

VARIABLE STAR NOTES

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Peculiarities, behavior, and activity of some of the more prominent variables* for 1975 are given in the notes below, which are in three parts. Part I summarizes the behavior of the different types of stars except U Geminorum variables. Part II lists the dates and brightness of the outbursts of some prominent U Gem stars in our observing program, and Part III is a list of variables in the Notes in order of constellations.

SS Cygni has been included in both Parts I and II, due to the special interest of amateur and professional astronomers. In the notes, activities stated are for 1975, unless otherwise indicated. AAVSO light curves of six variables which are of interest to our members have also been included. Other light curves will be included in the future issues of Variable Star Notes.

PART I

PECULIARITIES IN AAVSO LIGHT CURVES IN 1975

000451 SS Cas. (M). On April 27, a $9^m.3$ maximum was observed between two faint maxima: $10^m.2$ on December 8, 1974, and $10^m.1$ on September 14, 1975.

001032 S Scl. (M). $7^m.5$ maximum on October 28 followed the brightest recorded maximum, $5^m.5$ of October, 1974.

001726 T And. (M). A faint maximum of $9^m.3$ in late September, followed the $8^m.5$ maximum of December 8, 1974.

001838 R And. (M). A bright maximum of $6^m.3$ in late October, followed another bright maximum of $6^m.9$ in late September, 1974.

002725b DZ And. (RCB). Continues to be at maximum, with observations scattered between $9^m.6$ and $10^m.2$.

003162 TY Cas. (M). This variable, new in our program, continues to have a lengthening of period with maxima observed by a few observers on JD 2,442,745 and 2,442,100. The period before the 1920's was given to be 545 days, and that listed in the 1969 Third edition of the General Catalog of Variable Stars (GCVS) is 618 days.

004132 RW And. (M). A faint maximum, $10^m.2$, was observed in late August. The average magnitude for maximum is 8.7 according to GCVS.

005840 RX And. (Z). Varied between $10^m.8$ and $13^m.9$ until April with intervals ranging from 10 to 15 days between maxima. It was between $11^m.6$ and 14^m until mid-July, stayed between $13^m.2$ and $14^m.3$ until late August and then varied from $10^m.4$ to $14^m.3$ with 7 to 18-day intervals until the end of the year.

010940 U And. (M). Still another fainter maximum of $10^m.8$ in mid-August, followed the $10^m.2$ maximum of August, 1974.

013050 KT Per. (Z). Variations observed between $11^m.6$ and $16^m.1$ with interval of maxima between 20 and 38 days.

020657a TZ Per. (Z). Varied between $12^m.5$ and $14^m.3$ until early April, then the amplitude of variation decreased to about one magnitude and the star varied from $12^m.5$ to $13^m.5$ the rest of the year.

021024 R Ari. (M). An $8^m.0$ maximum at the beginning of February followed by a fainter $9^m.0$ maximum in mid-August.

021143a W And. (M). A bright $7^m.1$ maximum in early November followed the $8^m.5$ maximum of October, 1974.

021403 o Cet. (M). The bright 417th maximum of Mira at $3^m.0$ on March 8, was followed by a long minimum where the variable was fainter than 9^m for about 90 days. Minimum was on October 26 at $9^m.4$.

*Key to variable types in the notes:

I = Irregular, associated with Nebulae; M = Mira Ceti type; N = Nova; NL = Nova-like; NR = Recurrent Nova; QSO = Quasar; RCB = R Coronae Borealis; S Dor = S Doradus; SR = Semiregular; UG = U Geminorum; Z = Z Camelopardalis; Z And = Z Andromedae (Symbiotic).

021558 S Per. (SR). It brightened from 11^m5 to 8^m8 in the second half of 1974 and declined slowly during 1975, reaching 11^m4 on December 31.

030046 V400 Per. (Nova 1974). (N). This nova, which is on the border between the class of moderately fast to slow novae, showed a slow decline from 11^m to 13^m5 with irregular fluctuations until the end of the year. Observers with large aperture telescopes are urged to follow the decline.

032443 GK Per. (Nova 1901). (N). Discovered on February 21, 1901, it was the first bright nova of the century, reaching 0^m0 in two days. After a very fast decline to 4^m and then oscillations with amplitudes 1^m to 1^m5 , steady decline followed; it reached the pre-outburst brightness of 13^m in 11 years. From then to August, 1966, AAVSO records for this nova indicate irregular fluctuations between 12^m5 to 13^m5 with a few rises to 12^m0 . Since 1966, it had five small-scale outbursts. The recent outburst of January, 1975, was the brightest and the most observed of these. On January 20 it started to brighten with a short stillstand at 12^m0 . It reached 10^m5 by mid-February, it was brighter than 12^m0 for 15 days and descended to minimum by mid-March. It stayed at minimum, around 13^m2 for the rest of the year. Figure 1 is an AAVSO light curve of GK Persei from 1966 to July, 1975.

043274 X Cam. (M). A very bright minimum of 11^m9 followed the bright maximum of 7^m6 in mid-April. The following maximum was of average brightness at 8^m1 in early September. The mean maximum and minimum magnitudes are 8.1 and 12.6 , respectively, according to GCVS.

053326 RR Tau. (I). This nebular variable of spectral class A had an active year. It started the year at 10^m8 , by March it was down to 12^m3 . During an interval of about 150 days it varied between 12^m3 and 10^m8 . At the end of its season of visibility it was bright, about 11^m . When observable again, in early August, it was 11^m3 and fading with irregular variations. By mid-October it reached 13^m3 and started to brighten, rising to 10^m8 by mid-November, and staying bright until mid-December. On December 22 it started to fade rapidly, reaching 13^m5 the end of the year.

