

(E)

S201 Catalog of Far-Ultraviolet Objects

THORNTON PAGE
NASA, Johnson Space Center

GEORGE R. CARRUTHERS
Space Science Division
Naval Research Laboratory

and

RICHARD HILL
Lockheed Electronics Co.

{NASA-TM-79343)	S201 CATALOG OF	N78-17957
FAR-ULTRAVIOLET OBJECTS	Final Report (NASA)	
164 p HC A08/MF A01	CSCCL 03A	
		Unclas
		G3/89 06001

January 20, 1978



NAVAL RESEARCH LABORATORY
Washington, D.C.

REPORT DOCUMENTATION PAGE		READ INSTRUCTIONS BEFORE COMPLETING FORM
1 REPORT NUMBER NRL Report 8173	2 GOVT ACCESSION NO	3 RECIPIENT'S CATALOG NUMBER
4 TITLE (and Subtitle) S201 CATALOG OF FAR-ULTRAVIOLET OBJECTS		5 TYPE OF REPORT & PERIOD COVERED Final report on one phase of a continuing NRL Problem.
		6 PERFORMING ORG REPORT NUMBER
7 AUTHOR(s) Thornton Page, George R. Carruthers, and Richard E. Hill		8 CONTRACT OR GRANT NUMBER(s)
9 PERFORMING ORGANIZATION NAME AND ADDRESS Naval Research Laboratory Washington, D.C. 20375		10 PROGRAM ELEMENT PROJECT, TASK AREA & WORK UNIT NUMBERS NRL Problem A01-63
11 CONTROLLING OFFICE NAME AND ADDRESS National Aeronautics and Space Administration, Headquarters Washington, D.C. 20546		12 REPORT DATE January 20, 1978
		13 NUMBER OF PAGES 166
14 MONITORING AGENCY NAME & ADDRESS (if different from Controlling Office)		15 SECURITY CLASS (of this report) UNCLASSIFIED
		15a DECLASSIFICATION/DOWNGRADING SCHEDULE
16 DISTRIBUTION STATEMENT (of this Report) Approved for public release, distribution unlimited.		
17 DISTRIBUTION STATEMENT (of the abstract entered in Block 20, if different from Report)		
18 SUPPLEMENTARY NOTES		
19 KEY WORDS (Continue on reverse side if necessary and identify by block number) Far ultraviolet radiation Astronomical instruments Astronomical cameras Astronomical spectroscopy Tables (data)		
20 ABSTRACT (Continue on reverse side if necessary and identify by block number) A catalog of star images was compiled from images obtained by an NRL Far-Ultraviolet Camera/Spectrograph (Experiment S201) operated from 21 to 23 April 1972 on the lunar surface during the Apollo-16 mission. These images were scanned on a microdensitometer, and the output recorded on magnetic tapes. A set of seven computer programs were written to process these recorded outputs in order to compile the catalog. The catalog is divided into 11 parts, covering ten fields in the sky (the Sagittarius field being covered by two parts), and each part is headed by a constellation name and the (Continued)		

20. ABSTRACT (Continued)

field center coordinates. The errors in position of the detected images are less than about 3 arc-min. Correlations are given with star numbers in the Smithsonian Astrophysical Observatory catalog. Values are given of the peak density and the density volume (a product of the number of pixels in the image and the density units above background in each pixel). The text includes a discussion of the photometry, corrections thereto due to threshold and saturation effects, and its comparison with theoretical expectation, stellar model atmospheres, and a generalized far-ultraviolet interstellar extinction law. The S201 catalog is also available on a single reel of seven-track magnetic tape.

CONTENTS

INTRODUCTION	1
COMPARISON WITH STELLAR MODELS	62
THE CATALOG	85
REFERENCES	89
APPENDIX A — STAR DETECTION Program for EXEC II	91
APPENDIX B — S201 Catalog Tape	93

THE S201 CATALOG OF FAR-ULTRAVIOLET OBJECTS

INTRODUCTION

The Naval Research Laboratory's Far-Ultraviolet Camera/Spectrograph (Experiment S201) was operated from 21 April to 23 April 1972 on the lunar surface during the Apollo-16 mission. A primary objective of this experiment was to obtain far-ultraviolet images and spectra of stars, nebulae, and extragalactic objects against the low sky background seen from the lunar surface. Figure 1 is a photograph of a training model of the instrument, illustrating its external features. The instrument was based on an electrographic Schmidt camera (Fig. 2). Further details of the instrument are given in Ref. 1.

The direct-imagery frames from the S201 camera covered 20° -diameter circular fields of view and had limiting resolution of about 2 arc-min at field center, degrading to about 4 arc-min near the edges. Exposures of 1, 3, and 10 min were taken with a LiF corrector on the electrographic Schmidt camera (designated ILi exposures, wavelength range 1050 to 1600 Å), followed by exposures of 3, 10, and 30 min with a CaF₂ corrector (designated ICa exposures, wavelength range 1250 to 1600 Å). Figure 3 shows as a function of wavelength the overall detection efficiency of the camera in these two modes of operation. In some cases the sequence was cut short, with the result that the last exposure was less than the maximum of 10 min for ILi or 30 min for ICa.

The ILi exposures include a diffuse background due to interplanetary Lyman- α emission [2]. This background produced a rather high fog level on the 3-min ILi exposures and made nearly all 10-min ILi exposures unusable due to saturation of the emulsion.

The camera was pointed at ten preselected target fields (Figs. 4a, 5a, ..., 13a) during the 48 hr it was deployed, and it obtained 185 photos and spectra. These included fields of view in and out of the galactic plane, allowing a sampling of both galactic and extragalactic objects. Both the target selection and the observing time on each were largely constrained by the mission time-line, the location of the landing site ($9^\circ 00'S$, $15^\circ 31'E$), and the position of the camera in the shadow of the lunar module. Negative prints of the best direct-imagery frames for each target are shown in Figs. 4b, 5b, ..., 13b.

Preliminary results of experiment S201 were given in Ref. 4; other published papers have given details of the imagery and spectrography of the terrestrial upper atmosphere and geocorona [2, 5, 6], imagery of nebulosities in Cygnus [7], and imagery and spectrography of the Large Magellanic Cloud [8-10].

Manuscript submitted September 23, 1977.

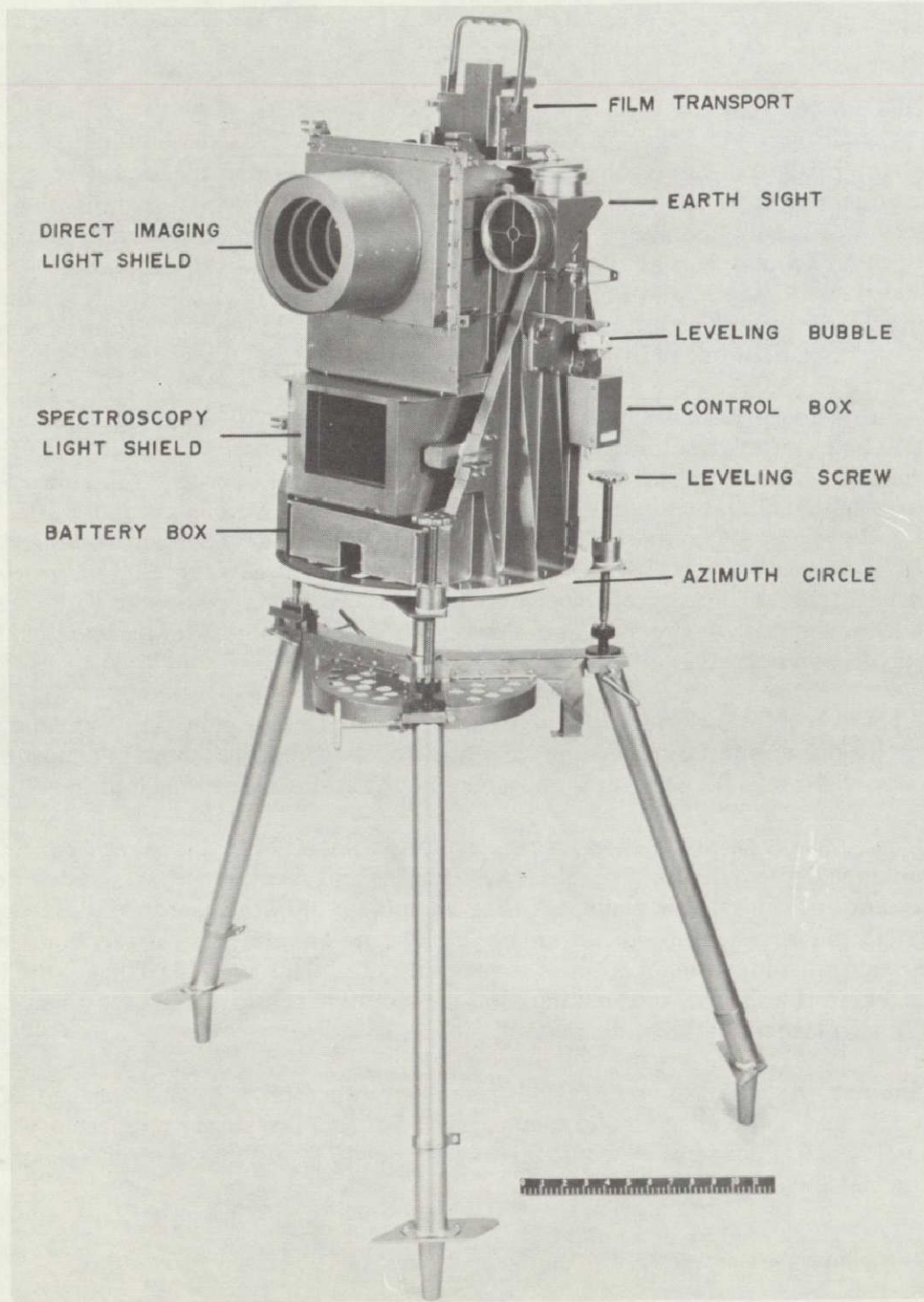


Fig. 1 — Training model of the NRL far-ultraviolet camera/spectrograph

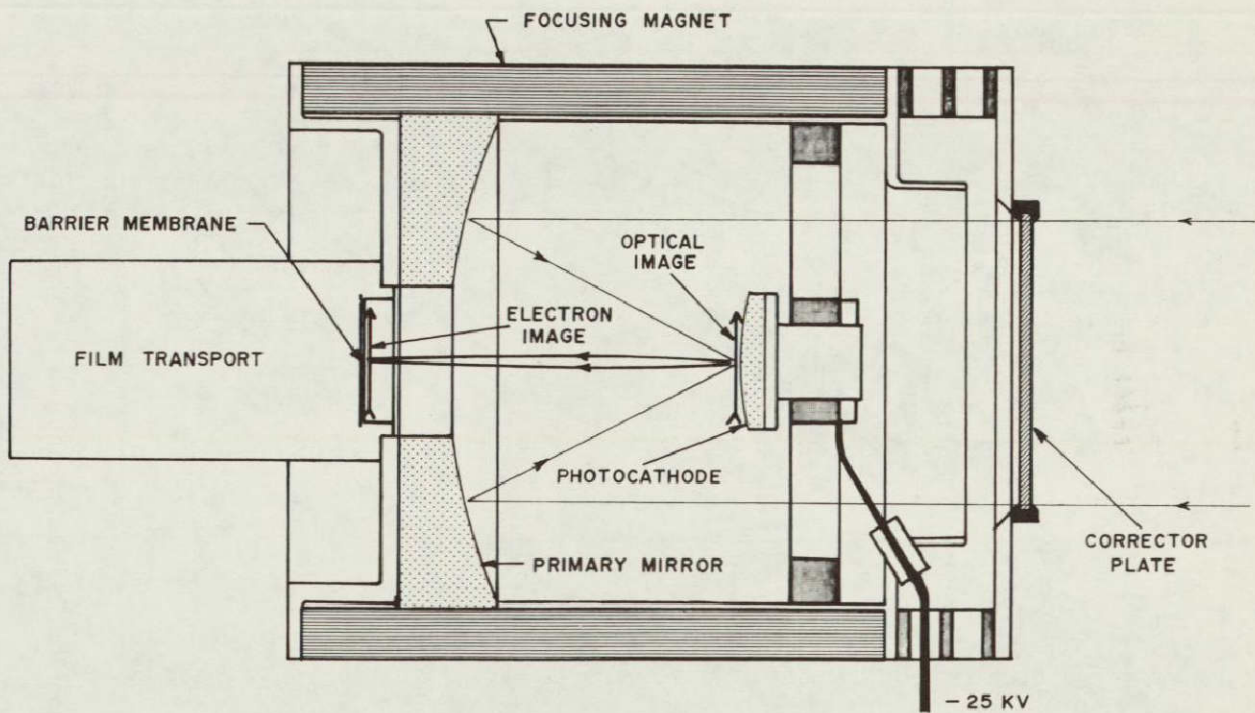


Fig. 2 — Diagram of electrographic Schmidt camera, illustrating operating principle

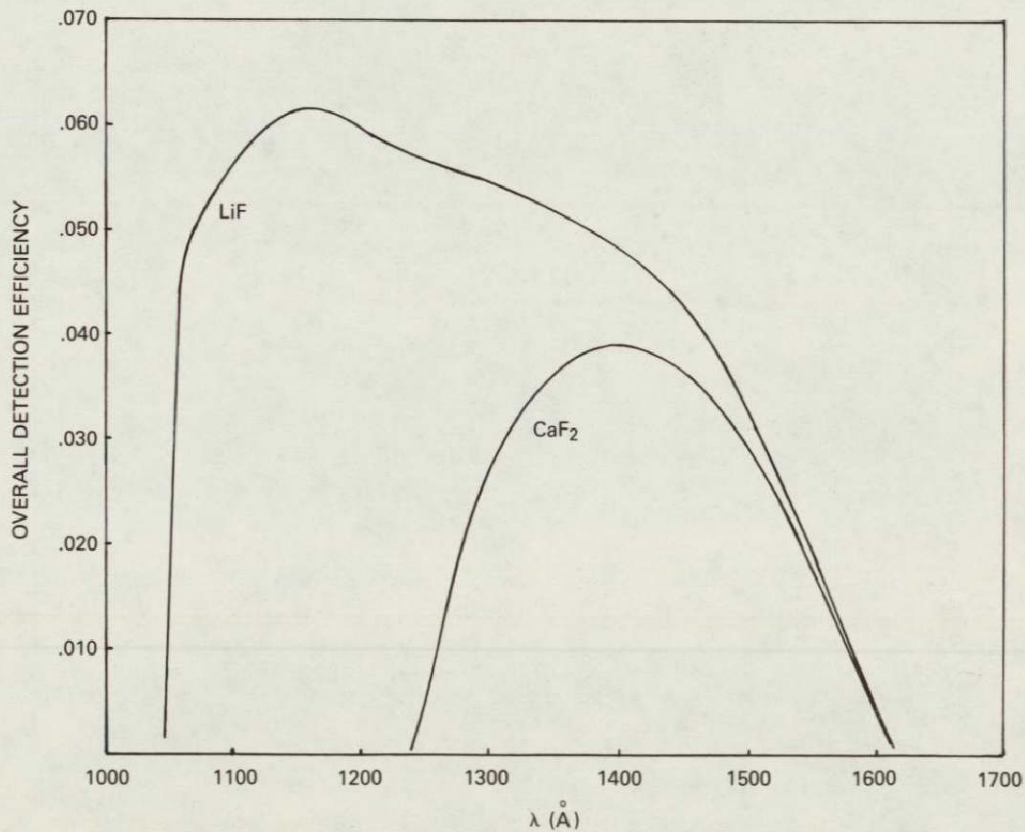


Fig. 3 — Detection efficiency of the camera in direct imaging mode, with a LiF corrector and a CaF₂ corrector

4

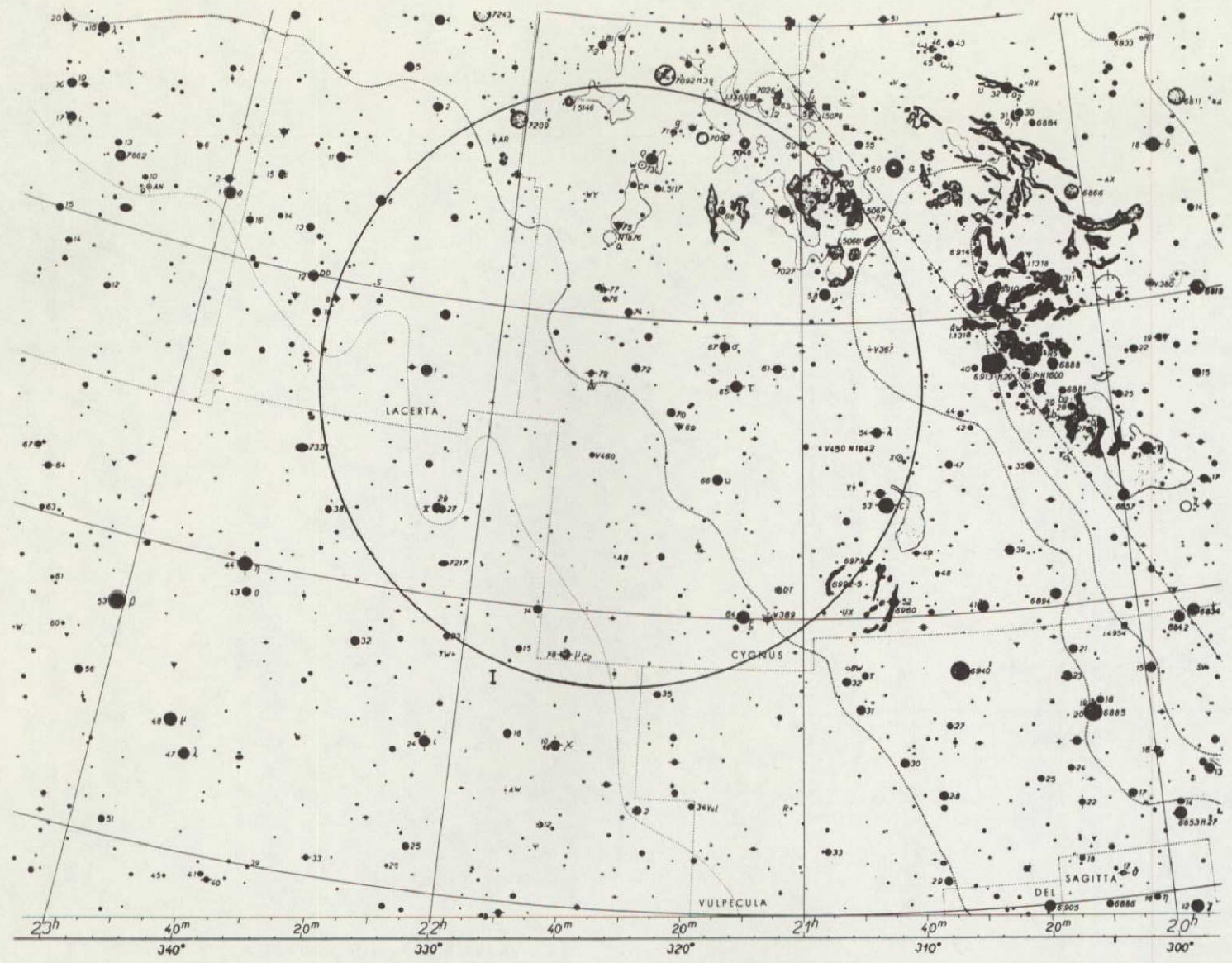


Fig. 4a — Preselected target field (Cygnus). Figures 4a, 5a, ..., 13a are adapted from Ref. 3. The approximate area covered by the S201 pointing is shown by the circle.

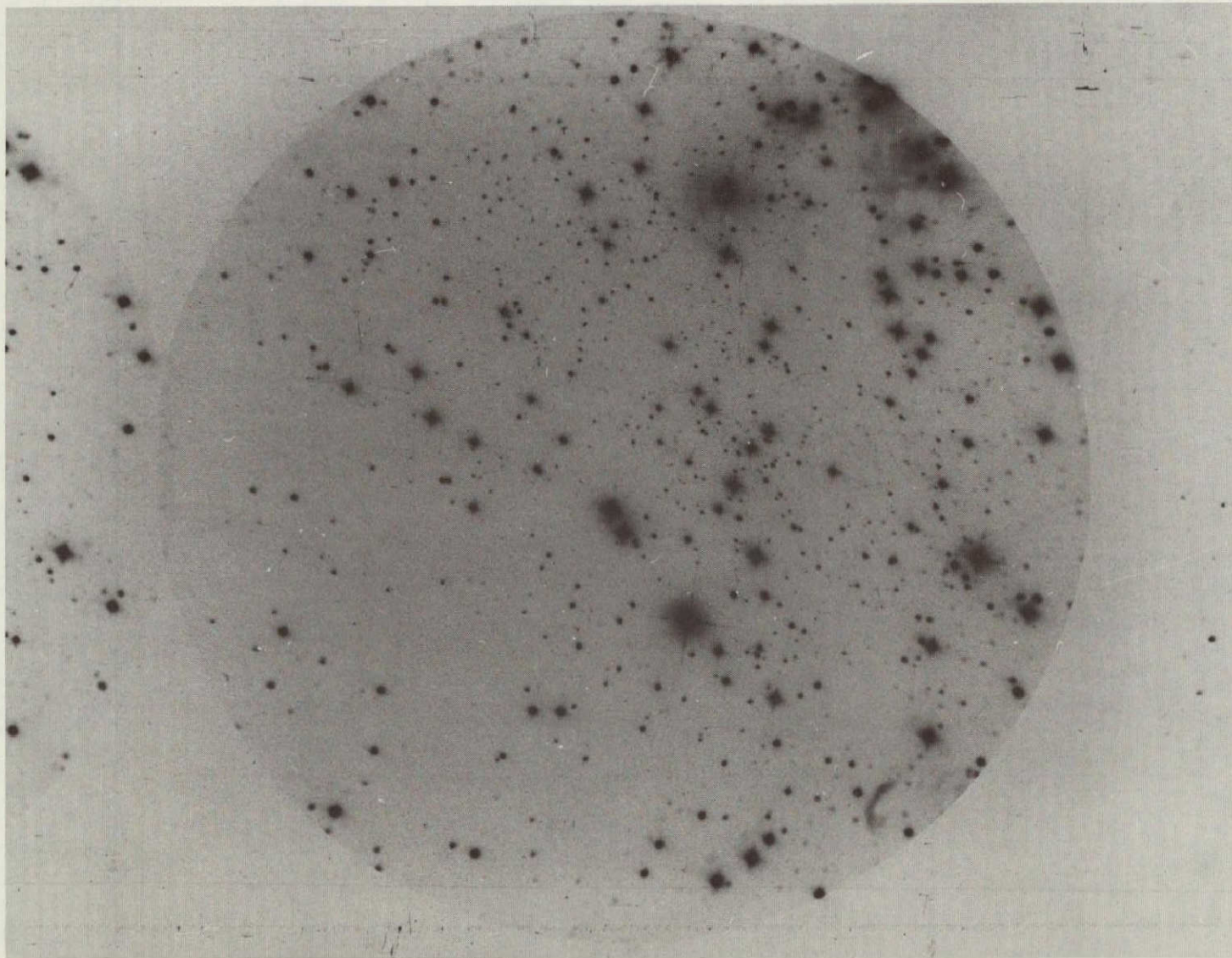


Fig. 4b — S201 starfield photograph (frame A27, ICa, exposure time 10-min)

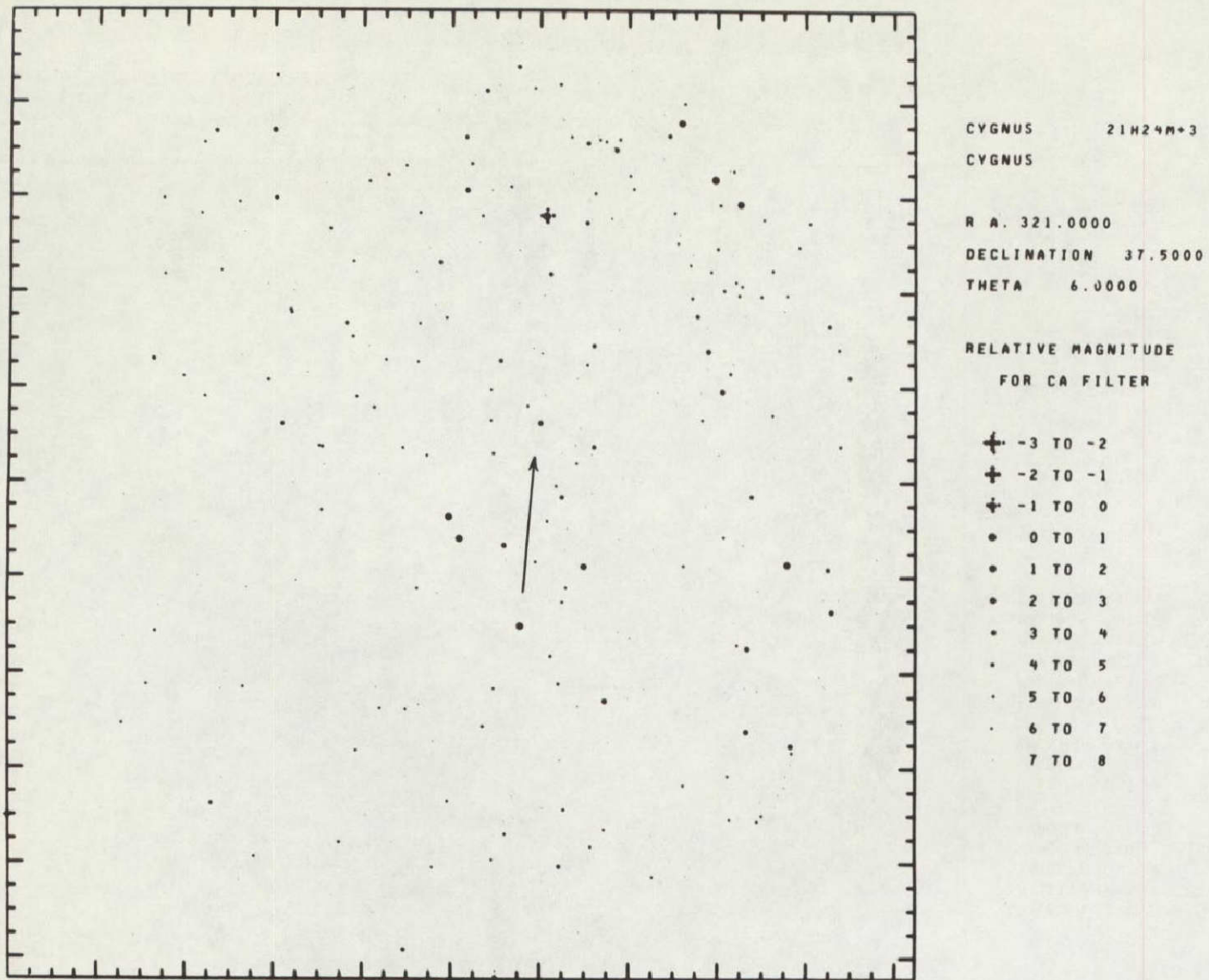
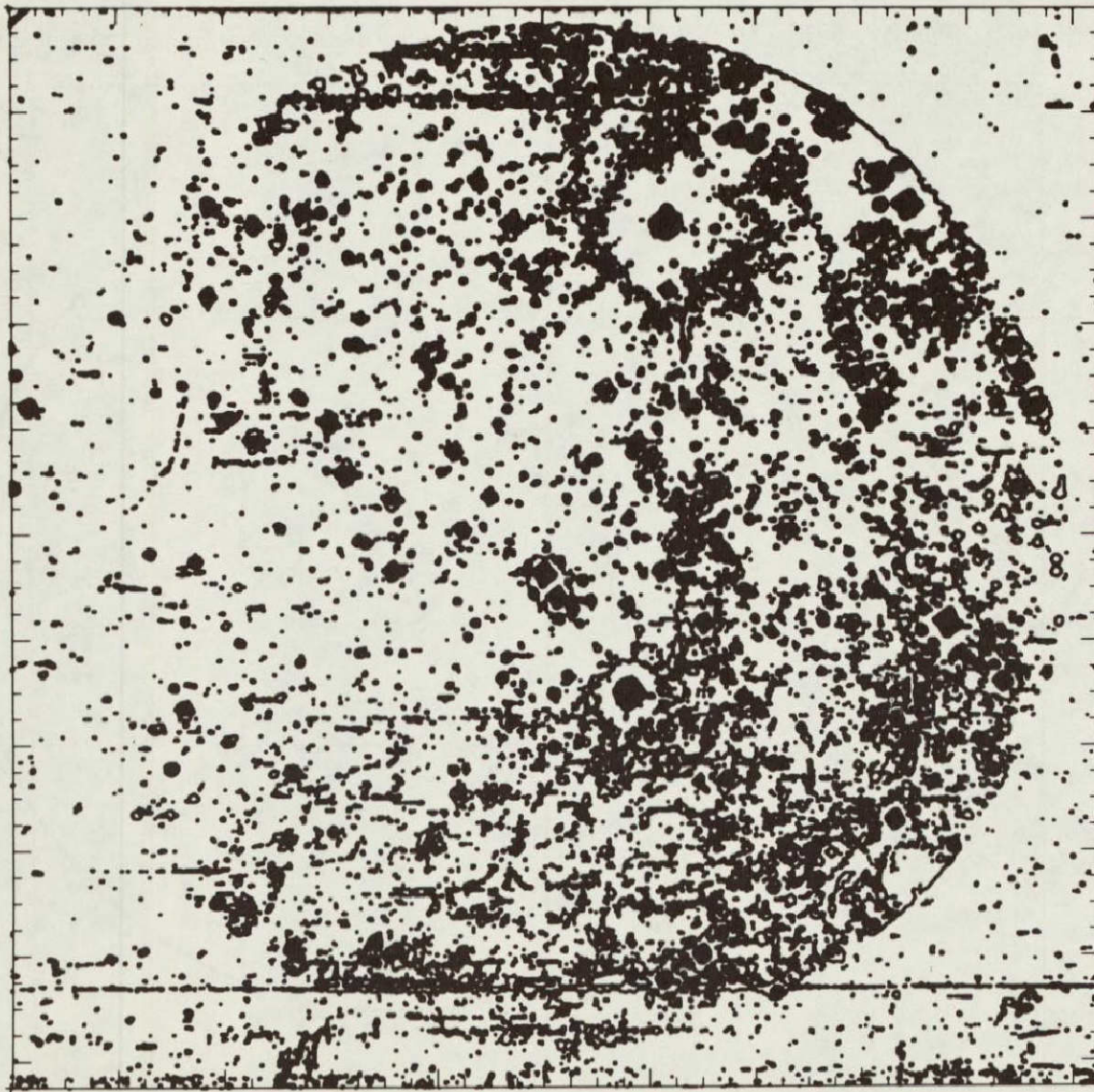


Fig. 4c — Smithsonian Astrophysical Observatory (SAO) star plot of area covered by the S201 image of Fig. 4b. North direction is indicated by arrow. Relative magnitudes are computed from SAO spectral classes and S201 camera response as explained in the text.



S201
UV CAMERA EXPERIMENT
MISSION FRAME 27
TARGET: CYG NEB
EXPOSURE TIME: 10.00
EXPOSURE DATE: 04/21/72

SCAN SPEED 30
DENSITY X 100
SMOOTHED DATA

MIN/MAX X COORD. 1 , 1024
MIN/MAX Y COORD. 1 , 1024
X/Y INTERVAL 33 , 33
MINIMUM CONTOUR LEVEL 21
MAXIMUM CONTOUR LEVEL 461
CONTOUR INTERVAL 20

S201
760034

10/09/77
E06433

ORIGINAL PAGE IS
OF POOR QUALITY

Fig. 4d — Sample isodensity contour plot. Orientation is the same as in Figs. 4b and 4c.

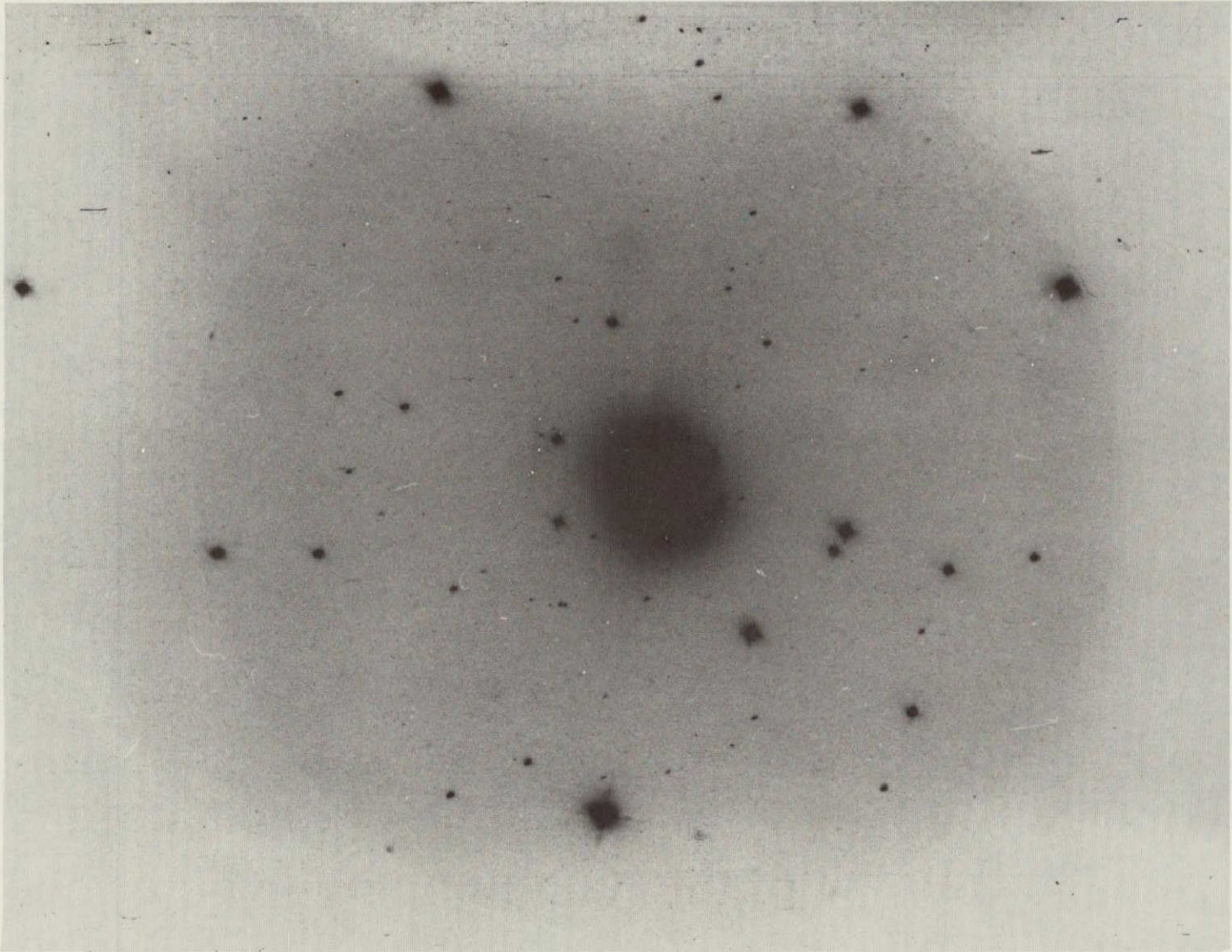


Fig. 5b — S201 starfield photograph (frame A45, ICa, 10-min exposure)

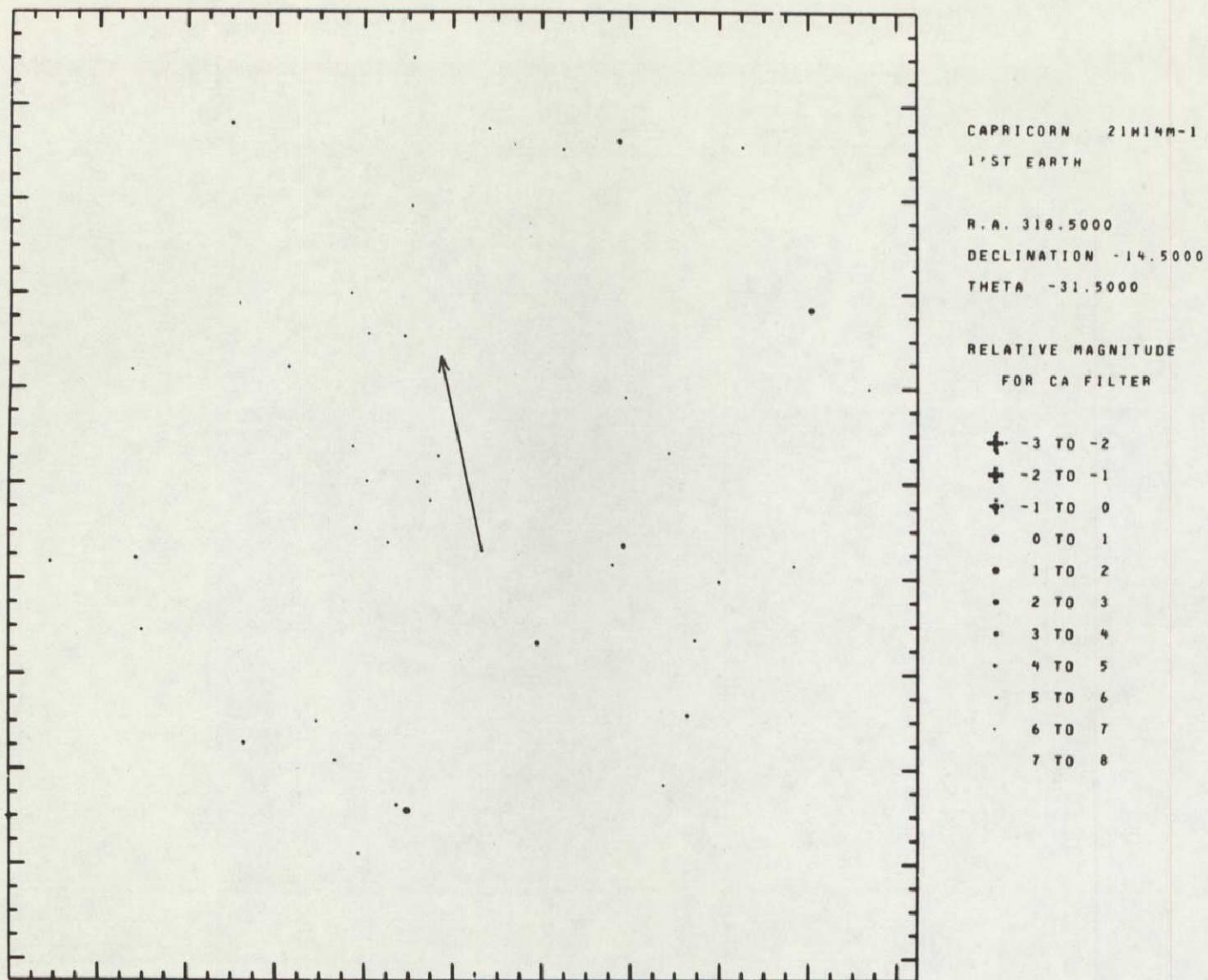
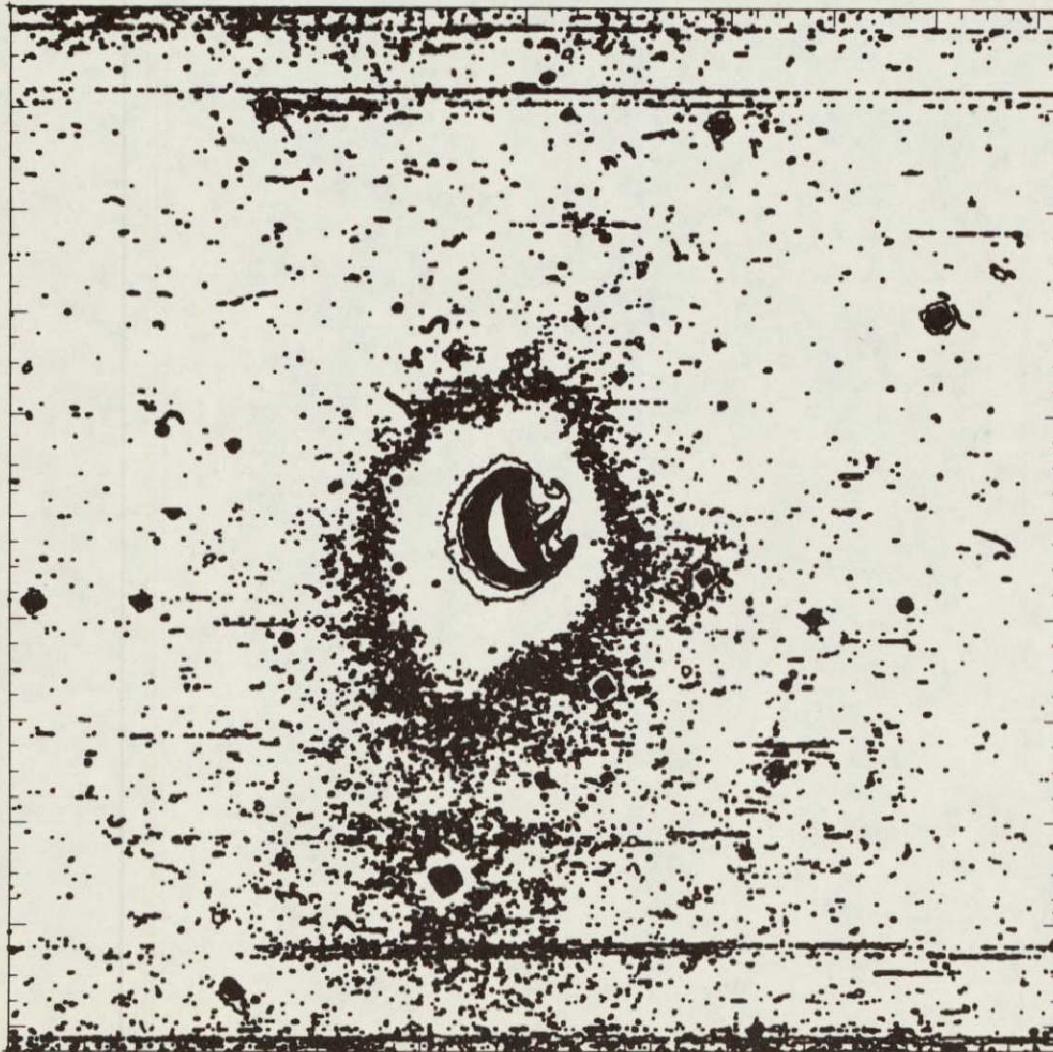


Fig. 5c — Smithsonian Astrophysical Observatory (SAO) star plot of area covered by the S201 image of Fig. 5b



S201
 UV CAMERA EXPERIMENT
 MISSION FRAME 45
 TARGET: EARTH
 EXPOSURE TIME: 10.00
 EXPOSURE DATE: 04/21/72

SCAN SPEED 30
 DENSITY X 100
 SMOOTHED DATA

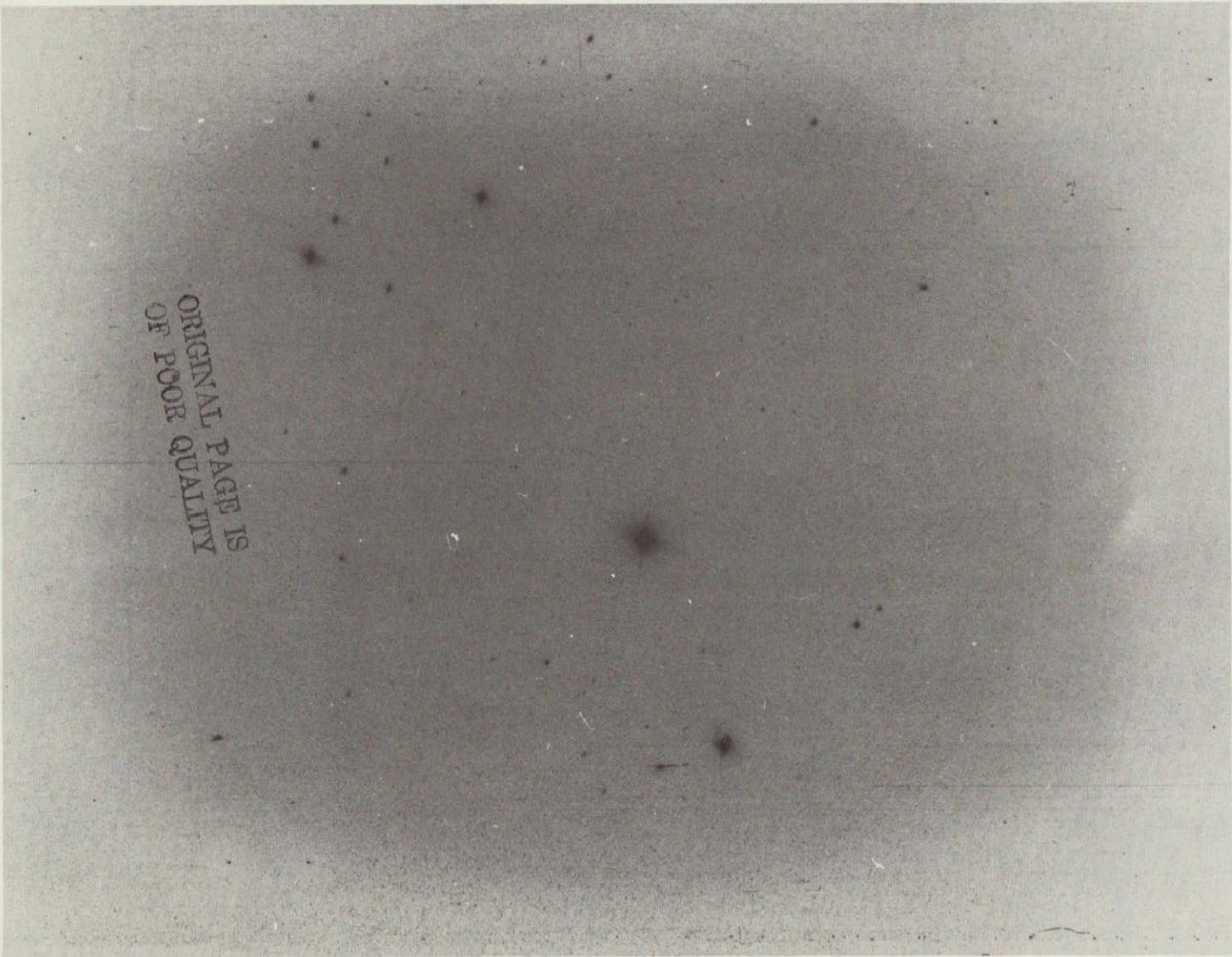
MIN/MAX X COORD. 1, 1024
 MIN/MAX Y COORD. 1, 1024
 X/Y INTERVAL 33, 33
 MINIMUM CONTOUR LEVEL 21
 MAXIMUM CONTOUR LEVEL 501
 CONTOUR INTERVAL 20

S201
 760036

10/09/77
 E06480

Fig. 5d — Sample isodensity contour plot. Orientation is the same as in Figs. 5b and 5c.

ORIGINAL PAGE IS
 OF POOR QUALITY



ORIGINAL PAGE IS
OF POOR QUALITY

Fig. 6b — S201 starfield photograph (frame A63, ICa, 10-min exposure)

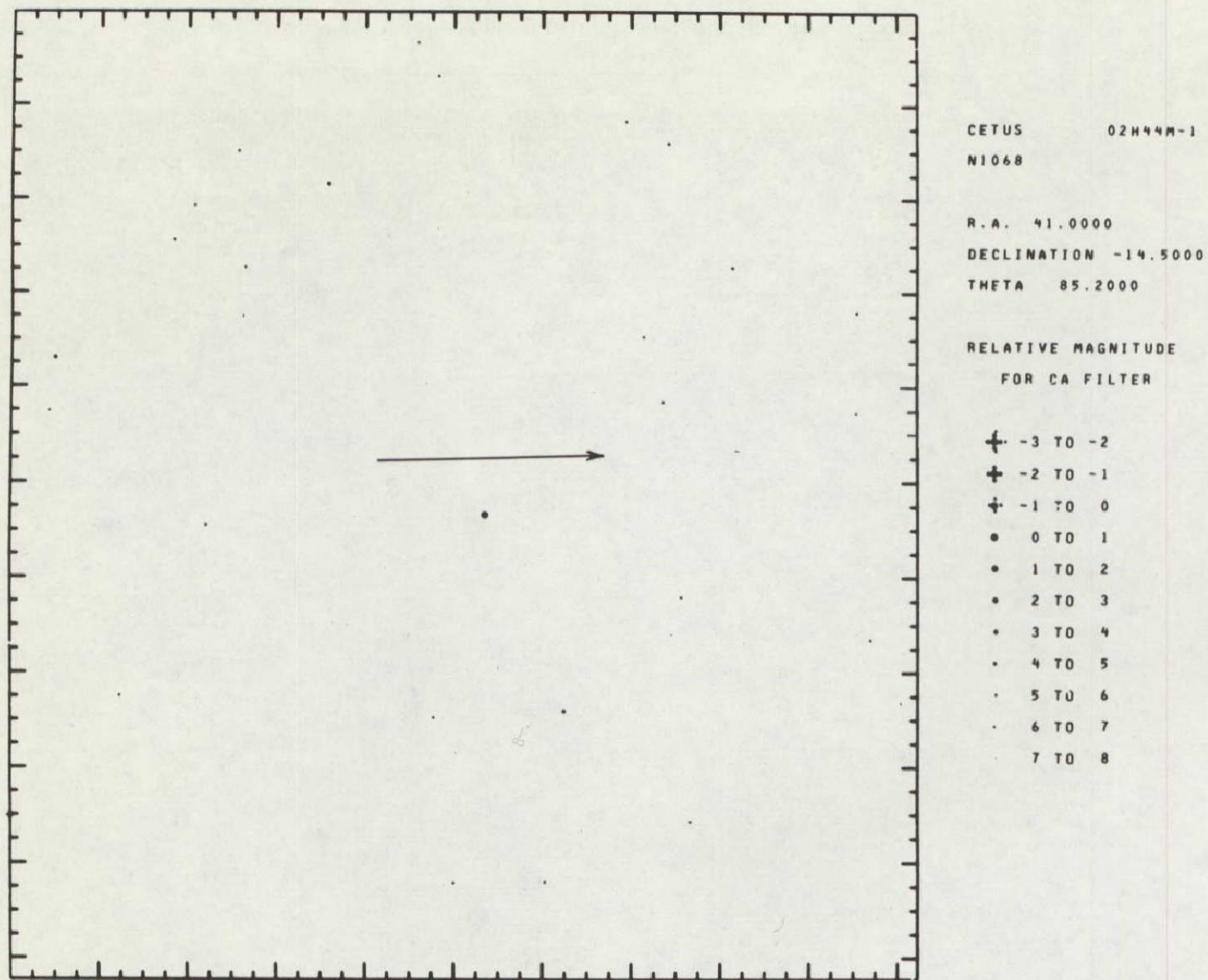


Fig. 6c — Smithsonian Astrophysical Observatory (SAO) star plot of area covered by the S201 image of Fig. 6b



S201
UV CAMERA EXPERIMENT
MISSION FRAME 63
TARGET: N1068
EXPOSURE TIME: 10.00
EXPOSURE DATE: 04/21/72

SCAN SPEED 120
DENSITY X 100
SMOOTHED DATA

MIN/MAX X COORD. 1, 1024
MIN/MAX Y COORD. 1, 1024
X/Y INTERVAL 33, 33
MINIMUM CONTOUR LEVEL 1
MAXIMUM CONTOUR LEVEL 361
CONTOUR INTERVAL 20

S201
760038

10/09/77
x20183

Fig. 6d — Sample isodensity contour plot. Orientation is the same as in Figs. 6b and 6c.

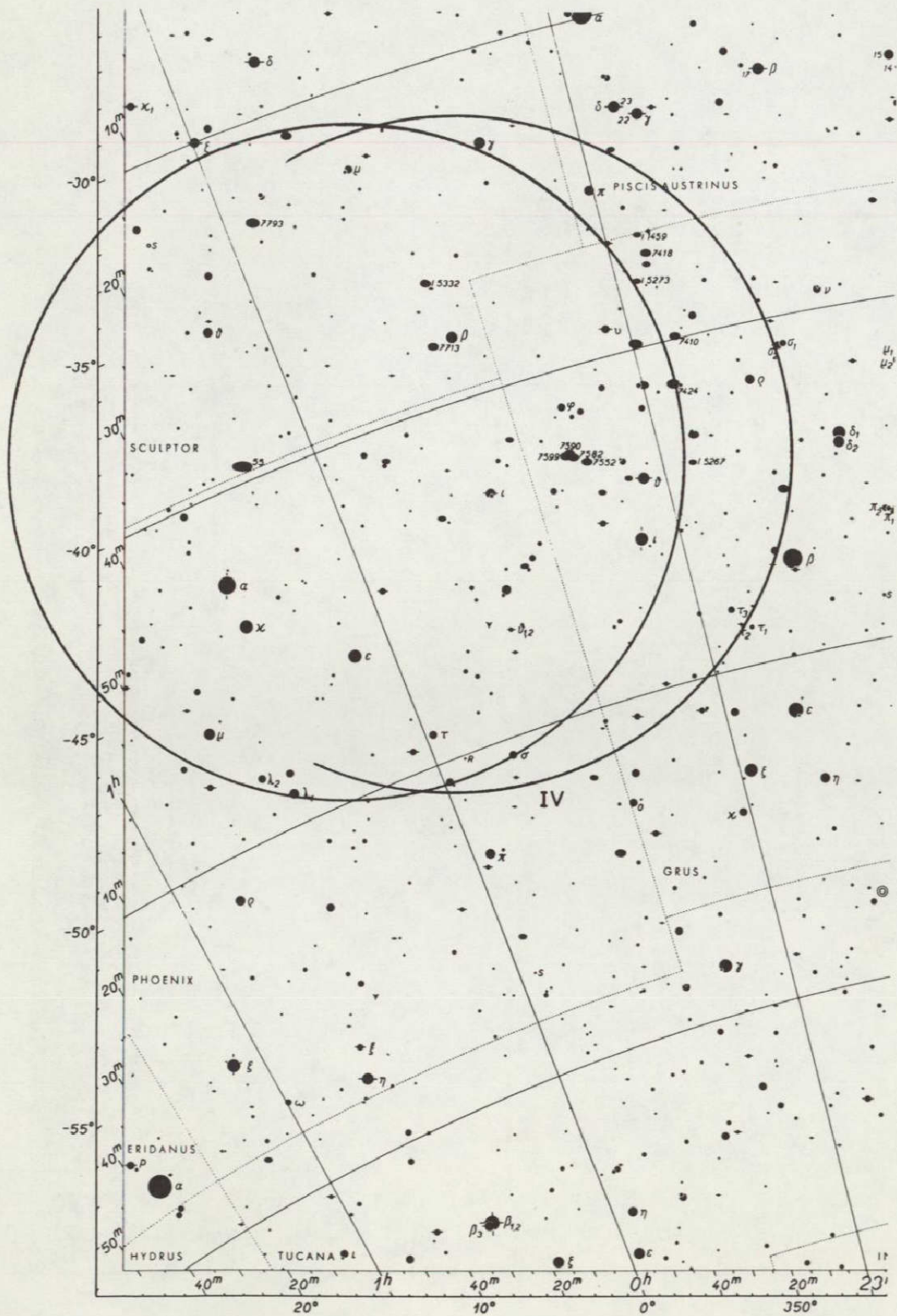


Fig. 7a — Preselected target field (Grus-N55). Two overlapping fields shown. The approximate area covered by the S201 pointing is shown by the two circles (beginning and ending of sequence).

ORIGINAL PAGE IS
OF POOR QUALITY

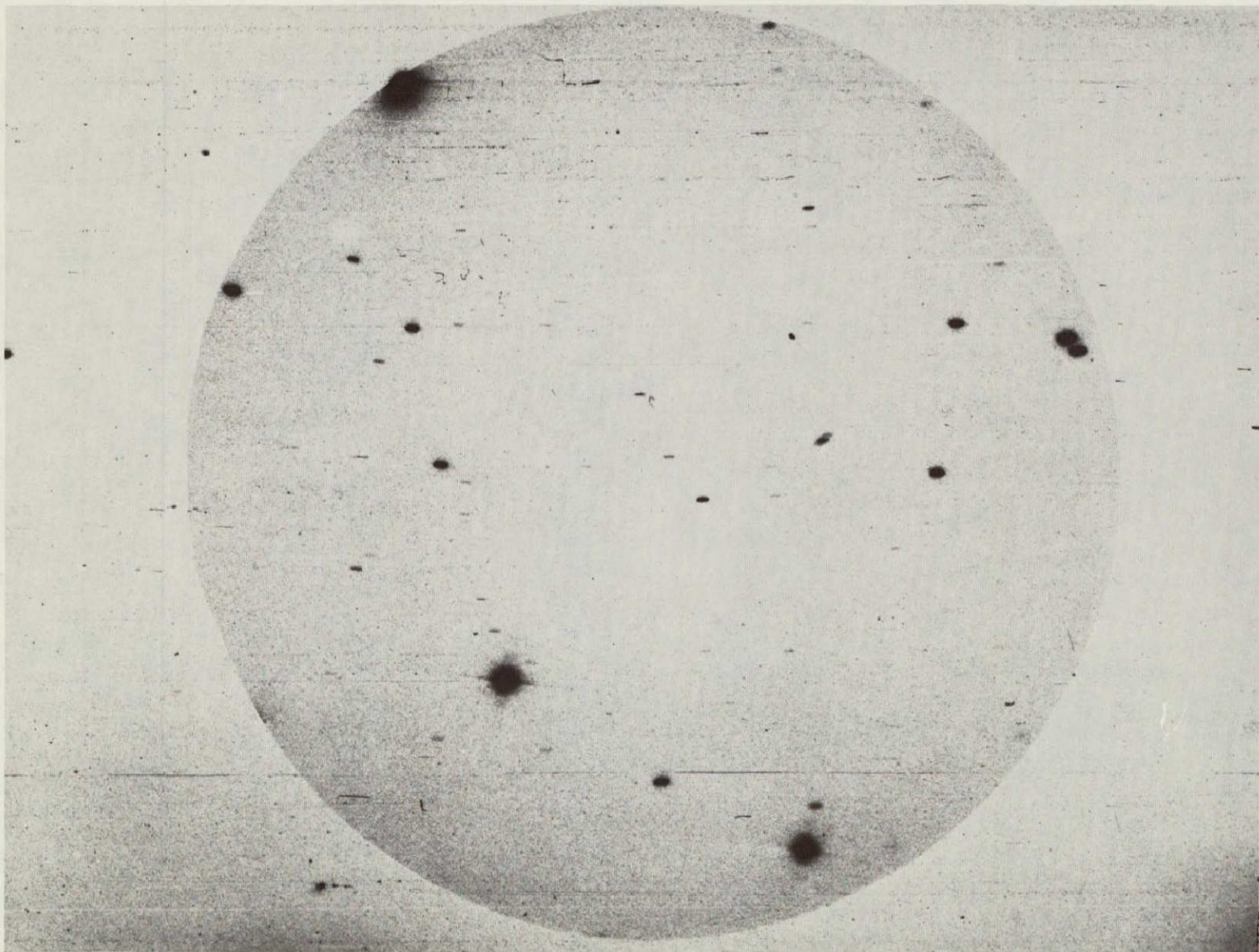
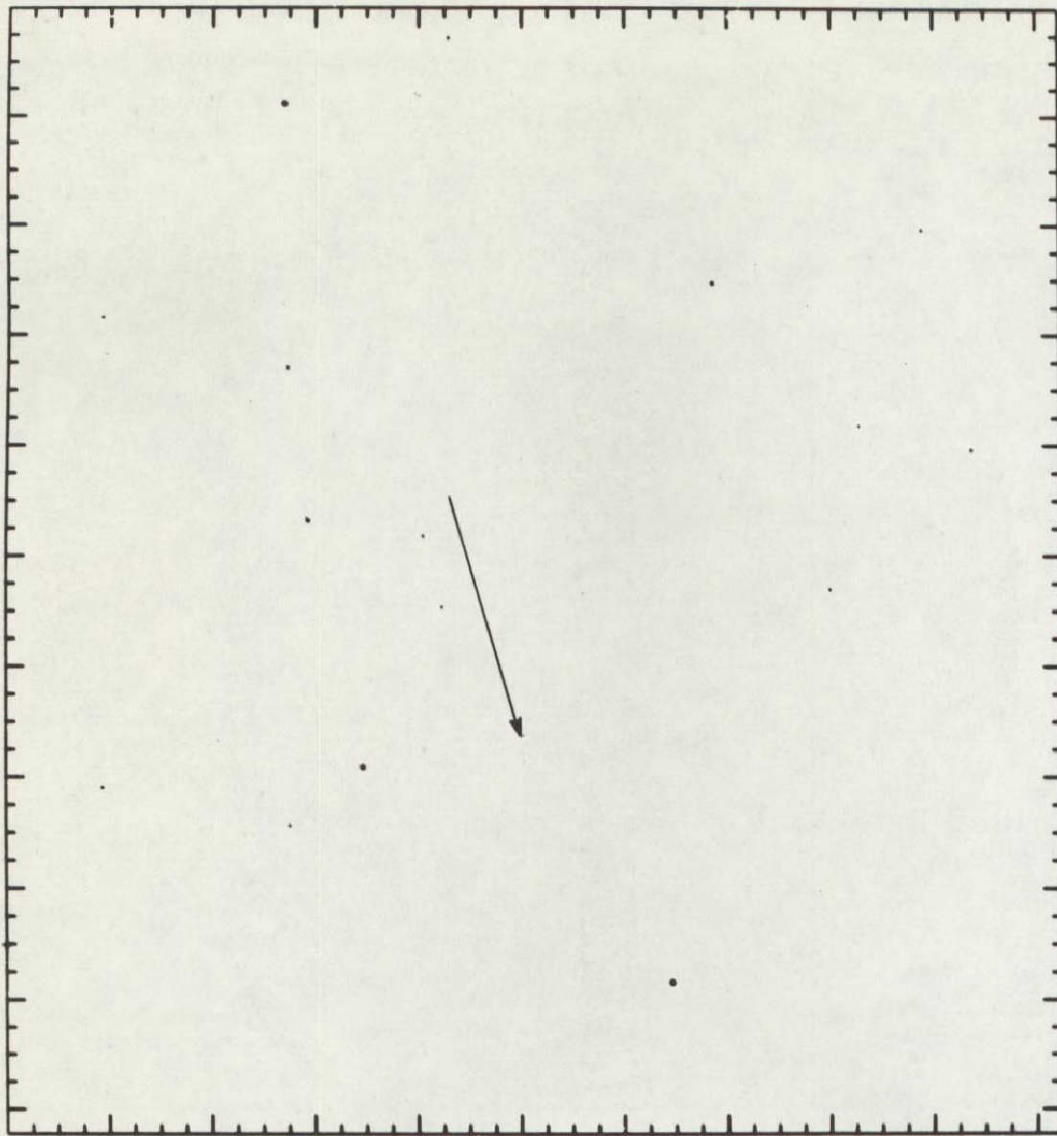


Fig. 7b — S201 starfield photograph (frame A94, ICa, 30-min exposure)



GRUS 2 23H54M-4
GRUS

R. A. 358.5000
DECLINATION -40.5000
THETA 158.5000

RELATIVE MAGNITUDE
FOR CA FILTER

+ -3 TO -2
+ -2 TO -1
+ -1 TO 0
• 0 TO 1
• 1 TO 2
• 2 TO 3
• 3 TO 4
• 4 TO 5
• 5 TO 6
• 6 TO 7
• 7 TO 8

Fig. 7c — Smithsonian Astrophysical Observatory (SAO) star plot of area covered by the S201 image of Fig. 7b

S201
UV CAMERA EXPERIMENT
MISSION FRAME 94
TARGET: GRUS
EXPOSURE TIME: 30.00
EXPOSURE DATE: 04/22/72

SCAN SPEED 30
DENSITY X 100
SMOOTHED DATA

MIN/MAX X COORD. 1 , 1024
MIN/MAX Y COORD. 1 , 1024
X/Y INTERVAL 33 , 33
MINIMUM CONTOUR LEVEL 21
MAXIMUM CONTOUR LEVEL 481
CONTOUR INTERVAL 20

S201
760040

10/09/77
E06443

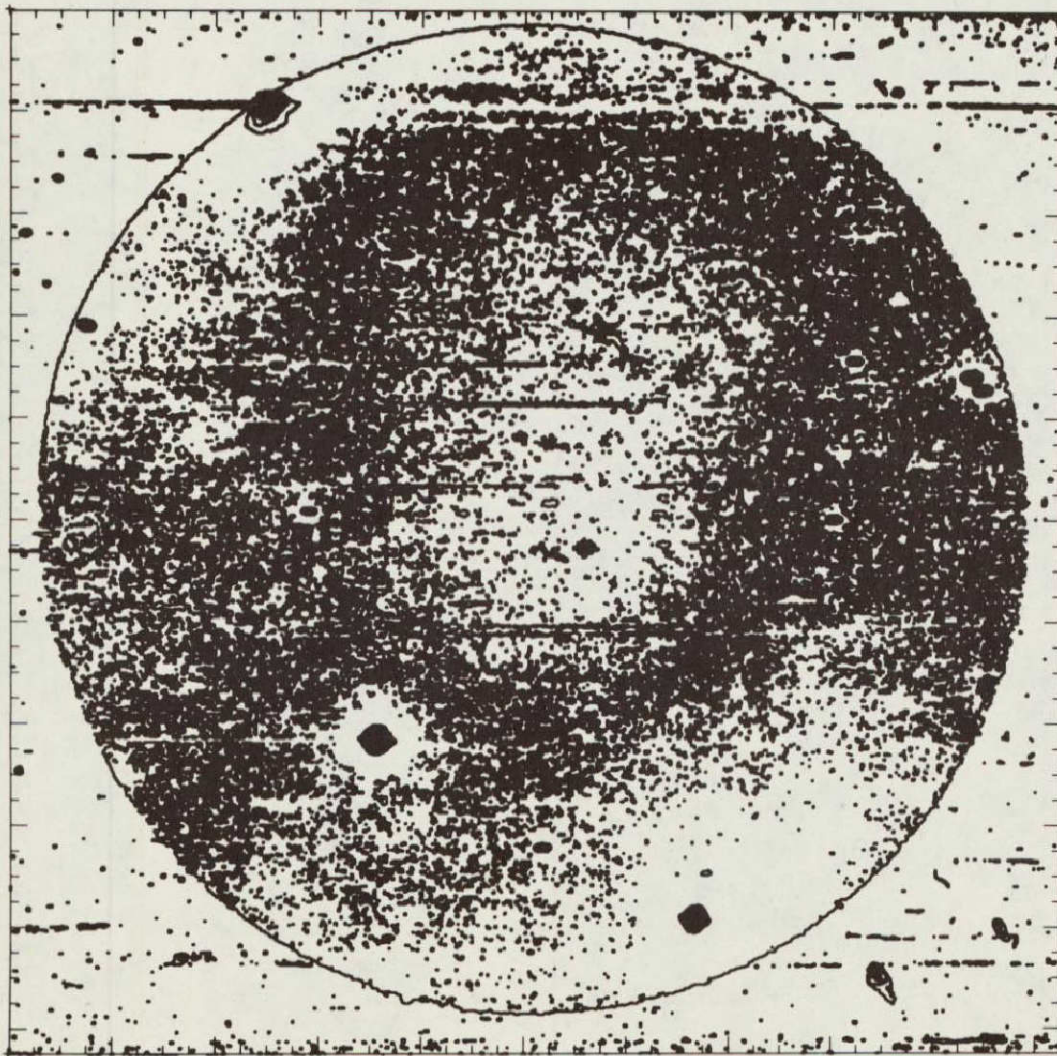


Fig. 7d — Sample isodensity contour plot. Orientation is the same as in Fig. 7b and 7c.

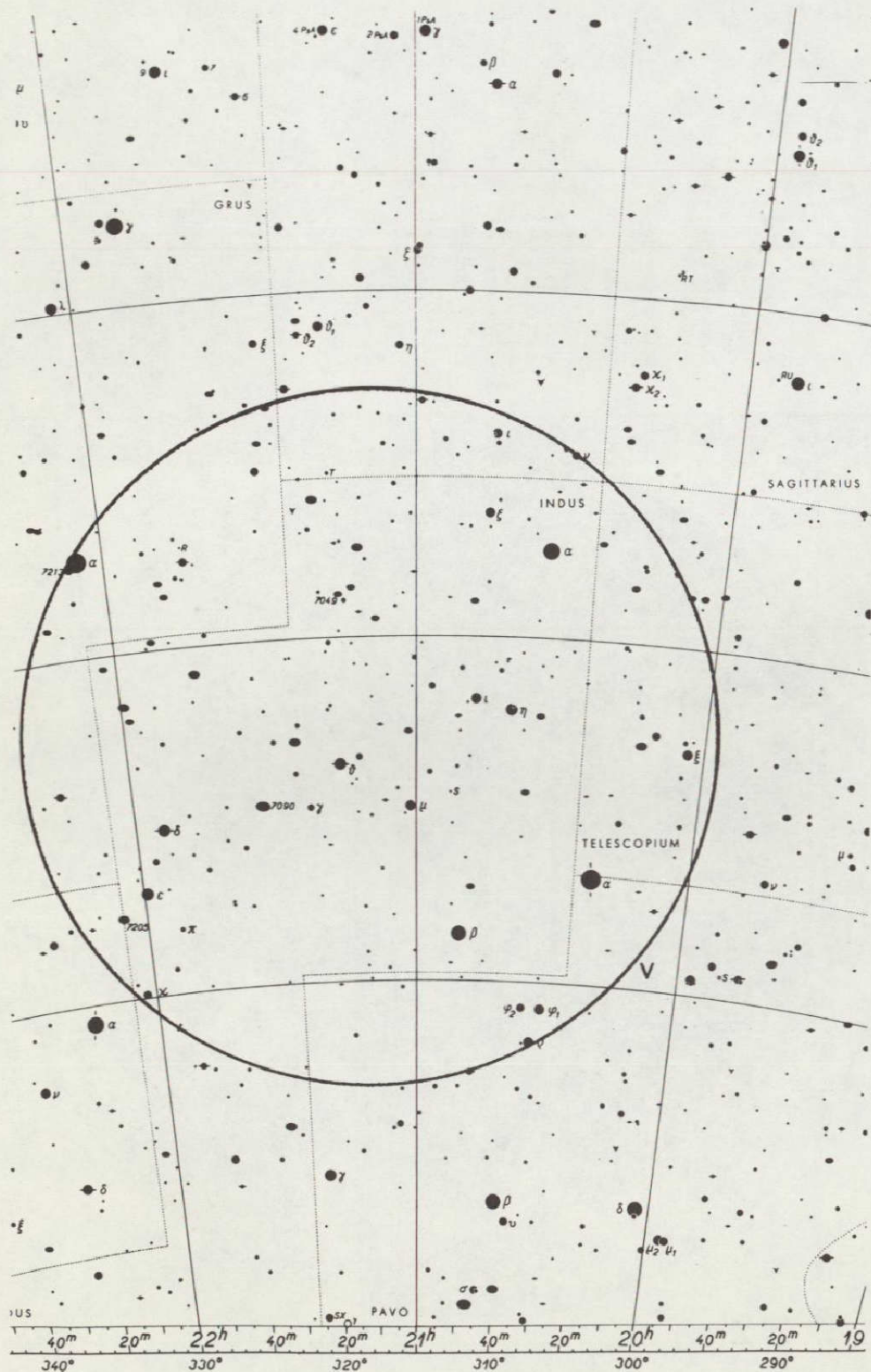


Fig. 8a — Preselected target field (Pavo). The approximate area covered by the S201 pointing is shown by the circle.

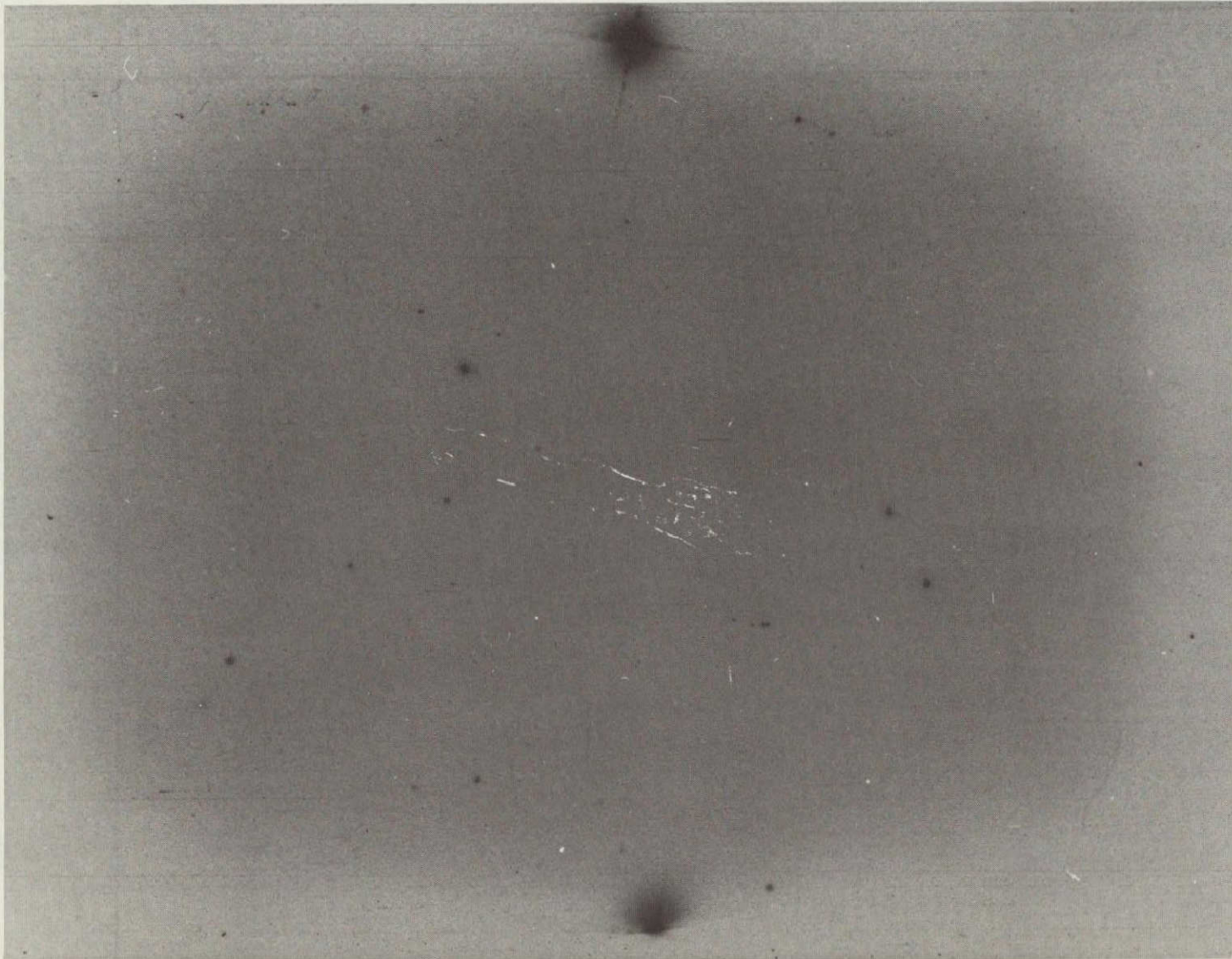


Fig. 8b — S201 starfield photograph (frame A121, ICa, 3-min exposure)

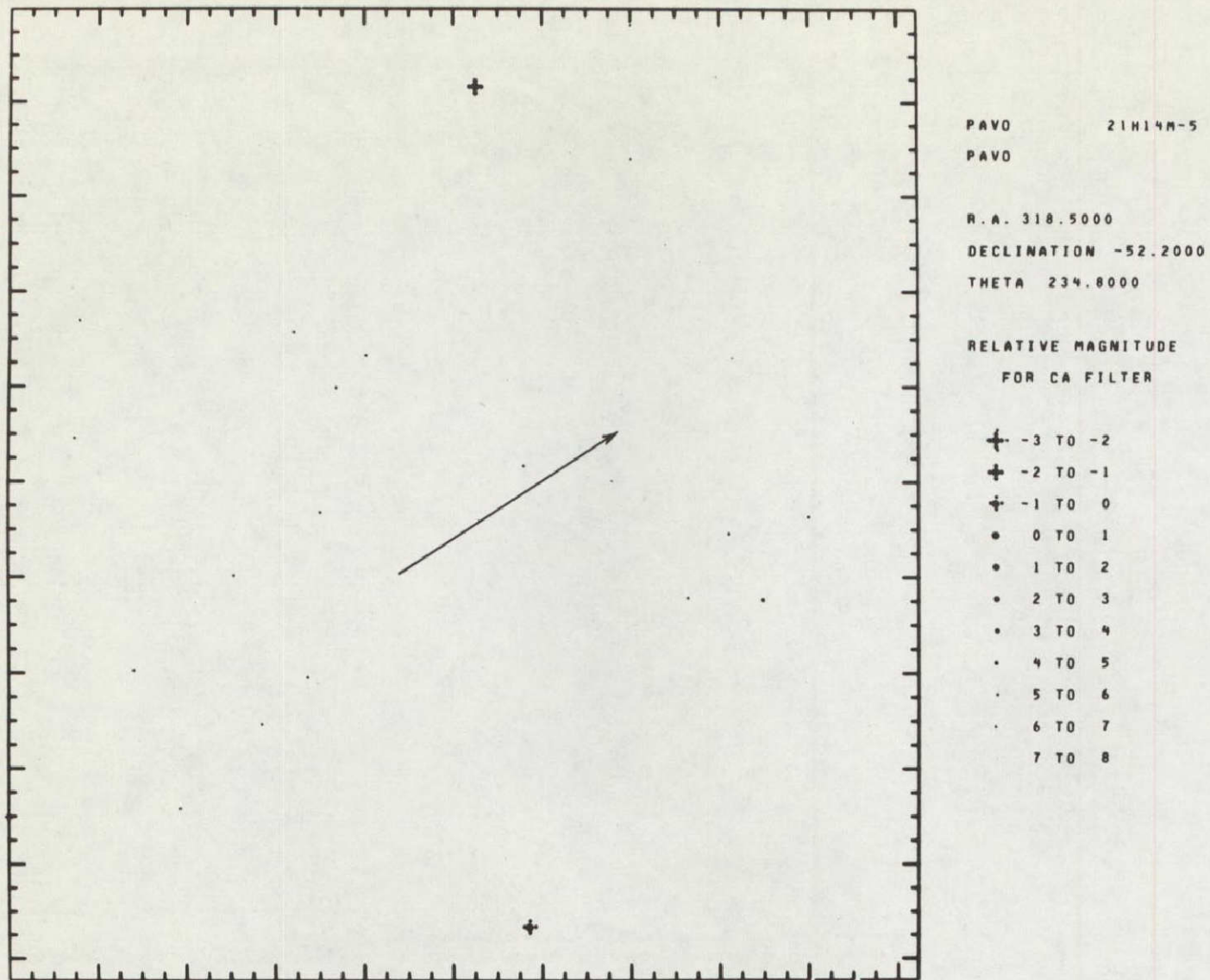


Fig. 8c — Smithsonian Astrophysical Observatory (SAO) star plot of area covered by the S201 image of Fig. 8b

S201
UV CAMERA EXPERIMENT
MISSION FRAME 121
TARGET: PAVO
EXPOSURE TIME: 3.00
EXPOSURE DATE: 04/22/72

SCAN SPEED 30
DENSITY X 100
SMOOTHED DATA

MIN/MAX X COORD. 1 , 1024
MIN/MAX Y COORD. 1 , 1024
X/Y INTERVAL 33 , 33
MINIMUM CONTOUR LEVEL 1
MAXIMUM CONTOUR LEVEL 501
CONTOUR INTERVAL 10

S201
760042

10/09/77
E06464

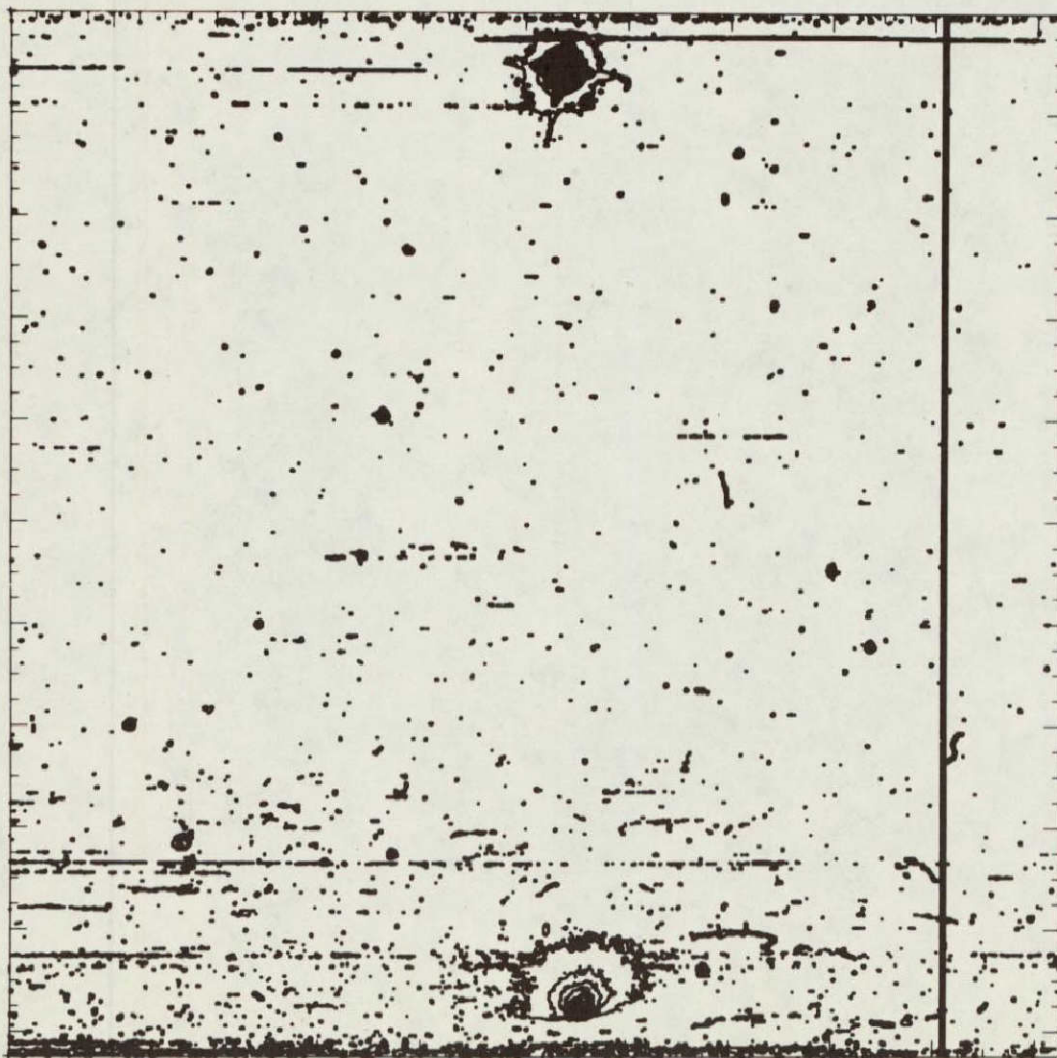


Fig. 8d — Sample isodensity contour plot. Orientation is the same as in Figs. 8b and 8c.

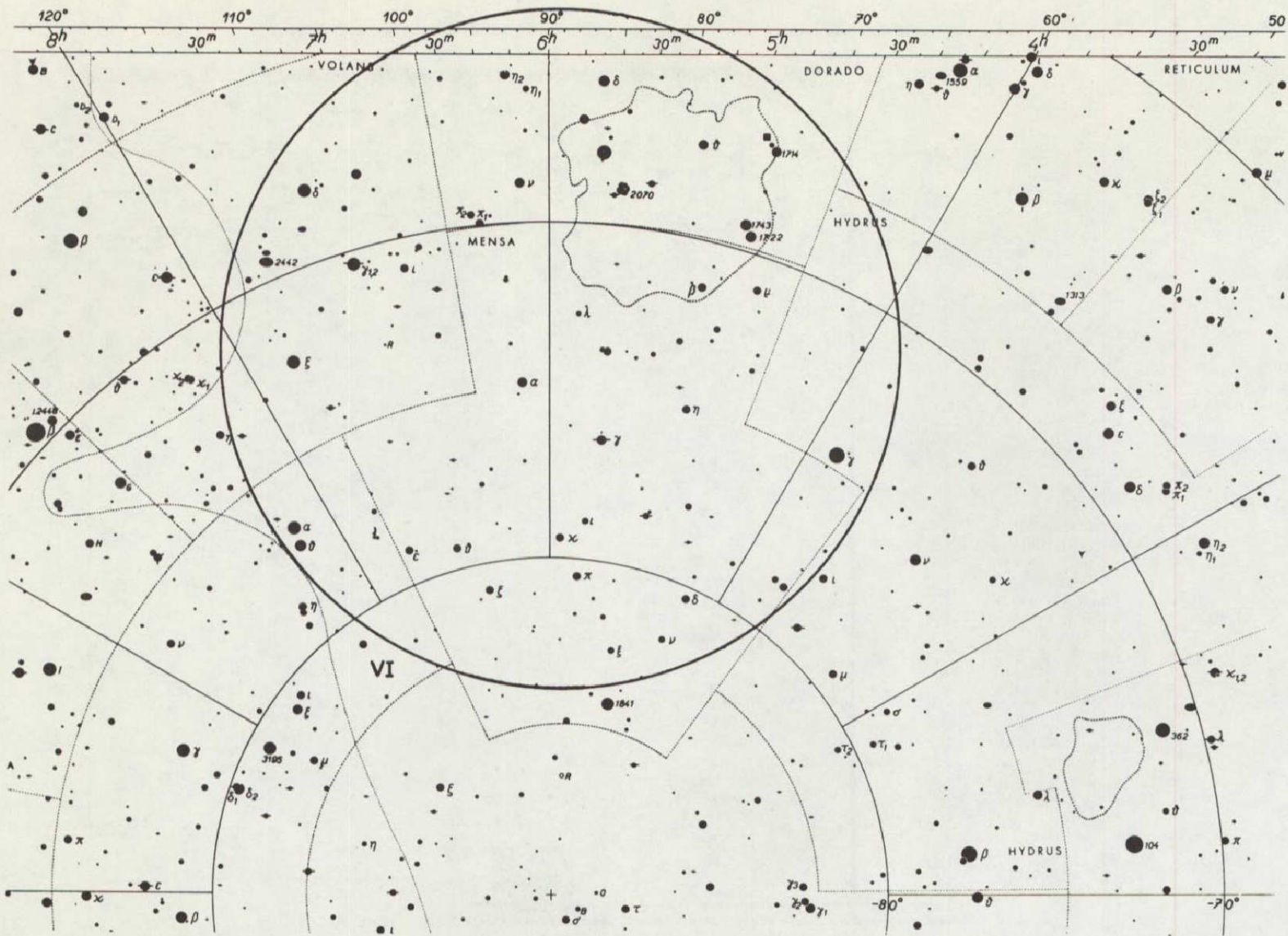


Fig. 9a — Preselected target field (Mensa-LMC). The approximate area covered by the S201 pointing is shown by the circle.

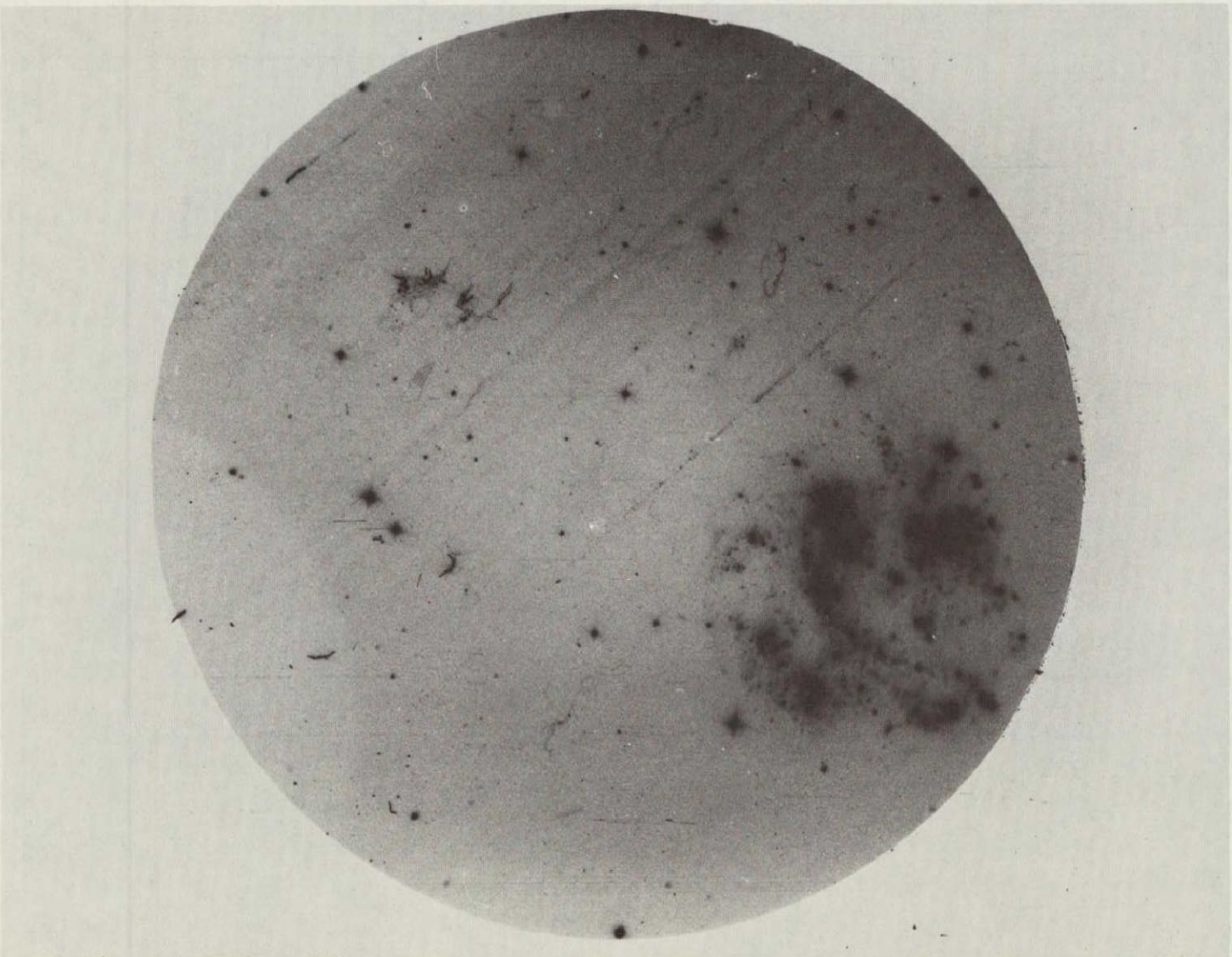


Fig. 9b — S201 starfield photograph (frame A129, ICa, 10-min exposure)

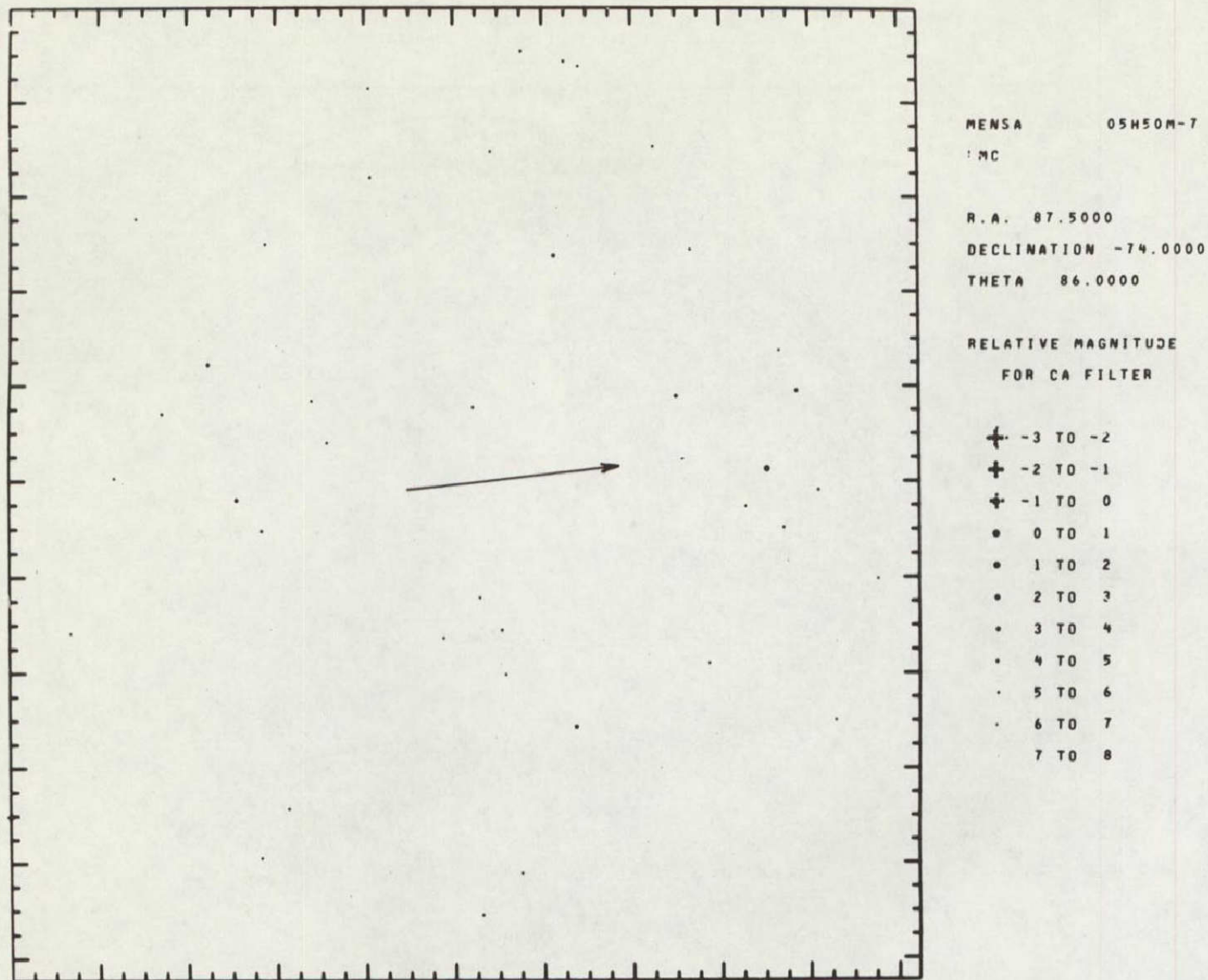
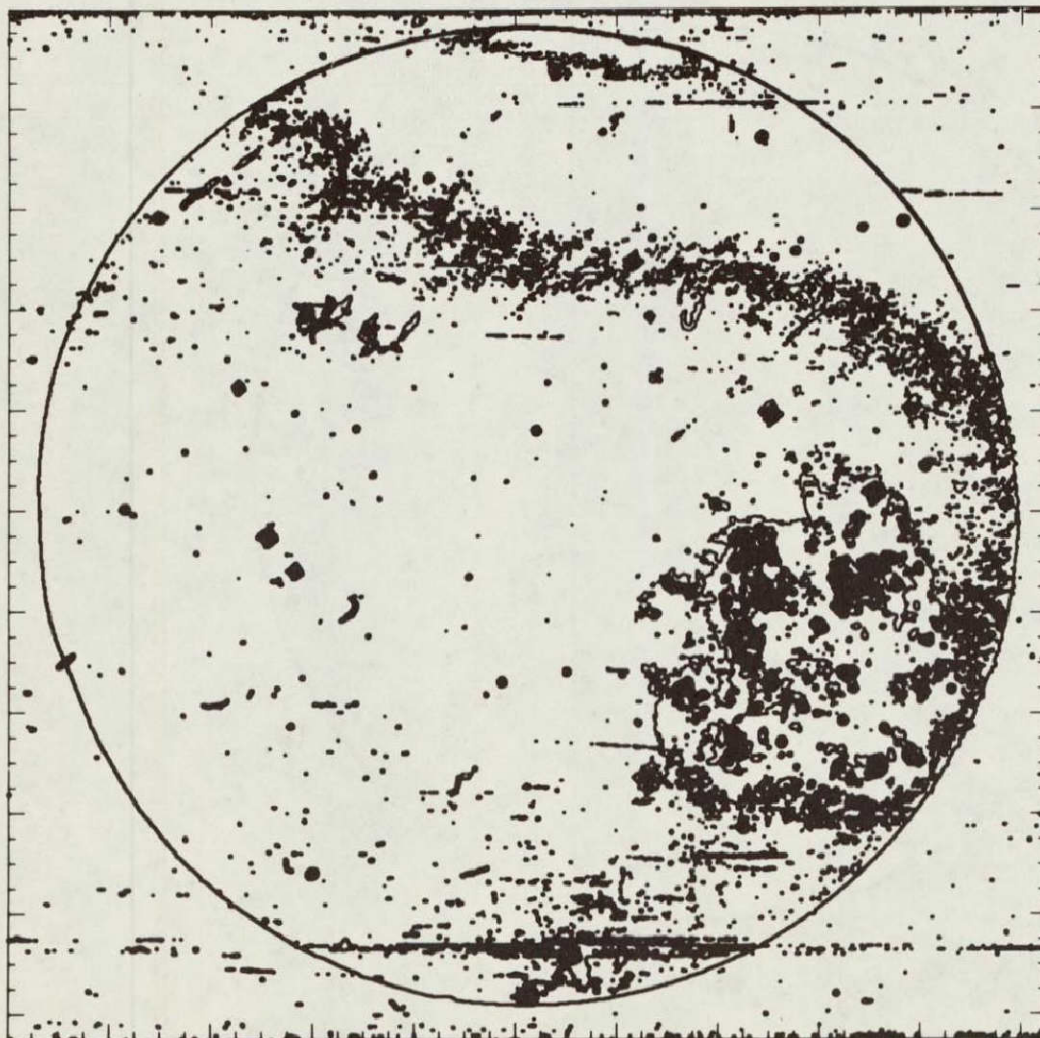


Fig. 9c — Smithsonian Astrophysical Observatory (SAO) star plot of area covered by the S201 image of Fig. 9b



S201
 UV CAMERA EXPERIMENT
 MISSION FRAME 129
 TARGET: L MAG. CLOUD
 EXPOSURE TIME: 10.00
 EXPOSURE DATE: 04/22/72

SCAN SPEED 30
 DENSITY X 100
 SMOOTHED DATA

MIN/MAX X COORD. 1 , 1024
 MIN/MAX Y COORD. 1 , 1024
 X/Y INTERVAL 33 , 33
 MINIMUM CONTOUR LEVEL 21
 MAXIMUM CONTOUR LEVEL 441
 CONTOUR INTERVAL 20

S201
 760051

10/09/77
 E04481

NRL REPORT 8173

ORIGINAL PAGE IS
 OF POOR QUALITY

Fig. 9d — Sample isodensity contour plot. Orientation is the same as in Figs. 9b and 9c.

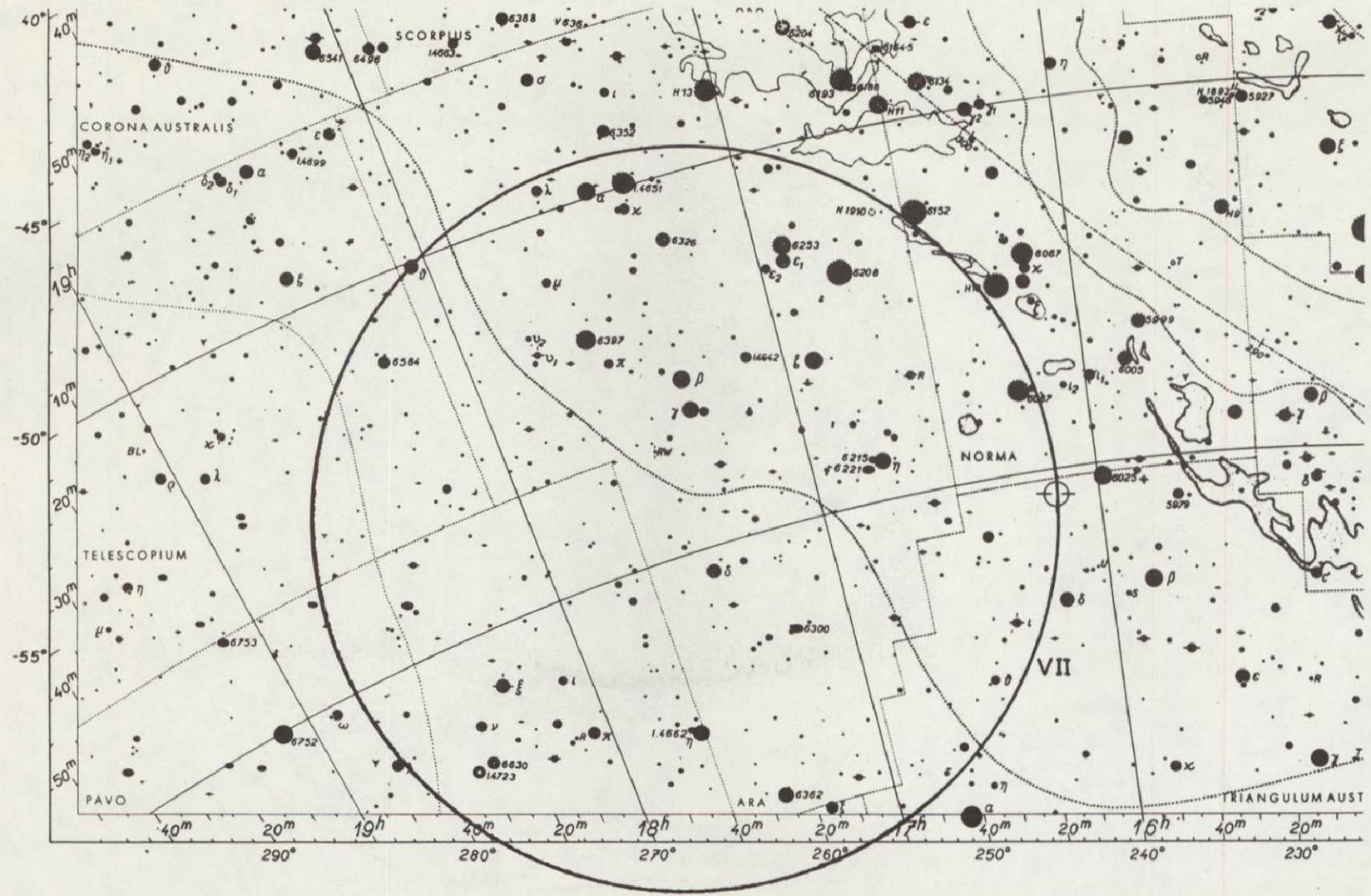


Fig. 10a — Preselected target field (Norma-N6300). The approximate area covered by the S201 pointing is shown by the circle.

ORIGINAL PAGE IS
OF POOR QUALITY

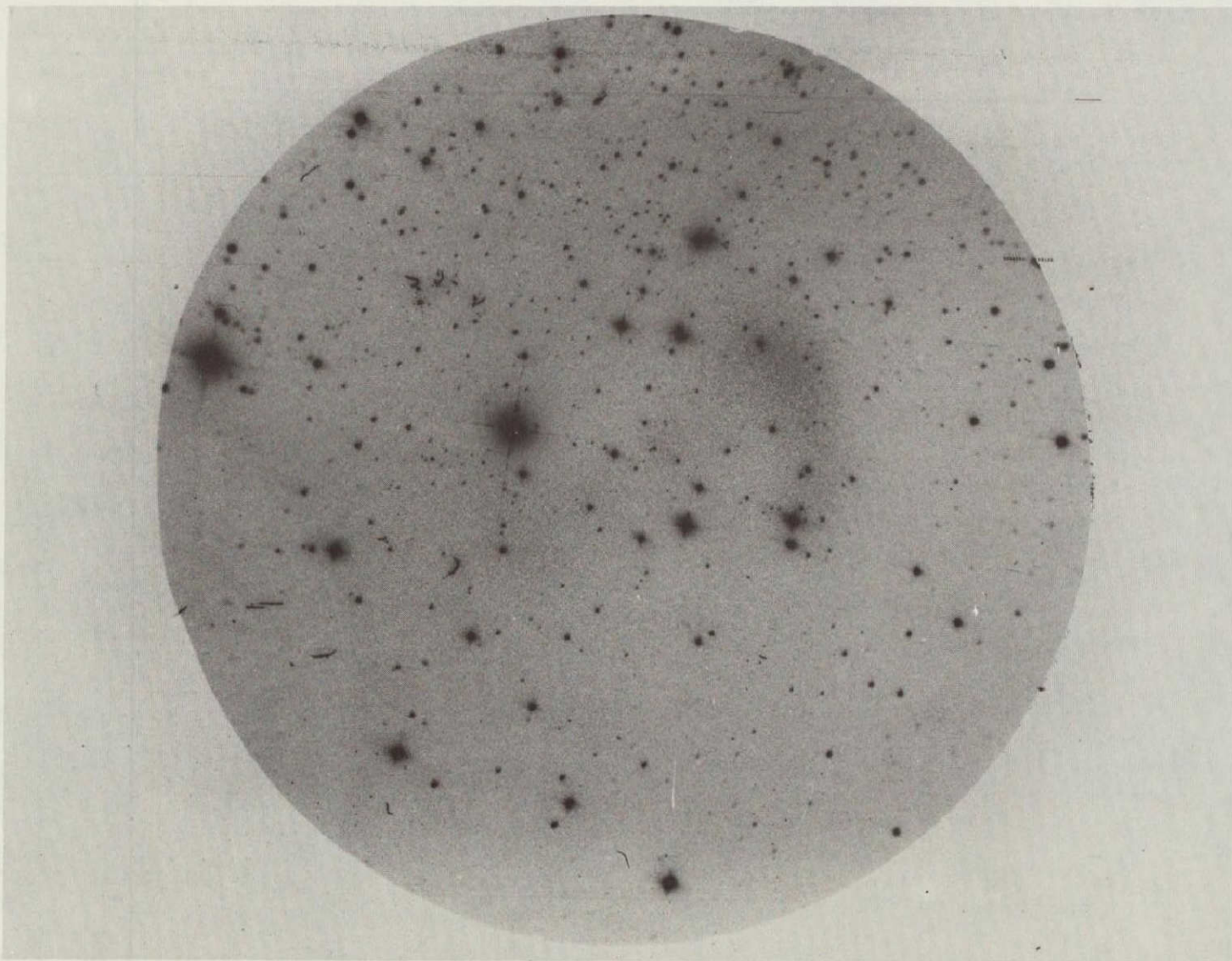
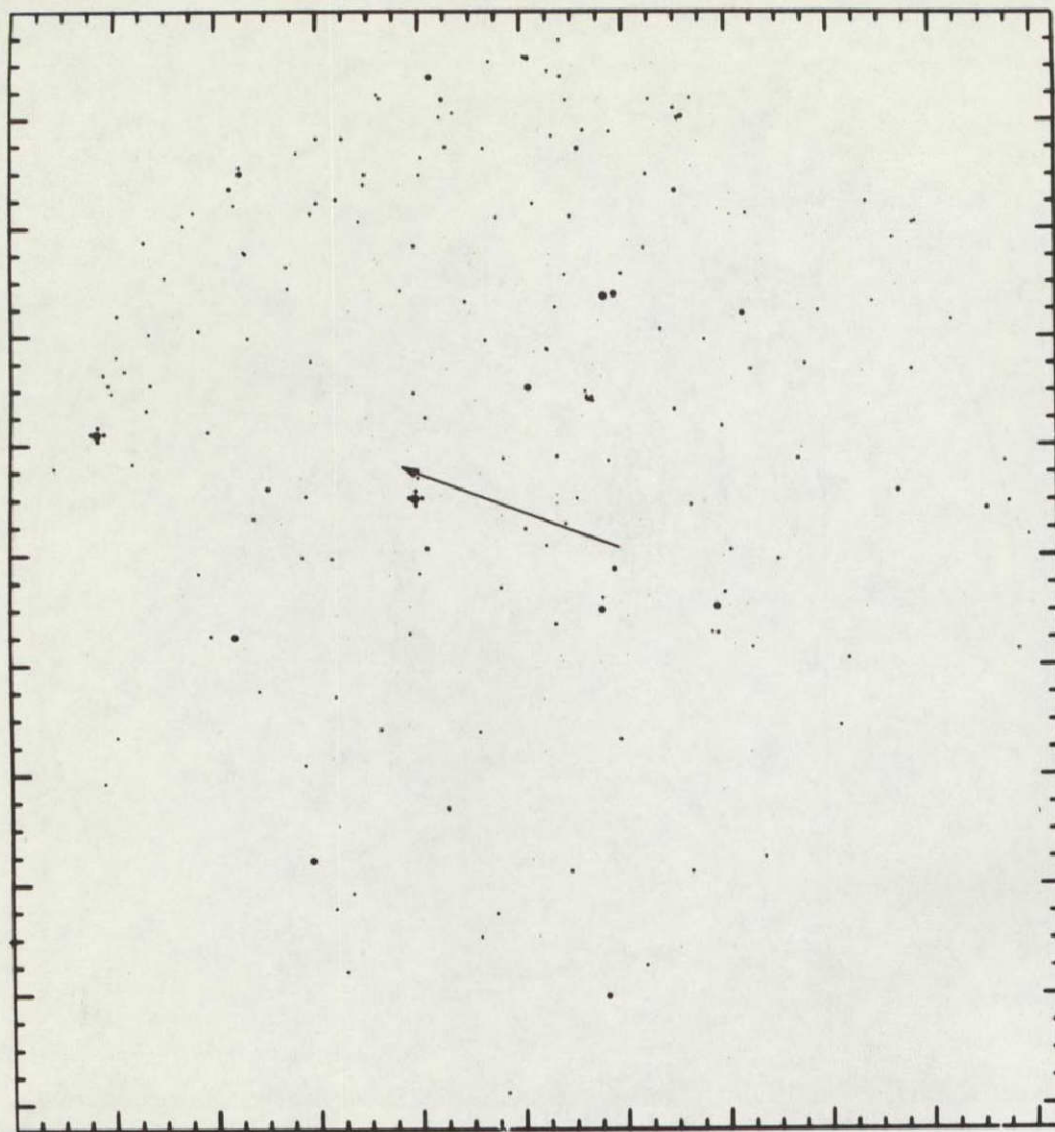


Fig. 10b — S201 starfield photograph (frame A149, 4.1-min exposure)



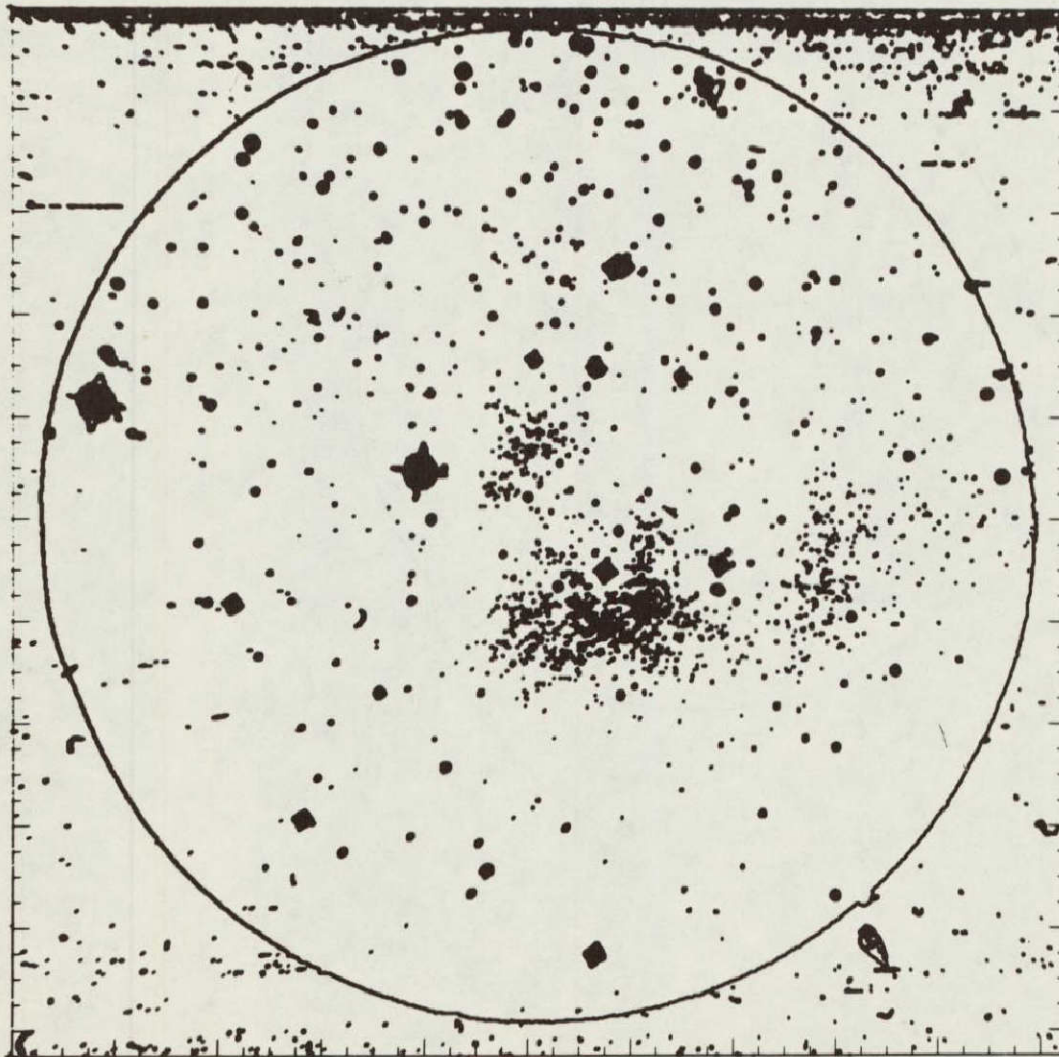
NORMA 17H24M-5
N6300

R. A. 261.0000
DECLINATION -59.0700
THETA -70.3000

RELATIVE MAGNITUDE
FOR CA FILTER

+	-3 TO -2
+	-2 TO -1
+	-1 TO 0
•	0 TO 1
•	1 TO 2
•	2 TO 3
•	3 TO 4
•	4 TO 5
•	5 TO 6
•	6 TO 7
•	7 TO 8

Fig. 10c — Smithsonian Astrophysical Observatory (SAO) star plot of area covered by the S201 image of Fig. 10b



S201
 UV CAMERA EXPERIMENT
 MISSION FRAME 149
 TARGET: N6300
 EXPOSURE TIME: 4.10
 EXPOSURE DATE: 04/22/72

SCAN SPEED 30
 DENSITY X 100
 SMOOTHED DATA

MIN/MAX X COORD. 1 , 1024
 MIN/MAX Y COORD. 1 , 1024
 X/Y INTERVAL 33 , 33
 MINIMUM CONTOUR LEVEL 21
 MAXIMUM CONTOUR LEVEL 501
 CONTOUR INTERVAL 20

S201
 760045

10/09/77
 E06436

Fig. 10d — Sample isodensity contour plot. Orientation is the same as in Figs. 10b and 10c.

