

AN UNSTABLE Ofpe STAR IN THE LMC

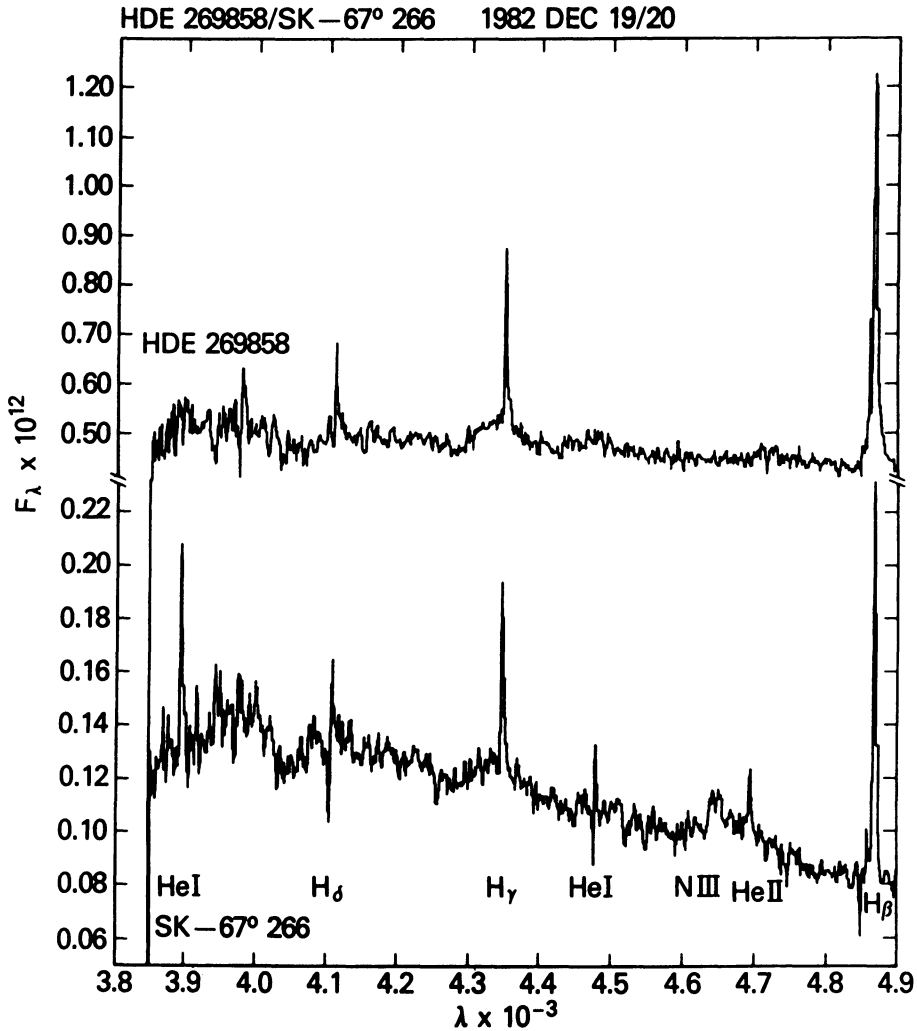
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The extreme Ofpe star HDE 269858 = Radcliffe 127 in the Large Magellanic Cloud (Walborn 1977), which has ejected nitrogen-rich material (Walborn 1982), was observed to be in a state of outburst on December 20, 1982. Spectroscopic observations at 2.5Å resolution with the Cerro Tololo Inter-American Observatory 1.5 meter SIT vidicon system showed a blue magnitude of 10.2, more than 1 magnitude brighter than previously, and a qualitatively changed spectrum. The Of emission features and the strong He I P Cygni profiles (especially $\lambda\lambda 3889$ and 4471) had disappeared, while the hydrogen Balmer emission remained very intense. IUE observations by S. Shore and N. Sanduleak provide evidence that the star has been in this "high" state since at least March 1981. Hence, a phenomenon related to those of P Cygni and/or Eta Carinae may be indicated. A current preprint by O. Stahl, B. Wolf, G. Klare, A. Cassatella, J. Krautter, P. Persi, and M. Ferrari-Toniolo announces the prior discovery of the outburst at the European Southern Observatory in January 1982 and discusses extensive observations of its development, making a convincing case for interpretation of HDE 269858 as the hottest known Hubble-Sandage variable and a prime candidate for an O star becoming a WR via episodic enhanced mass loss.

REFERENCES

Walborn, N. R. 1977, *Ap. J.* 215, 53.
_____. 1982, *Ap. J.* 256, 452.

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The spectra of HDE 269858 and Sanduleak -67° 266, as recorded with the SIT vidicon in December 1982. Note the absence of He I $\lambda\lambda 3889$ and 4771 as well as of the N III and He II $\lambda\lambda 4130$ and 4686 emission features in HDE 269858; in 1975 these features were stronger than in Sk -67° 266 (see Figure 2 of Walborn 1977). Also at that time HDE 269858 was only a few tenths of a magnitude brighter than Sk -67° 266. The broad depression between $\lambda\lambda 4000$ and 4100 and the hump near H_{γ} in the SIT data are due to imperfections of the flux calibration.