

# AN ANALYSIS OF THE LIGHT CURVES OF Z CHA

J. Smak

Copernicus Astronomical Center  
Polish Academy of Sciences  
Warsaw, Poland

Photometric results by Warner (1974) and Bailey (1979) are re-analysed to derive geometrical and relative photometric parameters of the system at minimum light. Relative mass of the secondary component is found between  $\mu = 0.1$  and  $0.2$ , while its photometric contribution at the bottom of eclipse is between 20 and 40 percent.

Photometric behavior reported by Bailey (Case B), as compared to that observed by Warner (Case W), corresponds to a situation when the disk was smaller by 10-30 percent and the white dwarf was smaller by about 40 percent. At the same time the dimensions of the hot spot were larger by about 40 percent. In Case B the relative brightness of the disk became higher, while that of the white dwarf became lower.

At minimum light the outer parts of the disk are brighter than its inner parts. The optical thickness of the disk is high.

The main source of light seen at outbursts is located asymmetrically with respect to the center of the white dwarf, has an asymmetric distribution of brightness, and its dimensions are significantly smaller than those of the disk.

## REFERENCES

- Bailey, J. 1979, M.N.R.A.S., in press.  
Warner, B. 1974, M.N.R.A.S., 168, 235.

This paper will be published in Acta Astr., 29, 309, 1979.