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A Catalog and Atlas of Cataclysmic Variables—2nd Edition

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ABSTRACT. We present a catalog of all 1020 known cataclysmic variables (CVs). This paper is a major update of the first edition of the catalog (Downes and Shara, 1993, PASP, 105, 127), which contained coordinates (measured in the reference frame of the *Hubble Space Telescope* Guide Star Survey for the non-novae, and obtained from the literature for the novae), the variability type, the magnitude range, and references to both finding charts and spectroscopy. Also included in the catalog were finding charts for all dwarf novae, novalike variables, and objects classified only as cataclysmic variables known as of 1993; a similar catalog and atlas for novae has been published by Duerbeck (1987, SSRV, 45, 1). This updated edition includes 195 new objects (172 CVs and 23 non-CVs), revised identifications for 57 objects, and revised information (classification and spectral references) when available. We also now include plate identification information for the coordinate measurements, a reference to the classification, proper motion information where appropriate, and a table showing the CVs observed by space-based observatories. This second edition is inclusive of the first edition, although only new or updated charts are presented.

1. INTRODUCTION

The *General Catalogue of Variable Stars* (GCVS, 4th edition; Kholopov et al. 1985a, Kholopov et al. 1985b, Kholopov et al. 1987) is the primary source of information on variable stars. However, not unexpectedly in a catalog of such size, there are errors present, such as misclassified objects (not necessarily the fault of the editors!) and improper references. The accuracy of the coordinates, while generally sufficient for the ground-based observations the catalog was meant to support, are not of sufficient accuracy to support space-based observations with observatories such as the *Hubble Space Telescope*, and many of the references cited (particularly for the finding charts) are in journals not easily accessible to some astronomers. We have been collecting the numerous references associated with a particular class of variable stars — the cataclysmic variables (CVs) — with the goal of producing an improved catalog and atlas for the cataclysmic variables. Duerbeck (1987a) has provided just such an improved catalog for novae, but that catalog does not include the novalike variables or the dwarf novae. We did produce such a catalog containing all types of CVs (Downes and Shara 1993; hereafter D&S), and we present here an updated version of our catalog, containing additional/revised information on objects in the first edition, as well as information on ~200 new objects. The catalog includes all objects which, to our knowledge, have been classified as a CV at some point in time; those which are no longer thought to be CVs are given the type **NON-CV** (see below).

We present, in Sec. 2, a detailed description of the catalog, Sec. 3 describes the atlas, and Sec. 4 presents a summary of space-based observations of CVs. The catalog is presented both in constellation order (to aid in finding objects whose variable-star designation is known) and in order of increasing right ascension (to aid in locating objects without variable-star designations).

2. THE CATALOG

A catalog of 865 cataclysmic variables [276 novae, 372 dwarf novae, 162 novalike variables, 47 objects classified only as cataclysmic variables, six interacting binary white

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TABLE 1(a)
Cataclysmic Variables (Constellation Order) [a]

GCVS Name	Coordinates α (2000)	Coordinates δ (2000)	b	Type	Year of Outburst	Mag. Range Max	Mag. Range Min	Coord Ref	Type Ref	Chart Ref	Spec Ref	Other Name
RX And	1 4 35.55	+41 17 58.0	−21	ugz		10.9 v-	12.6 v	02RY	87-01	83-01	S83-12	1E 0101+4101
AR And	1 45 3.27	+37 56 33.3	−23	ug		11.0 v-	16.9 v	02KX	95-05	83-01	S83-12	Ross 346
BV And	23 27 2.10	+50 7 12.9	−10	ug:		15.2 p-	18 p	036O	78-01	57-07	S78-03:	S 4637
DX And	23 29 46.72	+43 45 4.2	−16	ug		10.9 p-	16.4 p	02S2	87-03	87-06	S89-06	GR 17
FN And	1 11 57.6	+35 17 25.	−27	ug		13.5 p-	17.5 p	00Y1 *	87-03	87-06	-	S 9505
FO And	1 15 32.14	+37 37 35.5	−25	ugsu		13.5 v-	17.5 v	00Y1	95-05	87-06	S89-06	S 9508
FS And	2 25 55.07	+37 34 5.8	−21	ug		14.5 p-	(17.5 p	031L	87-03	87-06	S89-06	S 9519
HP And	0 19 9.2	+41 27 42.	−21	UG:		10.5 p-	(14.5 p	02RX *	00000	26-01	-	SVS 71
HQ And	0 31 35.89	+43 49 5.1	−19	cv		15.0 p -	16.2 p	01JV	80-01	**75-02**	S80-04:	S 10774
HV And	0 40 55.34	+43 24 59.3	−19	nl		15.0 p-	16.8 p	01JV	95-05	75-02	S92-09	S 10777
IO And	0 48 19.12	+39 41 9.0	−23	nl:		16.2 p-	17.1 p	06PI	80-01	**75-02***	S80-04:	S 10785
IW And	1 1 8.90	+43 23 25.7	−19	ux		14.2 p -	17.4 p	02RY	80-01	**75-02**	S80-04:	S 10792
IZ And	1 7 3.91	+42 43 12.4	−20	UG		15.6 p-	20.5:p	02RY	00000	75-02	-	S 10794
KV And	2 17 13.81	+40 41 30.8	−19	ugsu		14.6 p-	22.5:p	01WN	94-20	77-03	-	SVS 2205
KW And	2 35 18.02	+41 14 2.5	−17	UG		14.8 p-	22 p	000A	96-20	77-03	S96-12	SVS 2206
LL And	0 41 51.5	+26 37 21.	−36	ugsu		13.8 V-	19.5:V	02BE	94-01	**96-11***	X96-13	
LS And	0 32 10.12	+41 58 12.2	−21	na:	1971	11.7 p-	20.5 p	00002	87-02	87-04	-	NSV 191
LT And	0 35 24.27	+39 46 16.9	−23	UG		18.1 B-	19.4 B	06PI	00000	70-01	-	
OR And	234 37.43	+49 27 24.2	−10	cv/nl:		14.5 V		036O	86-05/90-06	86-06	S86-03	KPD 2302+4910
OS And	23 12 5.76	+47 28 19.7	−12	n	1986	6.3 v-	17.8:p	00002	87-02	87-04	S96-14	
PQ And	2 29 29.6	+40 2 41.	−19	nr/ug	1988	10.1 v-	19 V	000A	90-03	**90-08**	X88-05:	
PX And1	0 30 5.80	+26 17 26.7	−36	nl/vy		14.8 B-	(17 V	02BE	92-08/94-12	82-08	S91-02	PG 0027+260
And	23 9 59.	+36 56	−22	n::	1968	7.8 p		68-01	68-01*	-	-	NSV 14443
And	0 49 56.	+43 37 45.	−19	N:	1971	16.5 B-	(21 B	00001	00001*	73-05	-	NSV 312
And	0 50 1.	+43 33 56.	−19	N:	1971	16.2 B-	(21 B	00001	00001*	73-05	-	NSV 313
And	0 38 48.	+414 38.	−22	N:	1972	17.2 B-	(21 B	00001	00001*	73-05	-	NSV 238
And2	23 50 16.88	+46 59 21.9	−15	cv:		17.2 p-	(22 V	031J	91-02	**91-07**	-	
And3	1 14 44.	+35 37 9.	−27	N:		10 :p-	(13 P	876-1	00001	-	-	NSV 447
Z Aps	14 6 55.	−71 22 16.		non-cv					91-14*	-	-	HV 5060
AG Aps	15 30 22.18	−75 44 38.5	−15	ug		14.3 p-	18.1 V	04BW	82-01	82-01	S96-01	S 5507
DT Aps	17 22 47.98	−75 9 55.9	−20	ugss		14.4 p-	(15.8 p	04BX	82-01	82-01	-	S 5646
EK Aps	17 31 54.	−67 42 52.		non-cv					95-27*	-	-	
UU Aqr	22 9 5.74	−3 46 17.7	−45	nl		9.6 v-	13.5 v	00GX	88-02	00-01	S88-03	S 196/PB 7078
VY Aqr	21 12 9.20	−8 49 36.5	−35	ugwz		8.4 p-	17.2 p	018D	87-02	82-01	S92-01	Ross 88
VZ Aqr	21 30 24.56	−2 59 17.6	−36	ug		11.3 p-	17.2 p	03U2	82-01	82-01	S92-01	SVS 52
AE Aqr	20 40 9.02	−0 52 15.5	−24	dq		10.4 B-	12.6 B	02C4	95-05	83-01	S83-12	342.1931
CV Aqr	21 21 45.	−14 18 6.		non-cv					82-01*	-	-	HV 6262
EG Aqr	23 25 19.19	−8 18 18.9	−62	ug::		14.0 p-	18.5 p	00WQ	90-14	59-01	S92-01	PHL 505
EH Aqr	23 34 5.9	−22 48 42.0	−71	ug		17.5 p-	(21.0 p	04LP	89-01	**59-01***	-	BV 5/PHL 563
EV Aqr	21 6 19.	+0 51 48.	−29	UGZ:		12.1 p-	(14.2 p	00001	00000	91-02*	-	SVS 615
FO Aqr	22 17 55.43	−8 21 4.6	−49	dq		13.0 v-	14.0 v	015K	88-03	83-01	S83-12	H 2215−086
HL Aqr	22 20 26.94	+2 0 53.6	43	ux		13.4 B-	13.6 B	02JG	95-05	85-05	S85-01	PHL 227
HU Aqr	21 7 58.29	−5 17 39.4	−33	am		15.3 B-	17.7 V	03U3	95-05	**93-04**	S93-08	RX J2107.9−0518
Aqr1	22 38 43.81	+1 8 20.6	−47	cv		18.5 j		015P *	92-05	**99-99**	S92-13	2236+0052
Aqr2	22 25 43.74	−11 13 40.1	−52	nl?/cv		18.9 p-	20.2 p	015K	89-03/95-14	**60-01**	-	NSV 14152/PHL 392
Aqr3	22 43 31.88	−0 12 33.3	−49	nl?		17.9 p-	19.2 p	015P	89-03	**60-01**	-	NSV 14292/PHL 1899
Aqr4	22 16 27.5	−20 27 25.	−54	ug		(19.0 j-	21.5 j	04I5	94-14	**94-11**	S94-11	V2216−2027
Aqr5	23 16	−5	−59	am		18 B		93-04	93-17	-	-	RX J2316−05
UU Aql	19 57 18.68	−9 19 20.8	−18	ug		11.0 v-	16.1 v	044E	82-01	82-01	S83-12	HV 1319
CI Aql	18 52 4.	−1 28 39.		non-cv	1917				95-23*	-	-	
CM Aql	19 3 35.	−3 3 15.		non-cv					00000*	-	-	
DH Aql	19 26 11.	−10 15 28.	−12	ugsu		12.5 p-	18.3 V	00001	95-25	82-01	-	HV 3899
DO Aql	19 31 25.80	−6 25 38.6	−12	nb	1925	8.7 v-	16.5 p	00002	87-02	87-04	S87-09	9.1925
EL Aql	18 56 1.76	−3 19 18.9	−2	na	1927	6.4 p-	20 p	00002	87-02	897-04*	X28-01	60.1927

TABLE 1(a)
(Continued)

GCVS Name	Coordinates α (2000)	Coordinates δ (2000)	b	Type	Year of Outburst	Mag. Range Max Min	Coord Ref	Type Ref	Chart Ref	Spec Ref	Other Name
EY Aql	19 34 44.52	+15 1 51.6	−2	na:	1926	10.5 p- 20.0 r	00002	87-02	87-04	-	SVS 202
FO Aql	19 16 38.14	+0 7 37.6	−5	ugss		13.6 p- 17.5 p	02CT	82-01	82-01	X85-07	3.1905
KX Aql	19 33 53.69	+14 17 47.3	−2	ug		12.5 p- 17.5:p	00J2	82-01	82-01	-	HV 5428
V352 Aql	19 13 34.	+2 18 13.		non-cv				67-01*	-	-	
V356 Aql	19 17 13.53	+1 43 22.1	−5	nb	1936/1	7.7 p- 17.7 p	00002	87-02	87-04	S96-14	618.1936
V368 Aql	19 26 34.41	+7 36 13.6	−4	na	1936/2	5.0 p- 15.4 p	00002	87-02	87-04	S83-12	668.1936
V500 Aql	19 52 27.84	+8 28 46.4	−9	na	1943	6.6 p- 17.8 p	00002	87-02	87-04	X43-01:	S 3542
V528 Aql	19 19 18.97	+0 37 53.8	−5	na	1945	7.0 p- 18.1 p	00002	87-02	87-04	X45-01:	
V603 Aql	18 48 54.50	+0 35 2.9	0	na/dq::	1918	-1.1 v- 12.0 v	00002	87-02/94-06	87-04	S83-12	HD 174107
V604 Aql	19 2 6.	−4 26 45.	−4	na	1905	8.2 p- 21 p	064G	87-02	94-12*	X06-01:	HD 176779
V605 Aql	19 18 20.44	+1 46 59.5	−5	nb pec	1919	10.4 v- 22.5 v	00002	87-02	87-04	X87-08:	
V606 Aql	19 20 24.3	−0 8 7.	−6	na	1899	6.7 p- 17.3 p	0AVZ *	87-02	87-04*	X87-08:	BD −0°3708a
V607 Aql	19 35 26.	+0 42 41.		non-cv				87-02*	-	-	
V725 Aql	19 56 45.1	+10 49 32.	−9	ug		13.6 v- 17.3 v	00JC	95-22	**95-06***	-	105.1940
V794 Aql	20 17 33.97	−3 39 51.0	−21	vy		14.0 p- 20.2 B	02C2	95-05	82-01	S81-05	499.1936
V800 Aql	18 56 32.	+10 48 43.		non-cv				94-16*	-	-	S 4376
V841 Aql	19 7 39.79	+10 29 43.7	1	n	1951	11.5 p- (17.5 p	00002	87-02	87-04	X87-08:	
V890 Aql				non-ex	1946			87-02*	-	-	
V1047 Aql	19 51 31.06	+10 57 21.8	−8	UG		15 p- (17.5 p	00J2 *	00000	64-01	-	S 8191
V1050 Aql	19 51 43.46	+10 51 17.4	−8	ug		14.5 p- 17.5 p	00J2 *	82-01	82-01	-	S 8194
V1101 Aql	20 13 4.01	+15 35 46.9	56	ugz/cv:		13.8 p- 14.9 p	02UQ *	82-01/95-36	82-01	S95-18	139.1940
V1141 Aql	19 37 9.81	+2 36 0.5	−8	ug		14.5 p- 20 p	050V	82-01	82-01	-	36.1905
V1229 Aql	19 24 44.52	+4 14 47.4	−5	na	1970	6.7 v- 19.4 p	00002	87-02	87-04	X74-01:	
V1233 Aql	19 27 25.4	+2 23 3.	−6	UG		15.5 p- 20 :p	050V	00000	**69-07**	-	S 10574
V1289 Aql	19 38 42.	+12 16 30.		non-cv				95-13*	-	-	
V1301 Aql	19 17 55.20	+4 47 18.3	−3	na	1975	10.3 v- 21 p	00002	87-02	87-04	X75-03:	
V1315 Aql	19 13 54.53	+12 18 3.2	0	nl/ux		14.4 v- 16.1 v	02V0	86-02/95-05	86-01	S86-01	KPD 1911+1212
V1327 Aql	19 56 18.95	+1 46 44.2	−13	UG:		16 p- 18.5:V	050W	00000	64-01	S95-06	S 8255
V1336 Aql	19 18 42.	−5 14 21.	−8	NL:		16.2 p- (18 p	00001	00000	**78-06***	-	SVS 2270
V1370 Aql	19 23 21.10	+2 29 26.1	−6	n	1982	6 : - 19.5 p	00002	87-02	87-04	S96-14	
V1378 Aql	19 16 35.35	+3 43 19.3	−4	n	1984	10 p- 21 p	00002	87-02	87-04	X84-08:	
V1419 Aql	19 13 6.80	+1 34 23.3	−4	na	1993	7.6 p- (22 r	93-01	93-06	95-13	X93-07	
Aql	19 25 29.0	+2 47 28.	−6	n::	1949	(19 p	88-01	88-07	88-03	-	NSV 12006
Aql	19 5 26.64	−1 42 3.3	−4	n	1995	8.2 v	95-03	95-02	-	X95-02:	
Aql1	19 40 11.47	−10 25 25.1	−16	am		16 :V	02QN	95-05	**94-13**	S94-18	RX J1940.2−1025
Aql2	18 45 12.51	−2 58 34.8	0	UG:		13 v- (14 v	064F	00001	**51-02***	-	NSV 11297
Aql3	19 15 54.7	−0 14 43.	−5	UG:		16 p- 19 :p	0AVZ	00001	**69-04***	-	NSV 11855
Aql	18 44 36.	−2 59	0	UG:		10.4:p- (13 p	44-01	00001	-	-	NSV 11280
AE Ara	17 41 5.	−47 3 27.		non-cv				00000*	-	-	HV 5491
AT Ara	17 30 33.77	−46 5 58.5	−6	ugSS		11.5 v- 14.9 v	06AQ	82-01/00000	82-01	S95-16:	HV 6551
BF Ara	17 38 21.	−47 10 41.	−8	ugss		13.6 p- (16.0 p	00001	82-01	82-01	-	HV 6576
FV Ara	17 35 10.10	−63 2 49.7	−15	ug		12 p- (18 p	02I8	82-01	82-01	-	HV 6770
KY Ara	18 8 21.96	−54 56 17.3	−16	ug:	1937	15.1 p- (21 B	039U	94-08	**94-17***	-	HV 7987
OY Ara	16 40 50.27	−52 25 51.3	−4	na	1910	6.0 p- 17.5 p	00003	87-02	87-04	S87-09:	HD 149990
V422 Ara	16 59 19.	−61 43 34.		non-cv				96-01*	-	-	S 5989
V433 Ara	17 0 6.06	−57 51 52.1	−9	UG		14.8 p- (16.3 p	02F7	00000	**63-02**	-	S 6006
V499 Ara	17 14 39.36	−58 53 51.1	−11	ug		14.8 p- (16.2 p	02F7	82-01	82-01	-	S 6115
Ara	17 40 41.43	−53 40 17.5	−12	dq:			95-08	95-30	95-09	S95-11	NGC6397-COOL1
Ara	17 40 42.48	−53 40 17.4	−12	dq:			95-08	95-30	95-09	S95-11	NGC6397-COOL3
Ara	17 40 42.24	−53 40 30.9	−12	cv:			95-08	95-29	-	-	NGC6397-COOL4
Ara	17 40 42.98	−53 40 12.6	−12	cv:			95-08	95-29	-	-	NGC6397-COOL5
Ara	17 40 40.93	−53 40 25.2	−12	cv:			95-08	95-29	-	-	NGC6397-COOL7
Ara	17 40 41.88	−53 40 26.3	−12	cv:		21.1 f	95-08	95-29	94-09	-	NGC6397-DP1
Ara	17 40 42.21	−53 40 28.7	−12	cv:		20.3 f	95-08	95-29	94-09	-	NGC6397-DP2

TABLE 1(a)
(Continued)

GCVS Name	Coordinates α (2000)	δ	b	Type	Year of Outburst	Mag. Range Max Min	Coord Ref	Type Ref	Chart Ref	Spec Ref	Other Name
Ara	17 40 42.15	−53 40 26.7	−12	dq:		21.1 f	95-08	95-30	95-09	S95-11	NGC6397-DP3
Ara	17 40 42.56	−53 40 25.7	−12	cv:		21.1 f	95-08	95-29	94-09	-	NGC6397-DP4
Ara	17 16 53.	−65 32 42.	−16	ug:		13.5 p- (15.5 p	00005	00001*	82-01	-	NSV 8383
Ara	17 37 1.	−54 25 51.		non-cv				95-27*	-	-	NSV 9208
W Ari	3 20 45.1	+28 57 14.	−23	n::	1855	9.5 v- (20.0 v	00003	87-02	87-04:	-	BD +28°518
SU Ari	2 48 30.	+17 21 47.	−37	n:	1854	9.5 v- (14.5 v	00003*	87-02	87-04:	-	BD +16°354
SV Ari	3 25 3.57	+19 49 53.9	−30	n:	1905	12 p- 22 p	00002	87-02	87-04:	-	116.1905
TT Ari	2 6 53.09	+15 17 43.0	−43	vy/dq:		9.5 v- 14.5 v	03QO	95-05/94-06	83-01	S83-12	BD +14°341
WX Ari	2 47 36.24	+10 35 38.8	−43	ux		14.8 v- 15.4 v	00GT	95-05	82-08	S92-15	PG 0244+104
XY Ari	2 56 8.1	+19 26 34.	−34	dq		13.5 j- 17.6 j	92-01	92-17	-	-	H 0253+193
T Aur	5 31 59.06	+30 26 45.2	−2	nb	1891	4.2 p- 15.2 p	00002	87-02	87-04	S83-12	BD +30°923a
SS Aur	6 13 22.44	+47 44 25.7	13	ug		10.5 v- 14.5 v	02RS	87-01	83-01	S83-12	31.1907
FS Aur	5 47 48.34	+28 35 11.1	0	ug		14.4 v- 16.2 v	00DI	92-08	82-01	S83-12	S 3946
HM Aur	7 29 6.76	+40 40 57.2	24	nl?		11.3 p- 12.4 p	01H9	89-03	**55-02**	-	BV 23
HV Aur	4 53 16.8	+38 16 29.	−3	ugsu		15 p- (19 p	0049	95-11	**87-06***	-	S 8480
KR Aur	6 15 43.92	+28 35 8.9	6	vy		11.3 v- 16.9 v	01ZL	95-05	87-04	S83-12	KUV 06126+2836
QZ Aur	5 28 34.05	+33 18 21.5	−1	na	1964	6.0 p- 18.0 p	00002	87-02	87-04	S94-02	
V363 Aur	5 33 33.45	+36 59 32.4	2	nl/ux		14.4 B- 15.5 B	037G	84-01/95-05	73-01	S81-01	Lanning 10
Aur1	5 57 59.29	+53 53 44.9	14	dq		14.6 V	00VN	94-25	**94-16**	S94-20	RX J0558.0+5353
Aur2	6 14 9.89	+45 30 9.2	13	nl/ug?		11.2 p - 14.5 p	02RS	89-03	**33-01***	-	NSV 2872
T Boo	14 14 5.7	+19 4 2.	69	n:	1860	9.7 v- 18.5:p	00003	87-02	87-04*	-	BD +19°2768a
TT Boo	14 57 44.74	+40 43 42.2	60	ugsu		12.7 v- 19.2 V	01R4	95-05	87-06	X89-06	HV 3681
UZ Boo	14 44 1.3	+22 0 56.	63	ugwz		11.5 v- 20.4 V	00FB	91-05	82-01	-	HV 10426
AB Boo	14 7 4.4	+20 44 45.	71	n::	1877	4.5 v	00003	87-02	87-04:	-	
CR Boo	13 48 55.29	+7 57 34.8	66	ibwd		13.6 B- 17.2 B	019P	95-05	**86-05**	S87-18	PG 1346+082
CT Boo	14 8 19.53	+53 30 34.2	60	NL:		17.0 B- 18.7:B	003A	00000	**84-05***	-	SVS 2818
Boo	14 43 19.	+13 41 50.		non-ex	1962			84-04*		-	S 10808
Boo1	15 4 41.78	+8 47 54.1	54	ug		18.5 v	00J0	85-01	85-01	S85-02	1502+09
Boo	14 46 1.	+33 28 51.		non-cv				94-12*	-	-	PG 1443+337
Cae1	4 53 25.46	−42 13 39.6	−39	am		19.0 V	02AF	96-06	**96-05**	S96-06	RX J0453−42
Z Cam	8 25 13.20	+73 6 39.4	32	ugz		10.5 v- 14.8 v	01L1	87-01	83-01	S83-12	
AF Cam	3 32 15.59	+58 47 22.1	2	ug		13.4 v- 17.0 v	01MY	87-03	87-06	S85-07	SVS 1153
BY Cam	5 42 48.90	+60 51 31.8	16	am		15.2 B- (17.0 B	034T	95-05	86-02	S86-02	H 0538+608
BZ Cam	6 29 33.95	+71 4 37.1	−24	vy		12.5 B- 14.1 B	00M8	95-05	83-01	S83-12	0623+71
Cam	4 31 15.41	+58 45 7.9	7	n:	1980	8.5 p	81-04	81-02	-	-	
Cam1	6 0 2.00	+77 51 31.4	24	cv:		18.5 v	0708	95-33	**99-99**	-	FBS 0552+779
Cam2	7 32 33.46	+72 41 41.8	29	cv:		15.0 v	01KS *	95-33	**99-99**	-	FBS 0726+728
Cam3	8 32 45.57	+73 37 8.0	33	cv		15.9 v	01L1 *	95-33	**99-99**	-	FBS 0827+738
SY Cnc	9 1 3.35	+17 53 56.1	36	ugz		11.1 v- 13.5 v	0204	87-01	82-01	S83-12	BD +18°2101
YZ Cnc	8 10 56.62	+28 8 33.6	28	ugsu		11.9 v- 14.1 v	02HB	87-01	82-01	S83-12	BV 131
AA Cnc	8 37 23.	+26 12 29.		non-cv				82-01*	-	-	G 40-31
AC Cnc	8 44 27.15	+12 52 32.2	31	nl		13.8 V- 15.4 V	028I *	84-01	86-08	S82-07	1H 0841+1303
AK Cnc	8 55 21.21	+11 18 14.7	32	ugsu		13 p- (17 p	028I	94-30	**82-01***	S92-01	
AR Cnc	9 22 7.48	+31 3 14.6	44	ug		15.3 p- 18.7 V	02TS	87-03	87-06	S89-06	Ton 408
AT Cnc	8 28 36.92	+25 20 2.6	31	ugz		12.3 p- 14.6 p	02UG	95-05	68-03	S94-07	Ton 323/GR 151
CC Cnc	8 36 19.17	+21 21 5.4	32	ug		13.1 B- 17.6 B	03DI	95-05	82-01	S92-01	
DE Cnc	8 35 27.26	+19 45 30.3	31	UG		14.6 p- 18.0 p	03DI	00000	77-01	-	Ton 930/S 10803
DW Cnc	7 58 53.07	+16 16 45.4	22	ug		15 v- 17.5 v	03OQ	91-01	91-02	S88-07	FBS 0756+164
EG Cnc	8 43 4.04	+27 51 49.9	36	NL/ug:		11.9 v- 17 :v	01GX	00000/86-10	86-08	S96-12	
EU Cnc	8 51 27.	+11 46 58.	32	am:		20.8 V	00001*	95-05	91-09	-	M67-186
TX CVn	12 44 42.	+36 45 50.		non-cv				00000*	-	-	BD +37°2318
AM CVn	12 34 54.58	+37 37 43.4	79	ibwd		14.1 V- 14.2 V	01PQ	95-05	**83-01**	S83-12	HZ 29/EG 91
BE CVn	12 17 59.70	+40 33 10.1	75	ug:		16.0 p - 18.1 p	01QY	96-02	**77-04**	S96-02:	GR 281
CVn1	12 18 29.83	+40 5 22.5	75	nl/ug?		12.0 p-)14 p	01QY	89-03	**33-01***	-	NSV 5543

TABLE 1(a)
(Continued)

GCVS Name	Coordinates α (2000)	δ	b	Type	Year of Outburst	Mag. Range Max	Min	Coord Ref	Type Ref	Chart Ref	Spec Ref	Other Name
CVn2	13 29 33.71	+47 14 3.1	69	N:				008S	00001	**899-1**	-	NSV 6278
WZ CMa	7 18 49.16	−27 7 43.0	−6	ugz:		14.5 p-	18.3 V	0167	82-01	82-01	S95-06	HV 8080
CG CMa	7 4 5.	−23 45 35.		non-cv					95-08*	-	-	
EU CMa	7 5 41.0	−16 8 47.	−4	UG		16.5 p-	(19 p	00OG	00000	63-01	-	S 7991
HL CMa	6 45 17.0	−16 51 35.	−8	ug/ugz		10.0 v-	14.5 v	83-01*	87-01/95-05	81-02	S83-12	1E 0643−1648
CMa	6 40	−24	−24	ug		15 B		93-04	93-17	-	-	RX J0640−24
SV CMi	7 31 8.42	+5 58 48.6	11	ugz		13.0 p-	16.3 p	03R5	82-01	82-01	S82-03:	285.1928
AQ CMi	7 14 34.79	+8 48 5.5	9	ug		14.5 p-	(16.5 p	02UV	96-07	65-01	X96-12:	14.1934
BG CMi	7 31 28.98	+9 56 22.6	13	dq		14.5 V-	15.4 V	02UV	90-08	84-03	S85-05	3A 0729+103
CMi	7 10 5.	+2 56 11.	5	nl?		10.6 p-	11.4 p	46-01	89-03	-	-	NSV 3432
Cap1	20 22 42.28	−21 7 54.8	−29	cv		12.5 v		01D0	88-02	00-01	S88-03	S 176
Cap2	21 39 58.5	−23 11 44.	−47	ug		16.4 v-	19.1 V	03D5 *	83-01	**83-02**	S83-11	M30 V4
Cap3	21 34 6.09	−18 51 46.3	−46	nl?		18.0 p-	19.0 p	04OA	89-03	**59-01**	-	NSV 13783
Cap4	20 8 56.9	−17 16 38.	−25	ug		16 p-	21.5 V	00S9	94-19	**94-04**	S94-03	2006−17
RS Car	11 8 6.63	−61 56 4.6	−1	n	1895	7.0 p-	(22 j	00003	87-02	87-04:	X87-08:	HD 96830/HV 47
RT Car	10 44 47.	−59 24 48.		non-cv					00000*	-	-	LSS 1855
AG Car	10 56 12.	−60 27 13.		non-cv					00000*	-	-	PK 289−0°1
EP Car	10 28 24.	−58 58 0.		non-cv					00000*	-	-	
HR Car	10 22 54.	−59 37 28.		non-cv					00000*	-	-	HD 90177
OY Car	10 6 22.43	−70 14 4.9	−11	ugsu		12.4 v-	17.3 v	0196	87-01	82-01	S81-10	S 6302
QU Car	11 5 42.80	−68 37 58.0	1	nl		11.1 v-	11.5 v	0197	84-01	**49-01***	S82-11	HDE 310376
V351 Car	10 45 19.	−72 3 56.		non-cv					87-02*	-	-	BV 1543
V365 Car	11 3 15.98	−58 27 27.5	1	nb	1948	10.1 p-	21.6 j	00002	87-02	87-04	S96-01	He 3-558
V411 Car	10 31 19.	−59 58 25.		non-cv	1953				96-01*	-	-	NSV 4884
Car	10 39 47.12	−63 14 7.2	−5	n	1971	13 : -	18 :	00002	87-02	87-04:	X87-08:	
Car	10 38 22.51	−63 8 29.4	−4	n	1972	13 : -	18 :	00002	87-02	87-04:	X87-08:	
Car1	7 44 57.9	−52 57 13.	−14	ug		15.5 V		011F *	96-12	**96-08**	S96-09	RX J0744.9−5257
Car2	8 1 59.92	−53 27 51.3	−12	nl		15.8 p		011G *	89-03	**69-03**	S77-04:	BPM 18764
AM Cas	2 26 23.40	+71 18 32.3	9	ugz		12.3 p-	15.2 p	02RG	84-03	76-02	S95-18	258.1928
BC Cas	23 51 17.34	+60 18 10.3	−2	na:	1929	10.7 p -	17.4 p	00002	87-02	87-04	S96-14*	SVS 254
DK Cas	0 18 8.	+57 26 6.	−5	UGSS		15.3 p-	19.5:p	02RM *	00000	91-02	-	244.1940
FI Cas	0 6 10.07	+55 58 51.1	−6	ugSS		15.0 p-	18.5:p	02RM	87-03/00000	87-06	-	230.1940
GX Cas	0 49 1.46	+56 52 44.8	−5	ugsu		13.9 p-	18.5 p	01W2	94-15	57-01	-	S 3330
HT Cas	1 10 12.98	+60 4 35.9	−2	ugsu		10.8 v-	18.4 v	01MU	87-01	83-01	S83-12	S 3343
KP Cas	0 38 55.4	+61 12 55.	−1	UGSS		15.2 p-	20 p	01MU	00000	**57-04***	-	S 3865
KU Cas	1 31 2.48	+57 54 13.3	−4	ugSS		13.3 p-	18 p	01MV	87-03/00000	87-06	-	S 3883
KZ Cas	23 8 13.89	+56 27 17.2	−3	ugSS		15.2 p-	19 p	036H	87-03/00000	87-06	-	S 4628
LM Cas	23 12 59.37	+56 51 16.7	−3	ugSS		15.8 p-	(19 p	036H	87-03/00000	87-06	X96-12	S 4633
LW Cas	2 57 22.	+60 41 20.		non-cv					00000*	-	-	SVS 1144
V410 Cas	0 23 27.65	+61 46 28.8	0	NL/z an		15.5 p-	18 p	01MT	00000/92-04	67-01*	-	S 10141
V418 Cas	1 13 0.	+62 10 48.		non-cv					00000*	-	-	S 9142
V425 Cas	23 3 47.	+53 17 16.	−6	vy		14.5 v-	18 v	036H	95-05	80-02	S85-07	S 9712
V452 Cas	0 52 18.0	+53 51 51.	−9	ugSS		14 p-	17.5:p	01W2	87-03/00000	**96-02***	-	
V502 Cas	2 52 22.8	+58 45 51.	0	UG:		16.1 r-	(17.0 r	01MX	00000	**70-03***	-	GR 195
V513 Cas	0 18 14.90	+66 18 13.7	3	ugZ:		15.5 p-	(17.2 p	01YC	87-03/00000	87-06*	-	
V592 Cas	0 20 52.24	+55 42 16.6	−6	ux		12.8 V		02RM	89-03	00-01	S94-07	LS I +55°08
V630 Cas	23 48 51.91	+51 27 39.3	−10	ug:	1950	12.3 p-	17.1 p	031J *	87-02	87-04	S92-01	OV 29
V664 Cas1	3 3 46.99	+64 54 36.0	6	cv		13.5 v		01MR	90-15	85-07	S90-10	PK 136+5°1
V705 Cas	23 41 47.25	+57 30 59.7	−4	na	1993	6.4 v-	18 :b	00T7	93-05	94-06*	X93-15:	
Cas	1 5 5.37	+54 0 40.5	−9	n	1995	9.0 p		95-07	95-20	96-07	X95-12:	
Cas2	0 28 48.87	+59 17 21.8	−3	dq		14.4 V		01MT	96-12	**96-08**	S96-09	RX J0028.8+5917
Cas3	1 18 22.	+63 42 31.	1	n:		10 p-	18 :p	00MB *	90-21	**62-03**	-	
Cas4	1 55 10.75	+69 42 41.3	8	nl:		17.0 b		02U9	95-34	**95-14**	-	Lanning 159
Cas	1 53 18.	+74 46 0.	12	dq				95-06	95-35	-	-	RX J0153.3+7446

TABLE 1(a)
(Continued)

GCVS Name	Coordinates α (2000)	Coordinates δ (2000)	b	Type	Year of Outburst	Mag. Range Max	Mag. Range Min	Coord Ref	Type Ref	Chart Ref	Spec Ref	Other Name
WX Cen	13 12 52.49	−63 23 45.4	−1	nl		13.4 p-	14.4 p	060X	89-03	**68-05**	S95-14	
BV Cen	13 31 19.55	−54 58 33.6	7	ug		10.5 v-	13.3 v	0615	84-01	82-01	S82-12	HV 4647
MT Cen	11 44 0.74	−60 33 39.1	1	n:	1931	8.4 p-	22 j	00002	87-02	87-04	-	
MU Cen	12 12 53.86	−44 28 16.3	17	ugSS		11.8 p-	14.7 V	02EY	82-01/00000	82-01	S96-01	
NN Cen	13 14 15.4	−60 52 47.	1	ugss		13.2 p-	18.1 V	007L	82-01	96-01*	S96-01	HV 6432
V359 Cen	11 58 15.29	−41 46 7.9	20	n:	1939	13.8 p-	21.0 j	00002	87-02	87-04	-	
V373 Cen	12 26 4.93	−45 49 30.0	16	ug		13.5 p-	16.3 V	04UK	82-01	82-01*	S96-01	
V436 Cen	11 14 0.10	−37 40 48.6	21	ugsu		11.5 B-	16.0 v	04HE	87-01	82-01	S82-13	1E 1111−3724
V442 Cen	11 24 51.92	−35 54 37.7	23	ugSS		11.9 V-	(16.5 v	04HE	82-01/00000	82-01	S82-03:	HV 8364
V485 Cen	12 57 23.30	−33 12 6.8	29	ug		12.9 p-	17.9 V	04HH	82-01	82-01	S82-03:	HV 10231
V591 Cen	12 42 18.	−33 34 10.		non-cv					82-01*	-	-	HV 10172
V803 Cen	13 23 44.51	−41 44 30.4	21	ibwd		13.2 V-	17.7 V	02EI	89-04	**75-04**	S89-07	AE1
V812 Cen	13 13 54.18	−57 40 44.5	5	n	1973	11 p-	18 j	00002	87-02	87-04	X87-08:	
V834 Cen	14 9 7.46	−45 17 17.1	16	am		14.2 v-	17 v	02MC	84-01	82-05	S84-02	1E 1405−451
V840 Cen	13 20 49.	−55 50 14.		non-cv					87-02*	-	-	
V842 Cen	14 35 52.35	−57 37 34.7	2	n	1986	4.6 v-	20.3 j	00002	87-02	87-04:	X89-01	
V868 Cen	13 50 10.60	−63 8 52.0	−1	n	1991	10.2 V-	(22.5 V	91-03	91-08	-	X91-06:	
Cen	13 2 31.99	−60 11 38.1	3	n	1995	7.2 p		95-05	95-04	-	X95-04:	
Cen1	13 50 29.1	−48 2 50.	14	nl		(19.0 j-	21.0 j	01F7	94-14	**94-11**	S94-11	V1350−4802
Cen2	14 29 27.23	−38 4 10.0	21	am		16.5 v		0163	96-04	**96-04**	S96-04	EUVE J1429−38.0
Cen3	11 41 22.9	−64 10 14.	−2	cv		16.6 V		06AG	96-12	**96-08**	S96-09	RX J1141.3−6410
Cen4	13 49 31.8	−47 54 40.	14	nl		(19.0 j-	21.5 j	94-03	94-14	**94-11**	S94-11	V1349−4754
Cen	13 13	−32	29	am		16 B		93-04	93-17	-	-	RX J1313−32
BS Cep	22 29 6.	+65 14 41.		non-cv					92-15*	-	-	
CG Cep	23 10 26.03	+66 33 31.4	5	ugSS		14.5 p-	17.2 p	034R	87-03/00000	87-06	S96-12	581.1936
FX Cep	21 3 6.64	+66 10 32.0	12	ug		15.0 p-	17.5 p	01JU	95-17	**95-10***	-	GR 95
IV Cep	22 4 36.83	+53 30 23.7	−2	na	1971	7.5 B-	17.1 B	00002	87-02	87-04	S96-14	
Cep	22 13 45.55	+57 1 14.4	0	n:	1983	7.5 p		83-03	83-08	-	-	
Cep1	22 50 39.64	+63 28 39.3	4	nl		16.5 v		031H *	84-01	71-01	S90-04	GD 552
Cep2	2 22 22.75	+78 54 38.0	17	nl/ug?		10 p-	14 p	01JP	89-03	**BD ***	-	NSV 786
WW Cet	0 11 24.77	−11 28 42.7	−71	ugz:		9.3 v-	15.7 v	04MU	87-01	82-01	S83-12	HV 8002/PHL 718
WX Cet	1 17 4.17	−17 56 23.0	−79	ugwz		9.5 v-	17.5 v	02J7	87-02	87-04	S81-03	BV 416
XX Cet	2 22 40.	−19 32 47.		non-cv					93-13*	-	-	PHL 4037
BO Cet4	2 6 39.24	−2 3 42.8	−59	nl		14.4 V-	15.4 V	0086	90-10	90-03	S95-06	1H 0204−023
Cet1	2 42 53.45	+6 47 45.8	−47	cv		16.4 B		002M	86-01*	86-05	-	PG 0240+066
Cet2	2 51 17.71	+5 37 48.4	−46	cv		16.2 B-	17.6 V	00ZU	86-01*	86-05	S95-06	PG 0248+054
Cet3	2 0 52.17	−9 24 31.7	−66	cv:		17.1 V		03YP	87-11	84-06	S87-02	KUV 01584−0939
Cet5	2 35 40.39	−13 21 12.1	−62	UG:		18.1 p-	19.5 p	00BD	00001*	**60-01**	-	NSV 870
Cet6	0 33 34.40	−19 21 33.5	−81	cv:		16.4 V		011Q	96-05	**84-06**	S96-05:	KUV 00311−1938
Cet7	1 9 34.78	−8 0 33.1	−70	nl:		15 p		012C	88-06	**88-05**	S88-07	FBS 0107−082
Cet	2 50 3.	1 9 31.		non-cv					93-13*	-	-	US 3215
Z Cha	8 7 28.2	−76 32 1.2	−22	ugsu		12.4 v-	15.3 v	00RH	87-01	82-01*	S81-09	S 4893
RR Cha	13 26 23.44	−82 19 43.4	−19	na	1953	7.1 p-	19.3 j	00002	96-01	87-04	S96-01	S 5346
RX Cha	10 36 26.32	−80 2 47.8	−18	ug		14.4 p-	(16.9 p	00Q9 *	82-01	82-01	-	S 6311
BM Cha	13 8 7.	−77 55 5.		non-cv					83-07*	-	-	S 6445
X Cir	14 42 47.	−65 12 36.	−5	nb	1927	6.5 p-	(23 j	060Z	87-02	87-04*	X27-01:	
AI Cir	14 49 31.29	−68 51 35.9	−8	n:	1914	10.9 p-	23 j	00003	87-02	87-04:	-	HV 5121
AR Cir	14 48 9.60	−60 0 26.7	0	n:	1906	10.3 p-	15 p	0025	87-02	93-06*	S93-14	HV 2954
BW Cir	13 58 10.	−64 44 5.		non-cv	1987				88-05*	-	-	1354−64
Cir	14 44 53.48	−63 53 55.6	−3	n	1995	7.2 v		95-02	95-01	-	X95-01:	
Cir1	14 54 15.4	−68 16 19.	−8	nl		18.2 V		0600	90-09	90-02	S90-08	1E 1449.8−6803
TV Col	5 29 25.5	−32 49 5.	−30	dq		13.6 B-	(14.5 B	01WA	92-08	79-01*	S79-01	2A 0526−328
TX Col	5 43 20.22	−41 1 55.2	−30	dq		14.5 B-	15.8 B	04GX	86-03	86-03	S86-04	H 0542−407
Col1	5 12 13.12	−32 41 38.8	−34	dq		17.6 V		029U	96-14	**96-10**	S96-11	RX J0512.2−3241

TABLE 1(a)
(Continued)

GCVS Name	Coordinates α (2000)	Coordinates δ (2000)	b	Type	Year of Outburst	Mag. Range Max	Mag. Range Min	Coord Ref	Type Ref	Chart Ref	Spec Ref	Other Name
AL Com	12 32 25.90	+14 20 42.5	76	ugsu		12.8 v-	22 v	00G0	95-07	**96-14***	S90-09	Zw SN 106
FU Com	12 30 51.50	+27 7 10.0	85	ug		19.5 p-	21 :p	01PM	90-14	90-06	-	
FY Com	12 49 16.	+27 25 22.	89	ug		19.5 p-	21 :p	01PM	90-14	**95-11***	-	
GO Com	12 56 37.10	+26 36 43.7	88	ugsu		13.1 p-	20 p	002K	95-24	82-01	S90-09	SVS 382
GP Com	13 5 42.85	+18 1 2.6	80	ibwd		15.7 V		01PP *	95-05	**83-01**	S83-12	G 61-29/Gr 389
GT Com	12 30 53.20	+29 0 43.4	85	ug/ISB:		13.5 p-	(16 :p	01PM	76-01/00000	**73-06***	-	
IM Com	12 31 15.46	+14 12 14.6	76	UG:		17.6 B-	18.5 B	00G0	00000	84-05	-	SVS 2819
Com1	12 39 32.04	+21 8 6.3	83	ugsu:		13.5 p-	18 p	038A	95-15	**96-03**	-	S 10932
Com	12 19 14.	+13 52 55.		non-cv					89-07*	-	-	NSV 5550
BP CrA	18 36 50.80	−37 25 52.9	−13	ugz		13.5 v-	15.9 v	068A	82-01	82-01	S96-01	
V394 CrA	18 0 25.97	−39 0 35.1	−8	nrb	1949,1987	7.2 v-	18 :j	00002	91-06	88-06	X91-04	N Sco 1949
V655 CrA	18 24 44.6	−36 59 43.	−11	n	1967	8 p-	17.6 j	00003	87-02	87-04:	X87-08:	
V662 CrA	18 35 31.	−36 56 51.	−12	UG		15.7 p-	(19.6 p	71-01	00000	-	-	
V693 CrA	18 41 57.8	−37 31 14.	−14	na	1981	7.0 v-	23 j	00003	87-02	87-04:	X82-01	
T CrB	15 59 30.09	+25 55 11.4	48	nra		2.0 p-	11.3 p	00002	87-06	87-04	S83-12	BD +26°2765
CrB1	16 0 4.	+33 11 15.	49	ug		14.0 p-	(17.5 b	01RN	96-17	**96-12**	-	Var 21
CrB	15 19 14.	+26 17 20.		non-cv					94-12*	-	-	PG 1517+265
TV Crv1	12 20 24.15	−18 27 2.0	44	ug:		12 p-	19 v	05Y2	90-02	90-07	S94-15	
SW Crt	11 52 25.	−24 31 2.		non-cv					83-05*	-	-	SVS 2147
TT Crt	11 34 47.20	−11 45 30.4	47	ug		12.7 v-	15.3 v	02N8	92-06	89-01	S92-02	FSV 1132−11
TU Crt	11 3 36.50	−21 37 45.6	35	ugSU		12.1 B-	17.5 B	05Y1	92-01/00000	**92-01**	S92-11	J05.23
AP Cru	12 31 20.34	−64 26 24.3	−2	n:	1936	10.7 p-	21.7 j	00002	87-02	87-04	-	615.1936
SS Cyg	21 42 42.66	+43 35 9.5	−7	ugss		8.2 v-	12.1 v	01KD *	83-02	83-01	S83-12	BD +42°4189a
BF Cyg	19 23 54.	+29 40 29.		non-cv					00000*	-	-	He 3-1747
CI Cyg	19 50 12.	+35 41 3.		non-cv					00000*	-	-	HV 3625
CK Cyg	19 53 34.	+56 58 42.	15	NC:		12.0 p-	(17. p	23-02	00000	23-01	-	SVS 26
EM Cyg	19 38 40.10	+30 30 28.0	4	ugz		12.5 v-	14.4 v	000J	87-01	83-01	S83-12	185.1928
EY Cyg	19 54 36.77	+32 21 54.7	2	ugSS		11.4 v-	15.5 v	02UC	87-03/00000	87-06	S96-12	200.1928
HN Cyg	19 33 40.	+28 56 14.		non-cv					90-17*	-	-	
V337 Cyg	19 59 53.3	+39 13 55.	4	UG:		14.4 p-	(16.5 p	28-01*	00000	-	-	101.1928
V404 Cyg	20 24 4.	+33 52 4.		non-cv	1938,1989				94-36*	-	-	100.1938
V407 Cyg	21 2 10.	+45 46 33.		non-cv					87-02*	-	-	AS 453
V450 Cyg	20 58 47.39	+35 56 27.9	−6	nb	1942	7.8 p-	16.3:p	00002	87-02	87-04:	X43-03:	85.1942
V465 Cyg	19 52 37.61	+36 33 52.6	5	nb	1948	8.0 p-	17.0 p	00002	87-02	87-04	X49-01:	VV 67
V476 Cyg	19 58 24.57	+53 37 7.1	12	na	1920	2.0 p-	17.2 B	00002	87-02	87-04	S86-08	26.1920
V503 Cyg	20 27 17.44	+43 41 23.1	3	ugsu		13.4 v-	17.4 v	00VV	95-05	87-06	S92-06	S 4524
V516 Cyg	20 47 9.80	+41 55 26.8	0	ugSS		13.8 p-	16.8 p	00VV	87-03/00000	87-06	S94-07	S 4530
V542 Cyg	19 49 10.48	+58 31 58.7	15	ugSS:		13.0 p-	18.3:p	00VM	87-03/00000	87-06	S92-06	S 3813
V550 Cyg	20 5 5.0	+32 21 23.	0	UGSS		14.2 p-	(17.0 p	02UC	00000	57-04*	-	S 3847
V630 Cyg	21 34 59.21	+40 40 18.5	−8	ugsu:		13.4 p-	17.2 p	01KD	92-15	87-06	S92-06	S 4556
V632 Cyg	21 36 4.17	+40 26 18.7	−8	cv/UGSS		12.6 p-	17.5 p	01KD	96-11/00000	57-08	-	S 4558
V747 Cyg	20 37 17.68	+50 19 39.2	5	cv/NL:		11.7 p-	12.5 p	008T	94-09/00000	53-01	S94-07	34.1934
V751 Cyg	20 52 12.83	+44 19 25.9	0	vy		13.2 v-	14.5 v	00C8	95-05	58-02	S95-18	SVS 1202
V767 Cyg	20 16 49.99	+53 12 24.5	9	UGSS		15.0 p-	(17.5 p	003I	00000	57-03	-	S 3826
V792 Cyg	19 31 1.03	+33 47 4.6	7	ugSS		14.1 p-	17.0 p	02TN	87-03/00000	87-06	X92-06	VV 61
V793 Cyg	19 33 6.2	+33 15 37.	6	ugSS		14.4 p-	(18.5:p	000J	87-03/00000	87-06	-	VV 62
V795 Cyg	19 34 34.1	+31 32 13.	5	ugSS		13.4 p-	(17.9:p	000J	87-03/00000	**93-11***	-	VV 63
V811 Cyg	19 48 23.33	+36 26 23.3	5	ugSS		12.7 p-	(17.7 p	02TN	87-03/00000	87-06	S96-12	VV 64
V813 Cyg	19 49 35.89	+36 44 40.1	5	ugSS		16.0 p-	(19 p	02TN *	87-03/00000	87-06	-	VV 65
V823 Cyg	20 1 50.	+36 7 26.	2	ugsu		15.0 p-	(18.5 p	004C *	92-15	87-06	S92-06	VV 66
V868 Cyg	19 29 4.5	+28 54 26.	5	ugZ		14.3 p-	(17.8 p	000J *	87-03/00000	87-06	-	VV 137
V905 Cyg	19 35 5.64	+30 34 23.9	4	ug		16.5 p-	(18.1 p	000J	87-03	87-06	-	VV 138
V1006 Cyg	19 48 47.20	+57 9 21.8	15	ug		15.4 p-	17.0 p	00VQ	87-03	87-06	S92-06	S 7844
V1028 Cyg	20 0 56.59	+56 56 37.2	13	ugsu		13.0 p-	18 p	003I *	95-17	87-06	S92-06	S 7854

TABLE 1(a)
(Continued)

GCVS Name	Coordinates α (2000)	δ	b	Type	Year of Outburst	Mag. Range Max Min	Coord Ref	Type Ref	Chart Ref	Spec Ref	Other Name
V1032 Cyg	202 40.1	+57 16 26.	13	ug		15.5 p- (18.0 p	003I	87-03	87-06	-	S 7858
V1052 Cyg	20 36 6.34	+54 31 42.0	8	UGSS		15.8 p- (17.5 p	003I	00000	63-01	-	S 7916
V1060 Cyg	21 7 42.20	+37 14 8.7	−6	UGSS		13.5 p- 18 p	01W5	00000	66-01	-	S 9108
V1062 Cyg	21 8 12.	+36 49 29.	−7	UGSS		15.5 p- 18 p	01W5 *	00000	66-01	-	S 9110
V1065 Cyg	21 10 59.06	+38 57 13.0	−6	UGSS		18 p- (20 p	01W5	00000	66-01	-	S 9113
V1075 Cyg	21 29 18.80	+42 19 11.7	−6	UGSS		16.4 p- (18 p	01KD	00000	**64-01***	-	S 8393
V1081 Cyg	21 34 15.96	+49 11 22.9	−1	ugSS		14.5 p- (17.5 p	003P	87-03/00000	87-06	S92-06	S 8400
V1089 Cyg	21 44 17.67	+47 54 50.0	−4	UGSS		15.0 p- 18.5 p	003P	00000	64-01	-	S 8411
V1113 Cyg	19 22 42.	+52 43 59.	16	ugSS		14 p- (17 p	00VQ *	87-03/00000	87-06	-	S 9382
V1114 Cyg	19 24 36.4	+28 26 11.	5	ug		14.9 p- (17 p	000J *	87-03	87-06	-	103.1906
V1153 Cyg	19 48 15.	+34 52 2.	4	ugSS		16.4 p- (19 p	02TN	87-03/00000	**66-03***	-	VV 168
V1162 Cyg	19 54 45.72	+36 47 11.5	4	NL:	1948	15.8 p- (17.6 p	02TN	00000	67-05	-	VV 176
V1251 Cyg	21 40 55.0	+48 39 43.	−3	ugsu		12.5 p- (15 p	003P	95-05	**95-02***	-	Wr 160
V1285 Cyg	19 44 50.	+35 59 35.		non-cv				87-08*	-	-	VV 255
V1310 Cyg	20 9 32.41	+41 0 28.5	4	ugSS		15.9 p- (19 p	003S	87-03/00000	**69-06***	-	GR 135
V1316 Cyg	20 12 12.68	+42 45 53.0	4	ugSU:		14.5 p- (17.5 p	003S	87-03/00000	87-06	X92-06	GR 141
V1330 Cyg	20 52 44.75	+35 59 27.0	−5	na	1970	9 p- 18.1 p	00002	87-02	87-04*	X74-01:	
V1363 Cyg	20 6 11.58	+33 42 37.7	0	ugZ		13.0 p- (17.6 p	004C	87-03/00000	87-06	S92-06	VV 279
V1377 Cyg	20 16 49.	+38 21 8.	1	UG:		17.1 p- 18.5 p	004C	00000	**69-02***	-	GR 166
V1390 Cyg	20 28 23.36	+39 3 54.3	0	ugSU		16.0 p- (18.1 p	009K	87-03/00000	87-06	-	GR 177
V1404 Cyg	21 57 16.6	+52 12 2.	−2	ugZ		15.7 p- (17.7 p	036G	87-03/00000	**71-02***	-	VV 288
V1449 Cyg	19 49 16.59	+34 10 49.2	4	ugSS		15.5 p- (17.0 p	02TN	87-03/00000	87-06	-	GR 217
V1452 Cyg	19 52 2.	+35 55 34.	4	UGSS		15.4 p- (17.0 p	02TN *	00000	72-01	-	GR 220
V1454 Cyg	19 53 38.27	+35 21 45.0	3	ugSS		13.9 p- (17.0 p	02TN	87-03/00000	87-06	-	GR 221
V1500 Cyg	21 11 36.61	+48 9 1.9	0	na/am	1975	2.2 B- 21.5 p	00002	87-02/95-05	87-04	S88-04	
V1504 Cyg	19 28 56.49	+43 5 37.2	11	UGZ:		13.5 p- 17.4 p	01KC	00000	78-02	S96-12	SVS 710
V1505 Cyg	19 29 49.0	+28 32 54.	5	UGZ		15.2 p- (17.5 p	000J	00000	67-06*	-	SVS 1532
V1570 Cyg	21 40 17.	+47 59 47.		non-cv				92-15*	-	-	S 9726
V1668 Cyg	21 42 35.22	+44 1 54.9	−7	na	1978	6.7 p- 20.0 p	00002	87-02	87-04	X80-02:	
V1697 Cyg	20 43 17.	+42 42 39.	0	UG:		16.5 U- (17.5 U	00001*	00000	**91-02**	-	SVS 2272
V1711 Cyg	20 55 0.59	+44 55 31.5	0	UG:		15.0 p- (17.5 p	00C8	00000	76-03	-	SVS 2277
V1760 Cyg	21 42 57.	+31 27 31.		non-cv				87-02*	-	-	
V1776 Cyg	20 23 30.51	+46 31 29.7	5	ux		17.2 V- 18.4 V	008T	95-05	83-03	S83-05	Lanning 90
V1819 Cyg	19 54 37.6	+35 42 17.	4	nb	1986	8.7 v- 19 p	02TN	87-02	94-12*	X89-05	
V1974 Cyg	20 30 31.66	+52 37 50.8	8	na	1992	4.2 v- 19.5 v	93-05*	93-10	-	X93-13	
Q Cyg	21 41 43.84	+42 50 28.3	−7	na	1876	3.0 v- 15.6 v	00002	87-02	87-04	S86-08	BD +42°4182a
Cyg1	20 34 14.54	+50 48 6.2	6	cv:		14.8 V	008T	86-05	86-06	S86-03	KPD 2032+5037
Cyg2	19 34 36.08	+51 7 42.2	15	nl		17.5 V	00VQ *	90-10	90-03	S96-12	1H 1933+510
Cyg3	19 38 10.3	+35 51 27.	7	UG:/I		10.7 p- 11.6 p	02TN	00001	**38-02***	-	NSV 12245
Cyg4	20 5 7.68	+38 7 9.1	3	UG:		11.4 p- 14.2 p	004C	00001	**38-01**	-	NSV 12778
Cyg5	21 51 43.23	+43 9 23.9	−9	UG:		12.0 p- 14.2 p	02S1	00001	**51-01**	-	NSV 13904
Cyg6	21 23 44.83	+42 18 02.2	−6	cv/dq:		16.0 V	01KD	96-12	**96-08**	S96-09	RX J2123.7+4217
CM Del	20 24 56.92	+17 17 54.3	−11	ug/ux		13.4 v- 15.3 v	02UR	92-08/95-05	82-01	S85-07	147.1930
EZ Del	20 25 22.43	+15 46 0.8	−12	ug		14.5 p- 16.5 p	02UR	82-01	82-01	-	S 4505
HO Del	20 36 55.49	+14 3 8.9	−16	ugsu		13.6 p- (17.2 p	02V1	94-15	91-02	-	S 10066
HR Del	20 42 20.18	+19 9 40.3	−14	nb	1967	3.5 v- 12.0 v	00002	87-02	87-04	S96-14	
IO Del	20 26 47.	+18 31 0.	−11	ugwz:		15.5 p- (20 p	00001	94-31	70-02	-	S 10693
IS Del	20 31 9.58	+16 23 9.0	−13	ug		15 p- (17.5 p	02UR	93-16	82-01	-	S 10699
RY Dor	5 14 58.	−66 50 12.	−34	N	1926	12.4 p- (18 p	06B0	00000	**27-01***	-	HV 4004
AB Dra	19 49 6.50	+77 44 23.5	23	ugz		12.3 v- 14.5 v	00LX *	95-05	83-01	S83-12	90.1934
CG Dra	19 7 32.76	+52 58 28.6	19	ug		15 p- 17.5 p	00VP	87-03	87-06	S92-06	S 9370
CP Dra	10 15 40.	+73 26 5.	39	ug		15.1 p- 20 p	00M9 *	87-03	87-06	S90-09	
CQ Dra	12 30 6.69	+69 12 4.6	48	cv			+056 *	91-07	-	S85-06	4 Dra B
DM Dra	15 34 12.13	+59 48 31.9	47	ug		15.5 v- 21.7 v	01OK	95-05	82-11	-	SVS 2426

TABLE 1(a)
(Continued)

GCVS Name	Coordinates α (2000)	δ	b	Type	Year of Outburst	Mag. Range Max Min	Coord Ref	Type Ref	Chart Ref	Spec Ref	Other Name
DO Dra	11 43 38.34	+71 41 20.4	45	dq		10.0 B- 15.1 B	01L3	91-04	86-08	S83-12	YY Dra?
DV Dra	18 17 25.	+50 48 19.	26	ugwz:		15.0 B- (21 p	00TB *	91-15	85-06	-	SVS 2704
EP Dra4	19 7 6.13	+69 8 42.4	24	am		17.6 V- (20.8 V	00T1 *	95-05	91-05	S91-08	1H 1907+690
ES Dra3	15 25 31.82	+62 1 0.1	47	ug:		13.9 p- 16.3 p	01OK	94-12	86-05	S93-10	PG 1524+622
Dra1	13 17 51.76	+67 31 59.6	49	cv		16.0 B	01RQ	86-01	86-05	S93-10	PG 1316+678
Dra5	18 4 14.12	+67 54 12.2	29	ug		14 V- 15 V	00T0 *	96-09	**99-99**	S96-07	HS 1804+6753
Dra6	18 12 31.43	+67 4 46.1	29	ug:		15.0 B- 18.5 B	00T0	95-32*	**95-15**	-	KUV 18126+6704
Dra7	12 22 20.25	+75 3 27.5	42	cv		15.2 v	01G5 *	95-33	**99-99**	-	FBS 1220+753
Dra8	15 8 47.	+55 28 24.	52	sn:		15 p	01RT	65-01*	**65-02***	-	SN s1964α
Dra2	14 46 57.	+58 9 19.		non-cv				94-12*	-	-	PG 1445+583
Dra	16 57 27.	+65 31 5.		non-cv				94-12*	-	-	PG 1657+656
Dra	17 11 21.	+56 35 28.		non-cv				94-12*	-	-	PG 1710+567
XZ Eri	4 11 25.76	−15 23 24.3	−42	ug		14.6 p- 18.7 p	02NG	82-01	82-01	S92-01	HV 6276
AH Eri	4 22 38.10	−13 21 30.2	−38	ug/dq::		13.5 v- 18.4 V	02NH	82-01/94-06	82-01	S87-05	HV 6292
AQ Eri	5 6 13.04	−4 8 7.0	−25	ugsu		12.5 v- 17.5 V	04MX	95-05	82-01	S87-05	431.1934
CP Eri	3 10 32.76	−9 45 5.3	−52	ibwd		16.7 v- 19.7 v	015H	95-05	59-01	S92-17	PHL 4482
EF Eri	3 14 13.03	−22 35 41.4	−57	am		14.5 B- (17.3 B	027U *	84-01	83-01	S83-12	2A 0311−227
SY For	2 53 14.	−37 46 15.		non-cv				82-01*	-	-	
SZ For	3 41 20.	−26 36 21.		non-cv				96-10*	-	-	
UZ For	3 35 28.61	−25 44 22.6	−53	am		18.2 v- 20.9 v	027X	95-05	88-02	S89-02	EXO
For1	3 32 4.58	−25 56 55.5	−54	am		17.5 v	027X	95-05	89-02	S89-08	EXO
For3	3 26 46.9	−34 26 37.	−56	ug:		12.7 V -(19 B	02IX	90-13	**92-07**	X90-14:	
For4	2 52 51.33	−30 37 43.5	−63	am		(19.5 j- 20.5 j	02J9	94-14	**94-11**	S94-11	V0252−3037
For2	1 48 8.	−25 32 42.		non-cv				95-08*	-	-	GD 1401
U Gem	7 55 5.29	+22 0 5.7	23	ugSS		8.2 v- 14.9 v	02UF	83-02/00000	82-01	S83-12	BD +22°1807
SY Gem	6 40 37.	+31 11 26.	11	n::	1857	9.2 v- (13 v	00003	87-02*	87-04*	-	BD +31°1380
UV Gem	6 38 44.	+18 16 12.	5	ug		14.7 p- 18.5 p	001S *	82-01	82-01	S94-07	18.1916
VZ Gem	8 7 47.	+30 50 54.	29	n::	1856	8.7 v- (21 :	00003	87-02	87-04:	-	BD +31°1736
AW Gem	7 22 41.	+28 30 17.	18	ugsu		13.8 v- 19.4 v	000I *	95-05	82-01	S87-05	8.1933
CI Gem	6 30 5.75	+22 18 57.7	5	ugsu:	1940	14.7 p- 18.5 p	0078	90-04	87-04	-	
DM Gem	6 44 12.05	+29 56 41.9	12	na	1903	4.8 v- 16.7 p	00002	87-02	87-04	S86-08	HD 48328
DN Gem	6 54 54.37	+32 8 28.1	15	na	1912	3.5 p- 15.8 p	00002	87-02	87-04	S83-12	HD 50480
HM Gem	6 3 9.	+25 14 49.	1	UG:		16.5 p- 20.5 p	0076 *	00000	91-02	-	S 8466
HQ Gem	6 12 4.4	+25 28 34.	3	UG:		16.5 p- 20 p	0076	00000	**64-01***	-	S 8470
IR Gem	6 47 34.58	+286 22.7	11	ugsu		11.7 v- 16.3 v	000C	87-01	82-01	S83-12	S 5423
KT Gem	6 45 21.1	+19 4 47.	7	UGSS		16 p- 20 :p	03OP	00000	**67-01***	-	S 9775
KZ Gem	6 53 2.8	+16 39 52.	7	UG		14.7 p- (18.5 p	03OP	00000	**66-02***	-	S 9208
MV Gem	7 0 53.	+12 51 21.		non-cv				96-01*	-	-	S 10220
PQ Gem	7 51 17.39	+14 44 24.6	20	dq		14.5 V	01LS	92-03	**92-03**	S92-18	RE 0751+14
Gem	6 58 45.	+17 2 11.	9	n::	1892	7.0 v- (14 p	00003	87-02	87-04:	-	NSV 3313
Gem1	6 10 43.93	+25 10 31.9	3	nl/ug?		15.3 p- 15.9 p	0076	89-03	**57-09***	-	NSV 2853
RZ Gru	22 47 12.00	−42 44 38.5	−60	ux		11.5 p- 13.0 p	031D	95-05	81-05	S81-06	S 5150
AN Gru	23 7 55.	−47 25 41.		non-cv				95-08*	-	-	S 6526
CE Gru2	21 37 56.38	−43 42 13.1	−48	am		17.9 B- 20.7 B	04ZE	95-05	81-04	S83-13	Hawkins V1
CF Gru3	21 41 22.96	−45 4 31.0	−48	ug		)18.7 B- 20.4 B	04ZE	87-04	87-01	S87-10	2138−453
Gru1	21 33 7.	−42 28 52.	−46	ug		16.5 B- 18.5 B	04ZE	90-14	81-04*	X83-13:	Hawkins V6
Gru4	21 28 35.0	−42 32 30.	−46	n:		18.3 B- 19.8 B	81-03	83-06	81-04	S83-13	Hawkins V5
AH Her	16 44 9.99	+25 15 2.1	38	ugz		11.3 v- 14.7 v	02BA	87-01	82-01	S83-12	SVS 32
AM Her	18 16 13.33	+49 52 4.2	26	am		12.3 v- 15.7 v	00TB *	84-01	83-01	S83-12	3A 1815+498
CH Her	18 34 46.35	+24 48 1.6	14	ug		13.5 p- 17 :p	02UK *	82-01	82-01	-	203.1929
DQ Her	18 7 30.17	+45 51 31.9	26	na/dq	1934	1.3 v- 14.5 v	00002	95-05	87-04	S83-12	452.1934
PR Her	18 8 5.	+38 46 10.	24	UG		14.0 p- 18.5 p	00001	00000	57-05	-	S 4247
PU Her	18 9 52.98	+32 0 27.1	22	UG		15.5 p- 19.5 p	01KE	00000	91-02	-	S 4248
V360 Her	17 16 38.	+24 26 52.		non-cv	1892			93-12*	-	-	

