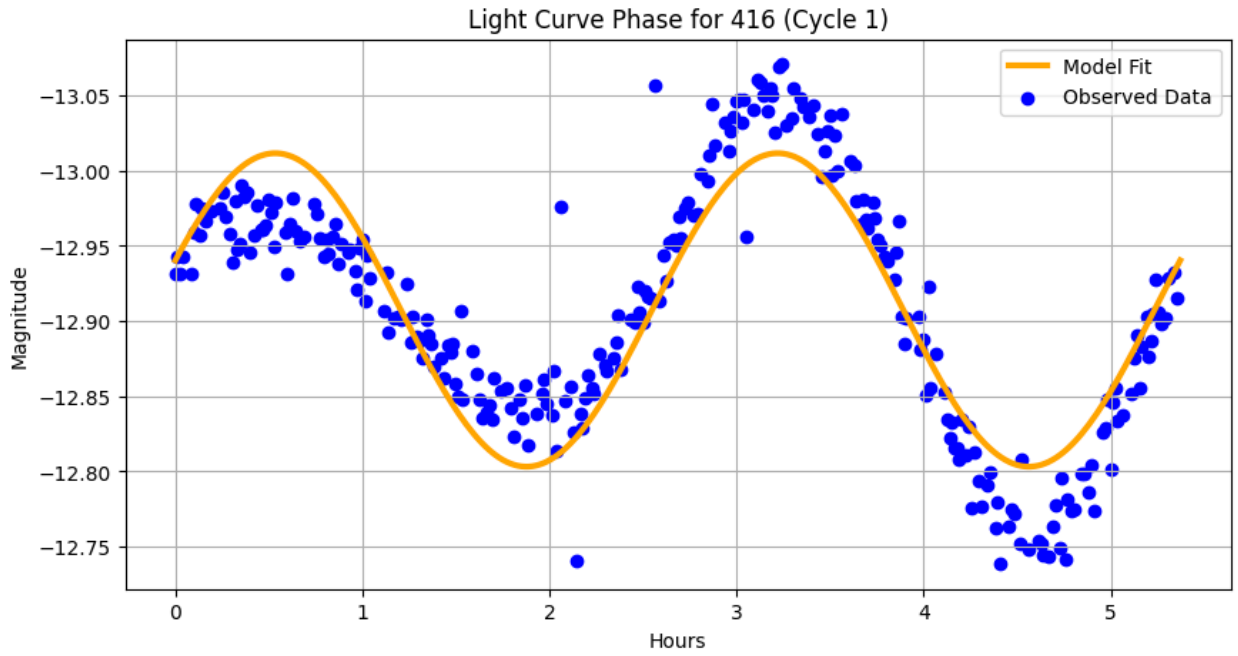
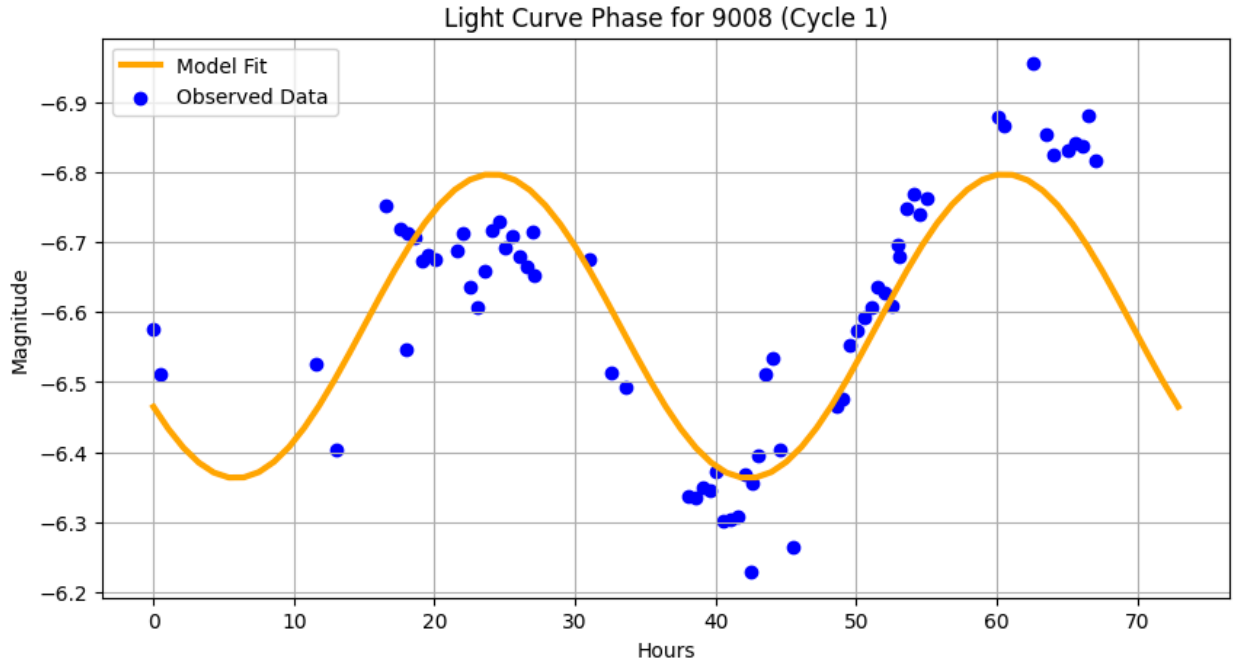
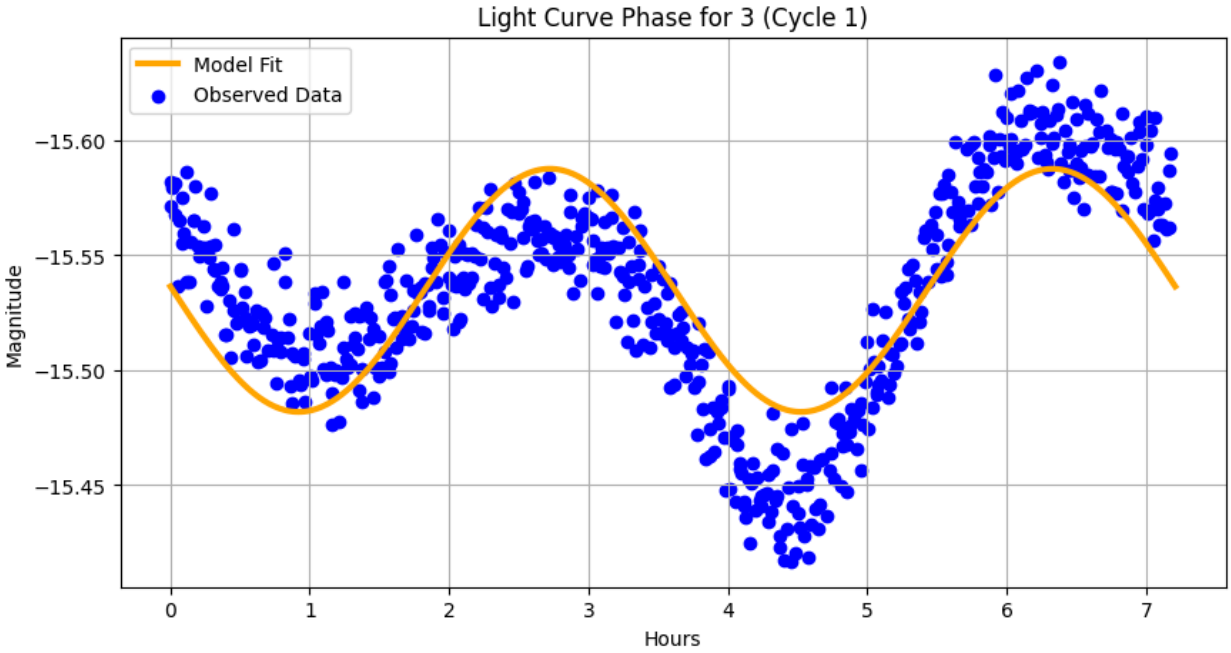
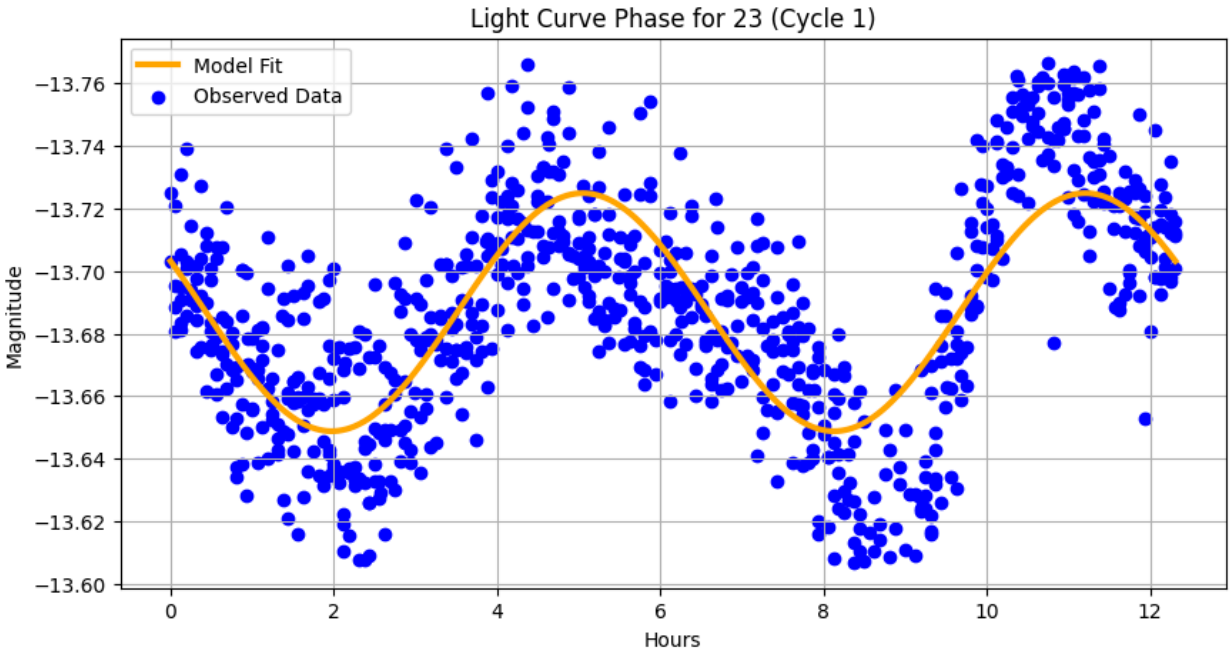
This gallery presents a curated set of asteroids with distinctive rotational signatures, identified through detailed light curve analysis. Each entry highlights how variations in brightness help us infer the shape, spin, and physical nature of these small bodies.

