	88051219	194100	000430	404	G C=180,B=57
AMKEB	HD 78362	35	4.7	0906491	+634307	L 3	33515	S	278	FU	88051220	201400	000300	405	G C=165,B=63
AMKEB	HD 78362	35	4.7	0906491	+634307	L 1	13212	L	275	FU	88051220	202400	000040	505	G C=231,B=70
AMKEB	HD 78362	35	4.7	0906491	+634307	L 1	13212	S	275	FU	88051220	203400	000100	X05	G C=3X,B=66
AMKEB	HD 78362	35	4.7	0906491	+634307	H 1	13213	L	281	FU	88051221	211300	001200	X04	G C=1.5-2X,C=248,B=56
AMKEB	HD 78362	35	4.7	0906491	+634307	H 3	33516	L	291	FU	88051221	214500	006300	403	G C=182,B=42
JA181	WR 15	10	11.17	0911310	-495401	L 3	33590	L	140	FO	88052023	235054	010000	230	U
JA181	WR 15	10	11.14	0911310	-495401	L 1	13285	L	144	FO	88052101	013850	008000	551	U
PHCAL	HD 80007	32	1.80	0912396	-693039	H 1	13187	L	4186	FU	88050819	192700	000023	503	G C=200,B=41
PHCAL	HD 80007	32	1.80	0912396	-693039	H 3	33491	L	4285	FU	88050820	200100	000100	503	G C=217,B=41
PHCAL	A+81 266	16	12.1	0913428	+815611	L 3	33238	L	235	FU	88040823	230900	000216	500	G C=185,B=16
PHCAL	A+81 266	16	12.1	0913428	+815611	L 1	13004	L	236	FU	88040823	231600	000248	402	G C=163,B=39
KA105	HD80077	23	07.91	0914133	-494550	L 3	33558	L	2566	FO	88051723	231138	004000	300	U
KA105	HD80077	23	07.91	0914133	-494549	L 1	13260	L	2570	FO	88051802	025037	001500	700	U
KA105	HD80077	23	07.89	0914133	-494549	L 3	33559	L	2606	FO	88051803	031311	021400	401	U

PRO	Object	CL	MAG	R.A.	DEC	D C	Image	A	FES	MD	Obs.date	Exptim	mmmsstt	ECC	Comment	
KAI05	HD80077	23	07.86	0914133	-494549	L 1	13267	L	2668	FO	88051900	005005	035800		U	
KAI05	HD80077	23	07.88	0914133	-494549	L 1	13266	L	2619	FO	88051900	000005	000700	501	U	
CEKTS	HD	81137	39	7.5	0920209	-522101	L 1	13540	L	1738	FO	88063019	190100	000630	502	G C=230,B=35
CEKTS	HD	81137	39	7.5	0920209	-522101	L 3	33839	L	2001	FO	88063019	193300	003800	X00	G C=1.5X,B=20
CEKTS	HD	81137	39	7.5	0920209	-522101	L 1	13541	L	1799	FO	88063020	201900	001930	X02	G C=3X,B=39
PHCAL	BD	+48 1777	16	10.8	0927221	+482912	L 3	33239	L	169	FO	88040900	002500	000050	500	G C=195,B=16
PHCAL	BD	+48 1777	16	10.8	0927221	+482912	L 1	13005	L	168	FO	88040900	003000	000058	402	G C=164,B=31
NPKST	ESO166B4	71		0929439	-560427	L 3	34073	L		BO	88081122	224300	031500	04	G B=52	
NPKST	ESO166CS	70	18.1	0929472	-560423	L 3	34071	L		BO	88081101	012900	046500	404	G C=171,B=55	
LDKCA	HD	82558	46	7.8	0930010	-105748	L 3	34623	L	1756	FO	88102905	055300	007500	331	G E=66,C=51,B=24
LDKCA	HD	82558	46	7.8	0930010	-105748	H 1	14334	L	1763	FO	88102907	071500	004500	336	G E=117,C=116,B=71
LDKCA	HD	82558	46	7.8	0930010	-105748	L 3	34624	L	1699	FO	88102908	080900	006500	225	G E=76,C=78,B=61
LDKCA	HD	82558	46	7.8	0930010	-105748	H 1	14335	L	1739	FO	88102909	092300	004500	333	G E=111,C=94,B=47
LDKCA	HD	82558	46	7.8	0930010	-105748	L 3	34625	L	1766	FO	88102910	101600	015000	233	G E=98,C=58,B=44
LDKCA	HD	82558	46	7.8	0930010	-105748	L 3	34631	L	1771	FO	88103005	054700	007500	332	G E=113,C=84,B=40
LDKCA	HD	82558	46	7.8	0930010	-105748	H 1	14343	L	1765	FO	88103007	070900	004500	336	G E=126,C=109,B=73
LDKCA	HD	82558	46	7.8	0930010	-105748	L 3	34632	L	1705	FO	88103008	080200	005000	234	G E=79,C=68,B=51
LDKCA	HD	82558	46	7.8	0930010	-105748	L 3	34641	L	1709	FO	88103105	053900	007500	222	G E=47,C=43,B=35
LDKCA	HD	82558	46	7.8	0930010	-105748	H 1	14350	L	1651	FO	88103107	070200	004500	303	G C=97,C=81,B=44
LDKCA	HD	82558	46	7.8	0930010	-105748	L 3	34642	L	1653	FO	88103107	075400	005500	31	G E=56,B=22
ALJGM	HD	82829	66	8.4	0931199	-445911	L 3	33546	L	1947	FO	88051708	080800	000900	500	G C=250,B=18
ALJGM	HD	82829	66	8.4	0931199	-445911	L 1	13247	L	1966	FO	88051708	082200	000300	X02	G C=1.5X,B=35
ALJGM	HD	82829	66	8.4	0931199	-445911	L 3	33547	L	1988	FO	88051709	092000	001200	X01	G C=2X,B=22
ALJGM	HD	82829	66	8.4	0931199	-445911	L 1	13248	L	2010	FO	88051709	093600	000200	502	G C=228,B=33
ALJGM	HD	82829	66	8.4	0931199	-445911	L 3	33548	L	2019	FO	88051710	103800	001200	X00	G C=2X,B=18
ALJGM	HD	82829	66	8.4	0931199	-445911	L 1	13249	L	1940	FO	88051710	105400	000200	502	G C=230,B=31
ALJGM	HD	82829	66	8.4	0931199	-445911	L 3	33549	L	2298	FO	88051712	121400	001200	X00	G C=2X,B=18
ALJGM	HD	82829	66	8.4	0931199	-445911	L 1	13250	L	2006	FO	88051712	123200	000200	502	G C=225,B=35
ALJGM	HD	82829	66	8.4	0931199	-445911	L 3	33550	L	1973	FO	88051713	133200	001200	X00	G C=2X,B=18
ALJGM	HD	82829	66	8.4	0931199	-445911	L 1	13251	L	1947	FO	88051713	134800	000200	502	G C=238,B=32
ALJGM	HD	82829	66	8.4	0931199	-445911	L 3	33551	L	1973	FO	88051714	144600	001200	X00	G C=2X,B=18
ALJGM	HD	82829	66	8.4	0931199	-445911	L 1	13252	L	1984	FO	88051715	150300	000200	502	G C=240,B=32
ALJGM	HD	82829	66	8.4	0931199	-445911	L 1	13253	L	1984	FO	88051716	160100	000200	502	G C=233,B=32
ALJGM	HD	82829	66	8.4	0931199	-445911	L 3	33552	L	1948	FO	88051716	161000	001200	X00	G C=2X,B=17
ALJGM	HD	82829	66	8.4	0931199	-445911	L 1	13254	L	1980	FO	88051717	170600	000200	502	G C=224,B=32
ALJGM	HD	82829	66	8.4	0931199	-445911	L 3	33553	L	1939	FO	88051717	171500	001200	X00	G C=2X,B=17
ALJGM	HD	82829	66	8.4	0931199	-445911	L 1	13255	L	2010	FO	88051718	181000	000200	502	G C=214,B=32
ALJGM	HD	82829	66	8.4	0931199	-445911	L 3	33554	L	1971	FO	88051718	181800	001200	X00	G C=2X,B=17
ALJGM	HD	82829	66	8.4	0931199	-445911	L 1	13256	L	2004	FO	88051719	191900	000200	502	G C=210,B=32
ALJGM	HD	82829	66	8.4	0931199	-445911	L 3	33555	L	2002	FO	88051719	192800	001200	X00	G C=2X,B=18
ALJGM	HD	82829	66	8.4	0931199	-445911	L 1	13257	L	2042	FO	88051720	202800	000200	502	G C=238,B=32
ALJGM	HD	82829	66	8.4	0931199	-445911	L 3	33556	L	1965	FO	88051720	203600	001200	X00	G C=2X,B=17
ALJGM	HD	82829	66	8.4	0931199	-445911	L 1	13258	L	2000	FO	88051721	213100	000200	502	G C=223,B=32
ALJGM	HD	82829	66	8.4	0931199	-445911	L 3	33557	L	1923	FO	88051721	214000	001200	X00	G C=2X,B=17
ALJGM	HD	82829	66	8.4	0931199	-445911	L 1	13259	L	1969	FO	88051722	223500	000200	502	G C=238,B=33

PRO	Object	CL	MAG	R.A.	DEC	D C	Image	A	FES	MD	Obs.date	Exptim	mmmsstt	ECC	Comment
GIJBS	HD	127557	20	8.7	0934599	+500459	H 3	33527	L	1019	FO	88051413	134000	006000	505 G C=226,B=61
DCKEB	L CAR	53	3.5	0943524	-621637	L 3	33669	L	832	FU	88052914	142200	003000	401 G C=145,B=23	
DCKEB	L CAR	53	3.4	0943524	-621637	L 1	14206	L	440		88101105	055900	000500	G FU	
DCKEB	L CAR	53	3.4	0943524	-621637	L 3	34451	L	454	FU	88101106	061200	009700	331 G E=52,C=52,B=30	
DCKEB	L CAR	53	3.4	0943524	-621637	H 1	14207	L	455	FU	88101107	075700	005000	333 G E=126,C=130,B=48	
DCKEB	L CAR	53	3.4	0943524	-621637	L 1	14211	L	481	FU	88101122	220600	000500	X02 G C=2X,B=35	
DCKEB	L CAR	53	3.4	0943524	-621637	L 3	34458	L	460	FU	88101122	221900	018000	334 G E=107,C=90,B=51	
DCKEB	L CAR	53	3.4	0943524	-621637	H 1	14212	L	458	FU	88101201	012600	005000	434 G E=120,C=168,B=51	
DCKEB	L CAR	53	3.4	0943524	-621637	L 3	34460	L	460	FU	88101205	054300	015000	344 G E=181,C=90,B=58	
DCKEB	L CAR	53	3.4	0943524	-621637	L 3	34462	L	453	FU	88101210	105100	011800	331 G E=72,C=80,B=28	
DCKEB	L CAR	53	3.4	0943524	-621637	L 1	14214	L	477	FU	88101222	221700	000500	XX2 G E=2X,C=2X,B=36	
DCKEB	L CAR	53	3.4	0943524	-621637	L 1	14214	L	477	FU	88101222	221800	000500	XX2 G E=2X,C=2X,B=36	
DCKEB	L CAR	53	3.4	0943524	-621637	L 3	34464	L	470	FU	88101222	223000	018000	334 G E=107,C=103,B=58	
DCKEB	L CAR	53	3.4	0943524	-621637	L 3	34464	L	470	FU	88101222	223100	018000	334 G E=107,C=103,B=58	
DCKEB	L CAR	53	3.4	0943524	-621637	H 1	14215	L	490	FU	88101301	013800	005000	433 G E=122,C=165,B=47	
DCKEB	L CAR	53	3.4	0943524	-621637	L 3	34465	L			88101310	100000	017000	335 G E=100,C=110,B=68	
DCKEB	L CAR	53	3.4	0943524	-621637	L 3	34470	L	500	FU	88101402	020200	016800	333 G E=117,C=100,B=49	
DCKEB	L CAR	53	3.4	0943524	-621637	L 3	34557	L	807	FU	88102311	112400	008400	453 G E=198,C=155,B=43	
DCKEB	L CAR	53	3.4	0943524	-621637	L 3	34602	L	750	FU	88102511	114000	006800	36 G E=176,B=79,B=38	
DCKEB	L CAR	53	3.4	0943524	-621637	L 3	34617	L	662	FU	88102811	115200	005500	331 G E=96,C=46,B=22	
DCKEB	L CAR	53	3.4	0943525	-621648	L 3	34429	L	451	FU	88100705	055900	006000	2?1 G E=4,C=44,B=30	
DCKEB	L CAR	53	3.4	0943525	-621648	H 1	14186	L	448	FU	88100707	070800	005000	?9 G E=91,B=112,B=41	
DCKEB	L CAR	53	3.4	0943525	-621648	L 3	34430	L	450	FU	88100708	080700	007000	222 G E=55,C=48,B=38	
DCKEB	L CAR	53	3.4	0943525	-621648	L 1	14192	L	442	FU	88100909	095900	000600	X03 G C=4X,B=41	
DCKEB	L CAR	53	3.4	0943525	-621648	L 3	34444	L	451	FU	88100910	101300	006000	223 G E=52,C=49,B=47	
DCKEB	L CAR	53	3.4	0943525	-621648	H 1	14193	L	453	FU	88100911	111900	004500	334 G E=110,C=121,B=51	
DCKEB	L CAR	53	3.4	0943525	-621648	L 3	34445	L	501	FU	88100912	121200	003500	2?1 G E=27,C=44,B=30	
DCKEB	L CAR	53	3.4	0943525	-621648	L 3	34452	L	439	FU	88101110	101900	015000	333 G E=84,C=82,B=50	
SAKW	HD	85123	33	2.96	0945517	-645024	L 1	13331	L	1326	FU	88052916	164400	000010	502 G C=195,B=38
SAKW	HD	85123	33	2.96	0945517	-645024	L 3	33670	L	1321		88052916	165400	000050	501 G C=245,B=25
SYJDC	MRK	1239	84	15	0949462	-012235	L 3	33304	L		BO	88041723	231000	009000	231 G E=51,C=45,B=27
AGKDC	MKN	1239	84	15.0	0949463	-012236	L 3	33636	L		BO	88052512	125400	011500	23 G E=58,B=43
AGKDC	MKN	1239	84	15.0	0949463	-012236	L 3	33651	L		BO	88052712	125100	011500	222 G E=44,C=47,B=39
AGKDC	MKN	1239	84	15.0	0949463	-012236	L 3	33659	L		BO	88052812	123800	013000	23 G E=54,B=41
BEJTS	HD	87543	26	6.1	1002015	-613828	H 3	33318	L	8536	FO	88041923	232000	001600	502 G C=198,B=39
BEJTS	HD	87543	26	6.1	1002015	-613828	H 1	13081	L	8722	FO	88041923	235500	000700	503 G C=196,B=41
STJRP	ALPH	LEO	22	1.34	1005425	+121244	L 3	33624	L	5739	FU	88052415	154900	000001	501 G C=195,B=23
STJRP	ALPH	LEO	22	1.34	1005425	+121244	L 3	33625	L	5706	FU	88052416	163700	000001	X01 G C=2X,B=27
STJRP	ALPH	LEO	22	1.34	1005425	+121244	L 3	33626	L	5759	FU	88052417	171000	000000	X01 G C=1.8X,B=26
STJRP	ALPH	LEO	22	1.34	1005425	+121244	L 3	33627	L	5781	FU	88052417	174300	000001	X01 G C=1.8X,B=29
STJRP	ALPH	LEO	22	1.34	1005425	+121244	L 3	33628	L	5781	FU	88052418	181800	000000	X01 G C=1.8X,B=23
STJRP	ALPH	LEO	22	1.34	1005425	+121244	L 3	33629	L	5708	FU	88052418	185500	000001	X01 G C=1.8X,B=25
STJRP	ALPH	LEO	22	1.34	1005425	+121244	L 3	33630	L	5706	FU	88052419	192900	000000	X01 G C=1.8X,B=22
MGKJB	S CAR	51	6.7	1007461	-611813	L 1	13340	L	5532	FO	88053117	174500	003000	233 G E=91,C=64,B=46	
MGKJB	S CAR	51	6.0	1007462	-611814	L 1	13774	L	14512	FO	88080201	013600	000700	332 G E=102,C=125,B=33	

PRO	Object	CL	MAG	R.A.	DEC	D C	Image	A	FES	MD	Obs.date	Exptim	mmmsstt	ECC	Comment	
MGKJB	S CAR	51	6.0	1007462	-611814	H 1	13775	L	15025	FO	88080202	021700	015500	335	G E=148,C=108,B=63	
MGKJB	S CAR	51	6.0	1007462	-611814	H 1	13856	L	11396	FO	88081523	232600	019000	305	G C=140,B=62	
MGKJB	S CAR	51	6.0	1007462	-611814	L 1	13903	L	8597	FO	88082322	224800	000600	332	G E=130,C=70,B=32	
MGKJB	S CAR	51	6.0	1007462	-611814	H 1	13904	L	8636	FO	88082323	233200	014000	334	G E=137,C=96,B=58	
MGKJB	S CAR	51	6.0	1007462	-611814	L 1	13953	L	6898	FO	88082922	224600	001000	342	G E=182,C=73,B=33	
MGKJB	S CAR	51	6.0	1007462	-611814	H 1	13954	L	6894	FO	88082923	233300	015000	335	G E=141,C=100,B=61	
MGKJB	S CAR	51	6.0	1007462	-611814	H 1	14062	L	3111	FO	88091603	034300	018700	35	G E=144,B=65	
MGKJB	S CAR	51	6.0	1007462	-611814	L 1	14116	L	2365	FO	88092301	011900	001000	32	G E=132,B=34	
MGKJB	S CAR	51	6.0	1007462	-611814	H 1	14117	L	2188	FO	88092302	021200	028000	346	G E=187,C=110,B=73	
SAKCV	HD	89388	47	3.39	1015245	-610454	L 1	13330	L	878	FU	88052915	152900	000220	332	G E=111,C=82,B=35
SAKCV	HD	89388	47	3.39	1015245	-610454	L 1	13332	L	886	FU	88052918	181100	000730	5X2	G E=2X,C=210,B=39
JA066	HR4049	25	06.11	1015499	-284429	H 1	13274	L	12044	FO	88051923	234219	006000	401	V	
JA066	HR4049	25	06.10	1015499	-284429	L 3	33577	L	12113	FO	88052000	005104	001600	400	V	
JA138	HEN401	27	13.14	1017486	-595823	L 3	33602	L	96	SO	88052203	031705	011000	222	V	
JA138	HEN401	27	13.22	1017486	-595823	L 1	13296	L	90	SO	88052205	051800	005000	333	V	
BEJTS	HD	89890	26	4.5	1019029	-554727	H 3	33310	L	412	FU	88041822	222600	000130	402	G C=152,B=33
BEJTS	HD	89890	26	4.5	1019029	-554727	H 1	13073	L	408	FU	88041822	224300	000100	403	G C=183,B=41
BEJTS	HD	89890	26	4.5	1019029	-554727	H 3	33319	L	399	FU	88042000	004600	000230	503	G C=220,B=41
HCKTA	HD	90254	50	5.61	1022370	+090222	L 1	13374	L	14363	FO	88060605	053300	031000	332	G E=129,C=66,B=35
HCKTA	HD	90254	50	5.61	1022370	+090222	L 3	33714	L	15221	FO	88060605	054800	018000	223	G E=62,C=68,B=49
WRKLA	HD	90657	11	9.8	1024408	-582310	L 3	34059	L	339	FO	88080910	100500	001800	441	G E=168,C=133,B=26
WRKLA	HD	90657	11	9.8	1024408	-582310	L 3	34060	L	421	FO	88080911	111100	001800	451	G E=188,C=137,B=25
WRKLA	HD	90657	11	9.8	1024408	-582310	L 3	34061	L	420	FO	88080912	120800	002200	452	G E=219,C=165,B=34
WRKLA	HD	90657	11	9.8	1024408	-582310	L 3	34062	L	345	FO	88080913	130500	001100	453	G E=211,C=166,B=41
WDKJH	EG 70	37	12.9	1031151	-112606	H 3	33807	L	72	SO	88062406	062500	038500	338	G E=178,C=170,B=100	
BEJTS	HD	93563	26	5.2	1044561	-562935	H 3	33317	L	18571	FO	88041922	221500	000800	503	G C=215,B=41
BEJTS	HD	93563	26	5.2	1044561	-562935	H 1	13080	L	19019	FO	88041922	222800	000400	503	G C=215,B=43
PHCAL	HD	93521	12	7.04	1045335	+375003	L 3	33415	L	4489	FO	88043020	201900	000003	400	G C=150,B=18
PHCAL	HD	93521	12	7.04	1045335	+375003	L 1	13146	L	4537	FO	88043020	202400	000003	402	G C=170,B=35
PHCAL	WAVECAL	98		1045335	+375004	L 3	33479	S			88050719	192300	000005	79	G E=20X,B=185	
PHCAL	WAVECAL	98		1045335	+375004	L 3	33479	S			88050719	192500	000002	79	G E=20X,B=105	
PHCAL	WAVECAL	98		1045335	+375004	H 3	33480	S			88050719	195000	000005	79	G E=20X,B=130	
PHCAL	WAVECAL	98		1045335	+375004	H 3	33480	S			88050719	195100	000200	79	G E=20X,B=130	
PHCAL	TFLOOD	99		1045335	+375004	H 3	33481				88050720	202000	000005	09	G B=105	
PHCAL	WAVECAL	98		1045335	+375004	L 1	13177	S			88050720	202200	000025	79	G E=10X,B=104	
PHCAL	WAVECAL	98		1045335	+375004	L 1	13177	S			88050720	202400	000001	79	G E=10X,B=104	
PHCAL	WAVECAL	98		1045335	+375004	H 1	13178	S			88050720	205100	000025	79	G E=50X,B=106	
PHCAL	WAVECAL	98		1045335	+375004	H 1	13178	S			88050720	205300	000016	79	G E=50X,B=106	
PHCAL	TFLOOD	99		1045335	+375004	H 1	13179				88050721	213900	000025	09	G B=103	
PHCAL	HD	93521	12	7.0	1045336	+375004	L 1	13038	L	4142	FO	88041321	215300	000003	502	G C=205,B=35
PHCAL	HD	93521	12	7.0	1045336	+375004	L 3	33277	L	4145	FO	88041321	215800	000003	500	G C=179,B=15
PHCAL	HD	93521	12	7.0	1045336	+375004	L 1	13039	L	4199	FO	88041323	231100	000003	502	G C=206,B=35
PHCAL	HD	93521	12	7.0	1045336	+375004	L 1	13040	L	4380	FO	88041323	235900	000011	402	G C=179,B=36
PHCAL	HD	93521	12	7.0	1045336	+375004	L 3	33278	L	4391	FO	88041400	002300	000003	500	G C=181,B=18
PHCAL	HD	93521	12	7.0	1045336	+375004	L 2	18186	L	4208	FO	88041719	190300	000004	401	G C=154,B=22

PRO	Object	CL	MAG	R.A.	DEC	D C Image A	FES	MD	Obs.date	Exptim	mmmsstt	ECC	Comment
PHCAL HD	93521	12	7.0	1045336	+375004	L 2 18206 L	4311	FO	88050920	200600	000004	401 G	C=150,B=24
PHCAL HD	93521	12	7.0	1045336	+375004	L 3 33726 L	4504	FO	88060819	194800	000003	400 G	C=160,B=12
PHCAL HD	93521	12	7.0	1045336	+375004	L 3 33727 L	4304	FO	88060820	202000	000003	400 G	C=160,B=15
PHCAL HD	93521	12	7.0	1045336	+375004	L 3 33728 L	5467	FO	88060820	204700	000003	400 G	C=160,B=15
PHCAL WAUECAL		98		1046377	+104836	L 1 13342 S			88060114	143300	000025	?8 G	E=10X,B=99
PHCAL WAUECAL		98		1046377	+104836	L 1 13342 S			88060114	143500	000001	?08 G	C=10X,B=99
PHCAL WAUECAL		98		1046377	+104836	H 1 13343 S			88060115	150400	000025	?9 G	E=50,B=104
PHCAL WAUECAL		98		1046377	+104836	H 1 13343 S			88060115	150600	000016	?9 G	E=50X,B=104
PHCAL NULL		99		1046377	+104836	H 2 18210			88060115	153400	000000	00 G	B=17
PHCAL WAUECAL		98		1046377	+104836	L 3 33686 S			88060115	155700	000005	?9 G	E=20X,B=101
PHCAL WAUECAL		98		1046377	+104836	L 3 33686 S			88060115	155900	000002	?9 G	E=20X,B=101
PHCAL WAUECAL		98		1046377	+104836	H 3 33687 S			88060116	162400	000005	?9 G	E=60X,B=115
PHCAL WAUECAL		98		1046377	+104836	H 3 33687 S			88060116	162500	000200	?9 G	E=60X,B=115
PHCAL WAUECAL		98		1046377	+104836	L 2 18211 S			88060116	165600	000010	?8 G	E=10X,B=91
PHCAL WAUECAL		98		1046377	+104836	L 2 18211 S			88060116	165700	000001	?8 G	E=10X,B=91
PHCAL WAUECAL		98		1046377	+104836	H 2 18212 S			88060117	172100	000010	?9 G	E=50X,B=124
PHCAL WAUECAL		98		1046377	+104836	H 2 18212 S			88060117	172300	000022	?9 G	E=50X,B=124
SAKCW HD	93843	13	7.34	1046401	-595731	L 1 13334 L	3223	FO	88052920	204300	000030	502 G	C=190,B=38
SAKCW HD	93843	13	7.34	1046401	-595731	L 3 33672 L	3257	FO	88052920	205300	000045	501 G	C=200,B=23
L3JHJ HD	94705	49	5.3	1053257	+062709	L 1 13378 L	18347	FO	88060620	202900	002000	3X2 G	E=2X,C=95,B=37
IGKJN HD	95569	36	8.5	1058399	-652916	L 1 13456 L	974	FO	88061905	052200	000200	402 G	C=170,B=33
IGKJN HD	95569	36	8.5	1058399	-652917	H 1 13457 L	967	FO	88061906	060000	012000	404 G	C=172,B=59
AMKEB HD	95608	35	4.4	1059398	+202654	H 3 33513 L	360	FU	88051216	163300	000900	503 G	C=198,B=42
AMKEB HD	95608	35	4.4	1059398	+202654	H 1 13210 L	364	FU	88051216	165000	000400	503 G	C=197,B=46
AMKEB HD	95608	35	4.4	1059398	+202654	L 1 13211 L	358	FU	88051218	180100	000013	503 G	C=199,B=42
AMKEB HD	95608	35	4.4	1059398	+202654	L 1 13211 S	358	FU	88051218	181000	000008	505 G	C=228,B=63
AMKEB HD	95608	35	4.4	1059398	+202654	L 3 33514 L	354	FU	88051218	181800	000036	500 G	C=203,B=18
AMKEB HD	95608	35	4.4	1059398	+202654	L 3 33514 S	354	FU	88051218	182900	000020	501 G	C=204,B=21
JA114 HD95881		34	08.64	1100144	-711441	H 1 13082 L	1337	FO	88042002	020013	018000	504 U	
SAJCW HD	95735	48	7.47	1100365	+361820	L 1 12974 L	3134	FO	88040310	101300	002000	332 G	E=99,C=66,B=35
SAJCW HD	95735	48	7.47	1100365	+361819	L 1 12975 L	3209	FO	88040311	111430	000230	347 G	E=226,C=161,B=85
JQ148 NGC3516		84	13.17	1103228	+725024	L 3 33199 L	94	SO	88040301	015921	023000	341 U	
JQ148 NGC 3516		84	13.17	1103228	+725024	L 3 33203 L	94	SO	88040401	015724	023000	341 U	
JQ148 NGC 3516		84	13.22	1103228	+725024	L 3 33204 L	90	SO	88040406	061543	015500	330 U	PREAD
BCJEB ER CAR		53	6.8	1107319	-583400	L 3 33533 L	4239	FO	88051514	143300	002000	00 G	B=17
SAKCW HD	97534	40	4.61	1110267	-600242	L 1 13335 L	282	FU	88052922	220500	000200	502 G	C=240,B=38
SAKCW HD	97534	40	4.61	1110267	-600242	L 3 33673 L	24993	FO	88052922	222800	001500	X01 G	C=5X,B=30
QSJRJ PG	1115+080	85	15.8	1115415	+080224	L 3 33231 L		BO	88040809	094300	027000	305 G	C=93,B=65
QSJRJ PG	1115+080	85	15.8	1115415	+080224	L 3 33242 L		BO	88041009	095100	025500	204 G	C=79,B=60
QSJRJ PG	1115+080	85	15.8	1115415	+080224	L 3 33254 L		BO	88041110	100400	024500	205 G	C=84,B=65
QSJRJ PG	1115+080	85	15.8	1115415	+080224	L 3 33263 L		BO	88041210	101300	023000	304 G	C=82,B=59
CHKCG HD	99022	60	5.8	1120513	-563017	L 3 33738 L	11369	FO	88061017	170500	000100	X00 G	C=2X,B=17
CHKCG HD	99022	60	5.8	1120513	-563017	L 1 13399 L	11353	FO	88061017	171100	000020	X02 G	C=1.5X,B=34
CHKCG HD	99022	60	5.8	1120513	-563017	H 3 33739 L	11447	FO	88061017	174700	008700	X06 G	C=4X,B=78
CHKCG HD	99022	60	5.8	1120513	-563017	H 1 13400 L	13514	FO	88061019	192100	002300	X03 G	C=1.5X,B=49

