BRITISH ASTRONOMICAL ASSOCIATION

VARIABLE STAR SECTION

CIRCULAR No. 42 — 1979 NOVEMBER - 1980 JANUARY

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IMPORTANT NOTICES INSIDE - New charts, new sequences, VSS Meeting, 1979 reports, 1980 reports

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Last SAE Reminder

Albrighton, S.W. Blackett, R.P. Coady, G.A.V. Duff, I. Higgins, L.J. Lamb, R.S. Middleton, R.W. Paterson, R. Pickard, R.D. Smith, H.W.S. Spalding, G.

BRITISH ASTRONOMICAL ASSOCIATION VARIABLE STAR SECTION
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New Charts and Sequences Rodney Lyon has produced new charts for the following stars:

| | | | | |
|---|---|---|---|---|
| RX And | SS Cyg | AH Her | CZ Ori | SU Tau |
| UU Aql | CI Cyg | X Leo | RU Peg | SU UMa |
| SS Aur | AB Dra | AY Lyr | TZ Per | SW UMa |
| Z Cam | U Gem | CN Ori | UV Per | CH UMa |

Details of the star fields have been improved using Palomar Observatory Sky Survey Prints. Most importantly, comparison star designations have been changed for all the above stars; in addition new magnitudes have been assigned in many cases, based on the photoelectric photometry carried out by Jeremy Bailey and the Director. The new sequences take effect from 1980 January 1.

Most active observers will already have received revised charts for the stars which they are known to follow regularly. Any observers of the above stars who have not been contacted by the Chart Curator by the end of January, and others wishing to avail themselves of the new charts, may write to Rodney Lyon. Please note the following points:

1 Dwarf nova observations should not be made henceforth using the old chart series - both comparison star designations and magnitudes have been changed. If you plan to observe any of the above stars, please ensure that you are equipped with the current chart.

2 At the same time, stocks of the new charts are fairly restricted; please do not trouble the Chart Curator for charts if you are unlikely to observe a particular star.

3 Although the spirit which moves observers to provide SAE's to Rodney is appreciated, envelopes are almost invariably the wrong size or shape; so please, no envelopes. A set for any one of the stars listed above (usually 3 sheets) costs 10 p; small orders may be paid for in stamps, larger ones with postal orders (or cheques).

New Reporting Methods We expect to ask observers to submit all their 1980 results on new report forms suited to direct transcription onto computer input media. The forms, which will incorporate all the lessons learned from the Nova Cygni 1978 experiment, are now being finalised, and it is hoped that they may be available in the next two or three months. Meanwhile...

1979 Reports This Circular should reach observers by the end of January 1980, by which time submission of 1979 results should be well under way. Please send your main programme results to Doug Saw and binocular group data to Alan Forno as soon as possible, certainly no later than mid-February. Fresh report forms can be obtained from the aforementioned gentlemen.

Every year at this time the importance of prompt submission of results on properly filled-in standard report forms is emphasised. If anyone has any difficulty in correctly completing standard report forms (and there can be no excuse for not using the readily available standard form), then any of the Section officers will be pleased to help. (Notes are given in VSS Circular 33 pp 1 - 4 and in Circular 38 p 9. The latter is recommended for the tables of single and double decimal divisions of the day.)

Copies of these back numbers may be obtained from Storm Dunlop.) If any doubts remain then it is far better to leave the offending column blank than to fill it in with incorrect numbers. May we remind observers that Julian Days start at noon Universal Time, so that the JD does not change at midnight (= JD ... ·5), and that legibility is as important as accuracy!

1979 Julian Dates

The following JD's are for day zero of each month. Thus, to find the Julian Date for a given night, simply add the date to the tabulated JD; e.g. 1979 Jan 10, $20^h$ UT = Jan 10, $8^h$ GMAT = JD 2 443 884.333 & 1979 Mar 17, $03^h$ UT = Mar 16, $15^h$ GMAT = JD 2 443 949.625. (A table for 1980 is given later in this Circular.)

| | | | | | |
|---|---|---|---|---|---|
| Jan | 2 443 874 | May | .... 994 | Sep | .... 117 |
| Feb | .... 905 | Jun | ...4 025 | Oct | .... 147 |
| Mar | .... 933 | Jly | .... 055 | Nov | .... 178 |
| Apr | .... 964 | Aug | .... 086 | Dec | .... 208 |

Notes on Light-curves 1978

R And On Jan 1, rising at 9.0. Max. (6.9) about Feb 13. Lost late Mar (7.9). Recovered by Munford on May 28 at 9.0. Continued to fall until 14.1 late in Sep. Last positive observation by Lyon on Sep 28.