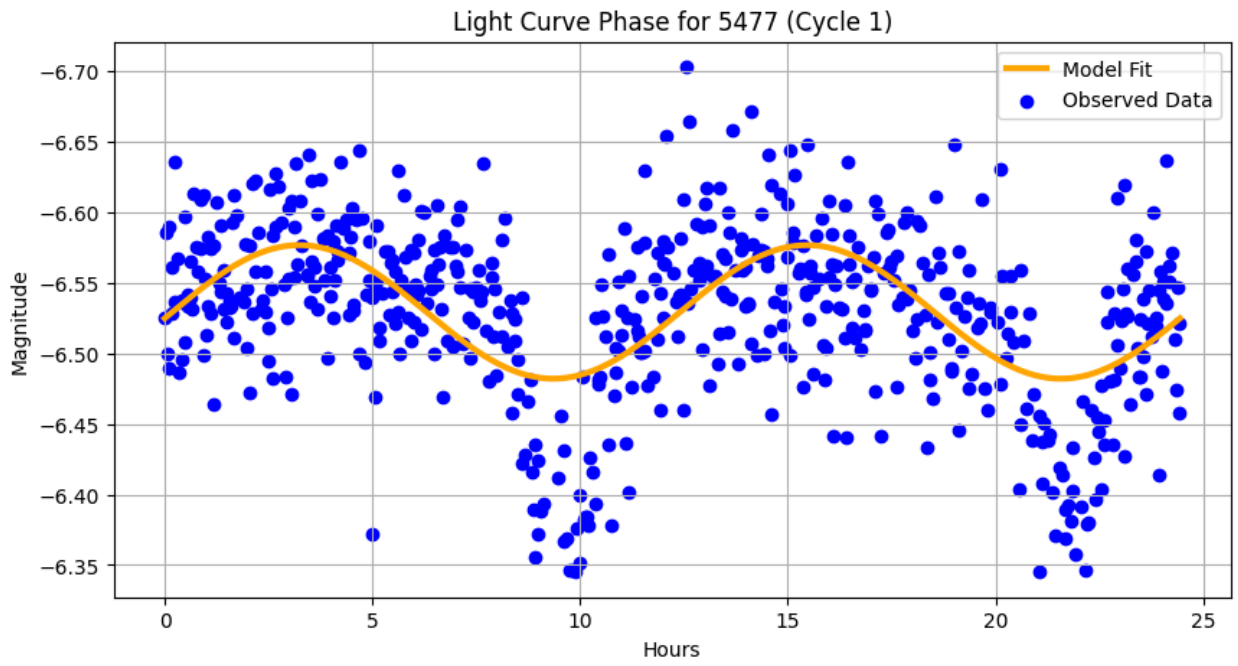
From Cycle 1:

