758 2 36 00 -64 23

±5 ±5 ±9 ±3

6.56 -722 853 -52 2.303 550

6.55 -721 852 -54 2.300

6.55 -721 853 -53 2.302

59 CT10

6.56 -723 855 -55 2.297 " " " "

6.57 -725 853 -57 2.302 10 Dec 79 30"

6.55 -720 854 -53 — 26 Dec 77

6.55 -722 857 -52 — 27 "

6.54 -708 839 -52 — 29

6.56 -717 850 -52 — 30 "

6.57 -724 846 -36 — 31

6.55 -721 854 -56 — 1 Jan 78

6.57 -727 855 -54 2.300 25 Sept 79 40"

6.56 -723 856 -54 2.301 3 " " "

6.56 -729 855 -41 2.297 4 " " "

6.58 -726 856 -61 2.292 13 Sept 79 30"

6.55 -724 854 -63 2.299 7 Oct 79

6.53 -716 844 -67 2.297 6 Oct 79

6.55 -724 863 -58 2.301 12 Nov 79 60"

6.55 -724 857 -56 2.298 14 " "

6.56 -719 845 -57 2.297 21 Nov 79 30"

6.57 -726 858 -53 2.295 22 " "

6.55 -729 861 -56 2.295 23 " "

6.55 -728 861 -54 2.298 24

6.56 -730 857 -51 2.302 25

6.55 -727 857 -53 2.301 16 Dec 79 24"

6.55 -718 853 -51 2.302 6 Dec 79 40"

6.55 -719 850 -49 2.299 8 " "

6.55 -724 857 -53 2.301 8 "

656-715 837-47 2304 12Aug79

762 2 33 00 -62 41

6.80	-711 ±6	+845 ±7	+040 ±5	2.300 ±4	30 SSO
6.80	-710 ±6	+845 ±7	+040 ±5	2.300 ±5	50 CT10
6.80	-710 ±5	+846 ±6	+035 ±7	2.297 ±4	54 "
6.80	-710	845	+038	2.299	

6.74 -704 843 +34 2.296 40"

6.74 -704 843 +39 2.296 40"

6.80 -710 845 +34 2.296 40"

6.74 -704 843 +39 2.296 40"

6.80 -715 851 +24 2.290 12 Sat 7:36

6.74 -705 846 +23 2.290 8 Sat 7:4

6.80 -705 844 +31 2.298 6 " "

6.74 -708 840 +35 2.296 12 Mon 7:4

6.80 -710 840 +45 2.287 14 "

6.81 -715 853 +25 2.292 8 Mon 7:36 21

6.81 -712 848 +36 2.294 22 "

6.74 -717 851 +43 2.295 28 " "

6.80 -715 853 +23 2.298 24

6.80 -709 845 +33 2.294 Mon 7:4

6.74 -704 842 +33 — 26 Mon 7:7

6.74 -705 848 +36 — 27 "

6.80 -718 861 +23 — 29 "

6.81 -715 853 +43 — 30 "

6.80 -716 845 +57 — 31

6.74 -705 844 +35 — 1 Sat 7:4

6.82 -713 844 +35 2.284 1 Sat 7:4

6.81 -713 850 +31 2.292 2 " "

6.80 -707 848 +25 2.293 3 " "

6.80 -715 853 +46 2.297 4 " "

6.79 -711	846	+59	2299	8 Dec 79		40"
6.79-714	851	+37	2.298	10 "	"	36 "
6.81-717	855	+41	2295	"	"	"
6.83-718	848	+40	~~2~~	12 "	"	"

6.81 -705 836 +30 2.247 6S Ayr80

6.80 -713 846 +42 2244 27 Ayr80 36"

6.74 -713 544 +30 2.254 11 Ayr80 36"

6.80 -712 852 +35 2.248 12 " " "

6.74 -714 848 +32 2.300 13 "

6.80 -710 845 +30 2.254 14"

6.78 -717 846 +36 2.303 15

6.81 -704 840 +47 2244 16

6.82 -714 855 +24 2.243 23 Ayr80 40"

6.82 -708 840 +30 2.248 24 " " "

6.82 -700 834 +31 2.303 25 40"

6.80 -704 827 +41 2.301 26 " "

~~6.83 -700 835 +51~~

6.83 -704 835 +42 2.263 29 " "

6.80 -713 847 +40 2.246 3 Mun 80 36"

6.80 -706 838 +32 2.247 28 Ayr80 36"

6.80 -713 848 +29 2.256 2 Mun 80 36"

6.81 -716 844 +38 2256 2 Mun 80 36"

6.82 -699 835 +48 2302 5 " " 36"

6.82 -711 841 +37 2246 6 " " 40"

6.82 -708 844 +39 2.250 7 " " "

6.76 -709 842 +42 2.257 8 " "

