COMMISSION 27 OF THE I. A. U.
INFORMATION BULLETIN ON VARIABLE STARS
Number 966

Konkoly Observatory
Budapest
1975 February 25

CSV 7917

A possible Nova Scuti 1958 was reported by the late S.Apriamishvili (1962) (the coordinates in that report are for 1950, not 1900), and on this account it is No. 7917 in the Catalogue of Stars Suspected of Variability. I shall refer to this catalogue as the CSV.

I have noted that an S star found here some years ago,No.12 in Table 2 of the paper by Nassau, Blanco, and Morgan (1954), is variable and quite close to the position of CSV 7917. Kharadze and Dolidze of Abastumani Observatory have very kindly made available to me photographic prints from Apriamishvili's discovery plate,and comparison of these with the Case material leaves no doubt that S-WS 12 and CSV 7917 are the same star. It is missing from the blue Palomar Sky Survey print, as Apriamishvili had noted, and which supported his suspicion that the star was a nova. However, it appears to be present on the red print; I was assisted in reaching this conclusion by our fortunate possession of a transparency of the red Palomar print, made to the scale of our Burrell Schmidt plates.

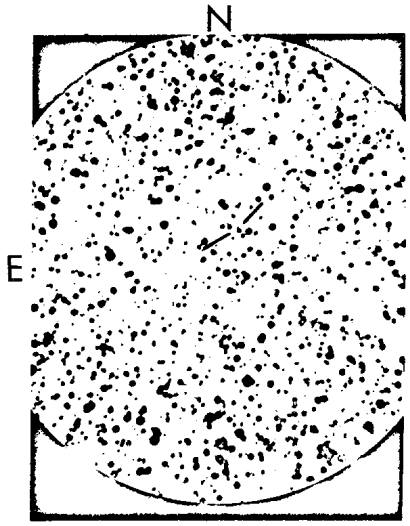
The accompanying chart, from the red Palomar print, shows the star in a field approximately 6′ in radius.

Apriamishvili discovered the star from its Hα emission, and this plus my previous remarks suggest that it is a long-period variable. However, the situation may not be that simple; the Abastumani people do not think their spectrum is type S, and my plates (chiefly infrared) do not establish the form of the light curve. I can only say the following: The star was bright on May 27 and June 19, 1947; July 20, 1952; July 12, Aug. 12, and Sept. 8, 1955. It was faint(at least two mags. fainter, and usually invisible) Aug. 2, 1951;July 4, 1959; and July 30, 1962. As this summary suggests, my material is inadequate for meaningful determinations of magnitude values.

Kharadze feels that the Abastumani discovery spectrogram is like a Wolf-Rayet star. This circumstance, and Apriamishvili's fail-

ure to find the star on a number of other plates, suggests possible membership in, or relationship to, the Z Andromedae group; if this is the case, it is the first one in which the cool component is S-type. Somewhat against this, and perhaps favoring the long-period variable status, is the fact that my material shows the S-type spectrum to be distinctly variable in flux in the photographic infrared.

My only spectral plates that give useful information about the spectrum are infrared (there is one unwidened red-region spectrum, of uncertain character), and appear mostly to show a red continuum with the λ7909 LaO band characteristic of S-type stars.



C. B. STEPHENSON
Warner and Swasey Observatory

References:

Apriamishvili, S. 1962, Astron.Circ. No. 229, 1

Nassau, J.J., Blanco, V.M., and Morgan, W.W. 1954, Astrophys.J., 120, 478