

## UBVRI CATALOGUE OF DWARF NOVAE

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Received 1984 February 20

## RESUMEN

La fotometría *UBVRI* de setenta y cinco novae enanas compilada de la literatura se presenta en este catálogo. El catálogo contiene una lista de observaciones de cada objeto para propósitos estadísticos.

## ABSTRACT

*UBVRI* photometry of seventy-five dwarf novae compiled from the literature is presented in this catalogue. The catalogue lists observations for each object per night per observer for statistical purposes.

*Key words:* PHOTOMETRY – STARS-DWARF NOVAE

## I. INTRODUCTION

A statistical analysis of thirty-six dwarf novae based on a compilation of *UBVRI* photometry by Echevarría (1983) has been published by Echevarría and Jones (1983, 1984). As the number of observed dwarf novae has doubled since the compilation by Echevarría (1983) and as a list of the data is still unavailable, it seemed appropriate to present a complete version of the catalogue. Further analysis of the catalogue will be presented elsewhere (Echevarría 1984).

The catalogue contains seventy-five dwarf novae in quiescence or in outburst and includes only one entry per night per observer. In those cases where more than one observation was made during the same night, mean values were taken. This procedure ensures a more compact version of the data without losing critical information for statistical purposes. An extended version including all measurements is available on tape.

## II. THE CATALOGUE

Photoelectric photometry in the *UBVRI* bands of seventy-five dwarf novae, compiled from the literature, is presented here. The catalogue is arranged as follows:

Column 1. Name.

Column 2. *V* magnitude (Johnson 1964).

Columns 3-4. (*B - V*) and (*U - B*) color indices (Johnson 1964).

Columns 5-6. (*V - R*) and (*R - I*) color indices. The *R* and *I* magnitudes are from three different color systems: Johnson (1966) with effective wavelengths at 7000 and 9000 Å respectively, Kron-Cousins (Cousins 1976) with effective wavelengths at 6400 and 7900 Å respectively (marked with an \*), and Sandage-Smith (1963) with ef-

fective wavelengths at 6800 and 8100 Å respectively (marked with a #).

Column 7. Stage of variable. Codes are as follows: Q = quiescence, R = rise, M = maximum, SM = supermaximum, D = decline, S = standstill, e = eclipse. If the stage of the object is not well known the code O = outburst is used. A question mark is used in this column whenever the state of the variable is not well defined.

Column 8. Date of observation: DDMMYY.

Column 9. References: 1. Barwig *et al.* 1982. 2. Barwig and Schoembs 1983. 3. Bond, Kemper, and Mattei 1982. 4. Bruch 1980. 5. Bruch 1983a. 6. Bruch 1983b. 7. Bruch and Beuermann 1984. 8. Chlebowski, Halpern, and Steiner 1981. 9. Chuvayev 1962. 10. Echevarría 1983. 11. Echevarría *et al.* 1981. 12. Eggen 1967. 13. Grant and Abt 1959. 14. Haefner, Schoembs, and Vogt 1979. 15. Klare *et al.* 1982. 16. Kraft, Krzeminski, and Mumford 1969. 17. Krzeminski 1965. 18. Krzeminski and Smak 1971. 19. Lyutyi 1976. 20. Marino and Walker 1972. 21. Marino and Walker 1978. 22. Marino and Walker (in Bateson and Jones 1979). 23. Mumford 1966. 24. Mumford 1967a. 25. Mumford 1967b. 26. Mumford 1971. 27. Mumford and Krzeminski 1969. 28. Paczynski 1963. 29. Patterson 1979. 30. Patterson 1981. 31. Pugach 1974. 32. Shafter and Szkody 1983. 33. Sherrington and Jameson 1983. 34. Szkody 1974. 35. Szkody 1976a. 36. Szkody 1976b. 37. Szkody 1977. 38. Verbunt *et al.* 1984. 39. Vogt 1982. 40. Vogt 1983. 41. Vogt 1984. 42. Vogt and Breysacher 1980. 43. Vogt and Semeniuk 1980. 44. Walker 1957. 45. Walker and Chincarini 1968. 46. Walker and Marino 1978. 47. Wargau, Drechsel, and Rahe 1982. 48. Wargau, Rahe, and Vogt 1983. 49. Zuckermann 1961.

This is Contribution No. 128 of Instituto de Astronomía, UNAM.

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TABLE 1

## THE CATALOGUE OF DWARF NOVAE

Name	V	B-V	U-B	V-R	R-I	Sta	Date	Ref.	Name	V	B-V	U-B	V-R	R-I	Sta	Date	Ref.
RX And	10.77	0.00	-0.69			∞	08OCT64	023	VZ Aqr	18.4	0.2	-0.51			Q	31AUG78	040
	12.59	0.15	-0.89			D	20OCT65	023		16.51	0.78	-0.32			Q	13SEP79	005
	12.55	0.06	-0.34			D	21OCT65	023	UU Aql	16.07	0.22	-0.95			Q	01AUG78	040
	11.04	0.04	-0.70			H	17SEP73	034		16.56	0.13	-1.01			Q	02AUG78	040
	10.85	0.00	-0.67			H	18SEP73	034		16.66	0.71	-1.23			Q	13SEP79	005
	11.20	0.10	-1.07	0.02#	0.25#	∞	MAY1973	035	DU Aql	19.25	-0.09	-0.62			Q	31AUG78	040
	11.45	0.08	-0.58	0.10#	0.05#	O	1973	035	FG Aql	15.19	0.44	-0.46			Q	01AUG78	040
	11.83	0.07	-0.72	0.23#	0.12#	O	1973	035		15.65	0.35	-0.50			Q	02AUG78	040
	11.93	0.05	-0.30	0.20#	0.10#	C	1973	035		15.69	0.46	-0.62			Q	03AUG78	040
	12.95	0.08	-1.05	0.35#		O	TO 1973	035		14.30	0.38	-0.57			Q	30AUG78	040
										14.67	0.40	-0.55			H	31AUG78	040
	13.20	0.15	-1.05	0.47#	0.18#	O	1973	035		15.04	0.34	-0.56			Q	20JUL79	040
	13.33	0.10	-1.03	0.43#		Q	1973	035		13.37	0.66	-0.52			∞	04SEP79	040
	13.50	0.13	-1.08	0.52#	0.38#	Q	1973	035		16.57	0.66	-0.53			Q	13SEP79	005
	13.55	0.08	-0.95	0.40#	0.40#	Q	AUG1973	035	V725 Aql	15.79	1.52	0.60			?	14SEP79	005
	13.43	0.02	-1.07	0.43#	-0.13#	Q	28JUL75	037	AT Ara	15.32	0.57	-0.67			Q	26APR74	040
	11.93	0.05	-0.80	0.20#	0.10#	D	13JUL76	037		15.20	0.72	-0.79			Q	29APR74	040
	13.21	0.25	-1.13	0.31*	0.42*	R	22NOV79	010		15.04	0.59	-0.80			Q	30APR74	040
	12.99	0.29	-1.00	0.30*	0.36*	R	23NOV79	010		13.20	0.12	-0.59			M	27APR77	040
	12.39	0.25	-0.73	0.25*	0.18*	R	25NOV79	010		12.30	0.12	-0.58			H	28APR77	040
	13.70	0.38	-1.07	0.41*	0.73*	Q	03AUG80	010		12.62	0.08	-0.70			M	29APR77	040
										14.70	0.83	-0.55			Q	30AUG78	040
	11.13	0.02	-0.79	0.06*	0.10*	D	05AUG80	010		14.25	0.82	-0.69			Q	15SEP79	005
	13.34	0.24	-1.14	0.38*	0.48*	D	10AUG80	010	BF Ara	14.24	0.01	-0.72			H		006
	11.77	0.10	-1.02			S	04SEP81	033	SS Aur	14.71	0.12	-0.97			Q	17JAN64	023
	13.21	0.21	-0.98	0.47	0.49	R	08AUG82	038		14.66	0.17	-1.14			Q	08OCT64	023
	13.11	0.25	-0.94	0.46	0.46	R	09AUG82	038		14.73	0.05	-1.07			Q	20OCT65	023
	12.16	0.18	-0.55	0.26	0.21	R	12AUG82	038		14.81	0.03	-0.72			Q	21OCT65	023
	11.17	0.01	-0.65	0.10	0.06	M	13AUG82	038		14.55	0.23	-1.13			Q	22OCT65	023
	11.29	0.04	-0.74	0.15	0.10	D	15AUG82	038	Z Cam	12.76	0.27	-0.79			O	23APR71	031
	11.51	0.06	-0.72	0.19	0.17	D	16AUG82	038		11.22	0.09	-0.44			O	17HAY71	031
	11.81	0.11	-0.72	0.20	0.20	D	17AUG82	038		10.84	-0.02	-0.87			O	02HAR72	031
AR And	12.67	0.06	-0.74	0.16#	0.07#	O	20NOV79	010		10.78	-0.02	-0.83			O	03HAR72	031
DX And	13.63	0.31	-0.57	0.26#	0.31#	O	14NOV79	010		10.94	0.00	-0.81			O	04HAR72	031
	13.36	0.27	-0.54	0.24#	0.27#	O	20NOV79	010		10.45	0.00	-0.70	0.12#	0.10#	O	MAY1973	035
VY Aqr	17.11	-0.32	-1.29			Q	01AUG78	040		10.93	0.00	-0.75	0.10#	0.05#	O	1973	035
	17.52	-0.12	-1.99			Q	31AUG78	040									
	17.08	-0.18	-0.80			Q	14SEP79	005									

