

THE Be II λ 3130 Å REGION IN THE SPECTRA OF VEGA AND SIRIUS

R. F. Griffin and R. E. M. Griffin

Cambridge Observatories and Mount Wilson Observatory

Spectrograms of very high quality have been obtained of Vega and Sirius with the Mount Wilson 100-inch (2.5-m) telescope and coude spectrograph. Examples of these plates, showing the Be II region in the ultraviolet, are exhibited. The reciprocal dispersion is 0.83 \AA/mm (83 nm/m) and the FWHM is about 19 m\AA (1.9 pm). The spectrograms have a trailed width of 3 mm and are on IIa or IIIa emulsions.

No beryllium absorption can be detected in either star. The equivalent width of the Be II λ 3131.06 Å line is $0.7 \pm 1.2 \text{ m\AA}$ ($70 \pm 120 \text{ fm}$) in Vega and $0.38 \pm 0.41 \text{ m\AA}$ ($38 \pm 41 \text{ fm}$) in Sirius. The $1-\sigma$ upper limits of 1.9 and 0.8 m\AA are thought to correspond approximately to [Be/H] abundances of <-11.4 (Vega) and <-11.6 (Sirius).

We are very grateful to the Mount Wilson Observatory for our appointments there as Visiting Associates.

A paper describing our work on the Be II region has been submitted to Astronomy and Astrophysics.

DISCUSSION

MOROSSI: I have a colleague who is looking at the Be region with IUE showing a new possible employment of the International Ultraviolet Explorer.