054319 SU Tau. (RCB). In October, 1974, it was at minimum between 15^m and 15^m4 and it started to rise steeply until the end of the year when it reached 11^m2 and started to decline rapidly in January, 1975. By the end of February it reached 15^m7 and started to brighten once more. By mid-May it was 11^m2 ; when observable again at the end of July, it had reached 9^m7 . It varied between 10^m and 11^m5 until the end of the year.

054705 CN Ori. (Z). Variations ranged between 11^m5 and 14^m5 with intervals of maxima between 10 and 25 days.

061700 V616 Mon. (Nova 1975). (N). Discovered by the Ariel V Sky Survey Satellite on August 3, as a bright x-ray source, it was found also to be a radio and an optical source. AAVSO data indicate a slow decline from 11^m3 on September 5 to about 13^m by the end of the year.

081473 Z Cam. (Z). This variable, the prototype of its kind, was at a stillstand at 11^m7 from November, 1974, until the end of June. In the beginning of July it brightened slightly to 11^m3 and stayed at 11^m5 from July 6 until the end of November. It faded from 11^m5 to 13^m4 by December 27 and rose very rapidly to 10^m4 by December 31.

085518 SY Cnc. (Z). Variations between 10^m7 and 14^m0 , with maxima occurring at intervals of 24 to 30 days.

094735 S Lmi. (M). The faintest maximum since the 10^m2 maximum of March, 1936, was observed on March 8 at 10^m1 . The mean maximum brightness is 8^m6 according to GCVS.

121418 R Crv. (M). A brighter maximum of 7^m5 at the end of February followed the very faint maximum of 8^m7 in April, 1974.

122402 3C-273 Vir. (QSO). Observations scattered between 12^m4 and 13^m0 .

124238 U CVn. (M). This variable, soon to be placed in our

regular observing program, had its faintest maximum since 1969 when AAVSO observations started on it. The observed maximum was at $11^m.2$ in early March, which followed the brighter maximum of $9^m.5$ in early April, 1974.

131546 V CVn. (SR). Two maxima were observed in early January at 7^m and in mid-July at $6^m.8$ for this semiregular that resumed periodicity in 1971. Its variation appears to be consistent with the 191-day period given in the third edition of GCVS.

132262 RR UMa. (M). This variable, soon to be added to our regular observing program, had a very faint maximum of $10^m.1$ at the end of February, which followed the $8^m.6$ maximum of mid-July, 1974.

141954 S Boo. (M). A bright maximum of $8^m.0$ at the end of March followed a ninth magnitude maximum of late June, 1974.

142539 V Boo. (SR). Varying with a 259-day period and with amplitude less than $1^m.5$.

151731 S CrB. (M). A faint $7^m.5$ maximum in late January followed the $6^m.4$ maximum of early February, 1974.

154428a R CrB. (RCB). At maximum, about 6^m , until the beginning of October when it started to fade, reaching $10^m.3$ by November. It fluctuated between $10^m.1$ and $10^m.6$ until late November when it continued to drop to $11^m.4$ and started to brighten again. It reached 9^m by the end of the year. Figure 2.

155526 T CrB. (NR). Observations scattered between $9^m.8$ and $10^m.3$.

160118 R Her. (M). A bright maximum at $8^m.0$ observed at the end of April followed the three $9^m.0$ maxima of June, 1974; August, 1973; and October, 1972.

162319 Y Sco. (M). This long-period variable has been fainter than 12^m since 1972. The variation it shows, between $12^m.3$ and $15^m.0$, is not regular enough to predict maxima and minima. Needs our observers' attention.

164025 AH Her. (Z). Varied between $11^m.0$ and $14^m.7$ with 14-day to 35-day intervals between maxima.

174406 RS Oph. (NR). It was about 11^m at the beginning of the year. Until July, it fluctuated between $10^m.5$ and $11^m.9$, and the rest of the year it had a slow overall rise to about $10^m.5$ with irregular fluctuations between 10^m and $11^m.5$.

180222a VX Sgr. (SR). This star varying with a period of 732 days, faded from 8^m to 12^m during the year.

180445 DQ Her. (Nova 1934). (N). This eclipsing nova had scattered observations between $13^m.8$ and $15^m.0$.

180565 W Dra. (M). Two maxima of decreasing brightness were observed at $9^m.0$ in mid-February, and the faintest maximum recorded by the AAVSO at $11^m.3$ in mid-November.

180531 T Her. (M). A bright $7^m.5$ maximum in mid-March was followed by a fainter maximum, $8^m.7$ in the beginning of September.

182224 SV Her. (M). Faint $10^m.6$ maximum the end of May followed a magnitude brighter maximum of September, 1974.

182502 FH Ser. (nova 1970). (N). A slow decline with scattered observations between $13^m.5$ and $14^m.5$.

182529 V1017 Sgr. (Z And?). This variable, considered to be a recurrent nova for a long time, with eruptions in 1901, ($10^m.8$), 1919, ($7^m.2$), and 1973 ($10^m.2$), has been classified as a possible Z And type variable in the Second Supplement to the GCVS. It was around 14^m during the year.

183423 V348 Sgr. (RCR? SR?). In early May it was $14^m.6$ and started to brighten. By mid-July it reached $11^m.8$ and fluctuated between $11^m.6$ and $12^m.0$ until the end of August and then started to drop. It was $15^m.5$ in the beginning of October when it started to rise steeply, reaching $12^m.0$ by the end of the month and $11^m.2$ by mid-November.

184008 V368 Sct. (Nova 1970). (N). Fainter than $14^m.5$ in early August, it needs better coverage.

184300 V603 Aql. (Nova 1918). (N). Nearly constant at mean magnitude $11^m.4$ with observations scattered between $11^m.0$ and $11^m.6$.