TABLE 1 (CONTINUED)

Name	V	B-V	U-B	V-R	R-I	Sta	Date	Ref.	Name	V	B-V	U-B	V-R	R-I	Sta	Date	Ref.
	11.38	0.12	-0.70	0.20 <sup>#</sup>	0.05 <sup>#</sup>	O	1973	035		14.55	0.61	-0.50			Q	20FEB69	026
	11.65	0.13	-0.78	0.15 <sup>#</sup>	0.12 <sup>#</sup>	O	1973	035		13.11	0.11	-0.70			Q	10MAY70	020
	11.93	0.09	-0.68	0.33 <sup>#</sup>	0.20 <sup>#</sup>	O	TO 1973	035		13.74	0.16	-0.77			Q	11MAY70	020
	11.88	0.17	-0.60	0.30 <sup>#</sup>	0.00 <sup>#</sup>	O	1973	035		14.93	0.78	-0.45			Q	25APR74	040
	12.93	0.35	-0.65	0.68 <sup>#</sup>	0.35 <sup>#</sup>	O	1973	035		14.77	0.69	-0.43			Q	27APR74	040
	13.23	0.45	-0.88	0.73 <sup>#</sup>	0.37 <sup>#</sup>	Q	AUG1973	035		14.82	0.67	-0.40			Q	28APR74	040
	11.50	0.00	-0.65	0.22 <sup>#</sup>	0.18 <sup>#</sup>	S	14NOV75	037		14.88	0.71	-0.48			Q	29APR74	040
	13.51	0.56	-0.76			Q	18DEC65	016		14.84	0.76	-0.48			Q	30APR74	040
	13.53	0.52	-0.77			Q	13JAN66	016		14.79	0.76	-0.50			Q	01MAY74	040
	13.70	0.53	-0.79			Q	15JAN66	016		14.31	0.71	-0.51			Q	29MAY77	040
	13.66	0.57	-0.80			Q	12FEB66	016		14.90	0.66	-0.62			Q	30MAY77	040
	13.48	0.47	-0.74			Q	14FEB66	016		14.60	0.71	-0.51			Q	01APR77	040
	13.68	0.59	-0.74			H	15FEB66	016		13.71	0.20	-0.59			H	27APR77	040
SY Cnc	12.97	0.25	-0.69			S	01APR79	040		13.43	0.19	-0.61			H	28APR77	040
	12.98	0.33	-0.66			S	02APR79	040		13.21	0.18	-0.66			H	29APR77	040
	11.50	0.09	-0.79	0.19*	0.11*	O	24NOV79	010		14.74	0.62	-0.45			Q	29MAY77	040
	11.77	0.15	-0.78	0.12*	0.15*	O	21FEB80	010		14.78	0.72	-0.31			Q	30MAY77	040
YZ Cnc	12.0	-0.13	-0.87			R	04JAN78	029	V373 Cen	15.61	0.58	-0.39			Q	26APR74	040
	11.3	-0.11	-0.78			SH	05JAN78	029		15.22	0.85	-0.32			Q	28APR74	040
	11.0	-0.11	-0.90			SH	06JAN78	029		15.48	0.65	-0.54			Q	29APR74	040
	12.5	-0.05	-0.63			R	07JAN78	029		15.36	0.68	-0.61			Q	30APR74	040
	12.1	-0.08	-0.79			H	08JAN78	029		13.90	0.04	-0.81			M	01MAY74	040
	12.7	-0.14	-1.03			D	09JAN78	029		15.55	0.59	-0.42			Q	30MAY77	040
	14.1	-0.15	-1.01			D	10JAN78	029		15.65	0.71	-0.40			Q	27APR77	040
	14.22	0.24	-1.39	0.31*	0.42*	Q	17NOV79	010	V436 Cen	16.05	0.0	-1.1			Q		041
	14.00	0.22	-1.22	0.27*	0.35*	Q	18NOV79	010									
	14.75	0.31	-0.95	0.29*	0.39*	Q	22NOV79	010	V442 Cen	15.22	0.58	-0.47			R	30MAR77	040
	12.26	0.05	-0.65	0.17*	0.03*	R	24NOV79	010		12.14	-0.01	-0.61			M	31MAR77	040
	12.48	0.06	-0.73	0.05*	0.06*	H	13FEB80	010		12.19	-0.01	-0.74			M	01APR77	040
	13.36	0.06	-0.88	0.09*	0.11*	D	14FEB80	010		11.88	-0.01	-0.65			M	27APR77	040
	14.56	0.14	-1.15	0.34*	0.27*	D	15FEB80	010		11.96	-0.01	-0.66			M	28APR77	040
	14.96	-0.03	-1.39	0.43*	0.27*	Q	16FEB80	010		12.05	0.01	-0.68			M	29APR77	040
	15.02	0.04	-1.39	0.33*	0.34*	Q	17FEB80	010		12.87	0.00	-0.72			Q	17FEB78	040
	12.75	0.00	-0.78	0.06*	0.09*	O	21FEB80	010		11.89	-0.01	-0.66			M	29MAR78	040
										13.25	0.05				O	26APR78	040
HL Cha	13.2	0.13	-0.72			Q	30SEP80	008		15.97	0.05	-0.86			D?	03AUG78	040
SV Chi	14.91	0.16	-0.65			S?	17FEB78	040		16.30	0.28	-1.05			Q	18JUN79	040
	14.43	0.06	-0.62			S?	18FEB78	040		16.45	0.09	-1.05			Q	20JUN79	040
OY Car	12.53	-0.01	-0.83			H		041	V485 Cen	17.55	0.42	-1.20			Q	03AUG78	040
	15.55	0.04	-0.84			Q		041		18.2	0.2	-1.1			Q	20JUN79	040
HT Cas	16.93	-0.04	-1.11			Q	07AUG78	030	WU Cet	14.36	0.09	-1.24			Q	03SEP62	028
	15.32	0.27	-1.20			Qe	07AUG78	030		14.07	0.16	-1.17			Q	05SEP62	028
	16.16	0.09	-1.14	0.53*	0.59*	Q	20NOV81	010		14.00	0.10	-1.14			Q	06SEP62	028
										14.07	0.07	-1.00			Q	07SEP62	028
BV Cen	12.95	0.68	-0.37			Q	13FEB69	026		13.92	0.17	-1.04			Q	22SEP62	028
	13.68	0.60	-0.51			Q	15FEB69	026		13.90	0.06	-1.08			Q	26SEP62	028
	12.92	0.32	-0.29			Q	15FEB69	026		13.78	0.12	-1.09			Q	30SEP62	028
	15.09	0.65	-0.41			Q	20FEB69	026		13.73	0.15	-1.08			Q	04OCT62	028
	12.11					O	02SEP69	020		13.73	0.15	-1.06			Q	05OCT62	028
	12.25					O	20FEB70	020		12.05	-0.01	-0.66			R	07OCT62	028
	11.93					O	22FEB70	020		11.45	-0.06	-0.78			M	08OCT62	028
	12.24	0.36				O	02MAR70	020		12.36	-0.04	-0.87			D	10OCT62	028
	12.64	0.31				O	06MAR70	020		13.00	-0.10	-0.89			D	11OCT62	028
	13.07	0.18				O	09MAR70	020		13.21	0.16	-1.00			D	17OCT62	028
						O				13.45	0.16	-1.05			Q	24OCT62	028
	13.21	0.37				O	20MAR70	020		13.64	0.13	-1.11			Q	25OCT62	028
	12.95	0.68				O	23MAR70	020		13.53	0.16	-1.11			Q	27OCT62	028
	12.95	0.87	-0.26			O	06APR70	020		13.45	0.21	-1.14			Q	28OCT62	028
	13.06	0.76	-0.32			Q	12APR70	020		13.79	0.24	-1.14			Q	30OCT62	028
	13.00	0.82	-0.26			Q	16APR70	020		13.73	0.15	-1.08			Q	04NOV62	028
	13.15	0.76	-0.48			Q	20APR70	020		13.34	0.25	-1.04			Q	06NOV62	028
	13.16	0.84	0.03			O	03MAY70	020		11.55	0.06	-0.65			M	09NOV62	028
	13.01	0.65	-0.16			Q	04MAY70	020		13.16	-0.02	-0.98			D	12NOV62	028
	12.97	0.75	-0.32			O	11MAY70	020		13.79	0.07	-1.07			Q	15NOV62	028
	13.18	0.72	-0.08			O	15MAY70	020		13.84	0.07	-1.10			Q	16NOV62	028
						Q	17MAY70	020		14.25	0.08	-1.17			Q	21NOV62	028
	12.95	0.75	-0.19			O	27MAY70	020		14.09	0.13	-1.17			Q	30NOV62	028
	12.89	0.76	-0.35			O	08JUN70	020		14.18	0.18	-1.20			Q	03DEC62	028
	12.85	0.83	-0.36			O	20JUN70	020		14.56	0.10	-1.23			Q	09SEP77	022
	13.11	0.58	-0.56			O	08JUL70	020		12.79	0.01	-0.80			O	14OCT77	022
	12.88	0.77	-0.49			O	16JUL70	020		13.26	0.11	-0.95			D	16OCT77	015
	12.97	0.57	-0.36			O	31JUL70	020		13.51	0.24	-1.02			D	19OCT77	022
	13.40	0.77	-0.14			Q	16AUG70	020		13.85	0.20	-1.08			O	06NOV77	015
	11.77	0.93	-0.16			O	23AUG70	020		15.71	0.27	-1.31			Q	31AUG78	015
	12.80	0.82	-0.17			O	09SEP70	020		14.62	0.21	-1.39			O	09NOV78	015
	12.18	0.29	-0.89			O				14.29	0.07	-1.18			S?	01SEP79	015
						O	13SEP70	020		14.21	-0.04	-1.05			S?	02SEP79	015
	12.59	0.12	-0.45			O	18SEP70	020		14.07	0.18	-1.08			S?	03SEP79	015

