

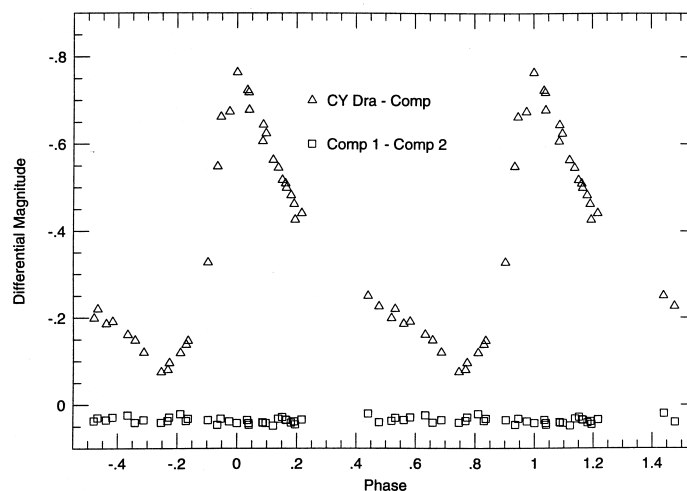
## A NEW POSITION AND PERIOD FOR CY DRACONIS

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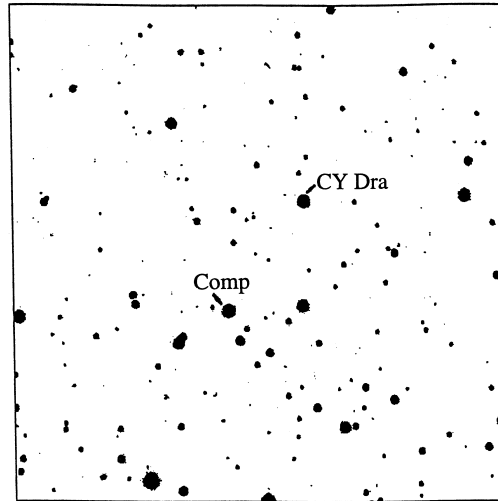
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CY Draconis is a suspected RR Lyrae star that is listed without a period in the *General Catalog of Variable Stars* (GCVS). We found no reference to CY Draconis in the Simbad database. We observed CY Draconis from 01 July 1997 to 30 July 1997 on the 24-inch telescope at Wellesley College. A few images were taken each night in each of the I, R, and V filters. The first part of the summer a PM512 CCD camera was used, but this was upgraded on 23 July 1997 to a Tektronics CCD with a 1024×1024 chip. We did photometry on CY Draconis and several comparison stars in the field using IRAF. The differences in the magnitudes of the comparison stars and CY Draconis were plotted in a spreadsheet. We made a phase diagram to try to determine the period of the star and found it to be about 0.53515 days. The V filter amplitude is about 0.7 magnitudes. The data we collected confirms that CY Draconis is an RR Lyrae star and seems to place it in the RRAb group. We illustrate the V folded light curve in Figure 1.



**Figure 1.** The V folded light curve for CY Draconis assuming a period of 0.53515 days

While studying this star, we found that the coordinates given under the GCVS's listing of CY Draconis are off by almost one arc minute. Using the *Guide Star Catalog*, we determined more precise coordinates for CY Draconis are  $\alpha_{2000} = 19^{\text{h}}46^{\text{m}}06^{\text{s}}$ ,  $\delta_{2000} = 59^{\circ}34'29''$ . Figure 2 gives a finder chart of CY Draconis identifying the comparison star we used.



**Figure 2.** Finder chart for CY Draconis identifying the comparison star used. North is up. The field of view is approximately 7.5 arcminutes square.

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#### References:

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