TABLE 1(a)
(Continued)

GCVS Name	Coordinates α (2000)	Coordinates δ (2000)	b	Type	Year of Outburst	Mag. Range Max Min	Coord Ref	Type Ref	Chart Ref	Spec Ref	Other Name
V446 Her	18 57 21.51	+13 14 29.9	5	na	1960	3.0 p- 15.0	00002	87-02	87-04	S95-08	
V478 Her	17 21 5.60	+23 39 36.9	30	cv		15.5 p - 17.1 p	02HC	96-11	**57-11**	-	S 4133
V533 Her	18 14 20.34	+41 51 21.3	24	na	1963	3.0 p- 15.0 p	00002	87-02	87-04	S83-12	
V544 Her	16 38 5.5	+8 37 58.	33	ug		14.5 p- 20 :p	02CX	95-05	82-01	-	S 9789
V589 Her	16 22 7.19	+19 22 36.3	41	ug		14.1 p- (17.5 p	01GC	82-01	82-01	S92-01	S 10296
V592 Her	16 30 58.	+21 16 57.	40	ug:	1968,1986	12.3 p- (21 p	00001	87-02	91-04	-	S 10376
V610 Her	16 43 39.16	+22 31 25.9	37	UG		16.2 p- (16.8 p	02BA	00000	68-01*	-	S 10311
V611 Her	16 44 50.	+19 59 44.	36	UG		15.4 p- (16.4 p	02D2	00000	**68-01***	-	S 10312
V631 Her	18 8 44.	+34 27 34.	23	UG		16.2 p- (21 p	00001*	00000	69-01	-	S 10422
V632 Her	18 19 41.	+24 33 14.	17	ug	1967	15.4 p- 21 p	00001	87-02	**68-07***	-	
V660 Her	17 42 9.19	+23 48 30.6	25	UG		16 p- 19 :p	071R	00000	75-03*	-	SVS 2120
V795 Her	17 12 56.09	+33 31 21.4	34	dq		12.5 B- 13.2 B	02TX *	90-05	82-08	S86-05	PG 1711+336
V809 Her	17 27 28.	+45 30 39.		non-cv				77-01*	-	-	S 10875
V825 Her	17 18 37.00	+41 15 51.1	34	ux		14.0 v- 14.2 v	009J	94-12	82-08	S84-10	PG 1717+413
V827 Her	18 43 42.59	+15 19 18.9	9	na	1987	7.5 v- 18.0 v	03OS	86-07	87-07	X86-09:	
V838 Her	18 46 31.48	+12 14 1.8	7	na	1991	5.4 v- 18.3 r	02UZ	95-05	94-02*	X92-10	
Her	17 39 29.	+21 11	25	N:	1919	13 p	23-01	00001	-	-	NSV 9445
Her2	16 35 45.70	+11 24 58.3	35	ug:		14.9 B	006K	94-12	86-05	S93-10	PG 1633+115
Her5	18 2 6.53	+18 4 43.3	19	am		15 v	01LT	95-28	**95-08***	S95-17	WGA 1802.1+1804
Her6	17 51 0.09	+45 0 42.4	29	UG/UV:		15.0:p- 17.2:p	02RU	00001	**58-04**	-	NSV 9787
Her1	16 19 49.	+14 53 11.		non-cv				94-12*	-	-	PG 1617+150
Her3	16 41 22.	+33 44 53.		non-cv				94-12*	-	-	PG 1639+338
Her4	17 13 50.	+49 16 11.		non-cv				83-04*	-	-	PG 1712+493
RU Hor	2 46 7.45	−63 35 46.7	−49	ugss		13.9 p- 17.5:p	04CB	82-01	82-01	-	HV 11902
WW Hor	2 36 11.45	−52 19 13.5	−58	am		18.4 B- (23 B	03BY	95-05	87-05	S87-06	EXO
AG Hya	9 50 29.85	−23 45 17.8	22	ug		14.3 p- 19.2 V	04A1	82-01	82-01	S87-05	HV 7591
CT Hya	8 51 7.4	+3 8 34.	27	ugss		14.1 p- 20 :p	02V6	82-01	82-01	-	114.1936
EX Hya	12 52 24.40	−29 14 56.7	33	ug/dq		10.0 v- 14.1 v	02C8 *	83-02/95-05	82-01	S83-12	1E 1249−2858
GY Hya	14 30 30.48	−25 52 38.2	31	ug:		14 p- 16 p	05XY	82-01	82-01	S96-01	S 6576
LW Hya3	12 53 33.	−22 52 23		non-cv				90-11*	-	-	Abell 35
LY Hya2	13 31 53.84	−29 40 59.1	32	ug:		17.4 v- 18.4 v	02EF	83-03	83-05	S83-02	1329−294
Hya1	9 14 13.99	−6 47 44.6	28	ug/ugwz		14.2 B- 18.7 B	03W0	94-12/94-29	82-08	S96-01	PG 0911−066
Hya4	9 29 7.10	−24 5 5.4	19	am		17.0 V	04A0	94-04	**94-05**	S94-04	RX J0929.1−2404
Hya	10 2	−19	28	am:		17 B	93-04	93-17	-	-	RX J1002−19
Hya	10 7	−20	28	am		18 B	93-04	93-17	-	-	RX J1007−20
VW Hyi	4 9 11.34	−71 17 41.1	−38	ugsu		9.5 v- 13.8 v	0186 *	87-01	82-01	S83-14	RE J0409−7125
WX Hyi	2 9 50.65	−63 18 39.9	−51	ugsu		12.5 v- 14.7 v	04CA	87-01	82-01	S83-14	HV 8016
BL Hyi	1 41 0.25	−67 53 27.7	−49	am		14.9 V- 17 V	049U	84-01	82-06	S86-07	H 0139−68
Hyi	1 32	−65	−51	am:		19 B	93-04	93-17	-	-	RX J0132−65
Hyi	1 53	−59	−56	am:		15 B	94-06	94-35	-	-	RX J0153−59
TT Ind	20 33 37.16	−56 33 44.1	−36	ugz		12.9 V- 18.3 V	02EB	82-01	82-01	S95-06	S 6899
TU Ind	20 33 10.52	−45 26 0.6	−36	ug		12.9 B- 18.1 V	04FT	82-01	82-01	S95-06	S 6749
Ind1	21 15 41.04	−58 40 53.7	−41	am		16.0 v	039C *	96-03	**99-99**	S96-03:	EUVE J2115−58.6
AY Lac	22 22 23.	+50 23 54.		non-cv				00000*	-	-	
BG Lac	22 0 25.	+43 26 45.		non-cv				00000*	-	-	BD +42°4267
CP Lac	22 15 41.07	+55 37 1.1	−1	na	1936	2.1 v- 16.6 p	00002	87-02	87-04	S96-14	605.1936
DI Lac	22 35 48.47	+52 42 59.7	−5	na	1910	4.6 v- 14.9 p	00002	87-02	87-04	S83-12	HD 214239
DK Lac	22 49 46.86	+53 17 18.3	−5	na	1950	5.0 p- 15.5 p	00002	87-02	87-04	S96-14	
EG Lac	22 50 39.	+55 14 51.	−3	ugSS		15.5 p- 19 :p	00001*	87-03/00000	87-06	-	S 4617
KM Lac	22 13 49.	+55 28 26.	0	UGSS		14.8 p- (17.4 p	036G	00000	71-02*	-	VV 347
MN Lac	22 23 4.	+52 41 0.	−3	ugZ		15.1 p- (18.0 p	00001	87-03/00000	87-06	-	VV 381
MR Lac	22 24 42.91	+50 31 41.3	−5	ug		15.0 p- (17.3 p	031I	87-03	87-06	-	VV 386
NQ Lac	22 28 44.	+56 14 59		non-cv				96-20*	-	-	VV 403
PS Lac	22 5 39.95	+51 39 0.3	−3	ugSS		15.0 p- 17.6 p	031I	87-03/00000	87-06	-	VV 442

TABLE 1(a)
(Continued)

GCVS Name	Coordinates α (2000)	Coordinates δ (2000)	b	Type	Year of Outburst	Mag. Range Max	Mag. Range Min	Coord Ref	Type Ref	Chart Ref	Spec Ref	Other Name
Lac	22 24 11.	+48 27 55.		non-ex	1986				87-02*			
T Leo	11 38 26.96	+3 22 8.1	60	ugsu		10 B-	15.7 B	0592 *	87-01	82-01	S84-03	BD +4°2506a
U Leo	10 24 3.3	+14 0 11.	53	n::	1855	10.5 v-	(15 v	00003	87-02	87-04*	-	BD +14°2239
X Leo	9 51 1.51	+11 52 31.1	45	ug		12.4 v-	15.8 v	01X2 *	87-01	82-01	S83-12	66.1907
RZ Leo	11 37 22.30	+1 48 57.8	59	ugwz	1918	11.5 v-	19 v	00WV *	87-02	82-01	S92-01	30.1919
TU Leo	9 29 51.	+21 22 53.		non-cv					95-12*	-	-	SVS 167
AU Leo	11 30 14.	+23 48 9.		non-cv					00000*	-	-	S 8015
DO Leo	10 40 51.21	+15 11 33.7	57	nl		16.0 B-	17.0 B	026A	95-05	82-08	S90-02	PG 1038+155
DP Leo	11 17 16.00	+17 57 41.1	65	am		17.5 B-	19.5 B	01TO *	84-01	85-03	S85-08	1E 1114+182
Leo	9 37 19.	+15 13 15.	43	n::	1612	4 v		78-01*	87-02	87-04:	-	NSV 4550
Leo2	11 17 3.52	+18 25 58.5	67	cv		14.6 B		01TO	86-01	86-05	S94-07	PG 1114+187
Leo5	10 28 0.09	+21 48 13.5	57	nl		16.2 V		0259	90-10	90-03	S96-12	1H 1025+220
Leo7	9 38 36.98	+7 14 55.4	40	ug		13.0 B-	17 B	01G7 *	94-12	**99-99**	S93-10	PG 0935+075
Leo	10 15 30.	+9 4	50	am:		17 B		96-05	93-17	-	-	RX J1015.5+0904
Leo	9 28 45.	+23 11	44	UG/N:		18.5 p		67-01	00001*	-	-	NSV 4498
Leo1	11 6 40.	+1 54 51.		non-cv					94-09*	-	-	PG 1104+022
Leo3	11 31 14.	+9 32 18.		non-cv					94-09*	-	-	PG 1128+098
Leo4	11 49 1.	+22 31 4.		non-cv					94-12*	-	-	PG 1146+228
Leo6	11 22 13.10	+14 26 21.4	66	cv		16.1 B		01TO	86-01*	91-01	-	PG 1119+147
RU LMi	10 2 7.53	+33 51 0.1	53	ug		13.8 p-	19.5 p	01RS	87-03	87-06	S90-09	CBS-119/Ton 1143
RZ LMi	9 51 49.02	+34 7 24.6	51	ugsu		14.4 B-	16.8 B	01RS	95-10	82-08	S92-01	PG 0948+344
SS LMi	10 34 6.0	+31 7 59.	60	ug or n	1980	15. p-	(21 p	91-05	87-02	87-04:	-	
ST LMi	11 5 39.75	+25 6 28.9	66	am		15.1 V-	17.0 V	0256	84-01	82-09	S83-10	CW 1103+254
SX LMi	10 54 30.42	+30 6 10.2	64	ugsu		13 V-	17.4 V	037Y	95-18	84-02	S88-01	CBS-31
GW Lib	15 19 55.45	−25 0 25.3	27	ug	1983	9 p-	18.5 p	00GV	96-19	87-04	S87-09	
Lib3	14 50 38.66	−24 22 50.0	31	ux		14.5 p-	14.8 p	02C7 *	89-03	**99-99**	-	Preston 874124
Lib4	15 10 6.27	−1 55 21.9	46	ug:		10.0 p-	16 p	023F *	90-20	**99-99**	-	
Lib5	15 35 53.08	−14 13 12.3	33	ibwd		13.7 V		03YJ *	94-28	**99-99**	S94-17	EC 15330−1403
Lib1	15 2 12.	−2 45 59.		non-cv					94-12*	-	-	PG 1459−026
Lib2	15 23 19.	−5 11 43.		non-cv					94-12*	-	-	PG 1520−050
BR Lup	15 35 53.	−40 34 6.	12	ugsu		13.1 p-	17.5 p	06Q0	95-05	82-01	X87-11	HV 4889
HY Lup	14 31 50.20	−51 10 33.1	8	n	1993	8.0 V-	(17 j	93-02	93-07	-	X93-12:	
BH Lyn	8 22 36.00	+51 5 24.9	35	vy		13.7 B-	16.3 B	01HB	95-05	82-08	S91-03	PG 0818+513
BI Lyn	9 3 19.45	+39 51 1.1	42	NL		12.9 B -	13.1 B	021G	00000	**86-05**	-	PG 0900+401
BK Lyn	9 20 11.20	+33 56 42.0	45	nl/ug:		15.1 B		01RX	95-05/94-12	82-08	S92-01	PG 0917+342
Lyn1	9 3 8.87	+41 17 47.9	42	ux		14.2 B		021G	94-12	86-05	S94-12	PG 0859+415
Lyn2	9 34 23.	+40 38 10.	48	ug		15.7 f -	19 :V	01BS	79-01	**79-06***	-	KUV 09313+4052
Lyn	9 9 38.3	44 46 34.	43	cv/sn:		13.5 v		72-01	72-01	-	-	NSV 4394*
AY Lyr	18 44 26.73	+37 59 51.8	17	ugsu		12.5 B-	18.4 B	01WO	87-01	87-06	S87-05	330.1928
CY Lyr	18 52 41.41	+26 45 29.9	11	ug		13.2 p-	17.0 p	02UK	85-06	82-01	S85-07	237.1929
DM Lyr	18 58 44.5	+30 15 33.	11	ug		13.6 p-	18 p	050R	94-15	30-01	-	250.1929
HR Lyr	18 53 24.97	+29 13 37.3	12	na	1919	6.5 p-	15.8 p	00002	87-02	87-04	S83-12	HD 175268
IR Lyr	18 23 54.	+39 18 59.		non-cv					95-13*	-	-	S 4267
LL Lyr	18 35 12.91	+38 20 4.3	19	ug		12.8 p-	17.1 p	01WO	87-03	87-06	S92-06	S 3808
MV Lyr	197 16.30	+441 8.4	15	vy		12.2 B-	18.0 B	0517	95-05	54-01	S82-04	Mac +43°1
V344 Lyr	18 44 39.17	+43 22 27.5	19	ugsu		14.5 p-	(20 p	01JY	93-08	87-06	-	S 9329
V358 Lyr	18 59 34.	+42 24 10.	16	n:/ugwz	1965	16 p-	(20 p	00001*	86-06	86-10	-	S 9649
V363 Lyr	19 8 51.62	+43 0 31.6	15	ug		15.7 p-	18.6 p	0517	87-03	87-06	-	S 9653
V369 Lyr	19 11 55.	+32 12 7.	10	NA		15.2 p-	(20 p	00001*	00000	68-04	-	SVS 1512
V391 Lyr	18 21 11.97	+38 47 43.0	22	ugZ		14.0 p-	17.0 p	037J	87-03/00000	87-06	X92-06	S 10436
V394 Lyr	18 28 47.	+35 49 29.	19	UG:		16.0 p-	(17.0 p	037J	00000	90-06	S90-09	S 10439
V415 Lyr	19 8 3.88	+31 23 55.7	10	ug:		14.8 p-	(17.0 p	050R	87-03	87-06	S92-06	SVS 1640
V419 Lyr	19 10 13.91	+29 6 14.0	9	UGZ		14.4 p-	(17.5 p	050R	00000	70-04	-	SVS 1584
V447 Lyr	19 0 19.91	+44 27 45.0	17	UG:		17.2 p-	(18.5 p	0517 *	00000	72-02	-	GR 247

TABLE 1(a)
(Continued)

GCVS Name	Coordinates α (2000)	Coordinates δ (2000)	b	Type	Year of Outburst	Mag. Range Max Min	Coord Ref	Type Ref	Chart Ref	Spec Ref	Other Name
V452 Lyr	19 10 26.3	+43 28 55.	15	UG:		17.6 p- (18.5 p	0517	00000	72-02	-	GR 252
V492 Lyr	18 43 22.27	+40 40 11.5	19	UG		18.2 V	01JY *	00000	**79-05**	-	LHS 3406
V493 Lyr	19 1 31.48	+42 54 52.7	16	ug		13.2 p- (17.2 p	0517	93-04	**93-05**	-	S 10930
Lyr	18 53 10.	+35 47	15	N:	1923	13 p- (16 p	23-01	00001	57-08	-	NSV 11494
TU Men	4 41 40.71	−76 36 46.3	−33	ugsu		11.4 p- 17 p	00RF	87-01	82-01	S95-05	S 6732
AD Men	6 4 28.60	−71 25 15.6	−29	ugSS		15.0 p- 16.6 p	014D	95-08/00000	**67-07***	X95-07	HV 12703
Men1	6 11 44.07	−81 49 24.1	−28	nl/dq:		13.2 V- 14.7 V	00Q6	93-14/94-06	93-09*	S93-04	1H 0551−819
BT Mon	6 43 47.21	−2 1 13.7	−3	na	1939	8.5 p- 15.8 p	00002	87-02	87-04	S83-12	67.1939
CW Mon	6 36 54.53	+0 2 16.3	−3	ug		11.9 v- 16.3 v	02O8	87-01	82-01	S87-05	61.1936
EQ Mon	6 57 37.	−9 48 3.		non-cv				82-01*	-	-	
GI Mon	7 26 47.06	−6 40 29.3	5	na	1918	5.6 p- 18 p	00002	87-02	87-04	X18-01:	HD 58756
HQ Mon	7 11 33.67	+0 52 5.2	5	ux		12.8 p- 14.2 p	00TW	85-02	00-01	S94-07	93.1933
KQ Mon	7 31 21.09	−10 21 50.0	4	ux		12.1 p- 13.0 p	0445	89-03	57-02	S94-07	
KT Mon	6 25 18.46	+5 26 31.7	−3	na	1942	10.3 p- (21	00003	87-02	87-04:	X54-02:	
Mon	7 52 44.	−10 42 45.		non-cv				95-27*	-	-	NSV 3775
CG Mus	12 20 16.0	−74 13 1.	−11	UGZ		15.9 p- 17.0 p	00RJ	00000	**63-02***	-	S 6398
GQ Mus	11 52 2.35	−67 12 20.2	−5	na/am	1983	7.2 v- 22 :j	00002	87-02/94-13	87-04	S87-09:	
GU Mus	11 26 27.	−68 40 32.		non-cv	1991			94-36	-	-	GRS 1121−68
AB Nor	15 49 16.	−43 4 51.	8	ug:		13.9 p- (16.0 p	06AK *	82-01	82-01	-	HV 4908
HP Nor	16 20 50.	−54 53 22.	−3	ugz		12.8 v- 16.4 V	06AJ	82-01	82-01	S76-01:	HV 8865
IK Nor	16 25 29.	−55 20 1.	−4	ug		12.9 p- 16.3 p	06AJ	82-01	82-01	S76-01:	
IL Nor	15 29 23.1	−50 35 0.	5	nb	1893	7.0 p- 18 :j	0619 *	87-02	87-04	S87-09:	HD 137677/HV 25
IM Nor	15 39 26.20	−52 19 21.3	2	n:	1920	9.0 p- 22.0 j	00002	87-02	87-04:	-	HV 3532
KQ Nor	16 27 33.20	−59 19 56.7	−7	UG/M:		15.8 p- (16.8 p	06AH	00000	**63-02***	-	S 5752
LR Nor	16 33 53.64	−56 27 58.4	−5	UG		15.5 p- (17.0 p	06AJ *	00000	63-02	-	S 5796
V341 Nor	16 13 44.4	−53 19 8.	−2	n:	1983	9.4 v- (17 j	00003	87-02	87-04:	X83-17:	
V344 Nor	15 40 31.	−51 12 55.		non-cv	1985/1			87-02*	-	-	
V345 Nor	16 6 45.	−52 3 2.		non-cv	1985/2			87-02*	-	-	NSV 7429
AO Oct	21 5 8.23	−75 21 1.8	−34	ugwz:		13.5 p- 21 p	00RL *	91-05	82-01	-	S 7103
AY Oct	23 27 51.	−75 40 40.		non-cv				96-10*	-	-	S 6613
BE Oct	0 0 48.80	−77 18 57.1	−39	UGSU		15.4 p- (17.5 p	00OO	00000	63-02	-	S 6633
Oct	13 14 41.	−87 31 32.	−25	N:	1911	13.0 p- (15 p	67-02	00001	-	-	NSV 6101
RS Oph	17 50 13.08	−6 42 28.4	10	nra	1967	4.3 v- 12.5 v	00002	87-06	87-04	S83-12	BD −6°4661
TU Oph	16 26 39.	−22 18 59.		non-cv				82-01*	-	-	
BB Oph	17 24 30.02	−24 48 6.1	6	n:	1897	11.3 p- 19 j	00002	87-02	87-04	-	HV 3985
V380 Oph	17 50 13.66	+6 5 29.1	16	nl		14.5 v- (16.1 v	03RC	84-01	86-08	S83-09:	159.1929
V426 Oph	18 7 51.71	+5 51 48.5	12	ugz/dq:		11.6 B- 13.4 B	02V7	95-05/94-06	83-01	S83-12	29.1926/SVS 83
V442 Oph	17 32 15.11	−16 15 21.7	9	vy		12.6 v- 15.5 v	03YM	95-05	83-01	S83-07	SVS 337
V553 Oph	17 42 53.50	−24 51 26.2	3	na	1940	12.5 p- 22 j	00003*	87-02	87-04:	X41-01:	-
V699 Oph	16 25 14.76	−4 40 25.6	29	UG		13.8 p- 18.5 p	03UT	00000	**58-03***	-	HV 10577
V794 Oph	17 38 49.20	−22 50 49.2	4	nb	1939	11.7 p- 18 p	00002	87-02	87-04	X43-02*	
V810 Oph	17 40 49.	+7 2 35.		non-cv				00000*	-	-	HV 11017
V840 Oph	16 54 44.	−29 37 26.	9	na:	1917	6.5 p- 20 :j	00003	87-02	87-04:	-	HV 3522
V841 Oph	16 59 30.26	−12 53 26.8	18	nb	1848	4.2 v- 13.5 v	00002	87-02	87-04	S83-12	BD −12°4633
V849 Oph	18 14 7.17	+11 36 42.7	13	nb	1919	7.3 p- 17 p	00002	87-02	87-04	S96-14	HD 167276
V906 Oph	17 26 9.7	−21 54 28.	7	na	1952	8.4	94-07	87-02	87-04:	X54-01:	
V908 Oph	17 27 51.	−27 45	4	n	1954	11.5 p- (14 p	00003	87-02	87-04:	X87-08:	
V972 Oph	17 34 43.81	−28 10 35.8	2	nb	1957	8.0 p- 16.6 V	00002	87-02	87-04	S96-01	
V1012 Oph	17 41 34.38	−23 23 33.1	4	n	1961	13.8 p- 22 j	00002	87-02	87-04:	X87-08:	SVS 1308
V1063 Oph	17 30 53.	+10 17 0.	22	UG		15.5 p- (17.5 p	00001	00000	**67-01**	-	S 9807
V1195 Oph	17 0 22.	−20 53 30.	13	ug		16.3 p- (20.1 p	00003	87-10*	87-04:	-	
V1235 Oph	17 1 50.	−20 21 0.	13	n or uv	1959	17.0 p- (20.8 p	00003	87-02	87-04:	-	
V1326 Oph	17 5 2.	−18 59 34.	13	UG		17.9 p- (20.2 p	67-03	00000	-	-	
V1548 Oph	17 11 26.	−16 20 19.	13	n:	1959	13.7 p- (20	00003	87-02	87-04:	-	

TABLE 1(a)
(Continued)

GCVS Name	Coordinates α (2000)	δ	b	Type	Year of Outburst	Mag. Range Max Min	Coord Ref	Type Ref	Chart Ref	Spec Ref	Other Name
V2024 Oph	17 42 21.	−24 59	3	n	1967	11.0 v- (18	00003	87-02	87-04:	-	
V2051 Oph	17 8 19.09	−25 48 30.8	8	nl		13.0 v- 17.5 v	067P *	83-02	82-01	S83-12	
V2101 Oph	17 9 38.	−27 18 56.		non-cv				92-16*	-	-	BV 1694
V2104 Oph	18 3 25.10	+11 47 57.2	16	n	1976	8.8 v- 20.5 p	00002	87-02	87-04:	X76-04:	
V2109 Oph	17 24 15.93	−24 36 50.2	6	n	1969	10.8 r- 18 j	00002	87-02	87-04:	-	
V2110 Oph	17 43 33.21	−22 45 36.9	4	nb/z an	1950	12.0 p- 20 j	00002	87-02	87-04	S84-01	AS 239
V2214 Oph	17 12 1.58	−29 37 33.3	6	nb/am	1988	8.5 p- 20.5 j	88-02*	93-02	93-01	X93-05	
V2264 Oph	17 20 20.83	−26 46 26.3	6	na	1991/1	9.9 v- (21 p	91-06	91-09	-	X91-07	
V2290 Oph	17 43 5.5	−20 7 0.	5	na	1991/2	9.3 v- (19 j	91-09	91-11	-	-	
V2295 Oph	17 25 7.	−23 11 13.		non-cv	1993			94-26*	-	-	
V2301 Oph1	18 0 35.55	+8 10 12.6	15	dq:/am		16.4 v	02V7	94-05/94-22	94-07*	S94-05	1H 1752+081
Oph	16 13 30.82	−5 18 38.6	31	n:	1893	11.5 p- 21 :j	00003	87-02	87-04:	-	NSV 7542
Oph	17 37 38.19	−3 14 41.8	15	n	1938	15.6 p- 21 v	91-04	86-04	86-04	S90-06	M14 Nova 1938
Oph	17 35 44.61	−19 19 34.1	7	n	1994	6.5 p	94-02	94-11	-	X94-09:	
Oph2	17 22 5.	−19 49 12.	9	cv		19. V	00001	90-01	90-02	S90-08	1E 1719−1946
Oph3	17 12 36.45	−24 14 44.6	9	dq		14 V	067P	95-21	**95-05**	S95-13	RX J1712.6−2414
Oph4	18 4 17.3	+4 43 44.	13	ug		15.0 p- (21.0 b	96-04	96-18	**96-13**	-	Var 25
BI Ori	5 23 51.77	+1 0 30.2	−18	ug		13.2 p- 16.7 p	01O3	82-01	82-01	S87-05	1.1916
CN Ori	5 52 7.77	−5 25 0.7	−15	ugz		11.9 v- 16.3 v	02NB	87-01	82-01	S83-12	39.1906
CZ Ori	6 16 43.23	+15 24 11.7	0	ug		11.2 v- 15.6 v	00FJ	87-01	82-01	S83-12	144.1928
GR Ori	5 21 35.20	+1 10 8.6	−19	n:	1916	11.5 p- (21 p	00003	87-02	87-04:	-	2.1916
V344 Ori	6 15 18.9	+15 31 0.	0	ug:		14.2 p- 17.5:p	00FJ	82-01	82-01	S96-12	S 3966
V529 Ori	5 58 22.3	+20 15 26.	−2	n::	1667	6 v- 20.5:p	81-01	87-02	87-04:	-	
V650 Ori	5 31 8.28	+9 45 9.9	−12	UG:		15.5 p- (17.5 p	03QP	00000	67-02	-	S 9560
V1159 Ori	5 28 59.52	−3 33 52.8	−20	ugsu		12.5 p- 16.0 p	02N9	95-09	**92-05**	S92-05	NSV 2011
V1193 Ori	5 16 26.65	−0 12 14.2	−21	ux		14.0 v- 14.3 v	01O3	95-05	86-07	S87-12	Hamuy's star
Ori1	5 15 41.41	+1 4 40.4	−21	am		15.5 V- 16.1 V	01O3	95-03	**95-03**	S95-03	RX J051541+0104.6
Ori	5 1	−3	−26	am:		15 B	94-06	94-35	-	-	RX J0501−03
BD Pav	18 43 11.90	−57 30 44.2	−22	ug	1934	12.4 p- 15.1 V	03BQ	87-02	87-04	S96-01	HV 10031
DP Pav	18 26 20.	−64 57 38.		non-cv				96-01*	-	-	S 7111
GS Pav	20 8 7.57	−69 48 57.5	−32	cv		15.0 p- 18.0 V	01CB *	95-08	63-02	S95-06	S 7040
V344 Pav	19 16 9.6	−62 35 53.	−27	ug		14.5 p- 20 j	90-03	90-16	-	S90-11:	
V345 Pav	19 35 42.99	−59 8 21.8	−29	ux		13.5 V	05XR	95-05/92-02	**92-02**	S92-20	EC 19314−5915
Pav1	20 8 55.79	−65 27 42.6	−33	am		(18.0 j- 19.5 j	02MA	95-05	**93-07**	S93-01	V2008−6527
Pav2	18 44 48.33	−74 18 33.5	−26	am		15.0 V- 16.7 V	00RK	93-15	**93-08**	S93-09	RE 1844−74
Pav3	19 56 48.47	−60 34 26.3	−31	nl		(18.0 j- 19.0 j	05XR	94-14	**94-11**	S94-11	V1956−6034
Pav4	19 57 11.52	−57 38 22.2	−31	am		18 V	05XR	96-13	**96-09**	S96-10	RX J1957.1−5738
Pav	18 42 30.	−61 51 45.		non-cv				95-27*	-	-	NSV 11181/LTT 7406
RU Peg	22 14 2.58	+12 42 11.4	−35	ugSS		9.0 v- 13.2 v	02CY	87-01/00000	82-01	S83-12	142.1904
EF Peg	21 15 4.	+14 3 50.	−23	ugsu		10.7 p- (17 p	02V2*	95-05	79-04*	S94-16	143.1935
EZ Peg	23 16 53.	+25 43 10.		non-cv				85-03*	-	-	BD +24°4742
HX Peg	23 40 23.73	+12 37 41.7	−47	ug/vy		12.9 V- 16.6 V	00JG	94-24	76-01	S94-07	PG 2337+123
IP Peg	23 23 8.60	+18 24 59.4	−40	ug		12.0 B- 18.6 B	02BB	87-01	85-02	S88-06	SVS 2549
KQ Peg	22 42 27.	+19 32 20.		non-cv				94-12*	-	-	PG 2240+193
Peg1	0 11 33.30	+18 49 48.5	−43	cv		16.2 B	01G3	86-01	86-05	-	PG 0008+185
Peg2	21 51 57.93	+14 6 53.8	−30	dq:		13.0 v	02KW	92-08	00-01	S88-03	S 193
Peg4	23 59 58.30	+12 44 46.7	−48	cv		16.4 B	00GQ *	86-01	86-05	-	PG 2357+125
Peg5	23 20 44.28	+10 23 51.7	−47	cv:		16.6 V	00JE	88-01	84-06	S88-08	KUV 23182+1007
Peg6	21 36 19.14	+11 40 54.6	−29	ux		14.3 B	02KW	94-12	86-05	S84-10	PG 2133+115
Peg7	23 53 51.02	+23 9 19.5	−38	nr:		15 p- 16 p	02CZ	88-06	**81-08**	S88-07	FBS 2351+228
Peg3	23 3 21.	+16 49 39.		non-cv				94-09*	-	-	PG 2300+166
V Per	2 1 53.74	+56 44 4.1	−5	n	1887	9.2 p- 18.5 p	00002	87-02	87-04	S89-03	BD +56°406a
SZ Per	3 47 6.3	+34 19 18.	−16	n::	1853	9.5 v- (16.5 p	08-01*	87-02	87-04:	-	BD +33°715
TZ Per	2 13 50.99	+58 22 52.7	−3	ugz		12.3 v- 15.6 v	01MW	87-01	88-04	S94-07	28.1912

TABLE 1(a)
(Continued)

GCVS Name	Coordinates α (2000)	δ	b	Type	Year of Outburst	Mag. Range Max	Min	Coord Ref	Type Ref	Chart Ref	Spec Ref	Other Name
UV Per	2 10 8.25	+57 11 20.6	−4	ugsu		11.0 v-	17.5 v	01YD	95-05	87-06	S85-07	87.1911
UW Per	2 12 29.59	+57 5 19.7	−4	ug or n		13.5 p-	18.0:p	00002	87-02	87-04:	-	21.1912
FO Per	4 8 35.03	+51 14 48.8	0	ug		11.8 v-	16.2 p	036K	87-03	87-06	S89-06	22.1939
FY Per	4 41 56.58	+50 42 36.2	3	ux/ugz		12.3 B-	14.5 B	003O	89-03	64-02	S94-07	640.1936
GK Per	3 31 11.82	+43 54 16.8	−10	na/dq	1901	0.2 v-	13.0 V	00002	87-02/95-05	87-04	S83-12	BD +43°740a
KT Per	1 37 8.72	+50 57 20.0	−11	ugz		11.5 v-	15.4 V	01WM	87-01	83-01	S83-12	GR 91
MR Per	3 50 47.	+48 12 37.		non-cv					89-05*	-	-	S 8540
MY Per	4 9 11.25	+48 22 5.9	−2	UG		16 p-	(18 p	036K	00000	**66-01***	-	S 8548
NS Per	4 18 44.50	+51 7 30.7	1	ug		15 p-	(18 p	036K	87-03	87-06	S89-06	S 8554
PT Per	2 42 51.	+56 41 31.		non-cv					92-15*	-	-	S 9530
PU Per	2 42 16.14	+35 40 46.4	−22	ug		14.7 p-	20 :p	95-04	87-03	**95-12***	S78-03:	S 9727
PV Per	2 42 53.49	+38 4 3.5	−20	ug		14.9 p-	20 :p	036R	87-03	87-06	S96-12	S 9728
PY Per	2 50 0.	+37 39 22.	−20	cv/UGZ		13.8 p-	16.5 p	036R	94-09/00000	**96-02***	S94-07	S 9160
QY Per	3 15 36.8	+42 28 15.	−13	UG		14.2 p-	(20 p	02RZ	00000	**94-03***	-	S 9178
V336 Per	3 22 53.9	+41 37 2.	−13	UG		14.3 p-	(20 p	02RZ	00000	**91-02***	-	S 9180
V368 Per	2 47 32.7	+34 58 28.	−22	ugZ:		15.2 p-	(17.5 p	036R	87-03/00000	**87-06***	-	S 10510
V372 Per	2 56 40.	+37 8 23.	−19	ug		15.4 B-	(19.0 B	036R *	87-03	87-06	-	S 10153
V392 Per	4 43 21.38	+47 21 26.1	1	UGZ:		15 p-	17.5 p	003O	00000	**70-02***	-	S 10653
V400 Per	3 7 38.12	+47 7 38.9	−10	na	1974	7.8 p-	20 p	00002	87-02	87-04	X76-02	
Per1	4 49 54.13	+40 32 31.4	−3	UG:		11.3 p-	14.2 p	01YG	00001	**55-04**	-	NSV 1725
Per	3 19 6.76	+35 29 35.9	−18	n::	1853	9.5 v		00003	87-02	87-04:	-	BD +34°620
Per	2 29 37.09	+52 25 40.5	−8	N:	1873	8.9 v-	(14 v	AGK	00001	-	-	NSV 837
Per	2 42 10.	+43 20 53.	−15	ug/sn		11.7 p-	(20 p	53-01	00001	53-02*	-	NSV 895
UY Phe	1 23 11.	−42 18 34.		non-cv					86-08*	-	-	S 7154
Phe1	0 21 33.10	−51 42 34.2	−65	nl?/cv		14.3 p		03BW *	89-03/95-27	**69-05**	-	NSV 137/BPM 16078
RR Pic	6 35 36.05	−62 38 23.4	−26	nb	1925	1.0 v-	11.9 p	00002*	87-02	87-04	S77-03	He 3-15
TW Pic	5 34 50.67	−58 1 40.9	−33	dq		14.1 B-	15.6 B	0398	95-05	86-03	S86-04	H 0534−581
Pic1	5 31 35.57	−46 24 5.9	−33	am		17.0 V		02C6	94-27	**94-14***	S94-21	RX J0531.5−4624
Pic2	5 14 25.56	−52 53 52.0	−36	nl		(19.5 j-	20.5 j	061F	94-14	**94-11**	S94-11	V0514−5253
TY Psc	1 25 39.35	+32 23 9.7	−30	ugsu		12.2 v-	16.3 v	00DV	87-01	87-06	S85-07	
XY Psc	1 10 11.	+3 32 36.	−59	UG:		13.0 p-	(18.5 p	00001	00000	80-01	-	
AH Psc	1 21 32.6	+9 40 59.	−52	N:		9.5 v-	(14 v	38-01	00000	-	-	BD +8°215
AO Psc	22 55 17.97	−3 10 40.4	−53	dq		13.2 B-	15.3 B	00GY	88-03	83-01	S83-15	H 2252−035
AS Psc	1 28 9.	+31 15 3.	−31	ug	1963	16.6 p-	21.5:p	00001	89-08	87-04:	-	S 10828
AY Psc	1 36 55.44	+7 16 29.7	−54	ux		14.9 v-	16.6 v	026D	95-05	82-08	S93-02	PG 0134+070
Psc3	0 24 52.55	−1 53 35.3	−64	ug:		15 p		00WS	88-06	**88-05***	S88-07	FBS 0022−021
Psc1	0 53 40.	+17 9 44.		non-cv					94-12*	-	-	PG 0051+169
Psc2	23 17 48.	+7 22 46.		non-cv					94-12*	-	-	PG 2315+071
Psc	0 51 27.	+9 21 33.		non-cv					94-12*	-	-	PG 0048+091
Psc	0 34 48.	+10 18 0.		non-ex	1907				00001*	-	-	NSV 206
TY PsA	22 49 39.86	−27 6 54.2	−63	ugsu		12 :v-	16.5 v	04LN	87-01	82-02	S82-02	PS 74/NSV 14328
UY Pup	7 46 31.23	−12 57 9.4	6	ugz:		13.0 p-	16.8 p	00BA	82-01	82-01	S94-07	153.1929
VV Pup	8 15 6.73	−19 3 16.8	9	am		13.9 v-	18.0 v	01Z4 *	84-01	83-01	S83-12	1E 0812−1854
BV Pup	7 49 5.26	−23 34 0.7	1	ugSS		13.1 V-	16.7 V	001A	82-01/00000	82-01	S95-06	661.1935
BX Pup	7 54 15.58	−24 19 36.4	2	ugz		13.8 V-	18.0 V	001A	87-01	82-01	S95-06	
CL Pup	7 30 2.	−19 29 51.		non-cv					00000*	-	-	S 4069
CP Pup	8 11 45.96	−35 21 5.7	−1	na	1942	0.5 v-	15.0 v	00002	87-02	87-04	S82-15	He 3-130
DY Pup	8 13 48.40	−26 33 57.1	4	nb:	1902	7.0 p-	19.6 V	00002	87-02	87-04	S96-01	HV 3600
HS Pup	7 53 24.87	−31 38 50.9	−2	na:	1963	8.0 p-	20.5 p	00002	87-02	87-04	S95-06	BV 431
HZ Pup	8 3 22.80	−28 28 28.8	1	na	1963	7.7 p-	18.5 p	00002	87-02	87-04	S95-06	S 8438
V347 Pup2	6 10 33.55	−48 44 25.9	−27	nl/dq:		13.4 V-	15.8 V	01CH	95-05	90-04	S90-03	LB 1800
V348 Pup1	7 12 32.88	−36 5 39.7	−12	nl/dq:		15.4 V-	17.1 V	02CS	95-05/94-21	90-01	S90-01	1H 0709−360
V351 Pup	8 11 38.38	−35 7 30.4	−1	n	1991	6.4 p-	(20 r	94-08*	92-09	92-07:	X92-03:	
Pup	7 59 1.	−43 49 6.	−7	n::	1673	3 v-	20 :p	00003	87-02	87-04*	-	NSV 3846

TABLE 1(a)
(Continued)

GCVS Name	Coordinates α (2000)	δ	b	Type	Year of Outburst	Mag. Range Max Min	Coord Ref	Type Ref	Chart Ref	Spec Ref	Other Name
T Pyx	94 4 1.47	−32 22 47.0	−1	nrb	1902	6.5 v- 15.3 v	00002	87-06	87-04	S83-12	HV 3348
VZ Pyx1	8 59 19.89	−24 28 55.1	14	ugsu		11 V- 17 V	04NP	96-16	94-10*	S94-10	1H 0857−242
Pyx2	8 33 5.69	−22 48 31.8	10	am:/dq		17.7 V	05XX	90-01/95-27	90-02	S90-08	1E 0830.9−2238
TV Ret	4 35 40.80	−59 15 24.1	−40	ug:		16.6 B- 20.8 B	02IC	91-16	**91-10**	-	R1
Ret1	3 34 34.22	−64 0 56.3	−45	nl:		14.2 V	05Y5 *	94-33	**99-99**	S94-13	P831-57
V Sge	20 20 14.75	+21 6 9.0	−9	nl pec		8.6 v- 13.9 v	02UR	00000	83-01	S83-12	He 3-1879
RZ Sge	20 3 18.49	+17 2 52.6	−7	ugsu		12.2 B- 17.4 B	02UQ	87-01	82-01	S82-10	157.1905
SS Sge	19 39 8.	+16 42 40.		non-cv				87-02*	-	-	SVS 81
WY Sge	19 32 43.75	+17 44 54.5	−1	n	1783	5.4 B- 20.7 B	00002	87-02	87-04	S83-16	
WZ Sge	20 7 36.40	+17 42 15.4	−8	ugwz/dq		7.0 p- 15.0 p	02UQ *	87-02/94-06	82-01	S81-03	HV 3518
AW Sge	19 58 37.	+16 41 28.	−7	ug		13.8 p- (17.5 p	02UQ	82-01	82-01	-	151.1905
ET Sge	20 9 6.3	+17 43 38.	−8	UG:		16 p- (20 p	02UQ	00000	64-01	-	S 8361
GL Sge	20 7 9.	+18 51 39.	−7	UG		16 p- 20 p	02UQ	00000	67-01	-	S 9975
HS Sge	19 39 22.02	+18 7 53.9	−2	na	1977	7.0 p- 20.5 p	00002	87-02	87-04	X77-02:	
AT Sgr	18 3 30.87	−26 28 28.5	−2	na:	1900	11.0 p- 19 j	00002	87-02	87-04	-	HV 1149
BS Sgr	18 26 46.62	−27 8 20.0	−7	nb	1917	9.2 p- 17 j	00002	87-02	87-04	S87-09*	
FL Sgr	18 0 30.2	−34 36 13.1	−6	na:	1924/2	8.3 p- 20 :j	00003	87-02	87-04:	-	HV 4003
FM Sgr	18 17 18.1	−23 38 27.1	−3	na:	1926/2	8.6 p- 20.5:j	00003	87-02	87-04:	-	HV 3994
GM Sgr	18 19 22.	−25 24 25.		non-cv				90-18*	-	-	HV 4048
GR Sgr	18 22 58.42	−25 34 47.1	−6	n	1924/1	11.4 p- 16.6 p	00002	87-02	87-04	S96-14	HV 4012
HS Sgr	18 28 3.44	−21 34 24.7	−5	nb:	1900	11.5 p- 16.5 p	00002	87-02	87-04*	-	HV 4011
KW Sgr	17 52 1.	−28 1 21.		non-cv				00000*	-	-	HDE 316496
KY Sgr	18 1 20.9	−26 24 40.9	−2	na:	1926/1	10.6 p- 20 j	00003	87-02	87-04:	-	HV 4480
LQ Sgr	18 28 29.	−27 55 20.		non-cv	1897			94-17*	-	-	HV 4475
V363 Sgr	19 11 16.3	−29 50 0.	−17	na	1927	8.8 p- 20 j	00003	87-02	87-04:	X87-08:	
V441 Sgr	18 22 8.09	−25 28 53.7	−5	na	1930	8.7 p	00003	87-02	87-04:	X87-08:	HDE 315574
V522 Sgr	18 48 0.36	−25 22 22.5	−11	n:/ug	1931	12.9 p- 17.5 p	00002	87-02	87-04*	-	
V551 Sgr	18 0 56.27	−34 35 47.8	−6	ugwz:		13.5 p- 20 p	92-08	91-05	**82-01**	-	HV 7095
V630 Sgr	18 8 48.25	−34 20 21.4	−7	na	1936/4	1.6 p- 19 j	00002	87-02	87-04	X36-01:	HDE 321353
V726 Sgr	18 19 33.69	−26 53 19.6	−6	na	1936/2	10.8 p- 19 :j	00003	87-02	87-04:	X87-08:	HDE 315532
V732 Sgr	17 56 7.44	−27 22 17.0	−1	na	1936/1	6.5 p- (16.0 p	00003	87-02	87-04:	X37-01:	HDE 316633
V735 Sgr	17 59 52.	−29 34 1.		non-cv				83-05*	-	-	HV 9175
V737 Sgr	18 7 8.66	−28 44 52.3	−4	n:	1933	10.3 p- 19 :j	00003	87-02	87-04:	-	V908 Sgr
V759 Sgr	17 50 19.74	−27 25 2.5	0	ux/ug		13.6 p- 16.0 p	067R	89-03	**40-01***	-	HV 10285
V787 Sgr	18 0 2.2	−30 30 30.9	−3	na:	1937	9.8 p- 21 :j	00003	87-02	87-04:	-	HDE 316917
V908 Sgr	18 7 8.66	−28 44 52.3			1933				-	-	V737 Sgr
V909 Sgr	18 25 52.3	−35 1 26.9	−10	na	1941	6.8 p- 20 j	00003	87-02	87-04:	X87-08:	
V927 Sgr	18 7 42.7	−33 21 17.4	−6	na	1944	8.0 p- 20 :j	00003	87-02	87-04:	-	
V928 Sgr	18 18 59.3	−28 6 0.	−6	nb	1947/1	8.9 p- 20.5 j	00003*	87-02	87-04:	X47-01:	
V939 Sgr	18 34 23.	−26 54 32.		non-cv				87-02*	-	-	
V941 Sgr	18 34 43.	−29 34 44.		non-cv				87-02*	-	-	
V949 Sgr	18 41 4.	−28 9 28.	−10	n:	1914/1	15.7 p- (17 p	00003	87-02*	87-04:	-	Innes 46
V990 Sgr	17 57 19.	−28 19 7.	−2	na:	1936/3	11.1 p- (14.7 p	00003	87-02	87-04:	-	
V999 Sgr	18 0 5.59	−27 33 14.0	−2	nb	1910	8.0 p- 17.4 B	00002	87-02	87-04	S87-09*	HD 163982
V1012 Sgr	18 6 14.0	−31 44 26.9	−5	na:	1914/2	8.0 p- 20 j	00003	87-02	87-04:	-	HV 3531
V1014 Sgr	18 6 45.7	−27 26 15.3	−3	na:	1901	10.9 p- 20 j	00003	87-02	87-04:	-	HV 3312
V1015 Sgr	18 9 3.	−32 28 16.	−6	na:	1905	7.1 p- 21 :j	00003	87-02	87-04:	-	HV 3529
V1016 Sgr	18 19 57.55	−25 11 14.7	−5	na	1899	8.5 p- 17 p	00002	87-02	87-04	-	HV 3306
V1017 Sgr	18 32 5.	−29 23 12.		non-cv	1919			87-02*	-	-	HV 3519
V1059 Sgr	19 1 50.43	−13 9 42.5	−8	na	1898	4.9 p- 18.1 B	00002	87-02	87-04	S86-08	HD 176654
V1089 Sgr	19 8 48.	−17 21 37.		non-cv				96-01*	-	-	
V1148 Sgr	18 9 6.	−25 59 32.	−3	n	1943	8.0 p- (16 p	00003	87-02	87-04:	X49-02:	
V1149 Sgr	18 18 30.4	−28 17 17.	−6	nb	1945	7.4 p- 21 j	00003	87-02	87-04:	-	
V1150 Sgr	18 18 54.	−24 5 44.	−4	nb	1946	13.3 p- (22 :j	00003	87-02	87-04:	-	

TABLE 1(a)
(Continued)

GCVS Name	Coordinates α (2000)	Coordinates δ (2000)	b	Type	Year of Outburst	Mag. Range Max Min	Coord Ref	Type Ref	Chart Ref	Spec Ref	Other Name
V1151 Sgr	18 25 23.75	−20 11 59.3	−4	nb	1947/2	11.1 p- 20 j	00002	87-02	87-04	-	
V1172 Sgr	17 50 23.55	−20 40 30.3	3	n	1951/1	9.0 p- 18 j	00002	87-02	87-04:	-	
V1174 Sgr	18 1 37.	−28 44 26.	−3	n	1952/2	12.0 p- (18 p	00003	87-02	87-04:	-	
V1175 Sgr	18 14 17.	−31 7 8.	−6	n	1952/1	7.0 p- (12 p	00003	87-02	87-04*	X87-08:	
V1223 Sgr	18 55 2.24	−31 9 48.5	−14	dq		13.0 B- (16.8 B	068H	88-03	81-03	S81-08	3A 1851−312
V1274 Sgr	17 48 55.	−17 51 55.	5	n	1954/2	9.5 p- (13.0 p	00003	87-02	87-04:	X87-08:	
V1275 Sgr	17 59 6.21	−36 18 40.4	−6	na	1954/1	7.0 p- 18 :j	00002	87-02	87-04:	X55-01:	N Sco 1954
V1310 Sgr	18 35 1.03	−30 3 35.0	−10	nb:	1935	11.7 p- (15.5 p	060E	87-02	87-04*	-	
V1431 Sgr	18 3 29.6	−29 59 54.	−4	n:	1945	17.2 p- (19.2 p	067O	87-02	87-04*	-	
V1502 Sgr	18 4 23.	−30 6 47.		non-cv				00000*	-	-	
V1572 Sgr	18 5 37.	−31 37 43.	−5	n	1955	11 p- (16 p	00003	87-02	87-04:	-	
V1583 Sgr	18 15 26.3	−23 23 18.2	−3	na:	1928	8.9 p- 21 j	00003	87-02	87-04:	-	HV 12320
V1709 Sgr	18 42 50.	−19 47 48.		non-cv				00000*	-	-	HV 12404
V1830 Sgr	18 13 51.	−27 42 23.	−5	ug		11.5 p- 17.5 p	067O	84-02	**82-01***	-	
V1905 Sgr	18 33 42.1	−25 20 42.	−7	n:	1932	9.1 p- 19 j	067S *	87-02	87-04*	-	
V1944 Sgr	18 0 36.9	−27 17 13.	−2	n	1960	13 p	067R *	87-02	87-04:	X87-08:	SVS 1397
V1988 Sgr	18 27 57.	−27 37 24.		non-cv				00000*	-	-	ICR -30385
V2012 Sgr	18 37 12.	−26 10 22.		non-cv				00000*	-	-	
V2032 Sgr	18 43 47.	−27 34 1.		non-cv				00000*	-	-	
V2038 Sgr	18 45 20.	−26 27 48.		non-cv				96-01*	-	-	
V2276 Sgr	20 26 22.16	−43 40 31.9	−35	ug		14.3 p- (16.7 p	04FT	82-01	82-01	-	S 6738
V2323 Sgr	18 15 55.04	−27 57 8.2	−5	UG:		13.1 p- 16.5 p	060E	00000	67-04	-	
V2329 Sgr	18 16 25.	−27 52 58.		non-cv				00000*	-	-	
V2359 Sgr	18 31 35.	−32 25 52.	−10	UG:		16.4 p- (18.6 p	060E	00000	62-02*	-	NGC 6637-V7
V2383 Sgr	18 42 50.	−19 1 37.		non-cv				00000*	-	-	
V2415 Sgr	17 53 12.	−29 34 25.	−2	n	1951/2	13 p- (18 p	00003	87-02	87-04:	X87-08:	
V2435 Sgr	17 58 55.0	−29 0 37.	−3	UG:		16.1 p- 17.2 p	067O *	00000	68-02	-	
V2446 Sgr	17 59 23.	−29 2 16.		non-cv				87-02*	-	-	
V2468 Sgr	17 59 49.	−29 1 3.	−3	UG:		17.4 p- 18.2 p	067O	00000	68-02	-	
V2493 Sgr	18 0 41.	−29 0 13.		non-cv				96-01*	-	-	
V2506 Sgr	18 11 2.	−28 32 40.		non-cv	1946/2			87-02*	-	-	AS 282
V2572 Sgr	18 31 36.75	−32 35 57.7	−10	na:	1969	6.5 p- 18 j	00002	87-02	87-04:	-	BV 1262
V2839 Sgr	18 16 19.	−31 42 14.	−7	UG:		15.3 p- 17.2 p	71-01	00000	-	-	
V3462 Sgr	18 30 19.	−32 37 55.	−10	UG:		14.1 p- 18.0 p	71-01	00000	-	-	
V3608 Sgr	18 35 25.	−35 32 3.	−12	UG		15.6 p- 18.7 p	71-01	00000	-	-	
V3645 Sgr	18 35 49.21	−18 41 45.1	−5	nb	1970	12.6 p- 18 p	00003	87-02	87-04:	X87-08:	SVS 1728
V3774 Sgr	18 41 41.2	−32 54 35.	−13	UG		14.7 p- (19.0 p	94-05*	00000	**99-99**	-	
V3876 Sgr	18 33 13.	−20 5 50.		non-cv				87-02*	-	-	
V3885 Sgr	19 47 40.54	−42 0 25.5	−28	ugz/ux		9.6 v- 10.5 V	01CE *	84-01/95-05	CD	S85-01	CD −42°14462
V3888 Sgr	17 48 41.07	−18 45 37.0	5	n	1974	9.0 v- 16 j	00002*	87-02	87-04	X76-03:	
V3889 Sgr	17 58 21.32	−28 21 52.7	−2	na:	1975/1	8.4 v- 21 j	00002	87-02	87-04	-	
V3890 Sgr	18 30 43.32	−24 1 8.6	−6	nra	1962,1990	8.4 p- 17.2 p	067S	91-06	90-05*	S83-12	GS 1826−24
V3909 Sgr	18 14 22.	−27 51 6.		non-cv				96-01*	-	-	
V3914 Sgr	18 14 49.	−30 43 29.		non-cv				96-01*	-	-	
V3941 Sgr	18 25 58.25	−29 25 49.2	−8	UG:		11.5 p- (14 p	060E	00000	73-02*	-	
V3964 Sgr	17 49 42.34	−17 23 35.6	−5	na	1975/2	9.4 p- (17 p	00002	87-02	87-04	-	
V4019 Sgr	18 25 27.	−25 40 8.		non-cv				96-01*	-	-	
V4021 Sgr	18 38 14.26	−23 22 47.0	−8	na	1977	8.8 v- 18 j	00002	87-02	87-04*	X78-02:	
V4027 Sgr	18 2 29.21	−28 45 19.9	−3	n	1968	11.0 r- (21 j	00003	87-02	87-04:	X87-08:	
V4049 Sgr	18 20 38.06	−27 56 26.0	−6	n	1978	12 p- 21 j	00002	87-02	87-04	X81-11	
V4065 Sgr	18 19 34.	−24 43 41.	−4	n:	1980	9.0 v- (14.0 v	00003	87-02	87-04:	X80-03:	
V4074 Sgr	18 16 5.3	−30 51 15.	−7	nb/z an	1965	8.6 p	00003	87-02	87-04*	S75-02:	AS 295B
V4077 Sgr	18 34 39.41	−26 26 2.9	−8	nb	1982	8.0 v- 22 j	00002	87-02	87-04	X83-08:	
V4092 Sgr	17 53 41.99	−29 2 8.4	−2	n:	1984	10.5 v	00002	87-02	87-04	X84-09:	

TABLE 1(a)
(Continued)

GCVS Name	Coordinates α (2000)	δ	b	Type	Year of Outburst	Mag. Range Max Min	Coord Ref	Type Ref	Chart Ref	Spec Ref	Other Name
V4121 Sgr	18 7 54.77	−28 49 26.8	−4	n	1983	9.5 v- 21 j	00002	87-02	87-04	X87-08:	
V4135 Sgr	17 59 45.08	−32 16 20.8	−4	n	1987	10.0 v- 21.5 j	87-03	87-05	87-07	X87-17:	
V4140 Sgr	19 58 49.71	−38 56 12.3	−29	ugsu:		15.5 v- 18 V	01CE	95-05	87-02	S88-02	NSV 12615
V4157 Sgr	18 9 34.9	−25 51 58.2	−3	na	1992/1	7.0 p- (21 j	92-02	92-10	-	X92-04:	
V4160 Sgr	18 14 13.83	−32 12 28.5	−7	na	1991	7.0 v- (19 j	91-07	91-10	-	X91-09:	
V4169 Sgr	18 23 26.94	−28 21 59.7	−7	na	1992/2	7.8 p- (12.6 V	93-05	92-11	92-07	X92-12:	
V4171 Sgr	18 23 41.34	−22 59 28.7	−5	na	1992/3	8.0 p- 20.5 j	92-06	92-12	-	X92-16:	
V4327 Sgr	18 12 49.82	−29 29 4.9	−5	na	1993	7.7 v	93-03	93-09	-	X93-11:	
V4332 Sgr	18 50 37.	−21 23 30.		non-cv	1994/1			94-03*	-	-	
Sgr	18 5 12.	−29 54 23.	−4	n	1953	10.5	00003*	87-02	87-04:	X53-02:	NSV 10158
Sgr	17 54 43.	−28 41 41.	−2	n	1963	13	00003	87-02	87-04*	X63-01:	NSV 9828
Sgr	18 3 37.86	−28 0 8.5	−3	n	1986	10.4 p	87-05	87-09	-	-	
Sgr	18 7 30.	−22 4 58.	−1	n:	1989	10 v	89-04	89-02	-	-	
Sgr	17 59 18.17	−29 9 52.9	−3	ug:	1990	8.0 v	90-01	90-12	-	X90-07:	
Sgr	18 30 23.11	−17 11 56.9	−3	n	1994/2	10.8 p	94-01	94-10	-	X94-08:	
Sgr1	19 43 57.	−40 26	−26	n::			00003	87-02	87-04:	-	NSV 12329
Sgr2	18 31 23.5	−32 20 49.	−10	cv		12 V	060E *	86-09	**68-06**	S86-12:	NGC 6637 CV
Sgr3	19 55 46.85	−20 30 54.7	−23	nl?		14.7 p	04O8 *	89-03	**49-04**	-	NSV 12560/LTT 7873
Sgr	17 52 32.69	−17 41 7.7	4	nb pec		12.8 V- 21 j	96-01	96-08	96-15	X96-08	Sakurai's var.
Sgr	17 49 11.	−17 50 49.	5	sn:		10.5 p	54-01	54-01*	-	-	SN s1954α
Sgr	18 8 51.	−26 16 12.		non-cv	1985			85-05*	-	-	
Sgr	17 59 41.	−25 13 24.		non-cv	1994			94-34*	-	-	
Sgr	18 24 44.5	−24 50 25.		non-cv				85-04*	-	-	NGC 6626 V7
T Sco	16 17 2.83	−22 58 31.3	19	n:	1860	7 v- 22.2:B	95-01	87-02	95-01	-	
U Sco	16 22 30.68	−17 52 42.1	22	nrb	1863	8.8 v- 19.2 v	00002	87-06	87-04	S81-02	BD −17°4554
AC Sco	16 46 46.	−27 24 26.		non-cv				95-27*	-	-	HV 1095
AF Sco	16 50 26.	−25 33 38.		non-cv				95-19*	-	-	HV 1108
FQ Sco	17 8 4.44	−32 42 2.1	5	ugSS		12.0 B- 18.5 B	06Q3 *	82-01/00000	82-01	S82-03:	HV 4389
KP Sco	17 44 16.47	−35 43 23.6	−3	na:	1928	9.4 p- 21 :j	00002	87-02	87-04:	-	HV 4716
MM Sco	17 30 46.	−42 11 40.	−5	ug		13.0 B- 18.5 B	06AO *	82-01	82-01	-	HV 6553
V382 Sco	17 51 56.13	−35 25 5.4	−4	n:	1901	9.5 p- 22 j	00002	87-02	87-04	-	HV 7006
V384 Sco	18 1 43.15	−35 39 27.8	−6	n:	1893	12.3 p- 18.5 j	00002	87-02	87-04	-	HV 7104
V455 Sco	17 7 22.	−34 5 14.		non-cv				00000*	-	-	HV 7869
V478 Sco	17 25 58.47	−35 32 31.5	−0	ug		14.0 B- 16.7 B	06Q3	82-01	82-01	S96-01	HV 7898
V598 Sco	17 2 47.	−34 40 28.		non-cv				92-16*	-	-	HV 10836
V601 Sco	17 4 5.28	−36 43 34.1	3	ug:		15.0 p- (16.5 p	06Q3	82-01	82-01	-	HV 10840
V696 Sco	17 53 11.51	−35 50 15.4	−5	na	1944	7.5 p- 19.5 j	00002	87-02	87-04	-	
V697 Sco	17 51 21.83	−37 24 55.2	−5	na	1941	10.2 p- 17 j	00002	87-02	87-04	X87-08:	
V707 Sco	17 48 26.38	−36 37 54.9	−4	na	1922	9.9 p- 20 j	00002	87-02	87-04:	X87-08:	HV 3618
V711 Sco	17 54 6.	−34 21 16.	−4	n:	1906	9.7 p- 19 j	00003	87-02	87-04*	-	HV 3061
V719 Sco	17 45 43.71	−34 0 55.1	−3	na	1950/1	9.8 p- 20.5 j	00002	87-02	87-04	X51-02:	He 3-1473
V720 Sco	17 51 58.	−35 23 22.	−4	n	1950/2	7.5 p- 21	00003	87-02	87-04:	X51-03:	
V721 Sco	17 42 28.95	−34 40 41.9	−2	n	1950/3	10.1 p- (18.0 j	00002	87-02	87-04	X51-02:	
V722 Sco	17 48 37.	−34 57 50.	−4	na	1952/1	9.4 v- (13 v	00003	87-02	87-04:	-	
V723 Sco	17 50 5.2	−35 23 57.8	−4	na/nra:	1952/2	9.8 p- 19 :j	00003	87-02/92-07	87-04	-	
V728 Sco	17 39 12.3	−45 28 45.	−8	n::	1862	5.0 v- 20 :j	00003	87-02	87-04:	-	N Ara 1862
V729 Sco	17 22 2.66	−32 5 48.8	2	n or m	1936	14.0 p- 22 :j	00002	87-02	87-04:	-	
V733 Sco	17 39 42.88	−35 52 38.4	−3	n or m	1937	13.5 p- 21 :j	00002	87-02	87-04:	-	
V734 Sco	17 45 1.48	−35 37 55.9	−3	n or m	1937	14.7 p- 20 j	00002	87-02	87-04:	-	
V744 Sco	17 53 18.08	−31 13 35.1	−3	n:	1935	13.3 p- 21 p	00003	87-02	87-04:	-	
V745 Sco	17 55 22.1	−33 14 57.	−4	nra	1937,1989	11.2 p- 21 j	89-02	91-06	87-04:	X90-13	
V794 Sco	16 11 4.	−9 50 38.	29	UG:		16.0 p- 17.3 p	66-01*	00000*	-	-	
V825 Sco	17 49 53.65	−33 32 13.7	−3	n	1964	12 p- 19.0 j	00002	87-02	87-04	X65-01:	
V893 Sco	16 14 45.	−28 39 8.	16	UG:		10.6 p- 14.5 p	72-02*	00000	-	-	SVS 1772

TABLE 1(a)
(Continued)