6.82 -706 847 +33 2.262 10"

6.79 -701 841 +44 2.297 11 "

6.78 -711 840 +32 2.290 12"

~~6.82 -712 847 +23 2247 13~~

6.82 -708 836 +35 2.248 12 Ayr80 40"

6.82 -706 834 +37 2.248 16 " " "

6.80 -703 832 +32 2.246 17 " " "

6.79 -708 841 +32 2.242 22 " " 36"

6.82 -714 846 +33 2.254 23 " " "

6.82 -716 845 +35 2.256 24 " " "

6.80 -706 834 +48 2.252 25 " " "

23 40 6.3 1855

V401 Cyg 19 25.25 +30' 11.8 1900

27.23 17.9 1950

+30° 3592 27 51 19.3 1962

d

0.58 F0 10.8 – 11.6 red

11.3 B

D

B

Gp *'s

var + D

60 mils

0.48 -0.04 -0.27

Std 19 52 48 -08 21 1960

J223 → 54

20" Bright

A 05.70 -0.08 -0.49

B 06.48 -0.04 -0.27

41176 6 02 20 -02 28.5 20 Ai

7.15 -696 (±005) 834 (±8) -225 (±9) 2.255 (±4) 25

7.14 -701 838 -225 2.255 1 Dec 80 60"
7.15 -701 840 -228 2.258 2" " "
7.14 -696 831 -229 2.260 3"
7.16 -694 825 -226 2.250 29 Nov 80 36"
7.15 -688 — -209 2.264 1 Jan 80
7.15 -705 833 -232 2.260 2" "
7.15 -700 840 -222 2.258 3"
7.15 -702 837 -229 2.259 30 Nov 80
7.17 -697 830 -236 2.246 24 Dec 80
7.15 -697 827 -216 2.249 25" "
7.14 -691 822 -220 2.246 26"

7.15 -697 840 -266 2.252 28 Dec 80
7.14 -698 839 -222 2.258 15 Jan 81
7.14 -699 836 -220 2.256 16"
7.14 -698 837 -228 2.258 17"
7.13 -704 838 -219 2.254 18"
7.14 -695 837 -18 2.257 20"
7.14 -702 840 -215 2.260 21
7.16 -695 837 -216 2.257 22
7.16 -702 839 -219 2.257 23
7.18 -696 832 -219 2.255 24
7.15 -695 830 -221 2.250 27 36"
7.14 -700 840 -223 2.255 29 60"
7.14 -697 839 -211 2.262 30 "
7.18 -692 821 -219 2.248 12 Feb 81 36"
7.16 -694 827 -226 2.242 2" "
7.17 -702 837 -221 2.244 4" "
7.16 -692 821 -219 2.248 5

AR Pavonis 18h 15.4 −66° 06 (1950)

17 32 05

10.2 − 12.7

CPD −66° 3307

S

27 may 70 4:30 AM 10.05 10.535 −0.605

D

T And	00	20	48	+26	50	52

9.27	+1.28	+0.54	21 July 72	7.61	+1.475 30 July 72
9.21	+1.22	+0.55	25 July 72	7.68	+1.475 23 July 72
9.15	+1.22	+0.57	27 July 72	7.57	+1.56 25 July 72
9.13	+1.275	+0.55	3 Aug 72		
9.28	+1.305	+0.445	17 Aug 72		

(V)

50 of

TH Pole	60	26	30	+17	48	4.8–8.2

R Oct 5 32 35 OR 15 -86 mm mm? 6.4-13.2 21 40s-d 22.1

12.75 +1.93 +0.28 31 Mar 73 7.89 +1.82 1 Apr 73
10.72 +1.735 +0.58 27 Aug 73 6.42 +1.47 30 Aug 73

15598 2 29 25 -5 07 25

±4 ±6 ±9 ±4	7.67 -662 929 +107 - 3 Jan 80 / 13 Jan 4 Jan 80
7.68 -669 933 96 2.393 (13)	7.66 -669 936 +101 2.395 18 Nov 80
7.66 -661 928 +99 2.397 2 Jan 81	7.67 -670 938 +95 2.383 "
7.66 -666 924 +97 2.386 1 Jan 81	7.67 -667 929 +104 2.388 19 Oct
7.68 -664 933 +109 2.394 24 Jul 80 60"	7.68 -666 931 +94 2.386 20 "
7.68 -668 935 +107 2.398 12 Aug 80 "	7.67 -669 938 +97 2.388 21 "
7.68 -670 934 +99 2.393 16 " " "	7.67 -665 931 +93 2.388 22 "
7.67 -673 939 +89 2.396 17 " " "	7.67 -672 939 +97 2.391 23
7.70 -667 924 +96 2.389 23 Aug 80 36"	7.69 -662 924 +112 2.392 6 Oct 80
7.67 -674 942 +90 2.390 24 " "	7.68 -661 927 +85 2.388 21 Sep 80
7.67 -670 926 +74 2.390 25 " " "	7.67 -661 922 +98 2.389 23 "
7.68 -667 926 +101 2.396 26 " " "	7.66 -662 931 +96 2.395 1 Dec 80 60"
7.68 -672 936 +84 2.396 27 Aug 80 "	7.67 -664 930 +97 2.395 2 " " "
7.66 -678 942 +92 2.403 25 Sep 80) 60"	7.66 -663 931 +93 2.390 3 "
7.68 -672 940 +97 2.394 6 " "	7.68 -665 925 +100 (2.382) 28 Nov 80
	7.68 -661 927 +97 2.392 29 "

