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OPTICAL BEHAVIOUR OF AT CANCRI IN THE SEASON 1988

In supplementing and completing the light curve of AT Cnc the cataclysmic star was measured on 24 blue-sensitive plates (ORWO-ZU21+GG13+BG12) from 9 nights obtained with the 50/70/172 cm Schmidt camera of Sonneberg Observatory covering the time interval between 13 February and 19 April 1988. The observations, which are linked to the sequence of comparison stars given in the IBVS No. 2363 are listed in Table I.

Table I

J.D.hel. 244...	m_B	J.D.hel. 244...	m_B	J.D.hel. 244...	m_B
7205.579	12. ^m 28	7239.414	15. ^m 11	7263.428	12. ^m 53
7205.598	12.20	7262.388	12.44	7263.451	12.48
7205.617	11.91	7262.407	12.33	7265.373	12.65
7206.540	12.28	7262.427	12.44	7265.396	12.66
7206.560	12.15	7262.449	12.12	7265.415	12.76
7207.497	12.21	7263.357	12.31	7265.437	12.41
7207.515	12.33	7263.379	12.54	7267.358	12.70
7207.533	12.33	7263.403	12.29	7271.345	15.37

The long-term light curve of AT Cnc, which results from the mean brightness values of each night and which is given in Figure 1 shows most of the observations in the high state. Only on 2 plates from 18 March and 19 April 1988 is the object in the low state.

Reducing all observations of the high state to one common epoch by means of the improved orbital elements given in the IBVS No.2918 the orbital light changes and the displaced minimum phase in the high state to the phase ≈ 0.5 can be confirmed. The results mentioned are given in Figure 2, where the magnitudes m_B are plotted against the phases.

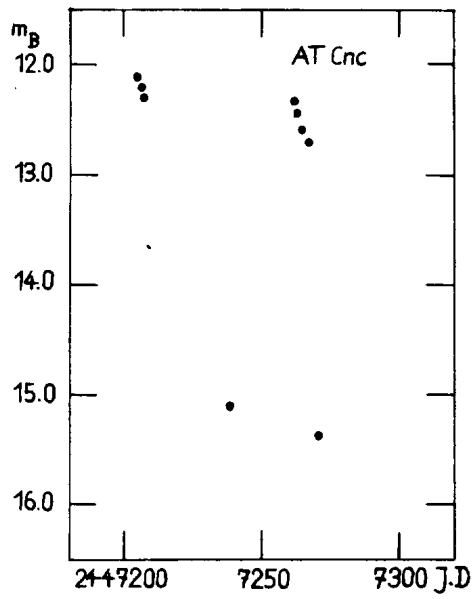


Figure 1

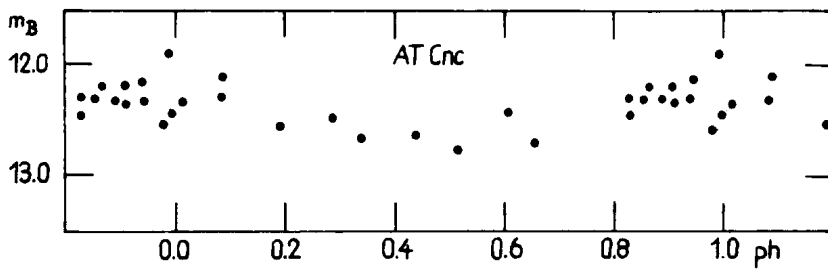


Figure 2

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