A SIMPLE MODEL OF CQ UMa

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ABSTRACT. An attempt is made to explain light variations in the blue region of the magnetic star CQ UMa by means of a simple oblique rotator model with one extensive circular dark spot centred to the south magnetic pole; Observed variations in v and B colours may be explained by a spot covering about 69 percent of a hemisphere, the ratios of luminances (brightness densities) inside and outside the spot being 0.77 and 0.84 in v and B, respectively. Our simple model cannot account for asymmetry of light curves and different shapes of thee in various colours. The construction of a reasonable model of CQ UMa is of great importance, for it may help to comprehend the nature of light variations of this star, which seems to be a representative of numerous groups of late CP 2 stars Barked by similar photometric behaviour.