185032 RX Lyr. (M). $12^m.7$ maximum in early July followed a brighter maximum of late October, 1974, at $11^m.6$.

185007 V373 Sct. (Nova 1975). (N). Discovered photographically by P. Wild of the Astronomical Institute of Bern University in Switzerland, on June 15 at photovisual magnitude $7^m.9$. Appearance of its spectrum indicated it to be 2 to 3 magnitudes past maximum on July 9, when it was $9^m.4$. The brightest pre-discovery photograph by D. Wereb of Perkins Observatory showed it to be at $6^m.1$ on May 9. A very blue star of approximately $18^m.5$ at the position of the nova was identified on the Palomar Sky Survey prints by C. Y. Shao of Harvard College Observatory. D. Hoffleit reported that Maria Mitchell Observatory plates, at limiting photographic magnitude of 15, indicated no trace of the nova between 1917 and 1974. This nova declined slowly with short term oscillations, of the order of $0^m.03(V)$ in 10 minutes, as well as long term fluctuations as much as 1^m on the order of days. It was $11^m.8$ in December. Figure 3.

185213 V446 Her. (Nova 1960). (N). Observers with large aperture telescopes are requested to follow this nova, observed at $14^m.7$ by T. Cragg in June.

190529a V Lyr. (M). A $9^m.3$ maximum in early July followed two fainter maxima: June, 1974 ($10^m.7$); June, 1973 ($10^m.2$).

191033 RY Sgr. (RCB). Observations were scattered between $6^m.0$ and $7^m.0$ on this R CrB variable, now at its maximum.

191204 V1301 Aql. (Nova 1975). (N). Also discovered photographically by P. Wild on June 6, 1975 at photovisual magnitude $11^m.5$. Examination of Palomar Sky Survey prints by C. Y. Shao showed no stars brighter than 19^m at the position. It declined with small fluctuations. It was $13^m.5$ by mid-July and continued its decline for the rest of the year. It was $15^m.7$ in November. Figure 3.

193449 R Cyg. (M). The brightest maximum recorded by the AAVSO was observed at $6^m.2$ in early February, following the $7^m.2$ maximum of December, 1973.

194048 RT Cyg. (M). Another pair of maxima, increasing in brightness, on March 22 ($7^m.6$) and September 27, ($6^m.8$) followed the $7^m.8$ and $6^m.9$ pair of maxima of 1974.

194635 CI Cyg. (Z And). This interesting symbiotic star was $11^m.0$ in the beginning of the year. It continued its slow decline until it reached $11^m.6$ in early March, when it started to brighten, rising to $9^m.2$ by mid-June. It stayed at maximum, $9^m.0$, until early August when it declined rapidly. By the end of August it was $11^m.2$. It fluctuated between $11^m.4$ and $11^m.0$ until mid-November when it underwent another outburst. It reached maximum, at $9^m.1$ by mid-December, and continued to be at maximum for the rest of the year.

194632 x Cyg. (M). A bright maximum, $4^m.4$ in late May, followed the $5^m.4$ maximum of early April, 1974.

195377 AB Dra. (Z). Varied between $11^m.7$ and $14^m.5$ with 6 to 20-day intervals between outbursts.

195656 RR Tel. (NL). Scattered observations, $9^m.5$ to $10^m.5$.

200212 SY Aql. (M). An average brightness maximum of $9^m.5$ in late August, followed the $10^m.5$ maximum of August, 1974.

201008 R Del. (M). A faint maximum of $9^m.0$ in early September followed the bright maximum, $7^m.7$, 303 days earlier. The period is given as 284 days in GCVS.

201437a P Cyg. (S Dor). This interesting variable, formerly classified as nova-like, has recently been typed in a newly introduced class: S Doradus, in the Second Supplement of the GCVS. S Dor type variables are highly luminous and are of spectral classes B to F with peculiar emission spectra. P Cyg continues to be well observed, with observations scattered between $4^m.6$ and $5^m.3$.

201520 V Sge. (NL). This unique nova-like eclipsing variable slowly declined from $10^m.5$ to about $12^m.5$ until the beginning of June. It varied between $11^m.8$ and $12^m.8$ until early September when it started to rise slowly with fluctuations. It reached $10^m.4$ in mid-October, W. Campney observed it at $9^m.7$, October 24.1 U.T. (JD 2,442,709.6) and C. Hurless at $9^m.2$ October 24.2 U.T. (JD 2,442,709.7). On November 11.05 U.T. (JD 2,442,727.55) C. Hurless observed another outburst at $8^m.8$. The star fluctuated between $10^m.3$ and $11^m.8$ the rest of the year.

203611 Y Del. (M). A brighter $11^m.2$ maximum was observed in November, following the $12^m.5$ maximum of 1974 of this long-period variable which was fainter than $13^m.5$ between 1971 and 1973.

203718 HR Del. (Nova 1967). (N). Observations scattered between 11^m and $11^m.7$.

204016 T Del. (M). A $9^m.8$ maximum in early August followed the two brighter maxima: June, 1974 ($8^m.8$); September, 1973 ($8^m.7$).

205543 V1057 Cyg. (I). In nebulosity in the region of the North American Nebula, this T-Tauri star was almost constant at mean magnitude 10.6, with observations scattered between $10^m.2$ and 11^m .

210868 T Cep. (M). It had a pronounced, well-observed still-stand between February and April at $7^m.7$ on its ascending branch. Maximum was observed in early June at $5^m.8$.

