

COMMISSIONS 27 AND 42 OF THE IAU  
 INFORMATION BULLETIN ON VARIABLE STARS  
 Number 4383

Konkoly Observatory  
 Budapest  
 9 October 1996  
*HU ISSN 0374 – 0676*

**PHOTOELECTRIC MINIMA OF SELECTED ECLIPSING BINARIES**

(BAV Mitteilungen No. 91)

In this 31th compilation of BAV results, photoelectric observations obtained in the years 1995 and 1996 are presented on 71 variable stars giving 141 minima. All times of minima are heliocentric. The error of margins is tabulated in column ‘±’. The values in column ‘O–C’ are determined without incorporation of nonlinear terms. The references are given in the section ‘remarks’. All information about photometers and filters are specified in the column ‘Rem’. The observations were made at private observatories and the public observatory of Nürnberg. The photoelectric measurements and all the lightcurves with evaluations can be obtained from the office of the BAV for inspection.

Table 1. Eclipsing Binaries

| Variable | Min JD 24... | +/-         | Ph    | Obs | O–C       | GCVS      | Rem      |    |
|----------|--------------|-------------|-------|-----|-----------|-----------|----------|----|
| V417     | Aql          | 49921.4385  | L     | KI  | –0.0390 s | BAVR 13)  | 3)       |    |
| V609     | Aql          | 49931.4188  | L     | KI  | –0.0214   | GCVS 85   | 3)       |    |
|          |              | 49978.4151  | L     | MSR | –0.0224   | GCVS 85   | 3)       |    |
| AH       | Aur          | 49739.3193  | .0002 | L   | AG        | +0.0673 s | BAVR 16) | 3) |
| AP       | Aur          | 49722.6186  | L     | MS  | +0.0019   | BAVM 67   | 3)       |    |
|          |              | 50043.4567  | .0007 | LB  | AG        | +0.0008 s | BAVM 67  | 4) |
|          |              | 50043.4595  | .0008 | LV  | AG        | +0.0036 s | BAVM 67  | 4) |
| GX       | Aur          | 49688.4760  | L     | MS  | –0.0113   | BAVM 69   | 3)       |    |
|          |              | 49721.6283  | L     | MS  | –0.0133   | BAVM 69   | 3)       |    |
|          |              | 50043.4541  | L     | MS  | –0.0127 s | BAVM 69   | 3)       |    |
| TY       | Boo          | 50081.6168  | L     | MS  | –0.0049   | BAVM 68   | 3)       |    |
| TZ       | Boo          | 49784.5496  | .0002 | L   | AG        | +0.0040 s | BAVM 68  | 3) |
|          |              | 50150.514 : | .002  | L   | AG        | +0.020    | BAVM 68  | 3) |
| VW       | Boo          | 49786.4458  | L     | MS  | –0.0218   | BAVR 12)  | 3)       |    |
| FF       | Cnc          | 49810.4029  | .0014 | LV  | AG        | –0.0223 s | BAVM 65  | 4) |
|          |              | 49810.4047  | .0014 | LB  | AG        | –0.0205 s | BAVM 65  | 4) |
| V445     | Cas          | 50033.3014  | L     | MS  | +0.0024   | BAVM 69   | 3)       |    |
| WW       | Cep          | 50152.4327  | .0005 | L   | AG        | –0.0011 s | BAVM 71  | 3) |
| SS       | Com          | 50140.4423  | .0002 | L   | AG        | +0.0297   | BAVR 13) | 3) |
| UX       | Com          | 49787.3742  | L     | MS  | MSR       | –0.0218   | BAVM 69  | 3) |
| CC       | Com          | 49839.4038  | L     | KI  | –0.0078   | GCVS 85   | 3)       |    |
| DK       | Cyg          | 49918.4470  | .0003 | LB  | AG        | +0.0176   | BAVR 15) | 4) |
|          |              | 49918.4475  | .0004 | LV  | AG        | +0.0181   | BAVR 15) | 4) |
| GO       | Cyg          | 49647.3328  | .0003 | LB  | AG        | +0.0528   | GCVS 85  | 4) |
|          |              | 49647.3330  | .0003 | LV  | AG        | +0.0530   | GCVS 85  | 4) |