W And 6.9 on Jan 2; falling to 9.2 mid-March. Recovered by Hollis July 11 at 11.9, falling to min. of 14.0 (McNaught, Oct 7). Rose to 11.0 by end of year.

RW And About 9.7 Jan 1, falling to 11.6 early March. One further positive obs. (still falling) of 14.1 (Saw, Oct 7).

RX And Irregular behaviour until max. Jan 21 (11.2). Further max. Feb 6 (11.3?), Feb 19, Mar 19 (11.6?), Mar 29 (11.5?). Lost early April. Recovered by Munford 28. Max. 29 (10.9). Further max. Jun 17 (10.9), Jly 27 (10.8), Aug 10 (11.0), Aug 26 (10.9), Sep 9 (10.8), Sep 24 (11.0), Oct 9 (11.2), followed by irregular standstill 11.7 to 12.0 until Nov 23, then falling to 12.6 Nov 30, steady until Dec 9. Possible unobserved max. Dec 10, or resumption of standstill (12.0 ± 0.3) until end of year.

DZ And Four obs. (about 10.3) until lost early Feb. Recovered July. Probably 10.0 to 10.2 until end of year, but some evidence of fall from Oct 28 to Nov 11 with min. of 10.4 on Nov 2.

R Aql On Jan 2 7.6 (Stott), falling to min. (11.2) about Apr 17. Rise to 8.8 early June, then slower rise to max. of 6.2 about Aug 22. Fall to 10.8 at end of year.

UU Aql Badly underobserved. Only two max. (both about 12.0 to 12.2) observed on July 22 and September 17, thanks to R. Lyon.

UW Aql Recovered on Apr 14 by Coady. Possible rise from 9.5 to 8.9 throughout year except fall to 9.5 about Sep 25.

RW Aur 11 observations only (6 McNaught, 5 Wheeler) from 10.5 to 11.2.

SS Aur Quite well observed. Good series by Gough and Withers. Observed end of May and end of Aug by Lewis, Lyon and Munford. Max about Jan 17, (10.7, long), Apr 4 (10.8, short), May 24 (10.9, short). Probable unobserved max. in mid-July, then Sep 23 (10.8, short, Nov 14 (10.9, long).

SU Aur Good series by Albrighton and Stott; in addition a.m. observations in Aug by Lewis and Peel. Probably about 9.1 to 9.3 until fall to 9.4 (Nov 25) then rise to 9.0 (Dec 16), fall to 9.5 by Dec 31.

U Boo Thanks to Coady, Gough, Kay and McNaught for a.m. obs. in Jan, Nov and Dec. Falling from 11.4 early Jan to min of 12.3 about Feb 13. Rise to long flat max. (10.6) early in June. Fall to min. of 12.5 (Sep 16). Rise to max. (10.6) about Dec 7, falling to 10.9 by end of year.

V Boo Thanks for observations in Jan, Nov and Dec to Bailey, Coady, Fraser, Gough, Kiernan, McNaught, Middlemist and Shanklin. Fall from 8.0 early in Jan to 9.1 about Feb 10. Irregular between 8.9 and 9.4 until Jly 10, then rise to max. of 7.6 about Aug 27;

V Cam Falling from 11.4 at start of year to 14.2 early in June. Followed through June and July by Lyon and Stott. Slow rise from 14.5 late in Aug to 14.0 by Dec 6, then rapid rise to 12.7 by end of year.

X Cam Well observed, especially by Coady, Stott, Wheeler and Withers. Rose from 8.9 on Jan 2 to max. of 8.4 about Jan 17; fall to min of 13.1 about Apr 4; rise to max. of 8.6 about Jun 9. The following min. about Aug 18 was rather bright (12.3) as was the next max. (7.5) about Oct 20. Fall to 12.9 on Dec 31.

Z Cam Well observed. At standstill throughout year, ranging from 11.8 in early March to 11.2 in mid-September.

