

BBSAG Bulletin 11

1973 October 10

44th List of Minima of Eclipsing Binaries

The following table lists 370 minima obtained visually during (except two entries from earlier, no. 5381 & no. 5465) August and September 1973 by the observers

| | |
|----|--------------------------------------|
| RA | Rosemarie Aeberli, Grüningen |
| UB | Ursula Boss, Schwerzenbach |
| RD | Roger Diethelm, Winterthur |
| SF | Steve Forbes, Chagrin Falls Ohio USA |
| RG | Robert Germann, Wald |
| GG | George Gliba, Chagrin Falls Ohio USA |
| AH | Andreas Heer, Greifensee |
| AJ | Annekäthi Jucker, Uster |
| BJ | Brigitte Jucker, Wetzikon |
| VK | Verena Kobelt, Fehraltorf |
| KL | Kurt Locher, Grüt |
| TM | Anthony Mallama, Solon Ohio USA |
| PM | Peter Morger, Hinwil |
| HP | Hermann Peter, Otelfingen |
| MS | Monika Senn, Pfäffikon |

The O-C values refer to the linear elements of the GCVS 1969, disregarding improved elements from the 1971 first supplement to the GCVS. Reductions were made using the tracing paper method by RD, RG, GG, KL, TM, and HP.

| current no. | star | minimum order | JD hel 244... | O-C | observer | current no. | star | minimum order | JD hel 244... | O-C | observer |
|-------------|--------|---------------|---------------|--------|----------|-------------|--------|---------------|---------------|--------|----------|
| 5163 | RT And | I | 1900.390 | +0.002 | 10 RG | 5192 | CN And | I | 1930.401 | -0.047 | 9 RD |
| 5164 | | I | 1905.400 | -0.020 | 6 RG | 5193 | AM Aqr | I | 1929.393 | -0.083 | 6 KL |
| 5165 | | I | 1934.343 | -0.008 | 10 RG | 5194 | CX Aqr | I | 1900.549 | +0.006 | 11 KL |
| 5166 | | I | 1934.351 | +0.001 | 11 HP | 5195 | | I | 1904.455 | +0.020 | 6 KL |
| 5167 | UU And | I | 1901.516 | +0.103 | 7 KL | 5196 | | I | 1905.557 | +0.010 | 8 KL |
| 5168 | | I | 1901.519 | +0.106 | 16 HP | 5197 | | I | 1929.462 | +0.008 | 11 HP |
| 5169 | | I | 1904.487 | +0.102 | 11 KL | 5198 | | I | 1943.360 | +0.006 | 9 KL |
| 5170 | WX And | I | 1929.490 | -0.193 | 8 KL | 5199 | CZ Aqr | I | 1900.468 | +0.008 | 6 KL |
| 5171 | XZ And | I | 1901.407 | -0.007 | 10 KL | 5200 | DX Aqr | I | 1900.508 | +0.046 | 18 KL |
| 5172 | | I | 1902.761 | -0.010 | 13 TM | 5201 | | I | 1901.451 | +0.043 | 15 KL |
| 5173 | | I | 1909.546 | -0.011 | 9 KL | 5202 | XZ Aql | I | 1903.459 | +0.025 | 12 HP |
| 5174 | | I | 1954.340 | -0.008 | 12 RG | 5203 | | I | 1903.465 | +0.031 | 10 KL |
| 5175 | AB And | I | 1900.426 | +0.009 | 9 RG | 5204 | FK Aql | I | 1929.383 | -0.052 | 17 HP |
| 5176 | | I | 1900.432 | +0.016 | 15 PM | 5205 | KP Aql | I | 1930.372 | +0.037 | 10 RD |
| 5177 | | I | 1900.432 | +0.016 | 11 KL | 5206 | OO Aql | II | 1904.569 | -0.019 | 9 RD |
| 5178 | | I | 1901.424 | +0.012 | 10 RG | 5207 | | I | 1916.473 | -0.024 | 11 KL |
| 5179 | | I | 1901.432 | +0.020 | 10 RD | 5208 | | II | 1924.325 | -0.028 | 7 RG |
| 5180 | | I | 1901.436 | +0.024 | 14 KL | 5209 | | II | 1926.380 | 0.000 | 6 BJ |
| 5181 | | I | 1901.440 | +0.028 | 10 HP | 5210 | | II | 1927.385 | -0.009 | 6 UB |
| 5182 | | I | 1904.417 | +0.018 | 14 PM | 5211 | | II | 1929.407 | -0.014 | 12 HP |
| 5183 | | I | 1905.409 | +0.015 | 6 RG | 5212 | | II | 1930.417 | -0.018 | 9 HP |
| 5184 | | I | 1910.386 | +0.013 | 8 RG | 5213 | | II | 1931.417 | -0.030 | 7 RG |
| 5185 | | I | 1911.380 | +0.011 | 7 RG | 5214 | | I | 1941.302 | -0.028 | 7 RG |
| 5186 | | I | 1912.381 | +0.016 | 7 RG | 5215 | | I | 1941.310 | -0.020 | 11 KL |
| 5187 | | I | 1916.365 | +0.018 | 7 RG | 5216 | | I | 1942.313 | -0.051 | 6 KL |
| 5188 | | I | 1916.368 | +0.021 | 11 KL | 5217 | | I | 1943.328 | -0.029 | 8 KL |
| 5189 | | II | 1943.416 | +0.019 | 12 HP | 5218 | | I | 1953.458 | -0.036 | 7 KL |
| 5190 | | II | 1954.372 | +0.023 | 9 KL | | | | | | |
| 5191 | | II | 1954.374 | +0.025 | 6 RG | | | | | | |

