

The Correlated Optical and X-ray Behavior of Sco X-1

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A long term study of the optical and X-ray behavior of Sco X-1 is presented. Optical observations at a time resolution of about 4 seconds were collected at the CTIO 1M Yale telescope over the course of two years. This database is compared to simultaneous BATSE SD measurements obtained with a similar time resolution. The SD measurements were in the approximate energy range of 10-20 keV. Correlated changes in the continuum X-ray emission from Sco X-1 as well as variations in its emission caused by flaring activity are examined. The time Sco X-1 spends in various optical at X-ray emission levels is also presented.