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THREE-COLOUR PHOTOMETRY OF IN COMAE

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Name of the object:	
IN Com = BD +26°2405 = HD 112313	
Equatorial coordinates:	Equinox:
R.A. = 12 ^h 55 ^m 33 ^s .70 DEC. = 25°53′5	2000
Observatory and telescope:	
Ege University Observatory, 48-cm Cassegrain telescope	
Detector:	Hamamatsu, R4457 (PMT)
Filter(s):	<i>B</i> , <i>V</i> and <i>R</i> filters of Johnson <i>UBV</i> system
Comparison star(s):	HD 112299
Check star(s):	HD 111812
Availability of the data:	
Upon request	
Type of variability:	R:/PN

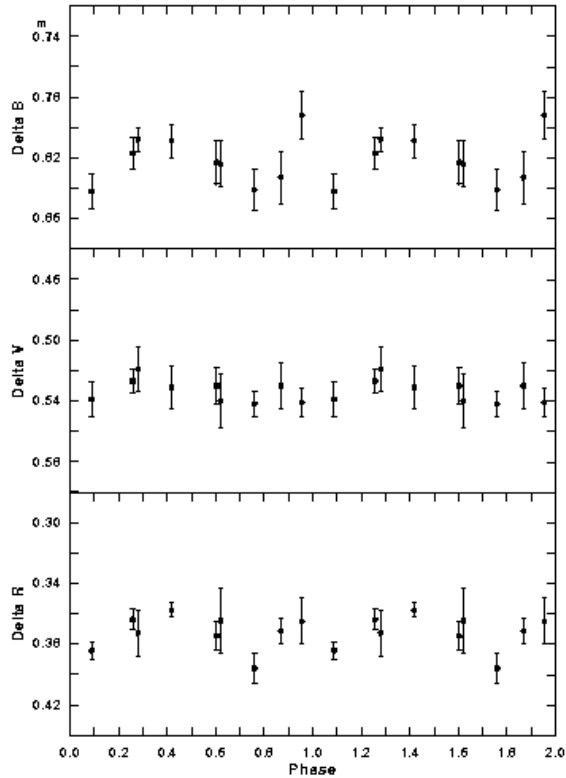


Figure 1. The B, V, R light curve obtained between March 9 and 25, 2000 of IN Com.

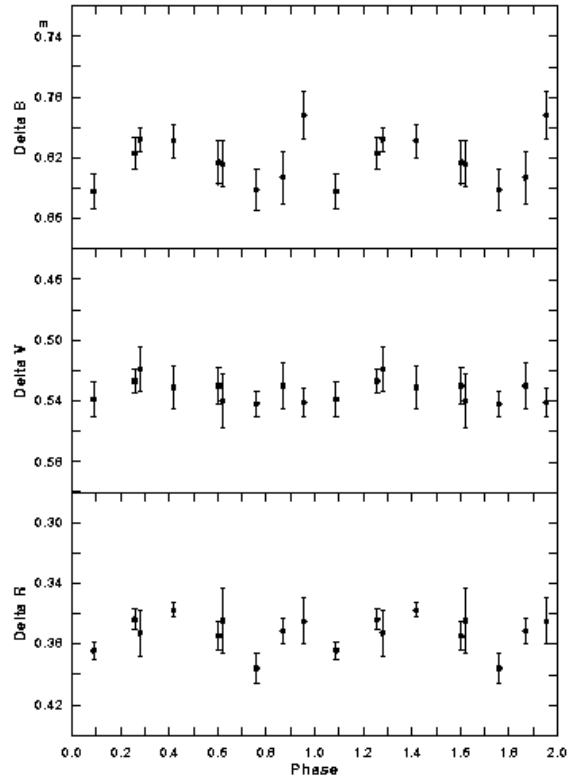


Figure 2. The B, V, R light curve obtained between May 4 and 12, 2000 of IN Com.

Remarks:

IN Comae was observed at Ege University Observatory with the 48-cm Cassegrain telescope. Two light curves in B, V, R were obtained with about two months interval. The light curves are shown in Figures 1 and 2. The points indicate nightly mean observed magnitude and the bars are their standard deviations. The phases of the observations were computed by using the following light elements (Strassmeier et al. 1997):

$$\text{JD(Hel)} = 2449415.0 + 5^d913 \times E.$$

The standard deviations of differential magnitude is about 0^m007 for the photometric system. The differences of the apparent magnitudes of comparison and check stars are almost constant during the observing season. Standard deviations of this differences do not exceed 3σ . However, the magnitude differences between IN Com and comparison change considerably at same night and are above 3σ . Therefore, the large deviations in Figures 1 and 2 originate from the IN Com itself (İbanoğlu et al. 2000). Note that the shape of the light curve of the system differs within a two-month time interval.

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References:

- İbanoğlu, C., et al., 2000, in preparation
 Strassmeier, K.G., Bartus, J., Cutispoto, G., and Rodono, M., 1997, *A&AS*, **125**, 11