TABLE 1 (CONTINUED)

Name	V	B-V	U-B	V-R	R-I	Sta	Date	Ref.	Name	V	B-V	U-B	V-R	R-I	Sta	Date	Ref.
	16.23	0.78	-0.28			Q?	17FEB69	026		11.31	0.61	-0.55			R	05AUG61	009
	15.25	0.27	-1.16			Q?	20FEB69	026		9.44	0.07	-0.18			R	06AUG61	009
	12.96	0.03	-0.66			SM	29MAR76	039									
	13.00	0.05	-0.78			SM	31MAR78	039		8.80	-0.05	-0.68			M	07AUG61	009
	13.31	0.07	-0.67			SM	01APR78	039		8.84	-0.06	-0.74			M	08AUG61	009
BP CrA	14.01	0.09	-0.79			Q?	06JUL69	026		9.07	-0.05	-0.75			D	09AUG61	009
	13.48	0.36	-0.70			Q?	08JUL69	026		9.39	-0.04	-0.75			D	10AUG61	009
	15.92	0.28	-0.78			Q?	13JUL69	026		9.70	-0.04	-0.78			D	11AUG61	009
	14.33	0.14	-0.60			S	30HAR77	040		10.10	0.00	-0.78			D	12AUG61	009
	14.10	0.14	-0.64			S	31HAR77	040		10.56	0.04	-0.76			D	13AUG61	009
	14.01	0.11	-0.67			S	01APR77	040		11.03	0.15	-0.74			D	14AUG61	009
	15.12	0.21	-0.74			S	27APR77	040		11.40	0.34	-0.64			D	15AUG61	009
	14.19	0.08	-0.79			S	29APR77	040		11.55	0.47	-0.81			Q	16AUG61	009
	14.61	0.16	-0.71			S	30MAY77	040									
	16.02	0.24	-0.91			Q	01AUG78	040		11.53	0.49	-0.80			Q	17AUG61	009
	15.93	0.35	-0.79			Q	02AUG78	040		11.84	0.52	-0.74			Q	06SEP61	009
	16.28	0.14	-0.95			Q	03AUG78	040		10.07	0.25	-0.08			R	12SEP61	009
	16.68	0.22	-0.75			Q	31AUG78	040		8.70	-0.05	-0.76			M	14SEP61	009
	16.31	0.18	-0.82			Q	19JUN79	040		8.79	-0.04	-0.71			M	15SEP61	009
	14.23	0.10	-0.79			M	13SEP79	005		8.61	-0.01	-0.64			M	16SEP61	009
										8.57	0.01	-0.66			M	18SEP61	009
										8.60	-0.03	-0.70			M	19SEP61	009
SU Crt	16.41	0.40	0.22			S?	20JUN79	040		8.68	-0.01	-0.73			M	21SEP61	009
										8.77	-0.03	-0.72			D	22SEP61	009
SS Cyg	11.90	0.62	-0.62			Q	09JUL54	044									
	8.96	0.02	-0.74			Q	07AUG55	049		8.93	0.00	-0.65			D	23SEP61	009
	11.78	0.56	-0.68			Q	06NOV55	013		9.92	0.00	-0.76			D	26SEP61	009
	11.38	0.57	-0.92			R	07NOV55	013		10.80	0.11	-0.72			D	28SEP61	009
	9.76	0.22	-0.19			R	11NOV55	013		11.09	0.23	-0.72			Q	29SEP61	009
	8.80	0.07	-0.80			M	12NOV55	013		11.56	0.48	-0.79			Q	05OCT61	009
	8.80	0.05	-0.85			M	13NOV55	013		11.8	0.59	-0.66			Q	JUN64?	012
	9.26	0.08	-0.88			D	15NOV55	013		10.94	0.32	-0.91			Q	08OCT64	023
	9.51	0.22	-0.94			D	16NOV55	013		11.46	0.26	-0.93			Q	21JUL65	045
	9.94	0.11	-0.82			D	17NOV55	013		11.23	0.52	-0.67			R	06AUG65	045
										9.28	0.26	-0.10			R	07AUG65	045
	10.39	0.11	-0.78			D	18NOV55	013									
	10.77	0.25	-0.82			D	19NOV55	013		11.58	0.25	-1.11			D?	20OCT65	023
	11.06	0.40	-0.75			D	20NOV55	013		11.73	0.17	-1.02			D?	21OCT65	023
	11.40	0.42	-0.67			D	21NOV55	013		11.92	0.63	0.32			Q	14MAY73	036
	11.60	0.33	-0.72			D	22NOV55	013		11.73	0.59	0.78			Q	18MAY73	036
	11.24	0.55	-0.83			R	30JUN56	049		11.65	0.56	0.67			Q	27MAY73	036
	11.87	0.58	-0.61			R	01JUL56	049		11.71	0.57	-0.75	0.75#	0.27#	Q	28MAY73	036
	9.52	0.02	-0.81			D	07JUL56	049		8.52	-0.07	-0.95	0.07#	-0.03#	M	01JUN73	036
	10.42	0.10	-0.85			D	09JUL56	049		8.45	-0.04	-0.88	0.07#	0.05#	M	02JUN73	036
	11.65	0.69	-0.79			R	20AUG57	049		8.93	-0.03	-0.84	0.08#	0.02#	D	10JUN73	036
										10.60	0.10	-0.83	0.25#	0.25#	D	15JUN73	036
	9.96	0.25	-0.10			R	21AUG57	049									
	8.46	-0.04	-0.90			R	24AUG57	049		11.97	0.60	0.69			Q	03JUL73	037
	8.42	0.01	-0.80			R	26AUG57	049		12.10	0.68	-0.60	0.82#	0.40#	Q	10JUL73	036
	8.46	0.01	-0.80			Q	27AUG57	049		11.90	0.55	-0.74	0.77#	0.28#	Q	23JUL73	036
	8.46	0.01	-0.80			Q	28AUG57	049		8.72	-0.01	-0.83	0.12#	0.02#	D	07AUG73	036
	8.49	0.02	-0.81			Q	29AUG57	049		8.80	0.02	0.53			M	15SEP73	034
	8.52	0.01	-0.82			Q	30AUG57	049		8.93	0.03	0.75			D	17SEP73	034
	8.65	0.01	-0.82			Q	31AUG57	049		9.20	0.10	0.90			D	18SEP73	034
	8.67	0.01	-0.82			D	01SEP57	049		8.50	-0.07	-0.98	0.05#	0.02#	M	01JUN74	034
	9.51	0.04	-0.90			D	03SEP57	049		8.72	-0.07	-0.90			D	01JUN75	019
										9.18	-0.11	-0.90			D	03JUN75	019
	10.53	0.12	-0.83			D	05SEP57	049									
	10.98	0.19	-0.74			D	06SEP57	049		9.50	-0.06	-0.89			D	04JUN75	019
	11.40	0.62	-0.93			D	10SEP57	049		11.38	0.26	-1.00			D	09JUN75	019
	11.52	0.50	-0.87			D	11SEP57	049		11.62	0.45	-1.01			D	14JUN75	019
	11.63	0.52	-0.76			Q	12SEP57	049		11.71	0.58	-0.75			R	20JUN75	019
	11.66	0.60	-0.70			Q	13SEP57	049		11.15	0.53	-0.67			R	21JUN75	019
	10.55	0.21	-0.82			R	05JUN60	009		9.44	0.06	-0.40			R	22JUN75	019
	10.30	0.14	-0.88			R	06JUN60	009		9.02	-0.08	-0.78			M	24JUN75	019
	10.15	0.09	-0.83			R	07JUN60	009		9.16	-0.08	-0.86			M	25JUN75	019
	10.10	0.05	-0.81			R	08JUN60	009		9.73	-0.06	-0.91			D	27JUN75	019
										11.67	0.43	-0.73			D	07JUL75	019
	9.35	0.02	-0.48			R	10JUN60	009									
	8.97	-0.03	-0.71			R	11JUN60	009		11.52	0.43	-1.04			D	11JUL75	019
	8.93	-0.06	-0.79			M	12JUN60	009		11.69	0.45	-1.04			D	13JUL75	019
	9.09	-0.07	-0.87			M	13JUN60	009		11.53	0.41	-1.07			D	16JUL75	019
	9.27	-0.07	-0.87			D	14JUN60	009		11.33	0.45	-1.00			R	17JUL75	019
	9.44	-0.05	-0.84			D	15JUN60	009		9.09	-0.02	-0.58			M	18JUL75	019
	10.06	0.00	-0.92			D	17JUN60	009		8.91	-0.10	-0.86			M	20JUL75	019
	10.34	0.03	-0.92			D	18JUN60	009		8.99	-0.03	-0.79			M	21JUL75	019
	11.20	0.34	-1.00			Q	27JUN60	009		8.62	-0.08	-0.80			M	24JUL75	019
	11.31	0.32	-0.94			Q	03JUL60	009		8.76	-0.06	-0.85			M	26JUL75	019
										8.48	-0.05	-0.90	0.05#	0.03#	M	28JUL75	037
	10.43	0.20	-0.71			R	07JUL60	009									
	10.04	0.03	-0.77			R	08JUL60	009		8.83	-0.03	-0.82	0.10#	0.05#	D	29JUL75	037
	9.95	0.00	-0.73			R	09JUL60	009		9.68	-0.09	-0.92			D	30JUL75	019
	9.80	0.01	-0.76			R	10JUL60	009		10.42	-0.02	-0.90			D	01AUG75	019
	9.10	-0.05	-0.65			R	11JUL60	009		10.60	0.10	-0.85	0.27#	0.23#	D	02AUG75	027
	8.95	-0.07	-0.80			M	13JUL60	009		11.35	0.22	-0.99			D	05AUG75	019
	9.02	-0.08	-0.82			M	14JUL60	009		11.75	0.41	-0.89			D	08AUG75	019
	9.06	-0.06	-0.77			M	15JUL60	009		11.95	0.50	-0.89			D	14AUG75	019
	8.90	-0.04	-0.71			M	16JUL60	009		11.85	0.41	-1.02			Q	19AUG75	019
	8.61	-0.02	-0.75			M	17JUL60	009		11.68	0.35	-1.01			Q	23AUG75	019
										11.76	0.34	-1.15			Q	24AUG75	019
	8.61	-0.08	-0.81			M	18JUL60	009									
	9.22	-0.11	-0.91			D	22JUL60	009		11.74	0.39	-1.05			Q	25AUG75	019
	9.50	-0.10	-0.92			D	23JUL60	009		11.84	0.42	-1.17			Q	26AUG75	019
	9.78	-0.07	-0.92			D	24JUL60	009		11.92	0.44	-1.05					

TABLE 1 (CONTINUED)

