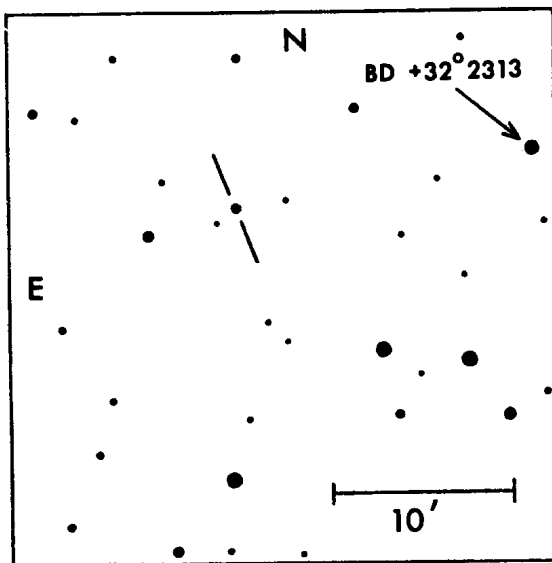


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A FAINT, RED VARIABLE NEAR THE NGP

A marked variability has been detected in a faint, late M-type star located at the 1950 coordinates, R.A. = $13^{\text{h}} 00^{\text{m}}.3$, D. = $+31^{\circ} 33'$, $l^{\text{II}} = 85^{\circ}$, and $b^{\text{II}} = +86^{\circ}$.



The variability was found during a comparison of a pair of plates (Kodak 103aD + GG 11 filter, 20 min. exposure) taken with the Warner and Swasey Observatory Schmidt telescope. The plates were calibrated by use of a

nearby photoelectric standard sequence of Sanduleak (1). It was estimated that the star showed $V = 13.5$ on May 25, 1962 but had brightened to $V = 12.3$ on April 27, 1963. No additional material is available to determine the nature of the variability.

On low-dispersion, infrared objective-prism plates taken with the same telescope, the star is classified as type M8 in the system described by Nassau and Velghe (2). In accord with this spectral type, the star is very red and has a V-I index of about 4.0 mag.

If the star were an intrinsically faint dwarf it would be very near (within a few parsecs) and would be expected to show a large proper motion. However, it is not listed in either the proper motion surveys of Luyten (3) or Giclas et al (4). This, together with its variability, suggests that it is probably a halo giant. If we adopt a visual absolute magnitude of -0.9 , the value for late M-type giants given by Blanco (5), the star is located about 6000 parsecs above the galactic plane.

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- (1) Sanduleak, N., Thesis (unpublished), 1965.
- (2) Nassau, J.J., and Velghe, A.G., Ap.J. 139, 190, 1964.
- (3) Luyten, W.J., private communication.
- (4) Giclas, H.L., Burnham, R., and Thomas, N.G., L.O.B.No.124, 1964.
- (5) Blanco, V.M., Galactic Structure, eds. A.Blauuw and M.Schmidt (Chicago: University of Chicago Press), chap.12.