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PHOTOMETRY OF KR AURIGAE 1985-1988¹

KR Aurigae is a well known prototype of the antidwarf novae class of nova-like variables. Our program for extensive research of variables of this type includes a photometric patrol in B-color of KR Aur in order to continue the long set of already existing observations for construction of long-term light curve of the object. The photometric data, total number 102, obtained in the time interval between JD 2446300, and 2447231 at the NAO "Rozhen" of Bulgarian Academy of Sciences are presented in Figure 1 and Table 1. Observations were made with the 50/70 cm Schmidt, 60-cm Cassegrain and 2-m RCC telescopes. The magnitudes are based on standard stars published by Popova (1965).

Two fadings in the brightness have been observed in this three year period. The greatest observed magnitudes are 15.23 and 15.10. The data published by Götz (1986, 1987) show similar values. It seems that these minima are not as deep as one observed at the end of 1981 (Popov, 1982). It is worth mentioning the remarkable stability of the high state of brightness for more than 400 days since JD 2446557.

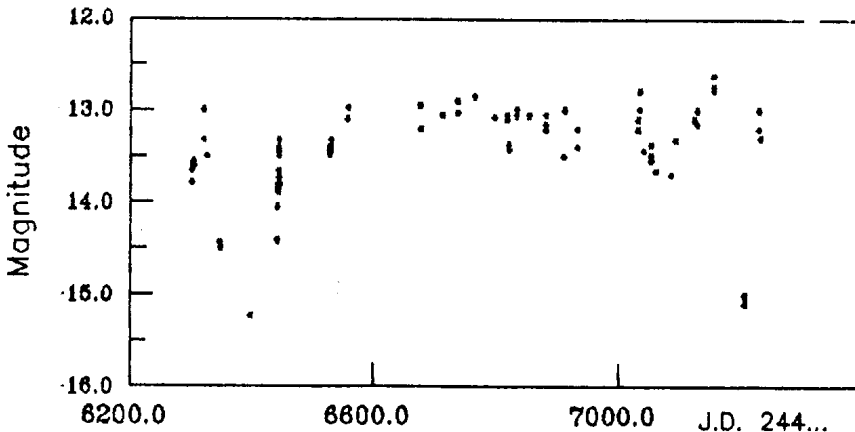


Figure 1

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Table 1

| J.D. 244... | m | J.D. 244... | m | J.D. 244... | m |
|-------------|-------|-------------|-------|-------------|-------|
| 8300.581 | 13.78 | 442.392 | 14.42 | 444.416 | 13.80 |
| .589 | 13.66 | .406 | 14.05 | .423 | 13.82 |
| 301.588 | 13.60 | .465 | 14.40 | .438 | 13.74 |
| 302.571 | 13.64 | 444.256 | 13.86 | .445 | 13.82 |
| 303.564 | 13.56 | .274 | 13.86 | .452 | 13.74 |
| 304.580 | 13.61 | .282 | 13.84 | .482 | 13.66 |
| 320.528 | 13.33 | .290 | 13.86 | .588 | 13.85 |
| .566 | 13.00 | .300 | 13.84 | .591 | 13.82 |
| 325.573 | 13.50 | .319 | 13.87 | .619 | 13.89 |
| 347.526 | 14.44 | .328 | 13.84 | .647 | 13.74 |
| 348.543 | 14.50 | .399 | 13.74 | .653 | 13.74 |
| 398.602 | 15.23 | .409 | 13.82 | .660 | 13.74 |
| .675 | 13.82 | 677.510 | 13.20 | .538 | 13.22 |
| .682 | 13.80 | 712.618 | 13.05 | .541 | 13.10 |
| .689 | 13.82 | 737.523 | 12.90 | 033.598 | 12.99 |
| 445.295 | 13.46 | .613 | 13.03 | 034.573 | 12.79 |
| .328 | 13.50 | 765.563 | 12.85 | 040.575 | 13.44 |
| .361 | 13.46 | 797.463 | 13.08 | 052.557 | 13.49 |
| .366 | 13.46 | 818.232 | 13.10 | .563 | 13.38 |
| .370 | 13.42 | .226 | 13.06 | .568 | 13.55 |
| .375 | 13.45 | 821.210 | 13.37 | 060.603 | 13.66 |
| .380 | 13.46 | .220 | 13.42 | 085.552 | 13.70 |
| .385 | 13.40 | 834.263 | 12.99 | 092.579 | 13.33 |
| .411 | 13.33 | .269 | 13.05 | 123.458 | 13.10 |
| 528.345 | 13.48 | 854.262 | 13.06 | 128.410 | 13.00 |
| .355 | 13.41 | .269 | 13.06 | 128.508 | 13.15 |
| .364 | 13.44 | 881.293 | 13.05 | 155.358 | 12.75 |
| 529.423 | 13.46 | .310 | 13.22 | 155.378 | 12.62 |
| 530.437 | 13.40 | .317 | 13.16 | 156.360 | 12.78 |
| 531.398 | 13.33 | 910.322 | 13.50 | 206.479 | 15.01 |
| 531.412 | 13.33 | 911.326 | 13.01 | .496 | 15.10 |
| 557.412 | 13.10 | 932.319 | 13.40 | 229.352 | 13.21 |
| 559.438 | 12.96 | .325 | 13.20 | .394 | 13.00 |
| 676.500 | 12.95 | 7 031.535 | 13.21 | 232.391 | 13.30 |

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