W Ursa Maj (UMa) 11 54 00 +12 45 14.3 R5 (NBV)

R Vir 12 37.0 +07 09 6.2-12.1 Vir

1450

7.30 +1.41 18 Jan 73

35 mov

17 Jan 73

Feb 71

Anydone

Mark - Coming up

R Vir

Come

7.48 +1.40 27 Jan 72

7.50 +1.44 20 Jan 72

9.494.28 — 17 Jan 73

9.54 +4.34 — 9 Jan 73

9.44 +4.30 — 31 Dec 72

7.31 +1.43 29 Dec 72

10.56 +4.26 — 28 Dec 71

10.73 +4.46 19 Jan 72

10.74 +4.44 22 Jan 72

7.65 +1.40 23 Dec 71

7.78 +1.45 27 Dec 71

7.77 +1.44 29 Dec 71

R

RU Vir

Archimus / Tempo

12 45 47 +04 19 8-14

R Vir

Var

(no) 107437

12 22 36 +06 09 8.0 g MY

5 main

B only

Var

T Inc 22 38 41 38 41 43 D 250d 22.10.8

Yps

8.49 +1.62 +1.10 Nov 71

~~11.11 +1.28 +1.88~~

9.53 +1.44 16.99 27 Aug 73

7.04 +1.305 Mar 71

8.07 +1.785 Sep 73

59643 7 30 02 +24 35 Var / RL

UBVRI

Surface of [illegible] near S

⊙

• R#1

Nov NGC 5999

						V	I
W112-02	15	50	10	−56	33	10.0	8.0
W112-03	15	50	56	−56	20	12.0	9.7
W109-02	15	48	25	−56	52.5	9.5	5.5

11.24 +2.24 − 27 July 23

112-02 11.33 +2.16 − 2 Aug 23 — 9.87 ± 1.02 — 22 July 23

109-02 11.30 +2.41 − 2 Aug 23 — 9.16 ± 1.35 — 22 July 23

11.40 +2.57 − 27 July 23

Nov NGC 5606

						V	I
095-03	14	24	13	−54	53.5	10.0	6.0

11.39 +3.30 − 3 Aug 23

11.51 +3.48 − 27 July 23

124448	9.58	-682	739	-746	2.024	15 Aug 77	10.07	-695	765	-765	1.975	24 Aug 77
124540	9.01	-648	911	313	2.365	24 Aug 77						
	9.02	-600	882	321	2.384							
124447	8.68	-720	807	-359	2.197	" "	→ 8.41	-728	827	-414	2.200	24 Aug 77
125825	8.26	-650	793	-29	2.232	" "	→ 8.25	-665	824	-28	2.231	24 Aug 77
124144	8.59	-636	921	+109	2.377	" "						

173850	8.59	-552	776	-314	2.147	15 Aug 77
173744	7.12	-641	859	+120	2.857	" "
173847	8.43	-867	620	-910	2.088	" "
173623	7.72	-642	788	-301	2.236	" "

G112-44 + 0°2058 (BD) (common μ, sep = 14") μ = 0.33

$\alpha_{1950} = 0^h 41^m 11^s$ } 12.5
$\delta_{1950} = +00^\circ\ 03.'5$ } +1

60" Jan 28/29, 1965 11.29 0.48 −0.20 0.21

G 112-43 + 0°2058 (BD) (common μ, sep = 14") μ = 0".33

$\alpha_{1950} = 07^h\ 41^m\ 11^s$ } 11.5
$\delta_{1950} = +00°\ 03'.3$ } +1

60"	Jan 28/29, 1965	10.27	0.44	-0.17	0.17

W018-06
8 05 50 -24 43 ← N

2533-104 8 05 02 -24 39.3 11.2 +4.1

9 ←

→ 8 08 54 -24 27 ,10 ←
W018-07 8 08 06 -24 23.6

→ 8 09 38 -24 00 ,10
8 08 58 -24 56.3
W018-08 → 8 04 24 -24 52.5 ← 10 ←
W018-05 8 03 36 524 494

HD 93030 θ Car 2·8 B0.5 Vp STD

HR 4199 $10^h\ 39\ 23$ $-63°\ 52$

$10^h\ 42\ 03$ $-64°\ 15·5$

-·102 ·071 -.075 2·600 2·8 B0.5 Vp.