ORIGINAL PAGE IS
 OF POOR QUALITY

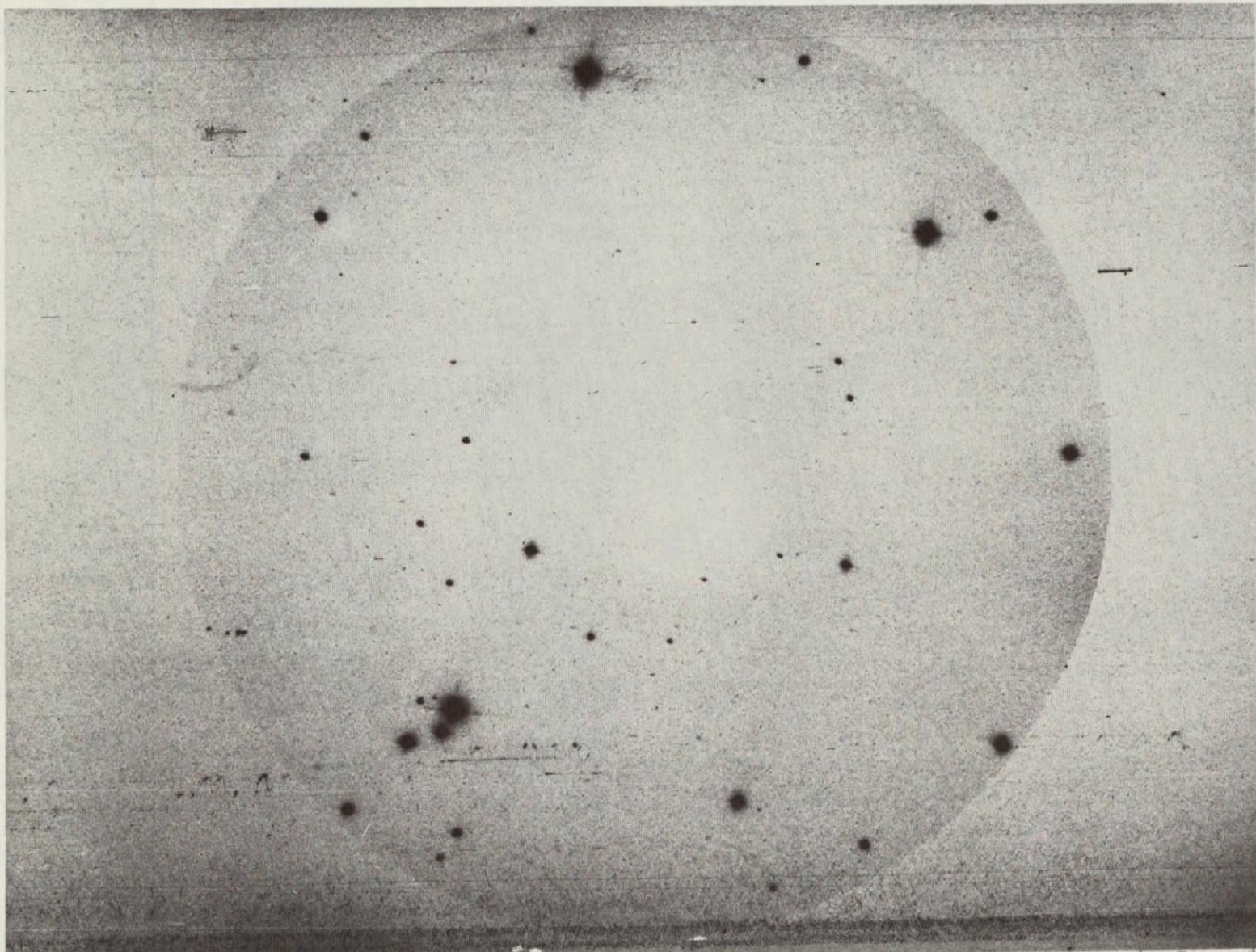


Fig. 11b — S201 starfield photograph (Aquarius 1, frame A156, ICa, 10-min exposure)

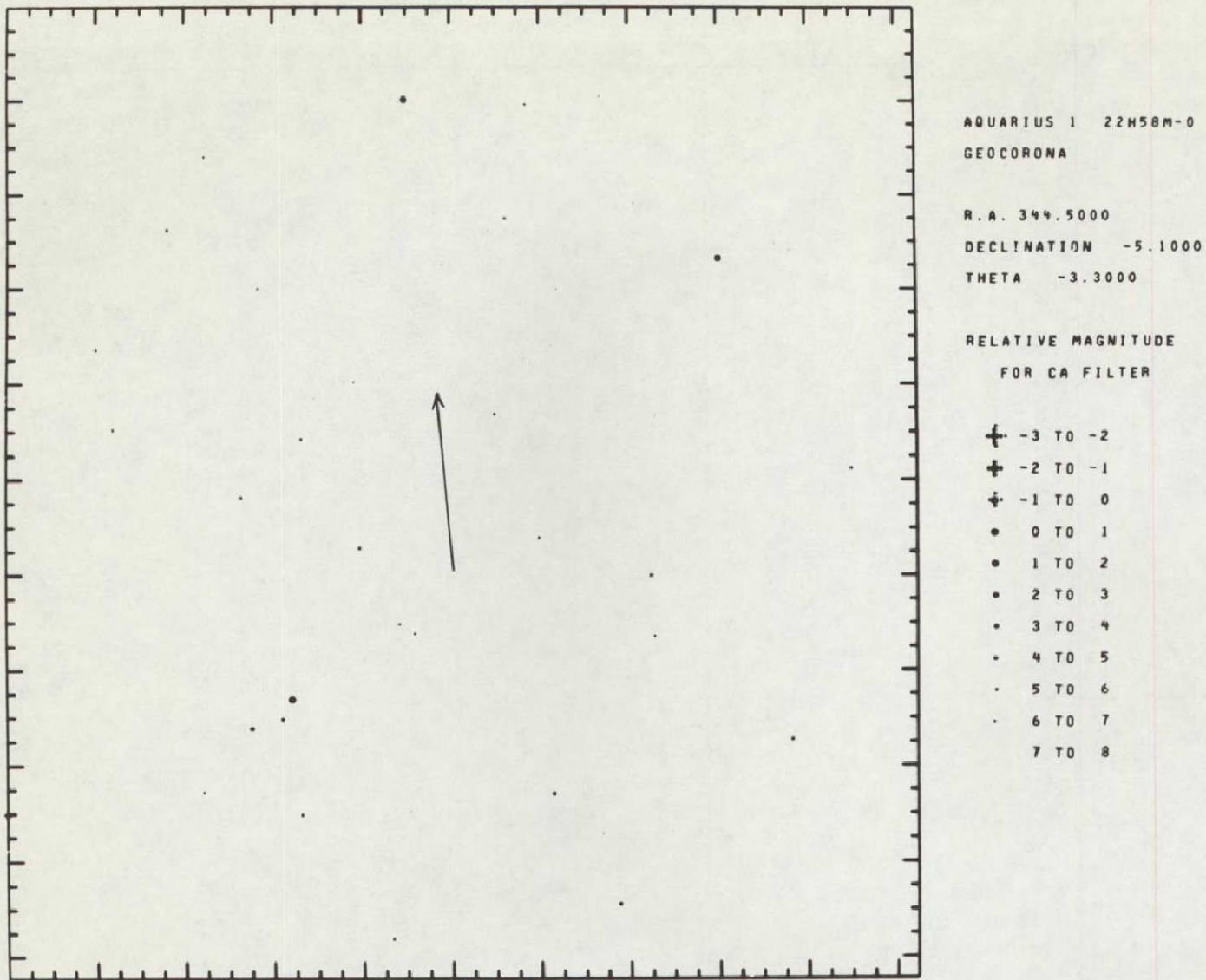


Fig. 11c — Smithsonian Astrophysical Observatory (SAO) star plot of area covered by the S201 image of Fig. 11b, Aquarius 1

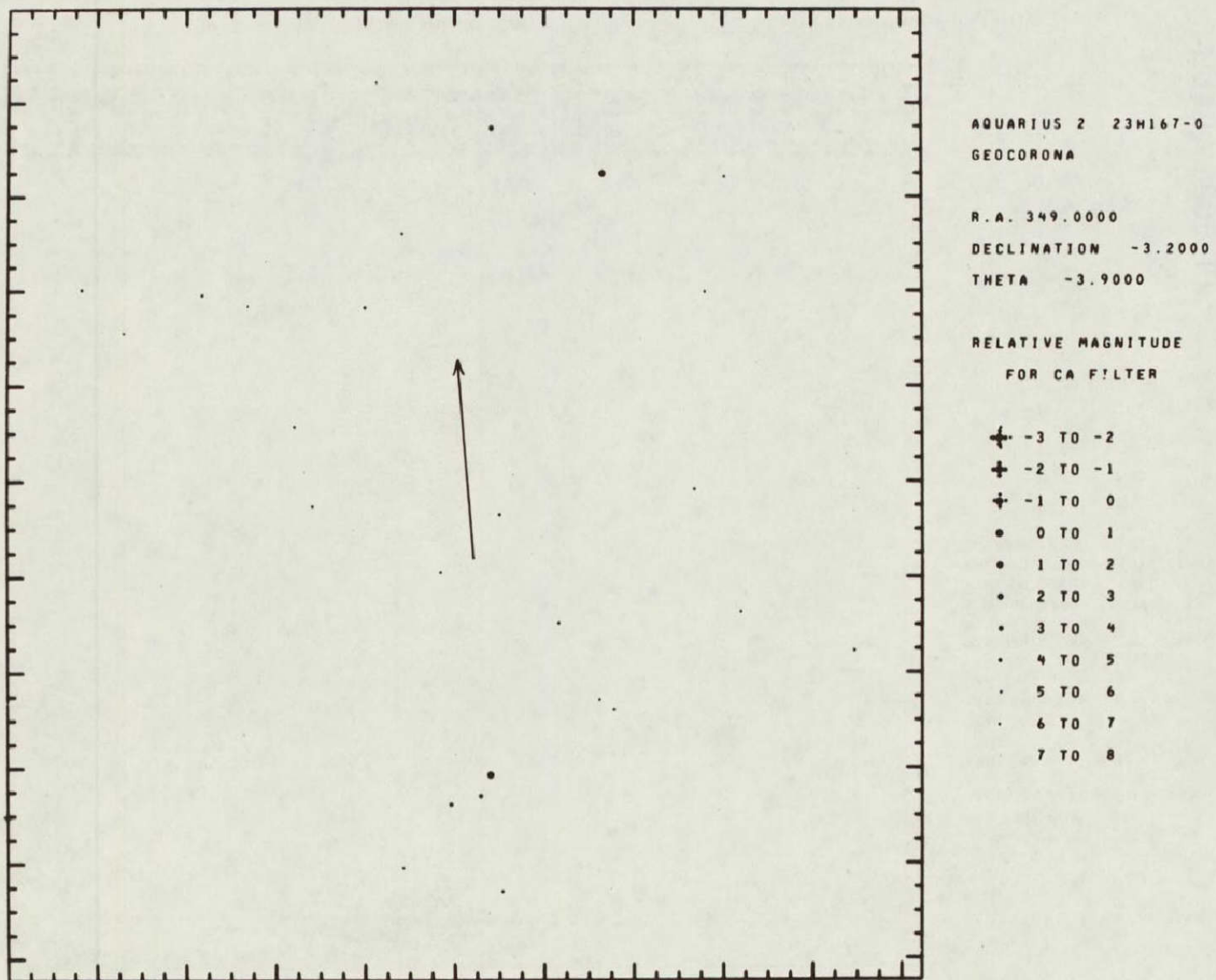
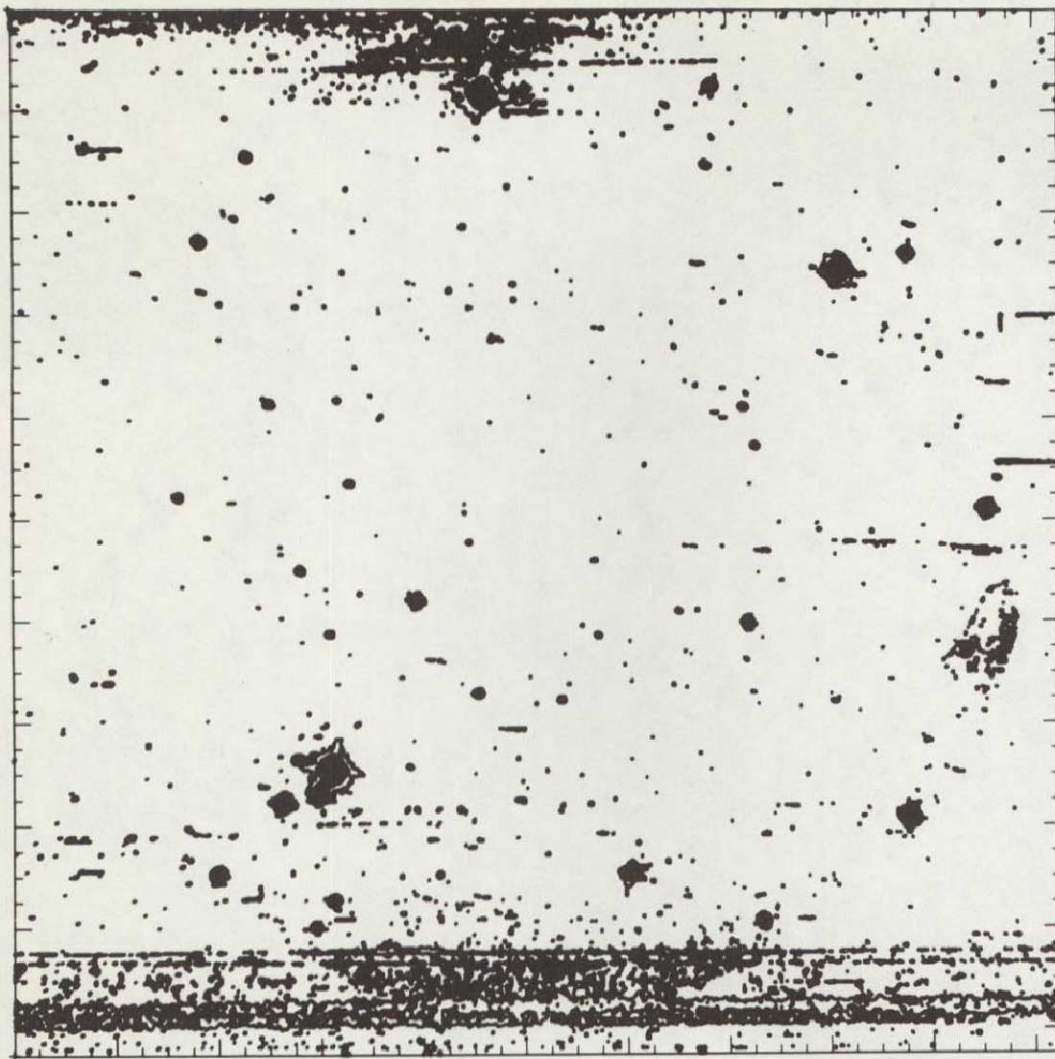


Fig. 11d — Sample isodensity contour plot. Orientation is the same as in Figs. 11b and 11c, frames A171-7, Aquarius 2



S201
 UV CAMERA EXPERIMENT
 MISSION FRAME 156
 TARGET: GEORONA
 EXPOSURE TIME: 10.00
 EXPOSURE DATE: 04/23/72

SCAN SPEED 30
 DENSITY X 100
 SMOOTHED DATA

MIN/MAX X COORD. 1 , 1024
 MIN/MAX Y COORD. 1 , 1024
 X/Y INTERVAL 33 , 33
 MINIMUM CONTOUR LEVEL 11
 MAXIMUM CONTOUR LEVEL 481
 CONTOUR INTERVAL 10

S201
 760045

10/09/77
 E06445

Fig. 11e — Isodensity contour plot of frame A156, ICa, 10 min exposure (Fig. 11b)

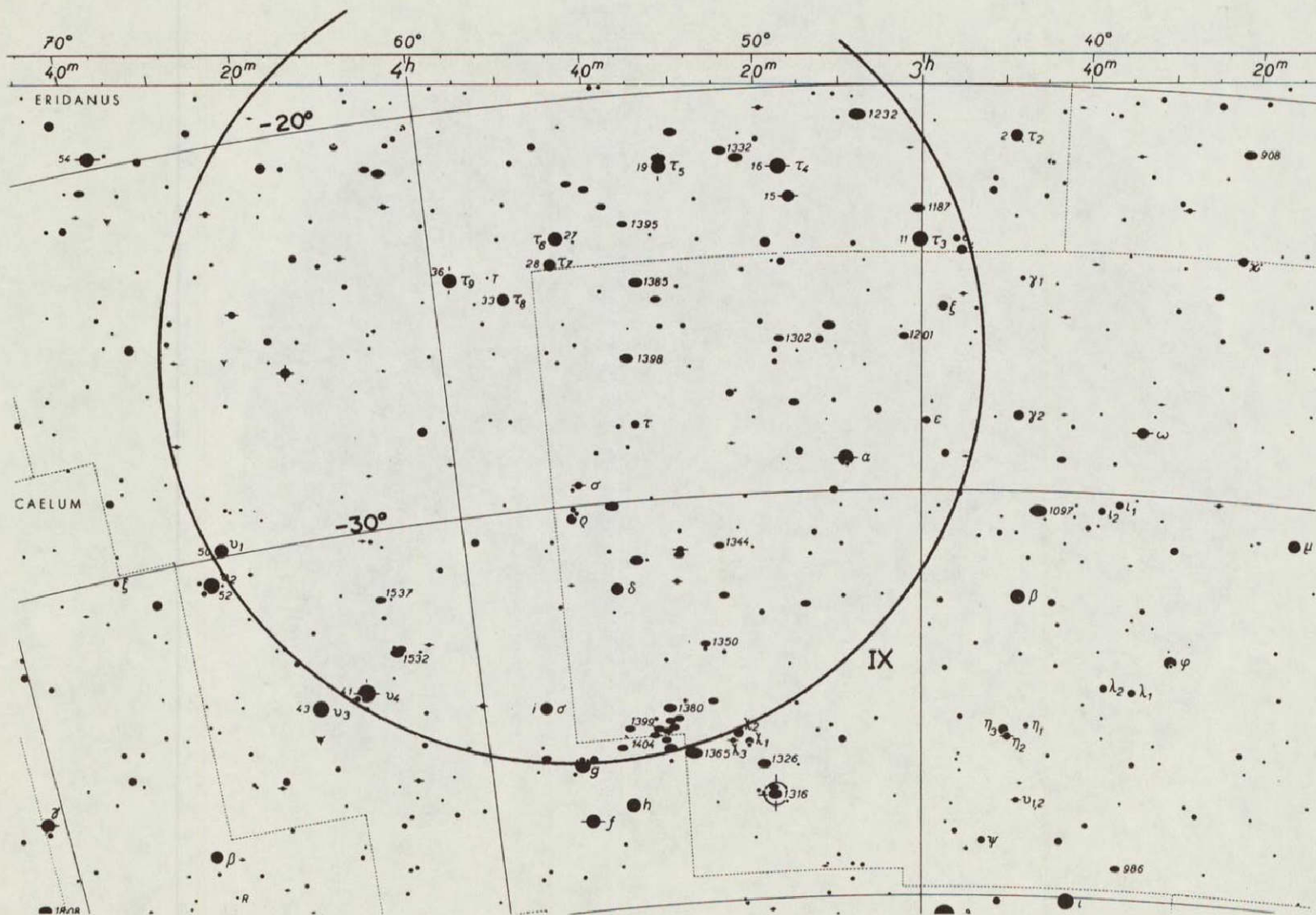


Fig. 12a — Preselected target field (Fornax). The approximate area covered by the S201 pointing is shown by the circle; see also Fig. 6a.

37

ORIGINAL PAGE IS
OF POOR QUALITY

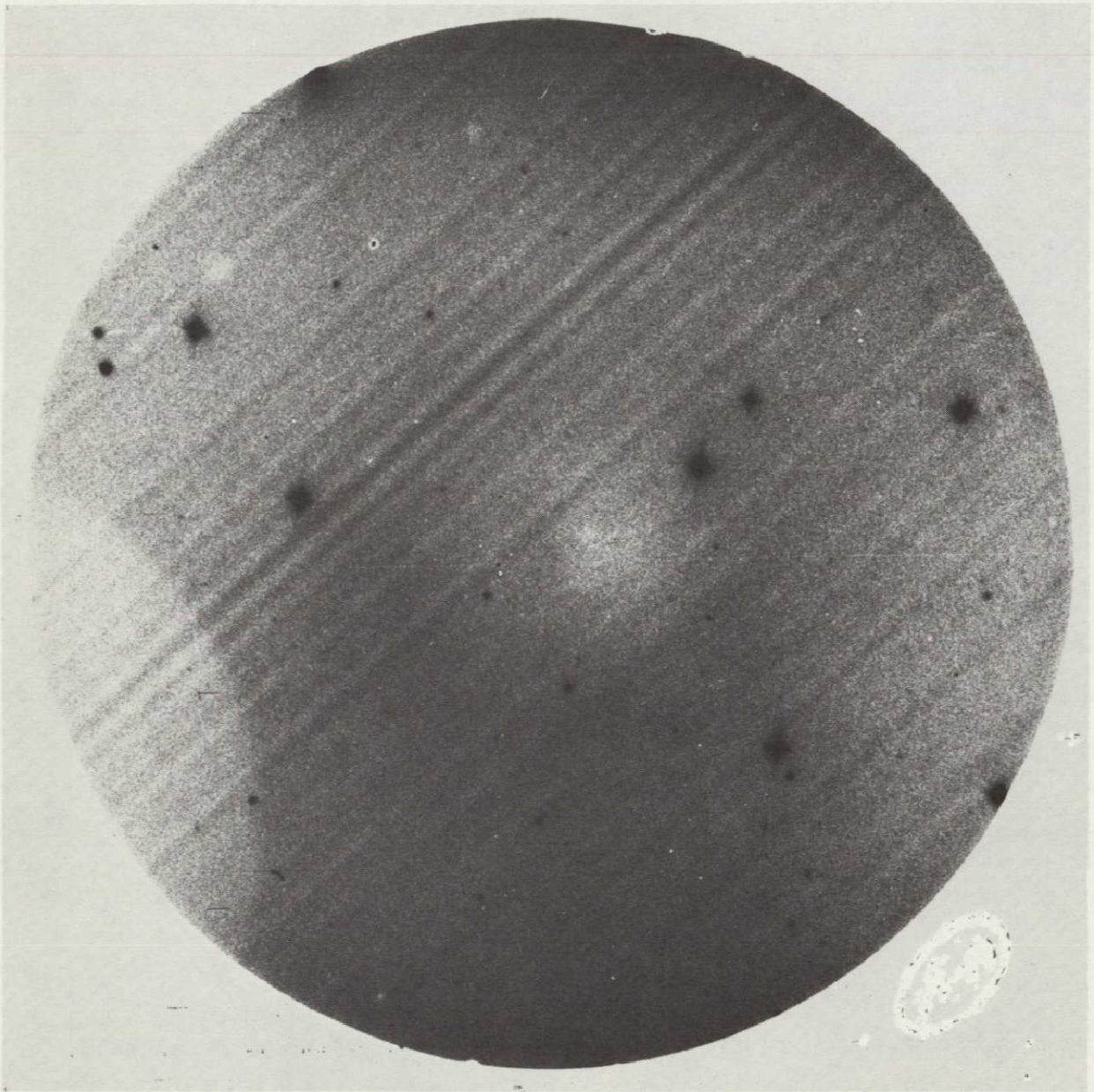


Fig. 12b — S201 starfield photograph (frame A192, ICa, 3-min exposure)

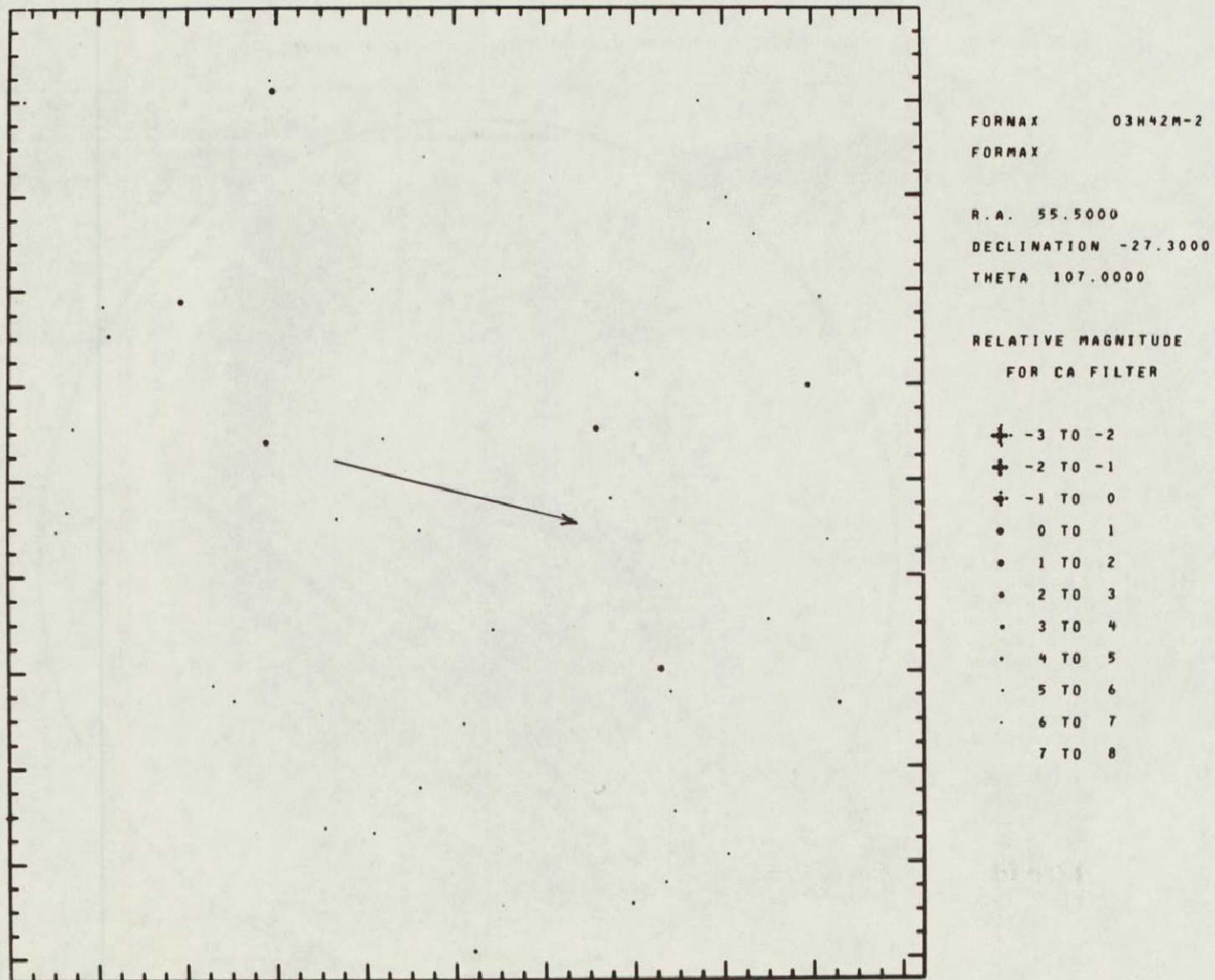
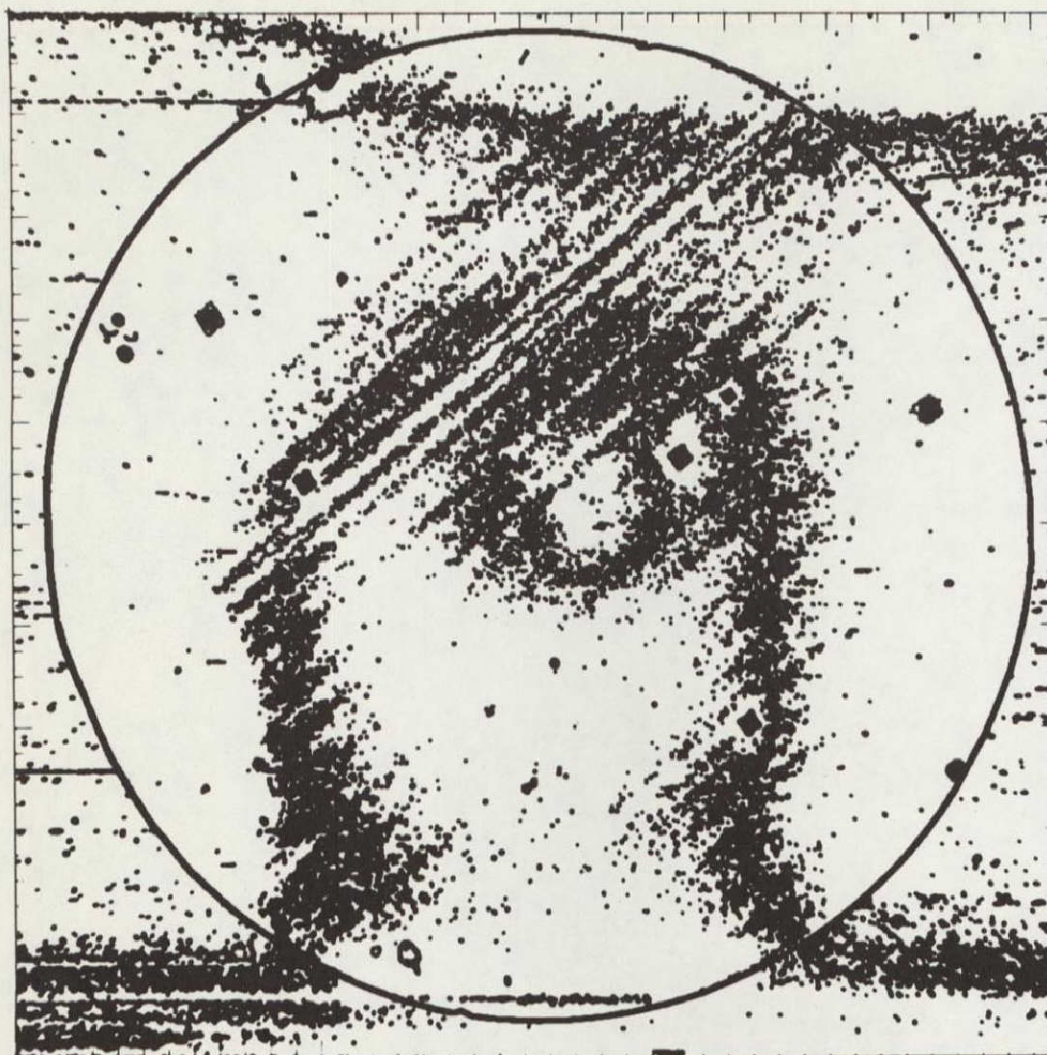


Fig. 12c — Smithsonian Astrophysical Observatory (SAO) star plot of area covered by the S201 image of Fig. 12b



S201
 UV CAMERA EXPERIMENT
 MISSION FRAME 192
 TARGET: FORMAX
 EXPOSURE TIME: 3.00
 EXPOSURE DATE: 04/23/72

SCAN SPEED 30
 DENSITY X 100
 SMOOTHED DATA

MIN/MAX X COORD. 1 , 1024
 MIN/MAX Y COORD. 1 , 1024
 X/Y INTERVAL 33 , 33
 MINIMUM CONTOUR LEVEL 21
 MAXIMUM CONTOUR LEVEL 461
 CONTOUR INTERVAL 20

S201
 760049

04/14/77
 806*77

Fig. 12d — Sample isodensity contour plot. Orientation is the same as in Figs. 12b and 12c

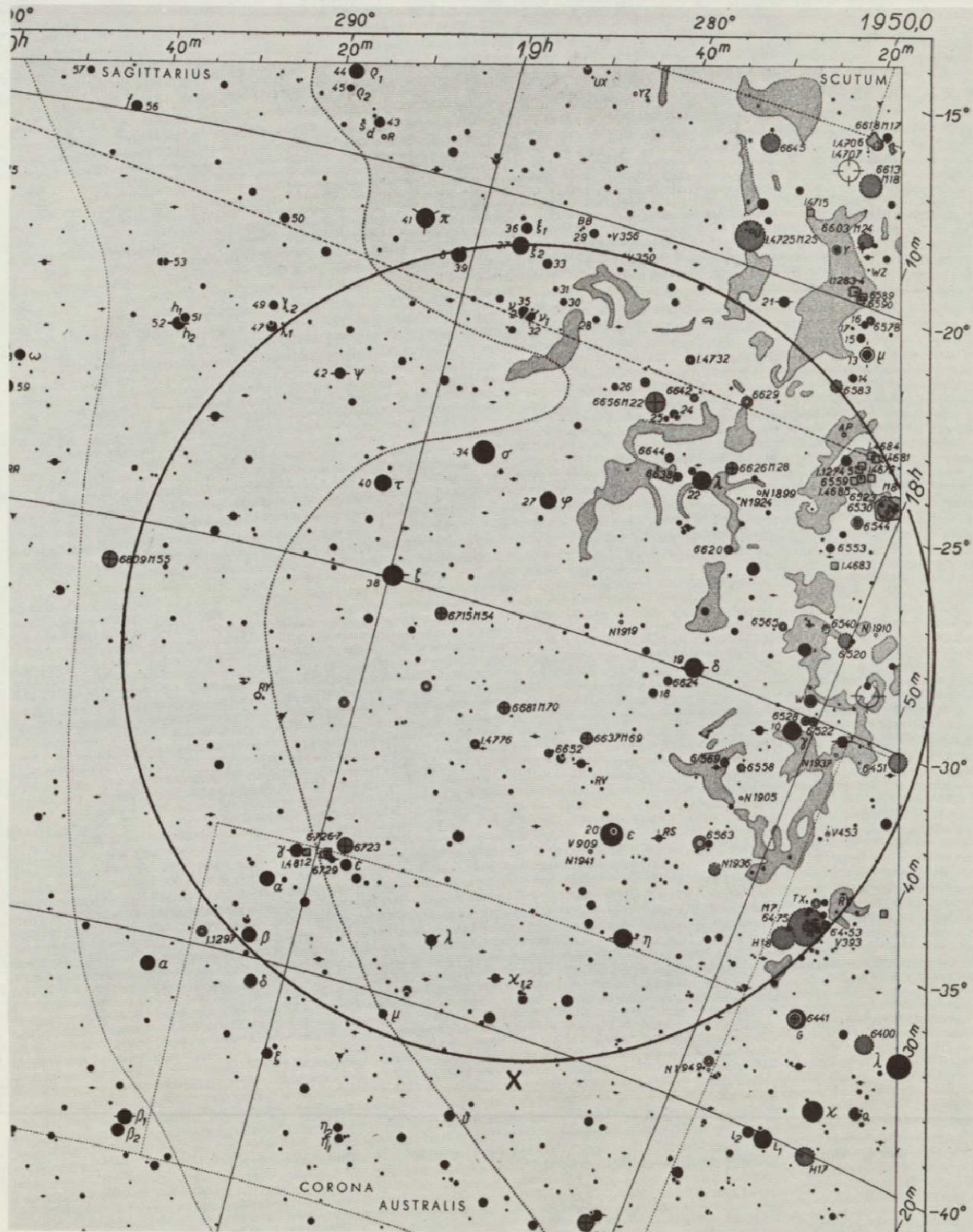


Fig. 13a — Preselected target field (Sagittarius-MW Center). The approximate area covered by the S201 pointing is shown by the circle.

ORIGINAL PAGE IS
OF POOR QUALITY

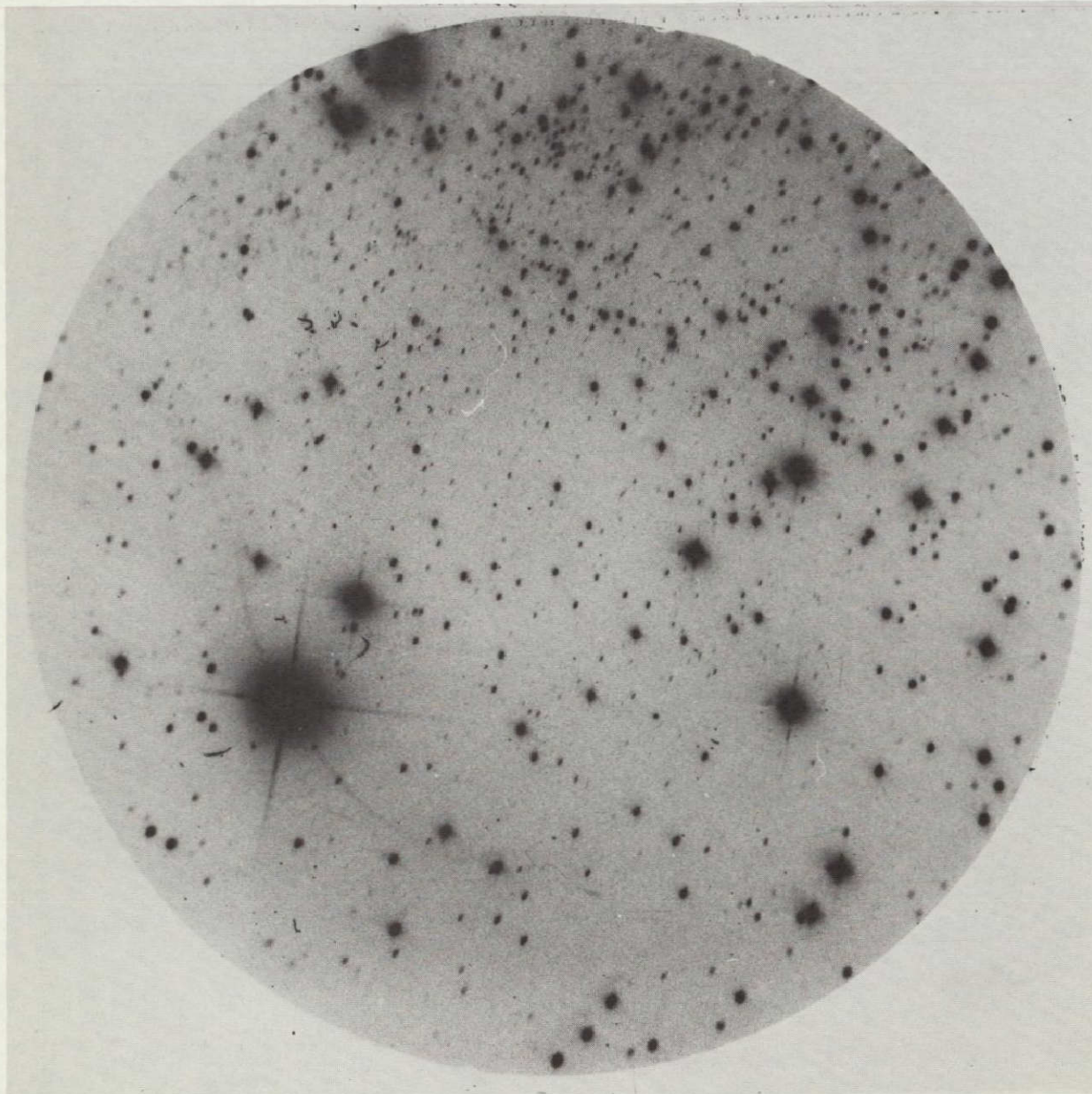


Fig. 13b — S201 starfield photograph (frame A203, ICa, 10-min exposure)

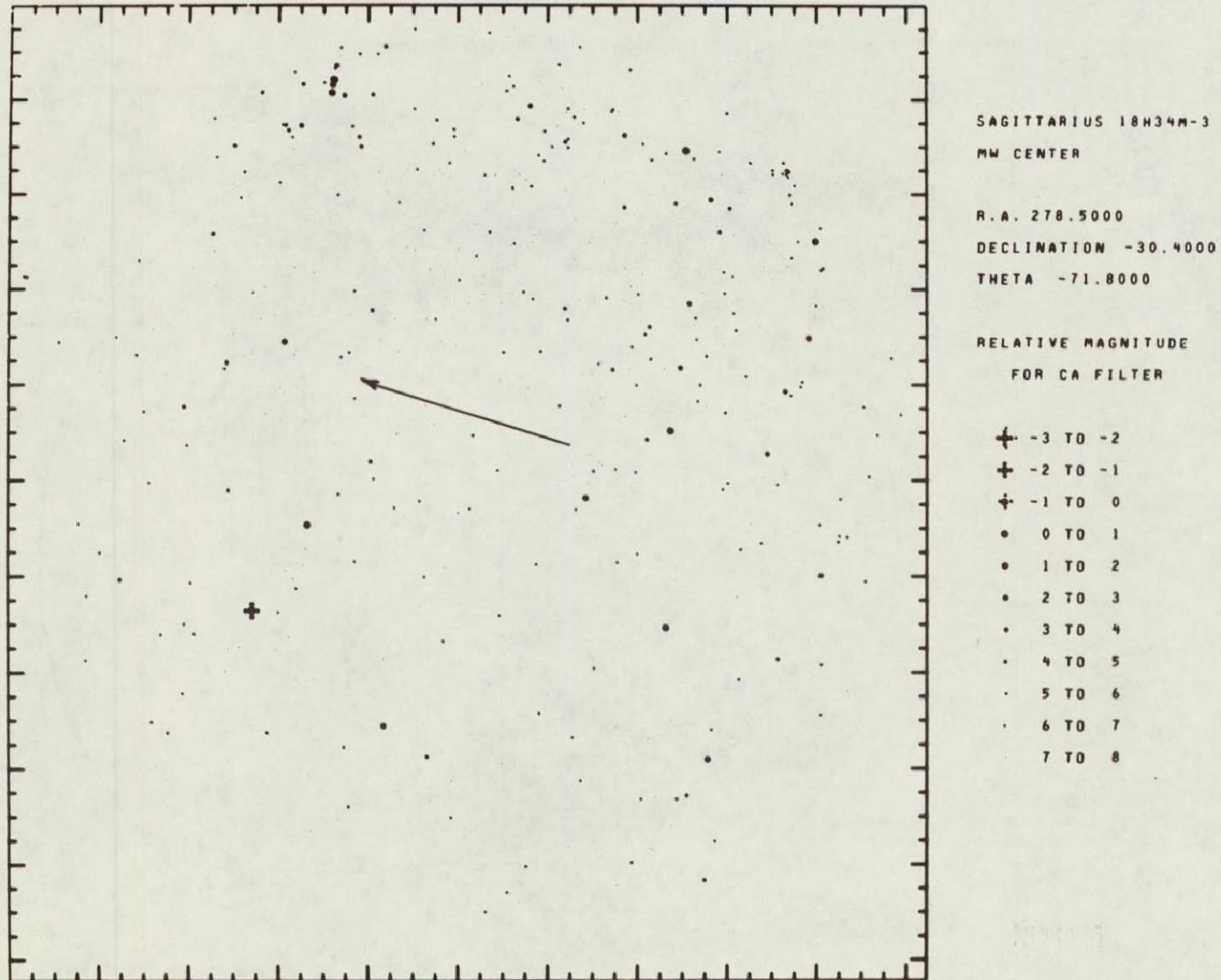
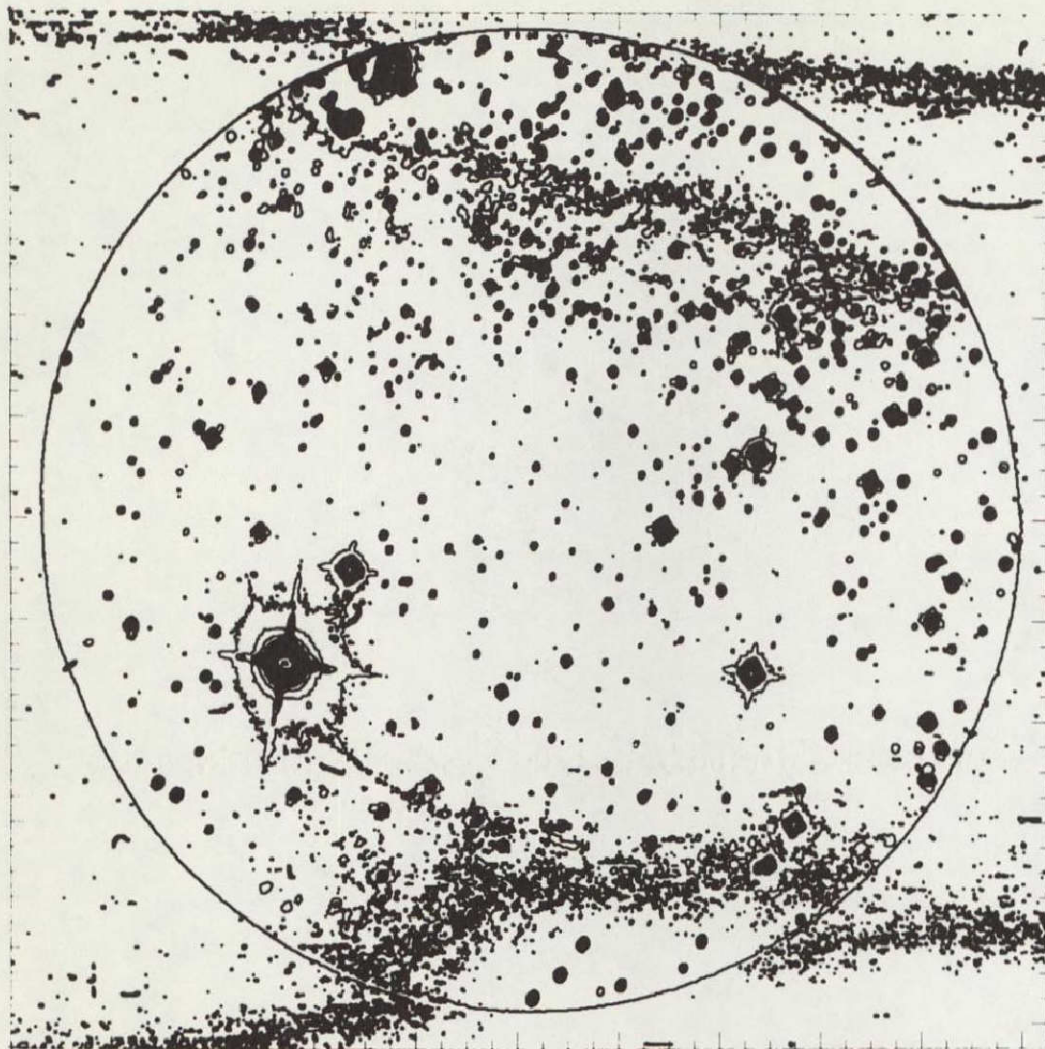


Fig. 13c — Smithsonian Astrophysical Observatory (SAO) star plot of area covered by the S201 image of Fig. 13b



S201
 UV CAMERA EXPERIMENT
 MISSION FRAME 203
 TARGET: MILKY WAY
 EXPOSURE TIME: 10.00
 EXPOSURE DATE: C472372

SCAN SPEED 60
 DENSITY X 100
 SMOOTHED DATA

MIN/MAX X COORD. 1, 1024
 MIN/MAX Y COORD. 1, 1024
 X:Y INTERVAL 33, 33
 MINIMUM CONTOUR LEVEL 21
 MAXIMUM CONTOUR LEVEL 501
 CONTOUR INTERVAL 20

S201
 760050

09/14/77
 E06426

Fig. 13d — Sample isodensity contour plot. Orientation is the same as in Figs. 13b and 13c.

• The SMOOTH program was found necessary to reduce grain noise in the PDS output. It created a new data tape by averaging 12 surrounding pixels with each pixel in the scan, using the following weighting factors to give a smoothed density $D(x, y)$ at each point x, y :

$$\begin{array}{cccccc} & & & & & 1/36 \\ & & & & & 2/36 \\ & & & & & 4/36 \\ 1/36 & 4/36 & 8/36 & 4/36 & 1/36 & \\ & & 2/36 & 4/36 & 2/36 & \\ & & & & & 1/36 \end{array}$$

• The CONTOUR program plotted isodensity contours at selectable contour intervals over selectable regions of the scan. This was used primarily to give quantitative intensity distributions over extended far-ultraviolet objects such as the geocorona, possible clouds in the solar wind, nebulas, clouds in the Large Magellanic Cloud (LMC), other galaxies, and clusters of galaxies. Sample full-frame plots are shown in Figs. 4d, 5d, ..., 13d. These contour plots also revealed defects in the scan data, such as hairs and scratches, which were later removed from the list of star images. They show streaks (as in Fig. 12d) caused by inhomogeneities in the barrier membrane, a lenticular region of low cathode sensitivity in the low- x , high- y part of each frame, and small variations in the background density (B) due to vignetting. Small-region (enlarged) contour plots were used to check density-volumes derived from the STAR DETECTION program.

• The STAR DETECTION program identified each starlike image by its "edge" 20 units (0.2D) above local background, measured its "area" by the number N of pixels within the edge, added up the total density $\sum_N D$, and measured the peak density P , the x, y coordinates of the peak, and the local background B . From these measurements the density volume of the image $V = \sum_N (D - B)$ can be derived. This program is described in detail in Appendix A.

• The STAR PLOT program was based on a tape created from the SAO catalog tape provided by the Smithsonian Astrophysical Observatory, Cambridge, MA 02138. That catalog, dated 1966, lists 258,997 stars as faint as 10.5 visual magnitude (complete to approximately 9 magnitude) in all parts of the sky, together with spectral type, visual magnitude m_v , photographic magnitude m_p , right ascension α , declination δ , (the latter two being 1950 coordinates), proper motions, and references. A new tape "SAO CATALOG APOLLO" was created, listing all SAO stars of O, B, and A types, F stars brighter than 4.5 visual magnitude and other types brighter than 3.5 visual magnitude in regions covering the ten S201 target fields listed in Table 1. From this tape the STAR PLOT program created plots and list lists of the SAO stars in fields accurately matching the S201 fields and using symbols that roughly represent far-ultraviolet magnitudes, as shown in Figs. 4c, 5c, ..., 13c. These rough far-ultraviolet magnitudes were computed using blackbody curves for the effective temperatures appropriate to the spectral classes and integrating the fluxes over the range 1050-1600 Å for the IL1 frames and over the range 1250-1600 Å for the ICa frames. These plots were used to identify three to 23 star images on each frame with the brighter SAO stars. (A previous step had been the identification of three to five bright O-B stars by visual inspection and comparison with the Skalnate-Pleso charts (Figs. 4a, 5a, ..., 13a).) It was later found necessary to introduce a "distortion correction" (Δx and Δy as a function of x, y) to eliminate an S-shaped distortion produced by a nonuniform magnetic field in the S201 camera. This involved plots of detected images and plotted positions of over 150 SAO stars in two fields (Cygnus and Sagittarius), plots of resulting Δx and Δy , and smoothing the $\Delta x, \Delta y$ matrix.

- The COORDINATE TRANSFORMATION program used the input of three or more identified star positions (x , y and α , δ) and the distortion matrix to convert all detected star positions on one frame from scan coordinates to celestial (1950) coordinates right ascension (α) and declination (δ). The program derives the center-of-frame coordinates α_0, δ_0 and the angle θ_0 between the $-y$ axis and the $+\delta$ axis (direction north) from the input positions by the method of least squares. The residuals for each input star were printed out and used to spot an occasional misidentified input star. The root-mean-square residuals in x and y were used to estimate position errors, typically within 3 arc-min. In Table 1, σ is the larger of the rms residuals in rasters.

- The STAR IDENTIFICATION program was used to compare the coordinates of detected starlike images on each frame with SAO star coordinates on the SAO CATALOG APOLLO tape and print out a separate line for each star image and the SAO stars within 10 arc-min of that image position. These printouts, in the format of the final S201 catalog, were then edited, eliminating scan defects and correcting background (B) values inconsistent with the contour plots. The editing was done with the EXEC VIII Univac 1110 computer, a query (?) was added to doubtful SAO numbers, background values, and density-volume values, and H or L was added to density-volume values considered too high or too low (i.e. a factor of 2 above or below the mean) for the SAO spectral type and visual magnitude. The symbol NO (for non-SAO object) was inserted in the SAO-number column when two or more S201 frames recorded an image with no SAO star within 10 arc-min. They are listed in Table 2.

The measured density volumes (V) require three corrections: at low V a quantity T must be added to correct for truncation of the images at 20 units ($0.2D$) above background B , a correction $\Delta\Delta$ must be added for the PDS lag during the rise from B to the peak density P , and for $V > 500$ a quantity ΔD must be added to correct for the nonlinear response of the S201-camera-and-NTB-3-emulsion combination.

Figure 14 illustrates schematically the truncation correction T for images of different sizes. Many cross sections were drawn from mosaics of the smoothed scan data. The images were found to be nearly circular, roughly approximated by a right circular cone of volume $(N/3)(P - B)$. At $V \leq 400$ the full image radius was 3.5 rasters, and the measured V was $20N$ plus a rounded cap somewhat larger than a cone of volume $(N/3)(P - B - 20)$, as shown in Fig. 14a. This excess of cap over a cone is called $\Delta V = V - 20N - (N/3)(P - B - 20)$, and it was found that, on the average, $\Delta V = 0.13N(P - B - 20)$ for $80 \leq V \leq 800$, and $\Delta V = 100$ for $800 < V < 3000$. Then for the faint images the truncation correction is

$$T = \frac{\pi}{3} (3.5)^2(P - B) - (N/3)(P - B - 20) - 20N, \quad \text{for } V \leq 400,$$

and is relatively large (up to a factor of 3.6 at $V = 80$). (Images with $N < 4$, or $V < 80$, are not listed in the catalog, because most of them are noise.)

Measured values of V , N , and $P - B$ for 138 images on frames A26, A27, and A28 (ICa, low background) also show how images "grow" from $V = 80$ to V over 100,000 (in units of $0.01D$ times raster squared, where 1 raster = $33 \mu\text{m}$). There is some scatter, but most of the values fall within 20% of the mean curves of N vs V and $(P - B)$ vs V (values from these curves being listed in the first three columns of Table 3).

Table 1 — Apollo Frames Scanned and Measured

In this table, α_0 and δ_0 are coordinates of the scan center, at $x = 512$, $y = 512$ rasters, θ_0 is the position angle of the $-y$ scan axis projected on the sky; "Stand Stars" is the number of α , δ and x , y inputs to the COORDINATE TRANSFORMATION program, σ is the larger of the rms x residuals or y residuals, given in rasters, "No. of Images" is the number of starlike images of four or more pixels located by the STAR DETECTION program, "BG Range" is the range of the background density (B) in units of 0.01D, "SAO Stars" is the number of star images within 5 arc-min of stars listed in the Smithsonian Astrophysical Observatory catalog (1966); and "Non-SAO Objects" (NOs) is the number of starlike images detected on two or more frames which are more than 10 arc-min from any star in the SAO catalog). Except for the three entries footnoted, the local background B was the average of five surrounding pixels (as explained in Appendix A).

Frame	Exp	Filter	α_0 (deg)	δ_0 (deg)	θ_0 (deg)	Stand. Stars	σ	No of Images	BG Range	SAO Stars	Non-SAO Objects
Cygnus (loop nebula)											
A21	1/4	Li	320 97	+37 57	+05 97	19	1 7	51	22- 30	32	0
22	1	Li	321 15	+37 47	+06 09	23	1 9	124	60- 70	103	1
23	3	Li	321 03	+37 51	+06 22	22	1 9	257	104-143	182	7
26	3	Ca	319 66	+37 58	+04 94	23	2 4	216	14- 20	166	3
27	10	Ca	321 12	+37 42	+05 68	23	2 0	456	18- 30	336	8
28	3 7	Ca	321 20	+37 55	+05 86	23	2 0	284	15- 28	212	7
Capricorn (earth centered)											
A40	1	Li	318 73	-14 43	-31 33	6	1 9	27	75-292	17	0
41	3	Li	318.71	-14 36	-31 40	8	1 9	30	158-348	19	0
44	3	Ca	318 49	-14 47	-31 46	12	1 8	36	17- 25	29	1
45	10	Ca	318 34	-14 70	-31 69	12	2 2	40	17- 28	31	4
46	30	Ca	318 59	-14 63	-31 80	12	2 1	43	12- 30	32	3
Cetus (for NGC1068)											
A58	1	Li	41 76	-15 26	+85 41	3	0.4	6	33- 40	3	1
59	3	Li	41 79	-15 24	+85 10	5	3 2	15	68- 83	9	2
62	3	Ca	40 57	-14 09	+85 19	5	2 3	17	12- 17	7	1
63	10	Ca	40 54	-14 09	+85 21	6	2 5	24	15- 20	11	3
64	8 4	Ca	41 69	-14 03	+85 47	5	1 9	21	17- 24	13	3
Grus (for NGC55)											
A68	1	Li	353 12	-42 61	+153 87	6	2 7	10	48- 63	7	0
69	3	Li	353 20	-42 64	+153 97	8	1 4	15	102-128	9	1
72	3	Ca	354 53	-42 09	+152 71	8	1 8	18	13- 19	9	1
73	10	Ca	353 81	-42 43	+153 38	8	1 5	20	15- 23	11	1
88	1	Li	358 11	-40 73	+153 59	3	3 3	8	43- 59	3	1
92	3	Ca	358 40	-40 58	+153 47	6	2 4	22	10- 22	9	1
93	10	Ca	358 70	-40 38	+153 36	6	2 3	20	16- 26	10	2
94	30	Ca	358 48	-40 50	+153 91	6	2 0	29	17- 27	10	2

Table continues.

Table 1 -- Apollo Frames Scanned and Measured (Concluded)

Frame	Exp	Filter	α_0 (deg)	δ_0 (deg)	θ_0 (deg)	Stand. Stars	σ	No of Images	BG Range	SAO Stars	Non-SAO Objects
Pavo											
A117	1	Li	318 55	-52 23	+234.76	9	2.7	22	47- 62	9	0
118	3	Li	318 51	-52.16	+235 02	10	3 0	27	106-136	11	1
121	3	Ca	318.86	-52 27	+234 79	10	1 8	32	14- 28	12	1
Mensa (LMC included)											
A124	1	Li	87 44	-74 00	+85 86	10	1 4	67	57- 90	16	13
125	3	Li	87 54	-74 03	+85 80	11	1 8	142	150-170	25	23
129	10	Ca	87.43	-74 03	+86.10	11	1 7	235	30- 70	37	51
130	30	Ca	87 25	-74.04	+86 31	7	1 4	499	70-120	43	54
Norma (for NGC6300)											
A144	1	Li	260.80	-59 06	-70 30	15	1 5	127	70-100	88	7
145	3	Li	260.85	-59.09	-70 26	15	1 6	230	160-300	165	21
148	3	Ca	261 13	-59.06	-70 42	15	1 5	220	20- 28	159	24
149	4	Ca	260 96	-59 08	-70 16	15	1 7	278	25- 35	197	25
Aquarius (geocorona)											
A150	1/2	Li	344.26	-05.16	-03.40	5	1 5	8	30- 49	7	0
151	1	Li	344 27	-05 06	-03.29	10	1 4	15	47- 77	13	1
152	3	Li	344.30	-05 05	-03 40	11	1.4	27	130-380	22	3
155	3	Ca	344.29	-05 13	-03 21	11	2 0	23	13- 22	21	2
156	10	Ca	344 46	-05.09	-03 11	11	1 8	32	16- 24	26	4
157	30	Ca	344 66	-05 02	-03 23	11	1.7	40	15- 35	27	4
171	1	Li	348 96	-03 31	-03 78	10	2 9	13	50- 75	11	2
172	3	Li	348 99	-03 23	-03.77	9	1 7	20	105-360	17	2
175	3	Ca	352.26	-02 89	-04 39	9	2 3	16	13- 29	14	1
176	10	Ca	349 04	-03 25	-03.84	10	2 9	26	14- 25	23	3
177	30	Ca	349.21	-03.20	-03.87	10	2.9	31	13- 39	25	4
Fornax											
A191	1	Li	55 38	-27 20	+107 07	6	1 0	14	30- 53	13	1
192	3	Li	55 38	-27.19	+107 10	6	1 1	29	67- 88 [†]	20	2
195	3	Ca	55.75	-27 47	+106 93	6	1 6	26	14- 20	16	2
196	0.3	Ca	55.75	-27 45	+106 92	6	1.1	10	14- 20	9	0
Sagittarius (Milky Way) (normal)											
A198	1	Li	278.36	-30 40	-71.72	14	1 6	150	60-144	107	3
202	3	Ca	278 46	-30.55	-71 78	14	1 4	265	15- 30	206	8
203	10	Ca	278 58	-30 42	-71 93	15	1.9	529	30- 70	375	44
Sagittarius (overexposed)											
A199	3	Li	278 33	-30 41	-71 75	14	2 0	851	210-300 [‡]	596	36
204	30	Ca	278 77	-30 37	-72 00	12	1.8	617	50-120 [†]	383	41

[†] Average of ten pixels

[‡] Average of 20 pixels

Table 2 — Positions of Non-SAO Objects (NOs) and Possible Identifications

R A (1975)Dec		Image on Frames	D-Vol/Exp	RNGC*	R A.(1975)Dec		Mag	Type
Cygnus								
h m	° '				h m	° '		
20 48	+36 00	A23,28	421L ₁ , 338Ca					
20 58	+32 04	A23,26,27,28	70L ₁ , 55Ca	6992?	20 55 2	+31 36	Faint	Nebula
21 02	+41 14	A26,27,28	40-62Ca	7024?	21 05 1	+41 24		Cluster?
21 08	+40 10	A23,27,28	47L ₁ , 55Ca					
21 09	+33 15	A23	38L ₁	7037?	21 09 7	+33 37		Cluster?
21 16	+34 08	A23,27,28	84L ₁ , 57Ca					
21 18	+38 09	A26,27,28	134-167Ca	7054?	21 19 7	+39 04		(no?)
21 23	+36 22	A23,27	31L ₁ , 118Ca	7063	21 23 4	+36 23	9 ^m	Cluster
21 24	+34 44	A23,27,28	144L ₁ , 130Ca					
21 29	+37 12	A22	146L ₁					
21 32	+35 58	A27	59Ca					
Capricorn (Earth centered)								
20 56	-14 36	A45,46	11-23Ca					
21 02	-11 31	A45,46	65-70Ca	7009	21 02 9	-11 28	8 ^m	Plan neb
21 29	-19 35	A45,46	11-23Ca					
21 35	-19 29	A44,45	233-417Ca					
Cetus (for N1068)								
02 23	-16 15	A59,63,64	32L ₁ , 30Ca	989?	02 32 6	-16 37	15 ^m	E galaxy
02 35	-09 00	A63,64	17Ca	985	02 33 3	-08 53	14 ^m	Galaxy
				988?	02 34 0	-09 27	11	E galaxy
02 52	-20 20	A58,59,62,63,64	139L ₁ , 102Ca	1068	02 41 4	-00 08	10 ^m	SB galaxy
Grus (for N55)								
23 43	-34 36	A69,72,73,88,92,93	322L ₁ , 443Ca					
00 14	-39 25	A93,94	11-54Ca	55	00 13 8	-39 22	8 ^m	Sc galaxy

50

PAGE, CARRUTHERS AND HILL

Footnotes are at the end of the table

Table continues.

Table 2 — Positions of Non-SAO Objects (NOs) and Possible Identifications (Continued)

R.A.(1975)Dec		Image on Frames	D-Vol/Exp	RNGC*	R A (1975)Dec		Mag	Type
Pavo								
22 ^h 14 ^m	-49.23'	A118,121	294Li, 67Ca					
Mensa (LMC not included)								
03-26	-77 08	A130						
03 36	-79 26	A129,130						
03 47	-77 27	A129,130						
04 27	-80 34	A130						
04 33	-80 10	A130						
04 36	-78 31	A129,130						
04 36	-74 35	A130						
04 38	-79 53	A129						
04 40	-82 00	A129,130						
04 41	-83 02	A129,130						
04 59	-74 40	A129		1777?	04 ^h 56 ^m 4	-74° 19'		Cluster LMC
05 14	-77 15	A129,130						
05-19	-75 16	A130						
05 21	-77 39	A125,129,130	29Li, 261Ca	1956?	05 20 9	-77.46	Faint	Galaxy
05 26	-77 36	A125,129	148Li, 27Ca					
05 32	-79 07	A130						
05 33	-79 13	A129†,130						
05 48	-75 01	A124,125	126-182Li					
05-49	-70 03	A125	251Li					
05 58	-68 29	A130		2164	05.58 8	-68 31	10 ^m 5	Cluster LMC
06 02	-69 48	A130		2187?	06-04 1	-69 34		Galaxy
06 03	-77 00	A129,130						
06 03	-74 22	A129,130						
06 05	-75 01	A125,129,130	36Li, 23Ca	2190?	06 01 6	-74 43		Globular LMC
06 07	-78 06	A124,129,130	106Li, 52Ca	2203?	06 05 6	-75 26		Cluster LMC
06.08	-78 06	A125	94Li					
06 08	-65 13	A129,130						
06 19	-71 35	A125	229Li					
06 23	-66 34	A129,130						
06 29	-73 11	A129,130						

51

ORIGINAL PAGE IS
OF POOR QUALITY

NRL REPORT 8173

Table continues.

Table 2 — Positions of Non-SAO Objects (NOs) and Possible Identifications (Continued)

R.A (1975)Dec		Image on Frames	D-Vol/Exp	RNGC*	R A (1975)Dec	Mag	Type
Mensa (continued)							
^h	^m	[°]					
06	29	-71 58	A129,130				
06	31	-68 51	A125,129,130	140Li,			10-17Ca 191Ca
06	38	-70 51	A125,129,130	157Li,			140Ca
06	43	-69 12	A129,130				62-66Ca
06	43	-68:10	A125,129,130	95Li,			190Ca
06	43	-65:36	A125,129,130	494Li,			518Ca
06	44	-66.22	A125,129,130	67Li,			214Ca
06	45	-67.36	A129				51Ca
06	55	-76 35	A124,125,129,130	97Li,			189Ca
06	57	-75 46	A129				38Ca
06	58	-76:28	A129†,130				24-40Ca
06	58	-72 50	A124,125,129,130	391Li,			141Ca
06	58	-71 36	A125,129	46Li,			51Ca
06	58	-69:16	A129,130				20-25Ca
06	59	-73:22	A125,129,130	70Li,			59Ca
07	02	-76 18	A129,130				13-40Ca
07	03	-76.28	A124,125,129,130	214Li,			382Ca
07	08	-72 40	A125,129,130	64Li,			67Ca
07	11	-76 43	A125,129,130	42Li,			56Ca
07	12	-77 37	A130				7Ca
07	13	-68 18	A129,130				13-27Ca
07	14	-77 00	A125,129,130	33Li,			99Ca
07	15	-77 39	A130				167Ca
07	15	-77 29	A124,125,129,130	222Li,			90Ca
07	15	-77 05	A124,125	160-203Li			
07	15	-76:55	A130				28Ca
07	16	-77 37	A125,129	76Li,			98Ca
07	17	-76 59	A129,130				13-23Ca
07	19	-77 28	A124	297Li			
07	24	-70 40	A129,130				60-100Ca
07	25	-70 22	A124,129,130	99Li,			115Ca
07	32	-75 41	A124	131Li			
07	37	-76:30	A129,130				25-26Ca
07	40	-70.17	A129,130				77-87Ca

52

PAGE, CARRUTHERS AND HILL.

Table continues.

Table 2 — Positions of Non-SAO Objects (NOs) and Possible Identifications (Continued)

R A (1975)Dec		Image on Frames	D-Vol/Exp		RNGC*	R A (1975)Dec		Mag	Type
Mensa (continued)									
^h ^m	[°] [']					^h ^m	[°] [']		
07 42	-77 28	A129,180		81-86Ca		07 45 4	-71 20'	Faint	Galaxy
07 43	-70 57	A124,125,129,130	190L _i , 1942L _i	304Ca	2466?				
08 03	-71 58	A129,130		24-74Ca					
08 16	-78 19	A130		356Ca					
(For objects in the LMC, see S201 Atlas of the LMC)									
Norma (for N6300)									
16 17	-64 32	A145,149	89L _i ,	47Ca					
16 17	-64 25	A145,148,149	94L _i ,	178Ca					
16 27	-65 59	A145,148,149	388L _i ,	212Ca					
16 31	-65 57	A144,145,148,149	1205L _i ,	1162Ca					
16 37	-57 24	A145,148,149	182L _i ,	152Ca					
16 45	-58 16	A145	94L _i						
16 47	-56 48	A148,149		28-42Ca					
16 51	-57 13	A144,148,149	271L _i ,	242Ca					
17 07	-53 59	A148,149		35-43Ca					
17 08	-54 29	A144,145,148,149	94L _i ,	100Ca					
17 08	-53 36	A148,149		42-96Ca					
17 09	-54 30	A148,149		54-62Ca					
17 09	-53 09	A145,148 [†] ,149 [†]	54L _i ,	196Ca					
17 09	-53 05	A145,148 [†] ,149	165L _i ,	152Ca					
17 10	-53 17	A144,148,149	149L _i ,	132Ca					
17 11	-54 42	A148,149		79Ca	6300	17.14 6	-62.48	^m 11 5	SB3 galaxy
17 21	-67 58	A145,149	37L _i ,	90Ca					
17 22	-57 45	A145,149	34L _i ,	34Ca					
17 24	-55 55	A145	28L _i						
17 28	-66 53	A144,145,148,149	1611L _i ,	1016Ca	6362	17 29 2	-67 02	^m 8 5	Globular
17 31	-54 57	A145	75L _i						
17 34	-68 58	A148,149		62-95Ca					
17 42	-64 53	A144,145,148,149	195L _i ,	209Ca					
17 43	-54 09	A145,148,149	140L _i ,	96Ca					

Table continues.

53

ORIGINAL PAGE IS
OF POOR QUALITY

NRL REPORT 8173

Table 2 — Positions of Non-SAO Objects (NOs) and Possible Identifications (Continued)

R.A (1975)Dec		Image on Frames	D-Vol/Exp		RNGC*	R A (1975)Dec		Mag	Type
Norma (continued)									
^h	^m								
17 45	-61 59	A144,145,148,149	265Li,	261Ca					
17 46	-66.15	A144,145,148,149	225Li,	362Ca					
17 46	-65 36	A145,148,149	210Li,	247Ca					
18 13	-66 56	A145,148,149	401Li,	445Ca					
Aquarius (Geocorona)									
22 49	-13 35	A156,157		40-78Ca		^h	^m		
22 54	-07 09	A156,157,176,177		14-35Ca	7406?	22 52.7	-06° 44'	15 ^m	Nebula
23.02	-05 08	A151	161Li						
23 16	-06 37	A152,155,156	97Li,	71Ca	7596?	23:15 9	-07 03	Faint	Galaxy
		A175,176,177		106Ca					
23 19	-05 20	A152,155,156,157	163Li,	117Ca					
		A171,172,176,177	149Li,	143Ca					
23 21	-03 17	A171,172	151-176Li						
23 28	+00 24	A152	32Li		7684?	23 29.2	-00:04	Faint	Galaxy
Fornax									
03 32	-25 58	A191,192,195	802Li,	360Ca	1360	03:32 3	-25 56		Plan neb
04 00	-32 28	A192,195	260Li,	108Ca					
Sagittarius (Milky Way)									
17 56	-32 58	A203,204		66-92Ca					
17 57	-30 56	A203,204		29-54Ca					
18 00	-27 41	A203,204		12-20Ca	6520?	18 01.9	-27 54	^m	Cluster
18 00	-27 32	A198,199 [†] ,202,203,204	2032Li,	895Ca	6520?			7 5	
18 00	-26 18	A199	301Li						
18 01	-29 59	A203,204		25-34Ca	6522	18 02 0	-30 02	^m	Globular
18 02	-25 29	A199,203,204	2380Li,	64Ca				10 5	
18 03	-27 54	A203		37Ca	6540?	18 04 8	-27 49	^m	Cluster
18 04	-28 49	A203,204		44-51Ca				14 5	

Table continues

Table 2 — Positions of Non-SAO Objects (NOs) and Possible Identifications (Continued)

R A (1975)Dec		Image on Frames	D-Vol/Exp		RNGC*	R A (1975)Dec		Mag.	Type
Sagittarius (continued)									
h m	° '					h m	° '		
18 04	-27 46	A199†,203,204	574L ₁ ,	9Ca	6540	18 04.8	-27 49'		Cluster
18 05	-26 43	A203,204		12-63Ca	6557?	18 08 4	-26 36	Faint	
18 05	-26 06	A199,203,204	250L ₁ ,	213Ca					
18 05	-23 55	A203,204		9-11Ca					
18 06	-29 33	A199,203,204	84L ₁ ,	32Ca	6551?	18 07 4	-29 33		(no?)
18 07	-26 27	A199	76L ₁		6557?				
18 08	-28 09	A199,203,204	103L ₁ ,	29Ca	6565	18 10 3	-28 11	13 ^m	Plan neb
18 09	-32 50	A203,204		57-66Ca					
18 09	-32 12	A203,204		28-32Ca					
18 10	-31 16	A203		27Ca	6558?	18 08 6	-31 47	Faint	Globular
18 10	-29 07	A203		29Ca					
18 10	-23 50	A203,204		8-21Ca	6559?	18.08 6	-24 08	Faint	Nebula
18 11	-36 14	A199,203,204	29L ₁ ,	11Ca					
18 11	-31 34	A199,203,204	71L ₁ ,	34Ca	6558?				
18 13	-38 13	A203,204		40-62Ca					
18 13	-22 49	A199†	396L ₁						
18 13	-21 50	A199,203,204	58L ₁ ,	22Ca	6568?	18.11 3	-21 36	8 ^m 5	Cluster
18 16	-29 04	A199,203	37L ₁ ,	46Ca					
18 16	-26 07	A199,203,204	82L ₁ ,	22Ca					
18 17	-34 26	A199,203,204	64L ₁ ,	25Ca					
18 18	-25.40	A199,203,204	384L ₁ ,	37Ca					
18 19	-37 15	A202,203,204		259-416Ca					
18 21	-39 48	A203,204		11-65Ca					
18 21	-39 43	A203,204		10-23Ca					
18 21	-34 21	A204		405Ca					
18 21	-25 24	A199	57L ₁						
18 22	-26:07	A199,203,204	177L ₁ ,	57Ca	6620?	18 21 4	-26 50	15 ^m	Nebula
18 23	-36 04	A203,204		51-53Ca					
18 24	-25 53	A199,203,204	115L ₁ ,	25Ca					
18 25	-27 02	A199,203	46L ₁ ,	8Ca	6620?	18 21 4	-26 50	15 ^m	Nebula
18 28	-32:14	A199,202,203,204	272L ₁ ,	90Ca	6637?	18.29 7	-32 22	9 ^m	Globular
18 28	-31 28	A199,204	168L ₁ ,	15Ca					
18 37	-32 00	A202,203,204		28-80Ca					
18 39	-29 55	A203,204†		51-56Ca					

ORIGINAL PAGE IS
OF POOR QUALITY

NRL REPORT 8173

Table continues

Table 2 — Positions of Non-SAO Objects (NOs) and Possible Identifications (Concluded)

R.A (1975)Dec		Image on Frames	D-Vol/Exp	RNGC*	R A (1975)Dec.		Mag.	Type
Sagittarius (continued)								
h m	° '							
18 41	-30 26	A203,204						
18 43	-39 45	A199,202,203,204	439L ₁ ,					
18 44	-39 20	A203,204						
18 47	-33 16	A202,203						
18 50	-26:13	A199 [†]	4074L ₁					
18.56	-29 16	A203,204						
18 58	-26 27	A198 [†]	263L ₁					
19 00	-36 59	A203						
19 01	-35:03	A199	76L ₁	6729	h m	° '		Nebula
19 10	-27 39	A199 [†]	114L ₁		19 00.1	-37.00'		
19.10	-26 50	A198,199,203	708L ₁ ,					
19 14	-34 56	A199,202,203,204	405L ₁ ,					
			298Ca					

*RNGC = The Revised New General Catalog of Nonstellar Astronomical Objects, by J W Sulentic and W G. Tifft, Univ of Arizona Press, 1978 A question mark (?) after the RNGC number indicates that the position differs by more than 5 arc-min

[†]Two close images.

50

PAGE, CARRUTHERS AND HILL.

Table 3 — Corrections to S201 Density Volumes*

V	N	P - B	H	Truncation Only			For Normal B ≈ 50			For High B ≈ 250		
				T	V + T/V	log V + T/V	V _c	V _c /V	log V _c /V	V _c	V _c /V	log V _c /V
80	3.5	22	25	210	3.62	0.559	290	3.62	0.559	325	3.94	0.596
100	4	25	27	233	3.33	0.522	333	3.33	0.522	363	3.63	0.560
150	6	30	31	244	2.63	0.420	394	2.63	0.420	433	2.89	0.462
200	7.5	34	34	250	2.25	0.353	450	2.25	0.353	494	2.47	0.394
300	10	40	40	245	1.82	0.260	545	1.82	0.260	594	1.98	0.298
400	13	46	46	242	1.605	0.206	642	1.605	0.206	700	1.75	0.244
500	15	49	49	245	1.51	0.180	745	1.51	0.180	825	1.65	0.218
600	17	54	52	265	1.44	0.160	865	1.44	0.160	945	1.575	0.198
700	20	58	53	295	1.42	0.152	995	1.42	0.152	1080	1.54	0.189
800	22	62	53	320	1.40	0.147	1120	1.40	0.147	1215	1.52	0.183
900	24	64	54	345	1.385	0.142	1245	1.38	0.142	1350	1.50	0.177
1000	26	70	54	365	1.365	0.136	1365	1.36	0.136	1490	1.49	0.173
1200	28	78	54	395	1.33	0.125	1595	1.33	0.125	1760	1.465	0.166
1400	30	90	55	420	1.30	0.115	1820	1.30	0.115	2015	1.44	0.159
1600	32	105	55	440	1.275	0.106	2050	1.28	0.108	2265	1.415	0.151
1800	33	122	56	430	1.24	0.093	2250	1.25	0.097	2500	1.39	0.144
2000	34	140	56	420	1.21	0.084	2460	1.23	0.090	2740	1.37	0.136
2500	38	165	56	520	1.207	0.082	3050	1.22	0.088	3380	1.35	0.131
3000	44	190	56	580	1.19	0.077	3640	1.215	0.085	4020	1.34	0.128
4000	52	225	56	680	1.17	0.069	4800	1.20	0.081	5320	1.33	0.125
5000	63	255	56	800	1.16	0.066	5950	1.19	0.077	6600	1.32	0.122
6000	72	285	58	820	1.136	0.056	7080	1.18	0.072	Not possible		
8000	87	315	64	910	1.113	0.047	9280	1.16	0.065	Not possible		
10000	103	345	67	1000	1.100	0.042	11460	1.146	0.060	Not possible		
12000	118	365	70	1100	1.090	0.038	13550	1.130	0.054	Not possible		
15000	137	375	75	1120	1.074	0.032	16700	1.113	0.047	Not possible		
20000	172	390	88	1150	1.053	0.024	21800	1.090	0.038	Not possible		

Table continued

57

NRL REPORT 8173

ORIGINAL PAGE IS
OF POOR QUALITY

Table 3 — Corrections to S201 Density Volumes* (Concluded)

V	N	P - B	H	Truncation Only			For Normal B ≈ 50			For High B ≈ 250		
				T	V + T/V	log V + T/V	V _c	V _c /V	log V _c /V	V _c	V _c /V	log V _c /V
25000	207	405	96	1200	1.048	0.021	26900	1.074	0.032	Not possible		
30000	240	410	104	1200	1.040	0.018	32000	1.066	0.028	Not possible		
40000	300	415	131	1200	1.030	0.014	42000	1.050	0.022	Not possible		
50000	365	420	200	900	1.016	0.008	51500	1.030	0.014	Not possible		
60000	430	425	311	600	1.010	0.004	61250	1.020	0.010	Not possible		
80000	525	440	420	400	1.005	0.003	81400	1.016	0.008	Not possible		
100000	715	455	455	100	1.001	0.000	101000	1.010	0.004	Not possible		

* V = density volume of an identified star image in units of 0.01D square raster,
 N = number of points (pixels) with density 20 (0.2D) above background B,
 P - B = peak density above background in units of 0.01D;
 H = height of "wing cone" (see Figs. 14d and 14e),
 T = correction for truncation in the STAR DETECTION program,
 B = local background density in units of 0.01D,
 V_c = fully corrected density volume in units of 0.01D-square-raster

58

ORIGINAL PAGE IS
 OF POOR QUALITY

PAGE, CARRUTHERS AND HILL

ORIGINAL PAGE IS
OF POOR QUALITY

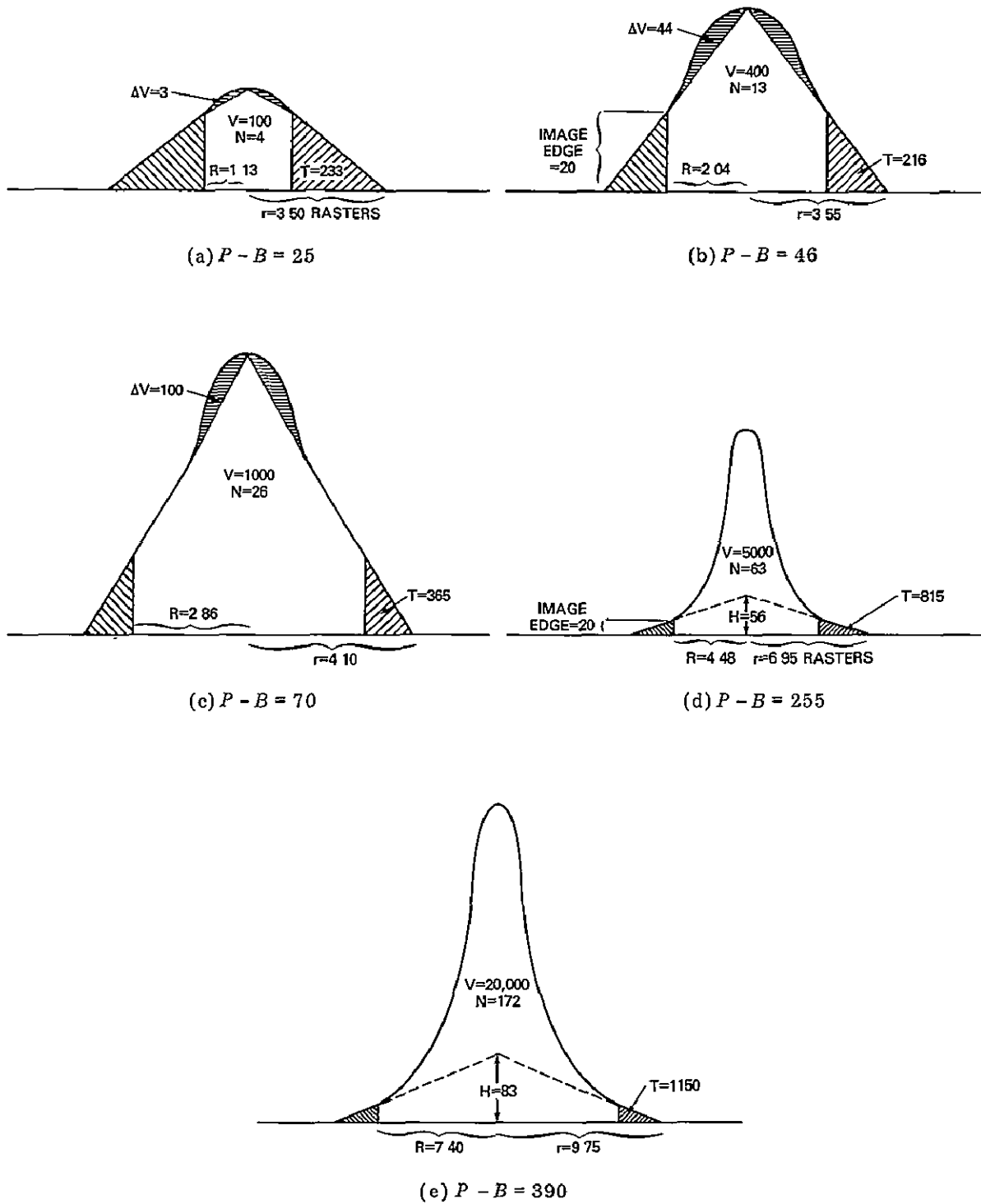


Fig. 14 — Correction to the measured density volume for image truncation (due to the PDS scan speed and the S201 nonlinear response)

The image cross sections show that for $V > 1000$ there is usually a wing or skirt extending several rasters beyond the measured image edge, as shown in Fig. 14b. This was fitted fairly well by extending a cone of height H beyond the measured image edge. Then the truncation correction is the volume of the H -cone rim, or

$$T = (N/3) H^3 / (H - 20)^2 - (N/3)(H - 20) - 20N, \quad \text{for } V > 400.$$

Values of H obtained from cross sections were plotted against V , and values of the resulting smoothed relation are listed in Table 3. At low V , H is nearly equal to $P - B$. In the range $V = 1000$ to 15,000, H remains near 60, and $P - B$ climbs to 350. In the large, overexposed images H reapproaches $P - B$.

Although uncertainties in H and T are fairly large, the ratio T/V drops off rapidly, as shown in Table 3, and the uncertainty in $\log [(V + T)/V]$ for $V > 400$ is estimated to be less than 0.05 (less than 0.02 for $V > 20,000$)

The PDS lag correction $\Delta\Delta$ and the linearizing correction ΔD are listed in Table 4a as functions of $P - B$ and P respectively. The PDS lag correction $\Delta\Delta$ was obtained from a speed test on four star images of different peak densities. The linearizing correction ΔD was obtained by measuring uniform geocorona densities on three frames, A40, A41, and A42 (1-, 3-, and 10-min IIL1 exposures), and up to measured density $D_M = 350$ units (3.5D) is closely represented by the following expression for linearized density:

$$D_L = D_M + \exp[0.674(D_M - 130)^{0.39}].$$

These two corrections have been applied to the image peak densities P as shown in Tables 4b and 4c, giving fully corrected density volumes V_c . The "normal" background $B \approx 50$, and the correction for nonlinear response is small for faint and medium star images. However on three frames (A41, A145, and A199) there is a high background: $B \approx 250$. This requires a correction to measured V even for faint images, as shown in Tables 4c and 3. Since the high background is subtracted from the (higher) star-image densities, the correction is the *difference* between ΔD for density P and ΔD for density 250, as given in Table 4c. This high-background correction cannot be given for $V > 5000$, where $P - B > 250$, and for $P > 500$, the upper limit to densities recorded by the PDS microdensitometer.

Table 3 lists V_c (fully corrected) for values of measured density volume V , and $\log V_c/V$ is plotted in Figs. 15a, 15b, and 15c. The correction for images on high background is considerably larger.

Figures 16 through 22 are plots of V magnitude vs $\log V/E$ (E is the exposure in minutes) on IIL1 and ICA frames. They show a scatter of about 1 magnitude about the expected relation $V \text{ mag} + 2.5 \log V/E = K$. The average intercept \bar{K} and the rms deviation σ are labeled on each plot, and large deviants are listed in Table 5. These derivations are probably due to:

- Differences in interstellar extinction,
- Errors in background (B) estimates,
- Corrections to V for truncation, PDS lag, and nonlinear response given in Table 3 but not applied to the figures,
- Errors in SAO visual magnitudes and/or spectral types, and
- Actual differences in the far-ultraviolet flux from stars of a given spectral type.

ORIGINAL PAGE IS
OF POOR QUALITY

Table 4a — Corrections to Peak Densities P for
PDS Lag $\Delta\Delta$ and Linearization ΔD *

$P - B$	$\Delta\Delta$	P	ΔD
50	0	50	0
100	0	100	0
150	0	150	+10
200	+10	200	30
250	20	250	80
300	40	300	150
350	70	350	270
400	100	400	400
450	140	450	600
500	180	500	870

* P = Peak density of a star image;
 B = local background density,
 $\Delta\Delta$ = correction for lag in the PDS microdensitometer,
 ΔD = correction for non linear response of the S201 camera,
 All densities are in units of 0.01D

Table 4b — Applied Corrections $\Delta\Delta$ and ΔD for Normal Background, $B \approx 50$ *

V	$V + T$	$P - B$	$\Delta\Delta$	$P = P - B + 50$	ΔD	V_c	V_c/V	$\log V_c/V$
1000	1365	70	0	120	0	1365	1.365	0.136
1300	1710	84	0	134	0	1710	1.315	0.120
1540	1975	100	0	150	10	1985	1.287	0.110
2100	2540	150	0	200	30	2570	1.224	0.088
3300	3910	200	10	250	80	4000	1.210	0.084
4800	5575	250	20	300	150	5745	1.197	0.079
7000	7865	300	40	350	270	8175	1.167	0.068
10500	11525	350	70	400	400	11995	1.143	0.058
23500	24680	400	100	450	600	25380	1.080	0.034
94000	94100	450	140	500	870	95110	1.012	0.006

* V = Density volume of a star image,
 T = correction for truncation in the STAR DETECTION program

Table 4c — Applied Corrections $\Delta\Delta$ and ΔD for High Background, $B \approx 250$

V	$V + T$	$P - B$	$\Delta\Delta$	$P = P - B + 250$	$\Delta D - \Delta D(250)$	V_c	V_c/V	$\log V_c/V$
50	268	21	0	271	24	292	5.84	0.767
80	290	22	0	272	25	315	3.94	0.596
100	333	25	0	275	30	363	3.630	-0.560
150	394	30	0	280	40	434	2.89	0.462
200	450	34	0	284	45	495	2.47	0.394
300	545	40	0	290	50	595	1.98	0.298
400	642	46	0	296	60	702	1.753	0.244
500	745	50	0	300	70	815	1.630	0.21
1540	1975	100	0	350	190	2165	1.405	0.149
2100	2540	150	0	400	320	2860	1.363	0.135
3300	3910	200	10	450	520	4430	1.343	0.129
4800	5575	250	20	500	790	6365	1.325	0.124

The many negative deviations, indicated by L in Table 5, are probably due to large interstellar extinction, and the positive deviations (H) may be due to stars' far-ultraviolet excess — both worthy of further study. The visual magnitudes and spectral types given in the SAO catalog are based on the Henry Draper Catalog; these often differ markedly from more modern determinations in specific regions of the sky, such as Orion [12].

The corrections to $\log V/E$ given as $\log V_c/V$ in Table 3 and in Figs. 15 will move points at the upper left on Figs. 16 through 22 toward the right by the amount $\log V_c/V \approx 0.25$. This, however, will not account for the large deviants.

COMPARISON WITH STELLAR MODELS

To compare the measured far-ultraviolet fluxes with expectations (with more accuracy used than used in the STAR PLOT program) the S201 camera response in the direct-imaging mode (Fig. 3) was folded with model atmosphere calculations by Kurucz, Petremann, and Avrett [13] and the "average" far-ultraviolet extinction curve of Bless and Savage [14]. For a monochromatic diffuse source the optical density of the image on the processed emulsion is given by $D = I s t$, where I is the monochromatic source density in kilorayleighs ($1 kR = 10^9/4\pi$ photons/cm² s sterad), s is the diffuse-source sensitivity in density units/kR seconds, and t is the exposure time in seconds. (E or EXP is used in this catalog for exposure time in minutes.)

The sensitivity s is the product of the overall detection (quantum) efficiency η , the "blackening factor" b (density units/photoelectron per μm^2 , at the emulsion), and a geometrical factor G depending on the focal ratio of the optical system $G = 10^{-8} A/f^2$, where A is the effective aperture in cm² and f is the focal length in cm. Thus for a monochromatic diffuse source

$$D = \frac{10^9}{4\pi} I \eta b G t = \Psi_\lambda \eta b G t,$$

ORIGINAL PAGE IS
OF POOR QUALITY

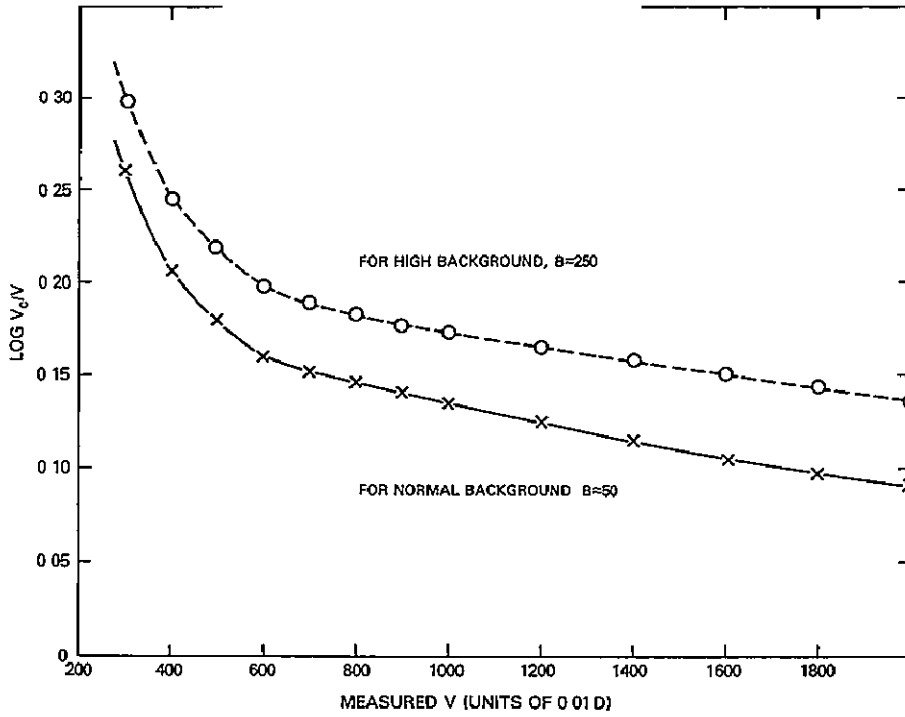


Fig. 15a — Relation of the fully corrected density volume V_c to the measured density volume V , plotted for $0 \leq V \leq 90,000$

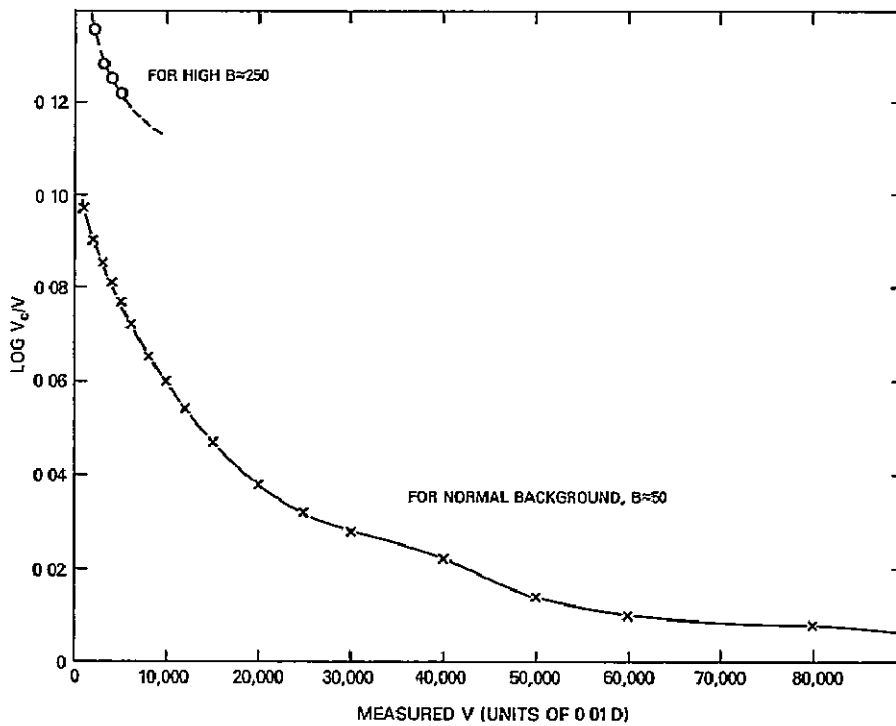
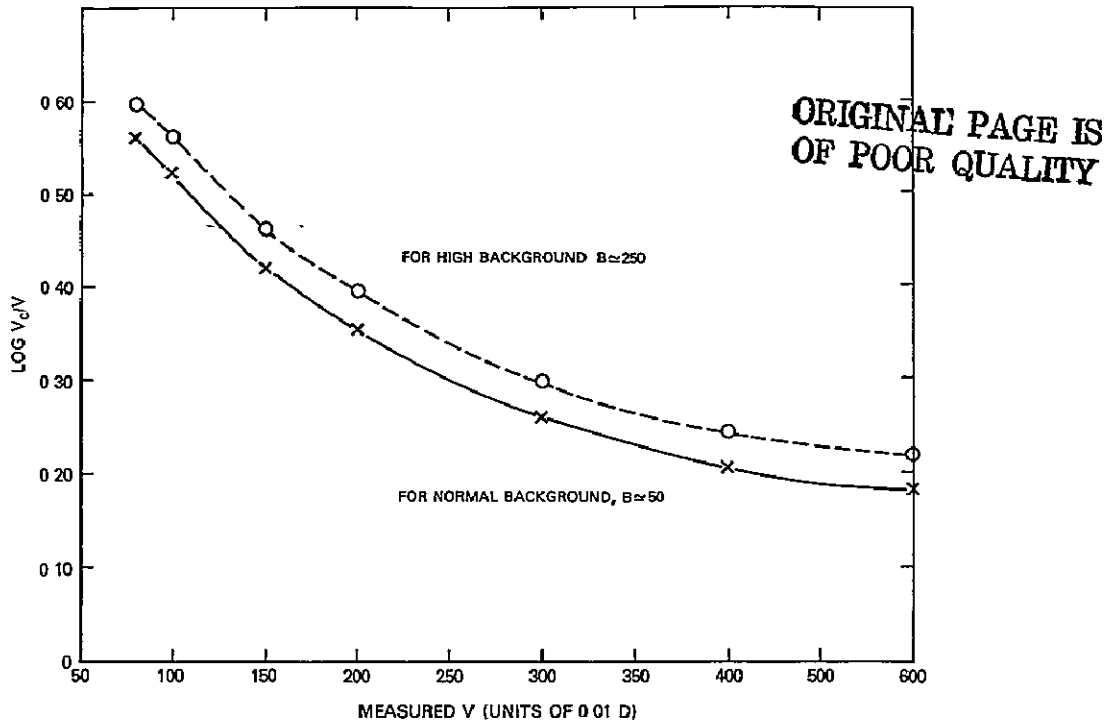


Fig. 15b — Relation of V_c to V , plotted for $200 \leq V \leq 2000$

Fig 15c — Relation of V_c to V , plotted for $50 \leq V \leq 600$

where Ψ_λ is the diffuse flux expressed in photons/cm² s sterad. For a nonmonochromatic source

$$D = b Gt \int \Psi_\lambda \eta_\lambda d\lambda = b Gt \Psi_{\lambda \text{ eff}} \eta_{\lambda \text{ eff}} \Delta\lambda_{\text{eff}},$$

where λ_{eff} is the effective wavelength of the camera for a flat continuum ($\Phi_{\lambda \text{ eff}} = \Phi_\lambda =$ constant) and $\eta_{\lambda \text{ eff}} \Delta\lambda_{\text{eff}}$, or $(\eta \Delta\lambda)_{\text{eff}}$, is the area under the curve of efficiency vs wavelength (half of which falls on either side of λ_{eff}). The result is relatively insensitive to slight changes in the shape of the continuum distribution.

For a point source the number of photoelectrons recorded in the image is

$$n = At \int \Phi_\lambda \eta_\lambda d\lambda = At \Phi_{\lambda \text{ eff}} (\eta \Delta\lambda)_{\text{eff}},$$

where Φ_λ is the photon flux (photons/cm² s Å). The density distribution in the recorded image of course depends on the resolution and details of the image structure. However, if linearity of response is assumed, the total density volume is independent of these details and is

$$V = \int D dA = \bar{D}A = b \int \left(\frac{n}{A}\right) dA = nb.$$

Table 5 — Deviant Density Volumes in the S201 Far-Ultraviolet Catalog

Negative deviations (density volumes lower than expected) are indicated by L, and positive deviations (higher than expected) are indicated by H. The frames are in order of right ascension.

Frame	V Mag	Spec. Type	log <i>D/E</i>	Approx. <i>D/E</i>	SAO	R.A.	<i>x</i>	<i>y</i>	Remarks
Cetus									
59L ₁	7.9	A0	3.15 H	1400	148254	02:08:33	507	980	7 rasters from edge of field
63Ca	8.3	B8	1.3 L	20	130410	03:15 50	689	77	15r from EOF, L on frame 64
64Ca	8.3	B8	1.05 L	11	130410	03:15:50	692	135	15r from EOF, L on 63
"	4.3	A3	1.6 L	40	168249	03:00:18	29	394	40r from EOF
Fornax									
192L ₁	5.04	A2	1.5 L	31	168836	03:45:31	669	509	
195Ca	9.6	A2	3.7 H	5260	149061	03.33.37	886	749	
Mensa									
125L ₁	7.0	A0	1.65 L	45	256308	06:30:31	343	419	
"	6.9	A0	1.60 L	40	256277	06:12.26	360	465	
129Ca	5.1	B5	3.45 L	2800	249368	05:50:21	855	481	L on 130, edge of LMC
130Ca	5.1	B5	3.18 L	1500	249368	05.50:05	856	479	L on 129, edge of LMC
"	7.1	A0	3.1 H	1250	249336	05:41 57	831	519	In LMC
"	8.3	A0	0.7 L	5	256448	07.48:18	407	124	
"	7.95	A0	0.65 L	4	249373	05:50:36	939	474	
"	7.9	A0	1.1 L	12	256381	07.13.16	218	344	
"	6.7	A0	1.4 L	25	256053	04:00.14	562	929	
"	6.5	A2	1.2 L	16	256408	07:25:14	556	133	

Table continues.

65

NRL REPORT 8173

ORIGINAL PAGE IS
OF POOR QUALITY

Table 5 — Deviant Density Volumes in the S201 Far-Ultraviolet Catalog (Continued)

Frame	V Mag	Spec. Type	log <i>D/E</i>	Approx. <i>D/E</i>	SAO	R.A	<i>x</i>	<i>y</i>	Remarks
Norma									
144Li	8.25	B3	2.0 L	100	244806	17:27:22	251	450	
"	5.9	B3	2.0 L	100	253903?	17:19:03	692	548	Another image, <i>D/E</i> = 8122
"	7.85	B8	1.95 L	90	244003	16:33:35	473	115	
"	8.75	B8	2.9 H	840	244400	17:00:02	221	207	H on 145
"	7.2	B8	3.65 H	4336	245405	18:15:48	464	847	
"	6.1	A0	1.95 L	90	253734	16:50:39	769	408	
145Li	8.75	B0	1.9 L	80	243899	16:26:22	566	108	
"	8.75	B8	1.5 L	30	244593	17:13:34	239	333	
"	8.7	B8	1.6 L	40	243647	16:16:06	688	103	
"	8.5	B8	1.6 L	40	244843	17 29:49	124	420	
"	7.9	B8	1.6 L	40	243796	16.22:16	600	94	
"	8.75	B8	3.0 H	1000	244400	16:59:55	222	204	H on 144
"	7.3	B9	1.9 L	80	244134	16.43:00	638	285	
"	6.05	B9	1.65 L	45	244755	17 23.15	130	368	L on 148,149
"	7.25	A0	1.55 L	35	244705	17:20:19	523	494	
"	7.74	B5	2.12 L	133	243741	16:19.42	555	39	10r from EOF
148Ca	9.0	B3	1.6 L	40	244409	17:00:43	238	211	
"	8.05	B3	2.1 L	125	243750	16:20:19	528	17	5r from EOF, L on 149
"	6.05	B9	1.8 L	63	244755	17:23:22	133	361	L on 144,149
"	6.3	A0	1.85 L	70	253673	16:38 12	988	447	5r from EOF, L on 145
149Ca	8.7	B0	1.52 L	33	243899	16:26 51	569	110	
"	8.05	B3	1.55 L	35	243750	16:20.27	526	22	5r from EOF, L on 148
"	8.9	B5	1.35 L	22	244089	16:39:01	415	119	
"	8.6	B5	1.55 L	35	243844	16:24:24	575	92	

66

PAGE, CARPENTERS AND HILL

Table continues

Table 5 — Deviant Density Volumes in the S201 Far-Ultraviolet Catalog (Continued)

Frame	V Mag	Spec. Type	log <i>D/E</i>	Approx. <i>D/E</i>	SAO	R.A.	<i>x</i>	<i>y</i>	Remarks
Norma (continued)									
149Ca	8.45	B5	1.85 L	70	243572	16:14.28	667	68	20r from EOF
"	8.0	B8	1.5 L	32	227872	17:18:23	105	310	
"	7.75	B9	1.6 L	37	244136	16:43:10	548	234	
"	6.05	B9	2.1 L	115	244755	17 23:21	131	364	L on 145,148
"	9.0	B9	2.5 H	320	244027	16 35.31	376	59	20r from EOF
"	5.9	A2	1.4 L	25	243509	16:11 47	687	60	10r from EOF
Sagittarius (Normal)									
198L1	8.8	B0	2.0 L	100	186748	18:20:14	405	324	
"	8.85	B3	1.95 L	92	209938	18.13.04	573	300	
"	7.6	B5	3.7 H	4664	186389	18:06 49	321	120	H on 202,203
"	7.1	B8	1.95 L	90	187672	19:03:08	275	782	
"	6.9	B9	1.95 L	90	209919	18.12.20	708	342	
"	9.4	B9	2.95 H	917	187070	18:35.00	182	418	H on 199,202,203,204
"	8.9	B9	3.2 H	1600	209597	17 57 52	919	271	10r from EOF, H on 203
"	8.10	B9	3.3 H	1920	186268	18:02:49	358	83	H on 203
"	9.2	A0	2.75 H	560	186471	18.09 25	505	231	H on 202,203
"	2.65	A2	3.2 L	1490	187600	18:59 09	409	773	
Sagittarius (Overexposed)									
199L1	6.6	O	1.5 L	32	209489	17.52:38	768	140	} Two images, L on 203
"	6.6	O	1.75 L	56	209489	17:53:06	765	145	
"	7.25	O	1.9 L	80	209560	17 55:59	910	247	10r from EOF
"	9.2	B3	1.7 L	50	185985	17:53.56	634	94	Another image, <i>D/E</i> = 38
"	7.2	B3	2.6 L	400	209569	17:56:22	792	197	Another image, <i>D/E</i> = 4146

Table continues

67

NRL REPORT 8173

ORIGINAL PAGE IS
OF POOR QUALITY

Table 5 — Deviant Density Volumes in the S201 Far-Ultraviolet Catalog (Continued)

Frame	V Mag	Spec. Type	log <i>D/E</i>	Approx. <i>D/E</i>	SAO	R.A.	<i>x</i>	<i>y</i>	Remarks
Sagittarius (Overexposed) (continued)									
199Li	9.0	B5	3.15 H	1400	186539	18:11:52	239	151	Another image, <i>D/E</i> = 283
"	8.80	B5	3.6 H	4000	186406	18:07 14	324	128	Another image, <i>D/E</i> = 35
"	5.95	B5	4.2 H	16000	186025	17:55:48	589	98	
"	8.2	B8	1.75 L	56	209755	18:04:46	803	298	
"	7.0	B8	1.85 L	81	209966	18:14:10	715	367	Another image, <i>D/E</i> = 624
"	9.1	B8	3.15 H	1400	186815	18:23:13	232	296	
"	8.6	B8	3.2 H	1542	186556	18:12:51	528	283	
"	7.45	B9	1.8 L	63	187089	18:36:03	405	509	L on 203
"	9.0	B9	3.1 H	1250	186249	18:02:05	514	146	Another image, <i>D/E</i> = 180
"	8.9	B9	3.3 H	2000	209597	17:57:53	918	272	15r from EOF, H on 198,203
"	9.4	B9	3.3 H	2000	187070	18:34 56	182	419	H on 202,203
"	6.95	B9	3.75 H	5600	210570	18:44:03	805	722	
"	7.2	A0	1.7 L	47	210853	18:59:42	693	855	
"	5.1	A0	2.3 L	200	210501	18:40:36	855	702	
"	9.6	A0	2.35 H	225	209906	18:12:10	649	319	
"	9.2	A0	3.15 H	1141	186201	18 00:28	524	130	Another image, <i>D/E</i> = 96
"	9.2	A0	2.7 H	462	186443	18:08:49	366	168	Another image, <i>D/E</i> = 395
"	8.7	A0	2.85 H	758	186846	18:24:59	353	363	
"	8.8	A0	2.95 H	877	186684	18.17:47	476	322	
"	8.5	A2	2.85 H	760	186033	17.55:41	463	43	H on 203
Sagittarius (Normal)									
202Ca	8.25	O	1.85 L	70	209521	17:54:20	692	119	
"	8.5	B2	1.9 L	80	186332	18:05:01	394	124	
"	8.6	B3	1.5 L	32	186086	17:57:52	399	29	3r from EOF
"	8.1	B3	1.9 L	80	209664	18:01:02	687	199	

68

PAGE, CARPENTERS AND HILL

Table continues.

Table 5 — Deviant Density Volumes in the S201 Far-Ultraviolet Catalog (Continued)

Frame	V Mag	Spec. Type	log <i>D/E</i>	Approx. <i>D/E</i>	SAO	R.A.	<i>x</i>	<i>y</i>	Remarks
Sagittarius (Normal) (continued)									
202Ca	8.9	B5	1.75 L	56	186166	17 59.59	599	149	
"	7.9	B5	1.55 L	35	186189	18:00:18	481	104	
"	7.6	B5	3.55 H	3500	186389	18:06:57	315	114	H on 198,203
"	7.9	B9	1.5 L	31	210276	18:28:51	832	564	
"	6.55	B9	1.75 L	56	209503	17:53:17	770	144	
"	9.4	B9	2.7 H	500	187070	18 34.59	177	412	H on 198,199,203,204
"	8.9	B9	3.28 H	1900	209597	17:57:51	914	265	7r from EOF, H on 198,199,203
"	9.2	A0	2.55 H	350	186471	18 09:26	500	225	H on 198,203
"	5.1	A0	2.2 L	160	210501	18.40:33	847	694	L on 204
203Ca	6.62	O	1.97 L	96	209489	17:52:45	772	131	L on 199
"	8.3	B2	1.65 L	45	209568	17:51:20	817	195	L on 204
"	9.05	B3	1.8 L	62	209456	17.51:19	811	132	L on 204
"	9.0	B5	1.35 L	22	186345	18 05.28	465	157	L on 204
"	8.95	B5	1.65 L	45	209934	18:13:01	979	447	10r from EOF, L on 204
"	7.6	B5	3.45 H	2950	186389	18 06:53	323	111	H on 198,202
"	8.5	B8	1.2 L	16	186861	18 25:47	401	378	
"	8.1	B8	1.25 L	18	186067	17:57 04	428	26	3r from EOF
"	8.9	B9	1.0 L	10	186882	18 26.38	322	360	
"	8.1	B9	1.25 L	18	187225	18 41:53	392	560	
"	7.45	B9	1.6 L	40	187089	18:36 09	408	499	L on 199
"	9.05	B9	2.6 H	390	209634	17:59.24	880	260	
"	9.3	B9	2.65 H	450	186360	18:05:49	313	92	
"	9.4	B9	2.72 H	550	187070	18:34:55	185	409	H on 198,199,202,204
"	8.9	B9	3.35 H	2440	209597	17:57 53	922	262	7r from EOF, H on 198,199,202
"	8.1	B9	3.25 H	1790	186268	18:02:58	360	75	H on 198
"	7.4	A0	1.05 L	11	209923	18:12:19	826	379	L on 204

69

NRL REPORT 8173

Table continues

Table 5 — Deviant Density Volumes in the S201 Far-Ultraviolet Catalog (Continued)

Frame	V Mag	Spec. Type	log <i>D/E</i>	Approx. <i>D/E</i>	SAO	R.A.	<i>x</i>	<i>y</i>	Remarks
Sagittarius (Normal) (continued)									
203Ca	6.45	A0	1.7 L	50	186863	18:25:51	371	368	
"	8.9	A0	2.55 H	350	186085	17:57:37	583	105	
"	9.2	A0	2.65 H	415	186471	18:09:29	508	222	H on 198,202
"	6.05	A2	1.55 L	35	187519	18:55:31	76	622	
"	5.25	A2	1.70 L	50	210277	18:29:08	959	608	
"	8.5	A2	2.35 H	238	186033	17:55 41	465	31	5r from EOF, H on 199
Sagittarius (Overexposed)									
204Ca	8.3	B2	1.55 L	35	209568	17:56:20	822	188	L on 203
"	9.05	B3	1.4 L	25	209456	17:51:41	814	428	L on 203
"	9.0	B5	1.65 L	45	186345	18:05:24	470	148	L on 203
"	8.95	B5	1.65 L	45	209934	18:12.51	984	439	L on 203
"	8.88	B8	1.3 L	20	209797	18:06:56	847	320	
"	8.1	B9	0.65 L	4.5	187225	18:42:18	394	557	3 more, <i>D/E</i> = 13,75,7; L on 203
"	9.65	B9	0.75 L	5.6	210147	18:23:21	744	458	
"	9.1	B9	0.67 L	4.7	209834	18:08:36	789	314	Another image, <i>D/E</i> = 7
"	9.2	B9	0.95 L	9.	210329	18:31.27	705	531	
"	9.4	B9	2.45 H	548	187070	18:34:48	190	401	H on 198,199,202,203
"	8.67	A0	0.77 L	6	210632	18:47:53	494	649	
"	8.5	A0	0.65 L	4.5	186844	18:25:07	287	321	
"	8.5	A0	0.77 L	6	209838	18:08:49	797	320	
"	7.4	A0	1.2 L	16	209923	18 12.11	831	371	L on 203
"	5.1	A0	2.4 L	265	210501	18.40:31	860	683	L on 203
"	8.9	A0	2.35 H	225	186432	18:08 38	587	233	
"	10	A0	1.82 H	67	210165	18:23:58	865	510	
"	8.9	A0	2.55 H	355	186085	17:57.36	588	98	

Table continues.

70 ORIGINAL PAGE IS OF POOR QUALITY

PAGE, CARROTHERS AND HILL

Table 5 — Deviant Density Volumes in the S201 Far-Ultraviolet Catalog (Continued)

Frame	V Mag	Spec. Type	log D/E	Approx. D/E	SAO	R.A.	x	y	Remarks
Capricorn									
45Ca	6.8	A0	1.45 L	31	164275	21:14:23	395	338	
"	4.9	A3	1.72 L	52	189986	21:01:42	756	662	L on 46
46Ca	4.9	A3	1.8 L	67	189986	21 01:39	769	659	L on 45
Pavo									
118L1	10.2	A5	2.1 H	125	246739	20:45 10	540	247	less H on 121
Cygnus									
21L1	6.0	O	3.15 L	1290	50263	20:54.42	812	168	
"	6.9	B2	2.7 L	500	70599	20:50:10	826	684	
"	7.7	B3	3.52 H	3300	71104	21 12:09	622	517	H on 22
"	4.3	A0	2.6 L	400	71165	21:15.35	597	436	
"	8.6	A2	3.55 H	3500	70291	20:35 23	981	445	7r from EOF
22L1	7.1	B0	2.72 L	536	50230	20:53 28	812	395	L on 23
"	7.7	B3	3.57 H	3700	71104	21:12:12	629	512	H on 21
"	7.9	B3	2.3 L	200	50583	21:11:11	666	213	
"	5.5	A0	2.3 L	200	51595	22:01:00	251	111	7r from EOF
"	8.5	A2	2.9 H	800	70837	21:01:22	732	498	H on 23,26,27,28
23L1	7.1	B0	2.82 L	660	50230	20.53.26	808	397	L on 22
"	8.5	B8	3.1 H	1250	50411	21:02:14	760	92	5r from EOF
"	8.0	B9	1.48 L	30	70662	20:52:58	800	695	
"	7.6	B9	1.65 L	45	51671	22:05:49	184	187	
"	7.3	B9	1.85 L	70	50859	21:24:59	543	211	

Table continues

71

NRL REPORT 8173

ORIGINAL PAGE IS
OF POOR QUALITY

Table 5 — Deviant Density Volumes in the S201 Far-Ultraviolet Catalog (Continued)

Frame	V Mag	Spec. Type	log <i>D/E</i>	Approx. <i>D/E</i>	SAO	R.A.	<i>x</i>	<i>y</i>	Remarks
Cygnus (continued)									
23L1	6.0	A0	2.1 L	125	71237	21:19:14	530	767	Another image?, <i>D/E</i> = 103
"	8.5	A2	2.85 H	700	70837	21:01:24	727	500	H on 22,26,27,28
26Ca	7.4	A2	2.8 H	775	50189	20:51:37	772	357	
"	8.5	A2	2.7 H	500	70837	21:01:31	674	497	H on 22
"	8.9	A3	2.15 H	140	51388	21:50:14	261	239	H on 28
27Ca	8.4	B2	1.27 L	19	70410	20:40:46	931	591	
"	7.6	B	1.98 L	95	50567	21:10:36	673	177	L on 28
"	6.9	B8	1.85 L	70	50925	21:27:08	534	148	L on 28
"	8.0	B9	1.4 L	25	71950	21:59:25	135	683	
"	8.1	A0	1.08 L	12	51417	21:52:22	331	82	10r from EOF
"	8.1	A0	1.35 L	22	70791	20:59:06	757	404	Another image?, <i>D/E</i> = 19
"	7.5	A0	1.42 L	26	71747	21:47:38	272	620	
"	7.5	A0	1.28 L	19	72055	22:06:12	138	364	
"	7.2	A0	0.97 L	9	70971	21:06:39	666	719	
"	6.4	A0	1.2 L	16	51277	21:44:21	372	224	
"	6.7	A2	1.25 L	18	50751	21:19:51	611	61	
"	6.05	A5	1.35 L	22	71086	21:11:24	631	566	
"	7.4	A2	2.85 H	688	50189	20:51:55	828	354	H on 28
"	8.5	A2	2.72 H	520	70837	21:01:21	731	494	H on 22
"	8.7	A2	2.3 H	200	50666?	21:15:09	654	49	10r from EOF, also <i>D/E</i> = 25
"	8.9	A3	2.28 H	190	51388	21:50:04	318	236	
28Ca	7.6	B	1.82 L	66	50567	21:10:37	676	184	L on 27
"	6.9	B8	1.5 L	32	50925	21:27:15	536	155	L on 27
"	7.6	B9	1.6 L	40	72016	22:03:10	134	523	

Table continues.

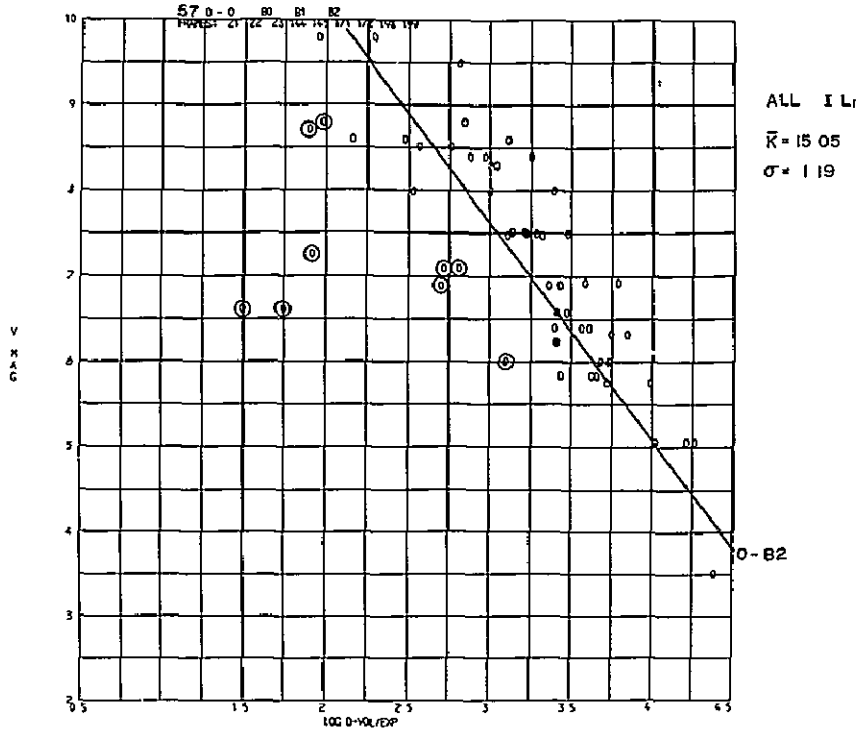
Table 5 — Deviant Density Volumes in the S201 Far-Ultraviolet Catalog (Concluded)

Frame	V Mag	Spec. Type	log D/E	Approx. D/E	SAO	R.A.	x	y	Remarks
Cygnus (continued)									
28Ca	7.4	A2	2.85 H	790	50189	20:51:53	831	361	H on 27
"	8.5	A2	2.75 H	560	70837	21:01:24	733	501	H on 22
"	8.9	A3	2.2 H	160	51388	21:50:11	320	243	H on 26
Aquarius									
150Li	5.2	A0	2.5 L	320	146635	23:16:29	291	764	H on 171, less H on 152,172 L on 172
151Li	7.6	B3	3.65 H	4500	165651	23:19:21	255	779	
152Li	5.55	A2	1.85 L	74	146593	23:13:02	322	466	
171Li	8.4	B8	3.17 H	1480	165696	23:24:09	424	921	H on 151
"	7.6	B3	3.7 H	5000	165651	23:19:15	484	849	
172Li	8.4	B8	3.17 H	1500	165696	23:24:11	425	924	10r from EOF L on 152
"	7.6	A0	3.3 H	2000	165622	23:16:20	519	981	
"	5.55	A2	1.6 L	40	146593	23:12:58	549	534	
177Ca	6.3	B9	1.4 L	25	146273	22:41:01	953	686	
Grus									
69Li	4.8	A2	1.65 L	45	231675	23:32:25	504	502	L on 72
"	4.85	A2	2.15 L	140	231707	23:34:59	465	366	
72Ca	4.8	A2	1.82 L	75	231675	23:32:15	449	501	L on 69
73Ca	7.15	B8	1.7 L	91	231947	00:06:17	569	29	30r from EOF
"	9.5	A5	2.1 H	118	231522	23:13:29	370	681	
93Ca	3.9	A3	1.15 L	14	215092	00:23:42	659	222	L on 94
94Ca	3.9	A3	1.50 L	32	215092	00:23:33	668	223	L on 93

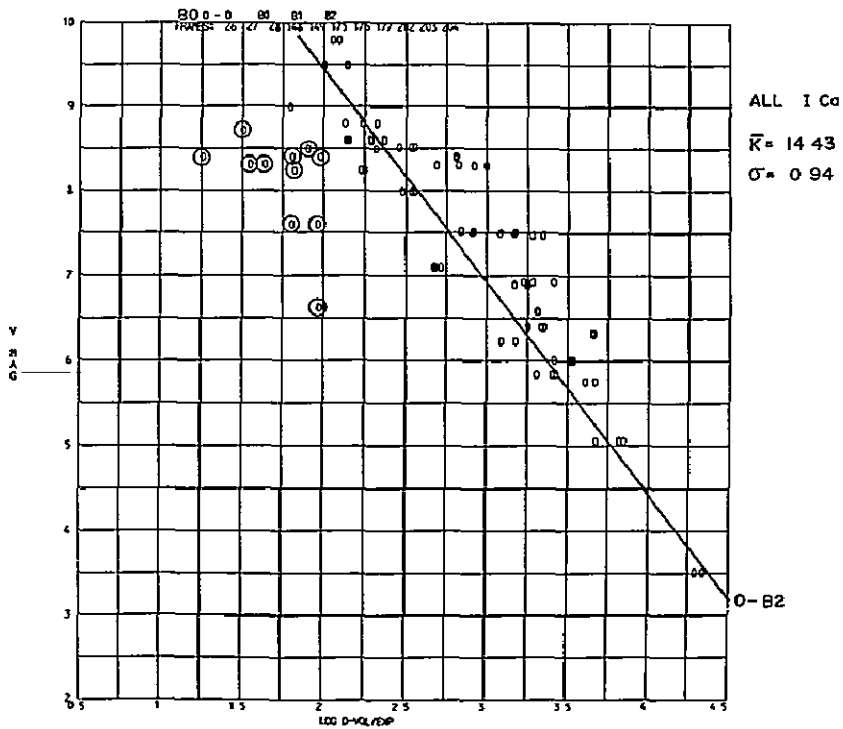
73

NRL REPORT 8173

ORIGINAL PAGE IS
OF POOR QUALITY



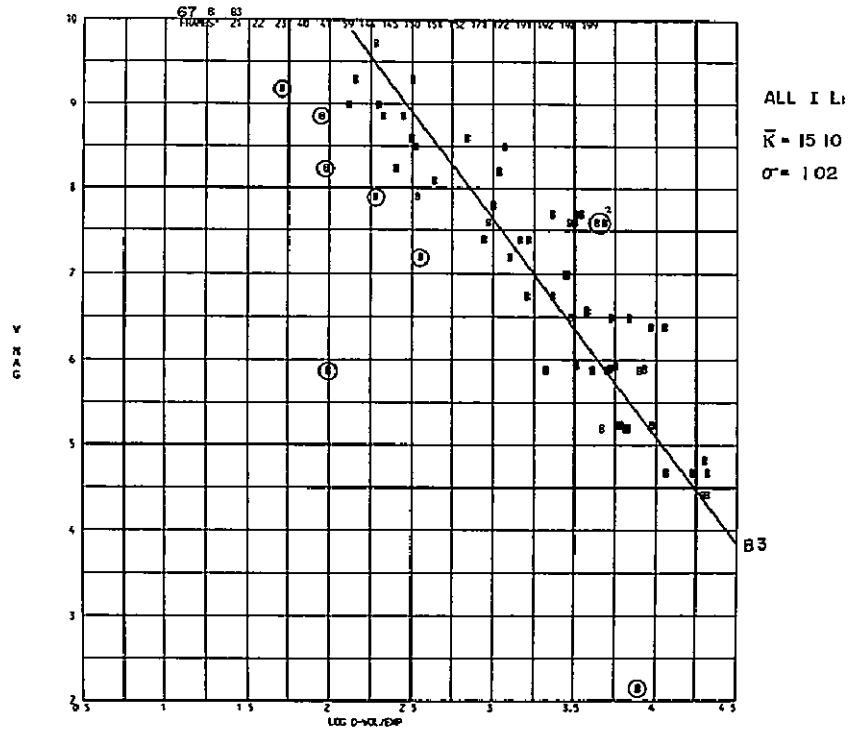
(a)



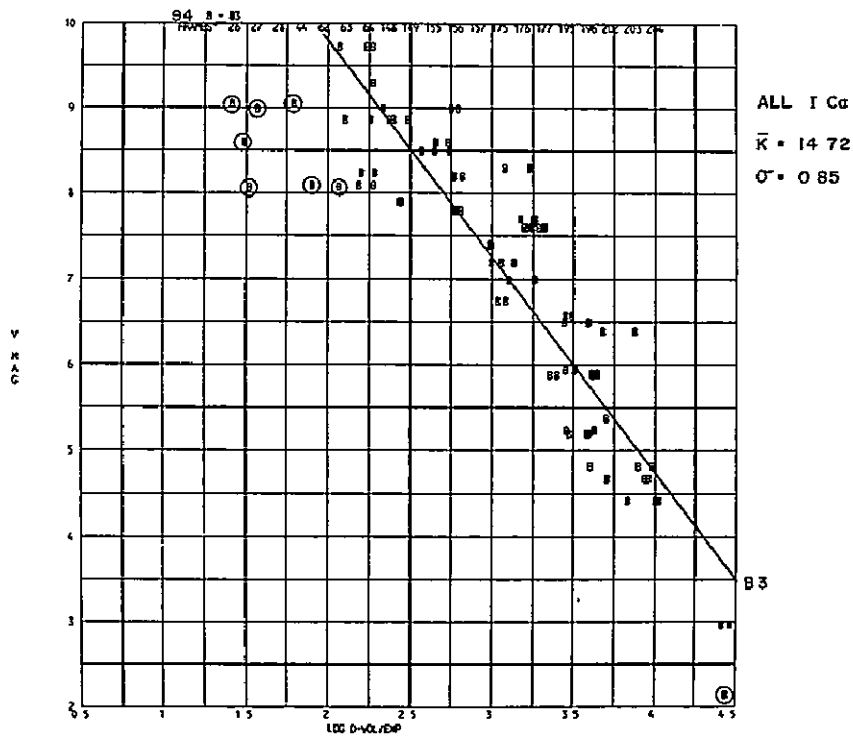
(b)

Fig 16 -- V magnitude as a function of $\log V/E$, where E is the exposure in minutes, for SAO spectral types O, B0, B1, and B2. The solid line is the expected relationship $V \text{ mag} + 2.5 \log V/E = K$.