GCVS Name	Coordinates α (2000)	Coordinates δ (2000)	b	Type	Year of Outburst	Mag. Range Max Min	Coord Ref	Type Ref	Chart Ref	Spec Ref	Other Name
V902 Sco	17 26 8.3	−39 4 5.0	−2	nb	1949	11 p- 20.0 j	00003	87-02	87-04:	X51-01:	He 3-1401
V916 Sco	17 43 55.	−36 3 27.		non-cv	1967			87-02*	-	-	
V960 Sco	17 56 34.14	−31 49 36.3	−4	n	1985	10.5 v- 20 j	00002	87-02	87-04	X86-11	
V977 Sco	17 51 50.25	−32 31 58.0	−3	n	1989	9.4 r- 21 j	89-03*	91-06	90-09:	X91-04	
V992 Sco	17 7 17.39	−43 15 22.5	−2	na	1992	8.3 p- 18 :j	92-07	92-13	95-13*	X92-14	
Sco	17 47 13.	−33 11 28.	−3	n	1952	11 p- 21 :j	52-01	87-02	87-04:	-	NSV 9663
Sco	17 53 40.	−30 45 32.	−2	n	1954	13.8 p	00003	87-02	87-04:	-	NSV 9808
Sco1	16 28 8.7	−38 48 44.	7	cv:		16.8 B -)19.6 B	061B	91-13	**91-11**	-	NGC 6139 V4
Sco	17 54 11.	−30 48 51.		non-ex	1990			90-22*	-	-	
VY Scl	23 29 0.45	−29 46 46.0	−72	vy		12.9 v- 18.5 v	04JJ	95-05	59-01	S87-05	GD 1662/PHL 538
VZ Scl	23 50 9.19	−26 22 52.9	−74	vy		15.6 v- 18.4 v	04LQ	95-05	58-01	S87-13	Ton S 120
Scl2	0 59 28.68	−26 31 0.9	−88	nl		16 p	02J4 *	89-03	**72-03**	-	LTT 560/G 269-70
Scl1	23 18 34.	−29 58 9.		non-cv				95-08*	-	-	GD 1555
EU Sct	18 56 13.00	−4 12 32.7	−3	na	1949	8.4 p- 18 p	00002	87-02	87-04	X50-01:	
FS Sct	18 58 16.83	−5 24 5.0	−4	na:	1952	10.1 p- 18 p	00002	87-02	87-04*	-	
FV Sct	18 34 51.55	−12 55 26.8	−2	n	1960	12.5 p- 20 p	00002	87-02	87-04	S96-14	SVS 1306
GL Sct	18 45 48.38	−6 25 14.7	−2	n:	1915	13.6 p- (16.8 p	00002*	87-02	87-04	-	
V366 Sct	18 29 42.8	−12 18 55.	−1	n	1961	15.4 v- (23 j	00003	87-02	87-04:	-	
V368 Sct	18 45 43.53	−8 33 0.9	−3	na	1970	6.9 v- 19.0 p	00002	87-02	87-04	X74-01:	
V373 Sct	18 55 26.71	−7 43 5.5	−4	na	1975	7.1 v- 18.5 p	00002	87-02	87-04	S96-14	
V391 Sct	18 28 7.	−15 54 49.	−2	UG:		13.5 I- 17.0 I	75-01	00000	-	-	
V427 Sct	18 43 0.	−4 28 20.		non-cv	1958			87-02*	-	-	CSV 7917
V443 Sct	18 49 38.95	−6 11 15.9	−2	n	1989	8.5 p- (20 p	89-01*	91-06	90-09:	X91-04	
V444 Sct	18 47 9.91	−8 20 53.6	−3	na	1991	10.5 v- 20 r	91-08	91-12	-	-	
Sct	18 46 51.1	−4 56 38.	−1	n::	1981	8 - (22 :	00003	87-02	87-04:	-	
Sct	18 28 11.	−13 44 33.	−1	n:		14.4 I- (16.0 I	75-01	93-01	93-10	-	NSV 10848
Sct	18 56 35.	−8 35 30.		non-cv	1938			96-01*	-	-	NSV 11561
X Ser	16 19 17.57	−2 29 29.2	31	nb:	1903	8.9 p- 18.3 p	00002	87-02	87-04	S83-12	HV 3137
RT Ser	17 39 52.	−11 56 39.		non-cv	1909			87-02*	-	-	He 3-1452
RY Ser	17 23 7.54	−12 47 44.0	13	UG		14.1 B- 18.0 B	03YM	00000	**71-03***	-	Ross 19
UZ Ser	18 11 24.90	−14 55 33.9	2	ugSS		11.9 v- 16.0 v	067F	87-01/00000	82-01	S82-03:	56.1924
AG Ser	18 33 52.	+3 42 49.		non-cv				82-01*	-	-	Ross 48
CT Ser	15 45 38.97	+14 22 32.7	48	n	1948	7.9 v- 16.6 p	00002	87-02	87-04	S92-01	
DZ Ser	18 0 58.86	−10 33 52.1	6	n	1960	14.0 p- 21 p	00002	87-02	87-04	X61-01:	
FH Ser	18 30 46.92	+2 36 51.5	6	na	1970	4.5 v- 16.2 p	00002	87-02	87-04	S83-12	
LW Ser	17 51 50.89	−14 43 50.6	6	na	1978	8.3 v- 21 p	00002	87-02	87-04	X87-07	
LX Ser	15 38 0.12	+18 52 3.2	51	vy		13.3 B- 17.4 B	00GM	95-05	79-02	S81-04	Stepanian's star
MR Ser	15 52 47.23	+18 56 27.6	48	am		15.0 V- 17 V	00GM	84-01	82-03	S82-08	PG 1550+191
MU Ser	17 55 52.78	−14 117.1	6	na	1983	7.7 v- (21 p	00002	87-02	87-04:	X85-03	
NN Ser	15 52 56.	+12 54 45.		non-cv				89-06*	-	-	PG 1550+131
Ser	15 18 14.	+2 5 34.	47	ug		17.5 p- 20.9 V	00001*	81-01	81-01	S81-07	M5 V101
Ser1	15 13 2.30	+23 15 7.9	58	ug:		14.8 V- 17.9 V	027J	94-12	86-05	S93-10	PG/NSV 6990
Ser2	15 24 27.	+12 2 7.		non-cv				94-12*	-	-	PG 1522+122
RW Sex	10 19 56.62	−8 41 56.0	39	ux		10.4 V- 10.8 V	0185 *	87-01	BD	S94-07	BD −7°3007
SW Sex	10 15 9.38	−3 8 33.5	42	ux		14.8 B- 16.7 B	03W1	95-05	82-08	S84-04	PG 1012−029
Sex1	9 49 40.	+3 24 25.		non-cv				96-01*	-	-	PG 0947+036
XX Tau	5 19 24.43	+16 43 0.7	−12	na	1927	5.9 p- 18.5 p	00002	87-02	87-04	X28-02:	100.1927
HW Tau	5 3 38.49	+26 24 4.0	−9	UGSS		11.5 p- (17 p	005N	00000	**46-01**	-	SVS 1023
OV Tau	3 46 6.27	+29 41 14.8	−19	nl		15.5 p- 16.5 p	0050	89-03	82-01	S94-07	S 10158
V421 Tau	5 48 22.90	+22 42 2.0	−3	ug		14.5 p- 20 p	000M	87-03	87-06	-	S 10491
V701 Tau	3 44 1.9	+21 57 8.4	−26	ugsu		15.0 p- (21 p	95-09	95-31	**95-04***	-	SVS 1972
V1062 Tau1	5 2 27.50	+24 45 22.7	−10	dq		16 V	005N	94-06	94-10*	S94-10	1H 0459+246
Tau2	4 0 37.25	+6 22 46.2	−33	cv		15.5 V	002N	93-11	**84-06**	S93-03	KUV 03580+0614
Tau3	4 59 44.03	+19 26 22.9	−14	ug		18 V	00FI	96-12	**96-08**	S96-09	RX J0459.7+1926

TABLE 1(a)
(Continued)

GCVS Name	Coordinates α (2000)	δ	b	Type	Year of Outburst	Mag, Range Max Min	Coord Ref	Type Ref	Chart Ref	Spec Ref	Other Name
Tau4	5 2 50.85	+16 24 22.8	−15	cv		17.1 V	00FI	96-12	**96-08**	S96-09	RX J0502.8+1624
RR Tel	20 4 19.	−55 43 33.		non-cv				87-02*	-	-	HV 3181
WW Tel	18 23 57.	−54 59 47.		non-cv				96-01*	-	-	HV 9884
YY Tel	18 33 56.32	−53 58 50.0	−19	ugwz:		14.4 p- 19.3 V	03BQ	91-05	82-01	S96-01	HV 9962
AK Tel	18 43 49.	−55 0 23.		non-cv				82-01*	-	-	HV 10036
KK Tel	20 28 38.46	−52 18 45.6	−36	ug		13.5 B- 20.8:V	02EA	82-01	82-01	S95-06	S 6888
QS Tel	19 38 35.73	−46 12 56.5	−27	am		16 V- 17.3 V	04FS	95-05	**93-02**	S93-06	RE 1938−461
RW Tri	2 25 36.14	+28 5 51.4	−30	ux		12.5 V- 15.6 V	01H7	95-05	83-01	S83-12	5.1938
TU Tri	1 39 15.34	+31 24 19.4	−30	ug		14.8 p- (18.0 p	037O	91-03	91-08	-	GR 287
TW Tri	1 36 37.01	+32 0 39.8	−30	cv/UGZ		13.3 p- 17.0 p	00DV	94-09/00000	78-05	S94-07	GR 292/SVS 2288
TX Tri	1 37 37.24	+30 2 48.9	−32	UGSS		14.5 B- 18.2 B	00DV	00000	81-06	-	SVS 2289
UW Tri	2 45 17.2	+33 31 25.5	−24	n:/nr:	1983,1995	15 p- (21 p	00003	87-02	87-04:	-	
UZ Tri	1 58 24.7	+33 31 30.	−27	N:	1980	)14.2 p- 21.0:p	037O	00000	**86-09***	-	S 10911
WY Tri	2 25 0.47	+32 59 55.8	−26	UG		13.8 p- (17.0 p	01H7	00000	86-09	-	S 10919
Tri	2 3	+29	−30	am:		17 B	93-04	93-17	-	-	RX J0203+29
EK TrA	15 14 1.47	−65 5 31.3	−6	ugsu		10.4 v- 16.6:v	007I *	87-01	82-01	X85-04	S 5005
FL TrA	16 30 36.5	−61 50 28.	−9	UG		15.5 p- (17.0 p	06AH *	00000	63-02	-	S 5770
TrA1	15 21 26.9	−68 38 27.	−10	nl		17.5 V	04C2 *	90-09	90-02	S90-08	1E 1516.6−6827
VW Tuc	0 20 19.08	−73 52 7.9	−43	UG:		15.4 p- (16.5 p	0024	00000	**91-02***	-	HV 6327
VZ Tuc	0 34 1.	−73 15 35.	−44	NA	1927	11.4 p- (18 p	06B1	00000	**91-03***	-	HV 6334
BE Tuc	1 16 58.	−73 43 10.		non-cv				82-01*	-	-	HV 2205
Tuc1	0 24 4.43	−72 4 58.4	−45	dq:		20.8 B	92-05*	95-05	92-06	-	NGC 104-CV1
Tuc2	23 15 19.10	−59 10 28.3	−54	am		17.1 V	04UI	95-26	**99-99***	S95-15:	AX J2315-592
Tuc	0 24 6.19	−72 4 56.6	−45	ug		15.4 f - 19.7 f	92-05*	94-07	94-08	X94-06	NGC 104-CV2
Tuc	0 24 10.15	−72 4 52.4	−45	cv:		17.6 V	96-03	96-15	-	-	Edmonds V5
Tuc	0 24 5.41	−72 4 51.8	−45	cv:		19.9 U	96-03	96-15	-	-	Edmonds V7
SU UMa	8 12 28.20	+62 36 22.6	33	ugsu		10.8 v- 15.0 V	02RJ	87-01	87-06	S87-05	PG 0808+627
SW UMa	8 36 42.80	+53 28 38.2	37	ugsu/dq		10.6 v- 16.5 v	01HB	87-01/94-06	83-01	S83-12	44.1909
UX UMa	13 36 40.97	+51 54 50.3	64	ux		12.6 V- 14.2 V	00XN	87-01	83-01	S83-12	SVS 365
AN UMa	11 4 25.71	+45 3 15.0	62	am		13.8 B- 20.2 B	01R5	84-01	83-01	S83-12	PG 1101+453
AR UMa	11 15 44.68	+42 58 22.5	65	am		13 V- 16.5 V	01QX	95-05	**94-01**	S94-01	1ES 1113+432
BC UMa	11 52 15.88	+49 14 42.0	65	ug		10.9 B- 18.3 B	024C	95-05	85-04	S90-09	GR 102
BZ UMa	8 53 44.14	+57 48 41.1	39	ugsu		10.5 v- 17.8 v	01OI	94-18	87-06	S89-06	PG 0849+580
CE UMa	11 16 11.	+29 21 37.	69	UG:		15.5 p- (21 p	00004	00000	-	-	
CH UMa	10 7 0.57	+67 32 46.5	43	ug		10.7 v- 15.9 v	02RH	87-03	87-06	S87-05	PG 1003+678
CI UMa	10 18 13.01	+71 55 42.8	41	ug		13.8 p- 18.8 V	00M9	87-03	87-06	S89-06	SVS 1755
CY UMa	10 56 57.05	+49 41 18.7	59	ugsu		11.9 v- 17.0 v	01R5	95-05	77-02	S92-01	SVS 2198
DI UMa	9 12 16.16	+50 53 54.7	43	ug		15 p- 17.7 p	021E	90-14	59-02	S92-01	NSV 4407
DR UMa	13 59 5.4	+55 44 4.	59	UG/NL		17.5 B- (18.2 B	003A	00000	**79-03***	-	GR 296
DV UMa	9 46 36.67	+44 46 45.1	49	ug/su:		15.4 v- 20.6 v	00T8 *	95-05	82-10	S90-09	US 943
DW UMa	10 33 52.95	+58 46 54.9	50	ux/vy		14.9 v- 16.4 v	01S0	95-05/94-12	82-08	S88-07	PG 1030+590
EG UMa	12 15 44.	+52 31 3.		non-cv				94-09*	-	-	CASE 1
EI UMa	8 38 21.98	+48 38 1.7	37	ug		13.4 p- 14.9 p	036M	95-05	82-08	S86-05	PG 0834+488
EK UMa	10 51 35.23	+54 4 36.0	55	am		18.0 v- 20.0 v	01AM *	95-05	87-03	S87-01	1E 1048.5+5421
EL UMa	10 55 7.0	+36 59 47.	64	ug:		14 p- 19 p	01R8	88-04	88-01	S88-01	CBS-132
ER UMa1	9 47 11.83	+51 54 9.0	48	ugsu		12.4 V- 15.2 V	0009	95-06	86-05	S94-07	PG 0943+521
EU UMa	11 49 55.70	+28 45 7.5	76	am		16.5 B- 16.9 B	01TE	95-05	**92-04**	S92-19	RE 1149+28
EV UMa	13 7 53.85	+53 51 30.0	63	am		17.1 V- 20.8 V	94-04	94-23	**94-15**	S94-19	RX J1307+53
UMa5	10 48 17.98	+52 18 30.0	56	ug		16.5 B	01AM	90-14	91-03	S88-01	CW 1045+525
UMa6	9 32 14.92	+49 50 54.0	46	nl		16.3 V	00T8	90-10	90-03	S96-12	1H 0928+500
UMa7	10 4 34.69	+66 29 14.6	43	nl:		15.4 B	02RH	94-12	**86-05**	S93-10	PG 1000+667
UMa8	10 23 20.18	+44 5 9.2	56	nl/ug?		14.5 p- 16.5 p	00XW	89-03	**55-03***	-	NSV 4838
UMa9	10 47 9.9	+63 35 14.	48	am		19.4:V	01G1	95-16	**95-07**	S95-10	WGA 1047.1+6335
UMa2	10 5 29.	+50 20 40.		non-cv				94-12*	-	-	PG 1002+506

TABLE 1(a)
(Continued)

GCVS Name	Coordinates α (2000)	Coordinates δ (2000)	b	Type	Year of Outburst	Mag. Range Max	Mag. Range Min	Coord Ref	Type Ref	Chart Ref	Spec Ref	Other Name
UMa3	11 19 31.	+34 40 14.		non-cv					94-09*	-	-	PG 1116+349
UMa4	11 38 36.	+57 52 27.		non-cv					94-09*	-	-	PG 1136+581
RW UMi	16 47 54.75	+77 2 12.2	33	nb/ug	1956	6 p-	21 p	034H *	87-02/94-02	87-04	S92-01	SVS 1359
SS UMi	15 51 22.24	+71 45 11.9	39	ugsu		12.6 v-	16.9 v	01L6	95-05	82-07	S82-05	PG 1551+719
UMi1	16 14 23.19	+70 58 18.6	38	cv:		16.4 v		01L6 *	94-32	**99-99**	-	FBS 1614+711
UMi	16 29 24.	+86 26 3.	29	UG:		9 :v-	11.5:v	00005	00001	-	-	NSV 7956
BB Vel	8 36 49.	−47 22 39.	−4	ug		13.8 v-	17.9 V	01FB	84-02	82-01*	S95-06	
CN Vel	11 2 38.5	−54 23 9.	5	nb	1905	10.2 p-	17.8 V	0614	87-02	96-01*	S96-01	HD 95821
CQ Vel	8 58 50.99	−53 20 17.8	−5	na:	1940	9.0 p-	21 j	00002	87-02	87-04:	-	
CU Vel	8 58 32.87	−41 47 50.8	3	ugsu		10.7 v-	18.2 V	014C	87-01	82-01	S95-06	HV 8171
IX Vel	8 15 18.90	−49 13 18.3	−8	ux		9.1 v-	10.0 v	03DQ *	87-01	CPD	S83-01	CPD −48°1577
KO Vel	10 15 58.35	−47 58 10.8	7	dq::		16.7 v-	17.7 v	04UJ	94-06	83-04	S83-06	1E 1013−477
TW Vir	11 45 21.13	−4 26 5.9	55	ug		12.1 v-	16.3 v	02ND	87-01	82-01	S83-12	PG 1142−041
HS Vir	13 43 38.45	−8 14 3.1	52	ug		13.0 B-	15.8 B	044B	95-05	82-08	S89-06	PG 1341−079
HV Vir	13 21 3.10	+1 53 28.2	64	ugwz	1929,1992	11 p-	19 p	92-04	92-14	87-04:	X92-08:	NSV 6201
Vir4	14 35 0.14	−0 46 7.0	53	cv		18.5 j		00WN *	92-05	**99-99**	S92-13	1432−0033
Vir5	12 43 26.05	+2 55 50.6	66	ug		17.5 V		092W	83-09	**83-08**	S83-18	1E 1240.8+0312
Vir6	12 25 34.43	+12 53 58.4	75	nl		14 p -	16 p	00IY *	80-02	**99-99**	-	
Vir1	11 59 52.	+0 7 51.		non-cv					94-12*	-	-	PG 1157+004
Vir2	13 16 38.	+3 48 18.		non-cv					94-12*	-	-	PG 1314+041
Vir3	14 6 2.	−11 18 33.		non-cv					94-09*	-	-	PG 1403−111
Vir	11 59 22.	−4 1 26.		non-cv					94-12*	-	-	PG 1156−037
Vir	12 19 58.	−6 59 33.		non-cv					94-12*	-	-	PG 1217−067
Vir	13 0 26.	+0 45 29.		non-cv					94-12*	-	-	PG 1257+010
Vir	13 17 39.	−12 32 52.		non-cv					94-12*	-	-	PG 1315−123
RX Vol	8 39 32.30	−66 17 39.2	−15	UGSU:		16 p-	(18 p	04CD	00000	63-02	-	S 6185
SY Vol	8 53 28.85	−71 12 29.7	−17	UG:		15.5 p-	(17.5 p	04C1	00000	63-02	-	S 6203
SW Vul	20 0 5.3	+22 56 6.	−4	ug		14.5 p-	18.5 p	00FF*	82-01	82-01	X92-06	29.1923
TY Vul	20 41 44.	+25 35 11.	10	UG		14 p-	19 :p	00001	00000	30-02	-	38.1923
UY Vul	20 55 53.	+26 40 51.		non-cv					90-07*	-	-	
UZ Vul	20 56 46.	+23 34 36.		non-cv					90-07*	-	-	
VW Vul	20 57 45.08	+25 30 26.0	−13	ugsu		13.1 B-	16.3 B	03OD	87-07	82-01	S85-07	153.1904
CK Vul	19 47 38.0	+27 18 48.	1	nb	1670	2.6 v-	20.7:v	82-01	82-02	82-04	S82-09:	BD +26°3670a
DO Vul	19 52 11.0	+19 34 42.	−4	UG		14.0 p-	(17.4 p	06SJ	00000	73-03	-	25.1928
FY Vul	19 41 39.91	+21 46 0.0	−1	ugz		13.4 B-	15.3 B	02UM	82-01	82-01	S95-18	122.1940
IL Vul	20 38 33.0	+22 42 17.	−11	ug		15 p-	20 :p	02UN	87-03	**87-06***	-	S 9068
LU Vul	19 45 35.27	+28 35 29.1	2	na	1968/2	9.5 p-	(21 p	00003	87-02	87-04:	X69-01:	
LV Vul	19 48 0.52	+27 10 19.3	1	na	1968/1	5.2 v-	16.9 p	00002	87-02	87-04	S96-14	
NQ Vul	19 29 14.59	+20 27 59.6	1	na	1976	6.0 v-	18.5 p	00002	87-02	87-04	S96-14	
PU Vul	20 21 13.	+21 34 18.		non-cv	1979				87-02*	-	-	Kuwano's NL
PW Vul	19 26 5.	+27 21 58.	5	na	1984/1	6.4 v-	17 :v	000J	87-02	96-06*	S96-14	
QQ Vul	20 5 41.93	+22 39 59.1	−5	am		14.5 B-	15.5 B	00FF	84-01	84-01	S84-05	1E 2003+225
QU Vul	20 26 45.94	+27 50 42.2	−6	na	1984/2	5.6 v-	19 p	00002	87-02	87-04	X95-09	
QV Vul	19 4 40.3	+21 46 14.	7	na	1987	7.0 v-	19 v	87-01	87-12	-	X94-14	
V362 Vul	20 2 49.	+22 28 26.		non-cv					90-19*	-	-	E2000+223
V374 Vul	20 26 8.78	+28 9 39.0	−6	n/nl:	1987	12.8 v-	(15.0 v	0382	93-03	**93-03**	-	LD 171
Vul	19 14 25.7	+24 56 40.2	6	cv:		(19.7 V		96-02	96-12	96-08	-	RX J1914+2456
Vul	20 20 37.	+20 11	−9	nl?		10.5 p-	11.5 p	53-02	89-03	-	-	NSV 13022

Notes to TABLE 1

[a]Note–Table 1a will be included in its entirety in Vol. 8 of the AAS CD-ROM Series.

TABLE 1(b)
Cataclysmic Variables (Right Ascension Order)[a]

GCVS Name	Coordinates α (2000)	δ	b	Type	Year of Outburst	Mag. Range Max Min	Coord Ref	Type Ref	Chart Ref	Spec Ref	Other Name
V890 Aql				non-ex	1946			87-02*	-	-	
BE Oct	0 0 48.80	−77 18 57.1	−39	UGSU		15.4 p- (17.5 p	00OO	00000	63-02	-	S 6633
FI Cas	0 6 10.07	+55 58 51.1	−6	ugSS		15.0 p- 18.5:p	02RM	87-03/00000	87-06	-	230.1940
WW Cet	0 11 24.77	−11 28 42.7	−71	ugz:		9.3 v- 15.7 v	04MU	87-01	82-01	S83-12	HV 8002/PHL 718
Peg1	0 11 33.30	+18 49 48.5	−43	cv		16.2 B	01G3	86-01	86-05	-	PG 0008+185
DK Cas	0 18 8.	+57 26 6.	−5	UGSS		15.3 p- 19.5:p	02RM *	00000	91-02	-	244.1940
V513 Cas	0 18 14.90	+66 18 13.7	3	ugZ:		15.5 p- (17.2 p	01YC	87-03/00000	87-06*	-	
HP And	0 19 9.2	+41 27 42.	−21	UG:		10.5 p- (14.5 p	02RX *	00000	26-01	-	SVS 71
VW Tuc	0 20 19.08	−73 52 7.9	−43	UG:		15.4 p- (16.5 p	0024	00000	**91-02***	-	HV 6327
V592 Cas	0 20 52.24	+55 42 16.6	−6	ux		12.8 V	02RM	89-03	00-01	S94-07	LS I +55°08
Phe1	0 21 33.10	−51 42 34.2	−65	nl?/cv		14.3 p	03BW *	89-03/95-27	**69-05**	-	NSV 137/BPM 16078
V410 Cas	0 23 27.65	+61 46 28.8	0	NL/z an		15.5 p- 18 p	01MT	00000/92-04	67-01*	-	S 10141
Tuc1	0 24 4.43	−72 4 58.4	−45	dq:		20.8 B	92-05*	95-05	92-06	-	NGC 104-CV1
Tuc	0 24 5.41	−72 4 51.8	−45	cv:		19.9 U	96-03	96-15	-	-	Edmonds V7
Tuc	0 24 6.19	−72 4 56.6	−45	ug		15.4 f - 19.7 f	92-05*	94-07	94-08	X94-06	NGC 104-CV2
Tuc	0 24 10.15	−72 4 52.4	−45	cv:		17.6 V	96-03	96-15	-	-	Edmonds V5
Psc3	0 24 52.55	−1 53 35.3	−64	ug:		15 p	00WS	88-06	**88-05***	S88-07	FBS 0022−021
Cas2	0 28 48.87	+59 17 21.8	−3	dq		14.4 V	01MT	96-12	**96-08**	S96-09	RX J0028.8+5917
PX And1	0 30 5.80	+26 17 26.7	−36	nl/vy		14.8 B- (17 V	02BE	92-08/94-12	82-08	S91-02	PG 0027+260
HQ And	0 31 35.89	+43 49 5.1	−19	cv		15.0 p - 16.2 p	01JV	80-01	**75-02**	S80-04:	S 10774
LS And	0 32 10.12	+41 58 12.2	−21	na:	1971	11.7 p- 20.5 p	00002	87-02	87-04	-	NSV 191
Cet6	0 33 34.40	−19 21 33.5	−81	cv:		16.4 V	011Q	96-05	**84-06**	S96-05:	KUV 00311−1938
VZ Tuc	0 34 1.	−73 15 35.	−44	NA	1927	11.4 p- (18 p	06B1	00000	**91-03***	-	HV 6334
Psc	0 34 48.	+10 18 0.		non-ex	1907			00001*	-	-	NSV 206
LT And	0 35 24.27	+39 46 16.9	−23	UG		18.1 B- 19.4 B	06PI	00000	70-01	-	
And	0 38 48.	+41 4 38.	−22	N:	1972	17.2 B- (21 B	00001	00001*	73-05	-	NSV 238
KP Cas	0 38 55.4	+61 12 55.	−1	UGSS		15.2 p- 20 p	01MU	00000	**57-04***	-	S 3865
HV And	0 40 55.34	+43 24 59.3	−19	nl		15.0 p- 16.8 p	01JV	95-05	75-02	S92-09	S 10777
LL And	0 41 51.5	+26 37 21.	−36	ugsu		13.8 V- 19.5:V	02BE	94-01	**96-11***	X96-13	
IO And	0 48 19.12	+39 41 9.0	−23	nl:		16.2 p- 17.1 p	06PI	80-01	**75-02***	S80-04:	S 10785
GX Cas	0 49 1.46	+56 52 44.8	−5	ugsu		13.9 p- 18.5 p	01W2	94-15	57-01	-	S 3330
And	0 49 56.	+43 37 45.	−19	N:	1971	16.5 B- (21 B	00001	00001*	73-05	-	NSV 312
And	0 50 1.	+43 33 56.	−19	N:	1971	16.2 B- (21 B	00001	00001*	73-05	-	NSV 313
Psc	0 51 27.	+9 21 33.		non-cv				94-12*	-	-	PG 0048+091
V452 Cas	0 52 18.0	+53 51 51.	−9	ugSS		14 p- 17.5:p	01W2	87-03/00000	**96-02***	-	
Psc1	0 53 40.	+17 9 44.		non-cv				94-12*	-	-	PG 0051+169
Scl2	0 59 28.68	−26 31 0.9	−88	nl		16 p	02J4 *	89-03	**72-03**	-	LTT 560/G 269-70
IW And	1 1 8.90	+43 23 25.7	−19	ux		14.2 p - 17.4 p	02RY	80-01	**75-02**	S80-04:	S 10792
RX And	1 4 35.55	+41 17 58.0	−21	ugz		10.9 v- 12.6 v	02RY	87-01	83-01	S83-12	1E 0101+4101
Cas	15 5.37	+54 0 40.5	−9	n	1995	9.0 p	95-07	95-20	96-07	X95-12:	
IZ And	1 7 3.91	+42 43 12.4	−20	UG		15.6 p- 20.5:p	02RY	00000	75-02	-	S 10794
Cet7	1 9 34.78	−8 0 33.1	−70	nl:		15 p	012C	88-06	**88-05**	S88-07	FBS 0107−082
XY Psc	1 10 11.	+3 32 36.	−59	UG:		13.0 p- (18.5 p	00001	00000	80-01	-	
HT Cas	1 10 12.98	+60 4 35.9	−2	ugsu		10.8 v- 18.4 v	01MU	87-01	83-01	S83-12	S 3343
FN And	1 11 57.6	+35 17 25.	−27	ug		13.5 p- 17.5 p	00Y1 *	87-03	87-06	-	S 9505
V418 Cas	1 13 0.	+62 10 48.		non-cv				00000*	-	-	S 9142
And3	1 14 44.	+35 37 9.	−27	N:		10 :p- (13 P	876-1	00001	-	-	NSV 447
FO And	1 15 32.14	+37 37 35.5	−25	ugsu		13.5 v- 17.5 v	00Y1	95-05	87-06	S89-06	S 9508
BE Tuc	1 16 58.	−73 43 10.		non-cv				82-01*	-	-	HV 2205
WX Cet	1 17 4.17	−17 56 23.0	−79	ugwz		9.5 v- 17.5 v	02J7	87-02	87-04	S81-03	BV 416
Cas3	1 18 22.	+63 42 31.	1	n:		10 p- 18 :p	00MB *	90-21	**62-03**	-	
AH Psc	1 21 32.6	+9 40 59.	−52	N:		9.5 v- (14 v	38-01	00000	-	-	BD +8°215
UY Phe	1 23 11.	−42 18 34.		non-cv				86-08*	-	-	S 7154
TY Psc	1 25 39.35	+32 23 9.7	−30	ugsu		12.2 v- 16.3 v	00DV	87-01	87-06	S85-07	

TABLE 1(b)
(Continued)

GCVS Name	Coordinates α (2000)	Coordinates δ (2000)	b	Type	Year of Outburst	Mag. Range Max Min	Coord Ref	Type Ref	Chart Ref	Spec Ref	Other Name
AS Psc	1 28 9.	+31 15 3.	−31	ug	1963	16.6 p- 21.5:p	00001	89-08	87-04:	-	S 10828
KU Cas	1 31 2.48	+57 54 13.3	−4	ugSS		13.3 p- 18 p	01MV	87-03/00000	87-06	-	S 3883
Hyi	1 32	−65	−51	am:		19 B	93-04	93-17	-	-	RX J0132−65
TW Tri	1 36 37.01	+32 0 39.8	−30	cv/UGZ		13.3 p- 17.0 p	00DV	94-09/00000	78-05	S94-07	GR 292/SVS 2288
AY Psc	1 36 55.44	+7 16 29.7	−54	ux		14.9 v- 16.6 v	026D	95-05	82-08	S93-02	PG 0134+070
KT Per	1 37 8.72	+50 57 20.0	−11	ugz		11.5 v- 15.4 V	01WM	87-01	83-01	S83-12	GR 91
TX Tri	1 37 37.24	+30 2 48.9	−32	UGSS		14.5 B- 18.2 B	00DV	00000	81-06	-	SVS 2289
TU Tri	1 39 15.34	+31 24 19.4	−30	ug		14.8 p- (18.0 p	037O	91-03	91-08	-	GR 287
BL Hyi	1 41 0.25	−67 53 27.7	−49	am		14.9 V- 17 V	049U	84-01	82-06	S86-07	H 0139−68
AR And	1 45 3.27	+37 56 33.3	−23	ug		11.0 v- 16.9 v	02KX	95-05	83-01	S83-12	Ross 346
For2	1 48 8.	−25 32 42.		non-cv				95-08*	-	-	GD 1401
Hyi	1 53	−59	−56	am:		15 B	94-06	94-35	-	-	RX J0153−59
Cas	1 53 18.	+74 46 0.	12	dq			95-06	95-35	-	-	RX J0153.3+7446
Cas4	1 55 10.75	+69 42 41.3	8	nl:		17.0 b	02U9	95-34	**95-14**	-	Lanning 159
UZ Tri	1 58 24.7	+33 31 30.	−27	N:	1980	)14.2 p- 21.0:p	037O	00000	**86-09***	-	S 10911
Cet3	2 0 52.17	−9 24 31.7	−66	cv:		17.1 V	03YP	87-11	84-06	S87-02	KUV 01584−0939
V Per	2 1 53.74	+56 44 4.1	−5	n	1887	9.2 p- 18.5 p	00002	87-02	87-04	S89-03	BD +56°406a
Tri	2 3	+29	−30	am:		17 B	93-04	93-17	-	-	RX J0203+29
BO Cet4	2 6 39.24	−23 42.8	−59	nl		14.4 V- 15.4 V	0086	90-10	90-03	S95-06	1H 0204−023
TT Ari	2 6 53.09	+15 17 43.0	−43	vy/dq:		9.5 v- 14.5 v	03QO	95-05/94-06	83-01	S83-12	BD +14°341
WX Hyi	2 9 50.65	−63 18 39.9	−51	ugsu		12.5 v- 14.7 v	04CA	87-01	82-01	S83-14	HV 8016
UV Per	2 10 8.25	+57 11 20.6	−4	ugsu		11.0 v- 17.5 v	01YD	95-05	87-06	S85-07	87.1911
UW Per	2 12 29.59	+57 5 19.7	−4	ug or n		13.5 p- 18.0:p	00002	87-02	87-04:	-	21.1912
TZ Per	2 13 50.99	+58 22 52.7	−3	ugz		12.3 v- 15.6 v	01MW	87-01	88-04	S94-07	28.1912
KV And	2 17 13.81	+40 41 30.8	−19	ugsu		14.6 p- 22.5:p	01WN	94-20	77-03	-	SVS 2205
Cep2	2 22 22.75	+78 54 38.0	17	nl/ug?		10 p- 14 p	01JP	89-03	**BD ***	-	NSV 786
XX Cet	2 22 40.	−19 32 47.		non-cv				93-13*	-	-	PHL 4037
WY Tri	2 25 0.47	+32 59 55.8	−26	UG		13.8 p- (17.0 p	01H7	00000	86-09	-	S 10919
RW Tri	2 25 36.14	+28 5 51.4	−30	ux		12.5 V- 15.6 V	01H7	95-05	83-01	S83-12	5.1938
FS And	2 25 55.07	+37 34 5.8	−21	ug		14.5 p- (17.5 p	031L	87-03	87-06	S89-06	S 9519
AM Cas	2 26 23.40	+71 18 32.3	9	ugz		12.3 p- 15.2 p	02RG	84-03	76-02	S95-18	258.1928
PQ And	2 29 29.6	+40 2 41.	−19	nr/ug	1988	10.1 v- 19 V	000A	90-03	**90-08**	X88-05:	
Per	2 29 37.09	+52 25 40.5	−8	N:	1873	8.9 v- (14 v	AGK	00001	-	-	NSV 837
KW And	2 35 18.02	+41 14 2.5	−17	UG		14.8 p- 22 p	000A	96-20	77-03	S96-12	SVS 2206
Cet5	2 35 40.39	−13 21 12.1	−62	UG:		18.1 p- 19.5 p	00BD	00001*	**60-01**	-	NSV 870
WW Hor	2 36 11.45	−52 19 13.5	−58	am		18.4 B- (23 B	03BY	95-05	87-05	S87-06	EXO
Per	2 42 10.	+43 20 53.	−15	ug/sn		11.7 p- (20 p	53-01	00001	53-02*	-	NSV 895
PU Per	2 42 16.14	+35 40 46.4	−22	ug		14.7 p- 20 :p	95-04	87-03	**95-12***	S78-03:	S 9727
PT Per	2 42 51.	+56 41 31.		non-cv				92-15*	-	-	S 9530
Cet1	2 42 53.45	+6 47 45.8	−47	cv		16.4 B	002M	86-01*	86-05	-	PG 0240+066
PV Per	2 42 53.49	+38 4 3.5	−20	ug		14.9 p- 20 :p	036R	87-03	87-06	S96-12	S 9728
UW Tri	2 45 17.2	+33 31 25.5	−24	n:/nr:	1983,1995	15 p- (21 p	00003	87-02	87-04:	-	
RU Hor	2 46 7.45	−63 35 46.7	−49	ugss		13.9 p- 17.5:p	04CB	82-01	82-01	-	HV 11902
V368 Per	2 47 32.7	+34 58 28.	−22	ugZ:		15.2 p- (17.5 p	036R	87-03/00000	**87-06***	-	S 10510
WX Ari	2 47 36.24	+10 35 38.8	−43	ux		14.8 v- 15.4 v	00GT	95-05	82-08	S92-15	PG 0244+104
SU Ari	2 48 30.	+17 21 47.	−37	n:	1854	9.5 v- (14.5 v	00003*	87-02	87-04:	-	BD +16°354
PY Per	2 50 0.	+37 39 22.	−20	cv/UGZ		13.8 p- 16.5 p	036R	94-09/00000	**96-02***	S94-07	S 9160
Cet	2 50 3.	1 9 31.		non-cv				93-13*	-	-	US 3215
Cet2	2 51 17.71	+5 37 48.4	−46	cv		16.2 B- 17.6 V	00ZU	86-01*	86-05	S95-06	PG 0248+054
V502 Cas	2 52 22.8	+58 45 51.	0	UG:		16.1 r- (17.0 r	01MX	00000	**70-03***	-	GR 195
For4	2 52 51.33	−30 37 43.5	−63	am		(19.5 j- 20.5 j	02J9	94-14	**94-11**	S94-11	V0252−3037
SY For	2 53 14.	−37 46 15.		non-cv				82-01*	-	-	
XY Ari	2 56 8.1	+19 26 34.	−34	dq		13.5 j- 17.6 j	92-01	92-17	-	-	H 0253+193
V372 Per	2 56 40.	+37 8 23.	−19	ug		15.4 B- (19.0 B	036R *	87-03	87-06	-	S 10153

TABLE 1(b)
(Continued)

GCVS Name	Coordinates α (2000)	Coordinates δ (2000)	b	Type	Year of Outburst	Mag. Range Max Min	Coord Ref	Type Ref	Chart Ref	Spec Ref	Other Name
LW Cas	2 57 22.	+60 41 20.		non-cv				00000*	-	-	SVS 1144
V664 Cas1	3 3 46.99	+64 54 36.0	6	cv		13.5 v	01MR	90-15	85-07	S90-10	PK 136+5°1
V400 Per	3 7 38.12	+47 7 38.9	−10	na	1974	7.8 p- 20 p	00002	87-02	87-04	X76-02	
CP Eri	3 10 32.76	−9 45 5.3	−52	ibwd		16.7 v- 19.7 v	015H	95-05	59-01	S92-17	PHL 4482
EF Eri	3 14 13.03	−22 35 41.4	−57	am		14.5 B- (17.3 B	027U *	84-01	83-01	S83-12	2A 0311−227
QY Per	3 15 36.8	+42 28 15.	−13	UG		14.2 p- (20 p	02RZ	00000	**94-03***	-	S 9178
Per	3 19 6.76	+35 29 35.9	−18	n::	1853	9.5 v	00003	87-02	87-04:	-	BD +34°620
W Ari	3 20 45.1	+28 57 14.	−23	n::	1855	9.5 v- (20.0 v	00003	87-02	87-04:	-	BD +28°518
V336 Per	3 22 53.9	+41 37 2.	−13	UG		14.3 p- (20 p	02RZ	00000	**91-02***	-	S 9180
SV Ari	3 25 3.57	+19 49 53.9	−30	n:	1905	12 p- 22 p	00002	87-02	87-04:	-	116.1905
For3	3 26 46.9	−34 26 37.	−56	ug:		12.7 V -(19 B	02IX	90-13	**92-07**	X90-14:	
GK Per	3 31 11.82	+43 54 16.8	−10	na/dq	1901	0.2 v- 13.0 V	00002	87-02/95-05	87-04	S83-12	BD +43°740a
For1	3 32 4.58	−25 56 55.5	−54	am		17.5 v	027X	95-05	89-02	S89-08	EXO
AF Cam	3 32 15.59	+58 47 22.1	2	ug		13.4 v- 17.0 v	01MY	87-03	87-06	S85-07	SVS 1153
Ret1	3 34 34.22	−64 0 56.3	−45	nl:		14.2 V	05Y5 *	94-33	**99-99**	S94-13	P83l-57
UZ For	3 35 28.61	−25 44 22.6	−53	am		18.2 v- 20.9 v	027X	95-05	88-02	S89-02	EXO
SZ For	3 41 20.	−26 36 21.		non-cv				96-10*	-	-	
V701 Tau	3 44 1.9	+21 57 8.4	−26	ugsu		15.0 p- (21 p	95-09	95-31	**95-04***	-	SVS 1972
OV Tau	3 46 6.27	+29 41 14.8	−19	nl		15.5 p- 16.5 p	0050	89-03	82-01	S94-07	S 10158
SZ Per	3 47 6.3	+34 19 18.	−16	n::	1853	9.5 v- (16.5 p	08-01*	87-02	87-04:	-	BD +33°715
MR Per	3 50 47.	+48 12 37.		non-cv				89-05*	-	-	S 8540
Tau2	4 0 37.25	+6 22 46.2	−33	cv		15.5 V	002N	93-11	**84-06**	S93-03	KUV 03580+0614
FO Per	4 8 35.03	+51 14 48.8	0	ug		11.8 v- 16.2 p	036K	87-03	87-06	S89-06	22.1939
VW Hyi	4 9 11.34	−71 17 41.1	−38	ugsu		9.5 v- 13.8 v	0186 *	87-01	82-01	S83-14	RE J0409−7125
MY Per	4 9 11.25	+48 22 5.9	−2	UG		16 p- (18 p	036K	00000	**66-01***	-	S 8548
XZ Eri	4 11 25.76	−15 23 24.3	−42	ug		14.6 p- 18.7 p	02NG	82-01	82-01	S92-01	HV 6276
NS Per	4 18 44.50	+51 7 30.7	1	ug		15 p- (18 p	036K	87-03	87-06	S89-06	S 8554
AH Eri	4 22 38.10	−13 21 30.2	−38	ug/dq::		13.5 v- 18.4 V	02NH	82-01/94-06	82-01	S87-05	HV 6292
Cam	4 31 15.41	+58 45 7.9	7	n:	1980	8.5 p	81-04	81-02	-	-	
TV Ret	4 35 40.80	−59 15 24.1	−40	ug:		16.6 B- 20.8 B	02IC	91-16	**91-10**	-	R1
TU Men	4 41 40.71	−76 36 46.3	−33	ugsu		11.4 p- 17 p	00RF	87-01	82-01	S95-05	S 6732
FY Per	4 41 56.58	+50 42 36.2	3	ux/ugz		12.3 B- 14.5 B	003O	89-03	64-02	S94-07	640.1936
V392 Per	4 43 21.38	+47 21 26.1	1	UGZ:		15 p- 17.5 p	003O	00000	**70-02***	-	S 10653
Per1	4 49 54.13	+40 32 31.4	−3	UG:		11.3 p- 14.2 p	01YG	00001	**55-04**	-	NSV 1725
HV Aur	4 53 16.8	+38 16 29.	−3	ugsu		15 p- (19 p	0049	95-11	**87-06***	-	S 8480
Cae1	4 53 25.46	−42 13 39.6	−39	am		19.0 V	02AF	96-06	**96-05**	S96-06	RX J0453−42
Tau3	4 59 44.03	+19 26 22.9	−14	ug		18 V	00FI	96-12	**96-08**	S96-09	RX J0459.7+1926
Ori	5 1	−3	−26	am:		15 B	94-06	94-35	-	-	RX J0501−03
V1062 Tau1	5 2 27.50	+24 45 22.7	−10	dq		16 V	005N	94-06	94-10*	S94-10	1H 0459+246
Tau4	5 2 50.85	+16 24 22.8	−15	cv		17.1 V	00FI	96-12	**96-08**	S96-09	RX J0502.8+1624
HW Tau	5 3 38.49	+26 24 4.0	−9	UGSS		11.5 p- (17 p	005N	00000	**46-01**	-	SVS 1023
AQ Eri	5 6 13.04	−4 8 7.0	−25	ugsu		12.5 v- 17.5 V	04MX	95-05	82-01	S87-05	431.1934
Col1	5 12 13.12	−32 41 38.8	−34	dq		17.6 V	029U	96-14	**96-10**	S96-11	RX J0512.2−3241
Pic2	5 14 25.56	−52 53 52.0	−36	nl		(19.5 j- 20.5 j	061F	94-14	**94-11**	S94-11	V0514−5253
RY Dor	5 14 58.	−66 50 12.	−34	N	1926	12.4 p- (18 p	06B0	00000	**27-01***	-	HV 4004
Ori1	5 15 41.41	+1 4 40.4	−21	am		15.5 V- 16.1 V	01O3	95-03	**95-03**	S95-03	RX J051541+0104.6
V1193 Ori	5 16 26.65	−0 12 14.2	−21	ux		14.0 v- 14.3 v	01O3	95-05	86-07	S87-12	Hamuy's star
XX Tau	5 19 24.43	+16 43 0.7	−12	na	1927	5.9 p- 18.5 p	00002	87-02	87-04	X28-02:	100.1927
GR Ori	5 21 35.20	+1 10 8.6	−19	n:	1916	11.5 p- (21 p	00003	87-02	87-04:	-	2.1916
BI Ori	5 23 51.77	+1 0 30.2	−18	ug		13.2 p- 16.7 p	01O3	82-01	82-01	S87-05	1.1916
QZ Aur	5 28 34.05	+33 18 21.5	−1	na	1964	6.0 p- 18.0 p	00002	87-02	87-04	S94-02	
V1159 Ori	5 28 59.52	−3 33 52.8	−20	ugsu		12.5 p- 16.0 p	02N9	95-09	**92-05**	S92-05	NSV 2011
TV Col	5 29 25.5	−32 49 5.	−30	dq		13.6 B- (14.5 B	01WA	92-08	79-01*	S79-01	2A 0526−328
V650 Ori	5 31 8.28	+9 45 9.9	−12	UG:		15.5 p- (17.5 p	03QP	00000	67-02	-	S 9560

TABLE 1(b)
(Continued)

GCVS Name	Coordinates α (2000)	Coordinates δ (2000)	b	Type	Year of Outburst	Mag. Range Max Min	Coord Ref	Type Ref	Chart Ref	Spec Ref	Other Name
Pic1	5 31 35.57	−46 24 5.9	−33	am		17.0 V	02C6	94-27	**94-14***	S94-21	RX J0531.5−4624
T Aur	5 31 59.06	+30 26 45.2	−2	nb	1891	4.2 p- 15.2 p	00002	87-02	87-04	S83-12	BD +30°923a
V363 Aur	5 33 33.45	+36 59 32.4	2	nl/ux		14.4 B- 15.5 B	037G	84-01/95-05	73-01	S81-01	Lanning 10
TW Pic	5 34 50.67	−58 1 40.9	−33	dq		14.1 B- 15.6 B	0398	95-05	86-03	S86-04	H 0534−581
BY Cam	5 42 48.90	+60 51 31.8	16	am		15.2 B- (17.0 B	034T	95-05	86-02	S86-02	H 0538+608
TX Col	5 43 20.22	−41 1 55.2	−30	dq		14.5 B- 15.8 B	04GX	86-03	86-03	S86-04	H 0542−407
FS Aur	5 47 48.34	+28 35 11.1	0	ug		14.4 v- 16.2 v	00DI	92-08	82-01	S83-12	S 3946
V421 Tau	5 48 22.90	+22 42 2.0	−3	ug		14.5 p- 20 p	000M	87-03	87-06	-	S 10491
CN Ori	5 52 7.77	−5 25 0.7	−15	ugz		11.9 v- 16.3 v	02NB	87-01	82-01	S83-12	39.1906
Aur1	5 57 59.29	+53 53 44.9	14	dq		14.6 V	00VN	94-25	**94-16**	S94-20	RX J0558.0+5353
V529 Ori	5 58 22.3	+20 15 26.	−2	n::	1667	6 v- 20.5:p	81-01	87-02	87-04:	-	
Cam1	6 0 2.00	+77 51 31.4	24	cv:		18.5 v	0708	95-33	**99-99**	-	FBS 0552+779
HM Gem	6 3 9.	+25 14 49.	1	UG:		16.5 p- 20.5 p	0076 *	00000	91-02	-	S 8466
AD Men	6 4 28.60	−71 25 15.6	−29	ugSS		15.0 p- 16.6 p	014D	95-08/00000	**67-07***	X95-07	HV 12703
V347 Pup2	6 10 33.55	−48 44 25.9	−27	nl/dq:		13.4 V- 15.8 V	01CH	95-05	90-04	S90-03	LB 1800
Gem1	6 10 43.93	+25 10 31.9	3	nl/ug?		15.3 p- 15.9 p	0076	89-03	**57-09***	-	NSV 2853
Men1	6 11 44.07	−81 49 24.1	−28	nl/dq:		13.2 V- 14.7 V	00Q6	93-14/94-06	93-09*	S93-04	1H 0551−819
HQ Gem	6 12 4.4	+25 28 34.	3	UG:		16.5 p- 20 p	0076	00000	**64-01***	-	S 8470
SS Aur	6 13 22.44	+47 44 25.7	13	ug		10.5 v- 14.5 v	02RS	87-01	83-01	S83-12	31.1907
Aur2	6 14 9.89	+45 30 9.2	13	nl/ug?		11.2 p - 14.5 p	02RS	89-03	**33-01***	-	NSV 2872
V344 Ori	6 15 18.9	+15 31 0.	0	ug:		14.2 p- 17.5:p	00FJ	82-01	82-01	S96-12	S 3966
KR Aur	6 15 43.92	+28 35 8.9	6	vy		11.3 v- 16.9 v	01ZL	95-05	87-04	S83-12	KUV 06126+2836
CZ Ori	6 16 43.23	+15 24 11.7	0	ug		11.2 v- 15.6 v	00FJ	87-01	82-01	S83-12	144.1928
KT Mon	6 25 18.46	+5 26 31.7	−3	na	1942	10.3 p- (21	00003	87-02	87-04:	X54-02:	
BZ Cam	6 29 33.95	+71 4 37.1	−24	vy		12.5 B- 14.1 B	00M8	95-05	83-01	S83-12	0623+71
CI Gem	6 30 5.75	+22 18 57.7	5	ugsu:	1940	14.7 p- 18.5 p	0078	90-04	87-04	-	
RR Pic	6 35 36.05	−62 38 23.4	−26	nb	1925	1.0 v- 11.9 p	00002*	87-02	87-04	S77-03	He 3-15
CW Mon	6 36 54.53	+02 16.3	−3	ug		11.9 v- 16.3 v	02O8	87-01	82-01	S87-05	61.1936
UV Gem	6 38 44.	+18 16 12.	5	ug		14.7 p- 18.5 p	001S *	82-01	82-01	S94-07	18.1916
CMa	6 40	−24	−24	ug		15 B	93-04	93-17	-	-	RX J0640−24
SY Gem	6 40 37.	+31 11 26.	11	n::	1857	9.2 v- (13 v	00003	87-02*	87-04*	-	BD +31°1380
BT Mon	6 43 47.21	−2 1 13.7	−3	na	1939	8.5 p- 15.8 p	00002	87-02	87-04	S83-12	67.1939
DM Gem	6 44 12.05	+29 56 41.9	12	na	1903	4.8 v- 16.7 p	00002	87-02	87-04	S86-08	HD 48328
HL CMa	6 45 17.0	−16 51 35.	−8	ug/ugz		10.0 v- 14.5 v	83-01*	87-01/95-05	81-02	S83-12	1E 0643−1648
KT Gem	6 45 21.1	+19 4 47.	7	UGSS		16 p- 20 :p	03OP	00000	**67-01***	-	S 9775
IR Gem	6 47 34.58	+28 6 22.7	11	ugsu		11.7 v- 16.3 v	000C	87-01	82-01	S83-12	S 5423
KZ Gem	6 53 2.8	+16 39 52.	7	UG		14.7 p- (18.5 p	03OP	00000	**66-02***	-	S 9208
DN Gem	6 54 54.37	+32 8 28.1	15	na	1912	3.5 p- 15.8 p	00002	87-02	87-04	S83-12	HD 50480
EQ Mon	6 57 37.	−9 48 3.		non-cv				82-01*	-	-	
Gem	6 58 45.	+17 2 11.	9	n::	1892	7.0 v- (14 p	00003	87-02	87-04:	-	NSV 3313
MV Gem	7 0 53.	+12 51 21.		non-cv				96-01*	-	-	S 10220
CG CMa	7 4 5.	−23 45 35.		non-cv				95-08*	-	-	
EU CMa	7 5 41.0	−16 8 47.	−4	UG		16.5 p- (19 p	00OG	00000	63-01	-	S 7991
CMi	7 10 5.	+2 56 11.	5	nl?		10.6 p- 11.4 p	46-01	89-03	-	-	NSV 3432
HQ Mon	7 11 33.67	+0 52 5.2	5	ux		12.8 p- 14.2 p	00TW	85-02	00-01	S94-07	93.1933
V348 Pup1	7 12 32.88	−365 39.7	−12	nl/dq:		15.4 V- 17.1 V	02CS	95-05/94-21	90-01	S90-01	1H 0709−360
AQ CMi	7 14 34.79	+8 48 5.5	9	ug		14.5 p- (16.5 p	02UV	96-07	65-01	X96-12:	14.1934
WZ CMa	7 18 49.16	−27 7 43.0	−6	ugz:		14.5 p- 18.3 V	0167	82-01	82-01	S95-06	HV 8080
AW Gem	7 22 41.	+28 30 17.	18	ugsu		13.8 v- 19.4 v	000I *	95-05	82-01	S87-05	8.1933
GI Mon	7 26 47.06	−6 40 29.3	5	na	1918	5.6 p- 18 p	00002	87-02	87-04	X18-01:	HD 58756
HM Aur	7 29 6.76	+40 40 57.2	24	nl?		11.3 p- 12.4 p	01H9	89-03	**55-02**	-	BV 23
CL Pup	7 30 2.	−19 29 51.		non-cv				00000*	-	-	S 4069
SV CMi	7 31 8.42	+5 58 48.6	11	ugz		13.0 p- 16.3 p	03R5	82-01	82-01	S82-03:	285.1928
KQ Mon	7 31 21.09	−10 21 50.0	4	ux		12.1 p- 13.0 p	0445	89-03	57-02	S94-07	

TABLE 1(b)
(Continued)

GCVS Name	Coordinates α (2000)	Coordinates δ (2000)	b	Type	Year of Outburst	Mag. Range Max Min	Coord Ref	Type Ref	Chart Ref	Spec Ref	Other Name
BG CMi	7 31 28.98	+9 56 22.6	13	dq		14.5 V- 15.4 V	02UV	90-08	84-03	S85-05	3A 0729+103
Cam2	7 32 33.46	+72 41 41.8	29	cv:		15.0 v	01KS *	95-33	**99-99**	-	FBS 0726+728
Car1	7 44 57.9	−52 57 13.	−14	ug		15.5 V	011F *	96-12	**96-08**	S96-09	RX J0744.9−5257
UY Pup	7 46 31.23	−12 57 9.4	6	ugz:		13.0 p- 16.8 p	00BA	82-01	82-01	S94-07	153.1929
BV Pup	7 49 5.26	−23 34 0.7	1	ugSS		13.1 V- 16.7 V	001A	82-01/00000	82-01	S95-06	661.1935
PQ Gem	7 51 17.39	+14 44 24.6	20	dq		14.5 V	01LS	92-03	**92-03**	S92-18	RE 0751+14
Mon	7 52 44.	−10 42 45.		non-cv				95-27*	-	-	NSV 3775
HS Pup	7 53 24.87	−31 38 50.9	−2	na:	1963	8.0 p- 20.5 p	00002	87-02	87-04	S95-06	BV 431
BX Pup	7 54 15.58	−24 19 36.4	2	ugz		13.8 V- 18.0 V	001A	87-01	82-01	S95-06	
U Gem	7 55 5.29	+22 0 5.7	23	ugSS		8.2 v- 14.9 v	02UF	83-02/00000	82-01	S83-12	BD +22°1807
DW Cnc	7 58 53.07	+16 16 45.4	22	ug		15 v- 17.5 v	03OQ	91-01	91-02	S88-07	FBS 0756+164
Pup	7 59 1.	−43 49 6.	−7	n::	1673	3 v- 20 :p	00003	87-02	87-04*	-	NSV 3846
Car2	8 1 59.92	−53 27 51.3	−12	nl		15.8 p	011G *	89-03	**69-03**	S77-04:	BPM 18764
HZ Pup	8 3 22.80	−28 28 28.8	1	na	1963	7.7 p- 18.5 p	00002	87-02	87-04	S95-06	S 8438
Z Cha	8 7 28.2	−76 32 1.2	−22	ugsu		12.4 v- 15.3 v	00RH	87-01	82-01*	S81-09	S 4893
VZ Gem	8 7 47.	+30 50 54.	29	n::	1856	8.7 v- (21 :	00003	87-02	87-04:	-	BD +31°1736
YZ Cnc	8 10 56.62	+28 8 33.6	28	ugsu		11.9 v- 14.1 v	02HB	87-01	82-01	S83-12	BV 131
V351 Pup	8 11 38.38	−35 7 30.4	−1	n	1991	6.4 p- (20 r	94-08*	92-09	92-07:	X92-03:	
CP Pup	8 11 45.96	−35 21 5.7	−1	na	1942	0.5 v- 15.0 v	00002	87-02	87-04	S82-15	He 3-130
SU UMa	8 12 28.20	+62 36 22.6	33	ugsu		10.8 v- 15.0 V	02RJ	87-01	87-06	S87-05	PG 0808+627
DY Pup	8 13 48.40	−26 33 57.1	4	nb:	1902	7.0 p- 19.6 V	00002	87-02	87-04	S96-01	HV 3600
VV Pup	8 15 6.73	−19 3 16.8	9	am		13.9 v- 18.0 v	01Z4 *	84-01	83-01	S83-12	1E 0812−1854
IX Vel	8 15 18.90	−49 13 18.3	−8	ux		9.1 v- 10.0 v	03DQ *	87-01	CPD	S83-01	CPD −48°1577
BH Lyn	8 22 36.00	+51 5 24.9	35	vy		13.7 B- 16.3 B	01HB	95-05	82-08	S91-03	PG 0818+513
Z Cam	8 25 13.20	+73 6 39.4	32	ugz		10.5 v- 14.8 v	01L1	87-01	83-01	S83-12	
AT Cnc	8 28 36.92	+25 20 2.6	31	ugz		12.3 p- 14.6 p	02UG	95-05	68-03	S94-07	Ton 323/GR 151
Cam3	8 32 45.57	+73 37 8.0	33	cv		15.9 v	01L1 *	95-33	**99-99**	-	FBS 0827+738
Pyx2	8 33 5.69	−22 48 31.8	10	am:/dq		17.7 V	05XX	90-01/95-27	90-02	S90-08	1E 0830.9−2238
DE Cnc	8 35 27.26	+19 45 30.3	31	UG		14.6 p- 18.0 p	03DI	00000	77-01	-	Ton 930/S 10803
CC Cnc	8 36 19.17	+21 21 5.4	32	ug		13.1 B- 17.6 B	03DI	95-05	82-01	S92-01	
SW UMa	8 36 42.80	+53 28 38.2	37	ugsu/dq		10.6 v- 16.5 v	01HB	87-01/94-06	83-01	S83-12	44.1909
BB Vel	8 36 49.	−47 22 39.	−4	ug		13.8 v- 17.9 V	01FB	84-02	82-01*	S95-06	
AA Cnc	8 37 23.	+26 12 29.		non-cv				82-01*	-	-	G 40-31
EI UMa	8 38 21.98	+48 38 1.7	37	ug		13.4 p- 14.9 p	036M	95-05	82-08	S86-05	PG 0834+488
RX Vol	8 39 32.30	−66 17 39.2	−15	UGSU:		16 p- (18 p	04CD	00000	63-02	-	S 6185
EG Cnc	8 43 4.04	+27 51 49.9	36	NL/ug:		11.9 v- 17 :v	01GX	00000/86-10	86-08	S96-12	
AC Cnc	8 44 27.15	+12 52 32.2	31	nl		13.8 V- 15.4 V	028I *	84-01	86-08	S82-07	1H 0841+1303
CT Hya	8 51 7.4	+3 8 34.	27	ugss		14.1 p- 20 :p	02V6	82-01	82-01	-	114.1936
EU Cnc	8 51 27.	+11 46 58.	32	am:		20.8 V	00001*	95-05	91-09	-	M67-186
SY Vol	8 53 28.85	−71 12 29.7	−17	UG:		15.5 p- (17.5 p	04C1	00000	63-02	-	S 6203
BZ UMa	8 53 44.14	+57 48 41.1	39	ugsu		10.5 v- 17.8 v	01OI	94-18	87-06	S89-06	PG 0849+580
AK Cnc	8 55 21.21	+11 18 14.7	32	ugsu		13 p- (17 p	028I	94-30	**82-01***	S92-01	
CU Vel	8 58 32.87	−41 47 50.8	3	ugsu		10.7 v- 18.2 V	014C	87-01	82-01	S95-06	HV 8171
CQ Vel	8 58 50.99	−53 20 17.8	−5	na:	1940	9.0 p- 21 j	00002	87-02	87-04:	-	
VZ Pyx1	8 59 19.89	−24 28 55.1	14	ugsu		11 V- 17 V	04NP	96-16	94-10*	S94-10	1H 0857−242
SY Cnc	9 1 3.35	+17 53 56.1	36	ugz		11.1 v- 13.5 v	0204	87-01	82-01	S83-12	BD +18°2101
Lyn1	9 3 8.87	+41 17 47.9	42	ux		14.2 B	021G	94-12	86-05	S94-12	PG 0859+415
BI Lyn	9 3 19.45	+39 51 1.1	42	NL		12.9 B - 13.1 B	021G	00000	**86-05**	-	PG 0900+401
T Pyx	9 4 41.47	−32 22 47.0	−1	nrb	1902	6.5 v- 15.3 v	00002	87-06	87-04	S83-12	HV 3348
Lyn	9 9 38.3	44 46 34.	43	cv/sn:		13.5 v	72-01	72-01	-	-	NSV 4394*
DI UMa	9 12 16.16	+50 53 54.7	43	ug		15 p- 17.7 p	021E	90-14	59-02	S92-01	NSV 4407
Hya1	9 14 13.99	−6 47 44.6	28	ug/ugwz		14.2 B- 18.7 B	03W0	94-12/94-29	82-08	S96-01	PG 0911−066
BK Lyn	9 20 11.20	+33 56 42.0	45	nl/ug:		15.1 B	01RX	95-05/94-12	82-08	S92-01	PG 0917+342
AR Cnc	9 22 7.48	+31 3 14.6	44	ug		15.3 p- 18.7 V	02TS	87-03	87-06	S89-06	Ton 408

TABLE 1(b)
(Continued)