PRO	Object	CL	MAG	R.A.	DEC	D C	Image	A	FES	MD	Obs.date	Exptim	mmmsstt	ECC	Comment	
CMKCG	HD	99022	60	5.8	1120513	-563017	H	3	33740	L	13667	FO	88061019	195200	002145	402 G C=170,B=34
CMKCG	HD	99022	60	5.8	1120513	-563017	H	1	13401	L	13835	FO	88061020	202700	002100	X03 G C=1.5X,B=49
QAJDT	QSO	1127-145	85	16.9	1127357	-143255	L	3	33404	L		BO	88042910	102400	038500	307 G C=119,B=90
JQ184	MKN739		84	14.10	1133526	+215224	L	1	13002	L		BO	88040802	021158	037500	305 V PREAD
CUKGS	T LEO		54	11.0	1135529	+033846	L	3	33641	L	118	FO	88052519	194300	003000	X03 G C=5X,B=43
CUKGS	T LEO		54	11.0	1135529	+033846	L	1	13308	L	122	FO	88052520	202200	001000	X02 G C=3X,B=39
CUKGS	T LEO		54	11.0	1135529	+033846	L	3	33642	L	139	FO	88052520	205300	000500	500 G C=200,B=17
CUKGS	T LEO		54	11.0	1135529	+033846	L	3	33645	L	97	FO	88052617	171000	000500	500 G C=171,B=17
CUKGS	T LEO		54	11.0	1135529	+033846	L	3	33646	L	427	SO	88052617	174500	000630	500 G C=206,B=13
CUKGS	T LEO		54	11.0	1135529	+033846	L	1	13312	L	516	SO	88052618	182400	000600	402 G C=170,B=38
CUKGS	T LEO		54	11.0	1135529	+033846	L	3	33647	L	12	FO	88052618	183400	000630	500 G C=210,B=15
CUKGS	T LEO		54	11.0	1135529	+033846	L	3	33652	L	96	FO	88052715	153100	000700	500 G C=180,B=14
CUKGS	T LEO		54	11.0	1135529	+033846	L	1	13314	L	371	FO	88052715	154600	000400	402 G C=168,B=33
CUKGS	T LEO		54	11.0	1135529	+033846	L	3	33653	L	85	FO	88052716	162100	000800	540 G E=137,C=192,B=13
CUKGS	T LEO		54	11.0	1135529	+033846	L	3	33654	L	367	SO	88052717	170200	000900	540 G E=151,C=215,B=14
CUKGS	T LEO		54	11.5	1135529	+033846	L	3	33660	L	301	SO	88052819	194000	001300	540 G E=161,C=215,B=18
CUKGS	T LEO		54	11.5	1135529	+033846	L	1	13325	L	330	SO	88052820	200600	001400	502 G C=210,B=40
CUKGS	T LEO		54	11.5	1135529	+033846	L	3	33661	L	307	SO	88052820	204100	001300	540 G E=155,C=220,B=17
CUKGS	T LEO		54	12.00	1135529	+033846	L	3	33688	L	160	SO	88060118	185300	003000	551 G E=209,C=220,B=25
PHCAL	BD	+33 2642	54	12.00	1135529	+033846	L	3	33689	L	133	FO	88060120	201800	000400	500 G C=170,B=17
CUKGS	T LEO		54	14.7	1135529	+033846	L	3	33699	L		BO	88060320	200500	003500	331 G E=81,C=50,B=24
CUKGS	T LEO		54	15.0	1135529	+033846	L	3	33724	L		BO	88060813	135100	009000	342 G E=141,C=69,B=38
GHJAS	UGC	6697	81	13.1	1141129	+201435	L	3	33212	L		BO	88040510	102200	027000	06 G B=73
XSJRB	X	1142-178	84	14.6	1143082	-181037	L	3	33570	L		BO	88051907	075300	008000	352 G E=246,C=70,B=35
XSJRB	X	1142-178	84	14.6	1143082	-181037	L	1	13268	L		BO	88051909	091700	008000	353 G E=206,C=120,B=50
XSJRB	X	1142-178	84	14.6	1143082	-181037	L	3	33571	L		BO	88051910	104500	007000	352 G E=209,C=70,B=40
XSJRB	X	1142-178	84	14.6	1143082	-181037	L	1	13269	L		BO	88051912	120400	008000	345 G E=212,C=145,B=65
XSJRB	X	1142-178	84	14.6	1143082	-181037	L	3	33572	L		BO	88051913	133000	008000	45 G E=180,B=70,B=42
SAKCU	HD	251575	32	3.80	1143139	-662704	L	1	13333	L	700	FU	88052919	191700	000014	502 G C=245,B=38
SAKCU	HD	251575	32	3.80	1143139	-662704	L	3	33671	L	701	FU	88052919	192600	000045	501 G C=236,B=28
USSBS	HD	102647	30	2.14	1146293	+145100	H	3	33340	L	2758	FU	88042223	230800	000500	X05 G C=3X,B=68
QSKAK	114B+549		85	15.8	1148426	+545413	L	3	34522	L		BO	88102122	225300	036000	309 G C=160,B=106
KA067	GQ MUS		55	17.00	1149350	-665539	L	3	33684	L		BO	88060100	000935	035800	332 V
LDKDB	HD	103095	44	6.5	1150062	+380439	L	1	13413	L	5709	FO	88061215	153500	000412	502 G C=240,B=35
AGKDC	MKN	42	84	15.2	1151057	+462924	L	3	33685	L		BO	88060107	071800	031000	306 G C=134,C=90,B=71
DAJTH	BPM36430		37	12.9	1153394	-482322	L	3	33195	L	86	SO	88040113	134300	001010	500 G C=195,B=20
DAJTH	BPM36430		37	12.9	1153394	-482322	L	3	33195	S	86	SO	88040114	140600	002200	00 G B=20
JM012	CPD-721184		23	11.06	1156290	-730900	H	3	34449	L	154	FO	88101014	141740	039000	703 V
JQ043	NGC 4051		84	13.55	1200360	+444900	L	1	13231	L	67	SO	88051423	235040	011000	451 V
JQ043	NGC 4051		84	13.55	1200360	+444900	L	3	33531	L	67	SO	88051501	014907	030000	341 V
AGJGR	NGC	4151	84	11.5	1208003	+394101	L	3	33682	L	151	FO	88053119	194000	006000	331 G E=107,C=52,B=27
AGJGR	NGC	4151	84	11.5	1208003	+394101	L	1	13341	L	15	SO	88053121	210400	002700	342 G E=158,C=75,B=37
JQ148	NGC4151		84	12.64	1208004	+394102	L	1	12972	L	151	SO	88040306	062510	003000	351 V
JQ148	NGC4151		84	12.68	1208004	+394102	L	3	33200	L	145	SO	88040307	070301	003000	240 V
JQ148	NGC4151		84	12.64	1208004	+394102	L	1	12973	L	150	SO	88040307	074219	003000	351 V

PRO	Object	CL	MAG	R.A.	DEC	D C	Image	A	FES	HD	Obs.date	Exptim	mmmsstt	ECC	Comment
OBKEF	HD	111904	25	5.8	1250220	-600326	L 3	33708 L	10984	FO	88060515	155800	000257	500 G	C=170,B=17
OBKEF	HD	111904	25	5.8	1250220	-600326	L 1	13363 L	10980	FO	88060516	161300	000035	02 G	B=34
OBKEF	HD	111904	25	5.8	1250220	-600326	L 1	13364 L	10874	FO	88060517	171200	000134	X02 G	C=2.5X,B=40
OBKEF	59	4528	20	9.6	1250220	-600654	L 1	13365 L	326	FO	88060518	181000	090000	X03 G	C=2.5X,B=46
OBKEF	59	4528	20	9.6	1250220	-600654	L 1	13365 S	327	FO	88060518	182000	023000	403 G	C=170,B=44
OBKEF	59	4528	20	9.6	1250220	-600654	L 3	33709 L	404	FO	88060518	184600	001236	500 G	C=185,B=18
OBKEF	59	4532	20	10.2	1250255	-600542	L 3	33702 L	237	FO	88060416	161400	001130	500 G	C=190,B=16
OBKEF	59	4532	20	10.2	1250255	-600542	L 1	13354 L	287	FO	88060416	165000	002900	X03 G	C=8X,B=50
OBKEF	59	4532	20	10.2	1250255	-600542	L 1	13355 L			88060418	183700	000948	502 G	C=200,B=37
OBKEF	HD	111934	23	6.9	1250377	-600510	L 1	13366 L	4407	FO	88060520	200100	000251	X02 G	C=3X,B=33
OBKEF	HD	111934	23	6.9	1250377	-600510	L 1	13366 L	4407	FO	88060520	200700	000019	402 G	C=170,B=35
OBKEF	59	4549	20	9.6	1250453	-600612	L 3	33701 L	345	FO	88060413	133500	000820	500 G	C=185,B=16
OBKEF	59	4549	20	9.6	1250453	-600612	L 1	13352 L	429	FO	88060413	135200	000542	402 G	C=185,B=35
OBKEF	59	4549	20	9.6	1250453	-600612	L 1	13353 L	404	FO	88060414	144300	001700	G	B=7.7X,B=40
OBKEF	59	4550	20	10.0	1250475	-600442	L 3	33703 L	257		88060419	193600	001216	400 G	C=136,B=17
OBKEF	59	4550	20	10.0	1250475	-600442	L 1	13356 L	313	FO	88060419	195800	000536	403 G	C=186,B=42
OBKEF	59	4550	20	10.0	1250475	-600442	L 1	13356 S	319	FO	88060420	200400	000248	X03 G	C=4X,B=41
OBKEF	HD	111990	23	6.8	1250596	-600350	L 3	33707 L	4649	FO	88060514	140000	000136	400 G	C=125,B=18
OBKEF	HD	111990	23	6.8	1250596	-600350	L 1	13361 L	4688	FO	88060514	141100	000031	302 G	C=133,B=35
OBKEF	HD	111990	23	6.8	1250596	-600350	L 1	13362 L	4716	FO	88060515	151400	000140	X02 G	C=2X,B=35
CCJTS	HD	112429	31	5.2	1253295	+654233	L 3	33606 L	16988	FO	88052217	173500	002400	?32 G	E=94,C=20X,B=33
OD46Y	3C279	85	14.5	1253358	-053108	L 1	13566 L		44	SO	88070504	040500	018000	X06 G	C=2X,B=72
OD46Y	3C279	85	14.5	1253358	-053108	L 3	33864 L		42	SO	88070507	071700	010000	304 G	C=89,B=51
OD46Y	3C279	85	14.5	1253358	-053108	L 1	13567 L		45	SO	88070509	090900	036000	305 G	C=152,B=67
OD46Y	3C279	85	14.5	1253358	-053108	L 3	33865 L		47	SO	88070510	101700	017000	309 G	C=180,B=106
OD46Y	3C279	85	14.5	1253358	-053108	L 1	13568 L		56	SO	88070513	131600	005000	309 G	C=206,B=138
JM012	CPD-69X1743	20	09.88	1257132	-695626	H 3	33525 L		442	FO	88051400	000825	020000	501 U	
LDKDB	HD	114710	44	4.3	1309324	+280752	L 1	13414 L	381	FU	88061216	164000	000038	502 G	C=225,B=34
LDKDB	HD	115043	44	6.8	1311344	+565822	L 1	13415 L	4224	FO	88061217	173200	000345	502 G	C=239,B=34
USSBS	HD	118098	30	3.4	1332078	-002027	H 1	13631 L	866	FU	88071315	153900	000216	504 G	C=245,B=52
USSBS	HD	118098	30	3.4	1332078	-002027	H 3	33909 L	865	FU	88071315	155100	000448	503 G	C=208,B=41
USSBS	HD	118098	30	3.4	1332078	-002027	H 3	33978 L	908	FU	88072812	124300	000448	503 G	C=210,B=41
USSBS	HD	118098	30	3.4	1332078	-002027	H 1	13753 L	939	FU	88072813	130600	000216	503 G	C=240,B=49
USSBS	HD	118098	30	3.4	1332078	-002027	H 3	33979 L	880	FU	88072813	134100	001400	X09 G	C=3X,B=109
CHKCG	HD	118232	60	4.7	1332248	+491616	H 3	33745 L	272	FU	88061116	161500	001000	301 G	C=118,B=26
CHKCG	HD	118232	60	4.7	1332248	+491616	H 1	13407 L	267	FU	88061116	165400	001500	X04 G	C=2X,B=52
CHKCG	HD	118232	60	4.7	1332248	+491616	H 3	33746 L	283	FU	88061117	174400	002000	502 G	C=194,B=37
CHKCG	HD	118232	60	4.7	1332248	+491616	H 1	13408 L	274	FU	88061118	183400	000730	503 G	C=209,B=41
CHKCG	HD	118232	60	4.7	1332248	+491616	H 3	33747 L	278	FU	88061119	191300	008000	X04 G	C=2X,B=53
CHKCG	HD	118232	60	4.7	1332248	+491616	L 1	13409 L	264	FU	88061120	204300	000006	502 G	C=207,B=34
QSJHM	PG	1333+176	85	15.6	1333367	+174030	L 1	13379 L		BO	88060706	061300	015000	304 G	C=110,B=57
QSKBW	Q1334+24	85	14.70	1334574	+243818	L 3	33690 L			BO	88060121	215008	041700	303 U	
QSKBW	Q1334+24	85	14.70	1334574	+243818	L 1	13349 L			BO	88060322	220025	033700	303 U	EXPOSURE SPLIT IN 2
KE034	NGC 5253#2	88	14.00	1337047	-312318	L 3	34072 S			BO	88081115	155459	035000	302 U	
KE034	NGC 5253	88	14.00	1337047	-312318	L 1	13826 L			BO	88081116	162231	030000	204 U	SERENDIPITY DURING S

PRO	Object	CL	MAG	R.A.	DEC	D C Image A	FES	MD	Obs.date	Exptim	mmmsstt	ECC	Comment
KE034	NGC5253#1	88	12.80	1337051	-312316	L 3 34056 S	131	SO	88080818	180856	037300	302	U
KE034	NGC5253	88	12.80	1337051	-312316	L 1 13812 L	131	SO	88080818	181354	039300	303	U SERENDIPITY WITH SWP
PHCAL	ETA UMA	21	02.04	1345340	+493344	H 1 13369 L	4115	FU	88060523	235829	000005	502	U
PHCAL	ETA UMA	21	02.04	1345340	+493344	H 3 33711 L	4115	FU	88060523	235337	000006	400	U
PHCAL	HD 120315	21	1.84	1345342	+493343	H 1 13147 L	4089	FU	88043021	213800	000005	503	G C=200,B=42
PHCAL	HD 120315	21	1.84	1345342	+493343	H 3 33416 L	4129	FU	88043021	214200	000006	402	G C=170,B=36
PHCAL	HD 120315	21	1.8	1345343	+493344	H 3 33230 L	3932	FU	88040800	004600	000006	402	G C=165,B=33
PHCAL	HD 120315	21	1.8	1345343	+493344	H 2 18187 L	3912	FU	88041719	194600	000008	501	G C=201,B=30
PHCAL	HD 120315	21	1.8	1345343	+493344	H 2 18207 L	3936	FU	88050920	204800	000008	502	G C=205,B=33
PHCAL	HD 120315	21	1.8	1345343	+493344	H 2 18216 L	3967	FU	88062815	154000	000008	502	G C=220,B=31
PHCAL	HD 120315	21	1.8	1345343	+493344	H 1 13562 L	4024	FU	88070415	150100	000005	503	G C=215,B=43
PHCAL	HD 120315	21	1.8	1345343	+493344	H 3 33859 L	3985	FU	88070415	150700	000006	402	G C=170,B=34
CHKRS	HD 120315	21	1.9	1345343	+493344	L 3 33866 L	3955	FU	88070514	145000	000045	300	G C=89,B=18
CHKRS	HD 120315	21	1.9	1345343	+493344	L 1 13569 L	4366	FU	88070514	145600	000045	302	G C=100,B=38
PHCAL	HD 120315	21	1.8	1345343	+493344	H 1 13691 L	3927	FU	88071815	152500	000005	503	G C=215,B=43
PHCAL	HD 120315	21	1.8	1345343	+493344	H 1 13692 L	3985	FU	88071816	160900	000010	X04	G C=2X,B=54
PHCAL	HD 120315	21	1.8	1345343	+493344	H 1 13693 L	4472	FU	88071816	164900	000020	X06	G C=4X,B=71
PHCAL	HD 120315	21	1.8	1345343	+493344	H 1 13694 L	4232	FU	88071817	173700	000005	503	G C=215,B=41
PHCAL	HD 120315	21	1.8	1345343	+493344	H 1 13695 L	3957	FU	88071818	181100	000010	X04	G C=2X,B=54
PHCAL	HD 120315	21	1.8	1345343	+493344	H 1 13696 L	4010	FU	88071818	184300	000020	X06	G C=4X,B=71
PHCAL	HD 120315	21	1.8	1345343	+493344	H 1 13703 L	3878	FU	88072015	153800	000005	503	G C=225,B=42
PHCAL	HD 120315	21	1.8	1345343	+493344	H 1 13704 L	3878	FU	88072016	164000	000010	X03	G C=2X,B=50
PHCAL	HD 120315	21	1.8	1345343	+493344	H 1 13705 L	4127	FU	88072017	172300	000020	X05	G C=4X,B=65
PHCAL	HD 120315	21	1.8	1345343	+493344	H 1 13706 L	4402	FU	88072018	182400	000005	503	G C=210,B=42
BEJGP	HD 120324	26	3.5	1346357	-421332	H 3 33618 L	951	FU	88052317	172700	000021	502	G C=210,B=34
BEJGP	HD 120324	26	3.5	1346357	-421332	L 3 33619 L	946	FU	88052317	175900	000000	X00	G C=1.5X,B=14
BEJGP	HD 120324	26	3.5	1346357	-421332	L 1 13302 L	950	FU	88052318	180500	000000	X02	G C=2X,B=32
JQ093	PG1351+64	85	15.22	1351461	+640028	L 3 33193 L	15	SO	88040103	033546	020500	352	U
JQ093	PG1351+64	85	15.22	1351461	+640028	L 1 12962 L	15	SO	88040107	070826	010000	303	U PREAD
PHCAL	HD 121263	20	2.5	1352245	-470235	H 1 13241 L	2293	FU	88051618	180200	000006	503	G C=217,B=42
PHCAL	HD 121263	20	2.5	1352245	-470235	H 3 33539 L	2315	FU	88051618	180700	000008	502	G C=245,B=37
QAJDT	QSO 1354+195	85	16.0	1354421	+193344	L 3 33410 L		BO	88043009	092900	028500	305	G C=103,B=62
JM055	HD122324	23	09.58	1359250	-554549	L 3 33337 L	577	FO	88042207	071544	001400	500	U
JM055	HD122324	23	09.59	1359250	-554549	L 1 13099 L	570	FO	88042207	074827	000326	602	U
JM055	HD122324	23	09.58	1359250	-554549	L 1 13100 L	575	FO	88042208	082252	001000	802	U
JA065	HD122324	23	09.55	1359250	-554549	L 1 13297 L	591	FO	88052223	234826	000120	401	U
CSKJE	HD 122250	49	5.5	1400233	-763325	L 1 13226 L	25970	FO	88051417	174800	002000	345	G E=211,C=108,B=70
CSKJE	HD 122250	49	5.5	1400233	-763325	L 1 13321 L	273	FU	88052815	154000	002000	342	G E=173,C=63,B=39
CSKJE	HD 122250	49	5.5	1400233	-763325	L 1 13421 L	21843	FO	88061317	175100	002000	342	G E=170,C=59,B=38
CSKJE	HD 122250	49	5.5	1400233	-763325	L 1 13507 L	23063	FO	88062714	140700	002000	342	G E=172,C=70,B=40
CSKJE	HD 122250	49	5.5	1400233	-763325	L 1 13590 L	23040	FO	88070815	155900	002000	357	G E=237,C=111,B=82
CSKJE	HD 122250	49	5.5	1400233	-763325	L 1 13745 L	25386	FO	88072711	114300	002000	352	G E=190,C=62,B=37
CSKJE	HD 122250	49	5.5	1400233	-763325	L 1 13858 L	325	FU	88081606	065700	002000	342	G E=149,C=63,B=40
CSKJE	HD 122250	49	5.5	1400233	-763325	L 1 13921 L	337	FU	88082611	112000	002000	343	G E=161,C=70,B=45
CSKJE	HD 122250	49	5.5	1400233	-763325	L 1 14166 L	342	FU	88100209	094300	002000	345	G E=184,C=86,B=61

PRO	Object	CL	MAG	R.A.	DEC	D C	Image	A	FES	HD	Obs.date	Exptim	mmmsstt	ECC	Comment
CSKJE HD	122250	49	5.5	1400233	-763325	L 1	14203	L	333	FU	88101009	093700	002000	342	G E=143,C=62,B=38
BEJRP HD	122669	26	9.0	1401428	-621607	L 3	33275	L	608	FO	88041318	181700	000445	500	G C=221,B=18
BEJRP HD	122669	26	9.0	1401428	-621607	L 1	13037	L	622	FO	88041318	182800	000120	502	G C=223,B=38
BEJRP HD	122669	26	9.0	1401428	-621607	L 1	13037	S	622	FO	88041318	184400	000800	03	G B=41
CCJEB HD	123034	44	8.8	1402363	+101507	L 1	13328	S	732	FO	88052907	075100	000400	302	G C=53,B=31
CCJEB HD	123034	44	8.8	1402363	+101507	L 1	13328	L	732	FO	88052908	080800	000500	332	G E=85,C=92,B=35
CCJEB HD	123034	44	8.8	1402363	+101507	L 3	33668	L	712	FO	88052908	082200	012000	31	G E=54,B=23
KI060 CDS165		71	14.60	1410428	-735849	L 1	13759	L	BO	88073001	010123	004500	403	V	
KI060 CDS 165		71	14.60	1410428	-735849	L 3	33984	L	BO	88073001	015053	005800	500	V	
CHKRS HD	124897	47	1.19	1413227	+192630	L 1	13656	L	15805	FU	88071604	041500	009000	444	G E=171,C=164,B=51
CHKRS HD	124897	47	1.19	1413227	+192630	L 1	13657	L	16640	FU	88071606	061800	000002	332	G E=114,C=110,B=35
JQ045 NGC5548		84	13.92	1415432	+252200	L 3	33210	L	48	SO	88040502	025226	009000	351	V
JQ045 NGC 5548		84	13.85	1415432	+252200	L 1	12987	L	51	SO	88040504	043057	005000	453	V
JQ045 NGC5548		84	13.90	1415432	+252200	L 1	13084	L	49	SO	88042102	023257	004500	342	V
JQ045 NGC5548		84	13.90	1415432	+252200	L 3	33327	L	49	SO	88042103	032542	009000	351	V
JQ045 NGC 5548		84	13.94	1415432	+252200	L 1	13174	L	47	SO	88050704	042146	004000	342	V
JQ045 NGC 5548		84	13.90	1415432	+252200	L 3	33476	L	49	SO	88050705	051155	010000	351	V P READ
JQ045 NGC5548		84	13.90	1415432	+252200	L 3	33667	L	49	SO	88052904	040716	010000	351	V
JQ045 NGC 5548		84	13.92	1415432	+252200	L 1	13327	L	48	SO	88052905	055447	005000	453	V
JQ045 NGC 5548		84	13.87	1415432	+252200	L 3	33798	L	50	SO	88062202	021835	009500	350	V
JQ045 NGC 5548		84	13.87	1415432	+252200	L 1	13488	L	50	SO	88062204	040140	004500	351	V
JQ045 NGC 5548		84	13.97	1415432	+252200	L 3	33888	L	46	SO	88070919	195830	011000	350	V
JQ045 NGC 5548		84	13.94	1415432	+252200	L 1	13601	L	47	SO	88070921	215742	005500	451	V
JQ045 NGC5548		84	13.92	1415432	+252200	L 1	13751	L	48	SO	88072800	000705	005000	353	V
JQ045 NGC5548		84	13.92	1415432	+252200	L 3	33975	L	48	SO	88072801	010636	010000	351	V
PHCAL HD	125324	28	9.7	1420037	-080116	L 3	33817	L	390	FO	88062719	192300	000118	500	G C=250,B=19
PHCAL HD	125924	28	9.7	1420037	-080116	L 1	13512	L	380	FO	88062719	192900	000102	X02	G C=1.5X,B=38
PHCAL HD	125924	28	9.7	1420037	-080116	L 1	13627	L	384	FO	88071216	163400	000048	502	G C=210,B=36
PHCAL HD	125924	28	9.7	1420037	-080116	L 3	33901	L	384	FO	88071216	163900	000105	500	G C=225,B=14
GIJBS HD	127557	20	8.90	1427580	+673441	H 1	13223	L	686	FO	88051408	080100	030000	409	G C=238,B=125
JAI38 HEN1013		27	11.29	1433074	-643501	L 3	33601	L	126	FO	88052201	011318	004000	230	V
JAI38 HEN1013		27	11.22	1433074	-643501	L 1	13295	L	134	FO	88052202	020401	002000	442	V
KE108 MK686		84	13.90	1435199	+364700	L 1	13796	L	BO	88080517	175005	040900	206	V POINTING MOVED BY (+	
PHCAL HD	128801	28	8.8	1436203	+080739	L 1	13511	L	820	FO	88062718	180700	000222	X02	G C=1.5X,B=38
PHCAL HD	128801	28	8.8	1436203	+080739	L 3	33816	L	828	FO	88062718	181300	000330	400	G C=150,B=19
PHCAL HD	128801	28	8.8	1436203	+080739	L 3	33902	L	839	FO	88071218	181800	000450	501	G C=185,B=30
KC015 HD129333		44	08.12	1437563	+643025	H 1	13514	L	2115	FO	88062722	223442	009000	443	V
GDKEG HD	129333	44	7.5	1437563	+643025	L 3	33836	L	223	FO	88063005	055600	030000	437	G E=133,C=189,B=81
KC015 HD129333		44	08.15	1437563	+643025	L 3	33818	L	2073	FO	88062800	001223	027000	442	V
GDKEG HD	129333	44	7.5	1437563	+643025	H 1	13536	L	2210	FO	88063011	113500	007500	305	G C=150,B=62
GDKEG HD	129333	44	7.5	1437563	+643025	L 3	33845	L	2142	FO	88070204	045400	027000	435	G E=148,C=181,B=67
GDKEG HD	129333	44	7.5	1437563	+643025	H 1	13549	L	2273	FO	88070209	092900	007000	345	G E=170,C=150,B=63
GDKEG HD	129333	44	7.5	1437563	+643025	H 1	13559	L	2207	FO	88070404	040100	009000	334	G E=148,C=135,B=53
GDKEG HD	129333	44	7.5	1437563	+643025	L 3	33856	L	2292	FO	88070405	053600	030000	437	G E=133,C=195,B=81
USSBS HD	128898	40	3.2	1438253	-644541	H 1	13713	L	1485	FU	88072118	183800	000125	403	G C=166,B=41

PRO	Object	CL	MAG	R.A.	DEC	D C	Image	A	FES	MD	Obs.date	Exptim	mmmsstt	ECC	Comment	
USSBS	HD	128898	40	3.2	1438253	-644541	H	3	33952	L	1482	FU	88072118	184300	000900	502 G C=205,B=32
USSBS	HD	129989	47	2.7	1442480	+271703	H	1	13107	L	2122	FU	88042300	001500	000400	403 G C=185,B=45
USSBS	HD	129989	47	2.7	1442480	+271703	H	1	13754	L	2085	FU	88072814	145200	000400	505 G C=236,B=67
STJRP	109 VIR	30	3.74	1443430	+020608	H	1	13307	L		664		88052420	203100	000145	403 G C=187,B=41
STJRP	109 VIR	30	3.74	1443430	+020608	H	3	33631	L		664	FU	88052420	203800	000400	502 G C=190,B=33
STJRP	109 VIR	30	3.74	1443430	+020608	H	3	33632	L		651	FU	88052421	212800	001420	X06 G C=3X,B=71
KS093	PLUTO	03	14.52	1447461	+004938	E	9	02079	2		28	SO	88071119	193000	002000	U FES FOR LWP13622/LAP
SPKTS	PLUTO	03	13.7	1447463	+004940	L	1	13622	L		28	SO	88071117	172800	072000	309 G C=205,B=135
SPKTS	PLUTO	03	13.7	1447463	+004923	L	1	13623	L				88071208	082200	013500	304 G C=86,B=60
SPKTS	PLUTO	03	13.7	1447469	+004947	L	1	13621	L		31	SO	88071112	123400	024000	309 G C=207,B=161
SPKTS	PLUTO	03	13.7	1447469	+004947	L	9	02078	2				88071118	185400	000020	G
KC088	HD131156	44	04.89	1449048	+191827	H	1	13384	L		325	FU	88060721	213753	001500	451 U
KC088	HD131156	44	05.11	1449048	+191827	L	3	33721	L		23921	FO	88060721	215943	006000	450 U
KC088	HD131156	44	05.11	1449048	+191827	H	1	13385	L		23921	FO	88060723	230433	030000	884 U
KC088	HD131156	44	05.11	1449048	+191827	L	3	33722	L		23921	FO	88060804	040839	004000	340 U PREAD
KM070	PG1449+653	28	14.02	1449402	+651810	L	3	34298	L		44	SO	88092316	162049	001500	400 U
KM070	PG1449+653	28	14.02	1449402	+651810	H	1	14118	L		44	SO	88092316	164341	036400	403 U
LDKDB	HD	132142	44	7.9	1453456	+535230	L	1	13416	L	1827	FO	88061218	183400	001230	402 G C=178,B=35
AGJHM	MKN 841	84	15.2	1501363	+103755	L	3	33683	L		80		88053122	220800	004000	331 G E=60,C=46,B=22
AGJHM	MARK 841	84	15.2	1501363	+103756	L	1	13380	L		80		88060712	121300	004000	332 G E=104,C=90,B=40
KE108	MARK 480	84	14.96	1504447	+424958	L	1	13757	L		19	SO	88072820	201604	039100	306 U
KA019	PG1518-098	16	14.10	1506408	-094805	L	1	13482	L		41	SO	88062100	004739	001800	501 U
KA019	PG1506-052	16	14.24	1506408	-050929	L	3	33792	L		36	SO	88062102	020500	002500	500 U
KA019	PG1506-052	16	14.21	1506408	-050929	L	1	13483	L		37	SO	88062102	024030	003000	501 U
USSBS	HD	134505	45	3.4	1508402	-515439	H	1	13036	L	809	FU	88041316	161800	002500	G E=1.5X,B=1.5X
USSBS	HD	134505	45	3.40	1508402	-515439	H	1	13882	L	806	FU	88082011	111700	002000	X04 G C=1.5X,B=54
KM070	PG1510+635	38	14.31	1510155	+633115	H	1	14115	L		34	SO	88092216	163900	036400	306 U
KM070	PG1510+635	38	14.31	1510155	+633115	L	3	34291	L		34	SO	88092216	161702	001500	300 U
JQ103	Q 1512+37	85	15.50	1512469	+370154	L	3	33649	L		80		88052700	000213	040500	353 U
QCJEH	4C37.43	85	15.5	1512469	+370155	L	3	33592	L				88052107	075000	039000	348 G E=228,C=144,B=97
JQ103	Q1512+37	85	15.50	1512469	+370154	L	1	13320	L		80		88052800	000113	040600	446 U
QCJEH	4C37.43	85	15.5	1512470	+370154	L	3	33581	L		80		88052007	074200	026500	346 G E=179,C=113,B=77
BCJEB	R TR A	53	6.7	1515157	-661854	L	3	33488	L		4348	FO	88050814	142200	002800	01 G B=24
KA019	PG1518-098	16	14.04	1518161	-094805	L	3	33791	L		43	SO	88062023	234339	001500	400 U 10 MIN + 5 MIN
USSBS	HD	136504	21	3.36	1519163	-443040	H	3	33285	L	1082	FU	88041500	000600	000021	402 G C=179,B=35
USSBS	HD	136504	21	3.36	1519163	-443040	H	1	13048	L	1054	FU	88041500	001100	000019	503 G C=224,B=43
KA122	HD136488	10	09.70	1519582	-623000	H	1	13971	L		521	FO	88090116	160531	024000	462 U
CCJFF	HD	136901	47	7.2	1520162	+254806	L	3	33466	L	3402	FO	88050612	124700	001000	00 G B=19
CCJFF	HD	136901	47	7.2	1520162	+254806	L	3	33467	L	3362	FO	88050613	133200	008000	222 G E=41,C=57,B=40
PHCAL	HD	137389	36	5.95	1521410	+621328	L	3	33540	L	9287	FO	88051619	194600	000018	400 G C=150,B=19
PHCAL	HD	137389	36	5.95	1521410	+621328	H	1	13242	L	9154	FO	88051619	195300	001300	503 G C=210,B=50
PHCAL	HD	137389	36	5.95	1521410	+621328	H	3	33541	L	9287	FO	88051620	202600	003500	X03 G C=1.5X,B=50
PHCAL	HD	137389	36	5.95	1521410	+621328	L	1	13243	L	10666	FO	88051621	210600	000011	502 G C=248,B=35
PHCAL	HD	137389	36	5.9	1521410	+621328	H	3	33566	L	9407	FO	88051819	194100	002000	406 G C=195,B=77
PHCAL	HD	137389	36	5.9	1521410	+621328	L	1	13264	L	9373	FO	88051820	201300	000009	502 G C=215,B=35