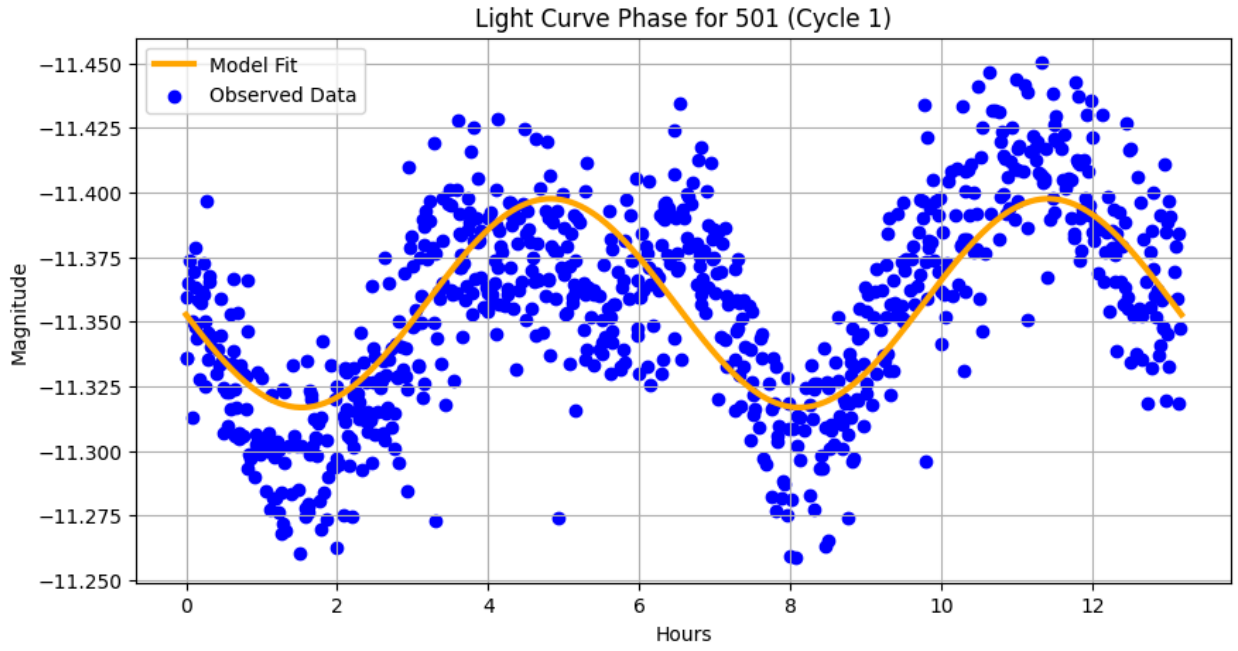


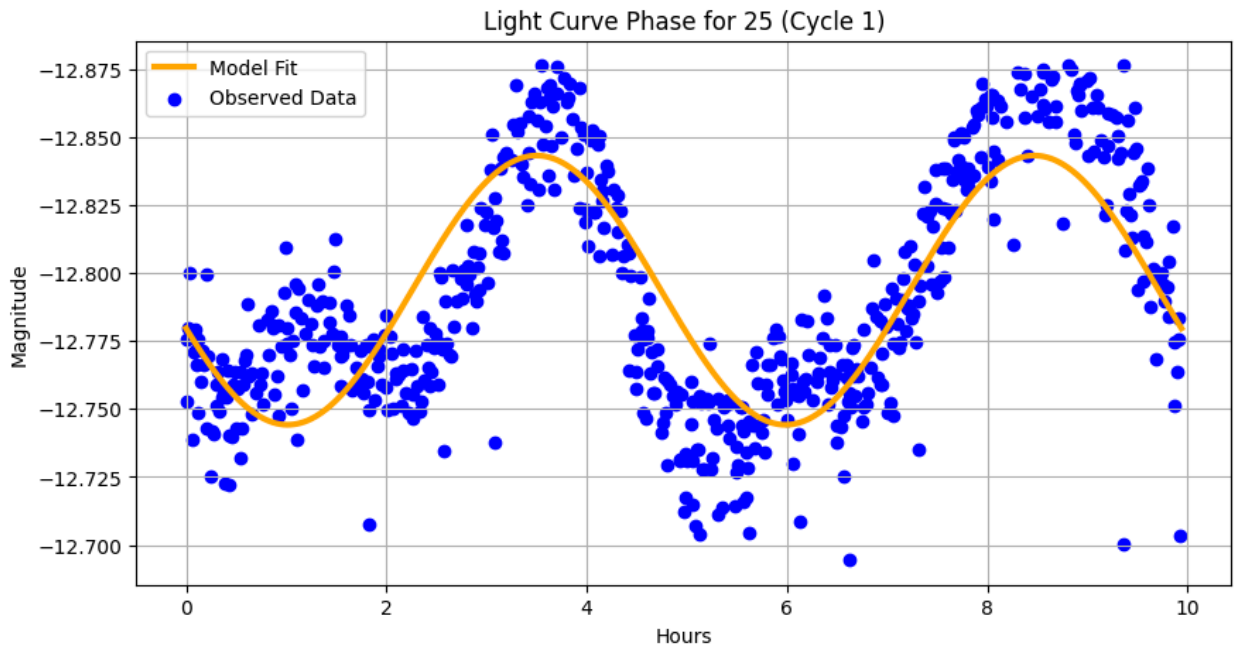


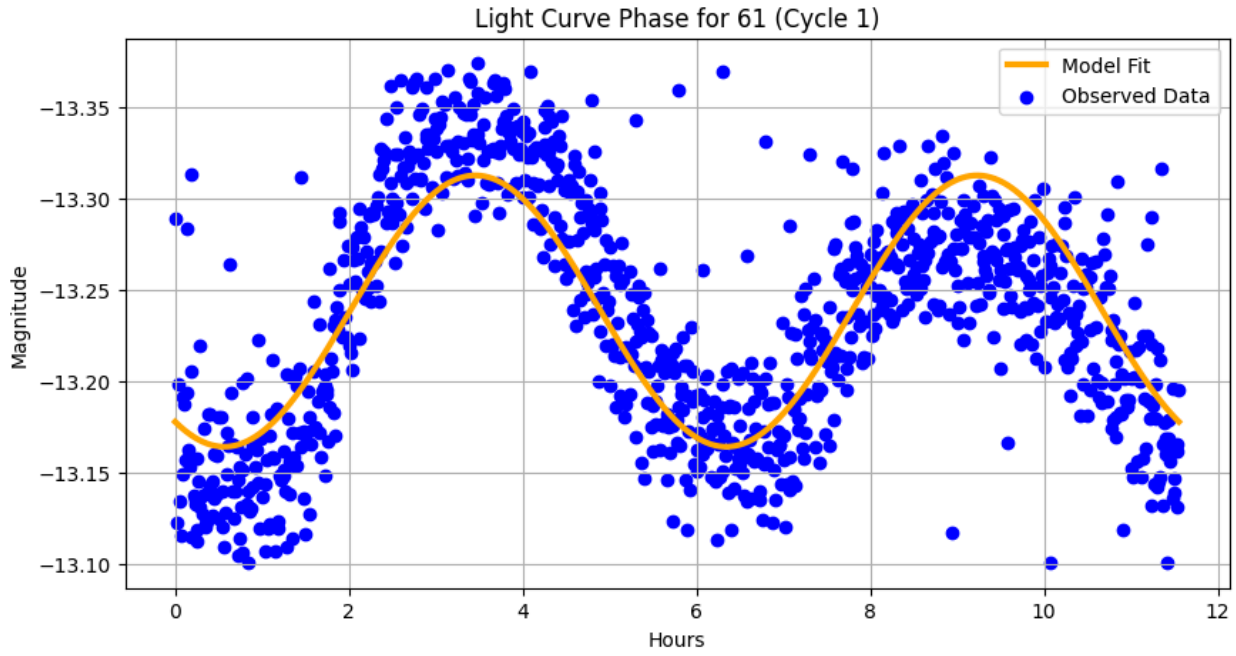

Light Curve Phase for 3 (Cycle 1)
Model Fit
Observed Data
−15.60
−15.55
−15.50
−15.45
Magnitude
0
1
2
3
4
5
6
7
Hours

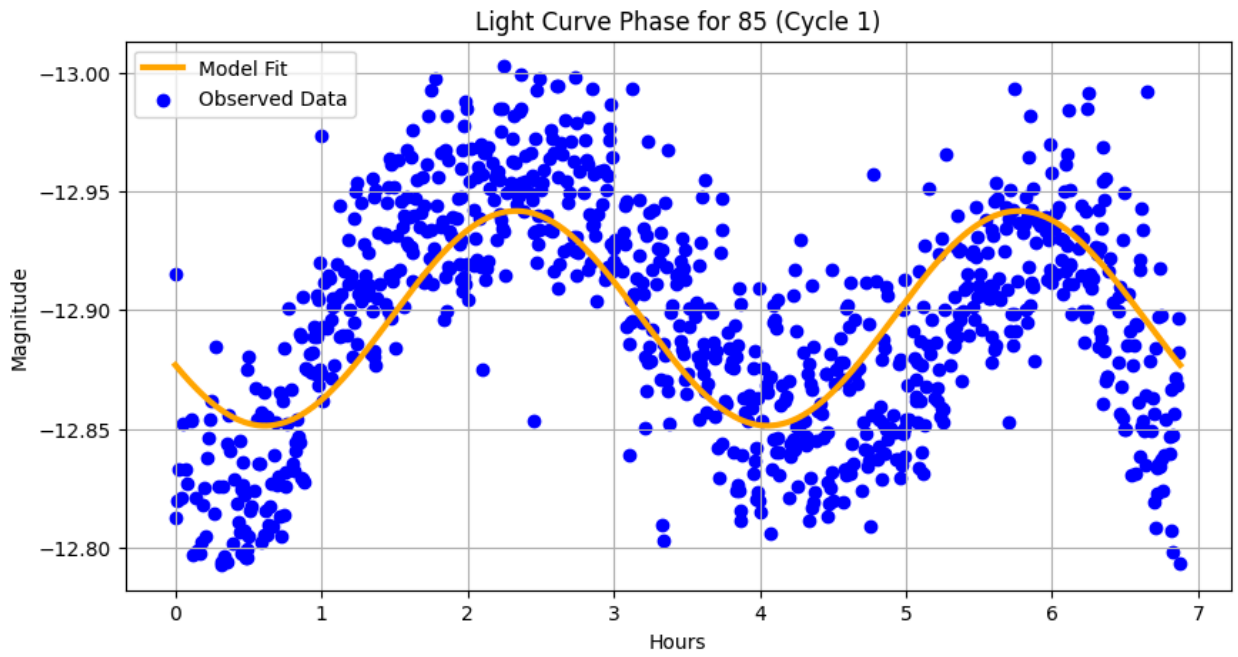

Light Curve Phase for 23 (Cycle 1)
Model Fit
Observed Data
−13.76
−13.74
−13.72
−13.70
−13.68
−13.66
−13.64
−13.62
−13.60
Magnitude
0
2
4
6
8
10
12
Hours

