

according to their respective heliographic latitudes and times of central meridian passage. The length of the last sun-spot cycle was therefore only 10.3 years, nearly a year less than the average length of the cycle.

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FIVE STARS HAVING SPECTRA OF CLASS BE

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The following five stars on my program for the determination of the radial velocities of the fainter Class B stars have been found to have spectra containing emission lines of hydrogen. As these stars are not given in Merrill's *Catalogue of Classes Be and Ae*,¹ it is probable that the presence of emission lines in their spectra has not been observed previously.

HDC	α (1900)		δ (1900)		l	b	mg	Spectral Class	No. of Plates
	h	m							
42259	6	4.6	- 5°	3'	180°	-10°	8.4	B3ne	6
46380	6	27.9	- 7	26	185	- 6	8.4	B3ne	5
47761	6	35.1	- 4	36	184	- 3	8.5	B0e	6
48282	6	37.5	-10	24	189	- 5	9.0	B5ne	5
51193	6	51.3	- 3	40	185	+ 1	8.7	B3ne	3

REMARKS: HDC 42259. $H\beta$ emission is slightly more intense than continuous background, while those of $H\gamma$ and $H\delta$ are of about the same intensity as the adjacent continuous spectrum.

HDC 46380. The emission lines vary in intensity from plate to plate. Interstellar H and K lines.

HDC 47761. $H\beta$ emission is considerably more intense than the adjacent continuous spectrum. The absorption lines are sharp except 4471. $H\gamma$ and $H\delta$ appear also as emission lines. Interstellar H and K lines.

HDC 48282. $H\beta$ emission is more intense than the adjacent continuous spectrum. The absorption lines are very faint and nebulous.

HDC 51193. The hydrogen emission character is present as far as $H\delta$. The absorption lines are very indistinct and nebulous.

The spectrograms were obtained with one or two-prism spectrographs (1 mm = 75 Å) attached to the 36-inch refractor. No observations were secured in the visual region of the spectrum.

¹ *Contributions from Mount Wilson Observatory*, 21, 389-442, 1934.