PRO	Object	CL	MAG	R.A.	DEC	D C	Image	A	FES	MD	Obs.date	Exptim	mmmsstt	ECC	Comment	
PHCAL	HD	137389	36	5.9	1521410	+621328	L	3	33567	L	9519	FO	88051820	204100	000024	501 G C=189,B=25
JA039	HD138749	26	04.42	1530547	+313136	H	3	33328	L	495	FU	88042105	054744	000145	500 U	
JA039	HD138749	26	04.42	1530547	+313136	H	1	13085	L	496	FU	88042105	055321	000110	503 U	
JA039	HD138749	26	04.44	1530547	+313136	H	3	33663	L	489	FU	88052823	235300	000145	550 U	
CCJFF	HD	139084	45	8.1	1534586	-573237	L	3	33465	L	1335	FO	88050607	073800	021000	335 G E=114,C=95,B=64
SCJPF	C/TEMPL2	06		1535479	+031344	L	1	13396	L		BO	88061008	080200	020800	06 G B=75	
SCKPF	P/TEMPL2	06	13	1536000	-091720	L	2	9	02088	2		88072704	042700	000070	G	
SCKPF	P/TEMPL2	06	13	1536000	-091720	L	3	33976				88072806	062200	006000	01 G B=24	
SCKPF	P/TEMPL2	06	13.00	1536000	-091720	L	1	13752	L	27	SO	88072807	073100	020000	337 G E=159,C=104,B=81	
KQ182	PKS1538	87	15.00	1538302	+145723	L	1	13783	L		BO	88080222	220105	016600	204 U	
KC202	HD140283	40	09.17	1540225	-104618	H	1	13760	L	3387	SO	88073019	192305	018000	702 U	
NHJRD	TFLOOD	99		1541153	-153053	L	1	13061	L			88041617	173200	000025	08 G B=98	
NHJRD	TFLOOD	99		1541153	-153053	L	3	33296	L			88041617	173500	000007	09 G B=137	
KC159	SZ68	58	10.62	1542014	-340807	L	1	13962	L	228	FO	88083015	154430	004500	351 U	
KC159	SZ68	58	10.72	1542014	-340807	L	3	34156	L	209	FO	88083016	163657	025400	111 U PREAD	
KC159	SZ68	58	10.71	1542014	-340807	L	1	13963	L	210	FO	88083019	194147	003000	351 U	
QSJMH	PG 1543+489	85	16.1	1543599	+485526	L	3	33717	L		BO	88060709	092200	013500	233 G E=64,C=61,B=42	
RCKAH	R CRB	52	5.8	1546307	+281832	L	1	13633	L	8385	FO	88071415	155200	000100	502 G C=220,B=39	
RCKAH	R CRB	52	5.8	1546307	+281832	L	1	13633	S	8418	FO	88071415	155700	000100	402 G C=142,B=38	
RCKAH	R CRB	52	5.8	1546307	+281832	L	3	33917	L	8414	FO	88071416	160600	002530	503 G C=210,B=50	
RCKAH	R CRB	52	5.8	1546307	+281832	L	1	13634	L	8872	FO	88071416	164400	000500	X03 G C=5X,B=42	
RCKAH	R CRB	52	5.8	1546307	+281832	L	3	33918	L	8855	FO	88071417	171500	003000	502 G C=220,B=32	
RCKAH	R CRB	52	5.8	1546307	+281832	L	1	13635	L	8827	FO	88071417	175200	000500	X02 G C=5X,B=38	
RCKAH	R CRB	52	5.8	1546307	+281832	L	3	33919	L	8842	FO	88071418	182000	003000	502 G C=216,B=32	
RCKAH	R CRB	52	5.8	1546307	+281832	L	1	13698	L	6191	FO	88071915	155900	000210	X03 G C=2X,B=42	
RCKAH	R CRB	52	5.8	1546307	+281832	L	1	13698	S	6191	FO	88071916	160500	000210	502 G C=195,B=38	
RCKAH	R CRB	52	5.8	1546307	+281832	L	3	33943	L	6144	FO	88071916	161400	006800	X23 G E=55,C=2X,B=50	
RCKAH	R CRB	52	5.8	1546307	+281832	L	1	13699	L	6044	FO	88071917	173100	000720	X02 G C=5X,B=35	
RCKAH	R CRB	52	5.8	1546307	+281832	L	3	33944	L	6292	FO	88071918	180100	004500	501 G C=225,B=24	
RCKAH	R CRB	52	5.8	1546307	+281832	L	1	13720	L	5100	FO	88072216	161000	000140	502 G C=240,B=36	
RCKAH	R CRB	52	5.8	1546307	+281832	L	1	13720	S			88072216	161600	000140	502 G C=240,B=36	
RCKAH	R CRB	52	5.8	1546307	+281832	L	3	33958	L	5017	FO	88072216	162400	004000	402 G C=174,B=39	
RCKAH	R CRB	52	5.8	1546307	+281832	L	1	13721	L	4989	FO	88072217	171100	000707	X02 G C=5X,B=34	
RCKAH	R CRB	52	5.8	1546307	+281832	L	3	33959	L	5034	FO	88072217	174100	004000	401 G C=164,B=23	
RCKAH	R CRB	52	5.8	1546307	+281832	L	1	13722	L	5393	FO	88072218	183200	000700	X02 G C=5X,B=35	
RCKAH	R CRB	52	5.8	1546307	+281832	L	1	13755	L	2251	FO	88072815	155700	000325	X03 G C=1.5X,B=42	
RCKAH	R CRB	52	5.8	1546307	+281832	L	1	13755	S	2259	FO	88072816	160500	000325	403 G C=152,B=41	
RCKAH	R CRB	52	5.8	1546307	+281832	L	3	33980	L	2198	FO	88072816	164700	009300	403 G C=183,B=41	
RCKAH	R CRB	52	5.8	1546307	+281832	L	1	13756	L	2627	FO	88072818	182700	001300	X02 G C=3X,B=38	
RCKAH	R CRB	52	5.8	1546307	+281832	L	1	13780	L	807	FO	88080213	135700	001400	X09 G C=2X,B=105	
RCKAH	R CRB	52	5.8	1546307	+281832	L	1	13780	L	807	FO	88080214	140900	000500	309 G C=159,B=105	
RCKAH	R CRB	52	5.8	1546307	+281832	L	3	34014	L	791	FO	88080214	143500	004000	308 G C=133,B=100	
RCKAH	R CRB	52	5.8	1546307	+281832	H	1	13781	L	806	FO	88080215	152300	008500	309 G C=166,B=103	
RCKAH	R CRB	52	10.9	1546307	+281832	H	1	13825	L	171	FO	88081113	133700	006300	306 G C=120,B=73	
RCKAH	R CRB	52	11.00	1546307	+281832	L	1	13862	L	198	FO	88081612	121300	001400	309 G C=225,B=136	

PRO	Object	CL	MAG	R.A.	DEC	D C	Image	A	FES	MD	Obs.date	Exptim	mmmsstt	ECC	Comment
RCKAH	R CRB	52	11	1546307	+281832	L 3	34092	L	190	FO	88081612	123400	002500	09	G B=162
RCKAH	R CRB	52	10.00	1546307	+281832	L 1	13863	L	178	FO	88081613	131300	001400	X09	G C=1.5X,B=179
RCKAH	R CRB	52	10.00	1546307	+281832	L 1	13864	L	177	FO	88081614	141200	001800	X09	G C=1.5X,B=152
RCKAH	R CRB	52	11.5	1546307	+281832	L 1	14010	L	431	SO	88090712	123800	002000	39	G E=201,B=168,B=73
RCKAH	R CRB	52	11.5	1546307	+281832	L 3	34194	L	450	SO	88090713	130400	006000	24	G E=77,B=58
RCKAH	R CRB	52	11.5	1546307	+281832	L 1	14011	L	390	SO	88090714	141300	003500	4X3	G E=1.5X,C=190,B=42
RCKAH	R CRB	52	11	1546307	+281832	H 1	14037	L	107	FO	88091211	113800	019000	09	G B=187
JA114	HD 141569	34	07.21	1547202	-034612	L 3	33211	L	3797	FO	88040506	060534	001000	800	V
JA114	HD 141569	34	07.54	1547202	-034612	H 1	12988	L	3550	FO	88040506	065018	003500	403	V
PHCAL	BD +33 2642	20	10.8	1550018	+330527	L 3	33417	L	144	FO	88043022	224680	000400	400	G C=150,B=18
PHCAL	BD +33 2642	20	10.8	1550019	+330528	L 3	33229	L	136	FO	88040723	234300	000400	400	G C=165,B=17
PHCAL	BD +33 2642	20	10.8	1550019	+330528	L 1	13001	L	135	FO	88040723	235400	000310	502	G C=208,B=32
PHCAL	BD +33 2642	20	10.8	1550019	+330528	L 2	18190	L	128	FO	88041722	220500	000420	501	G C=180,B=27
PHCAL	BD +33 2642	20	10.8	1550019	+330528	L 2	18208	L	134	FO	88050921	214200	000420	401	G C=165,B=24
PHCAL	BD +33 2642	20	10.8	1550019	+330528	L 3	33773	L	132	FO	88061818	181000	000400	500	G C=188,B=14
PHCAL	BD +33 2642	20	10.8	1550019	+330528	L 3	33774	L	128	FO	88061818	184300	000400	500	G C=185,B=14
PHCAL	BD +33 2642	20	10.8	1550019	+330528	L 3	33775	L	129	FO	88061819	191300	000400	500	G C=189,B=13
PHCAL	BD +33 2642	20	10.8	1550019	+330528	L 1	13453	L	129	FO	88061819	193200	000310	502	G C=225,B=35
PHCAL	BD +33 2642	20	10.8	1550019	+330528	L 1	13454	L	127	FO	88061820	200500	000310	502	G C=225,B=36
PHCAL	BD +33 2642	20	10.8	1550019	+330528	L 1	13455	L	126	FO	88061820	204300	000310	502	G C=225,B=35
PHCAL	BD +33 2642	20	10.8	1550019	+330528	L 3	33787	L	130	FO	88062016	164500	000400	500	G C=200,B=17
PHCAL	BD +33 2642	20	10.8	1550019	+330528	L 3	33788	L	169	FO	88062017	171900	000400	500	G C=198,B=17
PHCAL	BD +33 2642	20	10.8	1550019	+330528	L 3	33789	L	159	FO	88062017	175900	000400	500	G C=190,B=17
PHCAL	BD +33 2642	20	10.8	1550019	+330528	L 1	13477	L	127	FO	88062018	182100	000400	X02	G C=1.5X,B=38
PHCAL	BD +33 2642	20	10.8	1550019	+330528	L 1	13478	L	126	FO	88062019	190200	000310	502	G C=226,B=38
PHCAL	BD +33 2642	20	10.8	1550019	+330528	L 1	13479	L	165	FO	88062019	194100	000310	502	G C=225,B=36
PHCAL	BD +33 2642	20	10.8	1550019	+330528	L 1	13480	L	166	FO	88062020	201700	000310	502	G C=211,B=36
PHCAL	BD +33 2642	20	10.8	1550019	+330528	L 2	18217	L	133	FO	88062816	162800	000420	501	G C=181,B=28
PHCAL	BD +33 2642	20	10.8	1550019	+330528	L 3	33861	L	129	FO	88070418	183600	000400	500	G C=181,B=18
PHCAL	BD +33 2642	20	10.8	1550019	+330528	L 3	33885	L	139	FO	88070914	145300	000400	400	G C=154,B=17
PHCAL	BD +33 2642	20	10.8	1550019	+330528	L 1	13598	L	134	FO	88070915	153800	000310	503	G C=219,B=42
PHCAL	BD +33 2642	20	10.8	1550019	+330528	L 1	13764	L	141	FO	88073114	144400	000310	503	G C=220,B=46
PHCAL	BD +33 2642	20	10.8	1550019	+330528	L 3	33995	L	142	FO	88073114	145100	000400	500	G C=174,B=20
PHCAL	BD +33 2642	20	10.8	1550019	+330528	L 3	34184	L	136	FO	88090413	131200	000400	400	G C=160,B=18
PHCAL	BD +33 2642	20	10.8	1550019	+330528	L 1	13998	L	139	FO	88090413	132800	000310		G C=209,B
BEKTS	HD 142184	26	5.4	1550570	-234951	H 1	14027	L	15439	FO	88091010	104500	000200	403	G C=180,B=41
BEKTS	HD 142184	26	5.4	1550570	-234951	H 3	34217	L	15421	FO	88091010	105400	000600	502	G C=211,B=40
JA109	HD 141969	70	10.86	1551155	-660038	L 3	33441	L	185	FO	88050323	234230	000400	400	V
JA109	HD 141969	70	10.88	1551155	-660038	H 3	33442	L	181	FO	88050400	002909	037800	603	V
KQ182	PG1553+11	87	14.40	1553207	+112006	L 3	34008	L		BO	88080119	191320	033400	403	V
KQ182	PG1553+11	87	14.60	1553207	+112006	L 1	13782	L		BO	88080218	181641	016000	504	V
JC049	HD142560	58	11.18	1553240	-374058	L 3	33286	L	139	FO	88041504	042845	022300	462	V EXPOSURE IN THREE PA
JC049	HD 142560	58	11.22	1553240	-374058	L 1	13051	L	134	FO	88041505	050520	000300	351	V
JC049	HD 142560	58	11.22	1553240	-374058	L 1	13052	L	134	FO	88041507	075045	000800	461	V
JC049	HD 142560	58	11.22	1553250	-374058	L 1	13050	L	134	FO	88041504	041305	000800	561	V

PRO	Object	CL	MAG	R.A.	DEC	D C Image A	FES	MD	Obs.date	Exptim	mmmsstt	ECC	Comment
KA032	HD142666	32	08.90	1553433	-215300	L 3 34000	L	1056	FO 88080102	020548	000500	200	V PREAD
KA032	HD142666	34	09.55	1553433	-215300	L 1 13800	L	594	FO 88080722	222522	001500	500	V
KA032	HD142666	34	09.55	1553433	-215300	L 3 34054	L	592	FO 88080722	224805	010000	401	V
PHCAL	HD 142669	20	3.9	1553475	-290411	H 1 13115	L	684	FU 88042400	004000	000020	403	G C=160,B=41
PHCAL	HD 142669	20	3.9	1553475	-290411	H 1 13513	L	651	FU 88062720	204400	000026	503	G C=230,B=42
PHCAL	HD 142669	20	3.9	1553475	-290411	H 3 33824	L	663	FU 88062820	203000	000030	502	G C=195,B=35
PHCAL	HD 142669	20	3.9	1553475	-290411	H 1 13626	L	672	FU 88071215	152000	000026	503	G C=226,B=47
PHCAL	HD 142669	20	3.9	1553475	-290411	H 3 33900	L	675	FU 88071215	152500	000030	502	G C=200,B=33
AGKDC	MKN 493	84	14.9	1557163	+351015	L 3 33635	L		BO 88052507	075700	024000	344	G E=180,C=85,B=56
AGKDC	MKN 493	84	14.9	1557163	+351015	L 3 33650	L		88052707	074500	024000	334	G E=152,C=82,B=53
AGKDC	MKN 493	84	14.9	1557163	+351015	L 3 33658	L		BO 88052807	073400	024000	344	G E=181,C=93,B=56
IGJTS	HD 143183	39	8.20	1557394	-535942	L 3 33490	L	4173	FO 88050817	175400	005500	309	G C=140,B=103
TTKFW	OPH 21	46	11.5	1558278	-223220	L 1 13784	L	290	SO 88080402	021000	012000	333	G E=101,C=98,B=49
TTKFW	OPH 23	46	11.3	1559132	-223257	L 1 13785	L	353	SO 88080405	050400	013500	334	G E=130,C=110,B=59
TTKFW	OPH 027	46	11.1	1601548	-192216	L 3 33916	L	370	SO 88071403	035700	054000	309	G C=145,B=116
TTKFW	OPH 027	46	11.1	1601548	-192216	L 1 13632	L	377	SO 88071413	131300	009000	309	G C=219,B=170
PHCAL	HD 145454	30	5.4	1606107	+675630	L 3 33542	L	14360	FO 88051622	221200	000011	401	G C=158,B=24
PHCAL	HD 145454	30	5.4	1606107	+675630	H 1 13244	L	14390	FO 88051622	222000	000700	503	G C=205,B=45
PHCAL	HD 145454	30	5.4	1666107	+675630	H 3 33568	L	14896	FO 88051821	212100	001700	502	G C=217,B=40
PHCAL	HD 145454	30	5.4	1606107	+675630	L 1 13265	L	16218	FO 88051821	215300	000006	502	G C=226,B=35
KC129	HD 145206	47	05.71	1607133	-032012	L 3 33855	L	16297	FO 88070323	232517	020200	401	V
NPJTB	IC 4593	71	10.4	1609232	+121200	L 3 33382	L		88042721	212000	002000	X00	G C=1.5X,B=18
NPJTB	IC 4593	71	10.4	1609232	+121200	L 1 13131	L		88042721	215300	004000	X02	G C=1.5X,B=40
NPJTB	IC 4593	71	10.4	1609232	+121157	L 3 33383	L		88042722	224200	004000	301	G C=60,B=25
NPJTB	IC 4593	71	10.4	1609232	+121157	L 1 13132	L		88042723	233100	007800	X03	G C=1.5X,B=45
JA182	IC 4593	70	10.89	1609233	+121208	H 3 33512	L	180	FO 88051203	035409	017300	441	V
KC015	HD 146361	41	5.7	1612482	+335901	H 1 13515	L	15875	FO 88062805	053300	002500	543	G E=174,C=200,B=41
KC015	HD 146361	41	5.7	1612482	+335901	L 3 33819	L	16007	FO 88062806	060800	003000	531	G E=100,C=234,B=23
KC015	HD 146361	41	5.7	1612482	+335901	H 1 13516	L	15979	FO 88062806	064600	002500	543	G E=161,C=206,B=43
KC015	HD 146361	41	5.7	1612482	+335901	L 3 33820	L	15919	FO 88062807	071900	003000	531	G E=89,C=238,B=22
KC015	HD 146361	41	5.7	1612482	+335901	H 1 13517	L	16285	FO 88062807	075700	002500	543	G E=165,C=198,B=43
KC015	HD 146361	41	5.7	1612482	+335901	L 3 33821	L	16150	FO 88062808	083100	003000	531	G E=83,C=235,B=23
KC015	HD 146361	41	5.7	1612482	+335901	H 1 13518	L	15988	FO 88062809	091100	002500	543	G E=158,C=206,B=45
KC015	HD 146361	41	5.7	1612482	+335901	L 3 33822	L	15971	FO 88062809	094300	003000	531	G E=79,C=238,B=23
KC015	HD 146361	41	5.7	1612482	+335901	H 1 13519	L	15843	FO 88062810	102100	002500	543	G E=171,C=200,B=42
KC015	HD 146361	41	5.7	1612482	+335901	L 3 33823	L	15917	FO 88062810	105400	004000	X32	G E=129,C=1.5X,B=34
KC015	HD 146361	41	5.7	1612482	+335901	H 1 13520	L	16003	FO 88062811	114200	003000	553	G E=224,C=201,B=45
KC015	HD146361	41	05.77	1612483	+335902	H 1 13521	L	15603	FO 88062822	220049	002500	542	V
KC015	HD146361	41	99.99	1612483	+335902	L 3 33825	L	15901	FO 88062822	223340	003000	550	V
KC015	HD146361	41	05.74	1612483	+335902	H 1 13522	L	15889	FO 88062823	231744	002500	542	V
KC015	HD146361	41	05.72	1612483	+335902	L 3 33826	L	16201	FO 88062823	235930	003000	550	V
KC015	HD146361	41	05.74	1612483	+335902	H 1 13523	L	15912	FO 88062900	004143	002500	542	V
KC015	HD146361	41	05.73	1612483	+335902	H 1 13524	L	16011	FO 88062901	015834	002500	542	V
KC015	HD146361	41	05.75	1612483	+335902	L 3 33827	L	15768	FO 88062901	011307	003000	550	V
KC015	HD146361	41	05.73	1612483	+335902	L 3 33828	L	16053	FO 88062902	023015	003000	550	V

PRO	Object	CL	MAG	R.A.	DEC	D C	Image	A	FES	MD	Obs.date	Exptim	mmmsstt	ECC	Comment
KC015	HD146361	41	05.72	1612483	+335902	H 1	13525	L	16199	FO	88062903	030650	002500	542	V
KC015	HD146361	41	05.72	1612483	+335902	L 3	33829	L	16188	FO	88062903	033813	003000	550	V
KC015	HD146361	41	05.73	1612483	+335902	H 1	13526	L	16008	FO	88062904	042155	002500	542	V 50%TFLOOD+READERASE
KC015	HD146361	41	05.74	1612483	+335902	H 1	13532	L	15965	FO	88062921	214831	002500	441	V
KC015	HD146361	41	05.72	1612483	+335902	L 3	33834	L	16159	FO	88062922	222345	003000	530	V
KC015	HD146361	41	05.73	1612483	+335902	H 3	33835	L	16034	FO	88062923	233806	024000	432	V
KC015	HD146361	41	05.73	1612483	+335902	H 1	13533	L	16085	FO	88062923	230004	002500	441	V
KC015	HD146361	41	05.75	1612483	+335902	L 1	13534	L	15804	FO	88063003	034528	000025	500	V
KC015	HD146361	41	05.73	1612483	+335902	H 1	13535	L	16009	FO	88063004	042421	002500	440	V
TTKFW	OPH 60	44	10.1	1614305	-225606	L 1	13786	L	242	FO	88080408	080600	004500	403	G C=185,B=42
HCKEB	NGC 6087-11	22	9.4	1614383	-574850	L 3	34432	L	438	FO	88100711	114600	000800	501	G C=229,B=21
HCKEB	NGC 6087-11	22	9.4	1614383	-574850	L 3	34432	S	443	FO	88100712	120100	000600	401	G C=128,B=23
HCKEB	NGC 6087-11	22	9.4	1614383	-574850	L 1	14208	L	439	FO	88101109	093300	000200	502	G C=190,B=34
HCKEB	NGC 6087- 8	21	9.0	1614508	-574558	L 3	34431	L	662	FO	88100710	101800	000500	500	G C=220,B=16
HCKEB	NGC 6087- 8	21	9.0	1614508	-574558	L 3	34431	S	662	FO	88100710	103200	000500	400	G C=153,B=16
HCKEB	NGC 6087- 8	21	9.0	1614508	-574558	L 1	14187	L	662	FO	88100710	104500	000200	502	G C=232,B=36
HCKEB	NGC 6087- 8	21	9.0	1614508	-574558	L 1	14187	S	663	FO	88100710	105200	000200	402	G C=140,B=35
SCKMA	TEMPEL 2	06	14.2	1615377	-180648	H 9	02094	2			88082023	231000	000020		G
SCKMA	TEMPEL 2	06	14.2	1615377	-180648	L 1	13887	L	47	SO	88082100	003700	016500	345	G E=192,C=119,B=63
SCKMA	TEMPEL 2	06	14.2	1615377	-180648	H 9	02095	2			88082100	003800	000005		G
SCKMA	TEMPEL 2	06	14.2	1615377	-180648	H 9	02096	2			88082101	015100	000005		G
SCKMA	TEMPEL 2	06	14.2	1615377	-180648	L 3	34116	L	45	SO	88082103	030600	003600	50	G E=174,B=2
USSBS	HD 146791	45	3.24	1615404	-043417	H 1	13103	L	965	FU	88042217	173600	002200	X43	G E=144,C=1.5X,B=41
KA157	SAO 243756	26	10.36	1620434	-595640	L 3	33953	L	289	FO	88072120	201314	004000	300	V
KA157	SAO 243756	26	10.26	1620434	-595640	L 1	13714	L	316	FO	88072122	225706	002000	600	V
CMKRS	HD 148478	49	1.1	1626202	-261922	L 1	13571	L	9413	FU	88070517	172700	000002	502	G C=217,B=33
CMKRS	HD 148478	49	1.1	1626202	-261922	L 1	13572	L	9553	FU	88070518	181200	003500	344	G E=160,C=136,B=60
CMKRS	HD 148478	49	1.1	1626202	-261922	L 3	34167	L	10170	FU	88090123	233800	003000	400	G C=134,B=15
CMKRS	HD 148478	49	1.1	1626202	-261922	L 1	13973	L	10115	FU	88090200	001800	003000	443	G E=154,C=143,B=41
EGKRW	NGC 6166	81	13.0	1626539	+393935	L 3	34205	L	25	SO	88090902	021200	071500	308	G C=121,B=100
EGKRW	SKY	07	12.0	1626539	+393935	L 1	14021				88090902	022000	025500	06	G B=73
KE174	NGC6166	81	14.00	1626553	+393936	E 9	02109	2			BO 88091015	155800	004000		V FES FOR SWP 34220
EGKRW	NGC 6166	81	13.0	1626553	+393935	L 3	34214	L	25	SO	88091000	000400	084700	309	G C=165,B=134
EGKRW	NGC 6166	81	13.0	1626553	+393936	L 3	34220	L	25	SO	88091023	234000	087000	309	G C=160,B=137
KE174	NGC6166	81	14.00	1626554	+393936	E 9	02107	2			BO 88090818	180200	004000		V FES FOR SWP 34205
KE174	NGC6166	81	14.00	1626554	+393936	E 9	02108	2			BO 88090916	162600	004000		V FES FOR SWP 34214
CSKHJ	HD 148783	49	5.0	1626590	+415927	L 1	13441	L	523	FU	88061619	191500	000500	353	G E=246,C=75,B=41
CSKHJ	HD 148783	49	5.0	1626590	+415927	H 1	13442	L	520	FU	88061619	195600	004000	343	G E=155,C=92,B=43
CSKHJ	HD 148783	49	5.0	1626590	+415927	H 1	13443	L	544	FU	88061621	211000	088000	379	G E=30X,C=224,B=175
CSKHJ	HD 148783	49	5.0	1626590	+415927	H 9	02063	2			88061621	211600	000240		G
KC166	HD148783	49	04.32	1626598	+415927	E 9	02064	L	544	FU	88061621	213500	126000		V TARGET IN LWLA -LWP
NPKST	NGC 6153	70		1628050	-400858	L 3	34077	L	212	SO	88081308	080000	006000	221	G E=39,C=36,B=25
NPKST	NGC 6153	70		1628050	-400858	L 1	13841	L	214	SO	88081309	090700	017000	336	G E=128,C=140,B=80
JM012	HD148614	20	10.72	1628206	-585847	H 3	33526	L	209	FO	88051404	042329	014400	301	V PARTICLE EVENT
KA019	PG1629+081	16	13.14	1629361	+080558	L 3	33790	L	96	SO	88062021	213807	000700	500	V