Name	V	B-V	U-B	V-R	R-I	Sta	Date	Ref.	Name	V	B-V	U-B	V-R	R-I	Sta	Date	Ref.
	10.64	0.04	-0.89			D	19SEP75	019		14.29	0.46	-0.91	0.49*	0.51*	Q	17FEB80	010
	11.53	0.36	-1.08			D	25SEP75	019		13.90	0.48	-0.81	0.46*	0.49*	Q	21FEB80	010
	12.05	0.65	-0.65	0.80#	0.40#	Q	11AUG76	037		14.70	0.55	-0.89	0.59*	0.60*	Q	02AUG80	010
	11.87	0.63	-0.91	0.62*	0.56*	Q	26JUL79	010		13.00	0.07	-0.62	0.14*	0.22*	O	05AUG80	010
	11.89	0.62	-0.94	0.59*	0.57*	Q	30JUL79	010		11.71	0.04	-0.78	0.12*	0.14*	O	09AUG80	010
	11.85	0.67	-0.77	0.62*	0.57*	Q	01AUG79	010		14.13	0.43	-0.74			Q	15MAY81	033
	11.80	0.68	-0.73	0.59*	0.58*	Q	02AUG79	010		12.83	0.13	-0.65	0.15	0.25	R	08AUG82	038
	11.78	0.59	-0.90	0.42*	0.55*	Q	18NOV79	010		12.34	0.08	-0.61	0.15	0.13	R	10AUG82	038
	11.52	0.51	-1.03	0.40*	0.51*	R?	21NOV79	010		12.12	0.03	-0.69	0.14	0.12	M	11AUG82	038
	8.56	0.01	-0.75	0.90*	0.10*	H	19MAY80	010		12.08	0.07	-0.70	0.14*	0.05*	M	11AUG82	038
	8.52	0.00	-0.77	0.10*	0.10*	M	20MAY80	010		12.15	0.05	-0.72	0.18	0.13	M	12AUG82	038
	8.52	-0.01	-0.76	0.10*	0.11*	M	22MAY80	010		12.16	0.07	-0.81	0.19*	0.07*	M	12AUG82	038
	9.93	0.22	-0.07	0.20*	0.25*	R	02AUG80	010		12.25	0.14	-0.76	0.17	0.05	D	13AUG82	038
	8.78	-0.01	-0.73	0.04*	0.09*	R	03AUG80	010		12.46	0.12	-0.74	0.22*	0.44*	D	13AUG82	038
	8.73	0.00	-0.93	0.10*	0.11*	R	05AUG80	010		12.46	0.12	-0.75	0.22	0.17	D	14AUG82	038
	8.58	0.04	-0.96	0.12*	0.08*	M	09AUG80	010		12.50	0.03	-0.69	0.18*	0.25*	D	14AUG82	038
	8.64	0.01	-0.91	0.07*	0.11*	M	10AUG80	010		12.84	0.16	-0.71	0.29	0.31	D	15AUG82	038
	8.73	0.02	-1.00	0.08*	0.11*	D	11AUG80	010		13.40	0.16	-0.81	0.21*	0.29*	D	16AUG82	038
Eu Cyg	12.90	0.17	-0.72			S?	31MAY54	044	EX Hya	13.71	-0.10	-1.11			Q	15JAN64	024
	12.49	0.09	-0.89			O	14JUN64	027		13.62	-0.06	-1.05			Q	08APR64	024
	12.30	0.07	-0.84			O	15JUN64	027		11.7	-0.10	-1.00			M	JUN64?	012
	12.42	0.11	-0.89			O	16JUN64	027		13.99	-0.06	-1.12			Q	28APR65	024
	13.54	0.56	-0.55			Q	17APR66	027		13.54	-0.07	-1.09			Q	29APR65	024
	12.60	0.19	-0.74			O	17JUN66	027		13.58	-0.03	-1.05			Q	13JUL69	026
										13.44	-0.03	-1.24			Q	14JUL69	026
IS Del	15.90	0.09	-0.65			S?	13SEP79	005		13.43	-0.12	-1.33			Q	20FEB72	040
										13.39	-0.05	-1.15			Q	21FEB72	040
										13.64	-0.18	-1.04			Q	22FEB72	040
AB Dra	14.85	0.82	-0.01			Q?	20OCT65	023		13.58	-0.13	-1.01			Q	23FEB72	040
	14.54	1.10	0.03			Q?	22OCT65	023		13.23	-0.02	-1.03			Q	24FEB72	040
	12.30	0.00	-0.75	0.10#	-0.03#	O	MAY1973	035		13.63	-0.10	-1.26			Q	25FEB72	040
	13.43	0.10	-0.63	0.15#	0.05#	O	1973	035		13.55	-0.15	-1.17			Q	26FEB72	040
	13.53	0.02	-0.77	0.20#	0.13#	O	1973	035		13.57	-0.07	-1.31			Q	28FEB72	040
	13.58	0.05	-0.73	0.18#	0.05#	O	1973	035		13.61	-0.06	-1.09			Q	02APR76	040
	13.85	0.13	-0.78	0.20#	0.00#	O	1973	035		13.74	-0.07	-1.13			Q	04APR76	040
	14.13	0.07	-0.77	0.23#	0.07#	O	TO1973	035		13.59	-0.07	-1.10			Q	05APR76	040
	14.23	0.12	-0.82	0.30#	-0.07#	O	1973	035									
	14.40	0.10	-0.82	0.25#	0.32#	Q	1973	035									
	14.45	0.18	-0.90	0.27#	0.30#	Q	1973	035	VW Hya	13.42	0.17	-0.90			R?	13FEB69	026
	14.48	0.12	-0.85	0.28#	0.22#	Q	AUG1973	035		10.39	-0.13	-0.35			N	19FEB69	026