ORIGINAL PAGE IS
 OF POOR QUALITY

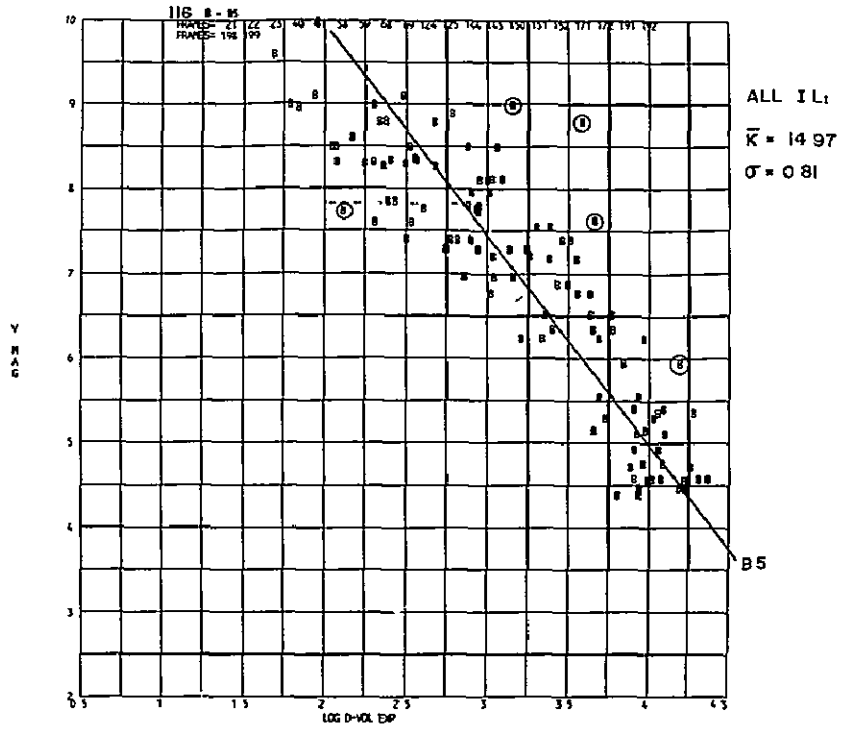


(a)

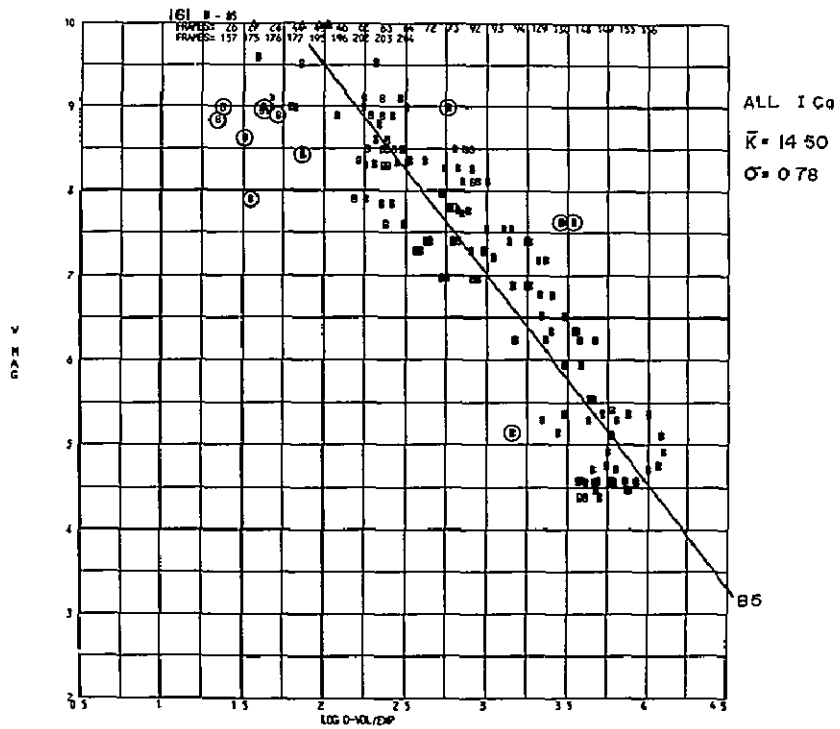


(b)

Fig 17 - V magnitude as a function of log V/E for SAO spectral type B3

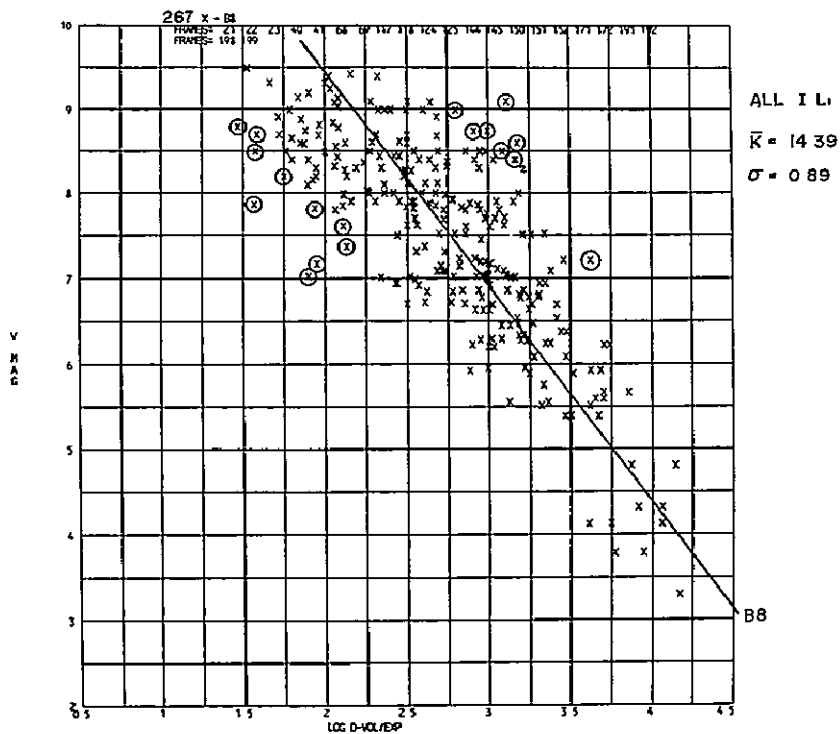


(a)

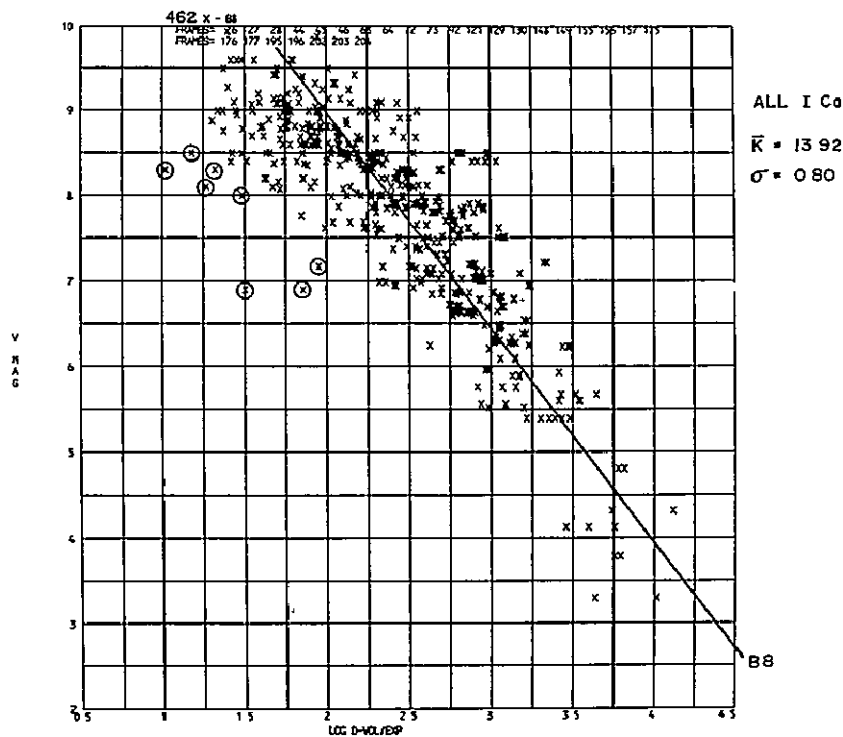


(b)

Fig 18 -- V magnitude as a function of log V/E for SAO spectral type B5

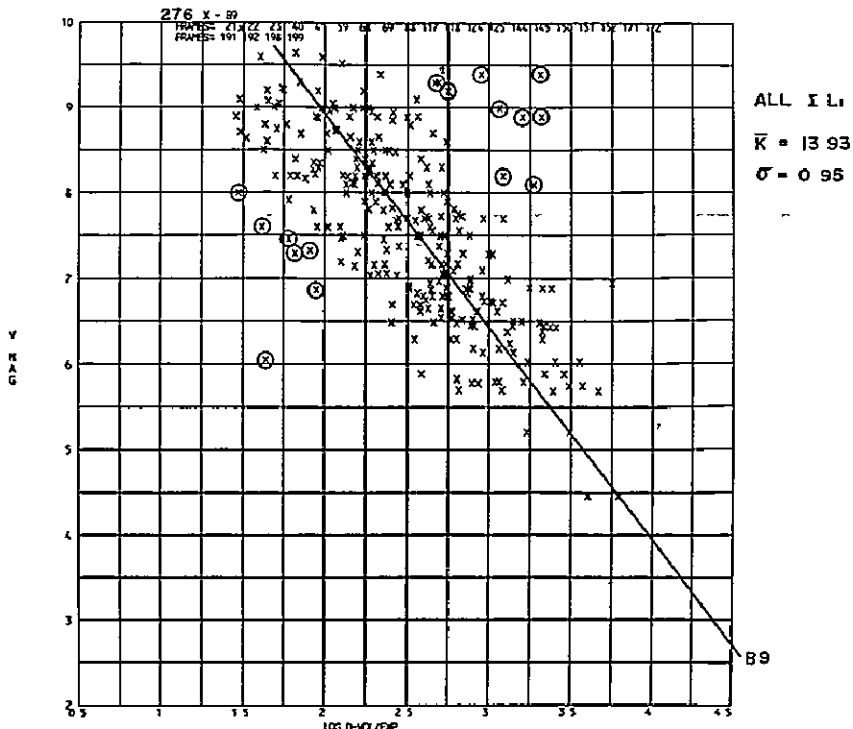


(a)

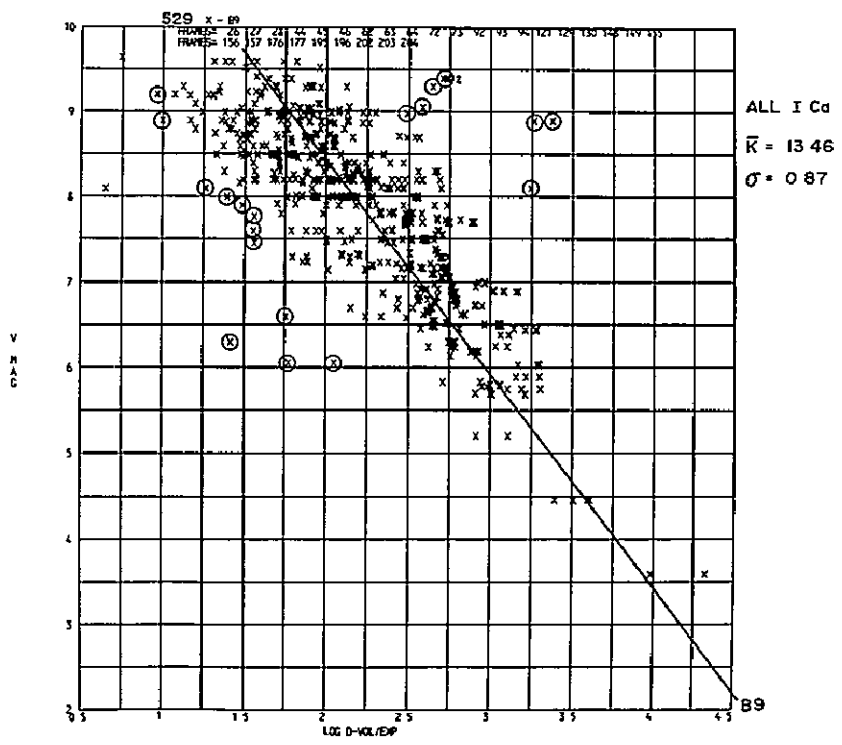


(b)

Fig 19 — V magnitude as a function of log V/E for SAO spectral type B8

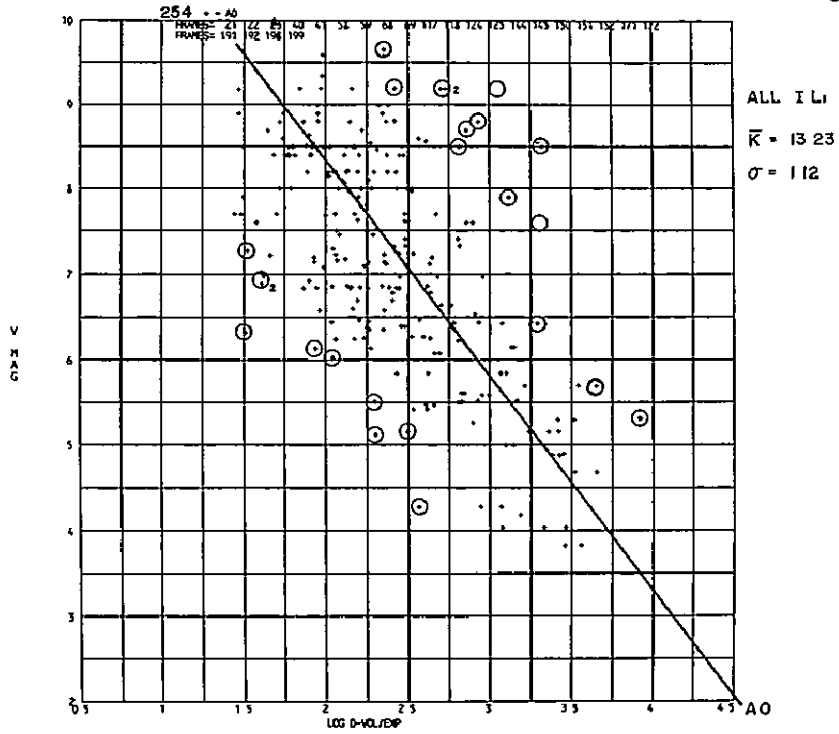


(a)

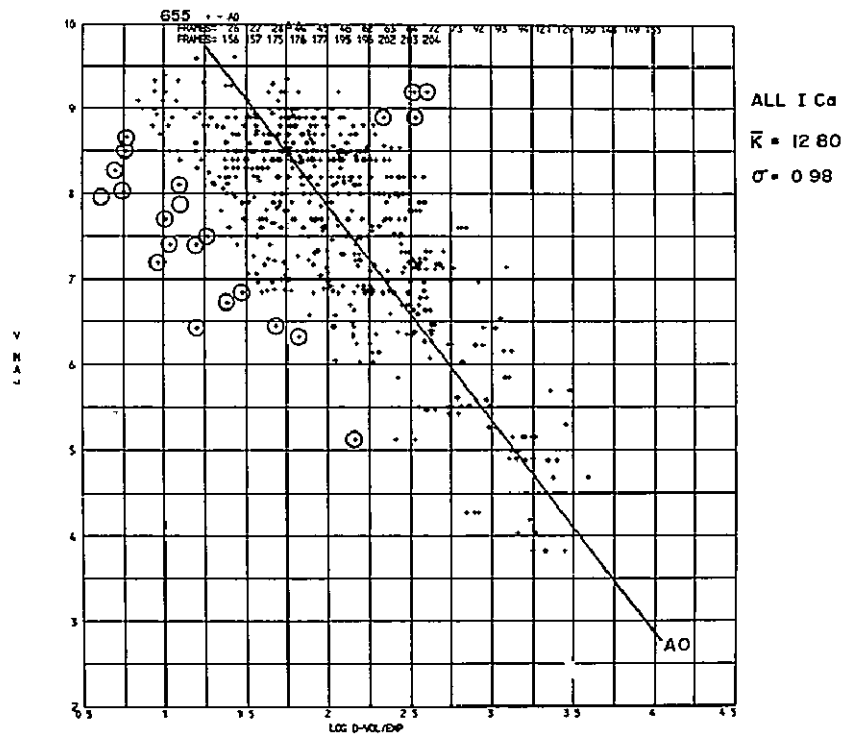


(b)

Fig 20 — V magnitude as a function of log V/E for SAO spectral type B9

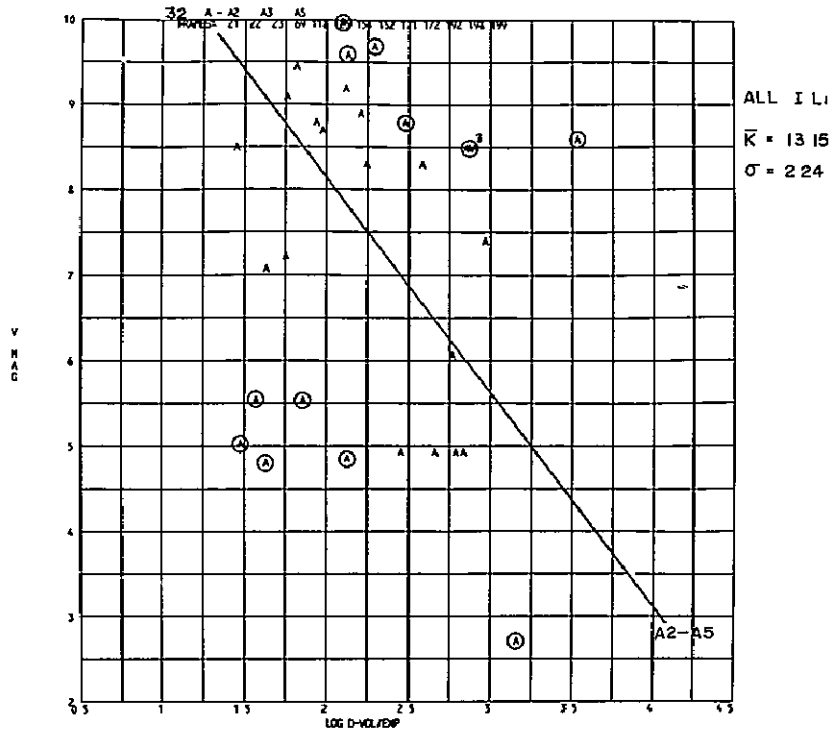


(a)

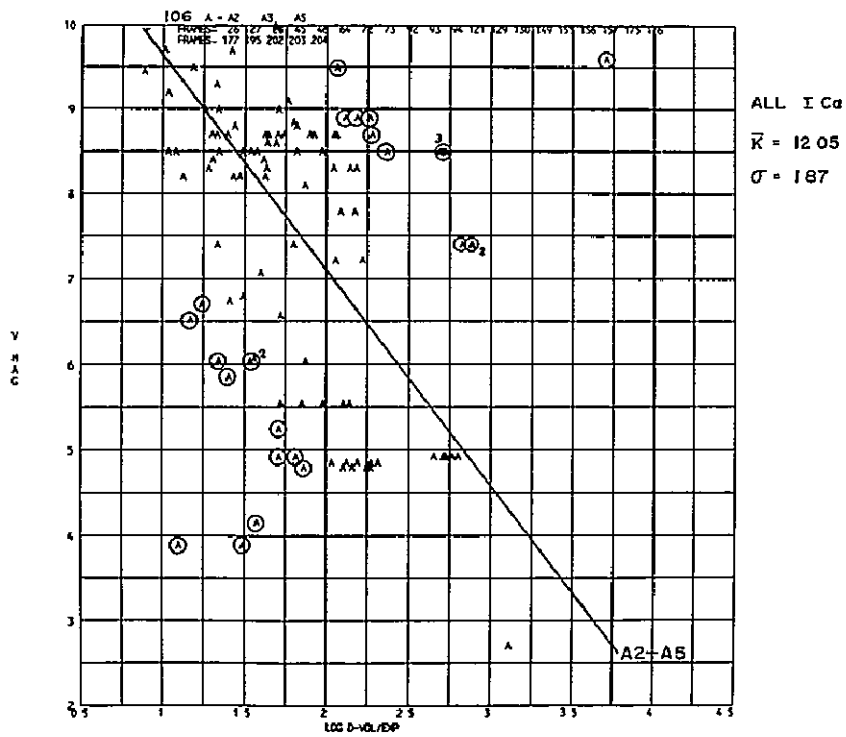


(b)

Fig 21 — V magnitude as a function of log V/E for SAO spectral type A0



(a)



(b)

Fig 22 — V magnitude as a function of $\log V/E$ for SAO spectral types A2, A3, and A5

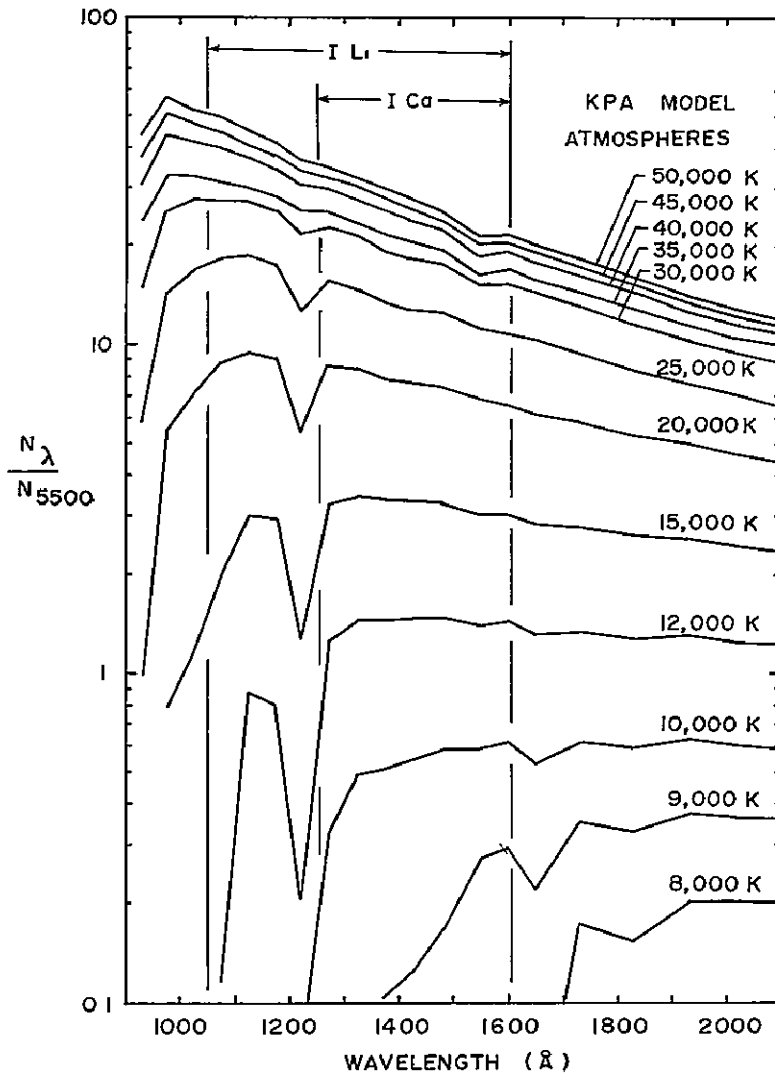


Fig 23 — KPA model [13] predictions of photon flux vs wavelength, normalized to 5500 Å

For the S201 camera at wavelength 1216 Å, preflight calibrations, confirmed by imagery of the hydrogen geocorona and the interplanetary Lyman-α background [2], yield a value $b = 0.4D/\text{photoelectron } \mu\text{m}^2$. Hence the theoretical density volume $V = 0.4n$, with area expressed in μm^2 and density as normally defined. However, with area expressed in number of pixels (33 μm square) and density in PDS units (100 × optical density),

$$V = 0.037n.$$

Thus a star image resulting from 1000 photoelectrons will yield a density volume $V = 37$.

Figure 23 shows plots of KPA model predictions of photon flux vs wavelength, normalized to the visual (5500 Å), where a star of visual magnitude 7.6 yields a flux of 1 photon/cm² s Å [15], and Fig. 24 shows the effects of varying degrees of interstellar reddening on the 20,000-K-model fluxes. Folding of these curves with the response functions in ILi and ICa modes (Fig. 3) yields the curves of density volume/exposure for a star

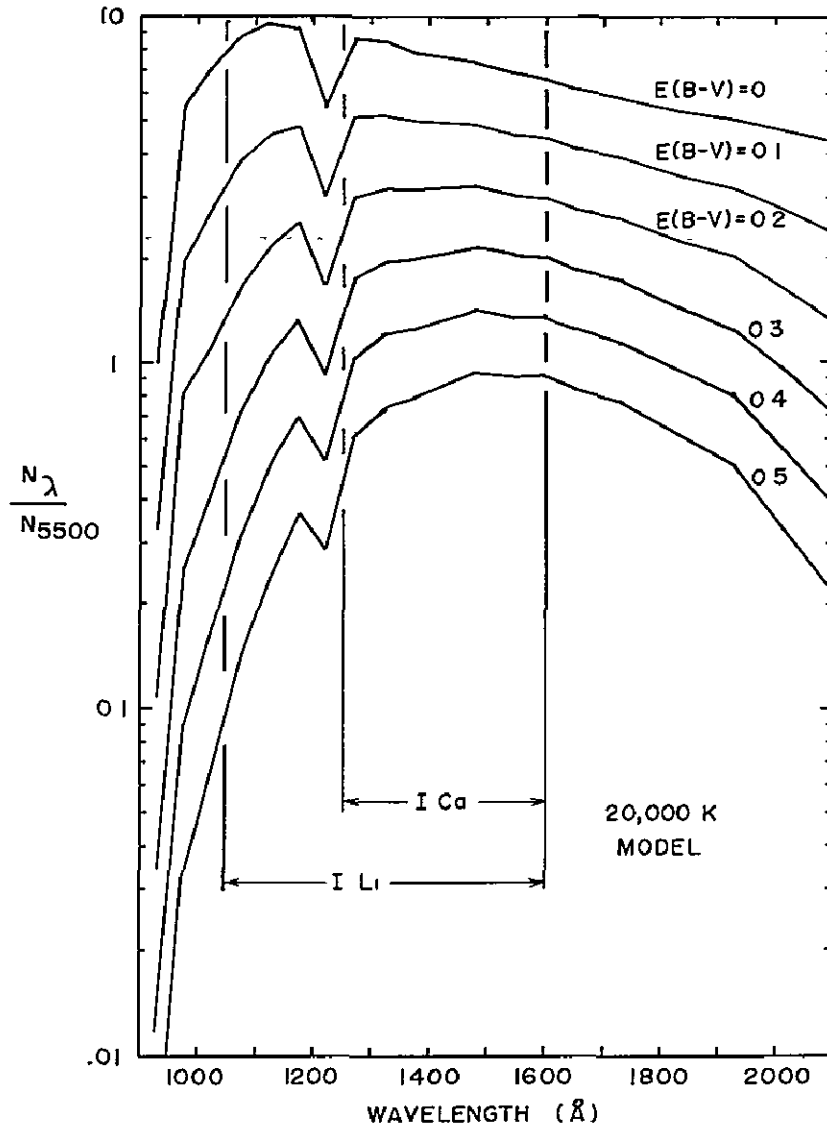


Fig 24 — Effects of various degrees of interstellar reddening (“average” interstellar extinction law of Bless and Savage [14]) on the 20,000-K-model photon fluxes, normalized to 5500 Å

of visual magnitude 7.6 shown in Fig. 25, and the ratio I_{Li}/I_{Ca} shown in Figs. 26 and 27. Figure 28 shows the computed stellar visual magnitude required to produce a density volume $V = 5131$ for the various I_{Li} and I_{Ca} exposures in relation to the unreddened model effective temperature T_e . This “standard” density volume corresponds to a conical image with peak density $P = 100$ and a 7-raster diameter ($N = 38$ pixels) and is by no means the weakest measurable image. Density volumes of 80 with $P < 75$ and $N = 4$ are measured reliably, although the corrected density volume V_c equals 290 (Table 3). That is, images 17.7 times fainter than this “standard” have been detected, measured, and recorded in the catalog. However, Fig. 29 shows the actual fractions of SAO stars detected in two fields (Cygnus and Norma) plotted against visual magnitude for various spectral types. They are seen to be about 3 magnitudes brighter than expected. For O-B2 stars ($T_e \approx 20,000$ K) half are detected at visual magnitude 9.5, for A0 stars ($T_e \approx 10,000$), 50% are detected at 7.8

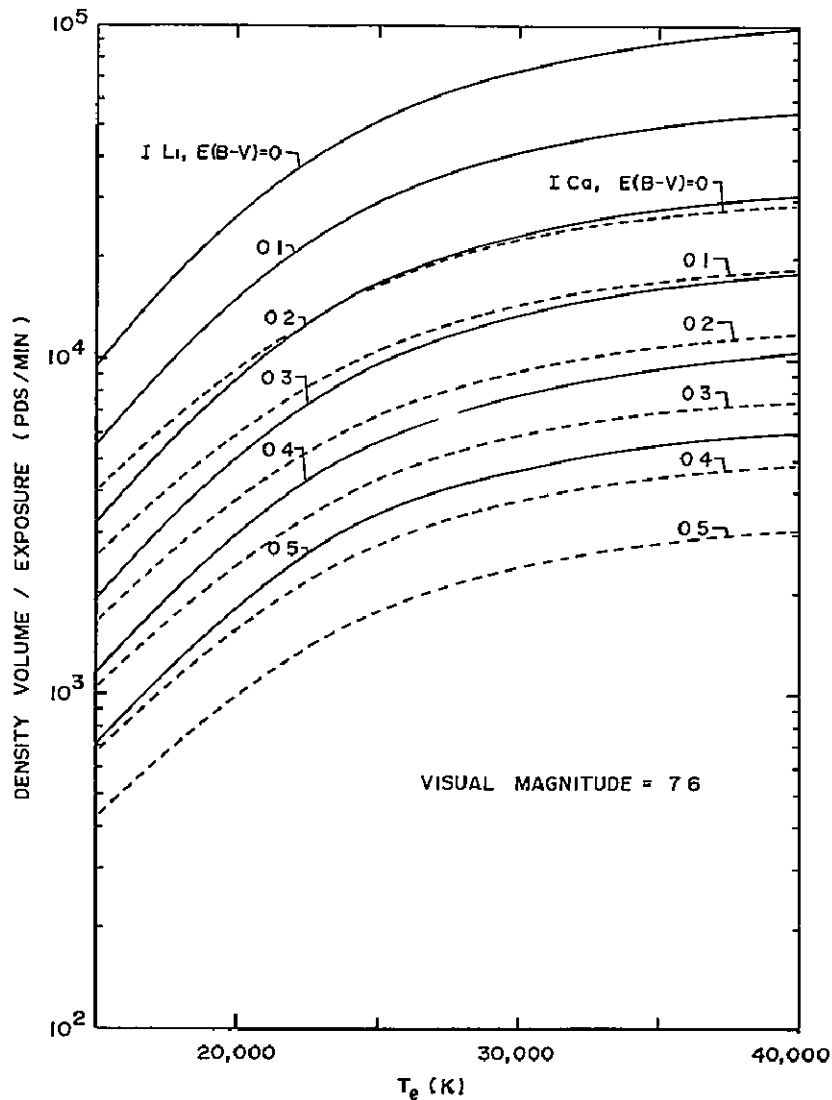


Fig 25 — Ratio of density volume to exposure for a star of visual magnitude 7.6 as a function of effective temperature

mag. For A2-A5 stars the detection fraction is erratic. The other 50%-detection magnitudes are given in Table 6.

Figures 30 through 32 give the theoretical relationship between density volume and visual magnitude for various effective temperatures and interstellar reddenings. These plots may be directly compared with the plots of visual magnitude vs $\log V/E$ in Figs. 16 through 22. Unfortunately, as apparent from these figures, it is not practical to separate the effects of temperature and of interstellar extinction using the far-ultraviolet imagery data alone; the effect of extinction is nearly equivalent to a decrease in effective temperature in the wavelength range covered by the I Li and I Ca exposures. Only if the near-visual reddening and/or effective temperature is known from ground-based measurements can the far-ultraviolet fluxes be used to provide independent estimates of temperature and far-ultraviolet extinction. Comparison of our far-ultraviolet data and ground-based data is difficult because of the incompleteness and/or doubtful accuracy of the available ground-based data (spectral classification and UBV photometry) for stars in the visual magnitude range fainter than 7.0.

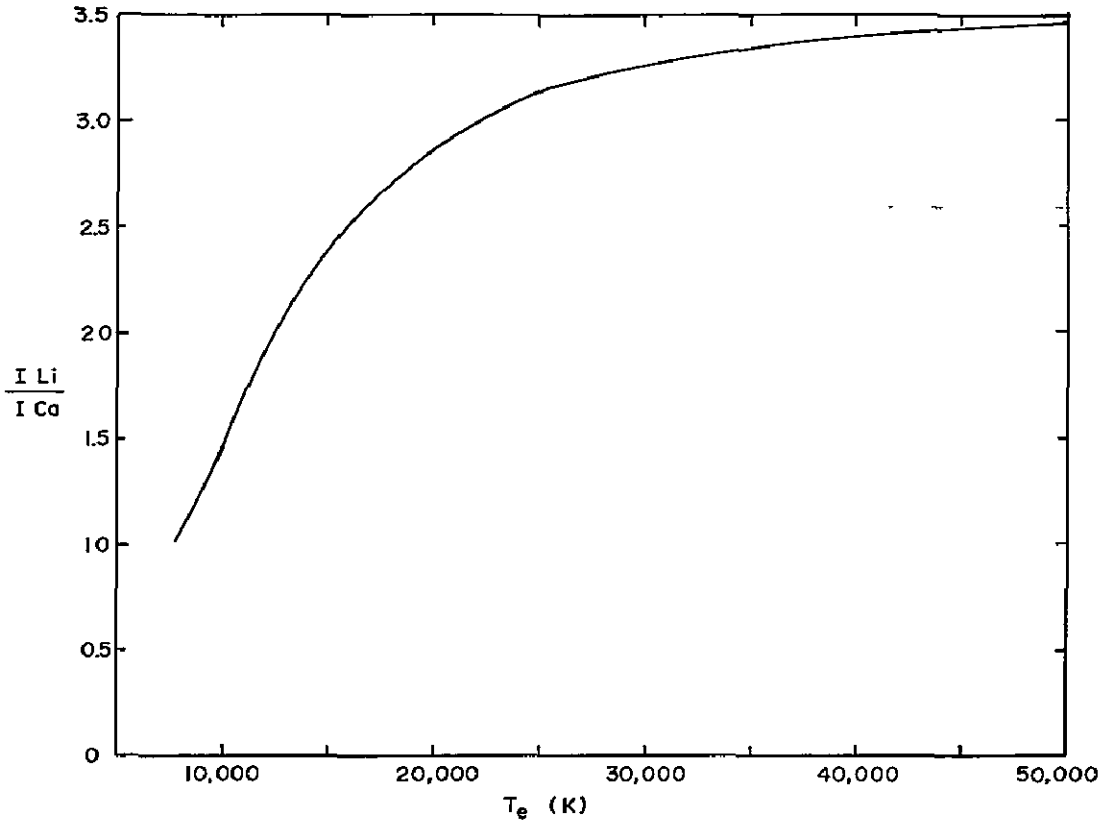


Fig 26 — Ratio I_{Li}/I_{Ca} as a function of effective temperature

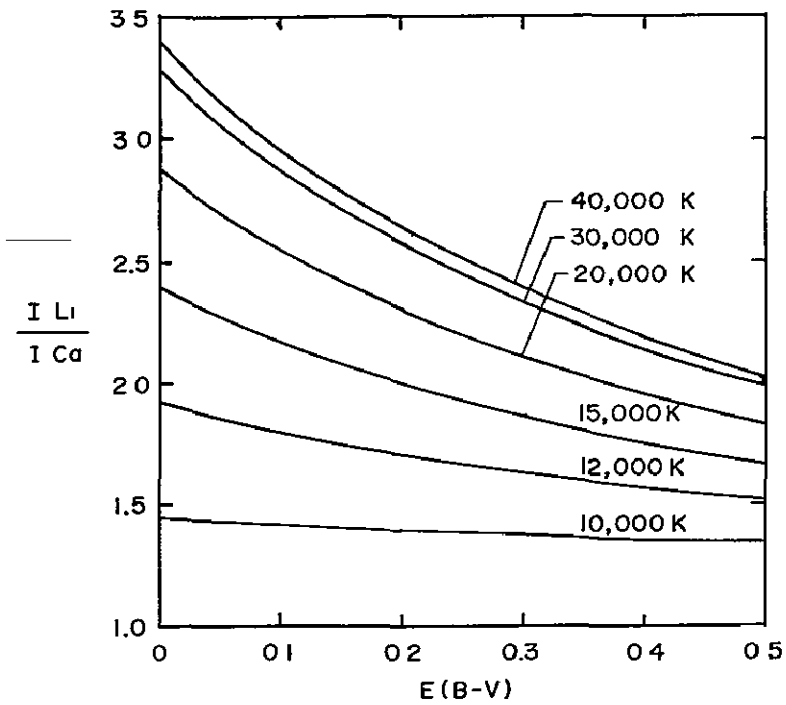


Fig 27 — Ratio I_{Li}/I_{Ca} as a function of interstellar reddening

ORIGINAL PAGE IS
OF POOR QUALITY

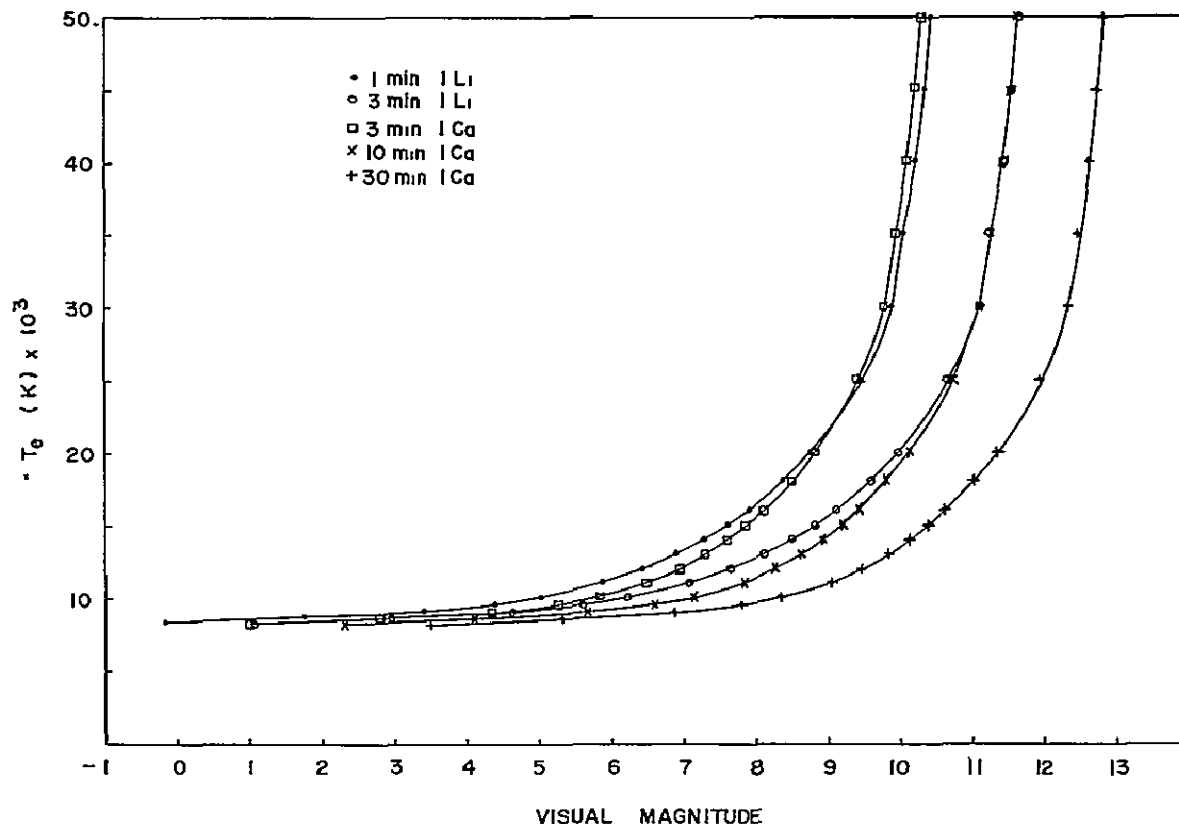


Fig 28 — Computed stellar visual magnitude required to produce a density volume $V = 5131$ for various S201 exposures

THE CATALOG

The catalog is divided into 11 parts, each covering one field in the sky. Each part is headed by a constellation name and the field center coordinates α_0 and δ_0 . Two parts cover the Sagittarius field: one headed SGR NORMAL and the other headed SGR OVER-EXP (high background densities). The first column gives the object number. The next two columns give the scan coordinates x and y for each image detected, and the next two give the celestial coordinates R.A. (α 1950) in hr:min s and DEC (δ 1950) in deg:arc-min arc-s. The errors in position are less than about 3 arc-min.

Column 6 gives the star number in the SAO catalog (Smithsonian Astrophysical Observatory, 1966) within 5 arc-min of the detected image. If this SAO number is followed by a slash (/), the star is one of a pair or group too close to be resolved by the S201 camera; if by a query (?), the image is between 5 and 8 arc-min from the SAO star listed (considered a doubtful identification); and if by a colon (:), the star is one of two within 5 arc-min but is considered the less likely identification.

Columns 7 and 8 give the differences (measured image position minus SAO catalog position) in right ascension (α) and declination (δ). Columns 9, 10, 11 give spectral type and visual and photographic magnitudes from the SAO catalog.

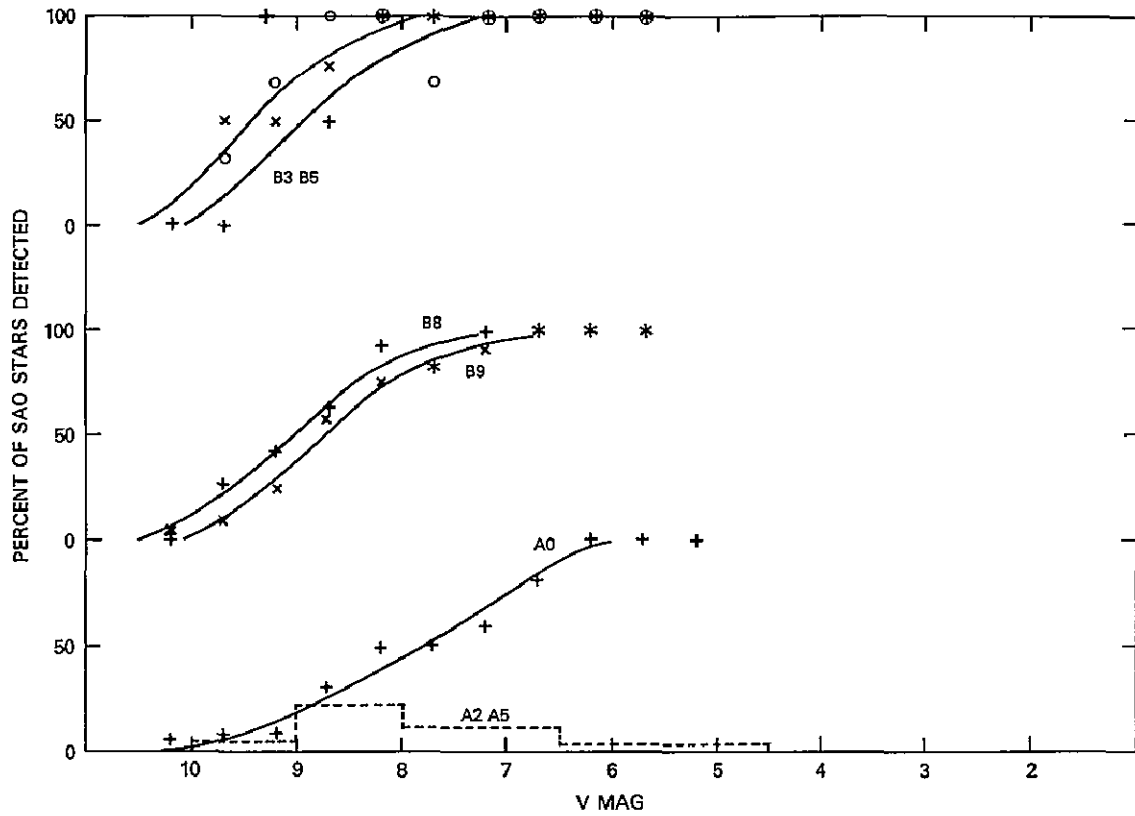


Fig 29 — Percent of SAO stars detected in Cygnus and Norma as a function of visual magnitude

Table 6 — Visual Magnitudes for 50% Detection on 3-min IL₁ or 4-10-min ICA in Cygnus and Norma Fields

Spectral Type	Approx. T_e (K)	No. of SAO Stars	Vis. Mag. for Actual 50% Detection	Expected Unreddened Visual Magnitude for $V = 80$ on 10-min ICA
O-B2	20000	21	9.5	$9.7 + 3.1 = 12.8$
B3-B5	16000	60	9.0	$9.2 + 3.1 = 12.3$
B8	14000	179	9.0	$8.8 + 3.1 = 11.9$
B9	12000	286	8.7	$8.0 + 3.1 = 11.1$
A0	10000	661	7.8	$6.6 + 3.1 = 9.7$

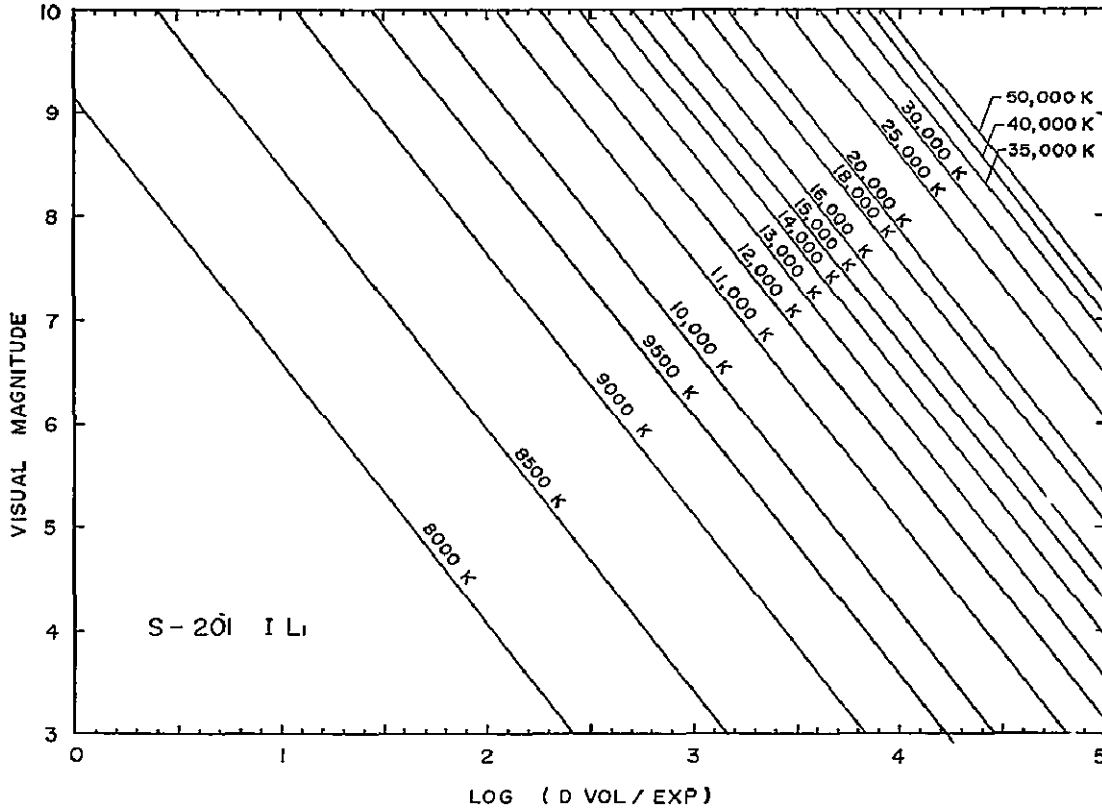


Fig 30 — Theoretical $I L_i$ relationships between $\log V/E$ and visual magnitude for various effective temperatures

Columns 12 to 17 concern the far-ultraviolet photometry based on a PDS-microdensitometer scan of each frame. Column 12 gives the peak density in units of 0.01D. The coordinates of this peak (x, y) are those given in columns 2 and 3. The S201 electrographic camera was fairly linear up to peak densities of 300 (3.0D) but was increasingly saturated at higher densities up to 510 (5.1D), the largest measured by the Boller and Chivens PDS microdensitometer. Column 13 gives the number of pixels more than 20 (0.2D) higher than the local background (BG) listed in column 14. The background (BG) was determined by an average of five pixels outside the star image (except for three frames noted in Table 1, where a 10- or 20-pixel average was used). A query (?) following the BG entry means that the computer value has been modified by inspection of the scan, where nearby images confused the computer average. A query follows the number of pixels when a large BG change was made or when there were other reasons to doubt the computer count of points in the image.

Column 15 lists the density volume of the image—the sum of density minus BG for all pixels inside the image “boundary,” which are pixels such that the density was 20 (0.2D) above BG. Images less than four pixels in extent have been omitted. Column 16 lists the exposure in minutes and the filter type (L for LiF and C for CaF₂). Column 17 gives the ratio of the density volume to the exposure for easy comparison between frames of different exposure times. This ratio is the best estimate of the object’s far-ultraviolet flux, although it has not been corrected for truncation, etc. These are upward corrections. The

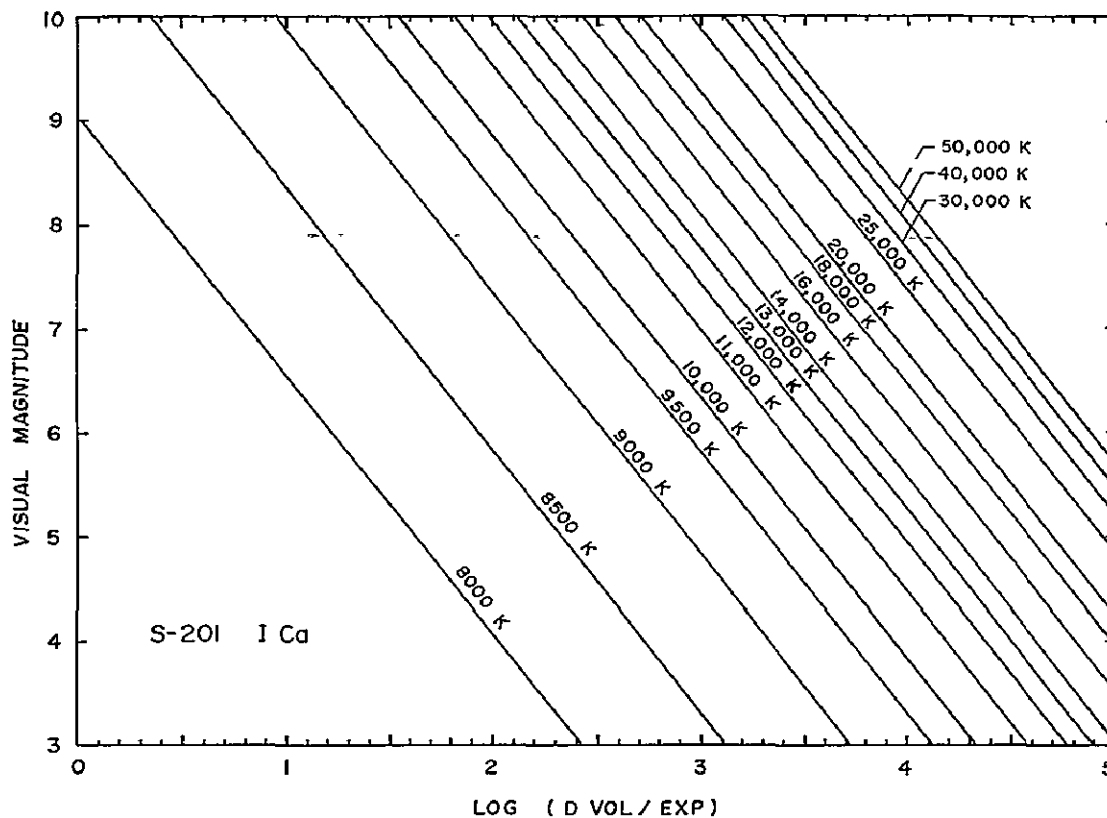


Fig. 31 — Theoretical I Ca relationships for various effective temperatures

frame number from which these measurements were made is not listed but can be inferred from column 16 (EXP. & FILTER) and Table 1. For instance, in the Cygnus field, a 3.7-min exposure through CaF_2 is frame A28.

Symbols after the density-volume entries in column 15 have the following meanings: a query (?) means that the image was detected on one frame only (not confirmed by other frames covering the same field); an L means that the density volume is lower than expected from the spectral type and visual magnitude (columns 9 and 10), and H means that it is higher than expected. The H entries are therefore stars or associated nebulas with apparent far-ultraviolet excess; the NO entries are either nonstellar objects or stars too faint to have been included in the SAO catalog. These are all objects of special interest.

Table 2 is a list of the non-SAO (NO) objects in the S201 catalog, with some possible identifications in the RNGC [16]. The first two columns give the measured right ascension and declination converted to 1975 coordinates. The third column gives the frames on which each image was detected, and column 4 gives the measured ratio of density values and exposure, with separate values being listed for LiF -filter frames and CaF_2 -filter frames. A blank in column 4 means no detection of an expected object (such as NGC1068 in the Cetus field). Column 5 gives the RNGC number of the possible identification (with queries following doubtful ones), and columns 6 and 7 give the RNGC 1975 coordinates. In extended nebulas, clusters, and galaxies, the S201 measured position (columns 1 and 2) might be affected by uneven far-ultraviolet flux distribution. Columns 8 and 9 give the magnitude and

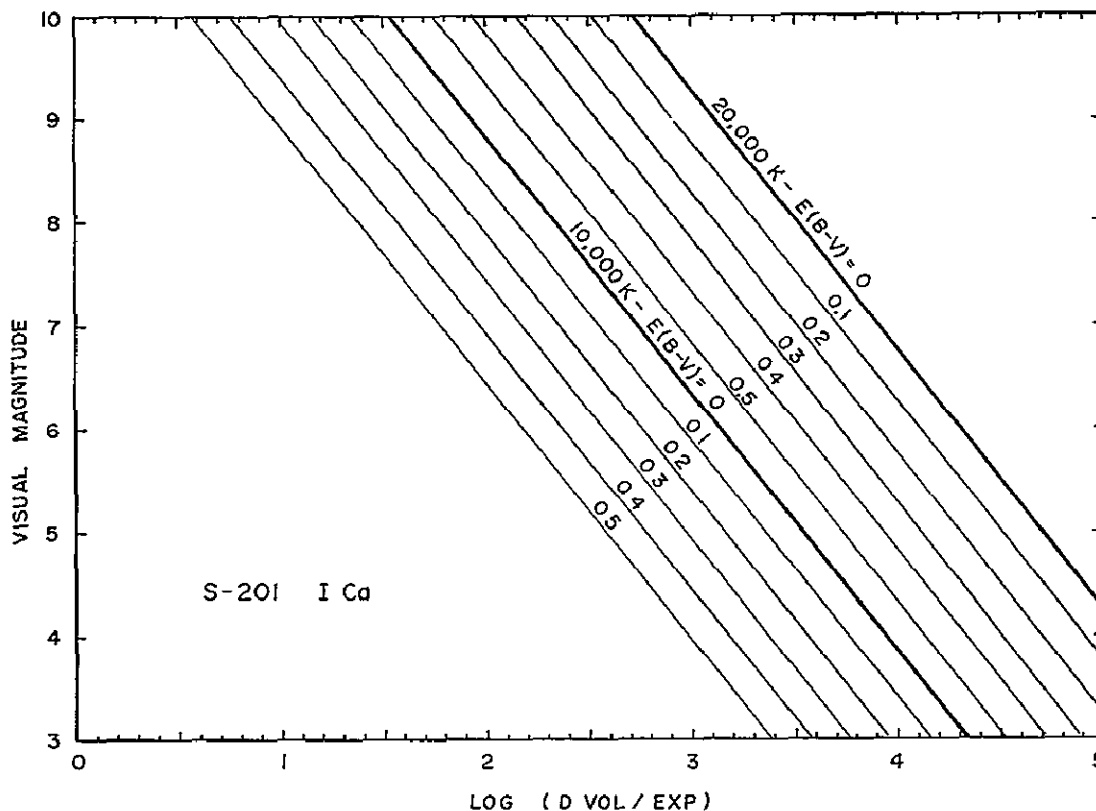


Fig 32 — Theoretical ICa relationships for various instellar reddening

type of the RNGC objects. In general, Table 2 omits objects in the Large Magellanic Cloud, which is the subject of another S201 study [10].

The S201 catalog is also available on a single reel of seven-track magnetic tape created by the Univac EXEC VIII system, Fortran formatted. Details are given in Appendix B.

REFERENCES

1. G.R. Carruthers, "Apollo 16 Far-Ultraviolet Camera/Spectrograph: Instrument and Operations," *Applied Optics* 12, 2501 (1973).
2. G.R. Carruthers, T. Page and R.R. Meier, "Apollo 16 Lyman alpha Imagery of the Hydrogen Geocorona," *J. Geophys. Research* 81, 1664 (1976).
3. A. Becvár, *Atlas of the Heavens*, Sky Publishing Corp, Cambridge, Mass., 1958.
4. G.R. Carruthers and T. Page, "The S201 Experiment," Chap. 13 in *Apollo 16 Preliminary Science Report*, NASA SP315, 1972.
5. G.R. Carruthers and T. Page, "Apollo 16 Far Ultraviolet Imagery of the Polar Auroras, Tropical Airglow Belts, and General Airglow," *J. Geophys. Research* 81, 483 (1976)
6. G.R. Carruthers and T. Page, "Apollo 16 Far Ultraviolet Spectra of the Terrestrial Airglow," *J. Geophys. Res.* 81, 1683 (1976).

7. G.R. Carruthers and T. Page, "Far-Ultraviolet Brightness of Nebulae in Cygnus," *Astrophys J.* 205, 397 (1976).
8. G.R. Carruthers and T. Page, "Apollo-16 Far-Ultraviolet Spectra in the Large Magellanic Cloud," *Astrophys J.* 211, 728 (1977).
9. T. Page and G.R. Carruthers, "Apollo-16 Far-Ultraviolet Imagery and Spectra of the Large Magellanic Cloud," COSPAR XIX, 15 June 1976.
10. T. Page and G.R. Carruthers, "S201 Far-Ultraviolet Atlas of the Large Magellanic Cloud," NRL Report 8206.
11. J.D. Wray and G.F. Benedict, *Instrumentation in Astronomy — II*, SPIE Proc. 44 137, (1974), Society of Photo-optical Instrumentation Engineers, Palos Verdes Estates, Calif.
12. H. Heckathorn, private communication.
13. R.L. Kurucz, E. Peytremann, and E.H. Avrett, *Blanketed Model Atmospheres for Early-Type Stars*, Smithsonian Institution, Washington, D.C., 1974.
14. R.C. Bless and B.D. Savage, "Ultraviolet Photometry from the Orbiting Astronomical Observatory. II. Interstellar Extinction," *Astrophys. J.* 171, 293 (1972).
15. A.D. Code, "Stellar Energy Distribution," p. 50 in *Stellar Atmospheres*, J. L. Greenstein, editor, University of Chicago Press, 1960.
16. J.W. Sulentic and W.G. Tifft, *The Revised New General Catalogue of Nonstellar Astronomical Objects*, University of Arizona Press, Tucson, 1973.

Appendix A

STAR DETECTION Program for EXEC II

The basic source of star data in this catalog was the STAR DETECTION program. It was required to pick out star images from the many anomalies present in the PDS-micro-densitometer scan data. These included overlapping frame fields, density variations due to streaks in the S201-camera barrier membrane (Figs. 2 and 12d), photocathode sensitivity deviations, dust on the film, and some emulsion flaking.

Each frame scan was a square matrix of 1024 by 1024 density pixels, which extended beyond the circular field of view of the camera, approximately 1000 pixels (rasters) in diameter. The STAR DETECTION program processes each scan line by first looking for the edge of the field of view, where there is usually a density step of 30 units or more (Figs. 4b, 5b, ..., 13b). If the edge of field was not discernible (step less than 10 units), the program applies a fail-safe test: all pixels within 475 rasters of the center of the scan matrix are considered to be within the field of view. The program then examines each pixel in the field of view to determine whether it exceeds a threshold value above local background.

Thus STAR DETECTION is based on the assumption that the density gradient in a star image exceeds the density gradients caused by normal variations in the background and exceeds other anomalies like streaks due to the barrier membrane. The threshold value is under the control of the user and has generally been set to 20 units (0.2D). At first a 10-unit value was used for ILi frames, but this complicated the truncation correction, so the threshold was set to 20 units (0.2D) for all star detection used in this catalog.

The local background is computed by the formula

$$B_i = \frac{(n-1)B_{i-1} + D_i}{n},$$

where B_i is the background density computed for the i th pixel, B_{i-1} is the background density computed for the previous, $(i-1)$ th, pixel, n is a number specified by the user (usually n was set to 5, that is, BG in Table 1 is an average of five pixels), and D_i is the density of the i th pixel. If there is a step change in background density, this formula halves the error in the computed background B_i every n pixels. To keep the edge of a star image from affecting the background calculation, the pixel being tested for exceeding the threshold is always five pixels ahead of the pixel used in the background calculation. That is, B_i is applied to the $(i+5)$ th pixel. Provisions were made for handling star images near or on the edge of the field by using stored densities from previous scan lines to calculate B_i .

Once a star edge has been detected, a record is kept of the sum of densities along the scan line which are greater than background plus threshold, the peak density value, the coordinates of the peak, and the background density B . The records of star images along two adjacent scan lines are maintained continuously. At the end of each scan line, the two lines are compared, and the densities are combined for each image that shows on both lines. If the peak density has increased from the previous line to the current line, the results

are brought forward to the current line. If the peak density has decreased, the results are placed in an output buffer and its location added to the current line so that additional data from succeeding lines can still be added. After the last scan line that detects the image edge, the data from the output buffer is listed, plotted, and placed on magnetic tape for further processing by the COORDINATE TRANSFORMATION program.

One problem was the effect of "noise" in the microdensitometer scans—localized high densities ("hot spots") within a star image. These hot spots would cause one large image to be recorded as several smaller images, which thwarted attempts to separate close, "double-star" images. These adverse effects of hot spots were reduced by preprocessing the scan data with the SMOOTH program. In addition the STAR DETECTION program was modified to automatically combine two peaks 3 rasters apart and to establish a "sphere of influence" of an image by measuring the diameter of the image (assumed to be circular) on the scan line through the peak. Other peaks within half this diameter from the first peak were combined with it unless the minimum density between them differed from the average peak density by more than a value specified by the user (usually 100 units). This modification may have helped resolve a few pairs of close images in the catalog.

Appendix B
S201 Catalog Tape

The S201 catalog of far-ultraviolet objects is available on a seven-track 800-bit-per-inch odd-parity tape. The tape was written on a Univac 1110 computer under the EXEC VIII operating system using Fortran-formatted write statements. Thus the file structure is of the Univac SDF sequential formatted record type. A more detailed description of this format can be found in the Sperry Univac 1100 Series Fortran V Library Programmer Reference (UP-7876).

There are 11 data files on the tape, and each data file is terminated by a software end-of-file mark and a hardware end-of-file mark. The data are in the field-data character set (see Univac 1100 Operating System UP-4144 Rev. 3, Appendix D) of 132 characters (22 words) per data line. The first data line of each file is a header line containing an alphanumeric description of the target field. Each succeeding line consists of 132 characters, the meanings of which are given in Table B1.

A listing of a Fortran program to extract the data is given in Table B2.

Table B1 — Meanings of Characters in Each Data Line

Characters	Meaning (digits right-justified)
1- 6	Object number
7- 12	x raster coordinate
13- 18	y raster coordinate
19- 23	Hours of right ascension (R A)
24	Separator (.)
25- 26	Minutes of R A.
27	Separator (-)
28- 29	Seconds of R.A.
30- 34	Degrees of declination (DEC.)
35	Separator ()
36- 37	Arc-minutes of DEC.
38	Separator ()
39- 40	Arc-seconds of DEC.
41- 43	Blank
44- 49	SAO star number, or NO, or blank
50	Query (?) or colon () or slash (/) or blank
51- 55	Minutes in deviation of R A from SAO star
56	Separator (.)
57- 58	Seconds in deviation of R A from SAO star
59- 63	Arc-minutes in deviation of DEC. from SAO star
64	Separator ()
65- 66	Arc-seconds in deviation of DEC. from SAO star
67- 69	Blank
70- 71	Spectral type of SAO star
72- 78	Visual magnitude of SAO star
79- 85	Photographic magnitude of SAO star (zeros = unknown)
86- 91	Peak density of the image
92- 99	Total number of points in the image
100	Query or blank
101-105	Local background density
106	Query or blank
107-114	Density volume of image
115	Query or blank
116	H or L or blank
117-121	Exposure time rounded off to tenths of minutes
122	Filter type (L or C)
123-132	Density volume divided by exposure time*

*For an image near the edge of the field, the letters ED replace the numerals for hundredths and thousandths (characters 131 and 132).

ORIGINAL PAGE IS
OF POOR QUALITY

Table B2 — Fortran Program to Extract Data From S201 Catalog Tape

```

1:      DIMENSION HEAD(22)
2:      DO 20 IFILE=1,11
3:        READ (1,2000,END=5) HEAD
4:      2000  FORMAT (22A6)
5:        GO TO 15
6:        5  WRITE (6,1111)
7:      1111  FORMAT (1H1,'SECOND END OF FILE HAS BEEN READ')
8:        READ (1,2000,END=20) HEAD
9:        15  WRITE (6,1000) HEAD
10:     1000  FORMAT (1H1,21A6,A5)
11:     10  READ (1,2005,END=20,ERR=17) LINEN,IX,IY,IRAH,IRAM,IRAS,IDECD,
12:          $ IDECM,IDECS,NSAO,Q1,JRAH,JRAM,JDECD,JOECM,SPECT,VMAG,PMAG,
13:          $ IPEAKD,NPOINT,Q2,IBG,Q3,IDVOL,Q4,Q5,EXP,FTYPE,DVSEX
14:     2005  FORMAT (13I6,2(15,1X,I2,1X,I2),3X,A6,A1,2(15,1X,I2),
15:          $ 3X,A2,2F7.2,I6,I8,A1,I5,A1,I8,2A1,F5.1,A1,F10.3)
16:C
17:C          START OF USER AREA
18:C
19:      GO TO 18
20:     17  WRITE (6,1010)
21:   1010  FORMAT (1H0,'ERROR IN READING DATA')
22:     18  WRITE (6,2005) LINEN,IX,IY,IRAH,IRAM,IRAS,IDECD,IDECH,
23:          $ IDECS,NSAO,Q1,JRAH,JRAM,JDECD,JOECM,SPECT,VMAG,PMAG,
24:          $ IPEAKD,NPOINT,Q2,IBG,Q3,IDVOL,Q4,Q5,EXP,FTYPE,DVSEX
25:C
26:C          END OF USER AREA
27:C
28:      GO TO 10
29:     20  CONTINUE
30:     30  STOP
31:      END

```

C-2

S201 Catalog
Listing



NRL REPORT 8173

CYGNUS RA 21 24 DEC +37 30

OBJECT NO	X	Y	R A	DEC	SAO NO	Δ R A	Δ DEC	SPEC TYPE	V MAG	P MAG	PEAK DEN	NO OF POINTS	BO	DENSITY VOLUME	EXP & FILTER	DEN VOL EXP
1	981	445	20 35 23	39 15 31	70291	-0 8	-3 37	A2	8 50	8 90	54	37	26	873 H	2L	3492 00
2	950	468	20 35 26	38 45 18	70276	0 7	-1 29	A0	8 70	8 70	38	8	16	168	3 7C	45 405
3	977	631	20 35 18	35 22 18	70314	0 3	-5 16	A2	8 40	8 20	50	8	20	207	10 0C	20 700
4	974	601	20 36 44	32 13 17	70303	0 57	-0 29		9 00	9 10	62	9	17	273	3 7C	73 784
5	908	381	20 37 25	40 26 21	49899/	-0 18	2 15	B9	5 93	00	266	110	16	9929 H	3 0C	3309 667
6	959	388	20 37 25	40 26 21	49902/	-0 24	1 50		8 90	8 90	266	110	16	9929 H	3 0C	3309 667
7	959	388	20 37 36	40 25 58	49899	-0 8	1 52	B8	5 93	00	50	9	26	196 L	2L	784 000
8	967	383	20 37 36	40 25 58	49902/	-0 13	1 27		8 90	8 90	50	9	26	196 L	2L	784 000
9	967	383	20 37 40	40 26 43	49899	-0 4	2 37	B8	5 93	00	180	90	61	4949	1 0L	4949 000
10	967	383	20 37 40	40 26 43	49902/	-0 9	2 12		8 90	8 90	180	90	61	4949	1 0L	4949 000
11	965	378	20 37 41	40 26 41	49899	-0 3	2 35	B9	5 93	00	430	203	21	26833	10 0C	2663 300
12	965	378	20 37 41	40 26 41	49902/	-0 8	2 10		8 90	8 90	430	203	21	26833	10 0C	2663 300
13	962	386	20 37 44	40 26 56	49899	0 1	2 50	B9	5 93	00	382	138	129	12952	3 0L	4317 333
14	962	386	20 37 44	40 26 56	49902/	-0 5	2 25		8 90	8 90	382	138	129	12952	3 0L	4317 333
15	967	386	20 37 45	40 25 45	49899/	-0 2	1 38	B8	5 93	00	307	130	18	12758 L	3 7C	3448 168
16	967	386	20 37 45	40 25 45	49902/	-0 4	1 14		8 90	8 90	307	130	18	12758 L	3 7C	3448 168
17	896	350	20 38 39	41 4 12	49899	-0 25	2 47	B9	6 92	00	67	35	15	1171	3 0C	390 333
18	893	457	20 38 53	39 53 4	70387	-0 15	-1 9	B9	6 44	00	193	83	15	5822 H	3 0C	1940 667
19	953	347	20 39 54	41 4 28	49929	-0 6	3 20	B9	6 92	00	184	77	21	4915	10 0C	491 500
20	955	354	20 38 58	41 4 45	49899	-0 6	3 20	B9	6 92	00	60	42	18	1554	3 7C	420 000
21	955	354	20 38 59	41 4 50	49929	-0 5	4 25	B9	6 92	00	172	33	129	999	3 0L	333 000
22	954	505	20 39 5	38 1 33							52	4	18	1117	3 7C	30 000
23	952	451	20 39 12	38 53 59	70267	0 4	-0 14	B9	6 44	00	225	94	18	7275	3 7C	1966 216
24	946	462	20 39 14	38 53 47	70367	0 6	-0 26	B9	6 44	00	309	97	133	7191 H	3 0L	2397 000
25	949	454	20 39 15	38 53 45	70367	0 7	-0 27	B9	6 44	00	397	143	21	16791 H	10 0C	1679 100
26	950	459	20 39 18	38 53 41	70387	0 10	-0 31	B9	6 44	00	144	59	60	2615 H	1 0L	2615 000
27	886	628	20 39 26	35 28 2	70380	-0 11	-5 5	B9	8 30	8 00	76	32	21	1109 H	3 0C	369 333
28	942	827	20 39 30	31 34 52	70372?	0 11	-6 34		9 10	9 40	53	5	17	159	10 0C	15 000
29	942	827	20 39 30	31 34 52	70375	0 1	-3 8		9 20	9 40	53	5	17	159	10 0C	15 000
30	943	609	20 39 35	35 47 57	70390?	-0 17	5 27		9 20	9 60	54	5	21	132	10 0C	13 200
31	943	625	20 39 37	35 29 16	70380	-0 0	-3 51	B9	8 30	8 00	180	73	30	4840 H	10 0C	484 000
32	945	632	20 39 38	35 29 33	70380	0 1	-3 34	B9	8 30	8 00	91	43	22	1721 H	3 7C	465 135
33	937	632	20 39 44	35 30 30	70380	0 7	-2 37	B9	8 30	8 00	192	38	137	1281 H	3 0L	427 000
34	886	324	20 39 49	41 35 45	49946	-0 19	3 31	B8	5 60	00	292	113	16	10874 H	3 0C	3624 667
35	938	331	20 39 53	41 35 4	49946?	-0 15	2 51	B8	5 60	00	61	17	24	483	2L	1932 000
36	941	329	20 39 56	41 35 54	49946	-0 12	3 40	B8	5 60	00	395	137	128	13655	3 0L	4618 333
37	946	328	20 40 1	41 36 10	49946	-0 7	3 57	B8	5 60	00	340	126	19	13150	3 7C	3554 054
38	943	321	20 40 2	41 35 67	49946	-0 6	3 44	B8	5 60	00	436	169	24	26824	10 0C	2682 400
39	945	326	20 40 4	41 35 49	49946	-0 4	3 35	B8	5 60	00	194	90	63	5155	1 0L	5155 000
40	878	642	20 40 10	35 10 39	70400?	-0 3	-4 48		9 10	9 60	322	118	17	11944	3 0C	3981 333
41	878	642	20 40 10	35 10 39	70406	-0 15	-5 55	B3	6 50	00	322	118	17	11944	3 0C	3981 333
42	935	639	20 40 21	35 13 11	70400?	0 8	-2 15		9 10	9 60	433	202	24	28306	10 0C	2830 600
43	935	639	20 40 21	35 13 11	70406	-0 4	-3 23	B3	6 50	00	433	202	24	28306	10 0C	2830 600
44	929	646	20 40 27	35 14 20	70400?	0 14	-1 7		9 10	9 60	419	151	133	16267	3 0L	5422 333
45	929	646	20 40 27	35 14 20	70406	0 2	-2 14	B3	6 50	00	419	151	133	16267	3 0L	5422 333
46	936	646	20 40 27	35 13 28	70400?	0 15	-1 59		9 10	9 60	364	137	20	14836	3 7C	4009 730
47	936	646	20 40 27	35 13 28	70406	0 3	-3 6	B3	6 50	00	364	137	20	14836	3 7C	4009 730
48	934	643	20 40 28	35 14 19	70406	0 3	-2 15	B3	6 50	00	233	104	62	7088	1 0L	7088 000
49	926	648	20 40 31	35 13 27	70406	0 6	-3 6	B3	6 50	00	62	28	26	768	2L	3072 000
50	931	591	20 40 46	36 9 21	70410	0 1	-2 40	B2	8 40	8 30	48	8	22	187 L	10 0C	18 700
51	921	654	20 41 1	35 6 0	70421?	-0 19	5 49		8 80	9 10	48	5	26	106	2L	424 000
52	868	725	20 41 5	33 33 27	70417?	-0 9	-5 34	A0	8 00	7 60	92	62	15	2610 H	3 0C	870 000
53	868	725	20 41 5	33 33 27	70422?	-0 19	-7 48	A0	7 80	7 30	92	62	15	2610 H	3 0C	870 000
54	869	626	20 41 9	35 29 31	70416?	0 2	-5 28	A0	8 40	8 60	44	11	16	264	3 0C	88 000
55	869	626	20 41 9	35 29 31	70420	-0 11	-4 7	A0	8 10	7 90	44	11	16	264	3 0C	88 000
56	928	630	20 41 14	35 32 14	70416?	0 7	-2 45	A0	8 40	8 60	53	19	18	516	3 7C	139 459
57	928	630	20 41 14	35 32 14	70420?	-0 6	-1 24	A0	8 10	7 90	53	19	18	516	3 7C	139 459
58	919	729	20 41 18	33 37 16	70417?	0 3	-1 45	A0	8 00	7 60	202	58	129	2421 H	3 0L	807 000
59	919	729	20 41 18	33 37 16	70422?	-0 5	-3 59	A0	7 80	7 30	202	58	129	2421 H	3 0L	807 000
60	925	623	20 41 19	35 32 1	70416?	0 12	-2 58	A0	8 40	8 60	99	55	21	2413 H	10 0C	241 300
61	925	623	20 41 19	35 32 1	70420?	-0 1	-1 38	A0	8 10	7 90	99	55	21	2413 H	10 0C	241 300
62	924	727	20 41 21	33 36 5	70417	0 6	-2 57	A0	8 00	7 60	86	14	60	324	1 0L	324 000
63	924	727	20 41 21	33 36 5	70422?	-0 3	-5 11	A0	7 80	7 30	86	14	60	324	1 0L	324 000
64	929	376	20 41 21	40 29 7	49974?	0 3	-7 24	A2	8 00	8 20	74	35	19	1228	10 0C	122 800
65	929	376	20 41 21	40 29 7	49977	-0 0	2 14	A0	8 30	8 30	74	35	19	1228	10 0C	122 800
66	924	722	20 41 22	33 36 15	70417?	0 8	-2 46	A0	8 00	7 60	216	123	21	9333 H	10 0C	933 300
67	924	722	20 41 22	33 36 15	70422?	-0 1	-5 0	A0	7 80	7 30	216	123	21	9333 H	10 0C	933 300
68	926	729	20 41 22	33 36 32	70417?	0 8	-2 30	A0	8 00	7 60	107	73	17	3437 H	3 7C	928 919
69	926	729	20 41 22	33 36 32	70422?	-0 1	-4 43	A0	7 80	7 30	107	73	17	3437 H	3 7C	928 919
70	863	624	20 41 40	35 32 4	70420?	0 19	-1 34	A0	8 10	7 90	49	4	17	114	3 0C	38 000
71	863	624	20 41 40	35 32 4	70425?	0 2	7 22		8 90	9 50	49	4	17	114	3 0C	38 000
72	919	710	20 41 51	33 49 57	70422?	0 27	8 42	A0	7 80	7 30	79	47	24	1541 H	10 0C	154 100
73	919	710	20 41 51	33 49 57	70432	-0 2	-3 25	A0	8 50	7 70	79	47	24	1541 H	10 0C	154 100
74	921	717	20 41 51	33 50 12	70432	-0 2	-3 10	A0	8 50	7 70	41	6	18	127	3 7C	34 324
75	925	315	20 41 54	41 42 44	49999	-0 7	3 6	A	7 70	8 40	58	23	21	644	10 0C	64 400
76	862	439	20 42 3	39 15 2							48	9	13	253?	3 0C	84 333
77	911	233	20 43 48	43 22 34	50028	0 4	-4 34		8 90	9 30	33	18	22	463	10 0C	46 300
78	911	233	20 43 48	43 22 34	50034?	-0 10	6 52		8 50	8 40	53	18	22	463	10 0C</	

PAGE, CARRUTHERS AND HILL

CYGNUS RA 21 24 DEC +37 30

OBJECT NO	X	Y	R A	DEC	SAD NO	Δ R A	Δ DEC	SPEC TYPE	V MAG	P MAG	PEAK DEN	NO OF POINTS	BG	DENSITY VOLUME	EXP & FILTER	DEN VOL / EXP
101	885	591	20 45 35	36 17 21	70505	0 9	-1 1	B5	4 47	00	433	234	20	28034	L 3 7C	7576 757
102	877	590	20 45 37	36 17 44	70505	0 10	-0 37	B5	4 47	00	453	235	141	26832	L 3 0L	8944 000
103	870	772	20 45 39	32 47 35	70510	-0 2	4 55		9 00	9 00	53	5	25	1182	2L	472 000
104	875	806	20 45 51	31 46 52	70513	-0 2	-6 12		9 00	9 00	49	21	25	485	10 0C	48 500
105	875	806	20 45 51	31 46 52	70514	-0 2	-0 58	A0	8 50	8 00	49	21	25	485	10 0C	48 500
106	888	304	20 45 52	41 56 2	50066	0 0	3 1	A0	7 20	7 60	61	18	21	564	10 0C	56 400
107	886	341	20 45 53	41 11 10	500717	-0 15	-3 16		8 40	10 00	67	8	18	271	10 0C	27 180
108	873	566	20 46 39	36 37 16	70525	0 1	-0 43		9 00	9 00	54	6	27	139	10 0C	13 900
109	914	615	20 46 39	35 40 55	70527	0 0	-2 36		9 00	9 00	43	7	17	157	3 0C	52 333
110	871	612	20 46 42	35 42 13	70527	0 4	-1 17		9 00	9 00	101	35	24	1479	H 10 0C	147 900
111	866	619	20 46 43	35 43 49	70527	0 5	0 19		9 00	9 00	165	7	138	186	3 0L	65 333
112	873	619	20 46 43	35 43 33	70527	0 5	0 2		9 00	9 00	51	11	17	303	3 7C	81 892
113	867	734	20 46 49	33 19 57	70529	0 8	-2 40	A2	8 80	9 10	50	12	22	283	10 0C	28 300
115	912	606	20 46 52	35 50 56	70527	0 14	7 25		9 00	9 00	76	25	15	929	3 0C	309 667
116	889	603	20 46 54	35 53 28							174	57	23	3617	10 0C	361 700
117	871	610	20 46 55	35 53 22	NO						88	31	17	1246	3 7C	336 757
117	889	607	20 46 55	35 54 3	70527	0 18	10 33		9 00	9 00	87	8	62	136	1 0L	136 000
118	864	610	20 46 58	35 53 47	NO						201	33	138	1263	3 0L	421 000
119	814	420	20 46 59	39 35 49	70541	-0 9	0 29	A0	7 32	00	75	22	13	855	H 3 0C	265 000
120	813	466	20 46 59	38 40 21	70539	-0 8	-0 23	A0	7 60	7 10	130	39	15	2003	H 3 0C	667 667
121	868	563	20 46 60	36 41 1	70534	0 0	-0 25		9 10	9 30	51	12	23	282	10 0C	28 200
122	821	262	20 47 1	42 49 26	50102	-0 19	3 20	B8	7 40	7 30	65	28	14	953	3 0C	317 667
123	876	266	20 47 10	42 51 21	50102	-0 10	5 16	B8	7 40	7 30	174	36	123	1193	3 0L	397 667
124	880	266	20 47 11	42 51 0	50102	-0 9	4 55	B8	7 40	7 30	83	36	19	1313	3 7C	354 855
125	871	417	20 47 12	39 37 34	70541	0 4	1 15	A0	7 32	00	170	49	20	3189	10 0C	318 900
126	868	424	20 47 13	39 37 54	70541	0 5	1 35	A0	7 32	00	186	24	142	798	3 0L	266 000
127	872	470	20 47 15	38 42 31	70539	0 8	1 47	A0	7 60	7 10	152	45	16	2658	H 3 0C	718 378
128	873	424	20 47 16	39 39 51	70541	0 8	2 32	A0	7 32	00	90	28	16	1133	3 7C	306 216
129	866	470	20 47 17	38 42 48	70539	0 10	2 4	A0	7 60	7 10	262	46	144	2415	H 3 0L	895 000
130	869	463	20 47 18	38 41 15	70539	0 12	0 30	A0	7 60	7 10	264	69	21	6341	H 10 0C	634 100
131	877	259	20 47 19	42 50 58	50102	-0 1	4 52	B8	7 40	7 30	162	71	22	4172	10 0C	417 200
132	870	468	20 47 20	38 41 47	70539	0 14	1 3	A0	7 60	7 10	111	22	61	740	H 1 0L	740 000
133	869	326	20 47 45	41 28 49	50112	0 1	2 59	A0	8 90	8 40	64	20	19	605	10 0C	60 500
134	801	593	20 47 60	36 5 53	70555	-0 0	-2 39	B8	8 50	8 30	132	38	18	2003	H 3 0C	667 667
135	860	598	20 48 3	36 7 12	70555	0 3	-1 20	B8	8 50	8 30	148	45	20	2576	H 3 7C	696 216
136	853	597	20 48 4	36 8 35	70555	0 5	0 4	B8	8 50	8 30	271	50	140	2980	H 3 0L	993 333
137	858	595	20 48 5	36 7 40	70555	0 5	-0 53	B8	8 50	8 30	120	26	64	909	H 1 0L	909 000
138	857	590	20 48 8	36 8 25	70555	0 8	-0 7	B8	8 50	8 30	293	73	25	6514	H 10 0C	651 400
139	847	882	20 48 14	30 36 15	70564	-0 18	-7 13	A2	6 75	00	47	4	17	98	3 7C	26 486
140	862	436	20 48 20	39 23 50							55	9	5	265	3 7C	71 622
141	804	291	20 48 35	42 13 20	50125	-0 16	1 42	B8	7 20	7 10	121	45	16	2289	H 3 0C	763 000
142	851	579	20 48 45	36 20 54	70568	0 3	-0 32	A0	8 90	8 90	73	21	22	698	10 0C	69 800
143	861	268	20 48 46	42 15 1	50125	-0 5	3 22	B8	7 20	7 10	288	92	23	7926	10 0C	792 600
144	859	295	20 48 48	42 15 14	50125	-0 2	3 35	B8	7 20	7 10	245	53	128	2944	3 0L	981 333
145	854	450	20 48 48	38 57 32							79	9	21	351	10 0C	35 100
146	863	292	20 48 49	42 15 28	50125	-0 2	3 49	B8	7 20	7 10	108	29	58	915	1 0L	915 000
147	863	295	20 48 51	42 15 2	50125	0 0	3 23	B8	7 20	7 10	148	55	19	3052	3 7C	824 865
148	845	722	20 48 59	33 32 6	70573	0 5	-2 12	B8	8 80	8 80	40	7	22	162	10 0C	16 200
149	848	595	20 49 3	36 2 5	70580	-0 6	4 59		9 40	9 40	51	8	21	206	10 0C	20 600
150	822	901	20 49 25	30 14 23							63	9	25	298	2L	1192 000
151	840	513	20 49 32	37 48 35	70590	-0 3	0 32	B5	6 97	00	288	40	143	2226	L 3 0L	742 000
152	855	275	20 49 33	42 30 0	50137	0 2	3 25	A0	8 70	8 30	78	26	26	856	10 0C	85 600
153	843	541	20 49 36	37 5 56	70586	0 3	0 3	A0	8 80	8 80	72	20	20	657	10 0C	65 700
154	787	509	20 49 37	37 4 28	70590	0 1	-0 36	B5	6 97	00	131	31	17	1634	L 3 0C	944 667
155	846	513	20 49 39	37 48 31	70590	0 4	0 28	B5	6 97	00	158	37	18	2194	L 3 7C	592 973
156	845	510	20 49 43	37 48 54	70590	0 8	0 51	B5	6 97	00	115	21	62	737	1 0L	737 000
157	844	506	20 49 43	37 48 33	70590	0 8	0 29	B5	6 97	00	207	61	25	5376	L 10 0C	537 600
158	775	772	20 49 59	32 35 20	70596	0 1	-4 17	B5	6 35	00	335	104	19	10562	3 0C	3520 667
159	826	776	20 50 2	32 38 15	70596	0 4	-1 22	B5	6 35	00	410	136	127	13946	3 0L	4848 667
160	834	777	20 50 2	32 37 8	70596	0 4	-2 29	B5	6 35	00	371	131	18	13687	3 7C	3699 199
161	823	778	20 50 3	32 37 49	70596	0 5	-1 48	B5	6 35	00	65	23	26	616	2L	2584 667
162	842	769	20 50 3	32 37 5	70596	0 5	-2 31	B5	6 35	00	428	188	24	25479	10 0C	2547 900
163	932	531	20 50 4	37 27 58	70608	-0 10	8 9	A2	8 70	8 50	66	10	24	305	2L	1220 000
164	832	531	20 50 4	37 27 58	70607	-0 10	-8 9		9 20	9 80	66	10	24	305	2L	1220 000
165	831	773	20 50 5	32 37 25	70596	0 7	-2 12	B5	6 35	00	238	89	61	6151	H 1 0L	6151 000
166	778	678	20 50 5	34 24 2	70599	0 1	-4 6	B2	6 90	00	257	63	18	5415	3 0C	1805 000
167	826	684	20 50 10	34 26 17	70599	0 6	-1 51	B2	6 90	00	49	6	26	130	L 2L	620 000
168	829	681	20 50 11	34 27 58	70599	0 8	-1 10	B2	6 90	00	376	83	138	7154	3 0L	2364 667
169	834	679	20 50 13	34 27 8	70599	0 9	-1 1	B2	6 90	00	168	48	64	2783	1 0L	2783 000
170	834	675	20 50 13	34 26 49	70599	0 9	-1 20	B2	6 90	00	401	142	24	15187	10 0C	1518 700
171	836	682	20 50 13	34 26 48	70599	0 10	-1 20	B2	6 90	00	305	73	18	6799	3 7C	1837 558
172	831	789	20 50 13	32 23 25	70619	-0 31	7 26		9 00	9 50	50	12	18	315	3 7C	65 405
173	837	529	20 50 14	37 20 55	70606	0 0	1 6	A2	8 70	8 50	89	29	19	1142	H 10 0C	114 200
174	839	487	20 50 16	38 11 5							55	9	21	2437	10 0C	24 300
175	839	537	20 50 16	37 19 37	70806	0 2	-0 12	A2	8 70	8 60	55	9	16	192	3 7C	51 892
176	839	460	20 50 17	38 43 41	70608	0 2	0 24		8 90	9 30	55	10	20	276	10 0C	27 600
177	852	193	20 50 28	44 16 55	50153	0 4	2 11	B8	8 50	8 30	167	7	133	179	L 3 0L	59 667
178	826	854	20 50 32	34 59 8	70803	0 20	-2 20		8 80	9 30	163	4	140	81	3 0L	27 000
179	831	647	20 50 32	34 59 16	70603	0 21	-2 12		8 80	9 30						

CYGNUS RA 21 24 DEC +37 30

OBJECT NO	X	Y	R A	DEC	SAO NO	Δ R A	Δ DEC	SPEC TYPE	V MAG	P MAG	PEAK DEN	NO OF POINTS	BG	DENSITY VOLUME	EXP & FILTER	DEN VOL/EXP
201	835	266	20 51 33	42 16 19	50183	-0 4	3 7	A0	6 47	00	234	54	29	4367	10 0C	436 700
202	837	291	20 51 35	42 15 18	50183	-0 1	2 6	A0	6 47	00	87	7	60	164	L 1 0L	164 000
203	833	293	20 51 36	42 16 12	50179 ^o	0 12	5 50		8 80	8 90	199	29	131	1151	3 0L	383 667
204	833	293	20 51 36	42 16 12	50183	-0 1	2 60	A0	6 47	00	199	29	131	1151	3 0L	383 667
205	772	357	20 51 37	40 51 53	50189	-0 11	0 20	A2	7 40	7 50	146	41	15	2325	H 3 0C	775 333
206	820	645	20 51 39	35 1 33	70638	0 4	-0 42	B9	7 80	8 00	83	26	20	981	L 10 0C	98 100
207	837	293	20 51 39	42 16 15	50179 ^o	0 15	5 53		8 80	8 90	116	37	21	1701	3 0C	459 730
208	837	293	20 51 39	42 16 15	50183	0 2	3 3	A0	6 47	00	116	37	21	1701	3 0C	459 730
209	822	652	20 51 40	35 1 30	70638	0 4	-0 46	B9	7 80	8 00	48	8	17	202	L 3 0C	54 995
210	826	360	20 51 47	40 54 56	50189	-0 2	3 24	A2	7 40	7 50	278	45	133	2882	H 3 0L	960 667
211	834	272	20 51 48	42 33 45	50193	-0 2	3 6		8 70	8 60	69	18	24	579	10 0C	57 900
212	831	361	20 51 53	40 53 46	50189	0 4	2 13	A2	7 40	7 50	176	46	17	2921	H 3 0C	789 459
213	830	359	20 51 55	40 54 3	50189	0 6	2 30	A2	7 40	7 50	122	26	61	951	H 1 0L	951 000
214	828	354	20 51 55	40 53 51	50189	0 6	2 18	A2	7 40	7 50	309	73	22	6886	H 10 0C	688 600
215	783	153	20 52 11	44 57 30	50205	-0 10	2 21		7 60	00	52	10	20	267	3 0C	89 600
216	817	554	20 52 11	36 49 17	70659	-0 34	-3 40	A0	8 74	00	76	13	20	448	L 10 0C	44 800
217	843	157	20 52 12	44 58 55	50187	0 26	1 3	A0	8 50	7 80	66	19	23	591	3 0C	159 730
218	843	157	20 52 12	44 58 55	50205	-0 8	3 46	B9	7 60	00	66	19	23	591	L 3 0C	159 730
219	764	374	20 52 22	40 30 28	50200 ^o	0 11	-0 29		8 80	8 80	207	47	16	3424	3 0C	1141 333
220	764	374	20 52 22	40 30 28	50209	-0 8	-0 15	B8	6 45	00	207	47	16	3424	H 3 0C	1141 333
221	802	726	20 52 24	33 35 37							55	4	26	100 ^o	2L	400 600
222	818	377	20 52 30	40 33 30	50200 ^o	0 13	2 33		8 80	8 80	345	59	135	4697	3 0L	1565 667
223	818	377	20 52 30	40 33 30	50209	0 0	2 47	B8	6 48	00	345	59	135	4697	3 0L	1565 667
224	823	375	20 52 32	40 32 40	50209	0 2	1 57	B8	6 48	00	163	38	60	1927	1 0L	1927 000
225	821	371	20 52 33	40 32 31	50209	0 3	1 48	B8	6 48	00	366	90	23	9424	10 0C	942 000
226	823	378	20 52 37	40 32 24	50200 ^o	0 26	1 27		8 80	8 80	249	56	18	4424	3 0C	1195 676
227	823	378	20 52 37	40 32 24	50209	0 7	1 41	B8	6 48	00	249	56	18	4424	3 0C	1195 676
228	779	151	20 52 39	44 59 58	50205 ^o	0 18	4 48	B9	7 60	00	55	32	18	919	H 3 0C	306 333
229	779	151	20 52 39	44 59 58	50219 ^o	-0 21	3 17	B9	8 10	7 80	55	32	18	919	H 3 0C	306 333
230	812	551	20 52 42	36 52 57	70659	-0 3	0 0	A0	7 24	00	211	58	20	3998	H 10 0C	399 800
231	814	558	20 52 44	36 52 49	70659	-0 1	-0 7	A0	7 24	00	118	28	16	1376	3 0C	371 992
232	835	156	20 52 45	45 0 2	50205 ^o	0 25	4 52	B9	7 60	00	162	32	131	771	3 0L	257 000
233	835	156	20 52 45	45 0 2	50219	-0 15	3 21	B9	8 10	7 80	162	32	131	771	3 0L	257 000
234	812	555	20 52 47	36 53 2	70659	0 2	0 6	A0	7 24	00	97	11	64	285	1 0L	285 000
235	907	557	20 52 48	36 53 47	70659	0 3	0 51	A0	7 24	00	217	24	142	1046	H 3 0L	348 667
236	755	554	20 52 48	36 51 37	70659	0 4	-1 19	A0	7 24	00	101	22	15	993	H 3 0C	331 000
237	838	156	20 52 48	45 0 9	50219	-0 12	3 28	B9	8 10	7 80	65	32	22	1025	3 0C	277 027
238	749	692	20 52 53	34 7 5	70652	0 3	-2 49	B9	8 00	8 10	47	7	16	178	L 3 0C	59 333
239	835	148	20 52 54	45 1 24	50219	-0 6	4 43	B9	8 10	7 80	135	93	39	5125	H 10 0C	512 500
240	806	689	20 52 55	34 8 41	70682	0 5	-1 12	B9	8 00	8 10	101	33	19	1445	10 0C	144 500
241	808	696	20 52 55	34 9 51	70682	0 5	-0 2	B9	8 00	8 10	53	12	16	337	L 3 0C	91 081
242	807	695	20 52 56	34 9 28	70652	0 8	-0 25	B9	8 00	8 10	158	4	134	92	L 3 0L	30 667
243	819	316	20 53 4	41 38 46	50221	0 2	1 57	A0	8 90	8 90	58	12	20	347	10 0C	34 700
244	819	335	20 53 11	41 21 22							104	7	59	227 ^o	1 0L	227 000
245	808	425	20 53 15	39 33 8	70578 ^o	-0 30	7 18	A5	8 30	8 70	172	7	135	210 ^o	3 0L	70 000
246	761	284	20 53 19	42 20 35	50226	-0 10	1 18	B9	6 89	00	230	57	16	4392	H 3 0C	1464 000
247	818	281	20 53 21	42 21 12	50226	-0 7	1 55	B9	6 89	00	394	112	23	12373	H 10 0C	1237 300
248	811	390	20 53 23	40 8 37	50230	-0 7	2 8	B0	7 10	7 10	240	62	20	4850	L 10 0C	485 000
249	820	285	20 53 25	42 22 33	50226	-0 4	3 15	B9	6 89	00	168	48	59	2455	H 1 0L	2455 000
250	816	288	20 53 25	42 22 8	50226	-0 4	2 50	B9	6 89	00	354	76	128	5498	H 3 0L	2165 000
251	754	393	20 53 25	40 7 42	50230	-0 5	1 13	B0	7 10	7 10	125	29	15	1491	L 3 0C	497 000
252	808	397	20 53 26	40 8 13	50230	-0 4	1 44	B0	7 10	7 10	258	37	137	1984	L 3 0L	651 333
253	820	288	20 53 27	42 22 20	50226	-0 1	3 3	B9	6 89	00	271	66	18	5588	H 3 0C	1508 108
254	813	397	20 53 27	40 8 28	50230	-0 3	1 60	B0	7 10	7 10	146	35	17	1983	L 3 0C	535 946
255	812	290	20 53 28	42 20 36	50226	-0 1	1 19	B9	6 89	00	46	4	25	85	2L	332 000
256	812	395	20 53 28	40 7 25	50230	-0 2	0 57	B0	7 10	7 10	110	16	61	535	L 1 0L	535 000
257	791	876	20 53 42	34 33 56							51	4	26	81 ^o	2L	36 000
258	819	229	20 53 48	43 24 41	50240	0 2	3 17		8 40	8 50	51	26	30	717	10 0C	71 700
259	819	229	20 53 48	43 24 41	50243 ^o	-0 14	1 51		8 80	9 40	71	26	30	717	10 0C	71 700
260	763	191	20 53 58	44 12 43	50247	-0 14	1 50	B8	6 71	60	201	54	17	1681	3 0C	627 000
261	819	194	20 54 2	44 14 1	50247	-0 10	3 8	B8	6 71	60	201	54	127	2198	3 0L	732 667
262	757	238	20 54 5	43 15 26	50253	-0 18	1 32	B8	6 79	00	158	69	16	4282	H 3 0C	1430 667
263	820	187	20 54 6	44 14 20	50247	-0 6	3 27	B8	6 71	00	119	95	33	6522	10 0C	652 200
264	822	195	20 54 6	44 13 1	50247	-0 6	2 29	B8	6 71	00	219	50	21	2453	3 0C	652 973
265	822	192	20 54 7	44 13 10	50247	-0 6	2 17	B8	6 71	00	88	13	58	326	L 1 0L	326 000
266	796	616	20 54 9	35 33 33	70683	0 6	1 0		9 30	9 50	55	8	22	213	10 0C	21 300
267	796	616	20 54 9	35 33 33	70685 ^o	-0 5	7 20		8 80	9 40	55	8	22	213	10 0C	21 300
268	812	242	20 54 14	43 16 49	50243 ^o	0 12	-6 2		8 80	9 40	329	72	131	5379	3 0L	1793 000
269	812	242	20 54 14	43 16 49	50249 ^o	-0 1	-8 14		8 80	8 90	329	72	131	5379	3 0L	1793 000
270	812	242	20 54 14	43 16 49	50253	-0 10	2 56	B8	6 79	00	329	72	131	5379	3 0L	1793 000
271	816	240	20 54 19	43 15 59	50253	-0 4	2 6	B8	6 79	00	147	45	58	2066	H 1 0L	2066 000
272	816	243	20 54 20	43 15 59	50253	-0 3	-1 56	B8	6 79	00	225	69	18	5220	3 0C	1410 811
273	813	235	20 54 21	43 17 11	50249 ^o	0 6	-7 52		8 80	8 90	390	111	26	11733	10 0C	1173 300
274	813	235	20 54 21	43 17 11	50253	-0 2	3 17	B8	6 79	00	390	111	26	11733	10 0C	1173 300
275	794	825	20 54 22	31 29 52	70688	-0 17	5 59	A2	8 50	8 80	59	63	24	1678	H 10 0C	167 800
276	800	436	20 54 23	39 11 60	70688	-0 1	1 36	A2	8 70	8 80	73	17	20	5610	10 0C	56 100
277	803	372	20 54 24	40 29 46	50254	-0 1	1 52	A0	8 60	8 80	51	6	20	160	L 10 0C	

PAGE, CARRUTHERS AND HILL

CYGNUS RA 21 24 DEC +37 30

OBJECT NO	X	Y	R A	DEC	SAO NO	Δ R A	Δ DEC	SPEC TYPE	V MAG	P MAG	PEAK DEN	NO OF POINTS	BG	DENSITY VOLUME	EXP & FILTER	DEN VOL / EXP
301	793	354	20 55 19	40 59 6	502717	0 5	-5 27	A0	8 60	8 80	388	71	132	6505	3 0L	2201 667
302	793	354	20 55 19	40 59 6	50274	0 0	0 40		4 04	0 00	388	71	132	6505	3 0L	2201 667
303	793	347	20 55 20	40 59 41	502717	0 6	-4 52		8 60	8 80	407	139	20	14719	10 0C	1471 900
304	793	347	20 55 20	40 59 41	50274	0 1	1 15	A0	4 04	0 00	407	139	20	14719	L 10 0C	1471 900
305	793	845	20 55 24	31 5 52	70731	-0 35	-3 49		9 00	9 30	47	15	22	358	10 0C	33 800
306	732	424	20 55 38	39 29 30	70721	-0 3	1 22	B9	7 50	0 00	114	25	14	1248	H 3 0C	416 000
307	790	426	20 55 39	39 27 57	70721	-0 2	-0 11	B9	7 50	0 00	103	13	63	390	1 0L	390 000
308	791	428	20 55 39	39 29 7	70721	-0 2	0 59	B9	7 50	0 00	135	28	18	1489	3 7C	402 432
309	788	421	20 55 42	39 29 18	70721	0 1	1 10	B9	7 50	0 00	254	52	19	4078	H 10 0C	407 600
310	768	879	20 55 42	30 34 42							47	6	18	151	3 7C	40 811
311	785	428	20 55 43	39 28 37	70721	0 2	0 29	B9	7 50	0 00	238	32	136	1550	H 3 0L	516 667
312	789	398	20 55 47	40 5 27	50289	-0 18	0 48	A0	8 20	7 70	46	6	16	142	L 3 7C	38 378
313	786	391	20 55 60	40 8 30	50288	-0 3	0 58	A0	8 20	7 70	83	19	19	711	10 0C	71 160
314	729	312	20 56 30	41 44 57	50303	-0 10	0 14	B9	6 03	0 00	319	67	15	6157	H 3 6C	2652 333
315	789	313	20 56 34	41 45 27	50303	-0 6	0 84	B9	6 03	0 00	249	53	63	3591	H 1 0L	3641 000
316	784	315	20 56 34	41 46 19	50303	-0 6	1 36	B9	6 03	0 00	400	84	132	7770	H 3 0L	2690 000
317	780	828	20 56 36	31 23 58	70743	-0 3	-3 13	B9	7 17	0 00	197	77	21	5460	10 0C	546 000
318	780	318	20 56 37	41 44 54	50303	-0 3	0 11	B9	6 03	0 00	64	15	24	441	2 0L	1764 000
319	753	834	20 56 37	31 24 15	70743	-0 2	-2 55	B9	7 17	0 00	201	39	126	1582	3 0L	527 333
320	788	316	20 56 37	41 45 33	50303	-0 3	0 50	B9	6 03	0 00	343	77	19	7321	3 7C	1978 649
321	703	831	20 56 39	31 23 16	70743	-0 0	-3 55	B9	7 17	0 00	86	35	17	1407	3 0C	469 000
322	786	309	20 56 39	41 45 45	50303	-0 1	1 2	B9	6 03	0 00	410	141	21	15099	10 0C	1509 900
323	781	835	20 56 40	31 25 3	70743	0 1	-2 7	B9	7 17	0 00	102	43	19	1909	3 7C	515 946
324	758	832	20 56 42	31 23 41	70743	0 3	-3 29	B9	7 17	0 00	99	10	62	237	L 1 0L	237 000
325	757	857	20 56 44	30 50 23							44	6	21	130	10 0C	13 000
326	756	853	20 56 50	30 55 18							56	5	20	136	10 0C	13 600
327	768	472	20 57 16	38 33 58							191	16	138	527	3 0L	175 667
328	761	568	20 57 22	36 14 16	70765	-0 2	0 16	B9	8 00	7 90	182	13	139	417	3 0L	139 000
329	747	805	20 57 24	31 57 24	NO						155	9	129	209	3 0L	86 667
330	765	581	20 57 24	36 13 57	70765	0 0	-0 2	B9	8 00	7 90	139	29	20	1571	10 0C	157 100
331	746	879	20 57 26	30 28 41							107	48	61	1548	1 0L	1548 000
332	767	589	20 57 26	36 14 58	70765	0 2	0 58	B9	8 00	7 90	74	14	17	491	3 7C	132 703
333	755	806	20 57 26	31 58 15	NO						46	8	18	197	3 7C	53 243
334	722	293	20 57 27	42 8 31	50319	-0 7	0 47	B9	5 51	0 00	212	49	16	3429	3 0C	1143 000
335	779	290	20 57 29	42 9 20	50319	-0 5	1 35	B9	6 51	0 00	375	95	21	9463	10 0C	946 300
336	708	584	20 57 31	36 14 57	70765	0 7	0 67	B9	9 00	7 90	60	19	15	315	3 0C	105 000
337	696	802	20 57 31	31 56 30	NO						41	5	15	123	3 0C	41 000
338	781	294	20 57 32	42 9 7	50319	-0 2	1 23	B9	6 51	0 00	154	36	61	1601	1 0L	1601 000
339	777	296	20 57 32	42 9 46	50319	-0 2	2 2	B9	6 51	0 00	330	58	128	4316	3 0L	1438 667
340	753	799	20 57 33	31 57 7	NO						86	34	21	1343	10 0C	134 300
341	724	256	20 57 34	42 53 31	50325	-0 9	1 24	B9	8 10	7 90	43	6	14	146	L 3 0C	48 667
342	781	297	20 57 35	42 9 6	50319	0 1	1 22	B9	6 51	0 00	250	54	17	4334	3 7C	1171 351
343	781	253	20 57 36	42 54 16	50325	-0 8	2 8	B9	8 10	7 90	103	33	22	1428	L 10 0C	142 800
344	779	260	20 57 41	42 53 27	50325	-0 2	1 20	B9	8 10	7 90	155	10	126	241	L 3 0L	60 333
345	783	260	20 57 42	42 54 2	50325	-0 2	1 55	B9	8 10	7 90	52	11	16	304	L 3 7C	82 162
346	772	320	20 57 57	41 31 41	50342	-0 41	4 46		8 40	9 00	54	10	18	296	10 0C	29 600
347	757	612	20 58 9	35 37 13	70775	0 1	0 14		8 80	9 30	73	14	27	404	10 0C	40 400
348	739	768	20 58 31	32 40 24	70774	0 26	-8 52	A2	8 50	8 20	163	4	133	107	3 0L	35 667
349	777	235	20 58 35	43 23 45	50344	-0 5	1 51	A2	8 50	8 20	84	6	17	143	3 7C	38 649
350	774	228	20 58 42	43 22 41	50344	0 2	0 48	A2	8 50	8 20	83	25	22	960	10 0C	96 000
351	786	112	20 58 52	45 40 18							54	5	30	110	10 0C	11 000
352	744	682	20 59 4	34 12 42	70793	-0 1	-0 29	A0	8 50	8 40	48	8	19	193	L 10 0C	19 300
353	757	412	20 59 5	39 39 40	70790	0 5	2 17		9 10	9 50	50	7	18	188	10 0C	18 800
354	757	412	20 59 5	39 39 40	70791	0 1	-7 37	A0	8 10	7 70	50	7	18	188	L 10 0C	18 800
355	757	404	20 59 6	39 48 28	70791	0 3	1 11	A0	8 10	7 70	54	7	18	207	L 10 0C	20 700
356	712	223	20 59 17	43 31 46	50356	-0 8	0 16	A0	8 20	7 40	64	17	14	562	3 0C	187 333
357	721	935	20 59 23	29 17 29	89380	-0 13	-8 29	B8	7 80	7 41	217	102	21	8265	H 10 0C	826 500
358	771	227	20 59 24	43 32 15	50358	-0 1	0 46	A0	8 20	7 40	81	23	17	369	H 3 7C	234 855
359	719	940	20 59 25	29 15 46	89380	-0 11	-10 11	B8	7 80	7 41	96	23	72	403	1 0L	403 000
360	713	940	20 59 25	29 18 38	89380	-0 11	-7 20	B8	7 80	7 41	214	71	124	3586	H 3 0L	1188 667
361	788	220	20 59 25	43 32 28	50358	-0 1	0 59	A0	8 20	7 40	157	48	20	2807	H 10 0C	280 700
362	767	226	20 59 26	43 32 46	50358	0 0	1 17	A0	8 20	7 40	169	19	124	608	H 3 0L	202 667
363	654	938	20 59 26	29 16 38	89380	-0 11	-9 20	B8	7 80	7 41	95	57	19	2445	H 3 0C	815 000
364	722	941	20 59 26	29 18 33	89380	-0 10	-7 25	B8	7 80	7 41	103	61	21	2183	3 7C	590 000
365	777	106	20 59 31	45 57 50	50359	0 5	0 19	B3	5 24	0 00	98	36	25	1480	2L	5920 000
366	781	105	20 59 32	45 56 35	50359	0 6	-0 56	B3	5 24	0 00	435	177	134	18720	3 0L	6240 000
367	725	101	20 59 32	45 56 58	50359	0 6	-0 33	B3	5 24	0 00	379	118	25	1313	3 0C	4378 333
368	785	102	20 59 35	45 57 9	50359	0 9	-0 23	B3	5 24	0 00	347	101	62	9671	1 0L	9671 000
369	781	98	20 59 38	45 57 24	50359	0 12	-0 7	B3	5 24	0 00	436	254	46	29214	10 0C	2921 400
370	784	105	20 59 39	45 57 15	50359	0 13	-0 16	B3	5 24	0 00	404	136	28	16027	H 3 7C	4331 622
371	750	802	20 59 53	32 0 41	70806	0 1	-1 29	A0	8 70	8 60	51	8	18	219	3 7C	59 189
372	741	553	20 59 59	36 46 55	70810	-0 3	0 36	A2	8 40	8 20	71	12	19	424	10 0C	42 400
373	728	795	21 0 0	32 0 52	70806	0 8	-1 19	A0	8 70	8 60	83	32	19	1226	10 0C	122 600
374	762	206	21 0 38	43 56 47	50362	-0 1	-0 9	A	8 70	8 80	42	16	7	170	3 7C	45 946
375	759	199	21 0 39	43 57 2	50362	-0 1	0 5	A	8 70	8 80	73	20	22	719	10 0C	71 900
376	688	343	21 0 44	41 7 12	NO						42	5	13	120	3 0C	40 000
377	748	347	21 0 44	41 6 43	NO						42	8	15	228	3 7C	61 622
378	717	835	21 0 45	31 13 7	70822	0 7	-2 50	A0	8 50	8 70	56	19	20	520	10 0C	52 000
379	745	340	21 0 46	41 5 46	NO						98	21	19	881	10 0C	88 100
380	763															

CYGNUS RA 21 24 DEC +37 30

OBJECT NO	X	Y	R A	DEC	SAO NO	Δ R A	Δ DEC	SPEC TYPE	V MAG	P MAG	PEAK DEN	NO OF POINTS	GG	DENSITY VOLUME	EXP & FILTER	DEN VOL / EXP	
401	700	139	21	1 44	45 10 30	50404	-0 7	0 22	A0	8 00	7 90	52	17	14	491 H	3 0C	163 667
402	756	143	21	1 49	45 10 1	50404	-0 2	-0 7	A0	8 00	7 90	155	14	123	369 H	3 0L	123 000
403	756	136	21	1 50	45 10 8	50404	-0 2	1 1	A0	8 00	7 90	128	54	24	2730 H	10 0C	273 000
404	759	143	21	1 51	45 10 54	50404	-0 1	0 47	A0	8 00	7 90	64	24	17	779 H	3 7C	210 541
405	764	93	21	2 5	46 10 9	50411	-0 4	2 17	B8	8 50	7 70	141	54	22	3711 H	3 7C	1002 973
406	704	89	21	2 6	46 9 46	50411	-0 3	1 54	B8	8 50	7 70	119	58	19	2935 H	3 0C	978 333
407	764	90	21	2 9	46 9 53	50411	-0 0	2 1	B8	8 50	7 70	101	29	56	912 H	1 0L	912 000
408	761	86	21	2 11	46 9 5	50411	0 2	1 13	B8	8 50	7 70	302	116	36	9874 H	10 0C	987 400
409	760	92	21	2 14	46 10 26	50411	0 5	2 33	B8	8 50	7 70	240	67	124	3750 H	3 0L	1250 000
410	717	593	21	2 20	35 57 58	70861	0 1	0 59	A0	8 90	8 90	66	10	20	331 H	10 0C	33 100
411	722	436	21	2 22	39 15 31	70874?	-0 33	6 10	A2	8 60	8 70	199	8	136?	350?	3 0L	116 667
412	726	293	21	2 40	42 12 42	50421?	-0 16	-4 40	A0	8 60	9 30	52	5	27	117 H	2L	468 000
413	725	353	21	2 49	40 49 54	50420	-0 0	1 25	A	8 40	8 20	54	10	18	264 H	10 0C	26 900
414	723	393	21	3 10	40 9 7	50426/	0 3	0 27	A0	8 60	8 70	48	6	16	153 H	3 7C	41 351
415	723	393	21	3 10	40 9 7	50428/	-0 2	-3 51	A0	8 70	9 20	48	6	16	153 H	3 7C	41 351
416	720	386	21	3 13	40 9 30	50426	0 6	0 49	A0	8 60	8 70	79	17	19	631 H	10 2C	63 100
417	720	386	21	3 13	40 9 30	50428?	0 1	-3 29	A0	8 70	9 20	79	17	19	631 H	10 0C	63 100
418	701	734	21	3 18	33 17 24	70886	0 3	-0 16	A0	8 00	8 00	49	8	17	199 L	3 7C	33 784
419	699	727	21	3 19	33 17 46	70886	0 3	0 6	A0	8 00	8 00	84	21	21	804 H	10 0C	80 400
420	697	666	21	3 22	34 37 36	70889	-0 3	0 55	A0	7 90	8 00	164	4	139	97 L	3 0L	32 333
421	704	667	21	3 24	34 37 41	70881?	0 14	8 53	A0	9 00	9 30	46	5	16	125 L	3 7C	33 784
422	704	667	21	3 24	34 37 41	70888	-0 2	0 60	A0	7 90	8 00	46	5	16	125 L	10 0C	61 800
423	702	660	21	3 28	34 36 47	70881?	0 20	7 58	A0	9 00	9 30	81	17	21	618 H	10 0C	61 800
424	702	660	21	3 29	34 36 47	70889	0 4	0 5	A0	7 90	8 00	81	17	21	618 H	10 0C	61 800
425	681	633	21	3 38	31 20 42	70892	0 0	-1 13	A0	8 40	8 70	167	15	127	476 H	3 0L	156 667
426	689	834	21	3 40	31 20 55	70892	0 3	-0 59	A0	8 40	8 70	167	15	127	476 H	3 7C	160 811
427	673	220	21	3 41	43 33 53	70892	0 3	-1 20	A0	8 40	8 70	52	10	16	280?	3 0C	93 333
428	631	630	21	3 41	31 20 34	70892	0 3	-1 20	A0	8 40	8 70	52	10	16	280?	3 0C	113 333
429	687	827	21	3 42	31 19 60	70892	0 5	-1 54	A0	8 40	8 70	119	40	22	2006 H	10 0C	200 600
430	693	869	21	3 44	30 32 42	70894	0 5	-2 50	A0	8 50	8 80	62	16	23	480 H	10 0C	48 000
431	740	160	21	3 46	44 50 23	70894	0 5	-2 50	A0	8 50	8 80	62	16	23	480 H	3 7C	161 351
432	711	427	21	3 54	39 18 49	70907	0 3	0 1	A0	8 80	9 30	50	7	19	198?	10 0C	15 800
433	700	579	21	4 9	36 13 21	70936	-0 53	-4 29	A0	8 00	8 00	167	8	141	188 H	3 0L	62 667
434	695	563	21	4 20	36 40 29	70936	-0 38	-1 31	A0	8 00	8 00	66	10	21	330 L	10 0C	33 000
435	697	554	21	4 34	36 43 22	70936	-0 38	0 33	B9	8 30	8 50	201	13	141	485 H	3 0L	161 667
436	685	660	21	4 37	34 42 69	70921	-0 6	0 45	B9	8 30	8 50	79	16	16	589 H	3 7C	159 189
437	692	661	21	4 38	34 43 12	70921	-0 5	1 7	B9	8 30	8 50	147	32	20	1860 H	10 0C	196 000
438	690	654	21	4 44	34 43 4	70921	0 2	0 37	B9	8 30	8 50	63	12	15	401 H	3 0C	133 667
439	633	658	21	4 60	30 20 17	70931	-0 2	-3 22	B8	7 51	8 00	189	69	19	4633 H	3 7C	1252 162
440	670	885	21	5 1	30 20 55	70931	-0 1	-2 45	B8	7 51	8 00	134	44	61	1877 H	10 0C	1877 000
441	667	891	21	5 1	30 21 4	70931	-0 9	-2 35	B8	7 51	8 00	293	71	126	4949 H	3 0L	1649 667
442	661	893	21	5 1	30 21 4	70943?	-0 20	-6 38	A5	8 90	8 49	293	71	126	4949 H	3 0L	1649 667
443	661	893	21	5 1	30 21 4	70931	-0 9	-2 35	B8	7 51	8 00	293	71	126	4949 H	3 0L	1649 667
444	668	878	21	5 2	30 19 22	70931	0 1	-4 18	B8	7 51	8 00	343	108	22	11300 H	10 0C	1130 000
445	668	878	21	5 2	30 19 22	70943?	-0 19	-8 21	A5	8 90	8 49	343	108	22	11300 H	10 0C	1130 000
446	611	881	21	5 6	30 19 49	70931	0 4	-3 50	B8	7 51	8 00	160	59	19	3674 H	3 0C	1224 667
447	611	881	21	5 6	30 19 49	70943?	-0 15	-7 53	A5	8 90	8 49	160	59	19	3674 H	3 0C	1224 667
448	698	492	21	5 9	38 7 5	70935	-0 1	0 18	A0	8 50	7 80	47	4	18	106 L	3 7C	28 649
449	683	690	21	5 11	34 0 32	70925?	0 27	4 40	A2	8 00	8 00	55	7	20	200 H	10 0C	20 000
450	683	690	21	5 11	34 0 32	70934	0 1	0 56	A0	9 00	9 50	55	7	20	200 H	10 0C	20 000
451	687	558	21	5 12	35 46 8	70936	-0 1	1 15	A0	8 00	8 00	196	15	140	507 H	3 0L	169 800
452	675	780	21	5 13	32 17 57	70940	-0 2	-0 3	B9	7 50	7 90	94	7	64	179 L	1 0L	179 800
453	695	465	21	5 13	38 7 31	70935	0 3	0 43	A0	8 50	7 80	85	17	19	670 H	10 0C	67 800
454	691	552	21	5 13	36 45 31	70936	-0 0	0 38	A0	8 00	8 00	141	32	21	1626 H	10 0C	162 600
455	693	559	21	5 14	36 46 18	70936	0 2	1 25	A0	8 00	8 00	74	15	17	512 H	3 7C	138 378
456	635	555	21	5 15	36 46 24	70936	0 2	1 31	A0	8 00	8 00	59	9	14	298 H	3 0C	99 333
457	669	782	21	5 16	32 18 6	70940	0 0	0 6	B9	7 50	7 90	208	26	132	1129 H	3 0C	376 333
458	677	764	21	5 16	32 18 28	70940	0 1	0 29	B9	7 50	7 90	110	25	19	1224 H	3 7C	330 811
459	619	780	21	5 17	32 18 14	70940	0 1	0 14	B9	7 50	7 90	89	22	17	898 H	3 0C	299 333
460	675	777	21	5 17	32 17 37	70940	0 2	-0 23	B9	7 50	7 90	203	47	23	3495 H	10 0C	340 500
461	699	401	21	5 19	39 49 35	70828	0 25	-1 42	A3	8 50	8 50	50	4	19	111 H	10 0C	11 000
462	719	177	21	5 21	44 27 62	50468	-0 5	-0 57	B9	7 70	7 10	212	40	122	1936 H	3 0L	645 333
463	720	171	21	5 21	44 27 39	50468	-0 2	-0 39	B9	7 70	7 10	269	67	22	5989 H	10 0C	598 900
464	723	175	21	5 25	44 26 55	50468	-0 1	-1 23	B9	7 70	7 10	94	15	56	438 H	1 0L	438 000
465	731	114	21	5 25	45 42 59	50473	-0 7	-0 38	A0	8 70	8 40	48	7	21	170 H	3 7C	45 946
466	723	178	21	5 25	44 28 33	50468	-0 1	0 15	B9	7 70	7 10	137	38	17	2119 H	3 7C	572 703
467	863	174	21	5 26	44 27 57	50468	-0 6	-0 22	B9	7 70	7 10	110	35	14	1708 H	3 0C	567 333
468	867	853	21	5 26	30 48 54	70944	0 2	-1 41	A0	9 00	9 00	67	23	20	742 H	10 0C	74 200
469	728	107	21	5 31	45 43 14	50473	-0 1	-0 23	A0	8 70	8 40	92	38	25	1522 H	10 0C	152 200
470	728	112	21	5 33	45 44 12	50473	0 0	0 35	A0	8 70	8 40	92	38	25	1522 H	10 0C	152 200
471	675	737	21	5 47	33 13 13	70953	-0 4	1 32	B0	7 50	7 60	303	63	18	119 H	3 0L	45 667
472	665	738	21	5 49	33 13 6	70953	-0 2	1 25	B0	7 50	7 60	259	43	64	3091 H	1 0L	3091 000
473	673	734	21	5 51	33 12 37	70953	-0 0	0 56	B0	7 50	7 60	395	117	22	1237 H	10 0C	1237 100
474	673	731	21	5 53	33 11 5	70953	0 2	-0 35	B0	7 50	7 60	385	67	137	5950 H	3 0L	1986 667
475	667	736	21	5 55	33 12 43	70953	0 3	1 3	B0	7 50	7 60	66	17	21	552 L	10 0C	55 200
476	717																

PAGE, CARRUTHERS AND HILL

CYGNUS RA 21 24 DEC +37 30

OBJECT NO	X	Y	R	A	DEC	SAO NO	Δ R	Δ A	Δ DEC	SPEC TYPE	V MAG	P MAG	PEAK DEN	NO OF POINTS	BO	DENSITY VOLUME	EXP & FILTER	DEN VOL / EXP	
501	676	517	21	7	4	37 27 17	70991?	-0	15	6 48	9 30	9 90	55	5	24	139?	10 0C	13 900	
502	686	386	21	7	5	40 3 13	NO						48	6	18	143	3 7C	38 649	
503	683	389	21	7	8	40 3 42	NO						86	19	19	717	10 0C	71 700	
504	681	382	21	7	30	40 12 18	NO						55	6	20	177?	10 0C	17 700	
505	714	85	21	7	33	46 8 17	50503	0	6	1 7	8 70	9 00	60	18	28	456	10 0C	45 600	
506	711	120	21	7	39	45 30 18	50510	-0	8	-1 46	8 70	7 60	91	24	57	614	1 0L	614 000	
507	651	119	21	7	39	45 31 26	50510	-0	9	-0 38	8 70	7 60	107	40	17	1897	3 0C	632 333	
508	707	116	21	7	43	45 31 7	50510	-0	4	-0 57	8 70	7 60	284	74	32	6399	10 0C	539 900	
509	707	122	21	7	44	45 31 50	50510	-0	3	-0 14	8 70	7 60	217	51	126	2460	3 0L	820 000	
510	689	289	21	7	44	45 12 51	50509	-0	2	-0 7	8 70	7 70	61	10	17	293	3 7C	79 169	
511	686	282	21	7	45	45 12 51	50509	-0	1	-0 55	8 70	7 70	110	24	21	1078	10 0C	107 800	
512	710	123	21	7	45	45 31 59	50510	-0	3	-0 5	8 70	7 60	135	46	20	2554	3 7C	690 270	
513	662	627	21	7	46	35 18 13	78954	-0	5	0 58	8 70	8 70	137	15	72	575	1 0L	575 000	
514	657	624	21	7	46	35 18 20	78954	-0	5	1 5	8 70	8 70	284	34	143	2013	H 3 0L	671 000	
515	671	482	21	7	48	38 9 45	78950	-0	3	1 3	9 10	9 30	48	5	19	124	10 0C	12 400	
516	671	482	21	7	48	38 9 45	71000?	-0	13	7 4	8 60	8 20	48	5	19	124	10 0C	12 400	
517	657	682	21	7	51	34 12 38	70998	-0	7	0 29	8 70	8 70	104	8	68	227	1 0L	227 000	
518	665	655	21	7	51	35 27 26	NO						53	5	23	122?	10 0C	12 200	
519	661	624	21	7	51	35 18 3	70994	-0	1	0 48	8 70	8 70	267	59	23	4417	H 10 0C	441 700	
520	663	631	21	7	51	35 17 30	70994	-0	0	0 15	8 70	8 70	137	30	18	1562	H 3 7C	422 162	
521	630	625	21	7	52	42 14 1	50509	0	6	0 15	A0	7 90	7 70	48	6	16	157	3 0C	52 333
522	605	627	21	7	53	35 18 47	78954	0	1	1 31	8 70	8 70	131	25	17	1239	H 3 0C	413 000	
523	651	684	21	7	56	34 12 39	70998	-0	2	0 30	8 70	8 70	223	22	142	972	H 3 0L	324 000	
524	711	82	21	7	56	46 10 34	50503?	0	28	3 25	8 70	9 00	72	34	24	1136?	10 0C	113 600	
525	656	678	21	7	58	34 13 42	70998	-0	0	1 34	8 70	8 70	186	41	25	2545	10 0C	254 500	
526	655	697	21	7	58	33 51 3	70999	-0	1	1 41	A0	8 90	9 30	73	16	20	566	10 0C	56 600
527	658	695	21	7	58	34 13 11	70998	-0	0	1 2	8 70	8 70	97	19	18	835	3 7C	225 676	
528	600	681	21	7	59	34 14 23	70998	0	1	2 14	8 70	8 70	86	16	17	824	3 0C	208 000	
529	668	487	21	8	5	38 3 15	71000	0	4	0 34	A2	8 60	8 20	85	15	27	502	10 0C	50 200
530	649	691	21	8	6	34 4 58	70998?	0	7	-7 11	6 70	8 70	176	7	144	171	3 0L	57 000	
531	649	691	21	8	6	34 4 58	71095	+0	2	1 27	A0	8 90	8 60	176	7	144	171	3 0L	57 000
532	697	136	21	8	7	45 17 2	50521	-0	4	-0 51	8 5	6 52	00	61	20	22	584	2L	2336 000
533	701	134	21	8	7	45 16 43	50521	-0	4	-1 10	8 5	6 52	00	417	151	138	13331	3 0L	4443 667
534	701	134	21	8	7	45 16 43	50531?	-0	24	-4 37	8 9	8 40	417	151	138	13331	3 0L	4443 667	
535	654	685	21	8	8	34 4 47	70998?	0	10	-7 22	8 70	8 70	168	31	24	1287	10 0C	128 700	
536	654	685	21	8	8	34 4 47	71005	0	1	1 16	A0	8 90	8 60	168	31	24	1287	H 10 0C	128 700
537	705	135	21	8	8	45 16 55	50521	-0	3	-0 56	8 5	6 52	00	380	107	297	11574	3 7C	216
538	705	135	21	8	8	45 16 55	50531?	-0	23	-4 25	8 9	8 40	380	107	297	11574	3 7C	3124 216	
539	656	692	21	8	8	34 5 30	70998?	0	10	-6 39	8 70	8 70	60	10	18	307	3 7C	82 973	
540	656	692	21	8	8	34 5 30	71005	0	1	1 59	A0	8 90	8 60	60	10	18	307	3 7C	82 973
541	598	688	21	8	9	34 6 42	70998?	0	11	-5 27	8 70	8 70	50	7	15	196	3 0C	65 333	
542	598	688	21	8	9	34 6 42	71005	0	2	3 11	A0	8 90	8 60	50	7	15	196	3 0C	65 333
543	705	132	21	8	10	45 16 23	50521	-0	1	-1 39	8 5	6 52	00	247	89	60	6088	H 1 0L	6088 000
544	645	131	21	8	10	45 17 30	50521	-0	1	-0 23	8 5	6 52	00	350	97	26	9342	H 3 0C	3114 000
545	701	128	21	8	14	45 17 14	50521	0	3	-0 39	8 5	6 52	00	432	165	37	22353	10 0C	2235 300
546	701	128	21	8	14	45 17 14	50531?	-0	17	-4 6	8 9	8 40	432	165	37	22353	H 10 0C	2235 300	
547	642	738	21	8	18	33 8 11	NO						161	5	134	113	3 0L	37 667	
548	690	205	21	8	20	43 45 7	50525?	0	6	-1 60	A0	8 10	8 00	76	16	25	553	L 10 0C	55 300
549	690	205	21	8	20	43 45 7	50529?	-0	4	-2 29	A0	8 50	00	76	16	25	553	L 10 0C	55 300
550	648	733	21	8	23	33 8 1	NO						74	19	19	65?	10 0C	66 500	
551	653	589	21	8	33	36 5 40	71011	0	7	-2 30	9 10	9 40	175	4	143	104	3 0L	34 667	
552	626	924	21	8	33	29 23 18	89506?	0	3	-5 38	A2	8 80	8 92	50	13	22	317	10 0C	31 700
553	666	456	21	8	39	38 44 41	71013?	0	9	5 46	9 30	9 30	191	29	67	1694	1 0L	1694 000	
554	666	456	21	8	39	38 44 41	71018	-0	3	-0 43	8 3	7 40	7 40	191	29	67	1694	1 0L	1694 000
555	671	375	21	8	39	40 20 25	50532	0	6	0 51	8 9	8 50	9 10	70	11	23	345	L 10 0C	34 500
556	658	509	21	8	40	37 42 53	71017	0	0	0 13	A0	8 50	7 90	176	7	139	195	3 0L	65 000
557	667	459	21	8	40	38 45 15	71013?	0	10	6 20	9 30	9 00	234	48	18	3685	3 7C	995 946	
558	667	459	21	8	40	38 45 15	71018	-0	2	-0 9	8 3	7 40	7 40	234	48	18	3685	L 3 7C	995 946
559	664	510	21	8	40	37 43 21	71017	0	0	0 42	A0	8 50	7 90	60	10	16	305	3 7C	82 432
560	661	458	21	8	42	38 46 2	71013?	0	12	7 7	9 30	9 00	356	64	137	4492	3 0L	1497 333	
561	661	458	21	8	42	38 46 2	71018	0	1	0 38	8 3	7 40	7 40	356	64	137	4492	3 0L	1497 333
562	658	460	21	8	43	38 46 22	71018	0	2	0 58	8 3	7 40	7 40	62	8	25	226	2L	989 700
563	664	452	21	8	43	38 45 46	71018	0	2	0 22	8 3	7 40	7 40	365	127	21	9837	10 0C	989 700
564	661	503	21	8	44	37 43 52	71017	0	5	1 13	A0	8 50	7 90	109	22	22	1013	10 0C	101 300
565	605	513	21	8	46	37 37 9	71017	0	6	-5 31	A0	8 50	7 90	37	4	15	85	3 0C	28 333
566	608	455	21	8	48	38 47 55	71018	0	7	2 31	8 3	7 40	7 40	209	43	16	3042	3 0C	1014 000
567	605	506	21	8	48	37 44 42	71017	0	8	2 2	A0	8 50	7 90	49	4	15	164	3 0C	54 667
568	646	722	21	8	52	33 28 28	NO						50	4	20	101?	3 7C	27 297	
569	660	489	21	8	56	38 2 41	71024	0	6	1 56	A0	8 70	8 70	45	4	20	97	L 10 0C	9 700
570	655	590	21	9	1	36 5 51	71032	-0	2	0 12	8 1	6 40	00	331	4	21	8285	L 3 7C	2239 459
571	663	468	21	9	2	38 34 53	71030	0	3	0 25	8 9	8 60	00	41	17	89	L 3 7C	24 054	
572	693	587	21	9	3	36 5 10	71032	0	0	-0 28	8 1	6 40	00	309	90	143	4203	1 0L	4203 000
573	648	589	21	9	4	36 6 30	71032	0	1	0 51	8 1	6 40	00	403	90	143	7676	L 3 0L	2558 667
574	644	720	21	9	5	33 30 48	NO						73	15	20	532?	3 7C	143 784	
575	645	591	21	9	7	35 6 50	71032	0	4	1 12	8 1	6 40	00						