GCVS Name	Coordinates α (2000)	Coordinates δ (2000)	b	Type	Year of Outburst	Mag. Range Max Min	Coord Ref	Type Ref	Chart Ref	Spec Ref	Other Name
Leo	9 28 45.	+23 11	44	UG/N:		18.5 p	67-01	00001*	-	-	NSV 4498
Hya4	9 29 7.10	−24 5 5.4	19	am		17.0 V	04A0	94-04	**94-05**	S94-04	RX J0929.1−2404
TU Leo	9 29 51.	+21 22 53.		non-cv				95-12*	-	-	SVS 167
UMa6	9 32 14.92	+49 50 54.0	46	nl		16.3 V	00T8	90-10	90-03	S96-12	1H 0928+500
Lyn2	9 34 23.	+40 38 10.	48	ug		15.7 f - 19 :V	01BS	79-01	**79-06***	-	KUV 09313+4052
Leo	9 37 19.	+15 13 15.	43	n::	1612	4 v	78-01*	87-02	87-04:	-	NSV 4550
Leo7	9 38 36.98	+7 14 55.4	40	ug		13.0 B- 17 B	01G7 *	94-12	**99-99**	S93-10	PG 0935+075
DV UMa	9 46 36.67	+44 46 45.1	49	ug/su:		15.4 v- 20.6 v	00T8 *	95-05	82-10	S90-09	US 943
ER UMa1	9 47 11.83	+51 54 9.0	48	ugsu		12.4 V- 15.2 V	0009	95-06	86-05	S94-07	PG 0943+521
Sex1	9 49 40.	+3 24 25.		non-cv				96-01*	-	-	PG 0947+036
AG Hya	9 50 29.85	−23 45 17.8	22	ug		14.3 p- 19.2 V	04A1	82-01	82-01	S87-05	HV 7591
X Leo	9 51 1.51	+11 52 31.1	45	ug		12.4 v- 15.8 v	01X2 *	87-01	82-01	S83-12	66.1907
RZ LMi	9 51 49.02	+347 24.6	51	ugsu		14.4 B- 16.8 B	01RS	95-10	82-08	S92-01	PG 0948+344
Hya	10 2	−19	28	am:		17 B	93-04	93-17	-	-	RX J1002−19
RU LMi	10 2 7.53	+33 51 0.1	53	ug		13.8 p- 19.5 p	01RS	87-03	87-06	S90-09	CBS-119/Ton 1143
UMa7	10 4 34.69	+66 29 14.6	43	nl:		15.4 B	02RH	94-12	**86-05**	S93-10	PG 1000+667
UMa2	10 5 29.	+50 20 40.		non-cv				94-12*	-	-	PG 1002+506
OY Car	10 6 22.43	−70 14 4.9	−11	ugsu		12.4 v- 17.3 v	0196	87-01	82-01	S81-10	S 6302
Hya	10 7	−20	28	am		18 B	93-04	93-17	-	-	RX J1007−20
CH UMa	10 7 0.57	+67 32 46.5	43	ug		10.7 v- 15.9 v	02RH	87-03	87-06	S87-05	PG 1003+678
Leo	10 15 30.	+94	50	am:		17 B	96-05	93-17	-	-	RX J1015.5+0904
SW Sex	10 15 9.38	−38 33.5	42	ux		14.8 B- 16.7 B	03W1	95-05	82-08	S84-04	PG 1012−029
CP Dra	10 15 40.	+73 26 5.	39	ug		15.1 p- 20 p	00M9 *	87-03	87-06	S90-09	
KO Vel	10 15 58.35	−47 58 10.8	7	dq::		16.7 v- 17.7 v	04UJ	94-06	83-04	S83-06	1E 1013−477
CI UMa	10 18 13.01	+71 55 42.8	41	ug		13.8 p- 18.8 V	00M9	87-03	87-06	S89-06	SVS 1755
RW Sex	10 19 56.62	−8 41 56.0	39	ux		10.4 V- 10.8 V	0185 *	87-01	BD	S94-07	BD −7°3007
HR Car	10 22 54.	−59 37 28.		non-cv				00000*	-	-	HD 90177
UMa8	10 23 20.18	+44 5 9.2	56	nl/ug?		14.5 p- 16.5 p	00XW	89-03	**55-03***	-	NSV 4838
U Leo	10 24 3.3	+14 0 11.	53	n::	1855	10.5 v- (15 v	00003	87-02	87-04*	-	BD +14°2239
Leo5	10 28 0.09	+21 48 13.5	57	nl		16.2 V	0259	90-10	90-03	S96-12	1H 1025+220
EP Car	10 28 24.	−58 58 0.		non-cv				00000*	-	-	
V411 Car	10 31 19.	−59 58 25.		non-cv	1953			96-01*	-	-	NSV 4884
DW UMa	10 33 52.95	+58 46 54.9	50	ux/vy		14.9 v- 16.4 v	01S0	95-05/94-12	82-08	S88-07	PG 1030+590
SS LMi	10 34 6.0	+317 59.	60	ug or n	1980	15. p- (21 p	91-05	87-02	87-04:	-	
RX Cha	10 36 26.32	−802 47.8	−18	ug		14.4 p- (16.9 p	00Q9 *	82-01	82-01	-	S 6311
Car	10 38 22.51	−638 29.4	−4	n	1972	13 : - 18 :	00002	87-02	87-04:	X87-08:	
Car	10 39 47.12	−63 14 7.2	−5	n	1971	13 : - 18 :	00002	87-02	87-04:	X87-08:	
DO Leo	10 40 51.21	+15 11 33.7	57	nl		16.0 B- 17.0 B	026A	95-05	82-08	S90-02	PG 1038+155
RT Car	10 44 47.	−59 24 48.		non-cv				00000*	-	-	LSS 1855
V351 Car	10 45 19.	−723 56.		non-cv				87-02*	-	-	BV 1543
UMa9	10 47 9.9	+63 35 14.	48	am		19.4:V	01G1	95-16	**95-07**	S95-10	WGA 1047.1+6335
UMa5	10 48 17.98	+52 18 30.0	56	ug		16.5 B	01AM	90-14	91-03	S88-01	CW 1045+525
EK UMa	10 51 35.23	+544 36.0	55	am		18.0 v- 20.0 v	01AM *	95-05	87-03	S87-01	1E 1048.5+5421
SX LMi	10 54 30.42	+306 10.2	64	ugsu		13 V- 17.4 V	037Y	95-18	84-02	S88-01	CBS-31
EL UMa	10 55 7.0	+36 59 47.	64	ug:		14 p- 19 p	01R8	88-04	88-01	S88-01	CBS-132
AG Car	10 56 12.	−60 27 13.		non-cv				00000*	-	-	PK 289−0°1
CY UMa	10 56 57.05	+49 41 18.7	59	ugsu		11.9 v- 17.0 v	01R5	95-05	77-02	S92-01	SVS 2198
CN Vel	11 2 38.5	−54 23 9.	5	nb	1905	10.2 p- 17.8 V	0614	87-02	96-01*	S96-01	HD 95821
V365 Car	11 3 15.98	−58 27 27.5	1	nb	1948	10.1 p- 21.6 j	00002	87-02	87-04	S96-01	He 3-558
TU Crt	11 3 36.50	−21 37 45.6	35	ugSU		12.1 B- 17.5 B	05Y1	92-01/00000	**92-01**	S92-11	J05.23
AN UMa	11 4 25.71	+453 15.0	62	am		13.8 B- 20.2 B	01R5	84-01	83-01	S83-12	PG 1101+453
ST LMi	11 5 39.75	+256 28.9	66	am		15.1 V- 17.0 V	0256	84-01	82-09	S83-10	CW 1103+254
QU Car	11 5 42.80	−68 37 58.0	1	nl		11.1 v- 11.5 v	0197	84-01	**49-01***	S82-11	HDE 310376
Leo1	11 6 40.	+1 54 51.		non-cv				94-09*	-	-	PG 1104+022

TABLE 1(b)
(Continued)

GCVS Name	Coordinates α (2000)	Coordinates δ (2000)	b	Type	Year of Outburst	Mag. Range Max Min	Coord Ref	Type Ref	Chart Ref	Spec Ref	Other Name
RS Car	11 8 6.63	−61 56 4.6	−1	n	1895	7.0 p- (22 j	00003	87-02	87-04:	X87-08:	HD 96830/HV 47
V436 Cen	11 14 0.10	−37 40 48.6	21	ugsu		11.5 B- 16.0 v	04HE	87-01	82-01	S82-13	1E 1111−3724
AR UMa	11 15 44.68	+42 58 22.5	65	am		13 V- 16.5 V	01QX	95-05	**94-01**	S94-01	1ES 1113+432
CE UMa	11 16 11.	+29 21 37.	69	UG:		15.5 p- (21 p	00004	00000	-	-	
Leo2	11 17 3.52	+18 25 58.5	67	cv		14.6 B	01TO	86-01	86-05	S94-07	PG 1114+187
DP Leo	11 17 16.00	+17 57 41.1	65	am		17.5 B- 19.5 B	01TO *	84-01	85-03	S85-08	1E 1114+182
UMa3	11 19 31.	+34 40 14.		non-cv				94-09*	-	-	PG 1116+349
Leo6	11 22 13.10	+14 26 21.4	66	cv		16.1 B	01TO	86-01*	91-01	-	PG 1119+147
V442 Cen	11 24 51.92	−35 54 37.7	23	ugSS		11.9 V- (16.5 v	04HE	82-01/00000	82-01	S82-03:	HV 8364
GU Mus	11 26 27.	−68 40 32.		non-cv	1991			94-36	-	-	GRS 1121−68
AU Leo	11 30 14.	+23 48 9.		non-cv				00000*	-	-	S 8015
Leo3	11 31 14.	+9 32 18.		non-cv				94-09*	-	-	PG 1128+098
TT Crt	11 34 47.20	−11 45 30.4	47	ug		12.7 v- 15.3 v	02N8	92-06	89-01	S92-02	FSV 1132−11
RZ Leo	11 37 22.30	+1 48 57.8	59	ugwz	1918	11.5 v- 19 v	00WV *	87-02	82-01	S92-01	30.1919
T Leo	11 38 26.96	+3 22 8.1	60	ugsu		10 B- 15.7 B	0592 *	87-01	82-01	S84-03	BD +4°2506a
UMa4	11 38 36.	+57 52 27.		non-cv				94-09*	-	-	PG 1136+581
Cen3	11 41 22.9	−64 10 14.	−2	cv		16.6 V	06AG	96-12	**96-08**	S96-09	RX J1141.3−6410
DO Dra	11 43 38.34	+71 41 20.4	45	dq		10.0 B- 15.1 B	01L3	91-04	86-08	S83-12	YY Dra?
MT Cen	11 44 0.74	−60 33 39.1	1	n:	1931	8.4 p- 22 j	00002	87-02	87-04	-	
TW Vir	11 45 21.13	−4 26 5.9	55	ug		12.1 v- 16.3 v	02ND	87-01	82-01	S83-12	PG 1142−041
Leo4	11 49 1.	+22 31 4.		non-cv				94-12*	-	-	PG 1146+228
EU UMa	11 49 55.70	+28 45 7.5	76	am		16.5 B- 16.9 B	01TE	95-05	**92-04**	S92-19	RE 1149+28
GQ Mus	11 52 2.35	−67 12 20.2	−5	na/am	1983	7.2 v- 22 :j	00002	87-02/94-13	87-04	S87-09:	
BC UMa	11 52 15.88	+49 14 42.0	65	ug		10.9 B- 18.3 B	024C	95-05	85-04	S90-09	GR 102
SW Crt	11 52 25.	−24 31 2.		non-cv				83-05*	-	-	SVS 2147
V359 Cen	11 58 15.29	−41 46 7.9	20	n:	1939	13.8 p- 21.0 j	00002	87-02	87-04	-	
Vir	11 59 22.	−4 1 26.		non-cv				94-12*	-	-	PG 1156−037
Vir1	11 59 52.	+0 7 51.		non-cv				94-12*	-	-	PG 1157+004
MU Cen	12 12 53.86	−44 28 16.3	17	ugSS		11.8 p- 14.7 V	02EY	82-01/00000	82-01	S96-01	
EG UMa	12 15 44.	+52 31 3.		non-cv				94-09*	-	-	CASE 1
BE CVn	12 17 59.70	+40 33 10.1	75	ug:		16.0 p - 18.1 p	01QY	96-02	**77-04**	S96-02:	GR 281
CVn1	12 18 29.83	+40 5 22.5	75	nl/ug?		12.0 p-)14 p	01QY	89-03	**33-01***	-	NSV 5543
Com	12 19 14.	+13 52 55.		non-cv				89-07*	-	-	NSV 5550
Vir	12 19 58.	−6 59 33.		non-cv				94-12*	-	-	PG 1217−067
CG Mus	12 20 16.0	−74 13 1.	−11	UGZ		15.9 p- 17.0 p	00RJ	00000	**63-02***	-	S 6398
TV Crv1	12 20 24.15	−18 27 2.0	44	ug:		12 p- 19 v	05Y2	90-02	90-07	S94-15	
Dra7	12 22 20.25	+75 3 27.5	42	cv		15.2 v	01G5 *	95-33	**99-99**	-	FBS 1220+753
Vir6	12 25 34.43	+12 53 58.4	75	nl		14 p - 16 p	00IY *	80-02	**99-99**	-	
V373 Cen	12 26 4.93	−45 49 30.0	16	ug		13.5 p- 16.3 V	04UK	82-01	82-01*	S96-01	
CQ Dra	12 30 6.69	+69 12 4.6	48	cv			+056 *	91-07	-	S85-06	4 Dra B
GT Com	12 30 53.20	+29 0 43.4	85	ug/ISB:		13.5 p- (16 :p	01PM	76-01/00000	**73-06***	-	
FU Com	12 30 51.50	+27 7 10.0	85	ug		19.5 p- 21 :p	01PM	90-14	90-06	-	
IM Com	12 31 15.46	+14 12 14.6	76	UG:		17.6 B- 18.5 B	00G0	00000	84-05	-	SVS 2819
AP Cru	12 31 20.34	−64 26 24.3	−2	n:	1936	10.7 p- 21.7 j	00002	87-02	87-04	-	615.1936
AL Com	12 32 25.90	+14 20 42.5	76	ugsu		12.8 v- 22 v	00G0	95-07	**96-14***	S90-09	Zw SN 106
AM CVn	12 34 54.58	+37 37 43.4	79	ibwd		14.1 V- 14.2 V	01PQ	95-05	**83-01**	S83-12	HZ 29/EG 91
Com1	12 39 32.04	+21 8 6.3	83	ugsu:		13.5 p- 18 p	038A	95-15	**96-03**	-	S 10932
V591 Cen	12 42 18.	−33 34 10.		non-cv				82-01*	-	-	HV 10172
Vir5	12 43 26.05	+2 55 50.6	66	ug		17.5 V	092W	83-09	**83-08**	S83-18	1E 1240.8+0312
TX CVn	12 44 42.	+36 45 50.		non-cv				00000*	-	-	BD +37°2318
FY Com	12 49 16.	+27 25 22.	89	ug		19.5 p- 21 :p	01PM	90-14	**95-11***	-	
EX Hya	12 52 24.40	−29 14 56.7	33	ug/dq		10.0 v- 14.1 v	02C8 *	83-02/95-05	82-01	S83-12	1E 1249−2858
LW Hya3	12 53 33.	−22 52 23		non-cv				90-11*	-	-	Abell 35
GO Com	12 56 37.10	+26 36 43.7	88	ugsu		13.1 p- 20 p	002K	95-24	82-01	S90-09	SVS 382

TABLE 1(b)
(Continued)

GCVS Name	Coordinates α (2000)	δ	b	Type	Year of Outburst	Mag. Range Max Min	Coord Ref	Type Ref	Chart Ref	Spec Ref	Other Name
V485 Cen	12 57 23.30	−33 12 6.8	29	ug		12.9 p- 17.9 V	04HH	82-01	82-01	S82-03:	HV 10231
Vir	13 0 26.	+0 45 29.		non-cv				94-12*	-	-	PG 1257+010
Cen	13 2 31.99	−60 11 38.1	3	n	1995	7.2 p	95-05	95-04	-	X95-04:	
GP Com	13 5 42.85	+18 1 2.6	80	ibwd		15.7 V	01PP *	95-05	**83-01**	S83-12	G 61-29/Gr 389
EV UMa	13 7 53.85	+53 51 30.0	63	am		17.1 V- 20.8 V	94-04	94-23	**94-15**	S94-19	RX J1307+53
BM Cha	13 8 7.	−77 55 5.		non-cv				83-07*	-	-	S 6445
WX Cen	13 12 52.49	−63 23 45.4	−1	nl		13.4 p- 14.4 p	060X	89-03	**68-05**	S95-14	
Cen	13 13	−32	29	am		16 B	93-04	93-17	-	-	RX J1313−32
V812 Cen	13 13 54.18	−57 40 44.5	5	n	1973	11 p- 18 j	00002	87-02	87-04	X87-08:	
NN Cen	13 14 15.4	−60 52 47.	1	ugss		13.2 p- 18.1 V	007L	82-01	96-01*	S96-01	HV 6432
Oct	13 14 41.	−87 31 32.	−25	N:	1911	13.0 p- (15 p	67-02	00001	-	-	NSV 6101
Vir2	13 16 38.	+3 48 18.		non-cv				94-12*	-	-	PG 1314+041
Vir	13 17 39.	−12 32 52.		non-cv				94-12*	-	-	PG 1315−123
Dra1	13 17 51.76	+67 31 59.6	49	cv		16.0 B	01RQ	86-01	86-05	S93-10	PG 1316+678
V840 Cen	13 20 49.	−55 50 14.		non-cv				87-02*	-	-	
HV Vir	13 21 3.10	+1 53 28.2	64	ugwz	1929,1992	11 p- 19 p	92-04	92-14	87-04:	X92-08:	NSV 6201
V803 Cen	13 23 44.51	−41 44 30.4	21	ibwd		13.2 V- 17.7 V	02EI	89-04	**75-04**	S89-07	AE1
RR Cha	13 26 23.44	−82 19 43.4	−19	na	1953	7.1 p- 19.3 j	00002	96-01	87-04	S96-01	S 5346
CVn2	13 29 33.71	+47 14 3.1	69	N:			008S	00001	**899-1**	-	NSV 6278
BV Cen	13 31 19.55	−54 58 33.6	7	ug		10.5 v- 13.3 v	0615	84-01	82-01	S82-12	HV 4647
LY Hya2	13 31 53.84	−29 40 59.1	32	ug:		17.4 v- 18.4 v	02EF	83-03	83-05	S83-02	1329−294
UX UMa	13 36 40.97	+51 54 50.3	64	ux		12.6 V- 14.2 V	00XN	87-01	83-01	S83-12	SVS 365
HS Vir	13 43 38.45	−8 14 3.1	52	ug		13.0 B- 15.8 B	044B	95-05	82-08	S89-06	PG 1341−079
CR Boo	13 48 55.29	+7 57 34.8	66	ibwd		13.6 B- 17.2 B	019P	95-05	**86-05**	S87-18	PG 1346+082
Cen4	13 49 31.8	−47 54 40.	14	nl		(19.0 j- 21.5 j	94-03	94-14	**94-11**	S94-11	V1349−4754
V868 Cen	13 50 10.60	−63 8 52.0	−1	n	1991	10.2 V- (22.5 V	91-03	91-08	-	X91-06:	
Cen1	13 50 29.1	−48 2 50.	14	nl		(19.0 j- 21.0 j	01F7	94-14	**94-11**	S94-11	V1350−4802
BW Cir	13 58 10.	−64 44 5.		non-cv	1987			88-05*	-	-	1354−64
DR UMa	13 59 5.4	+55 44 4.	59	UG/NL		17.5 B- (18.2 B	003A	00000	**79-03***	-	GR 296
Vir3	14 6 2.	−11 18 33.		non-cv				94-09*	-	-	PG 1403−111
Z Aps	14 6 55.	−71 22 16.		non-cv				91-14*	-	-	HV 5060
AB Boo	14 7 4.4	+20 44 45.	71	n::	1877	4.5 v	00003	87-02	87-04:	-	
CT Boo	14 8 19.53	+53 30 34.2	60	NL:		17.0 B- 18.7:B	003A	00000	**84-05***	-	SVS 2818
V834 Cen	14 9 7.46	−45 17 17.1	16	am		14.2 v- 17 v	02MC	84-01	82-05	S84-02	1E 1405−451
T Boo	14 14 5.7	+19 4 2.	69	n:	1860	9.7 v- 18.5:p	00003	87-02	87-04*	-	BD +19°2768a
Cen2	14 29 27.23	−38 4 10.0	21	am		16.5 v	0163	96-04	**96-04**	S96-04	EUVE J1429−38.0
GY Hya	14 30 30.48	−25 52 38.2	31	ug:		14 p- 16 p	05XY	82-01	82-01	S96-01	S 6576
HY Lup	14 31 50.20	−51 10 33.1	8	n	1993	8.0 V- (17 j	93-02	93-07	-	X93-12:	
Vir4	14 35 0.14	−0 46 7.0	53	cv		18.5 j	00WN *	92-05	**99-99**	S92-13	1432−0033
V842 Cen	14 35 52.35	−57 37 34.7	2	n	1986	4.6 v- 20.3 j	00002	87-02	87-04:	X89-01	
X Cir	14 42 47.	−65 12 36.	−5	nb	1927	6.5 p- (23 j	060Z	87-02	87-04*	X27-01:	
Boo	14 43 19.	+13 41 50.		non-ex	1962			84-04*		-	S 10808
UZ Boo	14 44 1.3	+22 0 56.	63	ugwz		11.5 v- 20.4 V	00FB	91-05	82-01	-	HV 10426
Cir	14 44 53.48	−63 53 55.6	−3	n	1995	7.2 v	95-02	95-01	-	X95-01:	
Boo	14 46 1.	+33 28 51.		non-cv				94-12*	-	-	PG 1443+337
Dra2	14 46 57.	+58 9 19.		non-cv				94-12*	-	-	PG 1445+583
AR Cir	14 48 9.60	−60 0 26.7	0	n:	1906	10.3 p- 15 p	0025	87-02	93-06*	S93-14	HV 2954
AI Cir	14 49 31.29	−68 51 35.9	−8	n:	1914	10.9 p- 23 j	00003	87-02	87-04:	-	HV 5121
Lib3	14 50 38.66	−24 22 50.0	31	ux		14.5 p- 14.8 p	02C7 *	89-03	**99-99**	-	Preston 874124
Cir1	14 54 15.4	−68 16 19.	−8	nl		18.2 V	0600	90-09	90-02	S90-08	1E 1449.8−6803
TT Boo	14 57 44.74	+40 43 42.2	60	ugsu		12.7 v- 19.2 V	01R4	95-05	87-06	X89-06	HV 3681
Lib1	15 2 12.	−2 45 59.		non-cv				94-12*	-	-	PG 1459−026
Boo1	15 4 41.78	+8 47 54.1	54	ug		18.5 v	00J0	85-01	85-01	S85-02	1502+09
Dra8	15 8 47.	+55 28 24.	52	sn:		15 p	01RT	65-01*	**65-02***	-	SN s1964α

TABLE 1(b)
(Continued)

GCVS Name	Coordinates α (2000)	Coordinates δ (2000)	b	Type	Year of Outburst	Mag. Range Max Min	Coord Ref	Type Ref	Chart Ref	Spec Ref	Other Name
Lib4	15 10 6.27	−1 55 21.9	46	ug:		10.0 p- 16 p	023F *	90-20	**99-99**	-	
Ser1	15 13 2.30	+23 15 7.9	58	ug:		14.8 V- 17.9 V	027J	94-12	86-05	S93-10	PG/NSV 6990
EK TrA	15 14 1.47	−65 5 31.3	−6	ugsu		10.4 v- 16.6:v	007I *	87-01	82-01	X85-04	S 5005
Ser	15 18 14.	+2 5 34.	47	ug		17.5 p- 20.9 V	00001*	81-01	81-01	S81-07	M5 V101
CrB	15 19 14.	+26 17 20.		non-cv				94-12*	-	-	PG 1517+265
GW Lib	15 19 55.45	−25 0 25.3	27	ug	1983	9 p- 18.5 p	00GV	96-19	87-04	S87-09	
TrA1	15 21 26.9	−68 38 27.	−10	nl		17.5 V	04C2 *	90-09	90-02	S90-08	1E 1516.6−6827
Lib2	15 23 19.	−5 11 43.		non-cv				94-12*	-	-	PG 1520−050
Ser2	15 24 27.	+12 2 7.		non-cv				94-12*	-	-	PG 1522+122
ES Dra3	15 25 31.82	+62 1 0.1	47	ug:		13.9 p- 16.3 p	01OK	94-12	86-05	S93-10	PG 1524+622
IL Nor	15 29 23.1	−50 35 0.	5	nb	1893	7.0 p- 18 :j	0619 *	87-02	87-04	S87-09:	HD 137677/HV 25
AG Aps	15 30 22.18	−75 44 38.5	−15	ug		14.3 p- 18.1 V	04BW	82-01	82-01	S96-01	S 5507
DM Dra	15 34 12.13	+59 48 31.9	47	ug		15.5 v- 21.7 v	01OK	95-05	82-11	-	SVS 2426
Lib5	15 35 53.08	−14 13 12.3	33	ibwd		13.7 V	03YJ *	94-28	**99-99**	S94-17	EC 15330−1403
BR Lup	15 35 53.	−40 34 6.	12	ugsu		13.1 p- 17.5 p	06Q0	95-05	82-01	X87-11	HV 4889
LX Ser	15 38 0.12	+18 52 3.2	51	vy		13.3 B- 17.4 B	00GM	95-05	79-02	S81-04	Stepanian's star
IM Nor	15 39 26.20	−52 19 21.3	2	n:	1920	9.0 p- 22.0 j	00002	87-02	87-04:	-	HV 3532
V344 Nor	15 40 31.	−51 12 55.		non-cv	1985/1			87-02*	-	-	
CT Ser	15 45 38.97	+14 22 32.7	48	n	1948	7.9 v- 16.6 p	00002	87-02	87-04	S92-01	
AB Nor	15 49 16.	−43 4 51.	8	ug:		13.9 p- (16.0 p	06AK *	82-01	82-01	-	HV 4908
SS UMi	15 51 22.24	+71 45 11.9	39	ugsu		12.6 v- 16.9 v	01L6	95-05	82-07	S82-05	PG 1551+719
MR Ser	15 52 47.23	+18 56 27.6	48	am		15.0 V- 17 V	00GM	84-01	82-03	S82-08	PG 1550+191
NN Ser	15 52 56.	+12 54 45.		non-cv				89-06*	-	-	PG 1550+131
T CrB	15 59 30.09	+25 55 11.4	48	nra		2.0 p- 11.3 p	00002	87-06	87-04	S83-12	BD +26°2765
CrB1	16 0 4.	+33 11 15.	49	ug		14.0 p- (17.5 b	01RN	96-17	**96-12**	-	Var 21
V345 Nor	16 6 45.	−52 3 2.		non-cv	1985/2			87-02*	-	-	NSV 7429
V794 Sco	16 11 4.	−9 50 38.	29	UG:		16.0 p- 17.3 p	66-01*	00000*	-	-	
Oph	16 13 30.82	−5 18 38.6	31	n:	1893	11.5 p- 21 :j	00003	87-02	87-04:	-	NSV 7542
V341 Nor	16 13 44.4	−53 19 8.	−2	n:	1983	9.4 v- (17 j	00003	87-02	87-04:	X83-17:	
UMi1	16 14 23.19	+70 58 18.6	38	cv:		16.4 v	01L6 *	94-32	**99-99**	-	FBS 1614+711
V893 Sco	16 14 45.	−28 39 8.	16	UG:		10.6 p- 14.5 p	72-02*	00000	-	-	SVS 1772
T Sco	16 17 2.83	−22 58 31.3	19	n:	1860	7 v- 22.2:B	95-01	87-02	95-01	-	
X Ser	16 19 17.57	−2 29 29.2	31	nb:	1903	8.9 p- 18.3 p	00002	87-02	87-04	S83-12	HV 3137
Her1	16 19 49.	+14 53 11.		non-cv				94-12*	-	-	PG 1617+150
HP Nor	16 20 50.	−54 53 22.	−3	ugz		12.8 v- 16.4 V	06AJ	82-01	82-01	S76-01:	HV 8865
V589 Her	16 22 7.19	+19 22 36.3	41	ug		14.1 p- (17.5 p	01GC	82-01	82-01	S92-01	S 10296
U Sco	16 22 30.68	−17 52 42.1	22	nrb	1863	8.8 v- 19.2 v	00002	87-06	87-04	S81-02	BD −17°4554
V699 Oph	16 25 14.76	−4 40 25.6	29	UG		13.8 p- 18.5 p	03UT	00000	**58-03***	-	HV 10577
IK Nor	16 25 29.	−55 20 1.	−4	ug		12.9 p- 16.3 p	06AJ	82-01	82-01	S76-01:	
TU Oph	16 26 39.	−22 18 59.		non-cv				82-01*	-	-	
KQ Nor	16 27 33.20	−59 19 56.7	−7	UG/M:		15.8 p- (16.8 p	06AH	00000	**63-02***	-	S 5752
Sco1	16 28 8.7	−38 48 44.	7	cv:		16.8 B -)19.6 B	061B	91-13	**91-11**	-	NGC 6139 V4
UMi	16 29 24.	+86 26 3.	29	UG:		9 :v- 11.5:v	00005	00001	-	-	NSV 7956
FL TrA	16 30 36.5	−61 50 28.	−9	UG		15.5 p- (17.0 p	06AH *	00000	63-02	-	S 5770
V592 Her	16 30 58.	+21 16 57.	40	ug:	1968,1986	12.3 p- (21 p	00001	87-02	91-04	-	S 10376
LR Nor	16 33 53.64	−56 27 58.4	−5	UG		15.5 p- (17.0 p	06AJ *	00000	63-02	-	S 5796
Her2	16 35 45.70	+11 24 58.3	35	ug:		14.9 B	006K	94-12	86-05	S93-10	PG 1633+115
V544 Her	16 38 5.5	+8 37 58.	33	ug		14.5 p- 20 :p	02CX	95-05	82-01	-	S 9789
OY Ara	16 40 50.27	−52 25 51.3	−4	na	1910	6.0 p- 17.5 p	00003	87-02	87-04	S87-09:	HD 149990
Her3	16 41 22.	+33 44 53.		non-cv				94-12*	-	-	PG 1639+338
V610 Her	16 43 39.16	+22 31 25.9	37	UG		16.2 p- (16.8 p	02BA	00000	68-01*	-	S 10311
AH Her	16 44 9.99	+25 15 2.1	38	ugz		11.3 v- 14.7 v	02BA	87-01	82-01	S83-12	SVS 32
V611 Her	16 44 50.	+19 59 44.	36	UG		15.4 p- (16.4 p	02D2	00000	**68-01***	-	S 10312
AC Sco	16 46 46.	−27 24 26.		non-cv				95-27*	-	-	HV 1095

TABLE 1(b)
(Continued)

GCVS Name	Coordinates α (2000)	Coordinates δ (2000)	b	Type	Year of Outburst	Mag. Range Max Min	Coord Ref	Type Ref	Chart Ref	Spec Ref	Other Name
RW UMi	16 47 54.75	+77 2 12.2	33	nb/ug	1956	6 p- 21 p	034H *	87-02/94-02	87-04	S92-01	SVS 1359
AF Sco	16 50 26.	−25 33 38.		non-cv				95-19*	-	-	HV 1108
V840 Oph	16 54 44.	−29 37 26.	9	na:	1917	6.5 p- 20 :j	00003	87-02	87-04:	-	HV 3522
Dra	16 57 27.	+65 31 5.		non-cv				94-12*	-	-	PG 1657+656
V422 Ara	16 59 19.	−61 43 34.		non-cv				96-01*	-	-	S 5989
V841 Oph	16 59 30.26	−12 53 26.8	18	nb	1848	4.2 v- 13.5 v	00002	87-02	87-04	S83-12	BD −12°4633
V433 Ara	17 0 6.06	−57 51 52.1	−9	UG		14.8 p- (16.3 p	02F7	00000	**63-02**	-	S 6006
V1195 Oph	17 0 22.	−20 53 30.	13	ug		16.3 p- (20.1 p	00003	87-10*	87-04:	-	
V1235 Oph	17 1 50.	−20 21 0.	13	n or uv	1959	17.0 p- (20.8 p	00003	87-02	87-04:	-	
V598 Sco	17 2 47.	−34 40 28.		non-cv				92-16*	-	-	HV 10836
V601 Sco	17 4 5.28	−36 43 34.1	3	ug:		15.0 p- (16.5 p	06Q3	82-01	82-01	-	HV 10840
V1326 Oph	17 5 2.	−18 59 34.	13	UG		17.9 p- (20.2 p	67-03	00000	-	-	
V992 Sco	17 7 17.39	−43 15 22.5	−2	na	1992	8.3 p- 18 :j	92-07	92-13	95-13*	X92-14	
V455 Sco	17 7 22.	−34 5 14.		non-cv				00000*	-	-	HV 7869
FQ Sco	17 8 4.44	−32 42 2.1	5	ugSS		12.0 B- 18.5 B	06Q3 *	82-01/00000	82-01	S82-03:	HV 4389
V2051 Oph	17 8 19.09	−25 48 30.8	8	nl		13.0 v- 17.5 v	067P *	83-02	82-01	S83-12	
V2101 Oph	17 9 38.	−27 18 56.		non-cv				92-16*	-	-	BV 1694
Dra	17 11 21.	+56 35 28.		non-cv				94-12*	-	-	PG 1710+567
V1548 Oph	17 11 26.	−16 20 19.	13	n:	1959	13.7 p- (20	00003	87-02	87-04:	-	
V2214 Oph	17 12 1.58	−29 37 33.3	6	nb/am	1988	8.5 p- 20.5 j	88-02*	93-02	93-01	X93-05	
Oph3	17 12 36.45	−24 14 44.6	9	dq		14 V	067P	95-21	**95-05**	S95-13	RX J1712.6−2414
V795 Her	17 12 56.09	+33 31 21.4	34	dq		12.5 B- 13.2 B	02TX *	90-05	82-08	S86-05	PG 1711+336
Her4	17 13 50.	+49 16 11.		non-cv				83-04*	-	-	PG 1712+493
V499 Ara	17 14 39.36	−58 53 51.1	−11	ug		14.8 p- (16.2 p	02F7	82-01	82-01	-	S 6115
V360 Her	17 16 38.	+24 26 52.		non-cv	1892			93-12*	-	-	
Ara	17 16 53.	−65 32 42.	−16	ug:		13.5 p- (15.5 p	00005	00001*	82-01	-	NSV 8383
V825 Her	17 18 37.00	+41 15 51.1	34	ux		14.0 v- 14.2 v	009J	94-12	82-08	S84-10	PG 1717+413
V2264 Oph	17 20 20.83	−26 46 26.3	6	na	1991/1	9.9 v- (21 p	91-06	91-09	-	X91-07	
V478 Her	17 21 5.60	+23 39 36.9	30	cv		15.5 p - 17.1 p	02HC	96-11	**57-11**	-	S 4133
V729 Sco	17 22 2.66	−32 5 48.8	2	n or m	1936	14.0 p- 22 :j	00002	87-02	87-04:	-	
Oph2	17 22 5.	−19 49 12.	9	cv		19. V	00001	90-01	90-02	S90-08	1E 1719−1946
DT Aps	17 22 47.98	−75 9 55.9	−20	ugss		14.4 p- (15.8 p	04BX	82-01	82-01	-	S 5646
RY Ser	17 23 7.54	−12 47 44.0	13	UG		14.1 B- 18.0 B	03YM	00000	**71-03***	-	Ross 19
V2109 Oph	17 24 15.93	−24 36 50.2	6	n	1969	10.8 r- 18 j	00002	87-02	87-04:	-	
BB Oph	17 24 30.02	−24 48 6.1	6	n:	1897	11.3 p- 19 j	00002	87-02	87-04	-	HV 3985
V2295 Oph	17 25 7.	−23 11 13.		non-cv	1993			94-26*	-	-	
V478 Sco	17 25 58.47	−35 32 31.5	−0	ug		14.0 B- 16.7 B	06Q3	82-01	82-01	S96-01	HV 7898
V902 Sco	17 26 8.3	−39 4 5.0	−2	nb	1949	11 p- 20.0 j	00003	87-02	87-04:	X51-01:	He 3-1401
V906 Oph	17 26 9.7	−21 54 28.	7	na	1952	8.4	94-07	87-02	87-04:	X54-01:	-
V809 Her	17 27 28.	+45 30 39.		non-cv				77-01*	-	-	S 10875
V908 Oph	17 27 51.	−27 45	4	n	1954	11.5 p- (14 p	00003	87-02	87-04:	X87-08:	
AT Ara	17 30 33.77	−46 5 58.5	−6	ugSS		11.5 v- 14.9 v	06AQ	82-01/00000	82-01	S95-16:	HV 6551
MM Sco	17 30 46.	−42 11 40.	−5	ug		13.0 B- 18.5 B	06AO *	82-01	82-01	-	HV 6553
V1063 Oph	17 30 53.	+10 17 0.	22	UG		15.5 p- (17.5 p	00001	00000	**67-01**	-	S 9807
EK Aps	17 31 54.	−67 42 52.		non-cv				95-27*	-	-	
V442 Oph	17 32 15.11	−16 15 21.7	9	vy		12.6 v- 15.5 v	03YM	95-05	83-01	S83-07	SVS 337
V972 Oph	17 34 43.81	−28 10 35.8	2	nb	1957	8.0 p- 16.6 V	00002	87-02	87-04	S96-01	
FV Ara	17 35 10.10	−63 2 49.7	−15	ug		12 p- (18 p	02I8	82-01	82-01	-	HV 6770
Oph	17 35 44.61	−19 19 34.1	7	n	1994	6.5 p	94-02	94-11	-	X94-09:	
Ara	17 37 1.	−54 25 51.		non-cv				95-27*	-	-	NSV 9208
Oph	17 37 38.19	−3 14 41.8	15	n	1938	15.6 p- 21 v	91-04	86-04	86-04	S90-06	M14 Nova 1938
BF Ara	17 38 21.	−47 10 41.	−8	ugss		13.6 p- (16.0 p	00001	82-01	82-01	-	HV 6576
V794 Oph	17 38 49.20	−22 50 49.2	4	nb	1939	11.7 p- 18 p	00002	87-02	87-04	X43-02*	
V728 Sco	17 39 12.3	−45 28 45.	−8	n::	1862	5.0 v- 20 :j	00003	87-02	87-04:	-	N Ara 1862

TABLE 1(b)
(Continued)

GCVS Name	Coordinates α (2000)	δ	b	Type	Year of Outburst	Mag. Range Max Min	Coord Ref	Type Ref	Chart Ref	Spec Ref	Other Name
Her	17 39 29.	+21 11	25	N:	1919	13 p	23-01	00001	-	-	NSV 9445
V733 Sco	17 39 42.88	−35 52 38.4	−3	n or m	1937	13.5 p- 21 :j	00002	87-02	87-04:	-	
RT Ser	17 39 52.	−11 56 39.		non-cv	1909			87-02*	-	-	He 3-1452
Ara	17 40 40.93	−53 40 25.2	−12	cv:			95-08	95-29	-	-	NGC6397-COOL7
Ara	17 40 41.43	−53 40 17.5	−12	dq:			95-08	95-30	95-09	S95-11	NGC6397-COOL1
Ara	17 40 41.88	−53 40 26.3	−12	cv:		21.1 f	95-08	95-29	94-09	-	NGC6397-DP1
Ara	17 40 42.48	−53 40 17.4	−12	dq:			95-08	95-30	95-09	S95-11	NGC6397-COOL3
Ara	17 40 42.24	−53 40 30.9	−12	cv:			95-08	95-29	-	-	NGC6397-COOL4
Ara	17 40 42.98	−53 40 12.6	−12	cv:			95-08	95-29	-	-	NGC6397-COOL5
Ara	17 40 42.21	−53 40 28.7	−12	cv:		20.3 f	95-08	95-29	94-09	-	NGC6397-DP2
Ara	17 40 42.15	−53 40 26.7	−12	dq:		21.1 f	95-08	95-30	95-09	S95-11	NGC6397-DP3
Ara	17 40 42.56	−53 40 25.7	−12	cv:		21.1 f	95-08	95-29	94-09	-	NGC6397-DP4
V810 Oph	17 40 49.	+7 2 35.		non-cv				00000*	-	-	HV 11017
AE Ara	17 41 5.	−47 3 27.		non-cv				00000*	-	-	HV 5491
V1012 Oph	17 41 34.38	−23 23 33.1	4	n	1961	13.8 p- 22 j	00002	87-02	87-04:	X87-08:	SVS 1308
V660 Her	17 42 9.19	+23 48 30.6	25	UG		16 p- 19 :p	071R	00000	75-03*	-	SVS 2120
V2024 Oph	17 42 21.	−24 59	3	n	1967	11.0 v- (18	00003	87-02	87-04:	-	
V721 Sco	17 42 28.95	−34 40 41.9	−2	n	1950/3	10.1 p- (18.0 j	00002	87-02	87-04	X51-02:	
V553 Oph	17 42 53.50	−24 51 26.2	3	na	1940	12.5 p- 22 j	00003*	87-02	87-04:	X41-01:	
V2290 Oph	17 43 5.5	−20 7 0.	5	na	1991/2	9.3 v- (19 j	91-09	91-11	-	-	
V2110 Oph	17 43 33.21	−22 45 36.9	4	nb/z an	1950	12.0 p- 20 j	00002	87-02	87-04	S84-01	AS 239
V916 Sco	17 43 55.	−36 3 27.		non-cv	1967			87-02*	-	-	
KP Sco	17 44 16.47	−35 43 23.6	−3	na:	1928	9.4 p- 21 :j	00002	87-02	87-04:	-	HV 4716
V734 Sco	17 45 1.48	−35 37 55.9	−3	n or m	1937	14.7 p- 20 j	00002	87-02	87-04:	-	
V719 Sco	17 45 43.71	−34 0 55.1	−3	na	1950/1	9.8 p- 20.5 j	00002	87-02	87-04	X51-02:	He 3-1473
Sco	17 47 13.	−33 11 28.	−3	n	1952	11 p- 21 :j	52-01	87-02	87-04:	-	NSV 9663
V707 Sco	17 48 26.38	−36 37 54.9	−4	na	1922	9.9 p- 20 j	00002	87-02	87-04:	X87-08:	HV 3618
V722 Sco	17 48 37.	−34 57 50.	−4	na	1952/1	9.4 v- (13 v	00003	87-02	87-04:	-	
V3888 Sgr	17 48 41.07	−18 45 37.0	5	n	1974	9.0 v- 16 j	00002*	87-02	87-04	X76-03:	
V1274 Sgr	17 48 55.	−17 51 55.	5	n	1954/2	9.5 p- (13.0 p	00003	87-02	87-04:	X87-08:	
Sgr	17 49 11.	−17 50 49.	5	sn:		10.5 p	54-01	54-01*	-	-	SN s1954α
V3964 Sgr	17 49 42.34	−17 23 35.6	−5	na	1975/2	9.4 p- (17 p	00002	87-02	87-04	-	
V825 Sco	17 49 53.65	−33 32 13.7	−3	n	1964	12 p- 19.0 j	00002	87-02	87-04	X65-01:	
V723 Sco	17 50 5.2	−35 23 57.8	−4	na/nra:	1952/2	9.8 p- 19 :j	00003	87-02/92-07	87-04	-	
RS Oph	17 50 13.08	−6 42 28.4	10	nra	1967	4.3 v- 12.5 v	00002	87-06	87-04	S83-12	BD −6°4661
V380 Oph	17 50 13.66	+6 5 29.1	16	nl		14.5 v- (16.1 v	03RC	84-01	86-08	S83-09:	159.1929
V759 Sgr	17 50 19.74	−27 25 2.5	0	ux/ug		13.6 p- 16.0 p	067R	89-03	**40-01***	-	HV 10285
V1172 Sgr	17 50 23.55	−20 40 30.3	3	n	1951/1	9.0 p- 18 j	00002	87-02	87-04:	-	
Her6	17 51 0.09	+45 0 42.4	29	UG/UV:		15.0:p- 17.2:p	02RU	00001	**58-04**	-	NSV 9787
V697 Sco	17 51 21.83	−37 24 55.2	−5	na	1941	10.2 p- 17 j	00002	87-02	87-04	X87-08:	
V977 Sco	17 51 50.25	−32 31 58.0	−3	n	1989	9.4 r- 21 j	89-03*	91-06	90-09:	X91-04	
LW Ser	17 51 50.89	−14 43 50.6	6	na	1978	8.3 v- 21 p	00002	87-02	87-04	X87-07	
V382 Sco	17 51 56.13	−35 25 5.4	−4	n:	1901	9.5 p- 22 j	00002	87-02	87-04	-	HV 7006
V720 Sco	17 51 58.	−35 23 22.	−4	n	1950/2	7.5 p- 21	00003	87-02	87-04:	X51-03:	
KW Sgr	17 52 1.	−28 1 21.		non-cv				00000*	-	-	HDE 316496
Sgr	17 52 32.69	−17 41 7.7	4	nb pec		12.8 V- 21 j	96-01	96-08	96-15	X96-08	Sakurai's var.
V696 Sco	17 53 11.51	−35 50 15.4	−5	na	1944	7.5 p- 19.5 j	00002	87-02	87-04	-	
V2415 Sgr	17 53 12.	−29 34 25.	−2	n	1951/2	13 p- (18 p	00003	87-02	87-04:	X87-08:	
V744 Sco	17 53 18.08	−31 13 35.1	−3	n:	1935	13.3 p- 21 p	00003	87-02	87-04:	-	
Sco	17 53 40.	−30 45 32.	−2	n	1954	13.8 p	00003	87-02	87-04:	-	NSV 9808
V4092 Sgr	17 53 41.99	−29 2 8.4	−2	n:	1984	10.5 v	00002	87-02	87-04	X84-09:	
V711 Sco	17 54 6.	−34 21 16.	−4	n:	1906	9.7 p- 19 j	00003	87-02	87-04*	-	HV 3061
Sco	17 54 11.	−30 48 51.		non-ex	1990			90-22*	-	-	
Sgr	17 54 43.	−28 41 41.	−2	n	1963	13	00003	87-02	87-04*	X63-01:	NSV 9828

TABLE 1(b)
(Continued)

GCVS Name	Coordinates α (2000)	δ	b	Type	Year of Outburst	Mag. Range Max Min	Coord Ref	Type Ref	Chart Ref	Spec Ref	Other Name
V745 Sco	17 55 22.1	−33 14 57.	−4	nra	1937,1989	11.2 p- 21 j	89-02	91-06	87-04:	X90-13	
MU Ser	17 55 52.78	−14 1 17.1	6	na	1983	7.7 v- (21 p	00002	87-02	87-04:	X85-03	
V732 Sgr	17 56 7.44	−27 22 17.0	−1	na	1936/1	6.5 p- (16.0 p	00003	87-02	87-04:	X37-01:	HDE 316633
V960 Sco	17 56 34.14	−31 49 36.3	−4	n	1985	10.5 v- 20 j	00002	87-02	87-04	X86-11	
V990 Sgr	17 57 19.	−28 19 7.	−2	na:	1936/3	11.1 p- (14.7 p	00003	87-02	87-04:	-	
V3889 Sgr	17 58 21.32	−28 21 52.7	−2	na:	1975/1	8.4 v- 21 j	00002	87-02	87-04	-	
V2435 Sgr	17 58 55.0	−29 0 37.	−3	UG:		16.1 p- 17.2 p	067O *	00000	68-02	-	
V1275 Sgr	17 59 6.21	−36 18 40.4	−6	na	1954/1	7.0 p- 18 :j	00002	87-02	87-04:	X55-01:	N Sco 1954
Sgr	17 59 18.17	−29 9 52.9	−3	ug:	1990	8.0 v	90-01	90-12	-	X90-07:	
V2446 Sgr	17 59 23.	−29 2 16.		non-cv				87-02*	-	-	
Sgr	17 59 41.	−25 13 24.		non-cv	1994			94-34*	-	-	
V4135 Sgr	17 59 45.08	−32 16 20.8	−4	n	1987	10.0 v- 21.5 j	87-03	87-05	87-07	X87-17:	
V2468 Sgr	17 59 49.	−29 1 3.	−3	UG:		17.4 p- 18.2 p	067O	00000	68-02	-	
V735 Sgr	17 59 52.	−29 34 1.		non-cv				83-05*	-	-	HV 9175
V787 Sgr	18 0 2.2	−30 30 30.9	−3	na:	1937	9.8 p- 21 :j	00003	87-02	87-04:	-	HDE 316917
V999 Sgr	18 0 5.59	−27 33 14.0	−2	nb	1910	8.0 p- 17.4 B	00002	87-02	87-04	S87-09*	HD 163982
V394 CrA	18 0 25.97	−39 0 35.1	−8	nrb	1949,1987	7.2 v- 18 :j	00002	91-06	88-06	X91-04	N Sco 1949
FL Sgr	18 0 30.2	−34 36 13.1	−6	na:	1924/2	8.3 p- 20 :j	00003	87-02	87-04:	-	HV 4003
V2301 Oph1	18 0 35.55	+8 10 12.6	15	dq:/am		16.4 v	02V7	94-05/94-22	94-07*	S94-05	1H 1752+081
V1944 Sgr	18 0 36.9	−27 17 13.	−2	n	1960	13 p	067R *	87-02	87-04:	X87-08:	SVS 1397
V2493 Sgr	18 0 41.	−29 0 13.		non-cv				96-01*	-	-	
V551 Sgr	18 0 56.27	−34 35 47.8	−6	ugwz:		13.5 p- 20 p	92-08	91-05	**82-01**	-	HV 7095
DZ Ser	18 0 58.86	−10 33 52.1	6	n	1960	14.0 p- 21 p	00002	87-02	87-04	X61-01:	
KY Sgr	18 1 20.9	−26 24 40.9	−2	na:	1926/1	10.6 p- 20 j	00003	87-02	87-04:	-	HV 4480
V1174 Sgr	18 1 37.	−28 44 26.	−3	n	1952/2	12.0 p- (18 p	00003	87-02	87-04:	-	
V384 Sco	18 1 43.15	−35 39 27.8	−6	n:	1893	12.3 p- 18.5 j	00002	87-02	87-04	-	HV 7104
Her5	18 2 6.53	+18 4 43.3	19	am		15 v	01LT	95-28	**95-08***	S95-17	WGA 1802.1+1804
V4027 Sgr	18 2 29.21	−28 45 19.9	−3	n	1968	11.0 r- (21 j	00003	87-02	87-04:	X87-08:	
V2104 Oph	18 3 25.10	+11 47 57.2	16	n	1976	8.8 v- 20.5 p	00002	87-02	87-04:	X76-04:	
V1431 Sgr	18 3 29.6	−29 59 54.	−4	n:	1945	17.2 p- (19.2 p	067O	87-02	87-04*	-	
AT Sgr	18 3 30.87	−26 28 28.5	−2	na:	1900	11.0 p- 19 j	00002	87-02	87-04	-	HV 1149
Sgr	18 3 37.86	−28 0 8.5	−3	n	1986	10.4 p	87-05	87-09	-	-	
Dra5	18 4 14.12	+67 54 12.2	29	ug		14 V- 15 V	00T0 *	96-09	**99-99**	S96-07	HS 1804+6753
Oph4	18 4 17.3	+4 43 44.	13	ug		15.0 p- (21.0 b	96-04	96-18	**96-13**	-	Var 25
V1502 Sgr	18 4 23.	−30 6 47.		non-cv				00000*	-	-	
Sgr	18 5 12.	−29 54 23.	−4	n	1953	10.5	00003*	87-02	87-04:	X53-02:	NSV 10158
V1572 Sgr	18 5 37.	−31 37 43.	−5	n	1955	11 p- (16 p	00003	87-02	87-04:	-	
V1012 Sgr	18 6 14.0	−31 44 26.9	−5	na:	1914/2	8.0 p- 20 j	00003	87-02	87-04:	-	HV 3531
V1014 Sgr	18 6 45.7	−27 26 15.3	−3	na:	1901	10.9 p- 20 j	00003	87-02	87-04:	-	HV 3312
V737 Sgr	18 7 8.66	−28 44 52.3	−4	n:	1933	10.3 p- 19 :j	00003	87-02	87-04:	-	V908 Sgr
V908 Sgr	18 7 8.66	−28 44 52.3			1933				-	-	V737 Sgr
DQ Her	18 7 30.17	+45 51 31.9	26	na/dq	1934	1.3 v- 14.5 v	00002	95-05	87-04	S83-12	452.1934
Sgr	18 7 30.	−22 4 58.	−1	n:	1989	10 v	89-04	89-02	-	-	
V927 Sgr	18 7 42.7	−33 21 17.4	−6	na	1944	8.0 p- 20 :j	00003	87-02	87-04:	-	
V426 Oph	18 7 51.71	+5 51 48.5	12	ugz/dq:		11.6 B- 13.4 B	02V7	95-05/94-06	83-01	S83-12	29.1926/SVS 83
V4121 Sgr	18 7 54.77	−28 49 26.8	−4	n	1983	9.5 v- 21 j	00002	87-02	87-04	X87-08:	
PR Her	18 8 5.	+38 46 10.	24	UG		14.0 p- 18.5 p	00001	00000	57-05	-	S 4247
KY Ara	18 8 21.96	−54 56 17.3	−16	ug:	1937	15.1 p- (21 B	039U	94-08	**94-17***	-	HV 7987
V631 Her	18 8 44.	+34 27 34.	23	UG		16.2 p- (21 p	00001*	00000	69-01	-	S 10422
V630 Sgr	18 8 48.25	−34 20 21.4	−7	na	1936/4	1.6 p- 19 j	00002	87-02	87-04	X36-01:	HDE 321353
Sgr	18 8 51.	−26 16 12.		non-cv	1985			85-05*	-	-	
V1015 Sgr	18 9 3.	−32 28 16.	−6	na:	1905	7.1 p- 21 :j	00003	87-02	87-04:	-	HV 3529
V1148 Sgr	18 9 6.	−25 59 32.	−3	n	1943	8.0 p- (16 p	00003	87-02	87-04:	X49-02:	
V4157 Sgr	18 9 34.9	−25 51 58.2	−3	na	1992/1	7.0 p- (21 j	92-02	92-10	-	X92-04:	

TABLE 1(b)
(Continued)

GCVS Name	Coordinates α (2000)	Coordinates δ (2000)	b	Type	Year of Outburst	Mag. Range Max Min	Coord Ref	Type Ref	Chart Ref	Spec Ref	Other Name
PU Her	18 9 52.98	+32 0 27.1	22	UG		15.5 p- 19.5 p	01KE	00000	91-02	-	S 4248
V2506 Sgr	18 11 2.	−28 32 40.		non-cv	1946/2			87-02*	-	-	AS 282
UZ Ser	18 11 24.90	−14 55 33.9	2	ugSS		11.9 v- 16.0 v	067F	87-01/00000	82-01	S82-03:	56.1924
Dra6	18 12 31.43	+67 4 46.1	29	ug:		15.0 B- 18.5 B	00T0	95-32*	**95-15**	-	KUV 18126+6704
V4327 Sgr	18 12 49.82	−29 29 4.9	−5	na	1993	7.7 v	93-03	93-09	-	X93-11:	
V1830 Sgr	18 13 51.	−27 42 23.	−5	ug		11.5 p- 17.5 p	067O	84-02	**82-01***	-	
V849 Oph	18 14 7.17	+11 36 42.7	13	nb	1919	7.3 p- 17 p	00002	87-02	87-04	S96-14	HD 167276
V4160 Sgr	18 14 13.83	−32 12 28.5	−7	na	1991	7.0 v- (19 j	91-07	91-10	-	X91-09:	
V1175 Sgr	18 14 17.	−31 7 8.	−6	n	1952/1	7.0 p- (12 p	00003	87-02	87-04*	X87-08:	
V533 Her	18 14 20.34	+41 51 21.3	24	na	1963	3.0 p- 15.0 p	00002	87-02	87-04	S83-12	
V3909 Sgr	18 14 22.	−27 51 6.		non-cv				96-01*	-	-	
V3914 Sgr	18 14 49.	−30 43 29.		non-cv				96-01*	-	-	
V1583 Sgr	18 15 26.3	−23 23 18.2	−3	na:	1928	8.9 p- 21 j	00003	87-02	87-04:	-	HV 12320
V2323 Sgr	18 15 55.04	−27 57 8.2	−5	UG:		13.1 p- 16.5 p	060E	00000	67-04	-	
V4074 Sgr	18 16 5.3	−30 51 15.	−7	nb/z an	1965	8.6 p	00003	87-02	87-04*	S75-02:	AS 295B
AM Her	18 16 13.33	+49 52 4.2	26	am		12.3 v- 15.7 v	00TB *	84-01	83-01	S83-12	3A 1815+498
V2839 Sgr	18 16 19.	−31 42 14.	−7	UG:		15.3 p- 17.2 p	71-01	00000	-	-	
V2329 Sgr	18 16 25.	−27 52 58.		non-cv				00000*	-	-	
FM Sgr	18 17 18.1	−23 38 27.1	−3	na:	1926/2	8.6 p- 20.5:j	00003	87-02	87-04:	-	HV 3994
DV Dra	18 17 25.	+50 48 19.	26	ugwz:		15.0 B- (21 p	00TB *	91-15	85-06	-	SVS 2704
V1149 Sgr	18 18 30.4	−28 17 17.	−6	nb	1945	7.4 p- 21 j	00003	87-02	87-04:	-	
V1150 Sgr	18 18 54.	−24 5 44.	−4	nb	1946	13.3 p- (22 :j	00003	87-02	87-04:	-	
V928 Sgr	18 18 59.3	−28 6 0.	−6	nb	1947/1	8.9 p- 20.5 j	00003*	87-02	87-04:	X47-01:	
GM Sgr	18 19 22.	−25 24 25.		non-cv				90-18*	-	-	HV 4048
V726 Sgr	18 19 33.69	−26 53 19.6	−6	na	1936/2	10.8 p- 19 :j	00003	87-02	87-04:	X87-08:	HDE 315532
V4065 Sgr	18 19 34.	−24 43 41.	−4	n:	1980	9.0 v- (14.0 v	00003	87-02	87-04:	X80-03:	
V632 Her	18 19 41.	+24 33 14.	17	ug	1967	15.4 p- 21 p	00001	87-02	**68-07***	-	
V1016 Sgr	18 19 57.55	−25 11 14.7	−5	na	1899	8.5 p- 17 p	00002	87-02	87-04	-	HV 3306
V4049 Sgr	18 20 38.06	−27 56 26.0	−6	n	1978	12 p- 21 j	00002	87-02	87-04	X81-11	
V391 Lyr	18 21 11.97	+38 47 43.0	22	ugZ		14.0 p- 17.0 p	037J	87-03/00000	87-06	X92-06	S 10436
V441 Sgr	18 22 8.09	−25 28 53.7	−5	na	1930	8.7 p	00003	87-02	87-04:	X87-08:	HDE 315574
GR Sgr	18 22 58.42	−25 34 47.1	−6	n	1924/1	11.4 p- 16.6 p	00002	87-02	87-04	S96-14	HV 4012
V4169 Sgr	18 23 26.94	−28 21 59.7	−7	na	1992/2	7.8 p- (12.6 V	93-05	92-11	92-07	X92-12:	
V4171 Sgr	18 23 41.34	−22 59 28.7	−5	na	1992/3	8.0 p- 20.5 j	92-06	92-12	-	X92-16:	
IR Lyr	18 23 54.	+39 18 59.		non-cv				95-13*	-	-	S 4267
WW Tel	18 23 57.	−54 59 47.		non-cv				96-01*	-	-	HV 9884
V655 CrA	18 24 44.6	−36 59 43.	−11	n	1967	8 p- 17.6 j	00003	87-02	87-04:	X87-08:	
Sgr	18 24 44.5	−24 50 25.		non-cv				85-04*	-	-	NGC 6626 V7
V1151 Sgr	18 25 23.75	−20 11 59.3	−4	nb	1947/2	11.1 p- 20 j	00002	87-02	87-04	-	
V4019 Sgr	18 25 27.	−25 40 8.		non-cv				96-01*	-	-	
V909 Sgr	18 25 52.3	−35 1 26.9	−10	na	1941	6.8 p- 20 j	00003	87-02	87-04:	X87-08:	
V3941 Sgr	18 25 58.25	−29 25 49.2	−8	UG:		11.5 p- (14 p	060E	00000	73-02*	-	
DP Pav	18 26 20.	−64 57 38.		non-cv				96-01*	-	-	S 7111
BS Sgr	18 26 46.62	−27 8 20.0	−7	nb	1917	9.2 p- 17 j	00002	87-02	87-04	S87-09*	
V1988 Sgr	18 27 57.	−27 37 24.		non-cv				00000*	-	-	ICR -30385
HS Sgr	18 28 3.44	−21 34 24.7	−5	nb:	1900	11.5 p- 16.5 p	00002	87-02	87-04*	-	HV 4011
V391 Sct	18 28 7.	−15 54 49.	−2	UG:		13.5 I- 17.0 I	75-01	00000	-	-	
Sct	18 28 11.	−13 44 33.	−1	n:		14.4 I- (16.0 I	75-01	93-01	93-10	-	NSV 10848
LQ Sgr	18 28 29.	−27 55 20.		non-cv	1897			94-17*	-	-	HV 4475
V394 Lyr	18 28 47.	+35 49 29.	19	UG:		16.0 p- (17.0 p	037J	00000	90-06	S90-09	S 10439
V366 Sct	18 29 42.8	−12 18 55.	−1	n	1961	15.4 v- (23 j	00003	87-02	87-04:	-	
V3462 Sgr	18 30 19.	−32 37 55.	−10	UG:		14.1 p- 18.0 p	71-01	00000	-	-	
Sgr	18 30 23.11	−17 11 56.9	−3	n	1994/2	10.8 p	94-01	94-10	-	X94-08:	
V3890 Sgr	18 30 43.32	−24 1 8.6	−6	nra	1962,1990	8.4 p- 17.2 p	067S	91-06	90-05*	S83-12	GS 1826−24

TABLE 1(b)
(Continued)

GCVS Name	Coordinates α (2000)	Coordinates δ (2000)	b	Type	Year of Outburst	Mag. Range Max Min	Coord Ref	Type Ref	Chart Ref	Spec Ref	Other Name
FH Ser	18 30 46.92	+2 36 51.5	6	na	1970	4.5 v- 16.2 p	00002	87-02	87-04	S83-12	
Sgr2	18 31 23.5	−32 20 49.	−10	cv		12 V	060E *	86-09	**68-06**	S86-12:	NGC 6637 CV
V2359 Sgr	18 31 35.	−32 25 52.	−10	UG:		16.4 p- (18.6 p	060E	00000	62-02*	-	NGC 6637-V7
V2572 Sgr	18 31 36.75	−32 35 57.7	−10	na:	1969	6.5 p- 18 j	00002	87-02	87-04:	-	BV 1262
V1017 Sgr	18 32 5.	−29 23 12.		non-cv	1919			87-02*	-	-	HV 3519
V3876 Sgr	18 33 13.	−20 5 50.		non-cv				87-02*	-	-	
V1905 Sgr	18 33 42.1	−25 20 42.	−7	n:	1932	9.1 p- 19 j	067S *	87-02	87-04*	-	
AG Ser	18 33 52.	+3 42 49.		non-cv				82-01*	-	-	Ross 48
YY Tel	18 33 56.32	−53 58 50.0	−19	ugwz:		14.4 p- 19.3 V	03BQ	91-05	82-01	S96-01	HV 9962
V939 Sgr	18 34 23.	−26 54 32.		non-cv				87-02*	-	-	
V4077 Sgr	18 34 39.41	−26 26 2.9	−8	nb	1982	8.0 v- 22 j	00002	87-02	87-04	X83-08:	
V941 Sgr	18 34 43.	−29 34 44.		non-cv				87-02*	-	-	
CH Her	18 34 46.35	+24 48 1.6	14	ug		13.5 p- 17 :p	02UK *	82-01	82-01	-	203.1929
FV Sct	18 34 51.55	−12 55 26.8	−2	n	1960	12.5 p- 20 p	00002	87-02	87-04	S96-14	SVS 1306
V1310 Sgr	18 35 1.03	−30 3 35.0	−10	nb:	1935	11.7 p- (15.5 p	060E	87-02	87-04*	-	
LL Lyr	18 35 12.91	+38 20 4.3	19	ug		12.8 p- 17.1 p	01WO	87-03	87-06	S92-06	S 3808
V3608 Sgr	18 35 25.	−35 32 3.	−12	UG		15.6 p- 18.7 p	71-01	00000	-	-	
V662 CrA	18 35 31.	−36 56 51.	−12	UG		15.7 p- (19.6 p	71-01	00000	-	-	
V3645 Sgr	18 35 49.21	−18 41 45.1	−5	nb	1970	12.6 p- 18 p	00003	87-02	87-04:	X87-08:	SVS 1728
BP CrA	18 36 50.80	−37 25 52.9	−13	ugz		13.5 v- 15.9 v	068A	82-01	82-01	S96-01	
V2012 Sgr	18 37 12.	−26 10 22.		non-cv				00000*	-	-	
V4021 Sgr	18 38 14.26	−23 22 47.0	−8	na	1977	8.8 v- 18 j	00002	87-02	87-04*	X78-02:	
V949 Sgr	18 41 4.	−28 9 28.	−10	n:	1914/1	15.7 p- (17 p	00003	87-02*	87-04:	-	Innes 46
V3774 Sgr	18 41 41.2	−32 54 35.	−13	UG		14.7 p- (19.0 p	94-05*	00000	**99-99**	-	
V693 CrA	18 41 57.8	−37 31 14.	−14	na	1981	7.0 v- 23 j	00003	87-02	87-04:	X82-01	
Pav	18 42 30.	−61 51 45.		non-cv				95-27*	-	-	NSV 11181/LTT 7406
V1709 Sgr	18 42 50.	−19 47 48.		non-cv				00000*	-	-	HV 12404
V2383 Sgr	18 42 50.	−19 1 37.		non-cv				00000*	-	-	
V427 Sct	18 43 0.	−4 28 20.		non-cv	1958			87-02*	-	-	CSV 7917
BD Pav	18 43 11.90	−57 30 44.2	−22	ug	1934	12.4 p- 15.1 V	03BQ	87-02	87-04	S96-01	HV 10031
V492 Lyr	18 43 22.27	+40 40 11.5	19	UG		18.2 V	01JY *	00000	**79-05**	-	LHS 3406
V827 Her	18 43 42.59	+15 19 18.9	9	na	1987	7.5 v- 18.0 v	03OS	86-07	87-07	X86-09:	
V2032 Sgr	18 43 47.	−27 34 1.		non-cv				00000*	-	-	
AK Tel	18 43 49.	−55 0 23.		non-cv				82-01*	-	-	HV 10036
AY Lyr	18 44 26.73	+37 59 51.8	17	ugsu		12.5 B- 18.4 B	01WO	87-01	87-06	S87-05	330.1928
Aql	18 44 36.	−2 59	0	UG:		10.4:p- (13 p	44-01	00001	-	-	NSV 11280
V344 Lyr	18 44 39.17	+43 22 27.5	19	ugsu		14.5 p- (20 p	01JY	93-08	87-06	-	S 9329
Pav2	18 44 48.33	−74 18 33.5	−26	am		15.0 V- 16.7 V	00RK	93-15	**93-08**	S93-09	RE 1844−74
Aql2	18 45 12.51	−2 58 34.8	0	UG:		13 v- (14 v	064F	00001	**51-02***	-	NSV 11297
V2038 Sgr	18 45 20.	−26 27 48.		non-cv				96-01*	-	-	
V368 Sct	18 45 43.53	−8 33 0.9	−3	na	1970	6.9 v- 19.0 p	00002	87-02	87-04	X74-01:	
GL Sct	18 45 48.38	−6 25 14.7	−2	n:	1915	13.6 p- (16.8 p	00002*	87-02	87-04	-	
V838 Her	18 46 31.48	+12 14 1.8	7	na	1991	5.4 v- 18.3 r	02UZ	95-05	94-02*	X92-10	
Sct	18 46 51.1	−4 56 38.	−1	n::	1981	8 - (22 :	00003	87-02	87-04:	-	
V444 Sct	18 47 9.91	−8 20 53.6	−3	na	1991	10.5 v- 20 r	91-08	91-12	-	-	
V522 Sgr	18 48 0.36	−25 22 22.5	−11	n:/ug	1931	12.9 p- 17.5 p	00002	87-02	87-04*	-	
V603 Aql	18 48 54.50	+0 35 2.9	0	na/dq::	1918	-1.1 v- 12.0 v	00002	87-02/94-06	87-04	S83-12	HD 174107
V443 Sct	18 49 38.95	−6 11 15.9	−2	n	1989	8.5 p- (20 p	89-01*	91-06	90-09:	X91-04	
V4332 Sgr	18 50 37.	−21 23 30.		non-cv	1994/1			94-03*	-	-	
CI Aql	18 52 4.	−1 28 39.		non-cv	1917			95-23*	-	-	
CY Lyr	18 52 41.41	+26 45 29.9	11	ug		13.2 p- 17.0 p	02UK	85-06	82-01	S85-07	237.1929
Lyr	18 53 10.	+35 47	15	N:	1923	13 p- (16 p	23-01	00001	57-08	-	NSV 11494
HR Lyr	18 53 24.97	+29 13 37.3	12	na	1919	6.5 p- 15.8 p	00002	87-02	87-04	S83-12	HD 175268
V1223 Sgr	18 55 2.24	−31 9 48.5	−14	dq		13.0 B- (16.8 B	068H	88-03	81-03	S81-08	3A 1851−312

