Abstract

Intermediate Polars (IPs) are a subclass of Cataclysmic Variables (CVs) with magnetic fields string enough to affect the acretion disk, but weaker than the normal polars. EI UMa, one of the brighter IPs, is a system which we analyzed using India's AstroSat telescope. The data analyzed consists of both X-ray and far ultraviolet bands, all from AstroSat. Our analysis is unique in that it incorporates both soft X-Ray data and also hard X-Ray data from AstroSat's large area proportional counter (LAXPC), which means we have data from about 0.3 keV to about 20 keV. Using the fitting software from Chandra called Sherpa, we have fitted the soft X-ray and LAXPC data of EI UMa simultaneously, using a thermal bremsstrahlung model, and obtaining a chi-squared value of aproximately 0.67. Based on our results of the key parameters obtained from our analysis, we look to either confirm the measurments that are in the literature on EI UMa, or conclude that the system has changed, and analyze why those changes occured.