

Abstract Submitted  
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**Asteroid Analysis Using Lightcurve Photometry** JESSICA ZIMMERMAN, Texas A&M University - Commerce — During the summer of 2011 data was taken of asteroid 3807 Pagels, a mid-sized asteroid located in the main asteroid belt in order to identify its rotational period. The asteroid 3807 Pagels is a poorly studied main belt asteroid that has little information recorded about its physical features. Time-series photometry of 3807 Pagels was obtained with a 16-inch telescope connected to a CCD camera located at the Texas A&M University - Commerce Observatory. CCD images were taken continuously with five minute exposure times through the standard broadband V filter. The data was then analyzed using the MPO Canopus program which utilized comparison stars within each CCD image to determine differential photometry and then generate a lightcurve for the asteroid. The final lightcurve did not show a complete rotational period for the asteroid. Thus, additional observations are needed in order to precisely determine 3807 Pagels rotational period. This research is the first steps of a long process of determining more information about the many mid-sized asteroids located in the asteroid belt for the potential of being able to classify these asteroids by their physical characteristics.

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