210847 V1500 Cyg. (Nova 1975). (N). The brightest nova since CP Puppis of 1942, had many independent discoverers in the Northern Hemisphere; however, the earliest discoverer was K. Osada in Japan on August 29.48 U.T. at $3^m.0$. A weak structure of about 21^m (blue) at the position of the nova, on Palomar Sky Survey prints has been reported by C. de Veigt, U. K. Gehlich, and L. Kohoutek of Hamburg Observatory. The unprecedented number of prediscoversy photographs of this nova taken by Z. Alksne and I. Platais, O. Suyarkova of Riga Radioastrophysical Observatory of U.S.S.R., (not included in the light curve of Nova Cygni in Figure 3), P. Garnavich and B. Mayer of AAVSO indicate the rise to maximum to be in two stages: a rise to 13.5 mag until August 28, and a very fast rise of about 10 magnitudes in 24 hours. Photoelectric, spectroscopic and visual AAVSO observations indicate that the nova reached maximum on the evening of August 30-31 at $1^m.9$. It then started to decline very fast, fading two magnitudes in two days. The rate decreased to $0^m.38$ per day for the next 6 days. It continued to decline at a much slower rate, reaching 10^m by the end of the year, Figure 3. Observers are urged to follow the decline.

213244 W Cyg. (SR). It continued to vary between $5^m.8$ and $7^m.2$ until mid-July with a suggestion of maxima early in February ($5^m.9$), and mid-May, ($6^m.2$). The next apparent maximum was in late October at $5^m.7$.

213843 SS Cyg. (UG). Due to special requests for visual ground-based observations from astronomers observing it in soft x-ray, extreme ultraviolet, infra-red and radio regions of the electromagnetic spectrum, a record high of 4,035 observations was recorded by the AAVSO for 1975. This brightest U Gem variable continued to be very active this year, undergoing ten outbursts, like the previous year which was the second most active year in its recorded history. The maxima have been numbered consecutively since discovery in 1896 and have been categorized using Leon Campbell's classification. Six of the ten maxima are of A, three of B, and one of C class. An interesting pattern of two short followed by one longer duration outburst was noticed this year, but this is by no means a general pattern in the life of this variable. During minima, the variable fluctuated between magnitudes 11 and 12 with the exception of an activity with brightness reaching $10^m.6$ between outbursts 576 and 577. The mean interval between outbursts of this year was 36.2 days, which is the second shortest after the 33-day interval of 1960. The mean interval since discovery is 49.60 days. Figure 4 is a 1-day mean light curve of SS Cygni for 1975. The exact dates and magnitudes of maxima have been listed in the second part of these notes, with the rest of the U Gem variables.

215841 BL Lac. (?). This compact extragalactic(?) source had scattered observations between $14^m.7$ and $15^m.6$.

PART II

OUTBURSTS OF U GEMINORUM VARIABLES

DATE OF OUT- BURST JD. 2440000+	Magn.	Comments	DATE OF OUT- BURST JD. 2440000+	Magn.	Comments
<u>012031 TY Psc</u>			<u>063100 CW Mon</u>		
2420	12.4		2417	12.0	
2663	11.9	broad suspected by E. Mayer	<u>064128 IR Gem</u>		
2706	13.8		2446	13.1	
2751	12.0		2457	13.0	
<u>012457 KU Cas</u>			2489	12.5	
2447	13.9	one obs. by R. Annal	2534	11.4	
2472	14.0	one obs. by T. Cragg	2638	11.8	one obs. by C. Scovil
2579	14.0	one obs. by R. Annal	2665	13.0	
2688	13.0	well observed	2677	12.1	
			2697	12.0	
			2708	11.4	
<u>013937 AR And</u>			<u>071628 AW Gem</u>		
2442	13.0		2492	13.0	Observed by E. Mayer
2607	11.2		<u>074922 U Gem</u>		
2637	11.9		2447	9.3	broad; brighter than 10 ^m for 10 days
2653	11.8		2565	9.4	broad; brighter than 10 ^m for 10 days
2677	12.0	broad; brighter than 12 ^m 5 for 7 days.	2708	9.0	
2700	11.8			<u>080362 SU UMa</u>	
2720	12.4		2414	12.2	
2745	12.0		2427	12.0	
2775	12.2		2450	12.0	
<u>020356a UV Per</u>			2459	12.2	
2660	12.2	very narrow; brighter than 13 ^m 0 1 night	2483	11.2	broad; brighter than 12 ^m for 8 days
<u>060547 SS Aur</u>			2516	12.2	
2433	11.2		2531	12.2	
2495	10.6		2550	12.4	
2538	11.0		2567	12.1	
2641	10.6		2662	12.6	
2718	10.8		2674	12.2	
2758	10.9		2686	12.0	
<u>061115 CZ Ori</u>			2713	11.6	
2427	11.9		2723	12.8	
2450	12.2		2727	12.8	
2478	11.7		2738	12.4	
2512	12		2754	11.2	broad; brighter than 12 ^m for 8 days
2542	11.8				
2588	12.3				
2668	11.8				
2692	12.6				
2715	12.1				
2738	12.2				
2758	12.5				
2778	12.5				