PRO	Object	CL	MAG	R.A.	DEC	D C	Image	A	FES	MD	Obs.date	Exptim	mmmsstt	ECC	Comment
KA019	PG1629+081	16	13.14	1629361	+080558	L 1	13481	L	96	SO	88062022	220908	000900	500	U 1033 MF LOST AT THE
SDJGW	PG 1630+377	85	16.1	1630151	+374409	L 3	33225	L		BO	88040710	100400	040500	309	G C=158,B=110
PHCAL	T SCO	20	2.8	1632458	-280650	H 1	13899	L	1841	FU	88082310	101500	000006	503	G C=217,B=42
PHCAL	T SCO	20	2.8	1632458	-280650	H 3	34123	L	1838	FU	88082310	102000	000006	709	G C=195B=352
PHCAL	HD 149438	20	2.8	1632458	-280650	H 3	34273	L	1867	FU	88091912	121200	000006	402	G C=182,B=35
PHCAL	HD 149438	20	2.8	1632458	-280650	H 1	14095	L	1878	FU	88091912	121700	000006	503	G C=205,B=42
PHCAL	HD 149438	20	2.8	1632459	-280651	H 2	18185	L	1828	FU	88041717	175600	000008	501	G C=202,B=30
PHCAL	HD 149438	20	2.8	1632459	-280651	H 3	33884	L	1862	FU	88070913	131100	000006	402	G C=175,B=34
PHCAL	HD 149438	20	2.8	1632459	-280651	H 1	13597	L	1841	FU	88070913	131600	000006	403	G C=188,B=43
PHCAL	HD 149438	20	2.8	1632459	-280651	H 1	13677	L	1863	FU	88071713	132900	000006	503	G C=205,B=42
PHCAL	HD 149438	20	2.8	1632459	-280651	H 1	13678	L	1869	FU	88071714	140500	000012	X04	G C=2X,B=56
PHCAL	HD 149438	20	2.8	1632459	-280651	H 1	13679	L	1960	FU	88071714	143800	000024	X05	G C=4X,B=70
PHCAL	HD 149438	20	2.8	1632459	-280651	H 1	13680	L	1844	FU	88071715	153400	000006	503	G C=207,B=43
PHCAL	HD 149438	20	2.8	1632459	-280651	H 1	13682	L	1858	FU	88071718	183100	000012	X04	G C=2X,B=57
PHCAL	HD 149438	20	2.8	1632459	-280651	H 1	13690	L	1830	FU	88071814	140600	000024	X06	G C=4X,B=73
PHCAL	HD 149438	20	2.8	1632459	-280651	H 1	13729	L	1793	FU	88072316	160700	000024	X05	G C=4X,B=66
PHCAL	HD 149438	20	2.8	1632459	-280651	H 1	13730	L	1866	FU	88072411	114000	000006	504	G C=204,B=52
PHCAL	HD 149438	20	2.8	1632459	-280651	H 1	13731	L	1990	FU	88072412	121200	000012	X04	G C=2X,B=51
PHCAL	HD 149438	20	2.8	1632459	-280651	H 1	13732	L	1858	FU	88072412	124600	000024	X05	G C=4X,B=66
PHCAL	HD 149438	20	2.8	1632459	-280651	H 1	13733	L	2009	FU	88072413	133500	000006	503	G C=200,B=42
PHCAL	HD 149438	20	2.8	1632459	-280651	H 1	13734	L	1838	FU	88072414	141000	000012	?04	G C=2S,B=54
PHCAL	HD 149438	20	2.8	1632459	-280651	H 1	13735	L	1922	FU	88072414	144100	000024	X06	G C=4X,B=72
PHCAL	HD 149438	20	2.8	1632459	-280651	H 1	13736	L	1845	FU	88072415	151500	000012	X04	G C=2X,B=55
PHCAL	HD 149438	20	2.8	1632459	-280651	H 1	13737	L	2123	FU	88072416	160600	000006	503	G C=208,B=41
PHCAL	HD 149438	20	2.8	1632459	-280651	H 3	33993	L	1934	FU	88073111	113600	000006	502	G C=186,B=35
PHCAL	HD 149438	20	2.8	1632459	-280651	H 1	13762	L	1956	FU	88073111	114400	000006	503	G C=196,B=43
PHCAL	HD 149438	20	2.8	1632459	-280651	H 9	02119	2			88091911	115100	000240	G	
KA200	HD149427	26	12.30	1633379	-553625	L 3	33940	L	204	SO	88071901	010847	009900	330	U
JA039	HD149757	26	02.79	1634240	-102803	H 3	33330	L	2115	FU	88042108	080703	000025	500	U
PHCAL	HD 149757	12	2.5	1634241	-102803	H 1	13114	L	2104	FU	88042323	232000	000010	503	G C=200,B=43
PHCAL	HD 149757	12	2.5	1634241	-102803	H 3	33347	L	2110	FU	88042323	235300	000018	502	G C=190,B=35
JE187	Q 1634+706	85	16.00	1634514	+703738	L 1	13305	L		BO	88052400	000440	007500	343	U
XQJME	1635+119	85	16.5	1635258	+115545	L 3	33232	L		BO	88040815	153600	007500	04	G B=56
JAI14	HD150193	34	09.25	1637165	-234756	H 1	13083	L	778	FO	88042005	055948	016700	304	U
CSJAB	HD 150798	47	1.92	1643210	-685619	H 1	12965	L	3211	FU	88040121	214000	000500	354	G E=214,C=100,B=52
CSJAB	HD 150798	47	1.92	1643210	-685619	H 1	13007	L	3139	FU	88040917	171600	002500	4X8	G E=4X,C=223,B=94
CSJAB	HD 150798	47	1.92	1643210	-685619	H 1	13008	L	3386	FU	88040921	210300	000500	353	G E=203,C=100,B=50
WDJHS	GD 358	29	13.6	1645250	+323342	L 3	34161	S	44	SO	88083123	230400	008000	500	G C=208,B=17
WDJHS	GD 358	29	13.6	1645250	+323342	L 3	34162	S	43	SO	88090100	005700	008000	500	G C=218,B=18
KA086	GD358	29	13.87	1645255	+323346	E 9	02061	2	50	SO	88053023	235500	004000	U	SWP 33681
WDKES	GD 358	29	13.6	1645255	+323346	H 3	33681	L	47	SO	88053108	085400	079500	409	G C=235,B=130
KA086	GD358	29	13.97	1645255	+323346	L 3	33680	L	46	SO	88053100	001623	003000	400	U
KC013	HD 151676	31	06.83	1646362	-153455	L 3	33911	L	6594	FO	88071319	193625	003000	730	U
KC013	HD151676	31	07.62	1646362	-153455	L 3	33912	L	4323	FO	88071320	203943	006000	710	U PREAD
KC013	HD 151676	31	06.47	1646362	-153455	L 3	33914	L	8964	FO	88071401	012553	000100	300	U

PRO	Object	CL	MAG	R.A.	DEC	D C	Image	A	FES	MD	Obs.date	Exptim	mmmsstt	ECC	Comment
KC013	HD 151676	31	06.51	1646362	-153455	L 3	33915	L	8684	FO	88071402	020057	004800	740	V PREAD
JA016	HD 151932	11	06.86	1648480	-414617	H 3	33475	L	6449	FO	88050702	025122	001500	340	V
JA016	HD 151932	11	06.82	1648484	-414617	H 3	33449	L	6676	FO	88050423	234518	002000	550	V
JA016	HD 151932	11	06.87	1648484	-414617	H 1	13166	L	6406	FO	88050500	002248	001500	501	V
JA016	HD 151932	11	06.87	1648484	-414617	H 3	33450	L	6406	FO	88050500	005442	002000	550	V
JA016	HD 151932	11	06.84	1648484	-414617	H 3	33451	L	6573	FO	88050501	015118	002000	550	V
JA016	HD 151932	11	06.85	1648484	-414617	H 3	33452	L	6481	FO	88050502	024109	002000	550	V
JA016	HD 151932	11	06.92	1648484	-414617	H 3	33461	L	6124	FO	88050603	033839	002000	550	V
JA016	HD 151932	11	06.92	1648484	-414617	H 1	13169	L	6144	FO	88050604	040540	001500	501	V
JA016	HD 151932	11	06.92	1648484	-414617	H 3	33462	L	6144	FO	88050604	043734	002000	450	V
JA016	HD 151932	11	06.88	1648484	-414617	H 3	33463	L	6338	FO	88050605	052721	002000	550	V
JA016	HD 151932	11	06.91	1648484	-414617	H 3	33464	L	6148	FO	88050606	061549	002000	550	V
JA016	HD 151932	11	06.85	1648484	-414617	H 3	33472	L	6496	FO	88050700	001617	002000	450	V
JA016	HD 151932	11	06.84	1648484	-414617	H 3	33473	L	6547	FO	88050701	011037	002000	450	V
JA016	HD 151932	11	06.86	1648484	-414617	H 3	33474	L	6449	FO	88050702	020618	001700	450	V
JA016	HD151932	11	06.85	1648484	-414617	H 3	33482	L	6506	FO	88050800	000335	002000	450	V RP @ -20,-208
JA016	HD 151932	11	06.85	1648484	-414617	H 1	13180	L	6529	FO	88050800	003204	001500	502	V RP. @ -20,-208
JA016	HD151932	11	06.82	1648484	-414617	H 3	33483	L	6660	FO	88050801	010247	002000	450	V RP @ -20,-208
JA016	HD151932	11	06.82	1648484	-414617	H 3	33484	L	6653	FO	88050801	015401	002000	450	V RP @ -20,-208
JA016	HD151932	11	06.82	1648484	-414617	H 3	33485	L	6653	FO	88050802	024001	002000	450	V RP @ -20,-208
JM131	HD 152235	26	06.75	1650260	-415448	H 3	33294	L	7072	FO	88041606	061240	015500	601	V
JE161	NGC 6240	80	99.99	1650279	+022855	E 9	02056	2			88042702	024200	004000		V FOR SWP 33380
JE161	NGC 6240	82	15	1650279	+022855	L 3	33380	L		BO	88042710	100500	084200	309	G C=170,B=138
KC056	HD153751	44	04.68	1651009	+820722	H 1	13854	L	395	FU	88081519	192922	002000	442	V
KC056	HD153751	44	04.69	1651009	+820722	L 3	34090	L	391	FU	88081519	195527	002700	530	V
KC056	HD153751	44	04.67	1651009	+820722	H 1	13855	L	396	FU	88081520	203450	007200	773	V
CCJTS	SKY	07		1651040	+314458	L 3	33610	L			88052222	220730	001500	30	G E=43,B=18
CCJTS	HD 152598	40	5.3	1651041	+314659	L 3	33609	L	15388	FO	88052221	210100	002700	731	G E=88,C=20X,B=27
CCJAB	HD 152404	58	8.8	1651231	-364829	L 9	02052	2			88040101	010400	000240		G
CCJAB	HD 152404	58	8.8	1651231	-364829	H 1	12964	L	658	FO	88040119	193000	008500	337	G E=137,C=125,B=82
CCJAB	HD 152404	58	8.8	1651231	-364829	L 1	12966	L	679	FO	88040122	223600	001500	05	G B=70
CCJAB	HD 152404	58	8.8	1651231	-364829	H 1	12967	L	665	FO	88040208	083100	056000	309	G C=221,B=123
CCJAB	HD 152404	58	8.8	1651231	-364829	L 3	33197	L	654	FO	88040210	103800	017500	334	G E=144,C=105,B=59
CCJAB	HD 152404	58	8.8	1651231	-364829	H 1	12968	L	712	FO	88040211	112700	016500	??9	G E=130,C=121,B=168
CCJAB	HD 152404	58	8.8	1651231	-364829	H 1	13006	L	621	FO	88040909	095800	043000	XX9	G E=1.5X,C=1.5X,B=146
CCJAB	HD 152404	58	9.2	1651231	-364829	L 1	13009	L	593	FO	88040922	221100	001200	4X7	G E=1.5X,C=225,B=86
CCJAB	HD 152404	58	9.2	1651231	-364829	L 1	13010	L	590	FO	88040922	225700	003000	XX8	G E=3X,C=3X,B=96
CCJAB	HD 152404	58	9.2	1651231	-364829	L 3	33241	L	694	FO	88040923	233400	018500	348	G E=220,C=142,B=100
CCJAB	HD 152404	58	9.2	1651231	-364829	L 1	13011	L	604	FO	88041000	001500	000800	442	G E=182,C=145,B=34
BEJTS	HD 152478	26	6.3	1652170	-503545	H 3	33308	L	7372	FO	88041818	185900	001400	503	G C=208,B=42
BEJTS	HD 152478	26	6.3	1652170	-503545	H 1	13071	L	7963	FO	88041819	194000	000800	504	G C=253,B=52
KI158	HZ HER	59	14.50	1656017	+352507	L 3	34408	L		BO	88100314	140645	006000	330	V
KI158	HZ HER	59	14.50	1656017	+352507	L 1	14178	L		BO	88100315	152819	006000	301	V TWO SPREP PERFORMED
KI158	HZ HER	59	14.50	1656017	+352507	L 3	34409	L		BO	88100316	163404	007700	320	V
KI158	HZ HER	59	14.50	1656017	+352507	L 1	14179	L		BO	88100318	180004	008600	301	V

PRO	Object	CL	MAG	R.A.	DEC	D C Image A	FES	MD	Obs.date	Exptim	mmmsstt	ECC	Comment
KI158	HZ HER	59	14.50	1656017	+352507	L 3 34410	L		B0 88100319	193227	007500		300 V
KI158	HZ HER	59	13.79	1656017	+352507	L 3 34414	L	54	SO 88100414	143032	004000		340 V
KI158	HZ HER	59	13.81	1656017	+352507	L 1 14182	L	53	SO 88100415	152057	003000		500 V
KI158	HZ HER	59	13.71	1656017	+352507	H 3 34415	L	58	SO 88100415	155630	029000		322 V
SCKPF	P/TEMPL2	06	13.5	1657297	-234250	L 9 02104	2		88090508	084400	000005		G
SCKPF	P/TEMPL2	06	13.5	1657297	-234250	L 9 02105	2		88090510	104200	000005		G
SCKPF	UNKNOWN	06	13.5	1657297	-234250	L 1 14003	L	62	SO 88090608	080800	008700		37 G E=123,B=90
SCKPF	P/TEMPL2	06	13.5	1657297	-234250	L 9 02103	2		88090608	084400	000020		G
SCKPF	P/TEMPL2	06	13.5	1657297	-234250	L 1 14004	L	70	SO 88090611	112000	004000		39 G E=221,B=167
NPKST	IC 4634	70	11.6	1658339	-214511	L 1 13827	L	308	SO 88081211	115000	004500		X04 G C=1.5X,B=51
NPKST	IC 4634	70	11.6	1658339	-214511	L 3 34075	L	329	SO 88081212	124400	003000		450 G E=171,C=118,B=17
NPKST	IC 4634	70	11.6	1658339	-214511	L 1 13828	L	338	SO 88081213	132100	003500		504 G C=227,B=59
NPKST	IC 4634	70	11.6	1658339	-214511	L 3 34076	L	349	SO 88081214	140400	002700		340 G E=121,C=115,B=19
KQTOO	Q1700+6416	85	15.40	1700405	+641625	L 1 13542	L		B0 88063022	224158	032500		314 V
KQTOO	Q1700+6416	85	15.40	1700405	+641625	L 3 33927	L		B0 88071520	201122	038400		214 V
KQTOO	BGD	07	99.99	1700405	+641625	L 2 18225	L		88071521	213131	022000		003 V LWR 4.5KV; TO CHECK
KQTOO	FLARE	07	99.99	1700405	+641625	L 2 18226	L		88071601	013930	002000		002 V LWR 5KV; TO CHECK FL
GCJJS	NGC 6284	83	16.6	1701250	-244148	L 1 13109	L	279	FO 88042313	132200	015000		305 G C=118,B=62
GCJJS	NGC 6284	83	16.6	1701250	-244148	L 3 33342	L	276	FO 88042315	155900	005500		201 G C=41,B=27
JA109	IC4637	70	12.28	1701392	-404852	H 3 33434	L	207	SO 88050223	234724	042000		123 V
KA157	HD326971	26	13.65	1706549	-414907	L 1 13716	L	61	SO 88072202	021757	002000		100 V
KA157	HD326971	26	13.65	1706549	-414707	L 3 33956	L	61	SO 88072202	024707	003500		100 V PREAD
GCJJS	NGC 6293	83	8.8	1707040	-263112	L 1 13108	L	450	SO 88042309	095800	015000		304 G C=125,B=59
USSBS	HD 155125	30	2.4	1707306	-153949	H 3 33977	L	2175	FU 88072811	112700	000600		X05 G C=3X,B=63
PHCAL	HD 155763	25	03.31	1708381	+654634	L 3 33713	L	1340	FU 88060603	034206	000001		600 V
PHCAL	HD 155763	25	03.44	1708381	+654634	L 1 13372	L	1186	FU 88060603	034614	000000		502 V
PHCAL	HD 155763	25	03.36	1708381	+654634	L 1 13373	L	1277	FU 88060604	044133	000000		502 V
PHCAL	HD155763	25	03.47	1708381	+654634	L 3 34195	L	1155	FU 88090715	153310	000000		300 V
PHCAL	HD155763	25	03.30	1708381	+654634	L 3 34196	L	1349	FU 88090716	163025	000000		400 V
PHCAL	HD155763	25	03.51	1708381	+654634	L 1 14012	L	1144	FU 88090716	163423	000000		502 V
PHCAL	HD155763	25	03.36	1708381	+654634	L 3 34197	L	1275	FU 88090717	172711	000000		300 V
PHCAL	HD155763	25	03.36	1708381	+654634	L 1 14013	L	1275	FU 88090717	173034	000000		402 V
PHCAL	HD155763	25	03.34	1708381	+654634	L 1 14014	L	1296	FU 88090718	182454	000000		502 V
PHCAL	HD155763	25	03.34	1708381	+654634	L 3 34198	L	1296	FU 88090718	182147	000000		300 V
KA032	HD155448	24	09.10	1709438	-321102	L 3 33996	L	887	FO 88073119	195006	003311		800 V
KA032	HD155448	24	09.72	1709438	-321102	L 1 13766	L	918	FO 88073120	203822	002500		900 V
KA032	HD155448	24	09.10	1709438	-321102	L 3 33997	L	934	FO 88073122	220055	000500		800 V
KA032	HD155448	24	09.04	1709438	-321102	L 1 13767	L	933	FO 88073122	224850	000050		500 V PREAD
KA032	HD155448	24	08.86	1709438	-321102	L 3 33998	L	1097	FO 88073123	232100	000200		600 V
WDJHS	GD 205	29	14.9	1709497	+230428	L 3 33354	L		B0 88042509	095400	006000		300 G C=41,B=17
WDJHS	GD 205	29	14.9	1709497	+230428	L 3 33355	S		B0 88042511	114100	030500		05 G B=68
NPJTB	BLANKSKY	65	12.8	1710179	-370251	L 1 13118	L		FO 88042410	101400	028000		227 G E=97?,C=102,B=90
NPJTB	NGC 6302	71	12.8	1710179	-370251	L 1 13129	L		B0 88042621	213000	020000		307 G C=118,B=82
NPJTB	BLANKSKY	65	12.8	1710202	-370250	L 1 13119	L		B0 88042419	190700	003300		03 G B=50
NPJTB	NGC 6302	71	12.8	1710202	-370250	L 3 33352	L		B0 88042420	203200	009000		G

PRO	Object	CL	MAG	R.A.	DEC	D C	Image	A	FES	MD	Obs.date	Exptim	mmmsstt	ECC	Comment
NPJTB	BLANKSKY	65	12.8	1710224	-370232	L 3	33351	L		FO	88042416	160200	018000	03	G B=50
NPJTB	NGC 6302	71	12.8	1710224	-370232	L 1	13120	L		BO	88042422	221800	015200	334	G E=96,C=91,B=60
NPJTB	NGC 6302	71	12.8	1710224	-370232	L 3	33379	L		BO	88042618	181500	011000	306	G C=123,B=80
KA157	SAO 244567	26	11.09	1711564	-592604	L 3	33954	L	150	FO	88072123	234432	003000	100	V WRONG TARGET?
KA157	SAO244567	26	12.39	1711564	-592604	L 1	13715	L	189	SO	88072200	003419	002000	600	V
KA157	SAO 244567	26	12.42	1711564	-592604	L 3	33955	L	184	SO	88072201	010533	003000	500	V
USSBS	HD 156164	30	3.14	1712584	+245342	H 3	33411	L	1273	FU	88043015	151400	000340	502	G C=200,B=38
USSBS	HD 156164	30	3.1	1712585	+245343	H 3	34011	L	1251	FU	88080209	091700	001100	X05	G C=3X,B=63
GKJBS	-6011162	23	10.6	1714480	-502900	H 3	33281	L	162	FO	88041409	095200	025000	307	G C=163,B=81
MCKEB	U636 SCO	53	6.8	1719055	-453401	H 1	13175	L	4351	FO	88050707	075700	024000	306	G C=175,B=77
MCKEB	U636 SCO	53	6.8	1719055	-453401	H 1	13184	L	6243	FO	88050810	103500	020000	X09	G C=1.5X,B=138
MCKEB	U636 SCO	53	6.8	1719055	-453401	H 1	13191	L	6161	FO	88050907	075400	023000	X48	G E=210,C=1.5X,B=99
MCKEB	U636 SCO	53	6.8	1719055	-453401	H 1	13202	L	4741	FO	88051107	075700	024000	407	G C=205,B=90
MCKEB	U636 SCO	53	6.8	1719055	-453401	H 1	13208	L	4485	FO	88051207	074300	030000	409	G C=223,B=109
SCKPF	P/TEMPL2	06	7.4	1720556	-255857	L 1	14046	L			88091400	004100	002000		G
SCKPF	P/TEMPL2	06	7.4	1720556	-255857	L 9	02111	2			88091400	004600	000005		G
SCKPF	P/TEMPL2	06	7.4	1720556	-255857	L 1	14046	L			88091401	011500	003000		G
SCKPF	P/TEMPL2	06	7.4	1720556	-255857	L 3	34250	L			88091404	042300	003000		G
SCKPF	P/TEMPL2	06		1720556	-255857	L 1	14047	L			88091405	053400	009000		G
SCKPF	P/TEMPL2	06		1720556	-255857	L 1	14048	L			88091407	074500	009000	36	G E=113,B=72
SCKPF	P/TEMPL2	06		1720556	-255857	L 1	14049	L			88091409	095400	002000		G
SCKPF	P/TEMPL2	06		1720556	-255857	L 1	14050	L			88091413	130200	009000	39	G E=143,B=105
KA122	HD157451	10	10.51	1721467	-432652	H 1	13969	L	251	FO	88083100	000000	011000	332	V
KA122	HD157451	10	10.50	1721467	-432652	H 1	13970	L	255	FO	88083118	183443	019500	442	V
JM055	HD157857	15	08.25	1723310	-105701	L 3	33408	L	1889	FO	88043007	070125	000100	600	V
JA138	HEN1428	27	11.29	1731118	-492433	L 3	33600	L	126	FO	88052123	231947	003500	330	V
JA138	HEN1428	27	11.29	1731118	-492433	L 1	13294	L	126	FO	88052200	000337	001600	553	V
KC013	HD 159441	31	08.04	1733507	-564729	L 3	33913	L	2283	FO	88071322	224209	012000	731	V PREAD
KS117	SATURN	03	00.00	1740224	-222151	L 3	34115	L		BO	88082020	204940	005000	740	V PREAD
KS117	SATURN	03	00.30	1740273	-222142	L 3	34105	L		BO	88081915	155946	005000	470	V TRACKING ON TITAN
KI060	IC4663	70	13.42	1741485	-445309	L 3	33946	L	75	SO	88072020	204319	006000	230	V
KI060	IC4663	70	13.42	1741485	-445309	L 1	13707	L	75	SO	88072022	220203	009000	331	V
SSKDS	SKY BKGD	07		1741569	-221035	L 3	34035	L			88080614	144400	004000	42	G E=170,B=36
SSKDS	SATURN	03	0.2	1742034	-222032	L 3	34032	L			88080610	100100	001500	30	G E=110,B=17
SSKDS	SATURN	03	0.2	1742034	-222032	L 3	34032	S			88080610	102500	001500	X30	G E=110,C=5X,B=17
SSKDS	SATURN	03	0.2	1742034	-222032	L 3	34033	L			88080611	111800	009000	?X5	G E=1.5X,C=10X,B=62
SSKDS	SATURN	03	0.2	1742034	-222032	L 3	34033	S			88080611	115700	009000	?X5	G E=1.5X,C=10X,B=62
SSKDS	SATURN	03	0.2	1742034	-222032	L 3	34034	L			88080613	133600	003000	X44	G E=184,C=5X,B=58
SSKDS	SATURN	03	0.2	1742034	-222032	L 3	34034	S			88080613	133700	003000	X44	G E=184,C=5X,B=58
SSKDS	SATURN	03	0.2	1742034	-222032	L 3	34036	L			88080616	160000	003000	X40	G E=130,C=5X,B=19
SSKDS	SATURN	03	0.2	1742034	-222032	L 3	34036	S			88080616	160100	003000	X40	G E=130,C=5X,B=19
SPKHM	SATURN	03	0.2	1742323	-221948	L 3	34018	L			88080310	102700	006000	X51	G E=202,C=5X,B=26
SPKHM	SATURN	03	0.2	1742323	-221948	L 3	34019	L			88080312	121100	005000	X54	G E=216,C=5X,B=56
SPKHM	SATURN	03	0.2	1742323	-221948	L 3	34020	L			88080313	133800	005000	??9	G E=1.5,C=10,B=128
SPKHM	SATURN	03	0.2	1742323	-221948	L 3	34021	L			88080315	150400	005000	X53	G E=210,C=5X,B=48

PRO	Object	CL	MAG	R.A.	DEC	D C	Image	A	FES	MD	Obs.date	Exptim	mmmmssstt	ECC	Comment	
SPKJC	SATURN	03	0.0	1743110	-221945	H 3	33992	L			88073103	035100	034500	X39 G	E=196,C=5X,B=120	
SPKJC	SATURN	03	0.0	1743110	-221945	L 3	33992	L			88073106	065300	006000	X39 G	E=178,C=5X,B=120	
SPKHM	SATURN	03	0.2	1743210	-221928	L 3	33985				88073004	040900	012000	X54 G	E=234,C=5X,B=55	
SPKHM	SATURN	03	0.2	1743210	-221928	L 3	33986	L			88073006	063900	012000	X53 G	E=236,C=5X,B=43	
SPKHM	SATURN	03	0.2	1743210	-221928	L 3	33987	L			88073009	090600	012000	XX4 G	E=1.5X,C=5X,B=53	
SPKHM	SATURN	03	0.2	1743210	-221928	L 3	33988	L			88073011	115700	006000	X55 G	E=250,C=8X,B=69	
SPKHM	SATURN	03	0.2	1743210	-221928	L 3	33989	L			88073013	135500	003000	X09 G	E=208,C=8X,B=110	
SPKHM	SATURN	03	0.2	1743210	-221928	L 3	33990	L			88073015	150200	003500	X46 G	E=204,C=5X,B=79	
SPKHM	SATURN	03	0.2	1743210	-221928	L 3	33991	L			88073016	161300	008000	X53 G	E=238,C=5X,B=46	
KS117	URANUS	03	06.01	1745143	-233657	L 3	34106	S	13024	FO	88081918	180404	020900	041 U	TRACKING ON LIGH	
KS117	URANUS	03	06.01	1745143	-233657	L 3	34106	L	13024	FO	88081918	180404	012000	331 U	TRACKING ON LIGH	
SAJGW	HD	161868	30	3.8	1745233	+024358	L 1	13338	L	654	FU	88053008	080900	000130	201 G	C=40X,B=23
SUKRW	URANUS	03	5.9	1745268	-233657	H 1	14122	L	10136	FO	88092500	003600	007000	X04 G	C=2.5X,B=52	
SUKRW	URANUS	03	5.9	1745268	-233657	H 1	14123	L		FO	88092502	023200	006000	X09 G	C=8X,B=115	
SUKRW	URANUS	03	5.9	1745268	-233657	L 1	14124	L	10425	FO	88092506	065700	000042	502 G	C=219,B=33	
USSBS	HD	161892	47	3.20	1746272	-370143	H 1	13104	L	1005	FU	88042218	185700	002100	343 G	E=157,C=140,B=43
SPKHM	URANUS	03	5.6	1746414	-233717	L 3	34015	L	11044	FO	88080301	013500	018000	453 G	E=210,C=200,B=50	
SPKHM	URANUS	03	5.6	1746414	-233717	L 3	34016	L	11438	FO	88080305	050700	015000	443 G	E=184,C=183,B=50	
SPKHM	SKYBKGD	07		1746414	-233717	L 3	34017	L			88080308	081200	007500	41 G	E=141,B=23	
SPKHM	URANUS	03	5.6	1746548	-233721	L 3	34001	L	11527	FO	88080103	030000	018000	553 G	E=211,C=210,B=50	
SPKHM	URANUS	03	5.6	1746548	-233721	L 3	34002	L	11988	FO	88080106	063300	015000	453 G	E=218,C=189,B=41	
SPKHM	SKYBKGD	07		1746548	-233721	L 3	34003	L			88080109	094200	002800	01 G	B=23	
JQ184	KAZ163	84	15.00	1747158	+683725	L 1	13012	L		BO	88041003	035453	029300	335 U		
JQ184	KAZ163	84	15.00	1747161	+683735	L 3	33240	L		BO	88040901	015324	041400	233 U		
J1125	RS OPH	55	11.34	1747315	-064148	L 3	33453	L	120	FO	88050503	034650	018000	341 U		
KA041	HD162732	26	07.25	1748447	+482425	H 3	34113	L	4583	FO	88082018	182122	002200	400 U		
BEJGP	HD	162732	26	6.7	1748447	+482424	L 3	33564	L	4693	FO	88051817	174400	000015	401 G	C=155,B=23
KA041	HD162732	26	07.22	1748447	+482425	L 3	34114	L	4704	FO	88082019	193308	000015	400 U	PREAD	
BEJGP	HD	162732	26	6.7	1748447	+482424	L 1	13263	L	4600	FO	88051818	182500	000011	502 G	C=200,B=35
KA041	HD162732	26	07.22	1748447	+482425	L 1	13886	L	4703	FO	88082019	192832	000011	501 U		
BEJGP	HD	162732	26	6.7	1748447	+482424	H 3	33565	L	4555	FO	88051818	183700	002000	405 G	C=210,B=70
CBKBB	X	1751+704	59	9.6	1751027	+704616	L 1	13810	L	359	FO	88080814	140300	003500	349 G	E=247,C=160,B=113
CBKBB	X	1751+704	59	9.6	1751027	+704616	L 3	34055	L	350	FO	88080814	144800	006000	04 G	B=60
JA144	PK53+241	70	13.41	1752247	+280029	L 3	33543	L	76	SO	88051623	234050	004500	350 U		
JA144	PK53+241	70	13.35	1752247	+280029	L 1	13245	L	80	SO	88051700	003344	012000	462 U		
JA144	PK 53+241	70	13.39	1752247	+280029	L 3	33544	L	77	SO	88051702	024331	013500	470 U		
JM055	HD164019	23	09.77	1757100	-283709	L 1	13140	L	488	FO	88043005	050356	000228	702 U		
JM055	HD164019	23	09.78	1757100	-283709	L 3	33407	L	483	FO	88043005	051219	000716	500 U		
JM055	HD164019	23	09.77	1757100	-283709	L 1	13141	L	488	FO	88043005	054600	000800	802 U		
GKJBS	HD	164032	23	7.4	1757158	-294923	H 1	13043	L	2785	FO	88041414	142400	003000	X04 G	C=1.5X,B=59
BEJGP	HD	164284	26	4.6	1757471	+042211	L 3	33562	L	303	FU	88051815	153800	000002	X01 G	C=1.5X,B=21
BEJGP	HD	164284	26	4.6	1757471	+042211	H 3	33563	L	299	FU	88051816	161100	000210	502 G	C=225,B=40
BEJGP	HD	164284	26	4.6	1757471	+042211	L 1	13262	L	298	FU	88051816	161800	000001	502 G	C=195,B=35
BEKGP	HD	164284	26	4.6	1757471	+042211	H 3	33933	L	24420	FO	88071716	164400	000210	503 G	C=220,B=41
BEKGP	HD	164284	26	4.6	1757471	+042211	L 3	33934	L	24566	FO	88071717	171800	000001	500 G	C=205,B=15