| current no. | star | or-der | minimum JD hel 244... | O-C | n | ob-ser-ver |
|-------------|-------|--------|-----------------------|--------|----|------------|
| 5219 | V 342 | Aql I | 1902.487 | +0.004 | 13 | HP |
| 5220 | V 343 | Aql I | 1916.395 | -0.003 | 12 | KL |
| 5221 | V 346 | Aql I | 1918.380 | -0.012 | 8 | RG |
| 5222 | | I | 1918.384 | -0.009 | 9 | RD |
| 5223 | | I | 1918.385 | -0.007 | 7 | KL |
| 5224 | | I | 1918.392 | -0.001 | 11 | HP |
| 5225 | | I | 1928.342 | -0.008 | 11 | HP |
| 5226 | | I | 1939.409 | -0.004 | 14 | HP |
| 5227 | V 803 | Aql II | 1930.420 | -0.045 | 6 | KL |
| 5228 | V 805 | Aql I | 1900.415 | +0.018 | 12 | KL |
| 5229 | | I | 1929.323 | +0.026 | 9 | KL |
| 5230 | | I | 1941.352 | +0.015 | 9 | KL |
| 5231 | TT | Aur I | 1931.593 | -0.014 | 9 | RD |
| 5232 | UW | Boo I | 1904.361 | +0.003 | 10 | HP |
| 5233 | ZZ | Boo I | 1900.382 | -0.033 | 8 | RG |
| 5234 | | I | 1900.419 | +0.003 | 9 | KL |
| 5235 | | I | 1905.365 | -0.042 | 7 | RG |
| 5236 | | I | 1910.366 | -0.033 | 6 | RG |
| 5237 | AD | Boo I | 1912.365 | +0.062 | 5 | RG |
| 5238 | SV | Cam I | 1930.374 | -0.009 | 10 | RD |
| 5239 | | I | 1935.736 | +0.015 | 8 | TM |
| 5240 | | I | 1941.638 | -0.013 | 8 | KL |
| 5241 | TU | Cnc I | 1950.650 | +0.007 | 5 | KL |
| 5242 | TY | Cap I | 1932.315 | -0.076 | 11 | KL |
| 5243 | RZ | Cas I | 1903.461 | -0.002 | 13 | KL |
| 5244 | | I | 1903.464 | +0.001 | 11 | HP |
| 5245 | | I | 1905.855 | +0.002 | 17 | TM |
| 5246 | | I | 1910.632 | -0.003 | 12 | TM |
| 5247 | | I | 1917.805 | -0.001 | 20 | TM |
| 5248 | | I | 1923.781 | -0.001 | 18 | TM |
| 5249 | | I | 1927.370 | +0.002 | 7 | KL |
| 5250 | | I | 1927.372 | +0.004 | 10 | HP |
| 5251 | | I | 1935.737 | +0.002 | 12 | TM |
| 5252 | | I | 1939.325 | +0.004 | 9 | RG |
| 5253 | TV | Cas I | 1901.697 | +0.001 | 12 | TM |
| 5254 | | I | 1903.499 | -0.009 | 16 | KL |
| 5255 | | I | 1919.815 | -0.007 | 12 | GG |
| 5256 | | I | 1934.317 | -0.006 | 9 | RG |
| 5257 | | I | 1934.329 | +0.006 | 12 | HP |
| 5258 | AB | Cas I | 1902.538 | +0.004 | 12 | HP |
| 5259 | | I | 1913.478 | +0.009 | 11 | HP |
| 5260 | OR | Cas I | 1904.585 | +0.032 | 10 | RD |
| 5261 | U | Cep I | 1901.457 | +0.032 | 12 | HP |
| 5262 | | I | 1901.463 | +0.037 | 12 | KL |
| 5263 | | I | 1911.425 | +0.027 | 14 | HP |
| 5264 | | I | 1916.423 | +0.039 | 11 | KL |
| 5265 | | I | 1931.367 | +0.025 | 11 | KL |
| 5266 | | I | 1931.369 | +0.027 | 24 | RG |
| 5267 | | I | 1931.370 | +0.028 | 14 | HP |
| 5268 | | I | 1941.345 | +0.029 | 16 | HP |
| 5269 | | I | 1941.354 | +0.040 | 5 | KL |
| 5270 | VW | Cep I | 1907.518 | -0.076 | 14 | KL |

