

## AAVSO'S ASTRONOMICAL DATA BANK

Janet Akyüz Mattei

The American Association of Variable Star Observers (AAVSO)

The AAVSO founded in 1911 is the largest organization of variable star observers in the world, with 1100 members in 49 states and 38 countries. AAVSO Headquarters, in Cambridge, MA, receives about 150,000 observations a year from about 400 active observers. Since 1911, over 4 million observations have been compiled. The limiting visual magnitude of observations is about 16<sup>m</sup>.5. AAVSO's observing program contains about 2000 variable stars of the following types: Mira (825); semiregular (350); cataclysmic-U Gem, Z Cam, nova, recurrent nova, novalike, symbiotic (200); cepheid (120); R Coronae Borealis (20); RV Tauri (30); nebular (100); flare (15); irregular (140); suspected variables (200). AAVSO has finder charts for most of the stars.

### AAVSO Publications

AAVSO Report: Contains computerized light curves of AAVSO observations. Journal of AAVSO: Contains articles on variable stars, mostly by AAVSO members (semi-annual). AAVSO Bulletin: Contains the prediction of maxima and minima dates of about 700 long period variables (annual). AAVSO Circular: Contains preliminary results on cataclysmic variables and stars of special interest (monthly). Subscription information may be obtained from AAVSO HQ at 187 Concord Avenue, Cambridge, MA 02138.

### The AAVSO Resources to Astronomers

AAVSO observations, either as listing (until 1959) or computerized light curves, have been published in Harvard Annals, Popular Astronomy, AAVSO Quarterly Reports, and AAVSO Reports, respectively. Observations from 1960 to present, except for a gap from 1966 to 1974, where data have not yet been fully processed, are in machine readable form, on magnetic tape. Handplotted light curves for every star in the program are kept up to date.

AAVSO data are being used extensively for the correlation of optical variation of stars with the behavior in the different wavelengths (x-ray, EUV, UV, IR and radio). Close monitoring through an established AAVSO telephone and mail hotline service by AAVSO observers and prompt notification of outbursts of dwarf novae to interested observing teams, have helped in the successful execution of both ground based and satellite (Ariel V, Apollo-Soyuz, IUE, HEAO-1 and 2) observing runs. Astronomers are encouraged to use AAVSO services.