NRL REPORT 8173

CYGNUS RA 21 24 DEC +37 30

OBJECT NO	X	Y	R A	DEC	SAO NO	Δ R A	Δ DEC	SPEC TYPE	V MAG	P MAG	PEAK DEN	NO OF POINTS	BG	DENSITY VOLUME	EXP & FILTER	DEN VOL EXP
501	604	908	21 10 9	29 47 44	69524	0 21	0 7	A0	9 00	9 19	158	11	123	308 H	3 0L	102 667
502	605	117	21 10 12	45 28 34	50561	-0 7	-1 17	B8	7 90	7 70	210	58	39	4086 H	10 0C	408 600
503	605	122	21 10 13	45 29 1	50561	-0 6	-0 50	B8	7 90	7 70	192	29	135	1040 H	3 0L	346 667
504	602	368	21 10 15	40 35 31	50556	0 16	1 25	B8	7 70	7 90	163	32	15	1908 H	3 0C	602 667
505	606	135	21 10 15	45 15 43	50550	0 1	-1 29	B8	8 90	8 90	50	12	24	343 H	3 7C	92 703
506	627	131	21 10 17	45 15 15	50560	0 3	-0 57	B8	8 90	8 90	51	10	17	280 H	3 0C	93 333
507	607	124	21 10 20	45 29 19	50561	0 2	-0 32	B8	7 90	7 70	97	32	27	1293 H	3 7C	349 459
508	615	803	21 10 22	31 51 0	71061	-0 4	1 33	B9	8 20	8 20	163	8	130	210 H	3 0L	70 000
509	629	120	21 10 22	45 29 51	50561	0 3	0 0	B8	7 90	7 70	87	31	23	1093 H	3 0C	364 333
510	623	805	21 10 23	31 50 38	71061	-0 3	1 11	B9	8 20	8 20	55	11	16	317 H	3 7C	85 676
511	621	798	21 10 24	31 49 55	71061	-0 1	0 28	B9	8 20	8 20	101	28	19	1277 H	10 0C	127 000
512	604	801	21 10 30	31 51 39	71061	0 5	2 12	B9	8 20	8 20	47	7	16	183 H	3 0C	61 000
513	646	471	21 10 32	38 21 47	71053	0 26	-2 37	B9	8 70	8 70	335	91	27	7827 H	10 0C	782 700
514	646	471	21 10 32	38 21 47	71065	0 1	0 10	B9	7 70	7 10	335	91	27	7827 H	10 0C	782 700
515	647	474	21 10 34	38 21 44	71065	0 2	0 8	B9	7 70	7 10	171	25	65	1257 H	1 0L	1257 000
516	649	433	21 10 34	38 21 40	71064	0 3	0 2	B9	8 70	8 40	61	12	18	358 H	10 0C	36 800
517	648	478	21 10 34	38 21 48	71065	0 3	-0 28	B9	7 70	7 10	204	49	19	3018 H	10 0C	815 676
518	642	476	21 10 36	38 21 44	71065	0 5	0 8	B9	7 70	7 10	347	50	137	2845 H	3 0L	948 333
519	673	177	21 10 36	44 17 29	50567	-0 2	-2 2	B8	7 60	7 70	54	9	18	243 L	3 7C	65 676
520	676	164	21 10 37	44 18 16	50567	-0 2	-1 16	B8	7 60	7 70	54	9	18	243 L	3 7C	65 676
521	681	118	21 10 43	45 33 36	50573	-0 6	-1 41	B8	8 50	8 50	183	39	125	1452 H	3 0L	484 000
522	689	474	21 10 43	38 23 46	71065	0 12	2 9	B9	7 70	7 10	177	42	16	2402 H	3 0C	800 667
523	684	119	21 10 44	45 34 3	50561	0 25	4 12	B8	7 90	7 70	85	27	22	1086 H	3 7C	293 514
524	684	119	21 10 44	45 34 3	50573	-0 6	-1 17	B8	8 30	8 50	85	27	22	1086 H	3 7C	293 514
525	684	119	21 10 44	45 34 3	50578	-0 22	0 13	B8	9 10	9 50	85	27	22	1086 H	3 7C	293 514
526	685	116	21 10 46	45 33 23	50573	-0 4	-1 56	B8	8 30	8 50	81	4	57	91 L	1 0L	91 000
527	625	115	21 10 46	45 34 34	50573	-0 4	-0 45	B8	8 30	8 50	71	26	17	902 H	3 0C	300 667
528	681	112	21 10 50	45 34 24	50573	0 0	-0 55	B8	8 30	8 50	177	50	34	3304 H	10 0C	330 400
529	673	157	21 10 59	44 40 55							51	5	28	1067 H	10 0C	10 600
530	630	626	21 11 4	35 18 0	71079	-0 8	1 2	B8	8 00	7 30	106	8	67	237 L	1 0L	237 000
531	622	716	21 11 4	33 30 50	71077	-0 7	1 39	B8	7 09	0 0	128	14	67	530 L	1 0L	530 000
532	625	628	21 11 4	35 17 59	71079	-0 8	1 0	B8	8 00	7 30	226	18	143	808 H	3 0L	269 333
533	622	739	21 11 5	33 9 1							48	8	17	204 H	3 7C	55 135
534	622	713	21 11 6	33 29 44	71077	-0 5	0 34	B8	7 09	0 0	267	56	25	4455 H	10 0C	445 500
535	624	719	21 11 6	33 31 38	71077	-0 5	2 28	B8	7 09	0 0	143	29	18	1659 H	3 7C	448 378
536	616	718	21 11 8	33 30 42	71077	-0 3	1 32	B8	7 09	0 0	263	26	141	1486 H	3 0L	495 333
537	629	623	21 11 9	35 18 5	71079	-0 3	1 7	B8	8 00	7 30	184	40	23	2530 H	10 0C	253 800
538	631	629	21 11 10	35 18 42	71079	-0 2	1 44	B8	8 00	7 30	101	21	20	930 H	3 7C	251 351
539	666	213	21 11 11	43 38 32	50563	-0 8	-1 29	B3	7 90	7 50	90	8	60	196 L	1 0L	196 000
540	673	626	21 11 11	35 18 45	71079	-0 1	1 46	B8	8 00	7 30	82	17	17	640 H	3 0C	213 333
541	662	215	21 11 13	43 38 39	50563	-0 5	-1 22	B3	7 90	7 50	216	24	132	1058 L	3 0L	352 667
542	665	716	21 11 13	33 31 30	71077	0 2	2 20	B8	7 09	0 0	124	25	17	1255 H	3 0C	418 333
543	644	416	21 11 13	39 29 30	71078	0 2	0 30	A0	8 40	8 00	57	9	18	270 L	10 0C	27 000
544	630	548	21 11 14	36 53 54	71082	-0 3	0 13	A0	8 40	8 00	200	12	136	491 H	3 0L	163 667
545	634	543	21 11 14	36 54 2	71082	-0 3	0 21	A0	8 40	8 00	136	27	20	1537 H	10 0C	153 700
546	687	51	21 11 16	46 44 34	50592	-0 1	0 12	A0	8 00	7 90	56	22	23	552 H	10 0C	55 200
547	636	549	21 11 16	36 54 38	71082	-0 1	0 57	A0	8 40	8 00	71	14	19	470 H	3 7C	127 027
548	678	546	21 11 18	36 56 1	71082	0 1	2 19	A0	8 40	8 00	59	12	14	366 H	3 0C	122 000
549	663	210	21 11 18	43 38 22	50583	-0 0	-1 39	B3	7 90	7 50	214	40	31	2839 H	10 0C	283 900
550	665	217	21 11 18	43 37 52	50583	-0 1	-2 9	B3	7 90	7 50	105	23	22	1032 L	3 7C	278 919
551	631	565	21 11 24	36 26 6	71086	-0 2	0 32	A5	6 65	0 0	56	8	20	226 L	10 0C	22 600
552	647	395	21 11 26	40 15 26	50585	0 2	0 24	B8	8 60	8 90	66	10	16	341 L	3 7C	92 162
553	606	213	21 11 27	43 39 27	50583	0 9	-0 34	B3	7 90	7 50	91	21	17	863 H	3 0L	287 667
554	842	383	21 11 33	40 15 57	50585	0 9	0 55	B8	8 60	8 80	185	13	136	412 H	3 0L	137 333
555	644	378	21 11 35	40 14 40	50585	0 11	-0 22	B8	8 60	8 80	122	24	21	1196 H	10 0C	119 600
556	588	381	21 11 42	40 16 47	50585	0 18	1 45	B8	8 50	8 80	58	9	14	265 H	3 0C	88 333
557	674	125	21 11 46	45 22 47	50592	-0 8	-1 27	B5	7 40	7 10	172	64	56	3364 H	1 0L	3364 000
558	666	129	21 11 50	45 23 22	50592	-0 4	-0 52	B5	7 40	7 10	44	4	22	82 H	2L	328 000
559	670	127	21 11 50	45 22 55	50592	-0 3	-1 19	B5	7 40	7 10	390	98	124	8952 H	3 0L	2984 000
560	673	129	21 11 50	45 22 11	50592	-0 3	-2 3	B5	7 40	7 10	296	75	19	6918 H	3 7C	1669 730
561	614	125	21 11 53	45 22 40	50592	-0 1	-1 34	B5	7 40	7 10	242	65	17	5370 H	3 0C	1790 000
562	633	474	21 11 55	38 18 13	71092	0 13	-2 49	B8	7 70	9 20	73	19	23	603 H	10 0C	60 300
563	633	474	21 11 55	38 18 13	71096	0 4	4 9	B8	8 80	9 10	73	19	23	603 H	10 0C	60 300
564	633	474	21 11 55	38 18 13	71098	-0 3	0 45	B8	8 80	9 10	73	19	23	603 H	10 0C	60 300
565	670	122	21 11 56	45 21 20	50592	0 3	-2 54	B5	7 40	7 10	40	12	30	1403 H	10 0C	1413 900
566	600	859	21 11 60	30 45 27	71089	0 29	1 14	B8	9 10	9 10	94	29	18	1229 H	3 7C	332 162
567	600	859	21 11 60	30 45 27	71101	-0 3	0 13	A0	7 80	7 60	94	29	18	1229 H	3 7C	332 162
568	613	707	21 12 2	33 40 0	71110	-0 17	4 12	A0	9 60	9 20	98	5	65	1347 H	1 0L	134 000
569	591	857	21 12 2	30 45 33	71101	-0 0	0 19	A0	7 80	7 60	193	23	129	969 H	3 0L	303 000
570	630	494	21 12 7	37 52 48	71121	-0 42	2 56	F0	3 82	0 0	64	12	20	3827 H	10 0C	38 200
571	597	855	21 12 7	30 45 36	71101	0 4	0 22	A0	7 80	7 60	90	7	61	179 H	1 0L	179 000
572	625	514	21 12 8	37 34 51	71104	0 2	0 25	B3	7 70	7 20	393	93	135	7107 H	3 0L	2369 000
573	598	853	21 12 8	30 44 40	71101	0 5	-0 34	A0	7 80	7 60	178	52	21	3534 H	10 0C	353 400
574	631	516	21 12 8	37 34 24	71104	0 2	-0 2	B3	7 70	7 20	315	82	19	6952 H	3 7C	1878 919
575	622	517	21 12 9	37 34 4	71104	0 3	-0 22	B3	7 70	7 20	103	20	26	828 H	2L	3312 000
576	626	499	21 12 9	37 53 49	71121	-0 39	3 57	F0	3 82	0 0	163	9	135	201 H	3 0L	67 000
577	609	887	21 12 10	34 6 15	71109	-0 6	1 3	B8	7 02	0 0	328	38	143	2600 H	3 0L	866 667
578	609	887	21 12 10	34												

PAGE, CARRUTHERS AND HILL

CYGNUS RA 21 24 DEC +37 30

OBJECT NO	X	Y	R A	DEC	SAO NO	Δ R A	Δ DEC	SPEC TYPE	V MAG	P MAG	PEAK DEN	NO OF POINTS	BG	DENSITY VOLUME	EXP & FILTER	DEN VOL / EXP
701	614	538	21 13 29	37 2 2	71128	-0 5	-0 35	B8	7 80	7 70	138	18	63	741	1 0L	741 000
702	613	534	21 13 30	37 2 35	71128	-0 3	0 58	B9	7 80	7 70	267	58	21	4604	10 0C	460 400
703	609	540	21 13 31	37 2 10	71128	-0 3	0 33	B8	7 80	7 70	276	27	139	1636	3 0C	645 333
704	615	541	21 13 32	37 2 61	71128	-0 2	0 14	B6	7 80	7 70	144	31	17	1754	3 7C	474 954
705	603	652	21 13 37	34 41 54	71134	-0 7	1 31	A0	8 30	8 60	64	8	35	163 L	10 0C	16 300
706	557	537	21 13 41	37 5 24	71128	0 7	2 47	B8	7 80	7 70	118	26	15	1351 H	3 0C	450 333
707	591	710	21 13 42	33 38 12							178	13	142	373?	3 0L	124 333
708	649	154	21 13 42	44 42 53	50627	-0 4	-1 51	A0	8 00	7 20	191	46	25	3122 H	10 0C	312 200
709	652	161	21 13 43	44 43 36	50627	-0 3	-1 8	A0	8 00	7 20	97	25	18	1082 H	3 7C	292 432
710	593	157	21 13 45	44 43 59	50627	-0 1	-0 44	A0	8 00	7 20	79	21	15	816 H	3 0C	272 000
711	648	160	21 13 47	44 42 50	50627	0 1	-1 53	A0	8 00	7 20	182	29	124	1036 H	3 0C	345 333
712	652	119	21 14 2	45 29 55	50644	-0 7	-1 22	B9	7 80	7 70	182	32	123	1183 H	3 0C	334 333
713	655	121	21 14 2	45 29 23	50644	-0 7	-1 57	B9	7 80	7 70	93	30	21	1204 H	3 7C	325 405
714	655	118	21 14 4	45 28 34	50644	-0 5	-2 47	B9	7 80	7 70	80	4	57	88 L	1 0L	88 000
715	596	117	21 14 5	45 31 2	50644	-0 4	0 19	B9	7 80	7 70	76	25	16	927	3 0C	309 000
716	652	114	21 14 8	45 29 48	50644	-0 1	-1 32	B9	7 80	7 70	187	60	23	3885	10 0C	388 500
717	612	444	21 14 29	38 52 49	71147	0 7	-0 23	A2	8 20	8 30	61	9	20	278 L	10 0C	27 800
718	615	368	21 14 51	40 26 1							46	5	18	119?	10 0C	11 900
719	591	690	21 14 58	34 0 50	NO						185	8	143	251	3 0L	83 667
720	586	685	21 15 1	34 1 31	NO						88	17	23	694	10 0C	69 400
721	588	691	21 15 1	34 2 2	NO						52	6	18	169	3 7C	45 676
722	621	273	21 15 3	42 26 30	50671?	-0 26	-1 53	B8	6 09	8 00	161	5	129	137 L	3 0L	45 667
723	654	49	21 15 9	46 44 32	50666?	-0 3	10 26	A2	8 70	8 80	215	26	32	1937 H	10 0C	193 700
724	609	398	21 15 10	39 49 8	71156	0 3	0 20	A0	8 50	8 50	74	10	20	365	10 0C	36 500
725	623	247	21 15 11	42 57 48	50654	-0 0	-1 13	A3	8 70	8 70	172	10	131	292 H	3 0L	97 333
726	652	59	21 15 11	46 33 25	50656	-0 1	-0 41	A2	8 70	8 80	50	10	21	254	10 0C	25 400
727	627	249	21 15 11	42 57 26	50654	-0 1	-1 35	A3	8 70	8 70	70	9	19	317 H	3 7C	85 676
728	624	242	21 15 12	42 58 3	50664	0 0	-0 58	A3	8 70	8 70	132	23	26	1183 H	10 0C	118 300
729	595	60	21 15 16	46 35 47	50656	0 5	1 41	A2	8 70	8 80	52	6	23	136	3 0C	45 333
730	579	731	21 15 18	33 7 4	71161	-0 4	2 54	A2	9 00	9 20	72	16	21	525	10 0C	52 500
731	568	245	21 15 20	42 58 53	50664	0 9	-0 8	A3	8 70	8 70	58	8	16	244	3 0C	81 333
732	595	537	21 15 23	36 59 25							52	10	18	264?	10 0C	26 400
733	643	96	21 15 28	45 49 56	50672	-0 4	-1 53	B9	8 50	8 30	65	22	23	651	10 0C	65 100
734	621	271	21 15 30	42 26 9	50671	0 0	-2 14	B8	6 09	00	245	43	60	3050	1 0L	3050 000
735	605	432	21 15 31	39 10 31	71165	0 4	-0 23	A0	6 28	00	174	24	63	1206 L	1 0L	1206 000
736	617	273	21 15 31	42 26 5	50671	0 1	-2 18	B8	6 09	00	383	78	129	5831	3 0L	1943 667
737	621	274	21 15 32	42 26 60	50671	0 3	-1 23	B8	6 09	00	300	66	20	5310	3 7C	1435 135
738	606	435	21 15 32	39 11 26	71165	0 5	0 23	A0	4 28	00	217	45	17	3133 L	3 7C	846 757
739	613	275	21 15 34	42 26 38	50671	0 4	-1 45	B8	6 03	00	74	15	23	486	2L	1944 000
740	597	436	21 15 35	39 10 56	71165	0 8	-0 7	A0	4 28	00	53	4	25	95 L	2L	380 000
741	600	434	21 15 35	39 10 19	71165	0 8	-0 45	A0	4 28	00	327	36	132	2705 L	3 0L	991 667
742	603	429	21 15 35	39 10 52	71165	0 8	-0 12	A0	4 28	00	341	79	21	7198 L	10 0C	719 800
743	618	267	21 15 40	42 27 32	50671	0 11	-0 50	B8	6 09	00	378	128	25	1172?	10 0C	1172 700
744	547	432	21 15 41	39 12 46	71165	0 14	1 43	A0	4 28	00	186	35	16	2398 L	3 0C	799 333
745	577	655	21 15 46	34 42 55	71173	-0 5	1 45	B3	4 42	00	454	340	140?	4052 L	3 0L	13507 333
746	582	653	21 15 47	34 41 53	71173	-0 5	0 43	B3	4 42	00	414	212	70	19328	1 0L	19328 000
747	582	649	21 15 47	34 43 42	71173	-0 5	2 32	B3	4 42	00	459	504	30	69627 L	10 0C	6962 700
748	562	270	21 15 49	42 29 34	50671	0 19	1 12	B8	6 59	00	269	58	17	4328	3 0C	1442 667
749	574	657	21 15 51	34 43 33	71173	-0 0	2 23	B3	4 42	00	290	66	28	5325	3 0L	21300 000
750	619	238	21 15 51	43 8 30							161	6	128	158?	3 0L	614 000
751	498	886	21 15 53	30 9 7	71174	0 1	2 19	B5	7 80	7 56	114	37	17	1842	3 0C	52 667
752	583	656	21 15 53	34 44 5	71173	0 2	2 55	B3	4 42	00	433	314	21	39108	3 7C	10299 459
753	525	682	21 15 56	34 45 24	71173	0 4	4 14	B3	4 42	00	426	288	18	32388	3 0C	10799 333
754	553	886	21 15 57	30 6 36	71174	0 6	-0 12	B5	7 80	7 56	113	25	63	774	1 0L	774 000
755	556	890	21 15 57	30 6 35	71174	0 5	-0 13	B5	7 80	7 56	139	43	20	2313 L	3 7C	625 135
756	547	887	21 15 58	30 7 32	71174	0 6	0 44	B5	7 80	7 56	242	49	25	2698	3 0L	899 333
757	554	883	21 15 58	30 7 14	71174	0 6	0 26	B5	7 80	7 56	260	60	22	6627	10 0C	662 700
758	592	457	21 16 8	38 41 54	71178	0 0	0 18	9 30	9 60	157	5	130	118	3 0L	39 333	
759	595	452	21 16 9	38 42 31	71178	0 1	0 58	9 30	9 60	74	30	19	989	10 0C	98 900	
760	648	57	21 16 11	46 38 43	50681	-0 5	-0 7	B9	7 00	00	93	28	54	793	1 0L	793 000
761	644	54	21 16 12	46 38 51	50681	-0 4	0 4	B9	7 00	00	294	112	23	9486 H	10 0C	948 600
762	647	51	21 16 14	46 38 20	50681	-0 2	-0 26	B9	7 00	00	146	61	18	3512 H	3 7C	949 189
763	587	67	21 16 16	46 38 43	50681	0 1	-0 4	B9	7 00	00	115	54	18	2588 H	3 0C	862 667
764	644	59	21 16 17	46 39 41	50681	0 1	-0 6	B9	7 00	00	230	72	19	3989 H	3 0L	132? 667
765	642	64	21 16 21	46 36 27	50681?	0 5	-6 20	B9	7 00	00	151	4	123	104 L	3 0L	34 667
766	612	297	21 16 21	41 53 37	50680	0 7	-2 5	A0	8 40	8 20	58	10	16	307	3 7C	82 973
767	609	290	21 16 23	41 59 17	50680	0 8	-1 25	A0	8 40	8 20	112	19	22	922	10 0C	92 200
768	589	500	21 16 25	37 44 3	71172?	0 35	-6 35	9 00	9 50	52	6	17	175?	10 0C	17 500	
769	607	295	21 16 26	41 59 47	50680	0 11	-1 55	A0	8 40	8 20	162	7	130	185	3 0L	61 667
770	553	293	21 16 31	42 1 16	50680	0 17	0 34	A0	8 40	8 20	48	5	14	141	3 0C	47 000
771	620	207	21 16 32	43 41 46	50690	-0 3	-2 19	0	5 06	00	419	161	62	16515	1 0L	16515 000
772	620	211	21 16 32	43 41 26	50690	-0 3	-2 39	0	5 06	00	427	237	24	25051 L	3 7C	6770 541
773	582	568	21 16 35	36 23 33	71191	-0 7	0 5	A0	8 40	8 30	103	10	64	290	1 0L	290 000
774	612	212	21 16 36	43 42 17	50690	0 1	-1 48	0	5 06	00	246	61	23	4780	2L	18800 000
775	577	570	21 16 36	36 24 33	71191	-0 5	1 5	A0	8 40	8 30	230	19	136	915 H	3 0L	305 000
776	581	565	21 16 38	36 24 4	71191	-0 4	0 37	A0	8 40	8 30	191	39	21	2442 H	10 0C	244 200
777	616	204	21 16 39	43 41 58	50690	0 4	-2 7	0	5 06	00	453	399	35	48507 L	10 0C	4850 700
778	583	572	21 16 39	36 24 31	71191	-0 3	1 4	A0	8 40	8 30	100	19	16	832 H	3 7C	224 855
779	615	210	21 16 41	43 40 20	50690	0 6	-3 4									

NRL REPORT 8173

CYGNUS RA 21 24 DEC +37 30

OBJECT NO	X	Y	R A	DEC	SAO NO	Δ R A	Δ DEC	SPEC TYPE	V MAG	P MAG	PEAK DEN	NO OF POINTS	RG	DENSITY VOLUME	EXP & FILTER	DEN VOL/ EXP
801	581	485	21 17 23	38 0 52	NO						140	29	17	1674	10 0C	167 400
802	577	490	21 17 26	38 1 15							165	14	128	532 [?]	3 0L	177 333
803	525	489	21 17 28	38 3 57	NO						52	12	13	409	3 0C	136 333
804	588	385	21 17 41	40 3 21	50711	0 6	-0 42		8 80	9 00	60	6	18	165	10 0C	16 500
805	605	247	21 17 42	42 57 48							66	35	18	1132 [?]	3 7C	305 946
806	612	163	21 17 50	44 25 44	50716	-0 2	-2 21		9 00	9 60	64	9	26	270	10 0C	27 000
807	800	231	21 18 5	43 15 9							202	15	132	567 [?]	3 0L	189 000
808	546	724	21 18 7	33 18 11	71220	-0 8	1 49	A0	8 84	0 0	195	16	137	556	3 0L	185 333
809	946	724	21 18 7	33 18 11	71228 [?]	-0 32	4 8		8 80	9 40	195	16	137	556	3 0L	185 333
810	551	722	21 18 9	33 18 30	71220	-0 6	2 8	A0	8 84	0 0	93	6	64	144 L	1 0L	144 000
811	553	726	21 18 10	33 18 26	71220	-0 5	2 4	A0	8 84	0 0	87	17	16	685	3 7C	187 838
812	553	726	21 18 10	33 18 26	71228 [?]	-0 29	4 23		8 80	9 40	87	17	16	685	3 7C	187 838
813	454	994	21 18 11	27 52 51							66	29	17	1095 [?]	3 0C	365 000
814	551	719	21 18 11	33 19 15	71220	-0 4	2 53	A0	8 84	0 0	158	38	21	2202	10 0C	220 200
815	495	722	21 18 13	33 21 1	71220	-0 2	4 38	A0	8 84	0 0	70	15	14	518	3 0C	172 657
816	611	147	21 18 13	44 48 7							72	17	22	558 [?]	10 0C	55 800
817	586	240	21 18 55	43 5 29							45	10	21	211 [?]	3 7C	67 027
818	531	777	21 18 57	32 15 28	71237 [?]	-0 19	-8 30	A0	6 03	0 0	183	9	132	310 [?]	3 0L	103 333
819	538	769	21 19 13	32 26 55	71237	-0 2	2 57	A0	6 03	0 0	80	18	20	596 L	3 7C	161 001
820	530	767	21 19 14	32 26 27	71237	-0 2	2 29	A0	6 03	0 0	176	11	132	340 L	3 0L	113 333
821	536	763	21 19 14	32 26 29	71237	-0 1	2 32	A0	6 03	0 0	135	37	20	1915 L	10 0C	191 500
822	460	765	21 19 16	32 29 30	71237 [?]	0 1	5 32	A0	6 03	0 0	60	13	15	405 L	3 0C	135 000
823	607	112	21 19 22	45 28 12	50750	-0 4	-2 34	A	8 80	9 10	51	9	22	216	10 0C	21 600
824	558	514	21 19 35	37 24 29	71241	-0 2	-0 4		9 20	9 40	47	6	17	148	10 0C	14 800
825	611	61	21 19 51	46 27 16	50751	0 20	-3 41	A2	6 71	0 0	56	7	22	178 L	10 0C	17 000
826	586	249	21 19 52	42 54 33	50750	-0 0	-1 17	A0	8 20	8 00	47	4	19	95 L	3 7C	25 676
827	583	242	21 19 59	42 55 10	50758	0 8	-0 40	A0	8 20	8 00	86	15	29	504	10 0C	50 400
828	526	246	21 20 15	42 55 38	50758	0 23	-0 12	A0	8 20	8 00	37	4	15	85 L	3 0C	28 333
829	542	567	21 20 17	36 25 26	71255	-0 8	-0 5	A0	8 40	8 20	169	7	136	184	3 0L	61 333
830	546	562	21 20 19	36 25 25	71255	-0 7	-0 6	A0	8 40	8 20	100	19	24	775	10 0C	77 500
831	548	568	21 20 21	36 27 1	71255	-0 5	1 30	A0	8 40	8 20	52	7	18	186	3 7C	50 270
832	489	565	21 20 29	36 28 16	71255	0 4	2 45	A0	8 40	8 20	44	4	15	100	3 0C	33 333
833	554	470	21 20 43	38 25 47	71266	-0 4	0 35	A0	8 45	0 0	69	12	17	406 L	3 7C	109 730
834	548	469	21 20 45	38 24 10	71266	-0 2	-1 1	A0	6 45	0 0	172	11	129	332 L	3 0L	110 667
835	551	464	21 20 47	38 25 21	71266	-0 0	0 9	A0	6 45	0 0	134	28	18	1464 L	10 0C	146 400
836	560	363	21 20 58	40 27 59	50772	0 4	-0 59	B5	7 40	7 30	271	59	20	4622	10 0C	462 200
837	495	467	21 20 59	38 26 56	71266	0 12	1 44	A0	6 45	0 0	65	10	15	335 L	3 0C	111 667
838	524	668	21 21 3	34 22 50							190	10	141	329 [?]	3 0L	109 667
839	562	369	21 21 3	40 29 34	50772	0 9	0 37	B5	7 40	7 30	150	30	19	1693 L	3 7C	467 568
840	561	366	21 21 4	40 28 22	50772 [?]	0 11	-0 36	B5	7 40	7 30	137	22	62	898	1 0L	898 000
841	557	367	21 21 4	40 29 18	50772	0 10	0 20	B5	7 40	7 30	288	30	134	2034	3 0L	678 000
842	580	185	21 21 7	44 1 48	50760	-0 0	-2 35	B	8 70	9 00	51	4	24	105	10 0C	10 500
843	503	366	21 21 13	40 30 50	50772	0 19	1 53	B5	7 40	7 30	125	26	15	1299	3 0C	433 000
844	534	547	21 21 19	36 48 18	71277	-0 7	-0 29		9 10	9 10	165	5	134	124	3 0L	41 333
845	540	549	21 21 21	36 48 43	71277	0 5	-0 7		9 10	9 10	46	5	17	125	3 7C	33 784
846	551	432	21 21 22	39 6 57	71273	0 4	-1 4	B9	7 90	7 40	94	7	62	180 L	1 0L	180 000
847	552	435	21 21 23	39 8 10	71273	0 5	0 6	B9	7 90	7 40	98	16	16	692	3 7C	187 027
848	538	542	21 21 26	36 49 33	71277	-0 0	0 45		9 10	9 10	85	15	21	577	10 0C	57 700
849	546	433	21 21 27	39 7 45	71273	0 9	-0 19	B9	7 90	7 40	203	15	130	632	3 0L	210 667
850	549	428	21 21 27	39 9 0	71273	0 8	0 56	B9	7 90	7 40	184	32	19	2059	10 0C	205 900
851	493	431	21 21 33	39 10 41	71273	0 15	2 37	B9	7 90	7 40	75	12	15	465	3 0C	155 000
852	525	634	21 21 44	34 57 42	71282	-0 10	0 38	A0	8 20	9 10	110	25	19	1188	10 0C	118 800
853	525	634	21 21 44	34 57 42	71284 [?]	-0 24	9 2	A2	8 10	8 00	110	25	19	1188	10 0C	118 800
854	527	640	21 21 45	34 59 16	71282	-0 9	2 12	A0	8 20	9 10	62	9	16	299	3 7C	80 811
855	520	638	21 21 46	34 58 41	71282	-0 8	1 37	A0	8 20	9 10	192	10	140	342	3 0L	114 000
856	468	637	21 21 54	35 0 31	71282	0 0	3 27	A0	8 20	9 10	50	6	14	177	3 0C	59 000
857	487	452	21 21 59	38 44 51							48	13	14	364 [?]	3 0C	121 333
858	588	43	21 22 0	46 51 30	50792 [?]	-0 1	-5 7	B2	7 40	7 40	177	8	122	273 L	3 0L	91 000
859	598	43	21 22 0	46 51 50	50801 [?]	-0 2	-7 36	A	8 90	8 90	177	8	122	273	3 0L	91 000
860	598	35	21 22 4	46 56 10	50792	0 23	-0 46	B2	7 40	7 40	73	34	22	1193 [?]	10 0C	119 300
861	524	576	21 22 9	38 13 6							164	4	136	92	3 0L	30 667
862	542	437	21 22 16	38 56 53	NO						85	34	32	1175	10 0C	117 500
863	529	658	21 22 14	36 18 57	NO						48	10	18 [?]	251	3 7C	67 946
864	529	574	21 22 16	36 18 29	NO						48	10	18	251	3 7C	67 946
865	506	705	21 22 25	33 38 6	71300	-0 6	2 42	A0	8 40	8 90	7	141	182	3 0L	60 667	
866	511	701	21 22 28	33 37 11	71300	-0 4	1 48	A0	8 40	8 90	91	22	23	834	10 0C	83 400
867	511	701	21 22 28	33 37 11	71307 [?]	-0 27	8 54	A3	8 00	8 60	91	22	23	834	10 0C	83 400
868	513	707	21 22 28	33 38 45	71300	-0 3	3 22	A0	8 40	8 90	49	7	17	178	3 7C	48 100
869	562	226	21 22 33	43 12 45	50805	0 1	-0 52	A	8 80	9 00	85	18	23	641	10 0C	64 100
870	454	704	21 22 38	33 40 1	71300	0 5	4 38	A0	8 40	8 90	40	4	15	96 L	3 0C	32 000
871	507	655	21 22 55	34 36 55	NO						193	12	140	431	3 0L	143 667
872	512	651	21 22 55	34 37 20	NO						119	30	19	1435	10 0C	143 500
873	514	657	21 22 56	34 37 37	NO						63	13	15	424	3 7C	114 595
874	431	840	21 23 2	30 57 14							51	6	16	159 [?]	3 0C	53 000
875	455	854	21 23 4	34 38 53	71284	0 56	-9 46	A2	8 10	8 80	54	8	15	228	3 0C	76 000
876	553	238	21 23 24	43 3 9							159	6	127	157 [?]	3 0L	52 333
877	498	716	21 23 32	33 19 29	71326	-0 9	3 34		8 10	8 40	62	12	19	365	10 0C	36 500
878	515	999	21 23 35	36 26 49	71313 [?]	0 21	-1 32	A5	8 50	8 50	415	203	24	20936 H	10 0C	2093 600
879	515	999	21 23 35	36 26 49	71329	-0 10	-0 13	B0	5 84	0 50	415	203	24	20936 L	10 0C	2093 600
880	517	565	21 23 37	36 28 19	71313 [?]	0 24	-0 2	A5	8 50	8 50	369	110	22</			

PAGE, CARRUTHERS AND HILL

ORIGINAL PAGE IS
OF POOR QUALITY

CYGNUS RA 21 24 DEC +37 30

OBJECT NO	X	Y	R A	DEC	SAO NO	Δ R A	Δ DEC	SPEC TYPE	V MAG	P MAG	PEAK DEN	NO OF POINTS	BG	DENSITY VOLUME	EXP & FILTER	DEN VOL / EXP	
901	547	213	21 24	57	43 34 29	50859	0 5	-1 12	B9	7 30	7 50	63	9	17	291 L	3 7C	78 649
902	533	278	21 24	58	42 13 23	50861	0 5	-1 30	A	8 60	8 70	153	7	125	169	3 0L	55 000
903	543	211	21 24	59	43 33 58	50859	0 7	-1 42	B9	7 30	7 50	153	9	125	204 L	3 0L	69 000
904	537	280	21 24	60	42 13 53	50861	0 7	-0 60	A	8 60	8 70	52	6	16	161	3 7C	43 514
905	535	273	21 25	1	42 14 45	50861	0 8	-0 8	A	8 60	8 70	96	17	20	760	10 0C	76 000
906	486	209	21 25	7	43 35 39	50859	0 15	-0 2	B9	7 30	7 50	54	7	17	192 L	3 0C	64 000
907	538	235	21 25	12	42 59 52	50868	0 6	-0 56	A0	7 70	7 60	64	10	19	315 L	10 0C	31 500
908	503	539	21 25	15	36 52 45	71358	-0 4	-1 10	B3	5 20	0 0	350	91	68	6997	1 0L	6997 000
909	502	536	21 25	17	36 53 58	71358	-0 2	0 3	B3	5 20	0 0	427	277	22	30315	10 0C	3031 600
910	504	542	21 25	19	36 54 10	71358	-0 2	0 15	B3	5 20	0 0	391	157	19	14455 L	3 7C	3905 757
911	495	543	21 25	20	36 54 25	71358	0 1	0 29	B3	5 20	0 0	184	27	32	1660	2L	6640 000
912	497	540	21 25	23	36 53 15	71358	0 4	-0 41	B3	5 20	0 0	418	172	141	14471 L	3 0L	4823 667
913	445	539	21 25	27	36 55 25	71358	0 9	1 29	B3	5 20	0 0	378	134	16	12132	3 0C	4044 000
914	510	392	21 25	38	39 58 9							87	15	28	545?	2L	2180 000
915	562	70	21 25	53	46 19 31	50890	-0 11	-1 4	B5	6 88	0 0	269	95	19	6956	3 7C	1800 000
916	559	68	21 25	55	46 19 2	50890	-0 9	-1 33	B5	6 88	0 0	352	128	123	9536 H	3 0L	3212 000
917	563	66	21 25	56	46 19 20	50890	-0 8	-1 15	B5	6 88	0 0	142	60	54	2753 H	1 0L	2753 000
918	559	64	21 25	57	46 18 54	50890	-0 7	-1 41	B5	6 88	0 0	400	131	28	14899 H	10 0C	1489 000
919	460	816	21 25	60	31 20 17							105	14	60	461?	1 0L	461 000
920	502	67	21 26	11	45 21 42	50890	0 7	1 7	B5	6 88	0 0	214	72	16	5393 H	3 0C	1797 667
921	439	916	21 26	21	29 16 19	89747?	-0 58	6 25	A2	8 90	8 61	50	7	21	163?	10 0C	16 800
922	448	435	21 26	22	39 1 13							40	4	12	100?	3 0C	33 333
923	555	58	21 26	31	46 25 45	50911	-0 9	-1 33		9 20	9 60	87	30	28	1135	10 0C	113 500
924	521	275	21 26	35	42 11 42							49	4	19	108?	10 0C	10 800
925	465	740	21 26	36	32 47 50	71377	-0 9	4 11	B9	8 30	8 30	51	9	25	244 L	10 0C	24 400
926	517	302	21 26	37	41 38 51	50906	0 6	-0 35	A0	8 00	8 30	74	13	19	483 L	10 0C	48 300
927	465	681	21 26	48	34 2 28	71383	-0 13	2 49	A5	8 30	8 50	199	14	139	540 H	3 0L	180 000
928	470	680	21 26	49	34 1 53	71383?	-0 12	2 14	A5	8 30	8 50	95	4	67	94	1 0L	94 000
929	472	664	21 26	50	34 2 17	71383	-0 11	2 38	A5	8 30	8 50	74	15	16	926 H	3 7C	142 162
930	470	677	21 26	56	34 3 13	71383	-0 9	3 35	A5	8 30	8 50	124	31	22	1551 H	10 0C	156 100
931	413	680	21 27	4	34 3 27	71383	-0 6	3 49	A5	8 30	8 50	55	12	15	338 H	3 0C	112 667
932	534	148	21 27	8	44 41 46	50925	-0 3	-0 27	B8	6 90	0 0	83	20	20	734 L	10 0C	73 400
933	536	155	21 27	15	44 40 47	50925	-0 2	-1 26	B8	6 90	0 0	42	5	15	122 L	3 7C	32 973
934	531	180	21 27	16	44 6 47	50930	-0 5	-0 20	B2	7 52	0 0	154	34	56	1669	1 0L	1669 000
935	548	83	21 27	17	46 4 17	50935?	-0 28	-8 8	A3	6 77	0 0	46	4	17	109?L	3 7C	29 459
936	488	442	21 27	19	38 55 2							13	25	25	355?	2L	1420 000
937	527	182	21 27	19	44 6 15	50930	-0 2	-0 52	B2	7 52	0 0	325	58	122	4223	3 0L	1407 667
938	527	178	21 27	22	44 6 28	50930	0 1	-0 39	B2	7 52	0 0	349	73	22	781	10 0C	781 000
939	530	185	21 27	22	44 5 36	50930	0 1	-1 31	B2	7 52	0 0	225	42	17	3894 L	3 7C	836 216
940	552	31	21 27	26	46 58 40							57	34	22	905?	10 0C	90 600
941	471	181	21 27	39	44 7 46	50930	0 18	0 39	B2	7 52	0 0	193	37	14	2556	3 0C	852 000
942	482	748	21 27	48	32 39 35	71397	-0 3	4 11	B8	7 80	7 70	152	22	63	1050 H	1 0L	1050 000
943	454	753	21 27	49	32 38 48	71397	-0 1	3 24	B8	7 80	7 70	170	43	19	2490	3 7C	672 973
944	448	750	21 27	50	32 38 44	71397	0 19	6 35	B8	7 80	7 70	305	37	134	2240 H	3 0L	746 667
945	446	750	21 27	50	32 38 44	71397	0 19	6 35	B8	7 80	7 70	305	37	134	2240 H	3 0L	746 667
946	452	746	21 27	51	32 38 44	71397	0 0	4 29	B8	7 80	7 70	304	70	23	6144	10 0C	614 400
947	468	616	21 27	53	35 15 29	71402	-0 9	0 21	A0	7 17	0 0	83	22	18	890 L	10 0C	89 000
948	479	621	21 27	54	35 16 52	71402	-0 7	1 44	A0	7 17	0 0	47	6	15	156 L	3 7C	42 162
949	447	776	21 27	56	32 4 28	71391?	0 27	7 6	9 00	9 60	46	6	19	149	10 0C	14 900	
950	447	776	21 27	56	32 4 28	71399	0 6	4 22	8 70	9 10	46	6	19	149	10 0C	14 900	
951	395	749	21 27	57	32 10 10	71397	0 7	4 46	B8	7 60	7 70	149	32	17	1813 H	3 0C	604 333
952	534	125	21 27	58	45 14 56	50942	-0 11	-1 31	B5	6 96	0 0	213	43	19	3259 L	3 7C	880 811
953	535	120	21 28	1	45 15 55	50942	-0 8	-0 32	B5	6 96	0 0	118	30	55	1126	1 0L	1126 000
954	426	901	21 28	2	29 40 21	89757	0 5	0 8	A0	8 30	7 95	41	4	17	91 L	3 7C	24 595
955	531	118	21 28	4	45 15 38	50942	-0 5	-0 49	B5	6 96	0 0	363	83	22	8301 L	10 0C	830 100
956	531	122	21 28	5	45 15 22	50942	-0 3	-1 5	B5	6 96	0 0	288	67	118	4391	3 0L	1463 667
957	463	635	21 28	5	34 52 23	71407	-0 11	1 56	A0	8 40	8 50	107	27	19	1209	10 0C	120 900
958	458	639	21 28	6	34 51 19	71407	-0 11	0 52	A0	8 40	8 50	182	8	139	251	3 0L	83 667
959	465	641	21 28	6	34 52 30	71407	-0 11	2 4	A0	8 40	8 50	58	9	17	264	3 7C	71 351
960	424	894	21 28	11	29 41 12	89757	0 14	0 60	A0	8 30	7 95	55	16	19	443	10 0C	44 300
961	475	121	21 28	17	45 18 17	50942	0 8	1 50	B5	6 96	0 0	172	44	16	2749	3 0C	916 333
962	406	638	21 28	20	34 52 25	71407	0 3	1 58	A0	8 40	8 50	50	6	16	159	3 0C	53 000
963	469	536	21 28	23	36 55 26							171	4	134	120?	3 0L	40 000
964	483	443	21 28	25	38 45 35							47	5	17	134?	10 0C	13 400
965	454	695	21 28	32	33 47 18	71404	0 25	1 0	A3	8 50	9 00	74	48	16	1848 H	3 7C	499 459
966	472	527	21 28	39	37 4 41	NO						98	5	62	146	1 0L	146 000
967	467	528	21 28	41	37 5 10							205	10	135	416?	3 0L	138 667
968	423	859	21 28	50	30 22 47	71416	0 6	2 16	A2	8 50	8 23	47	5	20	124 L	10 0C	12 400
969	469	514	21 28	59	37 17 11							45	4	19	94?	10 0C	9 400
970	505	241	21 29	15	42 52 35	50962	0 8	-0 33	B9	8 20	8 50	92	9	57	239	1 0L	239 000
971	501	243	21 29	17	42 51 57	50962	0 9	-1 10	B9	8 20	8 50	202	24	123	1006	3 0L	335 333
972	50P	238	21 29	17	42 52 33	50962	0 9	-0 35	B9	8 20	8 50	179	30	21	2090	10 0C	209 000
973	505	245	21 29	17	42 52 50	50962	0 9	-0 17	B9	8 20	8 50	100	18	16	759	3 7C	205 135
974	493	323	21 29	19	41 18 3	50966	0 4	-1 1	B9	8 20	8 60	74	11	17	407	3 7C	110 000
975	490	316	21 29	21	41 19 3	50966	0 6	-0 2	B9	8 20	8 60	136	26	20	1363	10 0C	136 300
976	508	192	21 29	23	43 47 44	50968	0 5	-0 23	A2	8 20	8 60	59	10	19	304	10 0C	30 400
977	488	320	21 29	24	41 19 31	50966	0 8	0 27	B9	8 20	8 60	187	17	128	635	3 0L	211

NRL REPORT 8173

CYGNUS RA 21 24 DEC +37 30

OBJECT NO	X	Y	R A	DEC	SAO NO	Δ R A	Δ DEC	SPEC TYPE	V MAG	P MAG	PEAK DEN	NO OF POINTS	BO	DENSITY VOLUME	EXP & FILTER	DEN VOL / EXP
1001	471	326	21 31 21	41 5 2	51022	0 6	-0 9		8 90	8 80	82	15	18	568	10 0C	55 800
1002	440	589	21 31 21	35 5 23							44	4	16	937	3 7C	25 135
1003	469	330	21 31 22	41 5 17	51022	0 7	0 5		8 90	8 80	156	5	129	119	3 0L	39 333
1004	397	852	21 31 30	30 27 41							39	4	17	877	10 0C	8 700
1005	504	113	21 31 32	45 23 18							150	9	119	2267	3 0L	75 333
1006	454	469	21 31 33	38 17 19	71461	-0 0	-0 58	B9	8 00	00	141	23	18	1298	3 7C	350 811
1007	419	729	21 31 34	33 3 43	71465	-0 6	4 13	A0	7 70	7 80	47	6	17	152 L	3 7C	41 081
1008	448	467	21 31 35	38 15 57	71461	0 1	-2 20	B9	8 00	00	261	22	130	1345 H	3 0L	448 333
1009	411	726	21 31 36	33 3 17	71465	-0 3	3 48	A0	7 70	7 80	163	6	131	155	3 0L	51 667
1010	451	463	21 31 36	38 17 9	71461	0 3	-1 8	B9	8 00	00	250	47	20	3703	10 0C	370 300
1011	481	243	21 31 37	42 44 30	51029	0 8	-0 27	A0	8 20	8 10	146	25	20	1444	10 0C	144 400
1012	452	465	21 31 38	38 16 41	71461	0 5	-1 36	B9	8 00	00	124	14	62	541	1 0L	541 000
1013	350	726	21 31 41	33 3 53	71465	0 2	4 23	A0	7 70	7 80	42	4	14	97 L	3 0C	32 333
1014	417	723	21 31 41	33 3 31	71465	0 1	4 2	A0	7 70	7 80	85	20	18	812	10 0C	81 200
1015	395	466	21 31 42	38 18 29	71461	0 8	0 12	B9	8 00	00	113	22	14	1087 H	3 0C	362 333
1016	459	393	21 31 43	39 43 23	71464	0 5	0 18	B9	8 80	8 90	129	25	18	1306	10 0C	130 660
1017	463	250	21 31 43	42 44 35	51029	0 11	-0 22	A0	8 20	8 10	76	11	18	399	3 7C	107 839
1018	479	247	21 31 44	42 44 44	51029	0 12	-0 14	A0	8 20	8 10	168	11	121	353	3 0L	117 667
1019	456	397	21 31 46	39 42 9	71464	0 7	-0 55	B9	8 80	8 90	189	10	133	356	3 0L	118 667
1020	456	397	21 31 46	39 42 9	71471	-0 28	5 50		9 20	9 50	189	10	133	356	3 0L	118 667
1021	461	400	21 31 47	39 42 9	71464	0 8	-0 56	B9	8 80	8 90	66	11	15	368	3 7C	99 459
1022	424	246	21 31 53	42 45 34	51029	0 21	0 37	A0	8 20	8 10	62	9	14	306	3 0C	102 000
1023	451	439	21 31 54	38 45 58							58	6	17	172	10 0C	17 200
1024	402	398	21 31 56	39 43 15	71464	0 17	0 10		8 80	8 90	54	9	14	265	3 0C	88 333
1025	402	396	21 31 56	39 43 15	71471	-0 18	6 55		9 20	9 50	54	9	14	265	3 0C	88 333
1026	430	596	21 32 1	35 35 8	71470	-0 11	3 6	A2	7 80	8 30	53	9	18	250	10 0C	25 000
1027	350	757	21 32 13	32 25 15							41	8	14	197	3 0C	65 667
1028	503	94	21 32 25	45 48 3	51041	-0 3	1 43	B9	8 70	8 00	94	32	18	1308 H	3 7C	353 514
1029	500	91	21 32 26	45 48 14	51041	-0 1	1 55	B9	8 70	8 00	180	40	118	1407	3 0L	469 000
1030	500	88	21 32 30	45 47 35	51041	0 2	1 15	B9	8 70	8 00	182	53	21	3755 H	10 0C	375 500
1031	394	761	21 32 37	32 24 2							51	10	24	239	2L	952 000
1032	444	91	21 32 39	45 43 50	51041	0 11	-2 30	B9	8 70	8 00	71	25	15	947 H	3 0C	315 667
1033	444	91	21 32 39	45 43 50	51045	0 4	8 44		8 90	9 50	71	25	15	947 H	3 0C	315 667
1034	387	450	21 32 45	38 36 1							40	12	12	283	3 0C	94 333
1035	466	258	21 33 1	42 26 13	51055	0 2	0 59		9 10	9 30	78	15	19	553	10 0C	55 300
1036	386	795	21 33 2	31 38 54	71483	0 9	5 17	A0	7 21	00	180	18	124	631	3 0L	210 333
1037	335	796	21 33 2	31 37 25	71483	0 9	3 48	A0	7 21	00	63	16	20	451	3 0C	150 333
1038	394	799	21 33 2	31 38 14	71483	0 9	4 38	A0	7 21	00	76	17	18	598	3 7C	161 622
1039	392	792	21 33 4	31 39 26	71483	0 12	5 50	A0	7 21	00	136	45	24	2069	10 0C	206 900
1040	468	265	21 33 6	42 24 60	51055	0 7	-0 14		9 10	9 30	44	4	16	94	3 7C	25 405
1041	509	35	21 33 7	46 55 27	51057	-0 3	3 29	A0	8 20	7 70	62	25	17	785	3 7C	212 162
1042	506	32	21 33 11	46 55 34	51057	0 2	3 35	A0	8 20	7 70	19	121	482	3 0L	160 667	
1043	506	28	21 33 11	46 56 11	51057	0 2	4 12	A0	8 20	7 70	126	58	21	2993 H	10 0C	299 300
1044	478	198	21 33 13	43 44 16							53	8	15	244	3 7C	65 946
1045	475	207	21 33 15	43 28 38	51058	0 3	-0 8	B9	6 70	00	223	43	58	2674	1 0L	2674 000
1046	475	212	21 33 15	43 27 51	51058	0 2	-0 55	B9	6 70	00	262	54	18	4458	3 7C	1204 865
1047	472	205	21 33 16	43 28 53	51058	0 3	0 7	B9	6 70	00	384	107	22	9773	10 0C	977 300
1048	471	209	21 33 17	43 27 51	51058	0 5	-0 55	B9	6 70	00	374	67	125	5677 H	3 0L	1892 333
1049	467	211	21 33 20	39 29 4	51058	0 7	0 18	B9	6 70	00	57	10	23	269	2L	1076 000
1050	381	447	21 33 25	39 29 50							49	17	13	470	3 0C	156 667
1051	500	46	21 33 25	46 34 50							49	9	22	2167	10 0C	21 600
1052	449	31	21 33 27	46 49 50	51057	0 18	-2 9	A0	8 20	7 70	50	16	17	419 H	3 0C	139 667
1053	421	662	21 33 27	36 13 42	71492	-0 4	-0 87		9 10	9 20	46	6	17	143	10 0C	14 300
1054	387	796	21 33 31	31 33 44	71483	0 38	0 7	A0	7 21	00	68	15	19	465 L	10 0C	48 500
1055	416	208	21 33 32	42 28 36	51059	0 19	-0 10	B9	6 70	00	256	46	15	3701 H	3 0C	1233 667
1056	307	898	21 33 33	29 31 26	89826	0 0	0 9	B	8 40	7 74	103	42	15	1983	3 0C	661 000
1057	357	898	21 33 39	29 31 7	89826	0 6	-0 9	B	8 40	7 74	226	54	118	2874	3 0L	958 000
1058	366	901	21 33 39	29 31 55	89826	0 6	0 39	B	8 40	7 74	121	49	18	2476	3 7C	669 189
1059	363	896	21 33 40	29 32 11	89826	0 6	0 54	B	8 40	7 74	102	25	58	779	1 0L	779 000
1060	364	895	21 33 42	29 31 51	89826	0 9	0 34	B	8 40	7 74	240	84	22	6711	10 0C	671 100
1061	429	501	21 33 42	37 36 0	71499	-0 7	-0 21		8 60	8 70	91	33	16	1426	3 7C	395 405
1062	429	501	21 33 42	37 36 0	71504	-0 24	-3 6	A0	8 20	8 00	91	33	16	1426	3 7C	395 405
1063	427	497	21 33 46	37 35 15	71499	-0 3	-1 6		8 60	8 70	106	10	63	309	1 0L	309 000
1064	422	499	21 33 48	37 34 16	71499	-0 1	-2 6		8 60	8 70	215	28	132	1299 H	3 0L	433 000
1065	422	499	21 33 48	37 34 16	71504	-0 18	-4 50	A0	8 20	8 00	215	28	132	1299 H	3 0L	433 000
1066	426	495	21 33 52	37 35 44	71499	0 3	-0 37		8 60	8 70	194	54	20	3944 H	10 0C	394 400
1067	426	495	21 33 52	37 35 44	71504	-0 14	-3 22	A0	8 20	8 00	194	54	20	3944 H	10 0C	394 400
1068	378	498	21 33 56	37 35 46	71499	0 7	-0 35		8 60	8 70	82	29	16	1038	3 0C	346 000
1069	370	498	21 33 56	37 35 46	71504	-0 10	-3 20	A0	8 20	8 00	82	29	16	1038 H	3 0C	346 000
1070	473	150	21 34 14	44 32 49	51088	-0 5	0 32		9 00	9 20	65	14	19	453	10 0C	45 300
1071	416	536	21 34 37	36 52 36							47	4	15	118	3 7C	31 892
1072	455	236	21 34 40	42 59 23	51099	0 4	0 18	A2	8 70	8 70	59	8	21	220	10 0C	22 000
1073	376	786	21 34 57	31 51 35							51	6	18	162	3 7C	43 784
1074	313	797	21 35 3	31 31 46							40	4	15	95	3 0C	32 000
1075	455	185	21 35 42	43 49 5	51110	0 7	-1 36	A0	8 90	8 90	50	6	19	159 L	10 0C	15 900
1076	431	331	21 35 43	40 55 1							55	7	19	1957	10 0C	19 500
1077	420	427	21 35 45	39 4 29	71538	-0 2	-1 0	B9	6 66	00	153	28	16	1598 L	3 7C	431 892
1078	418	421	21 35 48	39 4 25	71538	0 1	-1 4	B9	6 66	00	266	50	18	4269	10 0C	426 900
1079	285	889	21 35 50	29 37 49	89862	0 1	-0 6	A0	8 40	8 02	43	8	16	167	3 0C	62 333
1080	419	423	21 35 51	39 3 37	71538	0 5	-1									

PAGE, CARRUTHERS AND HILL

CYGNUS RA 21 24 DEC +37 30

OBJECT NO	X	Y	R A	DEC	SAO NO	Δ R A	Δ DEC	SPEC TYPE	V MAG	P MAG	PEAK DEN	NO OF POINTS	BC	DENSITY VOLUME	EXP & FILTER	DEN VOL/ EXP
1101	442	169	21 37 53	44 11 24	51161	-0 5	-0 53	B9	6 70	00	136	30	17	1682	3 7C	454 595
1102	439	165	21 37 56	44 12 12	51161	-0 0	-0 5	B9	6 70	00	165	30	116	1071	3 0L	357 000
1103	439	163	21 37 58	44 11 6	51161	0 1	-1 11	B9	6 70	00	265	53	20	4360	10 0C	436 000
1104	442	164	21 38 1	44 11 46	51161	0 3	-0 52	B9	6 70	00	90	14	21	389 L	1 0L	369 000
1105	444	131	21 38 5	44 47 19	51161	0 17	-1 45	B9	6 70	00	114	4	21	937	10 0C	9 300
1106	382	166	21 38 15	44 10 32	51166	0 17	-1 45	B9	6 70	00	114	26	13	1324	3 0C	441 333
1107	408	335	21 38 35	40 53 7	51171	-0 1	-0 38	B9	8 90	0 90	52	4	21	104	3 0C	27 568
1108	305	919	21 38 36	28 53 59	51171	-0 1	-0 38	B9	8 90	0 90	49	4	20	103	10 0C	10 300
1109	403	332	21 38 37	40 52 29	51171	0 2	-1 16	B9	8 90	0 90	161	4	133	100	3 0L	33 333
1110	405	329	21 38 37	40 53 5	51171	0 1	-0 40	B9	8 90	0 90	96	16	26	651	10 0C	65 100
1111	403	327	21 39 16	41 2 10	51178	0 4	-0 57	AD	8 40	8 00	54	8	17	226	3 7C	61 000
1112	401	320	21 39 18	41 3 25	51178	0 6	0 17	AD	8 40	8 00	106	19	21	845	10 0C	84 500
1113	399	323	21 39 19	41 2 43	51178	0 8	-0 24	AD	8 40	8 00	166	6	126	148	3 0L	45 333
1114	344	323	21 39 24	41 3 4	51178	0 12	-0 4	AD	8 40	8 00	44	5	14	126	3 0C	42 000
1115	336	736	21 39 26	32 36 3	51178	0 12	-0 4	AD	8 40	8 00	57	4	20	129	10 0C	12 900
1116	322	776	21 39 30	31 50 18	51178	0 12	-0 4	AD	8 40	8 00	57	4	20	160	3 0L	53 333
1117	397	350	21 39 35	40 33 43	51187	0 5	-0 19	AD	9 20	9 30	66	11	16	365	3 7C	98 649
1118	397	350	21 39 35	40 33 43	51189	0 1	-0 56	AD	6 05	00	66	11	16	365 L	3 7C	98 649
1119	392	346	21 39 37	40 34 14	51187	0 8	0 13	AD	9 20	9 30	165	7	130	196	3 0L	65 333
1120	392	346	21 39 37	40 34 14	51189	0 4	-0 25	AD	6 05	00	165	7	130	196 L	3 0L	65 333
1121	394	343	21 39 37	40 34 58	51187	0 8	0 56	AD	9 20	9 30	112	23	19	1126	10 0C	112 600
1122	394	343	21 39 37	40 34 58	51189	0 4	0 19	AD	6 05	00	112	23	19	1126 L	10 0C	112 600
1123	338	346	21 39 43	40 34 38	51187	0 14	0 36	AD	9 20	9 30	52	8	13	232	3 0C	77 333
1124	338	346	21 39 43	40 34 38	51189	0 9	-0 1	AD	6 05	00	52	8	13	232 L	3 0C	77 333
1125	393	363	21 39 49	40 18 3	51196	0 2	0 13	AD	7 60	8 10	58	7	21	200 L	3 7C	54 054
1126	390	357	21 39 50	40 16 49	51196	0 3	-1 0	AD	7 60	8 10	108	21	17	988	10 0C	98 800
1127	387	360	21 39 57	40 17 7	51196	0 9	-0 42	AD	7 60	8 10	158	5	129	117 L	3 0L	39 000
1128	333	360	21 40 2	40 16 19	51196	0 15	-1 31	AD	7 60	8 10	46	6	13	158 L	3 0C	562 667
1129	362	540	21 40 11	36 39 40	71625	-0 8	-0 40	AD	8 90	8 70	145	36	16	1997	3 7C	539 736
1130	362	540	21 40 11	36 39 40	71633	-0 32	0 50	AD	8 90	9 50	145	36	16	1997	3 7C	539 736
1131	360	536	21 40 13	36 37 19	71625	-0 6	-3 1	AD	8 90	8 70	145	18	63	791 H	1 0L	791 000
1132	359	534	21 40 15	36 38 29	71625	-0 4	-1 51	AD	8 90	8 70	282	60	20	5186 H	10 0C	518 600
1133	359	534	21 40 15	36 38 29	71633	-0 29	-0 22	AD	8 90	9 50	282	60	20	5186 H	10 0C	518 600
1134	355	537	21 40 16	36 38 33	71625	-0 3	-1 47	AD	8 90	8 70	289	28	136	1779	3 0L	593 000
1135	355	537	21 40 16	36 38 33	71633	-0 28	-0 17	AD	8 90	9 50	289	28	136	1779	3 0L	593 000
1136	303	537	21 40 17	36 38 24	71625	-0 2	-1 56	AD	8 90	8 70	229	29	16	1515 H	3 0C	505 000
1137	303	537	21 40 17	36 38 24	71633	-0 27	-0 27	AD	8 90	9 50	129	29	16	1515 H	3 0C	505 000
1138	389	329	21 40 22	40 50 15	51207	0	0 39	AD	5 48	00	289	47	20	4133 L	10 0C	413 300
1139	392	335	21 40 22	40 51 28	51207	-0 0	0 35	AD	5 48	00	156	29	16	1711 L	3 7C	462 432
1140	391	331	21 40 23	40 49 16	51207	0 1	-1 37	AD	5 48	00	118	12	61	419	1 0L	419 000
1141	387	332	21 40 24	40 50 40	51207	0 2	-0 13	AD	5 48	00	241	26	126	1406	3 0L	468 667
1142	333	332	21 40 28	40 49 52	51207	0 6	-1 2	AD	5 48	00	124	23	14	1211 L	3 0C	403 667
1143	371	432	21 40 56	38 50 54	51220	0 0	-0 31	A3	8 30	8 50	46	7	15	187	3 7C	50 541
1144	417	138	21 41 0	44 35 15	51220	0 0	-0 31	A3	8 30	8 50	46	7	15	187	3 7C	50 541
1145	360	465	21 41 15	38 2 6	71637	0 22	4 45	AD	8 30	8 40	318	71	20	6205	10 0C	620 500
1146	360	465	21 41 15	38 2 6	71643	-0 6	-1 8	AD	5 62	00	318	71	20	6205	10 0C	620 500
1147	360	465	21 41 15	38 2 6	71646	-0 17	-0 24	AD	6 87	00	318	71	20	6205	10 0C	620 500
1148	361	467	21 41 16	38 0 52	71643	-0 5	-0 23	AD	5 62	00	139	17	63	718	1 0L	718 000
1149	362	472	21 41 17	38 0 36	71637	0 24	-3 15	AD	8 30	8 40	176	35	17	2317	3 7C	626 216
1150	362	472	21 41 17	38 0 36	71643	-0 5	-3 20	AD	5 62	00	176	35	17	2317	3 7C	626 216
1151	362	472	21 41 17	38 0 36	71646	-0 16	-3 55	AD	6 87	00	176	35	17	2317	3 7C	626 216
1152	356	468	21 41 19	38 0 48	71637	0 26	-3 27	AD	8 30	8 40	275	40	131	2058	3 0L	696 000
1153	356	468	21 41 19	38 0 48	71643	-0 2	-3 27	AD	5 62	00	275	40	131	2058	3 0L	696 000
1154	356	468	21 41 19	38 0 48	71896	-0 13	-3 42	AD	6 87	00	275	40	131	2058	3 0L	696 000
1155	302	468	21 41 24	38 0 27	71643	0 2	-2 48	AD	5 62	00	154	33	14	1905	3 0C	635 000
1156	302	468	21 41 24	38 0 27	71646	-0 9	-4 4	AD	6 87	00	154	33	14	1905	3 0C	635 000
1157	304	780	21 41 31	31 39 5	71646	-0 9	-4 4	AD	6 87	00	76	29	20	1168	10 0C	116 800
1158	361	435	21 41 46	38 39 30	71646	-0 9	-4 4	AD	6 87	00	102	7	62	200	1 0L	200 000
1159	382	285	21 42 3	41 41 59	51237	0 2	1 1	AD	9 00	9 40	47	5	19	122	10 0C	12 200
1160	328	612	21 42 13	35 0 51	71654	-0 0	-0 38	AD	8 50	8 30	57	12	18	355	10 0C	35 500
1161	208	915	21 42 14	28 52 5	89948	-0 1	-5 44	AD	7 40	7 06	41	6	15	137 L	3 0C	45 667
1162	266	918	21 42 22	28 54 35	89948	0 7	-3 14	AD	7 40	7 06	41	5	18	107 L	3 7C	28 919
1163	265	912	21 42 26	28 54 45	89948	0 11	-3 3	AD	7 40	7 06	79	41	18	1505	10 0C	150 500
1164	338	529	21 42 30	36 40 56	71661	-0 10	-2 31	AD	9 10	9 00	45	4	18	101 L	10 0C	10 100
1165	263	892	21 43 5	29 18 31	71661	-0 10	-2 31	AD	9 10	9 00	45	4	18	101 L	10 0C	10 100
1166	384	212	21 43 12	43 7 18	51256	-0 4	1 15	A	8 50	8 80	59	10	20	287	10 0C	28 700
1167	384	212	21 43 12	43 7 18	51257	-0 7	4 2	AD	8 70	9 10	59	10	20	287	10 0C	28 700
1168	409	84	21 43 14	45 32 57	51259	-0 7	2 45	AD	8 90	9 30	49	9	21	218	10 0C	21 800
1169	333	506	21 43 22	37 8 41	71674	-0 7	-1 30	AD	8 80	8 30	119	26	17	1447	10 0C	144 700
1170	335	512	21 43 24	37 8 22	71674	-0 4	-1 50	AD	8 80	8 30	62	12	16	380	3 7C	102 703
1171	329	508	21 43 25	37 8 22	71674	-0 4	-1 49	AD	8 80	8 30	174	6	140	162	3 0L	54 000
1172	276	509	21 43 29	37 5 48	71674	-0 0	-4 24	AD	8 80	8 30	47	5	21	112	3 0C	37 333
1173	388	167	21 43 47	43 57 59	71674	-0 0	-4 24	AD	8 80	8 30	47	5	20	108	10 0C	10 800
1174	327	505	21 43 60	37 7 33	71680	-0 7	-1 57	B9	8 70	8 30	119	28	17	1487	10 0C	148 700
1175	396	117	21 44 1	44 55 22	51272	0 2	-0 10	AD	8 50	8 80	71	27	19	943	10 0C	94 300
1176	396	117	21 44 1	44 55 22	51275	-0 5	2 54	B9	8 90	9 10	71	27	19	943	10 0C	94 300
1177	323	508	21 44 2	37 7 10	71680	-0 5	-2 20	B9	8 70	8 30	184	9	132	318	3 0L	106 000
1178	329	51														

CYGNUS RA 21 24 DEC +37 30

OBJECT NO	X	Y	R	A	DEC	SAO NO	Δ R	Δ	Δ	SPEC TYPE	V MAG	P MAG	PEAK DEN	NO OF POINTS	BG	DENSITY VOLUME	EXP & FILTER	GEN VOL/ EXP	
1201	310	447	21	46	20	38 23 15		71722	-0 5	-1 41	B9	5 80	00	269	55	19	4369 L	3 7C	1180 811
1202	260	727	21	46	22	32 35 9		71718	-0 8	1 21	A0	6 79	00	214	28	120	1337 H	3 0L	445 667
1203	309	446	21	46	23	38 23 38		71722	-0 1	-1 18	B9	5 80	00	67	9	24	278	2L	1112 000
1204	312	443	21	46	23	36 22 58		71722	-0 2	-1 58	B9	5 80	00	327	49	130	3552 3	0L	1184 000
1205	259	444	21	46	23	36 20 33		71722	-0 1	-4 23	B9	5 80	00	228	48	15	3518 3	0C	1172 667
1206	265	726	21	46	24	32 35 22		71718	0 11	1 35	A0	6 79	00	95	9	58	262	1 0L	267 000
1207	267	731	21	46	26	32 35 35		71718	0 12	1 48	A0	6 79	00	109	29	17	1366 3	7C	374 595
1208	265	725	21	46	27	32 35 58		71718	0 14	2 11	A0	6 79	00	212	57	21	4049	10 0C	404 900
1209	329	325	21	47	25	40 51 30		51333/	0 11	-0 3	A2	8 70	9 20	59	7	19	207	3 7C	55 946
1210	329	325	21	47	25	40 51 30		51334/	0 10	3 42	A2	8 20	8 00	59	7	19	207	3 7C	55 946
1211	329	325	21	47	25	40 51 30		51341/	-0 4	-0 21	A0	8 30	8 10	59	7	19	207	3 7C	55 946
1212	329	325	21	47	25	40 51 30		51344/	-0 13	-3 24	A0	6 49	00	59	7	19	207 L	3 7C	55 946
1213	324	321	21	47	28	40 51 18		51333/	0 14	-0 15	A2	8 70	9 20	158	4	129	106	3 0L	35 333
1214	324	321	21	47	28	40 51 18		51334/	0 13	3 29	A2	8 20	8 00	158	4	129	106	3 0L	35 333
1215	324	321	21	47	28	40 51 18		51341	-0 1	-0 33	A0	8 30	8 10	158	4	129	106	3 0L	35 333
1216	324	321	21	47	28	40 51 18		51344/	-0 10	-3 36	A0	6 49	00	158	4	129	106 L	3 0L	35 333
1217	327	318	21	47	28	40 52 56		51333/	0 13	1 23	A2	8 70	9 20	115	30	18	1431	10 0C	143 100
1218	327	318	21	47	28	40 52 56		51334/	0 12	5 8	A2	8 20	8 00	115	30	18	1431	10 0C	143 100
1219	327	318	21	47	28	40 52 56		51341/	-0 2	1 5	A0	8 30	8 10	115	30	18	1431	10 0C	143 100
1220	327	318	21	47	28	40 52 56		51344	-0 10	-1 58	A0	5 49	00	115	30	18	1431 L	10 0C	143 100
1221	272	620	21	47	38	34 40 34		71747	-0 2	-0 24	A0	7 50	7 30	56	9	18	253 L	10 0C	26 300
1222	332	300	21	47	38	41 21 37		51346	-0 6	1 7	B9	8 20	8 20	49	7	16	189 L	3 7C	51 081
1223	329	297	21	47	39	41 21 48		51346	-0 5	1 19	B9	8 20	8 20	104	22	21	951 L	10 0C	95 100
1224	327	297	21	47	41	41 20 9		51346	-0 3	-0 21	B9	8 20	8 20	150	6	120	154 L	3 0L	51 333
1225	162	856	21	47	45	29 52 46		90040	0 7	-3 41	A0	5 00	00	155	74	17	4246	3 0C	1415 333
1226	272	297	21	47	46	41 18 23		51346	0 4	-2 6	B9	8 20	8 20	40	4	12	86 L	3 0C	32 000
1227	220	859	21	47	55	29 55 18		90040	0 17	-1 16	A0	5 00	00	184	89	19	5488	3 7C	1483 243
1228	218	854	21	47	56	29 53 25		90040	0 18	-3 1	A0	5 00	00	117	28	54	1422 L	1 0L	1422 000
1229	218	855	21	47	56	29 52 59		90040	0 18	-3 28	A0	5 00	00	253	72	115	3838	3 0L	1279 333
1230	219	853	21	47	57	29 54 19		90040	0 20	-2 7	A0	5 00	00	351	133	23	13474	10 0C	1347 400
1231	212	873	21	48	8	29 50 11		90043	0 19	-2 14	A0	8 20	7 67	56	25	212	618/	10 0C	61 800
1232	315	325	21	48	17	40 49 50		51355	-0 7	0 7	A0	8 20	8 10	73	13	14	476	3 7C	128 849
1233	315	321	21	48	20	40 49 32		51355	-0 4	-0 11	A0	8 20	8 10	164	8	124	237	3 0L	79 000
1234	262	321	21	48	22	40 48 4		51355	-0 1	-1 38	A0	8 20	8 10	51	10	13	278	3 0C	92 667
1235	318	318	21	48	26	40 51 4		51355	0 2	1 21	A0	8 20	8 10	129	31	18	1801	10 0C	160 100
1236	203	854	21	48	42	29 52 36								135	5	105	1512	3 0L	50 333
1237	300	393	21	48	62	39 17 19		71787	-0 9	-0 48	B9	6 19	00	356	82	20	7790	10 0C	779 400
1238	243	366	21	48	54	39 15 28		71787	-0 7	-2 39	B9	6 19	00	194	39	15	2516	3 0C	838 667
1239	297	395	21	48	55	39 16 31		71787	-0 6	-1 35	B9	6 19	00	296	39	126	2463	3 0L	821 000
1240	302	399	21	48	56	39 16 51		71787	-0 5	-1 16	B9	6 19	00	220	45	18	3234	3 7C	874 054
1241	301	394	21	48	57	39 16 43		71787	-0 4	-1 24	B9	6 19	00	161	26	61	1176	1 0L	1176 000
1242	353	87	21	49	25	45 26 20								10	22	293/	2L	1172 000	
1243	362	58	21	49	57	45 58 33		51376	0 8	0 44	B9	8 20	8 10	43	9	17	208 L	3 7C	56 216
1244	275	444	21	49	59	38 17 38								5	24	137/	2L	548 000	
1245	190	849	21	49	59	29 54 52		90058	0 6	-2 29	B9	8 40	7 40	130	9	104	284	3 0L	68 000
1246	359	52	21	50	1	45 58 26		51376	0 12	0 36	B9	8 20	8 10	84	49	19	1853	10 0C	185 300
1247	303	54	21	50	2	45 56 19		51376	0 13	-1 31	B9	8 20	8 10	38	5	14	111 L	3 0C	37 000
1248	318	236	21	50	4	42 25 38		51388	-0 9	1 3	A3	8 90	8 70	140	34	19	1889 H	10 0C	188 900
1249	359	54	21	50	7	45 58 13		51376	0 18	0 23	B9	8 20	8 10	134	9	110	180 L	3 0L	63 333
1250	347	86	21	50	8	45 26 11								12	22	314/	2L	1256 000	
1251	316	238	21	50	11	42 24 55		51388	-0 2	0 21	A3	8 90	8 70	164	16	117	503 H	3 0L	167 667
1252	320	243	21	50	11	42 25 12		51388	-0 2	0 37	A3	8 90	8 70	71	15	14	583 H	3 7C	157 568
1253	261	239	21	50	14	42 22 2		51388	0 1	-2 33	A3	8 90	8 70	60	13	14	404 H	3 0C	134 667
1254	195	848	21	50	18	29 55 54		90058	0 24	-1 26	B9	8 40	7 40	70	40	19	1323	10 0C	132 300
1255	289	341	21	50	52	40 18 46		51391/	0 33	8 45	B9	9 10	9 80	187	14	119	635/	3 0L	211 667
1256	225	661	21	51	27	33 42 2								4	18	100/	10 0C	10 000	
1257	313	191	21	51	39	43 15 39		51407	-0 4	0 53	0	9 00	9 00	66	20	20	639 L	10 0C	63 900
1258	254	493	21	51	45	37 7 46		71809	-0 4	-1 29	A2	8 70	9 20	85	14	19	435	10 0C	43 500
1259	274	371	21	51	52	1 39 37 45		71814	-0 5	-0 41	A5	9 10	9 40	68	19	20	595 H	10 0C	59 500
1260	331	82	21	52	22	45 18 52		51417	0 5	0 28	A0	8 10	8 20	41	6	18	127 L	10 0C	12 700
1261	272	368	21	52	30	39 41 9		71828	-0 10	-0 45	B9	9 00	8 00	64	4	57	99	1 0L	99 000
1262	213	370	21	52	31	39 38 34		71828	-0 9	-3 20	B9	9 00	8 00	68	15	13	513 H	3 0C	171 000
1263	270	367	21	52	31	39 41 49		71828	-0 9	-0 5	B9	9 00	8 00	155	35	19	2031 H	10 0C	203 100
1264	272	374	21	52	34	39 40 1		71814/	0 28	1 34	A5	9 10	9 40	76	14	18	548	3 7C	148 108
1265	272	374	21	52	34	39 40 1		71828/	-0 6	-1 53	B9	9 00	8 00	76	14	18	548	3 7C	148 108
1266	267	369	21	52	35	39 40 35		71828	-0 5	-1 19	B9	9 00	8 00	182	16	119	570 H	3 0L	190 000
1267	200	696	21	52	35	32 56 2		71822	0 4	-1 21	B9	9 00	8 90	142	11	109	297	3 0L	99 000
1268	205	695	21	52	38	32 56 24		71822	0 8	-0 59	B9	9 00	8 90	83	31	19	1099	10 0C	109 900
1269	207	701	21	52	38	32 57 4		71822	0 8	-0 19	B9	9 00	8 90	46	9	16	221	3 7C	59 730
1270	210	643	21	53	13	33 59 54								48	4	18	105/	10 0C	10 800
1271	131	723	21	53	27	32 20 35								47	5	13	134/	3 0C	44 667
1272	315	111	21	53	27	44 44 4		51447	-0 3	1 25		7 70	7 40	120	52	18	2673	10 0C	267 300
1273	216	602	21	53															

PAGE, CARRUTHERS AND HILL

CYGNUS RA 21 24 DEC +37 30

OBJECT NO	X	Y	R A	DEC	SAO NO	Δ R A	Δ DEC	SPEC TYPE	V MAG	P MAG	PEAK DEN	NO OF POINTS	BG	DENSITY VOLUME	EXP & FILTER	DEN VOL/ EXP
1301	216	197	21 56 4	42 56 35	51496/	-0 5	-3 24	B9	7 38	00	88	33	14	1309 H	3 0C	436 333
1302	272	196	21 56 5	43 0 20	51489?	0 5	5 42	A2	8 10	7 60	189	38	113	1509	3 0L	503 000
1303	272	196	21 56 5	43 0 20	51496	-0 4	0 22	B9	7 38	00	189	38	113	1509	3 0L	503 000
1304	210	501	21 56 21	36 53 25							42	5	15	123	3 7C	33 243
1305	194	274	21 56 33	41 24 15	51507	-0 19	-3 8	B9	7 70	7 30	81	23	13	923	3 0C	307 667
1306	253	271	21 56 38	41 29 19	51507	-0 14	1 56	B9	7 70	7 30	85	11	53	268	1 0L	288 000
1307	253	277	21 56 39	41 28 24	51507	-0 13	1 1	B9	7 70	7 30	99	26	16	1174	3 7C	317 297
1308	250	273	21 56 40	41 28 49	51507	-0 12	1 26	B9	7 70	7 30	194	46	19	3308	10 0C	330 800
1309	248	273	21 56 44	41 27 20	51507	-0 9	-0 3	B9	7 70	7 30	182	24	12	979	3 0L	326 333
1310	95	724	21 56 47	32 10 44	71905	-0 1	-3 52	B9	7 50	7 60	47	12	15	309	3 0C	103 000
1311	107	668	21 56 48	33 18 55	71910	-0 12	-4 32	B3	7 80	7 90	111	36	14	1776	3 0C	592 000
1312	246	280	21 56 55	41 16 49	51511	-0 9	0 18	B9	8 90	9 40	53	14	18	370	10 0C	37 000
1313	253	264	21 57 1	41 42 52	51513	-0 10	-0 17	B9	8 40	8 40	45	8	15	197	3 7C	57 243
1314	166	671	21 57 1	33 21 36	71910	0 1	-1 51	B3	7 80	7 90	132	46	18	2316	3 7C	625 946
1315	164	665	21 57 2	33 22 19	71910	0 2	-1 8	B3	7 80	7 90	248	83	18	8595	10 0C	659 500
1316	250	257	21 57 3	41 44 31	51513	-0 8	1 21	B9	8 40	8 40	82	24	18	926	10 0C	92 600
1317	153	727	21 57 5	32 12 59	71905	0 18	-1 37	B9	7 50	7 60	54	19	16	542	3 7C	146 486
1318	158	666	21 57 6	33 21 9	71910	0 5	-2 18	B3	7 80	7 90	241	54	105	3100	3 0L	1033 333
1319	145	722	21 57 6	32 11 18	71905	0 19	-3 18	B9	7 50	7 60	142	14	104	397	3 0L	132 333
1320	151	721	21 57 7	32 13 41	71905	0 20	-0 55	B9	7 50	7 60	104	49	17	2209	10 0C	220 800
1321	163	665	21 57 8	33 21 50	71910	0 8	-1 37	B3	7 80	7 90	110	29	53	1021	1 0L	1021 000
1322	287	95	21 57 35	45 0 19							58	6	17	184?	3 7C	49 730
1323	253	214	21 57 46	42 33 42	51526	-0 3	1 17		8 70	8 90	43	6	18	135	10 0C	13 600
1324	258	185	21 57 53	43 7 37	51522?	0 16	10 7		8 70	8 90	78	22	18	777?	10 0C	77 700
1325	165	644	21 58 23	33 44 39	71933	0 6	-1 19	A0	8 80	8 60	42	4	20	87	10 0C	8 700
1326	149	391	21 58 35	38 55 47	71949	-0 25	-4 31	A0	7 08	0 00	62	10	18	308	3 0L	102 657
1327	117	520	21 58 41	36 6 4	71942?	-0 5	-8 55		9 10	9 50	54	12	13	358	3 0C	119 333
1328	117	528	21 58 41	36 6 4	71952	-0 29	-5 26	B9	8 00	8 00	54	12	13	358	3 0C	119 333
1329	165	581	21 58 44	35 0 12	71945	-0 5	-3 25	A0	8 30	8 50	52	10	18	272	10 0C	27 200
1330	208	395	21 58 48	38 58 8	71949	-0 12	-2 9	A0	7 08	0 00	76	17	20?	525	3 7C	141 216
1331	224	297	21 58 50	40 50 53	51555	-0 14	0 37	A0	8 40	8 50	63	17	19	518	10 0C	51 800
1332	205	388	21 58 52	38 59 53	71949	-0 8	-0 25	A0	7 08	0 00	145	57	18	2918	10 0C	291 800
1333	202	390	21 58 53	38 57 54	71949	-0 7	-2 24	A0	7 08	0 00	162	10	122	299	3 0L	299 657
1334	170	526	21 58 60	36 8 45	71942?	0 14	-2 14	B9	9 10	9 50	162	23	11?	726	3 0L	242 000
1335	170	526	21 58 60	36 8 45	71952	-0 10	-2 45	B9	8 00	8 00	162	23	11?	726	3 0L	242 000
1336	174	525	21 58 60	36 9 45	7 942?	0 14	-5 15	B9	9 10	9 50	123	39	18	1966	10 0C	196 600
1337	174	525	21 58 60	36 9 45	71952	-0 11	-1 45	B9	8 00	8 00	123	39	18	1966	10 0C	196 600
1338	176	531	21 59 1	36 8 58	71942?	0 15	-5 2	B9	9 10	9 50	66	17	15	553	3 7C	149 459
1339	176	531	21 59 1	36 8 58	71952	-0 9	-2 32	B9	8 00	8 00	66	17	15	553	3 7C	149 459
1340	135	683	21 59 25	32 54 0	71950	0 17	-1 42	B9	8 00	8 20	46	10	17	254	10 0C	25 400
1341	173	209	22 0 19	42 31 41	51589?	-0 22	-2 40	B9	7 06	0 00	98	37	14	1522	3 0C	507 333
1342	135	371	22 0 26	39 15 37	71979?	-0 18	4 30	A0	8 30	8 10	40	4	14	99	3 0C	33 000
1343	135	371	22 0 26	39 15 37	71981?	-0 22	-3 37	A0	8 00	8 10	40	4	14	99	3 0C	33 000
1344	232	212	22 0 27	42 36 2	51589	-0 14	1 41	B9	7 06	0 00	112	40	16	1927	3 7C	520 811
1345	195	375	22 0 33	39 18 17	71979?	-0 11	7 10	A0	8 30	8 10	49	10	15	269	3 7C	72 703
1346	195	375	22 0 33	39 18 17	71981	-0 15	-0 57	A0	8 00	8 10	49	10	15	269	3 7C	72 703
1347	205	205	22 0 34	42 38 28	51589	-0 7	2 7	B9	7 06	0 00	80	10	52	244	1 0L	244 000
1348	229	205	22 0 34	42 36 15	51589	-0 7	1 54	B9	7 06	0 00	219	66	20	5157	10 0C	515 700
1349	228	207	22 0 36	42 35 47	51589	-0 5	1 26	B9	7 06	0 00	180	38	108	1594	3 0L	531 333
1350	182	369	22 0 38	39 18 50	71979?	-0 8	7 43	A0	8 30	8 10	91	29	18	1177	10 0C	117 700
1351	182	369	22 0 38	39 18 50	71981	-0 12	-0 24	A0	8 00	8 10	91	29	18	1177	10 0C	117 700
1352	189	370	22 0 40	39 17 51	71979?	-0 4	6 44	A0	8 30	8 10	139	7	112	161	3 0L	53 667
1353	189	370	22 0 40	39 17 51	71981	-0 8	-1 23	A0	8 00	8 10	139	7	112	161	3 0L	53 667
1354	192	113	22 0 51	44 21 38	51595	-0 5	-2 51	A0	5 52	0 00	89	43	17	1737	3 0C	579 000
1355	251	117	22 0 59	44 26 13	51595	0 3	1 43	A0	5 52	0 00	106	57	20	2442	3 7C	660 000
1356	251	117	22 0 59	44 26 13	51601?	-0 23	1 21	A0	8 60	8 50	106	57	20	2442	3 7C	660 000
1357	251	111	22 0 60	44 25 37	51595	0 5	1 8	A0	5 52	0 00	77	9	52	204	1 0L	204 000
1358	247	112	22 1 4	44 24 55	51595	0 8	0 26	A0	5 52	0 00	176	52	108	2080	3 0L	693 333
1359	247	112	22 1 4	44 24 55	51601?	-0 18	0 4	A0	8 60	8 50	176	52	108	2080	3 0L	693 333
1360	248	110	22 1 4	44 26 22	51595/	0 8	1 53	A0	5 52	0 00	221	94	27	6834	10 0C	683 400
1361	248	110	22 1 4	44 26 22	51601/	-0 18	1 31	A0	8 60	8 50	221	94	27	6834	10 0C	683 400
1362	235	124	22 2 0	44 7 47	51614	-0 4	1 49	A2	6 57	0 00	54	19	18	538	10 0C	53 800
1363	95	473	22 2 16	37 4 59							47	8	13	217?	3 0C	72 333
1364	134	523	22 3 10	36 6 36	72016	-0 15	-1 52	B9	7 60	7 90	40	6	15	137	3 7C	37 027
1365	130	276	22 3 14	41 3 25	51636?	-0 24	-3 6	B9	7 60	7 50	84	34	12	1391	3 0C	463 667
1366	131	517	22 3 14	36 7 15	72016	-0 11	-1 13	B9	7 60	7 90	72	28	17	989	10 0C	96 900
1367	189	279	22 3 23	41 7 35	51636	-0 15	1 5	B9	7 60	7 50	105	39	14	1816	3 7C	490 811
1368	186	273	22 3 24	41 8 10	51636	-0 14	1 40	B9	7 60	7 50	200	68	18	4886	10 0C	488 600
1369	188	273	22 3 27	41 7 54	51636	-0 10	1 24	B9	7 60	7 50	83	10	53	252	1 0L	252 000
1370	184	274	22 3 27	41 7 7	51636	-0 10	0 36	B9	7 60	7 50	184	34	113	1351	3 0L	450 333
1371	162	357	22 3 51	39 23 45	72031	-0 17	0 42	A0	8 40	8 50	50	11	17	290	10 0C	29 000
1372	162	357	22 3 51	39 23 45	72033?	-0 28	-3 35		8 80	9 10	50	11	17	290	10 0C	29 000
1373	92	654	22 3 59	33 16 1							73	10	17	332?	10 0C	33 200
1374	191	241	22 4 12	41 51 26	51649?	0 12	7 27		8 90	9 50	40	4	15	91?	3 7C	24 595
1375	130	190	22 5 22	42 39 36	51671?	-0 22	-2 53	B9	7 60	7 60	40	10	13	238	3 0C	79 333
1376	189	193	22 5 39	42 43 45	51671	-0 6	1 17	B9	7 60	7 60	50	17	15	464	3 7C	125 405
1377	186	186	22 5 40	42 45 34	51671	-0 5	3 5	B9	7 60	7 60	100	54	19	2317	10 0C	231 700
1378	184	187	22 5 49	42 44 14	51671	0 4	1 45	B9	7 60	7 60	127	6	10			

CAPRICORN RA 21 14 DEC -14 30

OBJECT NO	X	Y	R A	DEC	SAO NO	Δ R A	Δ DEC	SPEC TYPE	V MAG	P MAG	PEAK DEN	NO OF POINTS	BG	DENSITY VOLUME	EXP & FILTER	DEN VOL/ EXP
1	917	310	20 36 13	-15 6 19	163771	-0 16	1 35	B5	5 30	00	407	159	22	19445	3 0C	6481 667
2	929	307	20 36 14	-15 6 2	163771	-0 15	1 51	B5	5 30	00	335	129	96	10987	1 0L	10667 000
3	904	303	20 36 14	-15 6 39	163771	-0 15	1 14	B5	5 30	00	449	305	22	43641	10 0C	4364 100
4	928	310	20 36 16	-15 5 56	163771	-0 12	1 55	B5	5 30	00	369	171	203	16660	3 0L	5653 333
5	913	310	20 36 29	-15 5 33	163771	0 1	2 21	B5	5 30	00	469	393	23	67438	30 0C	2247 933
6	895	357	20 40 20	-14 39 52							98	13	18	518?	3 0C	172 667
7	858	285	20 40 28	-14 3 2							152	9	101	255?	1 0L	255 000
8	797	198	20 41 42	-11 51 6							261	9	213	290?	3 0L	96 667
9	716	122	20 44 54	-9 42 10	144810	-0 4	-1 22	A0	3 83	00	367	116	194	8848	3 0L	2948 667
10	703	111	20 44 54	-9 41 26	144810	-0 4	-0 38	A0	3 83	00	467	330	24	64376 L	30 0C	1812 533
11	703	122	20 44 59	-9 40 56	144810	-0 0	-0 8	A0	3 83	00	328	84	21	8530	3 0C	2843 333
12	715	119	20 45 1	-9 42 55	144810	0 3	-2 7	A0	3 83	00	223	65	91	3721	1 0L	3721 000
13	689	116	20 45 3	-9 42 10	144810	0 5	-1 22	A0	3 83	00	427	163	22	21736	10 0C	2173 000
14	758	262	20 46 51	-12 42 32							156	6	112	185?	1 0L	185 000
15	874	584	20 49 27	-19 53 3	163943	0 2	-3 8	A0	7 18	00	169	70	19	4737	10 0C	473 700
16	895	592	20 49 29	-19 52 13	163943	0 4	-2 17	A0	7 18	00	85	30	23	1108 H	3 0C	369 333
17	716	278	20 49 31	-12 39 9							62	7	22	209?	3 0C	69 667
18	856	592	20 49 34	-19 51 27	163943	0 10	-1 32	A0	7 18	00	263	13	221	408	3 0L	136 000
19	885	582	20 49 41	-19 53 20	163943	0 16	-3 25	A0	7 18	00	213	167	20	14741 H	30 0C	491 367
20	868	592	20 51 41	-19 36 3							230	5	204	118?	3 0L	39 333
21	559	42	20 52 49	-6 51 21	144949	-0 12	2 6	A0	9 30	00	153	10	84	409?H	1 0L	409 000
22	707	384	20 54 44	-14 36 17	NO						56	28	24	683	30 0C	22 767
23	633	388	20 54 55	-14 35 31	NO						44	5	19	114	10 0C	11 400
24	554	100	20 54 58	-7 55 35	144978	-0 1	-1 9	A0	7 50	00	119	97	20	5300	30 0C	176 667
25	541	104	20 54 59	-7 54 57	144978	-0 1	-0 31	A0	7 50	00	104	35	19	1594	10 0C	159 400
26	536	74	20 55 3	-7 5 50	144981	-0 8	-0 58	A0	8 70	00	40	4	17	88	3 0C	29 333
27	555	111	20 55 3	-7 57 31	144978	0 3	-3 5	A0	7 50	00	50	9	18	235	3 0C	78 333
28	522	68	20 55 3	-7 5 26	144981	-0 8	-0 34	A0	8 70	00	81	37	18	1414	10 0C	141 400
29	532	65	20 55 15	-7 4 9	144981	0 5	0 44	A0	8 70	00	98	97	20	4477	30 0C	149 233
30	594	220	20 55 26	-10 29 22	164039	-0 10	-2 25	A0	8 50	00	93	59	21	2656	30 0C	88 533
31	592	231	20 56 42	-10 27 55	164039	0 6	-0 58	A0	8 50	00	50	6	17	160	3 0C	53 333
32	578	225	20 56 46	-10 27 16	164039	0 10	-0 19	A0	8 50	00	79	20	18	762	10 0C	76 200
33	796	605	20 56 48	-19 14 39	164043	0 2	-0 50	A0	6 23	00	180	41	21	2707 H	3 0C	902 333
34	807	602	20 56 49	-19 14 40	164043	0 3	-0 51	AC	6 23	00	179	19	122	702	1 0L	702 000
35	784	598	20 56 52	-19 15 24	164043	0 7	-1 35	A0	6 23	00	335	62	21	8195	10 0C	818 500
36	807	605	20 56 53	-19 14 8	164043	0 7	-0 19	A0	6 23	00	341	41	259	1954	3 0L	654 667
37	795	595	20 56 59	-19 15 11	164043	0 13	-1 22	A0	6 23	00	384	190	22	24146	30 0C	804 867
38	607	367	21 0 59	-13 1 44	164103	0 7	1 10	A0	8 10	00	71	10	19	333	3 0C	111 000
39	594	361	21 1 2	-13 1 24	164103	0 9	1 31	A0	8 10	00	120	28	20	1482	10 0C	148 200
40	603	358	21 1 15	-12 59 58	164103	0 23	2 56	A0	8 10	00	138	79	26	4793	30 0C	159 767
41	554	303	21 1 34	-11 31 34	NO						76	18	20	649	10 0C	64 900
42	769	659	21 1 39	-20 5 2	189986	0 6	-1 48	A3	4 93	00	73	55	21	2028 L	30 0C	67 600
43	756	662	21 1 42	-20 4 0	189986	0 9	-0 46	A3	4 93	00	60	18	19	530	10 0C	53 000
44	563	300	21 1 50	-11 31 13	NO						89	52	26	2102	30 0C	70 067
45	460	108	21 2 28	-6 41 41							237	80	193	2393?	3 0L	797 667
46	691	553	21 3 2	-17 25 25	164132	-0 6	0 32	A0	4 19	00	458	237	28?	42654 L	30 0C	1421 800
47	701	561	21 3 4	-17 26 2	164132	-0 5	-0 15	A0	4 19	00	318	22	173	1583	1 0L	1583 000
48	678	557	21 3 6	-17 24 20	164132	-0 3	1 38	A0	4 19	00	399	73	31?	12750 L	10 0C	1275 000
49	689	564	21 3 10	-17 24 33	164132	0 2	1 24	A0	4 19	00	306	53	25	5226	3 0C	1742 000
50	578	574	21 4 56	-17 38 34	164156	-0 1	0 52	A0	6 03	00	356	177	26	20634	30 0C	587 800
51	677	585	21 4 59	-17 38 29	164156	0 2	0 57	A0	6 03	00	173	34	22	2034	3 0C	578 000
52	655	578	21 4 59	-17 37 30	164156	0 3	1 57	A0	6 03	00	304	77	24	6626	10 0C	562 600
53	769	751	21 5 47	-21 25 28	190050	0 5	-1 43	A0	5 27	00	163	23	108	806	1 0L	806 000
54	758	755	21 5 51	-21 26 6	190050	0 9	-2 21	A0	5 27	00	188	49	23	3252	3 0C	1084 000
55	769	754	21 5 52	-21 24 43	190050	0 10	-0 58	A0	5 27	00	329	42	26	2183	3 0L	727 667
56	759	744	21 5 55	-21 24 30	190050	0 13	-0 46	A0	5 27	00	409	212	28	29375	30 0C	579 167
57	747	747	21 6 56	-21 25 14	190050	0 14	-1 30	A0	5 27	00	341	95	21	5889	10 0C	588 800
58	393	96	21 7 10	-5 53 44							156	14	27	507?	1 0L	507 000
59	372	84	21 7 13	-5 30 43							80	12	17	459?	3 0C	153 000
60	718	827	21 11 19	-22 27 44	190147	0 10	-2 34	A0	6 88	00	88	42	18	1689	10 0C	168 800
61	728	834	21 11 22	-22 27 36	190147	0 13	-2 28	A0	6 88	00	49	5	23	145 L	3 0C	48 333
62	448	335	21 11 39	-18 48 41	164240	-0 5	0 6	B9	6 49	00	287	146	27	14027 L	30 0C	467 667
63	434	339	21 11 39	-18 46 59	164240	0 4	1 48	B9	6 49	00	244	61	22	4730	10 0C	473 000
64	727	345	21 11 41	-22 28 12	190147	0 31	-3 2	A0	6 88	00	110	113	20	5788	30 0C	192 933
65	458	341	21 11 43	-18 49 28	164240	0 9	-0 41	B9	6 49	00	231	17	165	651	1 0L	651 000
66	446	345	21 11 43	-18 47 21	164240	0 9	1 26	B9	6 49	00	137	26	20	1346	3 0C	448 667
67	458	345	21 11 46	-18 49 41	164240	0 11	-0 54	B9	6 49	00	385	194	328	6219 H	3 0L	2073 000
68	678	739	21 12 11	-20 16 15							210	13	124	608?	1 0L	608 000
69	743	870	21 12 29	-23 10 56							144	23	91	830?	1 0L	830 000
70	392	289	21 13 34	-9 21 58	145256	-0 14	0 4	A0	7 34	00	106	62	22	3043	30 0C	181 433
71	390	299	21 13 52	-9 21 50	145256	0 4	0 12	A0	7 34	00	52	6	18	161 L	3 0C	53 667
72	376	294	21 13 57	-9 21 7	145256	0 9	0 55	A0	7 34	00	92	21	18	894 L	10 0C	89 400
73	357	223	21 14 17	-7 38 9							135	4	96	130?	1 0L	130 000
74	356	226	21 14 20	-7 36 33							271	7	207	299?	3 0L	99 667
75	395	338	21 14 23	-10 19 6	164275	0 7	1 35	A0	6 85	00	58	11	19	310 L	10 0C	31 000
76	405	335	21 14 35	-10 19 11	164275	0 18	1 29	A0	6 85	00	70	36	22	1215 L	30 0C	40 500
77	402	320	21 14 46	-9 44 32							299	26	270	621?	3 0L	207 000
78	593	661	21 14 55	-18 11 1	164286	-0 14	0 43	B8	5 39	00	465	444	30	62071	30 0C	2069 033
79	602	668	21 14 55	-18 11 34	164286	-0 13	0 11	B8	5 39	00	368	37	185	3013	1 0L	3013 000
80	591	672	21 15 1	-18 11 1	164286	-0 8	0 43	B8	5 39	00	330	97	25	8348	3 0C	2782 667
81	579	665	21 15 3	-18 9 20	164286	-0 6	2 24									

PAGE, CARRUTHERS AND HILL

CAPRICORN RA 21 14 DEC -14 30

OBJECT NO	X	Y	R A	DEC	SAO NO	Δ R A	Δ DEC	SPEC TYPE	V MAG	P MAG	PEAK DEN	NO OF POINTS	BG	DENSITY VOLUME	EXP & FILTER	DEN VOL/ EXP
101	400	464	21 21 5	-12 19 35	164359	0 6	-3 4	B8	8 30	00	275	25	201	898 H	1 0L	898 000
102	406	624	21 21 14	-16 16 28	164366	-0 21	0 12	A0	8 80	00	96	47	42	1820	30 0C	60 667
103	617	854	21 21 15	-21 43 53							57	9	21	2367	30 0C	7 867
104	470	669	21 21 33	-16 14 31	164366	-0 1	2 9	A0	8 80	00	73	16	26	528	10 0C	52 800
105	374	453	21 21 49	-12 0 27	164372	-0 9	-0 45	A0	9 40	00	54	14	31	309 L	30 0C	10 300
106	439	565	21 22 39	-14 32 22	164378	-0 1	-2 46	A0	6 86	00	279	16	251	423	1 0L	423 000
107	415	594	21 22 43	-14 28 30	164378	0 2	1 7	A0	6 86	00	77	18	27	610 L	10 0C	61 000
108	425	551	21 22 55	-14 28 31	164378	0 14	1 6	A0	6 86	00	106	37	46	1312 L	30 0C	43 733
109	394	544	21 24 34	-13 48 29	164400	-0 16	-1 8	B9	6 80	00	349	181	37	18563	30 0C	618 767
110	391	554	21 24 39	-13 48 29	164400	-0 2	-0 9	B9	6 80	00	165	34	23	1921	3 0C	640 333
111	379	549	21 24 39	-13 48 14	164400	-0 0	0 6	B9	6 80	00	291	71	24	6113	10 0C	611 300
112	402	551	21 24 42	-13 51 39	164400	0 2	-3 19	B9	6 80	00	286	22	206	933 H	1 0L	933 000
113	593	980	21 27 21	-23 18 19							46	4	19	1047	30 0C	3 467
114	493	809	21 27 29	-19 35 20	NO						48	5	23	111	10 0C	11 100
115	504	805	21 27 37	-19 35 60	NO						57	27	25	704	30 0C	23 467
116	445	751	21 30 4	-17 46 52							182	11	132	3567	1 0L	358 000
117	233	424	21 30 43	-9 57 1	145483	-0 11	-4 2	B9	8 10	00	206	113	22	8951 H	30 0C	298 367
118	218	428	21 30 54	-9 56 38	145483	-0 0	+3 39	B9	8 10	00	177	48	18	3025	10 0C	302 500
119	242	431	21 30 55	-9 55 2	145483	0 0	-2 3	B9	8 10	00	283	26	224	922 H	3 0C	307 333
120	230	433	21 30 58	-9 57 12	145483	0 3	-4 13	B9	8 10	00	92	18	19	735 H	3 0C	245 000
121	230	429	21 30 60	-9 58 26	145483	0 5	-5 27	B9	8 10	00	149	9	118	223	1 0L	223 000
122	533	945	21 31 27	-22 5 31							243	12	204	3397	3 0L	113 000
123	429	646	21 33 43	-19 28 33	NO						142	83	27	4166	10 0C	416 600
124	439	853	21 33 45	-19 30 50	NO						88	18	25	700	3 0C	233 333
126	449	869	21 34 7	-19 37 40	164520	-0 10	3 48	B5	4 72	00	392	316	230	23540	3 0L	7646 667
126	440	851	21 34 8	-19 37 9	164520	-0 10	4 19	B5	4 72	00	500	734	38	138821	30 0C	4660 700
127	448	857	21 34 11	-19 39 25	164520	-0 6	2 3	B5	4 72	00	432	175	105	18540	1 0L	18540 000
128	437	860	21 34 14	-19 36 47	164520	-0 3	4 41	B5	4 72	00	434	256	26	30949	3 0C	10316 333
129	426	854	21 34 16	-19 35 31	164520	-0 2	5 57	B5	4 72	00	457	410	29	64744	10 0C	6474 400
130	432	844	21 34 28	-19 23 39	164528	-0 22	3 45	B9	7 30	00	368	112	34	18165 H	30 0C	605 500
131	417	848	21 34 38	-19 23 4	164528	-0 12	4 20	B9	7 30	00	249	51	28	5123	10 0C	512 300
132	438	853	21 34 39	-19 23 54	164528	-0 11	3 30	B9	7 30	00	311	41	228	1717 H	3 0L	572 333
133	427	854	21 34 41	-19 23 41	164528	-0 9	3 43	B9	7 30	00	126	36	25	1692 H	3 0C	564 000
134	437	851	21 34 43	-19 25 39	164528	-0 7	1 45	B9	7 30	00	153	22	104	711 H	1 0L	711 000
136	162	411	21 35 9	-9 0 7	145541	-0 6	-4 48	A0	8 70	00	134	100	17	5975 H	30 0C	199 167
136	174	417	21 35 11	-8 58 50	145541	-0 4	-3 32	A0	8 70	00	225	19	188	512 H	3 0L	170 667
137	149	414	21 35 13	-8 59 27	145541	-0 2	-4 9	A0	8 70	00	102	37	17	1681 H	10 0C	168 100
138	161	419	21 35 15	-8 59 12	145541	0 0	-3 53	A0	8 70	00	55	10	18	296 H	3 0C	95 333
139	285	615	21 35 22	-13 46 55	164539	-0 10	-1 22	A0	8 40	00	135	93	23	5614 H	30 0C	187 133
140	293	623	21 35 32	-13 47 39	164539	-0 1	-2 6	A0	8 40	00	308	13	267	399 H	3 0L	133 000
141	280	619	21 35 32	-13 46 28	164539	0 0	-0 54	A0	8 40	00	115	35	19	1679	10 0C	167 900
142	271	624	21 35 35	-13 46 47	164539	0 3	-1 14	A0	8 40	00	65	11	21	336	3 0C	112 000
143	408	869	21 36 37	-19 26 39							65	13	24	4027	3 0C	134 000
144	370	805	21 37 40	-17 46 7	164566	-0 8	3 32	B3	9 30	00	289	29	231	986	3 0L	328 667
145	348	800	21 37 40	-17 44 16	164566	-0 7	5 23	B3	9 30	00	148	48	24	2650	10 0C	265 000
146	369	802	21 37 41	-17 46 52	164566	-0 6	2 47	B3	9 30	00	135	6	106	146 L	1 0L	146 000
147	360	797	21 37 42	-17 44 29	164566	-0 6	5 10	B3	9 30	00	176	122	23	9589 H	30 0C	285 633
148	358	806	21 37 46	-17 45 8	164566	-0 2	-4 31	B3	9 30	00	80	16	22	580	3 0C	193 333
149	174	493	21 37 55	-10 30 6	164570	0 1	-3 55	A0	8 80	00	89	68	19	3028 H	30 0C	100 933
150	174	493	21 37 55	-10 30 6	164573	-0 20	-4 3	A2	9 00	00	89	68	19	3028 H	30 0C	100 933
151	185	499	21 37 57	-10 30 15	164570	0 3	-4 4	A0	8 80	00	227	9	197	225	3 0L	75 000
152	161	496	21 37 57	-10 31 9	164570	0 3	-4 57	A0	8 80	00	74	23	18	606	10 0C	80 600
153	382	864	21 38 18	-19 3 35							64	7	23	2117	3 0C	70 333
154	219	592	21 39 30	-12 26 47	164584	0 12	1 56	A2	8 30	00	230	18	204	3997 H	3 0L	133 000
155	422	949	21 39 37	-20 55 49							288	25	196	10957	3 0L	365 333
156	376	894	21 40 36	-19 39 10							64	7	20	2097	30 0C	6 967
157	305	809	21 42 25	-17 5 58							244	10	208	2787	3 0L	92 667
158	154	597	21 42 45	-12 10 6							48	6	17	1667	10 0C	16 600
159	152	585	21 43 32	-11 39 8	164639	0 2	-3 17	A0	5 43	00	258	28	177	1265	3 0L	421 667
160	150	587	21 43 53	-11 39 51	164639	0 3	-4 0	A0	5 43	00	120	34	21	1669	3 0C	555 333
161	129	583	21 43 53	-11 41 7	164639	0 2	-5 16	A0	5 43	00	242	78	20	6144	10 0C	614 400
162	152	583	21 43 55	-11 41 44	164639	0 4	-5 53	A0	5 43	00	136	12	100	350 L	1 0L	350 000
163	140	580	21 43 59	-11 39 40	164639	0 9	-2 49	A0	5 43	00	319	171	22	19013	30 0C	633 767
164	281	832	21 44 45	-17 29 19	164653	-0 6	2 19	B9	8 20	00	164	129	23	8395 H	30 0C	279 833
165	288	839	21 44 54	-17 28 36	164653	0 3	3 3	B9	8 20	00	242	15	200	471	3 0L	157 000
166	267	836	21 44 55	-17 28 48	164653	0 4	2 51	B9	8 20	00	123	50	20	2561	10 0C	256 100
167	277	841	21 44 58	-17 29 7	164653	0 7	2 31	B9	8 20	00	62	15	23	449	3 0C	149 667
168	149	662	21 46 55	-13 8 38							47	4	18	1107	30 0C	3 667
169	260	861	21 47 45	-17 34 5							227	8	187	2467	3 0L	82 000
170	278	902	21 48 9	-18 30 2							215	4	186	1047	3 0L	34 667
171	34	540	21 48 27	-9 55 0							56	6	17	1847	10 0C	18 400
172	39	579	21 50 48	-10 33 14	164717	-0 8	-0 22	B9	6 50	00	392	267	18	34623 H	30 0C	1154 100
173	48	585	21 50 58	-10 33 24	164717	0 3	-0 31	B9	6 50	00	255	23	174	784	3 0L	261 333
174	24	582	21 50 59	-10 31 22	164717	0 3	1 31	B9	6 50	00	274	134	21	11940	10 0C	1194 000
175	47	582	21 51 3	-10 34 24	164717	0 7	-1 32	B9	6 50	00	149	16	110	473	1 0L	473 000
176	36	587	21 51 3	-10 33 18	164717	0 7	-0 25	B9	6 50	00	130	66	21	3515 L	3 0C	1171 667

ORIGINAL PAGE IS
OF POOR QUALITY

CETUS RA 02 44 DEC -14 30

OBJECT NO	X	Y	R A	DEC	SAO NO	Δ R A	Δ DEC	SPEC TYPE	Y MAG	P MAG	PEAK DEN	NO OF POINTS	RG	DENSITY VOLUME	EXP & FILTER	DEN VOL / EXP
1	507	990	2 8 33	-15 30 57	148254	0 0	2 2	A0	7 90	00	82	149	46	4048 H	3 0L	1349 333
2	609	879	2 11 23	-12 20 8							52	12	16	323?	3 0C	107 667
3	642	835	2 15 19	-13 44 46							48	18	18	470?	10 0C	47 000
4	695	820	2 15 39	-10 31 12							49	6	16	157?	3 0C	52 333
5	774	820	2 22 20	-21 29 1							50	8	13	225?	3 0C	75 000
6	479	800	2 23 14	-14 58 41							50	9	19	264?	8 4C	31 429
7	655	783	2 23 31	-12 31 6	148385	-0 1	-0 11	A0	4 90	00	191	45	40	2909	1 0L	2909 000
8	594	785	2 23 33	-12 33 43	148385	0 1	-2 48	A0	4 90	00	378	113	23	12142	8 4C	1445 476
9	654	783	2 23 34	-12 32 47	148385	0 2	-1 53	A0	4 90	00	355	68	79	6576	3 0L	2192 000
10	596	729	2 23 34	-12 34 23	148385	0 2	-3 29	A0	4 90	00	269	63	16	5519	3 0C	1839 667
11	595	727	2 23 37	-12 35 39	148385	0 5	-4 45	A0	4 90	30	334	125	22	13047	10 0C	1304 700
12	391	705	2 27 7	-16 50 60							47	6	17	152?	10 0C	15 200
13	813	691	2 30 7	-9 11 57							103	17	75	404?	3 0L	134 667
14	177	714	2 31 57	-22 52 14							141	21	33	1165?	1 0L	1166 000
15	470	695	2 32 16	-16 20 17	NO						108	4	82	97	3 0L	32 333
16	411	696	2 32 16	-16 20 42	NO						53	8	20	204	8 4C	24 286
17	412	639	2 32 25	-16 20 34	NO						59	12	17	357	10 0C	35 700
18	733	603	2 32 44	-9 35 51	129994	-0 14	-1 44	A0	7 16	00	59	14	13	465	3 0C	155 000
19	733	601	2 32 49	-9 35 52	129994	-0 10	-1 45	A0	7 16	00	115	39	17	1941	10 0C	194 100
20	733	659	2 32 49	-9 35 18	129994	-0 9	-1 11	A0	7 16	00	107	36	18	1656 H	8 4C	198 333
21	791	657	2 32 51	-9 36 26	129994	-0 8	-2 20	A0	7 16	00	112	13	76	360 L	3 0L	120 000
22	756	594	2 34 0	-9 5 35	NO						47	7	20	159	10 0C	15 900
23	756	642	2 34 0	-9 5 10	NO						46	6	19	144	8 4C	17 143
24	622	561	2 37 2	-11 50 55							49	5	12	136?	3 0C	45 333
25	572	567	2 41 47	-14 4 30	148575	0 2	-0 19	B5	4 39	00	320	117	40	8999	1 0L	8999 000
26	571	567	2 41 52	-14 4 45	148575	0 8	-0 34	B5	4 39	00	412	216	83	19729 L	3 0L	6576 333
27	513	568	2 41 60	-14 4 42	148575	0 16	-0 32	B5	4 39	00	419	308	22	35319	8 4C	4204 643
28	513	513	2 42 6	-14 4 11	148575	0 22	-0 1	B5	4 39	00	337	178	17	15262	3 0C	5120 667
29	513	511	2 42 10	-14 4 14	148575	0 25	-0 3	B5	4 39	00	362	346	24	38604	10 0C	3860 000
30	200	585	2 42 48	-20 36 55	168025	-0 13	0 47	A0	7 06	00	52	10	16	282 L	10 0C	33 571
31	200	529	2 43 9	-20 35 31	168025	0 8	1 10	A0	7 06	00	55	13	16	379 L	10 0C	37 900
32	233	571	2 43 51	-19 56 3							51	5	17	140?	8 4C	16 667
33	910	454	2 43 58	-5 50 58							39	4	12	94?	3 0C	31 333
34	504	503	2 47 31	-14 11 10							66	10	17	333?	8 4C	31 333
35	581	429	2 48 25	-12 31 16							41	6	13	155?	3 0C	51 667
36	309	458	2 48 39	-18 15 18							55	11	12	346?	3 0C	115 333
37	282	494	2 50 37	-20 27 33	NO						64	5	36	116	1 0L	116 000
38	203	494	2 50 38	-20 26 1	NO						95	22	17	94?	8 4C	112 738
39	202	441	2 50 50	-20 25 36	NO						44	7	12	185	3 0C	61 667
40	261	494	2 50 52	-20 27 5	NO						134	13	75	483	3 0L	161 000
41	202	438	2 50 59	-20 25 33	NO						101	31	16	1317	10 0C	131 700
42	27	423	2 53 23	-23 52 6							46	5	16	123?	10 0C	12 300
43	738	349	2 53 34	-9 8 34							101	14	12	636?	3 0C	211 667
44	717	328	2 55 25	-9 32 27							42	5	13	131?	3 0C	43 667
45	572	324	2 57 7	-12 33 20							71	9	15	338?	10 0C	33 800
46	447	369	2 59 40	-16 24 43							76	4	37	115?	1 0L	115 000
47	29	394	3 0 18	-23 44 37	168249	0 7	4 33	A3	4 16	00	48	13	17	327 L	8 4C	38 929
48	28	340	3 0 30	-23 42 44	168249?	0 19	6 26	A3	4 16	00	54	19	15	539 L	10 0C	53 900
49	803	250	3 1 6	-7 45 32							105	20	16	852?	10 0C	65 200
50	101	257	3 1 12	-9 47 5							48	5	16	140?	10 0C	14 000
51	324	307	3 1 13	-17 42 11							63	30	15	1033?	10 0C	103 300
52	73	373	3 1 45	-22 50 45							84	17	18	670?	8 4C	79 762
53	344	307	3 5 34	-17 14 54							85	30	17	1168?	8 4C	139 048
54	251	304	3 6 33	-19 9 12	148791	-0 5	0 22	A0	7 30	00	116	26	18	1241	8 4C	147 738
55	250	250	3 6 34	-19 7 38	148791	-0 3	1 55	A0	7 30	00	57	12	13	370	3 0C	123 333
56	250	248	3 6 38	-19 7 43	148791	0 0	1 51	A0	7 30	00	122	32	17	1582	10 0C	158 200
57	871	238	3 6 41	-7 33 2							108	11	69	335?	3 0L	111 667
58	308	304	3 6 46	-19 9 50	148791	0 9	-0 16	A0	7 30	00	116	11	73	339	3 0L	113 000
59	482	268	3 8 6	-15 54 21							111	7	75	187?	3 0L	62 333
60	170	270	3 9 49	-20 45 23	168376	-0 11	3 0	B9	6 90	00	352	88	20	8978 H	8 4C	1068 818
61	169	217	3 9 50	-20 44 31	168376	-0 11	3 52	B9	6 90	00	204	52	14	3687 H	3 0C	1229 000
62	168	215	3 9 53	-20 44 36	168376	-0 8	3 47	B9	6 90	00	325	100	17	10816 H	10 0C	1081 608
63	228	270	3 9 57	-20 47 56	168376	-0 3	0 27	B9	6 90	00	134	25	33?	1455	1 0L	1455 008
64	226	270	3 10 13	-20 47 11	168376	0 12	1 12	B9	6 90	00	293	70	72	5465 H	3 0L	1821 667
65	282	264	3 10 17	-19 39 0							122	30	70	1083?	3 0L	361 008
66	196	232	3 12 46	-20 10 36	168410	-0 14	1 35	A0	6 86	00	106	32	18	1492	8 4C	177 619
67	194	177	3 12 48	-20 10 38	168410	-0 12	1 33	A0	6 86	00	116	38	17	1897	10 0C	189 700
68	194	178	3 12 49	-20 9 10	168410	-0 10	3 1	A0	6 86	00	52	11	13	328 L	3 0C	109 333
69	252	232	3 13 8	-20 11 60	168410	0 9	0 11	A0	6 86	00	104	15	70	413 L	3 0L	137 667
70	345	156	3 13 24	-17 2 40	148854	-0 4	-1 54	B3	8 20	00	170	32	15	2016 H	3 0C	672 000
71	345	154	3 13 27	-17 2 45	148854	-0 1	-1 60	B3	8 20	00	281	66	19	5996	10 0C	599 600
72	347	210	3 13 33	-17 2 26	148854	0 5	-1 40	B3	8 20	00	260	59	21	5021	8 4C	597 738
73	404	209	3 13 37	-17 1 1	148854	0 9	-0 15	B3	8 20	00	271	47	74	3342 H	3 0L	1114 000
74	366	139	3 14 27	-16 35 49							96	39	16	1663?	10 0C	166 300
75	689	77	3 15 50	-9 58 28	130410	-0 5	-3 40	B8	8 30	00	44	9	17	216 L	10 0C	21 600
76	692	135	3 15 59	-9 52 59	130410	-0 4	1 48	B8	8 30	00	44	4	20	90 L	8 4C	10 714
77	372	114	3 16 17	-16 27 26							60	8	15	282?	10 0C	26 200
78	247	116	3 17 14	-19 1 8	148904	-0 16	0 21	A0	6 97	00	53	17	16	469 L	10 0C	46 900
79	249	171	3 17 21	-19 1 30	148904	-0 9	-0 1	A0	6 97	00	51	12	17	323 L	8 4C	38 452
80	233	163	3 18 53	-20 29 2	168485	-0 34	1 8	A0	6 58	00	127	20	70	693	3 0L	231 000
81	173	98	3 19 13	-20 29 27	168485	-0 14	0 43	A0	6 58	00	71	33	17	1126	10 0C	112 600
82	176	153	3 19 16	-20 27 53	168485	-0 11	2 16	A0	6 58	00	66	20	18	664	8 4C	79 048
83	460	46	3 25 40	-14 33 15	148985	0 19	-0 54	A0	7 16	00	53	16	19	4277L	8 4C	50 833