| current no. | star | or-der | minimum JD hel 244... | O-C | n | ob-ser-ver |
|-------------|---------|--------|-----------------------|--------|----|------------|
| 5271 | | II | 1913.499 | -0.079 | 6 | KL |
| 5272 | | II | 1934.403 | -0.049 | 7 | HP |
| 5273 | | II | 1941.331 | -0.079 | 11 | KL |
| 5274 | ZZ | Cep I | 1929.384 | -0.016 | 11 | HP |
| 5275 | | I | 1931.545 | +0.005 | 7 | RD |
| 5276 | CW | Cep II | 1938.318 | -0.043 | 8 | RD |
| 5277 | EG | Cep I | 1931.584 | +0.018 | 10 | RD |
| 5278 | | I | 1942.468 | +0.009 | 16 | HP |
| 5279 | EK | Cep I | 1938.352 | +0.005 | 8 | RD |
| 5280 | | I | 1938.359 | +0.012 | 11 | HP |
| 5281 | HBV 489 | Cep | 1904.508 | * | 9 | RD |
| 5282 | RW | Cet I | 1905.609 | -0.048 | 10 | KL |
| 5283 | | I | 1907.556 | -0.052 | 8 | KL |
| 5284 | TW | Cet II | 1901.582 | -0.021 | 8 | KL |
| 5285 | | I | 1904.593 | -0.019 | 12 | KL |
| 5286 | | I | 1905.554 | -0.009 | 12 | KL |
| 5287 | | II | 1913.620 | -0.023 | 9 | KL |
| 5288 | | I | 1929.626 | -0.017 | 11 | KL |
| 5289 | | I | 1931.529 | -0.016 | 11 | KL |
| 5290 | | II | 1933.586 | -0.019 | 12 | KL |
| 5291 | | I | 1942.618 | -0.017 | 10 | KL |
| 5292 | VY | Cet II | 1903.559 | ** | 15 | KL |
| 5293 | | II | 1904.577 | ** | 20 | KL |
| 5294 | | II | 1905.605 | ** | 20 | KL |
| 5295 | | I | 1911.583 | ** | 7 | KL |
| 5296 | | I | 1912.592 | ** | 6 | KL |
| 5297 | | I | 1913.613 | ** | 10 | KL |
| 5298 | | I | 1927.592 | ** | 9 | KL |
| 5299 | | I | 1928.611 | ** | 13 | KL |
| 5300 | | I | 1929.629 | ** | 12 | KL |
| 5301 | | I | 1930.654 | ** | 14 | KL |
| 5302 | | II | 1931.506 | ** | 13 | KL |
| 5303 | | II | 1932.522 | ** | 13 | KL |
| 5304 | | II | 1933.552 | ** | 14 | KL |
| 5305 | | II | 1934.571 | ** | 15 | KL |
| 5306 | | I | 1942.576 | ** | 12 | KL |
| 5307 | | I | 1953.489 | ** | 14 | KL |
| 5308 | | I | 1954.505 | ** | 15 | KL |
| 5309 | AA | Cet II | 1900.576 | *** | 11 | KL |
| 5310 | | I | 1904.589 | *** | 12 | KL |
| 5311 | | II | 1908.597 | *** | 10 | KL |
| 5312 | | I | 1912.640 | *** | 10 | KL |
| 5313 | | I | 1934.610 | *** | 15 | KL |
| 5314 | | I | 1942.652 | *** | 11 | KL |

* period unknown

** GCVS period erroneous, O-C according to the elements of BBSAG Bulletin 6, page 6: -0.033 -0.037 -0.032 -0.019 -0.032 -0.034 -0.030 -0.034 -0.038 -0.036 -0.036 -0.042 -0.036 -0.039 -0.044 -0.038 -0.045

