PHOTOMETRIC CONSTANCY OF IS Gem

After the visual measures of Bemporad (1912), BD+32° 1414=IS Gem was monitored, always visually, by Wroblewski (1962) and by Pogossiantz (1982). They report a variation of about 0.3 mag. and a periodicity of 40-50 days, although Pogossiantz's light curve does not seem to be much convincing. Spectra with a dispersion of 35 Å/mm discussed by Crimi and Mantegazza (1984) show a slight variation of the radial velocity close to the limits of observational errors and absence of spectral peculiarities.

IS Gem was measured photoelectrically at the 50 cm telescope and spectroscopically at the 137 cm telescope of the Osservatorio Astronomico di Merate, in the course of a program on variable stars of intermediate and late spectral types (Poretti, 1984; Poretti and LeBorgné, 1985). Photoelectric measures were carried out in V-light on 11 nights from 1983, October to 1984, February and on 2 nights in 1985, January. HR 2586 and HR 2660 were used as comparison star and check star respectively. For the instrumentation and data reduction techniques, see Poretti (1984).

The mean magnitudes obtained on these 13 nights prove constancy of IS Gem: the mean value is +0.189 (standard deviation: ±0.005) for HR 2586 minus IS Gem and +0.366 (s.d.:±0.009) for HR 2586 minus HR 2660. IS Gem must therefore be placed with VW Dra (Murnikova and Vasilyeva, 1979) in the list of constant stars erroneously classified as SRd variables.

IS Gem was also observed by GEOS from 1974 to 1982: a careful analysis of the visual estimates does not show any intrinsic variation larger than 0.1 mag. (Fumagalli, 1985), i.e. the probable error.

Spectroscopic observations and a more complete discussion of V measures will be published elsewhere later.

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