Table 1 (cont.)

| Variable | Min JD 24... | +/-         | Ph    | Obs | O-C | GCVS      | Rem      |    |
|----------|--------------|-------------|-------|-----|-----|-----------|----------|----|
| GO       | Cyg          | 49907.5249  | .0013 | LV  | AG  | +0.0555 s | GCVS 85  | 4) |
|          |              | 49907.5269  | .0013 | LB  | AG  | +0.0575 s | GCVS 85  | 4) |
| V366     | Cyg          | 49646.3819  | .0008 | LV  | AG  | -0.0482   | GCVS 85  | 4) |
|          |              | 49646.3826  | .0005 | LB  | AG  | -0.0475   | GCVS 85  | 4) |
| V382     | Cyg          | 49947.4150  | .0009 | LV  | AG  | +0.0352   | GCVS 85  | 4) |
|          |              | 49947.4164  | .0013 | LB  | AG  | +0.0366   | GCVS 85  | 4) |
| V478     | Cyg          | 49905.4969  | .0020 | LV  | AG  | +0.0208   | GCVS 85  | 4) |
|          |              | 49905.4973  | .0011 | LB  | AG  | +0.0212   | GCVS 85  | 4) |
| V885     | Cyg          | 49906.5094  | .0019 | LV  | AG  | -0.0642   | GCVS 85  | 4) |
|          |              | 49906.5096  | .0010 | LB  | AG  | -0.0640   | GCVS 85  | 4) |
| V909     | Cyg          | 49936.467 : | .002  | LV  | AG  | +0.645 s  | BAVR 11) | 4) |
| V1061    | Cyg          | 49941.4566  | .0004 | LV  | AG  | -0.0159   | GCVS 85  | 4) |
|          |              | 49941.4572  | .0003 | LB  | AG  | -0.0153   | GCVS 85  | 4) |
| V1191    | Cyg          | 49644.2651  | .0002 | L   | AG  | +0.0005 s | GCVS 85  | 3) |
|          |              | 49644.4228  | .0002 | L   | AG  | +0.0016   | GCVS 85  | 3) |
| V2021    | Cyg          | 49632.3637  | .0005 | LB  | AG  |           |          | 4) |
|          |              | 49940.5084  | .0002 | LV  | AG  |           |          | 4) |
|          |              | 49940.5088  | .0002 | LB  | AG  |           |          | 4) |
| TT       | Del          | 49932.3948  |       | L   | KI  | -0.0460   | GCVS 85  | 3) |
| TY       | Del          | 49939.4912  |       | L   | KI  | +0.0426   | GCVS 85  | 3) |
| YY       | Del          | 49947.4493  |       | L   | KI  | +0.0019   | GCVS 85  | 3) |
| EX       | Del          | 49925.4716  | .0004 | L   | AG  | -0.0598   | GCVS 85  | 3) |
|          |              | 49935.4020  |       | L   | KI  | -0.0505   | GCVS 85  | 3) |
| FZ       | Del          | 49944.3929  |       | L   | KI  | -0.0325   | GCVS 85  | 3) |
| GG       | Del          | 49929.4395  |       | L   | KI  | -0.0120   | GCVS 85  | 3) |
| BX       | Dra          | 50147.5838  | .0003 | L   | AG  | +0.0269 s | GCVS 85  | 3) |
| CV       | Dra          | 49860.4446  | .0004 | LV  | AG  | -0.0006   | BAVM 69  | 4) |
|          |              | 49860.4454  | .0005 | LB  | AG  | +0.0002   | BAVM 69  | 4) |
| EF       | Dra          | 49763.6371  | .0011 | LB  | AG  | +0.0020   | BAVM 63  | 4) |
|          |              | 49763.6379  | .0006 | LV  | AG  | +0.0028   | BAVM 63  | 4) |
| UX       | Eri          | 50096.3969  |       | L   | KI  | +0.0831   | GCVS 85  | 3) |
|          |              | 50105.3017  |       | L   | KI  | +0.0823   | GCVS 85  | 3) |
| YY       | Eri          | 50098.3840  |       | L   | KI  | +0.0585   | GCVS 85  | 3) |
|          |              | 50113.3321  |       | L   | KI  | +0.0571 s | GCVS 85  | 3) |
| BL       | Eri          | 50114.2715  |       | L   | KI  |           |          | 3) |
| BV       | Eri          | 49726.192 : | .004  | LV  | AG  | -0.033 s  | GCVS 85  | 4) |
|          |              | 49734.3132  | .0011 | LV  | AG  | -0.0347 s | GCVS 85  | 4) |
|          |              | 49735.3304  | .0026 | LV  | AG  | -0.0329 s | GCVS 85  | 4) |
|          |              | 49749.2882  | .0006 | LV  | AG  | -0.0358   | GCVS 85  | 4) |
| UX       | Her          | 49899.4475  |       | L   | KI  | +0.0263   | GCVS 85  | 3) |
| CT       | Her          | 49877.4356  |       | L   | KI  | -0.0015   | GCVS 85  | 3) |
| HS       | Her          | 49929.4485  | .0012 | LB  | AG  | -0.0149 s | GCVS 85  | 4) |
|          |              | 49929.4507  | .0009 | LV  | AG  | -0.0127 s | GCVS 85  | 4) |
|          |              | 49979.3943  | .0008 | LV  | AG  | -0.0109   | GCVS 85  | 4) |
| PW       | Her          | 49899.6221  | .0007 | LB  | AG  | -0.0070   | BAVM 68  | 4) |
|          |              | 49899.6248  | .0008 | LV  | AG  | -0.0043   | BAVM 68  | 4) |
| AV       | Hya          | 49778.3328  | .0004 | LB  | AG  | -0.0405   | GCVS 85  | 4) |
|          |              | 49778.3340  | .0008 | LV  | AG  | -0.0393   | GCVS 85  | 4) |
|          |              | 49784.4829  | .0004 | LB  | AG  | -0.0410   | GCVS 85  | 4) |
|          |              | 49784.4832  | .0004 | LV  | AG  | -0.0407   | GCVS 85  | 4) |
| FG       | Hya          | 49772.453 : | .004  | LV  | AG  | -0.037 s  | GCVS 85  | 4) |
|          |              | 49772.454 : | .004  | LB  | AG  | -0.036 s  | GCVS 85  | 4) |
| EM       | Lac          | 49935.5264  | .0004 | L   | AG  | +0.0337   | GCVS 85  | 3) |