XX Cam Thanks to Taylor for observations from May to July. Irregular between 7.2 and 7.6 throughout year with no obvious trends.

S Cas Thanks to R. Lyon, Munford, Peel and Pickard for obs. from May to July. Negative observations until Jul 28, (14.4), then rising through 12.5 at start of Nov to max. of 10.6 or 10.7 about Dec 14. Fall to about 11.0 at end of year.

T Cas Quite well observed. Thanks to Lewis and Withers for observations from April to June. Rise from 11.6 at start of year to 9.2 on Feb 1; thereafter long slow rise to max. of 7.3 about Aug 10. Fall to 12.1 late in Dec.

UV Cas About 11.0 to 11.1 through Jan, then rise to about 10.7 by early Mar. Thereafter constant at 10.7 ($\pm$ 0.1) except for possible fall to 10.9 late in June.

$\gamma$ Cas Well observed by Albrighton and Middlemist. Possible rise to 2.1 in mid-March, otherwise 2.3 to 2.4 throughout the year.

$\rho$ Cas Well observed by Espey and Middlemist. Observations ranging from 4.2 to 5.3, but probably constant at about 4.8.

$o$ Cet (Mira) Fall from 3.0 at start of year to 5.5 on Mar 12, then lost. Recovered late in Aug at 9.2, then rose to broad max. (approx 4.7) about Nov 24. Fall to 5.2 on Dec 31.

R CrB Thanks for observations in Jan, Nov and Dec to Brelstaff, Gough, MacLeod, McNaught, Munford, Shanklin and Taylor. Slow recovery from 7.5 at start of year to 6.4 at beginning of April. Very slow rise to 6.2 at start of July and 6.1 by mid-August. Thereafter at max. (about 6.1) to end of year.

S CrB Well observed by Stott. Thanks to Brelstaff, Kay and MacLeod for obs. in Jan and Nov. Fall from 7.2 at start of year to min. of 13.0 about Aug. 25. Slow rise to 12.0 on Nov 9,

then rapid rise until lost at 9.3 on Nov 25.

T CrB Thanks to McNaught for observations in Jan, Nov and Dec. Apparently constant at 10.0 ± 0.1 throughout year. Badly under-observed.

V CrB Fall from 10.0 early in Feb to min of 10.7 about May 8. Rise to max. of 7.1 about Sep 18. Fall to 8.7 (thanks to a.m. observations by McNaught) at end of year.

W CrB Very good agreement between all observers. Thanks to Coady, Kay and McNaught for obs. in Jan, Nov and Dec. Fall from 10.0 early in Jan to min. of 14.0 about Apr 16. Rise to max. of 8.3 about July 26. Fall to min. (uncertain, approx. 13.5) about Dec 15 with uncertain rise (one obs.) at end of year.

R Cyg Good series by Stott; also March/April obs. by Coady. Fall from 13.0 at start of year to min. of 14.3 about Mar 22. Rise to max. of 7.7 on Aug 8, then fall to 11.6 at end of year.

S Cyg Well observed by Stott. Falling from 12.7 at start of year to min. approx. 14.9 about Apr 10. Rise to max. of 9.8 about Sep 23. Fall to 14.3 on Dec 16.

V Cyg Rise from 13.3 at start of year to flat max. of 10.7 about May 14. Fall to min. of 13.8 about Nov 20, rising to 13.1 late in Dec.

W Cyg Good series by Albrighton and Middlemist. About 6.8 (with much scatter) at start of year, rising to max. of 6.4 about Mar 26, min. (6.9) June 1, max. (6.1) July 30, min. (7.1) Oct 21, max. (6.2) Dec 9, falling to 6.4 on Dec 31.

SS Cyg Thanks to Coady, Gough, Lewis and Munford for filling the Mar/Apr 'spring gap'. Slow rise from 11.8 on Jan 11 to anomalous max. (8.7) on Jan 30. Short max. (8.6) Mar 3, slow rise from 11.5 on Mar 29 to max. (8.6) Apr 7. Further maxima on May 11 (8.5, short), June 10 (8.5, long), July 26 (8.4, short), Sep 16 (8.3, long), Nov 22 (8.3, short), Dec 29 (8.5 short).

