

**PHYSICAL PROCESSES
IN SYMBIOTIC BINARIES
AND RELATED SYSTEMS**

**PROCEEDINGS OF THE INTERNATIONAL CONFERENCE,
HELD AT KONINKI, POLAND, JUNE 16-19, 1996**

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YY HER BETWEEN 1890 AND 1996

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The optical lightcurve of YY Her from 1890 to 1996 has been reconstructed with data gathered from: Harvard and Crimea plate archives, literature, our own photoelectric and photographic photometry, AAVSO and AFOEV databanks, and estimates on printed sky atlases. The same comparison sequences have been used to ensure the highest possible homogeneity. The visual data (open symbols) are averages over a 30-day period. A detailed analysis has been submitted to *Astron. J.*

There are four recorded outbursts, in 1918, 1930, 1981 and 1993. The lightcurves also show the presence of long lasting periods of flat quiescence and some bright phases (in 1890, 1904, 1954). A small amplitude ($\Delta V=0.3$ mag), strictly periodic ($P=588$ days) and sinusoid-like modulation dominates the behaviour in quiescence. It is ascribed to the heating of the cool giant side facing the hot and luminous white dwarf companion.

YY Her is spectroscopically monitored at Asiago with the B&C+CCD and Echelle+CCD spectrographs since 1985: a comprehensive review of the huge spectroscopic material is planned for the end of the 1996 observing season.

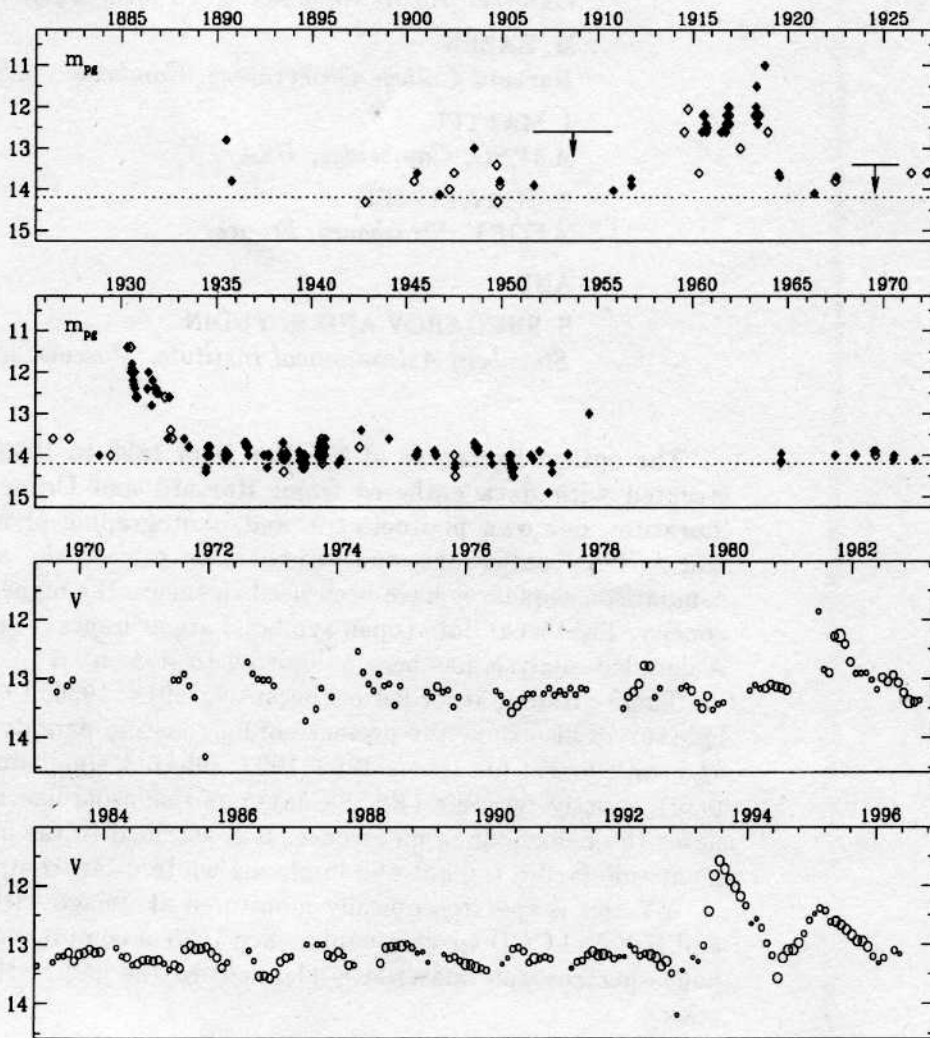


Figure 1. Photometric evolution of YY Her from 1890 to 1996. m_{pg} up to 1970, *visual* afterwards.