DATE OF OUT- BURST JD.			DATE OF OUT- BURST JD.		
2440000+	Magn.	Comments	2440000 +	Magn.	Comments
<u>080428 YZ Cnc</u>			<u>TW Vir</u> continued		
2415	11.6	broad; brighter than 12 ^m 5 for 6 days	2579	12.0	one obs. by N. Taylor of RASNZ, VSS
2447	12.2		2726	11.8	
2463	11.6		2752	13.0	
2477	12.1				
2503	11.8		<u>180514 UZ Ser</u>		
2510	11.5		2511	13.6	
2517	12.1		2542	12.8	
2524	12.0		2571	13.4	one obs. by R. Stanton
2532	11.8				one obs. by R. Stanton
2539	11.6		2581	13.3	
2546	11.8		2598	13.0	
2561	11.6		2628	13.2	
2567	11.4	one obs. by E. Mayer	2653	12.7	
2573	11.8	one obs. by W. Lowder	2680	13.0	
2682	11.8	one obs. by R. Annal	2690	13.0	
2692	12.0		<u>184137 AY Lyr</u>		
2700	12.5		2487	13.2	
2707	12.2		2522	13.0	
2714	11.9		2565	12.2	broad; brighter than 13 ^m 5 for 11 days
2724	10.2	broad; brighter than 12 ^m 5 for 9 days	2596	13.3	
2745	11.8		2621	13.3	
2759	12.3		2641	13.5	one obs. by R. Annal
2776	12.5		2660	13.4	
<u>094512 X Leo</u>			2683	13.0	
2442	12.2		2708	13.1	
2438	12.0		2732	13.2	one obs. by C. Sullivan
2483	12.2	brighter than 13 ^m for 5 days	2738	12.9	
2499	12.0	broad; brighter than 13 ^m for 7 days	<u>184826 CY Lyr</u>		
2520	13.0		2444	13.6	one obs. by R. Annal
2529	12.8		2459	12.8	
2548	12.0		2488	13.2	
2567	12.0		2503	13.1	
2680	12.3	one obs. by R. Annal	2524	13.2	
2695	12.1		2537	13.2	
2713	12.0		2549	13.2	
2744	12.0		2562	12.9	broad; brighter than 13 ^m 5 for 7 days
2758	12.2		2579	13.6	
<u>095968 CH UMa</u>			2584	13.4	single obs. by E. Hayden
2521	10.8		2594	13.3	
<u>114003 TW Vir</u>			2607	13.2	broad; brighter than 13 ^m 5 for 6 days
2463	11.9		2627	13.4	
2508	11.9		2637	13.2	
2545	11.8		2651	13.6	
2560	12.5		2662	13.3	

DATE OF OUT-BURST JD.			DATE OF OUT-BURST JD.		
2440000+	Magn.	Comments	2440000+	Magn.	Comments
<u>CY Lyr</u> continued			<u>SS Cyg</u> continued		
2677	13.2	one obs. by E. Mayer	2564	8.4	brighter than 10 ^m for 7 days
2694	13.3		2588	8.8	brighter than 10 ^m for 6 days
2708	13.4		2617	8.5	brighter than 10 ^m for 14 days
2721	13.5		2667	8.4	brighter than 10 ^m for 6 days
2737	13.0		2696	8.7	brighter than 10 ^m for 7 days
2756	13.6		2731	8.5	brighter than 10 ^m for 14 days
<u>195109 UU Aql</u>			2768	8.7	brighter than 10 ^m for 7 days
2571	11.7				
2628	11.4				
2677	11.7				
2733	11.5				
<u>213843 SS Cyg</u>			<u>220912 RU Peg</u>		
2404	8.8	brighter than 10 ^m for 15 days	2523	10.2	
2437	8.8	brighter than 10 ^m for 7 days	2586	10.0	broad; brighter than 11 ^m 0 for 10 days
2475	8.7	brighter than 10 ^m for 10 days	2643	10.3	
2516	8.3	brighter than 10 ^m for 14 days	2720	9.6	broad; brighter than 11 ^m 0 for 10 days

PART III

LIST OF STARS MENTIONED ABOVE, IN ORDER OF CONSTELLATION

Name	Design.	Name	Design.	Name	Design.
R And	001838	W Cyg	213244	V616 Mon	061700
T And	001726	RT Cyg	194048	RS Oph	174406
U And	010940	SS Cyg	213843	CN Ori	054705
W And	021143a	CI Cyg	194635	CZ Ori	061115
RW And	004132	V1057 Cyg	205543	RU Peg	220912
RX And	005840	V1500 Cyg	210847	S Per	021558
AR And	013937	P Cyg	201437a	TZ Per	020657a
DZ And	002725b	X Cyg	194632	UV Per	020356a
SY Aql	200212	R Del	201008	GK Per	032443
UU Aql	195109	T Del	204016	KT Per	013050
V603 Aql	184300	Y Del	203611	V400 Per	030046
V1301 Aql	191204	HR Del	203718	TY Psc	012031
R Ari	021024	W Dra	180565	V Sge	201520
SS Aur	060547	AB Dra	195377	RY Sgr	191033
S Boo	141954	U Gem	074922	VX Sgr	180222a
V Boo	142539	AW Gem	071628	V348 Sgr	183423
X Cam	043274	IR Gem	064128	V1017 Sgr	182529
Z Cam	081473	R Her	160118	Y Sco	162319
SY Cnc	085518	T Her	180531	S Scl	001032
YZ Cnc	080428	SV Her	182224	V368 Sct	184008
U CVn	124238	V446 Her	185213	V373 Sct	185007
V CVn	131546	AH Her	164025	UZ Ser	180514
SS Cas	000451	DQ Her	180445	FH Ser	182502
TY Cas	003162	BL Lac	215841	RR Tau	053326
KU Cas	012457	X Leo	094512	SU Tau	054319
T Cep	210868	S LMi	094735	RR Tel	195656
o Cet	021403	V Lyr	190529a	RR UMa	132262
R CrB	154428a	RX Lyr	185032	SU UMa	080362
S CrB	151731	AY Lyr	184137	CH UMa	095968
T CrB	155526	CY Lyr	184826	TW Vir	114003
R Crv	121418	CW Mon	063100	3C-273 Vir	122402
R Cyg	193449				

The observations for the stars above have been the contributions of AAVSO members and observers, as well as some of the members of the Albireo Amateur Astronomy Club of Hungary, the Astronomical Society of Southern Africa, the Japanese Astronomical Association, and M. Duruy of the Association Francaise d'Observateurs d'Etoiles Variables. Some observations of SS Cygni have been the contribution of the members of Astronomisk Selskab, courtesy of Ole Klinting, and the Variable Star Section of the Netherlands Association of Astronomy and Meteorology, courtesy of Kapteyn Astronomical Laboratory Report 26. One observation of outburst reported in the AAVSO Circular by N. Taylor of the Variable Star Section of the Royal Astronomical Society of New Zealand has also been included to make the data more complete. Many thanks to all our contributors for their valuable astronomical data.