	13.28	0.02	-0.75	0.08#	-0.05#	O	03AUG75	037		13.30	-0.11	-0.65			D	21FEB69	026
	14.30	0.13	-0.85	0.25#	0.20#	Q	15NOV75	037		9.54	-0.01	-0.68			M	13JUL69	026
										13.93	0.07	-0.99			Q	05DEC69	046
										12.79	0.30	-0.50			R	06DEC69	046
Aii Eri	18.4	0.3	-0.9			Q	15NOV77	040		11.82	0.06	-0.85			O	21DEC69	020
										14.38	0.02	-0.97			Q	17MAY70	020
										10.12	0.02	-0.66			O	12JUN70	020
AQ Eri	17.52	0.06	-1.03			Q	15NOV77	040		12.60	-0.04	-0.86			O	17JUL70	020
U Gem	9.49	0.00	-0.78			R	03JAN62	017		13.61	0.69	-0.99			O	14AUG70	020
	9.51	0.03	-0.88			M	04JAN62	017		13.93	0.11	-0.84			Q	04SEP70	020
	10.78	-0.03	-0.96			D	11JAN62	017		14.02	0.15	-0.89			Q	27NOV70	020
	11.17	-0.05	-0.92			D	12JAN62	017		14.12	0.02	-0.67			Q	02DEC70	020
	14.42	0.41	-1.04			Q	09MAR62	017		9.07	-0.09	-0.78			M	17DEC70	020
	10.03	-0.05	-0.88			Q	25MAY62	017		9.26	-0.07	-0.78			D	18DEC70	020
	10.83	0.02	-0.89			Q	26MAY62	017		9.60	-0.04	-0.73			D	19DEC70	020
	14.93	0.27	-1.08			Q	29NOV62	017		9.72	-0.06	-0.72			D	20DEC70	020
	9.93	-0.01	-0.73			Me	04DEC62	017		13.30	0.12	-0.95			D	27DEC70	020
	10.86	-0.08	-0.95			De	07DEC62	017		13.57	0.03	-0.93			D	29DEC70	020
	11.51	-0.09	-0.96			De	08DEC62	017		13.71	-0.01	-1.06			D	30DEC70	020
	12.32	-0.09	-0.98			De	09DEC62	017		13.81	0.04	-1.07			Q	01JAN71	020
	14.97	0.24	-1.19			Q	29DEC62	017		10.57	-0.07	-0.77			O	10MAY71	046
	14.0	0.35	-0.60			O	JUN64?	012		12.49	0.50	-0.38			R	02NOV71	046
	14.71	0.40	-1.21	0.69*	0.97*	Q	10FEB80	010		9.23	-0.11	-0.71			M	03NOV71	046
										9.52	-0.12	-0.80			M	20OCT72	046
										9.91	-0.04	-0.45			O	04JAN74	046
										9.59	-0.13	-0.81			O	01MAR74	046
										13.95	0.11	-0.91			Q	26APR74	014
										13.50	0.20	-0.68			Q	27APR74	014
IR Gem	14.45	-0.08	-0.77			Q		007									
Alh Her	13.93	0.27	-0.32			Q	14MAY73	036		11.35	0.40	-0.16			R	28APR74	014
	12.03	0.03	-0.75			?	18MAY73	036		9.58	-0.02	-0.68			N	29APR74	014
	12.03	0.03	-0.86	0.13#	0.05#	?	19MAY73	036		10.45	-0.07	-0.83			D	30APR74	014
	14.19	0.40	-0.94	0.66#	0.48#	Q	27MAY73	036		11.76	0.37	-0.09			O	10OCT74	046
	13.85	0.32	-0.94			Q	28MAY73	036		10.39	0.20	-0.19			R	30OCT74	014
	12.92	0.12	-0.79	0.27#	0.05#	R	01JUN73	036		9.64	-0.10	-0.74			D	31OCT74	014
	12.09	0.05	-0.55	0.11#	0.05#	R	02JUN73	036		9.53	-0.02	-0.48			M	31OCT74	046
	12.92	0.10	-0.85	0.29#	0.13#	D	10JUN73	036		10.03	-0.12	-0.78			D	01NOV74	046
	13.87	0.24	-0.99	0.49#	0.30#	Q	15JUN73	036		10.91	-0.14	-0.86			D	01NOV74	014
	13.52	0.29	-0.68	0.49#	0.28#	R	03JUL73	036		12.48	-0.06	-0.80			D	02NOV74	014
	11.79	0.07	-0.67	0.14#	0.07#	M	10JUL73	036		13.33	0.01	-0.82			D	03NOV74	046
	13.21	0.25	-0.42	0.28#	0.20#	R	23JUL73	036		11.91	0.51	-0.20			R	14NOV74	014
	14.27	0.33	-1.02	0.62#	0.35#	Q	07AUG73	036		9.50	-0.04	-0.62			M	15NOV74	014
	14.20	0.40	-0.95	0.67#	0.50#	Q	02AUG75	037		10.32	-0.12	-0.81			D	16NOV74	014
	12.03	0.02	-0.77	0.10#	0.03#	D	13JUL76	037		12.05	-0.12	-0.77			D	17NOV74	014
	13.76	0.22	-0.78			Q	06MAY77	048		13.59	0.08	-0.82			Q	18NOV74	014
	13.71	0.26	-0.67			Q	07MAY77	048		10.50	0.02	-0.34			R	26NOV74	046
	12.43	0.11	-0.74			D	11JUN77	048		11.13							