762 2·33 00 -62 41

6.80	-711	845	40	2.300	(30)
6.80	-710	845	40	2.300	(50)
6.80	-710	846	35	2.297	(54)
6.80	-712	848	36	2.294	(26)
6.80	-711	846	38	2.298	(154)
6.80	-708	853	37	2.291	21 Jan 79
6.80	-713	849	+33	2.253	22 "
6.79	-707	843	+37	2.294	23 "
6.80	-707	839	+50	2.290	24
6.79	-715	850	+39	2.288	25
6.80	-712	846	+31	2.290	26
6.79	-713	845	+39	2.295	4 Jan 80 31

6.83	-708	850	+18	2.294	8 Jan 80
6.81	-703	830	+15	2.291	7 Jan 80
6.82	-708	846	+40	2.293	6 Jan 80 60"
6.81	-711	841	+50	2.291	5 Jan 80 60"
6.81	-706	840	+26	2.286	4 Jan 80
6.81	-705	835	+37	2.294	3 Jan 80
6.80	-704	832	+43	2.295	2 Jan 80 60"
6.79	-710	846	+32	2.294	26 Jan 80
6.80	-710	847	+31	2.295	5 Jan 80 36"
6.79	-715	854	+33	2.285	6 "
6.78	-712	846	+35	2.258	7 "
6.79	-714	851	+29	2.294	8 "
6.79	-711	845	+30	2.292	9 "
6.79	-707	846	+33	2300	14
6.80	-713	848	+44	2.300	16
6.80	-708	842	+26	2.314	10 Jan 80 36"

Finding chart for the new flare star. The field is a 12' square, reproduced from the Palomar Sky Survey red print. (Copyright by National Geographic Society-Palomar Sky Survey; reproduced by permission.)

Bonds
flat

23 3[illegible] 30 -02 53 1977 15.0

chart

748 2 ±6 39 00 -64 23

6.56 -723 ±4 851 -57 ±6 2.301 ±9
6.56 -722 853 -52 2.303
6.55 -721 852 -57 2.300
6.55 -723 854 -53 2.299
6.56 -719 ±5 848 ±6 -57 ±3 2.300 ±4
6.56 -721 852 -54 2.300

6.55 -730 861 -69 2303 2 Sept 80
6.55 -721 846 -68 2.292 23 " "
6.56 -718 835 -49 — 23 Nov 80
6.55 -725 848 -48 2.295 24 Nov
6.55 -723 851 -55 2.290 25 "
6.55 -722 852 -58 2.302 26
6.56 -724 841 -58 2.295 27 " 80

(23) 6.54 -721 844 -51 2.300 28 Nov 80
(50) 6.55 -725 856 -57 2.300 29 "
(57) 6.56 -716 836 -49 2.302 30 "
(26) 6.55 -720 849 -63 2.306 24 Dec 80
(53) 6.56 -722 854 -59 2.304 25 "
6.55 -723 852 -54 2.301 26 "
6.58 -724 (841) -82 2.302 28
6.55 -727 858 -64 2.305 21 Jan 81
6.56 -727 863 -65 2.305 22
6.56 -728 860 -64 2.307 24
6.56 -721 848 -57 2.301 27 Jan 81 36"
6.56 -725 857 -58 2.305 29 " 60"
6.57 -718 857 -61 2.305 30 "
6.56 -720 848 -56 2.307 1 Feb 81 36"
~~6.55 -720 849 -57 2.302 2 " "~~
6.56 -727 858 -57 2.302 5 "

-18

E3-89 -1140

-1130

-1136 20 Feb 79	-1122 8 Dec 78	-1141
-1133 4 mar 79	-1141 12 Dec 78	-1136
-1155 21 Feb 79	-1142 2 Dec 78	1134
-1134 4 Feb 79	-1162 27 Dec 78	1138
		1141 -1127
-1134 1 mar 79	-1169 26 " "	1126 -1134
-1138 5 Feb 79	-1151 7 mar 78	1126 -1134
-1155 20 Dec 78	-1065 18 Jan 78	1134 -1136
-1116 7 Dec 78	-1113 19 "	1135 -1116
-1167 5 Jan 79	-1086 11 mar 78	1134 -1123
-1162 1 Jan 79	-1084 13 "	1128 -1131
		-1131
-1124 6 Dec 78	~~-1151 7 mar 78~~	-1134 ±5 -1129
		-1133
-1132 3 mar 79	-1152 6 mar 78	-1134
-1147 2 mar 79	-1159 5 " "	
	-1143 4 "	