

## Recent Minima of 144 Eclipsing Binary Stars

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**Abstract** This paper continues the publication of times of minima for eclipsing binary stars from observations reported to the AAVSO Eclipsing Binary Section. Times of minima from observations made from March 2010 through September 2010, along with a few unpublished times of minima from older data, are presented.

### 1. Recent Observations

The accompanying list contains times of minima calculated from recent CCD observations made by participants in the AAVSO's eclipsing binary program. This list will be web-archived and made available through the AAVSO ftp site at <ftp://ftp.aavso.org/public/datasets/gsam2j382.txt>. This list, along with eclipsing binary data from earlier AAVSO publications, is also included in the Lichtenknecker database administrated by the Bundesdeutsche Arbeitsgemeinschaft für Veränderliche Sterne e.V. (BAV) at: <http://www.bav-astro.de/LkDB/index.php?lang=en>. These observations were reduced by the observers or the writer using the method of Kwee and Van Woerden (1956). The standard error is included when available.

The linear elements in the *General Catalogue of Variable Stars* (GCVS, Kholopov *et al.* 1985) were used to compute the O–C values for most stars. For a few exceptions where the GCVS elements are missing or are in significant error, light elements from another source are used: CW Cas (Samolyk 1992a), DV Cep (Frank and Lichtenknecker 1987), Z Dra (Danielkiewicz-Krośniak and Kurpińska-Winiarska 1996), DF Hya (Samolyk 1992b), DK Hya (Samolyk 1990), GU Ori (Samolyk 1985). O–C values listed in this paper can be directly compared with values published in recent numbers of the AAVSO *Observed Minima Timings of Eclipsing Binaries* series.

### References

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Table 1. Recent times of minima of stars in the AAVSO eclipsing binary program.

| <i>Star</i> | <i>HJD(min)</i><br>2400000+ | <i>Cycle</i> | <i>O-C</i><br>( <i>day</i> ) | <i>Observer</i> | <i>Standard</i><br><i>Error (day)</i> |
|-------------|-----------------------------|--------------|------------------------------|-----------------|---------------------------------------|
| UU And      | 55380.8209                  | 9238         | 0.0785                       | G. Samolyk      | 0.0002                                |
| UU And      | 55435.8137                  | 9275         | 0.0783                       | K. Menzies      | 0.0001                                |
| WZ And      | 55438.7177                  | 20939        | 0.0532                       | K. Menzies      | 0.0001                                |
| WZ And      | 55454.7183                  | 20962        | 0.0537                       | K. Menzies      | 0.0001                                |
| AB And      | 55405.7635                  | 58140        | -0.0254                      | K. Menzies      | 0.0001                                |
| AB And      | 55443.4323                  | 58253.5      | -0.0263                      | L. Corp         | 0.0002                                |
| AB And      | 55443.5987                  | 58254        | -0.0259                      | L. Corp         | 0.0002                                |
| AB And      | 55458.6991                  | 58299.5      | -0.0266                      | K. Menzies      | 0.0001                                |
| AB And      | 55459.3632                  | 58301.5      | -0.0263                      | L. Corp         | 0.0004                                |