TABLE 1 (CONTINUED)

Name	V	B-V	U-B	V-R	R-I	Sta	Date	Ref.	Name	V	B-V	U-B	V-R	R-I	Sta	Date	Ref.
	9.49	-0.11	-0.61			M	23APR76	046		13.33	0.09	-0.75			M	31MAR77	040
	10.42	-0.15	-0.82			D	24APR76	046		13.13	0.10	-0.65			M	01APR77	040
	9.77	-0.03	-0.37			O	28APR76	046		13.39	0.07	-0.70			M	29MAY77	040
	14.20	0.13	-0.75	0.17*	-0.04*	Q	23SEP81	010		13.36	0.09	-0.74			M	30MAY77	040
	14.22	0.04	-0.88	0.15*	0.16*	Q	24SEP81	010		14.53	0.06	-0.77			S?	17FEB78	040
	14.15	0.08	-0.88	0.34*	0.21*	Q	28SEP81	010		14.19	0.22				S?	26APR78	040
	13.85	0.10	-0.75	0.26*	0.19*	Q	29SEP81	010		13.76	0.14	-0.64			R	01AUG78	040
										13.12	0.14	-0.59			M	03AUG78	040
WX Hyi	14.75	0.04	-1.14			Q	21MAY71	021							O	30AUG78	040
	13.13	0.21	-0.45			O	29MAY71	021		13.60	0.12	-0.65			O	18JUN79	040
	13.25	-0.28	-0.42			O	06JUN71	021		15.88	0.25	-0.92			Q	19JUN79	040
	12.80	0.02	-0.59			O	16JUN71	021		15.73	0.24	-0.99			Q	20JUN79	040
	12.74	0.09	-0.74			O	27JUN71	021		16.04	-0.03	-0.93			Q	25SEP81	010
	14.70	0.27	-1.36			Q	16JUL71	021		13.97	0.05	-0.70	0.40*		D	26SEP81	010
	14.82	0.07	-0.93			Q	18JUL71	021		14.34	-0.05	-0.80	0.04*	0.04*	D		
	12.47	0.00	-0.42			R	19JUL71	021	V2051 Oph	15.12	0.10	-0.89			Q	19JUN79	040
	14.79	0.24	-1.04			Q	23JUL71	021		15.26	-0.10	-0.66			Q	20JUN79	040
	14.28	0.36	-1.06			Q	30JUL71	021		14.98	-0.13	-0.82			Q	02SEP79	040
										15.06	-0.07	-0.99			Q	03SEP79	040
	12.52	-0.16	-0.67			O	14AUG71	021		15.32	0.00	-0.90			Q	12SEP79	040
	14.65	0.21	-0.91			Q	19AUG71	021									
	12.20	-0.04	-0.45			O	15SEP71	021	BI Ori	14.56	0.04	-0.78			D?	15SEP79	005
	11.95	0.04	-0.72			M	18SEP71	021									
	14.64	0.06	-1.10			Q	07NOV71	021	CN Ori	14.58	0.17	-0.80			Q	12FEB62	025
	13.35	0.01	-0.85			O	10NOV71	021		12.90	0.02	-0.67			S?	01APR79	040
	14.46	0.19	-0.98			Q	12NOV71	021		12.63	0.04	-0.60			S?	02APR79	040
	14.35	0.30	-1.09			Q	24NOV71	021		12.81	0.02	-0.74			S?	15SEP79	005
	12.57	0.02	-0.57			D	10DEC71	021		12.55	0.09	-0.73	0.17*	0.07*	D	19NOV79	010
	13.09	-0.38	-0.67			D	11DEC71	021		13.67	0.35	-0.87	0.42*	0.90*	D	24NOV79	010
										12.83	0.06	-0.64	0.11*	0.04*	R	23SEP81	010
	12.38	-0.18	-0.56			O	15JAN72	021		12.74	0.03	-0.66	0.08*	0.14*	R	24SEP81	010
	13.68	0.03	-1.10			O	29JAN72	021		12.51	0.01	-0.79	0.15*	0.08*	M	28SEP81	010
	14.78	-0.21	-1.12			Q	05FEB72	021		15.52	0.27	-1.02	0.37*	0.77*	Q	18NOV81	010
	14.39	-0.04	-1.10			Q	10FEB72	021									
	12.76	-0.07	-0.91			O	14HAR72	021		12.75	0.13	-0.82	0.10*	0.12*	O	29NOV81	010
	14.69	-0.12				Q	14JUN72	021	CZ Ori	14.38	-0.01	-0.93	0.14*	0.21*	Q	18NOV81	010
	12.80	0.07	-0.56			O	26HAY73	021		16.34	0.44	-1.18	0.42*	0.50*	O	29NOV81	010
	13.10	-0.13	-0.62			O	27OCT73	021									
	14.73	-0.19	-1.20			Q	27DEC73	021	BD Pav	15.42	0.63	0.13			Q		002
	14.29	0.48	-1.34			Q?	28DEC73	021									
									RU Peg	12.64	0.61	-0.67			Q	14JUN64	012
	12.51	-0.04	-0.44			O	01JAN74	021		12.79	0.59	-0.65			Q	18JUN64	012
	12.79	0.10	-0.82			O	02JAN74	021		12.82	0.67	-0.48			Q	08OCT64	023
	13.46	-0.01	-0.86			O	14JAN74	021		12.85	0.58	-0.44			Q	20OCT65	023
	13.45	0.07	-0.54			O	24JAN74	021		12.75	0.71	-0.37			Q	21OCT65	023
	13.20	0.11	-0.68			O	25JAN74	021		12.72	0.63	-0.70	0.52*	0.53*	Q	25JUL79	010