3  
Table 1. (cont.)

| Variable   | Min JD 24... | +/-         | Ph    | Obs       | O-C     | GCVS      | Rem     |    |
|------------|--------------|-------------|-------|-----------|---------|-----------|---------|----|
| UZ         | Leo          | 49734.5686  |       | L         | MS      | +0.0847 s | GCVS 85 | 3) |
|            |              | 49778.450 : | .002  | L         | AG      | +0.085 s  | GCVS 85 | 3) |
| VZ         | Leo          | 49810.3943  |       | L         | KI      | -0.0335   | GCVS 85 | 3) |
| XY         | Leo          | 49756.3626  | .0009 | LB        | AG      | -0.0449   | GCVS 85 | 4) |
|            |              | 49756.3649  | .0005 | LV        | AG      | -0.0426   | GCVS 85 | 4) |
|            |              | 49778.5232  | .0004 | LV        | AG      | -0.0439   | GCVS 85 | 4) |
|            |              | 49778.5237  | .0003 | LB        | AG      | -0.0434   | GCVS 85 | 4) |
|            |              | 50137.6365  | .0008 | LB        | AG      | -0.0291   | GCVS 85 | 4) |
|            |              | 50137.6372  | .0007 | LV        | AG      | -0.0284   | GCVS 85 | 4) |
|            |              | 49756.4048  | .0006 | LV        | AG      | +0.0163   | GCVS 85 | 4) |
| XZ         | Leo          | 49756.4053  | .0005 | LB        | AG      | +0.0168   | GCVS 85 | 4) |
|            |              | 50137.3277  | .0015 | LB        | AG      | +0.0181   | GCVS 85 | 4) |
|            |              | 50137.5702  | .0022 | LV        | AG      | +0.0167 s | GCVS 85 | 4) |
|            |              | 50137.5715  | .0024 | LB        | AG      | +0.0180 s | GCVS 85 | 4) |
|            |              | 49788.4730  | .0005 | L         | AG      | +0.0016   | GCVS 85 | 3) |
| AG         | Leo          | 49788.4730  | .0005 | L         | AG      | +0.0016   | GCVS 85 | 3) |
| AL         | Leo          | 49688.6231  |       | L         | MS      | +0.0053   | BAVM 53 | 3) |
|            |              | 49778.5311  | .0008 | LV        | AG      | -0.7982 s | BAVM 53 | 4) |
|            |              | 49778.5322  | .0017 | LB        | AG      | -0.7971 s | BAVM 53 | 4) |
|            |              | 50137.3612  | .0008 | LB        | AG      | +0.0023 s | BAVM 53 | 4) |
| 50137.3639 | .0020        | LV          | AG    | +0.0050 s | BAVM 53 | 4)        |         |    |
| AP         | Leo          | 49832.3942  |       | L         | KI      | -0.0230   | GCVS 85 | 3) |
| RT         | LMi          | 49786.3694  |       | L         | MS      | +0.0010   | GCVS 85 | 3) |
|            |              | 49788.4303  |       | L         | MS      | -0.0001 s | GCVS 85 | 3) |
|            |              | 49796.3028  |       | L         | MS      | -0.0009 s | GCVS 85 | 3) |
|            |              | 50080.6786  |       | L         | MS      | -0.0004   | GCVS 85 | 3) |
