

30 YARDS OF HISTORY: SS CYGNI 1896 - 1984

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Abstract

AAVSO data files contain several hundred thousand observations on the cataclysmic variable star SS Cygni from its discovery in 1896 to present. One-day means of these observations from 1896 to 1984 have been computerized for statistical analysis. Computer-generated magnitude and intensity light curves extending 30 yards have been displayed. Initial results of auto-correlation and power spectrum analysis of the light curve reflect the behavior of a quasi-periodic oscillator with an approximate period of 50 days. Detailed analysis of the data is continuing.

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OBSERVATIONS OF THE DWARF NOVA HL CANIS MAJORIS

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Abstract

Assisted by AAVSO data, IUE ultraviolet spectra, and x-ray observations from the Einstein Observatory (HEAO-2), we have undertaken an observational and theoretical study of the P Cygni profiles of the dwarf nova HL CMa. The details of this study will be published elsewhere (Mauche and Raymond 1986). Discovered in 1980 as a variable x-ray source, HL CMa has been shown by subsequent AAVSO coverage to be a dwarf nova whose light curve oscillates by $\gtrsim 3.5$ magnitudes between ~ 11 magnitude and $\gtrsim 14.5$ magnitude with an average recurrence time of only approximately 17 days. Although classified as a U Gem, HL CMa's short recurrence time, mean absolute magnitude [M_V (mean) ~ -5.8 magnitude at 250 pc], and (infrequent) short standstills suggest that it is an incipient Z Cam. As such, it warrants continued careful monitoring.

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REFERENCE

Mauche, C. W. and Raymond, J. C. 1986, **Astrophys. Journ.**, submitted.