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HR 6384: A PROBABLE INTERACTING BINARY

Although little is known about this southern-hemisphere star, recent IUE spectra obtained by us show the characteristics of a close binary system containing substantial circumstellar gas. The only known spectral classification is M1-2 II-III + A (Houk and Cowley 1975). BV photometry quoted by Hoffleit (1982) gives  $V = 6.09$ ,  $B-V = 1.78$ . No radial velocities are found in the literature.

The far-UV spectrum has very complex absorption and possible emission features. It resembles the spectra at some phases of the known interacting binaries SX Cas (Plavec, Weiland, and Koch 1982) and HD 207739 (Parsons, Holm, and Kondo 1983), and partial eclipses in the zeta Aurigae systems such as VV Cep (Hagen *et al.* 1980) and 22 Vul (Ake, Parsons, and Kondo 1984). Figure 1 suggests an embedded or obscured secondary hotter than type A. In order to have substantial interaction between the components, the period of the binary is probably hundreds of days.

Ground-based photometric and spectroscopic observations are strongly urged. HR 6384 is the more southerly of a bright pair separated by 6 arcmin. The nearest comparison stars, designated by 59 and 58 on chart 161 of the AAVSO Variable Star Atlas, are HR 6438 (G8 Ib-II,  $V = 5.88$ ,  $B-V = 1.07$ ,  $U-B = 0.86$ ) and HR 6442 (G8-K0 III,  $V = 5.80$ ,  $B-V = 1.00$ ) (data from Hoffleit 1982). Coordinates for 1985 (derived from SAO Catalog) :

HR 6384	(HD 155341, CPD-56 8098)	17h 12m 57.0s	-56° 52' 17"
HR 6438	(HD 156768, CPD-57 8478)	17h 21m 37.3s	-57° 59' 47"
HR 6442	(HD 156854, CPD-56 8191)	17h 21m 50.8s	-56° 30' 42"

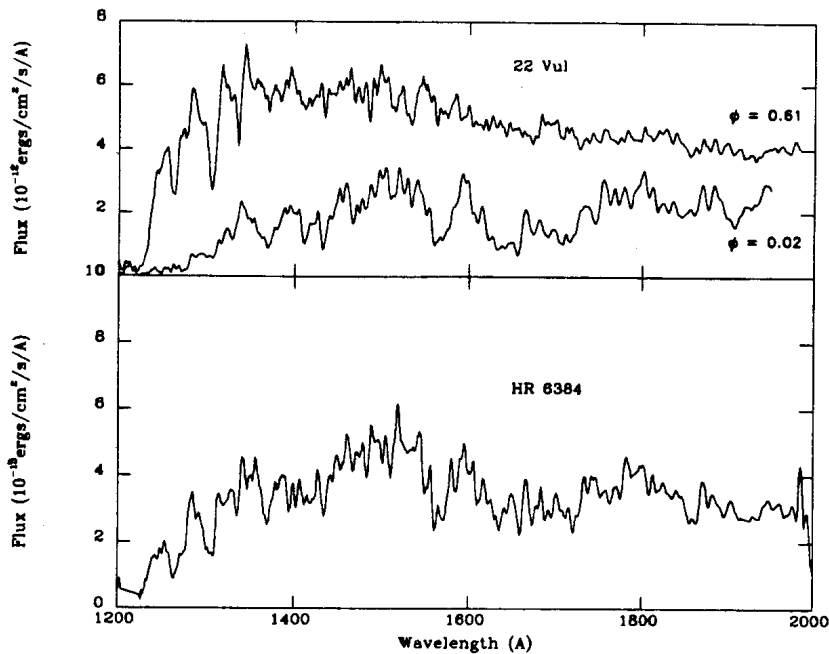


Fig. 1. IUE SWP spectrum of HR 6384 (bottom) and 22 Vul (top) at partial and out-of-eclipse phases. HR 6384 resembles 22 Vul at partial eclipse, where the added continuous and line absorption from the outer atmosphere of the G3 Ib-II primary strongly distorts the spectrum of the B9 secondary.

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