*** not contained in the GCVS, O-C according to Bloomer's (new) elements TRVS 745: +0.008 +0.001

| current no. | star | minimum or-der | JD hel 244... | 0 - C | ob- n ser- ver | current no. | star | minimum or-der | JD hel 244... | 0 - C | ob- n ser- ver |
|-------------|-----------|----------------|---------------|---------|----------------|-------------|-----------|----------------|---------------|--------|----------------|
| 5315 | RW CrB | I | 1918.351 | -0.004 | 8 RD | 5364 | | I | 1904.595 | 0.000 | 12 KL |
| 5316 | Y Cyg | I | 1903.603 | -0.103 | 12 KL | 5365 | | I | 1909.378 | -0.012 | 13 RG |
| 5317 | | II | 1926.302 | +0.125* | 5 KL | 5366 | | I | 1939.356 | -0.005 | 5 KL |
| 5318 | | II | 1932.311 | +0.140 | 10 KL | 5367 | S Equ | I | 1916.404 | +0.013 | 8 KL |
| 5319 | | I | 1933.560 | -0.109 | 13 KL | 5368 | TZ Eri | I | 1942.578 | -0.021 | 11 KL |
| 5320 | | II | 1938.301 | +0.138 | 6 RD | 5369 | WX Eri | I | 1931.505 | +0.003 | 9 KL |
| 5321 | | II | 1938.308 | +0.144 | 7 KL | 5370 | YY Eri | II | 1903.598 | -0.004 | 9 KL |
| 5322 | | I | 1954.529 | -0.115 | 10 KL | 5371 | | II | 1904.572 | +0.003 | 6 KL |
| 5323 | SW Cyg | I | 1904.393 | +0.157 | 10 KL | 5372 | | II | 1911.629 | -0.011 | 6 KL |
| 5324 | UW Cyg | I | 1902.533 | -0.023 | 13 HP | 5373 | | I | 1926.596 | +0.007 | 6 AJ |
| 5325 | | I | 1953.590 | -0.022 | 10 KL | 5374 | | I | 1927.582 | +0.029 | 9 VK |
| 5326 | ZZ Cyg | I | 1904.421 | -0.029 | 10 HP | 5375 | | I | 1927.585 | +0.031 | 9 RA |
| 5327 | BR Cyg | I | 1908.589 | +0.014 | 7 KL | 5376 | | II | 1932.531 | -0.006 | 12 KL |
| 5328 | KR Cyg | I | 1904.543 | -0.011 | 9 RD | .377 | | I | 1934.611 | -0.015 | 17 KL |
| 5329 | | I | 1931.582 | -0.017 | 8 RD | 5378 | | II | 1938.643 | -0.003 | 12 KL |
| 5330 | | I | 1932.433 | -0.011 | 12 HP | 5379 | | I | 1954.549 | -0.011 | 12 KL |
| 5331 | | I | 1938.348 | -0.012 | 11 HP | 5380 | W For | II | 1933.631 | +0.148 | 5 KL |
| 5332 | | I | 1938.351 | -0.009 | 10 RD | 5381 | GW Gem | I | 0290.501 | -0.031 | 8 RD |
| 5333 | | I | 1943.422 | -0.009 | 10 HP | 5382 | Z Her | I | 1910.376 | -0.003 | 7 RG |
| 5334 | V 456 Cyg | I | 1938.331 | +0.010 | 9 RD | 5383 | | I | 1910.384 | +0.004 | 9 HP |
| 5335 | V 477 Cyg | I | 1917.387 | -0.003 | 7 KL | 5384 | | I | 1918.364 | -0.002 | 10 RD |
| 5336 | | I | 1924.411 | +0.003 | 12 RG | 5385 | | I | 1934.330 | -0.007 | 10 RG |
| 5337 | V 548 Cyg | I | 1918.332 | -0.051 | 6 RD | 5386 | | I | 1938.311 | -0.018 | 8 RD |
| 5338 | V 687 Cyg | I | 1903.435 | +0.012 | 10 HP | 5387 | | I | 1938.331 | +0.002 | 13 HP |
| 5339 | V 728 Cyg | I | 1928.393 | +0.053 | 14 HP | 5388 | RX Her | I | 1901.403 | -0.007 | 9 RD |
| 5340 | V 836 Cyg | I | 1901.381 | +0.010 | 9 RD | 5389 | | I | 1901.411 | +0.001 | 9 RG |
| 5341 | TY Del | I | 1918.398 | -0.001 | 8 RD | 5390 | | I | 1933.453 | +0.029 | 10 HP |
| 5342 | | I | 1918.401 | +0.002 | 12 HP | 5391 | | II | 1934.324 | +0.011 | 14 HP |
| 5343 | YY Del | I | 1901.536 | +0.023 | 7 KL | 5392 | SZ Her | I | 1903.578 | +0.025 | 6 KL |
| 5344 | AV Del | I | 1901.524 | -0.006 | 6 KL | 5393 | | I | 1904.391 | +0.023 | 9 HP |
| 5345 | FZ Del | I | 1927.458 | -0.002 | 10 HP | 5394 | | I | 1913.391 | +0.023 | 9 HP |
| 5346 | | I | 1931.369 | -0.007 | 6 RG | 5395 | | I | 1931.390 | +0.024 | 10 HP |
| 5347 | | I | 1931.385 | +0.008 | 14 HP | 5396 | | I | 1954.300 | +0.027 | 6 KL |
| 5348 | Z Dra | I | 1903.382 | -0.002 | 14 HP | 5397 | UX Her | I | 1907.367 | -0.043 | 11 HP |
| 5349 | RR Dra | I | 1932.371 | +0.093 | 17 HP | 5398 | | I | 1938.343 | -0.044 | 10 RD |
| 5350 | RZ Dra | I | 1901.357 | +0.003 | 6 RD | 5399 | | I | 1938.348 | -0.039 | 11 KL |
| 5351 | | I | 1907.406 | -0.008 | 9 HP | 5400 | | I | 1938.350 | -0.038 | 13 HP |
| 5352 | | I | 1912.357 | -0.015 | 6 RG | 5401 | OO Her | I | 1927.362 | +0.045 | 13 HP |
| 5353 | | I | 1918.422 | -0.009 | 12 HP | 5402 | EF Her | I | 1904.513 | -0.014 | 5 RD |
| 5354 | | I | 1932.745 | -0.009 | 10 GG | 5403 | V 338 Her | I | 1907.471 | +0.077 | 13 HP |
| 5355 | | I | 1934.403 | -0.004 | 9 HP | 5404 | | I | 1911.392 | +0.079 | 12 HP |
| 5356 | | I | 1936.604 | -0.007 | 11 TM | 5405 | SW Lac | I | 1900.427 | -0.051 | 9 RG |
| 5357 | | I | 1936.605 | -0.006 | 11 GG | 5406 | | I | 1900.433 | -0.044 | 11 KL |
| 5358 | | I | 1939.362 | -0.003 | 9 HP | 5407 | | I | 1901.393 | -0.046 | 8 RD |
| 5359 | | I | 1941.558 | -0.010 | 6 GG | 5408 | | I | 1901.395 | -0.045 | 12 RG |
| 5360 | TW Dra | I | 1941.331 | -0.031 | 12 HP | 5409 | | II | 1902.509 | -0.053 | 12 HP |
| 5361 | WW Dra | I | 1904.533 | +0.044 | 9 RD | 5410 | | II | 1905.400 | -0.048 | 6 RG |
| 5362 | | I | 1904.536 | +0.048 | 15 KL | 5411 | | I | 1907.482 | -0.051 | 9 HP |
| 5363 | AT Dra | I | 1903.402 | +0.006 | 12 KL | 5412 | | I | 1910.369 | -0.051 | 7 RG |
| | | | | | | 5413 | | I | 1911.333 | -0.049 | 7 RG |
| | | | | | | 5414 | | I | 1917.432 | -0.044 | 10 KL |

