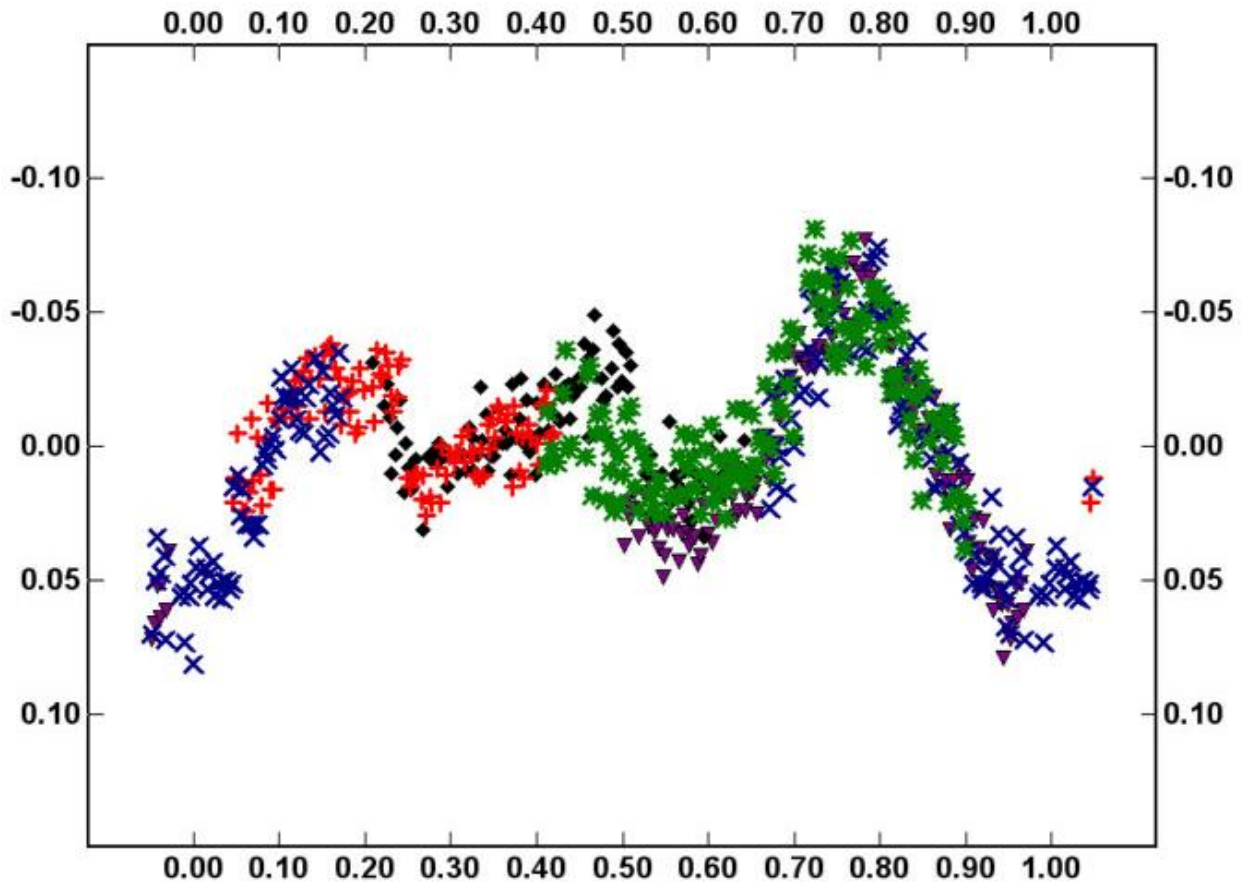


(96) Aegle



Period: $13.82 \pm .01$

Amplitude: $.15 \pm .02$

Dates Observed: August 26 to 30, 2004

Number of Sessions: 5

Number of Observations: 639



Instruments: .35 meter F/11 SCT with a SBIG ST1001e CCD Camera

Notes: Aegle was discovered on February 17, 1868 by E. W. Tempel and Marceilles. It is named after the one of the Hesperides, daughters of Hesperis and Atlas, guardians of the golden apples give to Juno by Jupiter on their wedding day. It is a Main Belt asteroid III and is 85 km in diameter.

Aegle is a very difficult target due to the shape of its lightcurve. Its lightcurve is not bimodal and has a very small amplitude making it difficult to identify repeating features. It was first observed in 1980 by Harris and Young (1989). They suspected a

period of around 10 hours. Wetter (1997) observed it in 1996 but was not able to refine the period. Blanco (2000) observed it in 1996 reporting a period of 10.470 hours. Finally Slivan and Roller observed it in 2001 reporting a period of 26.53 hours and a quality code of 2 while commenting on the lack of repeating features.

I observed Aegle around the time of the Full Moon and used a red Johnsons-Cousins filter to increase the signal-to-noise ratio. Typical FWHM was around 3.6 arcseconds and signal to noise was around 120. The first night of observation produced a strong maximum for the low amplitude, but the next two nights produced a jumbled light curve. Finally, the period revealed itself when the maximum repeated on the 4th and 5th nights of observations. Observations ceased when the Full Moon moved to within 20 degrees of the asteroid.

Coincidentally, one of the comparison stars used, GSC 1179-501 turned out to be a variable star.

Robert D. Stephens
Santana Observatory
11355 Mount Johnson Court
Rancho Cucamonga, CA 91737
rstephens@foxandstephens.com