Abstract Submitted for the TSS21 Meeting of The American Physical Society

Finding Variable Sources In Large Data Sets JACKIE GRAY-CHERRY, KENNETH CARRELL, Angelo State University — For years now astronomers have been collecting data using a combination of ground and space-based telescopes. We have so much information that it is impossible to sift through it all in a reasonable time frame. So, to counteract this we need to figure out ways to efficiently and quickly analyze these data sets to find meaningful results. One way we can do this is by crossmatching data sets with each other and looking for differences. This provides us with potentially interesting candidates for follow-up analysis. We used a crossmatched catalog with potentially variable sources flagged and examined their lightcurves from The Transiting Exoplanet Survey Satellite (TESS). After going through a magnitude limited sample, we found 3 binary sources that were already confirmed in the Set of Identifications, Measurements and Bibliography for Astronomical Data (SIMBAD) and 3 sources that are unknown.

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Date submitted: 15 Mar 2021 Electronic form version 1.4