* excentric secondary minimum

| current no. | star | minimum or- JD hel der 244... | O - C | n | ob- server | current no. | star | minimum or- JD hel der 244... | O - C | n | ob- server |
|----------------|-----------|-------------------------------------|--------|----|---------------|----------------|-----------|-------------------------------------|--------|----|---------------|
| 5415 | | I 1918.391 | -0.048 | 7 | KL | 5468 | | I 1941.353 | -0.011 | 11 | HP |
| 5416 | | II 1924.328 | -0.043 | 5 | RG | 5469 | DK Peg | I 1927.449 | +0.052 | 10 | HP |
| 5417 | | I 1927.369 | -0.049 | 6 | MS | 5470 | DO Peg | I 1954.565 | +0.093 | 13 | KL |
| 5418 | | I 1927.382 | -0.037 | 6 | AH | 5471 | RT Per | I 1927.820 | -0.053 | 16 | TM |
| 5419 | | II 1930.423 | -0.042 | 9 | HP | 5472 | | I 1930.369 | -0.051 | 12 | HP |
| 5420 | | II 1931.365 | -0.062 | 7 | RG | 5473 | | I 1934.610 | -0.058 | 12 | KL |
| 5421 | | I 1937.629 | -0.053 | 7 | TM | 5474 | ST Per | I 1909.563 | +0.003 | 8 | KL |
| 5422 | | II 1938.438 | -0.045 | 9 | HP | 5475 | | I 1933.403 | +0.008 | 11 | HP |
| 5423 | | II 1939.403 | -0.043 | 7 | KL | 5476 | | I 1954.586 | +0.004 | 11 | KL |
| 5424 | | II 1939.403 | -0.043 | 9 | HP | 5477 | XZ Per | I 1905.564 | +0.016 | 8 | KL |
| 5425 | | II 1941.316 | -0.054 | 5 | RG | 5478 | | I 1914.613 | +0.005 | 7 | KL |
| 5426 | | I 1942.445 | -0.048 | 11 | HP | 5479 | | I 1927.438 | +0.009 | 11 | HP |
| 5427 | | I 1954.318 | -0.042 | 10 | KL | 5480 | Y Psc | I 1933.460 | +0.130 | 14 | HP |
| 5428 | TW Lac | I 1901.466 | -0.054 | 9 | KL | 5481 | UV Psc | I 1900.555 | +0.021 | 14 | KL |
| 5429 | | I 1901.473 | -0.047 | 12 | HP | 5482 | RW PsA | I 1900.449 | -0.039 | 10 | KL |
| 5430 | | I 1904.516 | -0.041 | 8 | RD | 5483 | | I 1901.524 | -0.045 | 10 | KL |
| 5431 | | I 1904.520 | -0.038 | 5 | KL | 5484 | | II 1903.507 | -0.045 | 11 | KL |
| 5432 | VX Lac | I 1911.415 | -0.052 | 13 | HP | 5485 | | II 1954.333 | -0.043 | 10 | KL |
| 5433 | | I 1913.558 | -0.058 | 6 | KL | 5486 | U Sge | I 1903.589 | +0.006 | 10 | KL |
| 5434 | | I 1928.610 | -0.049 | 10 | KL | 5487 | | I 1954.308 | +0.016 | 8 | KL |
| 5435 | | I 1939.356 | -0.048 | 7 | KL | 5488 | V 505 Sgr | I 1931.416 | -0.044 | 7 | RG |
| 5436 | | I 1942.578 | -0.049 | 7 | KL | 5489 | | I 1932.599 | -0.044 | 7 | GG |
| 5437 | CM Lac | I 1903.410 | -0.001 | 10 | HP | 5490 | U Sct | I 1928.399 | +0.017 | 10 | HP |
| 5438 | | I 1903.414 | +0.002 | 11 | KL | 5491 | | I 1929.350 | +0.013 | 13 | HP |
