

COMMISSION 27 OF THE I. A. U.
INFORMATION BULLETIN ON VARIABLE STARS

Number 1160

Konkoly Observatory
Budapest
1976 July 28

A NEW FLARE STAR IN PISCES

While carrying out an objective-prism survey with the Curtis Schmidt telescope at Cerro Tololo Inter-American Observatory, the author discovered a new, large-amplitude flare star. The discovery plate was taken on 1976 June 7. The star abruptly appeared at about $m_{pg} = 8.5$ at 9:59 UT, and was still well above the plate limit of about $m_{pg} = 10.5$ when the exposure ended 14 minutes later. (Accurate timing is possible because the objective-prism spectra are widened with a single trail.) During the flare the object showed a continuous spectrum with the Balmer lines and possibly Ca II K in emission.

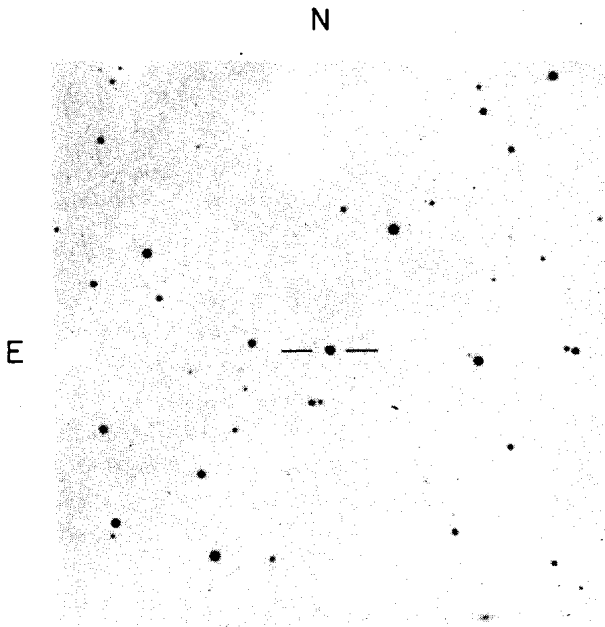
The star was found at minimum on the Palomar Sky Survey prints at about 15.0 mag, at 1950 position $23^h 29^m 09^s$, $-3^{\circ} 01' 17''$. The figure gives a finding chart for the star, reproduced from the Palomar red print.

This new flare star is not only one of the apparently brightest known during outburst, but is also, with a range of more than 6 magnitudes, one of the largest-amplitude flare stars. It deserves further study by optical and radio observers.

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Finding chart for the new flare star. The field is a 12' square, reproduced from the Palomar Sky Survey red print. (Copyright by National Geographic Society-Palomar Sky Survey; reproduced by permission.)