PRO	Object	CL	MAG	R.A.	DEC	D	C	Image	A	FES	MD	Obs.date	Exptim	mmmsstt	ECC	Comment	
BEKGP	HD	164284	26	4.6	1757471	+042211	L	1	13681	L	24701	FO	88071717	172300	000001	502 G C=190,B=35	
BEKGP	HD	164284	26	4.6	1757471	+042211	H	3	34101	L	293	FU	88081911	111600	000210	502 G C=217,B=40	
BEKGP	HD	164284	26	4.6	1757471	+042211	L	1	13876	L	297	FU	88081911	112200	000001	502 G C=185,B=32	
BEKGP	HD	164284	26	4.6	1757471	+042211	L	3	34102	L	333	FU	88081911	115500	000001	500 G C=200,B=15	
BEKGP	HD	164284	26	4.6	1757471	+042211	L	3	34206	L	293	FU	88090907	075300	000001	500 G C=209,B=13	
BEKGP	HD	164284	26	4.6	1757471	+042211	L	1	14022	L	293	FU	88090907	075700	000001	402 G C=177,B=36	
BEKGP	HD	164284	26	4.6	1757471	+042211	H	3	34207	L	292	FU	88090908	082500	000210	502 G C=235,B=40	
BEKGP	HD	164284	26	4.6	1757471	+042211	H	3	34396	L	303	FU	88100205	053900	000210	503 G C=214,B=41	
BEKGP	HD	164284	26	4.6	1757471	+042211	L	3	34397	L	313	FU	88100206	061000	000001	500 G C=185,B=14	
BEKGP	HD	164284	26	4.6	1757471	+042211	L	1	14164	L	308	FU	88100206	061500	000001	402 G C=165,B=34	
PRJCG	HD	164284	26	4.8	1757480	+042130	H	3	33246	L	25056	FO	88041022	222700	000210	503 G C=215,B=42	
PRJCG	HD	164284	26	4.8	1757480	+042130	H	3	33505	L	299	FU	88051115	155000	000210	503 G C=208,B=41	
KA122	HD164270	10	09.20	1758264	-324255	H	1	13972	L	808	FO	88090121	211821	009000	452	V	
NHJRD	TRIFID-4	72		1759158	-230336	9	02054	2				88041412	124500	000020		G	
NHJRD	SERENDIP	72		1759158	-230336	L	1	13053	L			88041509	095100	027000	308	G C=155,B=100	
NHJRD	SERENDIP	72		1759158	-230336	L	1	13060	L		BO	88041609	094600	038500	309	G C=175,B=105	
NHJRD	TRIFID-4	72		1759159	-230337	L	3	33287	L		BO	88041509	094800	030000	336	G E=133,C=135,B=80	
NHJRD	T-FLOOD	99		1759159	-230337	H	3	33288	L			88041515	153100	000007	09	G B=143	
NHJRD	TRIFID-4	72		1759159	-230337	L	3	33295	L		BO	88041609	093900	039000	309	G C=175,B=105	
NHJRD	TRIFID-4	72		1759176	-230319	L	3	33303	L		BO	88041709	094900	042000	309	G C=175,B=110	
NHJRD	SERENDIP	72		1759176	-230319	L	1	13067				88041710	101600	042000	309	G C=210,B=138	
NHJRD	HD	164492	12	7.3	1759213	-230154	L	3	33290	L	2893	FO	88041520	201100	000010	500	G C=180,B=18
NHJRD	HD	164492	12	7.3	1759213	-230154	L	1	13057	L	2916	FO	88041520	201600	000010	502	G C=200,B=34
NHJRD	TRIFID-1	72		1759223	-230137	L	1	13054	L			88041515	150500	006000	405	G C=175,B=65	
NHJRD	TRIFID-1	72		1759223	-230137	L	3	33289	L			88041516	161300	012000	X7	G E=1.5X,B=81	
NHJRD	TRIFID-1	72		1759223	-230137	L	1	13055	L			88041516	164300	006000	306	G C=135,B=74	
NHJRD	TRIFID-1	72		1759223	-230137	L	1	13056				88041518	182700	006000	409	G C=205,B=105	
NHJRD	TRIFID-2	72		1759224	-230214	L	3	33272	L		BO	88041309	094800	009000	501	G C=195,B=28	
NHJRD	TRIFID-2	72		1759224	-230214	L	1	13034	L		BO	88041311	112600	008500	404	G C=160,B=51	
NHJRD	T-FLOOD	99		1759224	-230214	L	3	33273	L			88041312	121900	000007	09	G B=130	
KI060	H1-49	70	13.00	1800072	-324232	L	3	33983	L			BO	88072923	233143	004500	110	V
NHJRD	HERSHL36	12	9.5	1800360	-242252	L	3	33298	L	271	FO	88041621	215900	000600	501	G C=183,B=22	
NHJRD	M8HGLS-S	72		1800370	-242304	L	1	13058	L			BO	88041521	213700	006000	X09	G C=3X,B=174
NHJRD	M8HGLS-S	72		1800370	-242304	L	3	33291	L			BO	88041522	224400	012500	503	G C=238,B=47
NHJRD	M8HGLS-N	72		1800374	-242248	L	3	33297	L			BO	88041619	191000	008000	X9	G E=1.5X,B=104
NHJRD	M8HGLS-N	72		1800374	-242248	L	1	13062	L			BO	88041620	203800	004500	X9	G E=1.5X,B=155
NHJRD	M8HGLS-N	72		1800374	-242248	L	1	13063	L			BO	88041622	224700	004500	404	G C=186,B=58
NHJRD	M8HGLS-N	72		1800374	-242248	L	3	33299	L			88041623	234100	006800	401	G C=159,B=23	
JA181	WR 106	10	12.22	1801440	-210944	L	1	13286	L	219	SO	88052104	042806	006000	330	V	
JA181	WR 106	10	12.22	1801440	-210944	L	3	33591	L	225	SO	88052105	053812	007200	220	V PREAD	
SSJHM	URANUS	03	5.6	1801548	-233819	L	3	33305	L	11297	FO	88041809	095100	018000	552	G E=218,C=190,B=33	
SSJHM	URANUS	03	5.6	1801548	-233819	H	3	33306	L	11401	FO	88041813	135800	015000	452	G E=216,C=175,B=32	
KC055	HD 165341	46	99.99	1802555	+023034	L	3	34200	L		SO	88090721	212744	002000		V VILSPA EXPO READ AT	
KC055	HD 165341	46	04.47	1802556	+023035	H	1	13993	L	473	FU	88090319	193515	002000	560	V	
KC055	HD165341	46	04.46	1802556	+023035	H	1	14015	L	477	FU	88090719	192820	002000	560	V	

PRO	Object	CL	MAG	R.A.	DEC	D C Image A	FES	MD	Obs.date	Exptim	mmmsstt	ECC	Comment
KC055	HD165341	46	04.46	1802556	+023035	L 3 34199 L	478	FU	88090720	201543	002000	560	U
KC055	HD165341	46	04.46	1802556	+023035	H 1 14016 L	478	FU	88090720	205424	002000	560	U
KC055	HD 165341	46	04.48	1802556	+023035	H 1 14034 L	472	FU	88091122	220816	001500	482	U
KC055	HD 165341	46	04.48	1802556	+023035	H 1 14060 L	471	FU	88091519	195937	002000	560	U
SSJHM	SATURN	03	0.2	1806571	-221622	L 3 33436 L			88050315	154100	006000	X41	G E=165,C=5X,B=24
SSJHM	SATURN	03	0.2	1806571	-221622	L 3 33437 L			88050317	172300	006000	X51	G E=189,C=5X,B=26
SSJHM	SATURN	03	0.2	1806571	-221622	L 3 33438 L			88050319	190000	006000	X51	G E=242,C=5X,B=30
SSJHM	SATURN	03	0.2	1806571	-221622	L 3 33439 L			88050320	203600	006000	X51	G E=207,C=5X,B=26
SSJHM	SATURN	03	0.2	1806571	-221622	L 3 33440 L			88050322	220700	002500	X30	G E=96,C=2.5X,B=18
SAJCW	HD 166197	20	6.15	1807367	-334838	L 3 33202 L	9285	FO	88040400	001800	000012		G
SAJCW	HD 166197	20	6.15	1807367	-334838	L 1 12981 L	9285	FO	88040400	004300	000012	502	G C=220,B=38
LDKDB	HD 166620	46	6.4	1807580	+382712	L 1 13411 L	5895	FO	88061213	132600	000330	302	G C=127,B=35
LDKDB	HD 166620	46	6.4	1807580	+382712	L 1 13417 L	5836	FO	88061219	195000	001030	X02	G C=1.5X,B=36
SSJHM	SATURN	03	0.4	1808249	-221626	L 3 33320 L			88042009	093700	012000	52	G E=234,B=35
SSJHM	SATURN	03	0.4	1808249	-221626	L 3 33321 L			88042012	123500	012000	53	G E=236,B=45
SSJHM	SATURN	03	0.4	1808249	-221626	L 3 33322 L			88042015	154200	010000	54	G E=229,B=60
SSJHM	SATURN	03	0.4	1808249	-221626	L 3 33323 L			88042018	181200	006000	44	G E=204,B=55
SSJHM	SATURN	03	0.4	1808249	-221626	L 3 33324 L			88042020	200300	006000	56	G E=238,B=75
SSJHM	SATURN	03	0.4	1808249	-221626	L 3 33325 L			88042021	214100	006000	53	G E=201,B=50
SSJHM	SATURN	03	0.4	1808249	-221626	L 3 33326 L			88042023	232000	006000	43	G E=184,B=41
KI209	AS296	57	10.06	1812329	-001953	L 3 34080 L	376	FO	88081315	153857	003000	200	U
KI209	AS296	57	10.05	1812329	-001953	L 1 13843 L	381	FO	88081316	161741	004000	502	U
KI209	AS 296	57	10.08	1812330	-001953	L 3 33928 L	369	FO	88071620	200200	001000	200	U
KI209	AS 296	57	10.09	1812330	-001953	L 1 13667 L	367	FO	88071620	201959	001000	301	U
KI209	AS 296	57	10.08	1812330	-001953	L 3 33929 L	371	FO	88071621	211034	003000	200	U
KI209	AS 296	57	10.07	1812330	-001953	L 1 13668 L	372	FO	88071621	214822	002500	401	U
GKJBS	HD 167402	23	8.95	1813059	-300833	H 1 13044 L	718	FO	88041415	154100	006000	506	G C=234,B=72
AMHJH	AM HER	59	13.0	1814585	+495054	L 3 33846 L	94	SO	88070215	155700	001500	3X9	G E=1.5X,C=140,B=104
AMHJH	AM HER	59	13.0	1814585	+495054	L 1 13552 L	106	SO	88070216	162100	001500	3X9	G E=1.5X,C=245,B=178
AMHJH	AM HER	59	13.0	1814585	+495054	L 3 33847 L	106	SO	88070216	165900	001500	3X6	G E=1.5X,C=105,B=72
KS148	C/TEMPEL 2	06	13.27	1815373	-292603	L 1 14133 L	86	SO	88092920	202929	007700	231	U SECOND HALF START 22
HHKEB	H-H 81	69	15.0	1816074	-205222	L 3 34191		BO	88090523	235100	069500	09	G B=112
HHKEB	SKYQH81	07	15.0	1816074	-205222	L 1 14002 L		BO	88090600	001700	062000	09	G B=145
KM039	HH81	58	15.00	1816075	-205223	E 9 02101 2		BO	88090415	153000	004000		U FOR LWP13999
HHKEB	H-H 81	69	15.0	1816075	-205323	L 3 34186 L		BO	88090416	160100	082000	09	G B=127
KM039	HH81	58	15.00	1816075	-205222	E 9 02102 2		BO	88090516	160000	004000		U FOR SWP34191
HHKEB	H-H 81	69	15.0	1816075	-205323	L 1 13999 L		BO	88090423	232100	083000	09	G E=103,B=210,B=174
KA008	HD168206	10	09.65	1816198	-113916	H 3 34037 L	542	FO	88080617	173902	042800	303	U
KA008	HD168206	10	09.68	1816198	-113916	H 3 34121 L	526	FO	88082216	161057	033700	302	U
NPJTB	8-41	70	13.5	1818574	-241208	L 3 33396 L	45	SO	88042822	222600	014300	3?2	G E=?,C=68,B=38
JM055	HD168941	13	09.76	1820180	-265846	L 1 13142 L	490	FO	88043007	075531	000110	501	U PREAD
JM055	HD168941	13	09.78	1820180	-265846	L 3 33409 L	483	FO	88043008	080025	000215	500	U PREAD
GJJJS	NGC 6624	83	8.6	1820275	-302315	L 1 13101 S	178	FO	88042209	095300	015000	204	G C=75,B=58
GJJJS	NGC 6624	83	8.6	1820275	-302315	L 1 13102 S	181	FO	88042212	125800	022500	307	G C=115,B=83
PSKJH	K1- 16	70	15.1	1821368	+642018	3 33849 L		BO	88070119	194700	079000	309	G C=240,B=170

PRO	Object	CL	MAG	R.A.	DEC	D C	Image	A	FES	MD	Obs.date	Exptim	mmmsst	ECC	Comment
PSKJH	K1-16	70	15.04	1821368	+642018	L 3	33848	L		BO	88070218	183000	001700	400	G C=155,B=18
PSKJH	K1-16	70		1821368	+642018	L 9	02071	2			88070218	183400	000240		G
PSKJH	K1-16	70	15.1	1821368	+642018	L 3	33850	L		BO	88070310	101900	002100	500	G C=188,B=18
KA113	K1-16	70	15.00	1821369	+642018	E 9	02072	2		BO	88070219	190500	004000		U FOR SWP 33849
JA144	NGC 6629	70	11.96	1822412	-231345	L 1	13246	L	276	SO	88051705	054703	002500	300	U TARGET OUT OF APERTU
JA144	NGC6629	70	11.96	1822412	-231345	L 3	33545	L	276	SO	88051706	061733	003300		U PREAD
CBJMP	HD 169515	66	9.3	1822430	-124300	L 3	33431	L	567	FO	88050217	175200	006000	431	G E=119,C=132,B=26
CBJMP	HD 169515	66	9.3	1822430	-124300	L 1	13161	L	630	FO	88050219	190130	002000	X03	G C=2X,B=42
KC196	HD169689	39	06.23	1823144	+080009	H 1	13917	L	10911	FO	88082515	152705	007000	601	U
KC196	HD169689	39	06.20	1823144	+080009	H 3	34135	L	11203	FO	88082516	164720	011000	501	U
KC196	HD169689	39	06.31	1823144	+080009	H 3	34138	L	10225	FO	88082615	152001	011000	300	U
KC196	HD169689	39	06.31	1823144	+080009	H 1	13925	L	9997	FO	88082617	171748	007500	401	U
KC196	HD169689	39	06.45	1823144	+080009	L 3	34142	L	9159	FO	88082815	153555	003000	100	U
KC196	HD169689	39	06.44	1823144	+080009	L 1	13943	L	9193	FO	88082816	161518	002000	700	U
KC196	HD169689	39	06.40	1823144	+080009	H 1	13944	L	9510	FO	88082818	185835	006300	331	U
KC196	HD169689	39	06.23	1823144	+080009	L 3	34144	L	10971	FO	88082820	201655	009400	230	U R.P. USED: -5,-211
KC196	HD169689	39	06.46	1823144	+080009	L 3	34143	L	9080	FO	88082826	164947	012000	230	U
KC193	HD169689	45	06.16	1823144	+080009	H 3	34630	L	11602	FO	88102920	200614	004200	301	U
UUKIA	HR 6902	39	5.7	1823147	+080014	H 3	34131	L	12190	FO	88082506	064300	014000	504	G C=240,B=60
UUKIA	HR 6902	39	5.7	1823147	+080014	H 1	13913	L	11993	FO	88082509	091300	006000	504	G C=240,B=57
UUKIA	HR 6902	39	5.7	1823147	+080014	H 3	34137	L	11029	FO	88082607	072500	012000	403	G C=180,B=45
UUKIA	HR 6902	39	5.7	1823147	+080014	H 1	13920	L	11517	FO	88082609	093300	005200	403	G C=170,B=50
UUKIA	HR 6902	39	5.7	1823147	+080014	H 1	13945	L	11113	FO	88082822	220600	003500	303	G C=80,B=43
UUKIA	HR 6902	39	5.7	1823147	+080014	H 3	34145	L	9546	FO	88082822	224600	016800	03	G B=46
UUKIA	HR 6902	39	5.7	1823147	+080014	H 1	13946	L	9707	FO	88082901	013900	012000	305	G C=141,B=65
UUKIA	HR 6902	39	5.7	1823147	+080014	H 3	34177	L	12341	FO	88090307	075300	013000	505	G C=237,B=70
UUKIA	HR 6902	39	5.7	1823147	+080014	H 1	13985	L	12552	FO	88090310	100800	004200	408	G C=216,B=94
UUKIA	HR 6902	39	5.7	1823147	+080014	H 3	34182	L	11814	FO	88090407	073200	012500	505	G C=227,B=64
UUKIA	HR 6902	39	5.7	1823147	+080014	H 1	13996	L	12145	FO	88090409	094400	004100	406	G C=194,B=73
MLKPM	HR 6902	39	5.7	1823147	+080014	H 3	34187	L	11657	FO	88090508	085800	010000	408	G C=224,B=91
BEJTS	HD 170235	26	6.6	1826169	-251725	H 1	13070	L	6371	FO	88041817	171400	001100	503	G C=245,B=46
BEJTS	HD 170235	26	6.6	1826169	-251725	H 3	33307	L	6258	FO	88041817	175000	001830	503	G C=210,B=41
NPJTB	18-11	70	16.0	1827229	-135604	L 3	33395	L		BO	88042817	174800	020000	05	G B=68
NPJTB	18-11	70	16.0	1827229	-135604	L 1	13135	L		BO	88042821	211600	002000	02	G B=32
RUKEB	AC HER	52	7.7	1828070	+215006	H 1	13381	L	2577	FO	88060713	135600	009000	334	G E=93,C=98,B=52
RUKEB	AC HER	52	7.7	1828070	+215006	H 1	13419	L	2327	FO	88061313	134600	010000	303	G C=94,B=50
RUKEB	AC HER	52	7.7	1828070	+215006	L 1	13475	L	1878	FO	88062013	135800	000500	302	G C=64,B=37
RUKEB	AC HER	52	7.7	1828070	+215006	L 1	13500	L	1142	FO	88062514	142100	001500	302	G C=105,B=39
RUKEB	AC HER	52	7.7	1828070	+215006	L 1	13550	L	1244	FO	88070212	120000	003500	504	G C=250,B=57
RUKEB	AC HER	52	7.7	1828070	+215006	L 1	13587	L	1970	FO	88070812	121600	002000	X02	G C=1.5X,B=37
RUKEB	AC HER	52	7.7	1828070	+215006	L 1	13665	L	2790	FO	88071617	173900	001000	X02	G C=2X,B=38
RUKEB	AC HER	52	7.7	1828070	+215006	L 1	13666	L	2730	FO	88071618	182800	000300	302	G C=127,B=35
RUKEB	AC HER	52	7.7	1828070	+215006	H 1	13701	L	3171	FO	88072011	115200	007000	306	G C=127,B=72
RUKEB	AC HER	52	7.7	1828070	+215006	L 1	13738	L	3003	FO	88072511	115800	000500	401	G C=160,B=21
RUKEB	AC HER	52	7.7	1828070	+215006	L 1	13739	L	3165	FO	88072512	123700	001000	X06	G C=1.5X,B=72

PRO	Object	CL	MAG	R.A.	DEC	D C	Image A	FES	MD	Obs.date	Exptim	mmmsstt	ECC	Comment
RUKEB	AC HER	52	7.7	1828070	+215006	H 1	13765 L	2371	FO	88073115	154900	018000	406 G	C=180,B=80
RUKEB	AC HER	52	7.7	1828070	+215006	L 1	13790 L	1816	FO	88080510	101200	001000	502 G	C=223,B=34
RUKEB	AC HER	52	7.7	1828070	+215006	H 1	13839 L	2047	FO	88081222	225300	030100	407 G	C=222,B=88
RUKEB	AC HER	52	7.7	1828070	+215006	L 1	13840 L	2055	FO	88081306	062600	001000	X52 G	E=247,C=2.5X,B=36
HCKEB	M 25- 91	24	8.1	1828413	-190700	L 3	34601 L	1510	FO	88102510	100500	001000	X01 G	C=2X,B=27
HCKEB	M 25- 91	24	8.1	1828413	-190700	L 1	14311 L	1739	FO	88102510	103500	000400	X02 G	C=2.5X,B=38
HCKEB	M 25- 91	24	8.1	1828413	-190700	L 1	14311 S	1668	FO	88102510	104600	000400	402 G	C=183,B=35
HCKEB	M 25- 96	25	9.7	1828451	-190854	L 3	34616 L	363	FO	88102809	091800	003000	G	
HCKEB	M 25- 96	25	9.7	1828451	-190854	L 1	14327 L			88102809	095500	001200	G	
HCKEB	U SGR	53	6.4	1828565	-190942	L 3	34461 L	6451	FO	88101209	090200	006000	205 G	C=83,B=63
HCKEB	M 25-150	45	7.4	1829163	-190940	L 3	34459 L	2877	FO	88101203	030100	009000	401 G	C=128,B=22
HCKEB	M 25-150	45	7.4	1829163	-190940	L 1	14213 L	2947	FO	88101204	043900	002000	402 G	C=160,B=35
HCKEB	M 25-150	53	7.4	1829163	-190940	H 1	14216 L	2993	FO	88101303	032000	036000	?09 G	C=135,B=161
NBKWF	M3- 28	70	13.5	1829556	-100805	L 3	33679 L		BO	88053020	203000	013500	03 G	B=41
SSKTS	TRITON	04	13.2	1830382	-221643	L 1	13891 L		BO	88082111	113700	012000	309 G	C=175,B=135
KS094	TRITON	04	99.99	1830386	-221644	E 9	02097 2	1640	FO	88082114	144900	004000		U FES FOR LWP13892
SCKMA	TEMPEL 2	06	14.2	1831380	-300113	L 9	02127 2			88100306	062700	000005	G	
SCKMA	TEMPEL 2	06	14.2	1831380	-300113	L 9	02126 2			88100406	062700	000005	G	
SCKMA	TEMPEL 2	06	14.2	1831380	-300113	L 1	14180 L	68	SO	88100406	065100	009500	346 G	E=211,C=100,B=79
SCKMA	TEMPEL 2	06	14.2	1831380	-300113	L 3	34413 L	74	SO	88100409	091900	003000	53 G	E=236,B=43
SCKMA	TEMPEL 2	06	14.2	1831380	-300113	L 1	14181 L	74	SO	88100410	101900	006000	38 G	E=146,B=94
NPJJC	M22PN	70	14.8	1833200	-235750	L 1	13134 L		BO	88042810	101000	012000	304 G	C=135,B=51
NPJJC	M22PN	70	14.8	1833200	-235750	L 3	33394 L		BO	88042812	121700	027000	305 G	C=165,B=68
SSKTS	TRITON	04	13.2	1834042	-220958	L 1	13892		BO	88082200	001300	070300	X09 G	C=1.5X,B=133
DCKNE	HD 172044	27	5.39	1834469	+332529	L 3	34110 L	15990	FO	88082010	102700	000010	?00 G	C=1.5,B=17
DCKNE	HD 172044	27	5.39	1834469	+332529	L 1	13890 L	15498	FO	88082109	093600	000003	502 G	C=202,B=31
DCKNE	HD 172044	27	5.39	1834469	+332529	L 3	34118 L	15602	FO	88082109	094000	000006	500 G	C=172,B=17
STJRP	ALPH LYR	30	0.03	1835146	+384408	H 3	33633 L	16312	FU	88052422	223300	000008	502 G	C=200,B=34
PHCAL	HD 172883	30	6.00	1838437	+520853	H 3	33569 L	9785	FO	88051822	222800	002200	503 G	C=230,B=44
PHCAL	HD 172883	36	6.0	1838438	+520854	L 3	33356 L	9267	FO	88042517	173300	000011	400 G	C=130,B=20
PHCAL	HD 172883	36	6.0	1838438	+520854	H 1	13122 L	9206	FO	88042517	174100	001000	503 G	C=215,B=47
PHCAL	HD 172883	36	6.0	1838438	+520854	H 3	33357 L	9531	FO	88042518	181600	002600	X03 G	C=1.5X,B=50
PHCAL	HD 172883	36	6.0	1838438	+520854	L 1	13123 L	10319	FO	88042518	184900	000008	502 G	C=231,B=35
USSBS	HD 173300	25	3.18	1842320	-270237	H 3	33582 L	1176	FU	88052014	142800	000038	402 G	C=150,B=35
USSBS	HD 173300	25	3.2	1842321	-270238	H 1	13778 L	1207	FU	88080210	103600	000100	X03 G	C=1.5X,B=46
USSBS	HD 173300	25	3.2	1842321	-270238	H 3	34012 L	1200	FU	88080210	104100	000053	402 G	C=185,B=35
USSBS	HD 173300	25	3.2	1842321	-270238	H 3	34013 L	1193	FU	88080211	112800	000300	X05 G	C=3X,B=70
USSBS	HD 173300	25	3.2	1842321	-270238	H 1	13779 L	1258	FU	88080211	115700	000045	503 G	C=233,B=46
NPKST	IC 4776	70	11.2	1842340	-332352	L 3	34078 L	400	SO	88081312	125300	002000	345 G	E=166,C=133,B=61
NPKST	IC 4776	70	11.2	1842340	-332352	L 1	13842 L	397	SO	88081313	132400	001500	438 G	E=191,C=200,B=97
NPKST	IC 4776	70	11.2	1842340	-332352	L 3	34079 L	391	SO	88081314	141000	001500	332 G	E=134,C=88,B=35
OD26Y	HD 173948	26	4.22	1847353	-621452	H 3	33583 L	502	FU	88052015	154500	000104	502 G	C=230,B=40
OD26Y	HD 173948	26	4.22	1847353	-621452	H 1	13278 L	500	FU	88052015	155000	000025	402 G	C=175,B=40
OD26Y	HD 173948	26	4.22	1847353	-621452	L 3	33584 L	492	FU	88052016	164500	000001	X00 G	C=1.5X,B=20
OD26Y	HD 173948	26	4.22	1847353	-621452	L 1	13279 L	492	FU	88052016	165000	000000	502 G	C=190,B=32

PRO	Object	CL	MAG	R.A.	DEC	D C	Image	A	FES	MD	Obs.date	Exptim	mmmsstt	ECC	Comment
OD26Y	HD	173948	26	4.22	1847353	-621452	H 3	33585	L	498	FU	88052017	174700	000104	502 G C=240,B=40
OD26Y	HD	173948	26	4.22	1847353	-621452	H 1	13280	L	495	FU	88052017	175200	000028	403 G C=191,B=42
OD26Y	HD	173948	26	4.22	1847353	-621452	H 3	33586	L	510	FU	88052018	184800	000104	502 G C=240,B=40
OD26Y	HD	173948	26	4.22	1847353	-621452	H 1	13281	L	502	FU	88052018	185300	000028	403 G C=195,B=45
OD26Y	HD	173948	26	4.22	1847353	-621452	H 3	33587	L	502	FU	88052019	195200	000104	502 G C=230,B=40
OD26Y	HD	173948	26	4.22	1847353	-621452	H 1	13282	L	502	FU	88052019	195800	000028	403 G C=190,B=42
OD26Y	HD	173948	26	4.22	1847353	-621452	H 3	33588	L	542	FU	88052020	205300	000104	502 G C=234,B=39
OD26Y	HD	173948	26	4.22	1847353	-621452	H 1	13283	L	508	FU	88052020	205800	000028	402 G C=175,B=40
OD26Y	HD	173948	26	4.22	1847353	-621452	H 3	33589	L	519	FU	88052022	226200	000104	502 G C=230,B=40
OD26Y	HD	173948	26	4.22	1847353	-621452	H 1	13284	L	513	FU	88052022	220700	000028	402 G C=180,B=40
ALKGP	AD	HER	66	9.4	1847510	+203936	L 3	33720	L	428	FO	88060719	193200	002500	G
ALKGP	AD	HER	66	9.4	1847510	+203936	L 3	33731	L	161	SO	88060914	146300	004000	221 G E=30,C=36,B=29
ALKGP	AD	HER	66	9.4	1847510	+203936	L 3	33732	L	152	FO	88060915	151600	005500	202 G C=41,B=31
ALKGP	AD	HER	66	9.4	1847510	+203936	L 1	13392	L	152	SO	88060919	190400	006000	343 G E=184,C=100,B=42
ALKGP	AD	HER	66	9.4	1847510	+203936	L 3	33763	L	419	FO	88061518	182600	006000	403 G C=190,B=41
ALKGP	AD	HER	66	9.4	1847510	+203936	L 1	13458	L	151	FO	88061913	133800	006000	336 G E=164,C=124,B=73
ALKGP	AD	HER	66	9.4	1847510	+203936	L 3	33779	L	157	FO	88061914	144400	004000	03 G B=41
ALKGP	AD	HER	66	9.4	1847510	+203936	L 1	13460	L	155	FO	88061917	175800	003000	333 G E=100,C=84,B=45
ALKGP	AD	HER	66	9.4	1847510	+203936	L 1	13461	L	195	FO	88061920	202000	003000	332 G E=105,C=95,B=35
CSKJE	HD	175865	49	4.0	1853487	+435246	H 1	13224	L	850	FU	88051415	152800	002000	43 G E=191,B=43
CSKJE	HD	175865	49	4.0	1853487	+435246	H 1	13324	L	731	FO	88052818	183000	002000	53 G E=242,B=42
CSKJE	HD	175865	49	4.0	1853487	+435246	H 1	13510	L	795	FU	88062716	165200	001500	44 G E=184,B=60
CSKJE	HD	175865	49	4.0	1853487	+435246	H 1	13749	L	733	FU	88072717	170500	002000	352 G E=226,C=75,B=36
CSKJE	HD	175865	49	4.0	1853487	+435246	H 1	13860	L	866	FU	88081609	092600	002000	353 G E=196,C=90,B=41
CSKJE	HD	175865	49	4.0	1853487	+435246	H 1	13924	L	804	FU	88082614	142000	000800	33 G E=122,B=41
IEKGC	USS	30	30	10.9	1858414	-372731	L 1	13908	L	104	FO	88082410	100500	009000	X06 G C=1.5X,B=73
IEKGC	USS	30	30	10.9	1858414	-372731	L 1	13908	S	467	SO	88082411	114300	003000	306 G C=118,B=73
IEKGC	USS	30	30	10.9	1858414	-372731	L 3	34128	L	429	SO	88082412	122100	012700	304 G C=110,B=59
IEKGC	USS	10	22	10.1	1859488	-373336	L 3	34124	L	223	FO	88082311	111200	009000	303 G C=185,B=43
IEKGC	USS	10	22	10.1	1859488	-373336	L 1	13900	L	229	FO	88082312	125300	009500	X05 G C=5X,B=65
IEKGC	USS	10	22	10.1	1859488	-373336	L 1	13907	L	250	FO	88082406	064300	002000	402 G C=153,B=37
IEKGC	USS	10	22	10.1	1859488	-373336	L 3	34127	L	249	FO	88082407	071500	015000	303 G C=138,B=47
USSBS	HD	177716	47	3.32	1903489	-274451	H 1	13277	L	883	FU	88052013	132700	002400	343 G E=166,C=140,B=42
CUJPS	MU	LYR	63	16	190545	+435614	L 3	33429	L		BO	88050211	115600	017400	03 G B=43
GCKBA	NGC	6752	83	14.1	1906239	-600359	L 3	34489	L	402	FO	88101622	221400	030000	505 G C=228,B=67
GCKBA	NGC	6752	83	14.1	1906239	-600359	L 1	14260	L	405	FO	88101703	032200	009000	503 G C=232,B=50
KC091	A31NGC6752	47	11.30	1906468	-600452	E 9	02131	2		124	FO	88102513	133500	016000	U FES FOR LWP 14312
OD50Y	NGC 6752	A31	47	10.8	1906468	-600452	L 1	14317	L	135	FO	88102621	214500	042300	X09 G C=2X,B=162
KC091	A31NGC6752	47	11.25	1906468	-600452	E 9	02132	2		130	FO	88102613	133300	016000	U FES FOR LWP 14317
KC091	NGC 6752	A31	47	10.8	1906469	-600452	L 1	14312	L	124	FO	88102522	222000	083000	X09 G C=2.5X,B=152
KC091	NGC 6752	A31	47	10.8	1906469	-600452	L 1	14312	S	124	FO	88102522	222100	083000	X09 G C=2.5X,B=152
KC056	HD179094	47	06.55	1907151	+522042	H 1	13852	L		8373	FO	88081515	151103	003000	253 U
KC056	HD179094	47	06.50	1907151	+522041	L 3	34089	L		8763	FO	88081515	154715	002800	230 U
KC056	HD179094	47	06.46	1907151	+522042	H 1	13853	L		9047	FO	88081516	162450	012000	473 U
JA114	HD 179218	34	07.77	1908554	+154215	H 1	12989	L		2891	FO	88040508	081632	003200	402 U