TABLE 1(b)
(Continued)

GCVS Name	Coordinates α (2000)	δ	b	Type	Year of Outburst	Mag. Range Max Min	Coord Ref	Type Ref	Chart Ref	Spec Ref	Other Name
V373 Sct	18 55 26.71	−7 43 5.5	−4	na	1975	7.1 v- 18.5 p	00002	87-02	87-04	S96-14	
EL Aql	18 56 1.76	−3 19 18.9	−2	na	1927	6.4 p- 20 p	00002	87-02	87-04*	X28-01:	60.1927
EU Sct	18 56 13.00	−4 12 32.7	−3	na	1949	8.4 p- 18 p	00002	87-02	87-04	X50-01:	
V800 Aql	18 56 32.	+10 48 43.		non-cv				94-16*	-	-	S 4376
Sct	18 56 35.	−8 35 30.		non-cv	1938			96-01*	-	-	NSV 11561
V446 Her	18 57 21.51	+13 14 29.9	5	na	1960	3.0 p- 15.0	00002	87-02	87-04	S95-08	
FS Sct	18 58 16.83	−5 24 5.0	−4	na:	1952	10.1 p- 18 p	00002	87-02	87-04*	-	
DM Lyr	18 58 44.5	+30 15 33.	11	ug		13.6 p- 18 p	050R	94-15	30-01	-	250.1929
V358 Lyr	18 59 34.	+42 24 10.	16	n:/ugwz	1965	16 p- (20 p	00001*	86-06	86-10	-	S 9649
V447 Lyr	19 0 19.91	+44 27 45.0	17	UG:		17.2 p- (18.5 p	0517 *	00000	72-02	-	GR 247
V493 Lyr	19 1 31.48	+42 54 52.7	16	ug		13.2 p- (17.2 p	0517	93-04	**93-05**	-	S 10930
V1059 Sgr	19 1 50.43	−13 9 42.5	−8	na	1898	4.9 p- 18.1 B	00002	87-02	87-04	S86-08	HD 176654
V604 Aql	19 2 6.	−4 26 45.	−4	na	1905	8.2 p- 21 p	064G	87-02	94-12*	X06-01:	HD 176779
CM Aql	19 3 35.	−3 3 15.		non-cv				00000*	-	-	
QV Vul	19 4 40.3	+21 46 14.	7	na	1987	7.0 v- 19 v	87-01	87-12	-	X94-14	
Aql	19 5 26.64	−1 42 3.3	−4	n	1995	8.2 v	95-03	95-02	-	X95-02:	
EP Dra4	19 7 6.13	+69 8 42.4	24	am		17.6 V- (20.8 V	00T1 *	95-05	91-05	S91-08	1H 1907+690
MV Lyr	19 7 16.30	+44 1 8.4	15	vy		12.2 B- 18.0 B	0517	95-05	54-01	S82-04	Mac +43°1
CG Dra	19 7 32.76	+52 58 28.6	19	ug		15 p- 17.5 p	00VP	87-03	87-06	S92-06	S 9370
V841 Aql	19 7 39.79	+10 29 43.7	1	n	1951	11.5 p- (17.5 p	00002	87-02	87-04	X87-08:	
V415 Lyr	19 8 3.88	+31 23 55.7	10	ug:		14.8 p- (17.0 p	050R	87-03	87-06	S92-06	SVS 1640
V1089 Sgr	19 8 48.	−17 21 37.		non-cv				96-01*	-	-	
V363 Lyr	19 8 51.62	+43 0 31.6	15	ug		15.7 p- 18.6 p	0517	87-03	87-06	-	S 9653
V419 Lyr	19 10 13.91	+29 6 14.0	9	UGZ		14.4 p- (17.5 p	050R	00000	70-04	-	SVS 1584
V452 Lyr	19 10 26.3	+43 28 55.	15	UG:		17.6 p- (18.5 p	0517	00000	72-02	-	GR 252
V363 Sgr	19 11 16.3	−29 50 0.	−17	na	1927	8.8 p- 20 j	00003	87-02	87-04:	X87-08:	
V369 Lyr	19 11 55.	+32 12 7.	10	NA		15.2 p- (20 p	00001*	00000	68-04	-	SVS 1512
V1419 Aql	19 13 6.80	+1 34 23.3	−4	na	1993	7.6 p- (22 r	93-01	93-06	95-13	X93-07	
V352 Aql	19 13 34.	+2 18 13.		non-cv				67-01*	-	-	
V1315 Aql	19 13 54.53	+12 18 3.2	0	nl/ux		14.4 v- 16.1 v	02V0	86-02/95-05	86-01	S86-01	KPD 1911+1212
Vul	19 14 25.7	+24 56 40.2	6	cv:		(19.7 V	96-02	96-12	96-08	-	RX J1914+2456
Aql3	19 15 54.7	−0 14 43.	−5	UG:		16 p- 19 :p	0AVZ	00001	**69-04***	-	NSV 11855
V344 Pav	19 16 9.6	−62 35 53.	−27	ug		14.5 p- 20 j	90-03	90-16	-	S90-11:	
V1378 Aql	19 16 35.35	+3 43 19.3	−4	n	1984	10 p- 21 p	00002	87-02	87-04	X84-08:	
FO Aql	19 16 38.14	+0 7 37.6	−5	ugss		13.6 p- 17.5 p	02CT	82-01	82-01	X85-07	3.1905
V356 Aql	19 17 13.53	+1 43 22.1	−5	nb	1936/1	7.7 p- 17.7 p	00002	87-02	87-04	S96-14	618.1936
V1301 Aql	19 17 55.20	+4 47 18.3	−3	na	1975	10.3 v- 21 p	00002	87-02	87-04	X75-03:	
V605 Aql	19 18 20.44	+1 46 59.5	−5	nb pec	1919	10.4 v- 22.5 v	00002	87-02	87-04	X87-08:	
V1336 Aql	19 18 42.	−5 14 21.	−8	NL:		16.2 p- (18 p	00001	00000	**78-06***	-	SVS 2270
V528 Aql	19 19 18.97	+0 37 53.8	−5	na	1945	7.0 p- 18.1 p	00002	87-02	87-04	X45-01:	
V606 Aql	19 20 24.3	−0 8 7.	−6	na	1899	6.7 p- 17.3 p	0AVZ *	87-02	87-04*	X87-08:	BD −0°3708a
V1113 Cyg	19 22 42.	+52 43 59.	16	ugSS		14 p- (17 p	00VQ *	87-03/00000	87-06	-	S 9382
V1370 Aql	19 23 21.10	+2 29 26.1	−6	n	1982	6 : - 19.5 p	00002	87-02	87-04	S96-14	
BF Cyg	19 23 54.	+29 40 29.		non-cv				00000*	-	-	He 3-1747
V1114 Cyg	19 24 36.4	+28 26 11.	5	ug		14.9 p- (17 p	000J *	87-03	87-06	-	103.1906
V1229 Aql	19 24 44.52	+4 14 47.4	−5	na	1970	6.7 v- 19.4 p	00002	87-02	87-04	X74-01:	
Aql	19 25 29.0	+2 47 28.	−6	n::	1949	(19 p	88-01	88-07	88-03	-	NSV 12006
PW Vul	19 26 5.	+27 21 58.	5	na	1984/1	6.4 v- 17 :v	000J	87-02	96-06*	S96-14	
DH Aql	19 26 11.	−10 15 28.	−12	ugsu		12.5 p- 18.3 V	00001	95-25	82-01	-	HV 3899
V368 Aql	19 26 34.41	+7 36 13.6	−4	na	1936/2	5.0 p- 15.4 p	00002	87-02	87-04	S83-12	668.1936
V1233 Aql	19 27 25.4	+2 23 3.	−6	UG		15.5 p- 20 :p	050V	00000	**69-07**	-	S 10574
V1504 Cyg	19 28 56.49	+43 5 37.2	11	UGZ:		13.5 p- 17.4 p	01KC	00000	78-02	S96-12	SVS 710
V868 Cyg	19 29 4.5	+28 54 26.	5	ugZ		14.3 p- (17.8 p	000J *	87-03/00000	87-06	-	VV 137
NQ Vul	19 29 14.59	+20 27 59.6	1	na	1976	6.0 v- 18.5 p	00002	87-02	87-04	S96-14	

TABLE 1(b)
(Continued)

GCVS Name	Coordinates α (2000)	Coordinates δ (2000)	b	Type	Year of Outburst	Mag. Range Max Min	Coord Ref	Type Ref	Chart Ref	Spec Ref	Other Name
V1505 Cyg	19 29 49.0	+28 32 54.	5	UGZ		15.2 p- (17.5 p	000J	00000	67-06*	-	SVS 1532
V792 Cyg	19 31 1.03	+33 47 4.6	7	ugSS		14.1 p- 17.0 p	02TN	87-03/00000	87-06	X92-06	VV 61
DO Aql	19 31 25.80	−6 25 38.6	−12	nb	1925	8.7 v- 16.5 p	00002	87-02	87-04	S87-09	9.1925
WY Sge	19 32 43.75	+17 44 54.5	−1	n	1783	5.4 B- 20.7 B	00002	87-02	87-04	S83-16	
V793 Cyg	19 33 6.2	+33 15 37.	6	ugSS		14.4 p- (18.5:p	000J	87-03/00000	87-06	-	VV 62
HN Cyg	19 33 40.	+28 56 14.		non-cv				90-17*	-	-	
KX Aql	19 33 53.69	+14 17 47.3	−2	ug		12.5 p- 17.5:p	00J2	82-01	82-01	-	HV 5428
V795 Cyg	19 34 34.1	+31 32 13.	5	ugSS		13.4 p- (17.9:p	000J	87-03/00000	**93-11***	-	VV 63
Cyg2	19 34 36.08	+51 7 42.2	15	nl		17.5 V	00VQ *	90-10	90-03	S96-12	1H 1933+510
EY Aql	19 34 44.52	+15 1 51.6	−2	na:	1926	10.5 p- 20.0 r	00002	87-02	87-04	-	SVS 202
V905 Cyg	19 35 5.64	+30 34 23.9	4	ug		16.5 p- (18.1 p	000J	87-03	87-06	-	VV 138
V607 Aql	19 35 26.	+0 42 41.		non-cv				87-02*	-	-	
V345 Pav	19 35 42.99	−59 8 21.8	−29	ux		13.5 V	05XR	95-05/92-02	**92-02**	S92-20	EC 19314−5915
V1141 Aql	19 37 9.81	+2 36 0.5	−8	ug		14.5 p- 20 p	050V	82-01	82-01	-	36.1905
Cyg3	19 38 10.3	+35 51 27.	7	UG:/I		10.7 p- 11.6 p	02TN	00001	**38-02***	-	NSV 12245
QS Tel	19 38 35.73	−46 12 56.5	−27	am		16 V- 17.3 V	04FS	95-05	**93-02**	S93-06	RE 1938−461
EM Cyg	19 38 40.10	+30 30 28.0	4	ugz		12.5 v- 14.4 v	000J	87-01	83-01	S83-12	185.1928
V1289 Aql	19 38 42.	+12 16 30.		non-cv				95-13*	-	-	
SS Sge	19 39 8.	+16 42 40.		non-cv				87-02*	-	-	SVS 81
HS Sge	19 39 22.02	+18 7 53.9	−2	na	1977	7.0 p- 20.5 p	00002	87-02	87-04	X77-02:	
Aql1	19 40 11.47	−10 25 25.1	−16	am		16 :V	02QN	95-05	**94-13**	S94-18	RX J1940.2−1025
FY Vul	19 41 39.91	+21 46 0.0	−1	ugz		13.4 B- 15.3 B	02UM	82-01	82-01	S95-18	122.1940
Sgr1	19 43 57.	−40 26	−26	n::			00003	87-02	87-04:	-	NSV 12329
V1285 Cyg	19 44 50.	+35 59 35.		non-cv				87-08*	-	-	VV 255
LU Vul	19 45 35.27	+28 35 29.1	2	na	1968/2	9.5 p- (21 p	00003	87-02	87-04:	X69-01:	
CK Vul	19 47 38.0	+27 18 48.	1	nb	1670	2.6 v- 20.7:v	82-01	82-02	82-04	S82-09:	BD +26°3670a
V3885 Sgr	19 47 40.54	−42 0 25.5	−28	ugz/ux		9.6 v- 10.5 V	01CE *	84-01/95-05	CD	S85-01	CD −42°14462
LV Vul	19 48 0.52	+27 10 19.3	1	na	1968/1	5.2 v- 16.9 p	00002	87-02	87-04	S96-14	
V1153 Cyg	19 48 15.	+34 52 2.	4	ugSS		16.4 p- (19 p	02TN	87-03/00000	**66-03***	-	VV 168
V811 Cyg	19 48 23.33	+36 26 23.3	5	ugSS		12.7 p- (17.7 p	02TN	87-03/00000	87-06	S96-12	VV 64
V1006 Cyg	19 48 47.20	+57 9 21.8	15	ug		15.4 p- 17.0 p	00VQ	87-03	87-06	S92-06	S 7844
AB Dra	19 49 6.50	+77 44 23.5	23	ugz		12.3 v- 14.5 v	00LX *	95-05	83-01	S83-12	90.1934
V542 Cyg	19 49 10.48	+58 31 58.7	15	ugSS:		13.0 p- 18.3:p	00VM	87-03/00000	87-06	S92-06	S 3813
V1449 Cyg	19 49 16.59	+34 10 49.2	4	ugSS		15.5 p- (17.0 p	02TN	87-03/00000	87-06	-	GR 217
V813 Cyg	19 49 35.89	+36 44 40.1	5	ugSS		16.0 p- (19 p	02TN *	87-03/00000	87-06	-	VV 65
CI Cyg	19 50 12.	+35 41 3.		non-cv				00000*	-	-	HV 3625
V1047 Aql	19 51 31.06	+10 57 21.8	−8	UG		15 p- (17.5 p	00J2 *	00000	64-01	-	S 8191
V1050 Aql	19 51 43.46	+10 51 17.4	−8	ug		14.5 p- 17.5 p	00J2 *	82-01	82-01	-	S 8194
V1452 Cyg	19 52 2.	+35 55 34.	4	UGSS		15.4 p- (17.0 p	02TN *	00000	72-01	-	GR 220
DO Vul	19 52 11.0	+19 34 42.	−4	UG		14.0 p- (17.4 p	06SJ	00000	73-03	-	25.1928
V500 Aql	19 52 27.84	+8 28 46.4	−9	na	1943	6.6 p- 17.8 p	00002	87-02	87-04	X43-01:	S 3542
V465 Cyg	19 52 37.61	+36 33 52.6	5	nb	1948	8.0 p- 17.0 p	00002	87-02	87-04	X49-01:	VV 67
CK Cyg	19 53 34.	+56 58 42.	15	NC:		12.0 p- (17. p	23-02	00000	23-01	-	SVS 26
V1454 Cyg	19 53 38.27	+35 21 45.0	3	ugSS		13.9 p- (17.0 p	02TN	87-03/00000	87-06	-	GR 221
EY Cyg	19 54 36.77	+32 21 54.7	2	ugSS		11.4 v- 15.5 v	02UC	87-03/00000	87-06	S96-12	200.1928
V1819 Cyg	19 54 37.6	+35 42 17.	4	nb	1986	8.7 v- 19 p	02TN	87-02	94-12*	X89-05	
V1162 Cyg	19 54 45.72	+36 47 11.5	4	NL:	1948	15.8 p- (17.6 p	02TN	00000	67-05	-	VV 176
Sgr3	19 55 46.85	−20 30 54.7	−23	nl?		14.7 p	04O8 *	89-03	**49-04**	-	NSV 12560/LTT 7873
V1327 Aql	19 56 18.95	+1 46 44.2	−13	UG:		16 p- 18.5:V	050W	00000	64-01	S95-06	S 8255
V725 Aql	19 56 45.1	+10 49 32.	−9	ug		13.6 v- 17.3 v	00JC	95-22	**95-06***	-	105.1940
Pav3	19 56 48.47	−60 34 26.3	−31	nl		(18.0 j- 19.0 j	05XR	94-14	**94-11**	S94-11	V1956−6034
Pav4	19 57 11.52	−57 38 22.2	−31	am		18 V	05XR	96-13	**96-09**	S96-10	RX J1957.1−5738
UU Aql	19 57 18.68	−9 19 20.8	−18	ug		11.0 v- 16.1 v	044E	82-01	82-01	S83-12	HV 1319
V476 Cyg	19 58 24.57	+53 37 7.1	12	na	1920	2.0 p- 17.2 B	00002	87-02	87-04	S86-08	26.1920

TABLE 1(b)
(Continued)

GCVS Name	Coordinates α (2000)	δ	b	Type	Year of Outburst	Mag. Range Max Min	Coord Ref	Type Ref	Chart Ref	Spec Ref	Other Name
AW Sge	19 58 37.	+16 41 28.	−7	ug		13.8 p- (17.5 p	02UQ	82-01	82-01	-	151.1905
V4140 Sgr	19 58 49.71	−38 56 12.3	−29	ugsu:		15.5 v- 18 V	01CE	95-05	87-02	S88-02	NSV 12615
V337 Cyg	19 59 53.3	+39 13 55.	4	UG:		14.4 p- (16.5 p	28-01*	00000	-	-	101.1928
SW Vul	20 0 5.3	+22 56 6.	−4	ug		14.5 p- 18.5 p	00FF*	82-01	82-01	X92-06	29.1923
V1028 Cyg	20 0 56.59	+56 56 37.2	13	ugsu		13.0 p- 18 p	003I *	95-17	87-06	S92-06	S 7854
V823 Cyg	20 1 50.	+36 7 26.	2	ugsu		15.0 p- (18.5 p	004C *	92-15	87-06	S92-06	VV 66
V1032 Cyg	20 2 40.1	+57 16 26.	13	ug		15.5 p- (18.0 p	003I	87-03	87-06	-	S 7858
V362 Vul	20 2 49.	+22 28 26.		non-cv				90-19*	-	-	E2000+223
RZ Sge	20 3 18.49	+17 2 52.6	−7	ugsu		12.2 B- 17.4 B	02UQ	87-01	82-01	S82-10	157.1905
RR Tel	20 4 19.	−55 43 33.		non-cv				87-02*	-	-	HV 3181
V550 Cyg	20 5 5.0	+32 21 23.	0	UGSS		14.2 p- (17.0 p	02UC	00000	57-04*	-	S 3847
Cyg4	20 5 7.68	+38 7 9.1	3	UG:		11.4 p- 14.2 p	004C	00001	**38-01**	-	NSV 12778
QQ Vul	20 5 41.93	+22 39 59.1	−5	am		14.5 B- 15.5 B	00FF	84-01	84-01	S84-05	1E 2003+225
V1363 Cyg	20 6 11.58	+33 42 37.7	0	ugZ		13.0 p- (17.6 p	004C	87-03/00000	87-06	S92-06	VV 279
GL Sge	20 7 9.	+18 51 39.	−7	UG		16 p- 20 p	02UQ	00000	67-01	-	S 9975
WZ Sge	20 7 36.40	+17 42 15.4	−8	ugwz/dq		7.0 p- 15.0 p	02UQ *	87-02/94-06	82-01	S81-03	HV 3518
GS Pav	20 8 7.57	−69 48 57.5	−32	cv		15.0 p- 18.0 V	01CB *	95-08	63-02	S95-06	S 7040
Pav1	20 8 55.79	−65 27 42.6	−33	am		(18.0 j- 19.5 j	02MA	95-05	**93-07**	S93-01	V2008−6527
Cap4	20 8 56.9	−17 16 38.	−25	ug		16 p- 21.5 V	00S9	94-19	**94-04**	S94-03	2006−17
ET Sge	20 9 6.3	+17 43 38.	−8	UG:		16 p- (20 p	02UQ	00000	64-01	-	S 8361
V1310 Cyg	20 9 32.41	+41 0 28.5	4	ugSS		15.9 p- (19 p	003S	87-03/00000	**69-06***	-	GR 135
V1316 Cyg	20 12 12.68	+42 45 53.0	4	ugSU:		14.5 p- (17.5 p	003S	87-03/00000	87-06	X92-06	GR 141
V1101 Aql	20 13 4.01	+15 35 46.9	56	ugz/cv:		13.8 p- 14.9 p	02UQ *	82-01/95-36	82-01	S95-18	139.1940
V767 Cyg	20 16 49.99	+53 12 24.5	9	UGSS		15.0 p- (17.5 p	003I	00000	57-03	-	S 3826
V1377 Cyg	20 16 49.	+38 21 8.	1	UG:		17.1 p- 18.5 p	004C	00000	**69-02***	-	GR 166
V794 Aql	20 17 33.97	−3 39 51.0	−21	vy		14.0 p- 20.2 B	02C2	95-05	82-01	S81-05	499.1936
V Sge	20 20 14.75	+21 6 9.0	−9	nl pec		8.6 v- 13.9 v	02UR	00000	83-01	S83-12	He 3-1879
Vul	20 20 37.	+20 11	−9	nl?		10.5 p- 11.5 p	53-02	89-03	-	-	NSV 13022
PU Vul	20 21 13.	+21 34 18.		non-cv	1979			87-02*	-	-	Kuwano's NL
Cap1	20 22 42.28	−21 7 54.8	−29	cv		12.5 v	01D0	88-02	00-01	S88-03	S 176
V1776 Cyg	20 23 30.51	+46 31 29.7	5	ux		17.2 V- 18.4 V	008T	95-05	83-03	S83-05	Lanning 90
V404 Cyg	20 24 4.	+33 52 4.		non-cv	1938,1989			94-36*	-	-	100.1938
CM Del	20 24 56.92	+17 17 54.3	−11	ug/ux		13.4 v- 15.3 v	02UR	92-08/95-05	82-01	S85-07	147.1930
EZ Del	20 25 22.43	+15 46 0.8	−12	ug		14.5 p- 16.5 p	02UR	82-01	82-01	-	S 4505
V374 Vul	20 26 8.78	+28 9 39.0	−6	n/nl:	1987	12.8 v- (15.0 v	0382	93-03	**93-03**	-	LD 171
V2276 Sgr	20 26 22.16	−43 40 31.9	−35	ug		14.3 p- (16.7 p	04FT	82-01	82-01	-	S 6738
QU Vul	20 26 45.94	+27 50 42.2	−6	na	1984/2	5.6 v- 19 p	00002	87-02	87-04	X95-09	
IO Del	20 26 47.	+18 31 0.	−11	ugwz:		15.5 p- (20 p	00001	94-31	70-02	-	S 10693
V503 Cyg	20 27 17.44	+43 41 23.1	3	ugsu		13.4 v- 17.4 v	00VV	95-05	87-06	S92-06	S 4524
V1390 Cyg	20 28 23.36	+39 3 54.3	0	ugSU		16.0 p- (18.1 p	009K	87-03/00000	87-06	-	GR 177
KK Tel	20 28 38.46	−52 18 45.6	−36	ug		13.5 B- 20.8:V	02EA	82-01	82-01	S95-06	S 6888
V1974 Cyg	20 30 31.66	+52 37 50.8	8	na	1992	4.2 v- 19.5 v	93-05*	93-10	-	X93-13	
IS Del	20 31 9.58	+16 23 9.0	−13	ug		15 p- (17.5 p	02UR	93-16	82-01	-	S 10699
TU Ind	20 33 10.52	−45 26 0.6	−36	ug		12.9 B- 18.1 V	04FT	82-01	82-01	S95-06	S 6749
TT Ind	20 33 37.16	−56 33 44.1	−36	ugz		12.9 V- 18.3 V	02EB	82-01	82-01	S95-06	S 6899
Cyg1	20 34 14.54	+50 48 6.2	6	cv:		14.8 V	008T	86-05	86-06	S86-03	KPD 2032+5037
V1052 Cyg	20 36 6.34	+54 31 42.0	8	UGSS		15.8 p- (17.5 p	003I	00000	63-01	-	S 7916
HO Del	20 36 55.49	+14 3 8.9	−16	ugsu		13.6 p- (17.2 p	02V1	94-15	91-02	-	S 10066
V747 Cyg	20 37 17.68	+50 19 39.2	5	cv/NL:		11.7 p- 12.5 p	008T	94-09/00000	53-01	S94-07	34.1934
IL Vul	20 38 33.0	+22 42 17.	−11	ug		15 p- 20 :p	02UN	87-03	**87-06***	-	S 9068
AE Aqr	20 40 9.02	−0 52 15.5	−24	dq		10.4 B- 12.6 B	02C4	95-05	83-01	S83-12	342.1931
TY Vul	20 41 44.	+25 35 11.	10	UG		14 p- 19 :p	00001	00000	30-02	-	38.1923
HR Del	20 42 20.18	+19 9 40.3	−14	nb	1967	3.5 v- 12.0 v	00002	87-02	87-04	S96-14	
V1697 Cyg	20 43 17.	+42 42 39.	0	UG:		16.5 U- (17.5 U	00001*	00000	**91-02**	-	SVS 2272

TABLE 1(b)
(Continued)

GCVS Name	Coordinates α (2000)	Coordinates δ (2000)	b	Type	Year of Outburst	Mag. Range Max Min	Coord Ref	Type Ref	Chart Ref	Spec Ref	Other Name
V516 Cyg	20 47 9.80	+41 55 26.8	0	ugSS		13.8 p- 16.8 p	00VV	87-03/00000	87-06	S94-07	S 4530
V751 Cyg	20 52 12.83	+44 19 25.9	0	vy		13.2 v- 14.5 v	00C8	95-05	58-02	S95-18	SVS 1202
V1330 Cyg	20 52 44.75	+35 59 27.0	−5	na	1970	9 p- 18.1 p	00002	87-02	87-04*	X74-01:	
V1711 Cyg	20 55 0.59	+44 55 31.5	0	UG:		15.0 p- (17.5 p	00C8	00000	76-03	-	SVS 2277
UY Vul	20 55 53.	+26 40 51.		non-cv				90-07*	-	-	
UZ Vul	20 56 46.	+23 34 36.		non-cv				90-07*	-	-	
VW Vul	20 57 45.08	+25 30 26.0	−13	ugsu		13.1 B- 16.3 B	03OD	87-07	82-01	S85-07	153.1904
V450 Cyg	20 58 47.39	+35 56 27.9	−6	nb	1942	7.8 p- 16.3:p	00002	87-02	87-04:	X43-03:	85.1942
V407 Cyg	21 2 10.	+45 46 33.		non-cv				87-02*	-	-	AS 453
FX Cep	21 3 6.64	+66 10 32.0	12	ug		15.0 p- 17.5 p	01JU	95-17	**95-10***	-	GR 95
AO Oct	21 5 8.23	−75 21 1.8	−34	ugwz:		13.5 p- 21 p	00RL *	91-05	82-01	-	S 7103
EV Aqr	21 6 19.	+0 51 48.	−29	UGZ:		12.1 p- (14.2 p	00001	00000	91-02*	-	SVS 615
V1060 Cyg	21 7 42.20	+37 14 8.7	−6	UGSS		13.5 p- 18 p	01W5	00000	66-01	-	S 9108
HU Aqr	21 7 58.29	−5 17 39.4	−33	am		15.3 B- 17.7 V	03U3	95-05	**93-04**	S93-08	RX J2107.9−0518
V1062 Cyg	21 8 12.	+36 49 29.	−7	UGSS		15.5 p- 18 p	01W5 *	00000	66-01	-	S 9110
V1065 Cyg	21 10 59.06	+38 57 13.0	−6	UGSS		18 p- (20 p	01W5	00000	66-01	-	S 9113
V1500 Cyg	21 11 36.61	+48 9 1.9	0	na/am	1975	2.2 B- 21.5 p	00002	87-02/95-05	87-04	S88-04	
VY Aqr	21 12 9.20	−8 49 36.5	−35	ugwz		8.4 p- 17.2 p	018D	87-02	82-01	S92-01	Ross 88
EF Peg	21 15 4.	+14 3 50.	−23	ugsu		10.7 p- (17 p	02V2*	95-05	79-04*	S94-16	143.1935
Ind1	21 15 41.04	−58 40 53.7	−41	am		16.0 v	039C *	96-03	**99-99**	S96-03:	EUVE J2115−58.6
CV Aqr	21 21 45.	−14 18 6.		non-cv				82-01*	-	-	HV 6262
Cyg6	21 23 44.83	+42 18 02.2	−6	cv/dq:		16.0 V	01KD	96-12	**96-08**	S96-09	RX J2123.7+4217
Gru4	21 28 35.0	−42 32 30.	−46	n:		18.3 B- 19.8 B	81-03	83-06	81-04	S83-13	Hawkins V5
V1075 Cyg	21 29 18.80	+42 19 11.7	−6	UGSS		16.4 p- (18 p	01KD	00000	**64-01***	-	S 8393
VZ Aqr	21 30 24.56	−2 59 17.6	−36	ug		11.3 p- 17.2 p	03U2	82-01	82-01	S92-01	SVS 52
Gru1	21 33 7.	−42 28 52.	−46	ug		16.5 B- 18.5 B	04ZE	90-14	81-04*	X83-13:	Hawkins V6
Cap3	21 34 6.09	−18 51 46.3	−46	nl?		18.0 p- 19.0 p	04OA	89-03	**59-01**	-	NSV 13783
V1081 Cyg	21 34 15.96	+49 11 22.9	−1	ugSS		14.5 p- (17.5 p	003P	87-03/00000	87-06	S92-06	S 8400
V630 Cyg	21 34 59.21	+40 40 18.5	−8	ugsu:		13.4 p- 17.2 p	01KD	92-15	87-06	S92-06	S 4556
V632 Cyg	21 36 4.17	+40 26 18.7	−8	cv/UGSS		12.6 p- 17.5 p	01KD	96-11/00000	57-08	-	S 4558
Peg6	21 36 19.14	+11 40 54.6	−29	ux		14.3 B	02KW	94-12	86-05	S84-10	PG 2133+115
CE Gru2	21 37 56.38	−43 42 13.1	−48	am		17.9 B- 20.7 B	04ZE	95-05	81-04	S83-13	Hawkins V1
Cap2	21 39 58.5	−23 11 44.	−47	ug		16.4 v- 19.1 V	03D5 *	83-01	**83-02**	S83-11	M30 V4
V1570 Cyg	21 40 17.	+47 59 47.		non-cv				92-15*	-	-	S 9726
V1251 Cyg	21 40 55.0	+48 39 43.	−3	ugsu		12.5 p- (15 p	003P	95-05	**95-02***	-	Wr 160
CF Gru3	21 41 22.96	−45 4 31.0	−48	ug		)18.7 B- 20.4 B	04ZE	87-04	87-01	S87-10	2138−453
Q Cyg	21 41 43.84	+42 50 28.3	−7	na	1876	3.0 v- 15.6 v	00002	87-02	87-04	S86-08	BD +42°4182a
V1668 Cyg	21 42 35.22	+44 1 54.9	−7	na	1978	6.7 p- 20.0 p	00002	87-02	87-04	X80-02:	
SS Cyg	21 42 42.66	+43 35 9.5	−7	ugss		8.2 v- 12.1 v	01KD *	83-02	83-01	S83-12	BD +42°4189a
V1760 Cyg	21 42 57.	+31 27 31.		non-cv				87-02*	-	-	
V1089 Cyg	21 44 17.67	+47 54 50.0	−4	UGSS		15.0 p- 18.5 p	003P	00000	64-01	-	S 8411
Cyg5	21 51 43.23	+43 9 23.9	−9	UG:		12.0 p- 14.2 p	02S1	00001	**51-01**	-	NSV 13904
Peg2	21 51 57.93	+14 6 53.8	−30	dq:		13.0 v	02KW	92-08	00-01	S88-03	S 193
V1404 Cyg	21 57 16.6	+52 12 2.	−2	ugZ		15.7 p- (17.7 p	036G	87-03/00000	**71-02***	-	VV 288
BG Lac	22 0 25.	+43 26 45.		non-cv				00000*	-	-	BD +42°4267
IV Cep	22 4 36.83	+53 30 23.7	−2	na	1971	7.5 B- 17.1 B	00002	87-02	87-04	S96-14	
PS Lac	22 5 39.95	+51 39 0.3	−3	ugSS		15.0 p- 17.6 p	031I	87-03/00000	87-06	-	VV 442
UU Aqr	22 9 5.74	−3 46 17.7	−45	nl		9.6 v- 13.5 v	00GX	88-02	00-01	S88-03	S 196/PB 7078
Cep	22 13 45.55	+57 1 14.4	0	n:	1983	7.5 p	83-03	83-08	-	-	
KM Lac	22 13 49.	+55 28 26.	0	UGSS		14.8 p- (17.4 p	036G	00000	71-02*	-	VV 347
RU Peg	22 14 2.58	+12 42 11.4	−35	ugSS		9.0 v- 13.2 v	02CY	87-01/00000	82-01	S83-12	142.1904
CP Lac	22 15 41.07	+55 37 1.1	−1	na	1936	2.1 v- 16.6 p	00002	87-02	87-04	S96-14	605.1936
Aqr4	22 16 27.5	−20 27 25.	−54	ug		(19.0 j- 21.5 j	04I5	94-14	**94-11**	S94-11	V2216−2027
FO Aqr	22 17 55.43	−8 21 4.6	−49	dq		13.0 v- 14.0 v	015K	88-03	83-01	S83-12	H 2215−086

TABLE 1(b)
(Continued)

GCVS Name	Coordinates α (2000)	Coordinates δ (2000)	b	Type	Year of Outburst	Mag. Range Max Min	Coord Ref	Type Ref	Chart Ref	Spec Ref	Other Name
HL Aqr	22 20 26.94	+2 0 53.6	43	ux		13.4 B- 13.6 B	02JG	95-05	85-05	S85-01	PHL 227
AY Lac	22 22 23.	+50 23 54.		non-cv				00000*	-	-	
MN Lac	22 23 4.	+52 41 0.	−3	ugZ		15.1 p- (18.0 p	00001	87-03/00000	87-06	-	VV 381
Lac	22 24 11.	+48 27 55.		non-ex	1986			87-02*			
MR Lac	22 24 42.91	+50 31 41.3	−5	ug		15.0 p- (17.3 p	031I	87-03	87-06	-	VV 386
Aqr2	22 25 43.74	−11 13 40.1	−52	nl?/cv		18.9 p- 20.2 p	015K	89-03/95-14	**60-01**	-	NSV 14152/PHL 392
NQ Lac	22 28 44.	+56 14 59		non-cv				96-20*	-	-	VV 403
BS Cep	22 29 6.	+65 14 41.		non-cv				92-15*	-	-	
DI Lac	22 35 48.47	+52 42 59.7	−5	na	1910	4.6 v- 14.9 p	00002	87-02	87-04	S83-12	HD 214239
Aqr1	22 38 43.81	+1 8 20.6	−47	cv		18.5 j	015P *	92-05	**99-99**	S92-13	2236+0052
KQ Peg	22 42 27.	+19 32 20.		non-cv				94-12*	-	-	PG 2240+193
Aqr3	22 43 31.88	−0 12 33.3	−49	nl?		17.9 p- 19.2 p	015P	89-03	**60-01**	-	NSV 14292/PHL 1899
RZ Gru	22 47 12.00	−42 44 38.5	−60	ux		11.5 p- 13.0 p	031D	95-05	81-05	S81-06	S 5150
TY PsA	22 49 39.86	−27 6 54.2	−63	ugsu		12 :v- 16.5 v	04LN	87-01	82-02	S82-02	PS 74/NSV 14328
DK Lac	22 49 46.86	+53 17 18.3	−5	na	1950	5.0 p- 15.5 p	00002	87-02	87-04	S96-14	
Cep1	22 50 39.64	+63 28 39.3	4	nl		16.5 v	031H *	84-01	71-01	S90-04	GD 552
EG Lac	22 50 39.	+55 14 51.	−3	ugSS		15.5 p- 19 :p	00001*	87-03/00000	87-06	-	S 4617
AO Psc	22 55 17.97	−3 10 40.4	−53	dq		13.2 B- 15.3 B	00GY	88-03	83-01	S83-15	H 2252−035
Peg3	23 3 21.	+16 49 39.		non-cv				94-09*	-	-	PG 2300+166
V425 Cas	23 3 47.	+53 17 16.	−6	vy		14.5 v- 18 v	036H	95-05	80-02	S85-07	S 9712
OR And	23 4 37.43	+49 27 24.2	−10	cv/nl:		14.5 V	036O	86-05/90-06	86-06	S86-03	KPD 2302+4910
AN Gru	23 7 55.	−47 25 41.		non-cv				95-08*	-	-	S 6526
KZ Cas	23 8 13.89	+56 27 17.2	−3	ugSS		15.2 p- 19 p	036H	87-03/00000	87-06	-	S 4628
And	23 9 59.	+36 56	−22	n::	1968	7.8 p	68-01	68-01*	-	-	NSV 14443
CG Cep	23 10 26.03	+66 33 31.4	5	ugSS		14.5 p- 17.2 p	034R	87-03/00000	87-06	S96-12	581.1936
OS And	23 12 5.76	+47 28 19.7	−12	n	1986	6.3 v- 17.8:p	00002	87-02	87-04	S96-14	
LM Cas	23 12 59.37	+56 51 16.7	−3	ugSS		15.8 p- (19 p	036H	87-03/00000	87-06	X96-12	S 4633
Tuc2	23 15 19.10	−59 10 28.3	−54	am		17.1 V	04UI	95-26	**99-99***	S95-15:	AX J2315-592
Aqr5	23 16	−5	−59	am		18 B	93-04	93-17	-	-	RX J2316−05
EZ Peg	23 16 53.	+25 43 10.		non-cv				85-03*	-	-	BD +24°4742
Psc2	23 17 48.	+7 22 46.		non-cv				94-12*	-	-	PG 2315+071
Scl1	23 18 34.	−29 58 9.		non-cv				95-08*	-	-	GD 1555
Peg5	23 20 44.28	+10 23 51.7	−47	cv:		16.6 V	00JE	88-01	84-06	S88-08	KUV 23182+1007
IP Peg	23 23 8.60	+18 24 59.4	−40	ug		12.0 B- 18.6 B	02BB	87-01	85-02	S88-06	SVS 2549
EG Aqr	23 25 19.19	−8 18 18.9	−62	ug::		14.0 p- 18.5 p	00WQ	90-14	59-01	S92-01	PHL 505
BV And	23 27 2.10	+50 7 12.9	−10	ug:		15.2 p- 18 p	036O	78-01	57-07	S78-03:	S 4637
AY Oct	23 27 51.	−75 40 40.		non-cv				96-10*	-	-	S 6613
VY Scl	23 29 0.45	−29 46 46.0	−72	vy		12.9 v- 18.5 v	04JJ	95-05	59-01	S87-05	GD 1662/PHL 538
DX And	23 29 46.72	+43 45 4.2	−16	ug		10.9 p- 16.4 p	02S2	87-03	87-06	S89-06	GR 17
EH Aqr	23 34 5.9	−22 48 42.0	−71	ug		17.5 p- (21.0 p	04LP	89-01	**59-01***	-	BV 5/PHL 563
HX Peg	23 40 23.73	+12 37 41.7	−47	ug/vy		12.9 V- 16.6 V	00JG	94-24	76-01	S94-07	PG 2337+123
V705 Cas	23 41 47.25	+57 30 59.7	−4	na	1993	6.4 v- 18 :b	00T7	93-05	94-06*	X93-15:	
V630 Cas	23 48 51.91	+51 27 39.3	−10	ug:	1950	12.3 p- 17.1 p	031J *	87-02	87-04	S92-01	OV 29
VZ Scl	23 50 9.19	−26 22 52.9	−74	vy		15.6 v- 18.4 v	04LQ	95-05	58-01	S87-13	Ton S 120
And2	23 50 16.88	+46 59 21.9	−15	cv:		17.2 p- (22 V	031J	91-02	**91-07**	-	
BC Cas	23 51 17.34	+60 18 10.3	−2	na:	1929	10.7 p - 17.4 p	00002	87-02	87-04	S96-14*	SVS 254
Peg7	23 53 51.02	+239 19.5	−38	nr:		15 p- 16 p	02CZ	88-06	**81-08**	S88-07	FBS 2351+228
Peg4	23 59 58.30	+12 44 46.7	−48	cv		16.4 B	00GQ *	86-01	86-05	-	PG 2357+125

Notes to TABLE 1

[a]Note–Table 1(b) will be included in its entirety in Vol. 8 of the *AAS CD-ROM Series*.

TABLE 2
Variability Types

Type	Definition
UG	U Gem variable (dwarf nova)
UGZ	U Gem variable (Z Cam subtype)
UGSS	U Gem variable (SS Cyg subtype)
UGSU	U Gem variable (SU UMa subtype)
UGWZ	U Gem variable (WZ Sge subtype)
N	nova
NA	fast nova
NB	slow nova
NC	very slow nova
NR	recurrent nova
NRA	recurrent nova - giant donor (Webbink et al. 1987)
NRB	recurrent nova - non-giant donor (Webbink et al. 1987)
SN	possible supernova with no galaxy visible
NL	novalike variable
UX	novalike variable (UX UMa subtype)
VY	novalike variable (VY Scl subtype) (systems which undergo low states)
AM	AM Herculis variable (synchronous rotators)
DQ	DQ Herculis variable (non-synchronous rotators)
CV	cataclysmic variable (no type classification)
IBWD	interacting binary white dwarf
M	Mira variable
I	Irregular variable
UV	UV Ceti-type star
Z AN	symbiotic variable (Z And subtype)
NON-CV	not a cataclysmic variable (although once classified as such)
NON-EX	non-existent object
PEC	peculiar
:	uncertain
::	very uncertain

TABLE 3
Magnitude Abbreviations

Magnitude	Definition
U	Johnson U
B	Johnson B
V	Johnson V
I	Johnson I
f	m_{2200}
v	visual
p	photographic
r	red
j	SRC j (unfiltered IIIa-J)

dwarf (IBWD), and two possible supernovae/novae], which includes objects discovered through 1996 May, is presented with the objects listed in constellation order (Table 1a) and with the objects listed in order of increasing right ascension (Table 1b). A description of the columns is as follows:

GCVS NAME—the name of the object in the *General Catalogue of Variable Stars* and subsequent Namelists (67th, Kholopov et al. 1985; 68th, Kholopov et al. 1987; 69th, Kholopov et al. 1989; 70th, Kazarovets and Samus 1990; 71st, Kazarovets et al. 1993; 72nd, Kazarovets and Samus 1995). For those objects without variable-star designations (189), we list the constellation name only (which were derived from Roman 1987). Since some constellations contain more than one object without a GCVS designation, we include a number after the constellation name. The non-GCVS designations are strictly provisional. Those names in **BOLD** type are objects which are not (with or without a GCVS name) in D&S.

COORDINATES—for non-novae, the J2000 coordinates of the objects as measured in the Space Telescope Guide Star reference frame. The right ascension is given to the nearest 0.01s, while the declination is given to the nearest 0.″1; for objects that are very faint or not visible, the coordinates are given to a lesser accuracy. The accuracy of the Guide Star Catalog is 0.″4 in the north, and 0.″6 in the south (Taff et al. 1990). For the novae, the coordinates are taken from Duerbeck (1987a) or from the literature (for recent novae), and are precessed to the J2000 equinox. For those objects without available/usable finding charts (62 objects), coordinates have been obtained from the literature, and are generally given to a lesser accuracy than those objects measured in this work.

b—The galactic latitude.

TYPE—the type of variability of the object. Table 2 lists the various types used in this work, which is based on the classification scheme used in the GCVS. Those types in upper-case letters are taken directly from the GCVS, while those in lower-case letters have been obtained from the literature (which was generally in agreement with the GCVS, and is presumably more secure); whenever possible, a type from the literature was used. There are 155 objects in the catalog designated **NON-CV**, which are stars that have been previously cataloged as CVs, and are included for completeness; the references for these stars are those papers which refute the CV nature of the objects. The revised classification is given in the comment section below.

YEAR OF OUTBURST—the year of outburst (for novae).

MAG. RANGE—the MAXimum and MINimum magnitudes for the objects; the magnitude systems are listed in Table 3. For novae, the primary source is Duerbeck (1987a), while for the non-novae, the catalog of Ritter (1990) is the prime source. When no other references to brightness were available, the GCVS values are used.

COORD REF—a code for a reference to the coordinates. Entries with a four-character code correspond to plate-IDs from the *Hubble Space Telescope* Guide Star survey; other codes refer to references in Table 4. An asterisk (*) following the references means that there is a comment regarding the coordinate measurement (see Sec. 2.3), and those D&S references which have been superseded are listed as "deleted."

TYPE REF—a code for a reference to the CV classification. Table 5 defines the codes from the literature. An asterisk (*) following the references means that there is a comment regarding the classification (see Sec. 2.3).

CHART REF—for those objects (the non-novae) with charts presented in this paper (168) or D&S, a code for the original reference from which our chart is based. Note that the identifications of the CVs are based on the published

TABLE 4
Coordinate References

Code	Reference	Code	Reference
00001	Space Telescope Guide Star plate - no target/uncertain target	90-02	deleted
		90-03	Maza and Hamuy 1990
00002	Duerbeck (1987a) - confirmed target	90-04	deleted
00003	Duerbeck (1987a) - no confirmed target	91-01	deleted
00004	referenced chart in GCVS not useful	91-02	deleted
00005	Kholopov et al. (1982; NSV Catalogue)	91-03	McNaught 1991a
		91-04	Margon et al. 1991
AGK1	AGK1 Catalog	91-05	Howell 1991a
876-1	Secchi 1876	91-06	McNaught 1991b
08-01	Luther 1908	91-07	Kilmartin 1991
23-01	Shapley 1923	91-08	McNaught 1991c
23-02	Seliwanow 1923	91-09	McNaught 1991d
38-01	Tempel 1938	92-01	Zuckerman et al. 1992
44-01	Zessewitsch 1944	92-02	McNaught 1992b
46-01	Weber 1946	92-03	deleted
52-01	Haro 1952	92-04	Jablonski and Cieslinski 1992
53-01	Kholopov 1953	92-05	Guhathakurta et al. 1992
53-02	Halbach 1953	92-06	McNaught 1992a
54-01	Naef 1954	92-07	Kilmartin 1992
66-01	Plaut 1966	92-08	Bruch et al. 1992
67-01	Luyten et al. 1967	93-01	Argyle and Morrison 1993
67-02	Luyten and Anderson 1967	93-02	McNaught and Garradd 1993
67-03	Plaut 1967	93-03	Della Valle, Cristiani, and Lissandrini 1993
68-01	Locher 1968	93-04	Beuermann and Thomas 1993
71-01	Plaut 1971	93-05	Carlsberg Meridian Catalogue La Palma No. 7 (CMC7) 1993
72-01	Wild 1972		
72-02	Satyvoldiev 1972	94-01	Morrison and Argyle 1994
75-01	Maffei 1975	94-02	Nakano 1994
78-01	Winnecke 1978	94-03	Drissen et al. 1994
81-01	Ashworth 1981	94-04	Osborne et al. 1994
81-02	deleted	94-05	Antipin et al. 1994b
81-03	Hawkins 1981	94-06	Beuermann and Schwope 1994
81-04	Reiland 1981	94-07	Antipin et al. 1994a
82-01	Shara and Moffat 1982	94-08	Carlsberg Meridian Catalogue La Palma No. 8 (CMC8) 1994
83-01	Williams 1983		
83-02	deleted	95-01	Shara and Drissen 1995
83-03	Kozai 1983	95-02	Gilmore and Kilmartin 1995
87-01	Horine et al. 1987	95-03	Argyle and Morrison 1995
87-02	deleted	95-04	Kato and Nogami 1995
87-03	Duerbeck 1987b	95-05	McNaught 1995
87-04	Halpern and Patterson 1987	95-06	Haberl and Motch 1995
87-05	McNaught 1987b	95-07	Hirosawa 1995
88-01	Karnashov and Moskalenko 1988	95-08	Cool et al. 1995
88-02	Kosai 1988	95-09	Vanmunster 1995b
88-03	deleted	96-01	Nakano 1996
89-01	McNaught 1989b	96-02	Motch et al. 1996
89-02	Tucholke et al. 1989	96-03	Edmonds et al. 1996
89-03	McNaught 1989a	96-04	Antipin 1996a
89-04	Waagen 1989	96-05	Burwitz et al. 1996
90-01	McNaught 1990		

charts (or in some cases coordinates only), and have not been independently verified by the authors. Table 6 defines the codes, and includes the numeric code used in the GCVS and subsequent Namelists. For novae (276 objects), a reference to the previously published chart in Duerbeck (1987a) is given (except for recent novae). Those names in **BOLD** type are objects which have new chart references from those in D&S. An asterisk (*) following the references means that there is a comment regarding the identification (see Sec. 2.3), and those D&S references which have been superseded are listed as "deleted."

SPEC REF—a code for a reference to a published spectrum; Table 7 defines the codes. A prefix of **S** indicates a spectrum in quiescence (394 objects), while a prefix of **X** indicates a spectrum in outburst (121 objects); we were unable to locate spectra for 350 objects. Whenever available, the quiescent spectrum was chosen for the catalog over an outburst spectrum. A colon (:) following the reference indicates that (i) the spectrum is only described, (ii) the spectrum is a glass plate tracing, or (iii) the reference is unconfirmed (only for a few novae in Duerbeck 1987a), and those D&S references which have been superseded are listed as "deleted."

TABLE 5
Type References

Code	Reference	Code	Reference	Code	Reference
00000	GCVS and Namelists	89-02	Waagen 1989	93-05	Schmidt 1993
00001	Kholopov et al. (1982; NSV Catalogue)	89-03	Vogt 1989	93-06	Austin and Starrfield 1993
		89-04	O'Donoghue and Kilkenny 1989	93-07	McNaught and Garradd 1993
54-01	Naef 1954	89-05	Bruch 1989	93-08	Kato 1993
65-01	Zwicky 1965	89-06	Haefner 1989	93-09	Della Valle et al. 1993
67-01	Perek and Kohoutek 1967	89-07	Gallagher and Hunter 1989	93-10	Chochol et al. 1993
68-01	Locher 1968	89-08	Richter and Börngen 1989	93-11	Wegner and Boley 1993
72-01	Wild 1972	90-01	Hertz et al. 1990	93-12	Webbink 1993
76-01	Kukarkin et al. 1976	90-02	Levy et al. 1990	93-13	Howell and Usher 1993
77-01	Kuhr 1977	90-03	Richter 1990	93-14	Buckley et al. 1993
78-01	Bond 1978	90-04	Wenzel 1990	93-15	O'Donoghue et al. 1993
79-01	Noguchi et al. 1979	90-05	Shafter et al. 1990	93-16	Kazennova and Shugarov 1993
80-01	Meinunger 1980	90-06	Wenzel and Haussler 1990	93-17	Beuermann and Thomas 1993
80-02	Maza 1980	90-07	Schimpke and Bruch 1990	94-01	Howell and Hurst 1994
81-01	Margon et al. 1981	90-08	Chanmugam et al. 1990	94-02	Howell et al. 1994
81-02	Reiland 1981	90-09	Hertz et al. 1990	94-03	Tomaney et al. 1994
82-01	Vogt and Bateson 1982	90-10	Remillard 1990	94-04	Sekiguchi et al. 1994
82-02	Shara and Moffat 1982	90-11	Acker and Jasniewicz 1990	94-05	Silber et al. 1994
83-01	Margon and Downes 1983	90-12	Wagner et al. 1990	94-06	Patterson 1994
83-02	Williams 1983	90-13	Liller 1990b	94-07	Paresce and De Marchi 1994
83-03	Echevarria et al. 1983	90-14	Howell and Szkody 1990	94-08	Schaefer and Hoffleit 1994
83-04	Sanduleak 1983	90-15	Acker and Stenholm 1990	94-09	Zwitter and Munari 1994
83-05	Vogt 1983	90-16	Maza and Hamuy 1990	94-10	Sakurai 1994
83-06	Hawkins 1983	90-17	Munari et al. 1990	94-11	Wagner et al. 1994
83-07	Krautter and Mouchet 1983	90-18	Goranskij 1990	94-12	Ringwald 1994b
83-08	Kozai 1983	90-19	Shara et al. 1990a	94-13	Kolb and de Kool 1994
83-09	Stocke et al. 1983	90-20	Debehogne 1990	94-14	Drissen et al. 1994
84-01	Patterson 1984	90-21	Iida 1990	94-15	Kato 1994b
84-02	Bruch 1984	90-22	Liller 1990a	94-16	Antipin and Shugarov 1994
84-03	Notni and Richter 1984	91-01	Khruzina and Shugarov 1991	94-17	Zhao et al. 1994
84-04	Gessner 1984	91-02	Weinberger 1991	94-18	Jurcevic et al. 1994
85-01	Filippenko et al. 1985	91-03	Sharov 1991	94-19	Howell et al. 1994
85-02	Wahlgren et al. 1985	91-04	Mateo et al. 1991	94-20	Kato et al. 1994
85-03	Howell and Bopp 1985	91-05	O'Donoghue 1991	94-21	Rosen et al. 1994
85-04	Margon and Anderson 1985	91-06	Williams et al. 1991	94-22	Barwig et al. 1994
85-05	Liller 1985	91-07	Hric and Urban 1991	94-23	Osborne et al. 1994
85-06	Szkody 1985	91-08	Suntzeff 1991	94-24	Ringwald 1994a
86-01	Green et al. 1986	91-09	Wagner 1991	94-25	Haberl et al. 1994
86-02	Downes et al. 1986	91-10	Della Valle 1991	94-26	Della Valle et al. 1994
86-03	Tuohy et al. 1986	91-11	McNaught 1991d	94-27	Reinsch et al. 1994
86-04	Shara et al. 1986	91-12	McNaught 1991c	94-28	O'Donoghue et al. 1994
86-05	Downes 1986	91-13	Hazen 1991	94-29	Misselt and Shafter 1994
86-06	Richter 1986	91-14	Marino and Walker 1991	94-30	Kato 1994a
86-07	Kosai 1986b	91-15	Wenzel 1991	94-31	Richter and Brauer 1994
86-08	Warner and Barrett 1986	91-16	Kinman et al. 1991	94-32	Abramyan and Mikaelyan 1994
86-09	Williams 1986	92-01	Maza et al. 1992	94-33	Rodgers and Roberts 1994
86-10	McNaught 1986	92-02	Buckley et al. 1992	94-34	Beers et al. 1994
87-01	Warner 1987	92-03	Mason et al. 1992	94-35	Beuermann and Schwope 1994
87-02	Duerbeck 1987a	92-04	Antipin and Shugarov 1992	94-36	van den Heuvel 1994
87-03	Bruch et al. 1987	92-05	Berg et al. 1992	95-01	Benetti and Cappellaro 1995
87-04	Hawkins and Veron, 1987	92-06	Szkody et al. 1992	95-02	Wagner et al. 1995
87-05	Duerbeck 1987b	92-07	Harrison 1992	95-03	Walter et al. 1995
87-06	Webbink et al. 1987	92-08	Stockman et al. 1992	95-04	Benetti et al. 1995
87-07	Warner and Livio 1987	92-09	Della Valle 1992a	95-05	Ritter and Kolb 1995
87-08	Bruch et al. 1987	92-10	Della Valle et al. 1992	95-06	Misselt and Shafter 1995
87-09	McNaught 1987b	92-11	Liller 1992	95-07	Nogami and Kato 1995a
87-10	Webbink et al. 1987	92-12	Stringfellow and Gregg 1992	95-08	Zwitter and Munari 1995
87-11	Wegner et al. 1987	92-13	Dopita et al. 1992	95-09	Nogami et al. 1995a
88-01	Wegner and McMahan 1988	92-14	Della Valle 1992b	95-10	Robertson et al. 1995
88-02	Downes and Keyes 1988	92-15	Bruch and Schimpke 1992	95-11	Nogami et al. 1995b
88-03	Garnavich and Szkody 1988	92-16	Claudi and Bianchini 1992	95-12	Schmadel et al. 1995
88-04	Wagner et al. 1988	92-17	Zuckerman et al. 1992	95-13	Downes et al. 1995
88-05	Cowley et al. 1988	93-01	Maffei and Tosti 1993	95-14	Haefner 1995
88-06	Kopylov et al. 1988	93-02	Baptista et al. 1993	95-15	Wenzel et al. 1995
88-07	Karnashov and Moskalenko 1988	93-03	Dahlmark 1993	95-16	Singh et al. 1995
89-01	Szkody et al. 1989	93-04	Wenzel 1993	95-17	Vanmunster 1995a

TABLE 5
(Continued)

Code	Reference
95-18	Howell 1995
95-19	Duerbeck 1995
95-20	Hirosawa 1995
95-21	Buckley et al. 1995
95-22	Nogami et al. 1995
95-23	Mennickent and Honeycutt 1995
95-24	Kato et al. 1995
95-25	Nogami and Kato 1995b
95-26	Thomas and Reinsch 1995
95-27	Koen and O'Donoghue 1995
95-28	Szkody et al. 1995
95-29	Cool et al. 1995
95-30	Grindlay et al. 1995
95-31	Vanmunster 1995b
95-32	Klose 1995
95-33	Abramyan and Mikaelyan 1995
95-34	Lanning and Meakes 1995
95-35	Haberl and Motch 1995
96-01	Zwitter and Munari 1996
96-02	Downes and Wallace 1996
96-03	Craig 1996
96-04	Craig et al. 1996
96-05	Darling and Wegner 1996
96-06	Burwitz et al. 1996
96-07	Vanmunster 1996b
96-08	Duerbeck and Benetti 1996
96-09	Billington et al. 1996
96-10	Augusteijn 1996
96-11	Bond 1996
96-12	Motch et al. 1996
96-13	Thomas et al. 1996
96-14	Burwitz et al. 1996
96-15	Edmonds et al. 1996
96-16	Kato 1996
96-17	Antipin 1996b
96-18	Antipin 1996a
96-19	Ringwald et al. 1996
96-20	Munari et al. 1996

OTHER NAME—discovery or common alternative (non-GCVS) designation for the object.

2.1 Revisions to the Catalog

2.1.1 Enhancements

There are three enhancements to this second edition of the catalog. First, we have added a reference to the CV classification (the TYPE reference). Second, for those objects with coordinates measured in the *Hubble Space Telescope* Guide Star reference frame, we provide the PLATE-ID (as the column COORD REF in Table 1) from which those measurements were made. Last, for those objects known to have significant proper motions ($\geqslant 0\farcs05$/yr), we provide in the Notes on Individual Objects those values from the literature, rotated to equinox J2000.

