LETTER TO THE EDITOR

Received 3 February 1988

"A New Variable and a Rediscovery"

In 1985 I began a photographic patrol program patterned after Ben Mayer's PROBLICOM technique (Mayer 1977), systematically photographing star fields with a 35mm camera and 135mm f/3.5 lens, using Ektachrome 400 film, piggybacked on a Celestron 8-inch telescope. Initially, exposures varied from 5 to 15 minutes, but 5-minute exposures soon proved to be satisfactory and were subsequently selected as a standard. Stars of magnitude 10.5 can be reached consistently with this procedure. The film is developed, mounted, and labeled, and then compared with earlier slides on a home-made blink comparator consisting of two slide projectors.

No novae have been found. However, asteroids, variables, film flaws, and even sunlight glinting off satellites have been found, and procedures to identify each developed. Variables are by far the most numerous finds, and in 1987 I began to identify each by name as it was found. Using the criteria set at the Maria Mitchell Observatory (Capron 1973), I have found, since September of 1987, two variables not listed in the Fourth Edition of the General Catalogue of Variable Stars (Kholopov et al. 1985).

The first star, at R.A. 01^h 57^m 53^s, Dec. +58^o 03' (1950), has subsequently been identified as a recent discovery of Lennart Dahlmark's, and has been given the provisional designation LD103 (Dahlmark 1986). It appears on five slides from four dates from August, 1986, to March, 1987, being brightest in March, 1987, at roughly magnitude 9.5. Subsequent patrol slides since September, 1987, show no star at this location. Photographs taken through the 8-inch telescope show a very red star beyond the limiting magnitude of the patrol slides.

The second star I have provisionally designated DHK3. It is located in Taurus at R.A. $05^{\rm h}$ $24^{\rm m}$, Dec. $+23^{\rm o}$ $10^{\rm t}$ (1950). It appears faint on four patrol slides taken on two dates, November 8, 1985, and March 3, 1987, and bright on subsequent slides taken since October 18, 1987. Very rough magnitude estimates are 10.0 at its faintest and 9.0 when bright.

Figure 1 is a finder chart for DHK3.

REFERENCES

Capron, B. A. 1973, Journ. Amer. Assoc. Var. Star Obs. 2, 63. Dahlmark, L. 1986, Inf. Bull. Var. Stars, No. 2878. Kholopov, P. N. et al. 1985, General Catalogue of Variable Stars, Fourth Edition, Moscow. Mayer, B. 1977, Sky & Telescope 54, 246.

Daniel H. Kaiser 2631 Washington Street Columbus, IN 47201

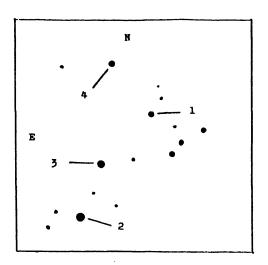


Figure 1. Finder chart for DHK3. 1 = DHK3; 2 = SAO 077191; 3 = SAO 077189; 4 = SAO077187. North is up; east is to the left.

LETTER TO THE EDITOR

Received 10 December 1987

"White Light Flare Observing"

I would like to inform AAVSO Solar Division observers that Sacramento Peak Observatory in New Mexico is planning a program of monitoring white light solar flares. This opportunity is an excellent one for AAVSO observers to contribute to solar study. They are keeping records of all known occurrances of white light flares and would appreciate information on sightings. As solar observers know, these flares are very rare, and it requires long periods at the telescope in the hope of seeing one. [Ed. Note: Be absolutely certain never to directly observe the sun without the appropriate filter in place. Serious eye damage or blindness could result.] White light flares begin approximately two years before sunspot maximum and decline slowly for about four years afterward. Also, there are approximately ten to fifteen outbursts per year near solar maximum. Chances of detection may be increased considerably by using a short-wavelength blue filter. A Wratten No. 47 blue-colored filter is an excellent choice. It peaks at 4400A and a UV-blocking filter should not be necessary.

Any interested observers should feel free to contact me.

REFERENCE

Neidig, D. F. and Beckers, J. M. 1983, Sky & Telescope 65, 3, 226.

Thomas G. Compton 1537 Chapin Street Birmingham, MI 48008