

A RADIAL VELOCITY STUDY OF TWO EARLY O STARS

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SUMMARY:

We report the results of a radial velocity study of two early O-type stars in NGC2467, namely HD64315 and HD64568. Medium dispersion spectrograms for both stars were obtained at CTIO, Chile, between 1982 and 1984. All plates were measured for the determination of the radial velocities with the Grant oscilloscope-engine coupled with the HP1000 computer at OALP.

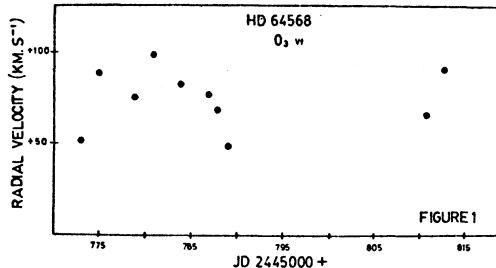


FIGURE 1

Our results for HD64568, which is of spectral type O3Vf (Walborn 1982a), are shown in Fig. 1. The radial velocity variations seen in this figure could be due either to a binary nature of HD64568, or to instabilities in the atmosphere of a very massive star. More data are necessary to decide between these two possibilities.

We have found HD64315, classified as O6Vn (Walborn 1982b), to be a double-lined spectroscopic binary. The preliminary orbital elements are listed in Table 1, and the observed radial velocities compared with the adopted orbital elements (Table 1) are plotted in Fig. 2.

TABLE 1

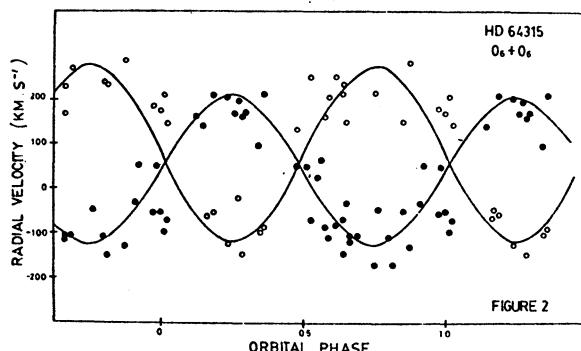


FIGURE 2

Preliminary Orbital Elements of HD64315

Parameter	Primary	Secondary
Period (days)	1.34	
e	0 (adopted)	
V_0 (km s⁻¹)	+40	+80
K (km s⁻¹)	170	200
$a \sin i$ (R_\odot)	4.5	5.3
$M \sin^3 i$ (M_\odot)	3.8	3.2

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