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THE ECLIPSING BINARY SYSTEM X Tri

Three-colour photoelectric observations of the star X Tri in the system close to U,B,V have been carried out by the telescope A3T-14 during 1969-1972.

On the basis of these observations corrected elements were obtained:

$$\text{Min}_0 = 2437572.2149 + 0.9715288 \cdot E,$$

which were applied for the mean light curves' calculations.

The mean light curves' rectifications followed Russell-Merrill's technique. Photometric elements were calculated on the computer "Nairi" after the programme of Lavrov's direct method. The elements thus obtained are given in the Table.

	yellow	blue	uv
k	0.870	0.861	0.865
r <sub>1</sub>	0.329	0.328	0.327
r <sub>2</sub>	0.286	0.283	0.283
i	90	90	89
L <sub>1</sub>	0.145	0.099	0.127
L <sub>2</sub>	0.855	0.901	0.873
J <sub>2</sub> /J <sub>1</sub>	7.8	12.2	9.9
x <sub>1</sub>	0.5	0.5	0.5
x <sub>2</sub>	0.5	0.5	0.5

The absolute parameters derived in yellow light are:

A	r <sub>1</sub>	r <sub>2</sub>	m <sub>1</sub>	m <sub>2</sub>	T <sub>1</sub>	R <sub>1</sub>	R <sub>2</sub>	M <sub>D1</sub>	M <sub>D2</sub>	q
5.91	1.94	1.69	1.05	1.89	5344	1.95	2.55	3.59	1.58	0.56

The Roche model constructed exhibits that the sub-giant component fills its Roche lobe. The X Tri proves an example of a typical semi-detached system, the cool component losing its mass.

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