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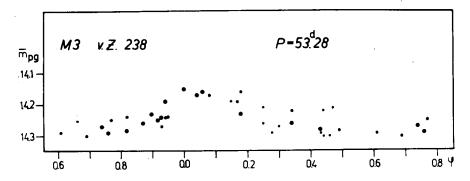
Konkoly Observatory Budapest 1979 August 4

ON THE VARIABILITY OF THE RED GIANT v.Z. 238 = No. 138 IN M3

This red giant (CI=1 $^{\rm m}$ 53) star was first investigated and found to be variable by Russev (Russev, 1971) with a period of 82 $^{\rm d}$ 53 and an amplitude of 0 $^{\rm m}$ 24 relying on the measurements of 114 plates made at the Byurakan Observatory and Sternberg Institute in Moscow.

A recent study of the plate material of the Konkoly Observatory showed that 73% of the measured magnitudes of this star were within a range of ± 0.000 around the mean and no light change was suspected.

Rediscussing this latter material the star has, indeed, proved to be variable with a period of 53.28 which is approximately 2/3 of the period found by Russev. The amplitude of the variable is about 0.15, a slightly more than the observing errors. The size of the dots in the Figure is proportional with the number of observations made in one night.



Our new result does not change the conclusion of Olah's paper. v.Z. 238 with its colour index (1.53) is the third reddest

giant star in the cluster, therefore indeed, from a given colour index all red giants are variable in M3.

We would like to emphasize that the investigations of the variability of red giants in globular clusters are extraordinarily interesting because of their evolutionary stage. Accurate photoelectric observations are especially needed.

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K. Olah, 1979, Mitt. Sternw. Budapest, No. 73.