QY CYGNI RE-EXAMINED

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Abstract

Observations of QY Cygni from 1975 to 1990 show that the period of 3.89188 days is still quite accurate for this Cepheid.

Observations of QY Cygni, a possible BL Herculis star (Kholopov *et al.* 1985), were examined in an effort to determine whether the published elements still hold. This research continues that of Dorrit Hoffleit (1974), who found that observations from 1920 to 1974 are satisfied by:

$$JD_{max} = 2442250.685 + 3.89188\ E. \quad (1)$$

Examination of more than 900 photographic plates taken at Maria Mitchell Observatory from 1975 to 1990 provided the raw data. Computer period searches failed to find any periods fitting the data better than equation (1), so this period was adopted as first approximation. An O-C diagram (Figure 1) was generated using the first approximation as the definition of C.

As can be seen, there is only a slight variation (either above or below the zero line) in the values of (O-C)/P, showing that the elements of equation (1) remain valid and that the period-change rate can be considered zero.

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References

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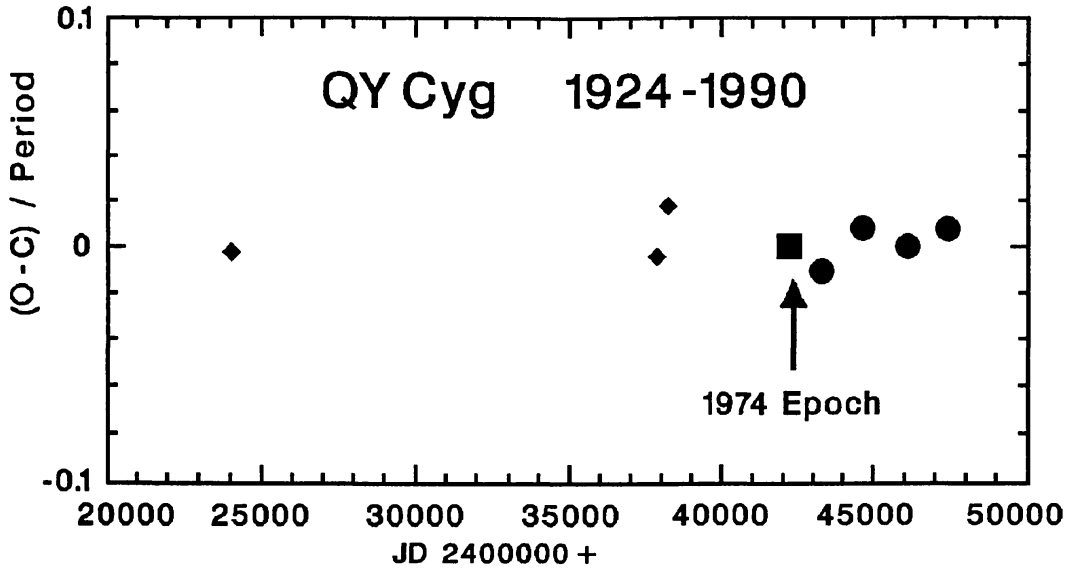

Figure 1. O-C diagram for QY Cygni. The square is Hoffleit's epoch. The diamonds are the epochs in the *General Catalogue of Variable Stars,* third edition, and *Supplements 1* and *3* (Kukarkin *et al.* 1969, 1971, 1976). The dots are the new data for 1975-78, 1979-82, 1983-86, and 1987-90.