

DISCOVERY OF ELEVEN ZZ CETI STARS

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Using the The SOuthern Astrophysical Research (SOAR) 4.1-m telescope, we report on the discovery of low amplitude pulsations for three stars previously reported as not-observed-to-vary (NOV) by Mukadam et al. (2004) and Mullally et al. (2005), which are inside the ZZ Ceti instability strip. With the two pulsators discovered by Castanheira et al. (2007), we have now found variability in a total of five stars previously reported as NOVs. We also report the variability of eight new pulsating stars, not previously observed, bringing the total number of known ZZ Ceti stars to 148. In addition, we lowered the detection limit for 10 NOVs located near the edges of the ZZ Ceti instability strip. Our results are consistent with a pure mass-dependent ZZ Ceti instability strip.