| AD And      | 55407.7519                  | 16635        | -0.0668                      | K. Menzies      | 0.0003                                |
| CX Aqr      | 55442.7177                  | 34154        | 0.0100                       | G. Samolyk      | 0.0001                                |
| OO Aql      | 55385.4336                  | 33095        | 0.0467                       | L. Corp         | 0.0006                                |
| OO Aql      | 55397.5977                  | 33119        | 0.0478                       | L. Corp         | 0.0001                                |
| V342 Aql    | 55438.6670                  | 4754         | -0.1670                      | G. Samolyk      | 0.0003                                |
| V346 Aql    | 55381.7051                  | 12169        | -0.0102                      | G. Samolyk      | 0.0001                                |
| RY Aur      | 55260.5973                  | 6227         | 0.0245                       | G. Samolyk      | 0.0001                                |
| WW Aur      | 55261.6609                  | 8838         | 0.0017                       | G. Samolyk      | 0.0001                                |
| AP Aur      | 55282.6051                  | 22549.5      | 1.2839                       | G. Samolyk      | 0.0002                                |
| AP Aur      | 55301.6778                  | 22583        | 1.2846                       | G. Samolyk      | 0.0003                                |
| AR Aur      | 55271.6155                  | 4080         | -0.1233                      | G. Samolyk      | 0.0003                                |
| CL Aur      | 55277.6120                  | 17929        | 0.1389                       | G. Samolyk      | 0.0002                                |
| EP Aur      | 55277.6534                  | 49015        | 0.0143                       | G. Samolyk      | 0.0002                                |
| SS Boo      | 55345.7302                  | 4555         | 6.0904                       | G. Samolyk      | 0.0009                                |
| TU Boo      | 55259.8104                  | 68438        | -0.1336                      | G. Samolyk      | 0.0001                                |
| TU Boo      | 55279.7547                  | 68499.5      | -0.1330                      | G. Samolyk      | 0.0001                                |
| TU Boo      | 55342.3398                  | 68692.5      | -0.1352                      | Y. Ogmen        | 0.0001                                |
| TY Boo      | 55296.8132                  | 65636        | 0.0818                       | G. Samolyk      | 0.0002                                |
| TY Boo      | 55309.6599                  | 65676.5      | 0.0840                       | G. Samolyk      | 0.0002                                |
| TY Boo      | 55315.6860                  | 65695.5      | 0.0843                       | R. Poklar       | 0.0003                                |
| TZ Boo      | 55261.8482                  | 52594        | 0.0682                       | K. Menzies      | 0.0004                                |
| TZ Boo      | 55301.6695                  | 52728        | 0.0698                       | G. Samolyk      | 0.0001                                |
| TZ Boo      | 55317.7164                  | 52782        | 0.0699                       | R. Poklar       | 0.0002                                |
| TZ Boo      | 55322.6172                  | 52798.5      | 0.0675                       | G. Samolyk      | 0.0005                                |
| VW Boo      | 55301.6839                  | 70484        | -0.1785                      | G. Samolyk      | 0.0003                                |