	12.25	-0.08	-0.66			O	05FEB74	021		12.64	0.63	-0.78			Q	13SEP79	005
	12.27	0.07	-0.85			O	06FEB74	021		12.51	0.79	-0.32	0.47*	0.46*	Q	08AUG80	010
	13.80	0.18	-0.89			O	21FEB74	021		11.10	0.13				D	21SEP81	010
	13.34	0.08	-0.59			O	13SEP74	021		11.72	0.21	-0.64	0.24*	0.30*	D	23SEP81	010
	11.92	-0.17	-0.79			O	17MAR75	021									
										11.98	0.31	-0.66	0.29*	0.34*	D	24SEP81	010
	11.73	-0.05	-0.61			M	21SEP76	021		12.18	0.34	-0.73	0.37*	0.33*	D	25SEP81	010
	11.79	-0.18	-0.78			M	22SEP76	021		12.46	0.52	-0.53	0.38*	0.46*	D	26SEP81	010
	12.34	-0.02	-0.61			D	28SEP76	021		12.64	0.67	-0.53	0.50*	0.51*	D	26SEP81	010
	12.65	-0.22	-0.79			D	30SEP76	021									
	15.10	-0.25	-1.05			Q	19OCT76	021	TZ Per	13.82	0.32	-0.48			O	14JAN64	023
	13.47	0.06	-0.63			O	06NOV76	021		13.62	0.28	-0.58			O	08OCT64	023
	14.68	0.08	-1.14			Q	04AUG78	005		14.80	0.58	-0.69			Q	20OCT65	023
	14.85	0.07	-1.07			Q	07AUG78	005		14.89	0.73	-0.85			Q	21OCT65	023
	14.84	0.01	-1.10			Q	08AUG78	005		14.31	0.62	-0.73			Q	22OCT65	023
	14.76	0.02	-1.18			Q	10AUG78	005		13.28	0.25	-0.58	0.33#	0.20#	S	02AUG75	037
										13.07	0.30	-0.68	0.25*	0.35*	S	25JUL79	010
	13.07	0.20	-0.02			D	11SEP79	005		13.34	0.39	-0.60	0.31*	0.30*	S	26JUL79	010
	14.21	0.21	-0.97			D	13SEP79	005		13.37	0.33	-0.53	0.25*	0.29*	S	19NOV79	010
	14.70	0.08	-1.16			Q	14SEP79	005		13.37	0.33	-0.53	0.24*	0.32*	S	22NOV79	010
	14.66	0.07	-1.18			Q	15SEP79	005									
										13.45	0.32	-0.52	0.23*	0.33*	S	23NOV79	010
	14.96	0.08	-1.30	0.29*	-0.13*	Q	23SEP81	010		13.50	0.39	-0.52	0.23*	0.35*	S	24NOV79	010
	12.79	0.06	-0.70	0.07*	0.11*	D	28SEP81	010		12.95	0.47	-0.11			S	05SEP81	033
	13.54	0.03	-0.88	0.04*	0.07*	D	29SEP81	010	RT Per	15.21	0.61	-0.83	0.29*	0.89*	Q	19NOV79	010
										15.56	0.53	-0.79	0.34*	0.88*	Q	20NOV79	010
TT Ind	14.06	-0.01	-0.81			Q?	15NOV77	040		13.17	-0.02	0.46			S?	05SEP81	033
	12.82	-0.04	-0.79			S	25SEP79	040	UY Pup	14.06	0.09	-0.78			M	17FEB78	040
	12.91	-0.05	-0.76			S	26SEP79	040		14.23	0.14	-0.76			D	18FEB78	040
	13.00	-0.03	-0.78			S	27SEP79	040	BV Pup	14.84	0.51	-1.01			O	15FEB69	026
TU Ind	15.32	0.22	-0.89			Q	13SEP79	005		13.33	0.10	-0.69			R	01FEB70	040
T Leo	15.49	-0.07	-1.06			Q	10FEB62	025		13.19	0.06	-0.73			M	02FEB70	040
	15.71	0.00	-1.13			Q	19MAY81	033		13.16	0.04	-0.80			H	03FEB70	040
	15.51	0.15	-1.10			Q	28FEB82	032		13.15	0.06	-0.77			H	04FEB70	040
	15.49	0.15	-1.16			Q	01MAR82	032		13.38	-0.03	-0.82			D	05FEB70	040
X Leo	15.74	0.50	-0.96	0.35*	0.49*	Q	22NOV79	010		13.29	0.06	-0.83			D	06FEB70	040
	15.88	0.44	-0.88	0.27*	0.55*	Q	23NOV79	010		13.62	0.08	-0.87			D	08FEB70	040
	12.42	0.06	-0.66	0.04*	0.02*	O	17FEB80	010		13.97	-0.01	-0.87			D	09FEB70	040
	13.27	0.04	-0.85	0.05*	0.09*	D	18FEB80	010		14.18	0.11	-0.92			D	10FEB70	040
	13.04	-0.03	-0.51			R	22MAY81	033		14.50	0.08	-0.81			D	11FEB70	040
TU Leo	14.76	0.34	-0.17			Q		007		14.49	0.23	-0.85			D	13FEB70	040
										14.58	0.32	-0.74			D	14FEB70	040
AY Lyr	13.70	0.15	-0.76			SM	15AUG77	029		14.84	0.26	-0.77			D	16FEB70	040
	15.30	0.15	-0.76			D	17AUG77	029		13.57	0.08	-0.82			D	17FEB72	040
	13.41	-0.04	-0.81			M	29JUL78	029		13.67	0.05	-0.83			D	18FEB72	040
										13.9							

TABLE 1 (CONTINUED)

