

COMMISSION 27 OF THE I. A. U.
INFORMATION BULLETIN ON VARIABLE STARS
NUMBER 533

Konkoly Observatory
Budapest
1971 March 25

A PHOTOELECTRIC MINIMUM OF THE ECLIPSING
BINARY SZ CAMELOPARDALIS

A secondary minimum of SZ Cam has been observed with the 40 cm reflecting telescope of the Copenhagen University Observatory at Brorfelde. A standard V filter was used. The comparison star was BD +61° 669 (B2) and the check star was BD +61° 673 (A0). The extinction coefficient determined from 52 observations of the comparison star was applied to all observations. A single observation consisted of five integrations of 14 seconds duration followed by two integrations of the light from the night sky. From ten observations of the check star the standard deviation of a single difference, check star minus comparison star, was found to be 0^m003 . The minimum consists of 49 differences, variable star minus comparison star, fairly evenly distributed within an interval of 0^d45 . A preliminary determination of the heliocentric julian date of the minimum, made by mirroring the ascending branch on the descending branch, gives $JD_{\odot} = 2\ 440\ 897^d538$. The O-C residual from the ephemeris by Wesselink (1941) is $+0^d111$ ($E=4952.5$).

As pointed out by Koch (1970) the spectral type by Morgan et al. (1955) - B0II-III - prompts a conjecture of mass loss and period changes. It should, however, be noted that Murphy (1969) classifies SZ Cam as an O9V star.

Assuming that the secondary minimum is separated from the primary minimum by half the period, as found by Wesselink (1941), a lengthening of the period seems to have taken place. The mean period from 1934 to 1970 has been $2^d6984390$. An observation of a primary minimum is needed to determine if the secondary minimum is still situated at phase 0^d5 .

1971 March 17

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