*Table continued on following pages*

Table 1. Recent times of minima of stars in the AAVSO eclipsing binary program, cont.

| <i>Star</i> | <i>HJD(min)</i><br><i>2400000+</i> | <i>Cycle</i> | <i>O-C</i><br><i>(day)</i> | <i>Observer</i> | <i>Standard</i><br><i>Error (day)</i> |
|-------------|------------------------------------|--------------|----------------------------|-----------------|---------------------------------------|
| ZZ Boo      | 55305.7841                         | 3353.5       | 0.0514                     | G. Samolyk      | 0.0005                                |
| ZZ Boo      | 55345.7326                         | 3361.5       | 0.0659                     | G. Samolyk      | 0.0007                                |
| AD Boo      | 55273.7333                         | 13379        | 0.0290                     | K. Menzies      | 0.0001                                |
| AD Boo      | 55301.6622                         | 13406        | 0.0290                     | G. Samolyk      | 0.0003                                |
| Y Cam       | 55275.7513                         | 3725         | 0.3728                     | R. Sabo         | 0.0003                                |
| SV Cam      | 55259.6769                         | 21355        | 0.0529                     | G. Samolyk      | 0.0002                                |
| EH Cnc      | 52299.6094                         | -480         | -0.0061                    | S. Dvorak       | 0.0002                                |
| EH Cnc      | 52324.6922                         | -420         | -0.0054                    | S. Dvorak       | 0.0002                                |
| EH Cnc      | 52383.6357                         | -279         | -0.0047                    | S. Dvorak       | 0.0002                                |
| EH Cnc      | 52396.5938                         | -248         | -0.0057                    | S. Dvorak       | 0.0001                                |
| EH Cnc      | 52624.8422                         | 298          | -0.0040                    | S. Dvorak       | 0.0002                                |
| BI CVn      | 50538.688                          | 16070        | -0.0129                    | S. Cook         |                                       |
| BI CVn      | 52408.7297                         | 20938        | -0.0621                    | S. Dvorak       | 0.0002                                |
| BI CVn      | 55336.3077                         | 28559        | -0.1674                    | Y. Ogmen        | 0.0002                                |
| R CMa       | 55262.6374                         | 9660         | 0.0912                     | G. Samolyk      | 0.0002                                |
| UU CMa      | 55259.5743                         | 4921         | -0.1064                    | G. Samolyk      | 0.0002                                |
| AK CMi      | 55270.7122                         | 21504        | -0.0196                    | R. Poklar       | 0.0002                                |
| AK CMi      | 55282.5955                         | 21525        | -0.0202                    | G. Samolyk      | 0.0001                                |
| AM CMi      | 55273.6479                         | 29463.5      | 0.2082                     | G. Samolyk      | 0.0006                                |
| RW Cap      | 55446.6863                         | 3768         | -0.5822                    | G. Samolyk      | 0.0003                                |
| RZ Cas      | 55298.6586                         | 10122        | 0.0622                     | G. Samolyk      | 0.0001                                |
| CW Cas      | 55379.7944                         | 43114.5      | -0.0568                    | G. Samolyk      | 0.0002                                |
| DZ Cas      | 55437.7880                         | 34404        | -0.1786                    | G. Samolyk      | 0.0002                                |
| DZ Cas      | 55445.6368                         | 34414        | -0.1787                    | K. Menzies      | 0.0002                                |
| GT Cas      | 55436.8067                         | 9397         | 0.1935                     | K. Menzies      | 0.0003                                |
| GT Cas      | 55439.7958                         | 9398         | 0.1928                     | K. Menzies      | 0.0003                                |
| GT Cas      | 55448.7651                         | 9401         | 0.1927                     | K. Menzies      | 0.0002                                |
| IR Cas      | 55436.6255                         | 19205        | 0.0084                     | G. Samolyk      | 0.0001                                |
| IS Cas      | 55437.7450                         | 14478        | 0.0655                     | K. Menzies      | 0.0001                                |
| IS Cas      | 55461.6850                         | 14491        | 0.0658                     | K. Menzies      | 0.0001                                |
| OR Cas      | 55436.7186                         | 9012         | -0.0233                    | K. Menzies      | 0.0001                                |
| OX Cas      | 55422.8423                         | 5685.5       | 0.0489                     | K. Menzies      | 0.0010                                |
| PV Cas      | 55440.7044                         | 8691         | -0.0336                    | K. Menzies      | 0.0002                                |
| U Cep       | 55336.6685                         | 4330         | 0.1697                     | G. Samolyk      | 0.0001                                |
| SU Cep      | 55367.7122                         | 32219        | 0.0052                     | G. Samolyk      | 0.0002                                |
| WZ Cep      | 55346.7168                         | 65412.5      | -0.0976                    | G. Samolyk      | 0.0002                                |
| DK Cep      | 55409.6919                         | 22131        | 0.0344                     | K. Menzies      | 0.0001                                |
| DL Cep      | 55346.7256                         | 13125        | 0.0545                     | G. Samolyk      | 0.0003                                |

Table continued on following pages

Table 1. Recent times of minima of stars in the AAVSO eclipsing binary program, cont.