PRO	Object	CL	MAG	R.A.	DEC	D C Image A	FES	MD	Obs.date	Exptim	mmmsstt	ECC	Comment		

DCKNE	HD	179494	53	8.4	1910174	+032819	L 1	14113	L	1114	FO	88092209	093400	004000	G C=195,B=104
CCJTS	HD	180777	31	5.1	1911012	+762842	L 3	33607	L	19188	FO	88052218	183700	002100	?33 G E=100,C=20X,B=49
CBKBH	HD	179821	40	7.9	1911248	+000218	L 1	13811	L	1909	FO	88080816	163600	000800	202 G C=46,B=35
KA200	IRAS	19127	70	13.79	1912458	+171727	L 3	33939	L	54	SO	88071820	200254	020000	111 U EXPOSURE IN TWO PART
KCT00	CASE	186	64	11.46	1913150	+171947	L 1	13697	L	108	FO	88071821	211250	002000	110 U PREAD
NPJTB	IC	4846	70	12.5	1913448	-090805	L 1	13130	L	135	SO	88042717	174100	008000	406 G C=195,B=73
NPJTB	IC	4846	70	12.5	1913448	-090805	L 3	33381	L	136	SO	88042719	191000	006000	333 G E=114,C=97,B=48
PRJCG	HD	180968	26	5.3	1915366	+225603	H 3	33247	L	14815	FO	88041023	232100	000630	502 G C=205,B=36
PRKCG	HD	180968	26	5.3	1915366	+225603	H 3	33637	L	15135	FO	88052515	154200	000630	502 G C=210,B=38
JI086	BF	CYGNI	57	11.50	1921550	+293434	L 3	33578	L	418	SO	88052002	024811	001000	360 U
JI086	BF	CYGNI	57	11.50	1921550	+293434	L 1	13275	L	104	FO	88052003	030724	003000	671 U
JI086	BF	CYGNI	57	11.52	1921550	+293434	L 3	33579	L	102	FO	88052003	034732	003000	370 U
JI086	BF	CYGNI	57	11.46	1921550	+293434	L 1	13276	L	431	SO	88052004	042839	001000	551 U
JI086	BF	CYGNI	57	11.50	1921550	+293434	H 3	33580	L	104	FO	88052005	050623	010000	162 U
JI030	HD	182917	57	07.31	1923142	+500831	L 3	33493	L	4344	FO	88050823	235702	016500	362 U
JI030	HD	182917	57	07.31	1923142	+500831	L 1	13190	L	4348	FO	88050902	025605	002000	162 U
JI030	HD	182917	57	07.31	1923142	+500831	L 3	33494	L	4353	FO	88050903	033414	019500	363 U STAR @ 52,-79(JET 08
CNJSS	NOVAUUL1	55	13	1924034	+271554	L 3	33803	L		B0	88062305	054500	042300	308 G C=120,B=93	
JE187	T	1924-416	82	15.00	1924292	-414038	L 1	13306	L	B0	88052402	024515	024200	405 U	
JE187	T	1924-416	82	15.00	1924292	-414038	L 3	33634	L	B0	88052423	235421	041300	554 U	
KE124	TOL	1924-41	88	14.00	1924293	-414039	L 3	34494	L	B0	88101914	143822	037000	451 U	
CGKEB	HD	183344	53	6.6	1926399	-070853	H 1	13360	L	4239	FO	88060505	054000	043000	409 G C=215,B=105
LDKDB	HD	185144	46	4.7	1932276	+693434	L 1	13412	L	22492	FO	88061214	143700	000230	X02 G C=1.5X,B=36
NBKWF	M1-92	70	12.2	1934200	+292605	L 3	33677	L	240	SO	88053008	085000	050000	308 G C=145,B=100	
DAJH	1936+327	37	13.5	1936339	+324629	L 3	33196	L	48	SO	88040116	162900	001200	400 G C=125,B=18	
CSJAB	HD	186791	47	2.72	1943528	+102923	H 1	12963	L	1584	FU	88040117	172300	001000	352 G E=213,C=75,B=40
KC193	HD	187076	49	03.97	1945094	+182435	H 3	34629	L	743	FU	88102918	180515	005000	551 U
KC193	HD	187076	49	09.25	1945094	+182435	H 1	14339	L	775	FO	88102919	190422	003000	771 U
CBKBH	HD	187183	66	9.5	1945480	+091100	L 1	13801	L	418	FO	88080802	020600	002500	542 G E=162,C=220,B=35
CBKBH	HD	187183	66	9.5	1945480	+091100	L 1	13802	L	327	FO	88080803	031200	002500	432 G E=124,C=170,B=38
CBKBH	HD	187183	66	9.5	1945480	+091100	L 1	13803	L	285	FO	88080804	044300	002800	532 G E=127,C=195,B=37
CBKBH	HD	187183	66	9.5	1945480	+091100	L 1	13804	L	447	FO	88080805	055600	002000	442 G E=142,C=180,B=38
CBKBH	HD	187183	66	9.5	1945480	+091100	L 1	13805	L	601	FO	88080807	072100	001800	432 G E=117,C=177,B=35
CBKBH	HD	187183	66	9.5	1945480	+091100	L 1	13806	L	480	FO	88080808	081800	002000	432 G E=134,C=168,B=38
CBKBH	HD	187183	66	9.5	1945480	+091100	L 1	13807	L	359	FO	88080809	092900	002500	432 G E=116,C=150,B=39
CBKBH	HD	187183	66	9.5	1945480	+091100	L 1	13808	L	308	FO	88080810	103800	003000	543 G E=148,C=195,B=41
CBKBH	HD	187183	66	9.5	1945480	+091100	L 1	13809	L	468	FO	88080811	115100	003500	X44 G E=195,C=1.5X,B=59
CBKBH	HD	187183	66	9.5	1945480	+091100	L 1	14137	L	469	FO	88093006	064300	002000	552 G E=188,C=220,B=36
CBKBH	HD	187183	66	9.5	1945480	+091100	L 1	14138	L	359	FO	88093008	081300	002000	433 G E=130,C=164,B=42
CBKBH	HD	187183	66	9.5	1945480	+091100	L 1	14139	L	193	FO	88093009	091400	002800	436 G E=144,C=172,B=72
BEKTS	HD	187567	26	6.5	1947519	+074630	H 1	14025	L	7816	FO	88091007	074400	000400	403 G C=157,B=41
BEKTS	HD	187567	26	6.5	1947519	+074630	H 3	34215	L	7909	FO	88091007	075500	001430	503 G C=221,B=41
CCJTS	HD	187642	31	0.2	1948206	+084406	L 3	33604	L	8572	FU	88052215	152500	000200	330 G E=74,C=90X,B=18
CBKBH	HD	187885	40	8.7	1950006	-170937	L 1	14134	L	874	FO	88093000	000700	002500	502 G C=225,B=39
CBKBH	HD	187885	40	8.7	1950006	-170937	L 3	34355	L	837	FO	88093000	004100	012000	303 G C=134,B=43

PRO	Object	CL	MAG	R.A.	DEC	D C	Image	A	FES	MD	Obs.date	Exptim	mmmsstt	ECC	Comment	
CBKDH	HD	187885	40	8.7	1950006	-170937	L	1	14135	L	844	FO	88093001	015100	002500	X02 G C=1.5X,B=38
IGJTS	HD	188037	39	7.76	1950205	+221926	L	1	13185	L	5035	FO	88050815	155400	000330	402 G C=162,B=35
IGJTS	HD	188037	39	7.76	1950205	+221926	L	3	33489	L	5029	FO	88050816	160500	001530	500 G C=174,B=17
IGJTS	HD	188037	39	7.76	1950205	+221926	L	1	13186	L	5013	FO	88050816	164000	001800	X03 G C=5X,B=50
CUJPS	EY	CYG	54	15.0	1952403	+321308	L	3	33428	L		BO	88050207	075700	018000	323 G E=63,C=85,B=44
KI110	V1016	CYG	57	11.18	1955199	+394130	L	3	33783	L	138	FO	88061921	212957	000600	270 U
KI110	V1016	CYG	57	11.18	1955199	+394130	L	1	13462	L	139	FO	88061922	220518	000230	360 U
KI110	V1016	CYG	57	11.22	1955199	+394130	H	3	33784	L	134	FO	88061922	223706	001800	250 U
KI110	V1016	CYG	57	11.23	1955199	+394130	H	1	13463	L	133	FO	88061923	230924	001800	251 U
KI110	V1016	CYG	57	11.19	1955199	+394130	H	3	33785	L	137	FO	88061923	234025	005000	270 U
KI110	V1016	CYG	57	11.18	1955199	+394130	L	1	13464	L	138	FO	88062000	004200	002500	581 U
KI110	V1016	CYG	57	11.18	1955199	+394130	H	3	33786	L	138	FO	88062001	011503	021200	372 U
OD44Y	PSR	1957	62	20.3	1957249	+203959	L	1	13995	L		BO	88090400	001200	004500	03 G B=44
OD44Y	PSR	1957	62	20.3	1957249	+203959	H	9	02100	2			88090400	004400	000240	G
OD44Y	PSR	1957	62	20.3	1957249	+203959	L	3	34181	L		BO	88090401	010400	034500	05 G B=62
CSKJE	HD	189124	49	5.1	1957326	-593052	L	1	13227	L	331	FU	88051418	185500	000400	353 G E=227,C=70,B=42
CSKJE	HD	189124	49	5.1	1957326	-593052	L	1	13322	L	318	FU	88052816	164500	000400	242 G E=186,C=52,B=38
CSKJE	HD	189124	49	5.1	1957326	-593052	L	1	13422	L	301	FU	88061318	185700	000400	342 G E=178,C=56,B=34
CSKHJ	HD	189124	49	5.1	1957326	-593052	H	1	13447	L	25843	FO	88061716	164000	004000	344 G E=185,C=95,B=60
CSKJE	HD	189124	49	5.1	1957326	-593052	L	1	13508	L	314	FU	88062715	150700	000400	352 G E=204,C=60,B=38
CSKJE	HD	189124	49	5.1	1957326	-593052	L	1	13591	L	340	FU	88070817	171100	000400	352 G E=195,C=67,B=35
CSKJE	HD	189124	49	5.1	1957326	-593052	L	1	13747	L	358	FU	88072714	141100	000300	344 G E=176,C=90,B=60
CSKJE	HD	189124	49	5.1	1957326	-593052	L	1	13859	L	337	FU	88081608	082500	000400	342 G E=154,C=58,B=36
CSKJE	HD	189124	49	5.1	1957326	-593052	L	1	13922	L	349	FU	88082612	122900	000400	352 G E=202,C=58,B=37
PHCAL	RR	TEL	63	11.0	2000199	-555159	L	1	13769	L	144	FO	88080111	115300	000200	3X2 G E=2X,C=79,B=39
PHCAL	RR	TEL	63	11.0	2000199	-555159	L	3	34004	L	148	FO	88080112	122800	000200	3X0 G E=2X,C=35,B=14
PHCAL	RR	TEL	63	11.0	2000199	-555159	H	1	13770	L	148	FO	88080112	123800	000200	3X6 G E=5X,C=120,B=73
PHCAL	RR	TEL	63	11.0	2000199	-555159	H	3	34005	L	149	FO	88080113	134200	000200	X7 G E=9X,B=81
PHCAL	RR	TEL	63	11.0	2000199	-555159	L	1	13771	L	148	FO	88080114	141600	000400	3X4 G E=8X,C=122,B=56
OD43Y	X	2001+25B	65	17.5	2000428	+250543	L	3	33477	L		BO	88050715	155500	006000	01 G B=27
OD43Y	X	2001+25A	65	17.5	2001014	+250857	L	3	33478	L		BO	88050717	173900	006000	03 G B=45
IGKJN	HD	190991	20	8.2	2004148	+395512	H	3	33778	L	1373	FO	88061911	115100	006000	303 G C=130,B=43
KS145	TEMPLE2	06	13.87	2004186	-302944	L	1	14328	L		50	SO	88102814	142206	005000	132 U
KS145	TEMPLE2	06	13.90	2004186	-302944	L	3	34618	L		49	SO	88102815	151754	003000	140 U
KS145	TEMPLE2	06	13.87	2004186	-302944	L	1	14329	L		50	SO	88102815	155307	014000	152 U PREAD
KS145	TEMPLE2	06	13.90	2004186	-302944	L	3	34619	L		49	SO	88102816	163027	003000	130 U SERENDIPITY DURING L
CUJPS	WZ	SGE	54	15.0	2005205	+173330	L	3	33419	L		BO	88050108	081200	018000	302 G C=90,B=34
CUJPS	WZ	SGE	54	15	2005205	+173330	L	1	13150	L		BO	88050111	112000	012000	304 G C=137,B=54
ALKGP	SW	CYG	66	9.3	2005236	+460915	L	3	33733	L	467	FO	88060917	170000	004000	402 G C=135,C=230,B=31
ALKGP	SW	CYG	66	9.3	2005236	+460915	L	1	13431	L	192	SO	88061513	134400	004500	343 G E=173,C=100,B=49
ALKGP	SW	CYG	66	9.3	2005236	+460915	L	3	33760	L	199	SO	88061514	143500	003500	202 G C=44,B=33
ALKGP	SW	CYG	66	9.3	2005236	+460915	L	1	13432	L	223	SO	88061515	151500	004500	444 G E=205,C=160,B=59
ALKGP	SW	CYG	66	9.3	2005236	+460915	L	1	13434	L	391	FO	88061519	194600	002500	X03 G C=2.5X,B=41
ALKGP	SW	CYG	66	9.3	2005236	+460915	L	3	33764	L	451	FO	88061520	201600	003400	502 G C=201,B=31
IGKJN	HD	191396	23	8.1	2006297	+375901	H	3	33777	L	1402	FO	88061909	091600	000000	404 G C=175,B=51

PRO	Object	CL	MAG	R.A.	DEC	D C	Image	A	FES	MD	Obs.date	Exptim	mmmsstt	ECC	Comment
USSBS HD	191692	25	3.2	2008435	-005815	H 1	14005	L	1253	FU	88090614	144700	000104	503 G	C=233,B=43
JC100 FG	SGE	41	09.71	2009430	+201054	L 1	13359	L	515	FO	88060502	025620	011000	502 U	
JC200 FG	SGE	41	09.58	2009430	+201054	L 1	13594	L	579	FO	88070821	211200	011000	503 U	
KI146 FG	SGE	41	09.59	2009430	+201054	L 1	14129	L	573	FO	88092621	211343	009700	552 U	
CMKCG HD	192518	60	5.2	2012112	+283232	L 3	33736	L	18263	FO	88061013	133100	000100	401 G	C=170,B=22
CMKCG HD	192518	60	5.2	2012112	+283232	L 1	13397	L	17902	FO	88061013	133600	000050	X02 G	C=4X,B=34
CMKCG HD	192518	60	5.2	2012112	+283232	H 3	33737	L	17839	FO	88061014	141200	008000	X04 G	C=1.5X,B=52
CMKCG HD	192518	60	5.2	2012112	+283232	H 1	13398	L	18467	FO	88061015	153900	001430	403 G	C=180,B=42
CMKCG HD	192518	60	5.2	2012112	+283232	H 3	33744	L	16769	FO	88061113	131800	006000	503 G	C=211,B=45
CMKCG HD	192518	60	5.2	2012112	+283232	H 1	13406	L	16477	FO	88061114	142500	003000	X04 G	C=1.5X,B=52
JA133 HD	192641	10	08.34	2012394	+363028	H 1	13157	L	1745	FO	88050203	034816	004500	443 U	
JA133 HD	192641	10	08.35	2012394	+363028	H 3	33427	L	1729	FO	88050204	045534	009700	342 U	
JA133 HD	192641	10	08.30	2012394	+363028	L 3	33426	L	1810	FO	88050204	041717	000230	450 U	
JA133 HD	192641	10	08.34	2012394	+363028	L 1	13158	S	1739	FO	88050205	055644	000120	442 U	
JA133 HD	192641	10	08.34	2012394	+363028	L 1	13158	L	1739	FO	88050205	055023	000215	882 U	
KA083 HD	192641	10	08.35	2012394	+363028	L 3	34066	L	1724	FO	88081000	003248	000245	550 U	PREAD
KA083 HD	192641	10	08.35	2012394	+363028	L 1	13819	L	1724	FO	88081000	004337	000045	550 U	PREAD
KA083 HD	192641	10	08.23	2012394	+363028	H 3	34474	L	1921	FO	88101416	161928	018000	451 U	
KA083 HD	192641	10	08.31	2012394	+363028	H 1	14226	L	1790	FO	88101419	193055	006000	444 U	
KA083 HD	192641	10	08.17	2012394	+363028	L 3	34475	L	2027	FO	88101420	204058	000235	450 U	PREAD
JA182 NGC	6891	70	11.31	2012480	+123254	H 3	33503	L	492	SO	88051023	235122	020000	342 U	
JA182 NGC	6543	70	09.28	2012480	+123254	H 3	33504	L	755	FO	88051104	040247	016500	452 U	
JA182 NGC	6891	70	11.29	2012480	+123254	H 3	33511	L	125	FO	88051200	000629	018000	341 U	
ALKGP UV	CYG	66	9.7	2013160	+342133	L 3	33702	L	200	FO	88061918	185600	006000	401 G	C=133,B=27
OD33Y	22 UUL	39	5.2	2013204	+232116	H 1	13313	L	15488	FO	88052619	194900	005000	453 G	E=254,C=196,B=50
OD33Y	22 UUL	39	5.2	2013204	+232116	H 3	33648	L	15909	FO	88052620	204400	012500	404 G	C=185,B=55
UVKIA HD	192713	39	5.15	2013205	+232117	H 3	34443	L	17152	FO	88100907	072300	009000	303 G	C=145,B=46
KC129 HD	332077	50	09.37	2015112	+312356	L 3	33854	L	696	FO	88070320	200627	012000	100 U	
JA066 P	CYG	23	05.11	2015565	+375236	H 3	33706	L	23949	FO	88060501	015021	003000	560 U	
JA066 HD	193237	23	05.25	2015565	+375236	H 3	33880	L	22016	FO	88070819	192445	003000	560 U	
JA066 HD	193237	23	05.24	2015565	+375236	H 1	13593	L	22139	FO	88070820	200215	000400	562 U	
CMKRS P	CYG	23	5.23	2015570	+375236	L 3	34168	L	26787	FO	88090201	014100	005000	300 G	C=43,B=16
CMKRS P	CYG	23	5.23	2015570	+375236	L 3	34169	L	24100	FO	88090203	030100	000005	300 G	C=63,B=20
JA133 HD	193793	10	07.28	2018466	+434142	H 1	13155	L	4458	FO	88050200	002513	003500	553 U	
JA133 HD	193793	10	07.28	2018466	+434142	L 3	33424	L	4449	FO	88050200	002023	000120	450 U	
JA133 HD	193793	10	07.29	2018466	+434142	L 1	13156	S	4430	FO	88050202	021747	000045	552 U	
JA133 HD	193793	10	07.29	2018466	+434142	L 1	13156	L	4430	FO	88050202	021220	000115	882 U	
JA133 HD	193793	10	07.29	2018467	+434143	H 3	33425	L	4442	FO	88050201	010619	012000	453 U	
KA083 HD	193793	10	07.32	2018467	+434143	H 1	13817	L	4320	FO	88080918	180442	005000	702 U	
KA083 HD	193793	10	07.28	2018467	+434143	H 3	34064	L	4486	FO	88080919	190916	019500	761 U	
KA083 HD	193793	10	07.30	2018467	+434143	L 3	34065	L	4409	FO	88080923	230213	000125	450 U	
KA083 HD	193793	10	07.24	2018467	+434143	L 1	13818	S	4641	FO	88080923	231932	000045	500 U	
KA083 HD	193793	10	07.24	2018467	+434143	L 1	13818	L	4641	FO	88080923	231151	000115	800 U	
KI209 PU	UUL	57	09.88	2019011	+212443	L 3	33930	L	442	FO	88071622	225329	001000	340 U	
NCKSK PU	UUL	57	9.0	2019011	+212443	L 1	13530	L	443	FO	88062918	182700	003000	X01 G	C=3X,B=24

PRO	Object	CL	MAG	R.A.	DEC	D C	Image	A	FES	MD	Obs.date	Exptim	mmmsstt	ECC	Comment
KI209	PU UUL	57	09.89	2019011	+212443	L 1	13669	L	437	FO	88071623	232711	000500	561	0
NCKSK	PU UUL	57	9.0	2019011	+212443	L 3	33833	L	440	FU	88062919	190600	008500	X02	G C=5X,B=36
NCKSK	PU UUL	57	9.0	2019011	+212443	L 1	13531	L	448	FO	88062920	203700	001000	X02	G C=1.5X,B=36
NCKSK	PU UUL	57	9.0	2019011	+212443	L 1	14173	L	426	FO	88100306	060800	000500	502	G C=226,B=33
NCKSK	PU UUL	57	9.0	2019011	+212443	L 3	34405	L	428	FO	88100306	062300	001000	340	G E=144,C=78,B=17
NCKSK	PU UUL	57	9.0	2019011	+212443	L 1	14174	L	489	FO	88100307	070300	000400	5X2	G E=1.5X,C=193,B=35
NCKSK	PU UUL	57	9.0	2019011	+212443	L 3	34406	L	419	FO	88100307	073900	002000	450	G E=213,C=120,B=18
NCKSK	PU UUL	57	9.0	2019011	+212443	L 3	34407	L	410	FO	88100308	083500	001500	350	G E=193,C=110,B=18
LDJDB	HD 193901	41	8.6	2020388	-213105	L 1	12976	L	900	FO	88040315	153900	001500	03	G B=42
LDJDB	HD 193901	41	8.6	2020388	-213105	L 1	12976	S	900	FO	88040315	154700	000500	503	G C=231,B=46
CNJSS	NOVAUUL2	55	12.5	2024405	+274040	L 1	13484	L	29	SO	88062105	055300	010000	334	G E=98,C=75,B=51
CNJSS	NOVAUUL2	55	12.5	2024405	+274040	L 3	33794	L	27	SO	88062107	074500	030300	337	G E=163,C=107,B=85
USSBS	HD 196171	47	3.10	2034036	-472759	H 1	13105	L	1049	FU	88042220	200000	002200	X43	G E=160,C=1.5X,B=41
RUKEB	U UUL	52	8.7	2034241	+262545	L 1	13382	L	1018	FO	88060716	161500	004000	443	G E=148,C=166,B=43
RUKEB	U UUL	52	8.7	2034241	+262545	L 1	13476	L	1055	FO	88062015	150400	005000	439	G E=194,C=208,B=107
RUKEB	U UUL	52	8.7	2034241	+262545	L 1	13551	L	973	FO	88070213	133000	004500	X09	G C=1.5X,B=120
RUKEB	U UUL	52	8.7	2034241	+262545	L 1	13702	L	987	FO	88072013	135300	004000	339	G E=194,C=210,B=115
RUKEB	U UUL	52	8.7	2034241	+262545	L 1	13791	L	545	FO	88080511	111100	001500	232	G E=76,C=56,B=37
RUKEB	U UUL	52	8.7	2034241	+262545	L 1	13792	L	527	FO	88080512	120400	006000	339	G E=219,C=174,B=126
RUKEB	U UUL	52	8.7	2034289	+262453	L 1	13339	L	368	FO	88053115	153200	004000	333	G E=115,C=68,B=42
RUKEB	U UUL	52	8.7	2034289	+262453	L 1	13420	L	1125	FO	88061316	161600	003000	332	G E=129,C=138,B=39
RUKEB	U UUL	52	8.7	2034289	+262453	L 1	13501	L	893	FO	88062515	151900	006000	446	G E=201,C=210,B=75
RUKEB	U UUL	52	8.7	2034289	+262453	L 1	13588	L	997	FO	88070813	132800	002000	402	G C=156,B=40
RUKEB	U UUL	52	8.7	2034289	+262453	L 1	13589	L	958	FO	88070814	142800	002000	405	G C=175,B=61
RUKEB	U UUL	52	8.7	2034289	+262453	L 1	13660	L	1059	FO	88071612	124200	003000	403	G C=170,B=45
RUKEB	U UUL	52	8.7	2034289	+262453	L 1	13661	L	1020	FO	88071613	134700	004500	X06	G C=1.5X,B=71
RUKEB	U UUL	52	8.7	2034289	+262453	L 1	13740	L	849	FO	88072517	173800	004000	333	G E=126,C=90,B=41
RUKEB	U UUL	52	8.7	2034289	+262453	H 1	13878	L	1060	FO	88081923	230500	027200	306	G C=123,B=78
CSKHJ	HD 196610	49	6.3	2035378	+180530	L 1	13444	L	19826	FO	88061713	131300	004000	303	G 5.0X,C=133,B=42
XBKJB	AE AQR	66	11.7	2037340	-010256	L 1	13344	L	107	FO	88060210	103100	002733	355	G E=244,C=100,B=65
XBKJB	AE AQR	66	11.7	2037340	-010256	L 3	33691	L	300	SO	88060211	114400	006000	341	G E=170,C=50,B=28
XBKJB	AE AQR	66	11.7	2037340	-010256	L 1	13345	L	375	SO	88060212	122200	001330	352	G E=228,C=68,B=35
XBKJB	AE AQR	66	11.7	2037340	-010256	L 3	33692	L	377	SO	88060213	135000	006000	341	G E=160,C=54,B=28
XBKJB	AE AQR	66	11.7	2037340	-010256	L 3	33693	L	391	SO	88060215	153200	006000	353	G E=230,C=65,B=41
XBKJB	AE AQR	66	11.7	2037340	-010256	H 1	13346	L	119	FO	88060217	170500	005000	334	G E=109,C=100,B=55
XBKJB	AE AQR	65	11.7	2037340	-010256	L 1	13348	L	102	FO	88060305	054900	000900	202	G C=52,B=35
XBKJB	AE AQR	54	11.45	2037342	-010256	L 3	33694	L	437	SO	88060221	213038	003439	112	0 63 ONE DIR. TRAILS W
XBKJB	UNKNOWN	65	11.2	2037344	-010255	L 3	33695	L	128	FO	88060306	061900	002500	01	G B=23
XBKJB	AE AQR	66	11.7	2037344	-010255	L 3	33696	L	346	SO	88060308	080400	005000	352	G E=222,C=76,B=33
XBKJB	AE AQR	66	11.7	2037344	-010255	L 3	33697	L	353	SO	88060309	093000	005000	232	G E=114,C=49,B=33
XBKJB	AE AQR	66	11.7	2037344	-010255	L 3	33698	L	255	SO	88060316	164000	003300	35	G E=102,B=64
PHCAL	HD 197637	21	6.8	2038018	+791515	L 3	33360	L	4613	FO	88042522	223200	000008	500	G C=190,B=20
PHCAL	HD 197637	21	6.8	2038018	+791515	H 1	13126	L	4619	FO	88042522	224300	000800	503	G C=212,B=47
PHCAL	HD 197637	21	6.8	2038018	+791515	H 3	33361	L	4792	FO	88042523	231500	001300	502	G C=205,B=40
PHCAL	HD 197637	21	6.8	2038018	+791515	L 1	13127	L	4954	FO	88042523	234800	000007	502	G C=220,B=35