TABLE 6
Chart References

Code	GCVS No.	Reference
BD		BD Catalog
CD		CD Catalog
CPD		CPD Catalog
99-99		coordinate match
00-01		Downes
899-1		Roberts 1899
04-01	01960	deleted
23-01	01170	Seliwanow 1923
26-01		Seliwanow 1926
27-01	01455	Luyten 1927
30-01	00133	Hoffmeister 1930
30-02	08656	Meinunger 1930
33-01		Rügemer 1933
38-01		Parenago 1938
38-02		Suzuki and Huruhata 1938
40-01	00478	Swope 1940
46-01	04064	Parenago 1946
49-01	05778	Cannon and Mayall 1949
49-02	01400	deleted
49-03		deleted
49-04		Luyten 1949
51-01		Vopolov 1951
51-02		Tsesevich 1951
53-01	01320	Wenzel 1953
53-02		Kholopov 1953
54-01	00365	Walker 1954
55-01	01634	deleted
55-02		Wedel and Wenzel 1955
55-03		Horn-D'Arturo and Lacchini 1955
55-04		Wenzel 1955
57-01	02339	Hoffmeister 1957a
57-02	02342	Hoffmeister 1957b
57-03	02354	Hoffmeister 1957c
57-04	02355	Hoffmeister 1957d
57-05	02365	Hoffmeister 1957e
57-06	02366	deleted
57-07	02375	Hoffmeister 1957f
57-08	02544	Brun and Petit 1957
57-09		Hoffmeister 1957g
57-10		deleted
57-11		Hoffmeister 1957h
58-01	03983	Chavira 1958
58-02	02698	Herbig 1958
58-03	02452	Walker and Olmstead 1958
58-04		Brun 1958
59-01	04037	Luyten and Haro 1959
59-02	02763	Hoffmeister 1959
60-01	04033	Haro and Luyten 1960
62-01	04298	deleted
62-02	04410	Rosino 1962
62-03		Vehrenberg 1962
63-01	04065	Hoffmeister 1963a
63-02	04001	Hoffmeister 1963b
64-01	04341	Hoffmeister 1964
64-02	03540	Richter 1964
65-01	03183	Meinunger 1965
65-02		Zwicky 1965
66-01	03776	Hoffmeister 1966a
66-02	03910	Hoffmeister 1966b
66-03		Miller 1966
67-01	03903	Hoffmeister 1967a
67-02	03905	Hoffmeister 1967b
67-03		deleted
67-04	03909	Oosterhoff et al. 1967
67-05	05701	Miller 1967

TABLE 6
(Continued)

Code	GCVS No.	Reference	Code	GCVS No.	Reference
67-06	07519	Kurochkin 1967	82-02	0196[a]	Barwig et al. 1982
67-07	0131[c]	Hodge and Wright 1967	82-03	0297[a]	Liebert et al. 1982
68-01	05515	Hoffmeister 1968	82-04	10163	Shara and Moffat 1982
68-02	05589	Oosterhoff and Ponsen 1968	82-05		Jensen et al. 1982
68-03	05519	Romano and Perissinotto 1968	82-06	0479[a]	Visvanathan and Pickles 1982
68-04	05166	Kurochkin 1968	82-07	0355[a]	Mason et al. 1982
68-05		Lyngå 1968	82-08	0308[a]	Green et al. 1982
68-06		Hartwick and Sandage 1968	82-09	0463[a]	Shore et al. 1982
68-07		Dorschner and Friedeman 1968	82-10	0351[a]	Usher et al. 1982
69-01	05443	Richter 1969a	82-11	08738	Stepanian 1982
69-02	05352	Romano 1969b	83-01	09515	Williams 1983
69-03		Eggen 1969	83-02		Margon and Downes 1983
69-04		Richter 1969c	83-03	0290[a]	Shafter et al. 1983
69-05		Jaidee and Lyngå 1969	83-04	0372[a]	Mason et al. 1983
69-06		Romano 1969a	83-05		Echevarria et al. 1983
69-07		Richter 1969b	83-06		deleted
70-01		Börngen et al. 1970	83-07		deleted
70-02	05884	Richter 1970	83-08		Stocke et al. 1983
70-03	05849	Romano 1970	84-01	0394[a]	Nousek et al. 1984
70-04	05876	Kurochkin 1970	84-02	0204[c]	Sanduleak and Pesch 1984
71-01		Giclas et al. 1971	84-03		McHardy et al. 1984
71-02	05862	Miller and Wachmann 1971	84-04		deleted
71-03	06286	Tsesevich and Kazanasmas 1971	84-05	0042[b]	Zach 1984
72-01	06282	Pinto and Romano 1972	84-06		Kondo et al. 1984
72-02	06358	Romano 1972	85-01		Filippenko et al. 1985
72-03		Giclas et al. 1972	85-02		Goranskij et al. 1985
73-01	0033[a]	Lanning 1973	85-03		Biermann et al. 1985
73-02	07782	Capron 1973	85-04	09875	Barbieri et al. 1985
73-03	06996	Tsesevich and Dragomireskaya 1973	85-05	0013[c]	Hunger et al. 1985
73-04	07484	deleted	85-06	0119[b]	Pavlov and Shugarov 1985
73-05		Sharov and Alksnis 1973	85-07		Heckathorn and Fesen 1985
73-06		Nygard 1973	86-01		Downes et al. 1986
75-01	07915	deleted	86-02	0049[c]	Remillard et al. 1986
75-02	07434	Meinunger 1975	86-03	0096[c]	Tuohy et al. 1986
75-03	07802	Shugarov 1975	86-04		Shara et al. 1986
75-04		Elvius 1975	86-05		Green et al. 1986
76-01	09601	Green et al. 1976	86-06		Downes 1986
76-02	05421	Hubel 1976	86-07	0216[c]	Hamuy and Maza 1986
76-03	08507	Erastova and Pavlov 1976	86-08		McNaught 1986
77-01	08357	Götz 1977	86-09	0005[c]	Meinunger 1986
77-02	07931	Goranskij 1977	86-10		Richter 1986
77-03	08197	Kurochkin 1977	87-01		Hawkins and Veron 1987
77-04		Romano 1977	87-02	0246[c]	Jablonski and Steiner 1987
78-01		deleted	87-03		Morris et al. 1987
78-02	09048	Crocker 1978	87-04		Duerbeck 1987a
78-03		deleted	87-05	0164[c]	Beuermann et al. 1987
78-04	08519	deleted	87-06		Bruch et al. 1987
78-05	08533	Kurochkin 1978b	87-07	0157[c]	Duerbeck 1987b
78-06	08204	Kurochkin 1978a	88-01	0306[c]	Pesch and Sanduleak 1988
79-01	08493	Charles et al. 1979	88-02	0005[c]	Osborne et al. 1988
79-02		Stepanian 1979	88-03		Karnashov and Moskalenko 1988
79-03	08350	Romano 1979	88-04		Bruch et al. 1988
79-04	09596	Tsesevich et al. 1979	88-05		Kopylov et al. 1988
79-05		Luyten and Albers 1979b	88-06		Duerbeck 1988
79-06		Noguchi et al. 1979	89-01		Toone 1989
80-01	08667	Bateson et al. 1980	89-02		Beuermann et al. 1989
80-02	08855	Platas and Rozenbush 1980	90-01		Tuohy et al. 1990
81-01		Margon et al. 1981	90-02		Hertz et al. 1990
81-02	03886	Chlebowski et al. 1981	90-03		Remillard 1990
81-03	06745	Steiner et al. 1981	90-04		Buckley et al. 1990
81-04		Hawkins 1981	90-05		Kato et al. 1990
81-05	09222	Kelly et al. 1981	90-06		Mukai et al. 1990
81-06	10054	Richter et al. 1981	90-07		Levy et al. 1990
81-07		deleted	90-08		Richter 1990
81-08		Lipovetskii and Stepanyan 1981	90-09		Bateson and Morel 1990
82-01	08852	Vogt and Bateson 1982	91-01		Green 1991

TABLE 6
(Continued)

Code	GCVS No.	Reference	Code	GCVS No.	Reference
91-02		Khruzina and Shugarov 1991	94-11		Drissen et al. 1994
91-03		Howell 1991b	94-12		Szkody 1994
91-04		Richter 1991	94-13		Staubert et al. 1994
91-05		Remillard et al. 1991	94-14		Reinsch et al. 1994
91-06		deleted	94-15		Osborne et al. 1994
91-07		Weinberger 1991	94-16		Haberl et al. 1994
91-08		Sharov 1991	94-17		Schaefer and Hoffleit 1994
91-09		Gilliland et al. 1991	95-01		Shara and Drissen 1995
91-10	0082[d]	Kinman et al. 1991	95-02		Hurst 1995
91-11		Hazen 1991	95-03		Walter et al. 1995
92-01		Maza et al. 1992	95-04		Vanmunster 1995b
92-02		Buckley et al. 1992	95-05		Buckley et al. 1995
92-03		Mason et al. 1992	95-06		Nogami et al. 1995
92-04		Mittaz et al. 1992	95-07		Singh et al. 1995
92-05		Jablonski and Cieslinski 1992	95-08		Szkody et al. 1995
92-06		Paresce et al. 1992	95-09		Cool et al. 1995
92-07		Bateson and Morel 1992	95-10		Vanmunster 1995a
93-01		Baptista et al. 1993	95-11		Howell 1995
93-02		Buckley et al. 1993	95-12		Kato and Nogami 1995
93-03		Dahlmark 1993	95-13		Bateson and Morel 1995
93-04		Schwope et al. 1993	95-14		Lanning and Meakes 1995
93-05		Wenzel 1993	95-15		Klose 1995
93-06		Duerbeck and Grebel 1993	96-01		Zwitter and Munari 1996
93-07		Wickramasinghe et al. 1993	96-02		Misselt 1996
93-08		O'Donoghue et al. 1993	96-03		Vanmunster 1996a
93-09		Buckley et al. 1993	96-04		Craig et al. 1996
93-10		Maffei and Tosti 1993	96-05		Burwitz et al. 1996
93-11		Van Cauteren 1993	96-06		Ringwald and Naylor, 1996
94-01		Remillard et al. 1994	96-07		Scovil 1996
94-02		Szkody and Ingram 1994	96-08		Motch et al. 1996
94-03		Hurst 1994	96-09		Thomas et al. 1996
94-04		Howell 1994	96-10		Burwitz et al. 1996
94-05		Sekiguchi et al. 1994	96-11		Howell and Hurst 1996
94-06		Munari et al. 1994	96-12		Antipin 1996b
94-07		Silber et al. 1994	96-13		Antipin 1996a
94-08		Paresce and De Marchi 1994	96-14		Howell et al. 1996
94-09		De Marchi and Paresce 1994	96-15		Duerbeck and Benetti 1996
94-10		Remillard et al. 1994			

Notes to TABLE 6

[a]From Kholopov et al. 1985
[b]From Kholopov et al. 1987
[c]From Kholopov et al. 1989
[d]From Kazarovets and Samus 1995

2.1.2 New CV Identifications since the First Edition

There are 172 new CVs in this edition, consisting of 37 novae, 34 dwarf nova, 96 novalike variables, and 5 IBWDs. There are also 23 new non-CVs listed in the catalog. Note that these additions consist both of newly discovered objects, and of older objects missed in the first edition.

The following 16 CVs from the first edition (which had no valid chart references) now have chart references: V1233 Aql, V433 Ara, FY Com, V1697 Cyg, RY Dor, For3, V838 Her, AY Oct, V1063 Oph, V2214 Oph, V351 Pup, V3774 Sgr, V977 Sco, V433 Sct, RY Ser, and HW Tau.

There are 57 objects in the first edition which have new identifications in this edition, 32 objects have revised identifications based on new information, while 25 objects have revised identifications based on re-examination of the original chart references; see Sec. 2.3 for details on individual objects.

2.1.3 Updates to the First Edition

Due to an error in the software originally used to measure the coordinates, an error of ~0.5 pixels (approximately 1″) in both coordinates was present. We have therefore remeasured all the CVs in the catalog, and the updated coordinates are given. There were also a number of objects (45) for which our new measurements differed by more than 2″ from the original position; see Sec. 2.3 for details on individual objects.

The 28 objects listed in Table 8 have been assigned GCVS identifications (Kazarovets et al. 1993; Kazarovets and Samus 1995) since the first edition. Also note that two objects had incorrect constellation assignments in the first edition - Cnc1 should be BK Lyn, and Nova 1853 Tri should be Nova 1853 Per.

The following 50 objects have had spectra published since the first edition: KW And, LL And, AG Aps, V1101 Aql,

TABLE 7
Spectrum References

Code[a]	Reference	Code[a]	Reference	Code[a]	Reference
X06-01	Moore 1906	S82-02	Barwig et al. 1982	S87-01	Morris et al. 1987
X18-01	Adams and Joy 1918	S82-03	Vogt and Bateson 1982	S87-02	Wegner et al. 1987
X27-01	Becker 1927	S82-04	Szkody and Downes 1982	X87-03	deleted
X28-01	Shajn and Nikonoff 1928	S82-05	Mason et al. 1982	S87-04	deleted
X28-02	Schwassmann and Wachmann 1928	S82-06	deleted	S87-05	Szkody 1987
X36-01	Joy et al. 1936	S82-07	Downes 1982	S87-06	Beuermann et al. 1987
X37-01	Burwell 1937	S82-08	Liebert et al. 1982	X87-07	Prabhu and Anupama 1987
X41-01	Burwell and Swope 1941	S82-09	Shara and Moffat 1982	X87-08	Duerbeck 1987a
X43-01	Sanford 1943a	S82-10	Bond et al. 1982	S87-09	Duerbeck and Seitter 1987
X43-02	Burwell and Hoffleit 1943	S82-11	Gilliland and Phillips 1982	S87-10	Hawkins and Veron 1987
X43-03	Sanford 1943b	S82-12	Gilliland 1982b	X87-11	O'Donoghue 1987
X45-01	Sanford 1945	S82-13	Gilliland 1982a	S87-12	Bond et al. 1987
X47-01	Merrill et al. 1947	S82-14	deleted	S87-13	O'Donoghue et al. 1987
X49-01	Yoss 1949	S82-15	Williams and Ferguson 1982	X87-14	deleted
X49-02	Mayall 1949	S83-01	Wargau et al. 1983	X87-15	deleted
X50-01	Colacevich 1950	S83-02	Echevarria et al. 1983	S87-16	deleted
X51-01	Henize and Haro 1951	X83-03	deleted	X87-17	McNaught 1987a
X51-02	McLaughlin 1951	S83-04	deleted	S87-18	Wood et al. 1987
X51-03	Sahade and Landi Dessi 1951	S83-05	Shafter et al. 1983	S88-01	Wagner et al. 1988
X53-01	deleted	S83-06	Mason et al. 1983	S88-02	Mukai et al. 1988
X53-02	Haro 1953	S83-07	Szkody and Shafter 1983	S88-03	Downes and Keyes 1988
X54-01	Hiltner 1954	X83-08	Iijima and Rosino 1983	S88-04	Kałużny and Chlebowski 1988
X54-02	Gaposchkin 1954	S83-09	Vogt 1983	X88-05	Wade 1988
X55-01	Abt 1955	S83-10	Schmidt et al. 1983	S88-06	Marsh 1988
S60-01	deleted	S83-11	Margon and Downes 1983	S88-07	Kopylov et al. 1988
X61-01	Nassau and Stephenson 1961	S83-12	Williams 1983	S88-08	Wegner and McMahan 1988
S62-01	Kraft 1962	S83-13	Hawkins 1983	X89-01	Sekiguchi et al. 1989
X63-01	Blanco 1963	X83-13	Hawkins 1983	S89-02	Ferrario et al. 1989
X64-01	deleted	S83-14	Hassall et al. 1983	S89-03	Shafter and Abbott 1989
X65-01	Wilde 1965	S83-15	Cordova et al. 1983	S89-04	deleted
X69-01	Rosino et al. 1969	S83-16	Shara and Moffat 1983	X89-05	Whitney and Clayton 1989
X70-01	deleted	X83-17	Peterson 1983	S89-06	Bruch 1989
S72-01	deleted	S83-18	Stocke et al. 1983	X89-06	Bruch 1989
X72-02	deleted	S84-01	Allen 1984	S89-07	O'Donoghue and Kilkenny 1989
X74-01	Ciatti and Rosino 1974	S84-02	Maraschi et al. 1984	S89-08	Beuermann et al. 1989
X75-01	deleted	S84-03	Shafter and Szkody 1984	S90-01	Tuohy et al. 1990
S75-02	Herbig and Hoffleit 1975	S84-04	Penning et al. 1984	S90-02	Abbott et al. 1990
X75-03	Pesch 1975	S84-05	Nousek et al. 1984	S90-03	Buckley et al. 1990
S76-01	Warner 1976	X84-06	deleted	S90-04	Hessman and Hopp 1990
X76-02	Weiler and Bahng 1976	S84-07	deleted	X90-05	deleted
X76-03	Leibowitz et al. 1976	X84-08	Kosai 1984	S90-06	Shara et al. 1990b
X76-04	Pesch 1976	X84-09	Foing 1984	X90-07	Wagner et al. 1990
S77-01	deleted	S84-10	Ferguson et al. 1984	S90-08	Hertz et al. 1990
X77-02	Bruhweiler and Wotten 1977	S85-01	Hunger et al. 1985	S90-09	Mukai et al. 1990
S77-03	Wyckoff and Wehinger 1977	S85-02	Filippenko et al. 1985	S90-10	Acker and Stenholm 1990
S77-04	Wickramasinghe and Bessell 1977	X85-03	Schlegel et al. 1985	S90-11	Maza and Hamuy 1990
X78-01	deleted	X85-04	Hassall 1985	S90-12	deleted
X78-02	Hidayat and Wiramhardya 1978	S85-05	Penning 1985	X90-13	Sekiguchi et al. 1990
S78-03	Bond 1978	S85-06	Reimers 1985	X90-14	Liller 1990b
S79-01	Charles et al. 1979	S85-07	Szkody 1985	S90-15	deleted
X80-01	deleted	X85-07	Szkody 1985	S90-16	deleted
X80-02	Klare et al. 1980	S85-08	Biermann et al. 1985	X91-01	deleted
X80-03	Kosai 1980	S85-09	deleted	S91-02	Thorstensen et al. 1991
S80-04	Meinunger 1980	S85-10	deleted	S91-03	Thorstensen et al. 1991
S81-01	Margon and Downes 1981	S86-01	Downes et al. 1986	X91-04	Williams et al. 1991
S81-02	Williams et al. 1981	S86-02	Remillard et al. 1986	X91-05	Wagner et al. 1991
S81-03	Downes and Margon 1981	S86-03	Downes 1986	X91-06	Suntzeff 1991
S81-04	Young et al. 1981	S86-04	Tuohy et al. 1986	X91-07	Wagner 1991
S81-05	Szkody et al. 1981	S86-05	Thorstensen 1986	S91-08	Remillard et al. 1991
S81-06	Kelly et al. 1981	S86-06	deleted	X91-09	Della Valle 1991
S81-07	Margon et al. 1981	S86-07	Tuohy et al. 1986	S92-01	Szkody and Howell 1992
S81-08	Steiner et al. 1981	S86-08	Shara et al. 1986	S92-02	Szkody et al. 1992
S81-09	Rayne and Whelan 1981	X86-09	Kosai 1986	X92-03	Della Valle 1992a
S81-10	Bailey and Ward 1981	X86-10	deleted	X92-04	Della Valle et al. 1992
X81-11	McCarthy et al. 1981	X86-11	Richtler and Liller 1986	S92-05	Jablonski and Cieslinski 1992
X82-01	Brosch 1982	S86-12	Williams 1986	S92-06	Bruch and Schimpke 1992

TABLE 7
(Continued)

Code[a]	Reference	Cole[a]	Reference	Code[a]	Reference
X92-06	Bruch and Schimpke 1992	S93-14	Duerbeck and Grebel 1993	S95-06	Zwitter and Munari 1995
S92-07	deleted	X93-15	Schmidt 1993	X95-07	Zwitter and Munari 1995
X92-08	Della Valle 1992b	S94-01	Remillard et al. 1994	S95-08	Honeycutt et al. 1995
S92-09	Schwope and Reinsch 1992	S94-02	Szkody and Ingram 1994	X95-09	Shafter et al. 1995
X92-10	Ingram et al. 1992	S94-03	Howell et al. 1994	S95-10	Singh et al. 1995
S92-11	Maza et al. 1992	S94-04	Sekiguchi et al. 1994	S95-11	Grindlay et al. 1995
X92-12	Liller 1992	S94-05	Silber et al. 1994	X95-12	Ohshima et al. 1995
S92-13	Berg et al. 1992	X94-06	Paresce and De Marchi 1994	S95-13	Buckley et al. 1995
X92-14	Dopita et al. 1992	S94-07	Zwitter and Munari 1994	S95-14	Diaz and Steiner 1995
S92-15	Beuermann et al. 1992	X94-08	Sakurai 1994	S95-15	Thomas and Reinsch 1995
X92-16	Stringfellow and Gregg 1992	X94-09	Wagner et al. 1994	S95-16	Koen and O'Donoghue 1995
S92-17	Abbott et al. 1992	S94-10	Remillard et al. 1994	S95-17	Szkody et al. 1995
S92-18	Mason et al. 1992	S94-11	Drissen et al. 1994	S95-18	Downes et al. 1995
S92-19	Mittaz et al. 1992	S94-12	Grauer et al. 1994	S96-01	Zwitter and Munari 1996
S92-20	Buckley et al. 1992	S94-13	Rodgers and Roberts 1994	S96-02	Downes and Wallace 1996
S93-01	Wickramasinghe et al. 1993	X94-14	Scott et al. 1994	S96-03	Craig 1996
S93-02	Szkody and Howell 1993	S94-15	Howell et al. 1994	S96-04	Craig et al. 1996
S93-03	Wegner and Boley 1993	S94-16	Howell and Liebert 1994	S96-05	Darling and Wegner 1996
S93-04	Buckley et al. 1993	S94-17	O'Donoghue et al. 1994	S96-06	Burwitz et al. 1996
X93-05	Baptista et al. 1993	S94-18	Staubert et al. 1994	S96-07	Billington et al. 1996
S93-06	Buckley et al. 1993	S94-19	Osborne et al. 1994	X96-08	Benetti et al. 1996
X93-07	Austin and Starrfield 1993	S94-20	Haberl et al. 1994	S96-09	Motch et al. 1996
S93-08	Hakala et al. 1993	S94-21	Reinsch et al. 1994	S96-10	Thomas et al. 1996
S93-09	O'Donoghue et al. 1993	X95-01	Benetti and Cappellaro 1995	S96-11	Burwitz et al. 1996
S93-10	Ringwald 1993	X95-02	Wagner et al. 1995	S96-12	Munari et al. 1996
X93-11	Della Valle et al. 1993	S95-03	Walter et al. 1995	X96-12	Munari et al. 1996
X93-12	McNaught and Garradd 1993	X95-04	Benetti et al. 1995	X96-13	Howell and Hurst 1996
X93-13	Chochol et al. 1993	S95-05	Mennickent 1995	S96-14	Ringwald et al. 1996

Notes to TABLE 7

[a] S=quiescence X=outburst

V1327 Aql, AT Cnc, EG Cnc, AQ CMi, LM Cas, NN Cen, CG Cep, BO Cet, Cet2, RR Cha, AR Cir, V747 Cyg, V811 Cyg, V1504 Cyg, Cyg2, ES Dra, Dra1, CP Eri, UV Gem, Her2, GY Hya, TT Ind, Leo2, Leo5, Lyn1, CY Lyr, AD Men, Men1, V2301 Oph, V344 Ori, GS Pav, EF Peg, FY Per, PY Per, DY Pup, HS Pup, VZ Pyx, V478 Sco, Ser1, V1062 Tau, YY Tel, KK Tel, TW Tri, ER UMa, UMa6, and CU Vel.

TABLE 8
New GCVS Designations

Old Name	GCVS Name	Old Name	GCVS Name
And1	PX And	1991 Mus	GU Mus
Cas1	V664 Cas	1991 Oph	V2264 Oph
1991 Cen	V868 Cen	1991 Oph	V2290 Oph
Cet4	BO Cet	Oph1	V2301 Oph
1987 Cir	BW Cir	Pav	V344 Pav
Crv1	TV Crv	1991 Pup	V351 Pup
1992 Cyg	V1974 Cyg	Pup1	V348 Pup
Dra3	ES Dra	Pup2	V347 Pup
Dra4	EP Dra	Pyx1	VZ Pyx
Gru2	CE Gru	1991 Sgr	V4160 Sgr
Gru3	CF Gru	1992,1 Sgr	V4157 Sgr
1991 Her	V838 Her	1991 Sct	V444 Sct
Hya2	LY Hya	Tau1	V1062 Tau
Hya3	LW Hya	UMa1	ER UMa

The following 57 objects have had better spectra published since the first edition: OS And, V356 Aql, V1370 Aql, AT Ara, WX Ari, QZ Aur, WZ CMa, V365 Car, AM Cas, BC Cas, V592 Cas, MU Cen, V373 Cen, IV Cep, BP CrA, TV Crv, EY Cyg, V476 Cyg, V516 Cyg, V751 Cyg, V1974 Cyg, Q Cyg, HR Del, V446 Her, Hya1, TU Ind, CP Lac, DK Lac, TU Men, HQ Mon, KQ Mon, V849 Oph, V972 Oph, V2214 Oph, BD Pav, HX Peg, TZ Per, PV Per, AY Psc, UY Pup, BV Pup, BX Pup, HZ Pup, GR Sgr, V1059 Sgr, FV Sct, V373 Sct, RW Sex, OV Tau, BB Vel, CN Vel, FY Vul, LV Vul, NQ Vul, PW Vul, QU Vul, and QV Vul.

The following objects 59 have been re-classified as non-CVs (see below for the revised classifications) since the first edition: EK Aps, CI Aql, V800 Aql, V1289 Aql, V422 Ara, CG CMa, V411 Car, BC Cas, XX Cet, Cet1, BM Cha, BW Cir, V404 Cyg, Dra2, For2, MV Gem, AN Gru, V360 Her, V809 Her, Her1, Her3, Her4, NQ Lac, TU Leo, Leo1, Leo3, Leo4, Leo6, Lib1, Lib2, IR Lyr, AY Oct, DP Pav, KQ Peg, Peg3, Psc1, Psc2, GM Sgr, LQ Sgr, V1089 Sgr, V2038 Sgr, V2493 Sgr, V3909 Sgr, V3914 Sgr, V4019 Sgr, AC Sco, AF Sco, Scl1, Nova 1938 Sct, Ser2, Sex1, WW Tel, EG UMa, UMa2, UMa3, UMa4, Vir1, Vir2, and Vir3.

2.2 Notes on Individual Objects

FN And—3.″9 north of the previous position
HP And—faint and nebulous
IO And—somewhat diffuse on Guide Star survey plate
LL And—revised identification is based on outburst observations; object has a companion of comparable magnitude to the northeast
And/NSV 14443—existence doubtful
And (NSV 312)—if a nova, probably a distant member of M31
And (NSV 313)—if a nova, probably a distant member of M31
And (NSV 238)—if a nova, probably a distant member of M31
AE Aqr—plate epoch = J1980.542, $\mu_\alpha = +0.''065$/yr, $\mu_\delta = +0.''018$/yr (Luyten 1969)
EH Aqr—two objects are marked as candidates for this variable. The coordinates of object B are $\alpha_{2000} = 23^h34^m5.^s7$, $\delta_{2000} = -22°48'39''$
EV Aqr—object is not visible on Guide Star Survey J plate (1983.451); position marked is that indicated by Khruzina and Shugarov (1991), but differs from the bright star to the NW (GSC 0526-01562) marked by Tsesevich and Kazanasmas (1971), whom they cite as their nominal reference
Aqr1—used coordinate matching for identification
DH Aql—star at/below the plate limit, coordinates approximate
EL Aql—the chart presented in Duerbeck (1987a) is incorrect and inverted. However, the quoted position is correct
V604 Aql—revised identification based on new chart reference
V606 Aql—the coordinates given in the catalog are for Duerbeck's candidate 3, identified from Bigourdan's (1900) precise position; our coordinates are $0.^s5$ east and 2″ north of Duerbeck
V725 Aql—revised identification based on new chart reference
V1047 Aql—crowded field
V1050 Aql—crowded field, 2.″5 north of the previous position
V1101 Aql—crowded field
V1336 Aql—revised identification based on re-examination of the original chart references
Aql2—identification uncertain
Aql3—identification very uncertain
BF Ara—star at/below the plate limit, coordinates approximate
KY Ara—revised identification based on new chart reference; object is 9.″5 east and 4.″2 south of the star at $\alpha_{2000} = 18^h08^m20.^s86$ and $\delta_{2000} = -54°56'13.''10$
Ara/NSV 8383—no evidence of flickering reported by Koen and O'Donoghue (1995)
SU Ari—coordinates in D&S are for Duerbeck's candidate 1, which is a galaxy (Duerbeck, private communication). Coordinates presented here are for candidate 2
HV Aur—revised identification based on re-examination of the original chart references
Aur2/NSV 2872—may not be a CV [Vanmunster (1995c)]; see Zinner (1931) for additional identification information
T Boo—Shara et al. (1990a) note that the spectrum of candidate 2 of Downes and Szkody (1989) is quite red, while the spectrum of candidate 5 is a featureless, blue continuum. Ringwald et al. (1996) also observed candidates 2 and 5, and found object 2 to be a K5-M4 star, while object 5 is that of an F2-9 star; candidate 1 was found to be a K3-5 dwarf
CT Boo—revised identification based on the object being in outburst on a Palomar Observatory Sky Survey plate (1955.310)
Cam2—used coordinate matching for identification
Cam3—used coordinate matching for identification
YZ Cnc—plate epoch = J1983.035, $\mu_\alpha = +0.''016$/yr, $\mu_\delta = -0.''058$/yr (CMC7)
AC Cnc—$0.^s4$ west, 1.″2 north of the previous position
AK Cnc—original chart reference was incorrect, a new reference was used
EU Cnc—our coordinates are 1^s west and 13″ north of Ritter and Kolb (1995)
CVn1—far from the nominal position, object is very blue on POSS
HL CMa—star is overlapped by Sirius; no measurement possible
Cap2—$1.^s6$ east, 18″ south of the previous position
QU Car—revised identification based on re-examination of the original chart references
Car1—near HD 63177
Car2—plate epoch = J1979.964, $\mu_\alpha = +0.''122$/yr, $\mu_\delta = +0.''024$/yr (Luyten 1963)
BC Cas—see the spectrum in Zwitter and Munari (1994) which does not show emission
DK Cas—very faint/diffuse

KP Cas—revised identification based on re-examination of the original chart references
V410 Cas—a spectrum by Munari et al. (1996) is that of a DA white dwarf or possibly a CV in outburst
V452 Cas—original identification is red, while the new candidate to the northwest is blue
V502 Cas—revised identification based on re-examination of the original chart references
V513 Cas—a spectrum by Munari et al. (1996) shows Hα emission on a reddish continuum
V630 Cas—$0^s.47$ east, $4''.8$ north of the previous position
V705 Cas—object is the north component with the measured object
Cas3—object faint but visible, close to V635 Cas (HMXB)
NN Cen—original ID is correct, however the object is a north-south double, with the CV being the north object
V373 Cen—object is in a double
FX Cep—revised identification based on outburst observations, and is to northeast of the original position
Cep1—plate epoch = J1983.848, $\mu_\alpha = +0''.15$/yr, $\mu_\delta = -0''.03$/yr (Giclas et al. 1980)
Cep2—also known as BD $+78°79$
Cet1—no flickering reported by Misselt and Shafter (1995)
Cet2—no flickering reported by Haefner et al. (1996)
Cet5—no flickering reported by Haefner et al. (1996)
Z Cha—close double; plate epoch = J1975.943, $\mu_\alpha = -0''.019$/yr, $\mu_\delta = +0''.073$/yr (Luyten 1969)
RX Cha—$0^s.71$ west, $4''.6$ north of the previous position
X Cir—our coordinates (but not identification) differ from Duerbeck (1987a)
AR Cir—revised identification based on new observations; object is in a close (blended) double; the measurement is of AR Cir A, while the nova is AR Cir B
TV Col—close double
AL Com—revised identification based on outburst observations
FY Com—the east component of a faint optical double
GP Com—plate epoch = J1982.154, $\mu_\alpha = -0''.34$/yr, $\mu_\delta = +0''.06$/yr (Giclas et al. 1971)
GT Com—the coordinates in Nygard (1973) are 3^s west and $1'52''$ south of the object indicated on her chart (and displayed in this atlas). The spectroscopic observations in Mukai et al. (1990) are of objects that match the coordinates
V662 CrA—no chart referenced in the GCVS, or the chart referenced in the GCVS is not useful, star unidentified
SS Cyg—plate epoch = J1983.670, $\mu_\alpha = +0''.108$/yr, $\mu_\delta = +0''.032$/yr (CMC8); $0^s.37$ west of the previous position
V337 Cyg—$2^s.3$ east, $3''$ north of the previous position; no chart referenced in the GCVS, or the chart referenced in the GCVS is not useful, star unidentified
V550 Cyg—close companion
V795 Cyg—revised identification based on outburst observations; object is north of the previous position; close pair?
V813 Cyg—$4''.4$ north of the previous position
V823 Cyg—crowded field
V868 Cyg—very crowded field
V1028 Cyg—$4''.4$ north of the previous position
V1062 Cyg—$7''$ north of the previous position
V1075 Cyg—revised identification based on re-examination of the original chart references; a spectrum by Munari et al. (1996) shows a featureless blue continuum
V1113 Cyg—$6''$ north of the previous position
V1114 Cyg—$4''.5$ north of the previous position
V1153 Cyg—revised identification based on re-examination of the original chart references
V1251 Cyg—revised identification based on outburst observations; a spectrum by Munari et al. (1996) is that of a M2 III star
V1310 Cyg—revised identification based on re-examination of the original chart references
V1330 Cyg—Ringwald et al. (1996) note the colors of Duerbeck's candidate is that of a K1-4 star
V1377 Cyg—revised identification based on re-examination of the original chart references
V1404 Cyg—revised identification based on re-examination of the original chart references
V1452 Cyg—very crowded
V1505 Cyg—south star of merged double
V1697 Cyg—42^s west, $38'46''$ north of the previous position; star at/below the plate limit, coordinates approximate
V1819 Cyg—revised identification based on a new chart reference
V1974 Cyg—original position was improperly precessed to J2000
Cyg2—$4''.9$ north of the previous position

Cyg3—merged double, identification uncertain
RY Dor—in the LMC
AB Dra—plate epoch = J1984.659, $\mu_\alpha = -0\farcs054$/yr, $\mu_\delta = -0\farcs017$/yr (Luyten 1969)
CP Dra—1^s west, 4″ north of the previous position
CQ Dra—position epoch = J2000.000, $\mu_\alpha = -0\farcs056$/yr, $\mu_\delta = -0\farcs045$/yr (Röser and Bastian 1991); coordinates are for the star 4 Dra (GSC 4394-01871)
DV Dra—$4\farcs5$ north of the previous position
EP Dra—$0\farcs8$ west of the previous position
Dra5—used coordinate matching for identification
Dra6—spectrum in Wegner and McMahan (1988) could be in outburst
Dra7—used coordinate matching for identification
Dra8—identification uncertain; although classified as a possible supernova, there is no host galaxy visible on the Palomar Observatory Sky Survey, so if real, the object may be a nova. The coordinates of object B are $\alpha_{2000} = 15^h08^m49^s, \delta_{2000} = +55°27'51''$. The coordinates given by Zwicky (1965) are $\alpha_{2000} = 15^h08^m50^s, \delta_{2000} = 55°28'07''$
EF Eri—plate epoch = J1977.949, $\mu_\alpha = +0\farcs147$/yr, $\mu_\delta = -0\farcs071$/yr (Williams et al. 1979)
SY Gem—missing BD star, bright non-BD object (GSC 2435-00868, $\alpha_{2000} = 6^h40^m37\farcs60$, $\delta_{2000} = 31°09'31\farcs8$) nearby; spectra by Munari et al. (1996) of Duerbeck's candidates 1 and 2 show neither has a CV-like spectrum
UV Gem—3″ north of the previous position
AW Gem—4″ north of the previous position
HM Gem—measured object may not be real
HQ Gem—revised identification based on a new chart reference
KT Gem—revised identification based on a new chart reference
KZ Gem—revised identification based on a new chart reference
Gem1—identification uncertain; no flickering reported by Haefner et al. (1996)
Gru1—close pair
AM Her—plate epoch = J1983.348, $\mu_\alpha = -0\farcs039$/yr, $\mu_\delta = +0\farcs030$/yr (Stockman et al. 1977)
CH Her—$2\farcs7$ north of the previous position
PR Her—star at/below the plate limit, coordinates approximate
V592 Her—star at/below the plate limit, coordinates approximate
V610 Her—in the Hoffmeister (1968) reference, this object and V611 Her are confused. The coordinates for V610 Her are those of variable S 10312, while the chart is that of S10311. For V611 Her, the coordinates are those of variable S 10311, while the chart is that of S 10312
V611 Her—revised identification based on a new chart reference; the measured object is bright on the Palomar Observatory Sky Survey E plate (1950.379), southern object ($16^h44^m51^s, +19°59'17''$) is bright on Guide Star Survey V plate (1982.384); see the note for V610 Her
V631 Her—6″ north of the previous position; star at/below the plate limit, coordinates approximate
V632 Her—revised identification based on a new chart reference; star at/below the plate limit, coordinates approximate
V660 Her—chart in D&S is of the wrong field
V795 Her—$2\farcs9$ north of the previous position
V838 Her—the object is $1\farcs4$ west and $1\farcs0$ north of the star at $18^h46^m31\farcs6$ and $+12°14'00\farcs8$
Her5—object is the southwest star in double
EX Hya—plate epoch = J1980.208, $\mu_\alpha = -0\farcs110$/yr, $\mu_\delta = +0\farcs022$/yr (Luyten 1969)
VW Hyi—$0\farcs74$ east, 5″ south of the previous position
Ind1—used coordinate matching for identification
EG Lac—6″ south of the previous position; star at/below the plate limit, coordinates approximate
KM Lac—close pair
MN Lac—star at/below the plate limit, coordinates approximate
T Leo—plate epoch = J1983.287, $\mu_\alpha = -0\farcs063$/yr, $\mu_\delta = -0\farcs063$/yr (Luyten 1969)
U Leo—Shara et al. (1990a) note that the spectrum of the variable object in Downes and Szkody (1989) has a G-type spectrum; the spectrum in Ringwald et al. is similar
X Leo—plate epoch = J1985.047, $\mu_\alpha = -0\farcs049$/yr, $\mu_\delta = -0\farcs015$/yr (Luyten 1969)
RZ Leo—$6\farcs2$ east, $23\farcs2$ south of the previous position
DP Leo—$4\farcs3$ north of the previous position
Leo6—no flickering reported by Misselt and Shafter (1995)
Leo7—used coordinate matching for identification

Leo (NSV 4498)—no flickering reported by Haefner et al. (1996) for stars in the field
Leo (NSV 4550)—Duerbeck's position, obtained from the same reference (Winnecke 1978), is substantially different than ours
Lib3—used coordinate matching for identification
Lib4—used coordinate matching for identification
Lib5—used coordinate matching for identification
Lyn2—object is not visible on Palomar Observatory Sky Survey E plate (1953.107)
Lyn/NSV 4394—also known as SN 1972δ
V358 Lyr—4″ south of the previous position; star at/below the plate limit, coordinates approximate
V369 Lyr—revised identification based on re-examination of the original chart references
V447 Lyr—in outburst on the Palomar Observatory Sky Survey (1951.672); 7″ north of the previous position
V492 Lyr—plate epoch = J1982.389, $\mu_\alpha = -0\farcs121$/yr, $\mu_\delta = +0\farcs607$/yr (Luyten and Albers 1979a)
AD Men—revised identification based on re-examination of the original chart references
Men1—revised identification based on a new chart reference
CG Mus—revised identification based on re-examination of the original chart references
AB Nor—3″ north of the previous position
IL Nor—our coordinates are $1\overset{s}{.}1$ west and 5″ south of Duerbeck
KQ Nor—revised identification based on re-examination of the original chart references
LR Nor—$0\overset{s}{.}21$ west, $4\farcs6$ north of the previous position
AO Oct—$6\farcs3$ north of the previous position
V553 Oph—original position was improperly precessed to J2000
V699 Oph—revised identification based on re-examination of the original chart references
V794 Oph—Ringwald et al. (1996) note the spectrum is featureless
V972 Oph—the chart in Duerbeck is incorrect; see de la Rosa (1959) for a correct chart
V1195 Oph—revised classification (was a non-CV in D&S)
V1326 Oph—no chart referenced in the GCVS, or the chart referenced in the GCVS is not useful, star unidentified
V1548 Oph—Antipin et al. (1994a) note a confusion between this object and V1528 Oph (a Mira variable). They conclude that no chart exists for V1548 Oph
V2051 Oph—$4\farcs2$ north of the previous position
V2214 Oph—1^s west of the previous position
Oph2—star at/below the plate limit, coordinates approximate
GS Pav—$0\overset{s}{.}81$ east, $3\farcs3$ north of the previous position
EF Peg—object is 5″ away at 305° from the star at $\alpha_{2000} = 21^h15^m04\overset{s}{.}45$, $\delta_{2000} = 14°03'47\farcs5$
Peg4—$1^m59\overset{s}{.}25$ west, $9\farcs7$ south of the previous position
SZ Per—1′3″ south of the previous position
MY Per—revised identification based on re-examination of the original chart references; a spectrum by Munari et al. (1996) reveals weak Hα emission on a red continuum
PU Per—revised identification based on outburst observations
PY Per—revised identification based on photometric observations; object is to the southeast of the previous position
QY Per—revised identification based on outburst observations
V336 Per—revised identification based on re-examination of the original chart references
V368 Per—revised identification based on re-examination of the original chart references
V372 Per—close companion
V392 Per—revised identification based on a new chart reference; the chart in Richter (1970) has the chart mislabeled as S 10652
Per (NSV 895)—possible supernova in irregular galaxy UGC 2172 = MCG 7-6-55
Phe1—plate epoch = J1975.816, $\mu_\alpha = +0\farcs042$/yr, $\mu_\delta = -0\farcs045$/yr (Luyten 1963)
RR Pic—plate epoch = J1978.034, $\mu_\alpha = -0\farcs049$/yr, $\mu_\delta = -0\farcs018$/yr (Turon et al. 1992)
Pic1—object appears double, center of pair measured
XY Psc—star at/below the plate limit, coordinates approximate
AH Psc—no chart referenced in the GCVS, or the chart referenced in the GCVS is not useful, star unidentified
AS Psc—star at/below the plate limit, coordinates approximate
Psc3—the object is also cataloged as a galaxy (PGC 1558 = UM 239), but appears stellar
VV Pup—plate epoch = J1979.233, $\mu_\alpha = +0\farcs025$/yr, $\mu_\delta = -0\farcs097$/yr (Luyten and Liebert 1978)
V351 Pup—closest candidate is 1^s west and 2″ south of the nominal position

Pup 1673—Shara et al. (1990a) note that the spectrum of Duerbeck's candidate shows narrow Balmer absorption superimposed on a blue continuum
Ret1—used coordinate matching for identification
WZ Sge—plate epoch = J1982.474, $\mu_\alpha = +0\farcs077$/yr, $\mu_\delta = -0\farcs014$/yr (Luyten 1969)
BS Sgr—Ringwald et al. (1996) note the colors as a reddened K star?
HS Sgr—Ringwald et al. (1996) note the colors of Duerbeck's candidate is that of a K3-6 star?
V522 Sgr—Ringwald et al. (1996) note the colors of Duerbeck's candidate is that of a G2-K5 star
V759 Sgr—revised identification based on a new chart reference
V928 Sgr—position is the midpoint between Duerbeck's candidates 1 and 2
V949 Sgr—there is a bright, extremely red star (GSC 6870-01383) a few arcsec away. If this is the counterpart, then V949 Sgr is likely long-period variable
V999 Sgr—Ringwald et al. (1996) note the spectrum is featureless
V1175 Sgr—there is an object at $\alpha_{2000} = 18^h14^m20\fs8$, $\delta_{2000} = -31°06'36''$ which is much fainter on the Guide Star plate (a V image) than Duerbeck's (a J image) published chart. This object is either very blue or variable, and is a candidate for the nova
V1310 Sgr—revised identification based on the original chart reference in Duerbeck (1987a); possible Mira variable
V1431 Sgr—revised identification based on the original chart reference in Duerbeck (1987a)
V1830 Sgr—revised identification based on re-examination of the original chart references
V1905 Sgr—our coordinates are $0\fs1$ east and 5″ south of Duerbeck; Ringwald et al. (1996) note the colors of Duerbeck's candidate is that of a K3-5 star
V1944 Sgr—our coordinates are $0\fs3$ east and 4″ north of Duerbeck
V2359 Sgr—measurement is of the center of a clump, the object is possibly the east object in the clump
V2435 Sgr—crowded field
V2839 Sgr—no chart referenced in the GCVS, or the chart referenced in the GCVS is not useful, star unidentified
V3462 Sgr—no chart referenced in the GCVS, or the chart referenced in the GCVS is not useful, star unidentified
V3608 Sgr—no chart referenced in the GCVS, or the chart referenced in the GCVS is not useful, star unidentified
V3774 Sgr—object is bright on the Palomar Observatory Sky Survey O print, not as bright on the Palomar Observatory Sky Survey E print, SRC J film, or Guide Star Survey V plate (1987.633)
V3885 Sgr—$4\farcs3$ north of the previous position; plate epoch = J1976.430, $\mu_\alpha = +0\farcs031$/yr, $\mu_\delta = -0\farcs042$/yr (Bastian and Röser 1993)
V3888 Sgr—note that Duerbeck's position is $0\fs66$ east of outburst positions
V3890 Sgr—revised identification based on 1990 outburst position and re-examination of the original chart references
V3941 Sgr—close companion to the southwest
V4021 Sgr—Ringwald et al. (1996) note the colors of Duerbeck's candidate is that of a K0-3 star
V4074 Sgr—object is 3″ south of the brighter star ADS 295
Sgr (NSV 10158)—position is 17″ north of Duerbeck's position (from Haro 1953)
Sgr (NSV 9828)—there is a bright, extremely red star (not in the GSC) a few arcseconds away. If this is the counterpart, then NSV 9828 is likely a long-period variable
Sgr2—position is computed by offset from star II-35 (cf Williams 1986)
Sgr3—plate epoch=J1977.549, $\mu_\alpha = +0\farcs09$/yr, $\mu_\delta = -0\farcs35$/yr (Luyten 1980)
Sgr (1954α)—although classified as a possible supernova, there is no host galaxy visible on the Palomar Observatory Sky Survey, so if real, the object may be a nova
FQ Sco—4″ north of the previous position
MM Sco—3″ north of the previous position
V711 Sco—13″ south of the previous position
V794 Sco—no chart referenced in the GCVS, or the chart referenced in the GCVS is not useful, star unidentified; observations of a star at the nominal position by Mukai et al. (1990) reveals a reddened A-star spectrum
V893 Sco—field unidentifiable from the chart (Satyvoldiev 1972); possible large error in position?
V977 Sco—measured object may not be real
V992 Sco—object blue on POSS
Scl2—plate epoch = J1982.634, $\mu_\alpha = +0\farcs14$/yr, $\mu_\delta = -0\farcs24$/yr (Giclas et al. 1972)
FS Sct—Ringwald et al. (1996) note the spectrum of Duerbeck's candidate is featureless
V391 Sct—no chart referenced in the GCVS, or the chart referenced in the GCVS is not useful, star unidentified
V443 Sct—a measurement of a possible prenova ($0\fs02$ west and $0\farcs3$ north of the position presented here) can be found in Anupama et al. (1992)

GL Sct—Duerbeck's quoted position is not consistent with his chart. The object is located $0^{s}.64$ east and $6''.4$ south of Duerbeck's location
Ser (M5 V101)—1^{s} east and 12″ south of the previous position
RW Sex—$2''.5$ north of the previous position
V701 Tau—revised identification based on outburst observations
UZ Tri—nebulous object nearby is a background galaxy (Bond, private communication)
EK TrA—$4''.3$ south of the previous position, close companion
FL TrA—1^{s} west, 5″ north of the previous position
VW Tuc—revised identification based on re-examination of the original chart references
VZ Tuc—the Howell (1991b) candidate, which is misidentified in D&S, is far from the nominal position of the object (and is labeled on the chart as B, with coordinates $\alpha_{2000}=0^{h}34^{m}1^{s}.3$, $\delta_{2000}=-73°16'16''$)
Tuc1—measurement performed off the published image; see Guhathakurta et al. (1992) for the reference frame definition
Tuc2—Thomas and Reinsch (1996) have published a chart confirming our positional identification
Tuc/NGC104-V2—measurement performed off the published image; see Guhathakurta et al. (1992) for the reference frame definition
CE UMa—no chart referenced in the GCVS, or the chart referenced in the GCVS is not useful, star unidentified
DR UMa—revised identification based on re-examination of the original chart references
DV UMa—$4''.5$ north of the previous position
EK UMa—$4''.8$ north of the previous position
UMa8—object blue on POSS
RW UMi—$0^{s}.8$ west and 31″ north of previous position; object is bright on Guide Star Survey plate (1983.349)
UMi1—used coordinate matching for identification, object slightly blue on POSS
BB Vel—close pair
CN Vel—the object is the east component of the faint optical double marked in Duerbeck (1987a)
IX Vel—plate epoch = J1975.197, $\mu_{\alpha}=-0''.027$/yr, $\mu_{\delta}=-0''.102$/yr (Bastian and Röser 1993)
Vir4—used coordinate matching for identification, object blue on POSS
Vir6—used coordinate matching for identification
SW Vul—$4''.5$ south of the previous position
TY Vul—star at/below the plate limit, coordinates approximate
IL Vul—revised identification based on re-examination of the original chart references
PW Vul—revised identification based on a new chart reference; object is the middle object in a chain of three

2.3 Classification of non-CVs

Z Aps—pulsating variable, possible a Cepheid
EK Aps—RR Lyrae star
CV Aqr—detection announcement could have been due to confusion with asteroid or a nearby red variable; 4^{s} east of the previous position
CI Aql—short period eclipsing binary
CM Aql—Symbiotic star; 7^{s} east of the previous position
V352 Aql—planetary nebula nucleus (PK 37−3°3=K3-25)
V607 Aql—Mira variable
V800 Aql—Cepheid; 6″ north of the previous position
V890 Aql—does not exist
V1289 Aql—early-mid G star, object likely misidentified
AE Ara—Symbiotic star; 4^{m} east, 9″ north of the previous position
V422 Ara—early-A V + K7 V binary
Ara/NSV 9208—cool DA white dwarf
N Boo 1962—Duerbeck (private communication) states that this object is not real, and was caused by a double exposure
Boo/PG 1443+337—DA white dwarf
AA Cnc—M star spectrum, possible flare star; 13″ south of the previous position
TX CVn—Z And type variable
CG CMa—possible white dwarf
RT Car—irregular variable
AG Car—S Dor type variable

VW Tuc—revised identification based on re-examination of the original chart references
VZ Tuc—the Howell (1991b) candidate, which is misidentified in D&S, is far from the nominal position of the object (and is labeled on the chart as B, with coordinates $\alpha_{2000}=0^h34^m1^s.3$, $\delta_{2000}=-73°16'16''$)
Tuc1—measurement performed off the published image; see Guhathakurta et al. (1992) for the reference frame definition
Tuc2—Thomas and Reinsch (1996) have published a chart confirming our positional identification
Tuc/NGC104-V2—measurement performed off the published image; see Guhathakurta et al. (1992) for the reference frame definition
CE UMa—no chart referenced in the GCVS, or the chart referenced in the GCVS is not useful, star unidentified
DR UMa—revised identification based on re-examination of the original chart references
DV UMa—4".5 north of the previous position
EK UMa—4".8 north of the previous position
UMa8—object blue on POSS
RW UMi—0^s.8 west and 31" north of previous position; object is bright on Guide Star Survey plate (1983.349)
UMi1—used coordinate matching for identification, object slightly blue on POSS
BB Vel—close pair
CN Vel—the object is the east component of the faint optical double marked in Duerbeck (1987a)
IX Vel—plate epoch = J1975.197, $\mu_\alpha=-0''.027$/yr, $\mu_\delta=-0''.102$/yr (Bastian and Röser 1993)
Vir4—used coordinate matching for identification, object blue on POSS
Vir6—used coordinate matching for identification
SW Vul—4".5 south of the previous position
TY Vul—star at/below the plate limit, coordinates approximate
IL Vul—revised identification based on re-examination of the original chart references
PW Vul—revised identification based on a new chart reference; object is the middle object in a chain of three

2.3 Classification of non-CVs

Z Aps—pulsating variable, possibly a Cepheid
EK Aps—RR Lyrae star
CV Aqr—detection announcement could have been due to confusion with asteroid or a nearby red variable; 4^s east of the previous position
CI Aql—short period eclipsing binary
CM Aql—Symbiotic star; 7^s east of the previous position
V352 Aql—planetary nebula nucleus (PK 37−3°3=K 3-25)
V607 Aql—Mira variable
V800 Aql—Cepheid; 6" north of the previous position
V890 Aql—does not exist
V1289 Aql—early-mid G star, object likely misidentified
AE Ara—Symbiotic star; 4^m east, 9" north of the previous position
V422 Ara—early-A V + K7 V binary
Ara/NSV 9208—cool DA white dwarf
N Boo 1962—Duerbeck (private communication) states that this object is not real, and was caused by a double exposure
Boo/PG 1443+337—DA white dwarf
AA Cnc—M star spectrum, possible flare star; 13" south of the previous position
TX CVn—Z And type variable
CG CMa—possible white dwarf
RT Car—irregular variable
AG Car—S Dor type variable
EP Car—possible Mira variable; 8" south of the previous position
HR Car—S Dor type variable
V351 Car—Mira variable
V411 Car—K1-2 III:e: star
LW Cas—T Tauri star; 11" north of the previous position
V418 Cas—Mira variable; 11^s east and 6" south of the previous position
V591 Cen—no star with a blue color or emission spectrum in field; 27" south of the previous position
V840 Cen—Z And variable
BS Cep—Herbig emission-line star
XX Cet—quasar
Cet/US 3215—Seyfert 1 Galaxy
BM Cha—T Tauri star
BW Cir—low mass X-ray binary; 5" south of the previous position

V345 Nor—Mira or Z And variable; 6^s west, 93″ north of the previous position
AY Oct—RR Lyrae star; 6^s east, 6″ north of the previous position
TU Oph—M-star spectrum, possible flare star; 1^s east, 14″ north of the previous position
V810 Oph—slow irregular variable; 46″ north of the previous position
V2101 Oph—semiregular, late-type giant (M5 II–III)
V2295 Oph—low mass X-ray binary
DP Pav—A2-3 V star; 23^s west, 114″ north of the previous position
Pav/NSV 11181—DC white dwarf
EZ Peg—RS CVn variable
KQ Peg—subdwarf B−O star
Peg3—hot object
MR Per—M-star spectrum, possible flare star; 9″ north of the previous position
PT Per—late-B star
UY Phe—RR Lyrae variable; 12″ north of the previous position
Psc1—subdwarf B star
Psc2—binary with hot subdwarf
Psc/PG 0048+091—subdwarf B star
Psc/NSV 206—does not exist
CL Pup—possible rapid irregular variable; 110″ south of the previous position
SS Sge—Z And variable
GM Sgr—early A-type star
KW Sgr—semiregular variable
LQ Sgr—symbiotic star
V735 Sgr—colors and spectrum are not that of a dwarf nova; 1^s east, 10′11″ south of the previous position
V939 Sgr—Mira variable
V941 Sgr—Mira variable; 5″.2 north of the previous position
V1017 Sgr—Z And variable, or possibly recurrent nova
V1089 Sgr—K3–5 III star
V1502 Sgr—semiregular variable; 1^s east, 19″ north of the previous position
V1709 Sgr—semiregular variable; 6″ south of the previous position
V1988 Sgr—possible Z And variable
V2012 Sgr—slow irregular variable; 2^s east, 15″ north of the previous position
V2032 Sgr—Mira variable; 1^s east, 16″ south of the previous position
V2038 Sgr—Mira variable
V2329 Sgr—Mira variable
V2383 Sgr—Mira variable; 2^s east, 25″ south of the previous position
V2446 Sgr—Mira variable
V2493 Sgr—Mira variable
V2506 Sgr—Z And variable
V3876 Sgr—Mira variable
V3909 Sgr—M3 III star (Mira variable?)
V3914 Sgr—Mira variable
V4019 Sgr—A7e star
V4332 Sgr—M-giant star
Sgr/1985—M star, long period variable
Sgr/1994—Mira or symbiotic star
Sgr/NGC 6626 V7—Mira variable
AC Sco—G star
AF Sco—Mira variable; 1^s east, 10″ north of the previous position
V455 Sco—Z And variable
V598 Sco—semiregular, late-type giant (K5 III); 7^s east, 15″ south of the previous position
V916 Sco—Z And variable; 6″ north of Duerbeck's (1987a) position
Sco/1990—does not exist
Scl1—white dwarf
V427 Sct—Mira variable?
Sct/NSV 11561—K4 V star

RT Ser—Z And variable
AG Ser—extremely red object, Mira variable or flare star
NN Ser—precataclysmic variable (Ritter 1986)
Ser2—subdwarf B star
Sex1—white dwarf
RR Tel—Z And variable
WW Tel—G0 V star, 8″ south of the previous position
AK Tel—very red colors, small-amplitude variations (1.2 mag); 6^s west, 7″ south of the previous position
BE Tuc—red colors, no line emission in spectrum
EG UMa—detached white dwarf-red dwarf pair
UMa2—binary with hot subdwarf; note that Munari et al. (1996) postulate the object as being a nearly pole-on CV
UMa3—hot object
UMa4—starburst galaxy
Vir1—DA white dwarf
Vir2—subdwarf B star
Vir3—F-G star
Vir/PG 1156-037—subdwarf B star
Vir/PG 1217-067—subdwarf B star
Vir/PG 1257+010—subdwarf B-O star
Vir/PG 1315-123—subdwarf B star
UY Vul—M-star spectrum
UZ Vul—M-star spectrum
PU Vul—Z And variable
V362 Vul—low redshift AGN

3. THE ATLAS

Finding charts for all objects not in the first edition, as well as objects with revised identifications, are presented in Figs. 1–28; note that finding charts for novae can be found in Duerbeck (1987a). The charts are based on the Digitized Sky Survey,[1] and since those plates vary in both color and limiting magnitude, a code is included with each chart indicating this information; Table 9 contains the definitions of the codes (see Lasker et al. 1990). The charts are all $\sim 5' \times \sim 5'$ in size, with North up and East to the left.

4. SPACE-BASED OBSERVATIONS OF CVS

Cataclysmic variables have been observed by space-based observatories for many years, particularly by X-ray missions. We have searched the archives of the High Energy Astrophysics Science Archive Research Center (HEASARC) for observations of CVs from X-ray satellites (*Ariel 5*, *HEAO-1*, *HEAO-2*, *EXOSAT*, *Ginga*, *ROSAT*, and *ASCA*) and the *EUVE* satellite, and the *IUE* and *HST* archives for spectroscopy of CVs; for on-going missions, our search contains observations in the archives as of 1996 April. All CVs with space-based observations are listed in Table 10.

5. SUMMARY

We have presented the second edition of a catalog of all cataclysmic variables known to us as of 1996 May, which contains accurate coordinates, classifications, magnitude ranges, and references to finding charts and spectroscopy. For those dwarf novae and novalike variables that have new identifications, or did not otherwise appear in D&S, we also present finding charts based on the Digitized Sky Survey. The charts will aid observers in obtaining ground-based data, while the accurate coordinates will aid in obtaining space-based data, particularly with the *Hubble Space Telescope*. We also present a summary of space-based observations of CVs.

An electronic version of this catalog will be available through the Astronomical Data Center at Goddard Space Flight Center (http://adc.gsfc.nasa.gov/), and Tables 1(a) and 1(b) will be included in their entirety in Vol. 8 of the *AAS CD-ROM Series*.

We would like to thank Sarah Stevens-Rayburn and Brenda Corbin for their excellent assistance in obtaining some of the more obscure references needed to generate the finding charts, and Debra Wallace for aid in extracting the images from the Digitized Sky Survey. We also wish to acknowledge Paul van Cauteren, Tonny Vanmunster, and Guy Hurst for providing updated identifications for several outbursting objects, and an anonymous referee for useful comments. R.F.W. gratefully acknowledges the hospitality and sabbatical support of the STScI and U.S. Naval Observatory. Financial support has been provided by NASA Grant NAGW-4306.

[1]The Digitized Sky Survey was produced at the Space Telescope Science Institute under U.S. Government Grant NAG W-2166. The images on these discs are based on photographic data obtained using the Oschin Schmidt Telescope on Palomar Mountain and the UK Schmidt Telescope. The plates were processed into the present compressed digital form with the permission of these institutions. The Palomar Observatory Sky Survey was funded by the National Geographic Society. The Oschin Schmidt Telescope is operated by the California Institute of Technology and Palomar Observatory. The UK Schmidt Telescope was operated by the Royal Observatory Edinburgh, with funding from the UK Science and Engineering Research Council, until 1988 June, and thereafter by the Anglo-Australian Observatory. Original plate material is copyright the Royal Observatory Edinburgh and the Anglo-Australian Observatory.

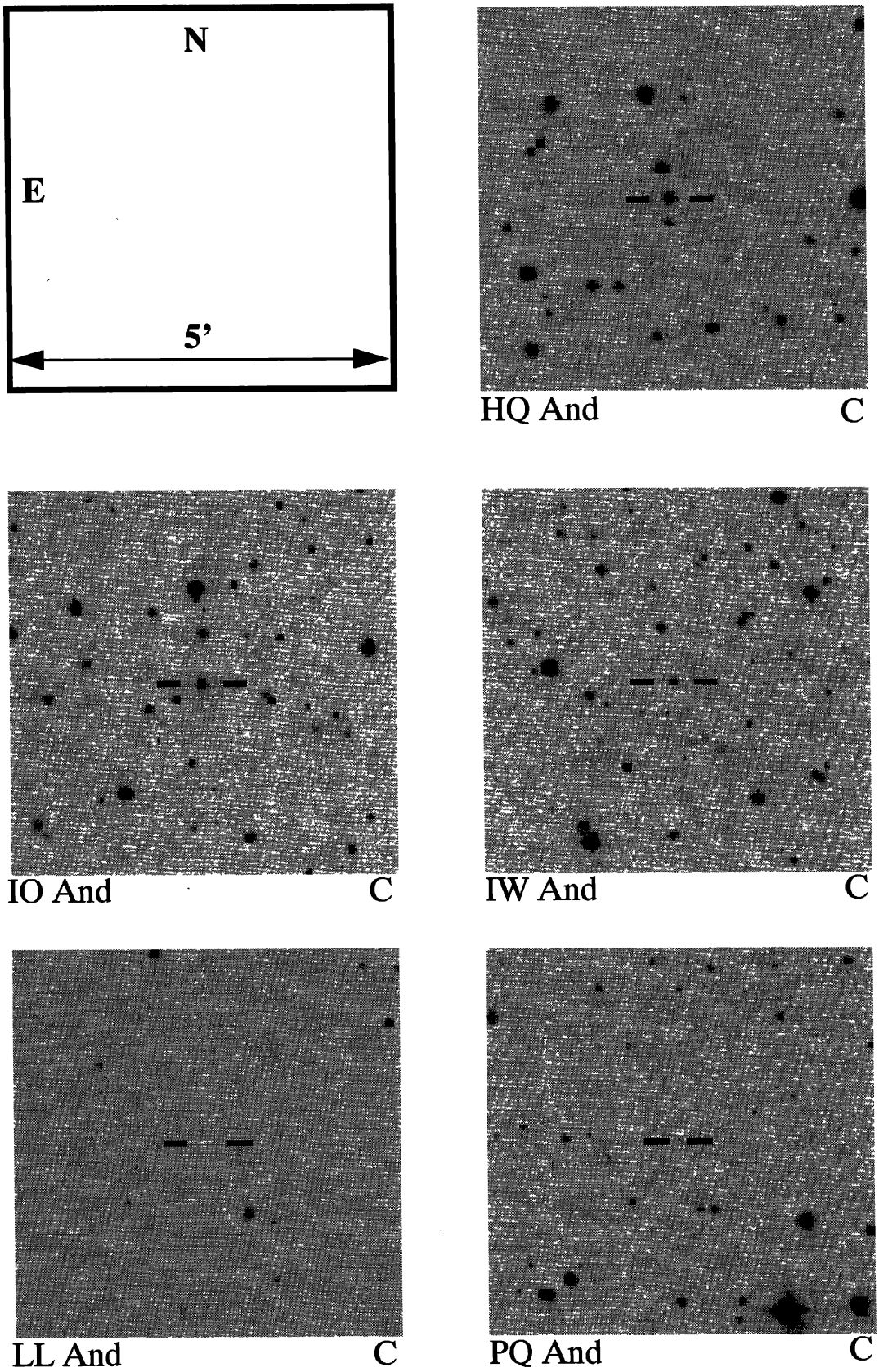
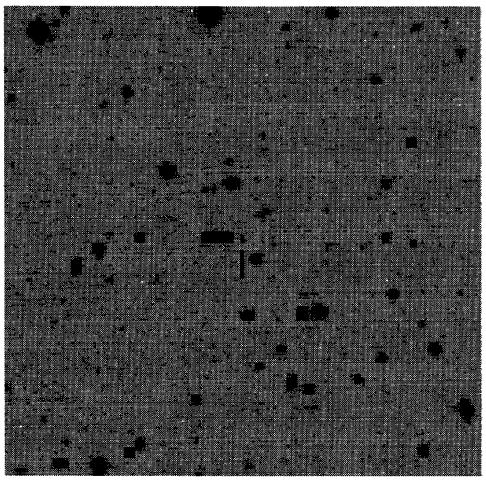
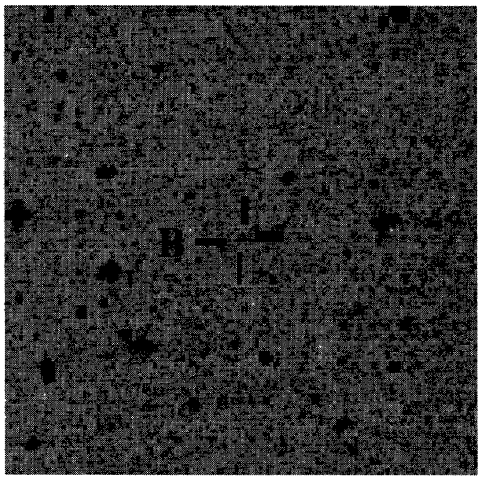


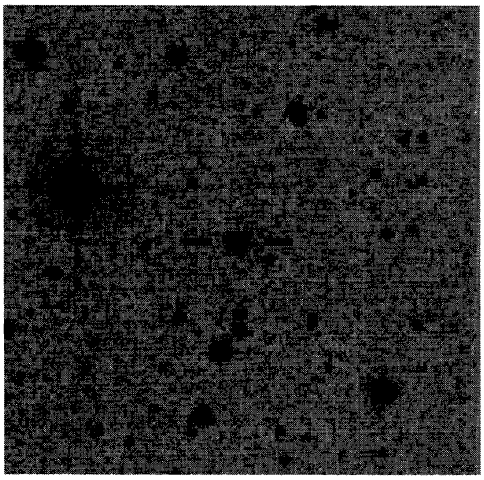
FIG. 1—The finding charts (28), based on the Digitized Sky Survey. The scale and orientation are given in the first chart, and the emulsion code is provided for each chart.