| <i>Star</i> | <i>HJD(min)</i><br><i>2400000+</i> | <i>Cycle</i> | <i>O-C</i><br><i>(day)</i> | <i>Observer</i> | <i>Standard</i><br><i>Error (day)</i> |
|-------------|------------------------------------|--------------|----------------------------|-----------------|---------------------------------------|
| DV Cep      | 55345.6940                         | 7386         | -0.0049                    | G. Samolyk      | 0.0001                                |
| EG Cep      | 55444.7483                         | 23595        | 0.0137                     | N. Simmons      | 0.0001                                |
| EG Cep      | 55445.8368                         | 23597        | 0.0130                     | G. Samolyk      | 0.0001                                |
| GW Cep      | 55442.6137                         | 53501.5      | -0.0506                    | C. F. Rivero    | 0.0004                                |
| GW Cep      | 55442.6140                         | 53501.5      | -0.0503                    | C. F. Rivero    | 0.0003                                |
| GW Cep      | 55443.5698                         | 53504.5      | -0.0510                    | C. F. Rivero    | 0.0005                                |
| GW Cep      | 55443.5702                         | 53504.5      | -0.0506                    | C. F. Rivero    | 0.0002                                |
| RW Com      | 55280.6585                         | 64287        | -0.0137                    | K. Menzies      | 0.0001                                |
| RZ Com      | 55290.6751                         | 60422        | 0.0434                     | R. Poklar       | 0.0001                                |
| RZ Com      | 55310.6469                         | 60481        | 0.0433                     | K. Menzies      | 0.0001                                |
| SS Com      | 55263.7549                         | 73307        | 0.7091                     | G. Samolyk      | 0.0002                                |
| CC Com      | 55279.6445                         | 71350.5      | -0.0149                    | G. Samolyk      | 0.0002                                |
| U CrB       | 55336.7986                         | 11178        | 0.1203                     | G. Samolyk      | 0.0002                                |
| RW CrB      | 55304.6558                         | 20034        | -0.0004                    | G. Samolyk      | 0.0002                                |
| W Crv       | 55296.7558                         | 40324        | 0.0184                     | G. Samolyk      | 0.0001                                |
| W Crv       | 55298.6960                         | 40329        | 0.0182                     | R. Poklar       | 0.0001                                |
| W Crv       | 55304.7114                         | 40344.5      | 0.0184                     | G. Samolyk      | 0.0001                                |
| W Crv       | 55345.6533                         | 40450        | 0.0177                     | N. Simmons      | 0.0001                                |
| RV Crv      | 55303.6924                         | 19102.5      | -0.0748                    | G. Samolyk      | 0.0004                                |
| RV Crv      | 55346.6599                         | 19160        | -0.0743                    | G. Samolyk      | 0.0007                                |
| V Crt       | 55261.8404                         | 19749        | -0.0028                    | C. Hesseltine   | 0.0001                                |
| Y Cyg       | 55379.8023                         | 15327.5      | 0.0921                     | G. Samolyk      | 0.0003                                |
| Y Cyg       | 55424.7483                         | 15342.5      | 0.0931                     | N. Simmons      | 0.0003                                |
| WW Cyg      | 55337.7938                         | 4509         | 0.0874                     | K. Menzies      | 0.0001                                |
| ZZ Cyg      | 55356.7573                         | 16475        | -0.0555                    | K. Menzies      | 0.0001                                |
| BR Cyg      | 55304.8539                         | 10330        | 0.0008                     | G. Samolyk      | 0.0001                                |
| CG Cyg      | 55338.7760                         | 25214        | 0.0647                     | K. Menzies      | 0.0001                                |
| CG Cyg      | 55381.6923                         | 25282        | 0.0634                     | G. Samolyk      | 0.0001                                |
| CG Cyg      | 55436.6029                         | 25369        | 0.0648                     | K. Menzies      | 0.0001                                |
| DK Cyg      | 55408.6297                         | 36986        | 0.0852                     | K. Menzies      | 0.0004                                |
| KR Cyg      | 55379.6589                         | 31087        | 0.0150                     | G. Samolyk      | 0.0001                                |
| V388 Cyg    | 55381.7181                         | 15632        | -0.0887                    | G. Samolyk      | 0.0001                                |
| V401 Cyg    | 55341.7523                         | 19746        | 0.0647                     | K. Menzies      | 0.0002                                |
| V401 Cyg    | 55355.7380                         | 19770        | 0.0651                     | K. Menzies      | 0.0002                                |
| V401 Cyg    | 55404.6871                         | 19854        | 0.0655                     | K. Menzies      | 0.0001                                |
| V401 Cyg    | 55414.5942                         | 19871        | 0.0663                     | K. Menzies      | 0.0004                                |
| V401 Cyg    | 55439.6528                         | 19914        | 0.0679                     | K. Menzies      | 0.0002                                |
| V456 Cyg    | 55383.7987                         | 11751        | 0.0462                     | K. Menzies      | 0.0001                                |

*Table continued on following pages*

Table 1. Recent times of minima of stars in the AAVSO eclipsing binary program, cont.

