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THE IUE SPECTRUM OF THE SHELL STAR HD 50845

HD 50845 = BD-1°1447 = SAO 133883, visual magnitude 8.2, was found to be a variable velocity shell object with an underlying F5V star (Sahade and Ringuelet 1985; Sahade, Ringuelet and Rotstein 1987).

In order to learn more about this interesting object, two *IUE* images (SWP 30288 and LWP 10103) were secured at the Goddard *IUE* Observatory on day 41, year 1987, in the small dispersion, large aperture mode. The exposure times were of 3600s and 460s, respectively. There is a third LWP image (LWP 10102) available, too weak for analysis.

The *IUE* spectrum of HD 50845 is shown in Fig. 1. The SWP image is too weak to permit any conclusion, while the LWP image is undoubtedly an absorption spectrum.

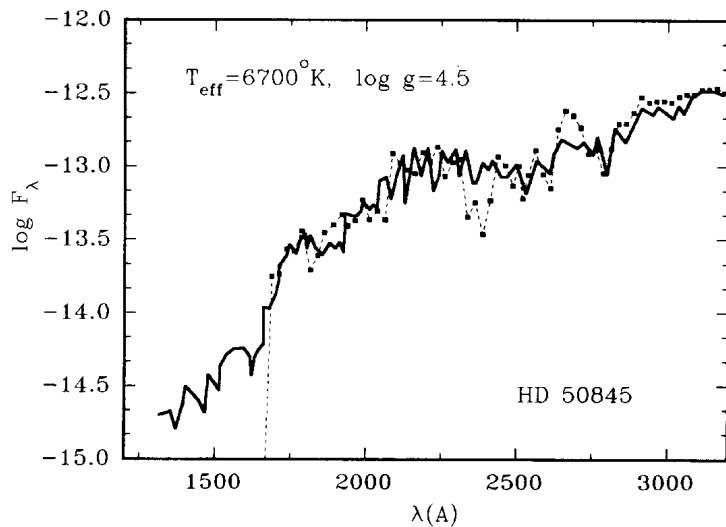


Fig. 1.- The *IUE* spectrum of HD 50845 (full line) and Kurucz's continuum for $T_{\text{eff}} = 6700^{\circ}\text{K}$, $\log g = 4.5$ (broken line).

The comparison of our *IUE* spectrum of HD 50845 with Kurucz's (1979) LTE model-atmosphere calculations shows that the best fitting for the continuous spectrum corresponds to the effective temperature of that of an F5 star and a gravity value around that of a main sequence object (as also shown in Fig. 1). Moreover, our *IUE* spectrum of HD 50845 looks very similar to that of a normal middle F dwarf (cf. Heck *et al.* 1984).

No other conclusions seem to be justified by the *IUE* material at our disposal.

We are indebted to the Goddard *IUE* Observatory staff for so efficiently securing and processing the images of HD 50845 for us.

Jorge Sahade^{1,2}

C.C. 677, Observatorio Astronómico
1900 La Plata, and
C.C. 5, Instituto Argentino de
Radioastronomía
1894 Villa Elisa (Bs. As.)
Argentina

Rodolfo Barbá³

Facultad de Ciencias Astronómicas y
Geofísicas,
Universidad Nacional de La Plata
1900 La Plata
Argentina

Yoji Kondo¹

Code 684
NASA-GSFC, U.S.A.

¹ Guest Observer, *IUE* Observatory.

² Member of the Carrera del Investigador Científico, CONICET, Argentina.

³ Fellow, CONICET, Argentina.

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