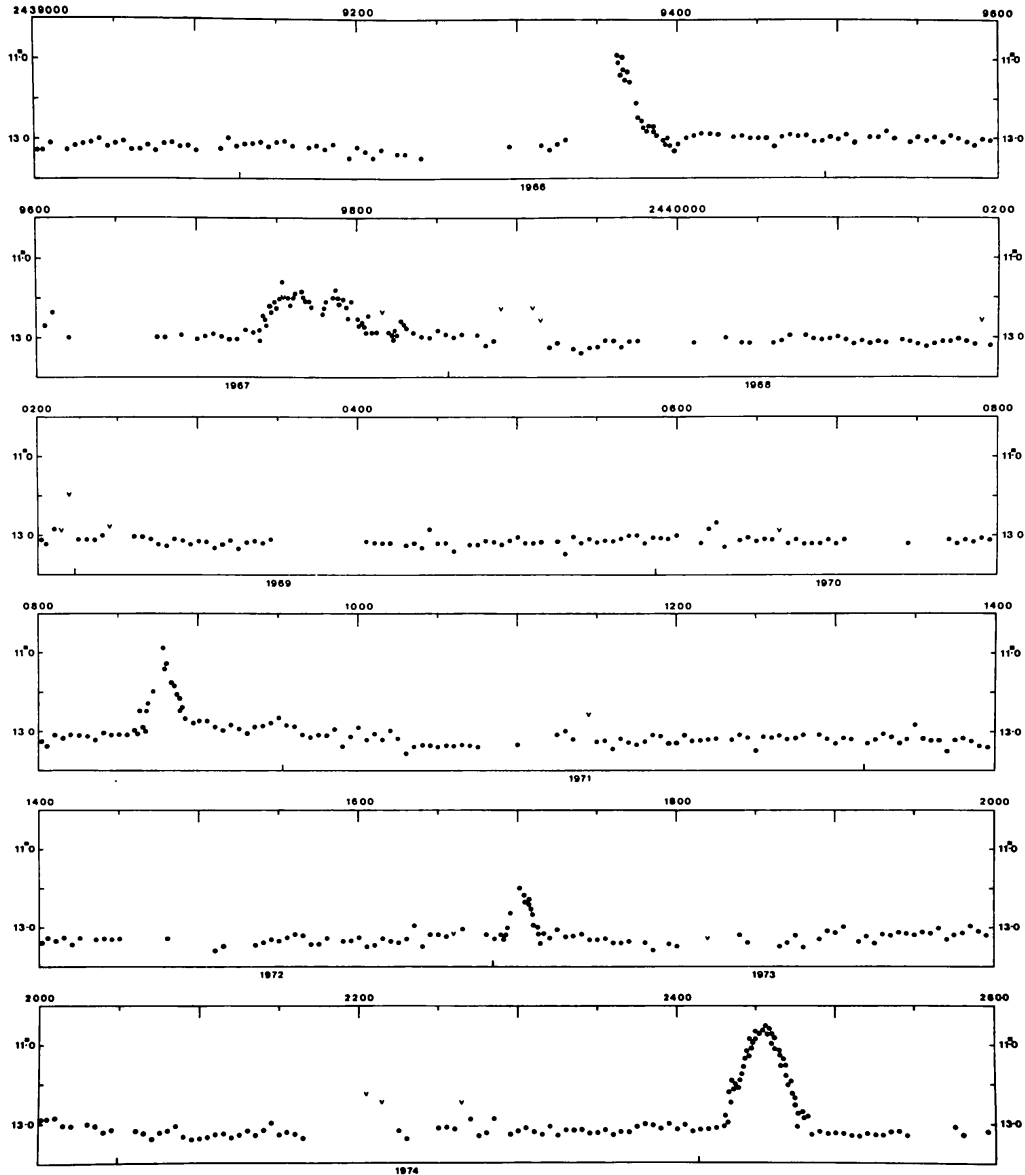


Figure 1. AAVSO light curve of GK Persei from 1966 to July, 1975, plotted from computerized 5-day mean values of observations during minimum and 1-day mean values during small-scale outbursts.

