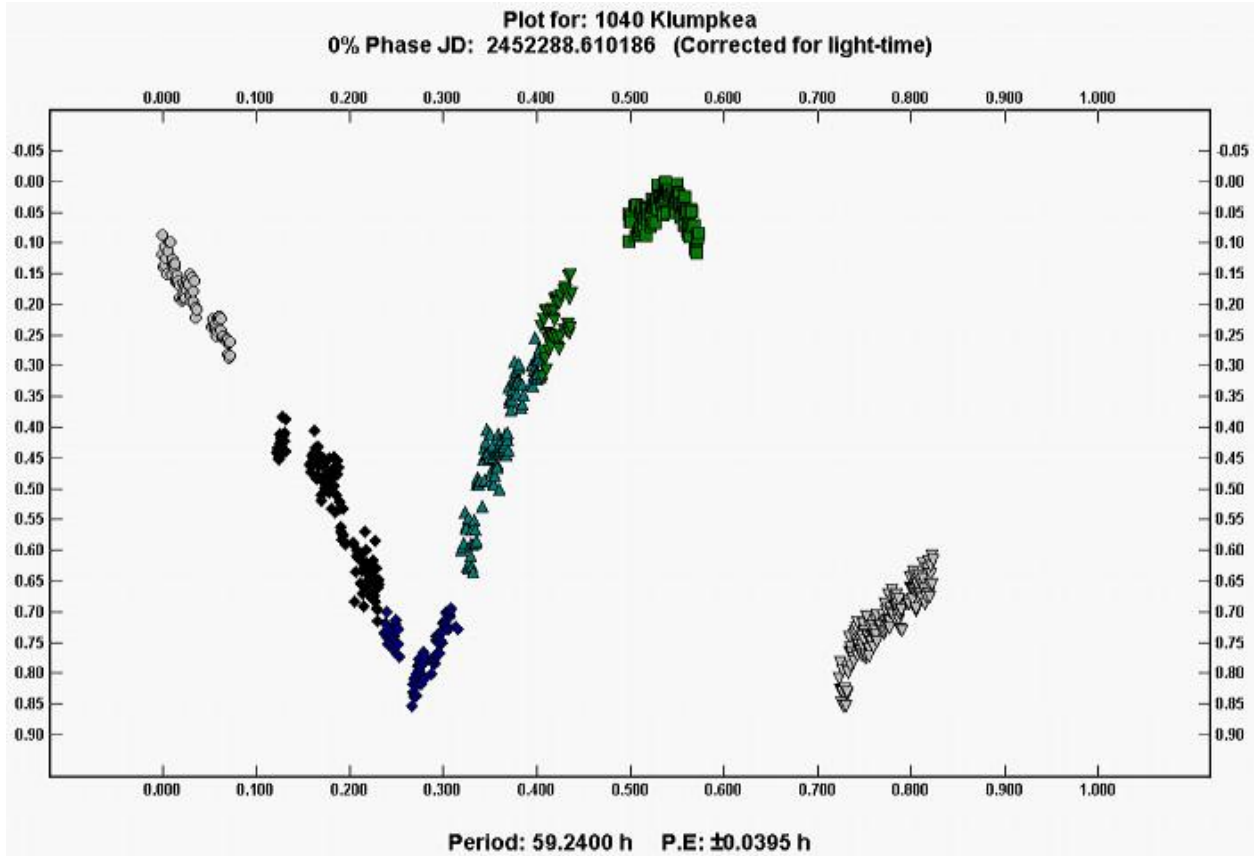


(1040) Klumpkea



Period: $59.24 \pm .1$

Amplitude: 0.85

Dates Observed: January 14 to February 21, 2002

Number of Sessions: 7

Number of Observations: 648

○	6 - 01/14
◆	9 - 01/22
■	10 - 02/04
▲	12 - 02/06
▼	13 - 02/07
◆	14 - 02/08
▼	18 - 02/21

Instruments: .28 meter F/9 SCT with a SBIG ST9e CCD Camera

Notes: 1040 Klumpkea is a main-belt asteroid discovered January 20, 1925 by B. Jekhovsky at Algiers. It is about 18km in diameter. Klumpkea is named in honor of the amateur astronomer Dorothea Klumpke (1861-1943), wife of the English astronomer Issac Roberts.

1040 Klumpkea was specifically selected because of the significance of its number. Every United States taxpayer knows of the dreaded 1040 form. I figured it would be an easy task for a Certified Public Accountant. I was wrong.

Klumpkea is a particularly difficult object on which to get a lightcurve. After the first night of observations, it was immediately apparent that this was a very long rotational period, since the six-hour session showed no hint of a minimum or maximum. However, continuing observations would help fight observational bias towards shorter period asteroids. Of the seven sessions obtained, only one minimum and one maximum were found. The provisional period of 59.2 hours was obtained only by eliminating all other possibilities. Every possible period between 20 and 70 hours was explored, and all but one had contradictory information (e.g. a session was descending when it should have been ascending). Still, this result cannot be considered secure. Even though over half of the lightcurve is represented; there is no overlap between the sessions. So still, a 1040 is difficult, even for a Certified Public Accountant!

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