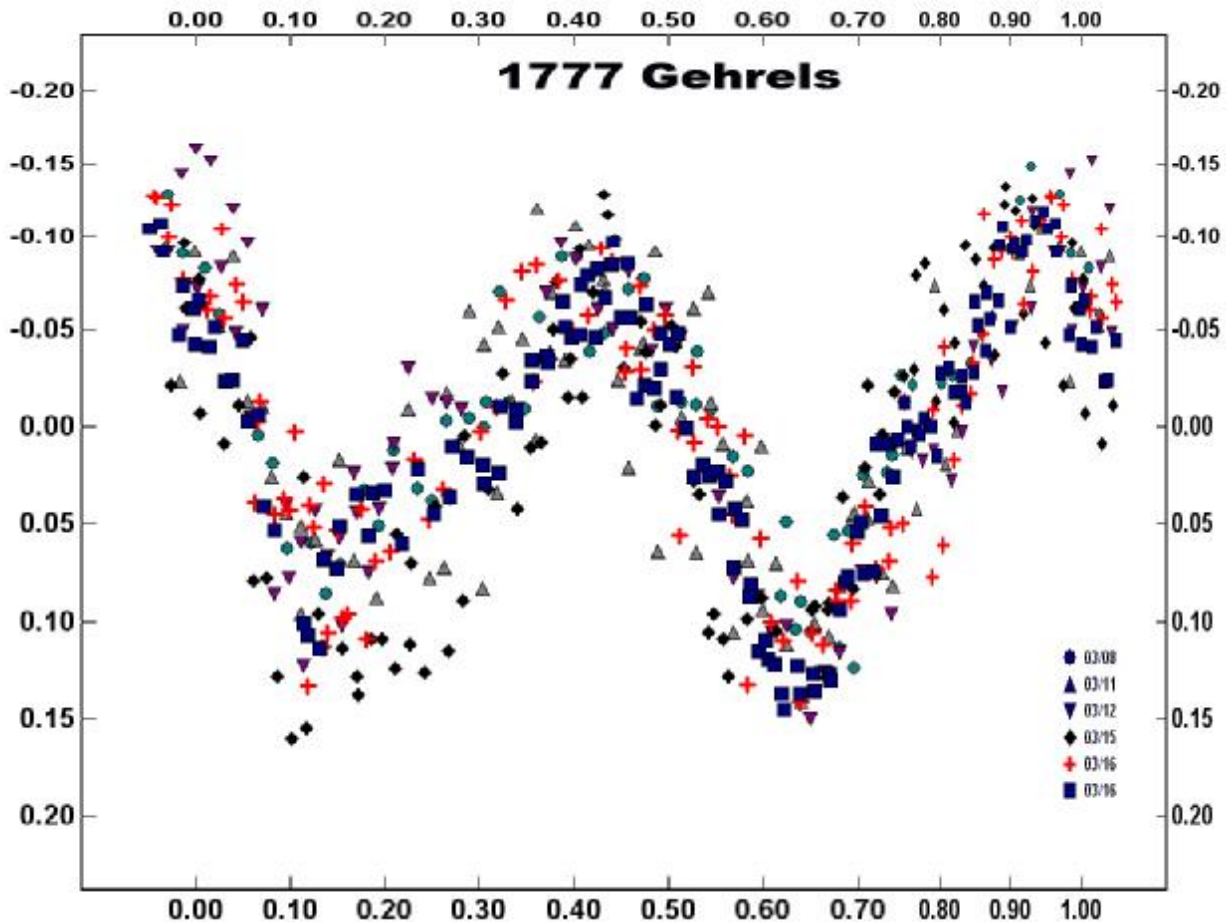


1777 Gehrels



Period: 2.8358 ± 0.0001 hours

Amplitude: 0.80 ± 0.03

Dates Observed: March 8 to 16, 2005

Number of Sessions: 6

Number of Observations: 526

Instruments: .35 meter F/11 SCT with a SBIG ST1001e CCD Camera (Stephens)
.50 meter Richey-Cretien with Fingerlakes CCD (Warner)

Notes: A member of the Marias Family, this asteroid was discovered September 24, 1960 by C. J. van Houten and I. Van Houten-Groeneveld at Palomar. It is named in honor to Tom Gehrels, staff member of the Lunar and Planetary Laboratory at Tucson.

Gehrels was on a list of asteroids to monitor for binary status prepared by Alan Harris. It was previously listed as having a 2.84 hour period as determined from the Wisniewski data as analyzed by Alan Harris (1997). The second and third nights of observations suffered from mediocre observing conditions. On March 12, an

anomalous feature in the lightcurve suggested an attenuation event. Peter Kusnirak of Ondrejov Observatory and Brian Warner of Palmer Divide Observatory each contributed observations while Petr Pravec was the analyzer of the joint dataset. While these additional observations and remeasuring of the original images reduced the likelihood of the asteroid having a satellite, it did provide a unique solution of 2.8358 ± 0.0001 hours for the rotational period. The lightcurve shown includes the Stephens and Warner datasets, but not the Kusnirak dataset because of incompatibility in the software programs.

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