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## II PEGASI REACHED THE LARGEST AMPLITUDE UP TO NOW

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Name of the object: II  $Peg = BD + 27^{\circ}4642 = HD 224085$ 

Equatorial coordinates:		Equinox:
$R.A.= 23^{h}55^{m}04.05$	$DEC. = 28^{\circ}38'.02$	2000

**Observatory and telescope:** Ege University Observatory, 48-cm Cassegrain telescope

Detector:	Hamamatsu, $R4457 (PMT)$	
Filter(s):	U, B, V and $R$ filters of Johnson system	
Comparison star(s):	$BD + 28^{\circ}4666 = SAO \ 91574$	
Check star(s):	$BD + 27^{\circ}4648 = SAO \ 91593$	
Availability of the data:		
Upon request		
Type of variability: RS CVn		

## **Remarks:**

II Pegasi is known as one of the most active RS CVn stars, which shows significant photometric variability due to rotational modulation of cool spots. The present observations of II Peg were obtained on 23 nights in 2000. We obtained 257 data points for each colour between July 3 and November 17, 2000. Johnson V-band light curve for II Peg obtained in this year is shown in Figure 1. Phasing is from HJD 2449582.9268 with 6<sup>d</sup>724333 period (Berdyugina *et al.* 1998). The brightness of the system reaches its maximum value at about phase 0.84 and its minimum value at about phase 0.42. Our broad-band photometry shows V-band variations up to 0.63 mag. This value is the largest amplitude value observed up to now. The system has diminished until 8.04 mag in V-band at the first time. The smallest amplitude of 0.05 mag in V was observed on II Peg in 1983 by Evren (1988). The largest amplitudes of 0.50 mag in V were observed previously in late 1986 by Doyle *et al.* (1988) and in early 1989 by Casas *et al.* (1989).



Figure 1.

References:

Berdyugina, S.V., Jankov, S., Ilyin, I., Tuominen, I., and Fekel, F.C., 1998,  $A \mathscr{C} A, \, {\bf 334}, \, 863$ 

Casas, R., Gomez-Forrellad, J.M., and Tomas, L., 1989, IBVS, No. 3330

Doyle, J.G., Butler, C.J., Morrison, L.V., and Gibbs, P., 1988, A&A, 192, 275

Evren, S., 1988, Astrophys. Space Sci., 143, 123