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THE ELEMENTS OF THE ECLIPSING BINARY HU TAURI

During the period from November, 1974 to January, 1976 the eclipsing binary HU Tau was observed photoelectrically with the 50 cm Cassegrain telescope of Bucharest Observatory. The observations were performed in two colours, V and B. BD +19^o744 was used as comparison star.

The light curves were made up of 122 normal points in V and 114 in B. The heliocentric timing minima for computation of the phase angle were chosen 2442807.2718 J.D. and 2442807.2693 J.D. for the light curves in V and B, respectively.

The rectification was carried out by the Russell-Merrill method. The coefficients of rectification are presented below.

Filter V	Filter B
$A_0 = 0.9732 \pm 0.0021$	$A_0 = 0.9800 \pm 0.0018$
$A_1 = -0.0198 \pm 0.0032$	$A_1 = -0.0032 \pm 0.0028$
$A_2 = -0.0280 \pm 0.0031$	$A_2 = -0.0079 \pm 0.0028$
$B_1 = 0.0011 \pm 0.0022$	$B_1 = 0.0024 \pm 0.0019$
$B_2 = 0.0009 \pm 0.0023$	$B_2 = 0.0023 \pm 0.0020$
$C_0 = 0.0172$	$C_0 = 0.0026$
$C_1 = 0.0198$	$C_1 = 0.0032$
$C_2 = 0.0056$	$C_2 = 0.0010$

There were no special problems in the computation of the geometric and photometric elements. The elements are given as follows:

Filter V

$$k = 0.8104, r_g = 0.2150, i = 78^{\circ}5, L_s = 0.8020, L_g = 0.1880,$$

$$x_g = 0.8, x_s = 0.0, a_o^{OC} = 0.5976, \theta_e = 26^{\circ}4, J_s/J_g = 6.50$$

Filter B

$k= 0.7910$, $r_g= 0.2127$, $i= 78^{\circ}3$, $L_s= 0.8310$, $L_g=0.1690$, $x_g= 0.8$,
 $x_s= 0.0$, $\alpha_o^{\circ C}= 0.6150$, $\theta_e= 26^{\circ}6$, $J_s/J_g= 7.88$.

So far no elements have been published. A detailed analysis of this system will be published elsewhere.

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