

THE POSSIBLE VARIATION OF HD33162

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For several years, the author has corresponded with Prof.J.M.L. da Silva of the State College of Paraná, Curitiba, Brazil, about the variable star RX Leporis. We agreed that certain of our visual observations were in doubt because of certain irregularities in the published magnitude sequence for stars on the comparison chart, AAVSO chart 050001 W Ori.

Further investigation showed that the difficulty lay with two stars, HD33093, marked at magnitude 6.1 on the chart, and HD33162, listed at magnitude 6.3. At times HD33162 seemed brighter than HD33093, although neither Da Silva nor the author could remember specific instances. However, both agreed that they had seen this phenomenon and had put it down to a misprint on the chart.

A check of the Atlas Coeli catalogue showed HD 33093 to be of spectral class F9 and, thus, it was not a candidate for variability. HD33162 was not listed in the catalogue. This problem was communicated to Dr.J.D.Fernie at the 1973 General Assembly of the Royal Astronomical Society of Canada at Ottawa.

Dr.Fernie's investigations showed that HD33162 is of spectral class Ma and that more recent observations had shown it to be of spectral class M0. He also stated that at the turn of the century, HD 33162 had a magnitude of 6.7 and thus it had brightened slightly.

The author then communicated this problem to the American Association of Variable Star Observers, who, in turn, printed a small

notice in "Variable Views", an AAVSO publication.

Shortly thereafter, the author received a letter from T.R. Williams, Cherry Hill, N.J., stating that he had observed HD33162 brighter than HD33093 on the night of January 6, 1974.

On the night of February 15, 1974, the author observed HD33162 at its published magnitude of 6.3 at approximately 7 PM. However, by 11:30 PM the magnitude had risen to 5.9. This was confirmed by Robert Speck, who was visiting with the author at the time.

In the meantime, Prof. da Silva had communicated with Dr. Boris Kukarkin, chairman of the IAU Commission on Variable Stars. Dr. Kukarkin replied, in a private communication, that HD33162 was quite likely variable, and would be given an official designation as soon as the type of variability and the period had been determined.

The purpose of this paper, then, is twofold: to warn visual observers that the AAVSO chart may be in error, and to ask for observations of HD33162. Certainly photometry would be of great assistance in determining the possible variability of HD33162.

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