

THE CHROMOSPHERE OF β CASSIOPEIAE

Terry J. Teays
Behlen Observatory
Department of Physics and Astronomy
University of Nebraska-Lincoln and
Astronomy Programs
Computer Sciences Corporation

Edward G. Schmidt
Behlen Observatory
Department of Physics and Astronomy
University of Nebraska-Lincoln

Massimo Fracassini
Dipartimento di Fisica
Università degli Studi di Milano

Laura E. Pasinetti Fracassini
Dipartimento di Fisica
Università degli Studi di Milano

Abstract. We have carried out high dispersion, long wavelength IUE observations and ground based photometry of the δ Scuti star, β Cas. Our ground based observations were used, together with the previous results of Antonello et al. (1986, I.B.V.S. 2958, 1986), to ensure that the IUE observations were correctly phased relative to the photometric variation. Fluxes for the emission core of the Mg II k line (2796 Å) were obtained from 23 ultraviolet spectra taken over several cycles in 1986 and 1987. The emission flux, if present, was measured with respect to the mean line profile of all of the spectra. Emission was present at phases between 0.4 and 0.5. This is in contrast to what has been observed for another δ Scuti star, ρ Pup, and for the classical Cepheids, where the emission appeared at maximum light.