

# HISTORICAL RECORDS OF ZZ CETI VARIABLES

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As a consequence of the discovery of the high-frequency variations that define the ZZ Ceti class of variables, observations of them or of new candidates have naturally tended to sample preferentially the period range from 1 or 2 seconds to ~ 30 minutes in unfiltered light. Hence, little is known about variability on time scales > 30 minutes, with the possible exception of some curiosities in the high-frequency literature and in Eggen's monumental photoelectric UBV observations; a brief summary of some potentially disquieting cases has been given recently by Hesser, Lasker and Neupert (1979). Inasmuch as the existence of unexplained observational discrepancies still admit the possibility that the high-frequency variations may be but one manifestation of the type or time scales of white-dwarf variability, we have measured several ZZ Ceti variables by iris photometry and by visual estimates on the plates of the Harvard collection. Based on an average of 50 observations per star over 55 years, going back to the 1890's, we find no positive indications of variations in excess of  $\pm 0.10-0.15$  mag for any of the following stars:

BPM 30551	GD 99	G 180 - 23
R 548	G 117 - B 15a	G 169 - 34
BPM 31594	G 44 - 32	G 207 - 09
HL TAU - 76	GD 154	LFT 1679
G 38 - 29	L 19 - 2	G 29 - 38

In spite of the limitations on precision imposed by the plate material, the results provide some assurance that the ZZ Ceti stars do not suffer large, very low-frequency amplitude modulations.

## REFERENCE

Hesser, J.E., Lasker, B.M., and Neupert, H.E., 1979, Ap.J. Suppl. (in press).