



FIG. 1 — The plot of V magnitude versus time for AT Herculis. The circles denote observations on August 25 and the squares denote those on September 1. The epoch of maximum light of the star is not known.

nor any other with as short a period as  $0^d33$ . To what class of variables AT Herculis belongs cannot be ascertained on the basis of present observations. If the small amplitude of  $0^m5$  is correct, AT Herculis may be an eclipsing variable with an early K-type star as the brighter component. The present observations also show that the star is about half a magnitude fainter than given in the *General Catalogue of Variable Stars*.

#### REFERENCES

- Kukarkin, B. V. and Parenago, P. P. 1948, *General Catalogue of Variable Stars*, 1st ed. (Moscow: U.S.S.R. Academy of Science).



### INFRARED OBJECT IN THE REGION OF IC 1805

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An infrared object has been discovered during a study of T Tauri objects and diffuse nebulae, on plates of the field of IC 1805

obtained with the Schmidt telescope (65/90 cm) of the Asiago Observatory.

The object appears compact and elliptical. The size of the bright part is  $18''$ , but the total diameter can be estimated to be about  $50''$ .

The peculiarity of the object is its pronounced brightness in infrared radiation (Kodak I-N hypersensitized + RG 5) with invisibility in blue light (Kodak 103a-O without filter). The object is visible also in red light (Kodak Ia-E + RG 1) but fainter than in the infrared. Objective prism photographs obtained by the writer at Hamburg and Asiago Observatories (Schmidt 80/120 and 40/50 respectively) show a smooth continuum without an  $H\alpha$  emission feature. Molecular absorption bands are also apparently absent. However, these spectra are rather poor since the object is a small but extended one.

This object is very near to the radio source 3C 69. However, if we assume for 3C 69 the position obtained by Pauliny-Toth, Wade, and Heeschen (1966), the two objects are separated by considerably more than the error limits given by these authors.

Not far from this object another infrared object has been observed which is fainter than the first one and seems to show quite similar characteristics.

The approximate positions for these two objects are:

$$\begin{array}{ll} \text{Object 1} & \left\{ \begin{array}{l} \alpha = 2^{\text{h}}32^{\text{m}}6 \\ \delta = +59^{\circ}25'8 \end{array} \right. \\ (1950.0) & \end{array} \quad \begin{array}{ll} \text{Object 2} & \left\{ \begin{array}{l} \alpha = 2^{\text{h}}38^{\text{m}}2 \\ \delta = +59^{\circ}23'7 \end{array} \right. \\ (1950.0) & \end{array}$$

The infrared photograph of the region is shown in Plate I. The positions of the objects and of 3C 69 are indicated.

The comparison between blue and infrared photographs is shown in Plate II.

The peculiarity of this object is evident. We believe nevertheless that before attempting any interpretation one would need to obtain slit spectra and/or an infrared multicolor photometry.

#### REFERENCES

- Pauliny-Toth, I. I. K., Wade, C. M., and Heeschen, D. S. 1966, *Ap. J. Suppl.* 13, 65.



PLATE I

The field of the infrared objects and of 3C 69 (north is to the left).



PLATE II

The infrared object 1: above as seen in blue light (103a-O), below in infrared radiation (I-N hyp. + RG 5).