| 5439 | | I 1911.434 | -0.001 | 15 | HP | 5492 | RS Sct | I 1900.467 | +0.036 | 10 | KL |
| 5440 | | I 1932.292 | -0.004 | 9 | HP | 5493 | | I 1916.384 | +0.010 | 9 | RG |
| 5441 | TZ Lyr | I 1930.330 | +0.018 | 9 | RD | 5494 | | I 1916.396 | +0.023 | 8 | KL |
| 5442 | EW Lyr | I 1900.584 | +0.036 | 11 | KL | 5495 | | I 1918.377 | +0.011 | 6 | RG |
| 5443 | | I 1902.540 | +0.043 | 13 | HP | 5496 | | I 1918.383 | +0.017 | 8 | RD |
| 5444 | | I 1904.482 | +0.037 | 18 | HP | 5497 | | I 1926.358 | +0.021 | 7 | KL |
| 5445 | | I 1904.483 | +0.037 | 10 | KL | 5498 | | I 1930.345 | +0.023 | 8 | RD |
| 5446 | U Oph | II 1931.386 | -0.010 | 15 | HP | 5499 | AO Ser | I 1903.371 | -0.007 | 6 | KL |
| 5447 | V 449 Oph | I 1900.476 | +0.034 | 10 | KL | 5500 | RW Tau | I 1907.526 | -0.068 | 11 | KL |
| 5448 | V 508 Oph | II 1904.424 | +0.009 | 9 | HP | 5501 | | I 1918.599 | -0.071 | 12 | KL |
| 5449 | | II 1912.352 | +0.007 | 6 | RG | 5502 | CT Tau | I 1931.524 | +0.036 | 7 | RD |
| 5450 | | I 1918.377 | -0.002 | 9 | RD | 5503 | EQ Tau | I 1932.525 | +0.038 | 11 | KL |
| 5451 | | I 1918.378 | -0.001 | 6 | RG | 5504 | X Tri | I 1917.859 | -0.031 | 23 | TM |
| 5452 | | I 1918.385 | +0.006 | 10 | HP | 5505 | | I 1919.802 | -0.030 | 10 | TM |
| 5453 | | I 1929.421 | +0.009 | 10 | HP | 5506 | | I 1922.717 | -0.030 | 10 | TM |
| 5454 | | II 1932.345 | +0.002 | 12 | RG | 5507 | | I 1922.719 | -0.028 | 8 | GG |
| 5455 | | II 1932.349 | +0.006 | 11 | HP | 5508 | | I 1922.719 | -0.028 | 9 | SF |
| 5456 | | I 1938.382 | +0.005 | 10 | HP | 5509 | | I 1923.690 | -0.029 | 20 | TM |
| 5457 | | II 1941.308 | 0.000 | 7 | RG | 5510 | | I 1926.604 | -0.029 | 6 | KL |
| 5458 | | II 1941.312 | +0.004 | 10 | KL | 5511 | | I 1927.576 | -0.029 | 7 | KL |
| 5459 | V 913 Oph | I 1942.394 | -0.015 | 10 | HP | 5512 | | I 1934.372 | -0.034 | 10 | HP |
| 5460 | ER Ori | II 1930.629 | -0.016 | 10 | KL | 5513 | V Tri | I 1931.570 | +0.008 | 9 | RD |
| 5461 | | II 1933.595 | -0.015 | 9 | KL | 5514 | RW Tri | I 1901.536 | -0.002 | 5 | KL |
| 5462 | | I 1934.644 | -0.024 | 10 | KL | 5515 | | I 1904.556 | +0.004 | 6 | KL |
| 5463 | | II 1941.644 | -0.010 | 5 | KL | 5516 | | I 1929.597 | +0.001 | 6 | KL |
| 5464 | UX Peg | I 1928.390 | -0.008 | 11 | HP | 5517 | | I 1932.609 | -0.002 | 6 | KL |
| 5465 | BN Peg | I 1213.370 | -0.307 | 9 | RD | 5518 | | I 1953.480 | 0.000 | 5 | KL |
| 5466 | | I 1904.570 | -0.290 | 10 | RD | | | | | | |
| 5467 | DI Peg | I 1931.375 | -0.023 | 6 | RG | | | | | | |