PAGE, CARRUTHERS AND HILL

GRUS RA 23 34 TO 23 54 DEC -42 30 TO -40 30

OBJECT NO	X	Y	R A	DEC	SAO NO	Δ R A	Δ DEC	SPEC TYPE	V MAG	P MAG	PEAK DEN	NO OF POINTS	BG	DENSITY VOLUME	EXP & FILTER	DEN VOL/ EXP
1	380	46	0 1 48	-50 12 7							160	18	16	1209?	3 0C	483 000
2	622	200	0 2 40	-46 49 12							24	37	16	1643?	10 0C	164 300
3	806	477	0 4 17	-40 12 33							45	6	14	154?	3 0C	51 333
4	892	268	0 4 59	-44 57 18							70	11	15	415?	10 0C	41 500
5	569	29	0 6 17	-50 21 46	231947	-0 20	4 56	09	7 17	00	80	26	22	917 L	10 0C	91 700
6	835	866	0 7 40	-31 8 14							68	4	16	432?	3 0C	164 0E0
7	571	320	0 9 3	-43 22 24							47	5	20	97?	30-0C	-3-233
8	674	464	0 12 36	-39 32 14	NO						42	5	19	110	10 0C	11 000
9	684	465	0 12 39	-39 32 53	NO						63	64	22	162?	30 0C	54 233
10	652	357	0 15 7	-41 50 19							72	15	21	525?	30 0C	17 500
11	836	702	0 15 12	-33 53 43							87	9	22	362?	30 0C	12 733
12	807	501	0 21 44	-37 41 60	192504	0 9	-0 44	09	7 83	00	76	19	16	651	3 0C	220 333
13	793	497	0 21 44	-37 41 49	192504	0 8	-0 34	09	7 83	00	165	45	18	2631	10 0C	263 100
14	804	498	0 22 3	-37 44 48	192504?	0 28	-3 32	09	7 83	00	213	117	22	9028	30 0C	303 933
15	660	223	0 23 33	-44 1 60	215092	-0 12	-4 34	A3	3 90	00	63	30	22	658 L	10 0C	31 933
16	659	222	0 23 42	-43 58 46	215092	-0 3	-1 20	A3	3 90	00	46	5	17	130 L	10 0C	13 000
17	808	413	0 26 43	-39 11 51							51	4	21	104?	30 0C	3 457
18	627	34	0 28 57	-47 48 5							54	27	24	685?	30 0C	22 833
19	885	461	0 30 31	-37 38 1							49	9	15	242?	3 0C	80 667
20	821	342	0 31 38	-40 19 56	215143?	0 16	-7 55	08	7 54	00	190	106	24	8059	30 0C	268 633
21	827	345	0 31 41	-40 14 12	215143	0 19	-2 11	08	7 54	00	64	19	14	627	3 0C	209 000
22	812	341	0 31 44	-40 15 21	215143?	0 21	-3 20	08	7 54	00	148	46	18	2677	10 0C	267 700
23	936	358	0 40 49	-38 52 50	192690?	0 30	-8 37	A0	6 07	00	364	211	24	25015	30 0C	833 833
24	942	360	0 40 51	-38 47 15	192690?	0 32	-3 2	A0	6 07	00	98	55	15	2477	3 0C	825 667
25	928	356	0 40 51	-38 47 27	192690?	0 32	-3 13	A0	6 07	00	227	108	18	8765	10 0C	876 500
26	953	373	0 41 2	-38 26 11	192692?	0 28	-2 8	08	00	10 10	46	18	16	438 H	3 0C	146 000
27	939	369	0 41 6	-38 27 24	192692?	0 32	-3 20	08	00	10 10	113	66	20	3130 H	10 0C	313 000
28	948	371	0 41 6	-38 31 6	192692?	0 32	-7 2	08	00	10 10	177	147	27	10283 H	30 0C	342 767
29	91	405	22 51 13	-47 54 25							116	11	50	471?	1 0L	471 000
30	146	763	22 51 13	-40 23 44							43	5	15	121?	3 0C	40 333
31	36	348	22 54 9	-48 58 54							55	5	15	168?	3 0C	56 000
32	191	632	22 56 53	-42 50 60							42	4	16	96?	10 0C	9 600
33	158	375	23 0 11	-48 5 50	231409	0 7	1 13	08	6 72	00	201	39	108	1817	3 0L	605 667
34	160	374	23 0 14	-48 4 52	231409	0 10	2 11	08	6 72	00	90	14	52	417 L	1 0L	417 000
35	133	376	23 0 14	-48 4 57	231409	0 10	2 6	08	6 72	00	233	74	20	5889	10 0C	588 900
36	103	374	23 0 24	-48 3 31	231409	0 20	3 31	08	6 72	00	106	37	16	1709	3 0C	569 667
37	349	837	23 3 28	-37 59 23							90	6	55	165?	1 0L	165 000
38	90	753	23 3 59	-39 10 6	214313	-0 8	-0 19	A0	5 59	00	54	15	17	437?	10 0C	43 700
39	280	779	23 4 0	-39 12 43	214313	-0 7	-2 57	A0	5 59	00	163	49	16	2834	3 0C	944 667
40	336	777	23 4 1	-39 14 39	214313	-0 6	-4 52	A0	5 59	00	139	22	56	1013	1 0L	1013 000
41	334	780	23 4 1	-39 13 26	214313	-0 6	-3 40	A0	5 59	00	287	41	117	2768	3 0C	922 667
42	310	781	23 4 3	-39 13 38	214313	-0 4	-3 52	A0	5 59	00	317	88	22	9122	10 0C	812 200
43	52	424	23 10 37	-45 40 48							55	29	18	830?	10 0C	83 000
44	370	681	23 13 29	-40 37 39	231522	0 13	1 12	A5	9 50	9 70	46	51	18	1185 H	10 0C	118 500
45	329	527	23 15 33	-43 49 14							58	9	16	290?	10 0C	29 000
46	287	347	23 15 52	-47 41 34	231542	-0 5	0 58	A0	6 70	00	86	6	54	161 L	1 0L	161 000
47	286	350	23 15 54	-47 41 21	231542	-0 5	1 11	A0	6 70	00	186	19	113	782	3 0C	260 667
48	231	348	23 15 58	-47 39 55	231542	-0 1	2 37	A0	6 70	00	97	20	15	866	3 0C	288 667
49	262	351	23 16 1	-47 39 38	231542	0 3	2 53	A0	6 70	00	205	45	18	3231	10 0C	323 100
50	29	315	23 16 3	-47 44 0	231542	0 5	-1 28	A0	6 70	00	47	17	16	419 L	3 0C	139 667
51	76	309	23 16 3	-47 44 9	231542	0 4	-1 37	A0	6 70	00	174	145	19	1100?	30 0C	366 300
52	65	310	23 16 12	-47 44 18	231542	0 13	-1 44	A0	6 70	00	110	85	18	3088	10 0C	308 800
53	239	792	23 16 35	-37 30 58							96	15	22	701?	30 0C	23 367
54	48	166	23 17 60	-50 31 17	247837	-0 1	3 45	A3	8 87	00	86	14	19	510?	30 0C	17 000
55	297	839	23 19 6	-35 28 46							91	9	50	266?	1 0L	268 000
56	470	840	23 20 12	-38 31 37							93	7	16	200?	3 0C	66 667
57	531	830	23 21 3	-36 35 56	214517	-0 14	2 53		10 50	10 78	50	5	55	143?	1 0L	143 000
58	370	935	23 23 15	-34 4 21							104	13	49	458?	1 0L	458 000
59	300	191	23 24 26	-50 25 9	247880	0 3	0 49	08	6 34	00	140	36	52	1675	1 0L	1675 000
60	299	193	23 24 29	-50 26 18	247880	0 6	-0 20	08	6 34	00	292	68	105	4734 H	3 0L	1578 000
61	244	191	23 24 31	-50 24 32	247880	0 7	1 26	08	6 34	00	207	55	15	4095 H	3 0C	1365 000
62	275	194	23 24 31	-50 24 44	247880	0 8	1 14	08	6 34	00	378	96	19	11030	10 0C	1103 000
63	485	614	23 25 23	-41 0 39							179	9	127	283?	3 0L	94 333
64	453	585	23 25 52	-41 37 58							59	8	16	261?	10 0C	26 100
65	289	856	23 26 36	-39 42 42							46	4	19	100?	10 0C	10 000
66	327	315	23 28 15	-47 29 6							44	4	17	93?	3 0C	31 000
67	476	625	23 29 12	-40 23 23							62	10	15	330?	3 0C	110 000
68	358	227	23 29 49	-49 19 56	231652?	0 12	9 34	A5	9 30	9 90	148	4	105	154?H	3 0L	51 333
69	429	926	23 29 51	-33 38 24							51	4	16	122?	3 0C	40 667
70	558	722	23 30 18	-38 8 12	214615	0 1	-2 29	09	4 46	00	434	285	21	32852	10 0C	3285 200
71	348	714	23 30 19	-38 9 57	214615	0 1	-4 15	09	4 46	00	436	282	21	32861	10 0C	3286 100
72	356	714	23 30 19	-38 10 28	214615	0 1	-4 45	09	4 46	00	483	539	32	76689	30 0C	2556 300
73	529	719	23 30 21	-38 9 29	214615	0 4	-3 47	09	4 46	00	324	135	19	12034	3 0C	4011 333
74	363	718	23 30 23	-38 9 18	214615	0 5	-3 36	09	4 46	00	345	132	19	12629	3 0C	4209 667
75	376	720	23 30 24	-38 8 58	214615	0 6	-3 15	09	4 46	00	357	69	59	6308	1 0L	6308 000
76	585	719	23 30 25	-38 6 9	214615	0 7	-0 26	09	4 46	00	317	76	60	6420	1 0L	6420 000
77	583	721	23 30 28	-38 6 51	214615	0 10	-1 9	09	4 46	00	412	137	126	12290	3 0L	4096 667
78	378	305	23 31 13	-47 31 49							57	10	16	302?	10 0C	30 200
79	402	810	23 31 30	-35 59 49							54	7	24	168?	30 0C	5 600
80	449	501	23 32 15	-42 53 51	231675?	0 6	3 48	A2	6 86	00	52	8	15	225	3 0C	75 000
81	449	501	23 32 15	-42 53 51	231675	-0 8	-0 21	A2	4 80	00	52	8	15	225 L	3 0C	75 000
82	290	490	23 32 16	-42 52 35	231675?	0 7	5 5	A2	6 86	00	168	84	24	5702	30 0C	190 067
83	290	490	23 32 16	-42 52 35	231675	-0 7	0 55	A2	4 80	00	168	84	24	5702 L	30 0C	190 067
84	295	495	23 32 18	-42 51 4	231675?	0 9	6 35	A2	6 86	00	60	13	15	391	3 0C	130 333
85	295	495	23 32 18													

PAGE, CARRUTHERS AND HILL

PAVO RA 21 14 DEC -52 12

OBJECT NO	X	Y	R A	DEC	SAD NO	Δ R A	Δ DEC	SPEC TYPE	V MAG	P MAG	PEAK DEN	NO OF POINTS	BO	DENSITY VOLUME	EXP & FILTER	DEN VOL/ EXP
51	393	830	21 35 35	-16 20 43	230770?	-0 34	-5 8	A0	9 00	9 40	233	36	131	1864 H	3 0L	821 333
52	380	832	21 35 36	-16 19 32	230769?	-0 20	-0 5	B9	9 60	9 60	100	17	56	513	1 0L	513 000
53	380	832	21 35 36	-16 19 32	230770?	-0 33	-3 57	A0	9 00	9 40	100	17	56	513	1 0L	513 000
54	372	825	21 35 36	-16 19 47	230769?	-0 20	-0 21	B9	9 60	9 60	84	26	8	998 H	3 0C	332 667
55	372	825	21 35 36	-16 19 47	230770?	-0 33	-4 12	A0	9 00	9 40	84	26	18	998 H	3 0C	332 667
56	639	658	21 42 13	-52 33 10							52	4	17	113?	3 0C	37 667
57	560	732	21 42 21	-50 22 52							42	4	17	99?	3 0C	31 333
58	659	655	21 43 15	-52 40 59							193	7	138	232?	3 0L	77 333
59	654	655	21 43 42	-52 45 45							171	5	138	139?	3 0L	46 333
60	670	653	21 45 33	-52 58 34							77	7	20	248?	3 0C	62 667
61	811	552	21 45 35	-56 31 15	247190	0 10	-0 50	B9	6 74	00	282	44	126	2862	3 0L	954 000
62	801	546	21 45 39	-56 31 27	247190	0 14	-1 3	B9	6 74	00	181	40	18	2510	3 0C	836 667
63	808	552	21 45 40	-56 31 17	247190	0 15	-0 53	B9	6 74	00	126	26	55	1045	1 0L	1045 000
64	675	653	21 46 0	-53 3 18							62	5	22	159?	3 0C	53 000
65	903	509	21 49 41	-59 31 15							92	7	51	211?	1 0L	211 000
66	894	532	21 51 23	-58 2 50							152	6	118	173?	3 0L	57 667
67	523	865	21 52 3	-47 51 3							196	13	129	492?	3 0L	164 000
68	955	509	21 54 31	-59 12 59							141	4	115	95?	3 0L	31 667
69	849	627	21 57 11	-56 6 41	247262	0 11	0 43	B8	6 21	00	260	53	122	3296	3 0L	1098 667
70	839	621	21 57 16	-56 6 58	247262	0 15	0 25	B8	6 21	00	171	47	19	2992	3 0C	997 333
71	846	627	21 57 22	-56 5 27	247262	0 21	1 57	B8	6 21	00	114	29	56	1024	1 0L	1024 000
72	557	973	22 3 9	-47 15 19							184	4	125?	234?	3 0L	78 000
73	734	802	22 3 29	-52 3 50							151	4	123	95?	3 0L	31 667
74	569	974	22 4 21	-47 24 17							206	5	125?	395?	3 0L	131 667
75	565	980	22 4 43	-47 18 25	230992	-0 23	-6 10	B5	2 16	00	80	159	55?	714	1 0L	714 000
76	568	982	22 4 57	-47 18 13	230992	-0 8	-5 58	B5	2 16	00	271	662	125?	1315? L	3 0L	4385 667
77	557	981	22 5 19	-47 13 58	230992	0 13	-1 43	B5	2 16	00	307	269	20?	2351? L	3 0C	7837 667
78	766	835	22 9 28	-52 6 12							150	4	123	95?	3 0L	31 667
79	695	944	22 11 52	-49 28 54	NO						159	33	124	881	3 0L	293 667
80	675	938	22 11 59	-49 29 3	NO						46	9	21	200	3 0C	66 667
81	742	928	22 17 11	-50 35 29							62	6	19	178?	3 0C	59 333

MENSA RA 05 50 DEC -74 00

1	256	903	3 26 8	-77 9 17	NO						163	16	83	642	30 0C	21 400
2	269	904	3 28 3	-76 55 47	255988?	2 16	-0 37	A0	6 89	00	124	4	90	121 L	30 0C	4 033
3	237	877	3 30 15	-77 47 41							108	5	76	134?	30 0C	4 467
4	332	926	3 33 5	-75 34 7							131	27	87	838?	30 0C	27 933
5	177	822	3 35 58	-79 27 21	NO						164	15	66	695	30 0C	23 167
6	176	824	3 35 7	-79 28 10	NO						65	4	29	123	10 0C	12 300
7	243	854	3 39 22	-77 57 47							110	8	74	222?	30 0C	7 400
8	171	806	3 40 39	-79 43 55							92	12	66	270?	30 0C	9 000
9	241	846	3 48 48	-78 4 39							113	7	76	181?	30 0C	6 033
10	512	981	3 44 46	-71 47 8	256025	-0 53	1 39	A0	6 54	00	343	123	42	11579 H	10 0C	1157 900
11	513	981	3 44 49	-71 46 56	256025	-0 49	1 51	A0	6 54	00	99	30	61	835 H	1 0L	835 000
12	511	978	3 44 50	-71 47 57	256025	-0 48	0 50	A0	6 54	00	428	840	93?	23433 H	30 0C	781 160
13	514	982	3 44 52	-71 47 5	256025	-0 47	1 41	A0	6 54	00	249	484	140?	4367 H	3 0L	1455 760
14	531	975	3 47 29	-71 27 41							128	4	99	103?	30 0C	3 433
15	259	835	3 47 32	-77 53 0							130	6	81	187?	30 0C	6 233
16	276	844	3 47 45	-77 28 24	NO						120	28	85	713	30 0C	23 767
17	301	861	3 47 50	-76 54 60	256028	-0 8	-2 54	B8	8 12	00	194	29	141	985	3 0L	328 333
18	275	846	3 47 52	-77 29 12	NO						59	5	36	105	10 0C	10 600
19	300	859	3 47 52	-76 54 32	256028	-0 6	-2 26	B8	8 12	00	167	55	36	3093	10 0C	309 300
20	300	855	3 48 16	-76 55 56	256028	0 17	-3 51	B8	8 12	00	341	108	85	8663	30 0C	288 767
21	537	969	3 49 13	-71 24 40							137	8	95	235?	30 0C	7 867
22	283	838	3 51 45	-77 25 33							73	4	35	107?	10 0C	10 700
23	561	943	3 57 47	-71 12 13							95	104	39	4117?	10 0C	411 700
24	570	940	3 58 32	-71 2 13							140	7	96	210?	30 0C	7 888
25	553	934	3 59 7	-71 25 42	256053?	-1 54	-7 22	A0	6 72	00	103	191	42	7951	10 0C	795 100
26	562	929	4 0 14	-71 17 46	256053	-0 46	0 34	A0	6 72	00	143	24	96	750 L	30 0C	25 000
27	359	841	4 0 49	-75 59 3							118	8	88	203?	30 0C	6 767
28	604	942	4 1 21	-70 22 6							121	8	94	190?	30 0C	6 333
29	648	951	4 2 8	-69 23 47							177	5	145	125?	3 0L	41 667
30	264	791	4 3 34	-78 12 37							115	4	84	116?	30 0C	3 867
31	294	804	4 3 34	-77 32 11							152	8	87	319?	30 0C	10 633
32	288	794	4 7 18	-77 35 37							128	5	87	168?	30 0C	5 600
33	463	857	4 9 34	-73 53 31							191	7	154	196?	3 0L	65 333
34	602	897	4 11 28	-70 47 8							90	17	39	581?	10 0C	58 100
35	817	978	4 12 18	-65 59 59							74	4	35	121?	10 0C	12 100
36	688	875	4 22 40	-69 16 3							257	17	150	912?	3 0L	304 000
37	440	788	4 24 52	-74 48 52							116	5	93	103?	30 0C	3 433
38	353	760	4 25 29	-76 44 53							117	7	87	170?	30 0C	5 667
39	175	899	4 26 57	-80 35 37	NO						107	8	68	230	30 0C	7 667
40	445	767	4 31 21	-74 50 52							126	85	93	1900?	30 0C	63 333
41	606	809	4 31 36	-71 18 39	LMC						109	7	66	232?	1 0L	232 000
42	316	730	4 32 8	-77 40 43	LMC						113	8	79	211?	30 0C	7 033
43	611	808	4 32 11	-71 12 53	LMC						127	8	68	308?	1 0L	308 000
44	441	763	4 32 15	-74 57 2							113	8	89	172?	30 0C	5 733
45	446	761	4 33 17	-74 51 35							137	31	91	938?	30 0C	31 267
46	199	691	4 33 49	+80 10 45	NO						115	10	66	346	30 0C	11 533
47	452	760	4 34 4	-74 44 35							154	51	89	1916?	30 0C	63 867
48	199	692	4 34 38	-80 10 28							67	8	34	211?	10 0C	21 100
49	92	658	4 35 10	-82 24 50							103	4	66	139?	30 0C	4 633
50	211	691	4 35 14	-79 56 16							118	5	66	175?	30 0C	5 833

ORIGINAL PAGE IS OF POOR QUALITY

PAGE, CARRUTHERS AND HILL

MENSA RA 05 50 DEC -74 00

OBJECT NO	X	Y	R	A	DEC	SAO NO	Δ R	Δ A	SPEC TYPE	V MAG	P MAG	PEAK DEN	NO OF POINTS	BO	DENSITY VOLUME	EXP & FILTER	DEN VOL/ EXP	
151	704	715	4	57	51	-69 43 26						97	10	71	211	10 0C	21 100	
152	801	730	4	57	53	-67 43 1						166	74	114	2381	30 0C	79 367	
153	704	712	4	57	59	-69 44 17						222	58	126	3121	30 0C	104 033	
154	695	713	4	57	60	-69 54 57						79	13	54	296	10 0C	29 600	
155	695	710	4	59	11	-69 54 34						186	87	125	2945	30 0C	98 167	
156	872	742	4	58	12	-68 15 33						174	4	143	107	30 0C	3 567	
157	810	729	4	58	23	-67 32 7						155	20	113	596	30 0C	19 667	
158	872	740	4	58	25	-68 15 43						169	24	143	193	30 0C	6 433	
159	822	729	4	58	46	-67 17 22						148	7	113	204	30 0C	6 800	
160	473	679	4	58	55	-74 39 60						189	29	75	1567	30 0C	52 233	
161	745	714	4	58	57	-68 53 10						210	80	126	3477	30 0C	115 900	
162	707	708	4	59	3	-69 41 17						162	10	125	293	30 0C	9 787	
163	894	743	4	59	6	-65 49 24						190	6	167	123	3 0L	41 000	
164	672	702	4	59	16	-70 25 46						146	6	114	159	30 0C	5 300	
165	689	739	4	59	19	-65 55 16						282	312	144	17692	30 0C	589 733	
166	795	722	4	59	20	-67 46 42						137	4	117	73	30 0C	2 433	
167	492	680	4	59	21	-74 40 44						66	6	30	187	10 0C	18 700	
168	889	741	4	59	23	-65 54 36						124	223	55	8827	10 0C	882 700	
169	704	706	4	59	25	-69 45 21						162	14	129	346	30 0C	11 533	
170	654	698	4	59	35	-70 50 5						144	42	109	961	30 0C	32 033	
171	787	718	4	59	37	-68 2 0						145	5	120	116	30 0C	3 867	
172	899	739	4	59	47	-65 54 56						190	16	167	331	3 0L	110 333	
173	682	703	5	0	7	-70 14 3						201	14	170	347	3 0L	115 667	
174	682	702	5	0	12	-70 13 0						127	47	52	1854	10 0C	185 400	
175	682	699	5	0	19	-70 15 6						275	173	122	7718	30 0C	257 267	
176	829	722	5	0	28	-67 9 56						139	11	117	226	30 0C	7 533	
177	722	702	5	0	42	-69 24 46	249166	-0 4	0 31	A0	8 95	00	169	20	125	619	30 0C	46 833
178	780	712	5	0	43	-68 11 39						93	7	95	169	L 0C	16 900	
179	721	705	5	0	46	-69 25 20	249166	-0 0	-0 2	A0	8 95	00	83	7	95	169	L 0C	16 900
180	721	705	5	0	46	-69 25 20	249172	-1 9	8 37	A3	8 32	00	148	8	127	123	30 0C	4 267
181	672	694	5	0	59	-70 28 13						148	8	127	123	30 0C	4 267	
182	776	710	5	1	3	-68 16 55						185	44	125	1717	30 0C	57 233	
183	776	712	5	1	7	-68 16 14						77	10	54	213	10 0C	21 300	
184	678	693	5	1	25	-70 20 55						55	24	114	764	30 0C	25 467	
185	691	693	5	1	51	-70 4 45						50	5	114	147	30 0C	4 800	
186	889	724	5	1	52	-68 9 45						201	185	117	6937	30 0C	232 000	
187	889	726	5	1	56	-68 9 5						85	20	54	588	10 0C	50 800	
188	664	691	5	2	2	-70 38 18						83	18	49	4772	10 0C	47 700	
189	645	686	5	2	3	-71 3 9						137	13	92	3802	30 0C	12 657	
190	651	685	5	2	31	-70 55 50						124	12	91	324	30 0C	10 800	
191	651	688	5	2	42	-70 42 31						110	76	46	2595	10 0C	258 500	
192	852	714	5	2	47	-66 44 8						142	20	112	431	30 0C	14 367	
193	757	700	5	2	48	-68 29 29						169	23	126	6672	30 0C	22 233	
194	838	711	5	2	49	-67 1 39						149	19	113	5412	30 0C	18 033	
195	488	669	5	3	6	-74 23 42	256152	0 39	0 57	A0	6 97	00	213	47	31	3263	H 0C	326 300
196	663	684	5	3	10	-70 41 2						269	302	111	14651	30 0C	488 367	
197	488	669	5	3	13	-74 23 10	256152	0 46	1 29	A0	6 97	00	122	14	69	489	1 0L	489 000
198	489	670	5	3	15	-74 23 26	256152	0 48	1 13	A0	6 97	00	257	19	167	866	3 0L	288 667
199	488	665	5	3	16	-74 24 34	256152	0 49	0 4	A0	6 97	00	362	77	80	7186	30 0C	239 533
200	662	686	5	3	25	-70 42 43						201	28	168	715	3 0L	238 333	
201	878	714	5	3	39	-68 13 34						156	11	127	50	3 0L	5 222	
202	865	711	5	3	44	-68 29 49						250	111	120	5225	3 0L	9 57	
203	865	713	5	3	47	-68 29 8						109	27	51	227	A 0C	28 722	
204	824	707	5	3	49	-67 20 15						199	20	165	536	3 0L	79 657	
205	678	686	5	3	54	-70 22 46						224	14	177	439	3 0L	6 333	
206	824	704	5	3	56	-67 19 57						298	89	117	6656	30 0C	22 867	
207	677	685	5	3	57	-70 23 2						152	168	45	197	2 0C	7 9 722	
208	737	690	5	3	59	-69 8 3						257	124	121	7883	30 0C	262 767	
209	824	706	5	3	60	-67 19 16						130	58	49	2570	3 0C	257 022	
210	737	692	5	4	4	-69 7 21						115	91	55	3459	10 0C	3 6 922	
211	677	682	5	4	6	-70 23 54						340	179	106	6629	30 0C	55 322	
212	798	697	5	4	19	-67 52 48						208	36	134	494	30 0C	9 822	
213	798	699	5	4	23	-67 52 6						91	14	55	398	4 0C	39 822	
214	768	692	5	4	24	-68 29 18						166	18	128	536	30 0C	7 867	
215	660	677	5	4	50	-70 45 50						258	80	105	7152	3 0C	238 722	
216	903	710	5	4	65	44 42						132	5	111	103	3 0C	3 333	
217	785	694	5	5	10	-68 7 40	249185	-0 4	1 28	B9	7 83	00	191	82	57	45394	3 0C	453 922
218	786	694	5	5	16	-68 7 32	249185	0 1	1 37	B9	7 83	00	212	28	174	793	3 0L	284 333
219	651	676	5	5	25	-70 56 48						88	11	42	350	10 0C	35 022	
220	686	679	5	5	27	-70 12 33						94	16	44	604	10 0C	60 422	
221	660	676	5	5	35	-70 44 59						106	13	78	323	1 0L	323 222	
222	635	671	5	5	36	-71 17 56						123	24	84	697	30 0C	23 233	
223	682	677	5	5	41	-70 44 1						240	81	176	2755	3 0L	9 8 333	
224	661	676	5	5	43	-70 44 19						209	176	50	10592	10 0C	059 222	
225	663	674	5	5	56	-70 41 22						107	15	77	383	1 0L	383 022	
226	638	669	5	6	12	-71 14 28						111	7	84	174	30 0C	5 852	
227	571	662	5	6	16	-72 39 26						119	6	77	197	30 0C	6 567	
228	949	710	5	6	19	-64 49 48						355	29	101	3608	30 0C	24 267	
229	948	712	5	6	20	-64 50 19						196	17	43	1271	10 0C	127 133	
230	669	673	5	6	21	-70 34 1						106	4	81	95	1 0L	95 000	
231	566	661	5	6	22	-72 47 5						130	7	78	230	30 0C	230 667	
232	670	670	5	6	39	-70 34 13						412	470	99	51702	30 0C	1723 000	
233	671	673	5	6	41	-70 33 11						251	79	174	3628	3 0L	1209 333	
234	670	672	5	6	44	-70 33 30						230	141	47	10819	10 0C	1081 900	
235	769	684	5	6	45	-68 29 59						130	27	75	949	10 0C	94 900	
236	535	657	5	6	47	-73 26 38						95	4	70	93	30 0C	3 100	
237	553	660	5	7	32	-73 4 15	256160	0 23	1 55	A0	6 25	00	217	13	166	457	3 0L	152 333
238	233	624	5	7	37	-79 49 13						124	19	75	634	30 0C	21 133	
239	551	658	5	7	44	-73 5 22	256160	0 35	0 48	A0	6 25	00	100	5	72	118	1	

NRL REPORT 8173

MENSA RA 05 50 DEC -74 00

OBJECT NO	X	Y	R A	DEC	SAO NO	Δ R A	Δ DEC	SPEC TYPE	V MAG	P MAG	PEAK DEN	NO OF POINTS	BG	DENSITY VOLUME	EXP & FILTER	DEN VOL/ EXP
251	755	672	5 8 55	-68 48 48							206	68	59	3716?	10 OC	371 600
252	686	664	5 9 1	-70 13 56							113	5	82	115?	1 OL	115 000
253	756	672	5 9 2	-68 48 34							225	34	174	1050?	3 OL	350 000
254	692	663	5 9 10	-70 19 2							123	4	77	171?	1 OL	171 000
255	722	664	5 9 12	-69 31 14							130	4	109	79?	30 OC	2 633
236	651	659	5 9 25	-70 58 17							110	4	73	107?	1 OL	107 000
257	637	654	5 9 47	-71 18 49							124	7	85	211?	30 OC	7 033
258	797	671	5 9 48	-67 57 20	NO LMC						186	45	112	1694	30 OC	56 133
259	797	673	5 9 52	-67 58 37	NO LMC						81	10	47	792	10 OC	27 700
260	750	666	5 10 3	-69 56 37	NO LMC						228	24	178	792	3 OL	264 000
261	749	663	5 10 5	-68 57 43	NO LMC						372	2164	132	74710	30 OC	2490 333
262	629	652	5 10 6	-71 29 5							131	40	84	1200?	30 OC	40 000
263	749	665	5 10 9	-68 56 59	NO LMC						138	57	63	3130	10 OC	313 000
264	922	685	5 10 15	-65 25 37							139	47	104	1320?	30 OC	44 300
265	688	655	5 10 34	-70 14 46							139	25	104	682?	30 OC	22 733
266	834	674	5 10 40	-67 12 59							192	4	171	78?	3 OL	26 333
267	703	656	5 10 40	-69 55 55							140	4	109	108?	30 OC	3 600
268	920	671	5 12 48	-65 29 27							140	32	100	930?	30 OC	31 257
269	932	673	5 12 48	-65 15 51	249221	-0 26	1 43	88	8 45	00	256	81	101	5583	30 OC	186 100
270	932	675	5 12 51	-65 15 7	249221	-0 23	2 27	88	8 45	00	109	38	50	1411	10 OC	141 100
271	626	655	5 13 39	-67 24 14	NO LMC						365	586	100	40562	30 OC	1352 057
272	825	657	5 13 41	-67 24 5	NO LMC						98	5	76	107	1 OL	107 000
273	626	658	5 13 45	-67 24 24	NO LMC						220	59	171	1844	3 OL	614 657
274	729	646	5 13 45	-69 23 8	NO LMC						111	13	80	342	1 OL	342 000
275	730	647	5 13 45	-69 23 8	NO LMC						264	56	183	1806	3 OL	635 333
276	357	661	5 13 52	-69 23 26	NO LMC						146	23	78	838	30 OC	27 933
277	730	644	5 13 54	-67 16 4	NO						408	694	188	2437	30 OC	81 233
278	626	657	5 13 56	-67 23 34	NO LMC						173	307	41	14784	10 OC	1478 400
279	730	646	5 13 58	-69 22 37	NO LMC						241	219	83	2959	10 OC	295 900
280	722	645	5 14 11	-69 33 37	NO LMC						205	8	173	207	3 OL	69 000
281	356	622	5 14 25	-77 16 39	NO						65	4	31	117	10 OC	11 700
282	670	656	5 14 37	-66 31 5							150	20	107	607?	30 OC	20 233
283	723	643	5 14 41	-69 32 33							205	8	174	200?	3 OL	66 667
284	741	642	5 15 7	-69 9 16							70	7	44	163?	10 OC	16 300
285	761	640	5 15 24	-68 45 4							118	7	94	159?	30 OC	5 300
286	620	640	5 16 35	-67 32 57							137	23	101	630?	30 OC	21 000
287	673	630	5 16 49	-70 39 26	NO LMC						64	5	37	118	10 OC	11 800
288	673	627	5 16 59	-70 36 17	NO LMC						153	37	86	1305	30 OC	43 500
289	800	634	5 17 23	-67 59 13							136	8	107	206?	30 OC	6 867
290	722	631	5 17 24	-69 33 58	NO LMC						182	369	50	14261	10 OC	1426 100
291	758	628	5 18 7	-68 51 4							123	4	97	94?	30 OC	3 133
292	641	619	5 18 29	-71 17 7							122	13	75	423?	30 OC	14 100
293	737	624	5 18 31	-69 16 17							432	371	98	4973?	30 OC	1657 900
294	737	626	5 18 35	-69 15 31	NO LMC						407	314	41	28418	10 OC	2841 800
295	737	625	5 18 39	-69 14 46	NO LMC						178	48	87	227?	1 OL	2277 000
296	738	626	5 18 44	-69 15 4	NO LMC						377	69	198	543?	3 OL	1810 667
297	904	638	5 18 48	-65 51 48							144	57	106	1550?	30 OC	52 000
298	310	604	5 18 50	-78 16 29							106	17	76	429?	30 OC	14 267
299	673	618	5 18 60	-70 38 55							114	12	84	302?	30 OC	10 067
300	452	611	5 19 6	-75 17 24	NO						135	11	70	456	30 OC	15 200
301	755	622	5 19 14	-68 55 11							131	5	100	132?	30 OC	4 409
302	912	636	5 19 18	-65 43 18							129	5	105	113?	30 OC	3 767
303	717	620	5 19 35	-69 40 8	NO LMC						116	19	81	482	1 OL	482 000
304	718	621	5 19 39	-69 40 26	NO LMC						273	147	179	5766	3 OL	1922 000
305	717	618	5 19 39	-69 41 45							396	1593	97	12855?	30 OC	4265 057
306	717	620	5 19 44	-69 40 58	NO LMC						248	151	50	10025	10 OC	1002 500
307	793	623	5 19 45	-68 7 45							159	33	122	735?	30 OC	24 500
308	331	606	5 19 57	-77 49 26							56	6	30	142?	10 OC	14 200
309	703	618	5 20 1	-69 58 39							64	4	48	89?	10 OC	8 900
310	830	624	5 20 12	-67 22 57							184	56	126	905?	30 OC	30 167
311	647	625	5 20 12	-67 1 46	LMC						142	20	108	527?	30 OC	17 567
312	830	626	5 20 15	-67 22 10	NO LMC						71	9	44	217	10 OC	21 700
313	797	620	5 20 15	-68 2 64							153	17	121	435?	30 OC	14 500
314	858	626	5 20 19	-66 48 7							132	6	108	135?	30 OC	4 500
315	924	631	5 20 26	-65 28 60	NO LMC						183	40	122	1400	30 OC	46 657
316	727	618	5 20 29	-69 29 21							213	17	183	422?	3 OL	140 667
317	923	632	5 20 40	-65 29 21	NO LMC						78	13	49	324	10 OC	32 400
318	335	603	5 20 50	-77 44 34							82	9	33	288?	10 OC	28 800
319	724	615	5 21 1	-69 32 32							146	218	51	11391?	10 OC	1138 100
320	724	615	5 21 10	-69 33 17	NO LMC						222	60	187	1368	3 OL	456 080
321	846	620	5 21 15	-67 3 19							187	40	116	1668?	30 OC	55 600
322	909	625	5 21 17	-65 47 38	NO LMC						309	209	107	1434?	30 OC	478 233
323	846	622	5 21 18	-67 2 32	NO LMC						81	13	50	325	10 OC	32 500
324	892	624	5 21 19	-66 7 27							149	5	114	152?	30 OC	5 067
325	909	627	5 21 20	-65 46 51	NO LMC						138	65	57	2873	10 OC	287 300
326	533	605	5 21 28	-73 35 32							112	9	62	304?	30 OC	10 133
327	340	599	5 21 31	-77 39 13	NO						227	155	81	8476	30 OC	282 533
328	338	601	5 21 41	-77 40 56	NO						106	57	32	2365	10 OC	238 500
329	338	602	5 22 4	-77 41 36	NO						189	4	161	87	3 OL	29 000
330	801	612	5 22 4	-67 58 24	NO LMC						415	273	114	24616	30 OC	820 533
331	800	613	5 22 8	-67 58 2	NO LMC						127	26	80	832	1 OL	832 000
332	801	614	5 22 8	-67 57 37	NO LMC						298	155	48	10979	10 OC	1097 900
333	746	609	5 22 9	-69 7 16	NO LMC						162	7	108	278	30 OC	9 267
334	802	614	5 22 13	-67 57 6	NO LMC						281	68	178	3285	3 OL	1095 000
335	995	617	5 22 35	-66 4 4							167	43	129	1117?	30 OC	37 233
336	838	611	5 22 53	-67 13 42							184	91	115	2971?	30 OC	99 033
337	696	601	5 23 17	-70 10 19							125	14	92	353?	30 OC	11 767
338	864	611	5 23 20	-66 42 43							170	27	119	916?	30 OC	30 533
339	883	613	5 23 22	-66 43 9	NO LMC						71	4	51	80	10 OC	8 000
340	827	608	5 23 26	-67 27 32							135	6	110	137?	30 OC	4 567
341	710	603	5 23 31	-69 51 57							85	11	48	298?	10 OC	29 500
342	626	599	5 23 33	-71 37 16	256180	0 24	-4 8	A3	7 40	00	176	51	82	1932	30 OC	64 480
343	626	601	5 23 39	-71 36 28	256180	0 29	-3 20	A3	7 40	00	75	8	39	223	10 OC	22 3

PAGE, CARRUTHERS AND HILL

MENSA RA 05 50 DEC -74 00

OBJECT NO	X	Y	R A	DEC	SAO NO	Δ R A	Δ DEC	SPEC TYPE	V MAG	P MAG	PEAK DEN	NO OF POINTS	BO	DENSITY VOLUME	EXP & FILTER	DEN VOL / EXP
351	877	608	5 24 4	-66 26 44							162	58	129	1386?	30 0C	46 200
352	721	601	5 24 15	-69 38 56	NO LMC						216	11	107	280	3 0L	93 333
353	721	600	5 24 21	-69 38 18	NO LMC						135	320	46	11859	10 0C	1185 900
354	835	603	5 24 35	-67 17 49							134	9	109	208?	30 0C	6 933
355	761	598	5 24 38	-68 49 0							139	9	123	97?	30 0C	3 233
356	751	597	5 24 47	-69 1 34							150	24	108	744?	30 0C	24 800
357	343	595	5 24 53	-77 35 41	NO -						197	17	160	445 ~	3 0L	-148 333
358	774	597	5 24 59	-68 32 48	NO LMC						223	30	108	1550	30 0C	51 667
359	679	593	5 25 7	-70 32 3							115	8	85	194?	30 0C	6 487
360	774	598	5 25 16	-68 32 2							106	20	58	662?	10 0C	66 200
361	885	601	5 25 35	-66 17 7	NO LMC						241	89	137	3594	30 0C	119 800
362	885	603	5 25 38	-66 16 19	NO LMC						104	27	59	855	10 0C	85 500
363	709	594	5 25 42	-69 53 36							84	30	46	857?	10 0C	85 700
364	748	595	5 25 46	-69 4 40							92	6	59	162?	10 0C	16 200
365	857	598	5 25 49	-66 51 55							138	10	108	249?	30 0C	8 300
366	843	597	5 25 56	-67 8 6	LMC						143	19	106	546?	30 0C	18 200
367	868	598	5 26 6	-66 38 18	NO LMC						215	173	108	8360	30 0C	278 667
368	766	594	5 26 8	-68 42 11							70	7	46	156?	10 0C	15 600
369	868	600	5 26 9	-66 37 29	NO LMC						94	23	53	681	10 0C	68 100
370	824	596	5 26 18	-67 31 0							290	566	65	26552?	10 0C	2655 200
371	939	597	5 26 24	-67 12 20							96	6	47	227?	10 0C	22 700
372	859	595	5 26 28	-66 49 32							138	21	105	596?	30 0C	19 867
373	727	590	5 26 48	-69 31 10	LMC						110	11	64	373?	10 0C	37 300
374	341	588	5 26 50	-77 37 50	NO						63	10	31	265	10 0C	26 500
375	710	589	5 26 55	-69 52 32							101	34	46	1278?	10 0C	127 800
376	728	590	5 26 56	-69 30 32	LMC						209	4	187	86?	3 0L	28 667
377	759	589	5 27 3	-68 50 8	NO LMC						140	14	94	479	1 0L	479 800
378	760	590	5 27 7	-68 50 27							320	45	212	1857?	3 0L	819 800
379	890	593	5 27 13	-66 23 34	249294?	-2 10	5 1	A0	8 41	00	186	196	120	6212 H	30 0C	207 067
380	759	589	5 27 14	-68 51 6							330	626	56	45302?	10 0C	4530 200
381	628	584	5 27 17	-71 36 36	NO LMC						150	44	80	1653	30 0C	55 100
382	816	591	5 27 20	-67 41 8							93	4	58	115?	10 0C	11 580
383	627	586	5 27 22	-71 37 2	NO LMC						62	5	38	108	10 0C	10 800
384	854	590	5 27 30	-66 55 54	NO LMC						198	58	104	2934	30 0C	97 800
385	710	586	5 27 39	-69 52 37							103	103	41	3546?	10 0C	354 600
386	828	587	5 27 47	-67 27 3	NO LMC						420	1237	106	109690	30 0C	3656 333
387	826	588	5 27 49	-67 27 45	NO LMC						126	65	90	1505	1 0L	1505 800
388	347	582	5 27 52	-77 31 13	LMC						130	67	75	2426?	30 0C	80 867
389	828	589	5 27 54	-67 26 50	NO LMC						281	164	217	2332	3 0L	777 333
390	751	584	5 27 56	-69 0 14	NO LMC						129	26	86	805	1 0L	805 800
391	854	590	5 27 58	-66 55 8	NO LMC						94	20	45	749	10 0C	74 900
392	752	585	5 28 1	-69 0 33	LMC						277	46	194	2247?	3 0L	749 800
393	750	581	5 28 17	-69 3 20							450	1516	38	198254?	30 0C	6541 800
394	674	580	5 28 22	-70 38 47	NO LMC						223	58	85	3348	30 0C	111 600
395	744	582	5 28 23	-69 9 3	NO LMC						137	63	85	2070	1 0L	2070 800
396	635	579	5 28 24	-71 27 54							131	32	86	865?	30 0C	28 833
397	674	582	5 28 26	-70 37 58	NO LMC						104	25	38	919	10 0C	91 900
398	745	583	5 28 27	-69 9 22	LMC						307	144	191	8140?	3 0L	2713 333
399	864	587	5 28 39	-66 42 47							84	8	55	211?	10 0C	21 100
400	729	581	5 28 43	-69 28 53							88	6	59	153?	0 0C	15 300
401	867	585	5 29 5	-66 39 6							90	18	55	457?	10 0C	45 700
402	688	575	5 29 26	-70 21 16							126	5	95	125?	30 0C	4 167
403	764	579	5 29 27	-68 45 38							268	33	208	1045?	3 0L	348 333
404	763	578	5 29 34	-68 46 20							249	126	57	9515?	10 0C	951 500
405	749	578	5 29 38	-69 4 26							247	62	194	2200?	3 0L	733 333
406	801	576	5 29 39	-68 0 55							147	13	102	434?	30 0C	14 467
407	836	581	5 29 40	-67 17 0	NO LMC						220	19	190	472	3 0L	157 333
408	693	573	5 29 57	-70 15 2							136	12	100	308?	30 0C	10 267
409	749	576	5 29 59	-69 3 54							192	172	59	5704?	10 0C	930 400
410	714	573	5 30 2	-69 48 39							184	50	115	1560?	30 0C	52 000
411	684	573	5 30 6	-70 51 31	NO LMC						258	94	80	672?	30 0C	190 333
412	899	580	5 30 9	-65 59 44	NO LMC						111	4	79	104	1 0L	104 000
413	655	575	5 30 9	-71 2 1							62	6	37	135?	10 0C	13 500
414	894	578	5 30 10	-66 7 46							134	8	120	180?	30 0C	3 333
415	664	575	5 30 11	-70 50 41	NO LMC						115	30	47	986	10 0C	98 600
416	855	578	5 30 19	-66 54 6							208	171	62	11964?	10 0C	1196 400
417	855	578	5 30 21	-66 54 39							240	90	190	2841?	3 0L	880 333
418	836	573	5 30 39	-67 18 35	NO LMC						419	1071	113	133853	30 0C	4461 767
419	835	574	5 30 40	-67 17 58	NO LMC						116	11	89	261	1 0L	261 000
420	835	575	5 30 41	-67 19 0	NO LMC						251	519	48	35968	18 0C	3596 800
421	836	575	5 30 44	-67 18 18	NO LMC						268	75	199	272?	3 0L	909 000
422	616	570	5 30 59	-71 52 3							92	5	69	108?	30 0C	3 600
423	637	569	5 31 3	-71 25 35							115	14	80	369?	30 0C	12 267
424	662	571	5 31 12	-70 53 16							68	13	38	319?	10 0C	31 900
425	784	571	5 31 18	-68 45 43	NO LMC						270	19	205	782	3 0L	234 000
426	764	568	5 31 22	-68 47 17	NO LMC						381	102	120	13703	30 0C	456 767
427	671	567	5 31 24	-70 42 47							131	4	96	114?	30 0C	3 800
428	764	570	5 31 26	-68 45 12	NO LMC						228	187	51	1229?	10 0C	1229 700
429	763	569	5 31 28	-68 45 24	NO LMC						122	8	89	214	1 0L	214 000
430	653	566	5 31 36	-71 5 27	NO LMC						356	222	90	15762	30 0C	525 400
431	850	572	5 31 37	-67 0 54	NO LMC						254	109	219	736	3 0L	248 333
432	614	566	5 31 47	-71 54 36							92	13	70	260?	30 0C	8 667
433	653	569	5 31 55	-71 5 7	NO LMC						236	42	174	1461	3 0L	487 000
434	653	568	5 31 57	-71 4 37	NO LMC						183	108	78	5244	10 0C	524 400
435	652	567	5 32 7	-71 4 49	NO LMC						107	11	78	262	1 0L	262 000
436	773	567	5 32 8	-68 35 12							120	63	53	225?	10 0C	223 200
437	818	565	5 32 8	-67 39 50	NO LMC						429	346	117	47429	30 0C	1580 667
438	817	567	5 32 15	-67 40 45	NO LMC						302	156	186	7034	3 0L	234 333
439	878	570	5 32 16	-66 27 22							234	23	193	703?	3 0L	234 333
440	709	566	5 32 17	-69 54 11	NO LMC						165	39	48	2229	10 0C	222 900
441	709	565	5 32 23	-69 53 7	NO LMC						125	13	79	395	1 0L	395 000
442	815	565	5 32 24	-67 41 40	NO LMC						132	69				

ORIGINAL PAGE IS
OF POOR QUALITY

MENSA RA 05 50 DEC -74 00

OBJECT NO	X	Y	R A	DEC	SAO NO	Δ R A	Δ DEC	SPEC TYPE	V MAG	P MAG	PEAK DEN	NO OF POINTS	RG	DENSITY VOLUME	EXP & FILTER	DEN VOL / EXP
451	270	569	5 32 49	-79 8 9	NO						144	12	80	438	30 0C	14 600
452	823	563	5 32 50	-67 33 41	NO LMC						106	4	81	92	1 0L	92 000
453	567	561	5 32 55	-70 47 51							111	7	81	190	30 0C	6 333
454	760	563	5 33 3	-68 51 29							88	29	51	811	10 0C	81 100
455	568	571	5 33 3	-79 8 33	NO						62	4	31	111	10 0C	11 100
456	849	564	5 33 5	-67 1 38							180	23	74	1337	10 0C	133 700
457	824	562	5 33 17	-67 31 31							186	219	47	1404	10 0C	1404 100
458	825	562	5 33 21	-67 30 45							239	72	184	2494	3 0L	831 333
459	622	560	5 33 25	-71 44 32							106	8	79	186	30 0C	6 200
460	876	563	5 33 31	-66 29 20							83	10	48	278	10 0C	27 800
461	887	563	5 33 43	-66 15 41							80	8	48	220	10 0C	22 000
462	263	566	5 33 43	-79 16 55	NO						150	20	75	942	30 0C	31 400
463	784	569	5 33 44	-68 46 28							90	5	67	106	10 0C	10 600
464	857	561	5 33 45	-66 52 10							224	6	195	155	3 0L	51 667
465	620	562	5 33 46	-71 46 41	NO LMC						204	4	169	110	3 0L	36 667
466	901	560	5 33 53	-65 59 11							148	4	129	60	30 0C	2 000
467	825	569	5 33 57	-67 31 31							142	174	49	8126	10 0C	812 600
468	262	568	5 34 6	-67 0 31	NO						69	9	34	244	10 0C	24 400
469	849	568	5 34 9	-79 10 40	LMC						111	17	86	390	1 0L	380 000
470	268	565	5 34 9	-79 10 40							126	12	74	429	30 0C	14 300
471	657	565	5 34 27	-71 0 26							109	4	86	89	30 0C	2 800
472	455	566	5 34 41	-75 16 12	256203	0 3	-0 6	A0	8 33	00	192	6	169	161	3 0L	53 667
473	456	561	5 34 41	-75 15 19	256203	0 3	0 47	A0	8 33	00	246	36	65	2571	30 0C	85 700
474	730	565	5 34 42	-69 27 48							122	44	52	1896	10 0C	189 500
475	455	564	5 34 50	-75 15 44	256203	0 11	0 22	A0	8 33	00	115	22	28	936	10 0C	93 600
476	771	561	5 35 4	-68 38 31							150	4	114	120	30 0C	4 000
477	854	564	5 35 15	-68 55 48	NO LMC						271	266	191	11311	3 0L	3770 333
478	899	562	5 35 19	-66 1 37	NO LMC						298	40	108	3732	30 0C	124 400
479	717	563	5 35 21	-69 44 33							260	65	184	2904	3 0L	968 000
480	853	562	5 35 23	-66 55 27	NO LMC						120	36	87	942	1 0L	942 000
481	752	562	5 35 23	-69 1 27							84	32	48	911	10 0C	91 100
482	855	561	5 35 23	-66 54 57	NO LMC						423	1312	111	149850	30 0C	4995 333
483	854	563	5 35 26	-66 55 21	NO LMC						248	460	61	29169	10 0C	2916 900
484	780	549	5 35 30	-68 27 14							148	17	113	404	30 0C	13 467
485	822	562	5 35 32	-67 35 37	NO LMC						216	4	195	79	3 0L	26 333
486	899	563	5 35 34	-66 0 45	NO LMC						131	32	60	1372	10 0C	137 200
487	758	561	5 35 36	-68 53 55							93	12	48	4477	10 0C	44 700
488	822	549	5 35 39	-67 36 2							305	127	121	90457	30 0C	301 500
489	718	549	5 36 0	-69 41 40	NO LMC						115	29	92	743	1 0L	743 000
490	827	548	5 36 21	-67 28 54							108	30	55	1070	10 0C	107 000
491	756	548	5 36 25	-68 56 48							224	9	196	215	3 0L	71 667
492	851	548	5 36 32	-66 59 25							216	5	194	1047	3 0L	34 667
493	871	545	5 36 48	-66 34 11	249322	-0 6	1 8	A0	6 44	00	129	21	88	619	1 0L	619 000
494	872	544	5 36 50	-66 34 58	249322	-0 5	0 20	A0	6 44	00	418	307	130	27321	H 30 0C	910 700
495	872	546	5 36 52	-66 34 7	249322	-0 3	1 12	A0	6 44	00	348	147	557	10982	H 10 0C	1098 200
496	872	546	5 36 53	-66 34 31	249322	-0 1	0 47	A0	6 44	00	291	55	194	2624	3 0L	874 667
497	730	545	5 37 14	-69 29 19	NO LMC						304	214	199	7583	3 0L	2527 667
498	731	542	5 37 16	-69 28 31	NO LMC						442	2155	104	237987	30 0C	7932 900
499	729	544	5 37 20	-69 30 9	NO LMC						310	698	46	53991	10 0C	5399 100
500	728	543	5 37 25	-69 30 13	NO LMC						140	38	88	1366	1 0L	1366 000
501	853	541	5 37 31	-66 57 16							171	21	132	3687	3 0L	2 267
502	827	540	5 37 37	-67 29 38							137	5	122	677	30 0C	2 233
503	697	541	5 37 39	-70 9 56							130	10	105	178	30 0C	5 933
504	847	539	5 37 45	-67 4 43							143	7	116	160	30 0C	5 333
505	284	559	5 37 50	-78 49 39	256214	-0 50	1 16	B9	6 14	00	362	86	35	8415	13 0C	841 500
506	865	540	5 37 50	-66 18 44							159	5	129	129	30 0C	300
507	732	541	5 37 52	-69 25 9	NO LMC						117	22	86	546	1 0L	546 333
508	815	538	5 37 53	-67 44 34							162	43	108	1393	30 0C	1393 000
509	204	561	5 37 55	-78 50 5	256214	-0 45	0 50	B9	6 14	00	351	45	158	2904	3 0L	924 667
510	694	539	5 38 9	-70 13 39							124	6	97	140	30 0C	140 667
511	202	559	5 38 20	-78 50 59	256214	-0 20	-0 4	B9	6 14	00	186	27	70	1437	1 0L	1437 000
512	204	565	5 38 28	-78 50 29	256214	-0 11	0 27	B9	6 14	00	414	174	79	17532	30 0C	584 000
513	746	539	5 38 35	-69 9 5							222	4	199	90	3 0L	30 000
514	748	535	5 38 9	-69 6 7	NO LMC						332	194	46	15519	13 0C	1551 900
515	776	532	5 39 10	-68 29 24							137	4	110	97	30 0C	3 233
516	747	534	5 39 12	-69 6 9	NO LMC						143	20	88	720	1 0L	720 333
517	672	535	5 39 16	-70 41 12							126	20	78	609	30 0C	20 395
518	748	536	5 39 17	-69 6 28	NO LMC						312	42	199	2132	3 0L	712 667
519	728	533	5 39 34	-69 29 56	NO LMC						116	11	84	291	1 0L	291 000
520	729	534	5 39 39	-69 30 15	NO LMC						268	38	191	1471	3 0L	430 333
521	894	530	5 39 39	-66 8 34							147	19	100	648	30 0C	21 667
522	729	531	5 39 40	-69 30 45	NO LMC						394	602	98	64210	30 0C	2148 333
523	729	533	5 39 44	-69 29 53	NO LMC						232	248	41	16299	10 0C	1629 900
524	832	531	5 39 49	-67 22 15	249336?	-2 0	3 15	A0	7 15	00	87	30	47	935	10 0C	93 500
525	749	529	5 40 33	-69 4 39							84	12	54	281	10 0C	28 100
526	733	530	5 40 34	-69 25 5	NO LMC						240	31	195	881	3 0L	297 000
527	721	530	5 40 40	-69 40 8	LMC						228	52	186	1461	3 0L	487 000
528	382	546	5 41 4	-76 48 17							103	6	66	163	30 0C	5 433
529	530	536	5 41 11	-73 41 23							99	16	59	473	30 0C	15 767
530	777	522	5 41 27	-68 30 17							141	22	116	2952	30 0C	9 833
531	634	527	5 41 38	-71 28 45							99	4	71	94	30 0C	3 133
532	704	523	5 41 48	-70 1 50							131	7	100	169	30 0C	5 633
533	831	519	5 41 57	-67 23 59	249336	0 8	1 32	A0	7 15	00	350	620	112	37724	H 30 0C	1259 467
534	830	521	5 41 60	-67 24 21	249336	0 11	1 10	A0	7 15	00	177	76	46	3517	H 10 0C	351 700
535	831	521	5 42 3	-67 23 23	249336	0 14	2 7	A0	7 15	00	224	11	193	263	L 3 0L	87 667
536	720	523	5 42 13	-69 40 46	NO LMC						135	142	47	6870	10 0C	687 000
537	704	521	5 42 17	-70 1 44							144	8	98	241	30 0C	8 833
538	868	517	5 42 19	-66 39 5							139	10	168	2697	30 0C	8 967
539	534	532	5 42 20	-73 36 10							89	8	60	200	30 0C	6 667
540	641	523														

PAGE, CARRUTHERS AND HILL

MENSA RA 05 50 DEC -74 00

OBJECT NO	X	Y	R	A	DEC	SAO NO	Δ R	Δ A	Δ DEC	SPEC TYPE	V MAG	P MAG	PEAK DEN	NO OF POINTS	BG	DENSITY VOLUME	EXP & FILTER	DEN VOL / C/P
551	808	514	43	35	-67 51 43	NO LMC							210	6	189	118	3 0L	39 333
552	865	510	43	40	-66 21 23	LMC							201	118	104	5361	30 0C	212 033
553	741	511	44	20	-69 14 49	NO LMC							197	224	102	9484	30 0C	316 133
554	741	513	44	24	-69 13 55	NO LMC							83	8	51	211	10 0C	21 100
555	839	508	44	45	-67 13 42	NO LMC							148	110	53	4897	10 0C	489 700
556	839	508	44	47	-67 13 56	NO LMC							231	28	195	785	3 0L	261 667
557	728	509	44	57	-69 30 59								130	5	97	139	30 0C	4 633
558	728	509	45	3	-69 41 1								126	4	97	100	30 0C	3 333
559	850	503	45	15	-67 1 59								170	13	116	437	30 0C	14 567
560	414	530	45	38	-76 7 15								98	6	66	158	30 0C	5 267
561	715	504	46	5	-69 47 2								128	12	88	376	30 0C	12 533
562	554	516	46	12	-73 10 9								85	5	62	110	30 0C	3 667
563	810	499	46	19	-67 49 5	249353	0 4	-5 30	AD	8 13	00		132	23	93	616 L	30 0C	20 533
564	735	502	46	39	-69 19 27	LMC							115	7	82	190	1 0L	190 000
565	465	521	47	24	-75 2 27								102	6	62	187	30 0C	6 233
566	985	487	47	31	-64 24 1	NO LMC							206	50	124	1899	30 0C	63 300
567	984	469	47	33	-64 24 20	NO LMC							90	41	42	1259	10 0C	125 900
568	558	511	47	36	-73 4 45								117	22	60	813	30 0C	27 100
569	465	524	47	42	-75 1 47	NO							229	9	163	379	3 0L	126 333
570	463	522	47	59	-75 2 38	NO							109	6	68	182	1 0L	182 000
571	801	491	47	59	-67 59 48	NO LMC							163	133	103	3434	30 0C	114 467
572	561	509	48	6	-73 0 50								93	6	59	165	30 0C	5 500
573	789	489	48	36	-68 14 37								138	42	90	1309	30 0C	43 633
574	709	493	48	50	-69 53 45								122	18	85	485	30 0C	16 167
575	394	521	49	14	-76 31 47								97	6	65	155	30 0C	5 167
576	700	493	49	32	-70 3 58	NO LMC							142	62	38	2839	10 0C	283 900
577	700	493	49	42	-70 4 5	NO							229	26	185	752	3 0L	250 667
578	805	483	49	43	-67 54 11								113	4	90	88	30 0C	2 933
579	700	490	49	43	-70 4 48	NO LMC							304	103	85	7768	30 0C	258 933
580	854	480	50	5	-66 54 10	249368	0 9	0 39	85	5 15	00		404	82	86	9713	1 0L	9713 000
581	856	479	50	5	-66 54 5	249368	0 9	0 44	85	5 15	00		445	340	112	44190 L	30 0C	1473 000
582	855	481	50	21	-66 54 19	249368	0 24	0 30	85	5 15	00		459	232	49	28095 L	10 0C	2809 500
583	855	481	50	23	-66 54 26	249368	0 26	0 24	85	5 15	00		463	134	196	14030	3 0L	4676 667
584	939	474	50	36	-65 17 1	249373	0 66	-0 41	AD	7 96	00		138	8	112	130 L	30 0C	4 333
585	792	479	50	48	-68 10 2	NO LMC							175	205	90	7969	30 0C	265 633
586	791	481	50	52	-68 10 22	NO LMC							75	32	40	782	10 0C	78 200
587	576	497	50	57	-72 41 0								91	7	63	162	30 0C	5 400
588	579	494	51	44	-72 36 57								113	14	64	421	30 0C	14 033
589	690	481	52	7	-70 16 31								127	10	86	2817	30 0C	9 367
590	246	525	52	18	-79 36 16								106	11	79	253	30 0C	8 433
591	706	478	52	33	-69 56 10								113	4	86	100	30 0C	3 333
592	257	528	52	45	-79 23 2	256248	-0 53	-0 42	88	5 56	00		396	52	162	4120 L	3 0L	1373 333
593	791	472	52	53	-68 9 30	NO LMC							72	40	38	1120	10 0C	112 000
594	789	469	52	53	-68 12 55	LMC							176	97	96	4332	30 0C	144 400
595	257	525	53	4	-79 22 40	256248	-0 35	-0 20	88	5 56	00		415	121	37	12514	10 0C	1251 400
596	256	526	53	11	-79 22 34	256248	-0 28	-0 15	88	5 56	00		251	35	72	2365	1 0L	2365 000
597	778	468	53	19	-68 26 32								108	4	85	91	30 0C	3 033
598	727	471	53	35	-69 29 17								116	4	87	104	30 0C	3 467
599	589	485	53	44	-72 23 34								110	16	84	476	30 0C	15 867
600	258	521	53	44	-79 22 8	256248	0 5	0 11	88	5 56	00		423	268	80	2661	30 0C	889 700
601	785	464	54	5	-68 17 23								125	9	91	252	30 0C	8 400
602	594	482	54	27	-72 16 57								109	32	64	992	30 0C	33 067
603	906	452	55	7	-65 53 14	NO LMC							223	51	93	2910	30 0C	97 000
604	905	454	55	10	-65 53 31	NO LMC							95	26	38	938	10 0C	93 800
605	590	476	56	12	-72 21 18								114	11	64	355	30 0C	11 833
606	73	527	56	29	-83 3 42								135	11	65	439	30 0C	14 633
607	788	453	56	30	-68 12 25	NO LMC							191	36	90	1624	30 0C	54 133
608	788	455	56	32	-68 11 28	NO LMC							81	7	38	378	10 0C	37 800
609	605	471	56	54	-72 1 58								88	7	57	135	30 0C	4 533
610	741	450	58	16	-59 10 36								143	18	83	661	30 0C	22 033
611	612	465	58	20	-71 52 26								123	46	65	1515	30 0C	50 500
612	773	441	59	20	-68 29 42	NO							150	22	87	773	30 0C	25 767
613	773	443	59	36	-68 28 36	NO LMC							65	4	37	101	10 0C	10 100
614	621	457	59	57	-71 40 13								119	50	66	1653	30 0C	55 100
615	631	448	60	1	-71 26 24								102	18	76	465	30 0C	15 533
616	709	436	60	13	-69 48 43	NO							140	10	76	382	30 0C	12 733
617	493	467	62	2	-74 22 40	NO							177	25	63	1233	10 0C	41 100
618	482	469	62	58	-74 22 57	NO							74	8	27	253	10 0C	25 300
619	636	443	63	12	-71 20 38								108	11	70	309	30 0C	18 300
620	368	485	63	21	-77 1 20	NO							125	11	44	441	30 0C	14 700
621	367	486	63	55	-77 1 27	NO							60	4	29	105	10 0C	24 200
622	461	463	65	44	-75 1 56	NO							163	14	62	726	30 0C	22 300
623	460	465	65	53	-75 2 12	NO							73	7	27	223	10 0C	24 300
624	460	465	66	4	-75 2 8	NO							202	4	167	109	3 0L	36 333
625	893	395	66	44	-65 59 48	249448	0 39	2 9	89	5 83	00		133	22	93	654	1 0L	654 000
626	895	395	66	47	-66 0 12	249448	0 41	1 45	89	5 83	00		140	95	15829	30 0C	627 633	
627	894	397	66	50	-66 0 10	249448	0 44	1 47	89	5 83	00		294	44	208	1972	3 0L	657 333
628	894	397	66	50	-66 0 26	249448	0 44	1 31	89	5 83	00		356	90	60	6862	10 0C	886 200
629	315	482	67	15	-78 6 59	NO							228	21	76	1321	30 0C	44 033
630	661	421	67	29	-70 46 7								142	105	74	4804	30 0C	133 467
631	314	483	67	52	-78 6 59	NO							113	13	30	596	10 0C	59 600
632	933	383	68	9	-65 14 7								161	31	101	1109	30 0C	36 957
633	932	385	68	11	-65 14 20	NO							161	7	43	161	10 0C	16 100
634	314	484	68	19	-78 6 53	NO							223	7	162	283	3 0L	94 333
635	313	482	68	40	-78 6 20	NO							102	4	71	106	1 0L	106 000
636	672	413	68	9	-70 30 59								123	97	81	2520	30 0C	84 000
637	752	402	68	16	-68 49 23	249461	0 12	0 35	89	5 21	00		422	60				

NRL REPORT 8173

MENSA RA 05 50 DEC -74 00

OBJECT NO	X	Y	R A	DEC	SAO NO	A R A	A DEC	SPEC TYPE	V MAG	P MAG	PEAK DEN	NO OF POINTS	BG	DENSITY / VOLUME	E/P & FILTEP	DEN VOL / E/P
651	780	376	6 13 32	-69 11 27							194	17	95	5367	30 00	17 867
652	115	497	6 14 7	-82 10 50	259438	-0 24	-2 14	88	7 61	00	129	47	31	2205	10 00	220 500
653	116	493	6 14 56	-82 10 11	258438	0 25	-1 35	88	7 61	00	271	88	74	6301	30 00	210 033
654	707	381	6 15 17	-69 42 37							109	4	87	867	30 00	2 867
655	714	377	6 15 56	-69 33 6							118	8	91	1847	30 00	6 133
656	522	416	6 16 0	-73 37 23	256286	0 5	-0 53	89	6 80	00	369	106	70	8493	30 00	283 60
657	522	418	6 16 5	-73 36 22	256286	0 10	0 8	89	6 80	00	248	49	30	3780	10 00	378 000
658	521	420	6 16 14	-73 37 23	256286	0 19	-0 52	89	6 80	00	307	24	179	1389	3 0L	163 000
659	877	349	6 16 18	-66 13 48	249497	0 41	2 37	89	7 34	00	389	97	97	9911	30 00	330 367
660	876	351	6 16 21	-66 13 59	249497	0 44	2 26	89	7 34	00	230	67	40	4880	10 00	488 000
661	876	351	6 16 22	-66 13 31	249497	0 44	2 54	89	7 34	00	267	22	216	731	3 0L	243 567
662	520	418	6 16 27	-73 36 47	256286	0 32	-0 17	89	6 80	00	146	14	78	579	1 0L	579 000
663	609	395	6 16 38	-71 45 22							102	4	74	937	30 00	3 000
664	726	370	6 16 50	-69 16 58							117	9	97	1397	30 00	4 633
665	719	370	6 17 8	-69 25 36							118	5	87	1427	30 00	4 733
666	723	367	6 17 39	-69 19 59							120	8	91	1907	30 00	6 333
667	727	365	6 17 57	-69 14 36							137	21	90	6537	30 00	21 767
668	614	389	6 17 58	-71 37 48							111	6	75	1817	30 00	6 033
669	528	405	6 18 53	-73 27 25							96	4	72	897	30 00	2 967
670	614	387	6 19 3	-71 35 33							223	24	188	688	3 0L	229 333
671	590	391	6 19 14	-72 6 29	256290	0 7	0 6	A0	7 96	00	74	9	30	281	10 00	28 100
672	882	333	6 19 24	-72 5 22							139	12	100	3267	30 00	10 867
673	591	388	6 19 27	-72 7 17	256290	0 20	-0 42	A0	7 96	00	181	23	76	1105	10 00	36 833
674	878	331	6 19 57	-66 9 46							123	7	98	1637	30 00	5 433
675	801	339	6 20 41	-67 41 22							124	8	96	1827	30 00	6 067
676	635	372	6 20 50	-71 9 30							111	56	77	15667	30 00	52 200
677	748	366	6 21 11	-68 45 46							122	8	95	1827	30 00	6 067
678	644	367	6 21 39	-70 57 10	2562987	-2 8	-2 9	A2	8 06	00	178	68	78	2816	10 00	93 867
679	643	369	6 21 57	-70 56 46	2562987	-1 49	-1 45	A2	8 06	00	214	4	190	85	3 0L	28 333
680	724	366	6 22 18	-69 15 13							207	41	94	23487	30 00	78 267
681	637	361	6 23 32	-71 4 16	2562987	-0 15	-9 15	A2	8 06	00	141	92	81	3081	10 00	102 700
682	854	315	6 23 49	-66 35 32							173	12	100	517	30 00	17 233
683	853	317	6 24 2	-66 34 13							81	5	41	156	10 00	15 600
684	771	327	6 24 24	-68 14 5							121	6	98	1277	30 00	4 233
685	360	426	6 24 51	-76 59 2							103	10	75	2467	30 00	8 200
686	779	319	6 25 49	-68 3 27							124	12	98	2677	30 00	8 900
687	787	311	6 27 10	-67 51 33							131	7	98	1907	30 00	6 333
688	365	417	6 27 47	-76 51 36							109	62	78	14527	30 00	48 400
689	589	355	6 28 41	-71 59 45							62	4	32	102	10 00	10 200
690	533	371	6 28 44	-73 12 13							73	8	32	234	10 00	23 400
691	798	301	6 28 48	-67 36 40							130	13	98	3277	30 00	10 900
692	590	352	6 28 50	-71 59 18							147	14	84	520	30 00	17 333
693	534	368	6 28 54	-73 11 46							165	20	78	889	30 00	29 633
694	802	299	6 29 5	-67 32 28							122	6	99	1297	30 00	4 300
695	746	310	6 29 13	-68 40 13							152	6	107	1777	30 00	5 900
696	257	439	6 30 23	-79 5 2							99	5	72	1127	1 0L	112 000
697	343	419	6 30 31	-77 16 43	2563087	-0 4	-1 25	A0	6 98	00	209	5	176	129	3 0L	43 000
698	343	417	6 30 32	-77 16 53	2563087	-0 3	-1 35	A0	6 98	00	118	22	32	1019	10 00	101 900
699	733	308	6 30 56	-68 53 1							268	13	221	419	3 0L	139 667
700	735	305	6 30 56	-68 52 10							350	57	102	4791	30 00	159 700
701	734	307	6 31 0	-68 52 18							197	36	40	2230	10 00	223 000
702	639	330	6 30 60	-70 54 43							136	8	90	2737	30 00	9 100
703	344	413	6 31 4	-77 16 7	2563087	0 30	-0 49	A0	6 98	00	271	41	78	3095	30 00	103 167
704	820	283	6 31 47	-67 7 2							125	7	101	1597	30 00	5 300
705	236	435	6 32 53	-79 31 50							120	6	81	1787	30 00	5 933
706	668	301	6 35 46	-70 11 7							136	72	99	18627	30 00	62 067
707	682	296	6 36 8	-69 53 45							149	113	97	40417	30 00	134 700
708	633	306	6 37 49	-70 52 10							262	14	211	471	3 0L	157 000
709	633	305	6 37 52	-70 52 47							163	28	37	1609	10 00	160 900
710	634	302	6 38 1	-70 52 20							304	53	87	3538	30 00	117 933
711	402	374	6 38 40	-75 53 35							126	7	79	2317	30 00	7 700
712	846	242	6 38 46	-66 28 18							136	4	108	1027	30 00	3 400
713	175	436	6 39 2	-80 45 3							135	22	83	7647	30 00	25 467
714	877	233	6 39 8	-65 50 30							138	5	113	1187	30 00	3 933
715	880	232	6 39 10	-65 46 36							139	10	112	2377	30 00	7 900
716	318	397	6 39 15	-77 42 50							109	5	85	1147	30 00	3 800
717	884	228	6 39 46	-65 41 44							149	29	112	7937	30 00	26 500
718	309	398	6 39 51	-77 54 3							119	71	82	19947	30 00	66 467
719	669	275	6 41 41	-70 2 47							133	23	96	6247	30 00	20 800
720	898	214	6 41 44	-65 21 42							162	14	127	3647	30 00	12 133
721	321	389	6 41 56	-77 36 24							123	24	100	3047	30 00	10 133
722	283	402	6 42 8	-78 24 58	256327	-0 17	-1 31	89	8 80	00	72	10	35	270	10 00	27 000
723	688	266	6 42 33	-69 37 80	249630	0 4	1 22	A0	7 56	00	250	117	106	5726	10 00	190 867
724	687	268	6 42 38	-69 38 4	249630	0 9	1 17	A0	7 56	00	114	24	40	950	10 00	95 000
725	284	398	6 42 42	-78 24 8	256327	0 17	-0 41	89	8 80	00	175	24	84	1123	30 00	37 433
726	776	240	6 42 52	-67 44 11	249631	0 19	3 21	A0	6 86	00	132	5	107	112	1 0L	112 000
727	777	241	6 42 58	-67 44 34	249631	0 25	2 57	A0	6 86	00	290	20	238	678	3 0L	226 000
728	756	247	6 42 59	-68 10 33							275	10	238	268	3 0L	55 333
729	779	238	6 42 59	-67 44 1	249631	0 26	3 31	A0	6 86	00	385	79	113	7873	30 00	242 433
730	757	244	6 43 3	-68 11 12							348	58	109	4939	30 00	164 633
731	777	240	6 43 7	-67 45 16	249631	0 34	2 15	A0	6 86	00	277	54	45	3944	10 00	394 400
732	756	246	6 43 7	-68 11 15							189	34	44	2138	10 00	213 800
733	881	212	6 43 15	-65 38 35							307	50	263	1482	3 0L	494 000
734	885	209	6 43 15	-65 35 43							397	154	120	14942	30 00	498 067
735	883	211	6 43 21	-65 36 56							196	86	49	5393	30 00	539 300
736	705	258	6 43 27	-69 13 18							105	17	42	561	10 00	66 100
737	707	255	6 43 36	-69 12 52							237	32	108	1862	30 00	62 067
738	843	218	6 44 2	-65 23 36							281	8	252	202	3 0L	67 333

PAGE, CARRUTHERS AND HILL

MNSA RA 05 50 DEC -74 00																				
OBJECT NO	X	Y	R	A	DEC	SAO NO	Δ R	Δ A	SPEC TYPE	Y MAG	P MAG	PEAK DEN	NO OF POINTS	RG	DENSITY VOLUME	EXP & FILTER	DEN VOL/ EXP			
751	611	256	6	51	27	-71	4	6				83	28	43	814?	10	0C	81 400		
752	360	340	6	51	34	-75	35	55				118	15	90	341?	30	0C	11 357		
753	618	251	6	51	51	-70	54	11	256344	-0 11	-0 6	88	5 52	00	434	162	45	1627 680		
754	617	252	6	51	53	-70	54	32	256344	-0 9	-0 26	88	5 32	00	441	73	235	6451 3 0L 2150 333		
755	616	250	6	52	2	-70	53	44	256344	-0 0	0 21	88	5 52	00	349	50	104	4290 1 0L 4290 000		
756	618	248	6	52	4	-70	54	56	256344	0 -2	=0 50	88	5.52	00	434	319	117	29996 30 0C 989 867		
757	548	273	6	52	35	-72	27	4				149	9	111	253?	30	0C	8 433		
758	442	312	6	53	32	-74	45	33				129	4	97	109?	30	0C	3 633		
759	371	338	6	53	40	-76	18	43				126	14	98	296?	30	0C	9 867		
760	373	336	6	54	6	-76	15	30				138	12	93	365?	30	0C	12 167		
761	690	215	6	54	17	-69	17	25				292	27	245	885?	3 0L		295 000		
762	343	345	6	54	38	-76	34	51				124	18	93	451?	30	0C	15 033		
763	362	331	6	54	42	-76	2	43				131	16	96	429?	30	0C	14 267		
764	539	269	6	54	43	-72	35	42				136	4	112	87?	30	0C	2 900		
765	373	334	6	54	46	-76	14	40				128	4	93	120?	30	0C	4 000		
766	350	342	6	54	49	-76	45	17				130	9	96	220?	30	0C	7 333		
767	352	341	6	54	55	-76	42	30				133	7	95	222?	30	0C	7 400		
768	356	338	6	55	27	-76	36	29	NO			290	146	92	7818	30	0C	260 600		
769	635	229	6	55	40	-70	25	20	256351	-0 5	0 1	A2	7 22	00	273	7	244	174 3 0L 58 000		
770	637	225	6	55	48	-70	24	37	256351	0 3	0 44	A2	7 22	00	331	44	117	3905 H 30 0C 116 833		
771	339	343	6	55	50	-76	58	43				120	8	90	200?	30	0C	6 667		
772	356	339	6	55	52	-76	34	55	NO			133	23	35	115?	10	0C	115 900		
773	636	227	6	55	54	-70	24	38	256351	0 9	0 43	A2	7 22	00	177	29	46	170? H 10 0C 170 700		
774	354	339	6	56	11	-76	34	48	NO			110	4	82	100	1 0L		100 000		
775	355	340	6	56	16	-76	35	12	NO			232	8	185	285	3 0L		95 000		
776	393	320	6	56	46	-75	46	37				192	180	91	822?	30	0C	274 057		
777	361	334	6	56	56	-76	26	51	NO			64	4	39	96	10	0C	9 600		
778	392	322	6	56	57	-75	46	39	NO			84	12	36	378	10	0C	37 800		
779	359	329	6	58	8	-76	29	3	NO			175	27	89	119?	30	0C	39 767		
780	358	331	6	58	19	-76	29	5	NO			73	5	36	138	10	0C	13 600		
781	578	241	6	58	21	-71	36	47	NO			260	6	234	138	3 0L		46 000		
782	523	261	6	58	22	-72	51	14	NO			334	34	105	299?	30	0C	96 633		
783	580	237	6	58	25	-69	17	6	NO			237	25	121	133?	30	0C	44 433		
784	687	194	6	58	29	-69	17	6	NO			215	12	115	605	30	0C	20 167		
785	522	263	6	58	30	-72	51	15	NO			233	23	42	185?	10	0C	185 600		
786	579	239	6	58	32	-71	35	7	NO			105	15	47	513	10	0C	51 300		
787	686	196	6	58	34	-69	17	5	NO			93	7	45	246	10	0C	54 600		
788	520	262	6	58	48	-72	50	39	NO			168	13	97	346	1 0L		546 000		
789	621	263	6	58	54	-72	51	2	NO			313	12	219	711	3 0L		62 000		
790	498	271	6	59	2	-73	22	37	NO			110	15	40	620	10	0C	62 000		
791	499	268	6	59	11	-73	22	9	NO			239	28	107	168?	30	0C	56 867		
792	497	272	6	59	12	-73	22	50	NO			248	8	216	209	3 0L		69 667		
793	227	379	6	59	18	-79	20	22	256355	-0 28	0 38	A0	5 51	00	288	39	170	2031 3 0L 677 000		
794	227	376	6	59	35	-79	20	25	256355	-0 11	0 36	A0	5 51	00	318	61	35	555?	10 0C 555 300	
795	226	377	6	59	39	-79	19	30	256355	-0 7	1 31	A0	5 51	00	131	18	73	654	1 0L 634 000	
796	788	150	7	0	5	-67	9	5				149	4	121	95?	30	0C	3 167		
797	363	322	7	0	5	-76	22	24				149	4	90	142?	30	0C	4 733		
798	228	372	7	0	10	-79	19	29	256355	0 24	1 32	A0	5 51	00	398	109	87	110?	L 30 0C 369 057	
799	631	206	7	0	36	-70	25	8				141	4	119	82?	30	0C	2 733		
800	293	343	7	2	2	-77	52	45				117	4	93	98?	30	0C	2 933		
801	362	317	7	2	15	-76	19	41	NO			80	17	47	399	10	0C	39 900		
802	364	314	7	2	16	-76	18	3	NO			172	8	91	381	30	0C	12 700		
803	353	323	7	2	21	-76	31	4				234	10	191	291?	3 0L		37 000		
804	352	321	7	2	36	-76	30	11	NO			111	5	81	128	1 0L		126 000		
805	355	316	7	3	26	-76	28	34	NO			316	205	91	13708	30	0C	456 333		
806	354	316	7	3	38	-76	28	34	NO			161	62	35	3179	10	0C	317 800		
807	626	195	7	3	42	-70	27	14	256366	0 4	0 41	A0	7 65	00	241	26	128	1406	30	0C 46 867
808	625	197	7	3	48	-70	27	13	256366	0 10	0 42	A0	7 65	00	96	14	47	483 L	10 0C 48 300	
809	354	317	7	3	53	-76	27	33	NO			255	9	192	368	3 0L		122 667		
810	363	315	7	4	8	-76	26	40	NO			122	6	83	179	1 0L		179 000		
811	360	309	7	4	26	-76	20	23				169	56	98	2289?	30	0C	176 300		
812	582	243	7	5	27	-73	8	53				158	7	114	199?	30	0C	6 500		
813	719	148	7	6	8	-68	22	34				307	21	267	59?	30	0C	196 667		
814	744	123	7	6	30	-67	16	5				152	6	121	163?	30	0C	5 433		
815	742	127	7	8	7	-67	49	9	249747	0 17	2 11	88	7 88	00	155	19	125	447	1 0L 447 000	
816	743	128	7	8	12	-67	51	9	249747	0 21	0 12	88	7 88	00	223	74	52	5056 H	10 0C 505 600	
817	743	128	7	8	13	-67	49	33	249747	0 23	1 47	88	7 88	00	337	73	281	387 H	3 0L 795 667	
818	745	125	7	8	14	-67	49	36	249747	0 24	1 45	88	7 88	00	403	113	120	11558 H	30 0C 385 267	
819	519	223	7	8	26	-72	41	42	NO			264	26	115	1714	30	0C	57 133		
820	518	225	7	8	27	-72	40	32	NO			130	17	42	78?	10	0C	70 300		
821	518	226	7	8	28	-72	39	25	NO			269	7	232	191	3 0L		63 667		
822	301	318	7	9	33	-77	31	58				132	32	107	420?	30	0C	14 000		
823	680	147	7	9	44	-69	5	47				290	4	269	81?	3 0L		27 000		
824	321	308	7	10	12	-77	5	6				122	25	87	730?	30	0C	24 333		
825	281	323	7	11	13	-77	56	58				132	11	85	351?	30	0C	12 033		
826	700	130	7	11	27	-88	37	24				305	10	277	249?	3 0L		83 000		
827	334	298	7	11	40	-76	45	6	NO			241	25	97	222?	30	0C	74 100		
828	334	300	7	11	43	-76	43	56	NO			112	10	54	384	10	0C	38 400		
829	324	302	7	11	48	-76	58	37				183	89	89	4579?	30	0C	152 633		
830	317	305	7	11	49	-77	8	1				139	28	90	1066?	30	0C	36 200		
831	334	301	7	11	59	-76	42	45	NO			226	6	197	126	3 0L		42 000		
832	294	314	7	12	3	-77	37	60	NO			144	8	104	219	30	0C	7 300		
833	750	100	7	12	52	-67	35	53				233	43	129	242?	30	0C	80 800		
834	714	116	7	12	59	-68	19	2	NO			80	5	53	125	10	0C	12 500		
835	735	106	7	13	14	-67	49	41				320	4</							

NRL REPORT 8173

MENSA RA 05 50 DEC -74 00

OBJECT NO	X	Y	R A	DEC	SAO NO	Δ R A	Δ DEC	SPEC TYPE	V MAG	P MAG	PEAK DEN	NO OF POINTS	BG	DENSITY VOLUME	EXP & FILTER	DEN VOL/ EXP
851	313	299	7 15 16	-77 4 41	NO						115	7	81	203	1 0L	203 000
852	296	304	7 15 26	-77 31 41	NO						202	24	91	2499	30 0C	93 300
853	322	291	7 15 28	-76 55 45	NO						178	26	104	853	30 0C	28 433
854	296	306	7 15 29	-77 30 30	NO						176	22	43	1089	10 0C	168 900
855	289	309	7 15 33	-77 40 3	NO						112	23	35	978	10 0C	97 800
856	617	145	7 15 34	-70 18 24							156	5	129	1177	30 0C	3 900
857	290	306	7 15 41	-77 39 34	NO						245	112	88	5024	30 0C	167 467
858	296	307	7 15 48	-77 29 17	NO						274	11	167	521	3 0L	173 667
859	295	305	7 16 4	-77 28 19	NO						131	8	62	270	1 0L	270 000
860	291	302	7 16 56	-77 36 18							275	220	89	14544	30 0C	484 800
861	317	288	7 17 15	-76 59 51	NO						139	12	91	393	30 0C	13 100
862	316	290	7 17 27	-76 59 48	NO						69	8	34	225	10 0C	22 500
863	290	305	7 17 29	-77 35 0	NO						225	8	186	228	3 0L	76 000
864	556	165	7 17 58	-71 34 19							159	5	125	141	30 0C	4 700
865	610	139	7 18 19	-70 20 21							291	7	265	160	3 0L	53 333
866	713	89	7 18 34	-68 7 32							340	5	318	107	3 0L	35 667
867	294	297	7 18 36	-77 28 30							120	69	36	3235	10 0C	323 500
868	293	296	7 19 10	-77 26 15	NO						113	7	88	129	1 0L	129 000
869	294	298	7 19 15	-77 26 41							229	11	196	228	3 0L	76 000
870	291	297	7 19 45	-77 30 4							229	10	188	314	3 0L	104 667
871	288	295	7 20 21	-77 31 20	NO						118	6	82	188	1 0L	168 000
872	419	226	7 20 38	-74 36 18							144	6	107	160	30 0C	5 333
873	635	115	7 20 42	-69 42 45							335	26	282	926	3 0L	308 667
874	286	296	7 20 57	-77 35 8							214	4	188	977	3 0L	32 333
875	572	141	7 21 33	-71 6 46							157	10	131	215	30 0C	7 167
876	567	140	7 22 20	-71 11 52							159	27	128	635	30 0C	21 167
877	572	133	7 23 9	-71 2 58							157	18	127	448	30 0C	14 933
878	676	80	7 23 51	-68 44 40							333	7	311	1377	3 0L	45 667
879	590	116	7 24 3	-70 27 19							166	18	134	427	30 0C	14 233
880	586	123	7 24 10	-70 41 8	NO						98	18	51	598	10 0C	59 800
881	588	120	7 24 17	-70 40 42	NO						226	66	127	2997	30 0C	99 900
882	688	71	7 24 45	-68 29 44							340	8	313	191	3 0L	63 667
883	556	133	7 25 14	-71 20 21	256408	0 5	1 52	A2	6 52	00	177	15	131	456 L	30 0C	15-200
884	598	110	7 25 42	-70 23 20	NO						174	16	54	889	10 0C	88 900
885	606	104	7 25 42	-70 13 26							174	38	130	1052	30 0C	35 067
886	597	109	7 25 43	-70 20 58	NO						153	4	126	99	1 0L	99 000
887	598	108	7 25 43	-70 24 34	NO						289	95	128	4232	30 0C	141 067
888	598	111	7 25 49	-70 21 23							340	6	289	188	3 0L	62 667
889	561	122	7 27 3	-71 10 17							159	9	133	202	30 0C	6 733
890	361	229	7 28 49	-75 41 52							128	8	97	208	30 0C	6 933
891	354	225	7 31 53	-75 43 21							278	9	209	392	3 0L	130 667
892	353	223	7 32 5	-75 42 20	NO						122	4	87	131	1 0L	131 000
893	587	72	7 35 13	-70 15 52							334	6	310	132	3 0L	44 000
894	296	242	7 35 56	-76 58 13	256426	0 36	0 4	A0	7 31	00	102	22	38	856	10 0C	85 600
895	298	238	7 36 11	-76 56 2	256426	0 51	2 16	A0	7 31	00	250	40	100	2579	30 0C	85 967
896	415	168	7 36 56	-74 10 13	256428	0 32	-0 29	B9	6 46	00	367	64	46	6623	10 0C	862 300
897	414	169	7 36 59	-74 8 40	256428	0 35	1 5	B9	6 46	00	369	47	244	2501	3 0L	833 667
898	413	168	7 37 2	-74 9 20	256428	0 38	0 25	B9	6 46	00	163	21	103	790	1 0L	790 000
899	416	165	7 37 3	-74 9 45	256428	0 39	-0 1	B9	6 46	00	410	122	115	11534	30 0C	384 467
900	314	224	7 37 34	-76 31 38	NO						191	17	103	776	30 0C	25 887
901	314	226	7 37 35	-76 30 24	NO						87	8	40	251	10 0C	25 100
902	579	51	7 40 4	-70 18 6	NO						242	51	141	2618	30 0C	87 267
903	578	53	7 40 10	-70 17 54	NO						104	26	62	765	10 0C	76 500
904	480	106	7 42 4	-72 28 39	NO						209	52	122	2572	30 0C	85 733
905	479	107	7 42 25	-72 27 50	NO						90	26	49	806	10 0C	80 600
906	542	61	7 43 21	-70 55 49	NO						397	17	350	570	3 0L	190 000
907	501	86	7 43 34	-71 56 49							154	4	127	90	30 0C	3 000
908	542	58	7 43 37	-70 59 50	NO						248	100	134	5407	30 0C	180 233
909	541	59	7 43 48	-70 57 56	NO						163	84	60	4291	10 0C	429 100
910	540	58	7 43 56	-70 56 16	NO						210	50	144	1942	1 0L	1942 000
911	405	138	7 45 9	-74 7 24							155	13	117	378	30 0C	12 600
912	59	351	7 45 31	-82 14 14							5	100	130	130	30 0C	4 333
913	490	83	7 45 48	-72 6 37							170	7	126	205	30 0C	6 833
914	96	327	7 46 6	-81 22 21							112	4	90	85	30 0C	2 833
915	556	29	7 48 8	-70 26 27							370	6	350	160	3 0L	53 333
916	407	124	7 48 18	-73 57 46	256448	0 33	0 10	A0	8 27	00	146	7	120	157 L	30 0C	5 233
917	552	23	7 49 27	-70 31 44							253	130	145	483	30 0C	16 100
918	334	165	7 51 34	-75 32 22							302	37	233	1397	3 0L	465 667
919	526	26	7 53 8	-70 53 24							363	4	350	100	3 0L	33 333
920	524	19	7 54 20	-70 57 36							144	202	141	7211	30 0C	240 460
921	96	301	7 57 58	-81 6 59							126	12	95	342	30 0C	11 400
922	89	302	7 59 22	-81 13 44							125	14	56	352	30 0C	11 733
923	91	300	7 59 37	-81 10 17							129	21	94	594	30 0C	19 800
924	311	138	8 2 39	-75 39 51							275	6	238	179	3 0L	59 667
925	462	25	8 3 31	-71 59 42	NO						87	11	62	237	10 0C	23 700
926	464	21	8 3 37	-71 59 17	NO						189	218	133	2233	30 0C	74 460
927	242	143	8 14 30	-76 57 14							130	16	92	487	30 0C	16 233
928	221	158	8 14 51	-77 28 22							117	5	93	111	30 0C	3 700
929	233	149	8 14 52	-77 10 39							158	60	91	2307	30 0C	76 500
930	205	169	8 15 30	-77 50 43							157	46	94	1761	30 0C	58 700
931	198	174	8 15 43	-78 1 24							169	46	89	1580	30 0C	52 000
932	211	164	8 15 46	-77 41 57							118	11	93	244	30 0C	8 133
933	185	183	8 15 59	-78 20 4	NO						241	164	93	10696	30 0C	356 533
934	278	108	8 16 9	-75 59 24							119	6	86	126	30 0C	4 200
935	186	184	8 16 34	-78 14 6							224	4	197	92	3 0L	30 667
936	175	193	8 16 40	-78 30 3							221	4	193	91	3 0L	30 333
937	149	207	8 18 16	-79 6 1	256491	0 56	1 46	A0	7 30	00	96	39	41	1287	10 0C	128 700
938	150	203	8 18 41	-79 6 44	256491	1 21	3 3	A0	7 30	00	213	69	102	3727	30 0C	124 233
939	285	90	8 19 26	-75 38 5							86	13	45	429	10 0C	42 900
940	250	98	8 24 54	-76 16 38	256507	0 56	-0 33	A2	7 14	00	89	17	50	448	10 0C	44 800
941	250	98	8 24 54	-76 16 38	256508	0 50	-0 16	A	8 86	00	89	17	50			

PAGE, CARRUTHERS AND HILL

NORMA RA 17 24 DEC -59 04

OBJECT NO	X	Y	R	A	DEC	SAO NO	A R A	A DEC	SPEC TYPE	V MAG	P MAG	PEAK DEN	NO OF POINTS	BG	DENSITY VOLUME	EXP & FILTER	DEN VOL / EXP	
1	687	60	16	11	47	-57 47 22	243509	0 6	-0 9	A2	5 86	00	68	4	36	107 L	4 1C	26 098
2	935	274	16	14	8	-54 31 7	NO						264	11	235	268	3 0L	89 333
3	678	79	16	14	13	-57 54 13	243551	G 21	1 35	A	8 89	0 68	361	5	331	119	3 0L	39 667
4	931	272	16	14	16	-54 25 38	NO						256	13	234	282	3 0L	94 000
5	667	68	16	14	20	-57 28 57	NO						70	27	29	823	4 1C	200 732
6	933	266	16	14	29	-54 28 7	243572	-0 1	0 52	B5	8 44	8 14	65	13	37	312 L	4 1C	76 098
7	673	78	16	14	31	-57 48 22	243571	0 3	0 40	B8	9 42	9 29	375	94	333	2104	3 0L	155 000
8	673	78	16	14	31	-57 48 22	243581	-0 6	1 5	B8	9 64	9 67	375	94	333	2104	3 0L	701 333
10	673	78	16	14	31	-57 48 22	243583	-0 6	1 5	B8	9 64	9 67	375	94	333	2104	3 0L	701 333
11	673	78	16	14	31	-57 48 22	243584	-0 10	1 0	B8	7 84	7 61	375	94	333	2104	3 0L	701 333
12	675	76	16	14	34	-57 47 47	243563	0 20	-3 37	A0	8 81	8 50	112	89	37	3602	H 4 1C	927 317
13	675	76	16	14	34	-57 47 47	243571	0 5	1 16	B8	9 42	9 29	112	89	37	3602	H 4 1C	927 317
14	675	76	16	14	34	-57 47 47	243581	-0 4	1 41	B8	9 42	9 67	112	89	37	3602	H 4 1C	927 317
15	675	76	16	14	34	-57 47 47	243583	-0 6	0 46	B8	7 84	7 61	112	89	37	3602	H 4 1C	927 317
16	675	76	16	14	34	-57 47 47	243584	-0 7	1 36	B8	8 81	8 50	112	89	37	3602	H 4 1C	927 317
17	677	72	16	14	36	-57 47 2	243563	0 22	-2 52	A0	9 78	9 65	83	60	29	2046	H 3 0C	882 000
18	677	72	16	14	36	-57 47 2	243571	0 8	2 1	B8	9 42	9 29	83	60	29	2046	H 3 0C	882 000
19	677	72	16	14	36	-57 47 2	243581	-0 2	2 26	B8	9 64	9 67	83	60	29	2046	H 3 0C	882 000
20	677	72	16	14	36	-57 47 2	243583	-0 4	1 33	B8	7 84	7 61	83	60	29	2046	H 3 0C	882 000
21	677	72	16	14	36	-57 47 2	243584	-0 5	2 21	B8	8 81	8 50	83	60	29	2046	H 3 0C	882 000
22	677	72	16	14	36	-57 47 2	243605	-0 33	-0 40	B5	9 28	9 03	83	60	29	2046	H 3 0C	882 000
23	934	274	16	14	37	-54 28 52	NO						54	9	30	194	4 1C	47 317
24	680	84	16	14	40	-57 59 47	243582	0 2	1 2	B8	8 63	8 29	349	13	330	199	L 3 0L	66 333
25	797	172	16	14	45	-51 0 13	253503	-0 40	0 37	B8	9 00	8 67	59	10	30	255	L 3 0L	62 195
26	671	80	16	14	46	-57 46 39	243571	0 18	2 24	B8	9 42	9 29	169	14	142	324	1 0L	324 000
27	671	80	16	14	46	-57 46 39	243581	0 9	2 49	B8	9 64	9 67	169	14	142	324	1 0L	324 000
28	671	80	16	14	46	-57 46 39	243583	0 7	1 55	B8	7 84	7 61	169	14	142	324	1 0L	324 000
29	671	80	16	14	46	-57 46 39	243584	0 5	2 44	B8	8 81	8 50	169	14	142	324	1 0L	324 000
30	671	80	16	14	46	-57 46 39	243605	-0 22	-0 18	B5	9 28	9 03	169	14	142	324	1 0L	324 000
31	671	80	16	14	46	-57 46 39	243612	-0 29	-0 45	B8	9 11	8 83	169	14	142	324	1 0L	324 000
32	794	174	16	14	54	-60 59 49	253503	-0 31	1 2	B8	9 00	8 67	293	8	266	188	L 3 0L	62 667
33	880	239	16	15	18	-63 10 21	253498	0 10	1 4	A5	9 30	9 29	51	4	28	89	4 1C	21 707
34	812	189	16	15	27	-61 28 1	253507	-0 34	1 15	B8	8 92	8 55	58	16	30	366	4 1C	94 146
35	809	190	16	15	28	-61 26 53	253507	-0 33	2 23	B8	8 92	8 55	288	8	266	160	L 3 0L	53 333
36	699	100	16	16	5	-58 20 25	243647	-0 10	-0 10	B8	8 70	8 22	67	13	35	335	L 4 1C	81 707
37	688	103	16	16	6	-58 22 43	243647	-0 9	-2 27	B8	8 70	8 22	336	7	316	119	L 3 0L	39 667
38	688	103	16	16	6	-58 22 43	243648	-0 13	4 22	A0	9 92	9 78	336	7	316	119	L 3 0L	39 667
39	673	112	16	18	12	-58 12 39	243679	0 55	3 26	A2	9 43	9 48	163	7	139	189	H 1 0L	189 000
40	739	163	16	18	37	-59 58 44	243711	-0 6	-0 47	A0	9 19	8 91	302	4	278	91	L 3 0L	30 333
41	742	165	16	19	4	-60 2 3	243711	0 20	-4 5	A0	9 19	8 91	59	12	30	297	4 1C	72 439
42	742	165	16	19	4	-60 2 3	253529	-0 6	-1 51	A2	9 20	9 17	59	12	30	297	4 1C	72 439
43	742	165	16	19	4	-60 2 3	253530	-0 15	-0 45	A0	9 03	8 59	59	12	30	297	4 1C	72 439
44	714	153	16	19	40	-59 26 28	243738	-0 11	0 11	B8	9 40	9 03	308	14	279	327	3 0L	109 000
45	555	39	16	19	42	-55 19 4	243741	-0 18	0 26	B5	7 74	7 40	440	40	362	400	L 3 0L	133 300
46	717	152	16	19	42	-59 27 43	243738	-0 8	-1 4	B8	9 40	9 03	62	12	31	301	4 1C	73 415
47	553	41	16	19	49	-55 20 5	243741	-0 10	1 14	B5	7 74	7 40	195	29	149	899	1 0L	899 000
48	559	33	16	19	49	-55 20 19	243741	-0 10	-0 2	B5	7 74	7 40	122	47	34	2174	3 0C	724 667
49	557	37	16	19	54	-55 20 5	243741	-0 5	0 12	B5	7 74	7 40	180	63	357	4244	H 4 1C	1035 024
50	856	255	16	19	57	-62 59 5	253532	0 23	-0 19	A2	9 70	9 52	51	5	27	110	H 4 1C	26 829
51	523	23	16	19	59	-54 33 57	243750	-0 24	2 41	B3	8 08	00	175	10	7	156	L 1 0L	160 000
52	547	32	16	19	59	-55 5 37	243748	-0 16	0 38	B8	7 86	00	93	37	38	1267	4 1C	309 024
53	549	28	16	20	6	-55 5 29	243748	-0 9	0 46	B8	7 86	00	67	20	29	581	L 3 0C	193 667
54	752	181	16	20	7	-60 23 54	253536	-0 23	0 7	B9	9 24	8 89	55	6	30	137	L 4 1C	33 415
55	528	17	16	20	19	-54 35 32	243750	-0 4	1 6	B3	8 08	00	64	13	28	356	L 3 0C	118 667
56	526	22	16	20	27	-54 37 1	243750	0 4	-0 22	B3	8 08	00	62	8	37	140	L 4 1C	34 146
57	562	62	16	22	15	-55 43 33	243793	0 3	-1 2	B8	8 08	7 87	74	20	38	532	4 1C	129 756
58	603	92	16	22	15	-55 47 28	243795	-0 2	-0 11	B8	7 87	7 50	85	25	34	832	4 1C	202 927
59	600	94	16	22	16	-56 46 49	243796	-0 0	-1 32	B8	7 87	7 50	348	5	322	115	L 3 0L	38 333
60	605	88	16	22	16	-56 46 36	243795	-0 1	-0 19	B8	7 87	7 50	61	14	28	363	L 3 0C	121 000
61	713	174	16	22	18	-59 41 12	243798	-0 5	-1 49	B8	8 66	8 31	320	20	271	658	H 3 0L	219 333
62	713	174	16	22	18	-59 41 12	243801	-0 10	-1 15	B9	9 28	9 04	320	20	271	658	3 0L	219 333
63	713	174	16	22	18	-59 41 12	243805	-0 17	-3 30	A0	9 80	9 45	320	20	271	658	3 0L	219 333
64	713	174	16	22	18	-59 41 12	243807	-0 19	-1 58	B9	8 74	8 45	320	20	271	658	3 0L	219 333
65	564	58	16	22	18	-55 44 25	243793	0 5	-1 54	B8	8 08	7 87	51	7	26	160	L 3 0C	53 333
66	712	175	16	22	21	-59 39 43	243798	-0 1	-0 20	B9	8 66	8 31	145	6	118	146	1 0L	146 000
67	712	175	16	22	21	-59 39 43	243801	-0 7	0 15	B9	9 28	9 04	145	6	118	146	1 0L	146 000
68	712	175	16	22	21	-59 39 43	243805	-0 14	-2 1	A0	9 80	9 45	145	6	118	146	1 0L	146 000
69	712	175	16	22	21	-59 39 43	243807	-0 16	-0 29	B9	8 74	8 45	145	6	118	146	1 0L	146 000
70	717	168	16	22	21	-59 39 52	243798	-0 2	-0 30	B9	8 66	8 31	84	23	26	842	3 0C	290 667
71	717	168	16	22	21	-59 39 52	243801	-0 8	0 5	B9	9 28	9 04	84	23	26	842	3 0C	290 667
72	717	168	16	22	21	-59 39 52	243805	-0 1	-2 10	A0	9 80	9 45	84	23	26	842	3 0C	290 667
73	717	168	16	22	21	-59 39 52	243807	-0 16	-0 38	B9	8 74	8 45	84	23	26	842	3 0C	290 667
74	715	172	16	22	23	-59 39 44	243798	-0 0	-0 21	B9	8 66	8 31	111	32	31	1394	4 1C	340 000
75	715	172	16	22	23	-59 39 44	243801	-0 6	0 13	B9	9 28	9 04	111	32	31	1394	4 1C	340 000
76	715	172	16	22	23	-59												

NORMA RA 17 24 DEC -59 04

OBJECT NO	X	Y	R A	DEC	SAO NO	Δ R A	Δ DEC	SPEC TYPE	V MAG	P MAG	PEAK DEN	NO OF POINTS	BO	DENSITY VOLUME	EXP & FILTER	DEH VOL/ EXP
101	488	32	16 24 12	-54 1 52	243853	-0 26	3 38	88	9 07	8 80	64	6	38	149 L	4 1C	35 341
102	961	358	16 24 20	-65 56 28	NO						248	42	211	1184	3 0L	388 000
103	593	92	16 24 24	-58 17 20	243844	0 3	-0 7	85	8 63	8 49	58	6	33	137 L	4 1C	33 415
104	963	358	16 24 27	-65 57 24	NO						78	39	307	1204	4 1C	293 659
105	630	136	16 24 34	-57 47 42	243850	0 2	-0 2	83	8 87	8 59	340	21	295	651	3 0C	170 000
106	965	354	16 24 39	-65 56 24	NO						51	15	229	391	3 0C	258 333
107	635	130	16 24 41	-57 48 9	243850	0 9	-0 29	83	8 87	8 59	79	22	225	769	3 0C	258 333
108	635	130	16 24 41	-57 48 9	243862	-0 28	3 27	80	9 94	9 95	78	22	225	769	3 0C	258 333
109	601	107	16 24 43	-58 56 30	243847	0 18	1 58	89	9 40	9 29	59	6	25	173	3 0C	57 667
110	633	134	16 24 44	-57 48 1	243850	0 26	-0 23	83	8 97	8 59	104	30	311	1280	4 1C	312 195
111	633	134	16 24 44	-57 48 1	243862	-0 25	3 34	89	9 94	9 95	104	30	311	1280	4 1C	312 195
112	599	112	16 24 47	-56 56 22	243947	-0 20	0 44	88	9 40	9 29	73	7	31	213	4 1C	51 951
113	889	323	16 26 12	-64 21 13	253585	-0 50	0 26	88	8 60	0 00	286	40	221	1623	3 0L	541 000
114	891	322	16 26 12	-64 21 13	253585	-0 50	0 26	88	8 60	0 00	137	65	26	3269	4 1C	797 317
115	889	324	16 26 13	-64 20 42	253585	-0 49	1 13	88	8 60	0 00	132	17	97	454	1 0L	464 000
116	893	318	16 26 15	-64 21 33	253585	-0 47	0 24	88	8 60	0 00	105	41	23	1820	3 0C	606 667
117	566	108	16 26 22	-56 20 55	243899	-0 31	2 19	80	8 72	8 51	334	9	302	245 L	4 1C	81 667
118	569	110	16 26 21	-56 24 19	243899	-0 2	-1 5	80	8 72	8 51	57	6	31	138 L	4 1C	33 659
119	797	266	16 26 52	-62 11 35	253588	-0 29	-0 34	89	7 46	0 00	282	22	236	706	3 0L	235 333
120	799	264	16 26 52	-62 10 12	253588	-0 28	0 49	89	7 46	0 00	100	27	30	1022	4 1C	263 902
121	801	261	16 27 2	-62 10 55	253588	-0 19	0 6	89	7 46	0 00	79	20	24	719	3 0C	239 667
122	543	100	16 27 10	-55 51 14	243905	-0 8	-1 17	89	8 01	7 77	346	30	300	706	3 0L	235 333
123	547	94	16 27 14	-55 50 1	243905	-0 4	-0 4	89	8 01	7 77	59	8	27	220 L	3 0C	73 333
124	545	98	16 27 19	-55 49 55	243905	0 1	0 3	89	8 01	7 77	72	15	32	460	4 1C	112 195
125	778	259	16 27 59	-61 45 42	253595	-0 31	-0 33	89	8 48	8 00	69	14	28	420	4 1C	102 439
126	780	255	16 27 60	-61 45 44	253595	-0 31	-0 34	89	8 48	8 00	55	11	22	285	3 0C	95 000
127	782	264	16 28 22	-61 53 16	253595	-0 31	-0 24	88	0 00	9 30	56	6	30	134 L	4 1C	32 683
128	948	376	16 29 2	-65 54 58	NO						168	80	26	4916	4 1C	1199 024
129	950	372	16 29 7	-65 54 56	NO						128	63	22	3379	3 0C	1126 333
130	946	378	16 29 15	-65 55 16	NO						303	86	210	3921	3 0L	1307 000
131	946	379	16 29 19	-65 54 45	NO						135	35	92	1104	1 0L	1104 000
132	774	267	16 30 15	-61 48 19	253613	-0 30	-0 51	88	9 50	9 04	53	6	23	154	3 0C	51 333
133	771	271	16 30 20	-61 47 15	253613	-0 25	0 13	88	9 50	9 04	69	14	27	432 H	4 1C	105 366
134	769	273	16 30 24	-61 47 29	253613	-0 20	-0 1	88	9 50	9 04	267	5	241	104 L	3 0L	34 667
135	838	324	16 31 24	-63 32 27	253621	-0 39	-1 13	89	8 72	8 29	249	4	224	94 L	3 0L	31 333
136	436	64	16 31 25	-53 31 38	243965	0 3	1 3	85	7 18	0 00	453	136	323	7378	3 0C	2459 333
137	440	58	16 31 25	-53 31 33	243965	0 3	1 7	85	7 18	0 00	239	80	26	6370	3 0C	2123 333
138	438	61	16 31 25	-53 30 51	243965	0 3	1 50	85	7 18	0 00	357	99	38	9668 H	4 1C	2358 049
139	839	322	16 31 28	-63 30 6	253521	-0 35	1 8	89	8 72	8 29	61	11	25	307	4 1C	74 878
140	435	65	16 31 31	-53 30 43	243965	0 9	2 3	85	7 18	0 00	227	73	123	3658	1 0L	3658 000
141	841	319	16 31 39	-63 30 43	253521	-0 24	0 31	89	8 72	8 29	46	4	22	95 L	3 0C	31 667
142	480	106	16 32 11	-54 45 4	243981	-0 9	1 19	88	9 34	9 15	327	9	296	230?	3 0L	76 667
143	433	79	16 33 7	-53 37 34	243996	-0 16	2 59	88	8 16	7 94	344	11	313	254 L	3 0L	66 333
144	479	107	16 33 24	-54 43 58	243995	0 6	2 45	88	9 10	8 84	86	36	27	1207	3 0C	402 333
145	479	107	16 33 24	-54 43 58	244003	-0 23	1 32	88	7 82	7 40	86	36	27	1207	3 0C	402 333
146	435	79	16 33 28	-53 38 41	243996	0 6	1 51	88	8 16	7 94	66	14	33	358 L	4 1C	87 317
147	437	75	16 33 29	-53 39 21	243996	0 7	1 12	88	8 16	7 94	51	7	26	157 L	3 0C	52 333
148	477	111	16 33 30	-54 43 56	243995	0 12	2 47	88	9 10	8 84	109	48	31	2069 H	4 1C	504 634
149	477	111	16 33 30	-54 43 56	244003	-0 17	1 34	88	7 82	7 40	109	48	31	2069 H	4 1C	504 634
150	477	111	16 33 30	-54 43 56	244007	-0 39	-0 49	80	9 46	9 29	109	48	31	2069 H	4 1C	504 634
151	473	115	16 33 35	-54 41 56	243995	-0 18	4 47	88	9 10	8 84	139	4	116	89	1 0L	89 000
152	473	115	16 33 35	-54 41 56	244003	-0 12	3 34	88	7 82	7 40	139	4	116	89 L	1 0L	89 000
153	473	115	16 33 35	-54 41 56	244007	-0 34	1 11	80	9 46	9 29	139	4	116	89	1 0L	89 000
154	474	114	16 33 36	-54 43 35	243995	0 18	3 8	88	9 10	8 84	338	33	291	1068	3 0L	355 000
155	474	114	16 33 36	-54 43 35	244003	-0 11	1 55	88	7 82	7 40	338	33	291	1068	3 0L	355 000
156	628	206	16 33 45	-58 33 29	244002	0 2	-1 39	88	7 52	7 03	210	40	31	2702 L	+	660 -98
157	625	209	16 33 47	-58 31 58	244002	0 4	-0 8	88	7 52	7 03	169	18	115	633	1 0L	533 222
158	630	202	16 33 47	-58 32 24	244002	0 4	-0 33	88	7 52	7 03	170	33	25	1963	3 0C	654 333
159	625	208	16 33 50	-58 32 32	244002	0 6	-0 41	88	7 52	7 03	370	32	271	1535	3 0L	51 667
160	720	269	16 34 8	-60 55 1	253638	-0 19	-1 34	85	6 24	0 00	428	65	241	4957	3 0L	1652 333
161	722	268	16 34 13	-60 55 31	253638	-0 13	-2 4	85	6 24	0 00	329	68	29	6262	4 1C	1527 317
162	720	271	16 34 15	-60 55 5	253638	-0 11	-1 38	85	6 24	0 00	247	38	109	2225	1 0L	2225 000
163	724	264	16 34 18	-60 54 24	253638	-0 9	-0 57	85	6 24	0 00	288	52	24	4554	3 0L	1518 000
164	581	177	16 34 23	-57 22 27	NO						73	11	24	384	3 0C	128 000
165	576	183	16 34 24	-57 22 33	NO						321	16	268	546	3 0L	182 000
166	579	181	16 34 27	-57 22 26	NO						95	19	30	731	4 1C	178 293
167	526	154	16 35 3	-56 7 0	244022	0 0	0 34	88	8 78	8 41	59	9	29	222 L	4 1C	54 146
168	528	151	16 35 6	-56 7 37	244022	0 3	-0 3	88	8 78	8 41	51	4	25	96 L	3 0C	32 000
169	375	62	16 35 18	-52 24 14	244024	0 11	-1 56	80	7 46	0 00	351	22	314	596	3 0L	98 667
170	375	62	16 35 18	-52 24 14	244027	-0 0	-4 8	89	8 98	8 64	351	22	314	596	3 0L	98 667
171	375	62	16 35 18	-52 24 14	244032	-0 10	2 2	82	9 18	8 82	351	22	314	596	3 0L	198 667
172	371	60	16 35 28	-52 19 19	244024	0 21	2 59	80	7 46	0 00	347	5	322	114?	3 0L	38 000
173	371	60	16 35 28	-52 19 19	244027	0 9	0 47	89	8 98	8 64	347	5	322	114?	3 0L	38 000
174	553	179	16 35 31	-56 54 27	244037	-0 4	-0 41	89	6 80	0 00	338	35	259	1587	3 0L	529 000
175	376	59	16 35 31	-52 23 6	244024	0 24	-0 48	80	7 46	0 00	78	43	35	1300	4 1C	317 073
176	376	59	16 35 31	-52 23 6	244027	0 12	-3 0	89	8 98	8 64	78	43	35	1300 H	4 1C	317 073
177	376	59	16 35 31	-52 23 6	244032	0 2	3 10	82	9 18	8 82	78	43	35	1300	4 1C	317 073
178	553	181	16 35 35	-56 54 29	244037	0 0	-0 43	89	6							

PAGE, CARRUTHERS AND HILL

NORMA RA 17 24 DEC -59 04

OBJECT NO	X	Y	R A	DEC	SAO NO	Δ R A	Δ DEC	SPEC TYPE	V MAG	P MAG	PEAK DEN	NO OF POINTS	EG	DENSITY VOLUME	EXP & FILTER	DEN VOL/EXP
201	542	190	16 37 40	-56 48 38	244069	-0 5	-0 7	99	8 36	8 00	288	11	256	264 L	3 0L	88 000
202	546	194	16 37 47	-56 49 11	244069	0 2	-0 40	99	8 36	8 00	57	6	25	159 L	3 0C	53 000
203	544	188	16 37 51	-56 49 14	244069	0 6	-0 43	99	8 35	8 00	74	14	28	441 L	4 1C	107 561
204	986	451	16 38 5	-67 22 10	253673	-0 13	-1 54	A0	6 32	00	54	21	26	598 L	4 1C	145 366
205	984	452	16 38 10	-67 21 37	253673	-0 7	-1 21	A0	6 32	00	219	5	198	100 L	3 0L	33 333
206	497	168	16 38 12	-55 44 54	244080	-0 13	0 2	A0	7 97	00	324	33	269	1028-H	3 0L	342 687
207	988	447	16 38 12	-67 22 0	253673	-0 6	-1 44	A0	6 32	00	49	9	23	207 L	3 0C	69 000
208	499	166	16 38 16	-55 44 55	244080	-0 9	0 2	A0	7 97	00	118	24	29	1125 H	4 1C	274 390
209	498	170	16 38 19	-55 43 48	244080	-0 6	1 8	A0	7 97	00	135	6	108	143 L	1 0L	143 000
210	500	163	16 38 28	-55 43 17	244080	0 2	1 0	A0	7 97	00	87	18	24	733 L	3 0C	244 333
211	604	231	16 38 45	-58 22 54	244084	-0 4	-0 18	99	8 20	7 82	71	10	30	302 L	4 1C	73 659
212	682	272	16 38 51	-60 16 2	253676	-0 6	-1 22	99	9 60	9 07	53	4	23	107 L	3 0C	35 667
213	680	276	16 38 52	-60 16 2	253676	-0 5	-1 29	99	9 60	9 07	69	9	27	277 L	4 1C	67 561
214	678	278	16 38 55	-60 16 2	253676	-0 3	-1 29	99	9 60	9 07	264	5	236	124 L	3 0L	41 333
215	606	228	16 38 59	-58 24 2	244084	0 10	-1 26	99	8 20	7 82	54	5	24	129 L	3 0C	43 000
216	415	119	16 39 1	-53 42 18	244089	-0 6	1 46	99	8 85	8 72	56	4	31	94 L	4 1C	22 927
217	483	181	16 40 45	-55 36 48	244108	-0 11	0 50	99	8 03	7 60	308	16	258	560 L	3 0L	186 667
218	484	179	16 40 54	-55 35 48	244108	-0 3	1 92	99	8 03	7 60	97	19	28	791 L	4 1C	192 927
219	486	176	16 40 56	-55 36 17	244108	-0 0	1 21	99	8 03	7 60	75	13	24	466 L	3 0C	155 333
220	685	289	16 40 58	-60 29 3	253684?	0 27	1 58	A0	8 68	8 49	195	36	25	2289	3 0C	763 000
221	685	289	16 40 58	-60 29 3	253686	-0 5	-0 44	99	7 62	00	195	36	25	2289 H	4 1C	763 000
222	683	293	16 40 59	-60 29 11	253684?	0 28	1 48	A0	8 68	8 49	231	43	30	3059 H	4 1C	746 098
223	683	293	16 40 59	-60 29 11	253686	-0 4	-0 52	99	7 62	00	231	43	30	3059 H	4 1C	746 098
224	681	296	16 40 60	-60 28 30	253684?	0 29	2 29	A0	8 68	8 49	198	27	102	1278 H	1 0L	1278 000
225	681	296	16 40 60	-60 28 30	253686	-0 3	-0 11	99	7 62	00	198	27	102	1278 H	1 0L	1278 000
226	681	295	16 41 1	-60 29 8	253684?	0 30	1 51	A0	8 68	8 49	394	42	232	2617 L	3 0L	872 333
227	681	295	16 41 1	-60 29 8	253686?	-0 1	-0 49	99	7 62	00	394	42	232	2617 L	3 0L	872 333
228	728	320	16 41 3	-61 35 34	253687	-0 24	-1 15	A0	7 00	00	67	8	27	245 L	4 1C	59 756
229	613	255	16 41 11	-58 47 58	244113	-0 3	0 45	99	9 50	9 17	61	4	34	100 L	4 1C	24 390
230	730	316	16 41 12	-61 36 1	253687	-0 15	-1 43	A0	7 00	00	52	6	21	161 L	3 0C	53 667
231	963	457	16 41 29	-67 2 22	253688	-0 8	-1 14	A0	5 30	00	337	117	25	11919 H	4 1C	2907 073
232	962	459	16 41 32	-67 2 11	253688	-0 5	-1 3	A0	5 30	00	181	71	85	3382 L	1 0L	3382 000
233	961	458	16 41 34	-67 1 45	253688	-0 3	-0 37	A0	5 30	00	388	105	195	8017 L	3 0L	2672 333
234	965	453	16 41 36	-67 2 10	253688	-0 1	-1 2	A0	5 30	00	261	100	22	8694 L	3 0C	2898 000
235	532	214	16 41 51	-56 51 47	244121	-0 1	0 21	99	9 27	9 16	55	4	27	106 L	4 1C	25 894
236	625	268	16 42 1	-59 10 10							57	4	29	98 L	4 1C	23 902
237	592	255	16 42 10	-58 24 28	244122	0 6	0 19	99	5 94	00	405	63	108	5835 L	1 0L	5835 000
238	596	248	16 42 11	-58 25 5	244122	0 7	-0 18	99	5 94	00	379	90	27	8669 L	3 0C	2889 667
239	594	252	16 42 14	-58 25 13	244122	0 10	-0 26	99	5 94	00	405	121	32	13481 L	4 1C	3889 049
240	686	312	16 42 15	-60 57 3	253693	-0 13	-1 56	99	8 68	8 31	256	8	222	220 L	3 0L	73 333
241	584	250	16 42 16	-58 13 53	NO						293	10	255	292 L	4 1C	54 000
242	697	310	16 42 17	-60 56 2	253693	-0 11	-0 55	99	8 68	8 31	65	9	28	254 L	4 1C	61 951
243	591	254	16 42 18	-58 24 1	244122	0 14	0 46	99	5 94	00	459	100	247	10042 L	3 0L	3347 333
244	587	244	16 42 19	-58 12 44	244111	1 9	0 33	99	9 88	9 59	66	10	28	272 L	3 0C	90 667
245	699	307	16 42 25	-60 56 29	253693	-0 3	-1 22	99	8 68	8 31	54	4	26	101 L	3 0C	33 667
246	583	253	16 42 35	-58 13 19	244133?	-0 29	1 47	A0	5 76	00	143	6	108	165 L	1 0L	165 000
247	544	228	16 42 47	-57 14 31	244129	0 6	0 32	99	9 61	9 32	57	4	28	101 L	4 1C	24 634
248	638	295	16 43 0	-59 35 40	244130?	0 6	5 7	A0	9 90	9 73	277	9	238	251 L	3 0L	83 667
249	638	295	16 43 0	-59 35 40	244134	-0 4	-0 52	99	7 33	00	277	9	238	251 L	3 0L	83 667
250	582	257	16 43 4	-58 14 0	244133	0 1	1 6	99	5 76	00	419	119	106	10084 L	1 0L	10084 000
251	639	283	16 43 4	-59 34 40	244134	0 0	0 8	99	7 33	00	97	17	30	651 L	4 1C	158 780
252	582	256	16 43 7	-58 14 40	244133	0 4	0 27	99	5 76	00	465	194	242	16293 L	3 0L	5431 000
253	530	224	16 43 8	-56 56 4	244137	-0 1	0 40	99	8 96	8 77	55	5	27	121 L	4 1C	29 512
254	641	280	16 43 10	-59 35 6	244134	0 7	-0 18	99	7 33	00	73	12	26	381 L	3 0C	127 000
255	548	234	16 43 10	-57 21 55	244136	0 2	0 22	99	7 77	7 50	57	6	27	153 L	4 1C	37 317
256	596	250	16 43 13	-58 15 14	244133	0 10	-0 7	99	5 76	00	407	132	27	14379 L	3 0C	4793 000
257	564	254	16 43 17	-58 15 23	244133	0 13	-0 16	99	5 76	00	426	161	31	17042 L	4 1C	4156 585
258	521	222	16 44 12	-56 43 50	NO						55	5	23	127 L	3 0C	42 333
259	710	326	16 44 15	-61 19 26	253705	-0 11	-1 25	A0	7 86	00	57	6	24	156 L	3 0C	55 000
260	519	227	16 44 20	-56 45 41	NO						59	4	27	113 L	4 1C	27 561
261	707	330	16 44 20	-61 18 31	253705	-0 6	-0 30	A0	7 86	00	74	12	28	382 L	4 1C	93 171
262	290	99	16 44 44	-51 15 38	244152	0 13	-0 60	99	9 80	9 90	293	6	273	105 L	3 0L	35 000
263	354	140	16 44 46	-52 49 44	244158	-0 10	1 28	99	7 04	00	368	81	258	3929 H	4 1C	1309 667
264	356	137	16 44 46	-52 49 20	244158	-0 10	1 28	99	7 04	00	188	54	28	3651 H	4 1C	890 488
265	353	143	16 44 58	-52 49 5	244158	0 2	2 7	99	7 04	00	146	30	100	952 L	1 0L	952 000
266	358	134	16 44 58	-52 49 15	244158	0 1	1 57	99	7 04	00	141	44	23	2422 L	3 0C	807 333
267	291	115	16 46 15	-51 25 43	244177?	-0 9	2 43	99	9 60	10 20	298	15	264	399 L	3 0L	133 000
268	291	115	16 46 15	-51 25 43	244184	-0 21	1 59	99	7 99	00	298	15	264	399 L	3 0L	133 000
269	294	110	16 46 34	-51 25 49	244177?	0 10	2 37	99	9 60	10 20	54	14	25	331 L	3 0C	110 333
270	294	110	16 46 34	-51 25 49	244184	-0 2	1 53	99	7 99	00	54	14	25	331 L	3 0C	110 333
271	292	113	16 46 35	-51 25 24	244177?	0 11	3 2	99	9 60	10 20	72	26	29	785 L	4 1C	191 463
272	292	113	16 46 35	-51 25 24	244184	-0 1	2 18	99	7 99	00	72	26	29	785 L	4 1C	191 463
273	292	113	16 46 35	-51 25 24	244203?	-1 0	-2 56	99	9 50	9 80	72	26	29	785 L	4 1C	191 463
274	460	214	16 46 35	-55 30 21	244186	-0 6	1 40	99	8 88	8 57	79	13	27	440 L	4 1C	107 317
275	458	217	16 46 38	-55 30 43	244186	-0 3	1 18	99	8 88	8 57	279	10	246	280 L	3 0L	93 333
276	434	195	16 46 39	-54 49 53	244187	-0 9	1 4	99	9 04	8 73	62	9	23	264 L	3 0C	88 000
277	871	438	16 46 40	-65 17 27	253717	-0 22	-0 0	99	6 30	00	330	50	208	3193 L	3 0L	1064 333
278	871															