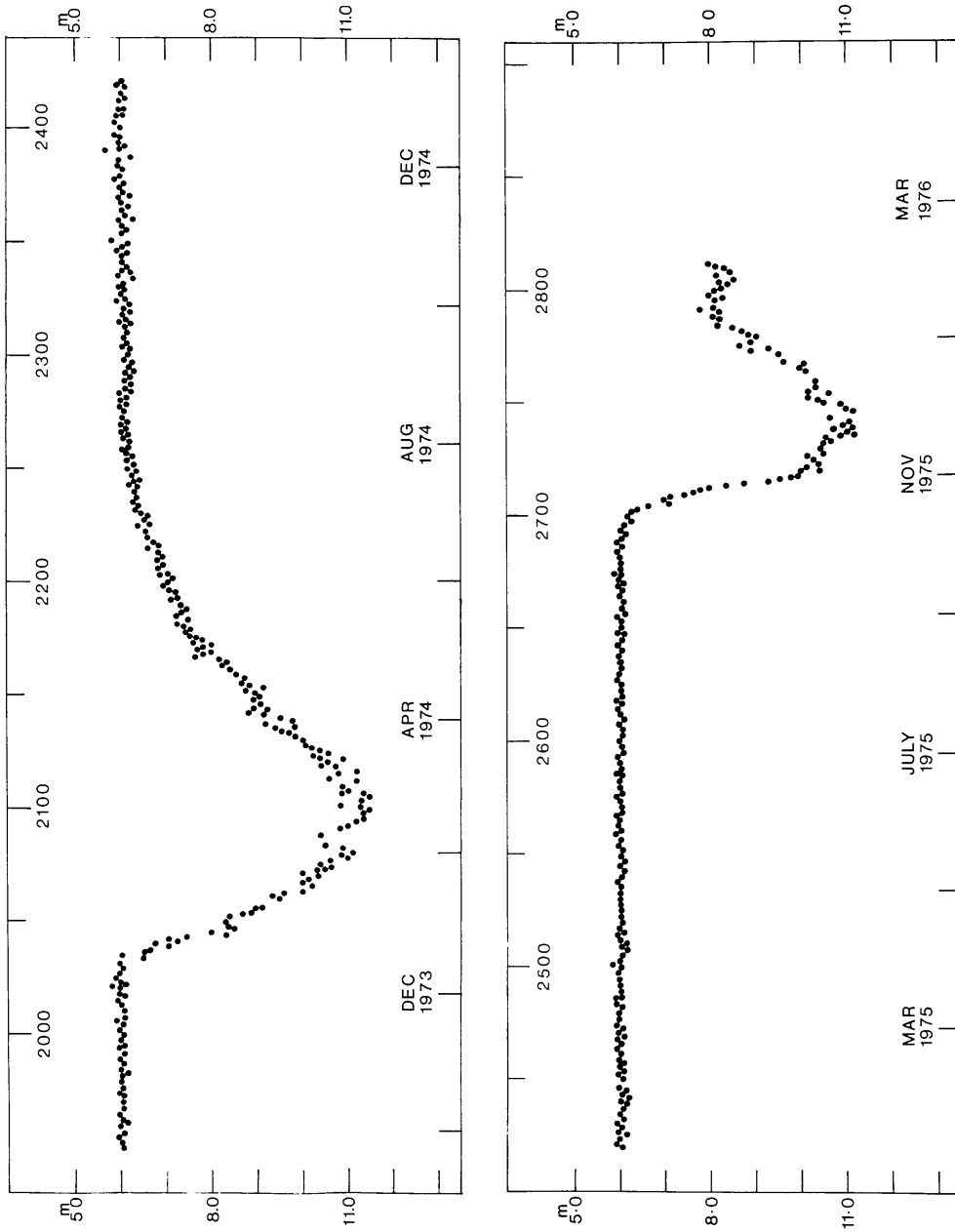


Figure 2. AAVSO light curve of two recent minima of R CrB, plotted from computerized 1-day mean values of visual observations.