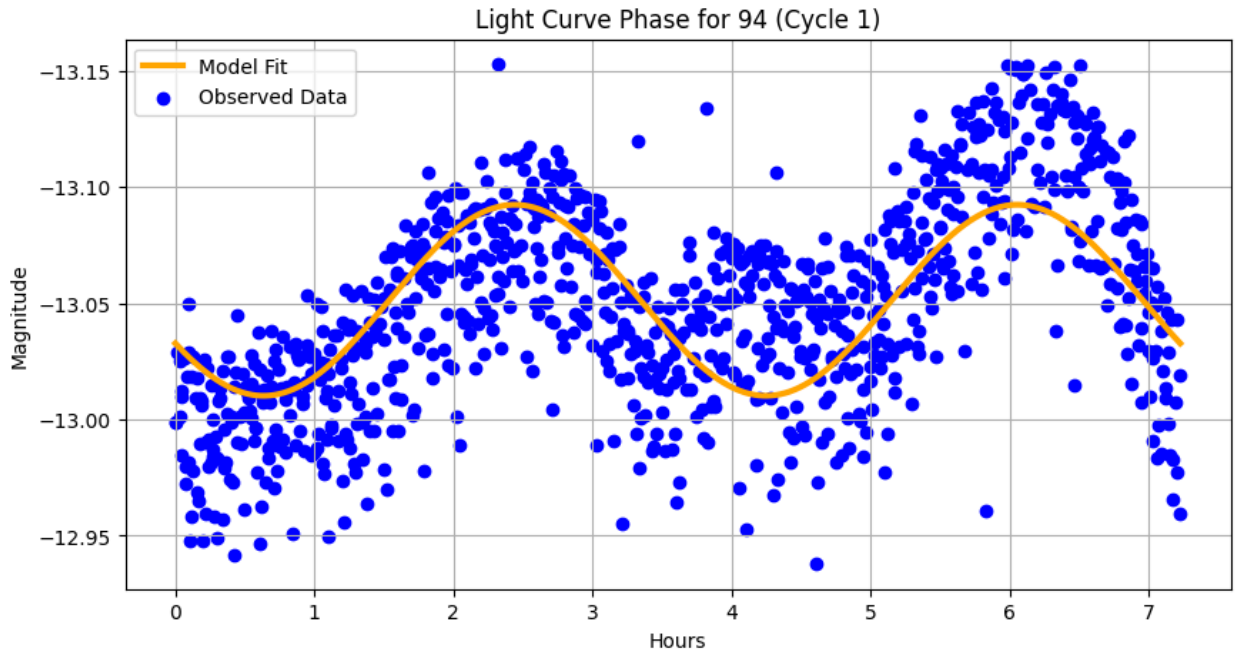

Light Curve Phase for 5477 (Cycle 1)
Model Fit
Observed Data
Magnitude
Hours
−6.70
−6.65
−6.60
−6.55
−6.50
−6.45
−6.40
−6.35
0
5
10
15
20
25

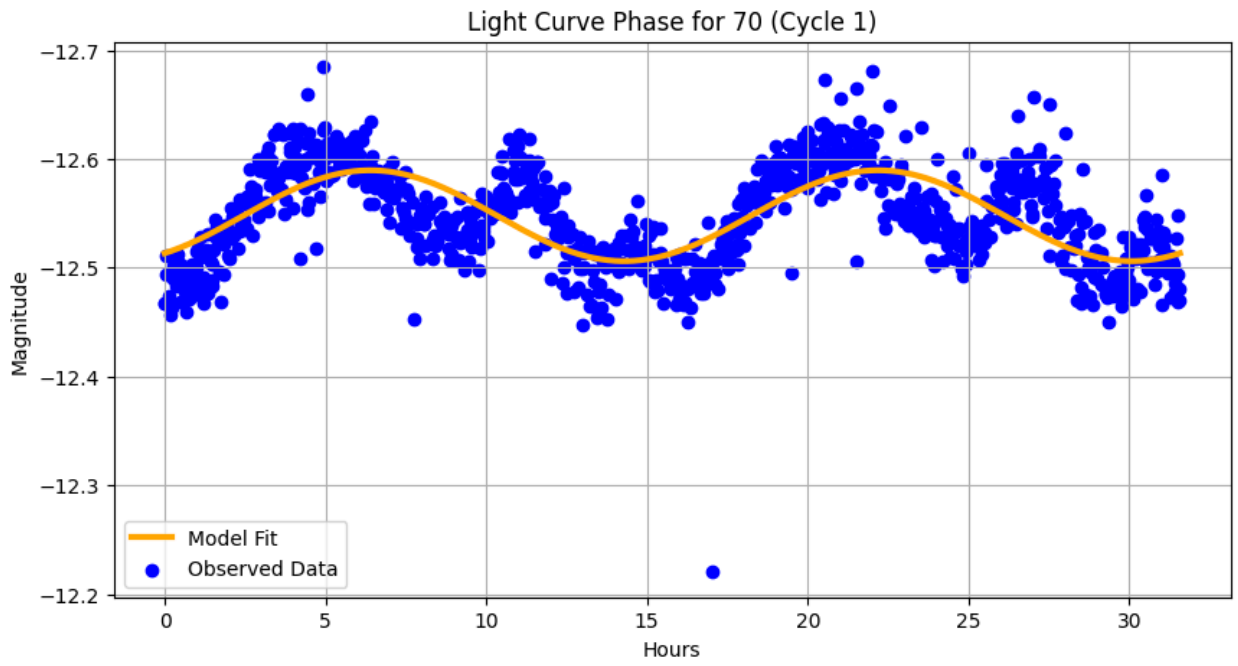

Light Curve Phase for 501 (Cycle 1)
Model Fit
Observed Data
Magnitude
Hours
−11.450
−11.425
−11.400
−11.375
−11.350
−11.325
−11.300
−11.275
−11.250
0
2
4
6
8
10
12

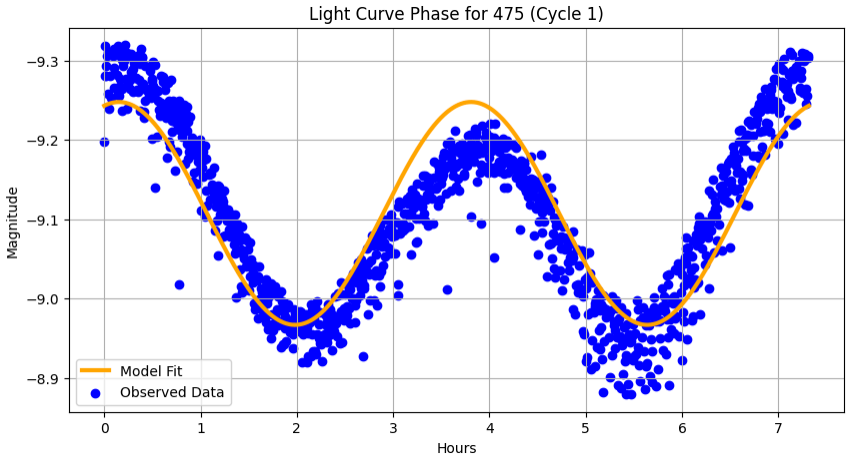

Light Curve Phase for 25 (Cycle 1)
Model Fit
Observed Data
Magnitude
−12.875
−12.850
−12.825
−12.800
−12.775
−12.750
−12.725
−12.700
0
2
4
6
8
10
Hours

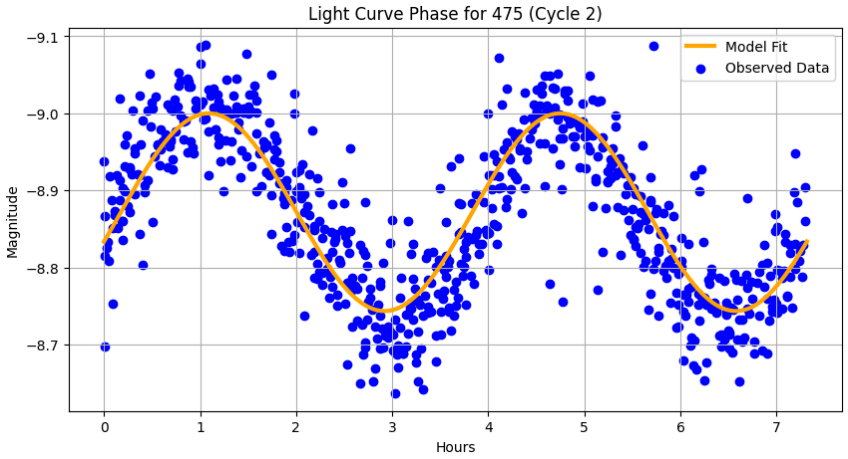

Light Curve Phase for 61 (Cycle 1)
Model Fit
Observed Data
Magnitude
−13.35
−13.30
−13.25
−13.20
−13.15
−13.10
0
2
4
6
8
10
12
Hours


Light Curve Phase for 85 (Cycle 1)
Model Fit
Observed Data
Magnitude
−13.00
−12.95
−12.90
−12.85
−12.80
0
1
2
3
4
5
6
7
Hours

