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A POSSIBLE NEW FLARE STAR IN THE PLEIADES (M45) REGION

Probably a new flare star in M45 region has been discovered in the course of a photographic survey made with the 16 cm f/5.7 astrograph of the Osservatorio astronomico di Pieve S. Paolo (Lucca) during the autumn 1979. I revealed this object only in October 1983, and a careful plate analysis made by prof. L. Rosino (1984) at Asiago Astrophysical Observatory has proved that the object is very probably a new flare star. The flare star catalogue of Haro et al. (1982) and IBVS from October 1979 onward have been consulted, but the object does not coincide with previous known flare stars. The object lies quite near to TON. new ser. No. 366 = B 539 (about 1'NE).

Deep infrared plates taken with the 67/92 cm Asiago Astrophysical Observatory Schmidt camera are empty in the position of this suspected new flare star. Its position has been measured with a micrometer at the Istituto di Astronomia dell'universita di Pisa.

Its coordinates are: $\alpha = 3^{\text{h}}43^{\text{m}}.3$; $\delta = +25^{\circ}08' \pm 0!3$ (1900)
Plate parameters: date - 19 October 1979; T.U. (middle exposure) - $21^{\text{h}}48^{\text{m}}$
exposure time - 50 min; emulsion - HP4 (Ilford)
The object has a panchromatic magnitude (at max.) = 13.

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