| current no. | star | minimum or- der | JD hel 244... | O-C | n | ob- server |
|----------------|--------|-----------------------|------------------|--------|----|---------------|
| 5519 | | I | 1954.409 | +0.001 | 6 | KL |
| 5520 | UX Uma | I | 1901.384 | 0.000 | 6 | KL |
| 5521 | | I | 1903.357 | +0.003 | 6 | KL |
| 5522 | | I | 1916.335 | -0.001 | 7 | KL |
| 5523 | VV Uma | I | 1942.642 | +0.054 | 8 | KL |
| 5524 | Z Vul | I | 1916.409 | +0.013 | 6 | KL |
| 5525 | | I | 1943.414 | +0.014 | 14 | HP |
| 5526 | XZ Vul | I | 1903.621 | +0.149 | 9 | KL |
| 5527 | | I | 1931.453 | +0.175 | 11 | KL |
| 5528 | AX Vul | I | 1917.385 | +0.008 | 10 | KL |
| 5529 | BE Vul | I | 1930.376 | +0.009 | 10 | RD |
| 5530 | BS Vul | I | 1929.317 | -0.025 | 5 | RD |
| 5531 | BU Vul | I | 1918.357 | -0.002 | 8 | KL |
| 5532 | | I | 1918.361 | +0.002 | 9 | RD |

V Y C e t i

Definite Elements

for the New Interpretation

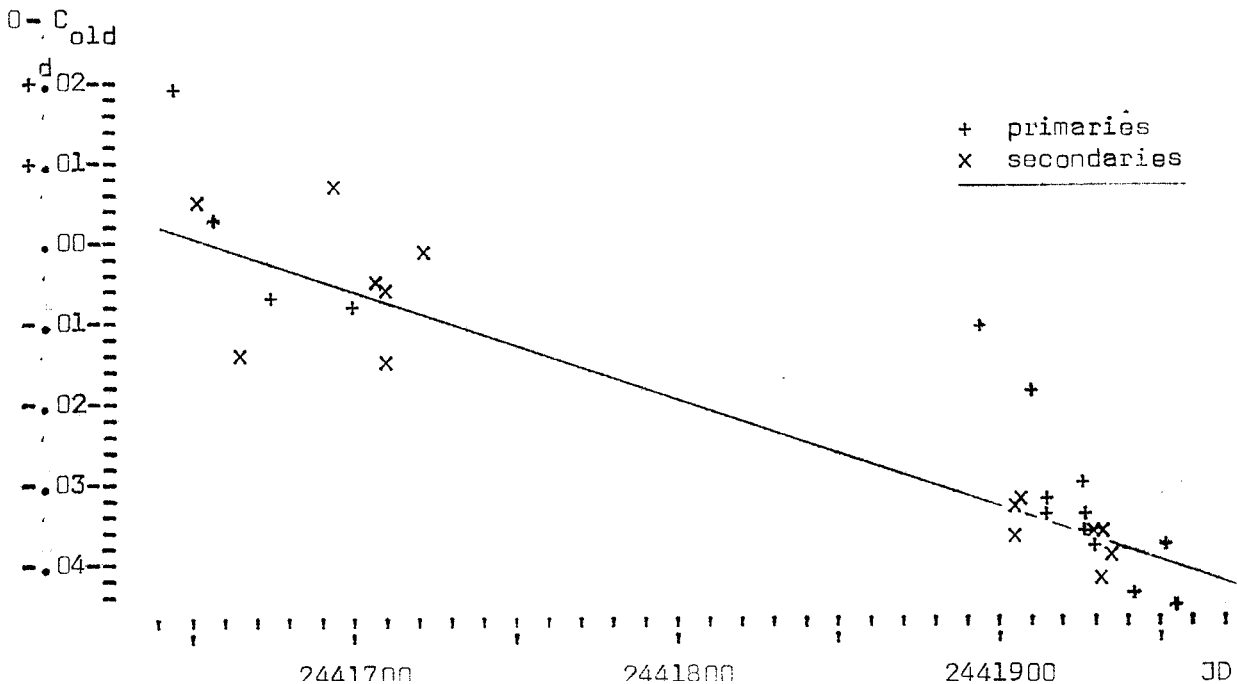
29 minima spread across some 900 periods being observed since it became evident that the previously adopted period had been erroneous (BBSAG Bulletin 6, page 6), the data have grown now sufficient to compute the period to 6 digits. A weighted least square solution results as

$$\text{Min}_I \text{ hel JD} = 2441645.391 + .340814 \times E$$

The O-C values against these new elements can be taken from figure 13 as the vertical deviations from the imposed straight line, while the true ordinates are the O-C values against the old elements (BBSAG Bulletin 6, page 6).