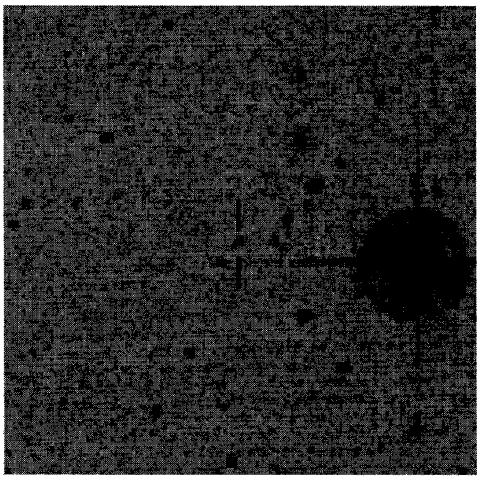
And2 C



EH Aqr A



HU Aqr A



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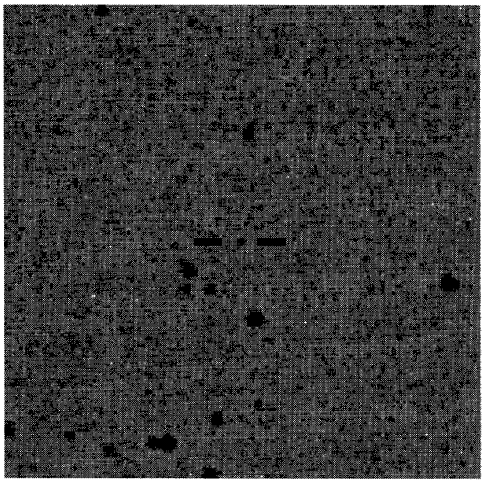

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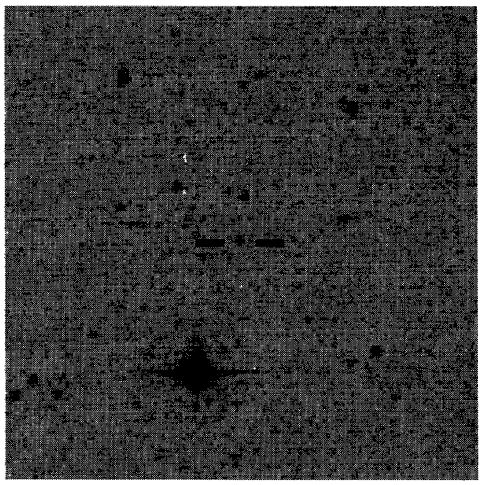

Aqr3 A

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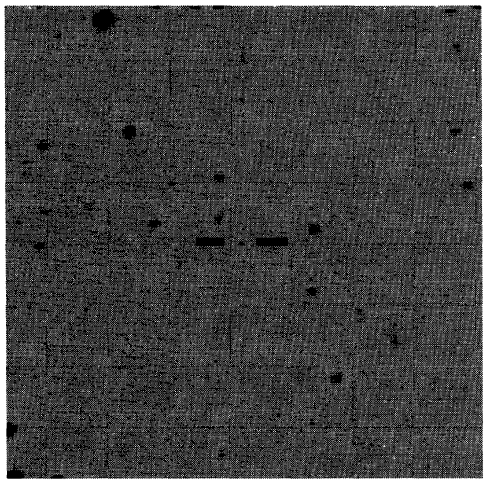
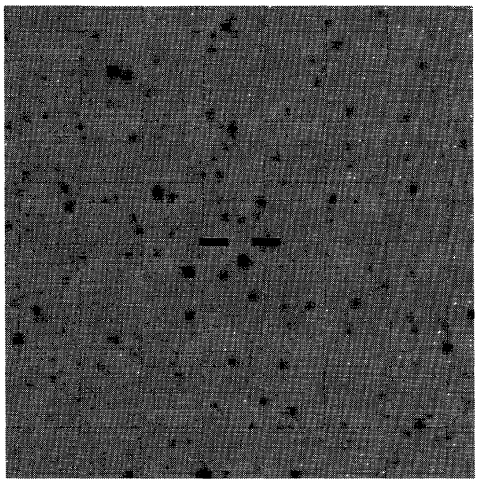
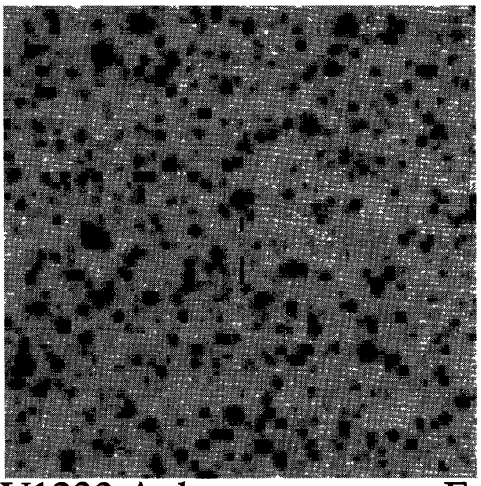


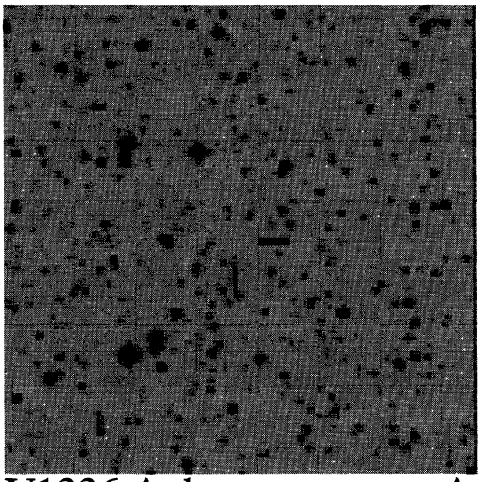
Aqr4 A



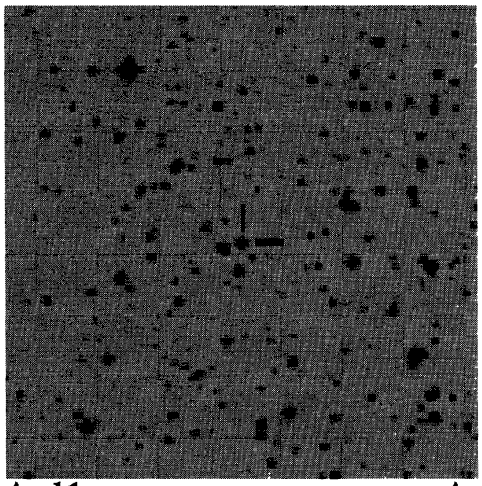
V725 Aql C



V1233 Aql E



V1336 Aql A



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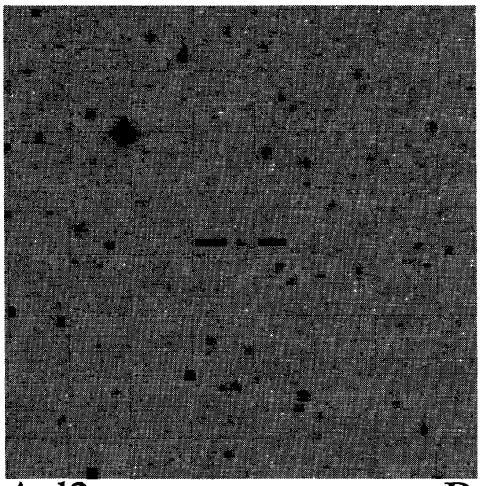

Aql2 B

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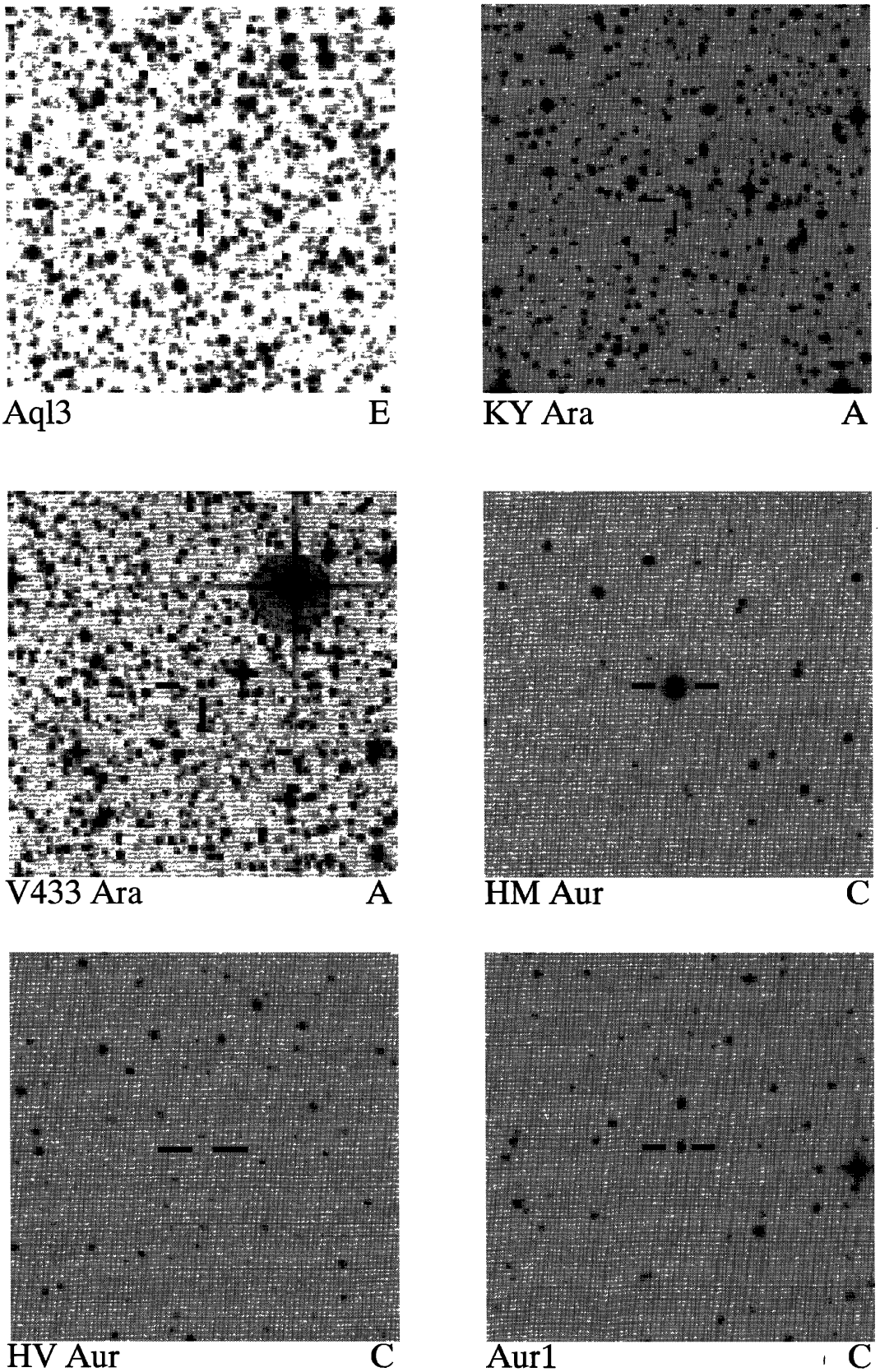

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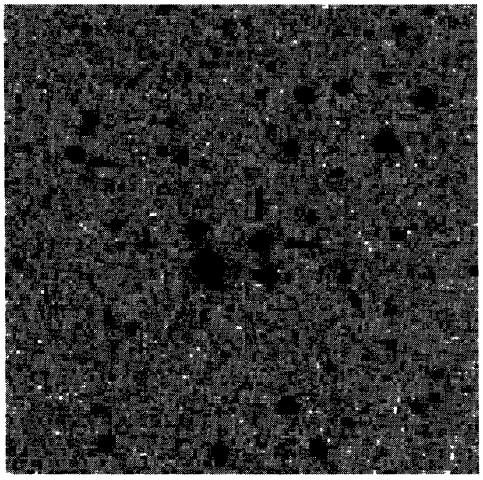
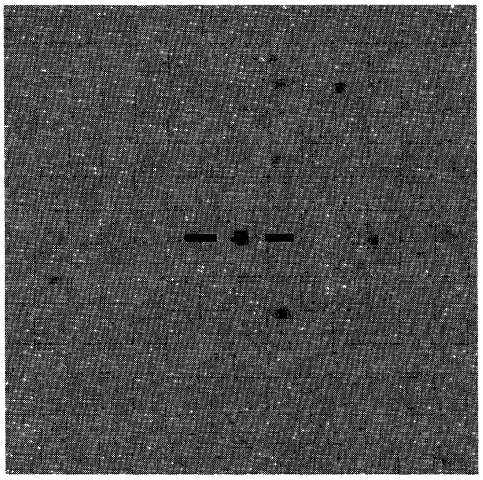
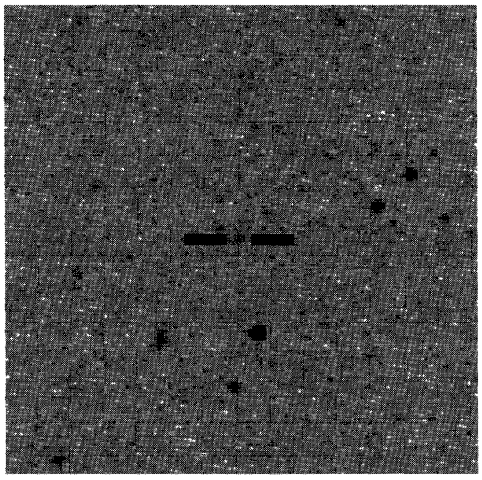


Aur2 C



CR Boo C



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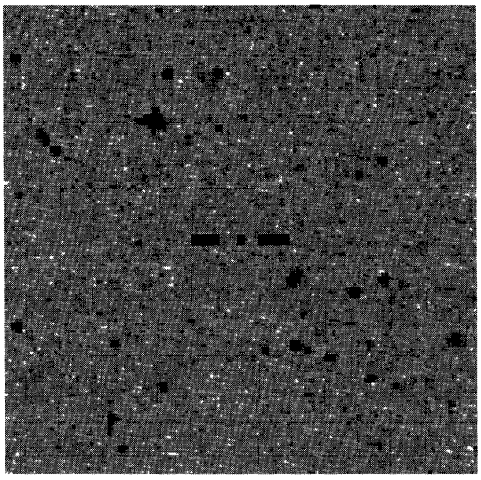
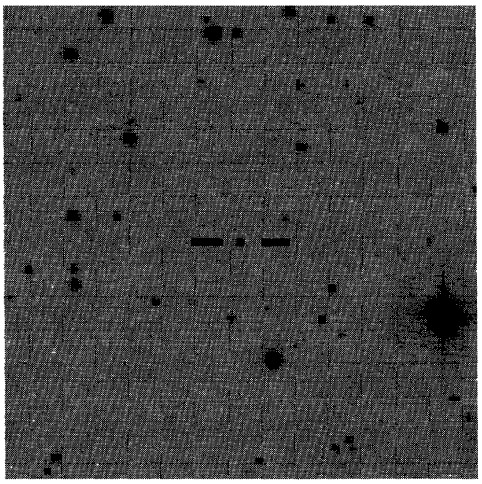


Cae1 A



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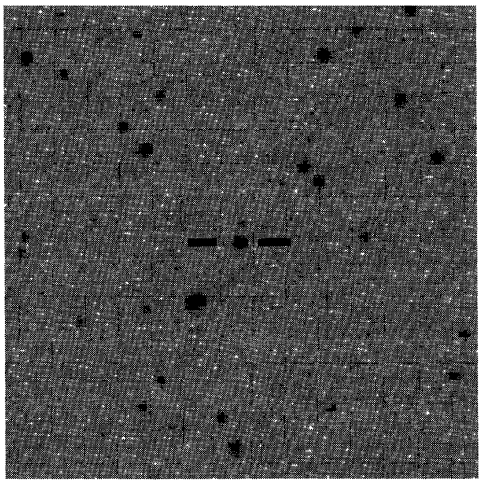

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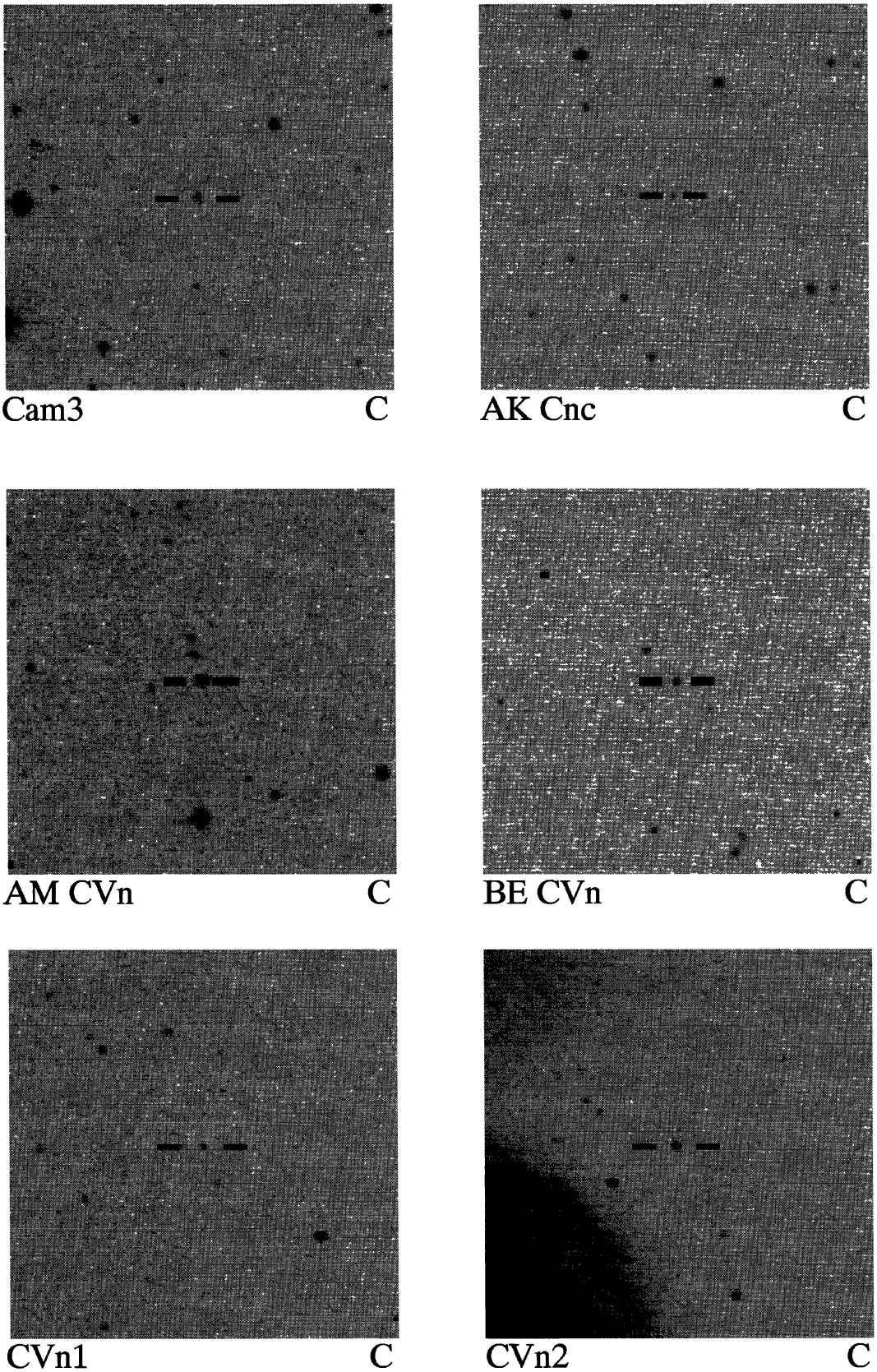

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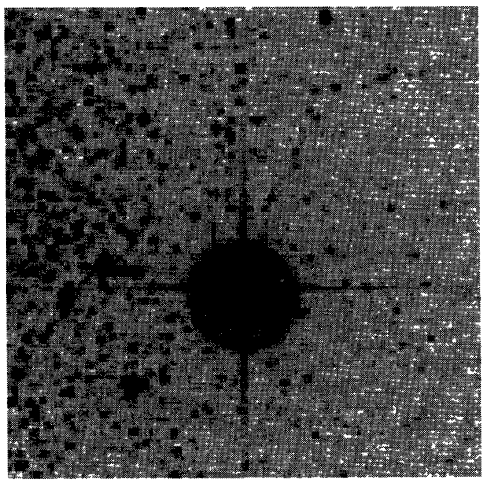

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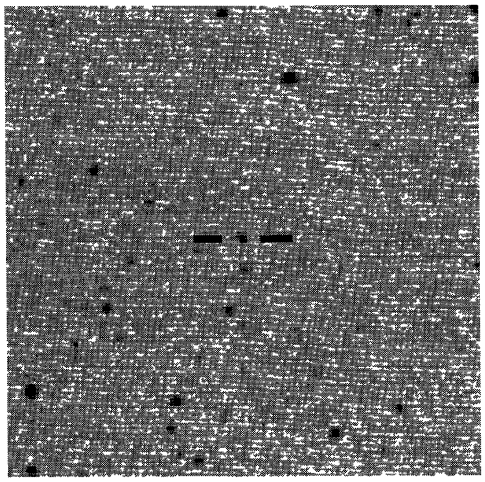

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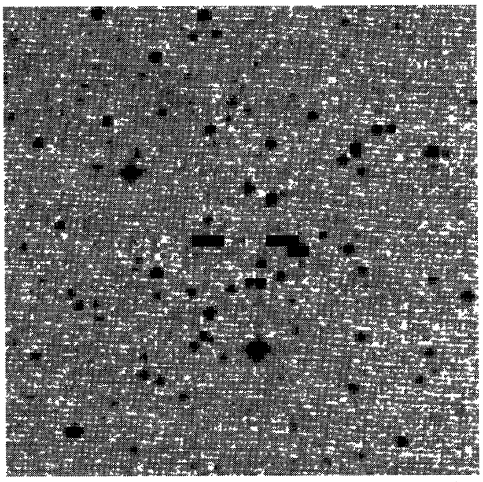

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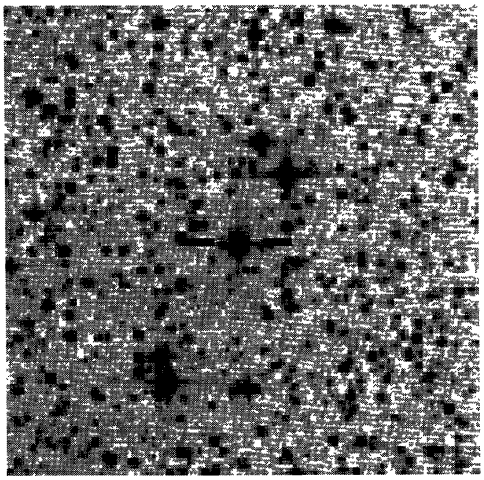

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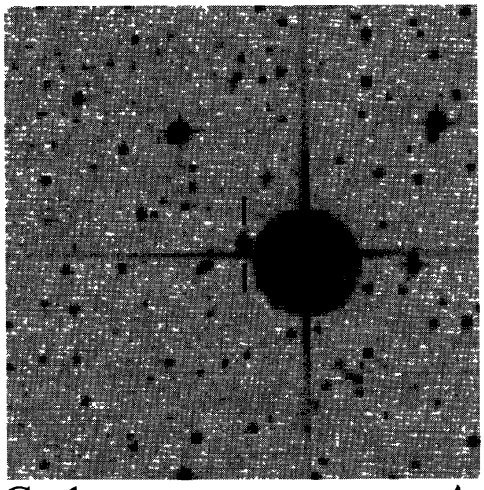

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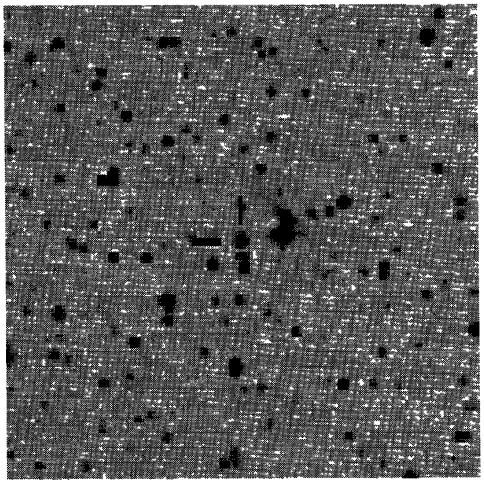

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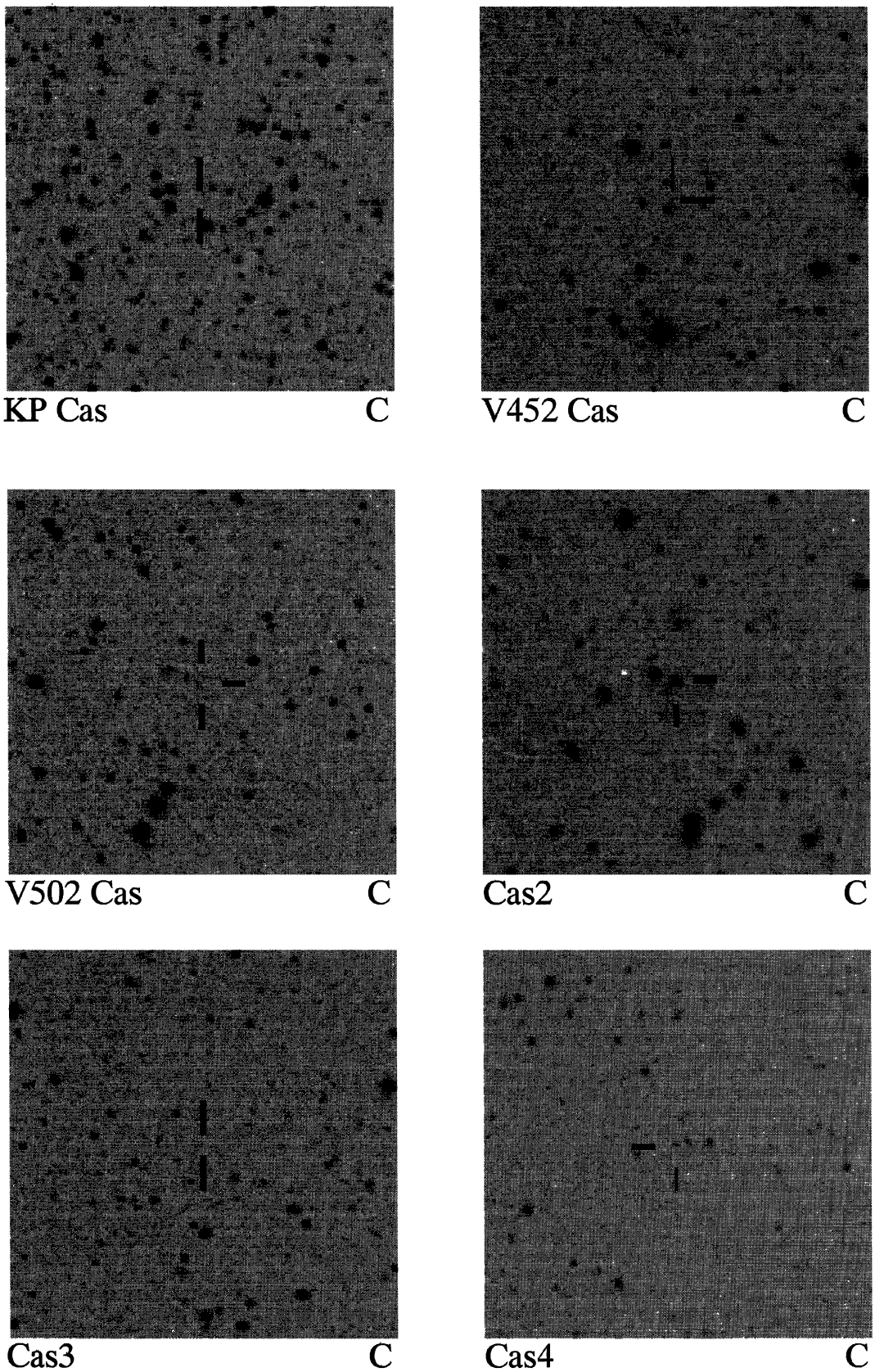

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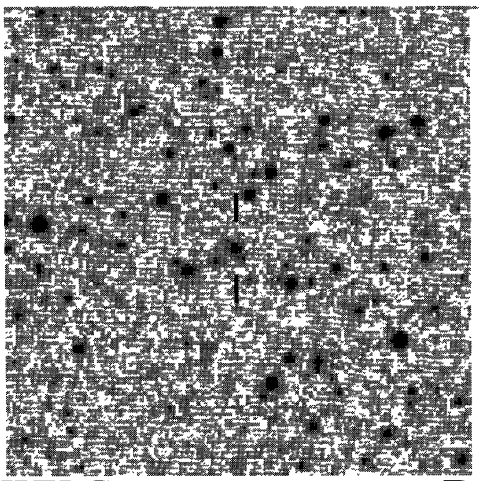
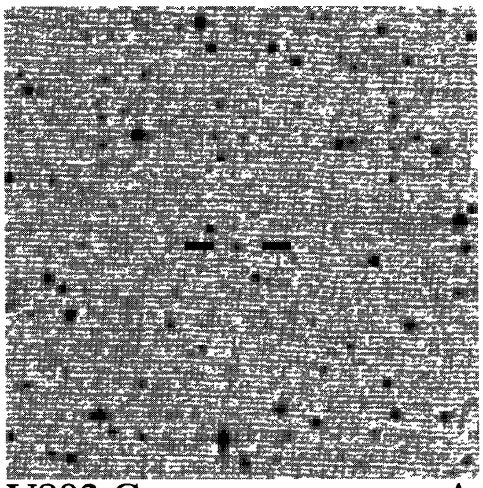
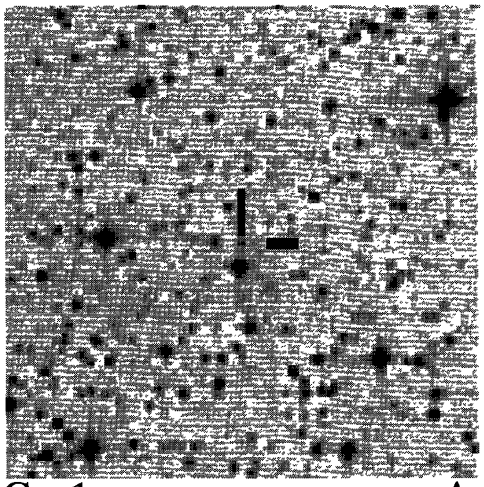


WX Cen B



V803 Cen A



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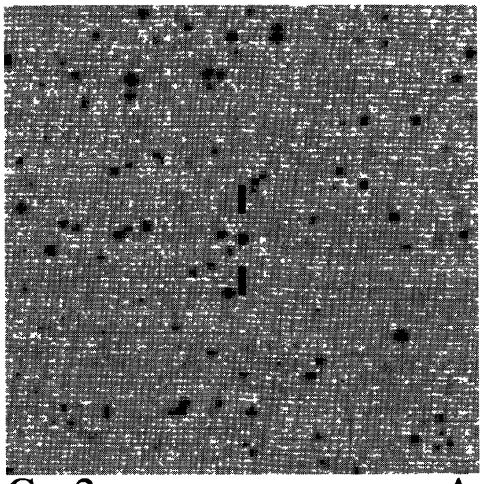

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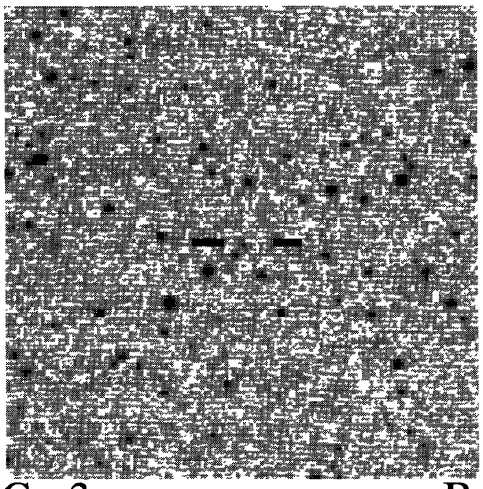
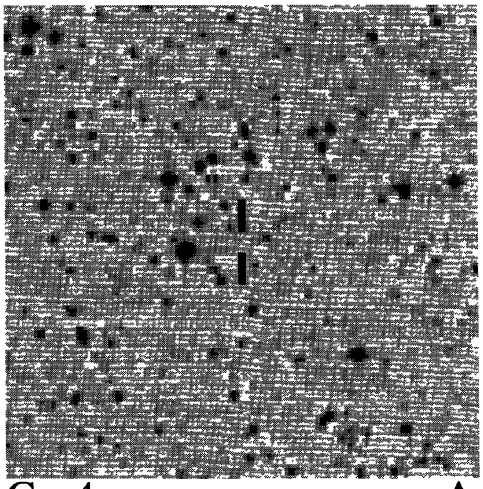


Cen3 B



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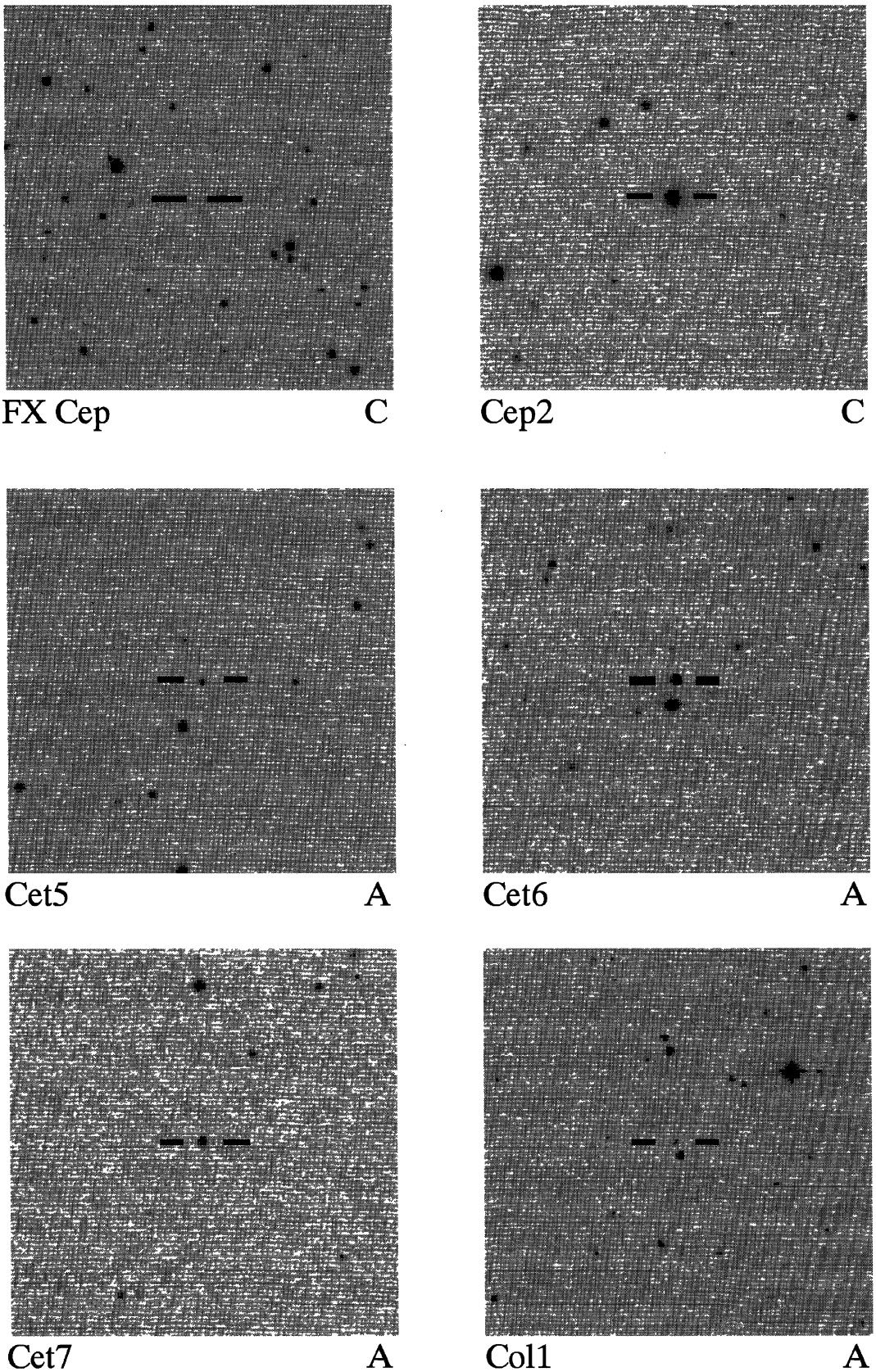

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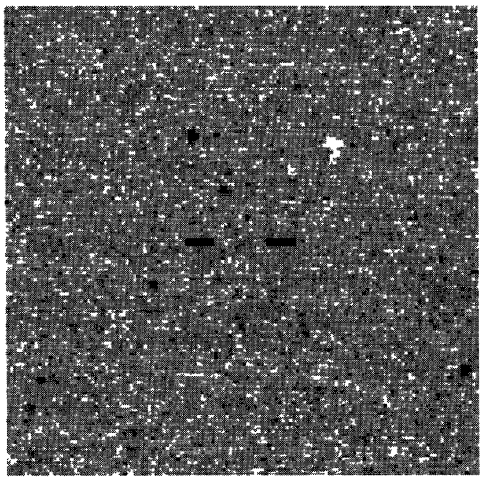

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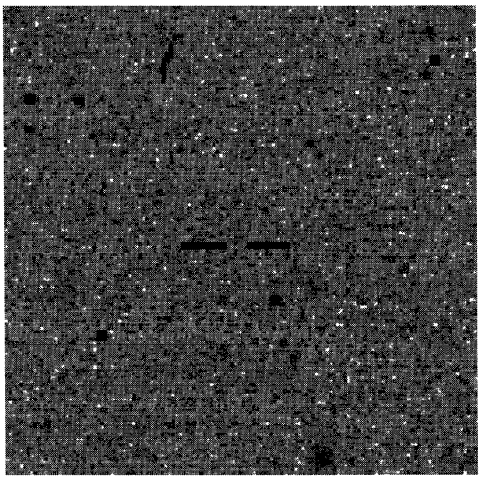

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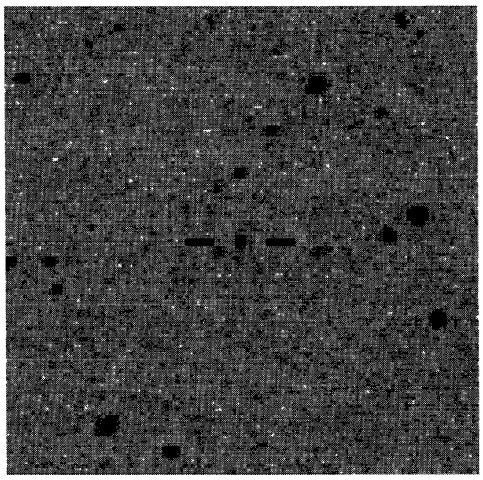
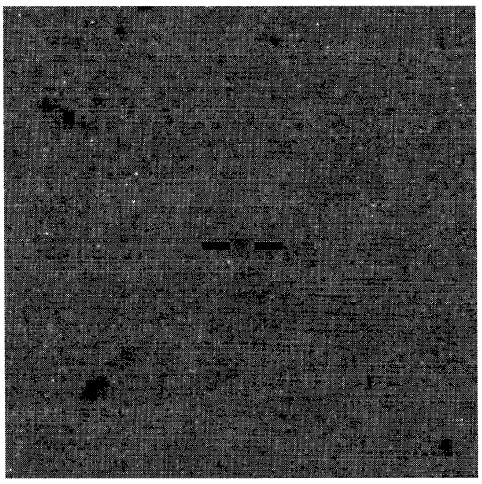
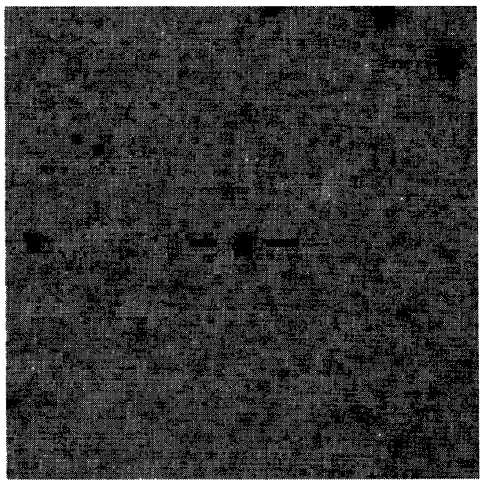


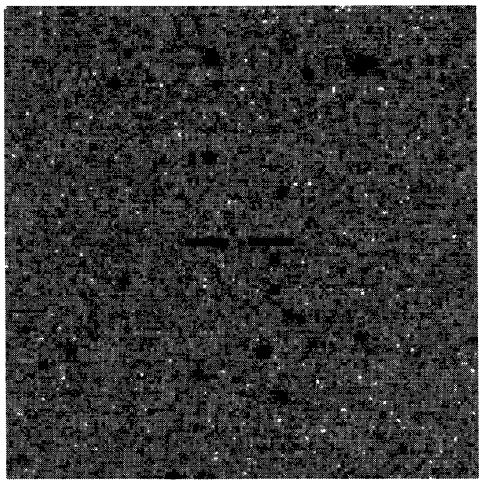
GP Com C



GT Com F



Com1 C



CrB1 C

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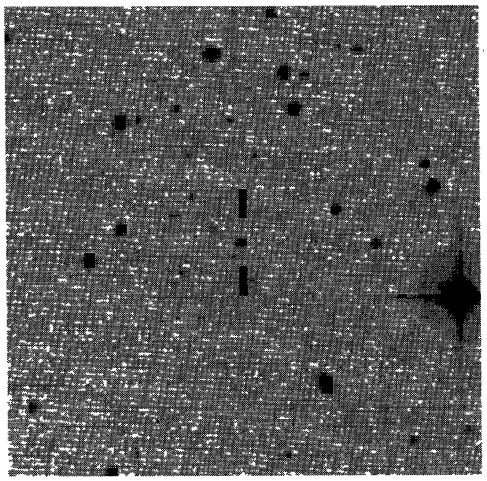

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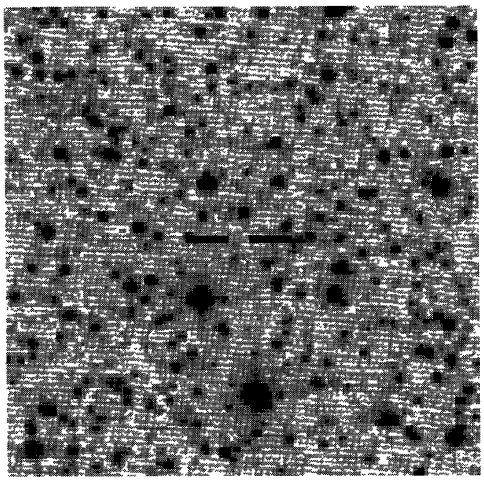
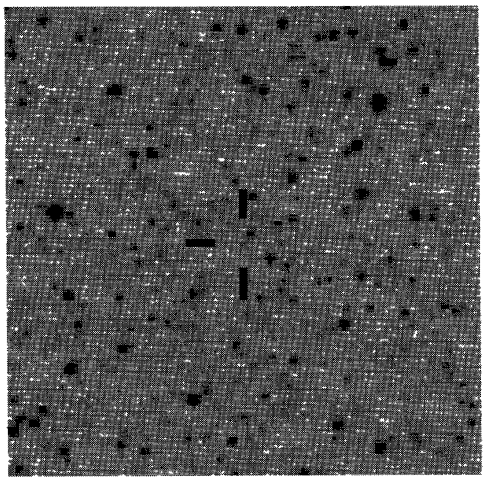
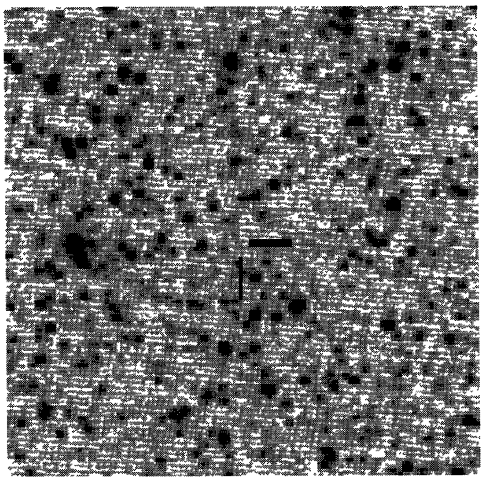


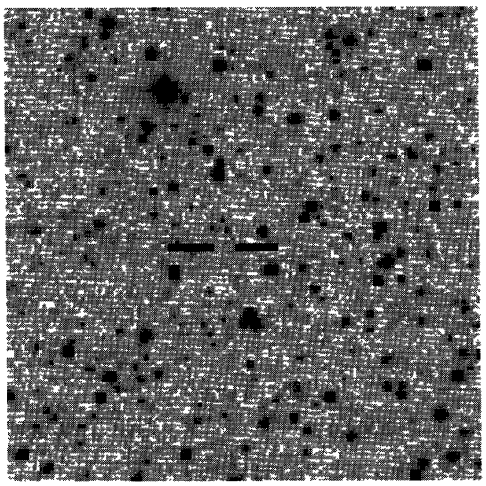
V795 Cyg C



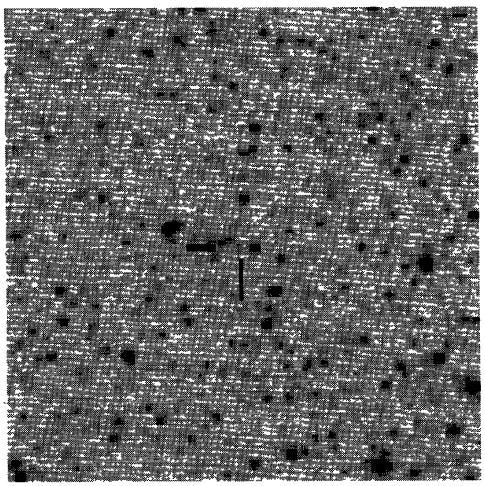
V1075 Cyg C



V1153 Cyg C

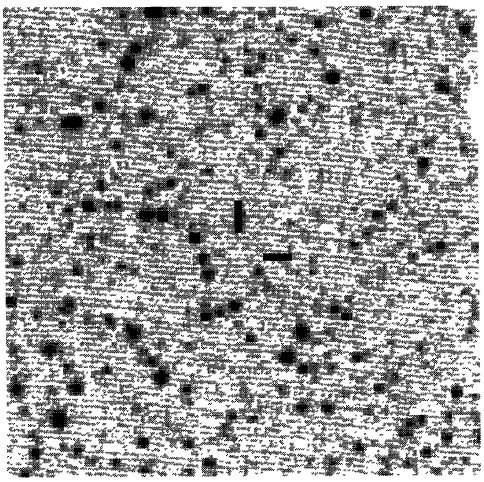


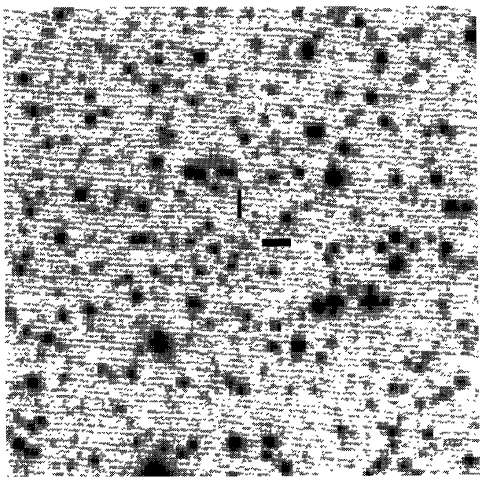
V1251 Cyg C

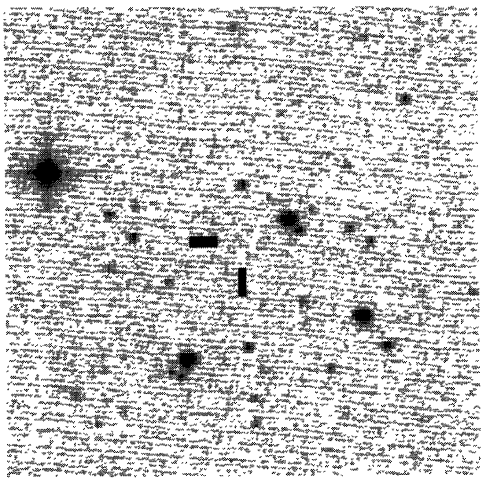


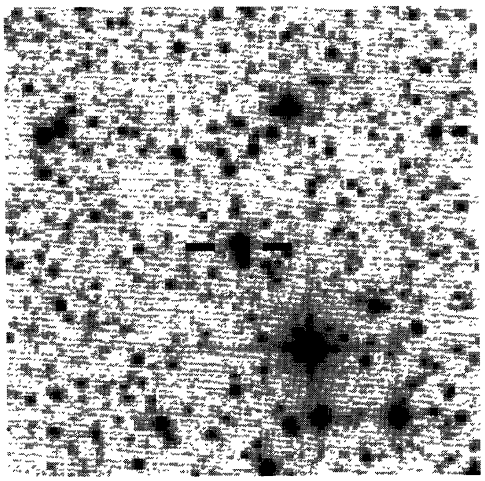
V1310 Cyg C

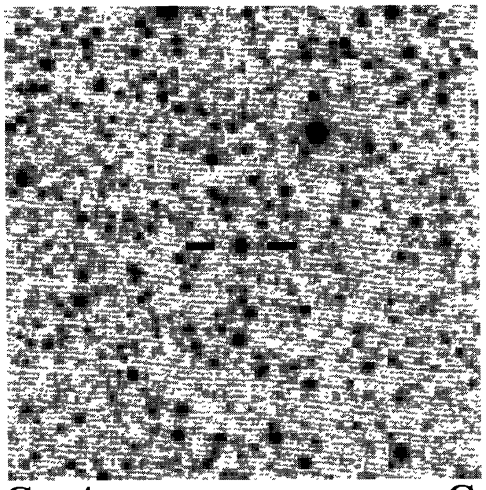
FIG. 1—(Continued)











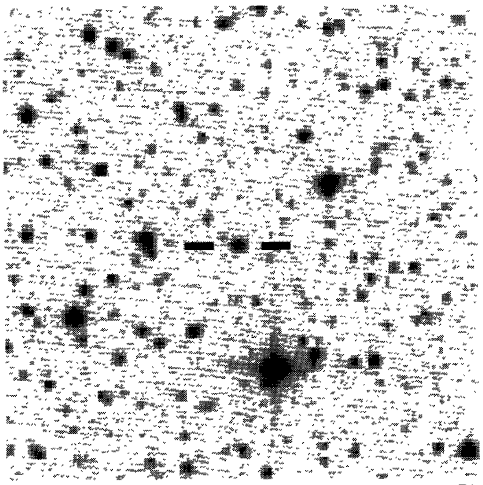
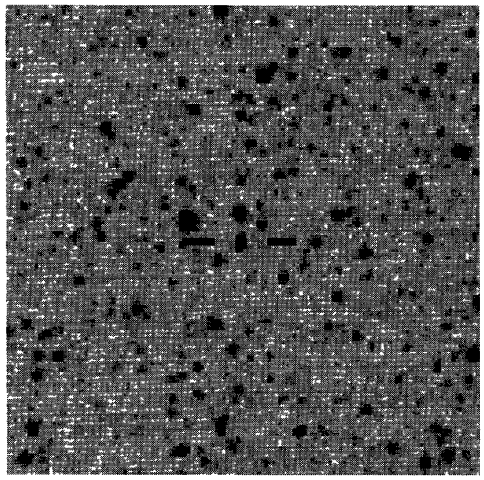
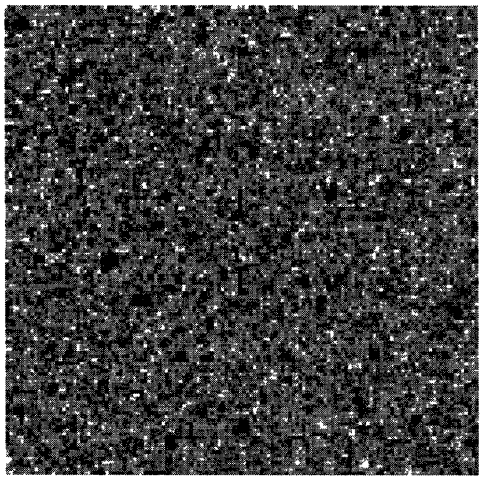


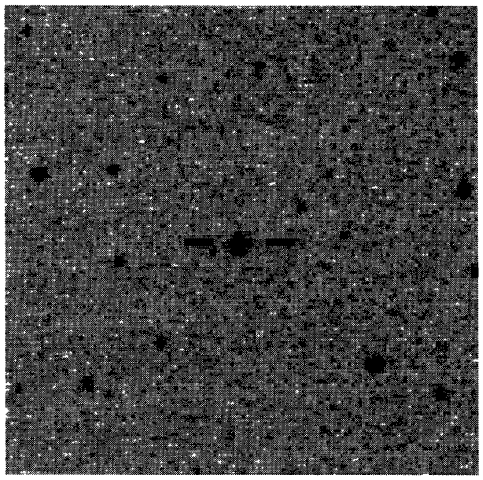
FIG. 1—(Continued)



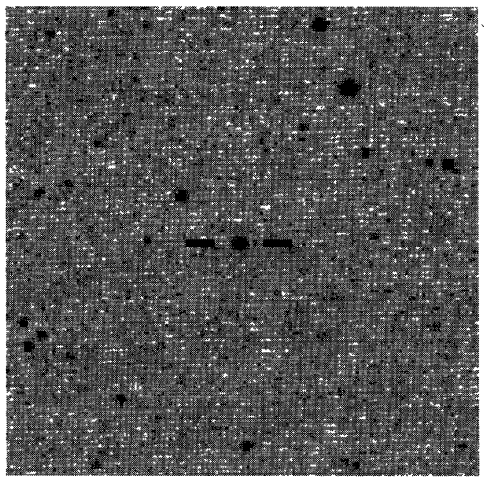
Cyg6 C



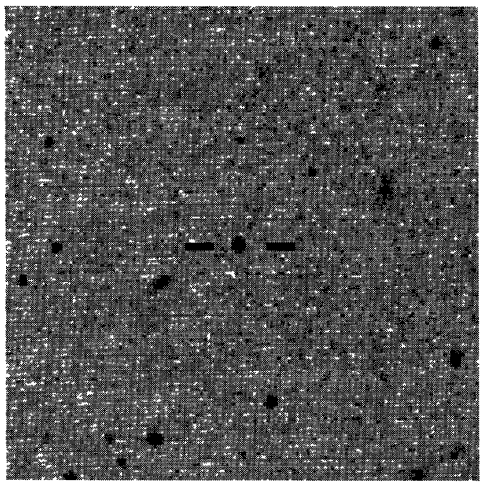
RY Dor B



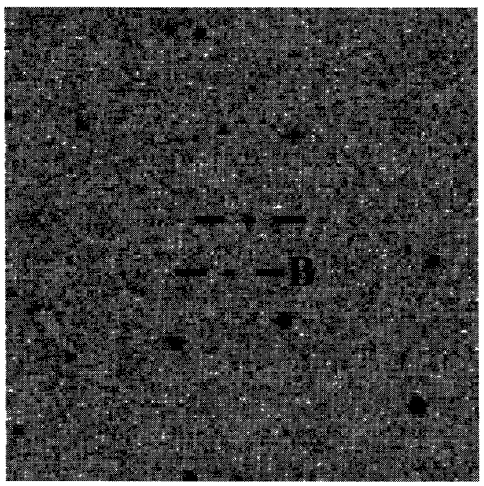
Dra5 C



Dra6 C

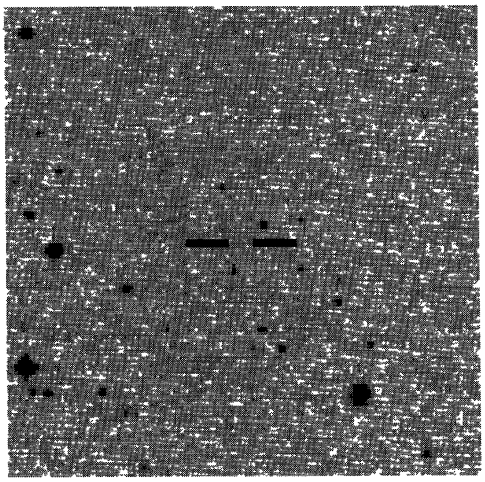


Dra7 C

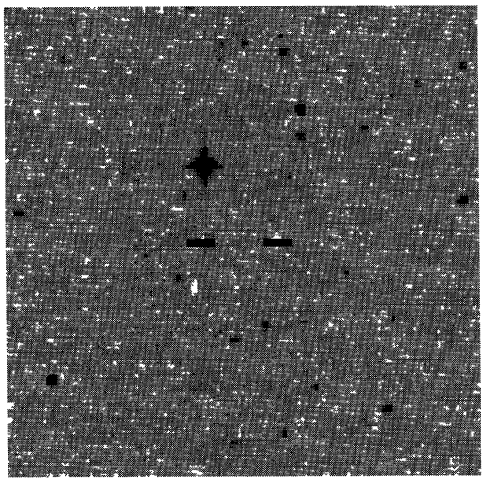


Dra8 C

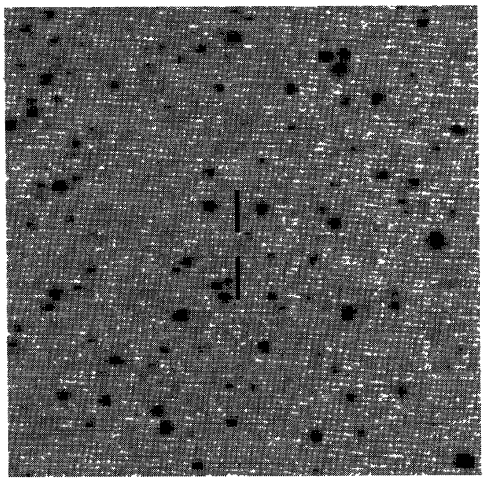
FIG. 1—(Continued)



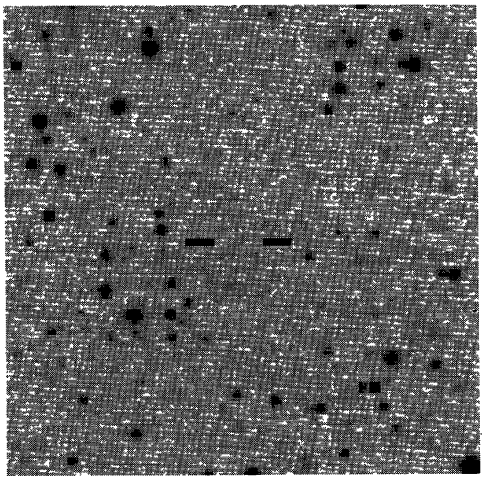
For3 A



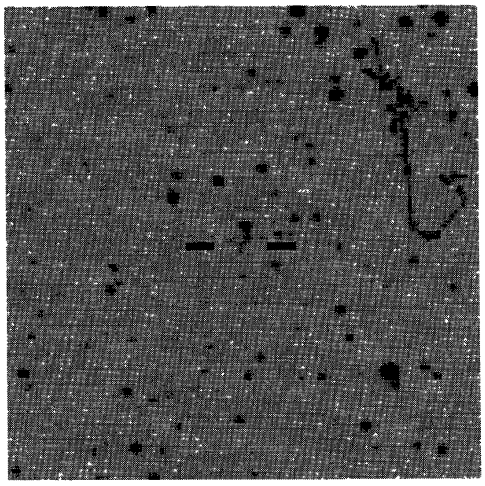
For4 A



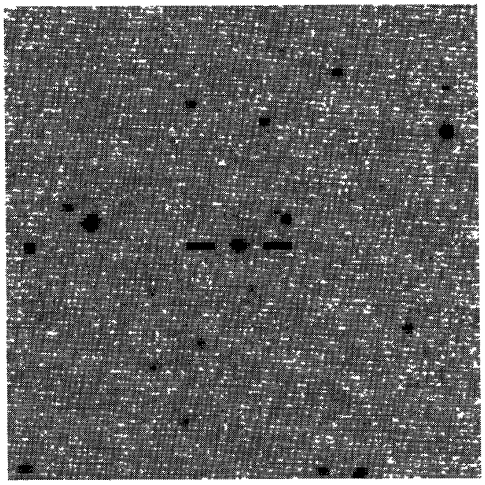
HQ Gem C



KT Gem C

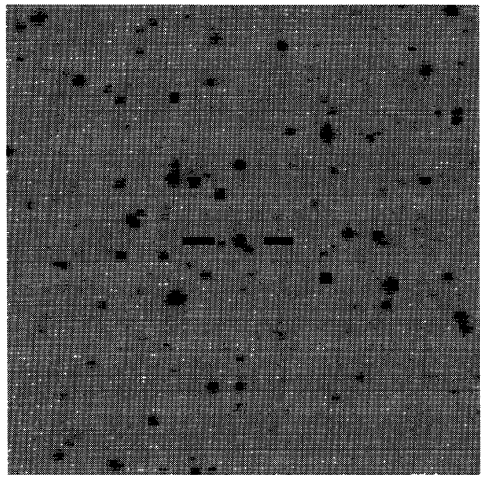


KZ Gem C

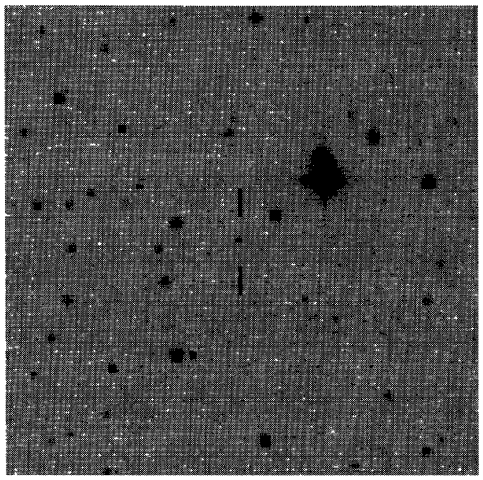


PQ Gem C

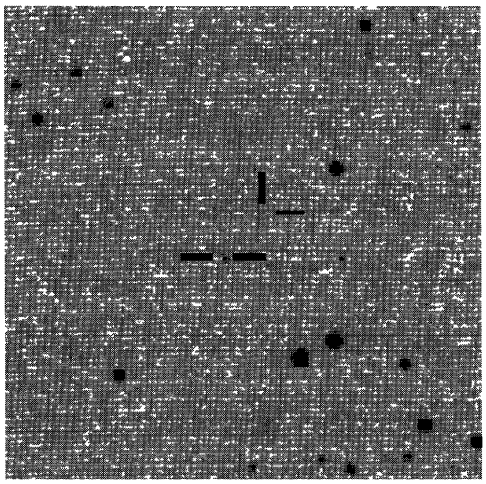
FIG. 1—(Continued)



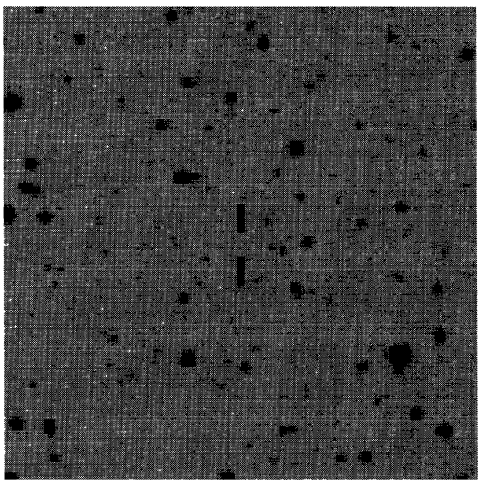
Gem1 C



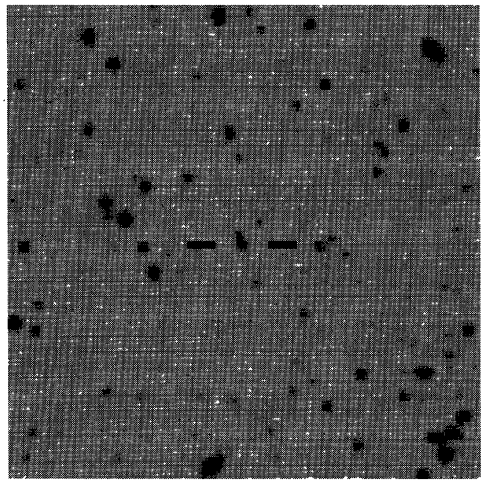
V478 Her C



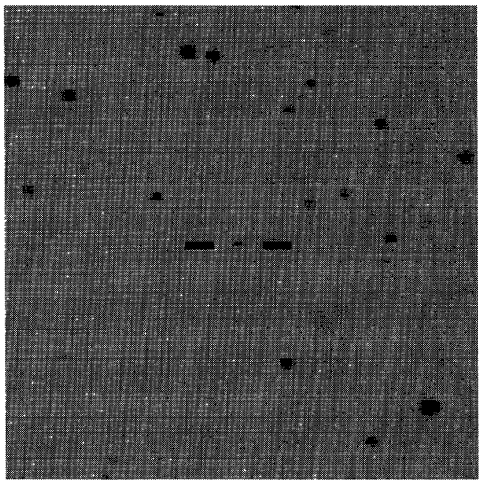
V611 Her C



V632 Her C

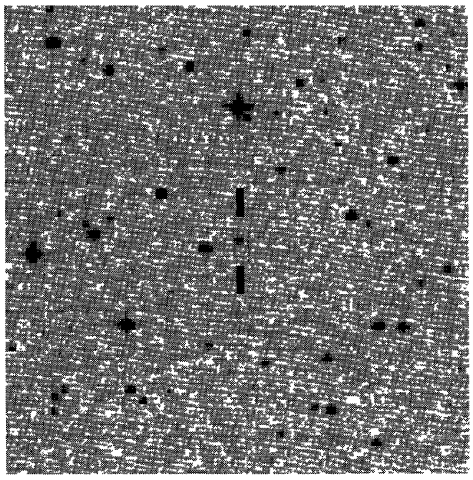


Her5 C

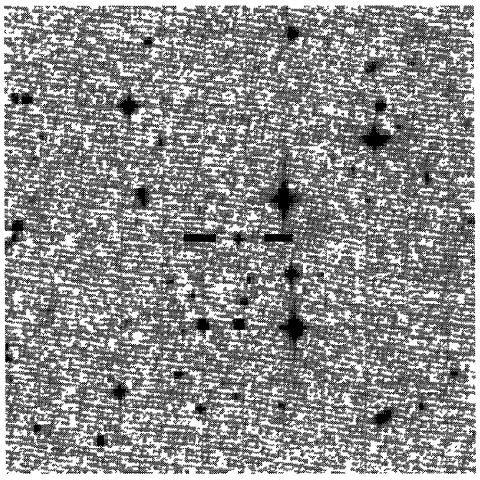


Her6 C

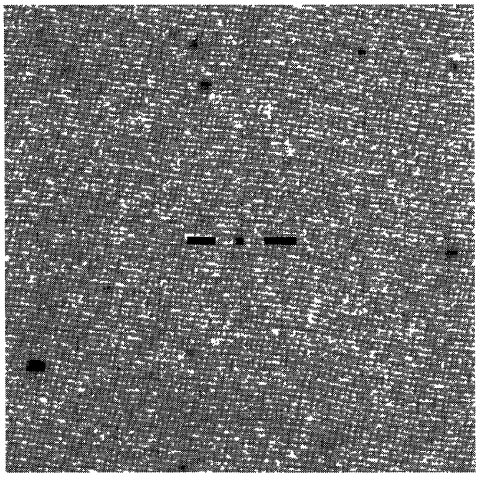
FIG. 1—(Continued)



