

TIME SERIES UV SPECTROPHY OF GD358

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Via HST spectroscopy, we find HeII lines in surface spectra of the DBV GD358 and hypothesize they might be due to atmospheric heating during pulsations. GD358 is the most extensively studied pulsating white dwarf star. Its effective temperature has been estimated via optical and UV at about 25,000K. In 2000, we obtained time series spectroscopic data on GD358 with the HST to compare pulsation amplitudes in the UV and optical. The UV spectra we obtained also revealed, for the first time, lines of H, C and HeII, the latter being particularly unusual in a DB cooler than $\approx T_{\text{eff}}/sim 80,000\text{K}$. We propose that pulsation heating of the GD358's atmosphere is responsible for producing the HeII lines.