K. Locher

figure 13



The Totality Duration of T Z E r i

The "d" value for this EA type binary is given in the 1969 and 1971 issues of the GCVS as

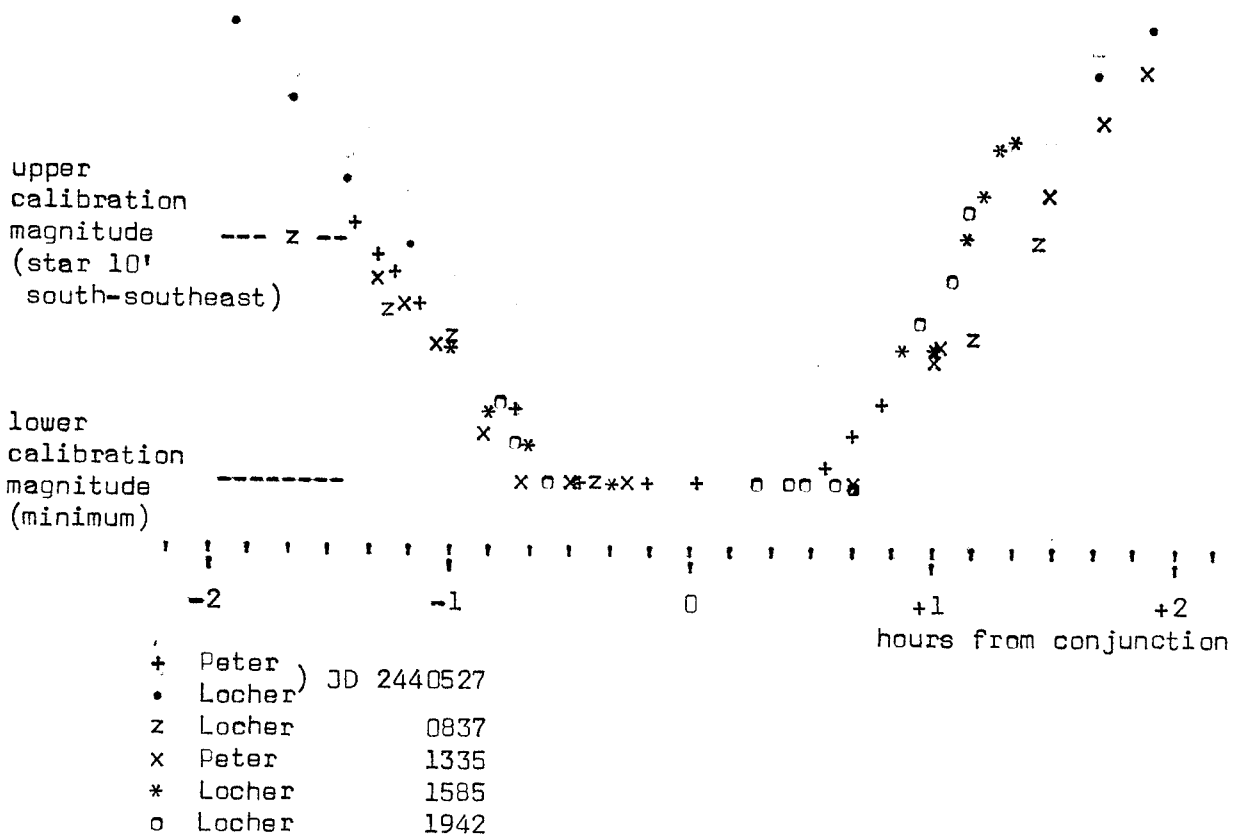
0.012 period or 45 minutes .

By the superposition of our visual lightcurves in figure 14 we would like to show that more reasonable values are, respectively

(0.020 ± 0.001) period (73 ± 4) minutes .

H.Peter & K.Locher

figure 14



Note on the O-C of SX Draconis

During the night of JD 2441903 (1973 August 8/9) I was able to observe descension and bottom of the lightcurve of SX Dra, the latter beginning near UT 23^h30^m. Along with the GCVS d value of 4.4 hours, the O-C results as +.07
K.Locher

Erratum

As we get aware only now, the erratum no.1 of BBSAG Bulletin 2 (page 5) concerning a minimum of Y Leonis published in ORION 90 was also compiled into ASTRONOMISCHE NACHRICHTEN Vol.290, page 108, 1967, where O and O-C likewise should be increased by 0.042. The uncertainty sign (:) there introduced obviously manifests the doubts of the compiler and is not justifiable from the observations.