BC Cyg Observations scattered. Probably 10.1 on Jan 2, then 9.8/10.0 from mid-Jan to May 22, then rising to 9.5 by June 9. Oscillations 9.3 to 9.6 until early Oct, then probably constant at 9.7/9.8 to end of year.

BI Cyg Two observations in March and April, thanks to Coady and Gough. Obs. range from 9.0 to 10.0, but probably constant at 9.5 ± 0.1 throughout the year.

CI Cyg Good series by Albrighton, Lewis and Stott. Oscillations 11.3 to 11.6 from Jan 1 until Mar 16, then caught on rise by Stott at 10.9 on Mar 25; continued rise to 9.9/10.0 on Apr 4. About 10.0 until Aug 21, then fall to 10.2 by Sep 17 and 10.3 by end of year.

V1500 Cyg Four positive observations, from 13.2 on Jan 2 (Pickard) to 14.5 on Nov 27 (Shanklin).

χ Cyg Needs more obs. at min. Falling from 8.5 at start of year to 10.6 on Feb 1, then lost. Recovered at 13.1 at end of May, rising to max. (with slight shoulder in mid-Aug) of 4.5 on Sep 28. Fall to 7.8 on Dec 31.

HR Del Good series by Stott. Slight fall from 11.5 to 11.6 through the year.

T Dra Slight rise from 11.3 to ill-defined max. (approx. 10.9) about Mar 1. Fall to min. of 12.9 about July 27, rising by Dec 25.

AB Dra Thanks to Gough and R. Lyon for good series. Maxima as follows: Jan 16 (12.8), about Feb 25 (13.0? AAVSO), Mar 29 (12.6), Apr 24 (12.7), about Jun 3 (falling at 13.0 on Jun 6), Jun 28 (12.5, AAVSO), Jly 24 (12.8), Aug 22 (12.7, AAVSO). Apparently long min. at 13.8, followed by further fall to 14.3 centred on Oct 6, then rise to max. on Oct 16 (12.9, AAVSO). Two further maxima were observed on Nov 24 (12.7) and Dec 25 (12.6).

U Gem Two maxima were observed; the first was seen at 9.9 on Feb 23 and 9.7 on Feb 25, falling to 11.9 by Mar 2. The second, with probable max. of 9.8 about Oct 14 was seen on the fall at 11.1 by Coady.

RU Her Falling during most of year, probably from 11.0 about Feb 21 to min of 13.1 about Jly 30. Rise to near maximum at 10.0 in mid-Dec.

SS Her Thanks to Coady and Stott for early morning observations. Near min. at 12.4 on Mar 1, rising to max. (8.6) on Apr 14, min. (12.3) on Jun 11, max. (8.8) about Aug 3, min. (13.5) on Oct 1, max. (9.2) about Nov 30, fall to 12.4 on Dec 31.

AC Her Thanks to Brelstaff and Taylor for observations in Jan and Mar. Some discordant observations from others later but curve quite well defined from June onwards. Primary min. (8.3) Mar 9?, max. (7.1) Mar 30?, secondary min. (7.6) Apr 16?, max. (7.2) Apr 29, primary min. (8.2) May 19?, max. (7.2) Jun 8, secondary min. (7.7) Jun 23, max. (7.2) July 9, primary min. (8.2) Jly 30, max. (7.1) Aug 20, deep secondary min. (8.1) Sep 8, max. (7.3) Sep 25, primary min. (8.4) Oct 18, max. (7.2) Nov 15, secondary min. (7.9) Nov 25, max. (7.3) Dec 7, near primary min. (8.3) on Dec 30.

R Hya Thanks to Brelstaff, MacLeod and McNaught for early morning observations. A series from Frank Ventura in Malta enabled the light curve to be extended to Jly 21. Rise from 6.8 at start of year to max. of 5.2 about Mar 26, falling to 7.8 on Jly 21. One obs. only at end of year (7.0, Dec 30, McNaught).

SU Lac Rising from 13.9 on Jan 17 to 13.3 on Feb 9 (thanks to Gough), then lost. Recovered rising from 14.2 on Oct 26 to 12.0 on Dec 25 (thanks to Withers).

