

## HD31992

### Introduction

HD31992 Aur is a new eclipsing variable, it was discovered by Hasan in the spring of 1997. The preliminary ephemerids were not sure:

$$\text{MinI} = \text{HDJ } 2450488.57 + (2.02 * E)$$

or

$$\text{MinI} = \text{HDJ } 2450488.57 + (1.01 * E)$$

So an ambiguity existed about the real period.

### Results

I obtained 65 observations of HD31992 in April 1999. I have observed three primary minima (following the period near 2.02 days) and two "secondary" minima.

The co-ordinates of HD31992 are:

AR: 5h 01m 48s Dec: 38° 20' 05" (2000)

I have used as comparison stars;

HD31879 Mv 8.8

HD31978 Mv 9.8

The minima times were;

HDJ 2451275.360

HDJ 2451277.380

HDJ 2451279.429

they were obtained by SOPACM (Gaspani). With all minima (the Hasan ephemerids time enclosed) I applied MPMA(Fernández) and after a lineal regression to the best period. So I find the next elements;

$$\text{Min I} = \text{HDJ } 2451273,324 + (2.033041 * E)$$

±4                      ±2

The OC table for this ephemerids is;

HDJ	E	O-C
488.57	-386	0.0002
1275.360	1	0.0029
1277.380	2	-0.0100
1279.429	3	0.0059

### References:

Hasan AK "Discovery of an eclipsing binary star in Auriga" .IBVS 4475 .1997

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(Ndir) What are the range and the spectrum of HD 31992 ?