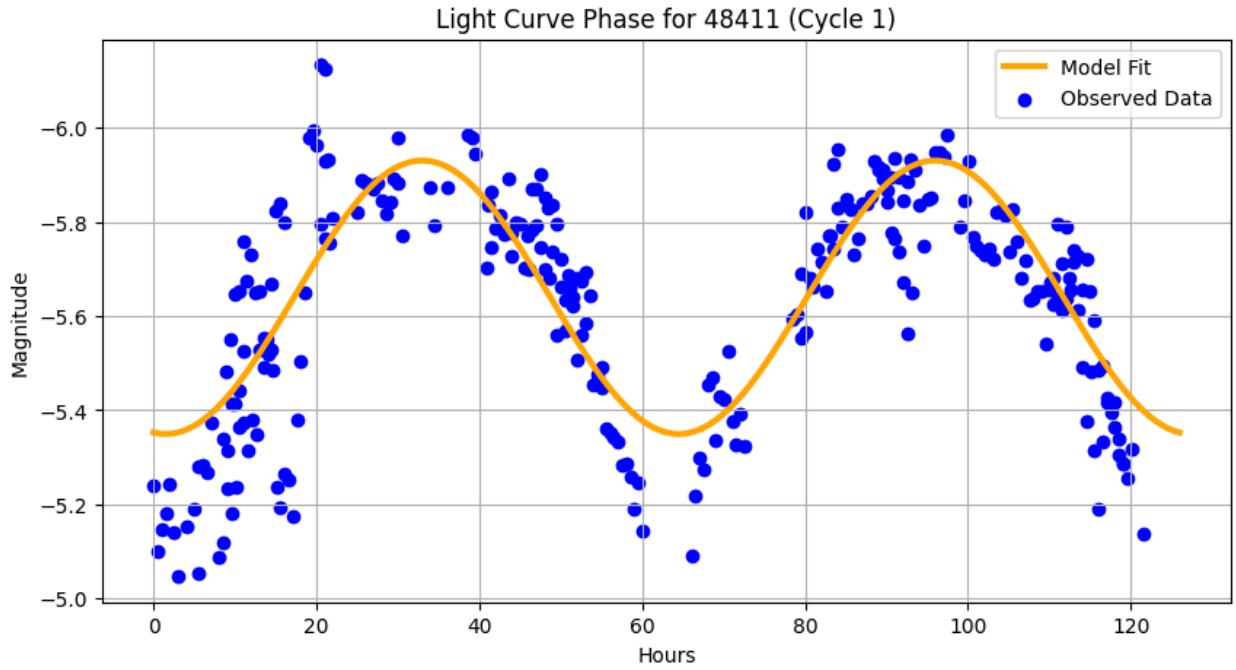

Light Curve Phase for 94 (Cycle 1)
Model Fit
Observed Data
Magnitude
−13.15
−13.10
−13.05
−13.00
−12.95
0
1
2
3
4
5
6
7
Hours

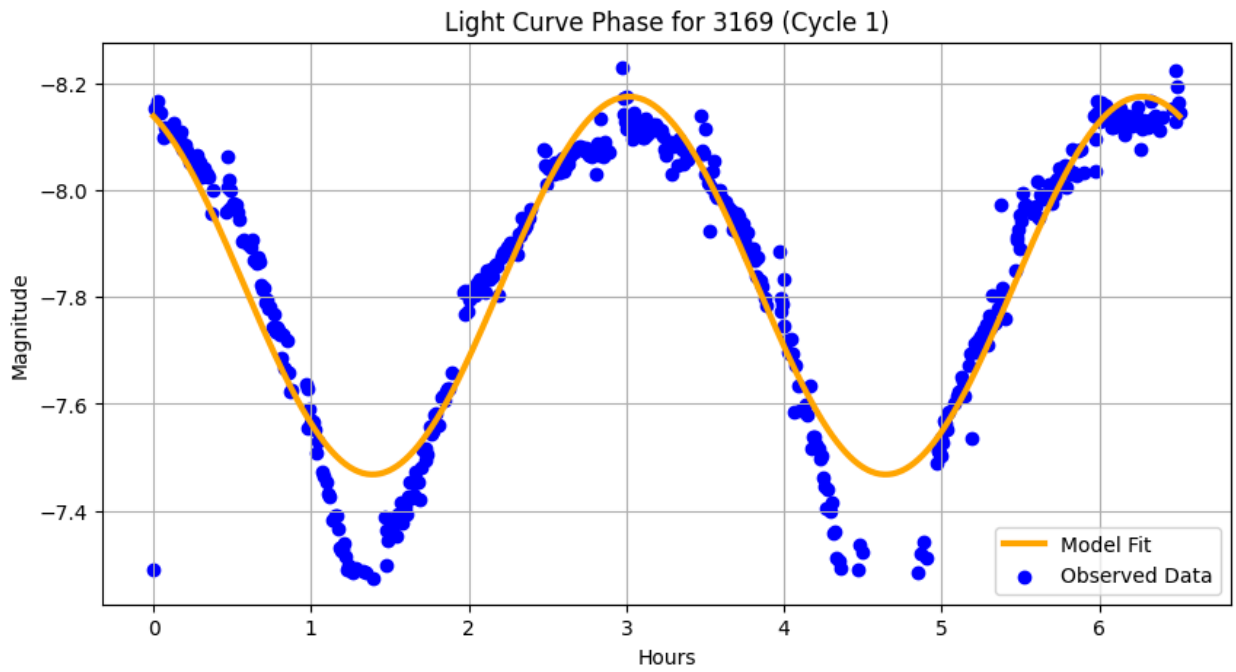

Light Curve Phase for 70 (Cycle 1)
Magnitude
Hours
Model Fit
Observed Data
−12.7
−12.6
−12.5
−12.4
−12.3
−12.2
0
5
10
15
20
25
30

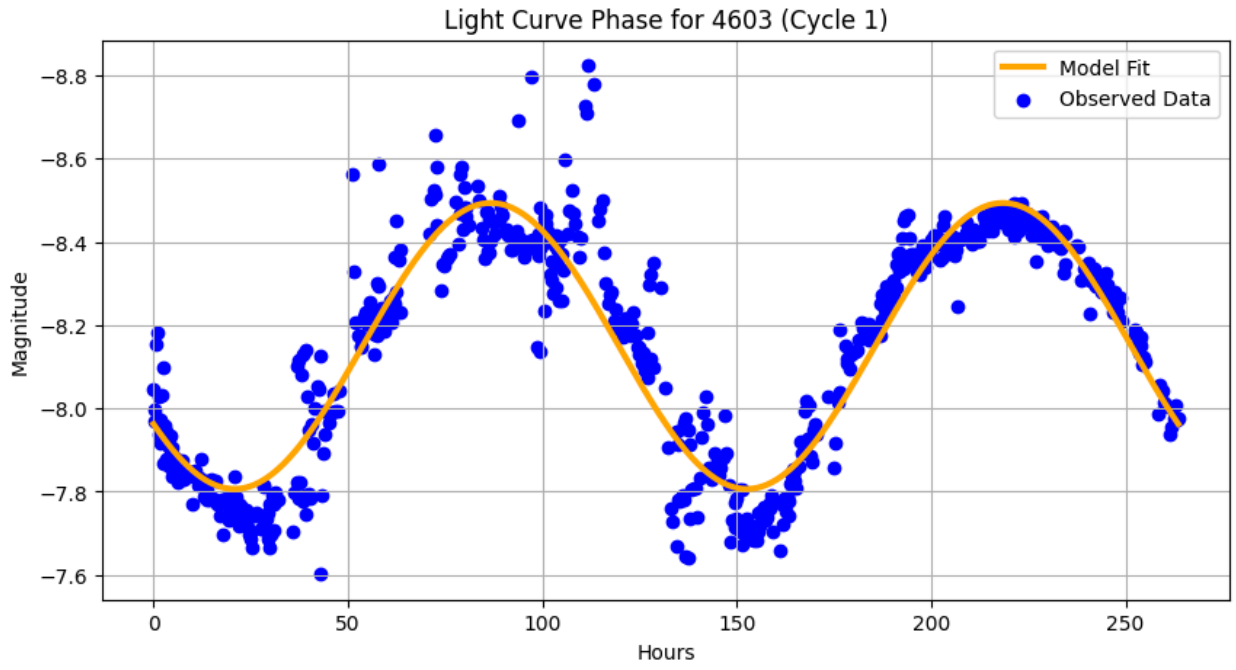

Light Curve Phase for 475 (Cycle 1)
Magnitude
Hours
Model Fit
Observed Data
−9.3
−9.2
−9.1
−9.0
−8.9
0
1
2
3
4
5
6
7