X Leo Good series by R. Lyon and Munford. Thanks to Coady for obs. in Dec. Max. observed on Jan 9 (12.1), Jan 30 (12.2), Feb 10 (12.3), Feb 27(12.3, long), Apr 2 (12.2), May 4 (12.2), Dec 5 (12.3).

AY Lyr Good series by Gough, R. Lyon and Munford. Max. observed on Jan 12 (13.2), Apr 27 (13.5), Jun 14 (13.4), Jly 9 (13.5), Jly 28 (13.3), Oct 14 (12.5,long), Nov 28 (13.4).

U Mon Thanks to Bailey, Brelstaff, Coady, Hollis and McNaught for a.m. obs. in Sep and Oct. Falling from 7.5 on Jan 4 to min. (7.9) on Jan 17, max. (7.3) Feb 7, min. (7.8) Mar 6, max. (7.2) Mar 30. Lost from Apr 5 until recovered rising at 7.4 on Sep 12. Max. (7.1) Sep 25, min. (7.8) Oct 22, max. (7.1) Nov 14, min. (7.6) Dec 12, rising to 7.1 on Dec 31.

RS Oph Badly underobserved. Scattered observations from May 9 to Oct 23 between 11.3 and 12.2.

U Ori Thanks to Albrighton, Brelstaff, Coady, Lewis, Peel and Stott for a.m. observations. Fall from 8.6 at start of year until lost on Apr 22 at 11.9. Recovered rising at 6.9 on Aug 18, reaching max. of 6.2 about Sep 13. Fall to 9.4 on Dec 31.

CN Ori Thanks to Kay and Coady for Nov/Dec observations. Falling from max. on Jan 1 (12.5). Max. on Jan 14 (12.1), Jan 31 (12.1), followed by standstill about 13.0? Max. Mar 4 (11.9/12.0), lost on Apr 6 at 13.3 when rising to max. Recovered on Nov 6 falling at 13.0. Possible max. about Nov 22 and Dec 5 (both observed on fall only), max of 12.1 on Dec 22.

CZ Ori Max. Jan 2 (12.0), Jan 18 (12.2), Mar 6 (11.9/12.0), Mar 31 (12.3?), Sep 8 (12.1 thanks to Hollis), Dec 5 (12.3, thanks to Coady). Probably max. 12.3 about Dec 27.

V529 Ori 44 observations, all negative.

RU Peg Quite well observed. Max. Jan 10 (10.6), lost on Feb 9 at min. (Gough). Recovered at 12.5 by Munford on May 28. Max. Jly 10 (10.6), then definitely at min. (about 12.6) until max. Oct 18 (9.9); further max. (approx 10.4) about Dec 22.

S Per About 9.5 at start of year, falling to 9.7 by late April, thereafter 9.7/9.8 to end of year.

RS Per Rise from 9.0 on Jan 1 to 8.6 very early in Mar. Steady until late April, then rise to max. of 8.2 about Jun 25. Fall to 9.1 about Sep 1, steady until late Sep, then fall to min. of approx. 9.4 about Nov 12. Rise to 9.1 at end of year.

TZ Per Thanks to R. Lyon and Munford for May/June observations. Max. about Jan 13 (12.4), Feb 25 (12.6), Mar 18 (12.5), Apr 3 (12.5), May 4 (12.4), Jun 5 (12.3), Jly 8 (12.3), Jly 26 (12.6), Aug 11 (12.5), Aug 30 (12.5), Sep 12 (12.5), probably Oct 18/19 (12.6), Nov 3 (12.6), Nov 16 (12.8), Nov 28 (12.6), Dec 16 (12.4).

UV Per Max. Mar 12 (12.3) to Mar 18 (12.6), observed by Gough and R. Lyon; otherwise negative observations.

BU Per Abput 10.0 at start of year, falling to 10.2 by Feb 3. Steady at 10.2/10.3 until mid-Aug, then rise to broad max. 9.9/10.0 about Oct 18. Slow fall to 10.2 at end of year.

GK Per Steady at 13.2 ± 0.1 except for rise to 12.5 on Jun 30 (AAVSO); seen falling on Jly 3 at 12.7 by Stott.

WZ Sge Negative observations to Nov 26 (less than 14.8, Saw). OUTBURST, (max. 8, Nov 30) first seen by McNaught on Dec 4 at 8.5. Falling to 10.6 by Dec 26.