NORMA RA 17 24 DEC -59 04

OBJECT NO	X	Y	R A	DEC	SAO NO	Δ R A	Δ DEC	SPEC TYPE	V MAG	P MAG	PEAK DEN	NO OF POINTS	BG	DENSITY VOLUME	EXP & FILTER	DEN VOL / EXP	
301	398	211	16 49 44	-54 19 49	244253	-0 16	1 35	BB	7 08	00	345	32	241	1656	3 0L	552 000	
302	398	213	16 49 46	-54 19 38	244253	-0 13	1 45	BB	7 08	00	146	15	98	495 L	1 0L	495 000	
303	380	197	16 49 48	-53 50 31	244252	-0 7	1 37	BB	8 73	8 47	66	13	27	363	4 1C	88 537	
304	382	193	16 49 49	-53 50 52	244252	-0 6	1 16	BB	8 73	8 47	55	6	26	151 L	3 0C	50 333	
305	400	208	16 49 54	-54 18 60	244253	-0 6	2 24	BB	7 08	00	165	37	27	2423	4 1C	590 976	
306	402	205	16 49 55	-54 19 21	244253	-0 4	2 3	BB	7 08	00	140	29	23	1548	3 0C	516 000	
307	348	186	16 50 10	-53 6 58	244261	-0 13	2 19	BB	8 40	8 05	273	10	243	243 L	3 0L	81 000	
308	353	180	16 50 14	-53 10 44	244261	-0 9	0 33	BB	8 40	8 05	51	7	23	170 L	3 0C	56 667	
309	350	184	16 50 25	-53 9 50	244261	0 2	1 27	BB	8 40	8 05	67	14	27	418	4 1C	101 951	
310	769	406	16 50 29	-63 12 41	253734	-0 15	-1 20	A0	6 14	00	251	18	203	578 L	3 0L	192 667	
311	773	401	16 50 33	-63 13 15	253734	-0 11	-1 53	A0	6 14	00	80	15	21	558 L	3 0C	189 333	
312	770	405	16 50 37	-63 12 25	253734	-0 7	-1 4	A0	6 14	00	96	20	25	854 L	4 1C	208 293	
313	769	408	16 50 39	-63 12 32	253734	-0 5	-1 10	A0	6 14	00	115	4	92	89 L	1 0L	89 000	
314	306	167	16 50 41	-52 12 50	244264?	0 9	2 39	A0	0 00	10 20	275	17	241	457	3 0L	152 333	
315	306	167	16 50 41	-52 12 50	244270	-0 17	0 46	BB	8 61	8 20	275	17	241	457 L	3 0L	152 333	
316	534	296	16 50 46	-57 37 6	244269	-0 2	1 6	BB	9 94	9 52	55	4	27	105	4 1C	25 610	
317	310	161	16 50 53	-52 12 22	244270	-0 2	1 13	BB	8 61	8 20	58	21	23	642	3 0C	251 000	
318	308	184	16 50 53	-52 12 2	244264?	0 22	3 26	A0	0 00	10 20	92	27	27	1033	H	4 1C	215 951
319	308	184	16 50 53	-52 12 2	244270	-0 5	1 33	BB	8 61	8 20	92	27	27	1033	H	4 1C	215 951
320	696	376	16 51 34	-61 33 53	253740	-0 10	-0 12	A0	6 84	00	255	6	219	226 L	3 0L	75 333	
321	697	374	16 51 35	-61 33 4	253740	-0 10	0 37	A0	6 84	00	91	17	35	481 L	4 1C	117 317	
322	633	345	16 51 39	-60 5 29	253744	-0 13	-0 37	BB	8 12	00	284	17	220	649	3 0L	216 000	
323	700	370	16 51 39	-61 34 28	253740	-0 6	-0 17	BB	8 12	00	116	20	28	901	4 1C	219 756	
324	634	347	16 51 42	-60 4 41	253744	-0 10	-0 25	BB	8 12	00	124	6	94	151	1 0L	151 000	
325	633	347	16 51 46	-60 5 32	253744	-0 6	-0 40	BB	8 12	00	83	15	24	543	3 0C	181 000	
326	636	340	16 51 58	-60 5 15	253745	-0 16	-0 16	A0	8 74	8 41	244	6	214	146	3 0L	48 667	
327	710	368	16 52 3	-61 6 27	253745	-0 16	0 32	A0	8 74	8 41	80	10	34	322	4 1C	78 537	
328	711	384	16 52 7	-60 3 7	244275?	0 34	-0 42	BB	9 00	00	194	78	94	3817	1 0L	3817 000	
329	231	138	16 52 7	-50 34 7	244280	-0 34	-0 42	BB	6 57	00	194	78	94	3817	1 0L	3817 000	
330	231	138	16 52 7	-50 34 7	244280	-0 6	2 30	BB	6 57	00	428	144	94	11689	3 0L	3896 333	
331	231	136	16 52 11	-50 33 15	244280	0 39	0 2	BB	9 00	8 30	257	104	24	8719	3 0C	2906 333	
332	235	129	16 52 12	-50 33 22	244275?	-0 5	2 23	BB	6 57	00	257	104	24	8719 L	3 0C	2906 333	
333	235	129	16 52 12	-50 33 22	244280	-0 6	0 16	A0	8 74	8 41	59	4	29	115	3 0C	38 333	
334	713	381	16 52 12	-61 6 43	253745	-0 6	0 16	A0	8 74	8 41	59	4	29	115	3 0C	38 333	
335	233	132	16 52 14	-50 33 3	244280	-0 3	2 42	BB	6 57	00	360	124	29	12952	4 1C	3159 024	
336	304	172	16 52 24	-52 12 16	244285	-0 9	0 1	A0	6 16	00	194	53	25	3629	3 0C	1209 667	
337	282	164	16 52 24	-51 44 15	244286	-0 10	1 5	BB	9 08	00	54	9	27	212 L	4 1C	51 700	
338	302	175	16 52 24	-52 11 58	244285	-0 8	0 19	A0	6 16	00	260	66	27	5552 H	4 1C	1354 146	
339	299	180	16 52 27	-52 10 48	244285	-0 5	1 29	A0	6 16	00	161	36	93	1386	1 0L	1386 000	
340	299	178	16 52 27	-52 11 2	244285	-0 6	1 15	A0	6 16	00	378	71	234	4317	3 0L	1439 000	
341	280	168	16 52 30	-51 44 59	244286	-0 5	0 22	BB	9 08	00	260	14	231	355	3 0L	118 333	
342	852	355	16 52 53	-60 31 26	253748	-0 10	-0 6	BB	6 81	00	234	49	28	3421	3 0C	1140 333	
343	848	362	16 52 55	-60 30 38	253748	-0 8	0 42	BB	6 81	00	245	35	95	2083 H	1 0L	2083 000	
344	848	361	16 52 57	-60 31 23	253748	-0 6	-0 3	BB	6 81	00	410	69	213	4707 H	3 0L	1569 000	
345	849	359	16 52 59	-60 30 37	253748	-0 4	0 43	BB	6 81	00	286	62	31	4955	4 1C	1208 537	
346	446	265	16 53 15	-55 44 50	244297	-0 11	1 39	BB	8 32	8 01	293	17	229	617 L	3 0L	205 667	
347	446	267	16 53 18	-55 44 36	244297	-0 8	1 52	BB	8 32	8 01	125	5	96	123 L	1 0L	123 000	
348	450	259	16 53 22	-55 45 29	244297	-0 4	0 59	BB	8 32	8 01	91	16	22	621 L	3 0C	207 000	
349	448	263	16 53 27	-55 45 46	244297	0 1	0 43	BB	8 32	8 01	105	19	26	849	4 1C	207 073	
350	355	223	16 53 38	-53 36 21	244307?	-0 18	9 26	A0	8 38	00	129	5	91	141	1 0L	141 000	
351	355	221	16 53 44	-53 37 8	244307?	-0 12	8 39	A0	8 38	00	297	6	227	332?	3 0L	110 667	
352	577	332	16 53 45	-58 53 18	244303	-0 2	1 38	BB	8 23	00	275	17	221	576	3 0L	192 000	
353	579	330	16 53 45	-58 53 41	244303	-0 2	1 15	BB	8 23	00	97	15	28	571	4 1C	139 268	
354	364	218	16 53 48	-53 44 30	244307	-0 8	1 17	A0	8 38	00	52	8	20	208	3 0C	69 333	
355	526	308	16 53 49	-57 40 38	244304/	-0 2	0 55	BB	7 70	00	361	42	222	2406 H	3 0L	892 000	
356	526	308	16 53 49	-57 40 38	244306/	-0 6	2 3	BB	7 71	00	361	42	222	2406 H	3 0L	892 000	
357	526	310	16 53 50	-57 41 32	244304/	-0 2	0 0	BB	7 70	00	171	97	779	779	1 0L	779 000	
358	526	310	16 53 50	-57 41 32	244306/	-0 5	1 8	BB	7 71	00	171	19	97	779	1 0L	779 000	
359	577	334	16 53 51	-58 53 6	244303	0 3	1 51	BB	8 23	00	121	4	96	90 L	1 0L	90 000	
360	581	327	16 53 51	-58 53 56	244303	0 3	1 0	BB	8 23	00	72	11	23	369	3 0C	123 000	
361	527	305	16 53 55	-57 39 53	244304/	0 4	1 40	BB	7 70	00	195	34	28	2208	4 1C	538 537	
362	527	306	16 53 55	-57 39 53	244306/	0 0	2 47	BB	7 71	00	195	34	28	2208	4 1C	538 537	
363	530	302	16 53 56	-57 41 16	244304/	0 4	0 16	BB	7 70	00	143	28	22	1626	3 0C	542 000	
364	530	302	16 53 56	-57 41 16	244306/	0 1	1 24	BB	7 71	00	143	28	22	1626	3 0C	542 000	
365	654	363	16 53 57	-60 38 10	253754	-0 4	-0 17	A0	8 93	8 55	56	29	49	100 L	3 0C	33 333	
366	365	225	16 53 59	-53 49 14	244307/	0 3	-3 27	A0	8 38	00	96	42	24	1541	4 1C	375 854	
367	365	225	16 53 59	-53 49 14	244311/	-0 16	1 25	A0	8 32	7 80	96	42	24	1541	4 1C	375 854	
368	363	228	16 53 60	-53 49 23	244307/	0 4	-3 36	A0	8 38	00	280	30	225	949	3 0L	316 333	
369	363	228	16 53 60	-53 49 23	244311/	-0 15	1 17	A0	8 32	7 80	280	30	225	949	3 0L	316 333	
370	651	367	16 54 3	-60 37 22	253754	0 2	0 31	A0	8 93	8 55	68	9	33	257	4 1C	62 683	
371	367	222	16 54 7	-53 50 3	244307/	0 12	-4 15	A0	8 38	00	77	19	21	661	3 0C	220 333	
372	367	222	16 54 7	-53 50 3	244311/	-0 8	0 37	A0	8 32	7 80	77	19	21	661	3 0C	220 333	
373	222	151	16 54 13	-50 32 56	244313	-0 13	0 56	BB	5 70	00	323	77	225	3670	3 0L	1223 333	
374	224	147	16 54 13	-50 31 10	244313	-0 13	2 42	BB	5 70	00	157	72	26	4222	4 1C	1029 766	
375	455	269	16 54 14	-55 56 4	244312/	-0 10	1 32	BB	8 97	8 74	55	4	22	124 L	3 0C	41 333	
376	455	269	16 54 14	-55 56 4	244315/	-0 14	-1 15	K5	3 06	00	55	4	22	124	3 0C	41 333	
377	451	275	16 54 15	-55 55 57	244312	-0 9	1 39	BB	8 97	8							

PAGE, CARRUTHERS AND HILL

NORMA RA 17 24 DEC -59 04

OBJECT NO	X	Y	R A	DEC	SAO NO	Δ R A	Δ DEC	SPEC TYPE	Y MAG	P MAG	PEAK DEN	NO OF POINTS	BG	DENSITY VOLUME	EXP & FILTER	DEN VOL / EXP
401	854	500	16 59 12	-65 35 23							52	7	25	162?	4 1C	39 512
402	366	271	16 59 26	-54 16 11	244392	-0 2	1 2	BB	8 49	8 25	54	5	25	129 L	4 1C	31 463
403	275	231	16 59 41	-52 13 19	244390/	0 18	1 28	BB	9 30	9 14	261	22	215	687 H	3 0L	229 000
404	275	231	16 59 41	-52 13 19	244395/	-0 16	-0 3	BB	9 27	9 05	261	22	215	687	3 0L	229 000
405	277	228	16 59 42	-52 13 21	244390/	0 19	1 27	BB	9 30	9 14	72	23	26	710	4 1C	173 171
406	277	228	16 59 42	-52 13 21	244396/	-0 15	-0 4	BB	9 27	9 05	72	23	26	710	4 1C	173 171
407	279	225	16 59 49	-52 14 1	244390/	0 26	0 46	BB	9 30	9 14	55	12	21	326	3 0C	108 667
408	279	225	16 59 49	-52 14 1	244396/	-0 8	-0 45	BB	9 27	9 05	55	12	21	326	3 0C	108 667
409	222	204	16 59 55	-51 0 37	244398?	-0 11	0 9	BB	9 50	0 0	311	60	212	3035	3 0L	1011 667
410	222	204	16 59 55	-51 0 37	244399?	-0 11	0 20	BB	9 50	10 90	311	60	212	3035	3 0L	1011 667
411	222	204	16 59 55	-51 0 37	244400	-0 12	0 13	BB	8 74	0 0	311	60	212	3035 H	3 0L	1011 667
412	226	198	16 59 56	-51 0 48	244393?	0 24	7 9	A3	7 90	0 0	114	47	21	2272 H	3 0C	757 333
413	226	198	16 59 56	-51 0 48	244399/	-0 9	-0 2	BB	9 50	0 0	114	47	21	2272 H	3 0C	757 333
414	226	198	16 59 56	-51 0 48	244399/	-0 10	0 9	BB	9 50	10 90	114	47	21	2272 H	3 0C	757 333
415	226	198	16 59 56	-51 0 48	244400/	-0 11	0 2	BB	8 74	0 0	114	47	21	2272 H	3 0C	757 333
416	224	201	16 59 58	-51 0 39	244398/	-0 8	0 7	BB	9 50	0 0	149	60	25	3393	4 1C	827 561
417	224	201	16 59 58	-51 0 39	244399/	-0 9	0 18	BB	9 50	10 90	149	60	25	3393	4 1C	827 561
418	224	201	16 59 58	-51 0 39	244400/	-0 10	0 11	BB	8 74	0 0	149	60	25	3393	4 1C	827 561
419	221	207	17 0 2	-51 0 47	244398?	-0 3	-0 1	BB	9 50	0 0	128	29	97	840	1 0L	840 000
420	221	207	17 0 2	-51 0 47	244399?	-0 4	0 10	BB	9 50	10 90	128	29	97	840	1 0L	840 000
421	221	207	17 0 2	-51 0 47	244400	-0 5	0 3	BB	8 74	0 0	128	29	97	840 H	1 0L	840 000
422	505	345	17 0 7	-57 36 43	244401	-0 1	1 50	B3	5 88	0 0	432	96	224	6506	3 0L	2168 667
423	507	343	17 0 7	-57 37 16	244401	0 1	1 17	B3	5 88	0 0	392	116	29	10499	4 1C	2560 732
424	505	347	17 0 12	-57 36 24	244401	0 3	2 9	B3	5 88	0 0	354	53	95	4173 L	1 0L	4173 000
425	509	339	17 0 14	-57 37 24	244401	0 5	1 9	B3	5 88	0 0	343	85	32	7006 L	3 0C	2335 333
426	557	372	17 0 27	-58 50 49	244406	-0 5	1 35	BB	8 44	8 00	126	8	90	224	1 0L	224 000
427	557	371	17 0 30	-58 51 39	244405	-0 2	0 46	BB	8 44	8 00	276	21	206	820	3 0L	273 333
428	558	369	17 0 34	-58 51 3	244406	0 2	1 22	BB	8 44	8 00	99	19	25	603	4 1C	195 854
429	233	217	17 0 35	-58 19 44	244405?	0 5	-1 19	BB	9 80	9 60	248	22	211	613	3 0L	204 333
430	233	217	17 0 35	-58 19 44	244409	-0 15	0 37	B3	9 00	8 60	248	22	211	613	3 0L	204 333
431	561	365	17 0 36	-58 52 20	244406	0 4	0 5	BB	8 44	8 00	83	13	22	479	3 0C	159 667
432	238	211	17 0 43	-51 20 26	244405?	0 13	-2 1	BB	9 80	9 60	47	5	23	115	3 0C	39 333
433	238	211	17 0 43	-51 20 26	244409	-0 6	-0 5	B3	9 00	8 60	47	5	23	115 L	3 0C	38 333
434	235	214	17 0 44	-51 20 18	244405/	0 14	-1 53	BB	9 80	9 60	61	16	26	449	4 1C	109 512
435	235	214	17 0 44	-51 20 18	244409/	-0 5	0 4	B3	9 00	8 60	61	16	26	449	4 1C	109 512
436	258	241	17 1 52	-51 59 10	244433	-0 16	-0 4	BB	9 23	8 95	235	7	208	169	3 0L	56 333
437	259	238	17 1 57	-51 58 7	244433	-0 11	0 60	BB	9 23	8 95	53	7	208	167	4 1C	40 732
438	275	252	17 2 6	-52 24 40	244432/	-0 6	0 256	AO	8 27	8 05	243	16	207	433	3 0L	144 333
439	275	252	17 2 6	-52 24 40	244435/	-0 11	0 15	BB	8 38	7 99	243	16	207	433 L	3 0L	144 333
440	277	249	17 2 7	-52 24 45	244432/	0 0	2 51	AO	8 27	8 05	71	16	26	484	4 1C	118 049
441	277	249	17 2 7	-52 24 45	244435/	-0 10	0 10	BB	8 38	7 99	71	16	26	484	4 1C	118 049
442	279	246	17 2 10	-52 23 44	244432/	0 3	3 52	AO	8 27	8 05	54	10	20	278 L	3 0C	92 667
443	279	246	17 2 10	-52 23 44	244435/	-0 7	1 12	BB	8 38	7 99	54	10	20	278 L	3 0C	92 667
444	413	318	17 2 28	-55 34 23	244438	-0 8	2 33	BB	8 76	8 51	52	4	25	100 L	4 1C	24 390
445	428	327	17 2 42	-55 57 22	244442	-0 8	0 57	AO	8 06	8 06	54	4	25	97 L	4 1C	23 659
446	526	371	17 2 52	-58 14 52	244449?	-0 39	-7 16	A2	9 26	9 23	58	5	25	123	4 1C	30 000
447	470	358	17 4 4	-53 42 42	244455?	0 3	2 32	BB	9 50	9 25	232	7	207	154?	3 0L	51 333
448	337	297	17 4 44	-53 55 53	NO						52	5	23	129	3 0C	43 000
449	584	412	17 4 46	-53 45 53	244461	-0 1	-0 6	BB	6 40	7 96	225	8	23	154 L	3 0L	64 667
450	359	315	17 4 49	-54 25 33	NO						121	4	90	102	1 0L	102 000
451	585	410	17 4 49	-54 44 35	244461	-0 2	0 24	BB	8 40	7 96	58	5	26	138 L	4 1C	73 659
452	355	314	17 4 54	-54 26 26	NO						255	7	208	227?	3 0L	75 667
453	335	302	17 4 59	-53 55 50	NO						59	5	27	143	4 1C	34 878
454	315	298	17 5 7	-53 32 32	NO						251	9	207	273?	3 0L	91 000
455	663	450	17 5 23	-61 37 13	253818	-0 9	-0 28	BB	6 52	0 0	341	33	198	2107	3 0L	702 333
456	665	448	17 5 23	-61 36 44	253818	-0 9	0 1	BB	6 52	0 0	177	37	28	2305	4 1C	582 195
457	664	452	17 5 27	-61 37 59	253818	-0 5	-1 14	BB	6 52	0 0	167	19	87	812	1 0L	812 000
458	188	233	17 5 31	-50 37 50	NO						78	17	26	508?	4 1C	123 902
459	667	445	17 5 32	-61 36 45	253818	0 0	-0 0	BB	6 52	0 0	150	30	24	1647	3 0C	549 000
460	357	312	17 5 33	-54 26 21	NO						76	10	20	355	3 0C	118 333
461	354	319	17 5 38	-54 27 47	NO						24	10	20	258	3 0L	66 000
462	318	300	17 5 41	-53 36 21	NO						57	7	25	174	4 1C	42 439
463	317	296	17 5 44	-53 32 27	NO						67	9	25	288	3 0C	85 000
464	355	317	17 5 47	-54 27 19	NO						75	10	26	339	4 1C	82 663
465	292	294	17 6 1	-53 44 41	NO						237	6	204	163	3 0L	54 333
466	298	293	17 6 6	-52 59 36	NO						232	6	203	159	3 0L	53 000
467	315	302	17 6 7	-53 33 54	NO						70	12	26	381?	4 1C	92 927
468	354	322	17 6 22	-54 28 10	NO						61	9	27	222	4 1C	54 146
469	356	319	17 6 32	-54 28 41	NO						54	7	21	186	3 0C	62 000
470	698	293	17 6 43	-53 6 14	NO						66	7	21	235	3 0C	78 333
471	297	294	17 6 44	-53 9 1	NO						55	12	22	323	3 0C	107 667
472	292	292	17 6 45	-53 2 19	NO						60	8	21	246	3 0C	82 000
473	294	298	17 6 47	-53 7 51	NO						73	18	26	556	4 1C	135 610
474	291	301	17 6 50	-53 6 29	NO						237	12	198	336	3 0L	112 000
475	296	304	17 6 57	-53 13 41	NO						285	11	201	528?	3 0L	176 000
476	295	306	17 6 58	-53 13 16	NO						120	5	95	149	1 0L	149 000
477	290	297	17 7 0	-53 3 15	NO						70	14	25	432	4 1C	105 366
478	534	409	17 7 17	-58 44 41	244498	-0 6	0 33	BB	7 31	0 0	257	13	197	491	3 0L	153 667
479	536	407	17 7 18	-58 45 25	244498	-0 5	-0 11	BB	7 31	0 0	90	17	24	674	4 1C	164 390
480	154	237	17 7 19	-50 3 28	244499?	-0 5	2 48	BB	9 80	9 80	229	13	193	372	3 0L	124 000
481	154	237	17 7 19	-50 3 29	244502	-0 15	0 2	AO	7 46	0 0	229	13	193	372	3 0L	124 000
482	158	231	17 7 20	-50 3 42	244499?	-0 3										

ORIGINAL PAGE IS OF POOR QUALITY

NORMA RA 17 24 DEC -59 04

OBJECT NO	X	Y	R A	DEC	SAO NO	Δ R A	Δ DEC	SPEC TYPE	V MAG	P MAG	PEAK DEN	NO OF POINTS	BO	DENSITY VOLUME	EXP & FILTER	DEN VOL/ EXP
501	355	341	17 8 47	-54 39 50	NO						75	10	25	325	4 1C	79 268
502	296	324	17 9 20	-53 24 3	244532	-0 11	0 11	BB	8 12	7 70	309	29	201	1459	3 0L	499 667
503	298	321	17 9 20	-53 24 20	244532	-0 11	-0 6	BB	8 12	7 70	149	33	25	1731	4 1C	422 195
504	705	486	17 9 22	-62 41 46	253841	-0 14	-1 11	BB	7 23	00	147	32	27	1673	3 0C	557 667
505	702	490	17 9 26	-62 41 9	253841	-0 10	-0 34	BB	7 23	00	199	37	32	2309	4 1C	560 976
505	701	493	17 9 28	-62 40 37	253841	-0 9	-0 2	BB	7 23	00	159	21	87	852	1 0L	852 000
507	701	492	17 9 28	-62 41 33	253841	-0 9	-0 58	BB	7 23	00	339	32	199	2052	3 0L	684 000
508	300	318	17 9 28	-53 24 47	244532	-0 3	-0 33	BB	8 12	7 70	118	25	23	1127	3 0C	375 667
509	296	327	17 9 30	-53 24 4	244532	-0 2	0 10	BB	8 12	7 70	152	13	85	422	1 0L	422 000
510	558	432	17 9 38	-59 23 21							69	6	25	1579	4 1C	48 049
511	235	300	17 9 55	-52 3 46	244542	-0 17	-1 17	B5	9 60	9 29	222	6	194	150 L	3 0L	50 000
512	235	298	17 10 7	-52 3 24	244542	-0 5	-0 55	B5	9 60	9 29	52	7	24	165 L	4 1C	40 244
513	469	372	17 10 16	-55 57 16	244544	-0 5	-0 15	B5	7 97	00	143	30	22	1652	3 0C	550 667
514	406	375	17 10 16	-55 56 9	244544	-0 4	0 52	B5	7 97	00	174	35	29	2204	4 1C	537 561
515	405	378	17 10 17	-55 56 59	244544	-0 4	0 1	B5	7 97	00	349	45	204	2442	3 0L	814 000
516	405	380	17 10 20	-55 56 32	244544	-0 1	0 29	B5	7 97	00	178	25	89	1062	1 0L	1062 000
517	333	348	17 10 20	-54 17 51	244546	-0 9	0 55	BB	8 56	8 25	249	11	202	361 L	3 0L	120 333
518	335	346	17 10 26	-54 18 39	244546	-0 2	0 7	BB	8 56	8 25	85	16	24	620	4 1C	151 220
519	337	342	17 10 27	-54 18 36	244546	-0 1	0 10	BB	8 56	8 25	67	10	21	332 L	3 0C	110 667
520	386	369	17 10 35	-55 30 1							62	12	26	3227	4 1C	78 537
521	482	413	17 10 48	-57 45 10	244551	-0 9	0 32	B9	7 92	7 55	231	7	199	186 L	3 0L	62 000
522	695	495	17 10 57	-62 35 58	253849	-0 8	-0 24	BB	8 44	7 99	110	23	27	974	4 1C	237 561
523	483	411	17 10 58	-57 43 39	244551	0 1	2 3	B9	7 92	7 55	66	9	25	275 L	4 1C	67 073
524	694	498	17 10 59	-62 36 20	253849	-0 6	-0 45	BB	8 44	7 99	272	22	197	879	3 0L	293 000
525	698	493	17 11 3	-62 37 4	253849	-0 2	-1 29	BB	8 44	7 99	84	16	25	597	3 0C	199 000
526	695	500	17 11 4	-62 37 2	253849	-0 1	-1 27	BB	8 44	7 99	124	10	85	292	1 0L	292 000
527	466	408	17 11 7	-57 45 14	244551	0 10	0 29	BB	7 92	7 55	54	6	22	154 L	3 0C	51 333
528	184	291	17 11 39	-51 1 56	244562	-0 10	-0 17	BB	7 31	00	270	40	192	1662	3 0L	554 000
529	186	288	17 11 42	-51 2 17	244562	-0 8	-0 38	BB	7 31	00	127	43	25	2231	4 1C	544 146
530	184	294	17 11 47	-51 1 53	244562	-0 3	-0 15	BB	7 31	00	117	13	81	372	1 0L	372 000
531	188	285	17 11 48	-51 2 40	244562	-0 2	-1 2	BB	7 31	00	97	33	21	1451	3 0C	483 667
532	618	475	17 11 57	-60 54 51	253854	-0 10	-0 48	A0	7 62	00	118	12	80	325 H	1 0L	325 000
533	621	468	17 11 59	-60 54 55	253854	-0 9	-0 51	A0	7 62	00	90	14	22	570	3 0C	190 000
534	617	474	17 12 3	-60 54 38	253854	-0 4	-0 35	A0	7 62	00	270	22	186	934 H	3 0L	311 333
535	618	472	17 12 4	-60 54 19	253854	-0 3	-0 15	A0	7 62	00	107	20	25	862	4 1C	210 244
536	535	440	17 12 50	-58 58 57	244579	-0 4	0 14	BB	9 00	8 61	82	14	21	497	3 0C	165 667
537	531	446	17 12 53	-58 58 39	244579	-0 0	0 32	BB	9 00	8 61	268	19	186	778	3 0L	259 333
538	532	448	17 12 55	-58 59 20	244579	0 2	-0 9	BB	9 00	8 61	119	8	80	240	1 0L	240 000
539	532	444	17 12 57	-58 58 21	244579	0 3	0 50	BB	9 00	8 61	97	19	24	803	4 1C	195 654
540	239	333	17 13 34	-62 24 2	244593	-0 15	-1 23	BB	8 79	8 47	215	4	191	91 L	3 0L	30 333
541	102	272	17 13 45	-49 23 32	227793	-0 24	0 25	BB	7 77	00	273	65	195	2635	3 0L	878 333
542	106	266	17 13 47	-49 23 49	227793	-0 22	0 8	BB	7 77	00	93	51	24	2044	3 0C	681 333
543	240	331	17 13 49	-52 22 35	244593	-0 0	0 3	BB	8 79	8 47	59	11	23	303	4 1C	73 902
544	104	269	17 13 50	-49 23 57	227793	-0 20	0 1	BB	7 77	00	123	67	29	3258	4 1C	794 634
545	102	276	17 13 59	-49 23 54	227793	-0 11	0 3	BB	7 77	00	112	17	82	414 L	1 0L	414 000
546	136	292	17 14 17	-50 10 33	244608	-0 15	-1 5	A0	7 10	00	221	20	187	528 L	3 0L	176 000
547	140	286	17 14 21	-50 9 42	244608	-0 10	-0 14	A0	7 10	00	59	19	21	552	3 0C	184 000
548	138	289	17 14 23	-50 9 50	244608	-0 8	-0 22	A0	7 10	00	75	29	26	967	4 1C	235 854
549	391	403	17 15 26	-55 50 24	244627	0 1	0 16	BB	8 59	8 25	66	8	24	247 L	3 0C	82 333
550	387	409	17 15 28	-55 50 4	244627	0 2	0 35	BB	8 59	8 25	249	8	210	231 L	3 0L	77 000
551	132	304	17 15 33	-50 9 27	244608	T 2	0 0	A0	7 10	00	116	11	79	317	1 0L	317 000
552	132	304	17 15 33	-50 9 27	244632	-0 23	-0 44	BB	9 60	9 50	116	11	79	317	1 0L	317 000
553	297	370	17 15 36	-53 46 58	244629	0 1	-0 59	BB	8 35	8 00	89	17	25	650	4 1C	158 537
554	388	407	17 15 36	-53 49 50	244627	0 10	0 50	BB	8 59	8 25	78	14	25	502	4 1C	122 439
555	295	373	17 15 37	-53 46 30	244629	0 2	-0 30	BB	8 35	8 00	256	17	194	599	3 0L	199 667
556	299	367	17 15 37	-53 46 49	244629	0 1	-0 50	BB	8 35	8 00	71	12	21	395	3 0C	131 667
557	295	376	17 15 47	-53 46 24	244629	0 11	-0 25	BB	8 35	8 00	109	4	82	96	1 0L	96 000
558	545	466	17 16 8	-59 24 0	244638	-0 4	-0 36	A0	7 05	00	54	7	23	168 L	3 0C	58 000
559	543	470	17 16 11	-59 24 37	244638	-0 1	-1 13	A0	7 05	00	69	14	27	380 L	4 1C	92 683
560	695	532	17 16 17	-62 53 41	253880	-0 19	-1 35	B0	9 80	9 37	263	16	201	598	3 0L	199 333
561	695	534	17 16 27	-62 53 9	253880	-0 10	-1 3	B0	9 80	9 37	113	4	88	93 L	1 0L	93 000
562	696	530	17 16 29	-62 52 45	253880	-0 7	-0 39	B0	9 80	9 37	93	14	31	524	4 1C	127 805
563	698	527	17 16 40	-62 52 34	253880	0 3	-0 28	B0	9 80	9 37	76	11	27	349 L	3 0C	116 333
564	566	465	17 16 42	-59 59 3	244645	-0 4	-1 3	A0	7 63	7 20	239	13	180	480	3 0L	160 000
565	559	479	17 16 42	-59 58 12	244645	-0 4	-0 13	A0	7 63	7 20	68	9	23	295	3 0C	98 333
566	567	483	17 16 44	-59 58 50	244645	-0 2	-0 50	A0	7 63	7 20	86	13	28	481	4 1C	117 317
567	718	542	17 16 50	-63 24 42	253883	-0 12	-1 36	A0	8 52	8 14	90	14	29	504	4 1C	122 927
568	717	544	17 16 53	-63 24 55	253883	-0 8	-1 49	A0	8 52	8 14	235	8	196	236	3 0L	78 667
569	720	538	17 16 55	-63 22 53	253883	-0 7	0 12	A0	8 52	8 14	66	8	25	251	3 0C	83 667
570	202	349	17 18 1	-51 49 32	244666	-0 1	-1 25	BB	8 70	7 60	55	8	24	213	4 1C	51 951
571	400	432	17 18 15	-55 16 3	244669	-0 4	-0 37	BB	8 27	7 90	127	33	35	1432	4 1C	349 268
572	398	435	17 18 19	-55 15 30	244669	0 1	-0 4	BB	8 27	7 90	303	25	218	1042	3 0L	347 333
573	639	520	17 18 22	-61 40 51	253894	-0 10	0 3	BB	8 19	7 76	78	13	25	449	4 1C	109 512
574	398	437	17 18 23	-55 14 56	244669	0 4	0 30	BB	8 27	7 90	142	10	96	314	1 0L	314 000
575	105	310	17 18 23	-49 43 39	227872	-0 10	-0 49	BB	8 00	7 40	51	6	27	130 L	4 1C	31 707
576	402	429	17 18 26	-55 16 18	244669	0 8	-0 52	BB	8 27	7 90	107	25	28	994	3 0C	328 000
577	642	517	17 18 27	-61 41 50	253894	-0 4	-0 56	BB	8 19	7 76	60	9	20	260 L	3 0C	86 667
578	921	636	17 18 27	-67 55 42	NO						56</					

PAGE, CARRUTHERS AND HILL

ORIGINAL PAGE IS
OF POOR QUALITY

NORMA RA 17 24 DEC -59 04

OBJECT NO	X	Y	R A	DEC	SAO NO	Δ R A	Δ DEC	SPEC TYPE	V MAG	P MAG	PEAK DEN	NO OF POINTS	BG	DENSITY VOLUME	EXP & FILTER	DEN VOL/ EXP
601	502	477	17 19 22	-59 38 37	244693	-0 1	-1 29	BB	6 78	00	233	49	25	3604	4 1C	879 024
602	501	481	17 19 23	-59 38 11	244693	0 0	-1 4	BB	6 78	00	230	25	79	1606	1 0L	1606 000
603	420	449	17 19 26	-56 46 47	244696	-0 3	0 22	BB	8 73	8 25	82	7	30?	291 L	4 1C	70 976
604	422	445	17 19 38	-56:47 1	244696	0 9	0 8	BB	8 73	8 25	83	4	33	105 L	3 0C	35 333
605	592	507	17 19 44	-60 37 57	253906	-0 3	-0 18	BB	5 96	00	216	43	22	2988	3 0C	996 000
606	589	513	17 19 45	-60 38 46	253906	-0 3	-1 7	BB	5 96	00	307	43	160	3050 L	3 0C	1016 667
607	590	511	17 19 46	-60 38 37	253906	-0 1	-0 58	BB	5 96	00	254	25	26	3858-L	4 1C	943 415
608	589	515	17 19 52	-60:38 11	253906	0 4	-0 31	BB	5 96	00	206	52	77	1712	1 0L	1712 000
609	460	467	17 20 9	-57 42 55	NO						63	5	23	140	4 1C	34 146
610	524	491	17 20 14	-59:10 51	244705	-0 8	-0 46	A0	7 27	7 00	62	9	24	276 L	4 1C	67 317
611	523	494	17 20 19	-59 11 25	244705	-0 2	+1 20	A0	7 27	7 00	209	4	162	103 L	3 0L	34 333
612	526	488	17 20 29	-59 11 3	244705	0 7	-0 58	A0	7 27	7 00	51	4	21	109 L	3 0C	36 333
613	173	363	17 20 39	-51 22 24	244716	-0 2	-0 13	BB	8 50	8 10	228	23	181	720	3 0C	240 000
614	177	357	17 20 40	-51 22 45	244716	-0 1	-0 8	BB	8 50	8 10	66	18	21	569	3 0C	189 667
615	175	360	17 20 41	-51:23 1	244716	0 0	-0 23	BB	8 50	8 10	85	27	26	936 H	4 1C	228 227
616	399	449	17 21 10	-56 21 10	244726	0 7	-1 11	BB	3 51	00	402	473	29	67337 L	3 0C	22445 667
617	396	452	17 21 10	-56 20 14	244726	0 7	-0 16	BB	3 51	00	491	563	36	82468 L	4 1C	20114 146
618	395	457	17 21 19	-56:21 21	244726	0 9	-1 22	BB	3 51	00	470	383	90	46282 L	1 0L	46282 000
619	396	456	17 21 26	-56 22 24	244726	0 14	-2 25	BB	3 51	00	507	629	206	74674 L	3 0L	24931 333
620	91	340	17 21 49	-49 41 10	227944	-0 19	0 19	BB	6 95	00	345	104	186	6337 H	3 0L	2112 000
621	373	452	17 21 54	-55 53 2	NO						228	4	206	85	3 0L	28 333
622	91	343	17 21 55	-49 40 56	227944	-0 12	0 33	BB	6 95	00	151	57	78	2288 H	1 0L	2288 000
623	95	334	17 21 58	-49:41 55	227944	-0 10	-0 27	BB	6 95	00	170	86	26	5230 H	3 0C	1743 333
624	92	337	17 22 3	-49 41 4	227944	-0 5	0 25	BB	6 95	00	218	104	31	7444 H	4 1C	1015 610
625	131	353	17 22 3	-50 30 57	244733	-0 2	0 1	A0	8 00	7 90	54	5	30	111 L	4 1C	27 073
626	100	341	17 22 28	-49 50 14	227958	-0 16	0 46	BB	8 00	7 90	67	20	28	581	3 0C	193 667
627	98	344	17 22 30	-49 50 32	227958	-0 14	0 28	BB	8 00	7 90	88	40	30?	1437 H	4 1C	350 488
628	97	348	17 22 31	-49:51 27	227958	-0 13	-0 28	BB	8 00	7 90	223	22	188	594	3 0L	198 000
629	192	380	17 22 53	-51 56 23	244749	-0 5	-2 0	BB	6 46	00	355	53	179	3703	3 0L	1234 333
630	192	393	17 23 1	-51 56 10	244749	0 3	-1 47	BB	6 46	00	164	31	78	1388	1 0L	1388 000
631	684	566	17 23 4	-62 54 57	253931	-0 26	-0 44	BB	7 75	7 30	130	26	26	1370	4 1C	334 146
632	195	384	17 23 7	-51:54 51	244749	0 9	-0 28	BB	6 46	00	204	50	22	3516	3 0C	1172 000
633	582	534	17 23 8	-60 38 52	NO						109	6	79	1497	1 0L	149 000
634	193	387	17 23 8	-51 55 9	244749	0 10	-0 46	BB	6 46	00	259	56	27	4708	4 1C	1148 293
635	687	563	17 23 11	-62 55 51	253931	-0 20	-1 37	BB	7 75	7 30	131	26	22	1446 H	3 0C	482 000
636	684	570	17 23 12	-62 55 34	253928/	-0 12	4 7	BB	6 38	00	149	13	88	513	1 0L	513 000
637	684	570	17 23 12	-62:55 34	253931/	-0 18	-1 20	BB	7 75	7 30	149	13	88	513	1 0L	513 000
638	130	368	17 23 15	-50 37 16	244755	-0 3	-1 59	BB	6 06	00	205	6	181	135 L	3 0L	45 000
639	683	569	17 23 17	-62:55 27	253931	-0 13	-1 13	BB	7 75	7 30	335	29	192	1990 H	3 0L	663 333
640	691	565	17 23 17	-83 1 26	253928	-0 8	-1 45	BB	6 38	00	213	44	23	3632	3 0C	1177 333
641	688	572	17 23 18	-83 1 9	253928	-0 6	-1 28	BB	6 38	00	219	34	85	2179	1 0L	2179 000
642	688	572	17 23 18	-83 1 9	253931?	-0 12	-6 55	BB	7 75	7 30	219	34	85	2179	1 0L	2179 000
643	688	569	17 23 20	-63 0 59	253928	-0 4	-1 18	BB	6 38	00	262	58	26	5431	4 1C	1324 634
644	131	364	17 23 21	-50 36 47	244755	0 3	-1 29	BB	6 06	00	67	17	29	474 L	4 1C	115 610
645	133	361	17 23 22	-50 35 18	244755	0 4	-0 9	BB	6 06	00	50	8	24	183 L	3 0C	61 000
646	687	571	17 23 23	-63 1 2	253928	-0 1	-1 21	BB	6 38	00	392	43	193	3935	3 0L	1311 667
647	703	581	17 24 0	-63 24 12	253935	-0 6	-1 12	BB	8 28	7 77	249	17	192	579	3 0L	133 000
648	707	576	17 24 12	-63 25 1	253935	-0 2	-2 2	BB	8 28	7 77	76	13	23	443	3 0C	147 667
649	704	580	17 24 15	-63 24 34	253935	0 1	-1 35	BB	8 28	7 77	98	16	26	691	4 1C	168 537
650	859	649	17 25 20	-66 50 57	NO						149	42	75	1754	1 0L	1754 000
651	859	647	17 25 23	-66:51 15	NO						234	62	49	3363	4 1C	820 244
652	862	643	17 25 24	-66 51 40	NO						181	56	21	3635	3 0C	1211 667
653	858	649	17 25 34	-66 51 16	NO						315	70	174	4457	3 0L	1485 667
654	579	546	17 26 25	-60 39 36	253945	-0 10	-0 55	BB	3 79	00	421	193	21	19077 L	3 0C	6359 000
655	579	550	17 26 27	-60 40 21	253945	-0 8	-1 41	BB	3 79	00	435	234	25	24237	4 1C	5911 463
656	575	552	17 26 29	-60 39 9	253945	-0 6	-0 28	BB	3 79	00	451	208	181	18139	4 1C	6046 333
657	185	412	17 26 31	-51 56 59	244796	0 10	-0 39	A0	8 20	7 90	48	4	24	92 L	4 1C	22 439
658	287	455	17 26 32	-54 12 29	244795	0 12	-0 23	BB	7 85	7 50	268	19	187	832 L	3 0L	277 333
659	291	449	17 26 32	-54 12 54	244795	0 11	-0 49	BB	7 85	7 50	89	19	21	702 L	3 0C	234 000
660	576	554	17 26 33	-60 39 40	253945	-0 2	-0 59	BB	3 79	00	400	121	81	9148	1 0L	9148 000
661	288	452	17 26 33	-54 12 4	244795	0 13	0 1	BB	7 85	7 50	110	25	24	1109	4 1C	270 488
662	287	457	17 26 34	-54 11 47	244795	0 14	0 18	BB	7 85	7 50	114	9	79	251 L	1 0L	251 000
663	406	501	17 27 3	-56 53 38	244808	-0 5	-0 38	BB	6 29	00	374	46	190	2721	3 0L	907 000
664	407	504	17 27 12	-56 54 32	244808	0 4	-1 32	BB	6 29	00	223	26	84	1611	1 0L	1611 000
665	465	523	17 27 14	-58 11 58	244799?	0 42	-6 1	A2	10 00	9 87	117	6	78	184 H	1 0L	184 000
666	251	447	17 27 15	-53 26 60	244814?	0 11	-0 32	BB	6 24	7 90	247	21	180	784 L	3 0L	261 333
667	251	447	17 27 15	-53 26 60	244814?	-0 21	-3 2	A0	10 00	9 78	247	21	180	784	3 0L	261 333
668	408	499	17 27 15	-56 55 16	244808	0 7	-2 15	BB	6 29	00	265	57	28	4323	4 1C	1054 390
669	309	468	17 27 16	-54 43 53	244805?	0 17	0 23	A0	9 20	8 95	214	4	191	877L	3 0L	29 000
670	255	441	17 27 16	-53 27 26	244806	0 12	-0 57	BB	8 24	7 90	73	14	21	489 L	3 0C	163 000
671	255	441	17 27 16	-53 27 26	244814?	-0 20	-3 28	A0	10 00	9 78	73	14	21	489	3 0C	163 000
672	252	444	17 27 18	-53 26 37	244806	0 14	-0 9	BB	8 24	7 90	94	21	25	812 L	4 1C	198 049
673	252	444	17 27 18	-53 26 37	244814?	-0 18	-2 39	A0	10 00	9 78	94	21	25	812	4 1C	198 049
674	410	496	17 27 21	-56 53 42	244808	0 13	-0 42	BB	6 29	00	221	43	23	3235	3 0C	1078 667
675	251	450	17 27 22	-53 27 53	244808	0 18	-1 25	BB	8 24	7 90	105	4	79	97 L	1 0L	97 000
676	251	450	17 27 22	-53 27 53	244814?	-0 14	-3 55	A0	10 00	9 78	105	4	79	97	1 0L	97 000
677	82	391	17 27 48	-49 51 36	228069	-0 10	-1 16	BB	2 97	00	493	486	82	68548 L	1 0L	68548 000
678	81	388	17 27 51	-49 5												

NORMA RA 17 24 DEC -59 04

OBJECT NO	X	Y	R A	DEC	SAO NO	Δ R A	Δ DEC	SPEC TYPE	V MAG	P MAG	PEAK DEN	NO OF POINTS	BC	DENSITY VOLUME	EXP & FILTER	DEN VOL/ EXP
701	809	660	17 31 28	-65 59 13	253970	0 13	-1 18	A0	7 53	00	103	27	24	1179 H	4 1C	287 561
702	236	477	17 31 30	-53 20 23	244870	0 13	-1 10	A0	6 27	00	123	11	73	343	1 0L	343 000
703	235	475	17 31 31	-53 19 57	244870	0 14	-0 44	A0	6 27	00	279	24	181	1200	3 0L	400 000
704	239	469	17 31 32	-53 20 25	244870	0 15	-1 12	A0	6 27	00	115	25	22	1156	3 0C	399 333
705	236	472	17 31 34	-53 19 41	244870	0 17	-0 28	A0	6 27	00	148	32	27	1805	4 1C	440 244
706	487	558	17 31 41	-58 53 48	244874	-0 5	-0 48	B9	8 28	7 86	222	9	182	262 L	3 0L	87 333
707	488	556	17 31 45	-58 53 56	244874	-0 1	-0 56	B9	8 28	7 86	75	10	28	323	4 1C	78 780
708	603	588	17 31 50	-61 24 46	253976	-0 11	-1 49	B9	9 05	8 73	58	7	20	209	3 0C	69 667
709	603	588	17 31 50	-61 24 46	253980?	-0 35	-2 30	A2	10 20	9 92	57	5	22	147 L	3 0C	49 000
710	490	553	17 31 51	-58 53 30	244874	0 4	-0 30	B9	8 28	7 86	233	10	193	348	3 0L	116 000
711	599	594	17 31 55	-61 24 15	253976	-0 7	-1 18	B9	9 05	8 73	69	10	23	320	4 1C	78 049
712	600	592	17 31 55	-61 24 24	253976	-0 6	-1 27	B9	9 05	8 73	69	10	23	320	4 1C	78 049
713	600	592	17 31 55	-61 24 24	253980?	-0 31	-2 8	A2	10 20	9 92	105	9	25	388	4 1C	94 634
714	946	715	17 32 2	-68 55 50	NO						70	6	23	187	3 0C	62 333
715	949	710	17 32 5	-68 56 9	NO						10	186	364	3 0L	121 333	
716	387	555	17 35 33	-56 51 13	244922	-0 2	-0 18	B9	8 73	8 39	239	14	26	440	4 1C	107 317
717	388	553	17 35 40	-56 51 26	244922	0 5	-0 32	B9	8 73	8 39	75	10	26	440	4 1C	107 317
718	391	550	17 35 41	-56 52 8	244922	0 5	-1 13	B9	8 73	8 39	54	6	22	170 L	3 0C	56 667
719	537	600	17 36 12	-60 10 58	253997	-0 4	-1 44	B9	9 08	8 53	63	4	23	102 L	4 1C	24 878
720	764	685	17 38 45	-65 16 55	NO						80	6	25	181?	4 1C	44 166
721	387	581	17 39 12	-57 1 32	244967	-0 5	-1 34	B9	6 88	6 00	341	36	182	2216	3 0L	739 567
722	391	575	17 39 13	-57 0 54	244967	-0 4	-0 56	B9	6 88	6 00	149	34	23	1874	3 0C	624 667
723	388	579	17 39 18	-57 1 51	244967	0 2	-1 53	B9	6 88	6 00	192	39	26	2566	4 1C	625 854
724	744	684	17 39 19	-64 51 34	NO						102	4	77	95	1 0L	95 000
725	743	681	17 39 20	-64 50 42	NO						101	22	25	942	4 1C	229 756
726	388	584	17 39 22	-57 2 15	244967	0 5	-2 17	B9	6 88	6 00	155	17	79	787	1 0L	787 000
727	743	683	17 39 23	-64 51 35	NO						240	22	176	895	3 0C	295 000
728	746	678	17 39 30	-64 51 28	NO						81	15	23	565	3 0C	188 333
729	180	525	17 40 17	-52 36 28	244976	0 17	-1 1	B9	7 90	7 50	233	24	170	880	3 0L	293 333
730	182	522	17 40 18	-52 37 37	244976	0 18	-2 10	B9	7 90	7 50	105	26	30	1102	4 1C	268 780
731	184	519	17 40 20	-52 35 48	244976	0 20	-0 21	B9	7 90	7 50	82	22	22	791	3 0C	263 667
732	181	528	17 40 23	-52 37 8	244976	0 23	-1 41	B9	7 90	7 50	101	6	73	148 L	1 0L	148 000
733	250	554	17 41 9	-54 7 6	NO						220	14	176	419	3 0L	139 667
734	254	548	17 41 9	-54 7 39	NO						60	8	22	236	3 0C	78 667
735	251	551	17 41 11	-54 7 5	NO						75	14	26	460	4 1C	112 195
736	607	660	17 41 53	-61 57 37	NO						125	9	77	295	1 0L	295 000
737	606	659	17 41 58	-61 57 39	NO						289	14	183	706	3 0L	235 333
738	343	591	17 42 22	-56 11 27	NO						216	11	183	279?	3 0L	93 000
739	608	658	17 42 50	-61 57 33	NO						135	14	22	839	3 0C	279 567
740	605	662	17 42 55	-61 57 19	NO						182	17	25	994	4 1C	242 439
741	801	723	17 43 9	-66 13 18	NO						235	31	175	1147	3 0L	382 333
742	345	590	17 43 10	-56 11 20	245020?	0 10	-6 27	A0	10 00	9 93	60	21	23	549	3 0C	183 000
743	804	718	17 43 15	-66 13 4	NO						89	25	22	998	3 0C	333 000
744	801	722	17 43 15	-66 12 50	NO						119	35	27	1603	4 1C	390 976
745	771	713	17 43 20	-65 34 12	NO						99	24	26	998	4 1C	243 659
746	801	725	17 43 22	-66 12 92	NO						101	7	75	167	1 0L	167 000
747	771	715	17 43 25	-65 34 59	NO						225	19	176	629	3 0L	209 667
748	774	709	17 43 31	-65 34 45	NO						81	21	22	749	3 0C	249 667
749	271	582	17 44 5	-54 41 38	245031	0 13	-0 28	B9	8 84	8 46	221	11	174	348 L	3 0L	116 000
750	272	579	17 44 6	-54 41 43	245031	0 13	-0 32	B9	8 84	8 46	81	17	27	559	4 1C	136 341
751	274	576	17 44 7	-54 41 2	245031	0 15	0 9	B9	8 84	8 46	61	8	22	238 L	3 0C	79 333
752	487	640	17 44 16	-59 24 20	245028?	0 39	1 30	A0	9 99	9 52	83	16	23	578	4 1C	140 976
753	487	640	17 44 16	-59 24 20	245047	-0 15	-2 9	B9	8 40	8 10	93	16	23	578	4 1C	140 976
754	489	637	17 44 22	-59 23 40	245047	-0 9	-1 29	B9	8 40	8 10	61	10	20	306	3 0C	132 330
755	485	643	17 44 23	-59 24 14	245047	-0 9	-2 3	B9	8 40	8 10	232	14	181	475	3 0L	58 333
756	595	668	17 44 60	-61 44 45	254048	-0 15	-2 48	B9	6 62	6 00	168	36	22	216	3 0C	720 333
757	592	672	17 45 4	-61 44 32	254048	-0 11	-2 35	B9	6 62	6 00	196	41	25	2807	4 1C	584 634
758	591	674	17 45 5	-61 44 5	254048	-0 10	-2 8	B9	6 62	6 00	353	37	193	2590	3 0L	863 333
759	592	676	17 45 9	-61 44 21	254048	-0 6	-2 24	B9	6 62	6 00	172	25	79	1141	1 0L	141 300
760	215	588	17 46 41	-53 35 36	245065	0 17	0 18	B3	5 90	5 90	402	90	74	8789	1 0L	8789 020
761	214	585	17 46 42	-53 35 21	245065	0 18	0 32	B3	5 90	5 90	459	180	169	16133	3 0L	5377 667
762	218	579	17 46 43	-53 35 57	245065	0 19	-0 4	B3	5 90	5 90	419	127	28	13681	3 0C	4560 333
763	215	582	17 46 44	-53 35 29	245065	0 20	0 24	B3	5 90	5 90	432	155	35	17202	4 1C	4 95 610
764	427	649	17 47 14	-58 12 2	NO						111	9	79	248?	1 0L	248 000
765	189	583	17 47 25	-53 6 5	245072	0 17	0 57	A0	6 40	6 00	243	21	167	934	3 0L	311 333
766	183	578	17 47 27	-52 57 10	245071	0 20	0 1	B9	9 42	9 02	55	7	29	157	4 1C	38 233
767	183	578	17 47 27	-52 57 10	245074?	0 12	-2 1	A0	10 20	10 07	55	7	29	157	4 1C	38 233
768	190	587	17 47 32	-53 6 39	245072	0 24	0 23	A0	6 40	6 00	108	10	70	296	1 0L	296 000
769	193	578	17 47 34	-53 7 1	245072	0 26	0 1	A0	6 40	6 00	113	28	25	1279	3 0C	26 333
770	191	581	17 47 34	-53 7 47	245072	0 26	-0 45	A0	6 40	6 00	145	33	33	1824	4 1C	444 878
771	721	723	17 47 48	-64 38 18	NO						55	5	26	123?	4 1C	30 000
772	418	653	17 48 17	-58 3 36	245085	-0 17	-1 38	B9	9 94	9 61	207	4	181	94	3 0L	31 333
773	699	720	17 48 48	-63 58 35	254064	-0 2	-1 39	A0	7 81	7 53	57	7	25	179 L	4 1C	43 659
774	159	579	17 48 56	-52 29 7	245087	0 16	-0 58	B9	8 17	7 80	46	4	22	91 L	3 0C	30 333
775	155	586	17 49 3	-52 28 50	245087	0 22	-0 41	B9	8 17	7 80	178	10	151	235 L	3 0L	78 333
776	156	583	17 49 7	-52 29 2	245087	0 26	-0 53	B9	8 17	7 80	61	11	27	298 L	4 1C	72 683
777	455	671	17 49 37	-58 54 25	245103	-0 26	-0 18	B9	7 61	7 30	265	20	180	857	3 0L	285 667
778	456	669	17 49 41	-58 54 58	245103	-0 21	-0 51	B9	7 61	7 30	115	24	26	1056	4 1C	260 000
779	456	674	17 49 49	-58 54 56	245103	-0 14	-0 50	B9	7 61	7 30	114	10	76	287	1 0L	287 000
780	459	666	17 49 54	-58 55 44	245103	-0 9	-1 37	B9	7 61	7 30	92	20	22	769	3 0C	256 333
781	314	642	17 50 33	-55 53 20	245108	0 2	0 1	B9								

PAGE, CARRUTHERS AND HILL

NORMA RA 17 24 DEC -59 04

OBJECT NO	X	Y	R A	DEC	SAD NO	Δ R A	Δ DEC	SPEC TYPE	V MAG	P MAG	PEAK DEN	NO OF POINTS	BG	DENSITY VOLUME	E/P & F/L *EP	DEM. VOL / E/P	
801	728	789	17 58	55	254121	0 29	-0 58	B8	8 28	00	230	25	170	650	3 OL	3 5 667	
802	281	705	18 0	18	245218	-0 6	3 4	B8	8 43	8 00	215	11	168	369 L	3 OL	123 229	
803	284	699	18 0	20	245218	-0 4	3 32	B8	8 43	8 00	60	11	23	318 L	3 OL	26 205	
804	262	703	18 0	26	245218	0 2	2 17	B8	8 43	8 00	77	17	28	553	4 OL	30 879	
805	422	747	18 1	40	245237	-0 27	0 2	B5	7 21	00	216	31	76	1871	1 OL	1871 222	
806	420	745	18 1	40	245237	-0 27	1 20	B5	7 21	00	383	45	180	3330	3 OL	1 2 222	
807	421	742	18 1	45	245237	-0 22	0 30	B5	7 21	00	274	57	29	4564	4 OL	3 17	
808	424	739	18 1	47	245237	-0 19	0 15	B5	7 21	00	219	48	24	3414	3 OL	38 222	
809	296	755	18 6	37	245288	-0 15	2 44	B9	8 90	8 41	222	19	170	641	3 OL	2 3 667	
810	296	755	18 6	37	245290?	-0 25	3 38	A0	10 10	9 91	222	19	170	641	3 OL	213 657	
811	297	752	18 6	38	245288	-0 14	3 16	B9	8 90	8 91	81	16	27	569	4 OL	38 782	
812	297	752	18 6	38	245290?	-0 24	4 10	A0	10 10	9 91	81	16	27	569	4 OL	38 782	
813	300	749	18 6	39	245288	-0 14	3 8	B9	8 90	8 91	60	16	26	419	3 OL	39 667	
814	300	749	18 6	39	245290?	-0 23	4 2	A0	10 10	9 91	60	16	26	419	3 OL	39 667	
815	541	797	18 7	31	254170	-0 19	-0 14	B5	8 34	7 87	262	26	179	1134	3 OL	378 222	
816	537	803	18 7	32	254170	-0 17	-0 32	B5	8 34	7 87	126	28	27	1347	4 OL	328 537	
817	538	801	18 7	33	254170	-0 16	-1 31	B5	8 34	7 87	112	9	75	261 L	3 OL	26 222	
818	539	805	18 7	34	254170	-0 15	-1 45	B5	8 34	7 87	94	54	27	2062	4 OL	592 927	
819	830	867	18 10	32	NO						71	35	23	1161	3 OL	387 222	
820	803	863	18 10	33	NO						212	36	164	1204	3 OL	421 333	
821	800	869	18 10	40	NO						27	27	27	1241	H	4 OL	362 683
822	454	815	18 11	50	245361	-0 29	0 2	A0	7 70	7 30	111	27	27	929	4 OL	369 667	
823	453	818	18 11	56	245361	-0 23	0 54	A0	7 70	7 30	248	23	177	829	3 OL	277 667	
824	456	812	18 11	55	245361	-0 23	1 12	A0	7 70	7 30	90	22	24	833	3 OL	277 667	
825	454	820	18 11	59	245361	-0 20	0 58	A0	7 70	7 30	103	6	74	153	1 OL	153 222	
826	386	811	18 12	24	245368	-0 28	0 58	A0	8 81	8 32	233	21	171	811	H	3 OL	270 333
827	387	809	18 12	30	245368	-0 22	1 45	A0	8 81	8 32	95	21	29	793	H	4 OL	193 115
828	388	814	18 12	32	245368	-0 20	0 13	A0	8 81	8 32	97	4	73	92	1 OL	92 222	
829	390	806	18 12	32	245368	-0 19	1 42	A0	8 81	8 32	73	16	25	507	L	3 OL	169 000
830	282	795	18 12	37	245369	-0 18	2 18	B5	5 54	00	463	145	173	15012	3 OL	5004 000	
831	283	792	18 12	38	245369	-0 17	2 40	B5	5 54	00	440	152	33	18057	4 OL	4404 146	
832	286	789	18 12	39	245369	-0 16	2 39	B5	5 54	00	415	124	29	14066	3 OL	4688 667	
833	283	798	18 12	46	245369	-0 9	2 8	B5	5 54	00	400	86	75	8778	1 OL	8778 000	
834	653	861	18 14	28	254204	0 17	-1 48	A0	8 59	8 33	52	6	26	141	4 OL	34 390	
835	461	842	18 15	40	245405	-0 33	0 50	B8	7 21	00	367	85	31	8890	H	4 OL	2168 293
836	461	845	18 15	45	245405	-0 28	0 34	B8	7 21	00	439	91	179	8880	H	3 OL	2960 000
837	464	839	18 15	45	245405	-0 29	0 49	B8	7 21	00	325	75	27	6743	H	3 OL	2247 667
838	462	847	18 15	48	245405	-0 25	0 41	B8	7 21	00	290	57	76	4336	H	4 OL	4336 000
839	321	824	18 16	18	245411	-0 13	1 52	B9	7 73	00	136	44	28	2232	H	4 OL	544 390
840	322	830	18 16	19	245411	-0 12	1 42	B9	7 73	00	112	17	70	522	H	1 OL	522 000
841	320	827	18 16	20	245411	-0 12	2 50	B9	7 73	00	268	43	167	2097	H	3 OL	699 000
842	324	821	18 16	21	245411	-0 10	3 8	B9	7 73	00	108	32	24	1457	3 OL	485 667	
843	446	865	18 19	44	245441	-0 12	-0 19	B9	7 56	00	144	40	28	2140	H	4 OL	521 951
844	445	868	18 19	49	245441	-0 7	0 46	B9	7 56	00	272	42	171	2030	H	3 OL	676 667
845	449	862	18 19	49	245441	-0 7	0 59	B9	7 56	00	111	32	25	1415	3 OL	471 667	
846	446	870	18 19	52	245441	-0 4	0 56	B9	7 56	00	109	15	70	462	1 OL	462 000	
847	247	839	18 20	9							56	5	28	1277	4 OL	30 976	
848	569	921	18 27	18	254273	0 35	-1 36	B8	4 81	00	441	159	28	20358	3 OL	6786 000	
849	569	921	18 27	18	254275?	0 26	-0 21	A2	7 76	00	441	159	28	20358	3 OL	6786 000	
850	566	927	18 27	19	254273	0 37	-1 41	B8	4 81	00	472	194	178	22974	3 OL	7658 000	
851	566	927	18 27	19	254275?	0 28	-0 27	A2	7 76	00	472	194	178	22974	3 OL	7658 000	
852	566	925	18 27	21	254273	0 38	-1 53	B8	4 81	00	451	196	34	25483	4 OL	6215 366	
853	566	925	18 27	21	254275?	0 29	-0 38	A2	7 76	00	451	196	34	25483	4 OL	6215 366	
854	567	929	18 27	24	254273	0 42	-1 24	B5	4 81	00	415	124	72	14287	1 OL	14287 000	
855	567	929	18 27	24	254275?	0 33	-0 10	A2	7 76	00	415	124	72	14287	1 OL	14287 000	

NRL REPORT 8173

AQUARIUS RA 22 58 TO 23 16 DEC -05 06 TO -03 12

OBJECT NO	X	Y	R A	DEC	SAO NO	Δ R A	Δ DEC	SPEC TYPE	V MAG	P MAG	PEAK DEN	NO OF PTS	BG	DENSITY VOLUHE	EXP & FILTER	DEN VOL/ EXP
1	984	553	22 19 23	-6 24 11	1460417	-0 24	5 32	A2	7 46	00	385	88	348	1702H	3 0L	567 333
2	976	580	22 18 59	-6 32 32	1460417	0 12	-2 49	A2	7 46	00	389	48	355	11677H	3 0L	389 000
3	837	488	22 21 17	-5 6 16	146067	-0 13	-0 50	A0	5 85	00	149	66	16	3899	3 0C	1299 667
4	954	489	22 21 20	-5 6 16	146067	-0 0	-0 50	A0	5 85	00	308	129	19	12576	10 0C	1257 600
5	944	489	22 21 34	-5 5 5	146067	0 3	0 21	A0	5 85	00	175	36	125	1192	1 0L	1192 000
6	945	488	22 21 37	-5 4 44	146067	0 6	0 42	A0	5 85	00	374	79	274	3885	3 0L	1295 000
7	963	491	22 21 38	-5 6 8	146067	0 8	-0 42	A0	5 85	00	387	264	27	36497	30 0C	1216 567
8	819	239	22 27 16	-0 1 32	146126	-0 20	5 34	A0	7 80	00	53	15	17	428	3 0C	142 667
9	867	241	22 27 27	-0 1 43	146126	-0 9	5 23	A0	7 80	00	198	19	155	496	3 0L	165 333
10	886	242	22 27 27	-0 1 14	146126	-0 10	5 52	A0	7 80	00	178	156	26	11252	30 0C	375 667
11	876	240	22 27 31	-0 1 18	146126	-0 5	5 40	A0	7 80	00	123	65	19	3312	10 0C	331 200
12	878	791	22 27 44	-11 0 49	165134	-0 17	-4 45	A0	4 89	00	418	173	20	22483	10 0C	2248 300
13	869	791	22 27 48	-10 59 31	165134	-0 12	-3 27	A0	4 89	00	189	65	112	2726	1 0L	2726 000
14	871	791	22 27 48	-11 0 15	165134	-0 12	-4 11	A0	4 89	00	399	113	250	7405	3 0L	2468 333
15	821	790	22 27 48	-11 2 31	165134	-0 12	-6 27	A0	4 89	00	228	96	16	7748	3 0C	2582 667
16	887	793	22 27 49	-10 59 9	165134	-0 11	-3 5	A0	4 89	00	427	297	28	49403	30 0C	1646 767
17	879	366	22 27 58	-2 31 43							58	9	23	237	30 0C	7 900
18	846	658	22 29 29	-8 32 15	1461417	-0 20	0 6	A2	9 10	00	80	4	46	99H	5L	198 000
19	799	252	22 32 37	-0 19 32	146181	-0 10	3 1	B8	4 13	00	128	144	38	2097	3 0L	4194 000
20	801	257	22 32 39	-0 19 32	146181	-0 9	3 1	B8	4 13	00	467	161	163	17321	3 0C	5773 667
21	751	256	22 32 39	-0 19 30	146181	-0 8	3 3	B8	4 13	00	440	139	18	17639	1 0L	5879 667
22	799	258	22 32 43	-0 20 7	146181	-0 4	2 26	B8	4 13	00	405	104	72	11808	1 0L	11808 000
23	808	256	22 32 47	-0 19 27	146181	0 0	3 6	B8	4 13	00	477	296	22	40833	10 0C	4083 300
24	818	259	22 32 48	-0 19 8	146181	0 0	3 24	B8	4 13	00	436	588	31	86888	30 0C	2941 933
25	720	428	22 33 26	-3 43 25	146252	-0 5	0 43	A0	7 70	00	210	4	185	84	3 0L	31 333
26	737	429	22 33 27	-3 43 18	146252	-0 4	0 49	A0	7 70	00	188	69	21	3495	30 0C	116 500
27	727	427	22 33 30	-3 43 49	146252	-0 1	0 20	A0	7 70	00	86	22	16	938	10 0C	93 800
28	959	507	22 33 34	-3 45 9	146252	0 2	-1 2	A0	7 70	00	51	29	18	871	10 0C	87 100
29	670	427	22 33 36	-3 42 33	146252	0 14	1 34	A0	7 70	00	44	5	13	131	3 0C	43 667
30	734	892	22 33 40	-12 56 34	165243	-0 15	-7 15	A0	7 90	00	129	70	19	3703	10 0C	370 300
31	728	892	22 33 42	-12 55 4	165243	-0 11	-5 45	A0	7 90	00	227	19	190	484	3 0L	161 333
32	678	892	22 33 43	-12 57 30	165243	-0 10	-8 11	A0	7 90	00	54	25	16	694	3 0C	231 333
33	955	509	22 33 43	-3 45 28	146252	0 11	-1 20	A0	7 70	00	307	4	295	86	3 0L	28 667
34	967	509	22 33 43	-3 45 44	146252	0 12	-1 36	A0	7 70	00	87	99	22	4055	30 0C	135 167
35	742	894	22 33 51	-12 55 46	165243	-0 13	-6 27	A0	7 90	00	169	170	24	11954	10 0C	398 467
36	959	470	22 33 51	-12 55 32	165243	-0 11	-1 10	B9	8 20	00	99	109	21	5138	30 0C	171 267
37	726	391	22 40 19	-2 57 52	146268	-0 5	0 38	B9	8 20	00	120	77	20	4303	30 0C	143 433
38	708	390	22 40 22	-2 56 2	146268	-0 1	0 40	B9	8 20	00	209	8	176	208	3 0L	69 333
39	659	368	22 40 22	-2 54 2	146268	-0 1	2 40	B9	8 20	00	45	4	15	115	3 0C	38 333
40	715	368	22 40 27	-2 55 14	146268	0 4	1 27	B9	8 20	00	98	25	17	1120	10 0C	112 000
41	946	467	22 40 27	-2 55 39	146268	0 4	1 2	B9	8 20	00	67	36	17	1188	10 0C	118 800
42	731	603	22 40 29	-7 14 13	146273	-0 9	-0 42	B9	6 30	00	333	159	23	18772	10 0C	625 733
43	712	602	22 40 33	-7 13 57	146273	-0 8	-0 26	B9	6 30	00	151	16	92	600	1 0L	600 000
44	948	694	22 40 33	-7 17 13	146273	-0 5	-3 42	B9	6 30	00	179	16	152	360	1 0L	360 000
45	950	697	22 40 33	-7 17 39	146273	-0 5	-4 8	B9	6 30	00	188	77	18	5707	10 0C	570 700
46	664	601	22 40 34	-7 12 36	146273	-0 3	0 55	B9	6 30	00	139	30	14	1730	3 0C	576 667
47	720	600	22 40 35	-7 13 29	146273	-0 2	0 2	B9	6 30	00	290	66	18	6183	10 0C	618 300
48	713	602	22 40 36	-7 14 18	146273	-0 1	-0 47	B9	6 30	00	326	36	207	1942	3 0L	647 333
49	947	688	22 40 36	-7 16 50	146273	-0 2	-3 19	B9	6 30	00	385	206	324	6515	3 0L	2171 667
50	953	686	22 41 1	-7 14 10	146273	0 24	-0 39	B9	6 30	00	82	23	27	806	10 0C	26 867
51	890	302	22 41 28	-1 7 48	1462823	-0 9	5 11	A3	8 80	00	227	73	77	4028H	1 0L	4028 000
52	676	75	22 43 6	3 23 52	127740	0 1	1 48	B9	8 20	00	166	27	130	728	3 0L	242 667
53	627	74	22 43 9	3 24 46	127740	0 4	2 42	B9	8 20	00	54	19	16	545	3 0C	181 667
54	694	77	22 43 13	3 22 26	127740	0 7	0 23	B9	8 20	00	178	157	21	11798	30 0C	393 267
55	685	74	22 43 14	3 23 2	127740	0 9	0 58	B9	8 20	00	139	70	18	3884	10 0C	388 000
56	650	939	22 47 31	-13 44 18	NO						71	79	29	2343	30 0C	78 100
57	639	935	22 47 35	-13 42 40	NO						52	16	22	403	10 0C	40 300
58	608	310	22 49 55	-1 7 32							48	4	20	1067	30 0C	3 533
59	596	841	22 50 43	-11 53 59	165359	-0 7	-1 1	B9	5 89	00	62	8	33	199	5L	398 000
60	604	845	22 50 43	-11 55 7	165359	-0 8	-2 9	B9	5 89	00	441	126	20	16914	10 0C	1691 400
61	596	847	22 50 44	-11 53 48	165359	-0 7	-0 50	B9	5 89	00	204	51	72	2913	1 0L	2913 000
62	598	847	22 50 45	-11 53 56	165359	-0 6	-0 58	B9	5 89	00	408	75	169	6730	3 0L	2243 333
63	613	848	22 50 48	-11 55 23	165359	-0 3	-2 25	B9	5 89	00	425	288	24	44273	30 0C	1475 767
64	548	846	22 50 52	-11 52 26	165359	0 1	0 32	B9	5 89	00	298	66	17	8119	3 0C	2039 667
65	809	695	22 52 43	-7 21 28	NO						47	4	24	88	30 0C	2 933
66	786	470	22 52 53	-2 52 28							239	4	207	1027	3 0L	34 000
67	583	615	22 52 86	-7 15 3	NO						57	22	20	631	30 0C	21 033
68	573	613	22 52 58	-7 15 56	NO						44	6	16	148	10 0C	14 800
69	795	690	22 53 8	-7 16 49	NO						44	6	18	140	10 0C	14 000
70	579	614	22 53 16	-7 13 31	NO						55	13	19	3727	30 0C	12 400
71	882	691	22 53 17	-7 15 60	NO						53	34	20	958	30 0C	31 933
72	534	158	22 56 2	2 1 45							46	4	19	967	30 0C	3 200
73	537	677	22 56 12	-8 29 7	146422	-0 11	-0 13	A0	8 70	00	63	16	17	520	10 0C	52 000
74	768	757	22 56 12	-8 31 12	146422	-0 11	-2 19	A0	8 70	00	75	63	21	2374	30 0C	79 133
75	538	473	22 56 16	-4 17 53							58	6	17	1947	30 0C	6 467
76	758	794	22 56 18	-8 30 36	146422	-0 5	-1 43	A0	8 70	00	56	17	17	503	10 0C	50 300
77	544	678	22 56 26	-8 26 40	146422	0 2	2 13	A0	8 70	00	77	56	20	2171	30 0C	72 367
78	541	820	22 56 53	-11 14 33							47	4	21	927	30 0C	3 067
79	484	248	23 0 15	0 21 35							48	4	19	1007	30 0C	3 333
80	464	526	23 1 12	-5 16 9	NO						105	6	66	161	1 0L	161 000
81	888	161	23 1 18	3 2												

PAGE, CARRUTHERS AND HILL

AQUARIUS RA 22 59 TO 23 16 DEC -05 06 TO -03 12																
OBJECT NO	X	Y	R A	DEC	SAO NO	Δ R A	Δ DEC	SPEC TYPE	V MAG	P MAG	PEAK DEN	NO OF POINTS	BG	DENSITY VOLUME	EXP & FILTER	DEN VOL/ EXP
101	830	747	23 3 30	-8 6 38	146505	0 13	5 47	A0	6 85	00	76	15	16	576	3 0C	192 000
102	451	448	23 3 33	-3 37 33							50	5	18	1317	30 0C	4 367
103	621	120	23 6 3	4 22 53	127991	0 0	-1 32	A0	7 70	00	49	12	16	322	L 10 0C	32 200
104	629	122	23 6 5	4 22 21	127991	0 3	-2 3	A0	7 70	00	67	56	21	1858	L 30 0C	61 933
105	415	42	23 6 11	4 22 41	127991	0 8	-1 44	A0	7 70	00	58	45	26	1173	L 30 0C	39 100
106	404	38	23 6 22	4 23 49	127991	0 20	-0 36	A0	7 70	00	47	5	24	104	L 10 0C	10 400
107	626	550	23 7 51	-6 14 7	146543	-0 13	-0 11	B8	7 01	00	391	204	24	27176	30 0C	905 867
108	386	577	23 7 54	-6 15 21	146543	-0 10	-1 26	B8	7 01	00	61	4	32	113	5L	226 000
109	395	579	23 7 56	-6 15 32	146543	-0 9	-1 37	B8	7 01	00	388	84	19	9152	10 0C	915 200
110	616	640	23 7 58	-6 13 20	146543	-0 7	0 27	B8	7 01	00	373	87	22	8727	10 0C	872 700
111	612	645	23 7 59	-6 13 20	146543	-0 6	0 35	B8	7 01	00	185	27	76	1478	1 0L	1478 000
112	771	651	23 7 59	-6 12 7	146543	-0 5	1 48	B8	7 01	00	191	42	18	2614	3 0C	871 333
113	387	582	23 8 1	-6 15 20	146543	-0 4	-1 24	B8	7 01	00	350	45	146	3061	3 0L	1020 333
114	613	649	23 8 1	-6 13 5	146543	-0 3	0 50	B8	7 01	00	266	46	173	2996	H 3 0L	998 667
115	385	581	23 8 2	-6 14 24	146543	-0 2	-0 29	B8	7 01	00	179	26	64	1392	1 0L	1392 000
116	403	581	23 8 3	-6 14 7	146543	-0 1	-0 12	B8	7 01	00	387	191	23	28056	30 0C	835 200
117	338	580	23 8 4	-6 14 5	146543	0 0	-0 9	B8	7 01	00	201	40	16	2606	3 0C	935 333
118	607	781	23 9 48	-8 46 58							55	6	21	1737	30 0C	5 767
119	556	113	23 11 18	4 38 58	128051	-0 10	-4 30	B2	6 93	00	432	322	23	51609	L 30 0C	1720 300
120	552	107	23 11 20	4 40 53	128051	0 3	-2 36	B2	6 93	00	291	77	58	6347	1 0L	6347 000
121	555	110	23 11 30	4 40 56	128051	0 2	-2 33	B2	6 93	00	451	139	19	19677	10 0C	1967 700
122	553	110	23 11 31	4 42 26	128051	0 3	-1 3	B2	6 93	00	432	110	128	11950	3 0L	3986 000
123	710	113	23 11 31	4 41 21	128051	0 3	-2 8	B2	6 93	00	343	72	18	7980	L 30 0C	2660 000
124	550	534	23 12 57	-3 46 21	146593	-0 2	-0 12	A2	5 55	00	97	60	18	2948	L 30 0C	98 267
125	549	534	23 12 58	-3 46 50	146593	-0 1	-0 40	A2	5 55	00	175	5	148	116	L 3 0L	38 667
126	551	532	23 12 59	-3 45 47	146593	-0 1	0 22	A2	5 55	00	76	20	17	733	L 10 0C	73 300
127	330	463	23 13 0	-3 49 35	146593	0 1	-3 25	A2	5 55	00	102	29	16	1298	L 10 0C	129 800
128	322	466	23 13 2	-3 48 59	146593	0 2	-2 50	A2	5 55	00	177	8	140	224	L 3 0L	74 667
129	339	466	23 13 2	-3 49 20	146593	0 3	-3 11	A2	5 55	00	119	74	20	4273	L 30 0C	142 433
130	273	464	23 13 5	-3 48 4	146593	0 6	-1 54	A2	5 55	00	46	6	14	163	L 3 0C	54 333
131	543	684	23 14 56	-6 45 6	NO						100	73	21	3353	30 0C	111 767
132	534	682	23 14 57	-6 43 18	NO						86	24	17	915	10 0C	91 500
133	538	682	23 14 58	-12 4 36	165609	-0 5	-5 25	A0	6 36	00	129	83	20	3339	10 0C	333 900
134	325	875	23 15 1	-12 0 14	165609	-0 3	-1 3	A0	6 36	00	165	143	22	9947	L 30 0C	331 667
135	322	875	23 15 3	-6 47 57	NO						93	69	21	3049	30 0C	101 633
136	688	685	23 15 3	-6 45 11	NO						65	11	18	349	3 0C	116 333
137	648	684	23 15 4	-6 45 59	165609	-0 1	-5 48	A0	6 36	00	203	183	24	13053	30 0C	435 100
138	534	682	23 15 4	-12 1 47	165609	0 1	-2 35	A0	6 36	00	191	23	150	692	L 3 0L	230 667
139	314	872	23 15 6	-12 1 33	165609	0 3	-2 21	A0	6 36	00	134	58	19	3089	L 10 0C	308 900
140	257	873	23 15 9	-12 0 32	165609	0 5	-1 24	A0	6 36	00	55	15	17	436	L 3 0C	145 333
141	545	819	23 15 9	-9 24 27	146620	-0 9	2 54	B5	4 56	00	447	688	39	143534	30 0C	4784 667
142	307	875	23 15 13	-12 0 44	165609	0 10	-1 32	A0	6 36	00	173	19	132	566	L 3 0L	188 667
143	254	613	23 15 13	-6 47 27	NO						39	4	14	93	3 0C	31 000
144	533	819	23 15 13	-9 24 54	146620	-0 5	2 26	B5	4 56	00	472	287	160	29976	3 0L	9992 000
145	310	611	23 15 14	-6 46 43	NO						74	22	17	791	10 0C	79 100
146	303	614	23 15 15	-6 45 60	NO						178	10	138	290	3 0L	96 667
147	690	821	23 15 15	-9 25 25	146620	-0 3	1 56	B5	4 56	00	389	241	19	26888	3 0L	8632 667
148	531	815	23 15 16	-9 25 6	146620	-0 2	2 15	B5	4 56	00	448	169	71	17782	1 0L	17782 000
149	324	747	23 15 17	-9 25 0	146620	-0 1	2 21	B5	4 56	00	450	819	35	126660	L 30 0C	4222 000
150	691	955	23 15 17	-12 2 55	165609	0 14	-3 44	A0	6 36	00	62	20	22	608	L 3 0C	202 667
151	304	742	23 15 21	-9 25 36	146620	0 3	1 44	B5	4 56	00	277	81	30	5010	5L	10020 000
152	934	818	23 15 21	-9 25 1	146620	0 3	2 20	B5	4 56	00	482	430	25	51328	10 0C	5132 800
153	306	747	23 15 22	-9 24 24	146620	0 3	2 57	B5	4 56	00	472	284	137	30018	3 0L	10005 000
154	256	745	23 15 24	-9 25 33	146620	0 5	1 48	B5	4 56	00	452	223	18	26145	3 0C	8715 000
155	303	746	23 15 27	-9 24 50	146620	0 9	2 31	B5	4 56	00	442	159	59	15835	1 0L	15835 000
156	312	744	23 15 28	-9 25 0	146620	0 10	2 21	B5	4 56	00	485	421	23	63205	10 0C	6320 500
157	532	981	23 16 12	-12 34 43	165622	-0 13	-8 5	A0	7 60	00	75	82	25	2830	30 0C	94 350
158	532	944	23 16 13	-9 52 9	146635	-0 9	0 55	A0	5 16	00	424	340	33	47347	30 0C	1578 233
159	523	942	23 16 14	-9 51 38	146635	-0 8	1 25	A0	5 16	00	433	133	24	15918	10 0C	1591 800
160	520	842	23 16 16	-9 50 9	146635	-0 5	2 55	A0	5 16	00	404	69	155	5440	3 0L	1813 333
161	531	808	23 16 17	-9 10 49	1466377	-0 9	9 11	A2	9 40	00	64	5	38	115	L 30 0C	3 833
162	519	981	23 16 20	-12 35 8	165622	-0 5	-8 30	A0	7 60	00	158	161	107	6284	H 3 0L	2094 667
163	521	978	23 16 23	-12 32 52	165622	-0 3	-6 13	A0	7 60	00	51	16	20	408	L 10 0C	40 800
164	518	839	23 16 24	-9 51 30	146635	0 3	1 34	A0	5 16	00	203	45	65	2712	1 0L	2712 000
165	307	900	23 16 25	-12 29 48	165622	-0 0	-3 9	A0	7 60	00	68	85	22	2198	L 30 0C	73 267
166	677	845	23 16 25	-9 52 57	146635	0 3	0 6	A0	5 16	00	296	63	19	5640	3 0C	1880 000
167	243	768	23 16 26	-9 51 57	146635	0 5	1 6	A0	5 16	00	279	67	18	5366	3 0C	1788 667
168	291	764	23 16 29	-9 50 43	146635	0 7	2 21	A0	5 16	00	57	7	30	162	L 5L	324 000
169	290	769	23 16 30	-9 51 18	146635	0 8	1 46	A0	5 16	00	192	40	59	2357	1 0L	2357 000
170	292	789	23 16 30	-9 50 44	146635	0 8	2 19	A0	5 16	00	376	63	135	5325	3 0L	1775 000
171	296	897	23 16 30	-12 29 54	165622	0 4	-3 16	A0	7 60	00	51	15	19	395	L 10 0C	39 500
172	309	769	23 16 30	-9 51 21	146635	0 9	1 43	A0	5 16	00	417	323	31	41165	30 0C	1372 167
173	299	766	23 16 31	-9 51 32	146635	0 9	1 31	A0	5 16	00	427	139	22	16481	10 0C	1648 100
174	514	622	23 17 8	-5 27 9	NO						125	81	18	4765	30 0C	158 833
175	293	553	23 17 15	-5 31 24	NO						122	88	21	4733	30 0C	157 767
176	502	621	23 17 18	-5 25 2	NO						224	16	158	591	3 0L	197 000
177	504	620	23 17 19	-5 25 11	NO						101	27	17	1256	10 0C	125 600
178	500	617	23 17 20	-5 25 10	NO						97	4	70	100	1 0L	100 000
179	281	549	23 17 22	-5 30 19	NO						102	29	17	1302	10 0C	130 200
180	273	552	23 17 26	-5 29 22	NO						186	14	131	468	3 0L	

NRL REPORT 8173

AQUARIUS RA 22 58 TO 23 16 DEC -05 06 TO -03 12

OBJECT NO	X	Y	R A	DEC	SAD NO	Δ R A	Δ DEC	SPEC TYPE	V MAG	P MAG	PEAK DEN	NO OF POINTS	BO	DENSITY VOLUME	EXP & FILTER	DEN VOL / EXP
201	465	521	23 19 51	-3 24 50	NO						100	6	63	176	1 0L	176 000
202	466	525	23 19 54	-3 24 48	NO						217	11	146	454	3 0L	151 333
203	603	234	23 20 13	2 29 31	128150	-0 7	-3 8	A0	6 92	00	59	10	14	320 L	3 0C	106 667
204	242	149	23 20 17	2 31 28	128150	-0 3	-1 11	A0	6 92	00	103	104	22	5082	30 0C	169 400
205	458	233	23 20 21	2 32 7	128150	0 1	-0 32	A0	6 92	00	152	77	18	5564	30 0C	185 467
206	449	231	23 20 23	2 32 36	128150	0 3	-0 3	A0	6 92	00	122	29	15	1560	10 0C	156 000
207	447	231	23 20 24	2 33 56	128150	0 4	1 17	A0	6 92	00	165	9	130	245 L	3 0L	81 667
208	231	144	23 20 27	2 33 25	128150	0 7	0 46	A0	6 92	00	72	37	18	1255 L	10 0C	126 500
209	585	60	23 21 42	5 55 36	128162	-0 7	0 54	A0	7 14	00	74	30	17	1096	3 0C	365 333
210	428	53	23 21 57	5 52 55	128162	0 8	-1 47	A0	7 14	00	89	8	63	186	1 0L	186 000
211	430	57	23 21 58	5 53 10	128162	0 9	-1 30	A0	7 14	00	162	21	81	1004 L	10 0C	100 400
212	438	59	23 22 1	5 52 50	128162	0 12	-1 51	A0	7 14	00	284	171	22	17920	30 0C	597 333
213	437	926	23 24 8	-11 22 19	165596	-0 2	-3 52	B8	8 40	00	398	242	24	33413 H	30 0C	1113 767
214	424	921	23 24 9	-11 21 57	165596	-0 1	-3 30	B8	8 40	00	121	41	59	1479 H	1 0L	1479 000
215	428	924	23 24 9	-11 21 49	165596	-0 1	-3 22	B8	8 40	00	307	104	24	9639 H	10 0C	963 900
216	425	924	23 24 11	-11 20 27	165596	0 1	-1 59	B8	8 40	00	284	73	137	4523 H	3 0L	1507 667
217	558	317	23 24 14	0 56 4	128186	-0 8	-2 50	A2	4 94	00	157	27	14	1637	3 0C	545 667
218	194	232	23 24 15	0 57 50	128186	-0 7	-1 4	A2	4 94	00	265	177	21	17980	30 0C	599 333
219	125	229	23 24 19	0 57 12	128186	-0 3	-1 42	A2	4 94	00	83	34	14	1392	3 0C	464 000
220	183	227	23 24 24	0 59 43	128186	0 2	0 49	A2	4 94	00	220	82	16	6490	10 0C	649 000
221	174	230	23 24 25	0 59 58	128186	0 3	1 4	A2	4 94	00	176	39	113	1419 L	3 0L	473 000
222	583	927	23 24 25	-11 19 14	165596	0 15	-0 45	B8	8 40	00	141	52	22	2875 H	3 0C	958 333
223	145	847	23 24 26	-11 22 21	165596	0 17	-3 54	B8	8 40	00	86	45	16	1806	3 0C	602 000
224	201	846	23 24 26	-11 22 51	165596	0 17	-4 24	B8	8 40	00	225	110	18	9580 H	10 0C	856 000
225	211	849	23 24 27	-11 22 29	165596	0 17	-4 2	B8	8 40	00	283	230	22	24088	30 0C	802 933
226	400	311	23 24 28	0 58 33	128186	0 6	-0 21	A2	4 94	00	123	18	55	706	1 0L	706 000
227	172	229	23 24 29	1 0 23	128186	0 7	1 29	A2	4 94	00	77	12	49	293 L	1 0L	293 000
228	412	316	23 24 29	0 58 17	128186	0 7	-0 37	A2	4 94	00	332	142	20	16039	30 0C	534 633
229	401	314	23 24 31	1 0 0	128186	0 9	1 6	A2	4 94	00	266	33	129	1893	3 0L	631 000
230	403	314	23 24 31	0 58 44	128186	0 9	-0 10	A2	4 94	00	384	61	20	5279	10 0C	527 900
231	192	848	23 24 32	-11 22 1	165596	0 22	-3 34	B8	8 40	00	88	28	47	848 H	1 0L	848 000
232	194	849	23 24 32	-11 21 16	165596	0 22	-2 48	B8	8 40	00	208	68	112	3317 H	3 0L	1105 667
233	171	269	23 26 11	0 15 51	NO						89	17	20	5007	30 0C	16 667
234	152	269	23 26 17	0 15 34	NO						138	4	112	95	3 0L	31 667
235	168	271	23 26 26	0 13 34	NO						83	14	22	573	30 0C	19 100
236	543	589	23 26 29	-3 57 10	146732	-0 9	-4 54	A0	8 50	00	56	12	14	349	3 0C	116 333
237	389	586	23 26 39	-3 54 32	146732	-0 5	-2 16	A0	8 50	00	111	35	16	1644	10 0C	164 400
238	174	481	23 26 44	-3 57 49	146732	-0 4	-5 33	A0	8 50	00	118	97	21	5170	30 0C	172 333
239	385	583	23 26 44	-3 54 38	146732	-0 3	-2 22	A0	8 50	00	89	4	64	99	1 0L	99 000
240	397	587	23 26 46	-3 53 41	146732	-0 2	-1 25	A0	8 50	00	130	83	18	5286	30 0C	173 533
241	386	586	23 26 47	-3 53 13	146732	-0 1	-0 57	A0	8 50	00	206	13	147	463	3 0L	154 333
242	105	478	23 26 49	-3 57 27	146732	0 1	-5 11	A0	8 50	00	40	4	15	91 L	3 0C	30 333
243	163	477	23 26 51	-3 57 2	146732	0 3	-4 46	A0	8 50	00	85	36	16	1407	10 0C	140 700
244	154	479	23 26 52	-3 55 21	146732	0 5	-3 5	A0	8 50	00	147	13	115	326	3 0L	108 667
245	234	203	23 38 14	3 19 38	128322	-0 4	-1 21	A0	8 90	00	58	23	16	690	10 0C	69 000
246	241	205	23 38 22	3 20 45	128322	0 4	-0 14	A0	8 90	00	78	72	19	2856	30 0C	95 200
247	220	401	23 40 44	-0 29 41	146860	0 0	-3 42	A0	8 40	00	46	17	20	386 L	30 0C	12 867
248	97	290	23 50 10	1 47 18	128436	-0 21	-1 28	A0	6 24	00	221	196	19	17367	30 0C	578 900
249	85	286	23 50 25	1 50 12	128436	-0 6	1 27	A0	6 24	00	152	93	17	5585	10 0C	550 500
250	240	289	23 50 40	2 3 44	NO						67	37	14	1216	3 0C	405 333
251	81	272	23 51 23	2 9 33	128458	-0 29	-1 37	A2	8 20	00	40	17	12	408 L	30 0C	13 600

ORIGINAL PAGE IS
OF POOR QUALITY

PAGE, CARRUTHERS AND HILL

FORNAX RA 03 42 DEC -27 20

OBJECT NO	X	Y	R A	DEC	SAO NO	Δ R A	Δ DEC	SPEC TYPE	V MAG	P MAG	PEAK DEN	NO OF POINTS	BG	DENSITY VOLUME	EXP & FILTER	DEN VOL/ EXP
1	481	947	3 4 51	-24 38 13							122	14	89	372?	3 0L	124 000
2	264	806	3 8 59	-29 59 52							114	8	79	214?	3 0L	71 333
3	244	791	3 9 28	-30 29 3	194145	-0 19	-1 13	A5	8 80	8 66	164	10	74	267 H	3 0L	89 000
4	584	930	3 10 41	-22 4 3							108	23	21	1147?	3 0L	3823 333
5	199	740	3 13 58	-31 3 21	194197	-0 9	-2 41	B9	6 62	00	88	31	17	1208	3 0C	402 667
6	238	735	3 14 3	-31 4 18	194197	-0 4	-3 38	B9	6 62	00	71	14	34	389	1 0L	389 000
7	239	735	3 14 3	-31 3 39	194197	-0 5	-2 59	B9	6 62	00	169	38	76	1813	3 0L	604 333
9	731	859	3 19 4	-20 28 32	168485	-0 23	1 37	A0	6 58	00	109	11	89	264 L	3 0L	94 667
9	160	843	3 19 20	-33 13 29							112	7	70	214?	3 0L	71 333
10	500	759	3 20 18	-25 47 6	168493	0 11	-1 10	A0	6 26	00	68	7	37	176 L	1 0L	176 000
11	500	759	3 20 18	-25 46 28	168493	0 10	-0 32	A0	6 26	00	168	33	87	1333	3 0L	444 333
12	461	764	3 20 25	-25 49 3	168493	0 18	-3 7	A0	6 26	00	81	17	18	808 L	3 0C	202 667
13	709	769	3 25 21	-21 34 5	168560	-0 13	0 6	B9	9 00	00	107	5	82	118 L	3 0L	39 333
14	465	685	3 25 27	-26 59 39							224	20	88	1158?	3 0L	386 000
15	574	706	3 28 14	-23 58 29							43	5	18	116?	3 0C	36 667
16	693	727	3 29 41	-21 25 36	168614	0 11	-0 38	B5	8 80	00	76	19	16	676	3 0C	225 333
17	732	722	3 29 44	-21 24 44	168614	-0 7	0 14	B5	8 80	00	66	9	36	223 L	1 0L	223 000
18	732	722	3 29 45	-21 24 10	168614	-0 7	0 48	B5	8 80	00	173	32	84	1444	3 0L	481 333
19	628	678	3 30 21	-23 45 37	168620	-0 4	2 11	B9	9 10	00	111	4	87	93	3 0L	31 000
20	629	637	3 31 8	-26 2 22	NO						115	18	39	792	1 0L	792 000
21	530	637	3 31 10	-26 0 37	NO						271	37	88	2440	3 0L	813 333
22	491	642	3 31 17	-26 3 8	NO						103	26	16	1081	3 0C	380 333
23	720	686	3 31 26	-21 48 56	168634	-0 9	-0 58	B8	4 32	00	463	233	86	25176	3 0L	8392 000
24	721	686	3 31 27	-21 48 18	168634	-0 8	-0 20	B8	4 32	00	414	109	39	11792	1 0L	11792 000
25	682	701	3 31 29	-21 49 36	168634	-0 6	-1 39	B8	4 32	00	403	167	17	17046	3 0C	5682 000
26	682	701	3 31 29	-21 48 35	168634	-0 6	-0 37	B8	4 32	00	259	16	16	4059	3 0C	13530 000
27	885	748	3 33 35	-17 33 48	149063?	-0 25	4 5	A0	5 32	00	82	47	16	1821 H	3 0C	6070 000
28	924	744	3 33 37	-17 35 51	149063?	-0 24	2 2	A0	5 32	00	210	119	33	8589 H	1 0L	8589 000
29	886	749	3 33 37	-17 33 39	149061?	-0 18	-4 57	A2	9 60	00	354	140	18	15806 H	3 0C	5288 667
30	886	749	3 33 37	-17 33 39	149063?	-0 24	4 14	A0	5 32	00	354	140	18	15806 H	3 0C	5288 667
31	924	744	3 33 38	-17 35 18	149063	-0 23	2 35	A0	5 32	00	445	181	74	25354 H	3 0L	8451 333
32	112	442	3 36 0	-35 32 19							115	5	73	165?	3 0L	61 667
33	455	550	3 36 39	-28 7 4	168701	-0 4	-0 45	A0	6 08	00	99	13	37	506	1 0L	506 000
34	456	550	3 36 40	-28 5 20	168701	-0 2	0 59	A0	6 08	00	224	22	86	1421	3 0C	473 667
35	417	555	3 36 43	-28 7 26	168701	-0 0	-1 7	A0	6 08	00	118	26	16	1278	3 0C	426 000
36	477	522	3 39 27	-28 2 21							129	7	83	226?	3 0L	75 333
37	680	574	3 39 51	-23 47 38	168752	-0 0	0 35	A0	8 30	00	116	6	87	141?	3 0L	47 000
38	247	463	3 40 6	-32 5 17	194467	-0 9	0 32	B5	4 93	00	392	171	17	17488	3 0C	5629 333
39	286	458	3 40 8	-32 5 8	194467	-0 8	0 42	B5	4 93	00	451	255	82	2498?	3 0L	8332 333
40	286	458	3 40 9	-32 5 38	194467	-0 7	0 11	B5	4 93	00	405	134	40	1744	1 0L	11744 000
41	246	462	3 40 11	-32 5 49	194467	-0 5	0 0	B5	4 93	00	237	50	16	382?	3 0L	12756 667
42	669	509	3 45 31	-24 0 48	168836	0 5	0 55	A2	5 04	00	107	4	82	93 L	3 0L	31 000
43	71	337	3 46 11	-36 13 30	194537	0 15	2 2	B8	6 25	00	182	76	16	5219	3 0C	1739 667
44	70	337	3 46 11	-36 13 37	194537	0 14	1 55	B8	6 25	00	37	6	14	130 L	3 0C	433 333
45	109	333	3 46 13	-36 15 44	194537	0 17	-0 12	B8	6 25	00	112	56	36	2274	1 0L	2274 000
46	110	333	3 46 13	-36 14 5	194537	0 17	1 27	B8	6 25	00	264	103	74	7324	3 0L	2441 333
47	103	300	3 49 4	-36 34 10	194570	0 18	0 22	B9	5 79	00	131	47	72	1693	3 0L	564 333
48	64	304	3 49 9	-36 32 42	194570	0 23	1 50	B9	5 79	00	67	34	16	1104	3 0C	368 000
49	653	434	3 51 32	-24 47 15	168925	-0 3	-1 42	B5	4 76	00	457	276	84	28330	3 0L	9443 333
50	654	434	3 51 34	-24 46 29	168925	-0 1	-0 56	B5	4 76	00	412	137	37	12475	1 0L	12475 000
51	615	439	3 51 36	-24 48 4	168925	0 2	-2 31	B5	4 76	00	396	169	17	1709?	3 0C	5699 000
52	615	439	3 51 37	-24 46 60	168925	0 2	-1 27	B5	4 76	00	212	48	18	3574	3 0C	11913 333
53	153	303	3 51 46	-34 51 43	194608	0 1	1 2	B5	5 12	00	176	54	14	368?	3 0C	12323 333
54	155	303	3 51 48	-34 50 25	194608	0 4	2 20	B5	5 12	00	408	143	18	18201	3 0C	6067 000
55	193	299	3 51 51	-34 52 16	194608	0 6	0 30	B5	5 12	00	403	118	37	12884	1 0L	12884 000
56	194	299	3 51 51	-34 50 38	194608	0 6	2 8	B5	5 12	00	462	214	76	25934	3 0L	8644 667
57	553	417	3 52 5	-26 11 16							87	10	14	414?	3 0C	138 000
58	185	264	3 56 16	-34 29 28							44	4	15	105?	3 0C	35 000
59	420	314	3 58 43	-30 15 30							143	13	82	517?	3 0L	172 333
60	888	449	3 57 27	-19 22 14							43	4	14	113?	3 0C	37 667
61	702	375	3 57 47	-24 8 59	169017	-0 0	0 27	A0	4 69	00	274	55	38	4651	1 0L	4651 000
62	662	379	3 57 49	-24 10 39	169017	0 2	-1 13	A0	4 69	00	123	24	16	1193	3 0C	3976 667
63	663	379	3 57 50	-24 10 31	169017	0 3	-1 6	A0	4 69	00	339	79	18	7254	3 0C	2418 000
64	702	374	3 57 52	-24 8 54	169017	0 5	0 31	A0	4 69	00	428	102	85	10236	3 0L	3412 000
65	408	289	3 58 46	-30 38 37	194689	0 6	-0 48	A0	5 85	00	74	9	34	279 L	1 0L	279 000
66	408	289	3 58 46	-30 38 13	194689	0 5	-0 24	A0	5 85	00	182	26	79	1292 L	3 0L	430 667
67	370	293	3 58 49	-30 38 59	194689	0 8	-1 9	A0	5 85	00	98	17	16	819 L	3 0C	273 000
68	264	264	3 59 9	-32 32 47	NO						53	12	16	324	3 0C	108 000
69	323	259	3 59 18	-32 31 40	NO						137	22	77	780	3 0L	260 000
70	858	393	4 1 17	-20 14 43	169071	0 4	2 7	B3	6 39	00	120	44	15	2310	3 0C	7700 000
71	859	393	4 1 18	-20 14 37	169071	0 6	2 13	B3	6 39	00	356	124	18	14751	3 0C	4917 000
72	897	388	4 1 20	-20 17 33	169071	0 8	-0 42	B3	6 39	00	470	213	79	28750	3 0L	9583 333
73	898	389	4 1 21	-20 16 44	169071	0 9	0 7	B3	6 39	00	328	120	36	11559	1 0L	11559 000
74	742	324	4 4 21	-22 53 18							53	7	14	217?	3 0C	72 333
75	544	260	4 5 32	-27 17 9							74	9	15	384?	3 0C	121 333
76	798	223	4 14 2	-22 25 58	169274	0 20	-9 30	A2	6 80	00	41	4	14	96 L	3 0C	32 000
77	535	156	4 14 15	-28 3 53							69	27	17	712?	3 0C	237 333
78	268	66	4 15 52	-33 57 55	194902	-0 8	-2 45	B9	3 59	00	435	207	21	29796	3 0C	9932 000
79	268	65	4 15 59	-33 57 3	194902	-0 1	-1 53	B9	3 59	00	240	78	15	6473	3 0C	21576 667

ORIGINAL PAGE IS
OF POOR QUALITY

NRL REPORT 8173

SGR NORMAL RA 16 34 DEC -30 24

OBJECT NO	X	Y	R A	DEC	SAO NO	Δ R A	Δ DEC	SPEC TYPE	V MAG	P MAG	PEAK GEN	NO OF POINTS	BG	DENSITY VOLUME	EXP & FILTER	DEN VOL / EXP
1	745	82	17 49 18	-31 37 11	209398	-0 12	0 18	B8	8 62	8 33	57	13	27	317	3 0C	105 667
2	751	80	17 49 31	-31 35 26	209398	-0 0	2 3	B8	8 62	8 33	111	23	54	891	10 0C	88 100
3	684	65	17 50 54	-30 13 39										284?	10 0C	26 480
4	865	60	17 51 19	-29 50 36	185914	-0 2	-0 4	B8	9 20	0 0	85	11	58	380?	10 0C	26 000
5	811	132	17 51 19	-33 11 21	209450	-0 18	-0 6	B3	9 06	9 00	88	23	53	835 L	10 0C	63 500
6	855	163	17 52 5	-34 16 38	209474/	0 4	-1 41	B3	8 60	8 70	149	56	54	324?	10 0C	32 400
7	690	88	17 52 24	-30 34 22	209480/	0 4	-0 31	A0	7 54	7 21	149	66	54	3168	10 0C	316 880
8	682	91	17 52 25	-30 33 14	209474/	0 5	-0 33	B3	8 60	8 70	60	11	28	281 L	3 0C	93 667
9	682	91	17 52 25	-30 33 14	209480/	-0 7	0 37	A0	7 54	7 21	60	11	28	281 L	3 0C	93 667
10	682	91	17 52 25	-30 33 14	209480/	-0 7	0 37	A0	7 54	7 21	60	11	28	281 L	3 0C	93 667
11	772	131	17 52 45	-32 29 11	209489	-0 14	-1 5	0	6 62	0 0	94	31	49	962 L	10 0C	96 200
12	770	144	17 53 17	-32 40 37	209503	-0 16	0 22	B9	6 60	0 0	49	8	25	175 L	3 0C	58 333
13	779	141	17 53 18	-32 41 40	209503	-0 16	-0 42	B9	6 60	0 0	139	49	51	2219	10 0C	221 900
14	727	117	17 53 20	-31 31 15	209502	-0 8	-0 19	B9	8 72	8 41	118	80	55	2845 H	10 0C	284 500
15	810	157	17 53 26	-33 24 34	209508	-0 18	-0 24	A0	8 12	7 84	76	18	47	252 L	10 0C	25 280
16	656	86	17 53 33	-29 56 3	185974	0 3	-1 5	B9	8 50	8 50	93	18	55	508	10 0C	50 800
17	534	92	17 53 35	-27 8 2	185976	-0 14	-0 13	B9	8 40	0 0	124	39	58	1505	10 0C	150 500
18	672	95	17 53 39	-30 18 20	209507	-0 1	-1 30	B8	8 50	8 47	123	35	56	1442	10 0C	144 200
19	678	109	17 53 59	-30 39 22	209506?	0 21	2 6	B8	9 50	9 33	49	4	27	85	3 0C	28 333
20	678	109	17 53 59	-30 39 22	209515	-0 3	-0 26	B8	9 10	8 66	49	4	27	85 L	3 0C	28 333
21	739	138	17 53 60	-32 3 48	209520	-0 14	-1 8	B5	8 27	7 82	99	40	25	1698	3 0C	568 000
22	686	106	17 54 0	-30 39 19	209506?	0 22	2 9	B8	9 50	9 33	126	61	57	2237 H	10 0C	223 700
23	686	106	17 54 0	-30 39 19	209515	-0 2	-0 23	B8	9 10	8 68	126	61	57	2237 H	10 0C	223 700
24	747	135	17 54 2	-32 3 44	209520	-0 12	-1 3	B5	8 27	7 82	310	91	52	824?	10 0C	824 700
25	744	145	17 54 6	-32 3 27	209520	-0 7	-0 47	B5	8 27	7 82	136	10	108	237 L	1 0L	237 000
26	830	177	17 54 15	-33 57 31	209527?	-0 25	-0 48	A0	8 30	7 93	72	8	48	179 L	10 0C	17 900
27	700	116	17 54 19	-31 1 27	209521	0 1	-0 50	0	8 24	8 17	137	41	55	1822 L	10 0C	182 200
28	692	119	17 54 20	-31 0 22	209521	0 2	0 15	0	8 24	8 17	53	9	26	207 L	3 0C	69 000
29	636	90	17 54 31	-29 35 42	185985/	0 18	-1 33	B3	9 20	0 0	100	25	55	829	10 0C	82 900
30	636	90	17 54 31	-29 35 42	185994/	-0 4	-1 37	B8	8 70	0 0	100	25	55	829	10 0C	82 900
31	785	169	17 54 36	-32 59 47	NO						91	23	50	661	10 0C	66 100
32	648	105	17 54 43	-30 4 6	209529	-0 5	-0 27	B8	7 65	7 20	71	20	27	613	3 0C	204 333
33	612	84	17 54 54	-29 5 11	186005	0 1	-1 5	B9	9 00	0 0	122	31	56?	1398	10 0C	139 800
34	656	103	17 54 55	-30 5 1	209529	0 7	-1 22	B8	7 65	7 20	190	70	54	4190 H	10 0C	419 000
35	564	69	17 55 1	-28 10 21	186010/	0 2	-0 53	B9	9 00	0 0	63	16	28	429	3 0C	143 000
36	564	69	17 55 1	-28 10 21	186011/	0 1	-2 5	B5	8 80	0 0	63	16	28	429	3 0C	143 000
37	572	67	17 55 1	-28 10 18	186010/	0 2	-0 50	B9	9 00	0 0	187	51	59?	2966	10 0C	296 600
38	572	67	17 55 1	-28 10 18	186011/	0 1	-2 3	B5	8 80	0 0	187	51	59?	2966	10 0C	296 600
39	619	91	17 55 14	-29 16 38	186016	0 1	-1 4	A0	9 00	0 0	77	4	54	88 L	10 0C	8 800
40	534	62	17 55 21	-27 31 32	186023	-0 7	-0 30	B8	8 50	0 0	60	15	29	378	3 0C	126 000
41	542	59	17 55 21	-27 31 29	186023	-0 7	-0 27	B8	8 50	0 0	167	73	56	3501	10 0C	350 100
42	915	242	17 55 27	-36 2 26	209555?	-0 27	-2 11	A0	8 60	8 26	124	8	100	171	1 0L	171 000
43	915	242	17 55 27	-36 2 26	209557?	-0 28	3 8	A0	9 36	9 18	124	8	100	171	1 0L	171 000
44	588	87	17 55 28	-28 46 50	186025	-0 0	-1 30	B5	5 95	0 0	403	99	31	11841	3 0C	3947 000
45	593	93	17 55 29	-28 45 56	186025	0 1	-0 36	B5	5 95	0 0	318	95	114	7110	1 0L	7110 000
46	691	127	17 55 30	-30 57 10	NO						93	18	51	542	10 0C	54 200
47	596	85	17 55 34	-28 47 15	186025	0 6	-1 55	B5	5 95	0 0	429	258	57	31229	10 0C	3122 900
48	908	237	17 55 36	-36 1 33	209555	-0 18	-1 17	A0	8 60	8 26	64	14	26	403	3 0C	134 333
49	908	237	17 55 36	-36 1 33	209557?	-0 19	4 1	A0	9 36	9 18	64	14	26	403	3 0C	134 333
50	465	31	17 55 41	-25 45 20	186033	-0 8	2 64	A2	8 50	0 0	145	47	66	2387 H	10 0C	238 700
51	465	31	17 55 41	-25 45 20	186047?	-0 29	3 38	B9	8 20	0 0	145	47	66	2387 H	10 0C	238 700
52	914	235	17 55 51	-33 59 33	209555?	-0 3	0 43	A0	8 60	8 26	93	15	51	464 L	10 0C	46 400
53	914	235	17 55 51	-33 59 33	209560/	-0 15	1 33	0	7 26	0 0	93	15	51	464 L	10 0C	46 400
54	807	188	17 56 4	-33 38 59	209563	-0 18	0 2	B9	9 29	8 99	88	23	56	499	10 0C	49 900
55	658	120	17 56 10	-30 17 25	209546?	0 37	1 49	B9	8 94	8 93	78	7	54	151	10 0C	15 100
56	557	76	17 56 13	-27 58 1	186045	0 4	-0 35	A0	8 70	0 0	75	5	50	121?	10 0C	12 100
57	675	129	17 56 14	-30 40 53	209561	0 5	-0 22	B9	8 47	8 10	90	24	50	687	10 0C	68 700
58	889	235	17 56 16	-35 39 28	209574?	-0 34	-0 37	B5	9 10	8 64	54	13	24	330 L	3 0C	111 000
59	623	106	17 56 17	-29 29 9	186048	0 6	-0 18	B9	8 90	0 0	78	6	51	158 L	10 0C	15 000
60	792	195	17 56 19	-33 23 34	209569	-0 19	0 49	B3	7 20	0 0	163	36	103	1299	1 0C	1299 000
61	456	35	17 56 19	-25 47 33	186047	0 9	1 25	B9	8 20	8 26	60	17	47	450 L	10 0C	45 000
62	817	195	17 56 20	-33 53 53	209568	-0 18	-0 34	B2	8 31	8 26	142	75	45	3657	10 0C	365 700
63	696	232	17 56 20	-33 39 14	209574?	-0 30	-0 24	B5	0 0	8 54	142	75	45	3657	10 0C	365 700
64	909	239	17 56 22	-35 56 60	209560	-0 15	-0 32	B3	7 29	0 0	163	58	24	3520	3 0C	1173 333
65	787	186	17 56 27	-33 24 54	209569	-0 15	-0 22	B3	7 20	0 0	393	120	47	14026	10 0C	1402 600
66	428	26	17 57 4	-28 5 20	186067	0 12	-1 45	B8	8 10	0 0	83	9	56	191 L	10 0C	19 100
67	634	129	17 57 9	-29 50 14	186068/	0 11	-0 15	B3	8 50	0 0	362	122	51	11965	10 0C	1196 500
68	634	129	17 57 9	-29 50 14	186079/	-0 7	-0 51	B2	8 00	0 0	362	122	51	11965	10 0C	1196 500
69	634	129	17 57 9	-29 49 57	186068/	0 16	0 2	B3	8 50	0 0	148	26	109	732	1 0L	732 000
70	631	132	17 57 14	-29 49 57	186079/	-0 2	-0 34	B2	8 00	0 0	148	26	109	732 L	1 0L	732 000
71	631	132	17 57 14	-29 49 57	186079/	-0 2	-0 34	B2	8 00	0 0	148	26	109	732 L	1 0L	732 000
72	625	126	17 57 15	-29 49 40	186068/	0 18	0 19	B3	8 50	0 0	129	53	25	2696?	3 0C	898 667
73	625	126	17 57 15	-29 49 40	186079/	-0 1	-0 17	B2	8 00	0 0	129	53	25	2696?	3 0C	898 667
74	541	84	17 57 20	-27 45 13	186082	-0 3	-1 56	B9	9 00	0 0	88	17	53	463?	10 0C	46 300
75	575	108	17 57 31	-28 43 19	186085	-0 1	-0 42	A0	8 50	0 0	59	11	26	297	3 0C	99 000
76	593	105	17 57 37	-28 43 41	186085	0 4	-1 5	A0	8 40	0 0	163	81	52	3520 H	10 0C	352 000
77	404	34	17 57 43	-24 36 14	186086	0 5	4 20	B3	8 60	0 0	122	7	100	141?	1 0L	141 000
78	914	265	17 57 51	-36 22 57	209597	-0 8	0 20	B9	8 90	8 46	156	99	26	567		

PAGE, CARRUTHERS AND HILL

SGR NORMAL RA 10 34 DEC -30 24

OBJECT NO	X	Y	R A	DEC	SAO NO	Δ R A	Δ DEC	SPEC TYPE	V MAG	P MAG	PEAK DEN	NO OF POINTS	BG	DENSITY VOLUME	EXP & FILTER	DEN VOL/ EXP
101	801	231	17 59	6 -33 53 24	209631	-0 18	0 1	B5	7 55	6 98	176	48	97	2043	1 0L	2043 000
102	795	225	17 59	7 -33 53 6	209631	-0 17	0 19	B5	7 55	6 98	187	59	24	3908	3 0C	1302 667
103	803	222	17 59	8 -33 54 2	209631	-0 16	-0 36	B5	7 55	6 98	394	123	44	14514	10 0C	1451 400
104	872	263	17 59	20 -35 36 52	2096237	0 24	-2 31	A	9 97	9 60	58	16	23	425 H	3 0C	141 667
105	872	263	17 59	20 -35 36 52	209634	-0 11	-5 1	B9	9 06	8 84	68	16	23	425 H	3 0C	141 667
106	890	260	17 59	24 -35 36 35	209634	-0 7	-4 44	B9	9 06	8 84	157	77	42	3936 H	10 0C	393 600
107	880	260	17 59	24 -35 36 35	209637	-0 20	0 19	B9	8 30	8 02	157	77	42	3936 H	10 0C	393 600
108	599	148	17 59	34 -29 22 1	185155	-0 2	0 4	B8	7 86	00	153	27	103	880	1 0L	880 000
109	594	142	17 59	38 -29 23 22	185155	0 2	-1 17	B8	7 86	00	145	39	25	2136 H	3 0C	712 000
110	602	139	17 59	39 -29 23 13	185155	0 3	-1 8	B8	7 86	00	342	104	47	9394 H	10 0C	939 400
111	629	151	17 59	41 -30 1 21	NO						75	10	46	251	10 0C	25 100
112	599	149	17 59	59 -29 32 1	185166	0 2	-0 9	B5	8 90	00	54	7	27	163 L	3 0C	54 333
113	599	149	17 59	59 -29 32 1	185170	-0 4	-4 2	A0	9 10	00	54	7	27	163 L	3 0C	54 333
114	466	88	18 0 2	-26 17 28	185180	-0 15	1 50	A0	7 50	90	122	73	48	2769	10 0C	276 800
115	607	146	18 0 3	-29 33 29	185166	0 5	-1 38	B5	8 90	00	141	48	51	1998	10 0C	199 800
116	534	117	18 0 6	-27 53 36	185171	0 3	-1 42	A0	9 00	00	99	25	58	676	10 0C	67 600
117	519	113	18 0 17	-27 34 22	185182	-0 2	-1 11	B9	8 80	00	79	5	27	1237L	10 0C	12 300
118	481	104	18 0 18	-26 51 24	185189	-0 14	0 52	B5	7 90	00	51	5	22	110 L	3 0C	36 667
119	489	101	18 0 18	-26 51 15	185189	-0 15	1 1	B5	7 90	00	117	37	45	1585 L	10 0C	158 500
120	468	90	18 0 20	-26 17 51	185189	0 3	1 27	A0	7 50	00	51	5	25	116 L	3 0C	38 667
121	852	260	18 0 30	-35 7 18	209653	-0 20	-0 45	A0	8 15	8 00	85	27	47	763 L	10 0C	634 500
122	507	112	18 0 34	-27 18 22	185200	-0 9	0 2	B3	9 00	00	207	103	6	134 L	1 0L	134 000
123	504	122	18 0 35	-27 17 37	185200	-0 7	0 48	B3	9 00	00	124	6	100	634 L	10 0C	634 500
124	499	115	18 0 37	-27 17 22	185200	-0 6	1 2	B3	9 00	00	77	20	27	661 L	3 0C	220 333
125	569	138	18 0 38	-28 45 12	185192	0 1	-0 58	A0	8 20	00	85	17	44	519 L	10 0C	51 900
126	525	121	18 0 40	-27 44 35	185201	-0 4	-0 37	A0	9 20	00	105	40	53	1185 H	10 0C	118 500
127	375	62	18 0 42	-24 17 52	185204	-0 6	3 57	0	5 86	00	408	549	103	47938	1 0L	47938 000
128	375	62	18 0 42	-24 17 52	185207	-0 11	1 4	B0	7 25	00	408	549	103	47938	1 0L	47938 000
129	428	77	18 0 48	-25 29 11	NO						87	22	23	594	10 0C	59 400
130	369	56	18 0 51	-24 17 3	185204	0 2	4 46	0	5 86	00	470	727	281	98000	3 0C	32666 667
131	369	56	18 0 51	-24 17 3	185207	-0 2	1 53	B0	7 25	00	470	727	281	98000	3 0C	32666 667
132	377	55	18 0 57	-24 18 56	185204	0 9	2 53	0	5 86	00	468	396	79	191540	10 0C	19154 000
133	377	55	18 0 57	-24 18 56	185207	0 4	0 0	B0	7 25	00	468	396	79	191540	10 0C	19154 000
134	695	196	18 1 1	-31 40 38	209664	0 1	-1 44	B3	8 09	7 81	143	41	9	1338 L	10 0C	133 800
135	687	199	18 1 2	-31 39 41	209664	0 1	-0 47	B3	8 09	7 81	56	9	22	247 L	3 0C	82 333
136	500	122	18 1 3	-27 22 30	1852007	0 21	-4 5	B3	9 00	00	61	12	25	3407	3 0C	113 333
137	500	122	18 1 3	-27 22 30	185218	-0 11	0 59	B9	8 90	00	61	12	25	3407	3 0C	113 333
138	863	273	18 1 12	-35 25 44	2096757	-0 28	-0 38	A0	8 30	8 06	71	45	6	132 L	10 0C	13 200
139	330	42	18 1 13	-23 25 39	185219	-0 2	2 24	A2	9 60	00	56	5	21	148	3 0C	49 333
140	330	42	18 1 13	-23 25 39	185233	-0 26	2 11	B	9 10	00	56	5	21	148	3 0C	49 333
141	659	185	18 1 21	-30 53 40	209669	0 2	-1 19	B9	9 60	9 34	73	42	21	209 L	10 0C	20 900
142	730	215	18 1 21	-32 29 45							119	39	41	1655	10 0C	165 500
143	380	71	18 1 34	-24 38 24	185240	-0 19	2 41	B0	8 00	00	112	15	307	713	3 0C	237 667
144	556	145	18 1 35	-28 34 6	185234	-0 5	-1 39	B9	9 30	00	99	23	44	823	10 0C	82 300
145	332	50	18 1 42	-23 32 15	185233	0 3	-4 25	B	9 10	00	49	4	29	75	3 0C	25 000
146	332	50	18 1 42	-23 32 15	185235	-0 4	3 48	B8	8 60	00	49	4	29	75	3 0C	25 000
147	385	81	18 1 48	-24 39 55	185240	-0 6	1 11	B0	8 00	00	209	55	115	2557	1 0L	2557 000
148	380	75	18 1 49	-24 39 46	185240	-0 4	1 19	B0	8 00	00	312	64	297	7031	3 0C	2343 667
149	629	178	18 1 50	-30 15 32	209678	0 2	-1 40	A0	8 54	00	422	179	647	28029	10 0C	2802 900
150	387	72	18 1 53	-24 40 1	185240	-0 1	1 4	B0	8 00	00	422	179	647	28029	10 0C	2802 900
151	911	312	18 1 54	-36 34 51	209691?	-0 27	0 13	B8	7 30	00	123	20	91	507	1 0L	507 000
152	905	306	18 1 55	-36 34 35	209691	-0 26	0 28	B8	7 30	00	100	49	23	2090 H	3 0C	696 667
153	913	303	18 1 57	-36 35 22	209691?	-0 24	-0 18	B8	7 30	00	296	112	40	9939 H	10 0C	993 900
154	470	116	18 2 3	-26 36 26	185252	-0 14	1 39	B8	8 60	00	90	20	49	557 L	10 0C	55 700
155	517	135	18 2 3	-27 42 32	185249	-0 8	-0 27	B9	9 00	00	116	50	60	1840 H	10 0C	184 000
156	577	161	18 2 14	-29 5 59	185248	0 5	-0 25	B9	8 70	00	92	13	45	363 L	10 0C	36 300
157	339	66	18 2 16	-23 38 16	185235	0 31	-2 12	B8	8 60	00	143	42	100	1246	1 0L	1246 000
158	339	66	18 2 16	-23 38 16	185255	-0 10	4 57	B3	8 30	00	143	42	100	1246	1 0L	1246 000
159	524	141	18 2 17	-27 54 36	NO						120	14	287	845	3 0C	281 667
160	365	75	18 2 18	-24 23 38	185247	0 12	0 33	0	6 79	00	85	17	44	510	10 0C	51 000
161	585	157	18 2 19	-28 50 10	NO						132	10	507	577 L	10 0C	57 700
162	386	78	18 2 20	-24 41 8	1852402	0 26	-0 3	B3	8 00	00	140	71	29	3702 H	3 0C	1234 000
163	334	60	18 2 21	-23 39 46	185255	-0 5	3 27	B3	8 30	00	363	175	50	17391 H	10 0C	1739 100
164	342	58	18 2 22	-23 41 8	185255	-0 5	2 5	B3	8 30	00	91	23	47	713	10 0C	71 300
165	465	120	18 2 32	-26 33 38	185252	0 15	4 26	B3	8 60	00	96	29	48	1037?	10 0C	103 700
166	520	143	18 2 36	-27 50 53							112	29	25	1384	3 0C	461 333
167	475	131	18 2 39	-26 57 14	185264	-0 13	1 35	B3	8 60	00	132	12	98	326 L	1 0L	326 000
168	480	138	18 2 42	-26 57 57	185264	-0 9	0 53	B3	8 60	7 46	119	6	95	134 L	1 0L	134 000
169	803	274	18 2 42	-34 19 2	209711	-0 19	0 13	B8	7 98	00	284	66	47	5531	10 0C	553 100
170	482	129	18 2 42	-26 57 30	185264	-0 8	1 20	B3	8 60	00	284	66	47	4854 H	10 0C	485 400
171	806	265	18 2 44	-34 19 35	209711	-0 17	-0 19	B8	7 98	00	284	66	47	5531	10 0C	553 100
172	798	268	18 2 46	-34 20 22	209711	-0 15	-1 6	B8	8 76	7 46	86	23	23	909	3 0C	303 000
173	680	211	18 2 48	-31 31 3	209703	-0 2	-1 22	B8	8 92	8 69	157	61	40	3073	10 0C	307 300
174	680	211	18 2 48	-31 31 3	209704	-0 2	3 33	B8	8 10	00	159	58	100	1923 H	1 0L	1923 000
175	358	83	18 2 49	-24 9 14	185268	-0 12	2 50	B8	8 10	00	159	58	100	1923 H	1 0L	1923 000
176	805	273	18 2 50	-34 31 31	209714	-0 17	-1 3	B8	9 24	9 05	56	9	25	230	3 0C	76 667
177	806	273	18 2 50	-34 31 31	209718	-0 21	-0 17	B8	9 24	9 05	56	9	25	230	3 0C	76 667
178	581	177	18 2 51	-29 25 46	185265	-0 1	0 28	B5	8 50	00	186	35	25	2263 H	3 0C	754 333
179	814	270	18 2													