| <i>Star</i> | <i>HJD(min)</i><br><i>2400000+</i> | <i>Cycle</i> | <i>O-C</i><br><i>(day)</i> | <i>Observer</i> | <i>Standard</i><br><i>Error (day)</i> |
|-------------|------------------------------------|--------------|----------------------------|-----------------|---------------------------------------|
| V456 Cyg    | 55436.3798                         | 11810        | 0.0469                     | Y. Ogmen        | 0.0000                                |
| V466 Cyg    | 55379.7512                         | 19119        | 0.0063                     | K. Menzies      | 0.0001                                |
| V466 Cyg    | 55441.6758                         | 19163.5      | 0.0062                     | K. Menzies      | 0.0001                                |
| V548 Cyg    | 55450.3757                         | 6090         | 0.0109                     | L. Corp         | 0.0003                                |
| V704 Cyg    | 55336.7783                         | 30484        | 0.0286                     | G. Samolyk      | 0.0005                                |
| V704 Cyg    | 55408.6878                         | 30610        | 0.0294                     | K. Menzies      | 0.0003                                |
| V704 Cyg    | 55436.6521                         | 30659        | 0.0292                     | G. Samolyk      | 0.0004                                |
| V1034 Cyg   | 55379.6742                         | 12735        | -0.0011                    | G. Samolyk      | 0.0002                                |
| W Del       | 55444.7593                         | 2521         | 0.0317                     | G. Samolyk      | 0.0001                                |
| FZ Del      | 55445.6715                         | 30798        | -0.0392                    | G. Samolyk      | 0.0001                                |
| Z Dra       | 55268.6870                         | 3996         | -0.0271                    | R. Poklar       | 0.0001                                |
| RZ Dra      | 55298.6464                         | 20188        | 0.0506                     | N. Simmons      | 0.0002                                |
| TW Dra      | 55436.6844                         | 4026         | 0.0233                     | G. Samolyk      | 0.0001                                |
| AI Dra      | 55261.8149                         | 9985         | 0.0241                     | G. Samolyk      | 0.0001                                |
| YY Eri      | 55259.5679                         | 42544.5      | 0.1360                     | G. Samolyk      | 0.0002                                |
| SX Gem      | 55261.6592                         | 26506        | -0.0526                    | G. Samolyk      | 0.0001                                |
| AF Gem      | 55271.6380                         | 22605        | -0.0677                    | G. Samolyk      | 0.0001                                |
| SZ Her      | 55304.8199                         | 16429        | -0.0219                    | G. Samolyk      | 0.0001                                |
| TT Her      | 55329.7586                         | 16812        | 0.0380                     | K. Menzies      | 0.0001                                |
| UX Her      | 55346.8012                         | 10120        | 0.0819                     | G. Samolyk      | 0.0003                                |
| CC Her      | 55305.8036                         | 9018         | 0.1973                     | G. Samolyk      | 0.0001                                |
| LT Her      | 55345.8105                         | 13459        | -0.1213                    | G. Samolyk      | 0.0004                                |
| V742 Her    | 55237.7376                         | 24943        | 0.0367                     | L. Corp         | 0.0002                                |
| WY Hya      | 55260.5932                         | 20516        | 0.0283                     | G. Samolyk      | 0.0001                                |
| WY Hya      | 55261.6676                         | 20517.5      | 0.0287                     | R. Poklar       | 0.0002                                |
| AV Hya      | 55277.6485                         | 27223        | -0.0945                    | G. Samolyk      | 0.0001                                |
| DF Hya      | 55258.6878                         | 37721.5      | -0.0137                    | R. Poklar       | 0.0001                                |
| DF Hya      | 55263.6467                         | 37736.5      | -0.0138                    | G. Samolyk      | 0.0001                                |
| DF Hya      | 55279.6815                         | 37785        | -0.0134                    | G. Samolyk      | 0.0002                                |
| DF Hya      | 55303.6502                         | 37857.5      | -0.0136                    | G. Samolyk      | 0.0001                                |
| DI Hya      | 55257.6702                         | 39146        | -0.0237                    | G. Samolyk      | 0.0001                                |
| DK Hya      | 55259.6959                         | 23789        | 0.0064                     | G. Samolyk      | 0.0002                                |
| DK Hya      | 55259.6959                         | 23789        | 0.0064                     | R. Poklar       | 0.0001                                |
| DK Hya      | 55305.6247                         | 23877        | 0.0061                     | G. Samolyk      | 0.0002                                |
| SW Lac      | 55380.8388                         | 31509        | -0.1037                    | G. Samolyk      | 0.0001                                |
| AW Lac      | 55436.7891                         | 25211        | 0.1808                     | N. Simmons      | 0.0002                                |
| AW Lac      | 55451.6483                         | 25224        | 0.1829                     | K. Menzies      | 0.0002                                |
| Y Leo       | 55259.6650                         | 5826         | -0.0163                    | G. Samolyk      | 0.0001                                |