PRO	Object	CL	MAG	R.A.	DEC	D C	Image	A	FES	MD	Obs.date	Exptim	mmmsstt	ECC	Comment	
WUKEG	UV	CEP	66	7.9	2038029	+752458	L	3	33921	L	2782	FO	88071503	034200	008000	232 G E=73,C=55,B=35
WUKEG	UV	CEP	66	7.9	2038029	+752458	L	1	13646	L	2007	FO	88071505	051100	000530	452 G E=197,C=160,B=35
WUKEG	UV	CEP	66	7.9	2038029	+752458	L	3	33922	L	2336	FO	88071505	054800	007500	232 G E=71,C=46,B=35
WUKEG	UV	CEP	66	7.9	2038029	+752458	L	1	13647	L	2715	FO	88071507	071100	000530	552 G E=224,C=220,B=34
WUKEG	UV	CEP	66	7.9	2038029	+752458	L	3	33923	L	2515	FO	88071507	074700	008000	232 G E=70,C=48,B=38
WUKEG	UV	CEP	66	7.9	2038029	+752458	H	1	13648	L	2457	FO	88071509	091500	012000	334 G E=141,C=120,B=59
WUKEG	UV	CEP	66	7.9	2038029	+752458	L	3	33924	L	2415	FO	88071511	112300	008000	232 G E=70,C=50,B=38
WUKEG	UV	CEP	66	7.9	2038029	+752458	L	1	13649	L	2437	FO	88071512	125100	000530	552 G E=242,C=221,B=35
WUKEG	UV	CEP	66	7.9	2038029	+752458	L	3	33925	L	2563	FO	88071513	132200	006500	236 G E=108,C=95,B=78
WUKEG	UV	CEP	66	7.9	2038029	+752458	L	1	13650	L	2497	FO	88071513	135800	000530	X53 G E=245,C=1.5X,B=41
WUKEG	UV	CEP	66	7.9	2038029	+752458	L	1	13651	L	2029	FO	88071515	150500	000500	453 G E=226,C=194,B=48
WUKEG	UV	CEP	66	7.9	2038029	+752458	L	3	33926	L	2154	FO	88071515	154400	008900	236 G E=129,C=96,B=79
WUKEG	UV	CEP	66	7.9	2038029	+752458	L	1	13652	L	2539	FO	88071516	164500	000500	552 G E=238,C=240,B=37
WUKEG	UV	CEP	66	7.9	2038029	+752458	L	1	13653	L	2348	FO	88071517	174700	000530	552 G E=227,C=230,B=35
WUKEG	UV	CEP	66	7.9	2038029	+752458	L	1	13654	L	1937	FO	88071518	183600	000530	552 G E=227,C=191,B=37
KC014	UV	CEP	44	07.92	2038065	+752520	H	1	13822	L	2528	FO	88081018	180614	009000	332 U
KC014	UV	CEP	44	07.84	2038065	+752520	H	1	13823	L	2714	FO	88081020	202120	009000	332 U
KC014	UV	CEP	44	08.23	2038065	+752520	H	1	13824	L	1927	FO	88081022	222541	010000	332 U
J1097	HR	DEL	55	12.69	2040038	+185848	L	3	33397	L	144	SO	88042902	020912	002500	540 U
J1097	HR	DEL	55	12.64	2040038	+185848	L	1	13136	L	150	SO	88042902	024156	001200	501 U
J1097	HR	DEL	55	12.52	2040038	+185848	L	3	33398	L	167	SO	88042903	031150	002500	501 U
J1097	HR	DEL	55	12.61	2040038	+185848	L	3	33399	L	154	SO	88042904	041100	002500	550 U
J1097	HR	DEL	55	12.64	2040038	+185848	L	3	33400	L	151	SO	88042905	051045	002000	550 U
J1097	HR	DEL	55	12.74	2040038	+185848	L	3	33401	L	138	SO	88042906	060748	002000	540 U
J1097	HR	DEL	55	12.73	2040038	+185848	L	3	33402	L	139	SO	88042907	070336	002000	440 U
J1097	HR	DEL	55	12.61	2040038	+185848	L	3	33403	L	154	SO	88042908	080042	002000	440 U
J1097	HR	DEL	55	12.61	2040038	+185848	L	1	13137	L	154	SO	88042908	082451	002300	702 U PREAD
H CJTA	ER	DEL	50	10.0	2040201	+082819	L	3	33715	L	262	FO	88060610	105700	024000	334 G E=158,C=105,B=59
H CJTA	ER	DEL	50	10.0	2040202	+083008	L	1	13375	L	252	FO	88060609	095200	006000	303 G C=97,B=45
USSBS	HD	197051	31	3.42	2040283	-662305	H	1	13293	L	833	FU	88052121	214500	000306	502 G C=236,B=40
USSBS	HD	197051	31	3.42	2040283	-662305	H	3	33599	L	830	FU	88052121	215600	000812	502 G C=211,B=37
USSBS	HD	197051	33	3.4	2040284	-662305	H	3	34063	L	843	FU	88080915	153900	002500	X05 G C=3X,B=70
KQ085	MKS09		84	13.92	2041261	-105417	L	1	14218	L	48	SO	88101316	164047	002500	452 U
DPKDM	BD	+35 4258	20	9.4	2044140	+352136	L	1	13968	L	439	FO	88083114	140000	000230	502 G C=226,B=35
DPKDM	BD	+35 4258	20	9.4	2044140	+352136	L	3	34160	L	562	FO	88083114	142700	000220	400 G C=168,B=18
CBJMP	HD	198287	66	7.4	2046060	+390600	L	1	13159	L	2425	FO	88050215	152300	002500	X03 G C=2.X,B=41
CBJMP	HD	198287	66	7.4	2046060	+390600	L	3	33430	L	2412	FO	88050215	155400	006000	431 G E=116,C=150,B=30
CBJMP	HD	198287	66	7.4	2046060	+390600	L	1	13160	L	2311	FO	88050217	170100	001000	X02 G C=1.2X,B=38
BEKTS	HD	198625	26	6.3	2048131	+462826	H	1	14026	L	7128	FO	88091009	090600	000525	403 G C=165,B=41
BEKTS	HD	198625	26	6.3	2048131	+462826	H	3	34216	L	7506	FO	88091009	091900	001930	503 G C=230,B=43
J1007	HBV	475	57	12.42	2049026	+352337	L	3	33348	L	183	SO	88042402	020536	002500	250 U
J1007	HBV	475	57	12.44	2049026	+352337	L	1	13116	L	180	SO	88042402	024122	002000	342 U
J1007	HBV	475	57	12.40	2049026	+352337	L	3	33349	L	185	SO	88042403	031449	008000	351 U
J1007	HBV	475	57	12.46	2049026	+352337	L	1	13117	L	176	SO	88042404	044327	006500	452 U
J1007	HBV	475	57	12.43	2049026	+352337	H	3	33350	L	182	SO	88042406	060005	016700	141 U

PRO	Object	CL	MAG	R.A.	DEC	D C	Image	A	FES	MD	Obs.date	Exptim	mmmsstt	ECC	Comment
JI007	HBV 475	57	12.42	2049026	+352337	L 3	33353	L	184	SO	88042502	022219	017000	371	V
JI007	HBV 475	57	12.41	2049026	+352337	H 1	13121	L	185	SO	88042505	052138	020600	331	V
KI045	HBV 475	57	12.58	2049026	+352337	L 3	33674	L	159	SO	88053000	003039	002500	150	V
KI045	HBV 475	57	12.61	2049026	+352337	L 1	13336	L	154	SO	88053001	010838	002500	352	V
KI045	HBV 475	57	12.59	2049026	+352337	L 3	33675	L	157	SO	88053001	014450	007000	350	V
KI045	HBV 475	57	12.62	2049026	+352337	L 1	13337	L	153	SO	88053003	030557	006500	362	V
KI045	HBV 475	57	12.61	2049026	+352337	H 3	33676	L	154	SO	88053004	042326	008500	131	V
KI025	HBV475	57	13.00	2049026	+352337	L 3	34313	L	109	SO	88092517	175926	004000	250	V
KI025	HBV475	57	13.02	2049026	+352337	L 1	14125	L	107	SO	88092518	184735	004000	350	V
KI025	HBV475	57	12.98	2049026	+352337	H 3	34314	L	111	SO	88092519	193643	019000	031	V
BEKGP	HD 200120	26	4.6	2058073	+471929	H 3	33734	L	24536	FO	88060918	182700	000130	502	G C=210,B=38
BEKGP	HD 200120	26	4.60	2058073	+471929	L 3	33761	L	24094	FO	88061516	164600	000001	500	G C=214,B=15
BEKGP	HD 200120	26	4.60	2058073	+471929	L 1	13433	L	23989	FO	88061516	165000	000000	402	G C=143,B=35
BEKGP	HD 200120	26	4.60	2058073	+471929	H 3	33762	L	24344	FO	88061517	172200	000130	502	G C=230,B=38
PRJCG	HD 200120	26	4.5	2058074	+471930	H 3	33248	L	25096	FO	88041100	000500	000130	502	G C=210,B=39
PRJCG	HD 200120	26	4.5	2058074	+471930	H 3	33506	L	24935	FO	88051116	163500	000130	503	G C=215,B=49
PRKCG	HD 200120	26	4.5	2058074	+471930	H 3	34208	L		FU	88090909	093800	000130	503	G C=230,B=41
NPJTB	NGC 7008	71	12.2	2059063	+542109	L 3	33405	L		BO	88042918	183700	033600	238	G E=164,C=112,B=95
CCKTA	HD 201091	46	5.2	2104515	+383143	L 1	14269	L	16850	FO	88101810	101100	000430	342	G E=155,C=98,B=33
CCKTA	HD 201091	46	5.2	2104515	+383143	L 1	14270	L	19314	FO	88101811	110500	002230	???	G E=4,C=3,B=38
CCKTA	HD 201091	46	5.2	2104515	+383143	L 1	14271	L	17105	FO	88101812	121700	003200	???	G E=15,C=14,B=41
DPKDM	HD SKY	07	7.7	2105520	+331142	L 1	13967	L	2072	FO	88083111	115900	000040	404	G C=192,B=55
DPKDM	HD 201345	12	7.7	2105520	+331142	L 3	34159	L	2122	FO	88083112	122700	000040	500	G C=177,B=20
XSJRB	2107-097	84	14.3	2106281	-095228	L 3	33560	L	27	SO	88051807	075000	024000	334	G E=145,C=108,B=59
XSJRB	2107-097	84	14.3	2106281	-095228	L 1	13261	L		BO	88051811	115500	012000	335	G E=157,C=130,B=61
XSJRB	2107-097	84	14.3	2106281	-095228	L 3	33561	L		BO	88051814	140900	004600	222	G E=50,C=47,B=32
PHCAL	HD 201908	22	5.9	2106320	+775527	L 3	33358	L	10172	FO	88042520	200000	000008	400	G C=135,B=19
PHCAL	HD 201908	22	5.9	2106320	+775527	H 1	13124	L	10244	FO	88042520	200800	000800	504	G C=220,B=52
PHCAL	HD 201908	22	5.9	2106320	+775527	H 3	33359	L	11125	FO	88042520	204000	001600	503	G C=225,B=49
PHCAL	HD 201908	22	5.9	2106320	+775527	L 1	13125	L	10519	FO	88042521	211300	000007	502	G C=230,B=35
PHCAL	HD 201908	22	5.9	2106320	+775527	L 3	33362	L	10999	FO	88042600	004300	000013	500	G C=190,B=19
CVKPS	V1500CYG	55	16.0	2109530	+475642	L 3	33830	L		BO	88062905	054500	028000	205	G C=75,B=63
KC214	HD202560	48	07.09	2114200	-390342	H 1	13952	L	5261	FO	88082921	211020	003700	040	V
KI047	2115-3426	63	16.50	2115006	-342621	L 3	34426	L		BO	88100614	142628	020000	341	V PREAD
KI047	2115-3426	63	16.50	2115006	-342621	L 1	14188	L		BO	88100713	134117	018000	352	V
KA187	HD203064	14	05.23	2116351	+434405	H 3	34532	L	22335	FO	88102213	134840	000220	500	V
MLKJN	HD 203064	14	5.0	2116351	+434405	H 3	34523	L	19995	FO	88102205	053600	000250	X43	G E=180,C=1.5X,B=41
KA187	HD203064	14	05.19	2116351	+434405	H 3	34535	L	22897	FO	88102215	155839	000220	500	V
MLKJN	HD 203064	14	5.0	2116351	+434405	H 3	34526	L	23195	FO	88102208	082300	000220	543	G E=169,C=230,B=46
KA187	HD203064	14	05.39	2116351	+434405	H 3	34538	L	20194	FO	88102218	183409	000220	500	V
MLKJN	HD 203064	14	5.0	2116351	+434405	H 3	34529	L	19042	FO	88102210	105100	000220	543	G E=165,C=220,B=41
KA187	HD203064	14	05.15	2116351	+434405	H 3	34558	L	23389	FO	88102313	135438	000220	500	V
MLKJN	HD 203064	14	5.0	2116351	+434405	H 3	34541	L	20425	FO	88102221	211300	000220	502	G C=220,B=39
KA187	HD 203064	14	05.14	2116351	+434405	H 3	34561	L	23571	FO	88102316	161201	000220	500	V
MLKJN	HD 203064	14	5.0	2116351	+434405	H 3	34544	L	20135	FO	88102223	233600	000220	502	G C=220,B=39

PRO	Object	CL	MAG	R.A.	DEC	D C	Image	A	FES	MD	Obs.date	Exptim	mmmsstt	ECC	Comment
KA187	HD203064	14	05.17	2116351	+434405	H 3	34564	L	23092	FO	88102318	184411	000220	500	U
MLKJN	HD 203064	14	5.0	2116351	+434405	H 3	34547	L	20158	FO	88102301	015800	000220	502	G C=220,B=40
KA187	HD203064	14	05.27	2116351	+434405	H 3	34589	L	21811	FO	88102415	152337	000225	500	U
MLKJN	HD 203064	14	5.0	2116351	+434405	H 3	34550	L	20522	FO	88102304	042700	000220	542	G E=150,C=219,B=40
KA187	HD203064	14	-00.20	2116351	+434405	H 3	34592	L	23852	FO	88102419	190702	000225	500	U
MLKJN	HD 203064	14	5.0	2116351	+434405	H 3	34553	L	20761	FO	88102306	064800	000220	543	G E=159,C=219,B=41
MLKJN	HD 203064	14	5.0	2116351	+434405	H 3	34568	L	20194	FO	88102322	224500	000220	503	G C=221,B=41
MLKJN	HD 203064	14	5.0	2116351	+434405	H 3	34571	L	20064	FO	88102401	010600	000225	503	G C=230,B=41
MLKJN	HD 203064	14	5.0	2116351	+434405	H 3	34574	L	20160	FO	88102403	032000	000225	503	G C=230,B=41
MLKJN	HD 203064	14	5.0	2116351	+434405	H 3	34577	L	20954	FO	88102405	053900	000225	502	G C=226,B=40
MLKJN	HD 203064	14	5.0	2116351	+434405	H 3	34580	L	20148	FO	88102407	075900	000225	503	G C=227,B=43
MLKJN	HD 203064	14	5.0	2116351	+434405	H 3	34583	L	20421	FO	88102410	102200	000225	503	G C=225,B=41
MLKJN	HD 203064	14	5.0	2116351	+434405	H 3	34586	L	20188	FO	88102412	124500	000225	503	G C=225,B=41
MLKJN	HD 203064	14	5.0	2116351	+434405	H 3	34598	L	19897	FO	88102507	071700	000225	543	G E=166,C=226,B=41
CEKTS	HD 203338	39	5.7	2117526	+582438	L 3	33838	L	14323	FO	88063017	170600	000103	500	G C=205,B=20
CEKTS	HD 203338	39	5.7	2117526	+582438	L 1	13539	L	14308	FO	88063017	171200	000035	X02	G C=1.5X,B=36
PRJCG	HD 203467	26	5.4	2118201	+643934	H 3	33249	L	18273	FO	88041100	004000	000600	502	G C=205,B=40
PRKCG	HD 203467	26	5.4	2118201	+643934	H 3	33638	L	19239	FO	88052516	163400	000600	502	G C=210,B=39
PRKCG	HD 203467	26	5.4	2118201	+643934	H 3	34209	L	18178	FO	88090910	104300	001000	X04	G C=1.9X,B=54
BEKGP	HD 218674	26	6.74	2118201	+643934	L 3	34210	L	4843	FO	88090911	112600	000018	500	G C=188,B=13
BEKGP	HD 218674	26	6.74	2118201	+643934	L 1	14023	L	4844	FO	88090911	113700	000009	502	G C=213,B=38
SSKCM	HD 204536	21	6.9	2126041	+462035	H 3	34424	L	4591	FO	88100610	104100	002332	503	G C=220,B=43
KA001	PHL1580	23	12.72	2127359	-194002	E 9	02112	2	140	SO	88091415	154000	004000		U FES FOR SWP34252
HSKJN	PHL 1580	23	12.3	2127359	-194002	H 3	34252		140	SO	88091504	045200	081800	X09	G C=3X,B=160
KA001	PHL1580	23	12.70	2127359	-194002	L 3	34251	L	143	SO	88091416	160258	001000	500	U
SSKCM	HD 204860	21	6.9	2128086	+451627	H 3	34423	L	4563	FO	88100609	092400	004108	504	G C=240,B=51
SSKCM	HD 204860	21	6.9	2128086	+451627	H 3	34439	L	4538	FO	88100812	120500	004108	X03	G C=1.5X,B=50
NPKST	K 3-62	70		2130090	+522034	L 3	34074	L		BO	88081207	075500	018000	03	G B=48
SSKCM	HD 205601	22	6.8	2133126	+432846	H 3	34422	L	5004	FO	88100608	081700	002235	503	G C=228,B=43
SSKCM	HD 205601	22	6.8	2133126	+432846	H 3	34438	L	5166	FO	88100811	110800	002235	503	G C=231,B=46
CSKJE	HD 205730	49	5.5	2134082	+450900	L 1	13225	L	19502	FO	88051416	163400	001000	243	G E=161,C=56,B=41
CSKJE	HD 205730	49	5.5	2134082	+450900	L 1	13323	L	21815	FO	88052817	173300	001000	232	G E=118,C=55,B=40
CSKJE	HD 205730	49	5.5	2134082	+450900	L 1	13423	L			88061320	200400	001000	232	G E=109,C=54,B=35
CSKHJ	HD 205730	49	5.5	2134082	+450900	H 1	13439	L	22596	FO	88061613	135300	018000	39	G E=164,B=123
CSKJE	HD 205730	49	5.5	2134082	+450900	L 1	13509	L	23157	FO	88062716	160600	001000	343	G E=165,C=75,B=50
CSKJE	HD 205730	49	5.5	2134082	+450900	L 1	13592	L	23067	FO	88070818	183000	001000	342	G E=176,C=63,B=35
CSKJE	HD 205730	49	5.5	2134082	+450900	L 1	13750	L	23095	FO	88072718	182500	001000	242	G E=138,C=51,B=35
CSKJE	HD 205730	49	5.5	2134082	+450900	L 1	13861	L	23471	FO	88081610	102400	001000	233	G E=116,C=60,B=43
CSKJE	HD 205730	49	5.5	2134082	+450900	L 1	13923	L	22613	FO	88082613	133200	001000	233	G E=101,C=60,B=41
CSKJE	HD 205730	49	5.5	2134082	+450900	L 1	14204	L	20769	FO	88101011	110800	001000	232	G E=113,C=46,B=34
KA188	HD 205637	26	04.82	2134170	-194128	H 3	34356	L	348	FU	88093016	160020	000130	510	U
BUKGP	HD 205637	26	4.7	2134170	-194128	L 3	34365	L	371	FU	88093022	224500	000001	500	G C=225,B=18
KA188	HD205637	26	04.71	2134170	-194128	L 3	34357	L	384	FU	88093016	163727	00000050	410	U
BUKGP	HD 205637	26	4.7	2134170	-194128	L 1	14145	L	369	FU	88093022	224900	000001	502	G C=215,B=32
KA188	HD205637	26	04.71	2134170	-194128	L 1	14141	L	384	FU	88093016	164106	00000050	312	U

PRO	Object	CL	MAG	R.A.	DEC	D C	Image	A	FES	MD	Obs.date	Exptim	mmmmssstt	ECC	Comment
BUKGP	HD 205637	26	4.7	2134170	-194128	H 3	34367	L	363	FU	88100101	014200	000150	503 G	C=230,B=41
KA188	HD205637	26	04.82	2134170	-194128	H 3	34358	L	348	FU	88093017	173828	000200	510 V	
BUKGP	HD 205637	26	4.7	2134170	-194128	L 3	34368	L	365	FU	88100102	021500	000001	500 G	C=210,B=17
KA188	HD205637	26	04.81	2134170	-194128	L 3	34359	L	351	FU	88093018	181141	00000130	510 V	
BUKGP	HD 205637	26	4.7	2134170	-194128	L 1	14147	L	368	FU	88100102	022000	000001	502 G	C=200,B=32
KA188	HD 205637	26	04.81	2134170	-194128	L 1	14142	L	351	FU	88093018	181429	000011	511 V	
BUKGP	HD 205637	26	4.7	2134170	-194128	H 3	34369	L	371	FU	88100103	031400	000140	502 G	C=215,B=38
KA188	HD 205637	26	04.76	2134170	-194128	H 3	34360	L	365	FU	88093019	190905	000200	511 V	
BUKGP	HD 205637	26	4.7	2134170	-194128	L 3	34370	L	375	FU	88100103	034400	000001	500 G	C=190,B=18
KA188	HD205637	26	04.73	2134170	-194128	L 3	34361	L	377	FU	88093019	193802	00000130	510 V	
BUKGP	HD 205637	26	4.7	2134170	-194128	L 1	14148	L	376	FU	88100103	034900	000001	402 G	C=182,B=32
KA188	HD205637	26	04.73	2134170	-194128	L 1	14143	L	377	FU	88093019	194015	000001	511 V	
BUKGP	HD 205637	26	4.7	2134170	-194128	H 3	34373	L	356	FU	88100106	064200	000140	502 G	C=200,B=37
KA188	HD205637	26	04.70	2134170	-194128	H 3	34362	L	386	FU	88093020	203117	000200	510 V	
BUKGP	HD 205637	26	4.7	2134170	-194128	L 3	34374	L	360	FU	88100107	071300	000001	500 G	C=198,B=17
KA188	HD205637	26	04.70	2134170	-194128	L 3	34363	L	387	FU	88093021	210256	000001	511 V	
BUKGP	HD 205637	26	4.7	2134170	-194128	L 1	14150	L	358	FU	88100107	071800	000001	402 G	C=183,B=33
KA188	HD205637	26	04.70	2134170	-194128	L 1	14144	L	387	FU	88093021	210521	000001	511 V	
BUKGP	HD 205637	26	4.7	2134170	-194128	H 3	34375	L	347	FU	88100108	081400	000140	502 G	C=207,B=37
KA188	HD205637	26	04.76	2134170	-194128	H 3	34364	L	368	FU	88093022	220315	000150	511 V	
BUKGP	HD 205637	26	4.7	2134170	-194128	L 3	34376	L	349	FU	88100108	084500	000001	500 G	C=206,B=17
KA188	HD205637	26	04.83	2134170	-194128	H 3	34378	L	27707	FO	88100114	145321	000140	500 V	
BUKGP	HD 205637	26	4.7	2134170	-194128	L 1	14151	L	351	FU	88100108	085100	000001	502 G	C=188,B=35
KA188	HD205637	26	04.80	2134170	-194128	L 3	34379	L	353	FU	88100115	154526	000001	500 V	
BUKGP	HD 205637	26	4.7	2134170	-194128	H 3	34377	L	353	FU	88100109	092900	000140	502 G	C=201,B=38
KA188	HD205637	26	99.99	2134170	-194128	L 1	14155	L			88100115	154806	000001	501 V	
BUKGP	HD 205637	26	4.7	2134170	-194128	H 3	34386	L	364	FU	88100121	214500	000140	502 G	C=210,B=38
KA188	HD205637	26	04.79	2134170	-194128	H 3	34380	L	356	FU	88100116	164950	000140	500 V	
BUKGP	HD 205637	26	4.7	2134170	-194128	L 3	34387	L	361	FU	88100122	221600	000001	500 G	C=205,B=18
KA188	HD205637	26	04.78	2134170	-194128	L 3	34381	L	359	FU	88100117	171914	000001	500 V	
BUKGP	HD 205637	26	4.7	2134170	-194128	L 1	14159	L	361	FU	88100122	222000	000001	502 G	C=195,B=32
KA188	HD 205637	26	04.78	2134170	-194128	L 1	14156	L	359	FU	88100117	172226	000001	401 V	
BUKGP	HD 205637	26	4.7	2134170	-194128	H 3	34388	L	361	FU	88100123	232400	000140	502 G	C=215,B=37
KA188	HD205637	26	04.78	2134170	-194128	L 3	34383	L	360	FU	88100118	184654	000001	500 V	
BUKGP	HD 205637	26	4.7	2134170	-194128	L 3	34389	L	366	FU	88100123	235400	000001	500 G	C=205,B=17
KA188	HD205637	26	04.77	2134170	-194128	H 3	34382	L	362	FU	88100118	181617	000140	500 V	
BUKGP	HD 205637	26	4.7	2134170	-194128	L 1	14160	L	365	FU	88100123	235900	000001	502 G	C=205,B=32
KA188	HD205637	26	04.78	2134170	-194128	L 1	14157	L	360	FU	88100118	185014	000001	301 V	
BUKGP	HD 205637	26	4.7	2134170	-194128	H 3	34390	L	391	FU	88100200	005400	000140	502 G	C=215,B=37
KA188	HD205637	26	04.80	2134170	-194128	H 3	34384	L	353	FU	88100119	194947	000140	500 V	
BUKGP	HD 205637	26	4.7	2134170	-194128	L 3	34391	L	363	FU	88100201	012500	000001	500 G	C=215,B=17
KA188	HD205637	26	04.80	2134170	-194128	L 3	34385	L	354	FU	88100120	202358	000001	500 V	
BUKGP	HD 205637	26	4.7	2134170	-194128	L 1	14161	L	362	FU	88100201	012900	000001	502 G	C=215,B=32
KA188	HD205637	26	04.80	2134170	-194128	L 1	14158	L	354	FU	88100120	202657	000001	501 V	
BUKGP	HD 205637	26	4.7	2134170	-194128	H 3	34392	L	365	FU	88100202	022300	000140	502 G	C=215,B=37

PRO	Object	CL	MAG	R.A.	DEC	D C Image A	FES	MD	Obs.date	Exptim	mmmsstt	ECC	Comment		
BUKGP	HD	205637	26	4.7	2134170	-194128	L 3	34393	L		88100202	025500	000001	G	
BUKGP	HD	205637	26	4.7	2134170	-194128	L 1	14162	L	370	FU	88100202	025900	000001	502 G C=194,B=32
BUKGP	HD	205637	26	4.7	2134170	-194128	H 3	34394	L	382	FU	88100203	035200	000140	502 G C=215,B=37
BUKGP	HD	205637	26	4.7	2134170	-194128	L 3	34395	L		88100204	042200	000001	G	
BUKGP	HD	205637	26	4.7	2134170	-194128	L 1	14163	L		88100204	042700	000001	G	
BUKGP	HD	205637	26	4.7	2134170	-194128	H 3	34398	L	357	FU	88100207	072700	000140	502 G C=195,B=38
BUKGP	HD	205637	26	4.7	2134170	-194128	L 3	34399	L	358	FU	88100207	075700	000001	500 G C=180,B=17
BUKGP	HD	205637	26	4.7	2134170	-194128	L 1	14165	L	351	FU	88100208	080200	000001	402 G C=181,B=34
BUKGP	HD	205637	26	4.7	2134170	-194128	H 3	34400	L	351	FU	88100208	083000	000140	502 G C=205,B=39
GCKBA	NGC	7099	83	15.1	2137300	-232459	L 3	34404	L	172	FO	88100222	222000	030000	406 G C=205,B=75
GCKBA	NGC	7099	83	15.1	2137300	-232459	L 1	14171			88100222	222200	012000	304 G C=90,B=52	
GCKBA	NGC	7099	83	15.1	2137300	-232459	L 1	14172	L	173	FO	88100303	032900	008000	502 G C=210,B=36
SSKCH	HD	206280	22	6.7	2137576	+441217	H 3	34421	L	5263	FO	88100606	060300	007538	X04 G C=2X,B=56
SSKCH	SS CYG	54		9.7	2140444	+432122	H 3	34435	L	412	FO	88100805	054600	015000	505 G C=237,B=67
SSKCH	HD	206774	22	5.6	2141216	+380315	H 3	34425	L	11637	FO	88100611	114500	004337	X05 G C=5X,B=62
SAKCV	HD	206936	49	3.99	2141584	+583259	L 1	13554	L	791	FU	88070312	122800	006000	4X9 G E=1.5X,C=215,B=104
KI119	CYG X-2	59		14.75	2142369	+380528	L 3	33748	L	23	SO	88061121	215130	041000	234 U
XBKSU	X	2142+380	59	14.6	2142369	+380528	L 3	33743	L		BO	88061105	055400	024000	234 G E=84,C=78,B=60
KI119	CYG X-2	59		14.90	2142369	+380528	L 3	33750	L		BO	88061221	215639	040200	334 U PREAD
XBKSU	X	2142+380	59	14.6	2142369	+380528	L 1	13405	L			88061109	095900	017000	305 G C=147,B=61
KI119	CYG X-2	59		14.70	2142369	+380528	L 3	33752	L	24	SO	88061321	212211	040500	343 U PREAD
XBKSU	X	2142+380	59	14.6	2142369	+380528	L 3	33749	L		BO	88061205	053300	024000	225 G E=63,C=78,B=61
XBKSU	X	2142+380	59	14.6	2142369	+380528	L 1	13410	L			88061209	094000	018000	305 G C=118,B=62
XBKSU	X	2142+380	59	14.6	2142369	+380528	L 9	02062	2			88061223	235400	000240	G
XBKSU	X	2142+380	59	14.6	2142369	+380528	L 3	33751	L		BO	88061305	054400	024000	334 G E=101,C=80,B=57
XBKSU	X	2142+380	59	14.6	2142369	+380528	L 1	13418	L		BO	88061309	095200	018000	334 G E=134,C=110,B=60
XBKSU	X	2142+380	59	14.6	2142369	+380528	L 1	13424	L		BO	88061405	052100	008000	333 G E=87,C=90,B=46
XBKSU	X	2142+380	59	14.6	2142369	+380528	L 3	33753	L			88061406	064900	036000	335 G E=149,C=111,B=64
XBKSU	X	2142+380	59	14.6	2142369	+380528	L 3	34411	L		BO	88100321	214400	018000	333 G E=92,C=83,B=41
XBKSU	X	2142+380	59	14.6	2142369	+380528	L 3	34412	L		BO	88100401	011100	021800	325 G E=80,C=85,B=62
XBKSU	X	2142+380	59	14.6	2142369	+380528	L 3	34416	L		BO	88100421	214200	020000	323 G E=60,C=75,B=41
XBKSU	X	2142+380	59	14.6	2142369	+380528	L 3	34417	L		BO	88100501	012900	020000	224 G E=58,C=73,B=54
XBKSU	X	2142+380	59	14.6	2142369	+380528	L 3	34428	L		BO	88100621	215000	042000	337 G E=132,C=118,B=83
XBKSU	X	2142+380	59	14.6	2142369	+380528	L 3	34433	L		BO	88100722	220400	020000	333 G E=69,C=73,B=46
XBKSU	X	2142+380	59	14.6	2142369	+380528	L 3	34434	L		BO	88100801	015200	017800	223 G E=58,C=58,B=49
LGTHJ	HD	207076	49	6.7	2143565	-022641	L 1	13376	L	15663	FO	88060615	152800	018000	355 G E=242,C=140,B=67
PHCAL	BD+28-4211	16		10.79	2148560	+283734	L 1	13370	L	196	FO	88060601	012441	000050	502 U
PHCAL	BD+28-4211	16		10.77	2148560	+283734	L 3	33712	L	199	FO	88060601	011925	000026	500 U
PHCAL	BD+28-4211	16		10.79	2148560	+283734	L 1	13371	L	196	FO	88060602	024300	000230	702 U
PHCAL	BD+28 4211	16		10.84	2148560	+283734	H 3	33766	L	188	FO	88061603	035311	004500	501 U
PHCAL	BD+28 4211	16		10.83	2148560	+283734	L 3	33897	L	190	FO	88071022	221258	000026	500 U PREAD
PHCAL	BD+28 4211	16		10.84	2148560	+283734	L 1	13612	L	187	FO	88071022	221659	000050	501 U
PHCAL	BD+28 4211	16		10.83	2148560	+283734	L 1	13613	L	189	FO	88071022	224843	000200	701 U PREAD
PHCAL	BD+28 4211	16		10.81	2148560	+283735	L 3	33920	S	192	FO	88071420	202913	000100	U
PHCAL	BD+28 4211	16		10.81	2148560	+283735	L 3	33920	L	192	FO	88071420	202458	000026	500 U