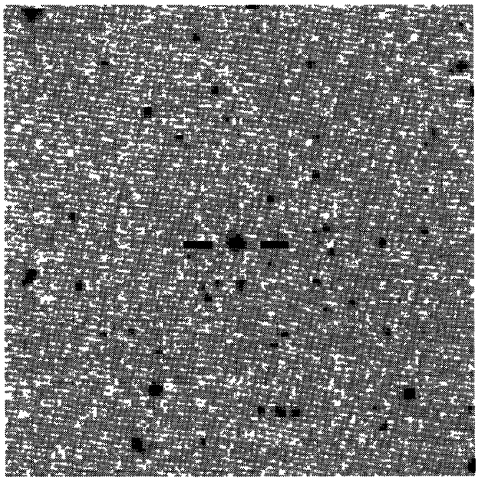
Hya4 A



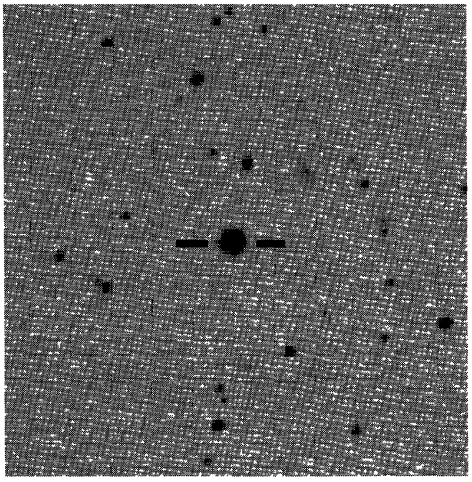
Ind1 A



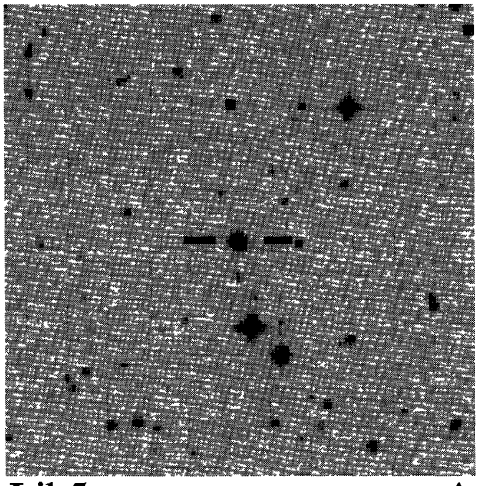
Leo7 C



Lib3 A



Lib4 A



Lib5 A

FIG. 1—(Continued)

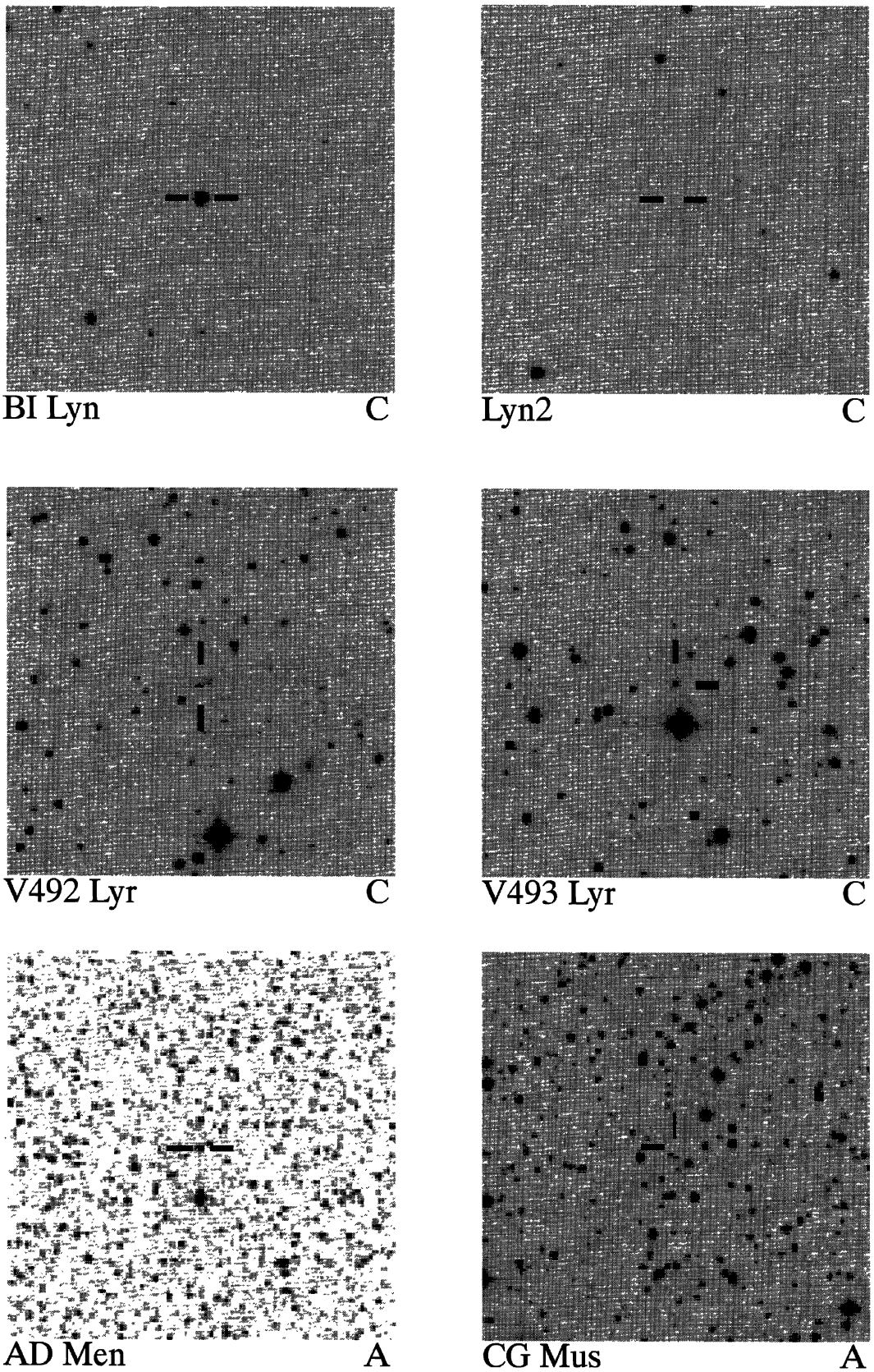
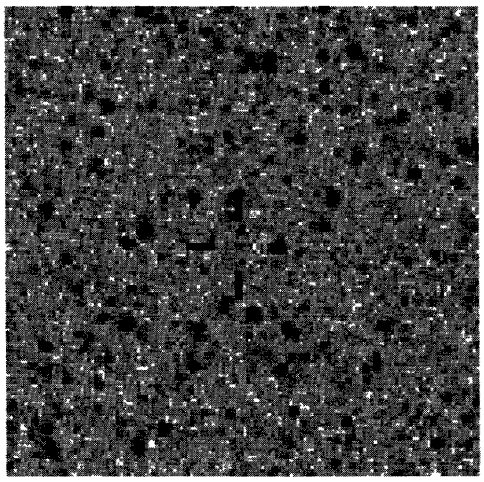
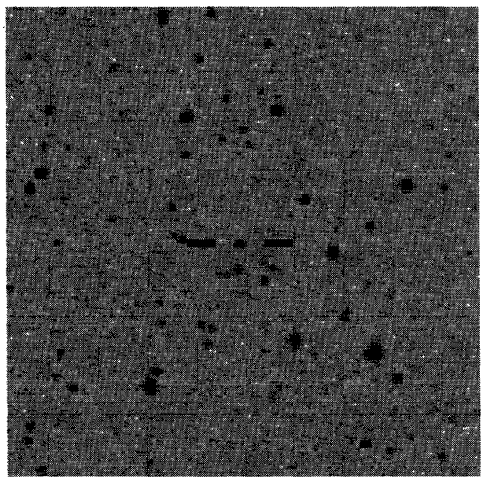


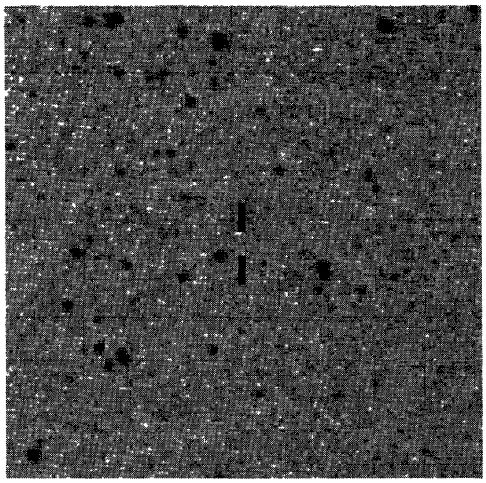
FIG. 1—(Continued)



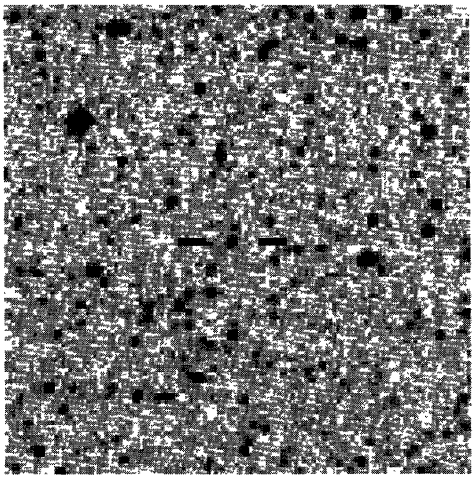
KQ Nor B



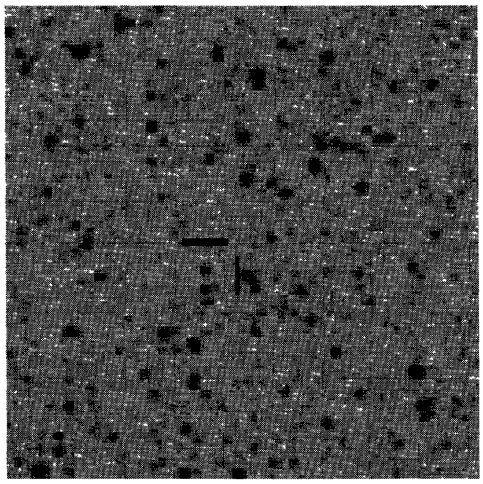
V699 Oph A



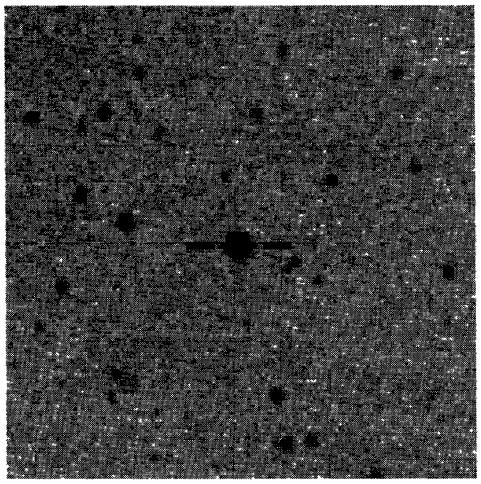
V1063 Oph C



Oph3 B

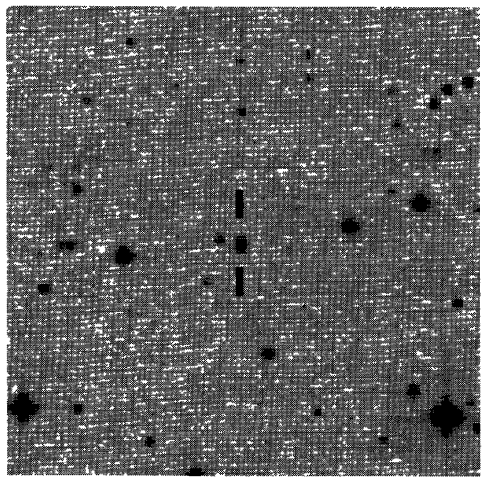


Oph4 A

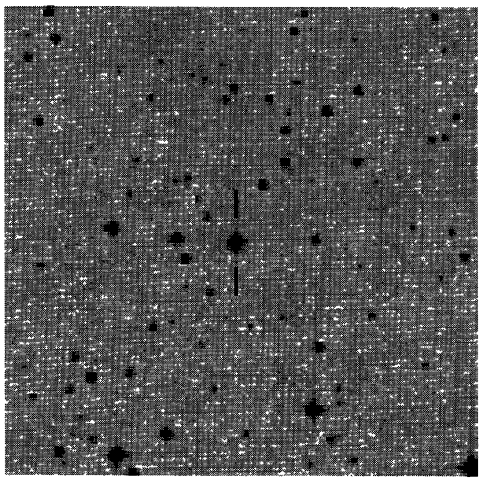


V1159 Ori A

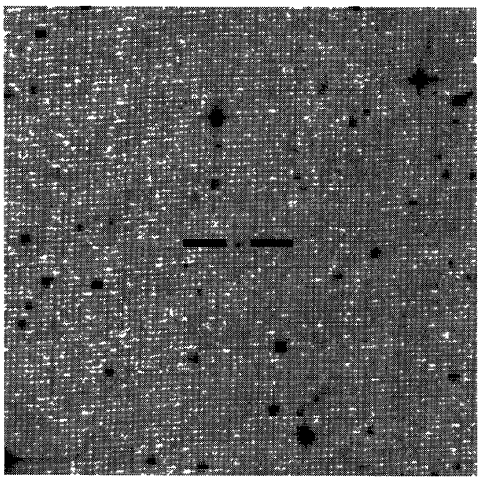
FIG. 1—(Continued)



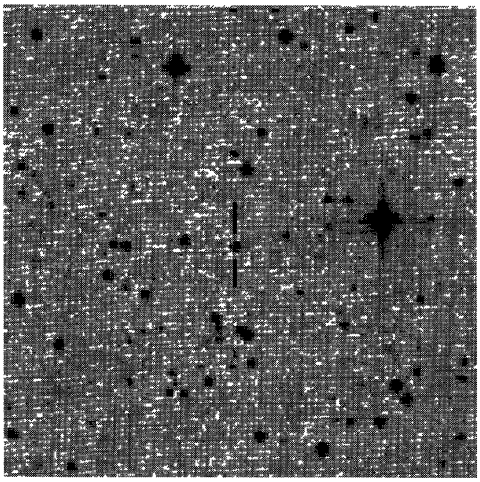
Ori1 A



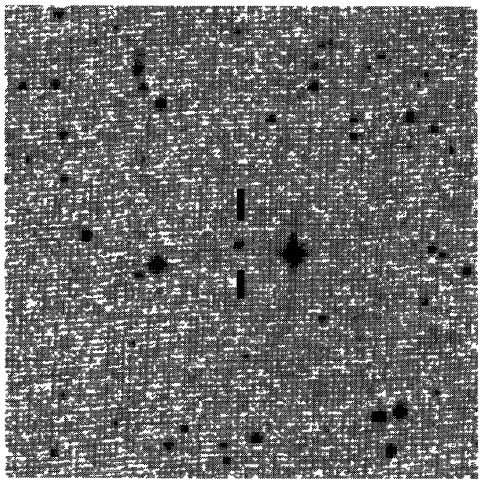
V345 Pav A



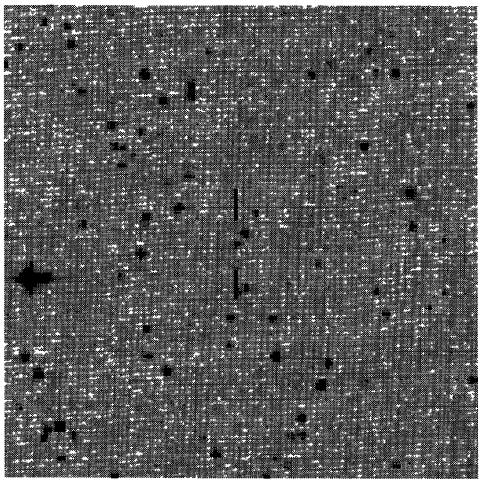
Pav1 A



Pav2 A



Pav3 A



Pav4 A

FIG. 1—(Continued)

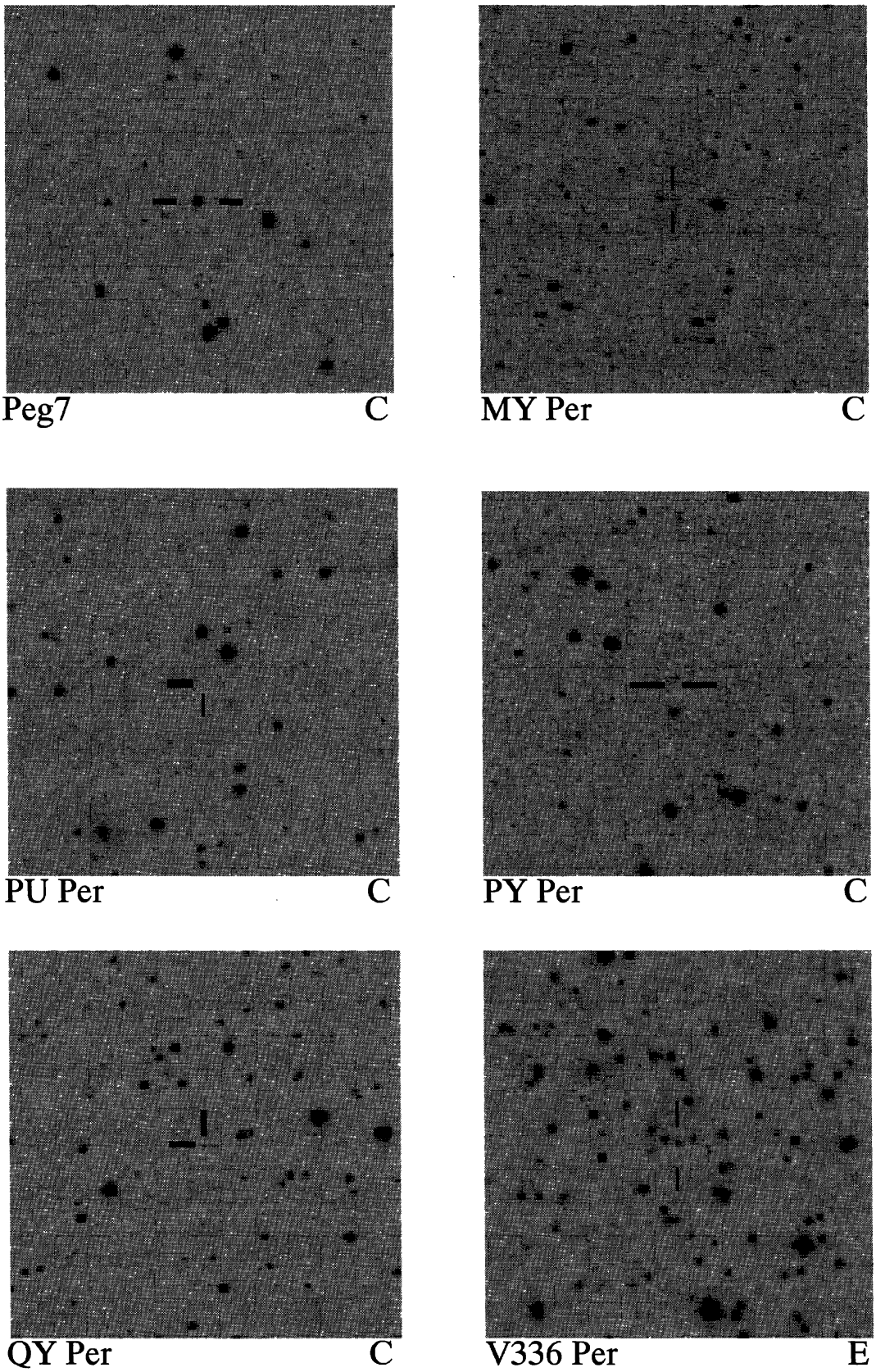
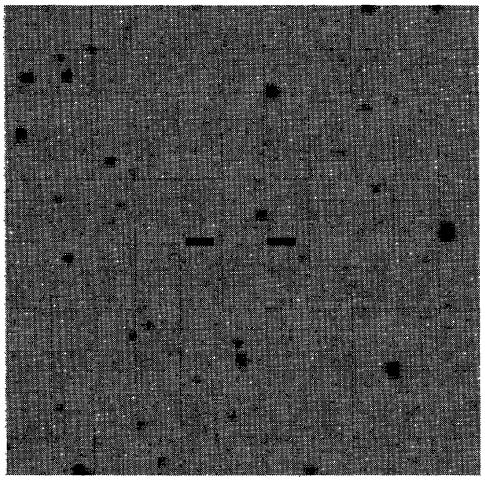
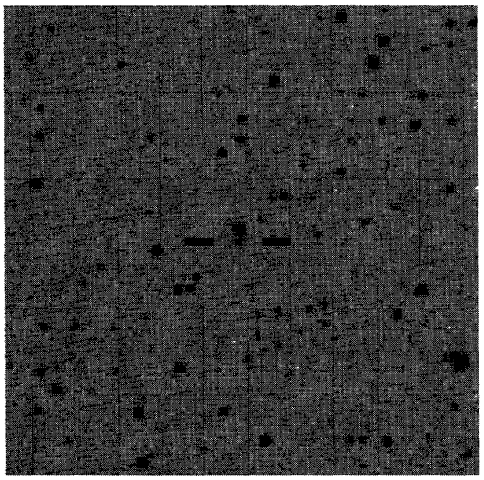


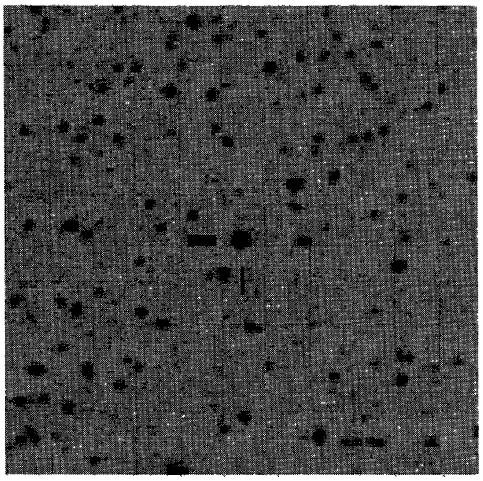
FIG. 1—(Continued)



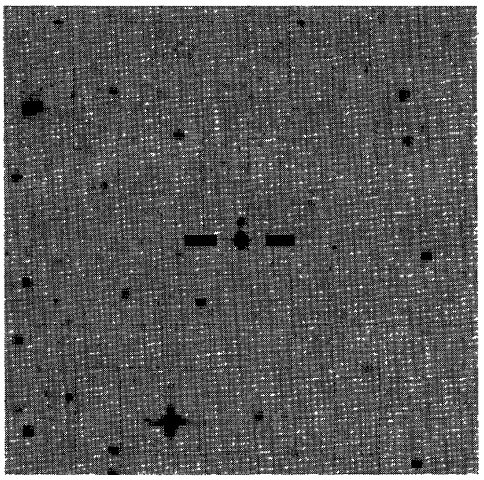
V368 Per C



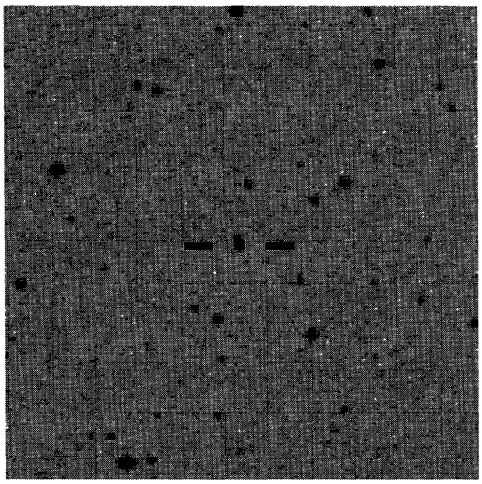
V392 Per C



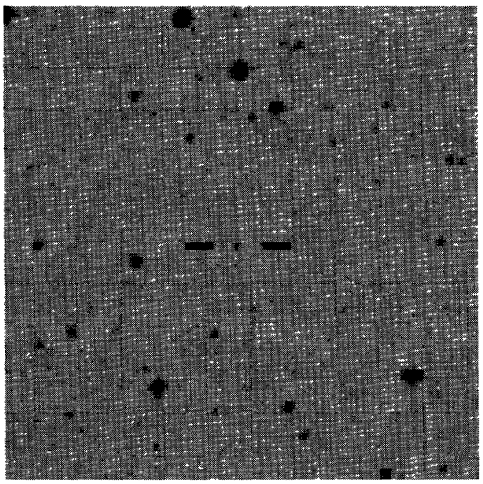
Per1 C



Phe1 A

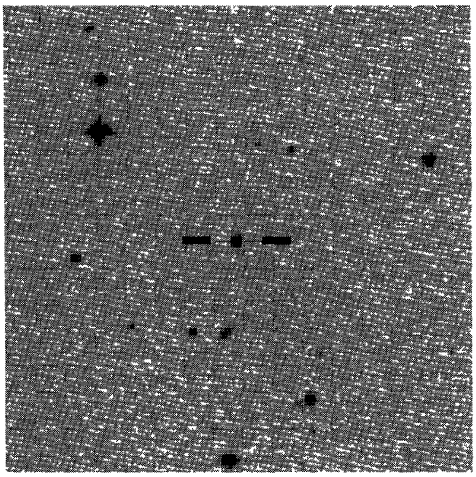


Pic1 A

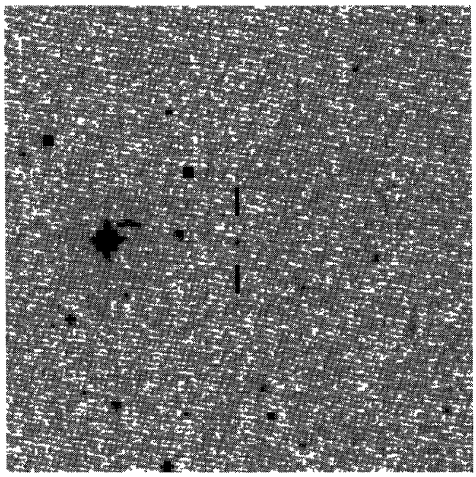


Pic2 A

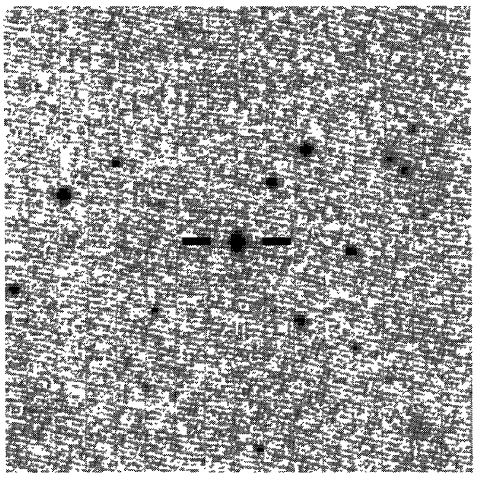
FIG. 1—(Continued)



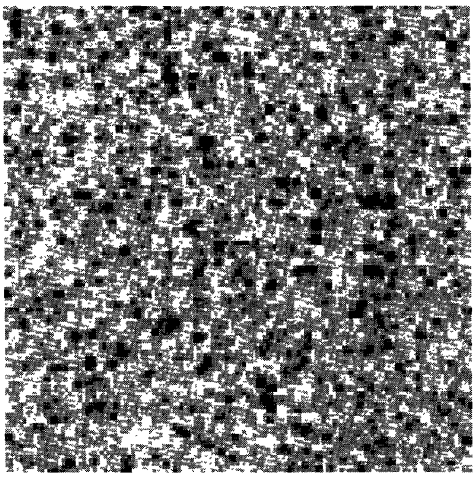
Psc3 A



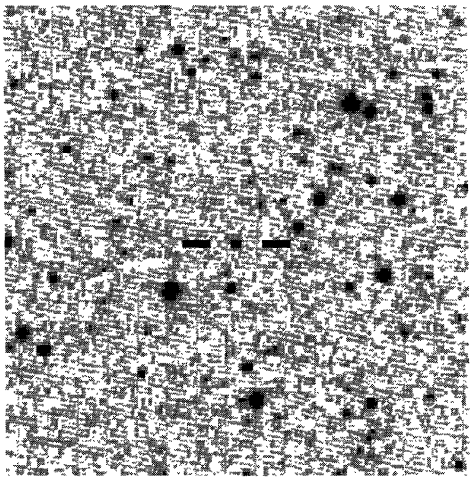
TV Ret A



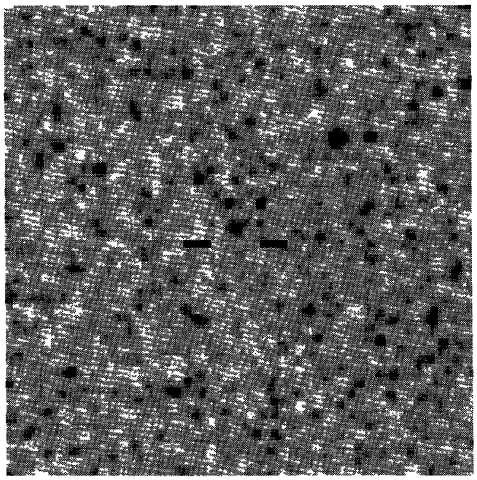
Ret1 A



V551 Sgr B



V759 Sgr B



V1830 Sgr B

FIG. 1—(Continued)

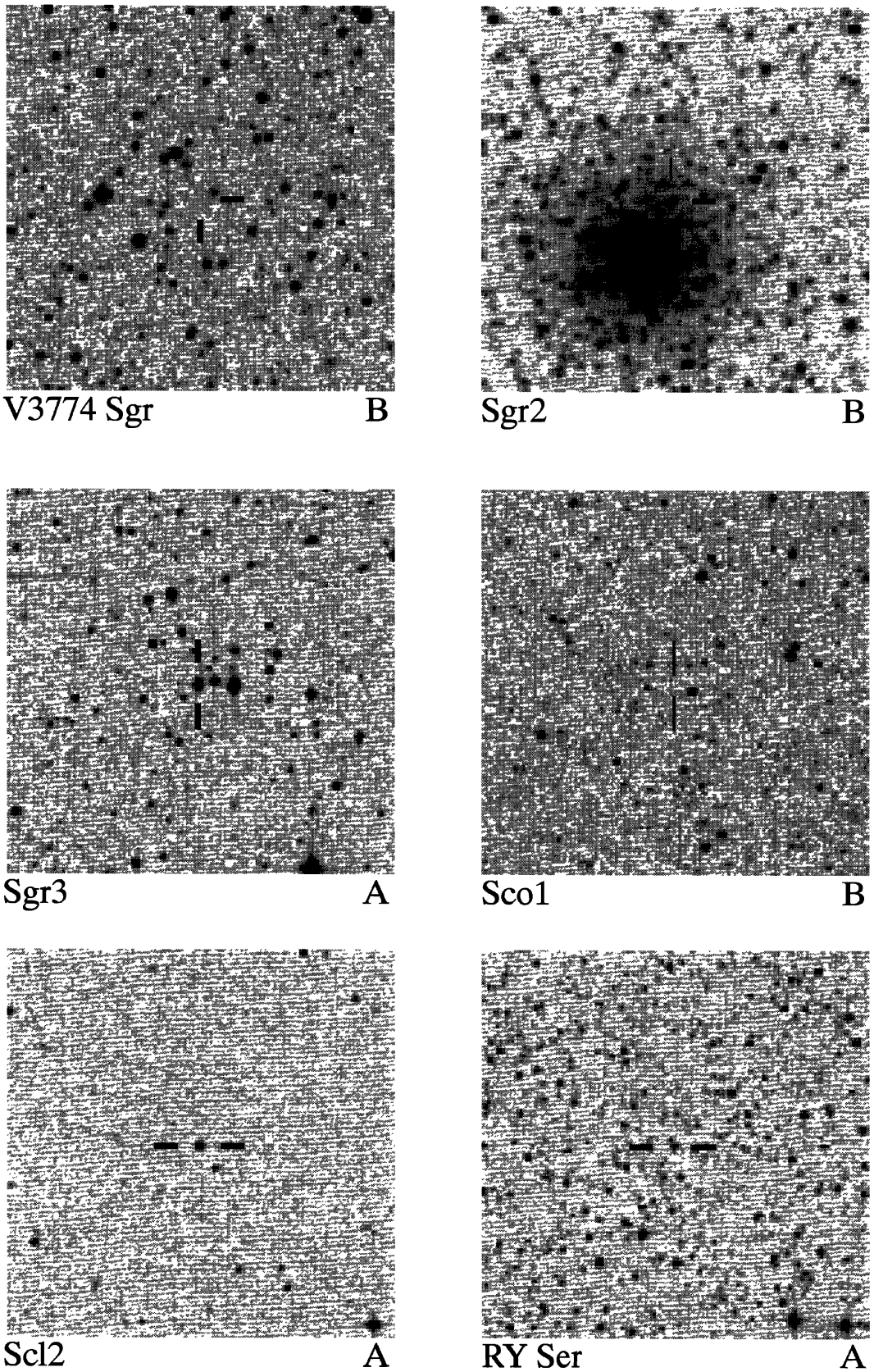
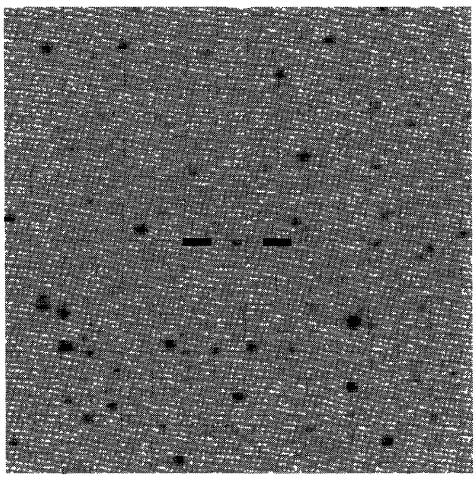
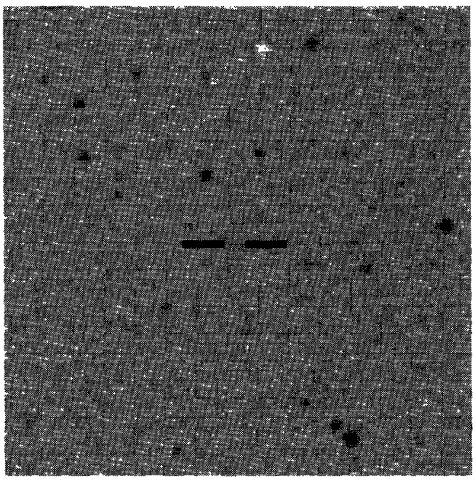


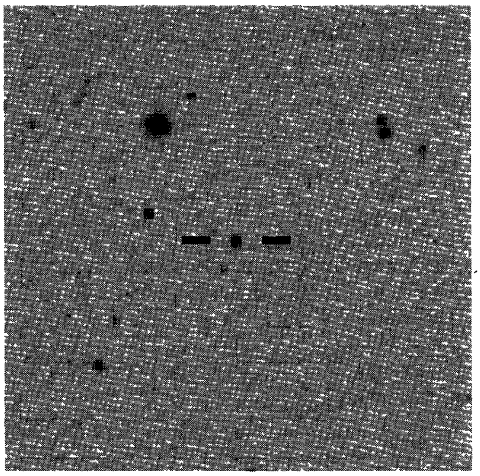
FIG. 1—(Continued)



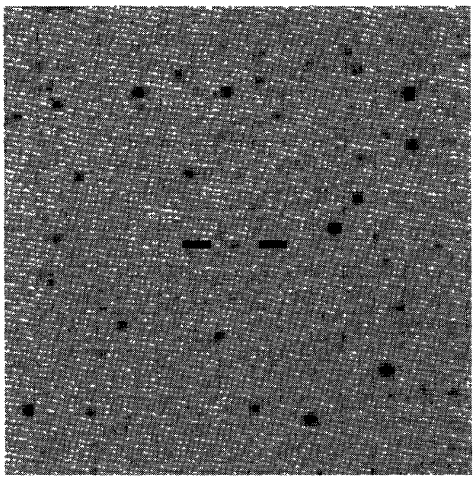
HW Tau C



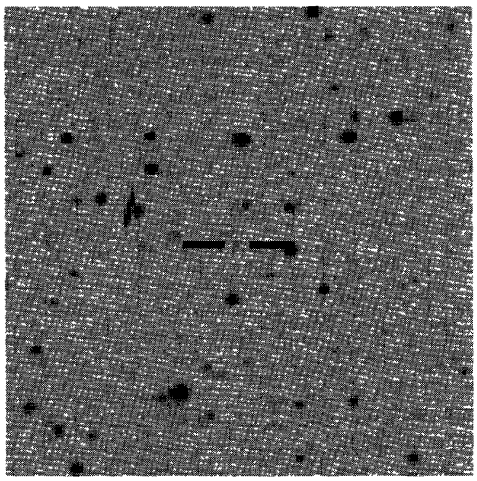
V701 Tau C



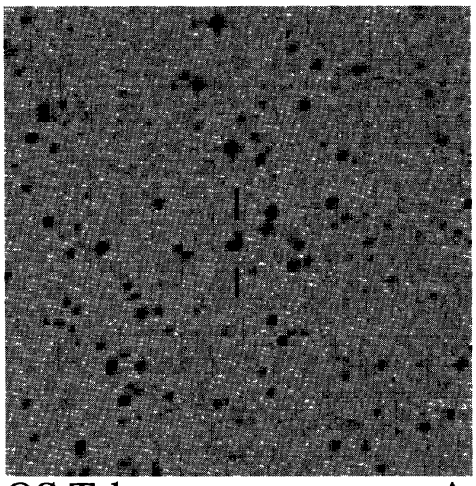
Tau2 C



Tau3 C

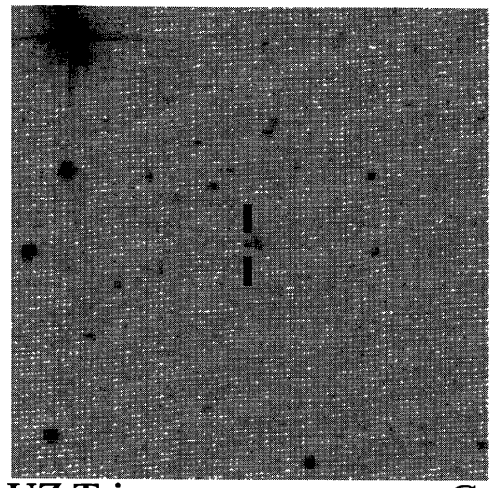


Tau4 C

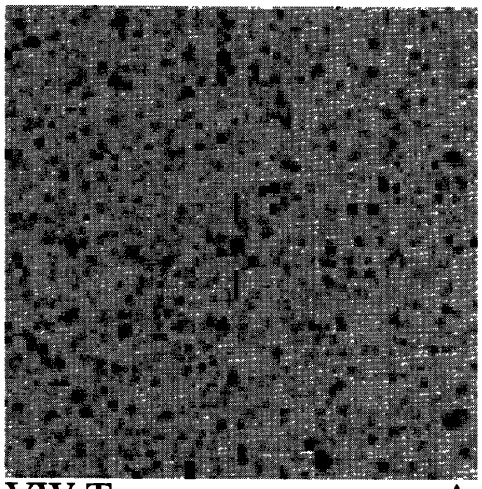


QS Tel A

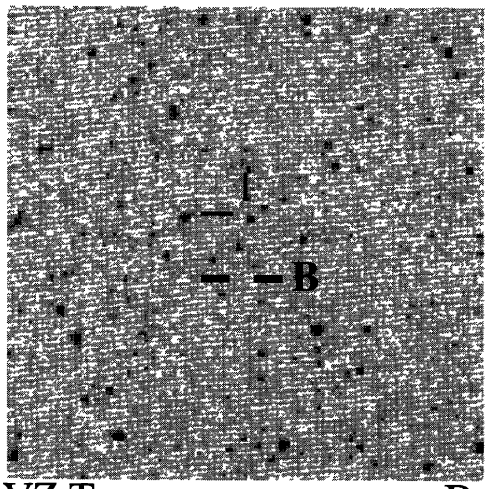
FIG. 1—(Continued)



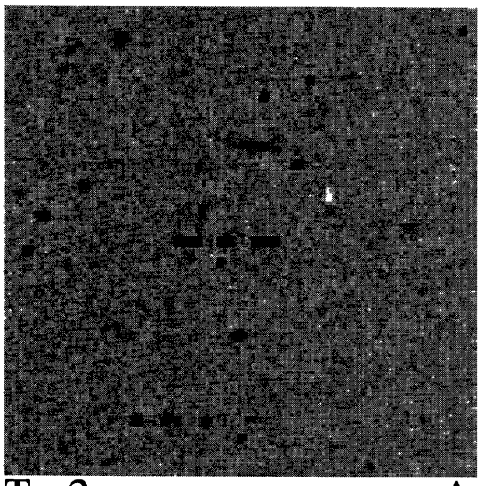
UZ Tri C



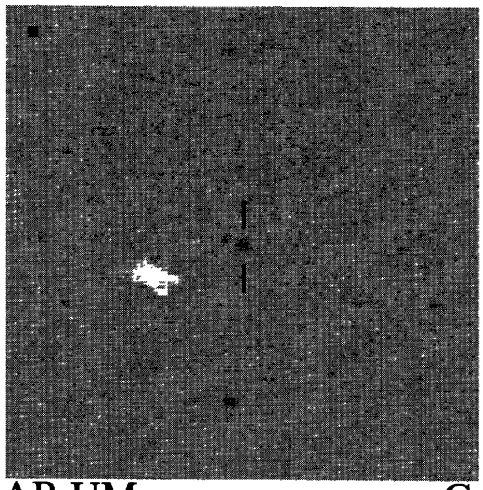
VW Tuc A



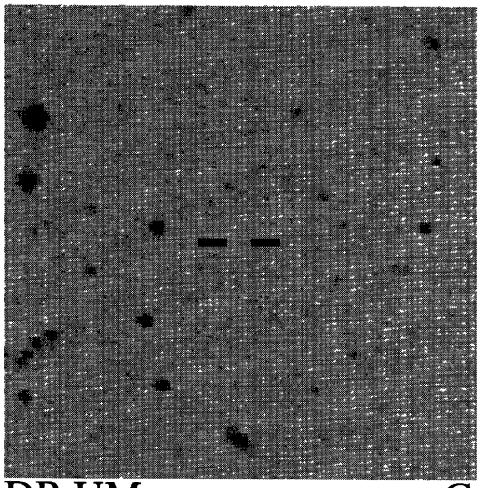
VZ Tuc B



Tuc2 A

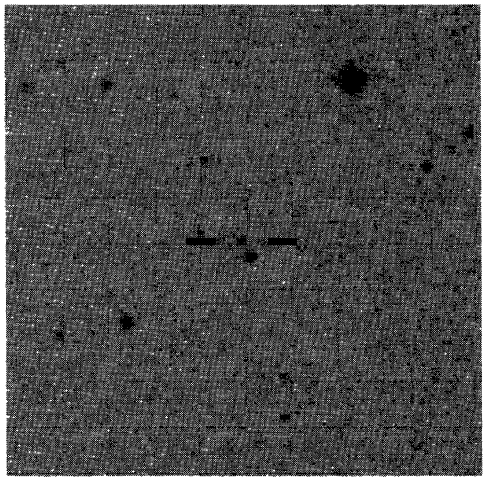


AR UMa C

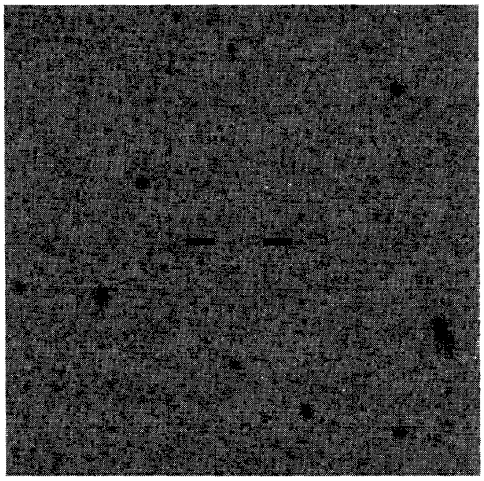


DR UMa C

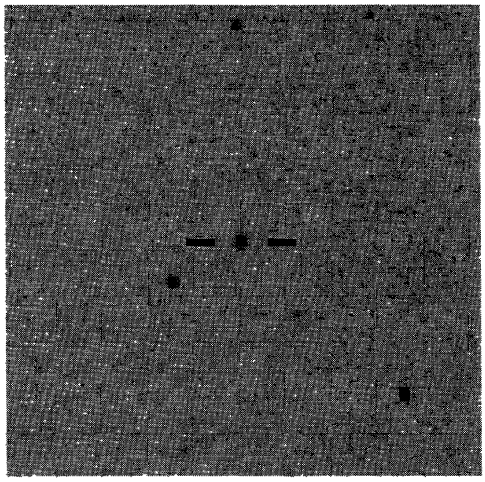
FIG. 1—(Continued)



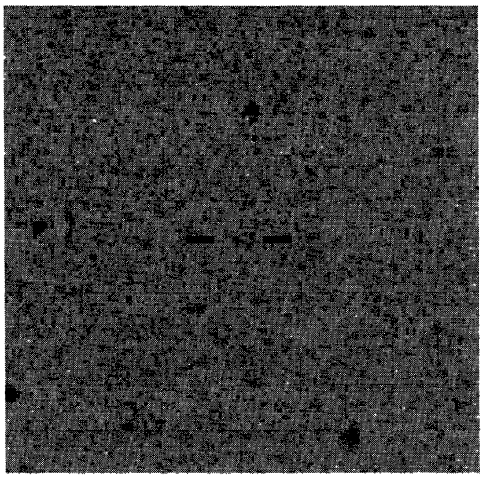
EU UMa C



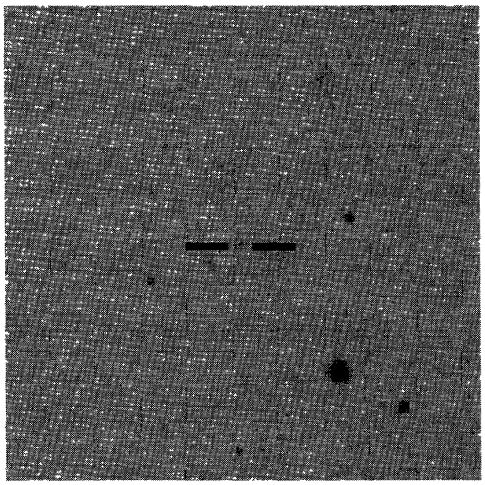
EV UMa C



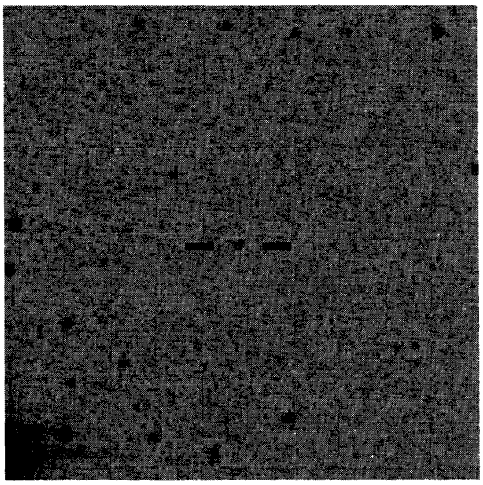
UMa 7 C



UMa8 C

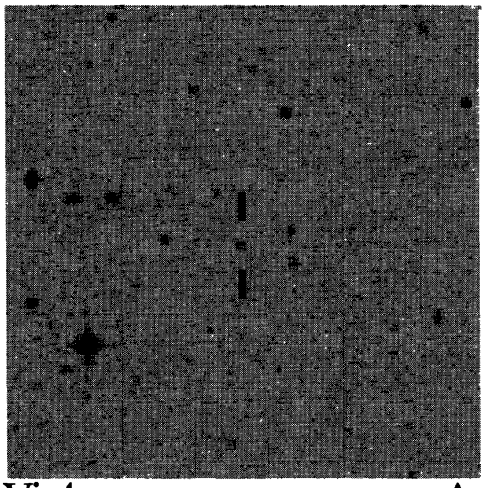


UMa9 C

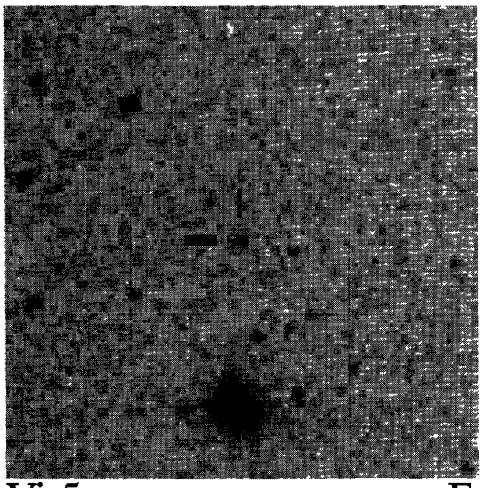


UMi1 C

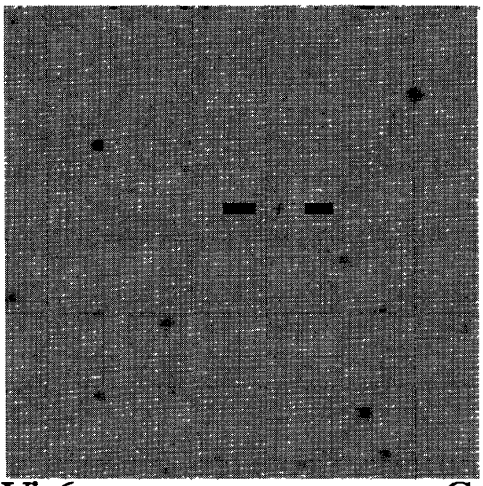
FIG. 1—(Continued)



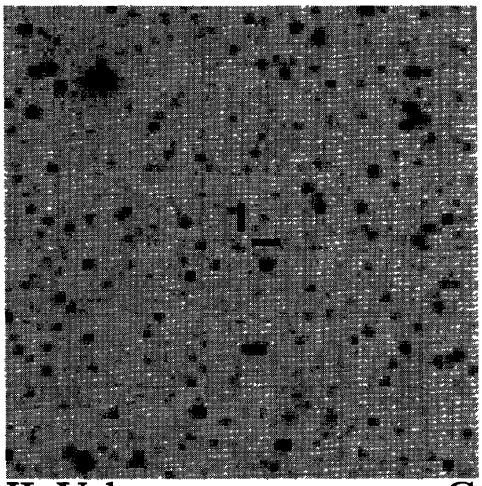
Vir4 A



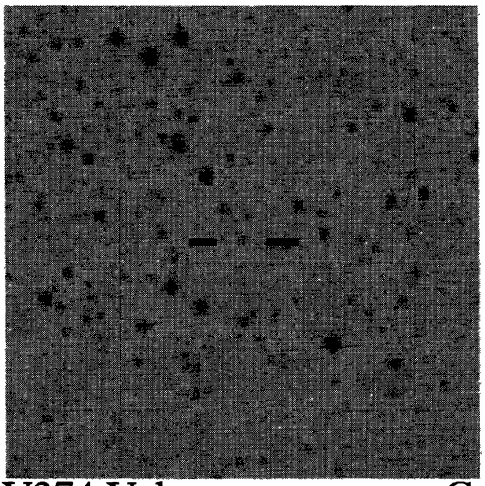
Vir5 E



Vir6 C



IL Vul C



V374 Vul C

FIG. 1—(Continued)

TABLE 9
Finding Chart Codes

Code	Definition
A	SERC J
B	SERC V
C	PAL V (Quick V survey)
D	PAL J
E	POSS E
F	PAL R (Second Generation POSS)

TABLE 10
Space-Based Observations

GCVS Name	Other Name	IUE	HST	ARIEL-5	HEAO-1	HEAO-2	EXOSAT	ROSAT	GINGA	ASCA	EUVE
RX And	1E 0101+4101	Y				Y					
AR And		Y									
DX And		Y									
OS And		Y						Y			
PX And1	PG 0027+260	Y						Y			
VY Aqr		Y									
AE Aqr		Y	Y			Y	Y	Y	Y		
FO Aqr	H 2215−086	Y	Y		Y	Y	Y		Y	Y	
HU Aqr	RX J2107.9−0518							Y			
Aqr5	RX J2316−05							Y			
UU Aql		Y									
FO Aql		Y									
V603 Aql	HD 174107	Y	Y			Y	Y	Y			
V794 Aql		Y				Y					
V1315 Aql	KPD 1911+1212	Y									
V1370 Aql		Y									
Aql1	RX J1940.2−1025							Y			
Ara	NGC 6397-DP4		Y								
Ara	NGC 6397-COOL1		Y								
Ara	NGC 6397-COOL3		Y								
TT Ari	BD +14°341	Y	Y		Y	Y	Y	Y	Y	Y	
WX Ari	PG 0244+104	Y						Y			
XY Ari	H 0253+193					Y		Y			
T Aur	BD +30°923a	Y									
SS Aur		Y			Y						
FS Aur		Y									
KR Aur		Y				Y		Y			
V363 Aur	Lanning 10	Y									
Aur1	RX J0558.0+5353							Y			
TT Boo							Y	Y			
CR Boo	PG 1346+082	Y					Y	Y			Y
Cae1	RX J0453−42							Y			Y
Z Cam		Y				Y				Y	
AF Cam		Y									
BY Cam	H 0538+608	Y			Y		Y	Y	Y	Y	
BZ Cam	0623+71	Y						Y			
SY Cnc	BD +18°2101	Y					Y				
YZ Cnc		Y				Y	Y	Y			
AC Cnc	1H 0841+1303	Y			Y			Y			
AM CVn	HZ 29	Y	Y					Y			
HL CMa	1E 0643−1648	Y				Y	Y				
CMa1	RX J0640−24							Y			
BG CMi	3A 0729+103	Y		Y		Y	Y	Y	Y		
OY Car		Y	Y				Y				
QU Car	HDE 310376	Y			Y						
Car1	RX J0744.9-5257							Y			
HT Cas		Y	Y			Y		Y		Y	
V425 Cas		Y									
V592 Cas	LS I +55°08	Y									

TABLE 10
(Continued)

GCVS Name	Other Name	IUE	HST	ARIEL-5	HEAO-1	HEAO-2	EXOSAT	ROSAT	GINGA	ASCA	EUVE
Cas2	RX J0028.8+5917			Y	Y			Y			
Cas	RX J0153.3+7446							Y			
BV Cen		Y				Y					
MU Cen		Y									
V436 Cen	1E 1111−3724	Y				Y		Y			
V834 Cen	1E 1405−451	Y			Y	Y	Y	Y	Y	Y	Y
V842 Cen		Y									
Cen2	EUVE J1429−38.0										Y
Cen3	RX J1141.3-6410							Y			
Cen	RX J1313−32							Y			
Cep1	GD 552	Y									
WW Cet	HV 8002	Y			Y	Y	Y	Y			
WX Cet	BV 416	Y									
BO Cet4	1H 0204−023				Y						
Z Cha		Y	Y			Y	Y	Y			
Cir1	1E 1449.8−6803					Y					
TV Col	2A 0526−328	Y		Y	Y	Y	Y	Y	Y	Y	
TX Col	H 0542−407	Y			Y		Y	Y	Y	Y	
Col1	RX J0512.2-3241							Y			
AL Com			Y								
GO Com	SVS 382							Y			
GP Com	G61-29	Y	Y			Y	Y	Y		Y	
V394 CrA		Y						Y			
V693 CrA		Y									
T CrB	BD +26°2765	Y									
TT Crt	FSV 1132−11	Y									
TV Crv1		Y									
Q Cyg	BD +42°4182a	Y									
SS Cyg	BD +42°4189a	Y		Y	Y	Y	Y	Y	Y	Y	Y
EM Cyg		Y				Y		Y			
EY Cyg		Y						Y			
V503 Cyg		Y									
V1363 Cyg								Y			
V1500 Cyg		Y	Y	Y				Y			
V1668 Cyg		Y									
V1776 Cyg	Lanning 90	Y					Y				
V1974 Cyg		Y	Y					Y			Y
Cyg2	1H 1933+510				Y						
Cyg6	RX J2123.7+4217							Y			
CM Del		Y	Y								
HR Del		Y									
YY/DO Dra	PG 1140+719	Y	Y		Y	Y		Y			
AB Dra		Y				Y		Y			
CQ Dra	4 Dra B							Y			
EP Dra4	1H 1907+690				Y	Y		Y			
Dra5	HS 1804+6753					Y					
AH Eri						Y		Y			
AQ Eri		Y									
EF Eri	2A 0311−227	Y		Y	Y	Y	Y	Y	Y	Y	Y
UZ For	EXO		Y				Y	Y	Y		Y
For1	EXO						Y	Y			
U Gem	BD +22°1807	Y	Y		Y	Y	Y		Y	Y	
DN Gem	HD 50480	Y									
IR Gem		Y									
PQ Gem	RE 0751+14		Y					Y	Y		
RZ Gru		Y									
AH Her		Y	Y			Y					
AM Her		Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
DQ Her		Y	Y					Y			
V446 Her		Y						Y			
V533 Her		Y									
V795 Her	PG 1711+336	Y	Y					Y			

TABLE 10
(Continued)

GCVS Name	Other Name	IUE	HST	ARIEL-5	HEAO-1	HEAO-2	EXOSAT	ROSAT	GINGA	ASCA	EUVE
V825 Her	PG 1717+413	Y			Y						
V827 Her		Y						Y			
V838 Her		Y						Y			
Her5	RX J1802.1+1804							Y			
WW Hor	EXO						Y	Y			
EX Hya	1E 1249−2858	Y	Y		Y	Y	Y	Y	Y	Y	Y
LY Hya2	1329−294							Y			
Hya4	RX J0929.1−2404							Y			
Hya	RX J1002−19							Y			
Hya	RX J1007−20							Y			
VW Hyi	REX 0409−7125	Y	Y			Y	Y	Y	Y	Y	Y
WX Hyi		Y				Y	Y	Y			
BL Hyi	H 0139−68	Y			Y	Y	Y	Y			Y
Hyi	RX J0132−65							Y			
Hyi	RX J0153.3−5917							Y			
Ind	EUVE J2115-58.6										Y
CP Lac		Y						Y			
DI Lac	HD 214239	Y									
DK Lac		Y									
T Leo	BD +4°2506a	Y	Y		Y			Y			
X Leo		Y					Y				
DP Leo	1E 1114+182	Y	Y		Y	Y	Y	Y			
Leo5	1H 1025+220				Y						
Leo	PG 0935+075	Y									
Leo	RX J1015+09							Y			
RZ LMi	PG 0948+344	Y									
ST LMi	CW 1103+254	Y	Y				Y				
SX LMi	CBS-31	Y									
BR Lup								Y			
Lyn1	PG 0859+415	Y									
AY Lyr		Y					Y				
CY Lyr		Y									
HR Lyr	HD 175268	Y									
LL Lyr								Y			
MV Lyr	Mac +43°1	Y				Y		Y			
V394 Lyr								Y			
TU Men		Y									
AD Men	HV 12703							Y			
Men1	1H 0551−819	Y			Y			Y			
BT Mon		Y				Y					
CW Mon		Y						Y			
GI Mon	HD 58756	Y									
HQ Mon		Y									
KQ Mon		Y									
GQ Mus		Y	Y				Y	Y			
RS Oph	BD −6°4661	Y					Y	Y			
V380 Oph		Y									
V426 Oph		Y					Y	Y	Y	Y	
V442 Oph		Y							Y		
V841 Oph	BD −12°4633	Y				Y					
V2051 Oph		Y	Y					Y			
V2301 Oph1	1H 1752+081				Y						
Oph2	1E 1719−1946					Y					
Oph3	RX J1712.6−2414							Y			
BI Ori								Y			
CN Ori		Y									
CZ Ori		Y									
V1159 Ori	NSV 2011							Y			
V1193 Ori	Hamuy's star							Y			
Ori1	RX J051541+0104.6							Y			

TABLE 10
(Continued)

GCVS Name	Other Name	IUE	HST	ARIEL-5	HEAO-1	HEAO-2	EXOSAT	ROSAT	GINGA	ASCA	EUVE
Ori	RX J0501−03							Y			
V345 Pav	EC 19314−5915				Y			Y		Y	
Pav2	RE 1844−74							Y			Y
Pav4	RX J1957.1−5738							Y			
RU Peg		Y				Y	Y	Y		Y	
EF Peg		Y									
HX Peg	PG 2337+123	Y									
IP Peg	SVS 2549	Y	Y					Y			
Peg2	S 193	Y						Y	Y		
Peg6	PG 2133+115	Y									
TZ Per		Y									
UV Per		Y									
GK Per	BD +43°740a	Y				Y	Y	Y	Y	Y	
KT Per		Y									
RR Pic		Y				Y	Y	Y			
TW Pic	H 0534−581	Y			Y	Y	Y	Y			
Pic1	RX J0531.5−4624							Y			
AO Psc	H 2252−035	Y			Y	Y	Y	Y	Y	Y	
TY PsA	PS 74/NSV 14328	Y						Y			
VV Pup	1E 0812−1854	Y				Y	Y	Y		Y	
BV Pup		Y							Y		
CP Pup		Y				Y	Y	Y			
V347 Pup2	LB 1800	Y			Y			Y			
V348 Pup1	1H 0709−360	Y			Y			Y	Y		
V351 Pup		Y						Y			
T Pyx	HV 3348	Y			Y						
VZ Pyx1	1H 0857−242	Y			Y			Y			
Pyx2	1E 0830.9−2238					Y					
V Sge		Y				Y		Y			
WZ Sge	HV 3518	Y	Y			Y	Y	Y			
V1223 Sgr	3A 1851−312	Y		Y	Y		Y	Y	Y	Y	
V3885 Sgr	CD −42°14462	Y	Y			Y	Y	Y			
V3890 Sgr	GS 1826-24	Y							Y		
V4077 Sgr		Y									
V4160 Sgr		Y									
V4169 Sgr		Y									
V4171 Sgr		Y									
U Sco	BD −17°4554	Y									
V745 Sco		Y									
V977 Sco		Y									
V992 Sco		Y									
VY Scl	GD 1662	Y				Y					
VZ Scl	TON S 120	Y						Y			
Scl2	LTT 560							Y			
V443 Sct		Y									
V444 Sct		Y									
X Ser	HV 3137	Y									
UZ Ser		Y									
LW Ser		Y									
LX Ser	Stepanian	Y									
MR Ser	PG 1550+191	Y					Y	Y			
MU Ser		Y									
RW Sex	BD −7°3007	Y	Y			Y	Y				
SW Sex	PG 1012−029	Y									
V1062 Tau	1H 0459+246	Y			Y	Y	Y	Y			
Tau3	RX J0459.7+1926							Y			
Tau4	RX J0502.8+1624							Y			
QS Tel	RE 1938−461		Y					Y	Y		Y
RW Tri		Y						Y			
Tri	RX J0203+29							Y			
EK TrA		Y									

TABLE 10
(Continued)

GCVS Name	Other Name	IUE	HST	ARIEL-5	HEAO-1	HEAO-2	EXOSAT	ROSAT	GINGA	ASCA	EUVE
TrA1	1E 1516.6−6827					Y					
Tuc1	0022−7221							Y:			
SU UMa	PG 0808+627	Y			Y	Y	Y	Y			
SW UMa		Y					Y	Y			
UX UMa		Y	Y					Y			
AN UMa	PG 1101+453	Y				Y	Y	Y			Y
AR UMa	1ES 1113+432					Y		Y			
BZ UMa	PG 0849+580	Y			Y			Y			
CI UMa								Y			
CY UMa	SVS 2198					Y		Y			
DW UMa	PG 1030+590	Y						Y			
EI UMa	PG 0834+488	Y			Y		Y	Y			
EK UMa	1E 1048.5+5421				Y	Y		Y			Y
ER UMa1	PG 0943+521	Y									
EU UMa	RE 1149+28		Y					Y			Y
EV UMa	RX J1307+53							Y			
UMa6	1H 0928+500				Y			Y			
UMa7	PG 1000+667	Y									
UMa9	WGA 1047.1+6335							Y			
SS UMi	PG 1551+719	Y						Y			
CU Vel							Y	Y			
IX Vel	CPD −48°1577	Y						Y			Y
KO Vel	1E 1013−477	Y			Y	Y	Y	Y			
TW Vir	PG 1142−041	Y				Y					
HV Vir	NSV 6201							Y			
Vir5	1E 1240.8+0312					Y					
VW Vul		Y									
CK Vul		Y									
PW Vul		Y					Y	Y			
QU Vul		Y					Y	Y			
QQ Vul	1E 2003+225	Y				Y	Y	Y	Y	Y	Y
QV Vul		Y						Y			
Vul	RX J1914+2456							Y			

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