*Table continued on following pages*

Table 1. Recent times of minima of stars in the AAVSO eclipsing binary program, cont.

| <i>Star</i>  | <i>HJD(min)</i><br><i>2400000+</i> | <i>Cycle</i> | <i>O-C</i><br><i>(day)</i> | <i>Observer</i> | <i>Standard</i><br><i>Error (day)</i> |
|--------------|------------------------------------|--------------|----------------------------|-----------------|---------------------------------------|
| Y Leo        | 55345.6563                         | 5877         | -0.0162                    | N. Simmons      | 0.0001                                |
| UU Leo       | 55304.7352                         | 5898         | 0.1674                     | C. Hesseltine   | 0.0003                                |
| UU Leo       | 55336.6516                         | 5917         | 0.1687                     | G. Samolyk      | 0.0005                                |
| UV Leo       | 55273.7372                         | 28051        | 0.0327                     | G. Samolyk      | 0.0002                                |
| VZ Leo       | 55305.6693                         | 22150        | -0.0646                    | G. Samolyk      | 0.0001                                |
| WZ Leo       | 55279.6004                         | 17160        | -2.4808                    | G. Samolyk      | 0.0006                                |
| XY Leo       | 55262.3982                         | 35860.5      | 0.0507                     | L. Corp         | 0.0002                                |
| XY Leo       | 55292.3694                         | 35966        | 0.0497                     | L. Corp         | 0.0004                                |
| XZ Leo       | 52397.6218                         | 15115.5      | -0.0961                    | S. Dvorak       | 0.0004                                |
| XZ Leo       | 53359.8133                         | 17088        | 0.0379                     | S. Dvorak       | 0.0001                                |
| XZ Leo       | 55297.3567                         | 21060        | 0.2975                     | L. Corp         | 0.0020                                |
| XZ Leo       | 55297.3587                         | 21060        | 0.2995                     | L. Corp         | 0.0020                                |
| $\delta$ Lib | 55337.5564                         | 5318         | -0.0132                    | G. Samolyk      | 0.0008                                |
| FL Lyr       | 55304.8135                         | 7843         | -0.0040                    | G. Samolyk      | 0.0002                                |
| FL Lyr       | 55437.6827                         | 7904         | -0.0022                    | G. Samolyk      | 0.0002                                |
| AT Mon       | 55279.5900                         | 14131        | 0.0084                     | G. Samolyk      | 0.0002                                |
| BO Mon       | 55265.5933                         | 5284         | -0.0625                    | K. Menzies      | 0.0001                                |
| V396 Mon     | 55238.3894                         | 51644.5      | -0.0664                    | L. Corp         | 0.0002                                |
| V508 Oph     | 55321.8157                         | 29697        | -0.0192                    | K. Menzies      | 0.0001                                |
| V839 Oph     | 55303.7784                         | 36321        | 0.2465                     | G. Samolyk      | 0.0001                                |
| V839 Oph     | 55379.8546                         | 36507        | 0.2496                     | G. Samolyk      | 0.0003                                |
| V1010 Oph    | 55380.6832                         | 24860        | -0.1394                    | G. Samolyk      | 0.0005                                |
| FZ Ori       | 55257.6250                         | 28084        | -0.0570                    | G. Samolyk      | 0.0003                                |
| FZ Ori       | 55261.6251                         | 28094        | -0.0567                    | C. Hesseltine   | 0.0004                                |
| GU Ori       | 55262.6120                         | 25904.5      | -0.0470                    | G. Samolyk      | 0.0002                                |
| GU Ori       | 55263.5537                         | 25906.5      | -0.0466                    | K. Menzies      | 0.0002                                |
| TY Peg       | 55448.7146                         | 4850         | -0.3364                    | G. Samolyk      | 0.0004                                |
| AQ Peg       | 55438.4813                         | 2562         | 0.5123                     | G. Samolyk      | 0.0003                                |
| BB Peg       | 55416.8077                         | 32233.5      | -0.0036                    | K. Menzies      | 0.0001                                |
| BB Peg       | 55437.7753                         | 32291.5      | -0.0032                    | G. Samolyk      | 0.0001                                |
| BB Peg       | 55451.6928                         | 32330        | -0.0035                    | N. Simmons      | 0.0001                                |
| GP Peg       | 55379.8630                         | 14495        | -0.0465                    | G. Samolyk      | 0.0002                                |
| RT Per       | 55436.7522                         | 25972        | 0.0688                     | G. Samolyk      | 0.0001                                |
| RT Per       | 55441.8487                         | 25978        | 0.0689                     | K. Menzies      | 0.0001                                |
| ST Per       | 55262.5949                         | 4843         | 0.2974                     | G. Samolyk      | 0.0001                                |
| AE Phe       | 55182.6283                         | 31596.5      | -0.0985                    | G. Samolyk      | 0.0002                                |
| AE Phe       | 55192.5937                         | 31624        | -0.0984                    | G. Samolyk      | 0.0002                                |
| UZ Pup       | 55260.7222                         | 13395        | -0.0079                    | G. Samolyk      | 0.0002                                |