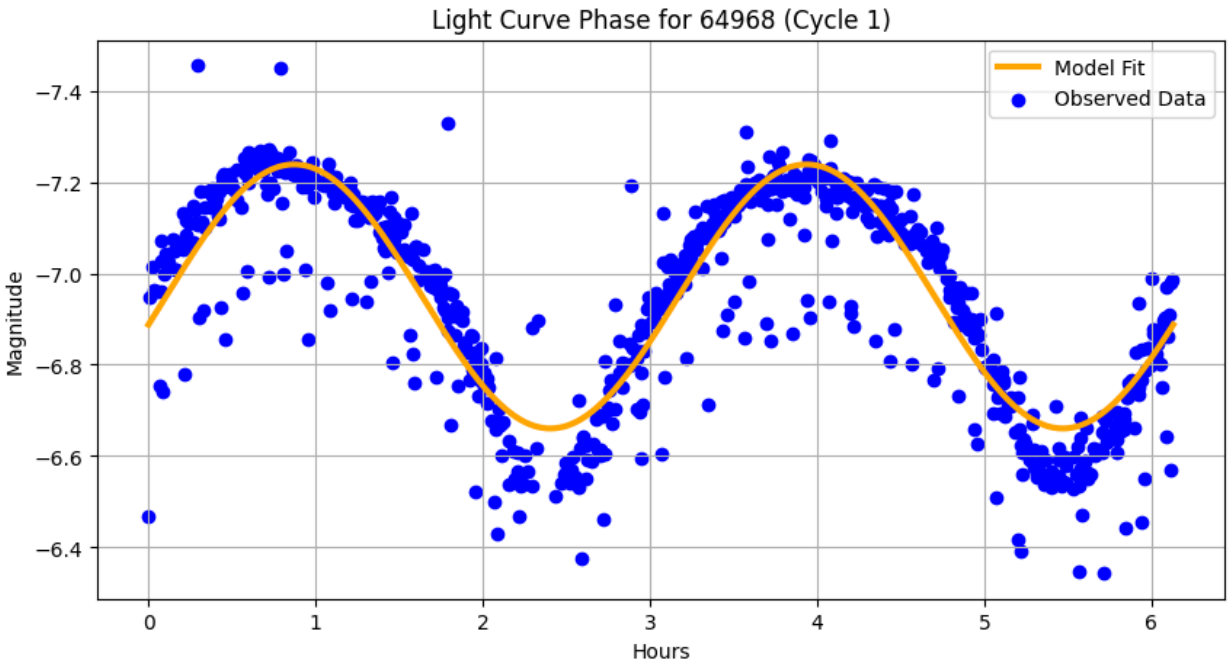


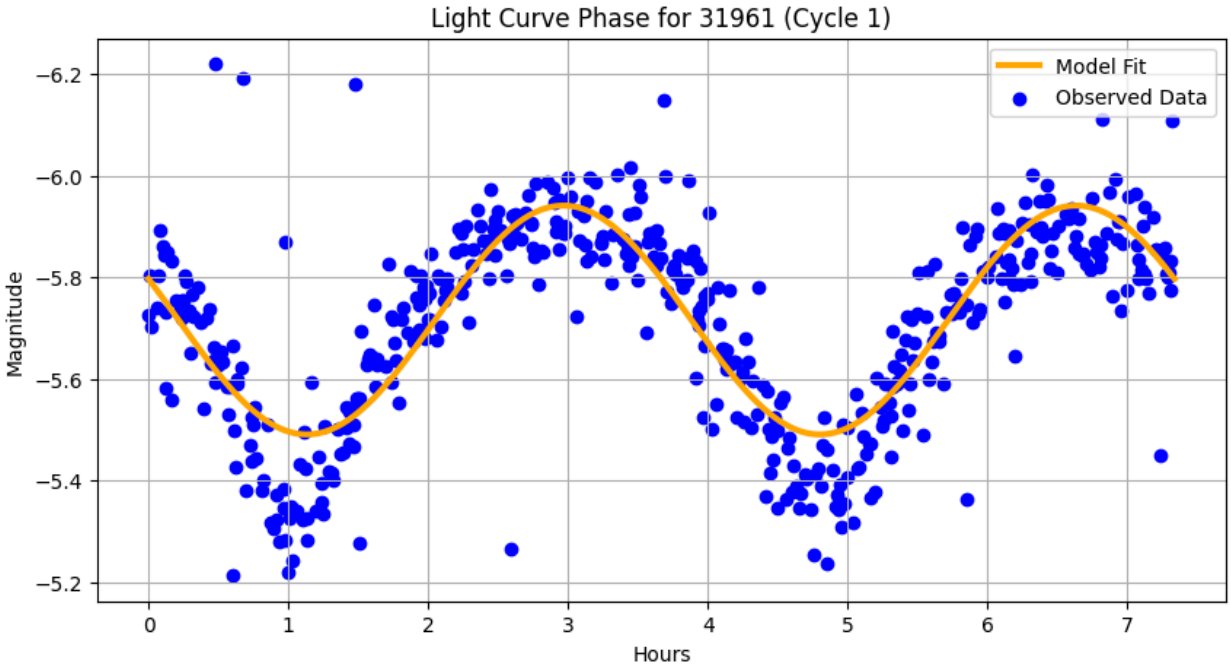
Asteroid 475 exhibits a well-constrained and periodic light curve in both Cycle 1 and Cycle 2, suggesting a stable rotation and elongated shape. Notably, the **slight variation in amplitude and phase symmetry** between the two cycles may reflect a **changing viewing geometry**, which is consistent with observing different surface features or shape orientations.

