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A NEW PERIOD FOR AP SERPENTIS

The variable AP Ser, discovered by Hoffmeister (1935), is an RR Lyrae star of type c, with a short period. The first known reference on the determination of the period is to Solovjev (1940). This is made in the first edition of the General Catalogue of Variable Stars by Kukarkin & Parenago (1948). They mention a period of 0.254464 days; subsequent editions give only minor corrections. No recent attempts seem to have been made to verify this period, although the available lightcurves are clearly irregular, even for an RRc type variable suffering from the Blazhko effect. See for example Varsavsky (1960) or even Lub (1977).

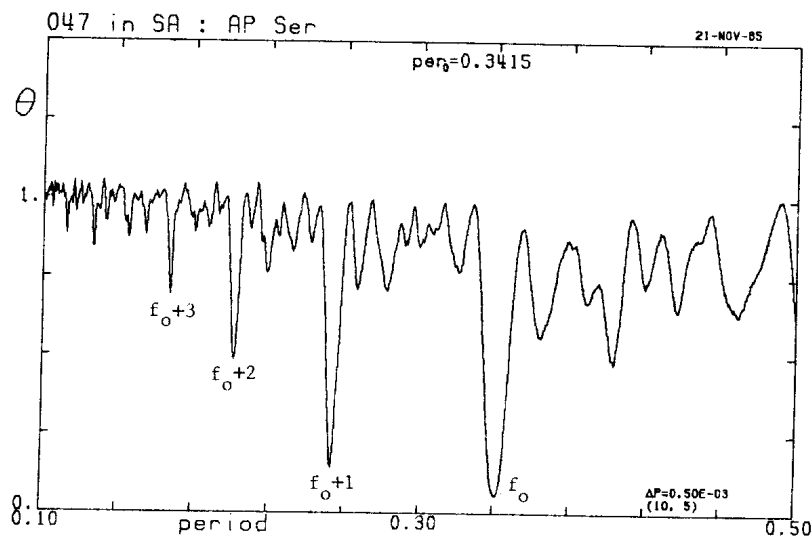


Figure 1

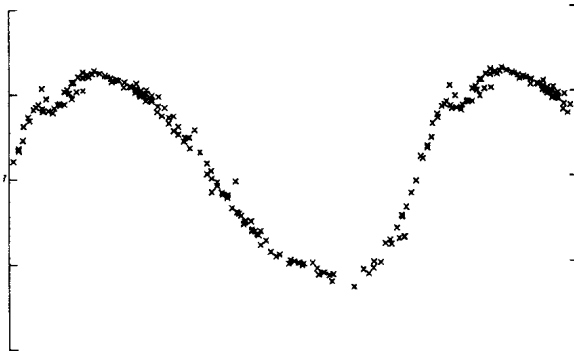


Figure 2

142 new measurements, made in the VBLUW-system by A.M. van Genderen in 1975 as part of a programme to study light-curve variations (as yet unpublished), were analyzed with the aid of a computer programme based on the method described by Stellingwerf (1978), which seeks to minimize the dispersion at constant phase. From this analysis a new period of 0.341320 days has been derived. The theta-transform of the data shows several major dips, which are identified in Figure 1. It is clear that the formerly assumed period is an alias of the correct one with the sidereal day. The B-light-curve, shown in Figure 2, is now typical for a c-type RR Lyrae star.

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