*Table continued on following pages*

Table 1. Recent times of minima of stars in the AAVSO eclipsing binary program, cont.

| <i>Star</i> | <i>HJD(min)</i><br><i>2400000+</i> | <i>Cycle</i> | <i>O-C</i><br><i>(day)</i> | <i>Observer</i> | <i>Standard</i><br><i>Error (day)</i> |
|-------------|------------------------------------|--------------|----------------------------|-----------------|---------------------------------------|
| UZ Pup      | 55282.5817                         | 13422.5      | -0.0068                    | G. Samolyk      | 0.0005                                |
| AV Pup      | 55271.6457                         | 43307        | 0.1460                     | G. Samolyk      | 0.0001                                |
| U Sge       | 55449.7247                         | 11335        | -0.0068                    | G. Samolyk      | 0.0001                                |
| V1968 Sgr   | 55381.6596                         | 31178        | -0.0148                    | G. Samolyk      | 0.0004                                |
| AO Ser      | 55259.7737                         | 24025        | -0.0128                    | G. Samolyk      | 0.0002                                |
| AU Ser      | 55340.3160                         | 27472        | -0.1101                    | Y. Ogmen        | 0.0001                                |
| CC Ser      | 55263.8284                         | 34459.5      | 0.9428                     | K. Menzies      | 0.0001                                |
| WY Tau      | 55461.8343                         | 26069        | 0.0576                     | K. Menzies      | 0.0001                                |
| EQ Tau      | 55259.5991                         | 44079        | -0.0255                    | G. Samolyk      | 0.0001                                |
| W UMa       | 55260.6641                         | 28459        | -0.0637                    | G. Samolyk      | 0.0001                                |
| W UMa       | 55264.6672                         | 28471        | -0.0643                    | K. Menzies      | 0.0002                                |
| TY UMa      | 55260.6414                         | 44361.5      | 0.2808                     | R. Poklar       | 0.0002                                |
| TY UMa      | 55262.5940                         | 44367        | 0.2834                     | G. Samolyk      | 0.0002                                |
| UX UMa      | 55259.6969                         | 90643        | 0.0017                     | G. Samolyk      | 0.0001                                |
| UX UMa      | 55279.7572                         | 90745        | 0.0015                     | G. Samolyk      | 0.0001                                |
| UX UMa      | 55283.6908                         | 90765        | 0.0017                     | K. Menzies      | 0.0001                                |
| UX UMa      | 55298.6378                         | 90841        | 0.0017                     | G. Samolyk      | 0.0001                                |
| UX UMa      | 55309.6512                         | 90897        | 0.0015                     | G. Samolyk      | 0.0001                                |
| UX UMa      | 55346.6254                         | 91085        | 0.0015                     | G. Samolyk      | 0.0001                                |
| VV UMa      | 55257.8274                         | 13737        | -0.0482                    | G. Samolyk      | 0.0001                                |
| VV UMa      | 55262.6395                         | 13744        | -0.0477                    | K. Menzies      | 0.0001                                |
| VV UMa      | 55273.6360                         | 13760        | -0.0493                    | R. Poklar       | 0.0003                                |