| V404       | Lyr          | 49787.5943  |       | L         | MS      | -0.0657 s | GCVS 85 | 3) |
|            |              | 49799.6564  |       | L         | MS      | -0.0642   | GCVS 85 | 3) |
|            |              | 49857.3968  |       | L         | MS      | -0.0685   | GCVS 85 | 3) |
|            |              | 49865.4441  |       | L         | MS      | -0.0616   | GCVS 85 | 3) |
| V406       | Lyr          | 49787.5855  | .0002 | L         | AG      | -0.0018   | BAVM 72 | 3) |
| AQ         | Mon          | 50144.2699  |       | L         | KI      | -0.0471   | GCVS 85 | 3) |
| NS         | Mon          | 49739.2755  | .0009 | LB        | AG      | +0.0001 s | BAVM 76 | 4) |
|            |              | 49739.2768  | .0008 | LV        | AG      | +0.0014 s | BAVM 76 | 4) |
|            |              | 50146.3531  |       | L         | KI      | +0.0038 s | BAVM 76 | 3) |
| V532       | Mon          | 50043.5729  |       | L         | MS      | +0.0906   | GCVS 85 | 3) |
|            |              | 50068.5549  |       | L         | MS      | +0.0890 s | GCVS 85 | 3) |
|            |              | 50079.5289  |       | L         | MS      | +0.0888   | GCVS 85 | 3) |
| BP         | Per          | 49645.3909  | .0004 | L         | AG      | -0.0123 s | GCVS 87 | 3) |
|            |              | 50113.4070  | .0002 | L         | AG      | -0.0094   | GCVS 87 | 3) |
| IM         | Per          | 49679.3692  |       | L         | MS      | +0.0582   | GCVS 87 | 3) |
|            |              | 49688.3858  |       | L         | MS      | +0.0579   | GCVS 87 | 3) |
|            |              | 50087.3845  | .0003 | L         | AG      | +0.0597   | GCVS 87 | 3) |
| V450       | Per          | 49658.6466  |       | L         | MS      | +0.0218   | GCVS 87 | 3) |
| V482       | Per          | 49761.3037  | .0021 | LV        | AG      | +0.0175   | BAVM 68 | 4) |
|            |              | 49761.3048  | .0011 | LB        | AG      | +0.0186   | BAVM 68 | 4) |
|            |              | 50047.5745  |       | L         | MS      | +0.0302   | BAVM 68 | 3) |
|            |              | 50079.3873  |       | L         | MS      | +0.0365   | BAVM 68 | 3) |
| VZ         | Psc          | 50042.3178  |       | L         | KI      | +0.0110 s | GCVS 87 | 3) |
| CU         | Sge          | 49918.4824  |       | L         | KI      | +0.0170   | GCVS 87 | 3) |
| CW         | Sge          | 49924.4898  | .0008 | LB        | AG      | -0.0935   | GCVS 87 | 4) |
|            |              | 49924.4902  | .0015 | LV        | AG      | -0.0931   | GCVS 87 | 4) |
|            |              | 49925.4754  | .0011 | LB        | AG      | -0.0984 s | GCVS 87 | 4) |
|            |              | 49925.4774  | .0008 | LV        | AG      | -0.0964 s | GCVS 87 | 4) |