Name	V	B-V	U-B	V-R	R-I	Sta	Date	Ref.	Name	V	B-V	U-B	V-R	R-I	Sta	Date	Ref.
	15.19	0.17	-0.89			D	23FEB72	040	FQ Sco	12.96	0.17	-0.55			D	01AUG78	040
	13.56	0.07	-0.82			D	05MAR72	040		13.40	0.22	-0.59			D	02AUG78	040
	13.62	0.22	-0.81			D	06MAR72	040		13.76	0.28	-0.60			D	03AUG78	040
	14.11	0.11	-1.01			D	07MAR72	040		16.61	1.19	0.03			Q	31AUG78	040
	14.50	0.05	-0.87			D	08MAR72	040		16.63	0.94	0.1:			Q	20JUN79	040
	14.77	0.26	-0.85			D	09MAR72	040		16.83	1.62	-0.70			Q	14SEP79	005
	15.07	0.41	-0.73			D	10MAR72	040									
	15.12	0.33	-0.77			D	11MAR72	040	V478 Sco	16.27	0.42	-0.67			Q	15SEP79	005
	15.01	0.39	-0.89			D	12MAR72	040									
	15.14	0.37	-0.88			D	13MAR72	040	UZ Ser	16.04	0.51	-0.73			Q	01AUG78	040
										12.81	0.14	-0.57			M	03AUG78	040
	15.48	0.39	-0.69			Q	15MAR72	040		13.20	0.24	-0.68			D	30AUG78	040
	15.9:	0.1:	-0.9:			Q	17MAR72	040		13.74	0.21	-0.63			D	31AUG78	040
	13.80	0.07	-0.82			D	20MAR72	040		15.69	0.14	-0.71			Q	12SEP79	005
	13.86	0.10	-0.84			D	21MAR72	040		13.16	0.20	-0.67	0.15*	0.22*	O	12AUG80	011
	14.06	0.13	-0.90			D	22MAR72	040		15.53	0.29	-0.91	0.13*	0.32*	Q	15AUG80	011
	14.52	-0.10	-0.81			D	23MAR72	040		12.54	0.18	-0.55	0.12*	0.15*	D	23SEP81	010
	13.52	0.06	-0.79			D	09APR72	040		12.64	0.13	-0.57	0.14*	0.16*	D	24SEP81	010
	13.44	0.17	-0.71			D	10APR72	040		12.79	0.20	-0.53	0.07*	0.12*	D	25SEP81	010
	14.03	0.05	-0.90			D	12APR72	040									
	14.69	0.00	-0.90			Q	14APR72	040		12.81	0.18	-0.54	0.15*	0.18*	D	26SEP81	010
										14.23	0.13	-0.70	0.35*	0.51*	D	29SEP81	010
	14.95	0.32	-0.91			Q	16APR72	040		12.73	0.15	-0.60	0.16*	0.21*	M	07AUG82	038
	13.56	0.02	-0.70			R	02MAY72	040		12.84	0.29	-0.53	0.31	0.24	D	08AUG82	038
	13.50	-0.05	-0.88			R	03MAY72	040		12.90	0.26	-0.58	0.30	0.23	D	09AUG82	038
	13.19	0.08	-0.55			M	05MAY72	040		13.41	0.27	-0.64	0.30	0.26	D	10AUG82	038
	13.95	0.19	-0.91			D	10DEC72	040		13.86	0.23	-0.62	0.24	0.18	D	11AUG82	038
	15.26	0.38	-0.89			Q	14DEC72	040		13.82	0.21	-0.59	0.26*	0.21*	D	11AUG82	038
	15.60	0.58	-1.13			Q	18DEC72	040		14.37	0.08	-0.53	0.26	0.27	D	12AUG82	038
	14.78	0.04	-0.18			R?	31DEC73	040		14.53	0.20	-0.65	0.22*	0.26*	D	12AUG82	038
	14.10	0.12	-0.71			R	25APR74	040									
	13.59	0.09	-0.70			R	27APR74	040		15.40	0.34	-0.61	0.04*	0.50*	D	13AUG82	038
										15.94	0.54	-0.83	0.65	0.63	Q	14AUG82	038
	13.50	0.11	-0.82			M?	28APR74	040		16.18	0.52	-0.82	0.63	0.75	Q	15AUG82	038
	13.94	0.16	-0.89			D	30APR74	040		16.18	0.49	-0.97	0.69*	0.51*	Q	15AUG82	038
	14.49	0.16	-0.91			D	01MAY74	040									
	15.17	0.51	-0.81			Q	27APR77	040	KK Tel	19.1:	0.6:	-1.2:			Q	20JUN79	040
	15.13	0.49	-0.88			Q	18FEB78	040	EK TrA	12.90	0.07	-0.72			D	06MAY78	043
BX Pup	14.55	0.10	-0.87			D	10DEC72	040		12.08	-0.03	-0.70			SM	20JUN79	043
	15.41	0.17	-0.95			D	13DEC72	040									
	14.13	0.03	-0.65			O	31DEC72	040	SU Uma	14.18	0.04	-1.11			Q?	14JAN64	023
	15.72	-0.05	-0.75			Q	25APR74	040		14.49	0.54	-0.75			Q	20OCT65	023
	13.80	-0.01	-0.75			S	30MAR77	040		14.48	0.17	-1.25			Q	21OCT65	023
	13.80	-0.01	-0.79			S	31MAR77	040		14.21	-0.04	-1.03			Q?	22OCT65	023
	13.81	0.01	-0.82			S	01APR77	040		14.55	0.23	-1.45	0.36*	0.44*	Q	23NOV79	010
	14.23	0.00	-0.82			D	27APR77	040		14.68	0.10	-1.30	0.35*	0.46*	Q	24NOV79	010
	14.51	-0.03	-0.84			D	28APR77	040		12.15	0.07	-0.85	0.04*	0.04*	M	10FEB80	010
	15.01	0.03	-0.87			D	29APR77	040		12.17	0.07	-0.82	0.05*	0.04*	M	13FEB80	010
										12.75	0.11	-0.95	0.12*	0.12*	D	14FEB80	010
	14.44	0.08	-0.79			O	30MAY77	040		13.34	0.20	-1.00	0.15*	0.16*	D	15FEB80	010
RZ Sge	16.86	0.56	-0.78			Q	13SEP79	005									
	13.32	-0.04	-0.73			SM	03OCT81	003		14.57	0.45	-1.55	0.19*	0.16*	Q	16FEB80	010
WZ Sge	15.3	0.10	-0.90			Q	JUN64?	012		14.16	0.17	-1.27	0.34*	0.31*	Q	17FEB80	010
	14.49	0.00	-1.07			Q	15JUL79	004		14.50	0.23	-1.45	0.39*	0.35*	Q	21FEB80	010
	14.75	0.17	-0.91			Q	17JUL79	004		14.96	0.33	-1.33			Q	23MAY81	033
V735 Sgr	14.81	0.89	0.5:			?	03SEP79	040	SW Uma	16.50	0.41	-1.09			Q	27MAY81	033
	14.83	0.78	0.9:			?	04SEP79	040	BB VEL	14.66	0.53	-0.31			Q	17FEB69	026
V1830 Sgr	12.56	0.01	-0.78			M	26APR75	040		14.12	0.43	-0.38			R?	20FEB69	026
	13.02	-0.02	-0.79			D	27APR75	040	TW Vir	13.08	0.08	-0.77	0.05*	0.08*	D	17FEB80	010
	13.13	0.15	-0.70			D	29MAY77	040		15.48	0.27	-1.20	0.35*	0.48*	Q	21FEB80	010
	13.70	0.23	-0.69			D	30MAY77	040	FY Vul	14.80	0.53	-0.65			Q	12SEP79	005
MM Sco	16.20	1.34	0.18			Q	19JUN79	040	PS74	13.27	-0.02	-0.80	0.07*	0.15*	O	01JUL82	001
	17.2:	0.8:	0.8:			Q	20JUN79	040									
	17.00	1.53	-0.70			Q	15SEP79	005									

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