| XZ UMa      | 55263.6061                         | 7441         | -0.1030                    | G. Samolyk      | 0.0001                                |
| XZ UMa      | 55280.7185                         | 7455         | -0.1031                    | R. Poklar       | 0.0001                                |
| ZZ UMa      | 55260.6661                         | 8398         | -0.0034                    | G. Samolyk      | 0.0002                                |
| RU UMi      | 55303.7201                         | 26113        | -0.0137                    | R. Poklar       | 0.0001                                |
| AH Vir      | 55262.7789                         | 23184.5      | 0.2233                     | K. Menzies      | 0.0001                                |
| AH Vir      | 55277.6530                         | 23221        | 0.2229                     | G. Samolyk      | 0.0002                                |
| AK Vir      | 55309.6695                         | 10668        | -0.0430                    | G. Samolyk      | 0.0001                                |
| AW Vir      | 55296.7211                         | 29023        | 0.0226                     | R. Poklar       | 0.0001                                |
| AW Vir      | 55304.6863                         | 29045.5      | 0.0229                     | G. Samolyk      | 0.0001                                |
| AZ Vir      | 55257.7642                         | 32263        | -0.0212                    | G. Samolyk      | 0.0005                                |
| AZ Vir      | 55271.7507                         | 32303        | -0.0213                    | R. Sabo         | 0.0002                                |
| AZ Vir      | 55322.6263                         | 32448.5      | -0.0220                    | G. Samolyk      | 0.0002                                |
| BH Vir      | 55309.6805                         | 14787        | -0.0090                    | G. Samolyk      | 0.0003                                |
| BH Vir      | 55336.6380                         | 14820        | -0.0083                    | G. Samolyk      | 0.0003                                |
| NY Vir      | 55240.6163                         | 49668        | -0.0071                    | L. Corp         | 0.0001                                |
| Z Vul       | 55381.7097                         | 5065         | -0.0087                    | G. Samolyk      | 0.0001                                |

*Table continued on following page*

Table 1. Recent times of minima of stars in the AAVSO eclipsing binary program, cont.

| <i>Star</i> | <i>HJD(min)</i><br><i>2400000+</i> | <i>Cycle</i> | <i>O-C</i><br><i>(day)</i> | <i>Observer</i> | <i>Standard</i><br><i>Error (day)</i> |
|-------------|------------------------------------|--------------|----------------------------|-----------------|---------------------------------------|
| RS Vul      | 50266.6900                         | 3899         | 0.0230                     | S. Cook         |                                       |
| RS Vul      | 55429.4220                         | 5052         | 0.0090                     | L. Corp         | 0.0005                                |
| AW Vul      | 55379.8029                         | 11277        | -0.0147                    | G. Samolyk      | 0.0001                                |
| BS Vul      | 55380.7456                         | 25441        | -0.0226                    | G. Samolyk      | 0.0004                                |
| BU Vul      | 55437.6562                         | 38496        | 0.0187                     | G. Samolyk      | 0.0001                                |
| BU Vul      | 55439.3613                         | 38499        | 0.0168                     | Y. Ogmen        | 0.0001                                |
| CD Vul      | 55380.6897                         | 13283        | -0.0001                    | G. Samolyk      | 0.0001                                |