HS Sge Observed only by G. Hurst. Fall from 12.2 on Jan 7 to 13.4 on Jly 26; further observations negative.

N Sgr 1977 One observation 12.2 on May 9 by Hurst.

N Sgr 1978 (= V3876 Sgr) One observation 10.6 on May 9 by Hurst.

R Sct First obs. 6.0 on Mar 30 by Shanklin. Max. approx. 5.4 about May 9, fall to 6.0 by Jun 4, then steady 5.9/6.0 until Jly 26. Fall to min. of 7.3 on Aug 20, rise to max. (5.1) on Sep 23. Fall to min. of 6.0 on Oct 24, rise to last obs. of 5.5 on Dec 4 (Hollis).

R Ser Thanks to Coady and Munford for obs. from Jan to Mar and to McNaught for late Dec obs. Fall from 10.2 on Jan 7 to min. (approx. 13.0) about Apr 3. Rise to max. (6.3) about Aug 22; fall to 10.9 on Dec 31.

N Ser 1978 4 obs. only (via Hurst). Fall from 8.8 on Mar 8 to 13.1 on May 19.

T Tau Thanks to Albrighton and Peel of Aug observations. At start of year, 10.2. Rise to 9.8 by Jan 16, fall to 10.1 on Jan 30, rise to 9.8 by Feb 22, fall to 10.2 by Mar 24. Lost at 10.1 on Apr 11. Recovered at 9.9 on Aug 18. Steady at 9.9/10.0 until Nov 12, then rise to 9.7 by Nov. 25. Fall to 10.0 at end of year.

RV Tau Good series by Coady and Stott. Some scatter at max., perhaps because of absence on nearby comparison stars. Min. Jan 6 (10.0), max. Jan 22 (9.0), min. Feb 12 (10.1), max. Mar 7 (8.9), min. Mar 27 (10.1), max. Apr 12 (8.9), Lost falling at 9.3 on Apr 30. Recovered on Aug 18 falling from 9.3 to min. Aug 26 (10.0), max. Sep 12 (9.0), min. Oct 6 (10.1), max. Oct 21 (9.0), min. Nov 16 (10.2), max. Nov 30 (8.9), min. Dec 25 (10.0), rising at 9.7 on Dec 31. Observers might like to work out the double period.

SU Tau Constant at 9.5/9.6 from Jan 2 until lost on May 1. Thanks to Hollis, Peel and McNaught for Aug/Sep obs. Probably $9.6 \pm 0.1$ to end of year with possible fall to 9.9 centred on Oct 4.

T UMa Thanks to Albrighton, Coady, Lewis and Withers for Jun/Jly observations. Rising from 9.6 on Jan 2 to max. (7.9) about Feb 8. Fall to min. (approx. 13.0) about Jly 12. Rise to max. (7.4) about Oct 26, falling to 9.5 on Dec 31.

SU UMa Thanks to Brundle, Lyon and Munford for obs. in Jun and Jly. Observed maxima as follows: Jan 9 (11.9), Jan 22 (11.8), Feb 4 (12.6), Mar 12 (11.6), Apr 14 (11.7), Aug 10 (12.1), Aug 25 (12.4), Sep 17 (12.3), Sep 27 (12.1), Oct 6 (12.2), Oct 25 (12.3), Nov 6 (12.3), Nov 19 (12.2), Dec 7 (12.1), Dec 21 (12.4).

SW UMa Good series by Gough, Lewis, R. Lyon, McNaught and Munford. No maximum; all observations negative.

CH UMa Good series by Lewis, Lyon and Munford. One maximum, rising on Apr 6 and 7 at 12.5 (identical obs. on two nights by two observers) to max. of 11.1 (from Apr 9 to Apr 16), falling to 13.1 on Apr 21. Positive obs. in Feb/Mar and Nov/Dec at 15.0 by Gough and Lyon.

V Vul Good series throughout year by Coady and Stott. Ill-defined at start of year; probably rising from 9.2 on Jan 2 to 8.7 on Jan 22. Falling from 8.7 on May 9 to secondary min. on May 26 (9.1), max. Jun 12 (8.6), primary min. Jly 11 (9.6), max. Jly 28 (8.6), secondary min. Aug 17 (9.2), max. Aug 30 (8.7), another secondary min.? Sep 20 (9.2), max. Oct 8 (8.6), primary min. Nov 1 (9.5), max. Nov 20 (8.5), secondary min. Dec 8 (9.1), rising to about 8.7 at end of year.