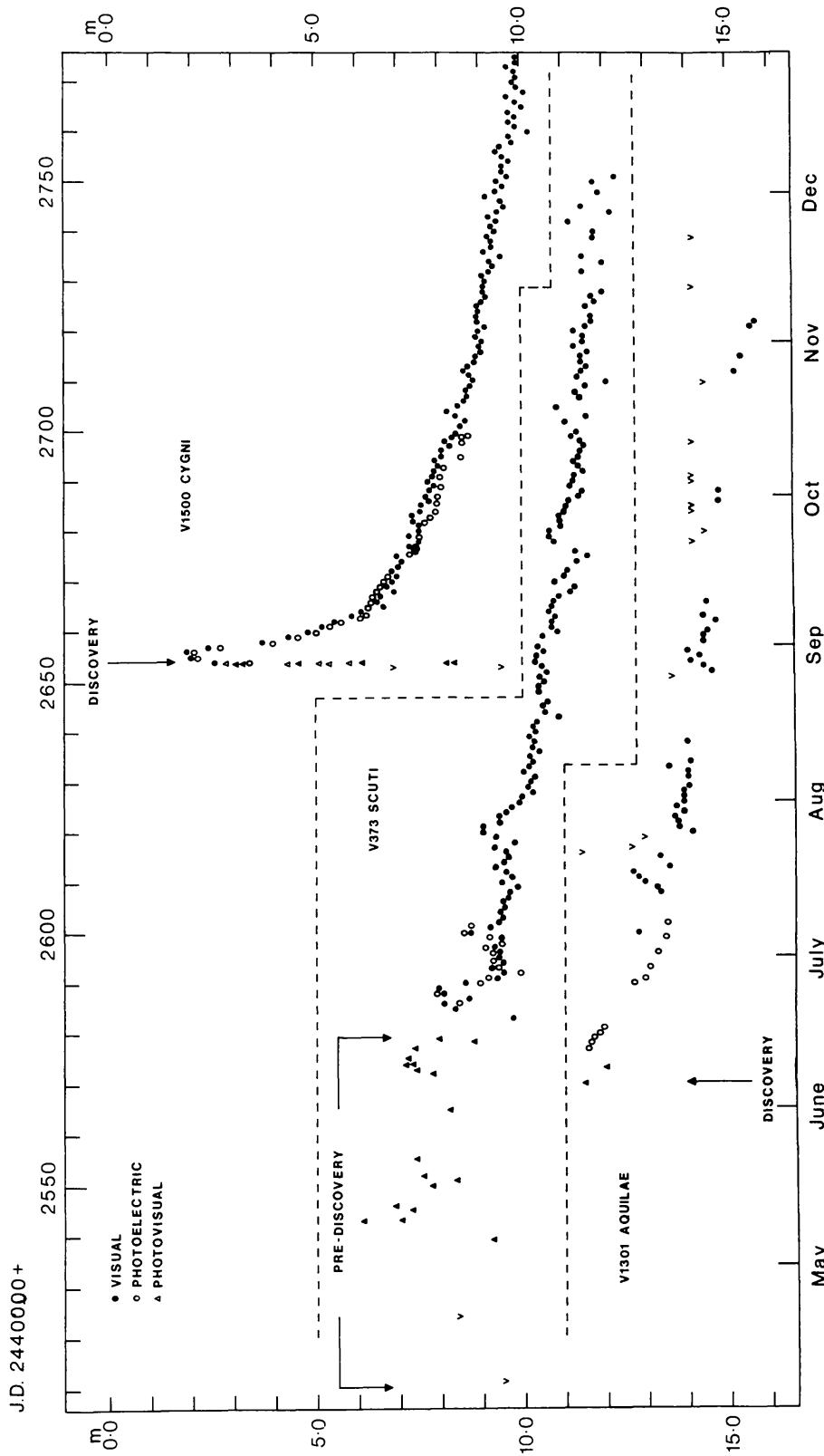


Figure 3. Light curves of V1301 Aquilae, V373 Scuti, and V1500 Cygni plotted from computerized 1-day mean values of visual AAVSO observations (dots), photovisual (open triangles), and photoelectric (V) observations (open circles) reported in the International Astronomical Union Circular, Nos. 2788, 2791, 2792, 2798, 2801, 2802, 2803, 2826, 2830, 2832, 2834, 2857, 2858, and those of H. Landis and H. Louth of AAVSO on V1500 Cygni.

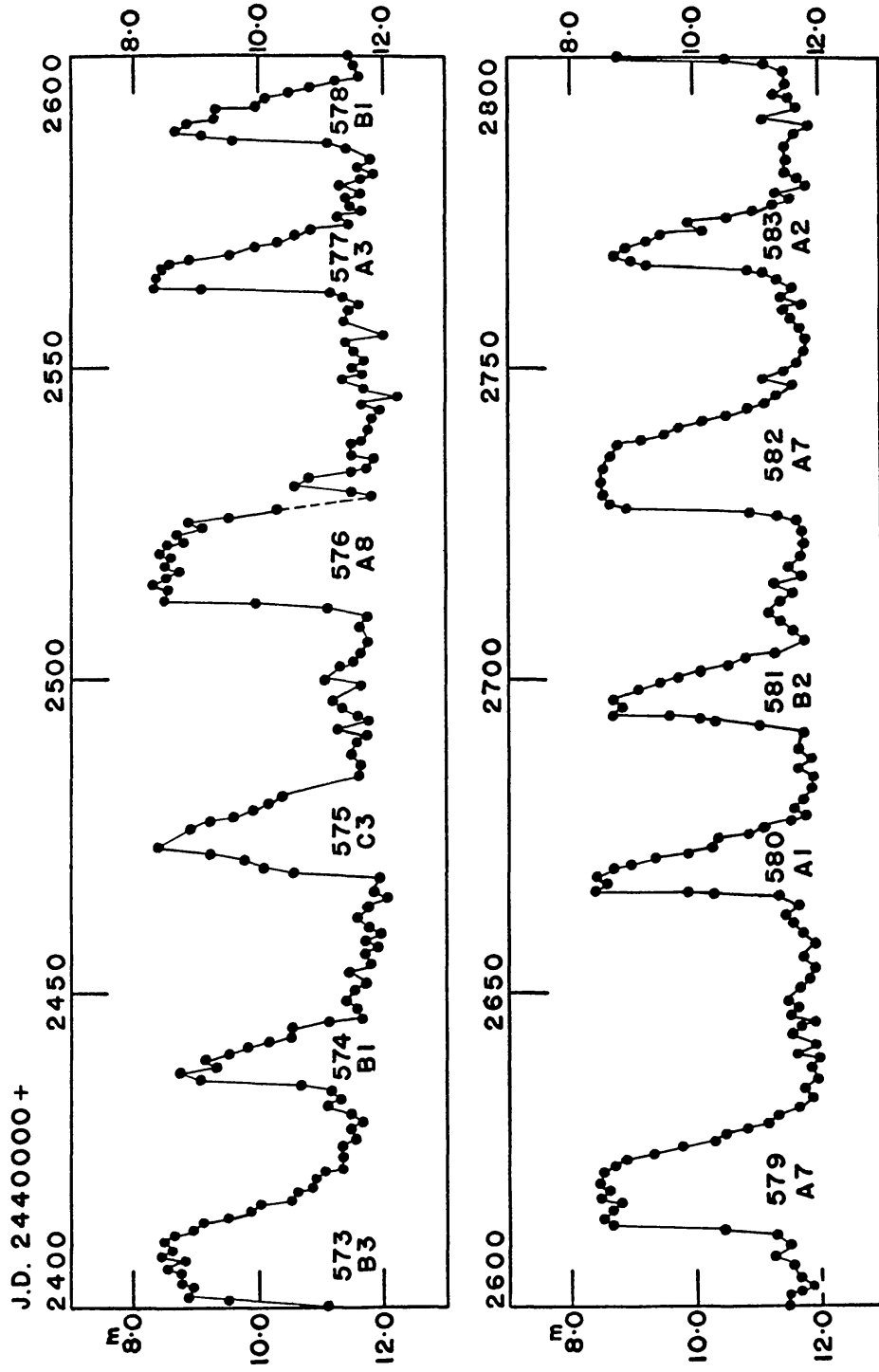


Figure 4. AAVSO light curve of SS Cygni for 1975, plotted from computerized 1-day mean values of visual observations.