

BOSS 678

(1900, $\alpha = 2^h 53^m \cdot 7$, $\delta = +51^\circ 57'$, mag. 5.42, type B5)

The star's spectrum consists of broad lines of hydrogen and traces of the magnesium $\lambda 4481$. The probable error of measurement is high, and the values given below may be as much as 10 km. in error. The H_γ line, however, is fairly uniform throughout its breadth and is thus fairly reliable, and judging by it alone there would seem to be good reason for considering the velocity of the star to be variable.

	Plate	Date, G.M.T.	Number of lines	Velocity
8335		1917, Nov. 5.685	2	+44
8347		" 12.568	2	-44
8668		1918, Oct. 21.649	4	+3
8688		Dec. 9.638	3	± 0
8706		1919, Jan. 27.552	3	+4

MEASURES OF BOSS 678

λ	8335		8347		8668		8688		8706					
	Vel.	Wt.	Vel.	Wt.	Vel.	Wt.	Vel.	Wt.	Vel.	Wt.	Vel.	Wt.	Vel.	Wt.
4861.527					-37.8	$\frac{1}{4}$	-20.9	$\frac{1}{4}$	+30.2	$\frac{1}{4}$				
4340.634	+ 9.8	$\frac{1}{4}$	-43.0	$\frac{1}{4}$	+ 6.0	$\frac{1}{4}$	+13.5	$\frac{1}{2}$	+22.1	$\frac{3}{4}$				
4104.890	+ 4.6	$\frac{1}{2}$	-53.3	$\frac{1}{4}$	- 9.0	$\frac{1}{2}$	+19.7	$\frac{1}{2}$	+36.3	$\frac{1}{2}$				
3970.177					-47.6	$\frac{1}{2}$								
Weighted mean	+ 6.33		- 46.43		- 9.10		+ 8.80		+ 28.19					
V_s	+ 5.08		+ 3.00		+ 12.03		- 8.58		- 23.48					
V_d	+ .02		+ .14		+ .11		- .03		- .09					
Curv.	- .28		- .28		- .28		- .28		- .28					
Radial Velocity	+ 11.2		- 43.6		+ 2.8		- 0.1		+ 4.3					