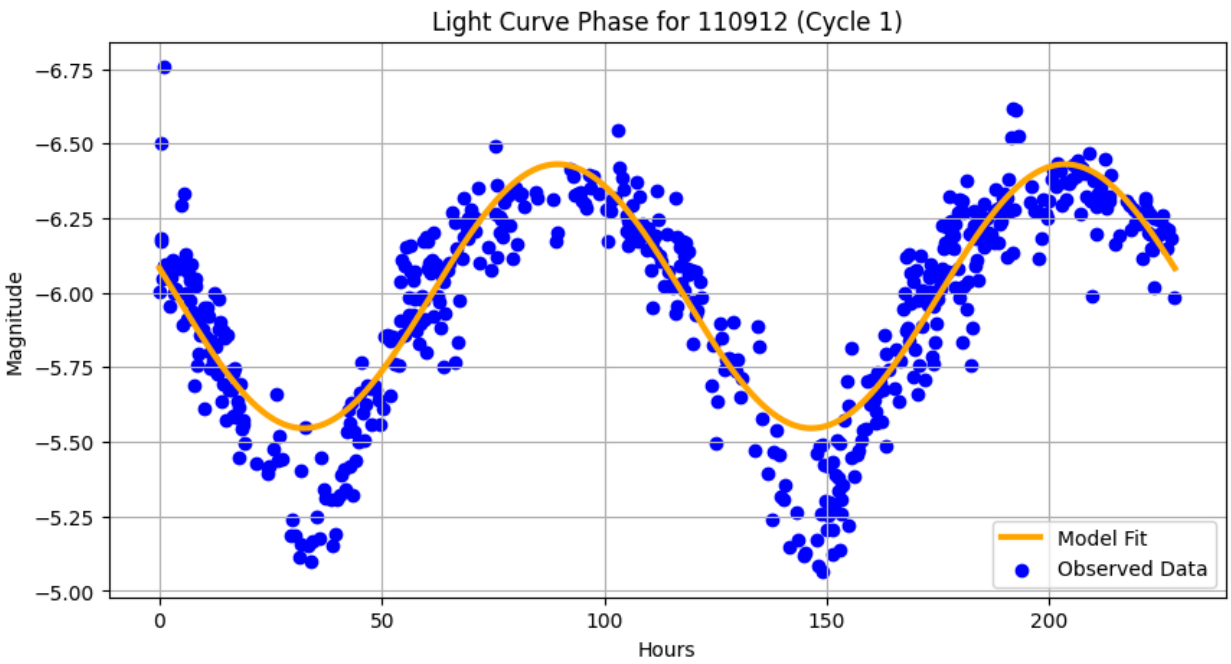


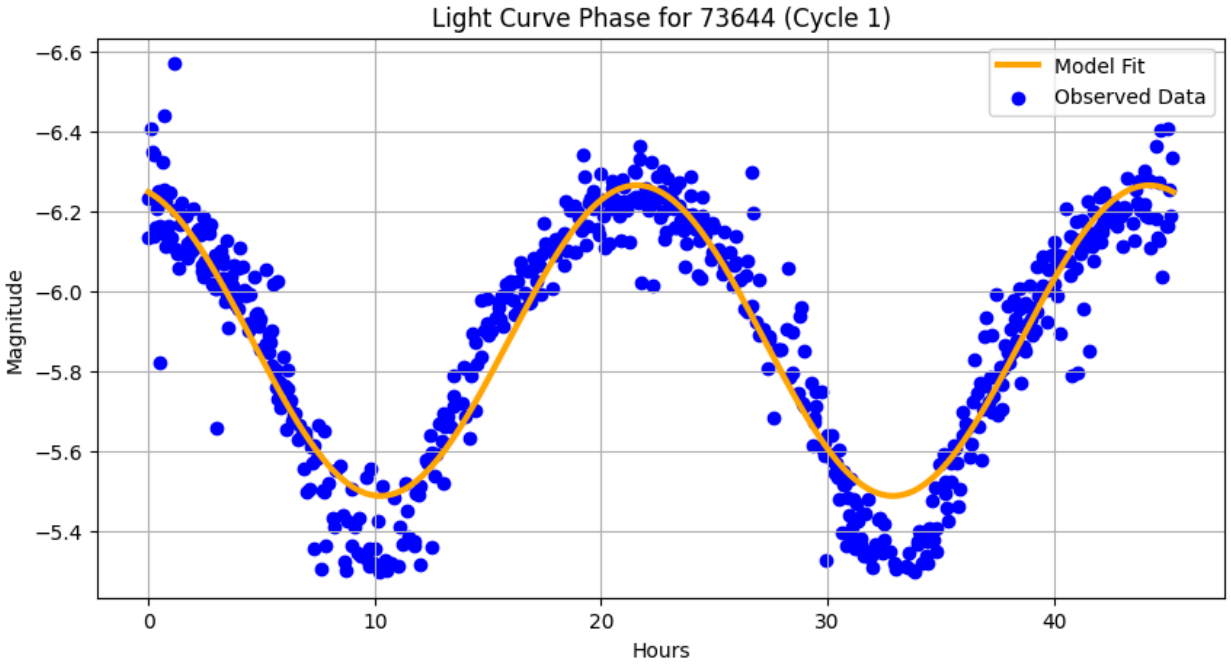

Light Curve Phase for 3169 (Cycle 1)
Magnitude
Hours
Model Fit
Observed Data
−8.2
−8.0
−7.8
−7.6
−7.4
0
1
2
3
4
5
6

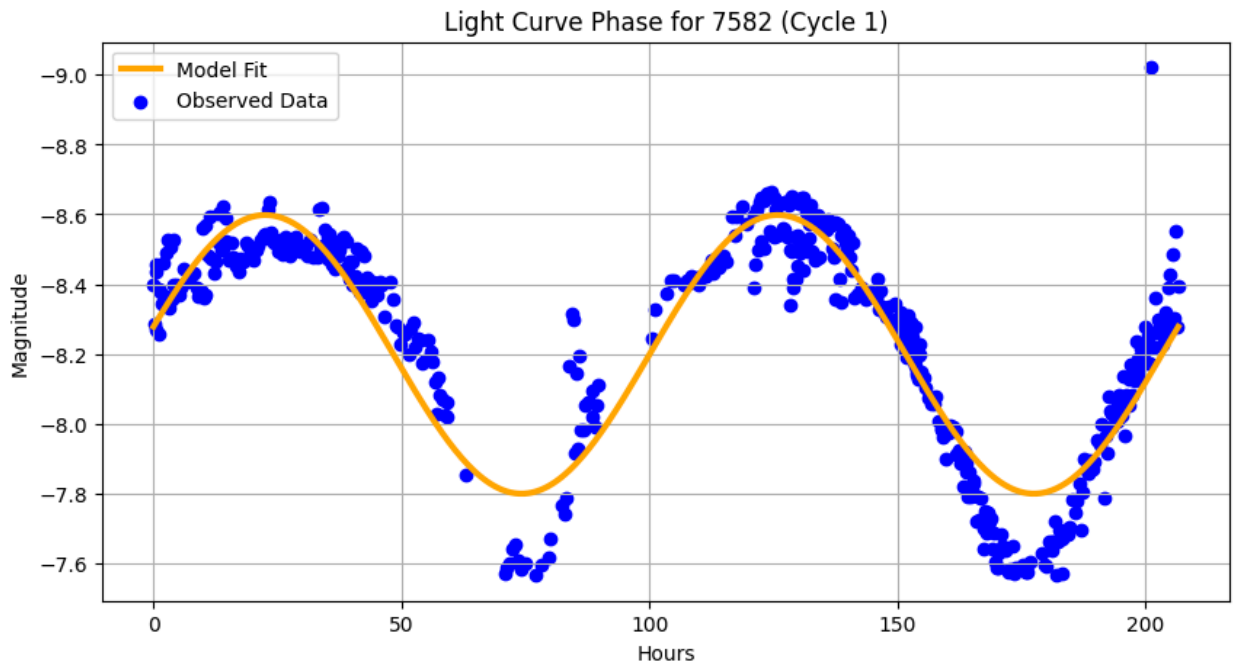

Light Curve Phase for 4603 (Cycle 1)
Magnitude
Hours
Model Fit
Observed Data
−8.8
−8.6
−8.4
−8.2
−8.0
−7.8
−7.6
0
50
100
150
200
250

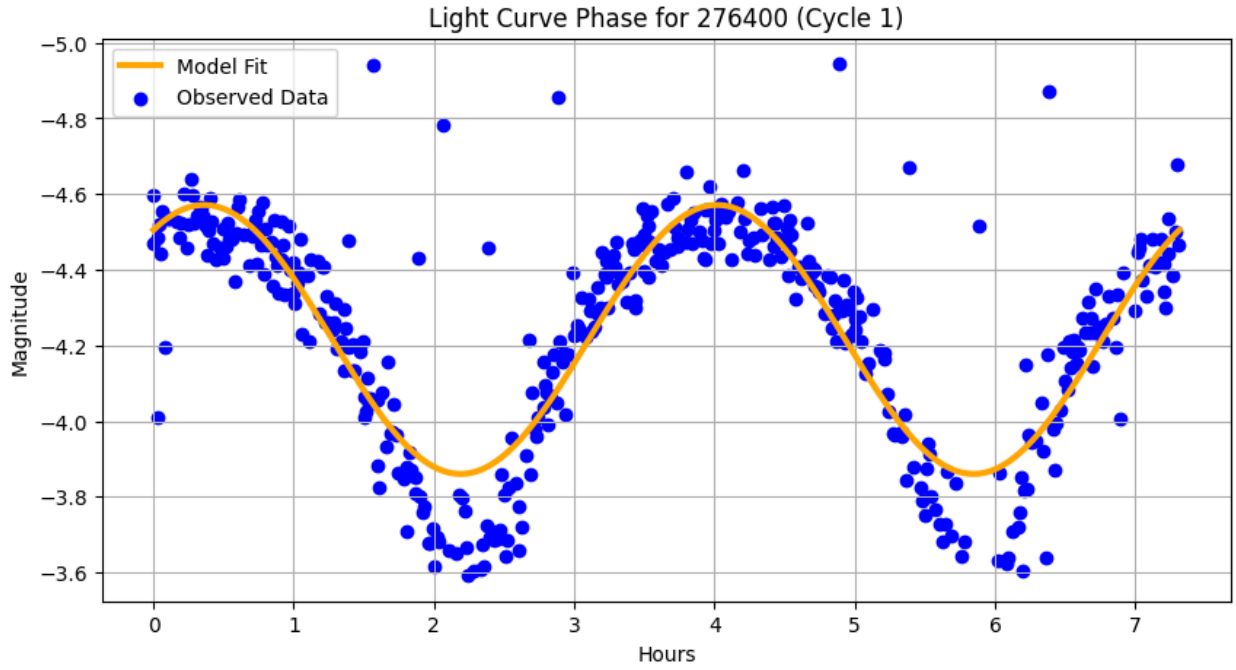

Light Curve Phase for 64968 (Cycle 1)
Model Fit
Observed Data
Magnitude
−7.4
−7.2
−7.0
−6.8
−6.6
−6.4
0
1
2
3
4
5
6
Hours