4  
Table 1 (cont.)

| Variable |     | Min JD 24... | +/-   | Ph | Obs | O-C     | GCVS       | Rem |
|----------|-----|--------------|-------|----|-----|---------|------------|-----|
| RS       | Sct | 49924.4408   |       | L  | KI  | +0.0016 | GCVS 87    | 3)  |
| CC       | Ser | 49870.4733   |       | L  | KI  | +0.1104 | GCVS 87    | 3)  |
| GR       | Tau | 49734.3334   | .0004 | L  | AG  | -0.0127 | BAVR 15)   | 3)  |
|          |     | 49760.344    | .003  | LV | AG  | -0.008  | s BAVR 15) | 4)  |
|          |     | 49760.349    | .003  | LB | AG  | -0.003  | s BAVR 15) | 4)  |
| UY       | UMa | 49776.541    | .001  | L  | AG  | +0.055  | s GCVS 87  | 3)  |
|          |     | 50113.6407   | .0002 | L  | AG  | +0.0561 | GCVS 87    | 3)  |
| AX       | Vir | 49857.3913   |       | L  | KI  | +0.0061 | BAVR 11)   | 3)  |
| AZ       | Vir | 49840.4102   |       | L  | KI  | -0.0137 | GCVS 87    | 3)  |
| BK       | Vul | 49905.4633   |       | L  | MS  | +0.1073 | GCVS 87    | 3)  |

R e m a r k s :

|    |              |             |     |              |            |
|----|--------------|-------------|-----|--------------|------------|
| AG | Agerer, F.   | Zweikirchen | MS  | Moschner, W. | Lennestadt |
| KI | Kleikamp, W. | Marl        | MSR | Moschner, J. | Lennestadt |

- : = uncertain
- s = secondary minimum
- L = photoelectric observation - without filter
- LB = as above - filter: B
- LV = as above - filter: V
- 3) = photometer CCD 375x242 uncoated - without filter
- 4) = photometer EMI 9781A - filter: V = GG495,1mm / B = BG12,1mm+GG385,2mm
- GCVS nn = Gen. Cat. of Variable Stars, 4th ed., 1985/87
- BAVM nn = BAV Mitteilungen No. nn
- BAVM 53 = BAV Mitteilungen No. 53 = IBVS No. 3401
- BAVM 63 = BAV Mitteilungen No. 63 = IBVS No. 3811
- BAVM 65 = BAV Mitteilungen No. 65 = IBVS No. 3859
- BAVM 67 = BAV Mitteilungen No. 67 = IBVS No. 3942
- BAVM 71 = BAV Mitteilungen No. 71 = IBVS No. 4131
- BAVM 72 = BAV Mitteilungen No. 72 = IBVS No. 4132
- BAVM 76 = BAV Mitteilungen No. 76 = IBVS No. 4143
- BAVR 11) = BAV Rundbrief 32, 36 ff
- BAVR 12) = BAV Rundbrief 32,122 ff
- BAVR 13) = BAV Rundbrief 33,152 ff
- BAVR 15) = BAV Rundbrief 35, 1 ff
- BAVR 16) = BAV Rundbrief 35, 41 ff

Franz AGERER  
Joachim HÜBSCHER  
Bundesdeutsche Arbeitsgemeinschaft  
für Veränderliche Sterne e.V. (BAV)  
Munsterdamm 90, D-12169 Berlin  
Germany