NRL REPORT 8173

SCR NORMAL RA 18 34 DEC -30 24

OBJECT NO	X	Y	R	A	DEC	SAO NO	Δ R A	Δ DEC	SPEC TYPE	V MAG	P MAG	PEAK DEN	NO OF POINTS	BG	DENSITY VOLUME	EXP & FILTER	DEN VOL/ EXP	
201	561	179	18	3	45	-29 3 26	185288/	0 0	1 26	B9	7 90	00	69	18	23	550	3 0C	186 667
202	569	177	18	3	48	-29 4 50	186287/	0 11	-2 16	A0	8 10	00	174	61	43	3260	10 0C	326 000
203	569	177	18	3	48	-29 4 50	186288/	0 4	0 2	B9	7 90	00	174	61	43	3260	10 0C	326 000
204	440	123	18	3	49	-26 6 55	NO						159	53	47	2710	10 0C	271 000
205	432	126	18	3	52	-26 5 59	NO						65	15	25	465	3 0C	155 000
206	683	239	18	4	10	-31 47 7							129	7	95	199?	1 0L	199 000
207	629	212	18	4	10	-30 40 22	209733	0 1	-0 9	B9	8 89	8 50	56	9	22	243	3 0C	81 000
208	637	210	18	4	14	-30 41 45	209733	0 6	-1 31	B9	8 89	8 50	128	30	41	1363	10 0C	136 300
209	823	296	18	4	15	-35 1 39	209746	-0 18	0 8	B8	8 66	8 22	49	7	23	160	3 0C	53 333
210	831	293	18	4	16	-35 2 27	209746	-0 17	-0 41	B8	8 66	8 22	116	38	40	1665	10 0C	166 500
211	463	141	18	4	17	-26 41 38	186310	-0 12	0 21	A0	8 90	00	67	5	44	108 L	10 0C	10 800
212	394	109	18	4	19	-25 6 31	186306	-0 3	0 11	B	8 40	00	69	23	47	664	10 0C	66 400
213	415	120	18	4	27	-25 35 23	186315	-0 4	0 40	B9	8 50	00	113	25	51	976	10 0C	97 600
214	304	71	18	4	36	-23 3 53	186324	-0 7	2 52	B9	8 40	00	112	8	50?	386 L	10 0C	38 600
215	597	195	18	4	43	-29 35 20	NO						73	10	41	260	10 0C	26 000
216	295	68	18	4	44	-22 52 38	186320/	0 4	1 39	B2	9 10	00	141	8	53?	588	10 0C	58 800
217	295	68	18	4	44	-22 52 38	186325/	-0 4	0 36	B3	8 50	00	141	8	53?	588	10 0C	58 800
218	286	70	18	4	46	-22 50 11	186320/	0 6	4 6	B2	9 10	00	66	31	23	982	3 0C	327 333
219	286	70	18	4	46	-22 50 11	186325/	-0 2	3 3	B3	8 50	00	66	31	23	982	3 0C	327 333
220	798	291	18	4	47	-34 32 2	209755	-0 17	-0 55	B8	8 20	7 87	48	6	24	133 L	3 0C	44 333
221	693	324	18	4	48	-36 20 13	209758?	-0 21	-0 30	A0	9 30	8 70	92	34	37	1222	H 10 0C	122 200
222	479	154	18	4	49	-27 7 21	185327	-0 3	0 42	A0	9 30	00	81	17	41	518	10 0C	51 800
223	479	161	18	4	50	-27 17 7	185331	-0 7	2 14	B9	8 60	00	53	5	24	132	3 0C	44 000
224	806	288	18	4	50	-34 31 41	209795	-0 14	-0 35	B8	8 20	7 87	124	59	44	2668	10 0C	266 800
225	487	158	18	4	53	-27 18 30	185331	-0 5	0 51	B9	8 60	00	122	26	45	1157	10 0C	115 700
226	402	121	18	4	57	-25 21 54	185332	-0 5	-0 28	B2	8 50	00	127	51	44	2133	L 10 0C	213 300
227	394	124	18	5	1	-25 21 1	185332	-0 1	0 26	B2	8 50	00	54	10	24	250 L	3 0C	83 333
228	657	230	18	5	11	-31 15 6	209767?	-0 29	0 20	B9	9 38	9 28	70	12	41	281 L	10 0C	28 100
229	465	157	18	5	28	-26 51 58	186345	-0 13	0 32	B5	9 00	00	75	9	41	247 L	10 0C	24 700
230	446	159	18	5	34	-26 28 47							131	9	94	263?	1 0L	263 000
231	450	161	18	5	35	-26 34 21							143	15	96	499?	1 0L	499 000
232	899	348	18	5	38	-36 40 11	209779	-0 21	0 44	B0	6 58	00	180	64	98	3032	1 0L	3032 000
233	893	341	18	5	39	-36 39 55	209779	-0 20	0 59	B0	6 58	00	223	82	23	626?	3 0C	2089 000
234	401	141	18	5	41	-25 27 36	186350	-0 7	1 18	B8	6 27	00	180	38	92	1743	1 0L	1743 000
235	644	237	18	5	44	-31 10 15	209767?	0 5	5 10	B9	9 36	9 29	59	9	21	257	3 0C	85 667
236	644	237	18	5	44	-31 10 15	209771	-0 1	-0 8	A0	7 69	00	59	9	21	257	3 0C	85 667
237	404	132	18	5	44	-25 28 44	186350	-0 4	0 10	B8	6 27	00	395	115	47	1313?	10 0C	1313 400
238	902	339	18	5	44	-36 42 15	209779	-0 15	-1 21	B0	6 58	00	414	149	40	2105?	10 0C	2105 500
239	771	290	18	5	46	-34 1 56	209777	-0 9	-0 54	B8	9 25	9 02	53	8	23	200	3 0C	66 667
240	779	287	18	5	46	-34 2 44	209777	-0 9	-1 43	B8	9 25	9 02	128	31	46	1409	10 0C	140 900
241	396	135	18	5	48	-25 27 51	186350	-0 1	1 3	B8	6 27	00	256	55	25	4360	H 10 0C	436 000
242	313	92	18	5	49	-23 24 58	186350	-0 16	1 43	B9	9 30	00	105	131	48	4542	H 10 0C	454 200
243	652	235	18	5	49	-31 11 36	209767?	0 9	3 49	B9	9 38	9 29	134	52	39	2234	H 10 0C	223 400
244	652	235	18	5	49	-31 11 36	209771	0 4	-1 28	A0	7 69	00	134	52	39	2234	H 10 0C	223 400
245	329	109	18	6	4	-23 58 19	186366	-0 11	1 33	B0	7 48	00	258	78	46	5918	3 0C	1972 667
246	327	107	18	6	5	-23 59 36	186366	-0 10	0 15	B0	7 48	00	411	130	46	22745	10 0C	2274 500
247	282	91	18	6	6	-23 44 6	186365	-0 5	3 6	B8	8 70	00	92	41	49	1191	10 0C	119 100
248	334	116	18	6	9	-23 57 44	186366	-0 5	2 8	B0	7 48	00	180	46	93	2142	1 0L	2142 000
249	366	123	18	6	20	-24 11 2	186374	-0 8	-0 37	B8	8 10	00	60	22	45	605	10 0C	60 500
250	813	319	18	6	22	-34 53 50	209789	-0 16	-1 7	B5	9 11	8 79	88	8	31	89	1 0L	89 000
251	515	187	18	6	22	-28 6 44	NO						88	8	31	190	10 0C	190 000
252	807	313	18	6	23	-34 53 32	209789	-0 15	-0 49	B5	9 11	8 79	88	17	22	546	3 0C	182 000
253	815	310	18	6	26	-34 53 9	209789	-0 11	-0 26	B5	9 11	8 79	88	17	22	546	3 0C	182 000
254	835	326	18	6	28	-35 31 34	209792?	-0 12	-0 5	A0	8 88	8 75	45	4	23	302 L	3 0C	302 400
255	835	326	18	6	28	-35 31 34	209797?	-0 16	-0 53	B8	8 68	8 58	45	4	23	96 L	3 0C	28 667
256	436	156	18	6	29	-26 20 58	186376?	0 5	0 14	A0	9 00	00	82	18	38	570	10 0C	57 000
257	844	323	18	6	31	-35 31 10	209795?	-0 13	-0 29	B8	8 88	8 75	105	35	41	1350	10 0C	135 000
258	844	323	18	6	31	-35 31 10	209797	-0 13	-0 29	B8	8 88	8 58	105	35	41	1350	10 0C	135 000
259	320	105	18	6	34	-23 39 30	186379?	-0 10	1 57	B	9 10	00	399	177	48	18045	H 10 0C	1804 500
260	320	105	18	6	34	-23 39 30	186380?	-0 10	-0 9	B	8 70	00	399	177	48	18045	H 10 0C	1804 500
261	320	105	18	6	34	-23 39 30	186381?	-0 12	0 27	B9	9 40	00	399	177	48	18045	H 10 0C	1804 500
262	320	105	18	6	34	-23 39 30	186385/	-0 15	-2 1	B5	9 10	00	399	177	48	18045	H 10 0C	1804 500
263	702	271	18	6	36	-32 34 26	209791	-0 3	-0 36	B8	9 14	8 90	51	6	22	148	3 0C	49 333
264	710	268	18	6	36	-32 35 16	209791	-0 3	-1 26	B9	9 14	8 90	114	32	40	1251	10 0C	125 100
265	321	120	18	6	49	-23 45 11	186379?	0 5	-3 44	B	9 10	00	162	114	90	4664	1 0L	4664 000
266	321	120	18	6	49	-23 45 11	186389	-0 15	1 50	B5	7 64	00	162	114	90	4664	1 0L	4664 000
267	323	111	18	6	53	-23 45 10	186379?	0 10	-3 43	B	9 10	00	397	325	49	29492	H 10 0C	2949 200
268	323	111	18	6	53	-23 45 10	186389	-0 11	1 51	B5	7 64	00	397	325	49	29492	H 10 0C	2949 200
269	798	309	18	6	56	-34 34 9	209800	-0 16	-1 11	A0	8 93	8 68	64	5	39	1152?	10 0C	11 500
270	315	114	18	6	57	-23 44 21	186379?	0 14	-2 53	B	9 10	00	189	152	26	10568	3 0C	3522 667
271	315	114	18	6	57	-23 44 21	186381?	0 11	-4 23	B9	9 40	00	189	152	26	10568	3 0C	3522 667
272	315	114	18	6	57	-23 44 21	186389	-0 7	2 40	B5	7 64	00	189	152	26	10568	H 3 0C	3522 667
273	590	228	18	7	18	-29 55 29	186397	0 1	-0 26	B9	8 80	00	93	18	40	594	10 0C	59 400
274	352	130	18	7	19	-24 27 27	186402	-0 7	0 26	B8	9 60	00	77	13	41	375	10 0C	37 500
275	320	122	18	7	20	-23 54 23	186406	-0 9	1 25	B5	8 80	00						

PAGE, CARRUTHERS AND HILL

SGR NORMAL RA 18 34 DEC -30 24

OBJECT NO	X	Y	R A	DEC	SAO NO	Δ R A	Δ DEC	SPEC TYPE	V MAG	P MAG	PEAK DEN	NO OF POINTS	BG	DENSITY VOLUME	EXP & FILTER	DEN VOL/ EXP
301	769	316	18 8 41	-34 6 30	209941	-0 7	-1 36	B8	7 11	00	369	90	46	9103 H	10 0C	910 308
302	532	229	18 8 44	-28 54 18	186444	-0 4	0 32	A0	6 38	00	108	18	23	820 L	3 0C	273 333
303	318	134	18 8 45	-23 50 55	NO						60	4	29	83	10 0C	8 300
304	561	241	18 8 47	-29 33 44	186445	-0 2	1 18	B9	8 00	00	65	9	23	262	3 0C	87 333
305	539	227	18 8 49	-28 54 26	186444	0 2	0 25	A0	6 38	00	230	47	28	3507 L	10 0C	350 700
306	537	236	18 8 50	-28 53 54	186444	0 3	0 57	A0	6 38	00	126	7	95	183 L	1 0L	183 000
307	569	238	18 8 51	-29 35 1	186445	0 2	0 0	B9	8 00	00	131	30	41	1343	16-0C	134 308
308	430	184	18 8 53	-26 24 1	186449	-0 5	0 34	A0	8 50	00	65	5	37	125 L	10 0C	12 500
309	474	204	18 9 0	-27 25 8							82	12	42	3527	10 0C	35 208
310	878	366	18 9 10	-36 29 32	209951	-0 10	0 2	B9	8 26	8 03	82	22	40	646 L	10 0C	64 600
311	460	203	18 9 24	-27 8 18	186462	-0 7	0 59	B9	9 20	00	102	20	42	7627	10 0C	76 200
312	505	231	18 9 25	-28 13 42	186471	-0 20	3 54	A0	9 20	00	142	17	91	552 H	1 0L	552 000
313	505	231	18 9 25	-28 13 42	1864727	-0 25	6 9	A0	9 20	00	142	17	91	552 H	1 0L	552 000
314	865	364	18 9 25	-36 14 45	NO						58	4	36	84	10 0C	8 400
315	500	225	18 9 26	-28 13 24	186471	-0 19	4 12	A0	9 20	00	117	22	22	1036 H	3 0C	345 333
316	508	222	18 9 29	-28 14 40	186471	-0 16	2 56	A0	9 20	00	251	55	39	4153 H	10 0C	415 300
317	653	280	18 9 37	-31 34 56	NO						75	12	37	348	10 0C	34 800
318	684	293	18 9 42	-32 17 10	20995627	-0 14	6 59	B8	9 32	9 14	69	8	43	184 L	10 0C	18 400
319	689	297	18 9 54	-32 24 51	2099562	-0 2	-0 42	B8	9 32	9 14	100	26	42	878	10 0C	87 800
320	460	212	18 10 4	-27 13 3	186481	-0 7	0 43	B9	8 20	00	239	49	40	3584 H	10 0C	358 400
321	452	215	18 10 6	-27 12 14	186481	-0 5	1 31	B9	8 20	00	110	21	23	921 H	3 0C	307 000
322	457	221	18 10 7	-27 11 21	186481	-0 4	2 25	B9	8 20	00	124	7	93	180 L	1 0L	180 000
323	554	248	18 10 8	-29 22 41	186489	-0 0	-0 40	B9	9 20	00	68	7	36	193 L	10 0C	19 300
324	261	127	18 10 11	-22 42 43	186489	-0 12	1 12	B2	8 60	00	98	39	41	1423 L	10 0C	142 300
325	801	346	18 10 11	-34 55 28	209971	-0 7	-0 28	B8	9 22	8 91	72	7	36	1887L	10 0C	18 800
326	666	303	18 10 19	-31 59 37	209973	-0 3	-0 43	B8	6 64	00	165	21	93	851	1 0L	851 000
327	660	297	18 10 23	-31 58 7	209973	0 1	0 48	B8	6 64	00	171	32	22	2034	3 0C	678 000
328	883	389	18 10 26	-36 53 50	209983	-0 16	-0 37	B5	8 36	8 00	59	18	22	501	3 0C	167 000
329	668	295	18 10 29	-31 59 20	209973	0 6	-0 26	B8	6 64	00	344	75	39	7490	10 0C	749 000
330	891	386	18 10 30	-36 53 18	209983	-0 11	-0 5	B5	8 36	8 00	154	80	36	4278	10 0C	427 800
331	769	347	18 10 31	-34 19 15	209985	-0 12	-1 0	B8	7 85	7 37	116	6	91	132 L	1 0L	132 000
332	956	419	18 10 31	-38 27 17	209980	-0 9	-1 39	A0	7 14	00	65	29	20	900	3 0C	300 000
333	716	322	18 10 33	-33 15 48	209988	-0 12	-0 51	B9	8 21	7 82	60	7	24	200	3 0C	66 657
334	772	338	18 10 33	-34 19 39	209985	-0 11	-1 24	B8	7 85	7 37	216	43	41	3171	10 0C	317 100
335	764	341	18 10 35	-34 20 33	209985	-0 8	-2 18	B8	7 85	7 37	86	19	23	715	3 0C	238 333
336	926	401	18 10 36	-37 38 55	209976/	0 10	1 57	B9	9 70	9 37	77	22	38	6207L	10 0C	62 000
337	926	401	18 10 36	-37 38 55	209986/	-0 9	-0 45	A0	7 70	7 42	77	22	38	6207L	10 0C	62 000
338	964	416	18 10 36	-38 26 41	209980	-0 4	-1 4	A0	7 14	00	184	81	36	5096 H	10 0C	509 600
339	724	320	18 10 39	-33 17 0	209988	-0 6	-2 3	B9	8 21	7 82	134	19	38	1055	10 0C	105 500
340	366	189	18 10 52	-25 19 26	186506	-0 11	0 8	B5	8 50	00	81	19	22	706	3 0C	235 333
341	371	195	18 10 53	-25 18 29	186506	-0 10	1 5	B5	8 50	00	112	5	96	121 L	1 0L	121 000
342	466	235	18 10 55	-27 28 53	186505	-0 7	2 11	B9	7 50	00	142	17	91	546	1 0L	546 000
343	373	187	18 10 57	-25 18 19	186506	-0 6	1 15	B5	8 50	00	196	47	37	3158	10 0C	315 800
344	461	229	18 10 59	-27 30 13	186505	-0 3	0 51	B9	7 50	00	143	23	23	1267	3 0C	422 333
345	469	226	18 10 59	-27 29 50	186505	-0 3	1 14	B9	7 50	00	286	51	41	4605 H	10 0C	460 500
346	709	327	18 11 16	-33 9 54	209900	-0 9	-0 31	B2	8 30	7 89	182	32	23	2076	3 0C	632 000
347	717	324	18 11 16	-33 10 38	209900	-0 9	-1 15	B2	8 30	7 89	345	94	39	8548	10 0C	854 800
348	518	255	18 11 19	-28 49 55	186512	-0 4	1 21	B8	8 00	00	97	16	26	582	3 0C	194 000
349	523	261	18 11 20	-28 49 4	186512	-0 3	2 13	B8	8 00	00	130	7	95	191 L	1 0L	191 000
350	526	252	18 11 22	-28 51 9	186512	-0 1	0 7	B8	8 00	00	196	65	51	2964	10 0C	296 400
351	714	334	18 11 23	-33 9 31	209900	-0 2	-0 8	B2	8 30	7 89	169	23	10	1035	1 0L	1035 000
352	505	245	18 11 24	-28 21 44	186514	-0 3	0 64	B8	9 00	00	123	20	48	929	10 0C	92 900
353	556	264	18 11 25	-29 31 47	186511/	0 2	1 50	A0	9 30	00	72	9	35	250	10 0C	25 000
354	556	264	18 11 25	-29 31 47	186513/	-0 0	1 19	A0	9 10	00	72	9	39	250	10 0C	25 000
355	497	248	18 11 26	-28 20 57	186514	-0 1	1 41	B8	9 00	00	57	7	24	178	3 0C	59 333
356	511	248	18 11 28	-28 30 7	186524	-0 14	-1 19	B9	9 20	00	88	11	53	208	10 0C	20 800
357	216	125	18 11 30	-21 50 43	NO						59	6	36	133	10 0C	13 300
358	637	297	18 11 39	-31 23 26	209904	-0 1	0 36	B8	8 69	8 26	101	22	36	838	10 0C	83 800
359	260	157	18 11 41	-22 52 10							112	5	81	1257	1 0L	125 000
360	234	143	18 11 51	-22 26 20	186539	-0 13	1 24	B5	9 00	00	59	20	23	545	3 0C	181 657
361	242	141	18 11 51	-22 27 27	186539	-0 13	0 16	B5	9 00	00	135	70	39	3314	10 0C	331 400
362	311	172	18 11 52	-24 0 20	186534	-0 10	0 32	B8	8 38	00	71	18	36	494	10 0C	49 400
363	949	424	18 11 55	-38 14 16	NO						64	15	33	397	10 0C	39 700
364	772	360	18 11 60	-34 38 7	209916	-0 8	-1 27	B8	6 85	00	130	29	21	1529	3 0C	569 657
365	777	366	18 12 1	-34 37 16	209916	-0 7	-0 36	B8	6 85	00	130	14	89	429	1 0L	429 000
366	780	357	18 12 1	-34 38 48	209916	-0 7	-2 8	B8	6 85	00	317	67	37	6357	10 0C	635 700
367	862	399	18 12 9	-36 35 16	209922	-0 18	0 11	B3	7 00	00	245	72	22	5683 H	3 0C	1894 333
368	852	309	18 12 11	-31 47 38	2099067	0 31	-2 7	A0	9 66	9 58	91	18	36	664	10 0C	66 400
369	867	406	18 12 16	-36 34 50	209922	-0 11	0 37	B3	7 00	00	195	53	86	2820	1 0L	2820 000
370	876	397	18 12 17	-36 36 20	209922	-0 11	-0 53	B3	7 00	00	410	158	37	18503	10 0C	1850 300
371	703	336	18 12 19	-33 8 58	209919	-0 4	-0 28	B9	6 87	00	90	17	21	682	3 0C	227 333
372	711	333	18 12 19	-33 7 41	209919	-0 4	-1 11	B9	6 87	00	221	62	37	3687	10 0C	368 700
373	826	379	18 12 19	-35 39 9	209923	-0 9	0 7	A0	7 40	7 21	60	5	36	112	10 0C	11 200
374	708	342	18 12 20	-33 6 8	209919	-0 3	0 22	B9	6 87	00	113	4	89	92	1 0L	92 000
375	878	401	18 12 24	-36 46 16	209924	-0 5	0 39	B8	8 25	7 96	76	9	38	2677L	10 0C	26 700
376	488	251	18 12 25	-28 3 59	186549	-0 4	1 50	B8	8 50	00	151	10	22	2223 H	10 0C	222 300
377	480	254	18 12 26	-28 4 23	186549	-0 4	1 25	B8	8 50	00	71	10	89	330	3 0C	110 000
378	620	315	18 12 52	-31 10 10	209933	-0 5	0 27	B5	7 60	00	122	18	21	209	1 0L	209 000
379	614	309	18 12 53	-31 9 50	209933</											

SGR NORMAL RA 18 34 DEC -30 24

OBJECT NO	X	Y	R	A	DEC	SAO NO	Δ R	Δ DEC	SPEC TYPE	V MAG	P MAG	PEAK DEN	NO OF POINTS	BG	DENSITY VOLUME	EXP & FILTER	DEN VOL/ EXP	
401	698	346	16	13	52	-32 59 0	209952	-0 8	-1 32	BB	8 32	7 90	180	28	38	1973	10 OC	197 300
402	695	355	16	13	53	-32 57 29	209952	-0 7	-0 0	BB	8 32	7 90	117	5	90	118	1 OL	118 000
403	816	393	16	13	59	-35 34 59	209954	-0 4	-0 24	BB	9 39	9 04	75	15	36	451 L	10 OC	45 100
404	616	322	16	13	60	-31 18 0	209953	-0 2	0 58	BB	7 37	00	105	18	21	788	3 OC	262 657
405	275	184	18	14	1	-23 24 44	186597	-0 20	-0 17	BB	9 40	00	65	4	36	101 L	10 OC	10 100
406	624	320	18	14	5	-31 19 10	209953	0 3	-0 12	BB	7 37	00	218	65	36	3915	10 OC	391 500
407	621	329	18	14	6	-31 17 38	209953	0 5	1 20	BB	7 37	00	118	6	91	140 L	1 OL	140 000
408	747	378	18	14	6	-34 8 21	209959/	-0 11	-0 46	BB	6 10	00	343	62	89	5494	1 OL	5494 000
409	747	378	18	14	6	-34 8 21	209961/	-0 16	-1 57	AO	8 70	8 26	343	62	89	5494	1 OL	5494 000
410	741	372	18	14	13	-34 8 28	209959/	-0 4	-0 53	BB	6 10	00	362	84	26	7855	3 OC	2655 000
411	741	372	18	14	13	-34 8 28	209961/	-0 9	-2 4	AO	8 70	8 26	362	84	26	7855	3 OC	2655 000
412	749	369	18	14	13	-34 8 28	209959/	-0 4	-1 32	BB	6 10	00	416	182	42	21345	10 OC	2134 600
413	749	369	18	14	13	-34 8 28	209961/	-0 9	-2 44	AO	8 70	8 26	416	182	42	21345	10 OC	2134 600
414	714	388	18	14	26	-33 25 37	209965	-0 8	-0 41	BB	7 02	00	129	12	91	339 L	1 OL	339 000
415	472	269	18	14	26	-27 53 49	186598/	-0 0	-0 43	BB	8 20	00	189	55	38	3227	10 OC	322 700
416	472	269	18	14	26	-27 53 49	186601/	-0 6	1 14	BB	8 60	00	189	55	38	3227	10 OC	322 700
417	524	288	18	14	26	-29 5 4	NO						88	13	39	458	10 OC	45 800
418	708	362	18	14	27	-33 25 17	209965	-0 7	-0 20	BB	7 02	00	123	21	22	1676	3 OC	358 657
419	573	305	18	14	27	-30 12 25	209964	-0 3	0 8	BB	9 52	9 33	104	24	36	923	10 OC	92 300
420	716	359	18	14	27	-33 25 57	209965	-0 7	-1 1	BB	7 02	00	294	58	36	4971	10 OC	497 100
421	200	165	18	14	28	-21 49 43	NO						109	10	76	269	1 OL	269 000
422	464	272	18	14	28	-27 53 5	186598/	0 2	0 0	BB	8 20	00	87	18	21	699	3 OC	233 000
423	464	272	18	14	28	-27 53 5	186601/	-0 4	1 57	BB	8 60	00	87	18	21	699	3 OC	233 000
424	469	278	18	14	29	-27 52 13	186598/	-0 3	0 52	BB	8 20	00	115	6	87	142 L	1 OL	142 000
425	469	278	18	14	29	-27 52 13	186601/	-0 2	0 49	BB	8 60	00	115	6	87	142 L	1 OL	142 000
426	565	309	18	14	29	-30 11 41	209964	-0 10	-0 28	BB	9 52	9 33	51	4	21	98	3 OC	32 667
427	268	188	18	14	35	-23 18 17	186608	-0 6	0 11	BB	8 00	00	167	76	37	3948	10 OC	394 800
428	260	191	18	14	39	-23 17 37	186608	-0 6	0 0	BB	8 00	00	70	21	22	667	3 OC	222 333
429	850	415	18	14	43	-36 22 22	209970	-0 10	0 4	BB	9 09	8 53	167	48	36	2777	10 OC	277 700
430	531	294	18	14	44	-29 15 58	186607	-0 1	0 40	BB	8 50	00	146	30	39	1571	10 OC	157 100
431	842	418	18	14	45	-36 23 24	209970	-0 8	-0 57	BB	9 09	8 53	66	14	22	432	3 OC	144 000
432	523	297	18	14	46	-29 15 14	186607	-0 1	1 23	BB	8 50	00	71	11	21	371	3 OC	123 667
433	550	303	18	14	55	-29 46 20	186615	-0 2	1 37	BB	8 70	00	100	22	36	794 L	10 OC	79 400
434	731	377	18	14	57	-33 48 28	209973	-0 3	-0 85	BB	9 01	8 61	77	15	36	454 L	10 OC	45 400
435	764	390	18	15	0	-34 43 2	209978	-0 10	-0 38	BB	6 86	00	162	32	23	1850	3 OC	616 667
436	393	247	18	15	3	-26 9 39	NO						65	6	36	149	10 OC	14 900
437	770	397	18	15	3	-34 43 48	209978	-0 6	-1 24	BB	6 86	00	146	20	89	712	1 OL	712 000
438	347	229	18	15	6	-25 7 9	186614	0 10	-1 5	AO	8 90	00	60	5	34	115 L	10 OC	11 500
439	772	388	18	15	7	-34 44 6	209978	-0 4	-1 43	BB	6 86	00	336	66	43	6665	10 OC	666 500
440	759	386	18	15	23	-34 27 59	NO						72	10	39	258	10 OC	25 800
441	231	183	18	15	25	-22 33 32	186627	-0 11	0 33	AO	8 80	00	67	20	34	526	10 OC	52 600
442	314	220	18	15	28	-24 25 4	186620/	0 17	-2 31	BB	9 10	00	61	9	33	213 L	10 OC	21 300
443	314	220	18	15	28	-24 25 4	186630/	-0 8	-0 26	BB	9 10	00	61	9	33	213 L	10 OC	21 300
444	400	289	18	15	49	-28 12 44	186635	-0 5	1 28	BB	9 10	00	109	22	37	926	10 OC	92 600
445	472	292	18	15	51	-28 12 1	186635	-0 2	2 10	BB	9 10	00	52	4	21	111	3 OC	37 000
446	514	305	18	16	13	-29 0 17	186642	-0 1	0 60	AO	8 50	00	123	27	36	1260	10 OC	126 000
447	506	308	18	16	14	-28 59 35	186642	0 1	1 42	AO	8 50	00	60	8	22	227	3 OC	75 667
448	367	252	18	16	14	-25 40 49	NO						71	11	34	320	10 OC	32 000
449	488	299	18	16	27	-28 26 31	186652	-0 5	1 22	BB	9 10	00	91	21	35	701	10 OC	70 100
450	820	428	18	16	29	-35 3 23	2099952	-0 9	-1 34	AS	9 15	9 26	72	18	21	617	3 OC	205 667
451	820	428	18	16	29	-35 3 23	209995	-0 11	0 7	BB	8 67	8 26	72	18	21	617	3 OC	205 667
452	189	180	18	16	36	-21 45 33	186659	-0 14	-0 13	AO	9 20	00	54	5	32	104 L	10 OC	10 400
453	828	426	18	16	36	-36 4 23	209995/	-0 2	-2 34	AS	9 15	9 26	185	52	34	3269	10 OC	326 900
454	828	426	18	16	36	-36 4 23	209996/	-0 4	-0 54	BB	8 67	8 26	185	52	34	3269	10 OC	326 900
455	762	407	18	16	42	-34 48 15	210002	-0 7	-0 68	BB	7 81	7 35	88	20	21	737	3 OC	245 667
456	767	414	18	16	43	-34 47 24	210002	-0 6	0 25	BB	7 81	7 35	115	8	87	190 L	1 OL	190 000
457	317	238	18	16	46	-24 36 60	186661	-0 8	0 16	BB	9 60	00	69	14	33	381	10 OC	38 100
458	770	405	18	16	48	-34 49 17	210002	-0 1	-1 28	BB	7 81	7 35	216	51	35	3431	10 OC	343 100
459	800	417	18	16	48	-35 29 17	210005	-0 8	-2 13	BB	6 72	00	355	90	35	9149	10 OC	914 900
460	791	420	18	16	49	-35 27 33	210005	-0 7	-0 28	BB	6 72	00	172	39	21	2469	3 OC	823 000
461	959	479	18	16	49	-38 49 28	209999	0 6	0 34	BB	9 60	9 29	62	11	34	268	10 OC	26 800
462	652	368	18	16	52	-32 21 35	210001/	0 4	1 48	BB	9 39	9 19	78	18	24	595	3 OC	198 333
463	652	368	18	16	52	-32 21 35	210003/	0 2	0 15	BB	8 90	8 56	78	18	24	595	3 OC	198 333
464	652	368	18	16	52	-32 21 35	210004/	-0 3	2 12	BB	8 77	8 56	78	18	24	595	3 OC	198 333
465	652	368	18	16	52	-32 21 35	210009/	-0 9	0 24	BB	8 29	7 89	78	18	24	595	3 OC	198 333
466	652	368	18	16	52	-32 21 35	210015?	-0 27	0 52	AZ	8 46	8 39	78	18	24	595	3 OC	198 333
467	660	365	18	16	52	-32 22 15	210001/	0 4	1 9	BB	9 39	9 15	197	55	42	3247	10 OC	324 700
468	660	365	18	16	52	-32 22 15	210003/	0 1	-0 24	BB	8 90	8 56	197	55	42	3247	10 OC	324 700
469	660	365	18	16	52	-32 22 15	210004/	-0 4	1 33	BB	8 77	8 56	197	55	42	3247	10 OC	324 700
470	660	365	18	16	52	-32 22 15	210009/	-0 9	-0 15	BB	8 29	7 89	197	55	42	3247	10 OC	324 700
471	779	410	18	16	52	-35 1 36	210008	-0 8	-1 32	BB	9 42	9 03	87	16	40	508	10 OC	50 800
472	797	427	18	16	53	-35 28 18	210005	-0 2	-1 13	BB	9 72	00	153	27	85	1083	1 OL	1083 000
473	770	413	18	16	53	-34 59 51	210008	-0 7	0 14	BB	9 42	9 03	62	16	22	468	3 OC	153 333
474	332	246	18	16	56	-24 57 34	186665	-0 10	0 24	BB	9 00	00	66	9	32	246 L	10 OC	24 600
475	353	262	18	17	31	-25 29 48	186679	-0 6	-0 7	BB	8 90							

PAGE, CARRUTHERS AND HILL

SGR NORMAL RA 18 34 DEC -30 24

OBJECT NO	X	Y	R A	DEC	SAO NO	Δ R A	Δ DEC	SPEC TYPE	V MAG	P MAG	PEAK DEN	NO OF POINTS	BG	DENSITY VOLUME	EXP & FILTER	DEN VOL / EXP
501	388	295	18 19 10	-26 25 49	186726	-0 4	0 41	B	7 99	00	228	52	34	3688	10 0C	368 800
502	389	298	18 19 13	-26 25 12	186728	-0 1	1 16	B	7 99	00	111	19	23	930	3 0C	310 000
503	410	304	18 19 15	-26 55 38	186730/	-0 3	0 30	A0	8 20	00	76	13	34	393 L	10 0C	39 300
504	410	304	18 19 15	-26 55 38	186733/	-0 7	0 33	A0	8 40	00	76	13	34	393 L	10 0C	39 300
505	845	473	18 19 23	-36 42 5	210061	-0 7	-0 24	B8	5 39	00	288	65	83	4820	1 0L	4820 000
506	839	457	18 19 24	-36 41 45	210061	-0 6	-0 8	B8	5 39	00	378	90	23	9366	3-0C	3122-000-
507	988	519	18 19 25	-39 43 59	NO						55	5	5	95	10 0C	9 500
508	847	464	18 19 28	-36 41 8	210061	-0 2	0 33	B8	5 39	00	416	202	37	25188	10 0C	2518 800
509	552	357	18 19 30	-30 9 42	210064	-0 4	0 15	B	8 52	8 07	238	51	33	3708	10 0C	370 800
510	544	360	18 19 31	-30 9 4	210064	-0 2	0 53	B	8 52	8 07	102	21	81	894	3 0C	298 000
511	549	366	18 19 32	-30 8 15	210064	-0 1	1 42	B	8 52	8 07	133	12	87	378	1 0L	378 000
512	216	234	18 19 50	-22 39 34	186743	-0 12	-1 27	B9	9 00	00	68	8	34	178 L	18 0C	17 800
513	992	525	18 19 55	-39 50 1	NO						76	21	34	650	10 0C	65 000
514	408	315	18 20 12	-26 57 31	186748	-0 6	1 16	B0	8 80	00	161	30	35	1791 L	10 0C	179 100
515	405	324	18 20 14	-26 57 13	186748	-0 4	1 33	B0	8 80	00	113	4	86	99 L	1 0L	98 000
516	400	318	18 20 15	-26 56 54	186748	-0 3	1 52	B0	8 80	00	71	13	21	417	3 0C	139 000
517	432	324	18 20 17	-27 31 20	186747	-0 0	0 24	A0	8 40	00	65	7	34	173 L	10 0C	17 300
518	234	249	18 20 23	-23 5 58	186754	-0 7	-0 42	B9	9 00	00	78	25	33	794	10 0C	79 400
519	181	229	18 20 34	-21 57 8	186763	-0 13	-0 24	B9	9 00	00	64	17	32	444	10 0C	44 400
520	735	446	18 20 45	-34 24 29	210084/	0 14	0 5	B9	10 10	9 50	403	127	88	12074	1 0L	12074 000
521	735	446	18 20 45	-34 24 29	210088/	0 1	-2 50	B9	6 79	00	403	127	88	12074	1 0L	12074 000
522	735	446	18 20 45	-34 24 29	210091/	-0 6	0 8	A0	1 95	00	403	127	88	12074	1 0L	12074 000
523	729	439	18 20 47	-34 24 9	210084/	0 15	0 25	B9	10 10	9 50	442	240	25	25361	3 0C	8453 667
524	729	439	18 20 47	-34 24 9	210088/	0 2	-2 30	B9	6 79	00	442	240	25	25361	3 0C	8453 667
525	729	439	18 20 47	-34 24 9	210091/	-0 5	0 28	A0	1 95	00	442	240	25	25361	3 0C	8453 667
526	868	466	18 20 47	-37 14 43	210087	0 2	-0 3	B9	9 02	8 50	100	32	35	1224	H 10 0C	122 400
527	868	466	18 20 47	-37 14 43	210087	-0 20	0 33	A3	7 84	7 71	100	32	35	1224	H 10 0C	122 400
528	736	436	18 20 49	-34 23 30	210084?	0 17	1 4	B9	10 10	9 50	447	438	42	63244	H 10 0C	6324 400
529	736	436	18 20 49	-34 23 30	210088/	0 4	-1 51	B9	6 79	00	447	438	42	63244	H 10 0C	6324 400
530	736	436	18 20 49	-34 23 30	210091/	0 2	1 6	A0	1 95	00	447	438	42	63244	H 10 0C	6324 400
531	369	309	18 20 55	-26 8 52	NO						79	16	32	519	10 0C	51 900
532	925	519	18 21 6	-38 41 31	210097	-0 0	-3 7	B8	8 20	7 87	50	9	21	224 L	3 0C	74 667
533	334	299	18 21 8	-25 23 21							66	8	34	1927	10 0C	19 200
534	933	516	18 21 8	-38 41 54	210097	0 2	-3 30	B8	8 20	7 87	133	58	33	2814	10 0C	281 400
535	405	335	18 21 13	-27 1 53							159	28	85	1249	1 0L	1249 000
536	375	323	18 21 29	-26 29 28	186780	-0 4	1 47	A0	8 50	00	57	8	21	220	3 0C	73 333
537	363	321	18 21 32	-26 30 27	186780	-0 1	0 48	A0	8 50	00	123	27	35	1237	10-0C	123 700
538	314	298	18 21 40	-24 59 20							75	11	32	3397	10 0C	33 900
539	809	474	18 21 46	-36 4 51	NO						76	17	31	528	10 0C	52 800
540	973	545	18 21 55	-39 46 33	210114?	0 18	2 26	A5	8 96	8 98	50	14	21	347 H	3 0C	115 667
541	973	545	18 21 55	-39 46 33	210115?	0 7	-5 15	B8	8 68	8 20	50	14	21	347	3 0C	115 667
542	578	394	18 21 60	-30 57 33	210120	-0 3	0 8	A0	8 47	8 07	116	27	30	1189	10 0C	118 800
543	981	542	18 22 0	-39 45 43	210115	0 13	-4 25	B8	8 68	8 20	134	73	35	3585 H	10 0C	358 500
544	570	397	18 22 1	-30 56 58	210120	-0 1	0 27	A0	8 47	8 07	54	7	21	181	3 0C	60 333
545	841	489	18 22 5	-36 45 60	210121	0 1	-0 17	B9	9 32	9 02	98	31	32	1167	10 0C	116 700
546	860	497	18 22 9	-37 10 3	210122	0 2	0 38	B9	8 01	7 70	83	20	34	671 L	10 0C	67 100
547	292	295	18 22 11	-24 32 35	186787?	0 10	-6 1	B9	8 60	00	75	8	31	2737 L	10 0C	27 300
548	294	296	18 22 12	-24 35 21	186787?	0 11	-8 47	B9	8 60	00	66	11	37	2497 L	10 0C	24 900
549	676	429	18 22 12	-33 9 34	210123	0 0	-0 35	A0	9 31	8 99	65	7	34	179 L	10 0C	17 900
550	289	294	18 22 13	-24 27 28	186787?	0 12	-0 53	B9	8 60	00	72	9	31	2837 L	10 0C	28 300
551	289	294	18 22 13	-24 27 28	186797?	-0 21	-0 49	A0	9 60	00	72	9	31	2837	10 0C	28 300
552	353	321	18 22 23	-25 54 33	NO						64	7	32	178	10 0C	17 800
553	709	455	18 22 31	-33 57 38	210135	-0 6	0 51	B8	6 38	00	285	45	83	3067	1 0L	3067 000
554	703	449	18 22 31	-33 57 17	210135	-0 5	1 12	B8	6 38	00	280	63	23	5040	3 0C	1680 000
555	605	415	18 22 32	-31 46 12	210138	-0 8	0 51	B8	7 15	00	122	23	20	1079	3 0C	359 667
556	711	446	18 22 32	-33 57 48	210135	-0 4	0 41	B8	6 38	00	394	165	39	16128	10 0C	1612 800
557	611	422	18 22 36	-31 46 60	210138	-0 4	0 3	B8	7 15	00	133	15	81	524	1 0L	524 000
558	613	413	18 22 42	-31 47 36	210138	0 2	-0 34	B8	7 15	00	264	57	29	4559	10 0C	455 900
559	291	302	18 22 44	-24 33 53							66	10	32	274?	10 0C	27 400
560	415	348	18 22 47	-27 20 27	186803	-0 4	1 17	B9	8 50	00	98	16	36	633 L	10 0C	63 300
561	407	351	18 22 50	-27 19 53	186803	-0 1	1 51	B9	8 50	00	44	4	19	92 L	3 0C	30 667
562	296	305	18 22 50	-24 41 1							111	11	32	515?	10 0C	51 500
563	233	293	18 23 11	-23 22 47	186815	-0 19	-0 12	B8	9 10	00	111	8	78	195	1 0L	195 000
564	235	287	18 23 24	-23 23 5	186815	-0 5	-0 31	B8	9 10	00	124	40	32	2077 H	10 0C	207 700
565	235	287	18 23 24	-23 23 5	186822?	-0 15	4 53	B9	8 40	00	124	40	32	2077	10 0C	207 700
566	400	350	18 23 26	-27 3 29	NO						55	4	34	89	10 0C	8 900
567	239	290	18 23 32	-23 29 1	186822	-0 7	-1 2	B9	8 40	00	146	43	31	2491 H	10 0C	249 100
568	231	293	18 23 35	-23 29 43	186822	-0 4	-1 45	B9	8 40	00	66	30	20	899 H	3 0C	299 667
569	861	515	18 23 43	-37 20 43	210165	-0 2	-1 4	A0	10 20	9 78	77	19	33	591 H	10 0C	59 100
570	355	338	18 23 47	-26 5 9							79	9	32	2847	10 0C	28 400
571	376	347	18 23 55	-26 33 46	186826	0 1	3 28	A2	9 20	00	69	4	33	111 L	10 0C	11 100
572	508	392	18 23 56	-29 31 25	186825	0 2	0 56	A0	8 50	00	73	12	30	375 L	10 0C	37 500
573	799	504	18 23 57	-36 3 45	210170	-0 4	-0 55	B9	6 83	00	121	13	82	374 L	1 0L	374 000
574	793	497	18 23 58	-36 3 27	210170	-0 3	-0 37	B9	6 83	00	114	25	22	1156	3 0C	385 333
575	833	513	18 23 58	-36 56 28	210171	-0 5	-1 19	A0	8 44	8 10	52	8	20	209	3 0C	89 667
576	801	494	18 23 60	-36 3 53	210170	-0 2	-1 3	B9	6 83	00	282	55	37	4858	10 0C	485 800
577	841	510	18 24 3	-36 54 26	210171	0 1	0 37	A0	8 44	8 10	118	24	34	1512	10 0C	151 200
578	915	539	18 24 3	-38 31 49	210169	0 7	-2 53	B9	8 88	8 62	88	33	34	806	10 0C	80 600
579	797	500	18 24 37	-36 1 16	210191	-0 9	-1 2	B9	7 73	00	177	46	34	3044	10 0C	

ORIGINAL PAGE IS OF POOR QUALITY

SGR NORMAL RA 10 34 DEC -30 24

OBJECT NO	X	Y	RA	DEC	SAO NO	Δ RA	Δ DEC	SPEC TYPE	V MAG	P MAG	PEAK DEN	NO OF POINTS	BG	DENSITY VOLUME	EXP & FILTER	DEN VOL/ EXP
601	696	491	18 26 15	-33 58 8	210226	-0 4	-0 4	B9	7 10	00	141	17	83	619	1 0L	619 000
602	613	459	18 26 15	-32 14 59	NO						50	5	19	128	3 0C	42 667
603	690	485	18 26 16	-33 57 47	210226	-0 3	0 17	B9	7 10	00	129	27	22	1348	3 0C	449 333
604	698	482	18 26 16	-33 58 15	210226	-0 3	0 10	B9	7 10	00	289	61	35	5383	H 10 0C	538 300
605	145	287	18 26 17	-21 41 16	186876	-0 11	-1 4	A0	8 90	00	67	21	31	572	10 0C	57 200
606	621	457	18 26 26	-32 16 18	NO						104	26	28	1143	10 0C	114 300
607	373	376	18 26 28	-26 42 54	186878	-0 2	-0 37	B9	9 30	00	81	15	33	492	L 10 0C	49 200
608	322	360	18 26 38	-25 34 38	186882	0 0	0 7	B9	8 90	00	67	4	39	192	L 10 0C	10 200
609	675	488	18 26 40	-33 31 57	210228/	0 15	0 34	A0	8 72	8 35	133	15	82	507	1 0L	507 000
610	675	488	18 26 40	-33 31 57	210234/	-0 5	-0 10	B9	7 64	00	133	15	82	507	1 0L	507 000
611	669	482	18 26 41	-33 31 35	210228/	0 16	0 55	A0	8 72	8 35	116	24	20	11362	3 0C	378 667
612	669	482	18 26 41	-33 31 35	210234/	-0 4	0 12	B9	7 64	00	116	24	20	11362	3 0C	378 667
613	677	479	18 26 41	-33 32 3	210228/	0 16	0 28	A0	8 72	8 36	252	59	34	4599	H 10 0C	459 900
614	677	479	18 26 41	-33 32 3	210234/	-0 4	-0 16	B9	7 64	00	252	59	34	4599	H 10 0C	459 900
615	141	293	18 26 54	-21 38 59	186876?	0 27	1 13	A0	8 90	00	83	20	29	6887	10 0C	68 800
616	659	476	18 26 53	-33 9 24	210235?	0 14	-4 26	A3	7 22	00	86	20	30	713	10 0C	71 300
617	659	476	18 26 53	-33 9 24	210240	0 1	-0 21	A0	8 38	8 00	86	20	30	713	10 0C	71 300
618	146	302	18 27 24	-21 49 10	186898	-0 10	-1 53	B9	8 80	00	57	11	30	259	L 10 0C	25 900
619	775	537	18 27 52	-35 49 54	210254?	0 14	4 21	A2	8 83	8 65	127	7	80	226	H 1 0L	226 000
620	288	363	18 27 54	-24 56 44	186905	-0 4	-1 5	B9	8 10	00	175	39	34	2389	10 0C	238 300
621	280	366	18 27 57	-24 56 19	186905	-0 0	-0 40	B9	8 10	00	82	15	21	567	3 0C	185 000
622	285	372	18 27 58	-24 55 26	186906	0 1	0 13	B9	8 10	00	102	6	76	140	L 1 0L	140 000
623	517	448	18 28 34	-30 5 38	210272	-0 4	0 44	B5	8 50	8 01	191	39	29	2508	10 0C	250 800
624	515	457	18 28 35	-30 5 33	210272	-0 3	0 46	B5	8 50	8 01	112	4	79	114	L 1 0L	114 000
625	509	451	18 28 36	-30 5 10	210272	-0 3	1 11	B5	8 50	8 01	85	15	19	572	L 1 0L	114 000
626	832	584	18 28 51	-27 15 25	210276	0 1	-0 28	B9	7 90	7 51	47	4	20	95	L 3 0C	31 667
627	840	561	18 28 52	-27 15 44	210276	0 2	-0 48	B9	7 90	7 51	104	3	27	121	L 10 0C	122 100
628	473	438	18 28 56	-29 8 34	186924	0 2	-0 22	B9	9 00	00	60	8	27	224	L 10 0C	22 400
629	629	489	18 29 6	-32 38 32	210281	0 16	-0 55	B9	8 48	8 12	66	11	28	319	L 10 0C	31 900
630	959	609	18 29 8	-32 38 22	210277	0 16	-3 58	A5	5 25	00	74	19	37	529	L 10 0C	52 900
631	386	421	18 29 10	-27 14 53	186937	-0 21	-1 16	A3	7 90	00	113	4	81	119	L 1 0L	119 000
632	380	415	18 29 10	-27 14 32	186937	-0 2	0 59	B9	8 80	00	88	16	20	615	3 0C	205 000
633	380	415	18 29 10	-27 14 32	186937	-0 20	-0 55	A3	8 80	00	88	16	20	615	3 0C	205 000
634	380	415	18 29 10	-27 14 32	186937	-0 5	0 9	B9	7 90	00	190	41	33	2637	10 0C	263 700
635	388	413	18 29 13	-27 15 22	186937/	-0 17	-1 45	A3	8 80	00	190	41	33	2637	10 0C	263 700
636	388	413	18 29 13	-27 15 22	186937/	-0 7	-1 47	B3	6 75	00	219	58	20	3716	3 0C	1238 667
637	237	376	18 30 4	-24 10 39	186959	-0 8	-2 42	A1	6 60	00	306	91	22	892	3 0C	2987 333
638	900	603	18 30 4	-38 48 11	210294/	0 8	-2 19	B8	6 00	00	306	91	22	892	3 0C	2987 333
639	900	603	18 30 4	-38 48 11	210294/	0 8	-2 20	B8	5 95	00	306	91	22	892	3 0C	2987 333
640	900	603	18 30 4	-38 48 11	210295/	0 8	-2 41	B9	6 55	00	306	91	22	892	3 0C	2987 333
641	900	603	18 30 4	-38 48 11	210295/	0 9	-1 44	A1	6 60	00	283	74	76	4225	1 0L	4225 000
642	905	609	18 30 5	-38 47 13	210294/	0 9	-1 21	B8	6 00	00	283	74	76	4225	1 0L	4225 000
643	905	609	18 30 5	-38 47 13	210294/	0 9	-1 22	B8	5 95	00	283	74	76	4225	1 0L	4225 000
644	905	609	18 30 5	-38 47 13	210295/	0 9	-1 43	B9	6 55	00	283	74	76	4225	1 0L	4225 000
645	905	609	18 30 5	-38 47 13	210295/	-0 5	-0 53	B3	6 75	00	183	34	75	1655	1 0L	1655 000
646	242	382	18 30 8	-24 10 45	186959	-0 5	-0 53	B3	6 75	00	352	111	34	1131	L 10 0C	1131 100
647	245	374	18 30 8	-24 10 13	186959	-0 3	-1 21	B3	6 75	00	433	180	37	2707	10 0C	2707 000
648	907	600	18 30 9	-38 47 15	210293/	0 12	-1 47	A1	6 60	00	433	180	37	2707	10 0C	2707 000
649	907	600	18 30 9	-38 47 15	210294/	0 12	-1 23	B8	6 00	00	433	180	37	2707	10 0C	2707 000
650	907	600	18 30 9	-38 47 15	210295/	0 12	-1 24	B8	5 95	00	433	180	37	2707	10 0C	2707 000
651	907	600	18 30 9	-38 47 15	210295/	0 12	-1 45	B9	6 55	00	433	180	37	2707	10 0C	2707 000
652	512	464	18 30 12	-30 6 7	210298	0 3	0 1	B9	8 51	8 16	52	4	26	957	L 10 0C	9 500
653	217	365	18 30 18	-23 35 32	186962	0 2	-1 52	B8	8 70	00	68	15	30	427	L 10 0C	42 700
654	808	570	18 30 19	-36 51 6	210302/	0 6	-2 50	B9	8 78	8 46	115	34	21	1572	H 3 0C	524 000
655	808	570	18 30 19	-36 51 6	210304/	0 2	-0 27	B9	8 04	7 60	115	34	21	1572	H 3 0C	524 000
656	813	577	18 30 20	-36 50 13	210302/	0 6	-1 56	B9	8 78	8 46	113	15	78	423	1 0L	423 000
657	813	577	18 30 20	-36 50 13	210304/	0 3	0 26	B9	8 04	7 60	113	15	78	423	1 0L	423 000
658	829	573	18 30 24	-37 8 46	210305	0 6	-1 27	B9	8 95	8 75	83	16	36	532	L 10 0C	53 200
659	816	568	18 30 26	-36 51 49	210302/	0 13	-3 32	B9	8 78	8 46	317	78	33	7183	H 10 0C	718 300
660	816	568	18 30 26	-36 51 49	210304/	0 10	-1 10	B9	8 04	7 60	317	78	33	7183	H 10 0C	718 300
661	395	431	18 30 30	-27 31 44	186988	0 1	-0 9	B8	8 50	00	70	15	29	444	L 10 0C	44 400
662	635	514	18 30 38	-33 3 20	210312	-0 3	0 0	B3	5 38	00	412	149	24	15448	3 0C	5149 333
663	635	514	18 30 38	-33 3 20	210314?	-0 10	-3 19	B9	6 88	00	412	149	24	15448	3 0C	5149 333
664	640	520	18 30 39	-33 2 31	210312/	-0 2	0 49	B3	5 38	00	388	111	81	9234	1 0L	9234 000
665	640	520	18 30 39	-33 2 31	210314/	-0 9	-2 30	B9	6 88	00	388	111	81	9234	1 0L	9234 000
666	642	511	18 30 40	-33 2 32	210312/	-0 1	0 48	B3	5 38	00	431	319	29	43013	10 0C	4301 300
667	642	511	18 30 40	-33 2 32	210314/	-0 8	-2 31	B9	6 88	00	431	319	29	43013	10 0C	4301 300
668	303	401	18 30 42	-25 29 19	186975	0 2	-0 4	B9	8 30	00	81	12	33	375	L 10 0C	37 500
669	303	401	18 30 42	-25 29 19	186986?	-0 21	-4 10	B9	9 00	00	81	12	33	375	L 10 0C	37 500
670	546	484	18 30 58	-30 56 3	210318	-0 5	-0 42	B9	7 15	00	145	32	26	1774	L 10 0C	177 400
671	538	487	18 30 59	-30 55 38	210318	-0 4	-0 17	B9	7 15	00	67	10	20	315	L 3 0C	105 000
672	289	404	18 31 5	-25 25 45	186986	0 2	-0 36	B8	9 00	00	132	37	35	1782	10 0C	178 200
673	291	407	18 31 6	-25 26 35	186975?	0 26	2 40	B9	8 30	00	63	9	21	270	3 0C	90 000
674	291	407	18 31 6	-25 26 35	186986	0 4	-1 26	B8	9 00	00	63	9	21	270	3 0C	90 000
675	153	353	18 31 16	-22 17 24	186994	-0 6	-2 21	B8	9 00	00	81	25	34	807	L 10 0C	80 700
676	701	538	18 31 20	-34 24 56	210329	-0 4	-0 59	B9	9 21	8 90	60	5	32	121	L 10 0C	12 100
677	289	407	18 31 36	-25 16 14	186997	0 3	-1 25	B9	9 30	00	55	6	29	137</		

PAGE, CARRUTHERS AND HILL

SGR NORMAL RA 18 34 DEC -30 24																
OBJECT NO	X	Y	R A	DEC	SAO NO	Δ R A	Δ DEC	SPEC TYPE	V MAG	P MAG	PEAK DEN	NO OF POINTS	BG	DENSIT/ VOLUME	E/P & FILTER	DEI VOL/ E/P
701	673	570	18 35 13	-34 3 41	210392	-0 1	-1 7	B9	8 55	8 07	109	23	31	988	10 0C	99 800
702	801	622	18 35 23	-37 3 16	210388/	0 15	-2 2	A5	9 59	9 74	51	6	21	155	3 0C	51 667
703	801	622	18 35 23	-37 3 16	210394/	0 5	-0 32	B8	9 02	8 65	51	6	21	155	3 0C	51 667
704	190	423	18 35 29	-23 34 40	187080	0 0	-1 42	B9	5 75	00	310	69	24	6208	3 0C	2059 333
705	195	429	18 35 30	-23 33 45	187080	0 2	-0 48	B9	5 75	00	243	48	73	3130	1 0L	3130 500
706	198	421	18 35 30	-23 35 15	187080	0 2	-2 18	B9	5 75	00	399	132	36	15916	10 0C	1591 500
707	809	620	18 35 30	-37 3 52	210388?	0 22	-2 39	A5	9 59	9 74	109	13	34	567	10 0C	56 750
708	809	620	18 35 30	-37 3 52	210394	0 12	-1 9	B9	9 02	8 65	109	13	34	567	L 10 0C	56 750
709	507	529	18 35 34	-30 33 56	210403	-0 6	-0 6	B8	7 62	00	66	9	19	301	L 3 0C	30 333
710	839	632	18 35 34	-37 42 2	210397	0 7	0 1	B8	8 92	8 49	183	51	35	3285	H 10 0C	328 500
711	831	635	18 35 36	-37 43 24	210397	0 9	-1 21	B8	8 92	8 49	68	21	21	632	H 3 0C	210 567
712	515	526	18 35 38	-30 34 39	210403	-0 1	-0 49	B8	7 62	00	144	32	27	1730	L 10 0C	173 300
713	579	547	18 35 44	-32 1 17	NO						85	22	27	801	L 10 0C	80 500
714	571	550	18 35 45	-32 0 57	NO						40	12	18	95	L 3 0C	28 333
715	670	583	18 35 55	-34 12 51	210408	-0 4	-0 9	A0	6 64	00	80	12	20	441	L 3 0C	147 500
716	678	580	18 35 56	-34 13 9	210408	-0 4	-0 25	A0	6 64	00	170	38	31	2294	L 10 0C	229 500
717	591	560	18 36 4	-32 28 51	210409	-0 5	-0 35	B9	9 05	8 63	45	4	19	93	L 3 0C	31 000
718	408	499	18 36 9	-28 14 51	187089	0 4	-1 16	B9	7 46	00	68	13	28	375	L 10 0C	37 500
719	599	557	18 36 10	-32 29 33	210409	-0 0	-1 17	B9	9 05	8 63	91	22	28	831	L 10 0C	83 500
720	121	405	18 36 28	-22 1 45	187095	-0 2	-1 4	A0	8 20	00	66	18	31	501	L 10 0C	50 500
721	459	520	18 36 34	-29 24 14	187100	-0 4	-1 6	B	9 50	00	123	30	28	1440	L 10 0C	144 000
722	451	523	18 36 36	-29 23 56	187100	-0 2	-0 48	B	9 50	00	58	11	18	311	L 3 0C	103 667
723	144	427	18 37 15	-22 43 48	187112	0 5	-1 10	B5	8 90	00	58	13	20	373	L 3 0C	274 333
724	935	684	18 37 15	-39 51 35	210450	-0 29	-6 40	A2	8 84	8 79	72	24	37	649	L 10 0C	64 900
725	152	426	18 37 16	-22 44 19	187112	0 6	-1 41	B5	8 90	00	128	47	31	2362	L 10 0C	236 200
726	314	482	18 37 16	-26 14 4							106	9	31	367	L 10 0C	36 700
727	481	535	18 37 18	-29 56 28	NO						78	16	26	583	L 10 0C	58 300
728	84	409	18 37 36	-21 33 5	187119	-0 4	-0 33	B9	8 80	00	76	30	30	946	L 10 0C	94 600
729	625	559	18 37 48	-31 8 23	210457	-0 7	-1 12	B8	8 82	8 50	51	5	19	127	L 3 0C	42 333
730	533	557	18 37 52	-31 9 3	210457	-0 3	-1 52	B8	8 82	8 50	104	25	27	1047	L 10 0C	104 700
731	431	529	18 38 7	-28 53 38	187128	-0 1	-1 13	B8	7 90	00	192	44	28	2781	L 10 0C	278 100
732	423	532	18 38 9	-28 53 22	187128	0 1	-0 57	B8	7 90	00	83	16	20	611	L 3 0C	203 667
733	428	538	18 38 10	-28 52 35	187128	0 2	-0 9	B8	7 90	00	115	7	77	208	L 1 0L	208 000
734	624	593	18 38 13	-33 21 10	210464	-0 1	-0 39	B9	8 87	8 37	66	10	19	342	L 3 0C	114 000
735	632	590	18 38 13	-33 21 26	210464	-0 1	-0 54	B9	8 87	8 37	152	34	30	1864	L 3 0C	186 400
736	359	518	18 38 38	-27 30 45	187141	-0 1	-1 8	B5	8 30	00	77	16	21	534	L 3 0C	184 667
737	367	516	18 38 41	-27 31 23	187141	0 2	-1 46	B5	8 30	00	171	41	33	2548	L 10 0C	254 800
738	364	525	18 38 45	-27 30 20	187141	0 5	-0 43	B5	8 30	00	111	7	75	180	L 1 0L	180 000
739	586	593	18 38 52	-32 26 2	210478	-0 3	-1 3	B8	7 76	7 11	176	20	80	994	H 1 0L	199 000
740	588	584	18 38 52	-32 25 53	210478	-0 2	-0 54	B8	7 76	7 11	309	77	29	6965	H 10 0C	696 500
741	580	587	18 38 53	-32 25 37	210478	-0 2	-0 38	B8	7 76	7 11	152	30	21	1776	H 3 0C	592 000
742	455	551	18 38 58	-29 39 7	187151	-0 3	-0 5	B9	8 60	00	50	5	19	124	L 3 0C	41 333
743	463	549	18 39 2	-29 39 46	187151	0 1	-0 44	B9	8 60	00	107	25	27	1120	L 10 0C	112 000
744	166	455	18 39 18	-23 11 26	187154	0 8	-0 28	A0	9 00	00	54	4	31	91	L 10 0C	9 100
745	896	702	18 39 37	-39 21 26	210488	0 11	-1 19	B8	7 09	00	131	58	23	3077	L 3 0C	1025 667
746	119	443	18 39 41	-22 13 19	187169	0 3	-0 8	B8	8 60	00	67	22	30	616	L 10 0C	61 600
747	496	566	18 39 42	-30 27 32	NO						50	4	25	93	L 10 0C	9 300
748	901	709	18 39 44	-39 20 48	210488	0 19	-0 41	B8	7 09	00	120	40	72	1266	L 1 0L	1266 000
749	904	700	18 39 46	-39 21 52	210488	0 20	-1 45	B8	7 09	00	394	131	38	15499	H 10 0C	1549 900
750	372	530	18 39 49	-27 42 41	187170	0 2	-0 48	B9	8 40	00	104	24	33	1012	L 10 0C	101 200
751	384	533	18 39 51	-27 42 28	187170	0 5	-0 34	B9	8 40	00	53	6	20	160	L 3 0C	53 333
752	128	455	18 40 23	-22 28 2	187185	0 4	-0 22	B9	7 60	00	72	21	31	625	L 10 0C	62 500
753	847	694	18 40 33	-38 22 33	210501	0 11	-0 9	A0	5 13	00	61	15	22	451	L 3 0C	150 333
754	856	691	18 40 33	-38 23 50	210501	0 12	-1 26	A0	5 13	00	178	57	35	3447	L 10 0C	344 700
755	727	661	18 41 1	-35 41 33	210509	0 3	0 3	B3	4 82	00	423	201	82	20549	L 1 0L	20549 000
756	721	655	18 41 3	-35 41 12	210509	0 4	0 23	B3	4 82	00	446	264	23	29732	L 3 0C	9910 667
757	728	652	18 41 5	-35 40 11	210509	0 7	1 25	B3	4 82	00	452	535	40	81361	L 10 0C	8136 100
758	557	605	18 41 35	-31 55 40	210523/	-0 3	0 42	A5	9 55	9 36	59	7	29	183	L 10 0C	18 300
759	557	605	18 41 35	-31 55 40	210526/	-0 10	-1 29	B9	9 70	9 18	59	7	29	183	L 10 0C	18 300
760	910	729	18 41 43	-39 48 9	NO						65	30	22	893	L 3 0C	297 667
761	918	726	18 41 47	-39 46 60	NO						197	91	38	6023	L 10 0C	602 300
762	237	515	18 41 51	-25 5 8	187216	0 6	-1 21	B8	5 76	00	254	57	22	4383	L 3 0C	438 000
763	242	521	18 41 52	-25 4 18	187216	0 7	-0 31	B8	5 76	00	215	36	72	2207	L 1 0L	2207 000
764	392	560	18 41 53	-28 17 38	187225	-0 7	-1 15	B9	8 10	00	75	6	34	188	L 10 0C	18 800
765	245	513	18 41 54	-25 4 26	187216	0 9	-0 39	B8	5 76	00	380	110	38	11998	L 10 0C	1199 800
766	386	561	18 42 9	-28 10 46	187225?	0 9	5 37	B9	8 10	00	87	29	35	968	L 10 0C	96 800
767	407	576	18 42 26	-28 51 11	187237/	-0 4	-1 22	A0	8 40	00	60	10	20	296	L 3 0C	98 667
768	407	576	18 42 26	-28 51 11	187238/	-0 5	-2 16	A0	8 40	00	60	10	20	296	L 3 0C	98 667
769	895	725	18 42 29	-39 21 5	NO						64	12	38	271	L 10 0C	27 100
770	415	574	18 42 31	-28 50 33	187237/	0 1	-0 43	A0	8 40	00	128	30	30	1554	L 10 0C	155 400
771	415	574	18 42 31	-28 50 33	187238/	-0 0	-1 37	A0	8 40	00	128	30	30	1554	L 10 0C	155 400
772	333	550	18 42 37	-27 2 55	187239	0 5	-0 18	B8	3 30	00	452	509	35?	78579	H 10 0C	7857 900
773	326	553	18 42 38	-27 3 57	187239	0 6	-1 19	B8	3 30	00	453	277	25	32202	L 3 0C	10734 000
774	331	559	18 42 39	-27 3 10	187239	0 7	-0 31	B8	3 30	00	410	179	82	15152	L 1 0L	15152 000
775	368	564	18 42 55	-27 50 12	187244	0 7	-0 19	B9	9 00	00	70	12	34	338	L 10 0C	33 600
776	465	602	18 43 40	-30 2 25	210563	-0 4	-1 33	B3	9 73	8 94	143	36	28	1924	L 10 0C	192 400
777	457	605	18 43 42	-30 2 14	210563	-0 3	-1 23	B3	9 73	8 94	64	11	19	359	L 3 0C	119 667
778	462	611	18 43 43	-30 1 28	210563	-0 2	-0 36	B3	9 73	8 94	114	7	78	196	L 1 0L	196 000
779	173	513	18 43 56													

NRL REPORT 8173

ORIGINAL PAGE IS
OF POOR QUALITY

SGR NORMAL RA 18 34 DEC -30 24

OBJECT NO	X	Y	R A	DEC	SAO NO	Δ R A	Δ DEC	SPEC TYPE	Y MAG	P MAG	PEAK DEN	NO OF POINTS	B6	DENSITY VOLUME	EXP & FILTER	DEN VOL / EXP
801	207	556	18 46 35	-24 36 46	187317	0 7	-0 49	A0	8 50	00	58	5	34	111 L	10 0C	11 100
802	578	668	18 46 44	-32 45 36							82	4	30	118?	10 0C	11 800
803	642	699	18 47 23	-34 22 18	210625	-0 6	-0 28	B9	7 23	00	73	12	21	428	3 0C	142 657
804	650	697	18 47 29	-34 22 45	210625	0 0	-0 55	B9	7 23	00	185	39	33	2440 H	10 0C	244 000
805	483	670	18 49 13	-30 48 44	210663	-0 16	-1 0	B8	6 63	00	328	85	34	8233 H	10 0C	823 300
806	475	673	18 49 14	-30 48 39	210653	-0 15	-0 56	B8	6 63	00	158	37	22	2197	3 0C	732 333
807	479	680	18 49 20	-30 48 15	210663	-0 9	-0 31	B8	6 63	00	168	21	81	951	1 0L	951 000
808	772	767	18 50 10	-37 21 16	210676	0 9	-1 6	A0	7 04	00	99	27	42	910 L	10 0C	91 000
809	188	596	18 50 27	-24 30 20	187408?	0 8	8 24	B9	9 50	00	62	6	29	172 L	10 0C	17 200
810	195	598	18 50 28	-24 38 13	187408	0 10	0 31	B9	9 50	00	67	10	38	218 L	10 0C	21 800
811	518	700	18 51 4	-31 42 47	210690/	0 26	3 27	A3	9 37	9 17	99	23	33	886	10 0C	88 600
812	518	700	18 51 4	-31 42 47	210700/	-0 11	-1 6	B9	9 29	8 64	99	23	33	886	10 0C	88 600
813	95	575	18 51 13	-22 37 8	187425	0 6	0 53	B8	8 00	00	83	41	28	1365 L	10 0C	136 500
814	495	696	18 51 13	-31 13 11	210704	-0 14	-1 39	A0	8 54	8 00	188	45	35	2802 H	10 0C	280 200
815	486	699	18 51 15	-31 11 56	210704	-0 11	-0 24	A0	8 54	8 00	78	14	20	525 H	3 0C	175 000
816	491	705	18 51 16	-31 11 10	210704	-0 10	0 22	A0	8 54	8 00	113	7	79	192	1 0L	192 000
817	192	614	18 51 26	-24 49 42	187431	0 7	0 15	B8	7 50	00	86	22	21	853	3 0C	284 333
818	197	620	18 51 27	-24 48 55	187431	0 8	1 2	B8	7 50	00	102	10	66	283	1 0L	283 000
819	200	612	18 51 30	-24 48 46	187431	0 11	1 11	B8	7 50	00	184	64	32	3975 H	10 0C	397 500
820	146	605	18 51 33	-23 45 48	187433	0 7	1 15	A0	8 50	00	93	11	65	238	1 0L	238 000
821	291	646	18 51 33	-26 56 24	187438	0 2	0 49	B9	7 76	00	88	6	38	216 L	3 0C	72 000
822	261	643	18 52 3	-26 19 14	187448	-0 7	2 25	B3	2 14	00	510	1187	30	176262	3 0C	58754 000
823	533	716	18 52 9	-32 7 40	210720	-0 9	-2 22	B9	8 07	8 43	69	12	34	335 L	10 0C	33 500
824	269	642	18 52 11	-26 19 52	187448	0 1	1 46	B3	2 14	00	504	2628	35?	447386	10 0C	44739 600
825	267	651	18 52 13	-26 20 22	187448	0 3	1 17	B3	2 14	00	472	979	100	108142	1 0L	108142 000
826	118	605	18 53 5	-23 14 13	187468	0 6	0 8	B8	5 89	00	358	172	32	15317	10 0C	1531 700
827	705	775	18 53 7	-35 57 49	210730	0 8	-1 33	B9	8 90	8 55	71	13	37	359 L	10 0C	35 900
828	109	608	18 53 10	-23 13 13	187468	0 11	1 8	B8	5 89	00	181	73	20	4552 H	3 0C	1517 333
829	114	614	18 53 11	-23 12 23	187468	0 12	1 58	B8	5 89	00	137	41	60	1813 H	1 0L	1813 000
830	579	749	18 53 27	-33 24 6	210749	-0 13	-0 21	B9	7 16	00	99	20	21	887	3 0C	295 667
831	764	804	18 53 31	-37 25 54	210734	0 14	-1 22	B5	5 41	00	434	149	25	18464	3 0C	6154 667
832	684	756	18 53 33	-33 23 39	210749	-0 7	0 7	B9	7 16	00	113	7	77	206 L	1 0L	206 000
833	769	811	18 53 35	-37 26 31	210734	0 18	-1 56	B5	5 41	00	387	122	76	12741	1 0L	12741 000
834	587	747	18 53 38	-33 24 46	210749	-0 2	-1 1	B9	7 16	00	240	51	36	3969	10 0C	396 900
835	771	802	18 53 40	-37 24 57	210734?	0 23	-0 25	B5	5 41	00	440	341	42	47831	10 0C	4783 100
836	398	703	18 54 8	-29 16 57	NO						67	8	35	215	10 0C	21 500
837	366	707	18 54 52	-28 48 15	187511	-0 12	0 58	B9	8 68	00	50	4	24	91 L	3 0C	30 333
838	374	705	18 54 56	-28 48 32	187511	-0 9	0 41	B9	8 68	00	111	29	38	1170	10 0C	117 000
839	293	684	18 55 9	-27 3 46	187513	-0 2	1 52	B9	8 80	00	76	4	52	92L	10 0C	9 200
840	615	777	18 55 10	-34 18 12	210769/	0 14	2 3	B9	8 95	8 57	81	18	21	677	3 0C	225 667
841	615	777	18 55 10	-34 18 12	210776/	-0 0	-1 14	B9	7 17	00	81	18	21	677	3 0C	225 667
842	623	774	18 55 10	-34 18 10	210769?	0 14	2 6	B9	8 96	8 57	232	54	38	3832	10 0C	383 200
843	623	774	18 55 10	-34 18 10	210776	-0 0	-1 12	B9	7 17	00	232	54	38	3832	10 0C	383 200
844	652	782	18 55 16	-34 55 51	210772	0 1	-1 37	A0	8 29	8 12	74	15	38	415 L	10 0C	41 500
845	188	664	18 55 21	-24 55 7	187517	0 4	1 35	A0	6 60	00	90	7	66	150 L	1 0L	150 000
846	183	658	18 55 25	-24 56 14	187517	0 6	0 28	A0	6 60	00	76	21	20	739	3 0C	246 333
847	191	656	18 55 28	-24 55 12	187517	0 12	1 30	A0	6 60	00	171	63	33	3843	10 0C	384 300
848	76	622	18 55 31	-22 32 30	187519	0 7	3 23	A2	6 04	00	56	15	29	353 L	10 0C	35 300
849	193	668	18 55 59	-25 10 6	187532	0 7	2 2	B8	8 40	00	54	8	22	205	3 0C	68 333
850	201	666	18 56 2	-25 10 16	187532	7 10	1 53	B8	8 40	00	118	44	35	1983	10 0C	198 300
851	239	682	18 56 22	-25 59 30	187542	-0 3	1 25	B8	8 60	00	79	23	40	657L	10 0C	65 700
852	523	769	18 56 34	-32 21 52	210798	-0 14	0 41	A0	8 57	8 11	67	11	22	334	3 0C	111 333
853	532	766	18 56 38	-32 23 22	210797?	0 3	4 10	A5	9 08	9 05	163	38	38	2260	10 0C	226 000
854	532	766	18 56 38	-32 23 22	210798	-0 10	-0 49	A0	8 57	8 11	163	38	38	2260 H	10 0C	226 000
855	256	703	18 56 50	-26 26 22	NO						114	6	89	114	1 0L	114 000
856	258	704	18 56 53	-26 29 7	NO						122	6	90	149	1 0L	149 008
857	154	668	18 56 58	-24 26 7	187551	0 8	1 60	B8	8 40	00	44	4	22	81 L	3 0C	27 000
858	162	666	18 57 1	-24 26 14	187551	0 10	1 53	B8	8 40	00	98	42	32	1628	10 0C	162 808
859	315	715	18 57 14	-27 40 7	187563	-0 11	2 50	A0	8 20	00	85	18	36?	648 L	10 0C	64 800
860	238	708	18 57 48	-26 7 55	NO						104	20	69	529	1 0L	529 000
861	250	714	18 57 57	-26 24 3	NO						140	36	79	1288?	1 0L	1288 000
862	738	844	18 57 59	-37 10 25	210815/	0 18	-2 31	B8	8 84	00	301	99	32	7971 H	3 0C	2657 000
863	738	844	18 57 59	-37 10 25	210816/	0 17	-2 27	B8	8 62	00	301	99	32	7971 H	3 0C	2657 000
864	743	851	18 58 4	-37 9 50	210815/	0 24	-1 55	B8	8 84	00	202	65	77	3646	1 0L	3646 000
865	743	851	18 58 4	-37 9 50	210816/	0 23	-1 52	B8	8 62	00	202	65	77	3646	1 0L	3646 000
866	746	842	18 58 8	-37 9 23	210815/	0 27	-1 29	B8	8 84	00	426	237	43	32643 H	10 0C	3264 300
867	746	842	18 58 8	-37 9 23	210816/	0 26	-1 25	B8	8 62	00	426	237	43	32643 H	10 0C	3264 300
868	728	848	18 58 39	-35 59 38	210828/	0 22	-1 53	A0	6 88	00	66	26	23	782	3 0C	260 667
869	728	848	18 58 39	-35 59 38	210829/	0 20	-2 46	B2	0 00	00	66	26	23	782	3 0C	260 667
870	689	831	18 58 39	-35 57 37	210833	0 13	-1 9	A0	8 07	7 80	96	22	48	676	10 0C	67 600
871	738	848	18 58 58	-37 0 25	NO						125	33	42	1419	10 0C	141 900
872	412	764	18 59 7	-29 55 39	187600	-0 19	1 34	A2	2 71	00	386	104	36?	12928	10 0C	1292 800
873	404	767	18 59 8	-29 55 46	187600	-0 18	1 27	A2	2 71	00	246	54	23	3996 L	3 0C	1332 000
874	409	773	18 59 9	-29 55 2	187600	-0 17	2 11	A2	2 71	00	176	29	74	1490 L	1 0L	1490 000
875	622	824	18 59 13	-34 43 16	210852	-0 1	-0 58	B9	7 21	00	82	22	22	826	3 0C	275 333
876	630	822	18 59 19	-34 43 28	210852	0 5	-1 10	B9	7 21	00	244	58	41	4401	10 0C	440 100
877	119	682	18 59 28	-23 42 52	187595	0 16	3 10	A0	8 60	00	62	17	30	452 L	10 0C	45 200
878	542	803	18 59 40	-32 49 13	210856	-0 7	-0 3	A0	8 10							

PAGE, CARRUTHERS AND HILL

SGR NORMAL RA 18 34 DEC -30 24

OBJECT NO	X	Y	R A	DEC	SAO NO	Δ R A	Δ DEC	SPEC TYPE	V MAG	P MAG	PEAK DEN	NO OF POINTS	BO	DENSITY VOLUME	EXP & FILTER	DEN VOL/ EXP
901	450	848	19 5 19	-31 21 32	2109707	0 17	4 9	A0	00	00	47	4	22	97	3 OC	32 333
902	450	848	19 5 19	-31 21 32	2109777	-0 5	2 12	B9	8 73	8 30	47	4	22	97 L	3 OC	32 333
903	135	763	19 5 24	-24 39 37	187718	0 12	4 36	B9	6 24	00	81	36	21	1292	3 OC	430 867
904	140	769	19 5 25	-24 38 53	1877187	0 14	6 20	B9	6 24	00	84	8	60	175 L	1 OL	175 000
905	144	761	19 5 26	-24 39 33	187718	0 15	4 40	B9	6 24	00	184	94	30	5989	10 OC	598 900
906	425	843	19 5 48	-30 40 15	210987	-0 8	2 9	A0	7 89	00	73	12	41	309 L	10 OC	30 900
907	154	774	19 5 51	-25 5 36	187728	0 8	3 60	B9	6 76	00	82	39	20	1424	3 OC	474 667
908	162	772	19 5 55	-25 4 19	1877287	0 12	5 16	B9	6 76	00	196	97	31	6463	10 OC	646 300
909	158	781	19 5 59	-25 3 59	187728	0 16	5 36	B9	6 76	00	91	16	60	422	1 OL	422 000
910	221	792	19 6 7	-26 20 43							79	8	33	2497	10 OC	24 900
911	475	866	19 6 11	-31 59 14	211001	-0 18	0 54	B5	9 52	8 91	52	9	22	223	3 OC	74 333
912	483	864	19 6 18	-31 58 5	211001	-0 11	2 3	B5	9 52	8 91	146	41	43	2138	10 OC	213 800
913	611	898	19 6 45	-34 47 1	2109987	0 23	-1 11	A0	9 21	7 89	72	9	45	214 L	10 OC	21 400
914	672	920	19 6 46	-36 18 25	210995	0 30	-3 39	B9	6 58	00	72	28	23	951	3 OC	317 000
915	681	917	19 6 47	-36 18 9	2109957	0 31	-3 24	B9	6 58	00	268	94	46	7460	10 OC	746 000
916	365	853	19 7 59	-29 32 27	187786	-0 10	2 41	B9	6 25	00	388	108	42	13014	10 OC	1301 400
917	361	862	19 8 0	-29 32 2	187786	-0 9	3 5	B9	6 25	00	138	34	69	1369	1 OL	1369 000
918	357	856	19 7 60	-29 32 44	187786	-0 9	2 23	B9	6 25	00	178	54	23	3303	3 OC	1101 000
919	195	806	19 8 1	-25 55 14	187776	0 9	4 25	B9	8 50	00	65	18	32	484 L	10 OC	48 400
920	238	822	19 8 20	-26 51 27	NO						67	6	33	155	10 OC	15 500
921	232	834	19 8 41	-26 49 38	NO						116	36	63	1269	1 OL	1269 000
922	662	944	19 9 46	-36 4 53	2110397	0 47	-3 20	B5	10 20	9 62	89	41	47	1246	10 OC	124 600
923	662	944	19 9 46	-36 4 53	2110437	0 30	9 43	A2	8 95	8 87	89	41	47	1246 H	10 OC	124 600
924	554	923	19 9 48	-33 55 58	211045/	0 21	0 15	A0	7 86	00	135	50	24	2645	3 OC	881 667
925	554	923	19 9 48	-33 55 58	211046/	0 20	-0 6	A0	7 30	00	135	50	24	2645	3 OC	881 667
926	365	874	19 9 52	-29 41 9	187830	-0 5	2 13	B9	8 10	00	90	27	43	835 L	10 OC	83 600
927	563	920	19 9 53	-33 57 10	211045/	0 26	-0 57	A0	7 86	00	388	113	49	13173 H	10 OC	1317 300
928	563	920	19 9 53	-33 57 10	211046/	0 25	-1 18	A0	7 30	00	388	113	49	13173 H	10 OC	1317 300
929	559	930	19 9 54	-33 55 28	211045/	0 26	0 45	A0	7 86	00	123	33	73	1102	1 OL	1102 000
930	559	930	19 9 54	-33 55 28	211046/	0 26	0 24	A0	7 30	00	123	33	73	1102	1 OL	1102 000
931	320	881	19 11 28	-28 50 58	187864	0 0	1 0	B8	9 20	00	75	15	40	396 L	10 OC	39 600
932	427	910	19 11 48	-31 9 30	211065	0 12	0 47	A0	8 94	8 47	66	4	42	92 L	10 OC	9 200
933	582	963	19 12 38	-34 56 37	NO						53	13	25	311	3 OC	103 667
934	601	960	19 12 38	-34 57 30	NO						163	76	497	4119	10 OC	411 900
935	532	953	19 12 52	-33 39 15	211100/	0 21	-2 7	A0	7 38	00	89	43	23	1675	3 OC	558 333
936	532	953	19 12 52	-33 39 15	211101/	0 18	0 53	B8	9 03	8 38	89	43	23	1675	3 OC	558 333
937	536	960	19 12 57	-33 38 45	211100/	0 27	-1 38	A0	7 38	00	105	20	78	469	1 OL	469 000
938	536	960	19 12 57	-33 38 45	211101/	0 24	1 22	B8	9 03	8 38	105	20	78	469	1 OL	469 000
939	541	950	19 12 57	-33 40 23	211100/	0 26	-3 16	A0	7 38	00	338	116	49	11211 H	10 OC	1121 100
940	541	950	19 12 57	-33 40 23	211101/	0 23	-0 16	B8	9 03	8 38	338	116	49	11211 H	10 OC	1121 100
941	588	967	19 13 47	-34 33 53	2111107	0 46	-1 48	A0	8 98	8 58	78	17	497	420 L	10 OC	42 000
942	605	976	19 15 25	-33 15 48	211148	0 19	-1 10	B8	7 52	00	90	43	27	1560	3 OC	520 000
943	609	983	19 16 30	-33 15 20	211148	0 24	-0 42	B8	7 52	00	100	227	70	742	1 OL	742 000
944	514	973	19 15 31	-33 15 41	2111487	0 25	-1 3	B8	7 52	00	306	117	49	10020 H	10 OC	1002 000

ORIGINAL PAGE IS OF POOR QUALITY

NRL REPORT 8173

SGR OVEREXP RA 18 34 DEC -30 24																
OBJECT NO	X	Y	R A	DEC	SAO NO	Δ R A	Δ DEC	SPEC TYPE	V MAG	P MAG	PEAK DEN	NO OF POINTS	BO	DENSITY VOLUME	EXP & FILTER	DEN VOL/ EXP
1	748	92	17 49 34	-31 37 54	209398	0 4	-0 25	B8	8 62	8 33	475	34	446	885 L	3 0L	295 000
2	686	70	17 50 13	-30 17 9							476	1401	365	111787?	3 0L	37262 333
3	696	78	17 50 26	-30 32 4							481	92	447	2301?	3 0L	767 000
4	617	42	17 50 32	-28 43 46							493	95?	430?	4443?	3 0L	1481 000
5	737	104	17 50 56	-31 32 3							463	283	340	27821?	3 0L	9273 657
6	838	159	17 51 25	-33 53 27	209447?	0 10	2 34	A0	8 80	8 56	420	4	397	87?L	3 0L	29 000
7	838	159	17 51 25	-33 53 27	209449?	0 5	3 25	B9	7 88	7 47	420	4	397	87?L	3 0L	29 000
8	838	159	17 51 25	-33 53 27	209450?	0 2	0 22	A0	7 71	7 35	420	4	397	87?L	3 0L	29 000
9	852	73	17 51 38	-29 40 25							468	314	365	23693?	3 0L	7897 657
10	814	128	17 51 41	-33 9 7	209456	0 4	2 9	B3	9 06	9 00	143	29	107	799 L	30 0C	26 633
11	606	55	17 51 54	-28 39 22							492	195	456	3894?	3 0L	1298 000
12	600	31	17 52 5	-28 19 19	185937	-0 5	1 9	B9	9 10	00	148	14	115	392?L	30 0C	13 067
13	747	124	17 52 9	-31 55 17							450	27	419?	683	3 0L	227 667
14	591	53	17 52 17	-28 21 13	185937	0 7	-0 44	B9	9 10	00	463	6	434	1607L	3 0L	53 333
15	689	100	17 52 26	-30 37 58	209475	0 6	2 35	B9	8 86	8 65	472	33	439	790 L	3 0L	263 333
16	689	100	17 52 26	-30 37 58	209480?	-0 6	-4 6	A0	7 54	7 21	472	33	439	790 L	3 0L	263 333
17	695	81	17 52 30	-30 33 28	209474?	0 10	-0 46	B3	8 60	8 70	245	257	122	13682	30 0C	456 067
18	695	81	17 52 30	-30 33 28	209480?	-0 1	0 23	A0	7 54	7 21	245	257	122	13682	30 0C	456 067
19	769	140	17 52 38	-32 27 55	209489	-0 22	0 11	0	6 62	00	434	4	408	97 L	3 0L	32 333
20	846	178	17 52 41	-34 12 47	209482	0 5	3 60	B9	8 06	7 71	410	13	384	290?	3 0L	96 667
21	857	185	17 52 48	-34 28 19	209493	-0 15	1 10	A0	8 66	8 44	402	10	374	2337L	3 0L	77 667
22	776	126	17 52 59	-32 27 35	209483	-0 0	0 31	0	6 62	00	156	78	103	2783?L	30 0C	92 767
23	765	145	17 53 6	-32 26 30	209483	0 7	1 37	0	6 62	00	439	7	410	173 L	3 0L	57 667
24	572	56	17 53 13	-28 2 2	185975?	-0 19	1 31	A3	5 76	00	466	5	443	113?L	3 0L	37 667
25	764	132	17 53 13	-32 39 43	209503	-0 20	1 15	B9	6 60	00	204	111	111	5373 L	30 0C	179 100
26	816	146	17 53 14	-33 23 13	209508?	-0 30	0 56	A0	8 12	7 84	126	27	101	613 L	30 0C	20 433
27	816	78	17 53 21	-29 3 55	185963?	0 7	-2 59	A2	9 10	00	458	4	435	89?	3 0L	29 667
28	816	78	17 53 21	-29 3 55	185970?	-0 5	-1 19	A3	8 90	00	458	4	435	89?	3 0L	29 667
29	839	24	17 53 21	-27 6 15	185976	-0 18	1 34	B9	8 40	00	215	93	118	5363 L	30 0C	178 767
30	529	44	17 53 34	-27 7 5	185976	-0 15	0 43	B9	8 40	00	465	42	431	1186 L	3 0L	395 333
31	661	79	17 53 34	-29 54 40	185962?	0 24	-3 8	A2	8 40	00	161	27	118	885 L	30 0C	29 500
32	661	79	17 53 34	-29 54 40	185974?	0 4	0 18	B9	8 50	00	161	27	118	885 L	30 0C	29 500
33	677	85	17 53 35	-30 16 27	209507	-0 5	0 23	B9	8 50	8 47	207	87	125	4053	30 0C	135 100
34	667	107	17 53 45	-30 16 51	209507	-0 5	-0 1	B9	8 50	8 47	443	13	411	365?	3 0L	121 667
35	730	113	17 53 47	-31 29 31	209502?	0 18	1 25	B9	8 72	8 41	236	183	113	9951	30 0C	331 700
36	730	113	17 53 47	-31 29 31	209514?	-0 18	0 27	A0	9 44	9 40	236	183	113	9951	30 0C	331 700
37	730	113	17 53 47	-31 29 31	209518?	-0 25	0 46	B5	9 34	9 17	236	183	113	9951	30 0C	331 700
38	753	125	17 53 50	-32 2 27	209520	-0 24	0 13	B5	8 27	7 82	339	208	102	20302 H	30 0C	676 733
39	634	94	17 53 56	-29 33 4	185985	-0 17	1 5	B3	9 20	00	452	7	428	168 L	3 0L	52 667
40	595	76	17 53 57	-28 38 49							467	190	424	5613?	3 0L	1871 000
41	706	107	17 54 0	-31 0 12	209521	-0 11	0 24	0	8 24	8 17	209	107	117	5196 L	30 0C	173 200
42	741	146	17 54 10	-32 1 10	209520	-0 4	1 30	B5	8 27	7 82	457	38	406	1471 L	3 0L	490 333
43	835	169	17 54 11	-33 55 32	209527	-0 29	1 11	A0	8 30	7 93	132	37	99	999	30 0C	33 300
44	619	70	17 54 21	-29 2 4	186005?	-0 31	2 2	B8	9 00	00	174	9	127	2927L	30 0C	9 733
45	791	150	17 54 21	-32 56 50	NO						155	74	99	2762	30 0C	92 067
46	516	48	17 54 23	-26 54 5	185998?	-0 18	-4 1	A5	9 00	00	444	12	420	216?	3 0L	72 000
47	633	99	17 54 25	-29 34 22	185985?	0 11	-0 13	B3	9 20	00	453	5	428	114 L	3 0L	38 000
48	633	99	17 54 25	-29 34 22	185994?	-0 10	-0 17	B8	8 70	00	453	5	428	114 L	3 0L	38 000
49	773	165	17 54 25	-32 47 25							428	9	395?	217?	3 0L	72 333
50	694	128	17 54 27	-30 58 51	209521	0 9	1 46	0	8 24	8 17	445	8	417	2007L	3 0L	66 667
51	641	81	17 54 27	-29 33 50	185985?	-0 14	0 18	B3	9 20	00	181	50	27	1754 L	30 0C	56 800
52	641	81	17 54 27	-29 33 50	185994?	-0 8	0 14	B8	8 70	00	181	50	127	1704 L	30 0C	56 800
53	776	145	17 54 32	-32 38 50							143	8	103	265?	30 0C	8 833
54	856	183	17 54 33	-34 25 57							122	12	99	241?	30 0C	8 833
55	644	107	17 54 34	-29 51 35	186002	-0 10	-4 16	B3	9 30	00	451	47	408	1616?L	3 0L	538 667
56	662	93	17 54 38	-30 3 20	209529	-0 10	0 19	B8	7 65	7 20	275	151	118	10935 H	30 0C	364 520
57	650	112	17 54 47	-30 0 55	209529	-0 1	2 44	B8	7 65	7 20	470	137	414?	5145	3 0L	17 5 220
58	617	75	17 54 50	-29 3 21	186005	-0 3	0 45	B8	9 00	00	204	39	124?	2226	30 0C	74 220
59	567	78	17 55 2	-28 8 16	186010?	0 3	1 12	B9	9 00	00	463	45	425	1393	3 0L	+6 333
60	567	78	17 55 2	-28 8 16	186011?	0 2	-0 0	B5	8 80	00	463	45	425	1393 L	3 0L	+6 333
61	577	59	17 55 2	-28 8 59	186010?	0 3	0 29	B9	9 00	00	269	41	140?	3654	30 0C	2 800
62	577	59	17 55 2	-28 8 59	186011?	0 2	-0 43	B5	8 80	00	269	41	140?	3654 L	30 0C	21 800
63	512	56	17 55 7	-26 52 51	185998?	0 25	-2 46	A5	9 00	00	461	18	428	+99?	3 0L	166 333
64	547	50	17 55 15	-27 30 51	186007?	0 21	-2 27	A0	9 30	00	258	17	146?	1637	30 0C	5 567
65	547	50	17 55 15	-27 30 51	186023	-0 14	0 11	B8	8 50	00	258	17	146?	1637 L	30 0C	5 567
66	697	117	17 55 18	-30 55 56	NO						150	40	117	884	30 0C	29 467
67	613	103	17 55 23	-29 13 59	186016	0 10	1 36	A0	9 00	00	448	51	399	1883?	3 0L	627 667
68	602	75	17 55 23	-28 46 6	186025	-0 6	-0 46	B5	5 95	00	412	432	127?	57155 L	30 0C	1905 467
69	614	83	17 55 30	-29 4 26	186005?	0 38	-0 20	B9	9 00	00	455	5	122	146?L	30 0C	4 867
70	622	87	17 55 33	-29 15 35	186016	0 20	-0 1	A0	9 00	00	143	10	117	229 L	30 0C	7 633
71	913	244	17 55 35	-36 1 49	209555	-0 19	-1 33	A0	8 60	8 26	397	31	343	1132	3 0L	377 333
72	913	244	17 55 35	-36 1 49	209557?	-0 19	3 45	A0	9 36	9 18	397	31	343	1132	3 0L	377 333
73	641	118	17 55 37	-29 54 39							444	1567	357	94882?	3 0L	3 627 333
74	463	43	17 55 41	-25 47 9	186033	-0 8	1 5	A2	8 50	00	456	53	403	2268 H	3 0L	762 667
75	463	43	17 55 41	-25 47 9	186047?	-0 29	1 49	B9	8 20	00	456	53	403	2268	3 0L	762 667
76	486	54	17 55 48	-26 21 32	186050?	-0 28	2 31	B9	9 00	00	451	26	426	493	3 0L	184 333
77	589	98	17 55 48	-28 45 4	186025	0 19	0 16	B5	5 95	00	479	1085	357	48000 H	3 0L	16000 000
78	468	25	17 55 54	-25 43 52	186033?	0 5	4 23	A2	8 50	00	256	95	118	6699	30 0C	223 300
79	468	25	17 55 54	-25 43 52	186047?	-0 16	5 7	B9	8 20	00	256	95	118	6699	30 0C	223 300
80	910	247</														

PAGE, CARRUTHERS AND HILL

SGR OVEREXP RA 18 34 DEC -30 24																
OBJECT NO	X	Y	R A	DEC	5A0 NO	Δ R A	Δ DEC	SPEC TYPE	V MAG	P MAG	PEAK DEN	NO OF POINTS	RG	DENSITY VOLUME	EXP & FILTER	DEN VOL/ EXP
101	588	98	17 57 36	-28 43 31	186085	0 3	-0 54	A0	8 90	00	249	175	114	10589 H	30 OC	352 300
102	543	80	17 57 43	-27 41 52	186082	0 20	1 25	B9	9 00	00	189	30	108	15437	30 OC	51 433
103	696	170	17 57 47	-31 25 20							422	39	384	12047	3 OL	401 333
104	918	272	17 57 53	-36 22 4	209597	-0 6	1 14	B9	8 90	8 45	422	119	327	6435 H	3 OL	2145 000
105	918	272	17 57 53	-36 22 4	209508?	-0 32	0 36	B9	6 32	00	422	119	327	6435	3 OL	2145 000
106	557	88	17 57 54	-28 1 49	186120?	-0 40	-4 26	B9	9 30	00	149	5	121	1107L	30 OC	3 657
107	532	79	17 57 55	-27 28 14							149	6	109	1677	30 OC	6 233
108	854	228	17 58 5	-34 59 49	209605	-0 9	0 44	A0	8 50	8 30	132	44	97	1224	30 OC	40 800
109	761	181	17 58 8	-32 42 18	209599/	-0 5	1 49	A0	8 90	8 89	140	73	94	2292	30 OC	76 400
110	761	181	17 58 8	-32 42 18	209609/	-0 18	0 37	0	8 76	8 77	140	73	94	2292 L	30 OC	76 400
111	587	127	17 58 9	-38 58 3	186102	0 3	1 35	A0	9 10	00	422	6	396	1387L	3 OL	46 000
112	885	261	17 58 12	-35 40 41	209614	-0 31	-0 29	B8	7 62	7 33	388	30	335	1124 L	3 OL	374 657
113	599	110	17 58 14	-29 1 57	186102	0 9	-2 19	A0	8 10	8 09	179	33	109	1082	30 OC	33 400
114	925	258	17 58 15	-36 21 29	209597/	0 17	1 48	B9	8 30	8 45	382	201	95	22622	30 OC	750 733
115	925	258	17 58 15	-36 21 29	209608/	-0 10	1 10	B9	6 32	00	382	201	95	22622	30 OC	750 733
116	613	140	17 58 20	-29 34 19	186109	0 5	0 56	A0	7 59	00	440	16	403	357 L	3 OL	119 000
117	522	103	17 58 22	-27 29 53	NO						440	51	395	1744	3 OL	581 333
118	622	123	17 58 25	-29 35 24	186109	0 10	-0 9	A0	7 50	00	198	89	114	3971	30 OC	132 367
119	543	112	17 58 26	-28 0 2	186120	-0 7	-2 39	B9	9 30	00	441	19	409?	510	3 OL	170 000
120	892	246	17 58 29	-35 39 39	209614	-0 15	0 33	B8	7 62	7 33	254	486	93	34609 H	30 OC	1153 833
121	550	94	17 58 32	-27 57 16	186120	-0 1	0 7	B9	9 30	00	162	46	116	1516	30 OC	50 533
122	881	263	17 58 33	-35 37 6	209614	-0 11	0 7	B9	7 62	7 33	367	7	335	1897L	3 OL	63 000
123	881	263	17 58 33	-35 37 6	209620?	-0 18	-4 36	A2	9 16	9 23	307	7	335	1897	3 OL	63 000
124	730	172	17 58 33	-32 3 52	209617	-0 14	-0 24	B8	8 61	8 38	199	133	96	4617	30 OC	153 900
125	481	89	17 58 37	-28 33 10	186136	-0 20	-4 10	A0	9 00	00	419	25	389	5997L	3 OL	199 667
126	521	107	17 58 43	-27 31 47	NO						456	309	392	7772	3 OL	2590 667
127	824	217	17 58 45	-34 10 46	209626	-0 19	0 40	B8	8 93	8 60	146	65	104	1733	30 OC	57 767
128	719	192	17 58 46	-32 3 13	209617	-0 1	0 15	B8	8 61	8 38	420	22	383	598 L	3 OL	199 333
129	529	89	17 58 52	-27 30 39	NO						371	308	115	27356	30 OC	911 867
130	880	267	17 58 55	-35 39 4	209614	0 12	1 8	B8	7 62	7 33	366	15	334?	3377L	3 OL	112 333
131	880	267	17 58 55	-35 39 4	209623?	-0 1	-4 43	A	9 37	9 60	356	15	334?	3377L	3 OL	112 333
132	537	93	17 58 55	-27 41 46	NO						163	10	114	351	30 OC	11 700
133	459	86	17 58 58	-26 18 51	NO						427	26	386	903	3 OL	301 000
134	605	123	17 59 2	-29 15 45	186128	0 23	-0 20	A0	9 00	00	173	46	106	1871	30 OC	62 367
135	473	70	17 59 8	-26 13 51	186147	-0 17	-7 0	A0	9 00	00	174	10	122	417 L	30 OC	13 900
136	800	233	17 59 11	-33 53 51	209631	-0 13	-0 26	B9	7 65	6 98	450	143	357	7425	3 OL	2475 000
137	679	158	17 59 17	-30 58 44	209635	-0 16	-0 28	B9	8 32	8 32	131	15	102	372L	30 OC	12 400
138	808	217	17 59 19	-33 53 33	209631	-0 5	-0 6	B5	7 55	6 98	380	259	92	30496	30 OC	1016 533
139	876	271	17 59 27	-35 36 28	209623?	0 31	-0 6	A	9 97	9 60	371	19	331	569 H	3 OL	189 667
140	876	271	17 59 27	-35 36 28	209634?	-0 4	-0 36	B9	9 06	8 84	371	19	331	569	3 OL	189 667
141	876	271	17 59 27	-35 36 28	209639	-0 25	0 27	B9	8 30	8 02	371	19	331	569	3 OL	189 667
142	753	216	17 59 28	-32 53 7	209636	-0 14	1 55	A0	9 61	9 33	417	21	381	9339?	3 OL	3113 000
143	656	173	17 59 30	-30 41 44	209636	-0 4	-0 29	B9	7 86	00	356	272	104	27293 H	30 OC	909 767
144	607	131	17 59 32	-29 22 34	186156	0 2	-0 21	B8	7 66	00	459	129	399?	4348	3 OL	1449 333
145	598	150	17 59 38	-29 22 26	186156	0 2	-0 21	B8	7 66	00	459	129	399?	4348	3 OL	1449 333
146	799	239	17 59 39	-33 56 18	209631	0 15	-0 52	B5	7 55	6 98	390	5	357	1397L	3 OL	46 333
147	472	76	17 59 41	-26 15 29	186147?	0 15	-0 39	A0	9 00	00	249	73	130?	4080 H	30 OC	136 000
148	472	76	17 59 41	-26 15 29	186180?	-0 36	-0 39	A0	7 50	00	249	73	130?	4080	30 OC	136 000
149	632	146	17 59 57	-26 17 44	NO						135	38	102	1007	30 OC	33 567
150	463	99	17 59 59	-27 15 53	186168	-0 18	1 33	A0	7 50	00	431	18	395	4847L	3 OL	161 333
151	504	116	18 0 0	-28 10 40	186168	-0 1	3 54	A2	9 00	00	401	7	350	320?	3 OL	106 667
152	543	133	18 0 8	-28 10 40							430	143	393	1632?	3 OL	544 000
153	511	140	18 0 11	-29 31 28	186166?	0 14	0 24	B5	8 90	00	206	66	99	3694 L	30 OC	123 133
154	413	140	18 0 11	-29 31 28	186170/	0 9	-3 29	A0	9 10	00	206	66	99	3694	30 OC	123 133
155	494	92	18 0 12	-26 50 40	186189	-0 21	1 36	B5	7 60	00	207	105	105	5670	30 OC	189 000
156	528	129	18 0 14	-27 50 56	186171	0 12	0 59	A0	9 00	00	436	89	388	2354?H	3 OL	788 000
157	502	118	18 0 15	-27 14 30	186168?	0 16	5 17	A2	9 00	00	404	35	357	1315 H	3 OL	438 333
158	502	118	18 0 15	-27 14 30	186200?	-0 28	3 54	B3	9 00	00	404	35	357	1315 L	3 OL	438 333
159	538	111	18 0 17	-27 53 14	186171	0 14	-1 19	A0	9 00	00	180	52	133	1367	30 OC	45 567
160	658	251	18 0 17	-35 6 1	209640?	0 25	-7 55	A2	9 18	9 23	134	69	90	2218	30 OC	73 933
161	858	251	18 0 17	-35 6 1	209663?	-0 41	-0 33	A0	8 15	8 00	134	69	90	2218	30 OC	73 933
162	624	130	18 0 28	-27 46 46	186201	-0 16	-2 48	A0	9 20	00	442	72	351	3424 H	3 OL	1141 333
163	565	147	18 0 32	-28 43 56	186192	-0 5	0 18	A0	8 20	00	419	34	385	731 L	3 OL	243 667
164	419	82	18 0 33	-25 20 13	186193	-0 6	-1 19	B1	8 90	00	421	40	378	12957L	3 OL	431 667
165	436	86	18 0 33	-25 30 28	NO						247	34	130?	2084	30 OC	69 467
166	427	87	18 0 37	-26 31 17	NO						433	169	366	7140	3 OL	2380 000
167	483	115	18 0 37	-26 49 29	186189	0 4	2 47	B5	7 90	00	422	88	346	348?	3 OL	1161 333
168	530	113	18 0 39	-27 44 26	186201	-0 5	-0 28	A0	9 20	00	173	59	123	2051	30 OC	68 367
169	574	131	18 0 44	-28 44 21	186192	0 7	-0 6	A0	8 20	00	155	49	108	1532	30 OC	51 067
170	511	106	18 0 45	-27 18 1	186200	0 3	0 24	B3	9 00	00	285	200	112	17354 H	30 OC	578 467
171	373	54	18 0 47	-24 17 5	186204/	-0 1	4 43	0	5 86	00	507	3339	369	23584?	3 OL	78613 667
172	373	54	18 0 47	-24 17 5	186207/	-0 6	1 50	B0	7 25	00	507	3339	369	23584?	3 OL	78613 667
173	413	85	18 0 56	-25 14 12	186193	0 17	4 42	B1	8 90	00	412	6	371	1957L	3 OL	65 000
174	692	207	18 0 57	-31 41 5	209654	-0 3	-2 11	B3	8 09	7 81	411	42	368	1350 L	3 OL	450 000
175	729	202	18 1 2	-32 18 32							115	12	90	2657	30 OC	8 833
176	822	243	18 1 3	-34 22 56							115	11	92	2387	30 OC	7 933
177	516	135	18 1 8	-27 38 13	186201	0 24	5 46	A0	9 20	00	419	11	388	289	3 OL	96 333
178	665	175	18 1 9	-30 52 30	209659	-0 11	-0 10	B9	8 50	9 34	123	31	92	809	30 OC	26 967
179	899	191	18 1 15	-31 39 2	209654	0 14	-0 9	B3	8 09	7 81	184	85	90	4741 L	30 OC	158 033
180	506	133	18 1 17	-27 26 50</												

NRL REPORT 8173

SGR OVEREXP RA 18 34 DEC -30 24

OBJECT NO	X	Y	R A	DEC	SAO NO	Δ R A	Δ DEC	SPEC TYPE	V MAG	P MAG	PEAK DEN	NO OF POINTS	BG	DENSITY VOLUME	EXP & FILTER	DEN VOL / EXP
201	514	146	18 2 5	-27 43 21	186249	-0 5	-1 16	B9	9 00	00	424	99	371	3593 H	3 0L	1197 667
202	339	66	18 2 7	-23 38 52	186235?	0 21	-2 48	B8	8 60	00	444	20	367	1117 L	3 0L	372 333
203	339	66	18 2 7	-23 38 52	186255?	-0 19	4 21	B3	8 30	00	444	20	367	1117 L	3 0L	372 333
204	522	150	18 2 9	-27 54 30	NO						412	16	378	426	3 0L	142 000
205	574	172	18 2 11	-29 6 22	186248	0 2	-0 48	B6	8 70	00	420	28	388	634 L	3 0L	211 333
206	374	60	18 2 11	-24 16 13	186227?	0 39	3 53	B3	8 90	00	472	1598	137?	375396	30 0C	12513 200
207	374	60	18 2 11	-24 16 13	186247	0 4	7 58	0	6 79	00	472	1598	137?	375396	30 0C	12513 200
208	570	148	18 2 12	-28 49 32	NO						141	41	100	1324	30 0C	44 133
209	465	129	18 2 15	-26 35 21	186252	-0 2	2 43	B8	8 60	00	406	44	375	975 L	3 0L	325 000
210	526	132	18 2 19	-27 49 21	186249?	0 8	-7 16	B9	9 00	00	211	239	107	11810 H	3 0C	393 667
211	584	178	18 2 21	-29 20 49	186256	-0 8	-3 54	A2	7 03	00	413	15	374	419? L	3 0L	139 667
212	472	111	18 2 23	-26 34 13	186252	0 7	3 52	B8	8 60	00	179	91	108	4191 H	30 0C	139 700
213	346	50	18 2 25	-23 38 45	186255	-0 1	4 27	B3	8 30	00	481	129	144?	25040	30 0C	834 667
214	516	152	18 2 27	-27 47 60	186249?	0 16	-5 55	B9	9 00	00	409	22	301	539	3 0L	179 667
215	627	199	18 2 32	-30 21 23	209696	-0 4	4 13	X0	3 07	00	407	10	383?	221?	3 0L	73 667
216	595	163	18 2 32	-29 25 6	186265	-0 20	1 6	B5	8 50	00	356	197	104	19478	30 0C	649 267
217	389	72	18 2 33	-24 39 39	186240?	0 40	1 27	B0	8 00	00	377	35	130?	4682 L	30 0C	156 067
218	581	158	18 2 36	-29 6 32	186248?	0 27	-0 58	B8	8 70	00	138	33	98	1063 L	30 0C	35 433
219	479	140	18 2 40	-26 57 50	186264	-0 11	0 59	B3	8 60	00	436	54	380	2137	3 0L	712 333
220	469	114	18 2 40	-26 31 39	186252?	0 23	6 25	B8	8 60	00	167	34	108	12112 L	30 0C	40 367
221	487	121	18 2 41	-26 57 23	186284	-0 9	1 27	B3	8 60	00	336	145	113	14011	30 0C	467 033
222	339	73	18 2 42	-23 42 1	186255	0 16	1 7	B3	8 30	00	415	15	365	541? L	3 0L	180 333
223	811	257	18 4 44	-34 18 9	209711	-0 17	1 7	B6	7 98	7 46	255	211	93	15101	30 0C	503 367
224	803	276	18 4 45	-34 20 35	209711	-0 16	-1 20	B8	7 98	7 46	396	49	339	1679	3 0L	559 667
225	676	221	18 4 46	-31 30 22	209703?	-0 3	-0 40	B8	8 76	8 49	407	424	382	1320	3 0L	440 000
226	676	221	18 4 46	-31 30 22	209704?	-0 3	4 14	B8	8 82	8 49	407	424	382	1320	3 0L	440 000
227	585	203	18 4 48	-31 29 41	209703	-0 1	0 1	B8	8 76	8 49	199	136	88	7914 H	30 0C	263 800
228	585	203	18 4 48	-31 29 41	209704?	-0 2	4 55	B8	8 82	8 49	199	136	88	7914 H	30 0C	263 800
229	355	94	18 5 50	-24 6 49	186258?	-0 11	5 15	B9	8 10	00	449	23	371	1260	3 0L	420 000
230	586	185	18 5 52	-29 27 36	186265	-0 0	-1 22	B5	8 50	00	442	63	384?	2183	3 0L	727 667
231	809	280	18 5 54	-34 29 26	209714?	-0 13	1 2	B8	8 71	8 31	382	26	343	707	3 0L	235 667
232	809	280	18 5 54	-34 29 26	209718?	-0 18	1 48	B8	9 24	9 05	382	26	343	707	3 0L	235 667
233	357	86	18 5 56	-24 10 2	186268	-0 5	2 2	B9	8 10	00	459	332	366	15440? H	3 0L	5146 667
234	679	224	18 5 56	-31 35 15	209704	-0 6	-0 40	B6	8 92	8 69	415	47	385	1460?	3 0L	488 667
235	555	152	18 6 00	-28 33 31	186278	-0 18	0 31	B8	9 20	00	159	69	104	2111	3 0L	70 367
236	694	231	18 6 31	-31 56 0	209701	-0 16	-0 45	A5	9 70	9 65	388	21	350	605 H	3 0L	201 667
237	818	265	18 6 33	-34 30 43	209714?	-0 2	-0 15	B8	8 71	8 31	191	51	89	2631	30 0C	88 367
238	818	265	18 6 33	-34 30 43	209718?	-0 7	0 31	B8	9 24	9 05	191	51	89	2631	30 0C	88 367
239	723	223	18 6 33	-32 23 55	209720	-0 21	-0 30	B8	8 82	8 63	130	56	86	1773	30 0C	59 100
240	545	173	18 6 36	-28 32 39	186278	-0 5	1 22	B8	9 20	00	445	10	376	247 L	3 0L	82 333
241	510	159	18 6 36	-27 44 17	NO						417	35	368	1297	3 0L	432 333
242	473	124	18 6 36	-26 42 3	NO						142	75	104	1896	30 0C	63 200
243	713	245	18 6 38	-32 25 23	209720	0 2	-1 58	B8	8 82	8 63	387	11	353	286 L	3 0L	95 333
244	713	245	18 6 38	-32 25 23	209722?	-0 10	4 53	B9	9 60	9 75	387	11	353	286	3 0L	95 333
245	710	244	18 6 38	-32 21 36	209720	0 3	1 59	B8	8 82	8 63	386	9	356	208? L	3 0L	69 333
246	685	212	18 6 39	-31 34 38	209704?	0 40	-0 1	B8	8 92	8 69	113	5	88	114?	30 0C	3 800
247	516	143	18 6 30	-27 43 32	NO						135	9	106	205	30 0C	6 833
248	536	173	18 6 32	-28 22 11	186286	-0 4	0 0	A0	7 33	00	426	60	376	2015	3 0L	671 667
249	808	266	18 6 33	-34 19 40	209711?	0 32	-0 24	B8	7 98	7 46	124	5	89	149? L	30 0C	4 967
250	487	159	18 6 39	-27 28 42	186292	-0 12	2 12	B5	9 00	00	412	16	362	617 L	3 0L	205 667
251	446	112	18 6 39	-26 5 54	NO						285	117	109	8704?	30 0C	290 133
252	506	141	18 6 38	-27 29 22	186292	-0 13	1 32	B5	9 00	00	155	54	101	2071 L	30 0C	69 033
253	955	330	18 6 40	-37 31 54	209728	-0 18	0 4	B9	9 30	8 94	125	40	80	1291	30 0C	43 033
254	689	238	18 6 42	-31 54 12	NO						388	6	363	132	3 0L	44 000
255	567	188	18 6 43	-29 6 25	186287?	0 6	-3 51	A0	8 10	00	411	55	369	1863	3 0L	621 000
256	587	188	18 6 43	-29 6 25	186288?	-0 1	-1 33	B9	7 90	00	411	55	369	1863	3 0L	621 000
257	351	71	18 6 46	-23 55 20	NO						207	6	151?	326	30 0C	10 867
258	430	130	18 6 48	-25 56 36	NO						395	18	351	625?	3 0L	208 333
259	437	135	18 6 52	-26 7 42	NO						415	22	373	751	3 0L	250 333
260	542	159	18 6 59	-28 21 10	186286	0 23	1 1	A0	7 33	00	316	136	94	12899 H	30 0C	429 967
261	572	172	18 6 2	-29 3 17	186287?	0 24	-0 43	A0	8 10	00	248	155	94	10026	30 0C	334 200
262	572	172	18 6 2	-29 3 17	186288?	0 17	1 35	B9	7 90	00	248	155	94	10026	30 0C	334 200
263	837	284	18 6 3	-35 1 13	209746	-0 31	0 34	B8	8 66	8 22	162	84	92	3563	30 0C	122 100
264	610	210	18 6 6	-30 7 57	209734	-0 5	3 7	A0	9 32	9 23	392	15	363	380?	3 0L	126 667
265	394	119	18 6 8	-25 8 41	186306	-0 14	-1 59	B	8 40	00	401	160	352	5471	3 0L	1823 667
266	642	202	18 6 9	-30 39 56	209733	0 1	0 18	B9	8 89	8 50	173	63	98	2854	30 0C	95 467
267	633	220	18 6 10	-30 39 25	209733	0 2	0 49	B9	8 89	8 50	404	26	354	978	3 0L	326 000
268	463	153	18 6 13	-26 45 56	186310	-0 16	-3 57	A0	8 80	00	402	18	371	433	3 0L	144 333
269	365	85	18 6 16	-24 18 1	186298	0 17	1 52	A0	9 20	00	169	20	121	529?	30 0C	17 633
270	411	129	18 6 17	-25 33 38	186315	-0 15	2 25	B9	8 50	00	397	23	366	755	3 0L	251 667
271	398	101	18 6 22	-25 4 6	186306	0 0	2 35	B	8 40	00	173	82	114	2947	30 0C	98 233
272	829	305	18 6 23	-35 3 58	209746	-0 10	-2 11	B8	8 66	8 22	349	8	323	194 L	3 0L	64 667
273	292	75	18 6 25	-22 49 58	186320?	-0 15	4 20	B2	9 10	00	397	5	375	89 L	3 0L	29 667
274	292	75	18 6 25	-22 49 58	186325?	-0 23	3 16	B3	8 50	00	397	5	375	89 L	3 0L	29 667
275	419	112	18 6 28	-25 34 7	186315	-0 3	1 56	B9	8 50	00	205	49	113	2675	30 0C	89 167
276	412	132	18 6 30	-25 36 10	186315	-0 1	-0 6	B9	8 50	00	398	33	349	1234?	3 0L	411 333
277	852	297	18 6 37	-35 24 12	209741	0 17	-0 25	B	8 67	9 20	110	7	88	142? L	30 0C	4 733
278	423	116	18 6 41	-25 40 34	186315	0 9	-4 31	B9	8 50	00	137	4	114	88? L	30 0C	2 933
279	894	316														

PAGE, CARRUTHERS AND HILL

SGR OVEREXP RA 18 34 DEC -30 24

OBJECT NO	X	Y	R	A	DEC	SAO NO	Δ R	Δ A	Δ DEC	SPEC TYPE	Y MAG	P MAG	PEAK DEN	NO OF POINTS	RG	DENSITY VOLUME	EXP & FILTER	DEN VOL / EXP
301	470	148	18	5	24	186345	-0	17	2 16	B5	9 00	00	135	42	95	1305 L	30 OC	43 500
302	397	138	18	5	25	186332?	0	23	-0 44	B2	8 50	00	397	15	361	447L	3 OL	149 000
303	445	159	18	5	27	NO							377	9	347	227	3 OL	75 667
304	898	349	18	5	30	209779	-0	21	0 50	B0	6 58	00	428	103	293	7949 L	3 OL	2649 667
305	400	143	18	5	44	186350	-0	4	0 59	B8	6 27	00	445	661	317?	58272 H	3 OL	18757 333
306	650	245	18	5	44	209767?	0	4	2 10	B9	7 38	9 28	368	11	355	307 L	3 OL	102 333
307	650	245	18	5	44	209771	-0	1	-3 7	A0	7 69	00	368	11	355	307 L	3 OL	102-333
308	776	298	18	5	44	209777	-0	10	-1 6	B8	8 25	9 02	379	14	348	334	3 OL	111 333
309	279	88	18	5	46	186365	-0	26	4 36	B8	8 70	00	376	9	355	162 L	3 OL	54 000
310	657	227	18	5	47	209767?	0	7	4 0	B9	9 38	9 28	181	133	84	6899 H	30 OC	229 967
311	657	227	18	5	47	209771?	0	2	-1 7	A0	7 69	00	181	133	84	6899	30 OC	229 967
312	407	147	18	5	50	186350?	0	2	-8 57	B8	6 27	00	387	19	349	559 L	3 OL	186 333
313	408	125	18	5	50	186350	-0	2	0 58	B0	6 58	00	385	417	108	41397	30 OC	1379 900
314	906	333	18	5	52	209779	-0	7	0 50	B0	6 58	00	388	228	762	40453	30 OC	1348 433
315	371	133	18	5	52	186368	-0	18	0 41	B8	9 40	00	388	26	345	8097	3 OL	269 667
316	333	116	18	5	52	186356	-0	12	2 43	B0	7 48	00	453	54	339	3938 L	3 OL	1312 667
317	361	130	18	5	52	186374?	-0	24	4 19	B8	8 90	00	399	76	335	3376	3 OL	1125 000
318	861	317	18	5	54	209790?	-0	35	1 23	A0	9 90	9 45	107	5	83	1117	30 OC	3 700
319	782	293	18	5	54	186360	-0	4	-0 20	B9	9 30	00	383	38	350	7387	3 OL	246 000
320	310	107	18	5	54	186377	-0	4	4 19	B8	8 70	00	213	14	128?	1031 L	30 OC	34 367
321	287	74	18	5	54	186365	0	20	-2 18	B8	8 25	9 02	368	10	334	2817	3 OL	93 667
322	774	303	18	5	54	209777	-0	12	1 4	B8	8 90	00	172	46	123	1385 L	30 OC	46 167
323	371	114	18	5	54	186374	-0	9	2 58	B8	8 90	00	377	6	345	1677L	3 OL	55 667
324	351	133	18	5	54	186371	-0	9	-0 26	A0	9 30	00	370	38	338	9117	3 OL	303 667
325	293	103	18	5	54	186374	-0	16	-1 0	B5	9 11	8 79	392	25	331	931	3 OL	310 333
326	812	320	18	5	54	209789	-0	6	3 59	B8	9 40	00	377	11	342	3517	3 OL	117 000
327	366	136	18	5	54	186358	-0	21	0 16	B8	8 88	8 58	156	169	82	6466 H	30 OC	215 533
328	849	315	18	5	54	209797?	-0	1	1 28	A0	9 00	00	391	27	355	736	3 OL	245 333
329	435	166	18	5	54	186374	-0	0	0 55	B8	8 90	00	380	9	347	2707L	3 OL	90 000
330	362	135	18	5	54	209791	-0	0	0 24	B8	9 14	8 90	157	73	95	3206	30 OC	108 867
331	715	260	18	5	54	186374	-0	7	-1 58	B8	9 14	8 90	374	15	345	373	3 OL	124 333
332	707	278	18	5	54	209797	-0	0	3 33	B8	8 88	8 58	337	10	312	222 L	3 OL	74 000
333	837	333	18	5	54	209808?	-0	35	0 28	A0	8 93	8 68	111	11	88	2272L	30 OC	7 567
334	804	298	18	5	54	209789	-0	0	0 3	B5	9 11	8 79	209	109	87	7133	30 OC	237 767
335	819	305	18	5	54	186375/	-0	6	-4 25	A2	8 60	00	455	565	342	35121	3 OL	11707 000
336	317	117	18	5	54	186379/	-0	4	2 22	B	9 10	00	455	565	342	35121	3 OL	11707 000
337	317	117	18	5	54	186380/	-0	5	0 15	B	8 70	00	455	565	342	35121	3 OL	11707 000
338	317	117	18	5	54	186381/	-0	6	0 52	B8	9 48	00	455	565	342	35121	3 OL	11707 000
339	317	117	18	5	54	156385/	-0	9	-1 36	B5	9 50	00	455	565	342	35121	3 OL	11707 000
340	317	117	18	5	54	186372	0	16	0 36	A0	9 00	00	137	57	89	1953	30 OC	85 100
341	442	151	18	5	54	NO							113	15	89	3467	30 OC	11 533
342	471	166	18	5	54	NO							127	34	90	920	30 OC	30 667
343	518	184	18	5	54	186379?	0	13	-1 20	B	8 10	00	446	1722	113	226681	30 OC	7556 033
344	327	103	18	5	54	186380/	0	12	-3 27	B	8 70	00	446	1722	113	226681	30 OC	7556 033
345	327	103	18	5	54	186381/	0	10	-2 50	B8	9 40	00	446	1722	113	226681	30 OC	7556 033
346	327	103	18	5	54	186389/	-0	8	4 14	B5	7 64	00	446	1722	113	226681	30 OC	7556 033
347	327	103	18	5	54	NO							141	45	90	1697	30 OC	58 567
348	725	269	18	5	58	209797	0	12	0 17	B8	8 88	8 58	139	18	87	621 L	30 OC	20 700
349	847	320	18	5	58	186402	-0	16	2 33	B8	8 60	00	160	59	109	1914	30 OC	63 800
350	357	120	18	7	11	186391	0	4	-0 20	A2	8 00	00	379	6	354	139?	3 OL	46 000
351	357	120	18	7	11	186391	0	4	-5 45	B5	7 64	00	434	238	341	11720 L	3 OL	3906 867
352	324	128	18	7	14	186389/	-0	16	3 1	B5	8 00	00	434	238	341	11720 H	3 OL	3906 867
353	324	128	18	7	14	186405	-0	17	-0 16	B9	9 00	00	384	8	353	1857L	3 OL	62 000
354	479	166	18	7	15	186408	-0	17	-0 16	B9	9 00	00	384	8	353	11377	3 OL	379 000
355	580	236	18	7	16	186397	-0	1	3 3	B9	8 80	00	391	35	351	1020	3 OL	340 000
356	585	238	18	7	16	186397	-0	1	3 3	B9	8 80	00	391	35	351	1139?	3 OL	379 867
357	327	103	18	7	16	186397	-0	32	1 13	A3	9 90	9 71	108	5	83	118?	30 OC	3 933
358	840	321	18	7	18	186415?	-0	31	3 1	B9	9 40	00	131	9	107	189 L	30 OC	6 300
359	287	90	18	7	20	186391	0	16	-4 3	A2	8 00	00	374	5	347	119L	3 OL	39 667
360	559	229	18	7	23	186415	-0	26	2 13	B9	9 40	00	361	8	336	1757L	3 OL	58 333
361	378	110	18	7	24	186407	-0	7	1 59	B9	9 20	00	391	53	339	1693?H	3 OL	584 333
362	365	158	18	7	24	209817	-0	10	-0 30	B5	6 24	00	462	220	332	15000	3 OL	5000 000
363	365	158	18	7	24	186395?	0	18	-6 35	A0	9 00	00	372	21	322	813	3 OL	271 000
364	365	158	18	7	24	209817	-0	3	-0 11	B5	6 24	00	411	535	88	70404	30 OC	2346 800
365	767	293	18	7	32	186409	-0	0	-2 14	A0	9 40	00	379	9	349	220?	3 OL	73 333
366	483	169	18	7	39	186415	-0	7	3 13	B9	9 40	00	364	6	332	1647L	3 OL	54 667
367	277	113	18	7	43	186415	-0	7	3 34	B9	9 40	00	131	25	103	5807L	30 OC	19 333
368	285	95	18	7	45	186395?	0	31	0 45	A0	9 00	00	144	18	109	4807L	30 OC	16 000
369	309	106	18	7	49	186415	-0	7	-4 47	A3	10 00	00	389	5	3607	119?	3 OL	39 667
370	447	190	18	7	49	186408	0	17	2 9	B9	9 00	00	386	12	360	2597L	3 OL	86 333
371	475	202	18	7	49	186406	0	21	-2 50	B5	8 80	00	374	8	340	2107L	3 OL	70 000
372	325	137	18	7	50	186417	0	0	2 58	A5	8 10	00	381	4	351	1077L	3 OL	35 667
373	576	241	18	7	51	186421	-0	4	-4 35	A0	9 20	00	384	25	352	5867	3 OL	195-333
374	570	240	18	7	59	209832	-0	20	1 28	B8	6 99	00	236	85	83	6399	30 OC	213-300
375	820	321	18	8	2	186414	0	14	-3 59	A0	8 60	00	370	5	341	1357L	3 OL	45 000
376	780	304	18	8	2	209832	-0	16	0 6	B8	6 99	00	387	27	315	1096 L	3 OL	365 333
377	518	221	18	8	3	186435?	-0	30	1 35	B9	9 20	00	368	29	311	1267?	3 OL	422-333
378	811	339	18	8	4	NO							118	37	84	963	30 OC	52 100
379	327	142	18	8	6	209826	0	5	-3 57	A3	9 55	9						

