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Variables Near NGC 6760

The work of Sawyer (1953) identified four variables near this globular cluster. Minimum and maximum magnitudes were estimated, though no periods were determined. Sawyer Hogg (1973) lists the variables again, with reference to some eclipsing variables in the field (V406, V407, and V1297 Aq1). The eclipsing variables however do not lie as near to the cluster as the other four found by Sawyer and should not be considered as possible members to NGC 6760. Armandroff (1988) was able to determine that variable V1 is not an RR Lyrae member of the cluster, though it might be a Mira belonging to the cluster. He also provides the first color-magnitude diagram from CCD photometry for this cluster.

It should be noted that Armandroff (1988) has misidentified variable V4 because it does not appear clearly on the chart given by Sawyer (1953). In her chart, V4 really lies at the tip of the arrow drawn and is NOT the star seen a small distance away from the arrow. This bulletin is meant to prevent future misidentifications by providing an improved finding chart for the variables, especially V4. Figure 1 is a 20 minute CCD frame of NGC 6760 taken on October 23, 1988 (UT) at Lick Observatory's 1-meter Nickel Telescope using a narrow (100Å) bandpass I filter at 8000Å. North is up, east to the left, and the scale is indicated. Many faint stars have been suppressed in this diagram. The four variables identified by Sawyer are indicated. A CCD exposure in V is given in Armandroff (1988) for NGC 6760.

The identity of V4 was confirmed using Sawyer's positions and the Northern Proper Motion Survey astrograph plates at Lick, on which V4 showed a change of approximately 3 magnitudes. Together, V4's strong red color (through comparison with a CCD V filter frame), large amplitude, and late-type spectrum obtained at the Nickel telescope lead this author to suspect that V4 is a possible Mira variable belonging to the cluster. V1, also a possible Mira, has a late-type spectrum similar to V4's. No periods have ever been determined for these variables however. Continued observations

NGC 6760

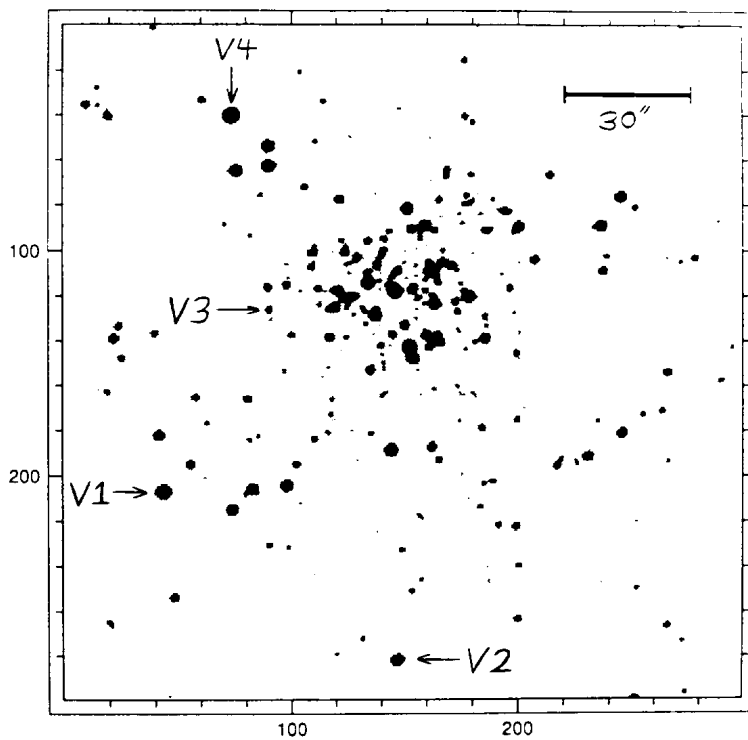


Figure 1

will be made with an effort at determining the variables' periods and I would welcome receiving magnitude estimates from fellow investigators with the aim of establishing the light curves.

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