ETOILES ECLIPSANTES . Bulletin d'information nº28

AO CANIS MINORIS

AO CMi (position 1950: $7^{h}07^{m}_{.5} + 2^{\circ}04^{\circ}$) is an EA-type star which was discovered by A.A. Wachman in the early sixties. It varies between magnitude 14.4 and 15.6 photographically. Wachman gave the following ephemeris (Bergd. Abh. 7, No. 3, 1964):

JD Min. = 2434 + 424.373 + 0.85310722 E

Since then, no observations of this star have been published, as far as we know.

AO CMi was observed visually on the night of March 6th, 1984, with the 60cm F/3.5 Newtonian of the Pic du Midi Observatory in France, for which it was a rather easy target. The observations were carried out by Roland Boninsegna, Patrick Louis and Patrick Wils, and are listed in the following table.

observer	hel. Min.	O-C	n
BNN	2445 766.366	-0.067	16
LSP	766.378	-0.055	17
WLS	766.366	-0.067	19

From the light-curves, a flat phase at mid-eclipse of about 10 minutes duration is evident. This compares favourably with the value given in the GCVS 1969 (d=0.01). The large 0-C value for this star (for E = 13295) suggests a significant error in the sixth digit of the period. Because the original value of the period is given up to eight decimal places, and no error band was given, we assume at least the sixth digit was correct at the time, so that we may conclude that the period of this star has changed. Of course, further observations are needed to support this conclusion. We therefore suggest this star for future GEOS-missions at the T60 of the Pic du Midi Observatory.