SGR OVEREXP RA 18 34 DEC -30 24

OBJECT NO	X	Y	R A	DEC	SAO NO	Δ R A	Δ DEC	SPEC TYPE	V MAG	P MAG	PEAK DEN	NO OF POINTS	BG	DENSITY VOLUME	EXP & FILTER	DEN VOL / EXP
401	579	251	18 8 37	-29 52 7	186424?	0 30	2 41	A0	8 30	00	384	19	350	488 L	3 0L	162 667
402	579	251	18 8 37	-29 52 7	186432	0 5	-0 2	A0	8 30	00	384	19	350	488 L	3 0L	162 667
403	587	233	18 8 38	-29 51 28	186432	0 6	0 37	A0	8 30	00	183	146	84	6770 H	30 0C	225 667
404	766	326	18 8 39	-34 5 55	209841	-0 8	-1 3	B8	7 11	00	428	66	329	3486	3 0L	1162 000
405	649	258	18 8 40	-31 16 39	209853?	-0 40	-3 28	A2	9 35	9 42	118	27	85	718	30 3C	23 933
406	342	156	18 8 41	-24 27 2	186436	0 3	0 53	A0	9 40	00	373	56	334	14787H	3 0L	482 667
407	330	129	18 8 42	-23 58 41	186439	0 2	1 32	B8	9 20	00	141	58	94	2067?	30 0C	69 587
408	566	249	18 8 48	-29 35 31	186445	-0 1	-0 29	B9	8 00	00	397	25	345	977	3 0L	325 667
409	366	168	18 8 49	-24 59 49	186443	0 2	4 14	A0	9 20	00	377	54	337	13867H	3 0L	462 000
410	535	237	18 8 49	-28 53 44	186444	0 1	1 6	A0	6 38	00	411	47	344	1818 L	3 0C	686 000
411	797	320	18 8 49	-34 35 16	209838	0 8	1 4	A0	8 50	8 18	120	7	88	181 L	30 0C	6 033
412	544	219	18 8 50	-28 53 8	186444	0 2	1 43	A0	6 38	00	273	162	88	10209	30 0C	340 300
413	371	172	18 8 52	-25 8 8	186443	0 5	-4 5	A0	9 20	00	379	37	335	11867H	3 0L	395 333
414	325	151	18 8 54	-24 5 31	186435?	0 18	-1 13	B9	9 20	00	356	4	332	65?	3 0L	20 333
415	325	151	18 8 54	-24 5 31	186451?	-0 7	1 18	B9	9 20	00	356	4	332	65?	3 0L	20 333
416	240	113	18 8 59	-22 10 27	186442	0 17	-3 26	B	9 10	00	355	6	325	1365L	3 0L	45 333
417	434	177	18 8 58	-26 23 12	186449	0 1	1 23	A0	8 50	00	117	29	86	762	30 0C	25 400
418	425	194	18 8 60	-26 22 33	186449	0 2	2 2	A0	8 50	00	354	4	337	97 L	3 0L	32 333
419	449	184	18 8 1	-26 42 14	186460	-0 23	2 36	B	9 20	00	109	6	85	1342L	30 0C	4 467
420	322	129	18 8 3	-23 49 51	NO						133	22	94	642L	30 0C	21 400
421	560	250	18 8 6	-29 28 56	186455	-0 6	0 22	B8	9 00	00	396	53	345	1947	3 0L	649 000
422	893	359	18 8 7	-36 29 13	209851	-0 12	0 22	B8	8 25	8 03	129	65	79	23002L	30 0C	76 667
423	572	234	18 8 9	-29 33 54	186445	0 20	1 7	B9	8 00	00	173	93	89	3832	30 0C	127 733
424	572	234	18 8 9	-29 33 54	186455?	-0 2	-4 36	B8	9 00	00	173	93	89	3832	30 0C	127 733
425	440	204	18 8 11	-26 43 40	186460	-0 13	1 11	B	9 20	00	391	33	345	881?	3 0L	293 667
426	636	280	18 8 11	-31 13 20	209853	-0 9	-0 9	A2	9 35	9 42	371	14	341	341?	3 0L	113 667
427	513	212	18 8 11	-28 13 12	186471?	-0 33	4 24	A0	9 20	00	292	124	91	10371 H	30 0C	345 700
428	513	212	18 8 11	-28 13 12	186472?	-0 38	6 38	A0	9 20	00	292	124	91	10371 H	30 0C	345 700
429	455	211	18 8 15	-27 5 31	186462	-0 15	3 47	B9	9 20	00	383	21	343	649?	3 0L	216 333
430	536	243	18 8 15	-28 55 0	186465	-0 19	2 34	A0	9 20	00	373	17	349	333?	3 0L	111 000
431	325	157	18 8 19	-24 7 43	186451	0 19	-0 54	B9	9 20	00	359	9	328	2277L	3 0L	75 667
432	505	232	18 8 21	-28 14 42	186471?	-0 24	2 54	A0	9 30	00	417	83	339	3861 H	3 0L	3287 000
433	505	232	18 8 21	-28 14 42	186472?	-0 28	5 9	A0	9 20	00	417	83	339	3861 H	3 0L	3287 000
434	500	209	18 8 22	-27 56 38	186458	0 2	-0 54	A2	8 70	00	115	24	86	620	30 0C	20 667
435	659	270	18 8 22	-31 35 1	NO						116	35	82	949	30 0C	31 633
436	638	283	18 8 23	-31 17 3	209853	0 3	-3 52	A2	9 35	9 42	362	4	339	897L	3 0L	29 667
437	862	374	18 8 23	-36 14 12	NO						319	4	295	87	3 0L	29 000
438	441	207	18 8 25	-26 46 10	186460	0 0	-1 20	B	9 20	00	370	14	343	3177L	3 0L	105 667
439	869	357	18 8 27	-36 12 7	NO						100	17	73	405	30 0C	13 500
440	553	252	18 8 31	-29 21 39	186457	0 16	0 22	A3	8 80	00	371	5	344	114?	3 0L	38 000
441	260	130	18 8 33	-22 41 11							366	54	318	1814?	3 0L	604 667
442	690	284	18 8 33	-32 17 42	209862?	-0 23	6 27	B8	9 32	9 14	122	16	85	449 L	30 0C	14 967
443	446	190	18 8 35	-26 43 45	186460	0 10	1 6	B	9 20	00	111	20	84	4697L	30 0C	15 633
444	680	302	18 8 36	-32 16 6	209862?	-0 21	8 3	B8	9 32	9 14	366	9	335	229	3 0L	76 333
445	621	279	18 8 37	-30 55 18	209858	0 2	2 24	A2	8 65	0 73	387	6	337	1537L	3 0L	51 000
446	283	142	18 8 38	-23 12 8							384	51	311	1885?	3 0L	628 333
447	452	193	18 8 38	-26 52 6	186473	-0 15	2 5	A0	8 80	00	113	31	85	708?	30 0C	23 600
448	443	212	18 8 39	-26 51 28	186473	-0 14	2 43	A0	8 80	00	388	44	341	1385?	3 0L	461 667
449	456	217	18 8 39	-27 8 56	186462	0 9	0 22	B9	9 20	00	376	16	343	3867L	3 0L	128 667
450	271	137	18 8 42	-22 56 30	186463	0 10	-2 43	A0	9 70	00	346	4	321	90?	3 0L	30 000
451	256	108	18 8 43	-22 24 28	186474	-0 10	3 32	A0	9 10	00	150	81	104	2392?	30 0C	79 733
452	340	169	18 8 44	-24 31 9	186469	0 0	-1 11	A5	9 00	00	355	4	329	88?	3 0L	29 333
453	651	292	18 8 45	-31 36 23	NO						369	7	334	212	3 0L	70 667
454	694	288	18 8 46	-32 24 12	209862	-0 10	-0 4	B8	9 32	9 14	144	103	89	3424	30 0C	114 133
455	686	307	18 8 50	-32 25 24	209862	-0 6	-1 16	B8	9 32	9 14	367	5	333	142	3 0L	47 333
456	354	177	18 8 52	-24 50 32							369	89	310	3413?	3 0L	1137 667
457	477	228	18 8 52	-27 39 38	186464	0 19	-2 23	A2	9 00	00	371	9	344	1547L	3 0L	51 333
458	579	245	18 8 52	-29 48 16							113	8	87	185?	30 0C	6 167
459	549	256	18 8 56	-29 18 19	186480	-0 13	3 42	B9	9 20	00	370	6	343	137 L	3 0L	45 667
460	559	238	18 8 58	-29 20 29	186480	-0 11	1 32	B9	9 20	00	111	24	81	624 L	30 0C	20 800
461	456	222	18 10 5	-27 11 10	186481	-0 6	2 36	B9	9 20	00	419	170	340	3756	3 0L	1252 000
462	248	132	18 10 6	-22 28 10	186474	0 13	-0 10	A0	9 10	00	344	11	313	2827L	3 0L	94 000
463	258	137	18 10 7	-22 41 28	186489	-0 16	2 27	B2	8 60	00	375	170	318	3978	3 0L	1326 000
464	454	205	18 10 11	-27 11 3	186481	0 0	2 42	B9	8 20	00	290	221	88	14993 H	30 0C	499 767
465	690	310	18 10 14	-32 19 18	209862	0 18	4 51	B8	9 32	9 14	357	6	329	152?	3 0L	50 667
466	225	124	18 10 16	-21 58 37	186487	-0 5	4 39	A0	9 20	00	344	27	306	812	3 0L	270 667
467	557	263	18 10 17	-29 30 52							380	65	338	2142?	3 0L	714 000
468	730	309	18 10 18	-33 16 36	209888?	-0 27	-1 40	B9	8 21	7 82	167	24	85	1106 L	30 0C	38 867
469	655	305	18 10 19	-31 59 27	209873	-0 3	-0 32	B8	6 64	00	423	61	336	3116	3 0L	1038 667
470	777	329	18 10 19	-34 18 28	209885?	-0 24	-0 13	B8	7 85	7 37	236	74	84	6576	30 0C	219 200
471	673	287	18 10 20	-31 58 43	209873	-0 2	0 11	B8	6 64	00	382	161	80	17728	30 0C	590 333
472	960	425	18 10 24	-38 24 7	209880	-0 16	1 30	A0	7 14	00	296	25	258	696	3 0L	232 000
473	265	121	18 10 24	-22 41 12	186489	0 1	2 43	B2	8 60	00	221	120	104	7266 H	30 0C	242 200
474	340	178	18 10 25	-24 34 40	186490	-0 5	1 52	A0	8 60	00	358	28	327	546?	3 0L	182 000
475	888	396	18 10 28	-36 52 47	209883	-0 14	0 26	B5	8 36	8 00	339	30	283	1111 L	3 0L	370 333
476	317	169	18 10 29	-24 4 24							360	33	320	989?	3 0L	329 667
477	485	238	18 10 29	-27 53 30	186488	0 6	0 59	A0	9 30	00	364	10	331	279?	3 0L	93 000
478	228	128	18 10 30	-22 3 47	186487	0 9	-0 32	A0	9 20	00	350	24	316	544?	3 0L	181 333
479	595	280	18 10 32	-30 24 48	209887	-0 13	1 21	A2	9 22	9						

PAGE, CARRUTHERS AND HILL

SGR OVEREXP RA 18 34 DEC -30 24

OBJECT NO	X	Y	R A	DEC	SAO NO	A R A	Δ DEC	SPEC TYPE	V MAG	P MAG	PEAK DEN	NO OF POINTS	RG	DENSITY VOLUME	EXP & FILTER	DEN VOL/ EXP
501	689	325	18 11 18	-32 36 41	208695	0 11	-3 19	A0	8 94	8 65	352	7	323	171.9L	3 0L	57 000
502	516	239	18 11 21	-28 29 34	1865247	-0 22	-0 46	B9	9 20	00	131	38	93	1132	30 0C	37 733
503	713	335	18 11 22	-33 9 20	209900	-0 2	0 3	B2	8 30	7 89	424	63	324	3355	3 0L	118 667
504	561	256	18 11 23	-29 31 40	1865117	0 0	1 58	A0	9 30	00	124	44	84	1203	30 0C	43 100
505	561	256	18 11 23	-29 31 40	1865137	-0 2	1 26	A0	9 10	00	124	44	84	1203	30 0C	46 100
506	522	263	18 11 24	-28 49 19	186512	0 1	1 57	B8	8 00	-00	411	33	340	1458	3 0L	486 000
507	214	134	18 11 25	-21 51 21	NO						345	6	313	173	3 0L	57 667
508	355	198	18 11 25	-25 1 13	1865037	0 27	1 45	B9	9 20	00	362	40	3397	667L	3 0L	28 667
509	508	258	18 11 26	-28 30 32	186524	-0 17	-1 50	B9	9 20	00	376	15	331	534	3 0L	178 000
510	261	157	18 11 30	-22 53 52	NO						336	6	310	140	3 0L	46 667
511	509	238	18 11 30	-28 20 54	186514	0 3	1 44	B8	9 00	00	171	56	95	2710	30 0C	30 333
512	269	161	18 11 33	-23 6 1	1865227	-0 4	1 57	A0	9 50	00	339	11	386	2937L	3 0L	57 667
513	269	161	18 11 33	-23 6 1	1865267	-0 13	-2 1	A5	9 00	00	339	11	386	2937	3 0L	57 667
514	295	155	18 11 36	-22 46 29	NO						347	33	305	1048	3 0L	393 333
515	410	223	18 11 38	-26 17 17	186510	0 17	-4 23	A5	8 60	00	367	95	329	20737	3 0L	691 000
516	281	168	18 11 40	-22 32 33	186516	0 10	1 46	B8	9 10	-00	344	11	310	3082L	3 0L	102 667
517	529	248	18 11 40	-28 50 2	186512	0 18	1 14	B8	8 00	00	262	106	100	6694	30 0C	223 133
518	220	118	18 11 41	-21 49 21	NO						138	21	96	624	30 0C	20 800
519	317	162	18 11 41	-23 59 24	186534	-0 22	1 27	B8	8 38	00	135	64	84	2258	30 0C	75 267
520	633	308	18 11 43	-31 23 16	209904	0 4	0 45	B8	8 69	8 26	366	12	335	284 L	3 0L	94 667
521	719	321	18 11 43	-33 8 46	209900	0 18	0 38	B2	8 30	7 89	362	272	80	30783 H	30 0C	1026 100
522	719	321	18 11 43	-33 8 43	209900	0 18	0 41	B2	8 30	7 89	362	142	79	15166	30 0C	505 533
523	785	348	18 11 49	-34 36 29	209916	-0 19	0 12	B8	6 85	00	317	121	81	13442	30 0C	448 667
524	641	291	18 11 50	-31 23 1	209904	0 10	1 1	B8	8 69	8 26	144	53	84	2145	30 0C	71 500
525	239	151	18 11 52	-22 26 40	186539	-0 12	1 4	B5	9 00	00	382	116	304	43777-H	3 0L	1459 000
526	308	183	18 11 53	-23 59 35	186534	-0 10	1 17	B8	8 38	00	356	53	311	1728	3 0L	576 000
527	953	417	18 11 56	-38 12 49	NO						109	84	71	1854	30 0C	61 800
528	777	367	18 11 59	-34 38 15	209916	-0 9	-1 35	B8	6 85	00	396	38	312	1843 L	3 0L	614 333
529	246	134	18 11 59	-22 25 30	186539	-0 5	2 13	B5	9 00	00	277	275	94	18041 H	30 0C	601 367
530	649	319	18 12 10	-31 47 2	209906	0 30	-1 31	A0	9 66	9 58	379	23	332	696 H	3 0L	232 000
531	975	389	18 12 10	-36 34 26	209922	-0 17	1 2	B3	7 00	00	385	345	76	39148	30 0C	1304 933
532	236	155	18 12 11	-22 25 38	186539	0 7	2 6	B5	9 00	00	350	28	305	8492L	3 0L	283 000
533	656	302	18 12 11	-31 46 18	2099067	0 31	-0 47	A0	9 66	9 58	136	55	78	2129 H	30 0C	70 967
534	831	371	18 12 11	-35 38 25	209923	-0 18	0 51	A0	7 40	7 21	99	21	73	485 L	30 0C	16 167
535	306	187	18 12 15	-24 0 9	1865347	0 13	0 43	B8	8 38	00	345	16	307	4827L	3 0L	160 667
536	306	187	18 12 15	-24 0 9	1865457	-0 3	-1 32	A0	9 20	00	345	16	307	4827L	3 0L	160 667
537	866	407	18 12 17	-36 34 40	209922	-0 11	0 48	B3	7 00	00	434	113	283	8832	3 0L	2944 000
538	708	343	18 12 18	-33 7 7	209919	-0 5	-0 37	B9	6 87	00	395	34	323	1361 L	3 0L	453 667
539	268	170	18 12 19	-23 5 59	186548	-0 9	2 3	B5	8 70	00	342	17	308	4397L	3 0L	146 333
540	485	261	18 12 23	-29 4 29	186549	-0 7	1 19	B8	8 50	00	393	56	340	1522	3 0L	507 333
541	378	199	18 12 27	-25 27 17	186559	-0 26	1 22	B8	9 30	00	114	17	83	4382L	30 0C	14 533
542	307	191	18 12 29	-24 2 37	186545	0 11	-3 59	A0	9 20	00	344	9	313	1947L	3 0L	64 667
543	274	154	18 12 29	-23 6 23	186548	0 1	1 39	B5	8 70	00	117	13	92	2987L	30 0C	9 933
544	250	166	18 12 34	-22 46 8	186547	0 13	-0 46	B9	8 80	00	337	16	306	3757L	3 0L	125 000
545	369	218	18 12 34	-25 27 4	186559	-0 19	1 35	B8	9 30	00	361	77	311	22497	3 0L	749 333
546	409	235	18 12 36	-26 22 7	186550	0 3	-1 27	A5	8 50	00	358	10	320	3067	3 0L	102 000
547	492	246	18 12 36	-28 3 36	186549	-0 2	2 13	B8	8 50	00	220	106	85	6581 H	30 0C	219 367
548	492	246	18 12 36	-28 3 36	1865607	-0 22	3 20	A0	8 80	00	220	106	85	6581 H	30 0C	219 367
549	388	205	18 12 38	-25 41 36	186561	-0 20	1 52	B9	9 30	00	112	13	82	3217	30 0C	10 700
550	372	221	18 12 43	-25 31 54	186559	-0 10	-3 15	B8	9 30	00	346	10	311	2772L	3 0L	92 333
551	336	186	18 12 49	-24 31 48	NO						115	39	83	9947	30 0C	33 133
552	393	209	18 12 49	-25 49 12	1865617	-0 9	-5 44	B9	9 40	00	114	15	83	3727L	30 0C	12 400
553	393	209	18 12 49	-25 49 12	1865647	-0 21	3 40	A0	9 20	00	114	15	83	3727L	30 0C	12 400
554	537	265	18 12 50	-29 6 34	1865567	0 4	3 47	B8	8 60	00	214	169	82	9890	30 0C	329 667
555	537	265	18 12 50	-29 6 34	1865627	-0 14	1 7	B8	8 60	00	214	169	82	9890	30 0C	329 667
556	528	283	18 12 51	-29 6 2	186556	0 5	4 19	B8	8 60	00	398	126	331	4628 H	3 0L	1542 667
557	528	283	18 12 51	-29 6 2	1865627	-0 12	1 39	B8	9 00	00	398	126	331	4628 H	3 0L	1542 667
558	619	316	18 12 51	-31 9 58	209933	-0 6	0 39	B5	7 60	00	386	28	332	1053 L	3 0L	351 000
559	984	439	18 12 51	-38 56 45	209934	-0 5	-0 28	B5	8 26	8 67	109	53	72	1408 L	30 0C	46 933
560	881	399	18 12 55	-36 45 55	2099247	0 26	0 60	B8	8 95	7 96	107	5	76	1317L	30 0C	4 367
561	451	256	18 12 60	-27 21 52	186566	-0 15	4 1	B9	8 30	00	355	17	329	3222L	3 0L	107 333
562	371	225	18 13 1	-25 32 2	1865597	0 9	-3 23	B8	9 30	00	384	41	312	1290	3 0L	430 000
563	371	225	18 13 1	-25 32 2	1865657	-0 12	1 59	B8	8 80	00	384	41	312	1290	3 0L	430 000
564	288	167	18 13 1	-23 28 58	NO						120	23	90	5517	30 0C	18 367
565	564	277	18 13 2	-29 45 18	1865727	-0 26	1 13	A2	8 80	00	134	14	81	4647	30 0C	15 467
566	378	228	18 13 3	-25 41 33	186561	0 4	1 56	B9	9 40	00	356	53	323	10377	3 0L	345 667
567	296	194	18 13 5	-23 51 5	NO						353	63	307	16477	3 0L	549 000
568	964	454	18 13 5	-38 43 3	209935	0 7	-2 3	A2	8 82	8 74	293	15	248	5037	3 0L	167 667
569	379	207	18 13 6	-25 31 56	1865597	0 13	-3 17	B8	9 30	00	141	100	82	3424	30 0C	114 133
570	379	207	18 13 6	-25 31 56	186565	-0 7	2 5	B8	8 80	00	141	100	82	3424	30 0C	114 133
571	573	302	18 13 7	-30 7 56	209938	0 0	0 37	B3	8 87	8 54	382	23	332	866 L	3 0L	288 667
572	522	263	18 13 9	-28 48 2	NO						201	19	84	10727	30 0C	35 733
573	592	289	18 13 10	-30 23 37	209941	-0 8	1 46	B8	7 69	7 28	198	71	89	4284	30 0C	142 800
574	975	460	18 13 12	-38 56 47	209934	0 15	-0 30	B5	8 66	8 67	273	8	244	212 L	3 0L	70 667
575	583	308	18 13 16	-30 23 34	209941	-0 1	1 48	B8	7 69	7 28	391	94	331	1650	3 0L	550 000
576	451	238	18 13 16	-27 11 52	186567	-0 0	2 26	B8	9 20	00	105	4	80	917L	30 0C	3 033
577	625	302	18 13 16	-31 9 52	209933	0 19	0 44	B5	7 60	00	249	125	78	9542	30 0C	318 667
578	387	214	18 13 20	-25 45 5	1865617	0 21	-1 37	B9	9 40</							

NRL REPORT 8173

SQR OVEREXP RA 18 34 DEC -30 24

OBJECT NO	X	Y	R A	DEC	SAD NO	A R A	A DEC	SPEC TYPE	V MAG	P MAG	PEAK DEN	NO OF POINTS	BG	DENSITY VOLUME	EXP & FILTER	DEN VOL / EXP
601	746	379	18 14 6	-34 8 8	209959/	-0 11	-0 33	B5	6 10	00	442	130	310	8923 L	3 0L	2974 333
602	746	379	18 14 6	-34 8 8	209961/	-0 16	-1 44	A0	8 70	8 26	442	130	310	8923 H	3 0L	2974 333
603	715	367	18 14 10	-33 26 51	209966	-0 23	-1 55	B8	7 02	00	342	9	307	244 L	3 0L	81 333
604	820	368	18 14 11	-35 34 27	209954	0 7	0 8	B9	9 39	9 04	123	98	75	1862	30 0C	82 667
605	298	209	18 14 11	-24 0 37	186587	0 8	0 54	B5	9 20	00	335	8	301	2097L	3 0L	89 667
606	753	362	18 14 13	-34 7 44	209959/	-0 4	-0 9	B5	6 10	00	398	336	85	40192	30 0C	1339 733
607	753	362	18 14 13	-34 7 44	209961/	-0 9	-1 20	A0	8 70	8 26	398	336	85	40192 H	30 0C	1339 733
608	280	192	18 14 15	-23 9 10	186585	0 12	4 45	A0	8 30	00	335	24	329	717?	3 0L	1239 000
609	482	263	18 14 19	-28 11 26	186593	-0 9	-4 15	A0	8 60	00	359	17	318	4067?	3 0L	135 333
610	624	335	18 14 19	-31 23 54	209953	0 16	-4 55	B8	7 37	00	349	11	318	2617L	3 0L	87 000
611	469	279	18 14 20	-27 52 44	186598/	-0 16	0 22	B9	8 20	00	385	32	325	1303	3 0L	434 333
612	469	279	18 14 20	-27 52 44	186601/	-0 12	2 19	B9	8 60	00	385	32	325	1303	3 0L	434 333
613	521	298	18 14 20	-29 4 0	NO						364	7	329	202	3 0L	67 333
614	273	179	18 14 20	-23 15 47	186586/	0 18	-1 52	A0	9 30	00	289	226	88	18959 H	30 0C	565 633
615	273	179	18 14 20	-23 15 47	186606/	-0 25	2 2	B8	8 00	00	289	226	88	18959 H	30 0C	565 633
616	476	260	18 14 21	-27 52 7	186598/	-0 5	0 59	B9	8 20	00	238	131	83	8910	30 0C	297 000
617	476	260	18 14 21	-27 52 7	186601/	-0 11	2 56	B9	8 60	00	238	131	83	8910	30 0C	297 000
618	506	293	18 14 24	-28 44 7	186594	0 10	-3 50	A3	6 04	00	350	5	322	1287L	3 0L	42 667
619	570	317	18 14 27	-30 11 49	209984	-0 4	0 44	B9	9 52	9 33	371	11	325	389	3 0L	129 667
620	358	216	18 14 27	-25 11 58	186614?	-0 29	-5 54	A0	8 90	00	101	9	75	210?	30 0C	7 000
621	731	378	18 14 32	-33 50 6	209973	-0 28	-2 34	B9	9 01	8 61	333	6	305	151 L	3 0L	50 333
622	712	370	18 14 33	-33 24 40	209966	-0 0	0 16	B8	7 02	00	403	38	316	1872 L	3 0L	624 000
623	265	199	18 14 34	-23 18 43	186608	-0 12	-0 55	B8	8 00	00	376	127	293	4745	3 0L	1581 667
624	855	407	18 14 34	-36 21 42	209970	-0 19	0 45	B8	9 09	8 53	198	85	72	6341 H	30 0C	211 367
625	277	205	18 14 36	-23 34 50	186602	0 3	1 45	A0	8 70	00	343	38	297	12617?	3 0L	420 333
626	348	235	18 14 36	-25 10 36	186614	-0 20	-4 32	A0	8 90	00	343	28	303	9007	3 0L	300 000
627	737	360	18 14 38	-33 48 5	209977	-0 25	-0 33	B9	9 01	8 61	120	43	80	1280	30 0C	42 667
628	475	285	18 14 38	-28 3 37	186599	0 10	3 34	A0	8 60	00	356	14	327	3407L	3 0L	113 333
629	385	251	18 14 41	-26 0 31	NO						349	35	306	1189?	3 0L	369 667
630	527	304	18 14 41	-29 13 44	186607	-0 5	2 54	B8	8 50	00	375	18	325	584	3 0L	194 667
631	481	288	18 14 42	-28 12 0	186599	0 14	-4 50	A0	8 60	00	357	21	326	502?	3 0L	167 333
632	647	426	18 14 45	-36 23 29	209970	-0 8	1 2	B8	9 09	8 53	341	35	283	1354	3 0L	451 333
633	535	287	18 14 45	-29 14 41	186607	-0 1	0 56	B8	8 50	00	202	71	94	3854	30 0C	128 467
634	719	355	18 14 46	-33 24 44	209966	0 12	0 12	B8	7 02	00	295	123	76	11835	30 0C	394 500
635	555	294	18 14 47	-29 14 48	186615	-0 9	2 9	B9	8 70	00	146	58	78	2485	30 0C	82 833
636	352	218	18 14 49	-25 5 48	186614	-0 7	0 16	A0	8 90	00	108	28	74	756 L	30 0C	25 200
637	286	190	18 14 50	-23 36 46	186602/	0 16	-0 11	A0	8 70	00	115	13	89	2977L	30 0C	9 900
638	286	190	18 14 50	-23 36 46	186617/	-0 14	3 37	B9	9 10	00	115	13	89	2977L	30 0C	9 900
639	448	277	18 14 52	-27 27 7	186616	-0 8	0 47	B9	9 40	00	364	23	321	672	3 0L	224 000
640	547	313	18 14 52	-29 42 55	186615	-0 4	1 2	B9	8 70	00	366	7	323	222 L	3 0L	74 000
641	205	176	18 14 54	-21 59 48	186622?	-0 21	1 36	A0	9 40	00	319	13	283	3617?	3 0L	120 333
642	279	210	18 14 58	-23 39 18	186617	-0 6	1 5	B9	9 10	-00	343	22	298	668?	3 0L	222 667
643	312	225	18 15 1	-24 23 24	186620	-0 10	-0 51	B9	9 10	00	329	8	388	1377L	3 0L	45 667
644	343	239	18 15 1	-25 6 2	186614	0 5	0 2	A0	8 90	00	344	9	386	276 L	3 0L	92 000
645	397	239	18 15 3	-26 8 25	NO						115	31	79	852	30 0C	28 400
646	764	376	18 15 3	-34 26 28	NO						113	32	84	718	30 0C	23 933
647	389	258	18 15 5	-26 7 49	NO						350	8	314	246	3 0L	82 000
648	769	398	18 15 5	-34 43 35	209978	-0 6	-1 11	B8	6 86	00	409	46	304	2672	3 0L	890 667
649	776	381	18 15 6	-34 42 43	209978	-0 4	-0 19	B8	6 86	00	333	256	84	22858	30 0C	761 933
650	314	227	18 15 7	-24 26 36	186620	-0 3	-4 3	B9	9 10	00	336	7	293	2377	3 0L	79 000
651	621	322	18 15 8	-31 13 37	209993?	-0 28	1 20	A0	8 90	8 74	97	4	75	857L	30 0C	2 833
652	212	161	18 15 10	-21 59 26	186622	-0 4	1 58	A0	9 40	00	108	8	83	1877L	30 0C	5 233
653	230	193	18 15 15	-22 35 53	186627	-0 21	-1 48	A0	8 80	00	313	5	289	106 L	3 0L	35 333
654	499	300	18 15 16	-28 38 56	186621	0 5	1 35	A2	8 90	00	354	12	323	2217L	3 0L	73 567
655	318	210	18 15 18	-24 22 59	186620/	0 8	-0 26	B9	9 10	00	121	54	78	1658	30 0C	25 267
656	318	210	18 15 18	-24 22 59	186630/	-0 18	1 39	B8	9 40	00	121	54	78	1658	30 0C	25 267
657	447	282	18 15 20	-27 28 8	186616	0 20	-0 13	B9	9 40	00	349	12	319	308?	3 0L	102 667
658	311	230	18 15 22	-24 25 7	186620/	0 11	-2 34	B9	9 10	00	343	24	294	820	3 0L	273 333
659	311	230	18 15 22	-24 25 7	186630/	-0 15	-0 29	B8	9 40	00	343	24	294	820	3 0L	273 333
660	199	181	18 15 23	-21 55 42	186622?	0 9	5 42	A0	9 40	00	318	16	283	442?	3 0L	147 333
661	755	396	18 15 23	-34 26 17	NO						336	8	307	193	3 0L	64 333
662	236	175	18 15 24	-22 33 29	186627	-0 12	0 38	A0	8 80	00	135	78	81	2601	30 0C	86 700
663	251	204	18 15 25	-23 4 32	186625	0 2	-0 34	A0	9 30	00	335	32	291	932?	3 0L	37 667
664	597	318	18 15 30	-30 43 6	NO						95	10	74	199?	30 0C	6 633
665	229	196	18 15 32	-22 35 59	186627	-0 4	-1 54	A0	8 80	00	327	44	288	1012?	3 0L	337 333
666	612	344	18 15 32	-31 14 56	209993?	-0 4	1 1	A0	8 90	8 74	344	17	315	417?	3 0L	139 667
667	254	187	18 15 40	-22 58 38	186639	-0 19	-0 23	B9	9 20	00	122	55	82	1575?	30 0C	62 600
668	411	275	18 15 49	-26 42 15	186637	-0 10	3 20	A0	9 10	00	356	27	313	785?	3 0L	261 667
669	477	299	18 15 49	-28 12 6	186635	-0 5	2 5	B9	9 10	00	377	34	322	1113	3 0L	371 000
670	270	218	18 15 51	-23 31 47	NO						324	48	280	1496?	3 0L	498 667
671	245	207	18 15 52	-22 58 49	186639	-0 7	-0 34	B9	9 20	00	324	22	290	551?	3 0L	187 000
672	484	283	18 15 50	-28 12 20	186535	0 6	1 51	B9	9 10	00	149	64	80	2727	30 0C	90 900
673	519	295	18 15 59	-28 59 19	186642	-0 14	1 58	A0	8 50	00	181	71	82	3876 H	30 0C	129 280
674	917	446	18 16 2	-37 46 38	209993?	-0 21	-9 14	A2	8 39	8 65	93	6	73	1187L	30 0C	3 933
675	259	216	18 16 7	-23 16 31	186648	-0 21	1 22	A2	8 30	00	323	49	280	1569H	3 0L	523 000
676	510	315	18 16 7	-28 59 14	186642	-0 7	2 2	A0	8 50	00	356	9	328	183 L	3 0L	61 000
677	410	262	18 16 11	-25 42 31	NO						340	39	304	1153	3 0L	384 333
678	385	279	18 16 12	-26 42 48	186637	0 13	2 47	A0	9 10	00	345	6	3			

PAGE, CARRUTHERS AND HILL

SOR OVEREXP RA 18 34 DEC -30 24

OBJECT NO	X	Y	R A	DEC	SAO NO	Δ R A	Δ DEC	SPEC TYPE	V MAG	P MAG	PEAK DEN	NO OF POINTS	BG	DENSITY VOLUME	EXP & FILTER	DEN VOL / EXP	
701	776	420	18 16 50	-35 1 6	210008	-0 10	-1 1	B8	9 42	9 03	336	15	294	445	3 OL	148 333	
702	221	210	18 16 51	-22 33 19	186655	0 13	-0 17	A5	9 20	00	312	16	284	367?	3 OL	122 333	
703	796	428	18 16 54	-35 28 3	210005	-0 2	-0 59	B9	6 72	00	410	64	292	3734	3 OL	1244 667	
704	224	212	18 16 55	-22 37 39	186655	0 17	-4 37	A5	9 20	00	311	35	281	824?H	3 OL	274 667	
705	657	376	18 16 56	-32 22 8	210001/	0 8	1 15	B9	9 39	9 19	376	35	306	1391	3 OL	463 667	
706	657	376	18 16 56	-32 22 8	210003/	0 6	-0 18	B8	8 90	8 56	376	35	306	1391	3 OL	463 667	
707	657	376	18 16 56	-32 22 8	210004/	0 1	1 39	B8	8 77	8 56	376	35	306	1391	3 OL	463 667	
708	657	376	18 16 56	-32 22 8	210009/	-0 5	-0 9	B8	8 29	7 89	376	35	306	1391	3 OL	463 667	
709	587	280	18 16 57	-26 15 42	186663	-0 2	-3 55	B9	8 70	00	334	5	307	1137L	3 OL	37 667	
710	783	403	18 16 57	-35 0 40	210008	-0 3	-0 35	B8	9 42	9 03	126	46	80	1487	30 OC	49 567	
711	392	403	18 17 1	-26 9 23	186663	0 3	2 24	B9	8 70	00	331	5	305	1152L	3 OL	38 333	
712	204	205	18 17 3	-22 11 53	186675?	-0 21	-1 6	B8	8 80	00	309	18	278	4337L	3 OL	144 333	
713	782	405	18 17 11	-35 0 25	210008	0 11	-0 20	B8	9 42	9 03	125	14	73?	507 L	30 OC	16 900	
714	358	252	18 17 16	-25 27 17	186679	-0 21	2 24	B8	8 90	00	128	56	72	2110	30 OC	70 333	
715	191	181	18 17 21	-21 45 20	186659	0 30	-0 0	A0	9 20	00	109	59	71	1612	30 OC	53 733	
716	353	273	18 17 25	-25 32 41	186679	-0 12	-3 0	B9	8 90	00	325	4	296	1107L	3 OL	36 667	
717	253	231	18 17 27	-23 18 36	186677	-0 6	2 37	A0	9 40	00	321	36	283	1022?	3 OL	340 667	
718	173	197	18 17 30	-21 33 25	186673	0 13	-2 34	A2	9 00	00	298	7	270	1677L	3 OL	55 667	
719	484	307	18 17 31	-29 19 43	186684	-0 20	2 35	A0	8 80	00	113	33	74	1009?	30 OC	33 633	
720	349	274	18 17 39	-25 28 25	186679	0 1	1 17	B9	8 90	00	340	35	292	1139	3 OL	379 667	
721	255	236	18 17 44	-23 22 37	186677	0 11	-1 24	A0	9 40	00	312	8	277	248?	3 OL	62 667	
722	598	344	18 17 44	-30 56 23	210026	-0 19	1 31	B9	6 98	00	296	109	70?	11182	30 OC	372 733	
723	476	322	18 17 47	-29 21 40	186684	-0 4	0 38	A0	8 80	00	363	76	314	2631 H	3 OL	877 000	
724	185	184	18 17 47	-21 39 37	186673?	0 31	-8 46	A2	9 00	00	100	5	71	126?	30 OC	4 200	
725	580	359	18 17 49	-30 42 50	210023	-0 6	-2 56	A3	8 77	8 77	332	7	305	162?	3 OL	54 000	
726	251	235	18 17 52	-23 17 57	186677	0 18	3 16	A0	9 40	00	313	13	277	382?	3 OL	120 667	
727	951	504	18 17 57	-39 2 2	210022	0 10	0 41	B9	6 70	00	286	25	240	795 L	3 OL	255 000	
728	589	364	18 17 58	-30 55 40	210026	-0 5	2 15	B9	6 98	00	403	45	305	2333	3 OL	777 667	
729	911	465	18 17 59	-37 48 46	NO						110	14	69	407?	30 OC	13 567	
730	876	472	18 18 1	-37 15 31	NO						344	35	266	1513?	3 OL	504 333	
731	717	390	18 18 2	-33 37 24	210031	-0 11	1 4	A9	9 60	9 23	108	17	72	483	30 OC	17 000	
732	969	487	18 18 4	-39 1 32	210022	0 17	1 12	B9	6 70	00	182	139	68	8310 H	30 OC	276 000	
733	707	407	18 18 5	-33 35 53	210031	-0 8	2 35	A0	9 80	9 23	330	12	298	294	3 OL	96 000	
734	350	280	18 18 8	-25 32 9	186689	0 1	1 47	A2	9 00	00	325	8	296	195?	3 OL	85 000	
735	645	387	18 18 15	-32 13 32	210027	0 11	-1 14	A3	7 07	00	331	6	307	133 L	3 OL	44 333	
736	645	387	18 18 15	-32 13 32	210032?	0 1	2 57	B8	8 80	8 56	331	6	307	133 L	3 OL	44 333	
737	883	457	18 18 17	-37 14 20	NO						225	137	70	9944	30 OC	331 467	
738	908	467	18 18 18	-37 46 9	210046?	-0 30	0 54	A0	8 83	8 56	113	9	67	2882L	30 OC	9 600	
739	179	190	18 18 23	-21 34 43	NO						99	9	70	208?	30 OC	6 933	
740	352	284	18 18 25	-25 36 12	186689	0 18	-2 16	A2	9 00	00	322	6	292	156?	3 OL	52 000	
741	644	369	18 18 34	-32 2 5	210043	-0 7	2 4	A0	8 50	8 31	102	10	88	2497L	3 OL	109 200	
742	711	394	18 18 35	-33 33 15	210052?	-0 25	-0 9	A0	9 35	9 08	125	92	69	3276 H	30 OC	11 267	
743	176	192	18 18 37	-21 33 13	NO						107	12	89	338?	30 OC	57 067	
744	653	373	18 18 38	-32 14 28	210032?	0 24	2 1	B9	8 80	8 56	132	46	72	1712 L	3 OL	580 000	
745	473	331	18 18 41	-28 22 0	186704	-0 9	5 17	A2	6 07	00	354	56	309	1794 L	3 OL	60 000	
746	195	223	18 18 43	-22 9 40	186710	-0 12	-3 15	A0	9 20	00	293	8	269	1027L	3 OL	34 000	
747	334	281	18 18 44	-22 13 44	186710/	-0 18	2 9	A2	8 80	00	318	4	289	1027L	3 OL	29 667	
748	191	221	18 18 46	-22 4 36	186710/	-0 10	1 49	A0	9 20	00	292	4	269	897L	3 OL	29 667	
749	191	221	18 18 46	-22 4 36	186712/	-0 11	-1 48	A3	8 68	00	292	4	269	897L	3 OL	29 667	
750	231	239	18 18 47	-22 57 26	186715/	-0 14	-0 39	B8	7 70	00	375	72	276	3403	3 OL	1134 333	
751	231	239	18 18 47	-22 57 26	186717/	-0 14	-0 39	B8	7 06	00	375	72	276	3403	3 OL	1134 333	
752	500	342	18 18 47	-28 58 42	186720	-0 18	-2 1	B9	9 20	00	358	4	311	982L	3 OL	64 667	
753	280	260	18 18 48	-24 2 18	186700	0 15	-1 36	A0	9 10	00	310	8	282	776	3 OL	258 667	
754	339	284	18 18 50	-25 20 54	186716	-0 11	2 40	B8	9 00	00	338	24	288	776	3 OL	258 667	
755	339	284	18 18 50	-25 20 54	186718?	-0 12	-5 1	A2	8 80	00	335	24	288	146?	3 OL	49 667	
756	480	336	18 18 54	-28 32 27	186706	0 1	-2 41	A0	9 35	9 08	332	7	306	291	3 OL	97 000	
757	782	415	18 18 55	-33 33 2	210052	-0 5	0 4	A0	9 35	00	331	10	294	2842L	30 OC	9 467	
758	210	210	18 18 55	-22 19 20	186719	-0 8	0 1	A0	8 60	00	102	13	78	162?	3 OL	54 000	
759	317	277	18 18 56	-24 52 3	186722	-0 14	3 47	B8	8 90	00	317	7	289	15701	30 OC	523 367	
760	238	223	18 18 59	-22 56 32	186715/	-0 2	0 15	B8	7 70	00	309	185	81	15701	30 OC	523 367	
761	238	223	18 18 59	-22 56 32	186717/	-0 2	0 15	B8	7 06	00	309	185	81	1121	30 OC	37 367	
762	482	318	18 18 59	-28 25 25	186704	0 8	1 52	A2	6 07	00	112	41	75	1121	30 OC	37 367	
763	482	318	18 18 59	-28 25 25	186705?	0 6	4 20	A0	9 40	00	111	8	301	1937L	3 OL	64 333	
764	474	336	18 19 0	-28 24 54	186704	0 10	2 22	A2	6 07	00	331	8	301	1937	3 OL	64 333	
765	474	336	18 19 0	-28 24 54	186706?	0 7	4 51	A0	9 40	00	331	8	299	1725 H	3 OL	575 000	
766	495	343	18 19 2	-28 53 13	186720	-0 2	3 28	B9	9 20	00	343	51	299	92?	3 OL	30 667	
767	307	274	18 19 4	-24 39 27	186724	-0 9	-0 0	A7	9 20	00	313	4	288	3099	3 OL	1833 000	
768	385	305	18 19 5	-26 24 48	186726	-0 9	1 42	B	7 99	00	400	71	288	301	1582L	3 OL	52 667
769	412	315	18 19 6	-27 0 57	186730/	-0 13	-4 49	A0	8 80	00	326	7	301	1582L	3 OL	52 667	
770	412	315	18 19 6	-27 0 57	186733/	-0 17	-4 46	A0	8 40	00	326	7	301	3297L	3 OL	109 667	
771	463	333	18 19 6	-28 10 36	186723	-0 5	2 22	B8	8 50	00	342	18	311	1106 L	30 OC	36 867	
772	346	270	18 19 6	-25 21 33	186716	0 5	2 1	B9	9 00	00	107	37	69	1898?	3 OL	629 333	
773	467	335	18 19 9	-28 16 11	186723	-0 3	-3 14	B8	8 50	00	351	5	269	1232L	3 OL	41 000	
774	340	289	18 19 12	-25 25 22	186720	0 11	-1 48	B9	9 00	00	317	19	70	446?	30 OC	16 533	
775	503	327	18 19 12	-28 54 32	186720	0 7	2 10	B9	9 20	00	100	277	122	1059?	30 OC	353 233	
776	392	289	18 19 16	-26 25 1	186726	0 1	1 29	B	7 99	00	297	9	267	2292L	3 OL	76 333	
777	202	234	18 19 21	-22 21 57	186719	0 18	-2 37	A0	8 60	00	297	32	300	1022	3 OL	340 667	
778	406	316	18 19 23	-26 54 17	186730/	0 4	1 51	A0	8 80	00	349	32	300	1022	3 OL	340 667	
779	406	316	18 19 23	-26 54 17	186733/	-0 0											

NRL REPORT 8173

SGR OVEREXP RA 18 34 DEC -30 24																		
OBJECT NO	X	Y	R	A	DEC	SAO NO	Δ RA	Δ DEC	SPEC TYPE	V MAG	P MAG	PEAK DEN	NO OF POINTS	BG	DENSITY VOLUME	EXP & FILTER	DEN VOL/ EXP	
801	435	320	18	20	37	-27 28 59	1867477	0 20	2 47	A0	9 40	00	103	8	73	192 L	30 OC	6 400
802	310	295	18	20	40	-24 52 34	186765	-0 15	-4 43	B9	9 20	00	300	5	278	1087L	3 OL	35 000
803	287	287	18	20	42	-24 22 10	186753	0 14	-3 18	A3	9 10	00	303	4	275	967L	3 OL	32 000
804	481	359	18	20	49	-28 44 14	186761	0 7	-2 29	B9	9 00	00	332	5	308	1077L	3 OL	35 667
805	865	457	18	20	50	-37 14 40	210087/	0 6	-0 1	B9	9 02	8 50	305	17	265	486	3 OL	162 000
806	865	457	18	20	50	-37 14 40	210088/	-0 16	0 35	A3	7 84	7 71	305	17	265	486	3 OL	162 000
807	872	480	18	20	54	-37 12 39	210087/	0 9	2 2	B9	9 02	8 60	144	80	73	3453	30 OC	115 100
808	872	480	18	20	54	-37 12 39	210088/	-0 13	2 38	A3	7 84	7 71	144	80	73	3453	30 OC	115 100
809	356	319	18	20	55	-26 6 17	NO						335	17	292	530	3 OL	176 667
810	184	225	18	20	57	-21 56 23	186763	0 10	0 21	B9	9 00	00	133	89	73	3289	30 OC	109 633
811	741	431	18	20	58	-34 24 15	210088/	0 13	-2 36	B9	6 79	00	425	818	74	122476	30 OC	4082 533
812	741	431	18	20	58	-34 24 15	210091/	0 7	0 22	A0	1 95	00	425	818	74	122476	30 OC	4082 533
813	445	349	18	21	1	-27 55 40							344	59	297	1882?	3 OL	463 333
814	318	303	18	21	2	-25 4 55							319	42	275	1391?	3 OL	463 667
815	938	507	18	21	2	-38 36 12	210097	-0 5	2 12	B9	8 20	7 87	167	130	66	7188	30 OC	239 600
816	575	373	18	21	4	-30 41 13	210101	-0 7	1 46	A0	8 03	7 61	87	8	63	174 L	30 OC	5 800
817	929	526	18	21	8	-38 40 19	210097	0 2	-1 55	B8	8 20	7 87	289	13	244	420 L	3 OL	140 000
818	372	305	18	21	13	-26 7 43	NO						126	52	74	1838	30 OC	61 267
819	399	333	18	21	18	-26 42 9							334	41	292	1211?	3 OL	403 667
820	390	331	18	21	25	-26 30 39	186760	-0 8	0 36	A0	8 50	00	352	49	287	2003 H	3 OL	667 667
821	685	437	18	21	29	-33 22 1	210102	0 17	-3 29	A0	8 46	8 10	309	4	286	852L	3 OL	28 333
822	387	314	18	21	32	-26 29 14	186760	-0 1	2 1	A0	8 50	00	168	66	75	3529 H	30 OC	117 633
823	289	300	18	21	40	-24 29 31	186787	0 20	-2 56	B9	8 60	00	297	5	272	1067L	3 OL	35 333
824	390	335	18	21	46	-26 32 20	186780	0 13	-1 5	A0	8 50	00	317	10	290	2257L	3 OL	75 000
825	813	467	18	21	47	-36 2 21	NO						109	46	65	1524	30 OC	50 800
826	213	249	18	21	51	-22 38 48	186795?	-0 39	4 19	B9	9 60	00	95	4	72	86?	30 OC	2 867
827	865	488	18	21	54	-37 9 2	210122	-0 13	1 39	B9	8 01	7 70	122	64	68	2534	30 OC	84 467
828	293	284	18	21	56	-24 26 11	186787	-0 5	0 24	B9	8 60	00	102	32	86	923 L	30 OC	30 767
829	335	300	18	21	56	-25 21 55							119	9	76	276?	30 OC	9 200
830	846	481	18	21	56	-36 45 25	210121	-0 8	0 18	B9	9 32	9 02	130	84	66	3426	30 OC	114 200
831	977	553	18	21	57	-39 45 18	210114?	0 20	3 41	A5	8 96	8 98	285	45	230	1491 H	3 OL	497 000
832	977	553	18	21	57	-39 45 18	210115	0 10	-4 1	B9	8 68	8 20	285	45	230	1491 H	3 OL	497 000
833	575	404	18	21	59	-30 57 2	210120	-0 3	0 23	A0	8 47	8 07	353	16	290	633	3 OL	211 000
834	985	535	18	21	59	-39 44 20	210114?	0 22	4 39	A5	8 96	8 98	178	169	71	9082 H	30 OC	302 733
835	985	535	18	21	59	-39 44 20	210115	0 11	-3 3	B8	8 88	8 20	178	169	71	9082 H	30 OC	302 733
836	283	301	18	22	2	-24 23 17	186787	0 1	3 18	B9	8 60	00	299	6	271	137 L	3 OL	45 667
837	283	301	18	22	2	-24 23 17	186797?	-0 33	3 22	A0	9 60	00	299	6	271	137 L	3 OL	45 667
838	837	499	18	22	3	-36 45 32	210121	-0 1	0 10	B9	9 32	9 02	300	11	264	309 L	3 OL	45 667
839	680	421	18	22	5	-33 7 52	210123/	-0 6	1 7	A0	9 31	8 99	101	25	69	654	30 OC	21 800
840	680	421	18	22	5	-33 7 52	210126/	-0 7	-3 53	A0	9 08	9 02	101	25	69	654	30 OC	21 800
841	582	387	18	22	7	-30 55 29	210120	0 5	1 56	A0	8 47	8 07	152	73	59	4000	30 OC	133 333
842	351	329	18	22	9	-25 55 31	NO						313	13	281	346	3 OL	116 333
843	435	360	18	22	14	-27 48 2							348	66	257	2192?	3 OL	730 667
844	543	395	18	22	15	-27 14 8	210128	-0 3	2 56	B8	7 35	7 95	322	4	293	1102L	3 OL	36 667
845	319	299	18	22	15	-25 2 12							113	11	73	275?	30 OC	9 167
846	667	418	18	22	15	-32 51 11	210135?	-0 22	1 6	A0	8 79	8 47	90	12	64	2737L	30 OC	9 100
847	175	262	18	22	15	-32 51 11	186799	-0 15	-1 40	A2	9 40	00	279	5	251	124?	3 OL	41 333
848	716	427	18	22	15	-32 51 11	210135	-0 13	1 12	B9	6 38	00	380	338	76	32641	30 OC	1088 033
849	319	299	18	22	18	-24 37 54							128	24	71	789?	30 OC	26 300
850	617	404	18	22	30	-31 45 27	210139	-0 9	1 36	B8	7 15	00	287	131	60	12568	30 OC	18 933
851	660	429	18	22	31	-32 53 15	210136	-0 5	-0 57	A0	8 79	8 47	308	5	284	1147L	3 OL	38 000
852	707	456	18	22	32	-33 56 9	210135	-0 4	2 20	B8	6 38	00	427	153	286	8512	3 OL	2837 333
853	609	423	18	22	37	-31 45 30	210138	-0 2	1 33	B8	7 15	00	398	35	286	2044	3 OL	681 333
854	355	316	18	22	43	-25 52 12	NO						167	32	68	1404	30 OC	46 800
855	388	349	18	22	45	-26 47 41	186795	0 18	-2 13	A2	9 50	00	317	14	288	344?	3 OL	114 667
856	412	359	18	22	53	-27 20 19	186803	0 1	1 24	B9	8 50	00	344	14	292	490 L	3 OL	163 333
857	295	297	18	22	55	-24 33 29	186797?	0 20	-6 50	A0	9 60	00	117	54	70	1832 H	30 OC	61 067
858	172	268	18	22	59	-22 2 52	186799	0 21	-0 37	A2	9 40	00	283	5	254	128?	3 OL	42 667
859	430	367	18	22	59	-27 46 14	186811	-0 15	4 32	B8	9 40	00	323	4	295	1077L	3 OL	35 667
860	425	365	18	23	0	-27 38 16							336	33	292	1083?	3 OL	361 000
861	228	292	18	23	5	-23 16 57	186802	0 20	-1 22	B9	9 40	00	284	4	258	1007L	3 OL	33 333
862	737	473	18	23	7	-34 40 1	210147	-0 1	-0 15	B9	9 65	9 33	312	9	283	204	3 OL	68 000
863	918	523	18	23	10	-38 25 33	210169?	-0 46	3 23	B9	8 88	8 62	114	12	85	423?	30 OC	14 100
864	687	456	18	23	11	-33 33 39	210153	-0 5	3 20	A2	9 46	9 17	311	9	284	202	3 OL	67 333
865	354	322	18	23	11	-25 53 3	NO						125	14	70	500	30 OC	16 667
866	432	370	18	23	12	-27 49 52	186811	-0 2	0 54	B8	9 40	00	331	29	300	651	3 OL	217 000
867	232	296	18	23	13	-23 22 52	186815	-0 16	-0 18	B8	9 10	00	344	103	261	3985 H	3 OL	1328 333
868	232	296	18	23	13	-23 22 52	186822?	-0 26	5 6	B9	8 40	00	344	103	261	3985 H	3 OL	1328 333
869	697	440	18	23	13	-33 35 30	210153	-0 3	1 20	A2	9 46	9 17	92	11	68	239 L	30 OC	7 967
870	197	281	18	23	15	-22 36 57	186810	0 2	4 8	A0	9 20	00	265	12	255	2837L	3 OL	94 333
871	244	280	18	23	16	-23 27 44	186806/	0 13	3 1	A0	9 00	00	221	193	68	15538 H	30 OC	517 933
872	244	280	18	23	16	-23 27 44	186822/	-0 23	0 14	B9	8 50	00	221	193	68	15538 H	30 OC	517 933
873	417	346	18	23	18	-27 18 53	186803?	0 27	2 51	B9	8 50	00	122	7	74	245 L	30 OC	8 167
874	744	458	18	23	21	-34 38 51	210147	0 13	0 54	B9	9 65	9 33	104	7	77	173 L	30 OC	5 767
875	439	354	18	23	24	-27 48 46	186811	0 10	1 59	B8	9 40	00	92	5	70	1057L	30 OC	3 500
876	155	246	18	23	27	-21 33 4	186824?	-0 24	0 2	B5	9 20	00						

PAGE, CARRUTHERS AND HILL

SGR OVEREXP RA 18 34 DEC -30 24																											
OBJECT NO	X	Y	R	A	DEC	SAO NO	Δ RA	Δ DEC	SPEC TYPE	V MAG	P MAG	PEAK DEN	NO OF POINTS	BG	DENSITY VOLUME	EXP & FILTER	DEN VOL/ EXP										
901	634	456	18	24	51	-32	30	18	210194	-0	4	-0	10	A0	7	70	7	29	358	36	274	1444	3	OL	481	333	
902	674	470	18	24	51	-33	23	42	210193	-0	4	-0	50	B9	8	60	8	32	330	20	282	591	3	OL	197	000	
903	641	438	18	24	54	-32	28	20	210194	-0	1	1	48	A0	7	70	7	29	221	98	62	6968	H	30	OC	232	267
904	180	296	18	24	55	-22	23	55	186953	-0	15	2	51	A0	9	00	00	00	273	8	245	151	L	3	OL	50	333
905	260	336	18	24	57	-24	34	31	186944	-0	3	1	9	A0	8	50	00	00	300	15	265	382	L	3	OL	127	333
906	379	372	18	24	57	-26	47	20	186943/	-0	5	0	0	A3	6	28	00	00	325	21	286	602	3	OL	200	667	
907	379	372	18	24	57	-26	47	20	186945/	-0	2	0	42	A0	9	00	00	00	325	21	286	602	3	OL	200	667	
908	925	565	18	24	58	-28	52	22	210200	-0	9	1	24	B9	7	60	00	00	259	14	217	383	L	3	OL	127	667
909	353	363	18	24	59	-26	11	35	186946	-0	2	1	14	A0	8	70	00	00	352	59	275	2216	H	3	OL	738	667
910	283	338	18	25	2	-24	38	53	186944	-0	2	-3	13	A0	8	50	00	00	297	26	282	7187	3	OL	239	333	
911	115	251	18	25	6	-20	50	7	186950	-0	1	0	29	A	8	50	00	00	94	51	65	12667	30	OC	42	200	
912	287	321	18	25	7	-24	34	37	186944	-0	7	1	3	A0	8	50	00	00	90	5	65	1367L	30	OC	4	533	
913	928	568	18	25	9	-38	57	6	2101977	-0	10	4	33	A2	5	65	00	00	285	14	243	324	L	3	OL	108	000
914	928	568	18	25	9	-38	57	6	210200	-0	2	-3	20	B9	7	60	00	00	285	14	243	324	L	3	OL	108	000
915	386	356	18	25	9	-26	46	13	186943/	-0	10	1	7	A3	6	28	00	00	107	25	74	662	L	30	OC	22	667
916	386	356	18	25	9	-26	46	13	186945/	-0	8	1	48	A0	9	00	00	00	107	25	74	662	L	30	OC	22	667
917	359	349	18	25	17	-26	10	53	186946	-0	15	1	55	A0	8	70	00	00	117	24	68	847	30	OC	28	233	
918	408	366	18	25	18	-27	27	35											332	44	289	13247	3	OL	441	333	
919	407	366	18	25	24	-27	15	18	186961?	-0	23	2	23	B8	8	50	00	00	26	69	68	668	L	30	OC	22	667
920	199	310	18	25	28	-22	51	26	186956	-0	3	-0	17	B8	9	10	00	00	273	5	247	112	L	3	OL	37	333
921	698	466	18	25	38	-33	48	55	210226?	-0	42	9	9	B9	7	10	00	00	90	12	67	247L	30	OC	8	233	
922	933	555	18	25	47	-38	54	45	210213	-0	20	-1	40	B8	6	65	00	00	325	244	73	2323	H	30	OC	774	633
923	652	453	18	25	49	-32	48	26	210224?	-0	30	0	31	A0	8	40	00	00	325	244	73	101L	30	OC	3	367	
924	923	573	18	25	50	-38	53	20	210213	-0	1	-0	16	B8	6	65	00	00	318	154	219	5360	3	OL	1796	667	
925	731	481	18	25	52	-34	33	52	210218	-0	12	0	20	B9	8	95	00	00	61	127	69	2787	30	OC	92	900	
926	724	499	18	25	57	-34	35	6	210218	-0	7	-0	54	B9	8	95	00	00	61	127	69	2787	30	OC	92	900	
927	890	563	18	26	3	-39	12	18	210222	-0	13	-4	24	A2	9	59	00	00	62	127	69	2787	30	OC	92	900	
928	366	380	18	26	4	-26	35	11	186963	-0	13	1	42	A0	6	50	00	00	311	25	285	417	3	OL	139	000	
929	397	391	18	26	5	-27	16	34	186961	-0	18	1	7	B8	8	40	00	00	333	68	284	2240	3	OL	746	667	
930	586	453	18	26	5	-31	30	18	NO										296	14	265	354	3	OL	118	000	
931	703	473	18	26	8	-33	57	45	210226	-0	12	0	19	B9	7	10	00	00	309	149	70	13947	30	OC	464	900	
932	308	361	18	26	10	-25	19	37	186973	-0	7	-1	12	B2	6	23	00	00	423	130	274	7755	3	OL	2585	000	
933	378	366	18	26	12	-26	40	25	186963?	-0	22	-3	31	A0	6	46	00	00	118	121	67	4072	L	30	OC	135	333
934	378	366	18	26	12	-26	40	25	186978	-0	18	1	52	B9	9	30	00	00	118	121	67	4072	H	30	OC	135	733
935	618	466	18	26	13	-32	15	1	NO										325	23	288	815	3	OL	271	667	
936	785	595	18	26	17	-35	47	17	210221	-0	9	0	47	A0	9	21	9	00	86	12	61	271	L	30	OC	9	033
937	695	493	18	26	21	-33	59	12	210226	-0	1	-0	8	B9	7	10	00	00	388	57	283	2783	3	OL	927	667	
938	370	386	18	26	23	-26	41	59	186978	-0	7	0	17	B9	9	30	00	00	334	45	280	1442	H	3	OL	480	667
939	314	346	18	26	24	-25	16	19	186973	-0	7	1	6	B2	6	23	00	00	377	182	74?	28463	L	30	OC	982	100
940	625	460	18	26	25	-32	15	3	NO										142	68	57	3381	30	OC	112	708	
941	591	439	18	26	26	-31	28	23	NO										83	19	55	463	30	OC	15	433	
942	640	476	18	26	27	-32	45	21	210224	-0	8	3	37	A0	8	40	00	00	299	19	273	3877L	3	OL	129	000	
943	650	489	18	26	27	-32	48	33	210224	-0	8	0	25	A0	8	40	00	00	82	6	58	137L	30	OC	4	567	
944	682	470	18	26	27	-33	31	10	210228/	-0	2	1	21	A0	8	72	00	00	280	132	66	11843	H	30	OC	394	767
945	682	470	18	26	27	-33	31	10	210234/	-0	18	0	37	B9	7	64	00	00	280	132	66	11843	H	30	OC	394	767
946	149	282	18	26	28	-21	40	50	186976	-0	0	-0	38	A0	8	90	00	00	122	92	61	3718	H	30	OC	123	933
947	143	301	18	26	30	-21	44	16	186976	-0	2	-4	3	A0	8	90	00	00	256	4	232	91	L	3	OL	30	333
948	263	349	18	26	34	-24	20	55											293	37	254	1107?	3	OL	369	000	
949	109	289	18	26	39	-21	0	40	186985	-0	13	-1	28	A0	8	20	00	00	257	6	234	130L	3	OL	43	333	
950	318	370	18	26	39	-25	34	8	186982	-0	1	0	37	B9	8	90	00	00	299	13	273	272	L	3	OL	90	667
951	318	370	18	26	39	-25	34	8	186988?	-0	35	0	57	A0	8	50	00	00	299	13	273	272	L	3	OL	90	667
952	326	353	18	26	39	-25	33	22	186982	-0	1	1	23	B9	8	90	00	00	113	26	79	702	L	30	OC	23	400
953	674	490	18	26	45	-33	32	1	210228/	-0	20	0	31	A0	8	72	00	00	378	45	275	2262	3	OL	754	000	
954	674	490	18	26	45	-33	32	1	210234/	-0	1	-0	13	B9	7	64	00	00	378	45	275	2262	3	OL	754	000	
955	656	466	18	26	52	-33	8	32	210235/	-0	7	-3	35	A3	7	22	00	00	311	19	274	478	L	3	OL	159	333
956	656	466	18	26	52	-33	8	32	210240/	-0	6	0	31	A0	8	38	00	00	311	19	274	478	L	3	OL	159	333
957	582	445	18	27	17	-31	20	7											80	21	51	5117	30	OC	17	033	
958	662	472	18	27	17	-33	8	12	210240	-0	20	0	51	A0	8	38	00	00	123	55	68	1956	30	OC	65	200	
959	378	399	18	27	18	-26	56	49	186990	-0	3	0	51	A0	8	60	00	00	313	10	283	234L	3	OL	78	000	
960	389	403	18	27	19	-27	11	33											321	59	274	2112?	3	OL	704	000	
961	383	402	18	27	24	-27	3	60	186990	-0	20	-1	43	A2	9	50	00	00	318	6	277	190?	3	OL	63	333	
962	282	355	18	27	25	-24	10																				

NRL REPORT 8173

SGR OVEREXP RA 18 34 DEC -30 24																			
OBJECT NO	X	Y	R A	DEC	SAO NO	Δ R A	Δ DEC	SPEC TYPE	V MAG	P MAG	PEAK DEN	NO OF POINTS	BG	DENSITY VOLUME	EXP & FILTER	DEN VOL/ EXP			
1001	241	384	18 30 8	-24 9 45	186959	-0 3	-0 53	B3	6 75	00	405	121	248	7113 L	3 0L	2371 000			
1002	241	384	18 30 8	-24 9 45	186977	-0 36	-0 1	B9	7 92	00	405	121	248	7113 H	3 0L	2371 000			
1003	904	611	18 30 12	-38 47 16	210293	0 16	-1 48 A	6 60	00	434	143	236	13394	3 0L	4464 667				
1004	904	611	18 30 12	-38 47 16	210294	0 16	-1 25 B	6 00	00	434	143	236	13394	3 0L	4464 667				
1005	904	611	18 30 12	-38 47 16	210295	0 15	-1 25 B	5 95	00	434	143	236	13394	3 0L	4464 667				
1006	904	611	18 30 12	-38 47 16	210296	0 16	-1 47 B	6 55	00	434	143	236	13394	3 0L	4464 667				
1007	309	390	18 30 17	-25 28 52	186957	-0 23	0 24 B	8 30	00	115	12	69	404 L	30 0C	13 467				
1008	813	578	18 30 18	-36 51 2	210302	0 5	-2 46 B	8 78	8 46	371	110	261	16000	3 0L	533 333				
1009	813	578	18 30 18	-36 51 2	210304	0 2	-0 23 B	8 04	7 60	371	110	261	16000	3 0L	533 333				
1010	825	582	18 30 18	-37 6 48	210305	-0 1	0 30 B	8 95	8 75	286	42	226	16137H	3 0L	537 667				
1011	400	422	18 30 25	-27 30 8	186959	-0 4	1 28 B	8 50	00	109	43	64	1402 L	30 0C	46 733				
1012	820	561	18 30 25	-36 50 34	210302	0 12	-2 17 B	8 78	8 46	296	154	63	15809	30 0C	526 967				
1013	820	561	18 30 25	-36 50 34	210304	0 8	0 5	8 04	7 60	296	154	63	15909	30 0C	526 967				
1014	833	566	18 30 25	-37 6 20	210305	0 6	0 58 B	8 95	8 75	116	51	70	1679	30 0C	55 967				
1015	248	370	18 30 25	-24 8 57	186959	0 14	-0 6	93 6 75	00	371	231	67	27153 L	30 0C	905 100				
1016	248	370	18 30 25	-24 8 57	186977	-0 19	0 47 B	7 92	00	371	231	67	27153 H	30 0C	905 100				
1017	639	519	18 30 28	-33 1 19	210312	-0 13	2 1	63 5 36	00	445	904	271	2699 L	3 0L	696 333				
1018	639	519	18 30 28	-33 1 19	210314	-0 21	-1 17 B	6 88	00	445	904	271	2699	3 0L	696 333				
1019	392	441	18 30 30	-27 31 18	186958	0 1	0 16 B	8 50	00	318	39	272	1076	3 0L	359 333				
1020	300	411	18 30 35	-25 29 40	186975	-0 5	-0 25 B	8 30	00	310	47	254	1577	3 0L	525 667				
1021	647	503	18 30 37	-33 2 31	210312	-0 4	0 49 B	5 38	00	412	655	61	82756	30 0C	2759 667				
1022	647	503	18 30 37	-33 2 31	210314	-0 11	-2 30 B	6 88	00	412	655	61	82786	30 0C	2759 667				
1023	639	521	18 30 39	-33 2 9	210312	-0 2	-1 11 B	6 38	00	456	2697	272	1436 L	3 0L	478 667				
1024	639	521	18 30 39	-33 2 9	210314	-0 9	-2 8 B	6 88	00	456	2697	272	1436 L	3 0L	478 667				
1025	172	324	18 30 41	-22 4 39	186976	-0 2	-0 80 B	9 40	00	282	9	231	2392L	3 0L	79 667				
1026	550	476	18 30 57	-30 54 51	210318	-0 6	0 30 B	7 15	00	177	92	52	5370	30 0C	179 000				
1027	542	494	18 30 59	-30 54 26	210318	-0 4	0 55 B	7 15	00	324	11	260	469 L	3 0L	156 333				
1028	296	414	18 31 0	-25 24 55	186986	-0 2	0 14 B	9 00	00	347	45	255	20367H	3 0L	678 667				
1029	995	596	18 31 2	-38 29 60	210317	0 1	-0 44 A	9 39	9 26	88	9	66	1877L	30 0C	6 233				
1030	372	441	18 31 6	-27 7 25	186994	0 7	-1 54 A	9 20	00	298	6	266	1707L	3 0L	56 667				
1031	149	363	18 31 19	-22 15 47	186994	-0 3	-0 44 B	9 00	00	270	36	224	1231	3 0L	410 333				
1032	157	346	18 31 23	-22 15 21	186994	0 1	-0 18 B	9 00	00	141	5	70	310 L	30 0C	10 333				
1033	302	400	18 31 23	-26 24 30	186985	0 20	0 39 B	9 00	00	180	111	73	6323	30 0C	210 767				
1034	286	416	18 31 26	-25 15 1	186997	-0 6	-0 12 B	9 30	00	286	8	263	216	3 0L	72 000				
1035	897	549	18 31 26	-34 23 46	210329	0 2	0 11 B	9 21	8 90	306	6	275	172 L	3 0L	57 333				
1036	706	531	18 31 27	-34 22 55	210329	0 2	1 2	8 9	9 21	91	11	61	283 L	30 0C	9 433				
1037	212	390	18 31 36	-23 23 14	187002	-0 15	-2 35 A	9 50	00	262	4	237	897L	3 0L	29 667				
1038	288	420	18 31 44	-25 18 59	186997	0 11	-4 10 B	9 30	00	284	18	255	4467	3 0L	148 667				
1039	350	421	18 31 44	-26 29 39	187001	-0 0	1 19 A	9 10	00	92	10	87	213 L	30 0C	7 100				
1040	293	401	18 31 44	-25 14 12	186997	0 11	0 37 B	9 30	00	97	29	67	683 L	30 0C	22 767				
1041	493	469	18 31 55	-29 41 47						96	5	58	1407	30 0C	4 667				
1042	631	539	18 32 1	-32 58 35	210344	-0 9	-2 41 A	8 65	00	297	18	267	439 L	3 0L	146 333				
1043	932	621	18 32 5	-39 19 37	210338	0 20	-0 44 A	8 78	8 45	182	28	71	709 L	30 0C	23 633				
1044	172	362	18 32 9	-22 38 27	187015	-0 18	-0 4	8 9	9 20	00	24	67	5287L	30 0C	17 600				
1045	837	517	18 32 11	-32 55 46	210344	0 1	0 6 A	6 65	00	82	5	60	997L	30 0C	3 300				
1046	141	371	18 32 13	-22 9 31	187010	-0 7	-1 37 B	8 50	00	352	64	223	3668	3 0L	1209 333				
1047	148	354	18 32 13	-22 8 41	187010	-0 7	-0 46 B	8 50	00	283	193	67	16966	30 0C	565 533				
1048	461	465	18 32 26	-29 1 27						112	7	55	2512	30 0C	8 367				
1049	355	453	18 32 36	-26 51 29	187021	-0 2	-0 16 B	9 60	00	267	6	262	1387	3 0L	46 000				
1050	690	540	18 32 40	-34 9 24	210355	-0 12	0 0	8 9	9 07	8 72	115	50	59	1922	30 0C	64 667			
1051	682	558	18 32 41	-34 9 3	210355	-0 10	-0 21 B	9 07	8 72	307	6	280	138 L	3 0L	46 000				
1052	491	499	18 32 50	-29 54 32	187030	-0 14	4 7	A2 9 71	9 73	286	4	260	977	3 0L	32 333				
1053	614	538	18 32 56	-32 39 50	210358	-0 4	-1 23 B	8 95	8 51	312	26	259	799	3 0L	266 333				
1054	541	496	18 33 0	-30 51 38	210354	0 12	0 29 A	9 27	8 84	86	27	52	737	30 0C	24 667				
1055	356	438	18 33 2	-26 44 43	187021	0 24	6 31 B	9 60	00	89	4	67	857L	30 0C	2 833				
1056	620	522	18 33 5	-32 37 0	210358	0 6	1 27 B	8 95	8 51	108	54	51	2116	30 0C	70 533				
1057	396	453	18 33 12	-27 38 28						87	10	61	2317	30 0C	7 700				
1058	594	537	18 33 22	-32 15 5	210360	0 17	5 27 A3	9 70	9 81	279	4	253	101	3 0L	33 667				
1059	292	421	18 33 24	-25 21 42	187037	-0 7	-0 22 B	8 50	00	115	52	65	1629	30 0C	60 967				
1060	325	453	18 33 29	-26 15 40	187027	0 30	-1 0	8 9	9 00	297	33	255	10757	3 0L	368 333				
1061	690	550	18 33 38	-34 13 21	210370	-0 15	0 0	A0 9 33	9 01	88	15	59	380 L	30 0C	12 667				
1062	834	622	18 33 41	-37 32 0	210367	0 9	-4 36 A2	8 30	8 19	259	36	215	1178 H	3 0L	392 667				
1063	284	441	18 33 42	-25 22 29	187037	0 11	-1 9	8 9	9 50	00	279	6	253	131 L	3 0L	43 667			
1064	120	366	18 34 5	-21 41 60	187042	0 3	0 22 B	9 10	00	87	13	64	2787L	30 0C	9 267				
1065	211	402	18 34 14	-23 38 51	187059	-0 7	0 34 B	9 10	00	108	6	76	1657L	30 0C	5 500				
1066	806	618	18 34 16	-36 58 54	210380	-0 18	-3 39 A2	9 52	9 32	263	4	251	327L	3 0L	10 667				
1067	409	471	18 34 21	-28 0 42	187063	-0 10	1 2	B2 8 60	00	190	92	82	5950 L	30 0C	198 667				
1068	704	563	18 34 21	-34 34 46	210378	-0 3	0 34 B	7 93	7 30	282	121	67	11250 H	30 0C	375 000				
1069	697	581	18 34 26	-34 35 60	210378	0 2	-0 40 B	7 93	7 30	330	30	281	1878	3 0L	626 000				
1070	134	397	18 34 32	-22 12 9	187064	-0 3	-2 22 B	9 40	00	251	14	215	3987	3 0L	132 667				
1071	401	490	18 34 34	-28 1 5	187063	0 3	0 39 B	8 60	00	360	23	277	919 L	3 0L	306 333				
1072	204	404	18 34 35	-23 32 31	187059	0 14	6 54 B	9 10	80	142	29	67	1197L	30 0C	39 700				
1073	200	422	18 34 36	-23 37 20	187059	0 15	2 6	8 9	9 10	00	260	11	232	2717L	3 0L	90 333			
1074	747	601	18 34 42	-35 43 0	210379	0 13	0 38 A	9 46	9 15	279	21	257	230	3 0L	76 667				
1075	190	401	18 34 48	-23 15 11	187070	-0 6	-0 59 B	9 40	00	315	163	70	16460 H	30 0C	548 667				
1076	182	419	18 34 56	-23 15 16	187070	0 1	-1 4	8 9	9 40	00	397	103	230	6290 H	3 0L	2096 667			
1077	549	541	18 34 56	-31 21 54	210386	-0 11	-0 22 B	9 15	8 71	306	6	258	213 L	3 0L	71 000				
1078	557	523	18 34 57	-31 21 4	210386	-0 10	0 26 B	9 15	8 71	104	43	51	1572 L	30 0C	52 400				
1079	852	621	18 34 57	-37 50 19	210381	0 17</													

PAGE, CARRUTHERS AND HILL

ORIGINAL PAGE IS
OF POOR QUALITY

OBJECT NO	X	Y	R A	DEC	SAO NO	Δ R A	Δ DEC	SPEC TYPE	V MAG	P MAG	PEAK DEN	NO OF POINTS	BG	DENSITY VOLUME	EXP & FILTER	DEN VOL/ EXP
1101	411	495	18 36 28	-28 12 26	1870897	0 23	1 9	B9	7 46	00	100	44	58	1390 L	30 0C	46 333
1102	126	398	18 36 28	-22 0 29	187096	-0 2	0 12	A0	9 20	00	118	70	65	2373	30 0C	79 100
1103	455	530	18 36 35	-29 22 43	187100	-0 2	0 25	B	9 50	00	341	317	259	2016	3 0L	572 000
1104	463	513	18 36 39	-29 23 27	187100	0 2	-0 19	B	9 50	00	153	75	55	4284	30 0C	142 800
1105	627	564	18 36 45	-33 2 35	210412?	0 31	-0 9	A0	7 65	00	80	15	54	3417L	30 0C	11 367
1106	627	564	18 36 45	-33 2 35	210435?	-0 26	0 9	A0	9 20	0 88	80	15	54	3417L	30 0C	11 367
1107	81	389	18 37 3	-21 7 21	187111?	-0 1	-6 37	B9	9 00	00	93	16	56	3797L	30 0C	12 633
1108	466	525	18 37 5	-29 55 44	NO						112	27	59	813	30 0C	27 100
1109	148	434	18 37 9	-22 42 2	187112	-0 1	0 36	B5	8 90	00	293	47	215	1848	3 0L	616 000
1110	931	895	18 37 14	-39 50 3	210450?	-0 30	-5 8	A2	8 84	0 79	259	6	230	149	3 0L	49 667
1111	939	877	18 37 15	-39 49 12	210450?	-0 29	-4 17	A2	8 84	0 79	111	80	69	2385 H	30 0C	79 533
1112	156	418	18 37 15	-26 43 6	187112	0 7	-0 28	B5	8 90	00	198	123	65	814	30 0C	271 467
1113	465	522	18 37 20	-29 28 56	187122?	-0 24	-6 23	A3	8 80	00	94	4	60	1817L	30 0C	3 367
1114	91	418	18 37 27	-21 31 60	187119	-0 13	0 32	B9	8 80	00	246	23	211	604?	3 0L	201 333
1115	751	633	18 37 29	-36 0 28	210451	-0 15	-4 20	A2	10 10	9 62	226	19	269?	96?	3 0L	32 000
1116	484	530	18 37 35	-29 55 15	NO						113	18	56	734	30 0C	24 467
1117	99	632	18 37 37	-21 31 49	187119	-0 3	0 43	B9	8 80	00	130	98	65	395?	3 0L	131 900
1118	743	632	18 37 39	-35 50 33	210451?	-0 6	5 35	A2	10 10	9 62	286	16	273?	37?	3 0L	12 333
1119	255	479	18 37 46	-25 3 27	187120	0 3	0 9	A0	9 00	00	276	7	245	172?L	3 0L	57 333
1120	435	521	18 38 1	-26 52 5	187128	-0 7	0 20	B8	7 90	00	220	104	57	7785	30 0C	259 533
1121	315	483	18 38 4	-26 12 21	NO						157	10	65	506?	30 0C	16 867
1122	525	582	18 38 6	-33 19 53	210454	-0 8	0 38	B9	8 87	0 37	170	97	50	5115 H	30 0C	170 500
1123	428	539	18 38 7	-20 53 20	187128	-0 1	-0 65	B8	7 90	00	356	21	269	1076	3 0L	358 667
1124	279	492	18 38 9	-25 36 40	187130	-0 5	-7 88	A0	9 30	00	291	98	248	2648?	3 0L	882 667
1125	629	601	18 38 10	-33 22 19	210454	-0 4	-1 47	B9	8 87	0 37	346	27?	277?	1492 H	3 0L	497 333
1126	97	408	18 38 10	-21 31 46	187119?	0 31	0 46	B9	8 80	00	101	7	64	206 L	30 0C	6 967
1127	535	552	18 38 10	-31 7 50	210457	0 15	-0 39	B8	8 82	0 50	130	63	50	3111	30 0C	103 700
1128	371	508	18 38 41	-27 30 13	187141	0 1	-0 36	B5	8 30	00	215	97	70	7129	30 0C	237 633
1129	363	526	18 38 43	-27 29 53	187141	0 3	-0 16	B5	8 30	00	372	17	275	989 L	3 0L	323 000
1130	468	538	18 38 43	-29 38 40	187151	-0 18	0 22	B9	8 60	00	132	50	59	2219	30 0C	77 300
1131	584	594	18 38 47	-32 23 60	210478	-0 7	0 59	B8	7 76	7 11	409	220?	273?	2228	3 0L	742 667
1132	592	577	18 38 51	-32 24 44	210478	-0 3	0 15	B8	7 76	7 11	317	172	56	17120 H	30 0C	570 667
1133	460	559	18 39 1	-29 39 28	187151	0 0	-0 26	B9	8 60	00	336	13	269	502	3 0L	167 333
1134	815	672	18 39 3	-37 30 6	210485?	-0 19	5 9	A2	10 50	10 32	282	0	252	211?	3 0L	70 333
1135	172	446	18 39 5	-23 11 51	187154	-0 5	-0 53	A0	9 00	00	99	39	65	1048	30 0C	34 933
1136	162	464	18 39 16	-23 9 34	187154	0 6	1 24	A0	9 00	00	253	11	221	275	3 0L	91 667
1137	506	579	18 39 30	-30 43 39	210479?	0 29	-3 4	A2	9 12	8 85	274	4	248	98 L	3 0L	32 667
1138	351	512	18 39 31	-27 7 20	NO						124	4	83	121?	30 0C	4 033
1139	500	558	18 39 36	-30 26 0	NO						79	14	50	349	30 0C	11 633
1140	901	710	18 39 43	-39 21 32	210488	0 17	-1 25	B8	7 09	00	384	110	236	737?	3 0L	2459 000
1141	115	454	18 39 48	-22 13 24	187169	0 9	-0 13	B8	8 60	00	233	9	206	218 L	3 0L	72 667
1142	369	540	18 39 49	-27 42 25	187170	0 3	-0 31	B9	8 40	00	330	13	267	542	3 0L	180 667
1143	123	438	18 39 52	-22 12 50	187169	0 14	0 21	B8	8 60	00	111	69	84	2329	30 0C	77 633
1144	376	524	18 39 54	-27 41 54	187170	0 8	-0 0	B9	8 40	00	147	60	72	2730	30 0C	91 267
1145	657	629	18 40 0	-34 6 29	210498	-0 5	-1 28	A0	9 39	8 95	315	354	276?	1368?H	3 0L	456 000
1146	908	695	18 40 2	-39 21 47	210488?	0 37	-1 41	B8	7 09	00	359	237	69	29419 H	30 0C	980 633
1147	133	446	18 40 12	-22 27 15	187185	-0 7	0 25	B9	7 60	00	114	70	67	2324	30 0C	77 467
1148	126	463	18 40 13	-22 28 11	187185	-0 7	-0 31	B9	7 60	00	243	9	205	277 L	3 0L	92 333
1149	726	654	18 40 14	-35 38 7	210499	0 7	3 40	A5	9 74	9 80	407	157	281	434??	3 0L	1449 000
1150	583	590	18 40 22	-32 18 48	NO						93	28	56	820?	30 0C	27 333
1151	124	465	18 40 26	-22 26 35	187185	0 7	1 6	B9	7 60	00	244	25	204	772?	3 0L	257 333
1152	860	683	18 40 31	-38 22 41	210501	0 10	-0 18	A0	5 13	00	193	118	65	7952 L	30 0C	265 067
1153	853	702	18 40 36	-38 23 52	210501	0 15	-1 26	A0	5 13	00	289	22	246	518 L	3 0L	206 000
1154	735	643	18 40 53	-35 42 16	210509	-0 6	-0 40	B3	4 82	00	424	935	83	123354	30 0C	4111 800
1155	726	663	18 41 8	-35 41 26	210509	0 9	0 9	B3	4 82	00	469	707	284?	11931	3 0L	3977 000
1156	227	511	18 41 14	-24 42 58	187199	0 15	2 1	A0	9 20	00	265	7	237	157?L	3 0L	52 333
1157	191	499	18 41 21	-23 56 22	187211	-0 11	-3 19	A0	9 90	00	247	7	219	173?	3 0L	57 667
1158	301	539	18 41 32	-26 20 2	187209	0 10	-3 17	A0	9 20	00	266	17	255	444	3 0L	148 000
1159	397	549	18 41 35	-28 16 34	187225?	-0 25	-0 11	B9	8 10	00	111	12	68	39?	30 0C	17 100
1160	561	597	18 41 35	-31 54 32	210521?	-0 10	-0 21	B9	9 70	9 18	88	26	52	723	30 0C	24 100
1161	561	597	18 41 35	-31 54 32	210526?	-0 10	-0 21	B9	9 70	9 18	88	26	52	723	30 0C	24 100
1162	190	503	18 41 38	-23 56 17	187211	0 7	-3 15	A0	9 90	00	242	9	219	192?	3 0L	64 000
1163	522	717	18 41 39	-39 45 29	NO						227	169	72	1284?	30 0C	421 567
1164	242	521	18 41 43	-25 4 39	187216	-0 2	-0 62	B8	5 76	00	389	87	242	424?L	3 0L	1415 667
1165	203	509	18 41 48	-24 13 60	187220	-0 2	-2 10	B9	9 10	00	253	6	227	138?L	3 0L	46 000
1166	250	505	18 41 48	-25 4 4	187216	0 2	-0 18	B8	5 76	00	373	213	86	25362	30 0C	845 400
1167	913	737	18 41 52	-39 45 50	NO						298	33	240	1316	3 0L	438 667
1168	151	494	18 42 3	-23 8 34	187222	0 6	-3 26	A0	9 40	00	232	7	208	150?L	3 0L	50 000
1169	420	563	18 42 7	-28 49 7	187237?	-0 23	0 42	A0	8 40	00	164	77	61	4576	30 0C	152 533
1170	420	563	18 42 7	-28 49 7	187238?	-0 24	-0 12	A0	8 90	00	164	77	61	4576	30 0C	152 533
1171	390	554	18 42 8	-28 9 37	187225?	0 8	6 46	B9	8 10	00	125	59	71	2268	30 0C	75 600
1172	400	579	18 42 17	-28 34 48	NO						303	40	268?	891?	3 0L	230 333
1173	394	557	18 42 18	-28 15 33	187225	0 18	0 50	B9	8 10	00	122	20	100	140 L	30 0C	4 667
1174	241	531	18 42 32	-25 6 48	NO						276	17	244	419	3 0L	139 667
1175	332	561	18 42 34	-27 5 5	187239	0 2	-2 26	B8	3 30	00	468	4000?	274?	45000 L	3 0L	15000 000
1176	368	559	18 42 39	-28 9 4	187225?	0 39	7 19	B9	8 10	00	113	7	72	203?	30 0C	6 767
1177	899	720	18 42 39	-39 20 39	NO						100	52	67	1422	30 0C	47 400
1178	336	544	18 42 44	-27 0 55	187239	0 12	1 43	B8	3 30	00	434	965	97	132936	30 0C	4431 200
1179																

NRL REPORT 8173

SCOR OVEREXP RA LB 34 DEC -30 24

OBJECT NO	X	Y	R A	DEC	SAO NO	Δ R A	Δ DEC	SPEC TYPE	V M/G	P MAG	PEAK DEN	NO OF POINTS	BO	DENSITY VOLUME	EXP & FILTER	DEN VOL/ EXP	
1201	326	579	18 44	20	-27 5 43	1872807	-0 28	2 46	B8	8 50	00	303	43	268?	7137L	3 0L	237 667
1202	322	598	18 44	25	-28 19 46	1872866	-0 3	0 21	B9	7 24	00	333	22?	272?	640	3 0L	213 333
1203	162	528	18 44	34	-23 36 12							235	37	202	985?	3 0L	328 333
1204	248	557	18 44	34	-25 24 24							280	47	236	1368?	3 0L	456 000
1205	390	582	18 44	35	-28 20 47	1872866	0 6	-0 41	B9	7 24	00	134	62	73	2377 L	30 0C	79 233
1206	215	547	18 44	39	-24 41 39	1872857	0 11	-7 24	A2	9 00	00	274	76	232	2176 H	3 0L	725 333
1207	327	585	18 44	45	-27 8 46	187290	-0 2	-0 16	B8	8 50	00	360	55?	267?	1120	3 0L	373 333
1208	226	552	18 44	48	-24 56 37	187301?	-0 18	-6 53	A2	8 60	00	257	31	234	528	3 0L	176 000
1209	633	675	18 44	51	-33 54 36	210583	-0 6	3 15	A2	7 06	00	299	30	277?	328	3 0L	109 333
1210	673	678	18 44	51	-34 7 44							303	176	277?	1744?	3 0L	581 333
1211	327	566	18 44	53	-26 57 49	*87308?	-0 44	-3 17	A3	8 50	00	122	38	87	1077	30 0C	35 900
1212	342	592	18 44	58	-27 29 23	187299	-0 1	-0 12	B9	9 10	00	313	20?	270?	400	3 0L	133 333
1213	908	749	18 45	9	-39 40 45	210581	0 19	-1 12	A0	6 97	00	255	220	71	17289 H	30 0C	575 300
1214	899	767	18 45	10	-39 40 21	210581	0 20	-0 49	A0	6 97	00	329	56	242	2797	3 0L	932 333
1215	543	653	18 45	11	-31 56 10	210588	0 3	-0 53	B8	7 45	6 80	353	141	275?	2020?	3 0L	673 333
1216	550	635	18 45	11	-31 55 19	210588	0 3	-0 53	B8	7 45	6 80	306	153	58	15005	30 0C	500 167
1217	209	553	18 45	19	-24 37 52							273	142	222	4509?	3 0L	1503 000
1218	461	631	18 45	20	-30 8 45	210591?	-0 6	-5 23	A0	9 51	9 24	311	163	283?	530?	3 0L	176 667
1219	517	654	18 45	25	-31 24 45	210599?	0 1	-5 13	A0	9 65	9 23	293	107	277?	1235?H	3 0L	411 667
1220	607	650	18 46	0	-33 14 42							219	18	57	1360?	30 0C	45 333
1221	463	623	18 46	20	-30 3 52	210613	-0 22	0 1	B8	8 82	8 24	128	59	62	251 L	30 0C	85 033
1222	454	641	18 46	22	-30 3 33	210613	-0 20	0 20	B8	8 82	8 24	316	49	270?	506	3 0L	168 667
1223	454	642	18 46	28	-30 3 55	210613	-0 15	-0 2	B8	8 82	8 24	338	25?	278?	1287?	3 0L	429 000
1224	202	565	18 46	33	-24 33 52	187317	0 6	2 5	A0	8 50	00	274	177	208	6448 H	3 0L	2149 333
1225	556	672	18 46	35	-32 19 54	210604?	0 23	-2 2	A2	9 49	9 37	304	37	280?	260?	3 0L	86 667
1226	210	552	18 46	52	-24 35 29	187317?	0 25	0 29	A0	8 50	00	106	44	71	1187	30 0C	39 567
1227	262	568	18 46	52	-25 41 59							114	7	87	163?	30 0C	5 433
1228	193	568	18 47	1	-24 25 24							250	50	213	1325?	3 0L	441 667
1229	466	653	18 47	9	-30 22 22	210626	-0 21	-4 30	A0	8 73	8 36	297	10	275?	106?L	3 0L	35 333
1230	655	686	18 47	9	-34 21 49	210625	-0 20	0 1	B9	7 23	00	200	103	65	6570 H	30 0C	219 000
1231	503	647	18 47	27	-31 2 4	210631	-0 18	-0 49	A0	7 88	00	94	5	89	1187L	30 0C	3 933
1232	126	533	18 47	39	-22 53 34	187337	0 5	-0 43	B9	9 00	00	84	28	57	569?L	30 0C	22 300
1233	487	665	18 47	42	-30 52 3	210632	-0 5	-0 43	A0	8 67	00	318	327	277?	3000?H	3 0L	1000 000
1234	494	649	18 47	53	-30 51 53	210632	0 7	-0 32	A0	8 67	00	85	9	64	184 L	30 0C	6 133
1235	218	587	18 47	54	-25 0 13	187357	-0 14	2 57	A2	9 30	00	265	35	240?	361?	3 0L	120 333
1236	187	577	18 47	58	-24 21 28	187355	-0 7	5 22	B9	8 70	00	242	21	212	528?	3 0L	176 000
1237	510	675	18 47	58	-31 24 39							312	267	277?	326?	3 0L	1087 333
1238	299	615	18 48	7	-26 45 34	187359	-0 5	1 26	A2	9 10	00	297	6	260	177	3 0L	59 000
1239	490	672	18 48	10	-30 57 49	210631?	0 26	3 26	A0	7 88	00	316	171	280?	1940?	3 0L	646 667
1240	325	608	18 48	31	-27 11 3	187374	-0 18	0 53	B5	9 30	00	150	25	75?	1712 L	30 0C	57 067
1241	478	553	18 48	36	-30 33 34							87	4	62	91?	30 0C	3 033
1242	72	528	18 48	37	-21 50 33	187369	-0 5	4 34	A0	8 80	00	80	4	56	83?L	30 0C	3 100
1243	273	615	18 48	47	-26 15 30	NO						334	20?	280?	273?	3 0L	912 333
1244	738	752	18 48	54	-36 28 53	210648	0 13	0 15	A2	9 36	9 44	286	32	258?	360?	3 0L	120 000
1245	268	617	18 49	5	-26 10 12	NO						325	139	277?	2633	3 0L	877 667
1246	271	619	18 49	11	-26 14 31	NO						351	1089	276?	6857	3 0L	2285 667
1247	487	662	18 49	12	-30 47 39	210663	-0 17	0 5	B8	6 63	00	338	189	64	1891?	30 0C	830 567
1248	479	681	18 49	18	-30 48 54	210663	-0 12	-1 10	B8	6 63	00	413	300?	278?	28616 H	3 0L	939 667
1249	440	671	18 49	21	-29 58 36	210856	0 9	3 55	A0	9 67	9 40	305	93	274?	1577?	3 0L	525 667
1250	601	717	18 49	30	-33 30 59							312	290	276?	3694?	3 0L	1231 333
1251	167	590	18 49	36	-24 3 26	187384	0 20	0 32	B9	9 30	00	245	20?	275?	1178 H	3 0L	392 667
1252	502	691	18 49	36	-31 20 15							314	331	284?	2295?	3 0L	765 000
1253	573	711	18 49	37	-32 54 42	210673?	-0 12	-9 16	A0	10 50	10 03	302	105	276?	999?H	3 0L	329 667
1254	201	588	18 50	10	-24 38 23	187488	-0 9	0 21	B9	8 50	00	116	84	88	2526	30 0C	84 200
1255	775	778	18 50	14	-37 21 20	210676	0 13	-1 10	A0	7 04	00	292	10?	259?	207 L	3 0L	69 000
1256	186	605	18 50	21	-24 31 5	187408?	0 2	7 39	B9	8 50	00	239	12	209	295 L	3 0L	98 333
1257	488	696	18 50	22	-31 4 41	210684?	-0 3	6 26	A5	9 82	9 78	310	274	287?	711?H	3 0L	270 333
1258	620	714	18 50	22	-33 49 29	210692	-0 7	-0 40	A0	9 88	9 16	91	7	7	166?	30 0C	5 200
1259	781	763	18 50	35	-37 20 22	210676?	0 33	-0 12	A0	7 04	00	135	77	72	316?	30 0C	103 400
1260	101	565	18 51	0	-22 37 35	187425	-0 7	0 25	B8	8 00	00	129	119	56	5008	30 0C	165 933
1261	206	601	18 51	6	-24 48 36	187431	-0 13	1 21	B9	7 50	00	263	179	73	12741	30 0C	424 700
1262	49	595	18 51	9	-22 36 44	187425	0 2	1 17	B8	8 00	00	228	42	182	1205	3 0L	401 667
1263	473	581	18 51	9	-30 37 50	210701	-0 7	0 59	A0	10 00	9 68	103	10	66	278?	30 0C	9 267
1264	499	688	18 51	12	-31 12 7	210704	-0 14	-0 34	A0	8 54	8 00	219	108	87	7536 H	3 0L	251 200
1265	462	699	18 51	15	-30 33 53	210701	-0 1	4 55	A0	10 00	9 68	316	768	286?	2471?H	3 0L	827 000
1266	490	706	18 51	15	-31 10 35	210704	-0 12	0 57	A0	8 54	8 00	377	200?	280?	31510	3 0L	10503 333
1267	521	696	18 51	22	-31 41 32	210700	0 7	0 9	B9	9 29	8 84	127	57	67	2284	30 0C	78 133
1268	196	621	18 51	25	-24 48 20	187431	0 6	1 37	B8	7 50	00	351	71	23?	1966?	3 0L	655 333
1269	221	633	18 51	42	-25 20 37	187441	0 2	0 46	A0	9 00	00	270	6	255?	597L	3 0L	19 667
1270	276	633	18 51	56	-26 21 39	187448	-0 14	-0 1	B3	2 14	00	484	630?	93	84981?	30 0C	28327 233
1271	537	707	18 51	59	-32 4 42	210720	-0 20	0 36	B9	8 87	8 43	104	36	66	1089 L	30 0C	35 633
1272	529	726	18 52	4	-32 5 55	210720	-0 14	-0 37	B9	8 87	8 43	326	1374	284?	726	3 0L	242 000
1273	266	655	18 52	22	-26 20 28	187448	0 12	1 10	B3	2 14	00	511	900?	273?	367978	3 0L	122659 333
1274	471	719	18 52	46	-30 52 33							312	334	281?	2370?	3 0L	790 000
1275	123	597	18 52	59	-23 13 52	187468	-0 0	0 29	B8	5 89	00	389	344	64	4168?	30 0C	1389 567
1276	839	829	18 53	1	-38 54 0	210737?	-0 21	-6 49	B9	8 55	8 27	277	10?	261?	1937L	3 0L	64 33

PAGE, CARRUTHERS AND HILL

SGR OVEREXP RA 18 34 DEC -30 24

OBJECT NO	X	Y	R A	DEC	SAO NO	A R A	A DEC	SPEC TYPE	V MAG	P MAG	PEAK DEN	NO OF POINTS	BO	DENSITY VOLUME	EXP & FILTER	DEN VOL / EXP
1301	82	615	18 55 30	-22 32 29	187519	0 6	3 24	A2	6 04	00	99	75	55	2306 L	30 OC	76 867
1302	195	650	18 55 34	-24 54 24	187517	0 17	2 19	A0	6 50	00	239	135	71	10842	30 OC	354 733
1303	328	713	18 55 45	-27 55 23	187522	0 9	5 43	A3	9 30	00	294	34	2737	202?	3 0L	67 335
1304	206	655	18 55 55	-25 9 55	187532	0 3	2 10	B8	6 40	00	191	114	77	202?	30 OC	211 433
1305	197	678	18 55 57	-25 9 55	187532	0 5	2 14	B8	6 40	00	312	32	228	1340	3 0L	446 657
1306	257	694	18 55 57	-26 25 6	187532	0 5	2 14	B8	6 40	00	345	975	258?	29261?	3 0L	9733 667
1307	250	693	18 56 2	-26 18 20	187534	0 4	-0 39	A0	8 50	00	279	6	2607	897L	3 0L	22 667
1308	201	679	18 56 7	-25 15 44	187532	0 15	-3 36	B8	8 40	00	246	4	324	807L	3 0L	26 667
1309	237	690	18 56 10	-25 59 60	187542	-0 16	0 55	B8	8 60	00	291	40	250	1176?	3 0L	326 000
1310	301	711	18 56 14	-27 22 4	187536?	0 2	-7 16	A0	9 20	00	302	86	276?	678?H	3 0L	226 000
1311	242	695	18 56 24	-26 7 22	187545	-0 11	-2 39	A2	9 00	00	278	24	2607	178?	3 0L	59 333
1312	428	749	18 56 25	-30 9 31	187545	-0 11	-2 39	A2	9 00	00	318	745	280?	4073?	3 0L	1357 667
1313	536	768	18 56 32	-32 22 0	210797?	-0 3	5 31	A5	9 08	9 05	194	84	74	5348 H	30 OC	178 267
1314	536	758	18 56 32	-32 22 0	210798	-0 16	0 33	A0	8 57	8 11	194	84	74	5348 H	30 OC	178 267
1315	527	777	18 56 38	-32 21 60	210798	-0 10	0 33	A0	8 57	8 11	370	27	291	1256	3 0L	418 667
1316	586	794	18 56 47	-33 40 37	210806	-0 16	0 12	A0	8 07	00	313	5	286	1077L	3 0L	35 667
1317	168	656	18 56 49	-24 25 35	187551	-0 2	2 31	B8	8 40	00	161	112	64	5817	30 OC	193 000
1318	159	675	18 56 56	-24 25 54	187551	0 5	2 12	B8	8 40	00	266	36	209	1161	3 0L	387 000
1319	335	730	18 57 0	-28 10 27	187552	0 8	-3 12	A2	7 71	00	305	6	275	1647L	3 0L	54 667
1320	320	706	18 57 2	-27 39 34	187563?	-0 23	3 23	A0	9 20	00	138	55	80?	2369	30 OC	78 90?
1321	255	710	18 57 19	-26 28 58	187563?	-0 23	3 23	A0	9 20	00	305	119	284?	2171?	3 0L	727 000
1322	750	834	18 58 6	-37 8 25	210815?	0 26	-0 30	B8	6 84	00	400	461	77	58758	30 OC	1958 600
1323	750	834	18 58 6	-37 8 25	210816?	0 25	-0 27	B8	6 82	00	400	461	77	58758	30 OC	1958 600
1324	741	852	18 58 7	-37 7 58	210815?	0 25	-0 3	B8	6 84	00	443	182	283	14244	3 0L	4748 000
1325	741	852	18 58 7	-37 7 58	210816?	0 25	0 0	B8	6 82	00	443	182	283	14244	3 0L	4748 000
1326	114	656	18 58 8	-23 23 45	187556?	0 31	-2 54	A3	9 40	00	94	6	57	179?	30 OC	5 967
1327	513	771	18 58 16	-31 57 59	187556?	0 31	-2 54	A3	9 40	00	131	7	74	239?	30 OC	7 967
1328	232	716	18 58 29	-26 4 48	187583	-0 7	-0 9	A0	8 20	00	260	21	234	473?	3 0L	157 667
1329	734	857	18 58 42	-37 0 47	210828?	0 25	-3 2	A0	6 88	00	349	19	281	682 L	3 0L	227 333
1330	734	857	18 58 42	-37 0 47	210829?	0 23	-3 55	B2	00	00	349	19	281	682 L	3 0L	227 333
1331	685	824	18 58 43	-35 57 44	210833	0 17	-1 16	A0	8 07	7 80	315	15	280	403 L	3 0L	134 333
1332	693	824	18 58 44	-35 56 57	210833	0 18	-0 29	A0	8 07	7 80	130	56	73?	2356	30 OC	78 533
1333	285	736	18 58 45	-27 13 11	187587	-0 3	4 4	A0	9 40	00	289	22	255?	462?	3 0L	154 000
1334	285	736	18 58 45	-27 13 11	187589?	-0 4	-3 10	A3	9 50	00	289	22	255?	462?	3 0L	154 000
1335	677	843	18 59 2	-35 48 23	210841	0 16	-0 40	A0	9 53	9 48	304	4	262	827L	3 0L	27 333
1336	279	738	18 59 5	-27 6 36	187589	0 15	3 25	A3	9 80	00	285	34	263?	391?	3 0L	127 000
1337	417	756	18 59 5	-29 55 49	187600	-0 21	1 24	A2	2 71	00	375	197	77?	26013	30 OC	867 100
1338	408	775	18 59 7	-29 54 22	187600	-0 18	2 51	A2	2 71	00	410	1500?	278?	10765 L	3 0L	3588 333
1339	284	740	18 59 8	-27 13 18	187587?	0 20	3 57	A0	9 40	00	284	12	258	206?	3 0L	88 667
1340	284	740	18 59 8	-27 13 18	187589	0 19	-3 17	A3	9 50	00	284	12	258	206?	3 0L	88 667
1341	125	672	18 59 11	-23 41 54	187595	-0 1	4 9	A0	8 60	00	189	78	60	2519 H	30 OC	83 667
1342	626	832	18 59 19	-34 42 5	210852	0 4	0 13	B9	7 21	00	389	75?	286	1300 L	3 0L	433 333
1343	548	792	18 59 21	-32 48 28	210852	-0 26	0 41	A0	8 10	7 76	134	62	74	2359	30 OC	78 633
1344	739	845	18 59 23	-35 59 29	210852	-0 26	0 41	A0	8 10	7 76	134	62	74	2359	30 OC	78 633
1345	634	815	18 59 24	-34 42 48	210852	0 10	-0 30	B9	7 21	00	259	122	75	9925	30 OC	330 833
1346	114	652	18 59 31	-23 40 34	187595?	0 19	5 29	A0	8 60	00	281	27	190	647	3 0L	215 667
1347	759	873	18 59 32	-37 35 25	210859	-0 17	-1 49	A5	10 00	10 40	299	10?	276	120?H	3 0L	76 333
1348	641	839	18 59 35	-35 3 2	NO	0 15	0 9	A0	7 22	00	310	9	283	129	3 0L	76 333
1349	701	836	18 59 37	-36 11 6	210853	0 20	0 55	A0	7 22	00	127	65	75	2353 L	30 OC	78 433
1350	693	836	18 59 42	-36 11 6	210853	0 20	0 55	A0	7 22	00	127	65	75	2353 L	30 OC	78 433
1351	257	738	18 59 43	-26 39 9	187609	-0 14	-2 58	A0	9 30	-00	264	31	263?	267?	3 0L	89 000
1352	243	738	18 59 55	-26 24 21	187606	0 9	0 45	A0	9 00	00	269	14	249?	265?	3 0L	88 667
1353	402	762	18 59 55	-29 39 13	187614?	-0 28	2 5	A0	8 60	00	111	22	82	550 L	30 OC	18 333
1354	246	739	19 0 2	-26 29 38	187606	0 15	-3 32	A0	9 00	00	276	7	244	200?L	3 0L	66 667
1355	394	781	19 0 2	-29 39 19	187614?	-0 22	1 59	A0	8 60	00	328	22	283	674	3 0L	224 667
1356	750	876	19 0 3	-27 25 43	210858?	0 14	6 52	A5	10 00	10 40	281	8	273?	30?	3 0L	10 000
1357	284	751	19 0 7	-27 18 7	187608?	0 12	-6 2	A3	9 00	00	284	22	264?	267?	3 0L	89 000
1358	249	742	19 0 12	-28 34 26	187609	0 14	1 47	A0	9 30	00	280	27	251	573?	3 0L	191 000
1359	539	821	19 0 17	-32 52 31	210856?	0 30	-3 21	A0	8 10	7 76	312	7	289	138?L	3 0L	46 000
1360	257	749	19 0 38	-26 46 23	187629?	-0 26	0 14	A0	9 40	00	282	10	250?	247?	3 0L	82 333
1361	477	809	19 0 38	-31 31 52	210876	-0 14	0 1	A0	8 98	8 55	329	13	282	351?	3 0L	117 000
1362	253	750	19 0 49	-28 41 53	187629	-0 14	4 44	A0	9 40	00	279	8	254?	155?	3 0L	51 667
1363	465	789	19 0 52	-31 5 41	210883	-0 21	1 39	A0	5 53	00	350	211	73?	23115	30 OC	770 500
1364	456	807	19 0 53	-31 5 24	210883	-0 20	1 55	A0	5 53	00	414	89	284	4481	3 0L	1493 667
1365	257	752	19 0 55	-28 47 22	187629	-0 9	-0 45	A0	9 40	00	276	43	258?	365?	3 0L	122 000
1366	260	757	19 1 12	-26 52 18	187629?	0 8	-5 41	A0	9 40	00	281	34	256?	437?	3 0L	145 667
1367	451	810	19 1 17	-31 0 17	210894	-0 16	1 9	A0	8 73	8 29	322	8	293	158 L	3 0L	52 667
1368	251	755	19 1 19	-26 41 6	187629?	0 15	5 31	A0	9 40	00	282	71	258?	557?	3 0L	185 667
1369	275	767	19 1 39	-27 13 21	187639	0 8	-0 59	A2	8 80	00	283	50?	251?	1821?H	3 0L	607 333
1370	279	768	19 1 39	-27 18 30	187639?	0 8	-6 8	A2	8 80	00	279	4	253	93?L	3 0L	31 000
1371	731	867	19 1 40	-36 57 26	210888	0 18	-2 14	A0	8 19	8 04	106	31	76	743 L	30 OC	24 767
1372	731	867	19 1 40	-36 57 26	210907?	-0 27	-0 21	A2	9 71	9 56	106	31	76	743	30 OC	24 767
1373	190	722	19 1 44	-25 14 58	187644	0 2	3 26	A0	6 87	00	114	75	65	266?	30 OC	89 900
1374	179	739	19 1 48	-25 12 34	187644?	0 6	5 50	A0	6 87	00	248	20	214	512?L	3 0L	170 667
1375	783	887	19 2 6	-38 6 28	210895?	0 30	-4 15	B9	7 21	00	178	145	75	7766	30 OC	258 667
1376	774	906	19 2 12	-38 6 16	210895?	0 36	-4 2	B9	7 21	00	318	15	274	452 L	3 0L	150 667
1377	360	798	19 2 17	-29 5 38	187661	-0 20	3 52	B8	6 92							

NRL REPORT 8173

SGR OVEREXP RA 19 34 DEC -30 24																
OBJECT NO	X	Y	R A	DEC	SAO NO	Δ R A	Δ DEC	SPEC TYPE	V MAG	P MAG	PEAK DEN	NO OF POINTS	BG	DENSITY VOLUME	EXP & FILTER	DEN VOL/ EXP
1401	430	835	19 5 46	-30 40 29	210997	-0 10	1 55	A0	7 89	00	120	47	77	1447 L	30 DC	48 233
1402	158	782	19 5 55	-25 4 28	187728?	0 12	5 7	B9	6 76	00	359	116	201	6835	3 DL	2278 333
1403	167	765	19 5 55	-25 4 24	187728	0 12	5 11	B9	6 76	00	297	197	84	19225	30 DC	644 167
1404	489	854	19 6 3	-31 58 58	211001	-0 26	1 11	B5	9 52	8 91	189	112	78	6374	30 DC	212 467
1405	220	804	19 6 15	-25 23 52	187758?	-0 34	4 34	A0	9 00	00	253	5	230	101 L	3 DL	33 667
1406	478	874	19 6 17	-31 56 50	211001	-0 12	3 18	B5	9 52	8 91	362	200?	280?	7876 H	3 DL	2625 333
1407	422	661	19 6 29	-30 45 7	210997?	0 32	-2 43	A0	7 89	00	302	9	274	216 L	3 DL	72 000
1408	604	907	19 6 35	-34 42 41	210999	0 13	3 9	A0	8 21	7 89	314	17	286	420 L	3 DL	140 000
1409	227	812	19 6 42	-26 35 43	187751	-0 1	1 41	A0	8 50	00	261	6	234	140?L	3 DL	46 667
1410	615	891	19 6 44	-34 46 6	210998	0 22	-0 17	A0	8 21	7 89	114	40	77	1093 L	30 DC	36 433
1411	685	909	19 6 46	-36 17 16	210996?	0 30	-2 30	B9	6 58	00	297	179	77	16760	30 DC	558 667
1412	499	885	19 6 54	-32 27 10	211004?	0 21	-1 2	A5	8 93	8 84	312	5	285	118?	3 DL	39 333
1413	675	929	19 6 59	-36 16 9	210998?	0 43	-1 24	B9	6 59	00	362	48	304	1519 L	3 DL	505 333
1414	419	876	19 7 50	-30 46 54	211019	0 0	-1 39	A5	10 10	9 76	308	107	283?	120?H	3 DL	40 000
1415	419	876	19 7 50	-30 46 54	211026?	-0 20	-3 51	A3	9 71	9 53	308	107	283?	120?H	3 DL	40 000
1416	192	815	19 7 54	-25 56 17	187776	0 2	3 22	B9	8 50	00	252	23	225	614	3 DL	204 667
1417	248	932	19 7 55	-27 8 11	187782?	-0 31	1 25	A0	8 60	00	261	26	254	438?	3 DL	146 000
1418	370	846	19 8 4	-29 31 45	187786	-0 5	3 23	B9	6 25	00	378	218	78?	28544	30 DC	951 467
1419	199	800	19 8 7	-25 54 27	187776	0 15	5 12	B9	8 50	00	119	85	67	2951	30 DC	98 367
1420	234	830	19 8 8	-26 50 58	NO						267	25	243?	445	3 DL	148 333
1421	361	866	19 8 14	-29 33 24	187786	0 5	1 44	B9	6 25	00	370	556	277?	9393	3 DL	3131 000
1422	273	846	19 8 32	-27 42 25	NO						293	9	259	255	3 DL	85 000
1423	242	838	19 8 35	-27 2 47	187792?	0 10	6 49	A0	8 60	00	272	9	247	191?L	3 DL	63 667
1424	554	921	19 9 1	-33 46 58	211046?	-0 27	8 54	A0	7 30	00	317	4	294	86?L	3 DL	28 667
1425	267	851	19 9 7	-27 36 41	NO						287	4	265	86	3 DL	28 667
1426	667	935	19 9 38	-36 4 57	211039	0 39	-3 24	B5	10 20	9 62	138	93	77?	3787	30 DC	128 233
1427	680	954	19 9 40	-36 7 11	211043?	0 24	7 26	A2	8 95	8 87	325	6	300	120 L	3 DL	40 000
1428	371	865	19 9 40	-29 40 47	187830	-0 17	2 35	B9	8 10	00	143	78	75?	4044	30 DC	134 000
1429	568	911	19 9 40	-33 55 42	211045/	0 13	0 31	A0	7 86	00	375	214	77?	27189 H	30 DC	906 300
1430	568	911	19 9 40	-33 55 42	211046/	0 13	0 18	A0	7 30	00	375	214	77?	27189 H	30 DC	906 300
1431	558	930	19 9 47	-33 54 24	211045/	0 20	1 49	A0	7 86	00	419	105	303	5540 H	3 DL	1980 000
1432	558	930	19 9 47	-33 54 24	211046/	0 20	1 28	A0	7 30	00	419	105	303	5540 H	3 DL	1980 000
1433	431	881	19 9 48	-30 58 31	211054/	-0 13	2 15	A0	9 07	8 71	110	25	75?	720	30 DC	24 000
1434	431	881	19 9 48	-30 58 31	211054/	-0 14	2 7	A0	8 80	9 01	110	25	75?	720	30 DC	24 000
1435	255	859	19 10 4	-27 27 0							288	67	265	1408?	3 DL	469 333
1436	358	886	19 10 5	-29 39 23	187830	0 7	3 58	B9	8 10	00	307	24	272	468 L	3 DL	156 333
1437	456	910	19 10 8	-31 44 22	211066?	-0 25	6 9	A0	9 39	8 97	308	5	282	116?L	3 DL	38 667
1438	273	868	19 10 29	-27 51 30	187840?	0 16	6 51	A5	9 20	00	294	55	273?	429?H	3 DL	143 000
1439	422	906	19 10 30	-31 3 4	211054?	0 29	-2 18	A0	8 07	8 71	310	4	285	89?L	3 DL	29 667
1440	422	906	19 10 30	-31 3 4	211057?	0 28	-2 25	A0	8 80	9 01	310	4	285	89?L	3 DL	29 667
1441	422	906	19 10 30	-31 3 4	211069	-0 15	-3 48	A0	10 00	9 51	310	4	285	89?	3 DL	29 667
1442	176	823	19 10 37	-25 36 12	187841	0 20	0 59	A0	9 10	00	100	4	65	126?L	30 DC	4 200
1443	251	868	19 10 58	-27 24 52	187851?	-0 25	3 6	A0	8 50	00	284	36	253?	775?	3 DL	258 333
1444	325	871	19 11 12	-28 49 5	187854	-0 18	22 53	B9	9 20	00	124	60	75?	2203	30 DC	73 433
1445	313	889	19 11 19	-28 46 51	187854?	-0 8	5 8	B9	9 20	00	307	8	276	210 L	3 DL	70 000
1446	257	855	19 11 24	-27 22 27	187861?	0 1	5 31	A0	8 50	00	113	61	73?	2024	30 DC	67 467
1447	247	873	19 11 29	-27 22 44	187861?	0 6	5 14	A0	8 50	00	291	69	260?	1061?	3 DL	353 667
1448	432	902	19 11 43	-31 8 16	211085	0 6	2 1	A0	8 94	8 47	109	29	75?	870	30 DC	29 000
1449	250	877	19 11 47	-27 27 34	187861?	0 24	0 25	A0	8 50	00	292	51	257?	1028?	3 DL	342 667
1450	255	879	19 11 51	-27 34 12	187861?	0 28	-6 14	A0	9 50	00	292	5	269	104?L	3 DL	34 667
1451	267	889	19 12 23	-27 52 36	187884	-0 10	4 4	A0	9 00	00	298	30	270	766?	3 DL	255 333
1452	605	952	19 12 32	-34 55 9	NO						233	150	80?	11364	30 DC	378 000
1453	277	876	19 12 45	-27 53 49	187884	0 13	2 52	A0	9 00	00	104	7	75?	185?L	30 DC	6 167
1454	597	972	19 12 46	-34 57 58	NO						343	38	297	1216	3 DL	405 333
1455	277	895	19 12 48	-28 6 46	187891	-0 7	-4 34	A2	9 20	00	301	14	275	343?	3 DL	114 333
1456	545	943	19 12 58	-33 38 18	211100/	0 27	-1 10	A0	7 38	00	347	227	80?	26247	30 DC	874 900
1457	545	943	19 12 58	-33 38 18	211101/	0 24	1 50	B9	9 03	8 38	347	227	80?	26247	30 DC	874 900
1458	535	962	19 13 3	-33 38 12	211100/	0 32	-1 5	A0	7 38	00	402	85	302	4980 H	3 DL	1660 000
1459	535	962	19 13 3	-33 38 12	211101/	0 29	1 55	B9	9 03	8 38	402	85	302	4980 H	3 DL	1660 000
1460	510	951	19 13 23	-33 8 29	211113	0 14	0 42	A0	8 86	8 55	319	10	292	234?	3 DL	78 000
1461	586	957	19 13 28	-34 33 26	211110	0 27	-1 21	A0	8 98	8 58	126	62	85	1855	30 DC	61 833
1462	484	951	19 13 52	-32 36 36	211132?	-0 25	-1 14	A0	8 84	8 53	318	13	284	356?	3 DL	118 667
1463	299	918	19 14 13	-28 41 58	187922?	-0 7	-7 59	A5	8 90	00	303	7	274	169?	3 DL	56 333
1464	402	950	19 14 53	-30 55 52	211155?	-0 29	-0 40	A0	9 20	8 81	305	4	282	87?L	3 DL	29 000
1465	509	983	19 15 22	-33 15 26	211148	0 16	-0 47	B9	7 52	00	396	11	274	6755 H	3 DL	2250 000
1466	518	966	19 15 32	-33 13 36	211148	0 25	1 2	B9	7 52	00	362	224	88	24884	30 DC	829 467
1467	396	957	19 15 38	-30 61 44	211155	0 16	3 28	A0	9 20	8 81	317	61	285	1552	3 DL	517 333
1468	459	979	19 16 26	-32 15 51	211182?	-0 30	5 14	A0	9 74	9 43	321	14	277	393?	3 DL	131 000

8BRKPT PRINTS

ORIGINAL PAGE IS
OF POOR QUALITY

DEPARTMENT OF THE NAVY

NAVAL RESEARCH LABORATORY
Washington, D C 20375

OFFICIAL BUSINESS

PENALTY FOR PRIVATE USE, \$300

POSTAGE AND FEES PAID
DEPARTMENT OF THE NAVY
DoD-316

