Discovery and Follow-up Observations of the Exoplanet Candidate GSC02087-01126

LAURA AUMEN, RICHARD OLENICK, ARTHUR SWEENEY, University of Dallas — Wide angle survey measurements by the University of Dallas Small Telescope Extrasolar Transit Survey (STExTS) in the summer of 2012 found that the star GSC02087-01126 exhibits characteristics of a possible transit. According to the UCAC4 catalogue, the star has a (B-V)$_0$ magnitude of 0.265, corresponding to a temperature of 7402 K, which is a reasonable for a star in possession of a planet. Using the box least squares (BLS) function, we determined a likely period for the orbit of 0.79380 days. Calculation of the ephemeris led to taking follow up data targeted toward the specific dates of the transit in the summer of 2014 with additional follow-up measurements in the spring of 2015 using the University of North Texas’ Monroe Robotic Observatory. The observational data and calculated quantities will be presented.

1Supported by the Donald A. Cowan Institute of Physics

Richard Olenick
University of Dallas

Date submitted: 06 Feb 2015

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