PRO	Object	CL	MAG	R.A.	DEC	D C Image A	FES	MD	Obs.date	Exptim	mmmsstt	ECC	Comment
PHCAL	BD+28 4211	16	10.81	2148560	+283735	L 1 13636 S	193	FO	88071420	204002	000200		U
PHCAL	BD+28 4211	16	10.81	2148560	+283735	L 1 13636 L	193	FO	88071420	203408	000050	501	U
PHCAL	BD+28 4211	16	10.82	2148560	+283734	L 1 13637 L	191	FO	88071421	214109	000200	701	U PREAD
PHCAL	BD+284211	16	10.81	2148560	+283735	L 3 34179 L	192	FO	88090318	184642	000026	500	U
PHCAL	BD +28 4211	16	10.5	2148573	+283733	L 1 14092 L	194	FO	88091908	083200	000050	502	G C=187,B=34
PHCAL	BD +28 4211	16	9.5	2148573	+283733	L 3 34271 L	195	FO	88091908	083700	000026	500	G C=195,B=18
PHCAL	BD +28 4211	16	9.5	2148573	+283733	H 9 02118 2			88091908	087100	000240		G
PHCAL	BD +28 4211	16	10.5	2148574	+283734	L 2 18204 L	257	FO	88050918	182400	000122	401	G C=166,B=27
PHCAL	BD +28 4211	16	10.5	2148574	+283734	H 3 33620 L	190	FO	88052320	200200	003500	403	G C=185,B=44
PHCAL	BD +28 4211	16	10.5	2148574	+283734	H 1 13303 L	196	FO	88052320	204700	006000	404	G C=169,B=52
PHCAL	BD +28 4211	16	10.5	2148574	+283734	L 3 33621 L	193	FO	88052321	215300	000025	500	G C=205,B=17
PHCAL	BD +28 4211	16	10.5	2148574	+283734	L 1 13304 L	19	FO	88052322	223900	000050	502	G C=200,B=36
PHCAL	BD +28 4211	16	10.5	2148574	+283734	L 3 33812 L	181	FO	88062614	140700	000026	500	G C=210,B=12
PHCAL	BD +28 4211	16	10.5	2148574	+283734	L 1 13503 L	183	FO	88062614	141100	000050	502	G C=215,B=36
PHCAL	BD +28 4211	16	10.5	2148574	+283734	L 1 13504 L	244	FO	88062615	150700	000050	502	G C=216,B=36
PHCAL	BD +28 4211	16	10.5	2148574	+283734	L 3 33813 L	243	FO	88062615	151200	000026	500	G C=215,B=11
PHCAL	BD +28 4211	16	10.5	2148574	+283734	L 3 33814 L	248	FO	88062616	161200	000026	500	G C=220,B=11
PHCAL	BD +28 4211	16	10.5	2148574	+283734	L 1 13505 L	241	FO	88062616	161600	000050	502	G C=225,B=36
PHCAL	BD +28 4211	16	10.5	2148574	+283734	L 2 18214 L	202	FO	88062813	135600	000122	501	G C=175,B=22
PHCAL	BD +28 4211	16	10.5	2148574	+283734	L 3 33857 L	193	FO	88070411	114700	000026	500	G C=190,B=12
PHCAL	BD +28 4211	16	10.5	2148574	+283734	L 1 13560 L	194	FO	88070411	115200	000050	502	G C=187,B=35
PHCAL	BD +28 4211	16	10.5	2148574	+283734	L 1 13763 L	204	FO	88073113	131600	000050	402	G C=185,B=37
PHCAL	BD +28 4211	16	10.5	2148574	+283734	L 3 33994 L	199	FO	88073113	132100	000026	500	G C=200,B=18
PHCAL	BD +28 4211	16	10.5	2148574	+283734	H 1 13776 L	202	FO	88080206	061100	000050	402	G C=180,B=33
PHCAL	BD +28 4211	16	10.5	2148574	+283734	H 3 34009 L	203	FO	88080206	062200	004000	402	G C=148,B=37
PHCAL	BD +28 4211	16	10.5	2148574	+283734	H 1 13777 L	199	FO	88080207	071300	006000	404	G C=184,B=57
PHCAL	BD +28 4211	16	10.5	2148574	+283734	L 3 34010 L	199	FO	88080208	081800	000025	500	G C=172,B=18
PHCAL	BD +28 4211	16	10.5	2148574	+283734	L 3 34185 L	193	FO	88090414	143500	000026	500	G C=183,B=17
PHCAL	BD +28 4211	16	10.5	2148574	+283734	L 1 14101 L	190	FO	88092007	074400	000050	502	G C=217,B=37
PHCAL	BD +28 4211	16	10.5	2148574	+283734	L 1 14102 L	191	FO	88092008	082000	000050	502	G C=198,B=36
PHCAL	BD +28 4211	16	10.5	2148574	+283734	L 1 14103 L	195	FO	88092008	085300	000050	402	G C=185,B=35
PHCAL	BD +28 4211	16	10.5	2148574	+283734	L 3 34277 L	193	FO	88092008	085800	000026	500	G C=202,B=17
PHCAL	BD +28 4211	16	10.5	2148574	+283734	L 3 34278 L	198	FO	88092009	092900	000026	500	G C=182,B=17
PHCAL	BD +28 4211	16	10.5	2148574	+283734	L 3 34279 L	198	FO	88092009	095800	000026	500	G C=188,B=16
PHCAL	BD +28 4211	16	10.5	2148574	+283734	L 3 34418 L	197	FO	88100506	060200	000026	500	G C=185,B=13
PHCAL	BD +28 4211	16	10.5	2148574	+283734	L 1 14183 L	190	FO	88100506	060700	000050	402	G C=177,B=35
SSKCH	HD 207857	22	6.2	2149006	+391807	H 3 34436 L	9524	FO	88100808	085800	003655	X04	G C=3X,B=59
JA039	HD208057	26	05.47	2150477	+254121	H 3 33664 L	19164	FO	88052900	003130	000210	550	U
KC193	HD208816	39	05.06	2155145	+632314	H 1 13918 L	24630	FO	88082519	191432	003000	560	U
KC193	HD208816	39	04.96	2155145	+632314	H 3 34136 L	26020	FO	88082519	194851	012000	400	U
KQ175	PKS2155-30	87	13.70	2155584	-302755	L 3 33517 L	60	SO	88051300	001134	012000	401	U
KQ175	PKS2155-30	87	13.71	2155584	-302755	L 1 13214 L	58	SO	88051302	022027	004500	402	U
KQ175	PKS2155-30	87	13.63	2155584	-302755	L 3 33518 L	62	SO	88051303	031428	015500	502	U
KQ175	PKS2155-30	87	13.71	2155584	-302755	L 1 13215 L	58	SO	88051305	055415	005500	502	U PREAD
LGJSB	BD -03 5357	45	9.4	2158009	-025853	L 3 33840 L	389	FO	88070105	053100	000340	500	G C=225,B=14

PRO	Object	CL	MAG	R.A.	DEC	D C	Image	A	FES	MD	Obs.date	Exptim	mmmsstt	ECC	Comment
LGJSB	BD	-03 5357 45	9.4	2158009	-025853	L 3	33840	S	398	FO	88070105	054700	000700	500	G C=185,B=14
LGJSB	BD	-03 5357 45	9.4	2158009	-025853	L 1	13543	L	416	FO	88070105	055800	000340	502	G C=195,B=36
LGJSB	BD	-03 5357 45	9.4	2158009	-025853	H 3	33841	L	403	FO	88070106	063600	019000	305	G C=160,B=68
LGJSB	BD	-03 5357 45	9.4	2158009	-025853	H 1	13544	L	395	FO	88070109	095200	013800	306	G C=160,B=72
LGJSB	BD	-03 5357 45	9.4	2158009	-025853	H 3	33870	L	471	FO	88070604	041100	022000	404	G C=185,B=51
LGJSB	BD	-03 5357 45	9.4	2158009	-025853	H 1	13576	L	476	FO	88070607	075900	018000	346	G E=193,C=176,B=77
LGJSB	BD	-03 5357 45	9.4	2158009	-025853	L 3	33871	L	495	FO	88070611	111100	000340	500	G C=211,B=18
LGJSB	BD	-03 5357 45	9.4	2158009	-025853	L 3	33871	S	495	FO	88070611	112200	000700	700	G C=170,B=18
LGJSB	BD	-03 5357 45	9.4	2158009	-025853	L 1	13577	L	473	FO	88070612	120200	000400	402	G C=178,B=36
LGJSB	BD	-03 5357 45	9.4	2158009	-025853	L 1	13577	S	473	FO	88070612	122100	000800	402	G C=174,B=33
KA019	PG2158+082	16	13.56	2158258	+081404	L 3	33793	L	66	SO	88062104	043848	001000	400	V PREAD
SAKCV	HD	209419 24	5.8	2200004	+523826	L 3	33851	L	11141	FO	88070314	141300	000026	502	G C=207,B=35
SAKCV	HD	209419 24	5.8	2200004	+523826	L 1	13555	L	11215	FO	88070314	142600	000013	503	G C=209,B=43
BLKSB	QSO	2200+420 87	15.5	2200394	+420209	L 1	13430	L	BO	88061506	060300	041000		309	G C=164,B=124
BLKSB	QSO	2200+420 87	15.5	2200394	+420209	L 1	13675	L	BO	88071704	041500	039500		309	G C=165,B=131
BUKGP	HD	209409 26	4.7	2200436	-022348	H 3	34371	L	298	FU	88100104	045500	000315	402	G C=175,B=35
BUKGP	HD	209409 26	4.7	2200436	-022348	L 3	34372	L	299	FU	88100105	052700	000002	300	G C=114,B=17
BUKGP	HD	209409 26	4.7	2200436	-022348	L 1	14149	L	297	FU	88100105	053200	000002	502	G C=193,B=33
SSKCM	HD	209515 22	5.6	2200556	+442429	H 3	34437	L	13727	FO	88100810	101100	002424	503	G C=225,B=46
KA187	HD209975	13	05.52	2203363	+620210	H 3	34534	L	18611	FO	88102215	151148	000545	600	V
MLKJN	HD	209975 13	5.1	2203363	+620210	H 3	34528	L	20193	FO	88102210	100700	000600	X44	G E=161,C=1.5X,B=51
KA187	HD	209975 13	05.27	2203363	+620210	H 3	34540	L	21789	FO	88102220	201807	000545	500	V
MLKJN	HD	209975 13	5.1	2203363	+620210	H 3	34546	L	19214	FO	88102301	012000	000530	502	G C=240,B=40
KA187	HD	209975 14	05.26	2203363	+620210	H 3	34560	L	21948	FO	88102315	152144	000545	500	V
MLKJN	HD	209975 13	5.1	2203363	+620210	H 3	34552	L	19555	FO	88102306	060600	000530	543	G E=157,C=241,B=42
KA187	HD209975	13	05.47	2203363	+620210	H 3	34591	L	19211	FO	88102418	181452	000545	600	V
MLKJN	HD	209975 13	5.1	2203363	+620210	H 3	34567	L	19010	FO	88102322	220400	000530	502	G C=242,B=40
MLKJN	HD	209975 13	5.1	2203363	+620210	H 3	34573	L	18898	FO	88102402	024000	000530	503	G C=242,B=41
MLKJN	HD	209975 13	5.1	2203363	+620210	H 3	34579	L	19376	FO	88102407	071800	000530	503	G C=239,B=45
MLKJN	HD	209975 13	5.1	2203363	+620210	H 3	34585	L	19286	FO	88102412	120100	000530	502	G C=243,B=40
MLKJN	HD	209975 13	5.1	2203363	+620210	H 3	34599	L	18480	FO	88102507	075800	000530	543	G E=165,C=248,B=47
PHCAL	HD	209952 22	1.7	2205054	-471215	H 3	33537	L	4130	FU	88051615	155700	000012	502	G C=210,B=37
PHCAL	HD	209952 22	1.7	2205054	-471215	H 1	13240	L	4131	FU	88051616	160300	000007	502	G C=222,B=40
DCKNE	HD	235739 53	9.13	2207079	+504759	L 1	13889	L	533	FO	88082108	082000	003200	502	G C=190,B=39
KA187	HD210839	15	05.29	2209486	+591003	H 3	34537	L	21485	FO	88102217	174134	001000	500	V
MLKJN	HD	210839 15	5.0	2209486	+591003	H 3	34525	L	18671	FO	88102207	071900	001000	554	G E=202,C=234,B=51
KA187	HD	210839 15	05.28	2209486	+591003	H 3	34563	L	21624	FO	88102317	174433	001000	500	V
MLKJN	HD	210839 15	5.0	2209486	+591003	H 3	34531	L	17990	FO	88102212	124100	001000	542	G E=183,C=230,B=40
KA187	HD210839	15	05.24	2209486	+591003	H 3	34588	L	22124	FO	88102414	141826	001000	500	V
MLKJN	HD	210839 15	5.0	2209486	+591003	H 3	34543	L	18789	FO	88102222	225100	001000	502	G C=230,B=40
MLKJN	HD	210839 15	5.0	2209486	+591003	H 3	34549	L	18744	FO	88102303	034100	001000	502	G C=233,B=40
MLKJN	HD	210839 15	5.0	2209486	+591003	H 3	34555	L	20175	FO	88102308	082400	001000	544	G E=203,C=241,B=57
MLKJN	HD	210839 15	5.0	2209486	+591003	H 3	34570	L	19045	FO	88102400	001900	001000	503	G C=228,B=41
MLKJN	HD	210839 15	5.0	2209486	+591003	H 3	34576	L	19609	FO	88102404	045000	001000	503	G C=221,B=42
MLKJN	HD	210839 15	5.0	2209486	+591003	H 3	34582	L	19524	FO	88102409	093500	001000	504	G C=231,B=54

PRO	Object	CL	MAG	R.A.	DEC	D C	Image	A	FES	MD	Obs.date	Exptim	mmmsstt	ECC	Comment
MLKJN	HD	210839	15	5.0	2209486	+591003	H 3	34600	L	18770	FO	88102508	084400	001000	544 G E=193,C=240,B=52
KA036	DHPEG	53	09.89	2212550	+063412	L 1	14194	L	438	FO	88100914	144621	000500	402 U	
KA036	DHPEG	53	09.76	2212550	+063412	L 1	14195	L	490	FO	88100915	153711	002600	502 U	REF POINT OFFSETS: 1
KA036	DHPEG	53	09.92	2212550	+063412	L 1	14196	L	428	FO	88100916	165808	003400	502 U	REF POINT OFFSETS:2,
KA036	DHPEG	53	10.13	2212550	+063412	L 1	14197	L	353	FO	88100918	181943	001500	502 U	
KA036	DH PEG	53	10.25	2212550	+063412	L 1	14198	L	319	FO	88100919	190934	002100	502 U	REP POINT OFFSETS: +
KA036	DH PEG	53	09.86	2212550	+063412	L 1	14199	L	451	FO	88100920	200939	001400	402 U	REF POINT OFFSET: +2
DCKNE	HD	212454	25	6.16	2221059	+570159	L 1	13880	L	8667	FO	88082008	081400	000008	X02 G C=2X,B=33
DCKNE	HD	212454	25	6.16	2221059	+570159	L 3	34108	L	8697	FO	88082008	081800	000007	400 G C=146,B=16
KM005	HD212593	25	04.95	2222289	+491320	H 3	34467	L	308	FU	88101317	174550	009000	801 U	
SAKCV	HD	212593	25	4.58	2222289	+491319	L 1	13556	L	24842	FO	88070315	152100	000012	504 G C=230,B=54
KM005	HD212593	25	04.94	2222289	+491320	H 1	14219	L	26248	FO	88101319	194418	000500	602 U	
SAKCV	HD	212593	25	4.58	2222289	+491319	L 3	33852	L	24757	FO	88070316	160100	000032	403 G C=188,B=42
KM005	HD212593	25	04.97	2222289	+491320	H 3	34468	L	25862	FO	88101319	195433	005600	801 U	
BEKGP	HD	212571	26	4.70	2222433	+010722	H 3	33780	L	327	FU	88061916	161000	000120	502 G C=230,B=40
BEKGP	HD	212571	26	4.70	2222433	+010722	L 1	13459	L	330	FU	88061916	161500	000000	402 G C=149,B=36
BEKGP	HD	212571	26	4.70	2222433	+010722	L 3	33781	L	340	FU	88061916	164400	000001	500 G C=222,B=12
BEKGP	HD	212571	26	4.7	2222434	+010723	H 3	33718	L	334	FU	88060717	174200	000115	502 G C=209,B=38
BEKGP	HD	212571	26	4.7	2222434	+010723	L 1	13383	L		FU	88060717	174800	000001	X02 G C=1.5X,B=36
BEKGP	HD	212571	26	4.7	2222434	+010723	L 3	33719	L	375	FU	88060718	181800	000001	500 G C=215,B=12
BEKGP	HD	212571	26	4.7	2222434	+010723	H 3	33931	L	26062	FO	88071711	113600	000120	502 G C=220,B=40
BEKGP	HD	212571	26	4.7	2222434	+010723	L 3	33932	L	26281	FO	88071712	120800	000001	500 G C=220,B=14
BEKGP	HD	212571	26	4.7	2222434	+010723	L 1	13676	L	25345	FO	88071712	121400	000000	402 G C=145,B=33
DPKDM	BD	+52 3210	20	10.7	2224580	+532336	L 3	34153	L	178	FO	88083008	083700	001120	500 G C=188,B=18
DPKDM	BD	+52 3210	20	10.7	2224580	+532336	L 1	13958	L	183	FO	88083009	092400	001330	X02 G C=1.5X,B=38
DPKDM	BD	+53 2885	23	10.5	2225090	+535530	L 3	34157	L	220	FO	88083107	073900	001200	400 G C=155,B=18
DPKDM	BD	+53 2885	23	10.5	2225090	+535530	L 1	13965	L	218	FO	88083108	081400	001200	502 G C=234,B=36
DPKDM	BD	+53 2885	23	10.5	2225090	+535530	L 1	13966	L	214	FO	88083110	102900	000800	502 G C=246,B=39
CSKHJ	HD	213080	49	4.30	2226459	-440029	H 1	13440	L	550	FU	88061617	174000	004000	3X5 G E=1.5X,C=108,B=67
CSKHJ	HD	213080	49	4.30	2226459	-440029	H 1	13446	L	555	FU	88061715	153200	002000	343 G E=166,C=75,B=43
DCKTT	DELCEP C	25	6.30	2227174	+580852	L 1	13894	L	7785	FO	88082209	091400	000013	X02 G C=1.5X,B=34	
DCKTT	DELCEP C	25	6.30	2227174	+580852	L 3	34120	L	7600	FO	88082209	091900	000019	500 G C=190,B=17	
DCKTT	HD	213306	53	3.5	2227185	+580932	L 1	13874	L	773	FU	88081906	064800	000005	402 G C=160,B=31
DCKTT	HD	213306	53	3.5	2227185	+580932	L 3	34099	L	760	FU	88081906	065300	000300	500 G C=214,B=16
DCKTT	HD	213306	53	3.75	2227185	+580932	L 1	13879	L	631	FU	88082006	065000	000009	402 G C=175,B=32
DCKTT	HD	213306	53	3.75	2227185	+580932	L 3	34107	L	644	FU	88082006	065700	002100	500 G C=244,B=20
DCKTT	HD	213306	53	3.95	2227185	+580932	L 1	13888	L	493	FU	88082106	065900	000015	502 G C=190,B=33
DCKTT	HD	213306	53	3.95	2227185	+580932	L 3	34117	L	512	FU	88082107	071300	004500	400 G C=142,B=18
DCKTT	HD	213306	53	4.15	2227185	+580932	L 1	13893	L	413	FU	88082206	063800	000019	402 G C=160,B=35
DCKTT	HD	213306	53	4.15	2227185	+580932	L 3	34119	L	412	FU	88082206	064500	011500	401 G C=164,B=28
CEKTS	HD	213310	39	4.4	2227268	+472704	L 1	13538	L	408	FU	88063015	153900	000250	X06 G C=1.5X,B=73
CEKTS	HD	213310	39	4.4	2227268	+472704	L 3	33837	L	424	FU	88063015	155800	000109	500 G C=222,B=19
DPKDM	HD	235874	24	9.6	2230570	+505730	L 1	13961	L	358	FO	88083014	142100	000400	502 G C=241,B=36
DPKDM	HD	235874	24	9.6	2230570	+505730	L 3	34158	L	454	FO	88083109	092700	000700	400 G C=158,B=18
KC214	GL867B	48	11.78	2236010	-205248	H 1	14209	L	323	SO	88101114	143404	029000	144 U	

PRO	Object	CL	MAG	R.A.	DEC	D C	Image	A	FES	MD	Obs.date	Exptim	mmmmssstt	ECC	Comment
KC214	GL867 A	48	09.41	2236010	-205248	H 1	14210	L	670	FO	88101120	201548	003100	132	U
CBKBH	RV GRU	66	11.3	2236250	-470800	L 1	14140	L	342	SO	88093011	110600	004500	337	G E=142,C=127,B=83
PHCAL	HD214680	13	05.14	2237010	+384722	L 1	13671	L	23553	FO	88071601	011831	00000050	400	U
PHCAL	HD214680	13	05.12	2237010	+384722	L 1	13670	L	23778	FO	88071700	004744	000000	400	U
PHCAL	HD214680	13	05.12	2237010	+384722	L 1	13672	L	23734	FO	88071701	014840	000000	400	U
PHCAL	HD214680	13	05.12	2237010	+384722	L 1	13673	L	23859	FO	88071702	021854	000000	400	U
PHCAL	HD214680	13	05.10	2237010	+384722	L 1	13674	L	24019	FO	88071702	025039	000000	400	U PREAD
PHCAL	HD214680	13	05.19	2237010	+384722	L 1	13837	L	22892	FO	88081221	211602	000000	402	U
PHCAL	HD214680	13	05.17	2237010	+384722	L 1	13838	L	23186	FO	88081221	214625	000000	402	U
PHCAL	HD214680	12	05.14	2237010	+384722	L 1	13989	L	23555	FO	88090316	160954	000000	400	U
PHCAL	HD214680	12	05.12	2237010	+384722	L 1	13990	L	23852	FO	88090316	164740	000000	400	U
PHCAL	HD214680	12	05.13	2237010	+384722	L 1	13991	L	23647	FO	88090317	172218	000000	400	U
PHCAL	HD214680	12	05.12	2237010	+384722	L 1	13992	L	23853	FO	88090317	175216	000000	400	U
DCKTT	HD 214975	53	8.6	2238530	+563406	L 1	13875	L	855	FO	88081907	075900	005500	403	G C=145,B=42
DCKTT	HD 214975	53	8.6	2238530	+563406	L 3	34100	L	831	FO	88081909	090100	009000	01	G B=28
KC214	GL 873	48	12.89	2244400	+440436	H 1	13951	L	120	SO	88082917	174319	015000	041	U
KC214	SKY	99	99.99	2244400	+440436	H 3	34150				88082918	183942	001500	000	U SERENDIPITY WITH LWP
SAKCB	HD 216228	47	3.58	2247535	+655612	L 1	13553	L	716	FU	88070311	112600	000220	502	G C=209,B=37
IGKDM	HD 216532	12	8.0	2250340	+621030	H 3	34226	L	1593	FO	88091123	233200	042000	X09	G C=1.5X,B=101
JA039	HD217543	26	06.83	2258348	+382621	H 3	33666	L	6591	FO	88052901	015754	001020	551	U
JA039	HD217543	26	06.86	2258348	+382621	H 1	13326	L	6432	FO	88052902	021646	000600	553	U
BEKGP	HD 217675	26	3.6	2259368	+420324	H 3	34103	L	780	FU	88081913	130300	000130	503	G C=220,B=45
BEKGP	HD 217675	26	4.6	2259368	+420324	L 3	34104	L	784	FU	88081913	133600	000004	500	G C=195,B=16
BEKGP	HD 217675	26	4.6	2259368	+420324	L 1	13877	L	770	FU	88081914	142600	000003	503	G C=216,B=41
BEKGP	HD 217675	26	3.6	2259368	+420324	H 3	34634	L	792	FU	88103011	111700	000130	502	G C=218,B=39
BEKGP	HD 217675	26	3.6	2259368	+420324	L 3	34635	L	782	FU	88103011	115000	000004	500	G C=187,B=18
BEKGP	HD 217675	26	3.6	2259368	+420324	L 1	14345	L	783	FU	88103012	120100	000003	502	G C=207,B=34
PRKCG	HD 217675	26	3.6	2259369	+420325	H 3	33639	L	792	FU	88052517	172200	000330	X05	G C=2.5X,B=65
PRKCG	HD 217675	26	3.6	2259369	+420325	H 3	34603	L	715	FU	88102605	054800	000330	X04	G C=3.5X,B=58
PRKCG	HD 217675	26	3.6	2259369	+420325	H 1	14313	L	713	FU	88102605	055600	000050	503	G C=253,B=41
QSKMM	NGC 7469	84	13.1	2300444	+083617	L 3	33906	L	65	SO	88071309	095600	006000	G	65
IGKDM	HD 218323	23	7.6	2303560	+640130	H 3	34442	L	2250	FO	88100822	221800	039300	X08	G C=1.5X,B=94
KC194	HD218329	49	04.85	2304290	+090821	L 1	14322	L	27486	FO	88102717	174455	001500	561	U
KC194	HD218329	49	04.90	2304290	+090821	L 3	34612	L	322	FU	88102718	181250	006000	111	U
KI132	HD218393	32	07.48	2304511	+495518	L 3	34620	L	3741	FO	88102819	192533	000050	401	U
KI132	HD218393	32	07.50	2304511	+495518	H 1	14330	L	3670	FO	88102819	193409	007000	701	U
KI132	HD218393	32	07.50	2304511	+495518	L 3	34638	L	3671	FO	88103017	175957	000050	401	U
KI132	HD 218393	32	07.48	2304511	+495518	H 1	14347	L	3747	FO	88103018	180703	007000	701	U
KI132	HD 218393	32	07.47	2304511	+495518	H 3	34639	L	3786	FO	88103019	192820	007900	401	U
DPKDM	BD +55 2899	23	10.2	2304570	+554400	L 3	34152	L	245	FO	88083006	065500	001630	400	G C=164,B=18
DPKDM	BD +55 2899	23	10.2	2304570	+554400	L 1	13957	L			88083007	072500	001800	X02	G C=1.5X,B=39
HCTJA	HD 218634	39	5.1	2306599	+082421	L 3	33716	L	23008	FO	88060618	184900	002000	X51	G E=242,C=1.5X,B=25
HCTJA	HD 218634	39	5.1	2306599	+082421	L 1	13377	L	25305	FO	88060619	192400	000230	552	G E=249,C=215,B=35
KE049	SERSIC 159	81	11.46	2311123	-430001	L 1	13493	L		BO	88062222	224440	036300	204	U
KE049	SERSIC 159	81	14.00	2311123	-430001	L 3	33806	L		BO	88062322	224220	036500	132	U

PRO	Object	CL	MAG	R.A.	DEC	D C Image	A	FES	MD	Obs.date	Exptim	mmmsstt	ECC	Comment
KC194	HD219215	49	04.52	2311440	-061908	L 3	34611 L	454	FU	88102716	160600	006000	111	U
KI047	2312-3105	54	16.50	2312502	-310509	L 3	34427 L		BO	88100618	184702	012000	330	U
KI047	2312-3105	54	16.50	2312502	-310509	L 1	14189 L		BO	88100717	174320	018400	332	U
KA068	BD-7 5977	16	11.17	2315116	-064456	H 3	34463 L	140	FO	88101214	142807	037900	403	U
SAKCV	HD 219734	49	4.86	2315250	+484429	L 1	13558 L	25420	FO	88070318	184700	000400	332	G E=112,C=58,B=34
QCJEH	A2597	88	15.5	2322437	-122357	L 3	33603 L		BO	88052207	075000	041500	238	G E=177,C=115,B=95
JI097	Z AND	57	10.96	2331149	+483230	L 3	33758 L	168	FO	88061421	215513	002000	361	U PREAD
JI097	Z AND	57	10.96	2331149	+483230	L 1	13428 L	676	SO	88061422	224335	002000	461	U PREAD
JI097	Z AND	57	10.94	2331149	+483230	H 3	33759 L	172	FO	88061423	230329	018000	262	U
JI097	Z AND	57	10.92	2331149	+483230	H 1	13429 L	175	FO	88061502	021648	015000	242	U
KI145	HD 221650	57	10.79	2331150	+483231	L 3	34402 L	197	FO	88100218	185721	001200	260	U
KI145	HD 221650	57	10.79	2331150	+483231	L 1	14170 L	196	FO	88100219	191638	002700	561	U
KI145	HD 221650	57	10.79	2331150	+483231	L 3	34403 L	196	FO	88100219	195234	005800	380	U
LGJSB	HD 222107	45	3.9	2335064	+461113	H 1	13578 L	582	FU	88070613	135500	000500	352	G E=191,C=80,B=38
LGJSB	HD 222107	45	3.9	2335064	+461113	L 3	33872 L	589	FU	88070614	141000	005000	236	G E=178,C=100,B=80
LGJSB	HD 222107	45	3.9	2335064	+461113	H 1	13579 L	629	FU	88070615	152000	000500	353	G E=236,C=98,B=47
LGJSB	HD 222107	45	3.9	2335064	+461113	L 3	33873 L	569	FU	88070615	155100	002500	346	G E=192,C=112,B=73
LGJSB	HD 222107	45	3.9	2335064	+461113	H 1	13580 L	650	FU	88070616	163000	000500	353	G E=246,C=96,B=48
LGJSB	HD 222107	45	3.9	2335064	+461113	L 3	33874 L	624	FU	88070617	170100	002500	343	G E=156,C=75,B=42
LGJSB	HD 222107	45	3.9	2335064	+461113	H 1	13581 L	654	FU	88070617	174000	000500	352	G E=246,C=88,B=31
LGJSB	HD 222107	45	3.9	2335064	+461113	L 3	33875 L	572	FU	88070618	181400	003000	341	G E=169,C=74,B=30
SAKCV	HD 222173	22	4.29	2335405	+425927	L 3	33853 L	418	FU	88070317	171800	000009	502	G C=190,B=32
SAKCV	HD 222173	22	4.29	2335405	+425927	L 1	13557 L	413	FU	88070317	173100	000006	503	G C=221,B=43
DPKDM	HD 224257	23	8.0	2353530	+554242	L 3	34154 L	2094	FO	88083010	105800	000054	400	G C=160,B=17
DPKDM	HD 224257	23	8.0	2353530	+554242	L 1	13959 L	2137	FO	88083011	111400	000045	502	G C=230,B=36
CSKJE	HD 224427	49	4.7	2355124	+245149	L 1	13445 L	26923	FO	88061714	143900	000300	452	G E=189,C=150,B=36

ERRORS IN FOREGOING VILSPA LOG

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

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

- 147 -

UK RESIDENT ASTRONOMER
ESA SATELLITE TRACKING STATION
APARTADO 54065
28080 MADRID
SPAIN

T A P E A R C H I V E R E T R I E V A L
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DATA TAPE:

- TAPE DENSITY 1600 bpi (default) 800 bpi
- REQUESTED DATA Raw Data Only
- Complete: Raw image + Extracted Spectra
- Extracted Spectra Only

* CAM :	IMAGE	* CAM :	IMAGE	* CAM :	IMAGE	* CAM :	IMAGE	* CAM :	IMAGE	*
* 1 :	1	* 2 :	2	* 3 :	3	* 4 :	4	* 5 :	5	*
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CAMERA NUMBERS: 1 = LWP / 2 = LWR / 3 = SWP / 4 = SWR

REASON DATA IS ACCESSIBLE:

- Normal Release (6 month rule)
- Special Release data from my programme
- maintenance data
- others (give details)
-

REQUESTED BY: DATE OF REQUEST:

MAILING ADDRESS:

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DATA BANK R.A.

.....

DR. M. BARYLAK
DATA BANK RESIDENT ASTRONOMER
ESA SATELLITE TRACKING STATION
APARTADO 54065
28080 MADRID
SPAIN

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**Mrs. S. Babayan
European Space Agency
8-10 rue Mario Nikis
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France**