

NOTES

No. 4362. A return of No. 4357.

No. 4366. A return of No. 4362, which was a return of No. 4357.

A STAR OF ABNORMALLY HIGH VELOCITY

The star Boss 5381¹ has been found from measures of five one-prism spectrograms taken during the past two months to have an abnormally high velocity. The individual velocities are:

Plate	Date, 1932	Velocity
γ 18927	June 25	—198.2 km/sec.
18933	July 15	—193.2
18939	July 16	—193.7
18948	July 17	—193.9
γ 18972	Aug. 10	—196.7 km/sec.
Mean		-195.1 ± 0.66 (P.E.)

The spectrum and absolute magnitude, according to Dr. Adams, are G5 and +2.5, respectively.

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ON THE PRESENCE OF TITANIUM OXIDE BANDS IN THE
SPECTRUM OF Z ANDROMEDAE

Merrill and Humason² have recently called attention to three stars whose spectra exhibit the anomaly of containing both the low excitation absorption spectrum of titanium oxide and the high excitation emission line of ionized helium at 4686A. More recently Dr. Merrill has suggested that the reproductions of the spectra in H. H. Plaskett's paper,³ "The Composite Stellar and Nebular Spectrum of *Z Andromedae*," also show evidence of the presence of the chief bands of *TiO* in the same spectrum with the strong line 4686A of helium. At Professor Plaskett's request, I have examined his original plates of this variable star.

¹ HD 199191, R.A. 20^h 50^m 5; Dec. +54° 08' (1900); Mag. 7.16.

² *Publ. A.S.P.*, 44, 56, 1932.

³ *Publ. D.A.O.*, 4, 119, 1928.