NQ Vul Followed through March and April by Hurst and Lewis. Fall from 12.5 on Jan 7 to about 13.5 on Oct 22.

UV Spectrophotometry of Dwarf Novae Members of the Oxbridge group (Bath, Pringle and Whelan, MNRAS, submitted) have obtained spectrophotometric observations of the dwarf novae BV Cen, EX Hya and VW Hyi in the wavelength range 1250 - 7500 Å using the IUE satellite and AAT telescopes. A long wavelength base is important as the main sequence (?) star may be expected to be the most notable contributor towards the red end of the spectrum, while the accretion disk should dominate at shorter wavelengths.

VW Hyi and EX Hya are objects with short orbital periods, and in such systems the main sequence star makes a negligible contribution.

As expected, the observed spectra closely match theoretical steady accretion disk models. The disk in VW Hyi, observed on the decline from outburst, is at least twice as hot as that in EX Hya, observed in quiescence, and the fraction of total disk luminosity radiated in the visible region for the former system is as small as ~1%.

The spectrum of the long period (14½ hr) system BV Cen is very markedly different, the red star (probably a slightly evolved G9 object) dominating the optical spectrum; the relative contribution of the disk is comparatively small.

Mira Stars for Binocular Observers Observers attracted to LPVs (see VSSC 41, pp 7 & 8) may be interested to know that 'binocular' charts are available for a few of these; i.e. R And, R Aql, *o* Cet (Mira), χ Cyg, R Hya and R Ser. Generally the charts show comparisons to about magnitude 9.5, expect for Mira (to 5.1) and R Hya (to 6.8) so a complete set for each variable would have to be requested (from the Chart Curator) for full coverage to minimum. Particular attention is drawn to R Hya at Dec. -23°, which deserves following, even at this low position. Both its period and amplitude vary strongly; its next predicted maximum is 1980 May 09. (-MDT)

Section Meeting The Section has been invited to hold a Meeting at Lincoln as an adjunct to Lincoln Astronomical Society's 21st Anniversary celebrations. Provisional plans are that this Meeting should be held in early July, probably the 5th and 6th (Saturday and Sunday), at the Riseholme Centre of the Lincolnshire College of Agriculture, just north of Lincoln. Overnight accommodation is available at the College at an all-inclusive charge of about £11. (All-inclusive in this context means all meals - breakfast, mid-morning coffee, lunch, mid-afternoon tea, dinner - single bedroom, nominal residential charge and VAT @ 15%.) Variations such as accommodation and no meals, or meals without accommodation should be available at appropriate cost. Financial arrangements have yet to be settled, but a charge of perhaps £2-3 may be expected for attendance, to help with the cost of hiring facilities, etc.

In view of previous experience with meetings such as that held for the Nova Search Programme, it is felt that the extra time available in a meeting extending from (say) midday Saturday to midday Sunday should prevent some of the problems encountered in squeezing in all of the talks which may be expected. We hope to have both amateur and professional papers of relevance to variable star work, one professional having already indicated a desire to attend. Members are invited to consider whether they have, or will have, any material which may be of interest, and to contact Storm Dunlop if they have any suggestions, or comments.

It would be of the very greatest assistance if any members who think they might like to attend could drop Storm a note, on the understanding that this does not commit them in any way. Even negative comments are of value! Further details will be given as soon as possible.

Julian Date Table for 1980 (for day zero, as on page 2)

| | | | | | |
|---|---|---|---|---|---|
| Jan | 2 444 239 | May | .... 360 | Sep | .... 483 |
| Feb | .... 270 | Jun | .... 391 | Oct | .... 513 |
| Mar | .... 299 | Jly | .... 421 | Nov | .... 544 |
| Apr | .... 330 | Aug | .... 452 | Dec | .... 574 |

Apologies We have to make the usual apologies for the lateness of this Circular (but we hold out hopes for improvement in the content, including the regular appearance of light-curves, etc.) and for an error in Melvyn Taylor's Postcode on Circular 41. Also on VSSC 41, p 3, line 19: for Tony Hollis read Andy Hollis.