

LETTER TO THE EDITOR

Received 13 July 1987

"Visual Observations of a Companion of Z Tauri"

Z Tauri is a Mira-type variable star, as given in the **General Catalogue of Variable Stars** (Kukarkin *et al.* 1969). Nagel's (1986) careful examination revealed three distinct discontinuities in the O-C curve. Mattei (1981, 1983a, 1983b, 1984, 1986, 1987) has encouraged observers to monitor Z Tauri closely because its period varies. The latest AAVSO "e" chart for Z Tauri dated 5-1986 has a note stating that there is a very faint companion.

Table I lists my observations of a companion located approximately three arcseconds southwest of Z Tauri. They were all made using the above-mentioned chart and a 14-inch Schmidt-Cassegrain telescope at a magnification of 434. I normally use eyepieces giving this much power when observing faint stars to help darken the sky background at my urban observing location. My magnitude estimates of Z Tauri during this time were from 13.1 to 13.5. It should be noted that the estimates of both stars may have slightly more than the normally expected error because of their small separation.

Observers should use caution when estimating the magnitude of Z Tauri, and should use a reasonably high magnification to be able to detect an outburst of the companion. Reports of observations should include a "companion fainter than" remark if Z Tauri is seen.

REFERENCES

- Kukarkin, B. V. *et al.* 1969, **General Catalogue of Variable Stars**, 3rd Edition, Moscow.
 Mattei, J. A. 1981, **AAVSO Circular**, No. 134, 3.
 _____ 1983a, **AAVSO Circular**, No. 147, 3.
 _____ 1983b, **AAVSO Circular**, No. 158, 3.
 _____ 1984, **AAVSO Circular**, No. 170, 3.
 _____ 1986, **AAVSO Circular**, No. 183, 3.
 _____ 1987, **AAVSO Circular**, No. 195, 3.
 Nagel, L. M. 1986, **Journ. Amer. Assoc. Var. Star Obs.** 15, 48.

TABLE I

Visual Observations of a Companion of Z Tauri

Date	Magnitude
2446744.0	13.1:
748.0	13.1:
750.8	13.1:
755.0	13.1
757.9	13.1
765.0	13.2
771.9	13.2
772.9	13.4
792.9	14.1:

Note - : = approximately

Thomas W. Langhans
 371 Pine Street
 San Bruno, CA 94066