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NEW PHOTOMETRIC DATA FOR THE Ap STAR GY And = HD 9996

GY And is a spectrum, magnetic and light variable Ap star suspected to have a very long period (Preston, 1970). According to Preston and Wolff (1970), spectrum, magnetic field and light appear to vary in the period of 22-24 years. Since that paper no light curve of GY And has been published.

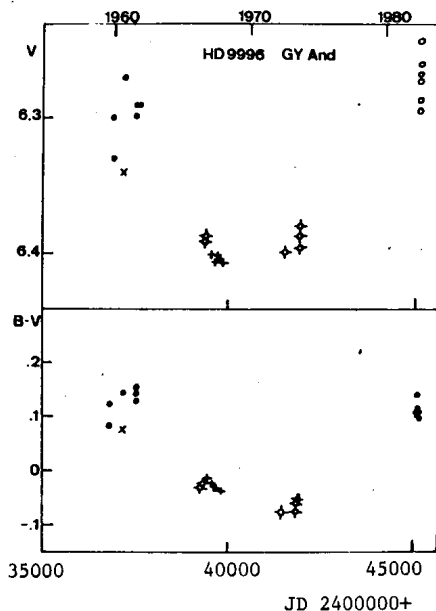


Figure 1

Photoelectric observations of GY And = HD 9996 from 1959 to 1982. Filled circles: Abt and Golson (1962); oblique cross: Osawa and Hata (1962); crossed open circles: Geneva (unpublished); crosses: Stéprien (1968); open circles: this paper.

In August 1982, M. Dumont and B. Pernier performed photoelectric measurements in the Geneva color system, using the 76 cm telescope at the Jungfrau-Joch Observatory (Switzerland). Figure 1 shows V and B-V curves between 1959 and 1982. Additional data come from Abt and Golson (1962), Osawa and Hata (1962), Stéprien (1968). Unpublished Geneva data have also been used. The data in the Geneva system have been converted into standard UBV system.

V and B-V variations confirm the possibility of a 22-24 year period. In August 1982, GY And had a mean V magnitude of 6.27 and a mean B-V value of 0.12; in 1982, GY And has reached the 1959 level in V and B-V. GY And was at light minimum in about 1970.

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