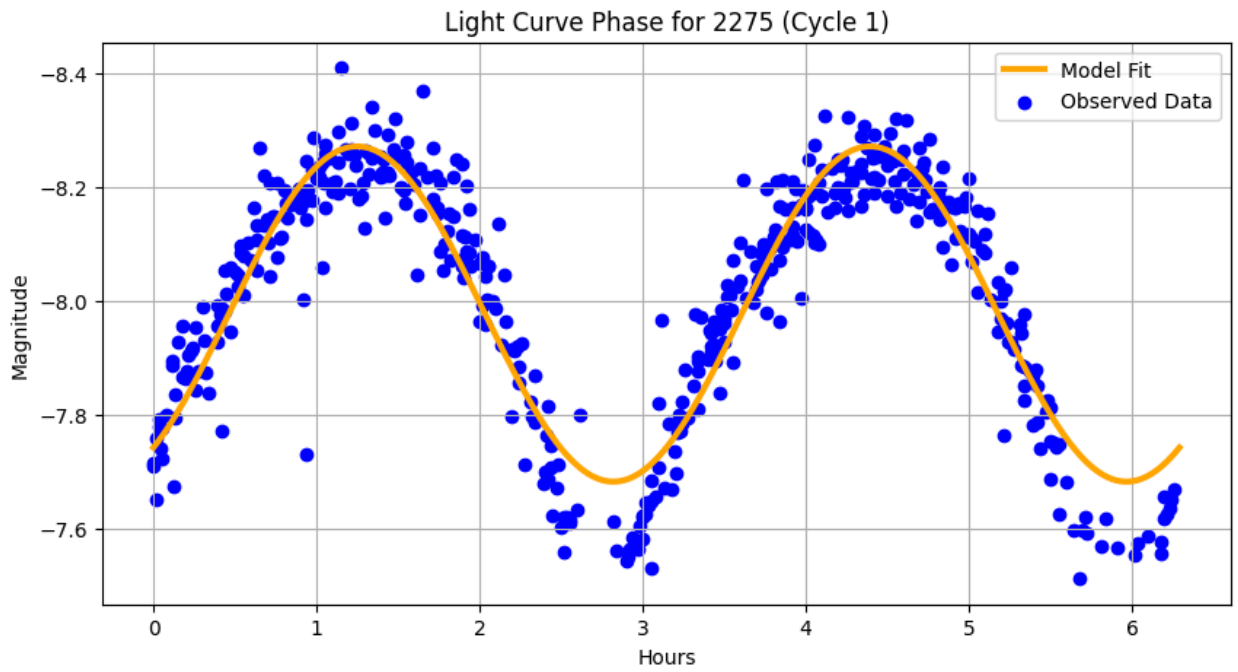

Light Curve Phase for 31961 (Cycle 1)
Model Fit
Observed Data
Magnitude
−6.2
−6.0
−5.8
−5.6
−5.4
−5.2
0
1
2
3
4
5
6
7
Hours

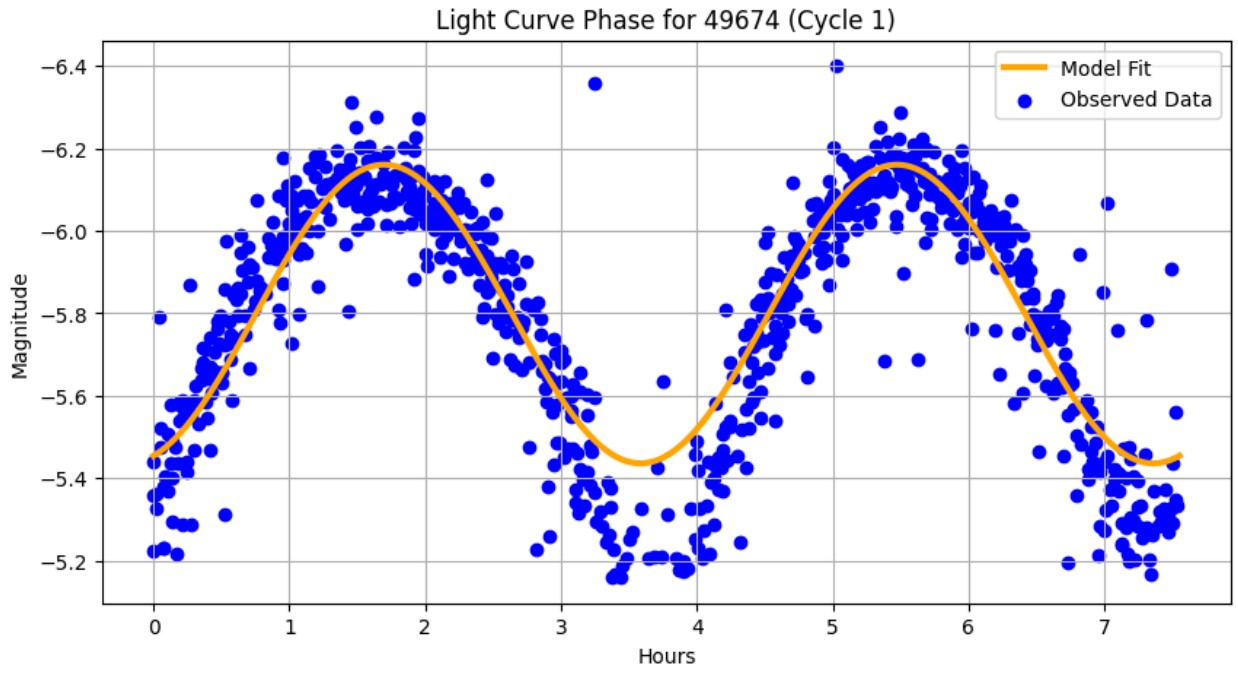

Light Curve Phase for 110912 (Cycle 1)
Magnitude
Hours
Model Fit
Observed Data
−6.75
−6.50
−6.25
−6.00
−5.75
−5.50
−5.25
−5.00
0
50
100
150
200


Light Curve Phase for 73644 (Cycle 1)
Magnitude
Hours
Model Fit
Observed Data
−6.6
−6.4
−6.2
−6.0
−5.8
−5.6
−5.4
0
10
20
30
40


Light Curve Phase for 7582 (Cycle 1)
Model Fit
Observed Data
Magnitude
Hours
−9.0
−8.8
−8.6
−8.4
−8.2
−8.0
−7.8
−7.6
0
50
100
150
200


Light Curve Phase for 276400 (Cycle 1)
Model Fit
Observed Data
Magnitude
Hours
−5.0
−4.8
−4.6
−4.4
−4.2
−4.0
−3.8
−3.6
0
1
2
3
4
5
6
7

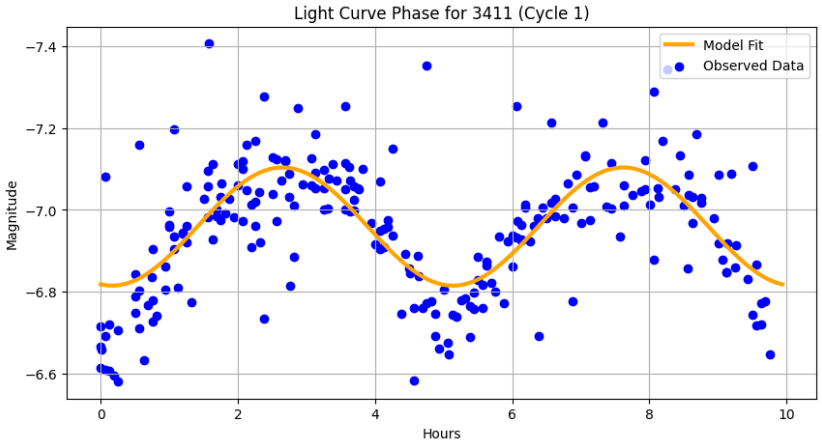

Light Curve Phase for 2275 (Cycle 1)
Model Fit
Observed Data
Magnitude
Hours
−8.4
−8.2
−8.0
−7.8
−7.6
0
1
2
3
4
5
6

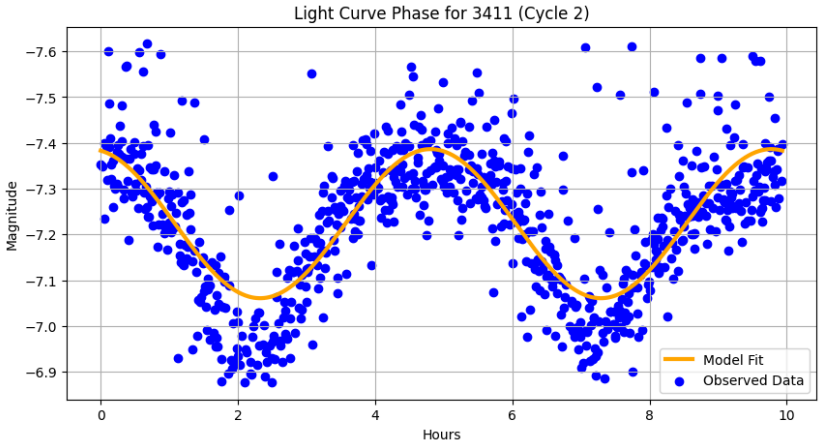

Light Curve Phase for 49674 (Cycle 1)
Model Fit
Observed Data
Magnitude
Hours
−6.4
−6.2
−6.0
−5.8
−5.6
−5.4
−5.2
0
1
2
3
4
5
6
7

*Object 3411 appears in both cycle 1 and cycle 2
Our dual-cycle plots for asteroids like **ID 3411** (seen in both Cycles 1 & 2) demonstrate:

- **Consistent rotation periods** across two different viewing geometries.

- Subtle **differences in amplitude or light curve shape**, likely due to changing viewing angle (pole orientation).

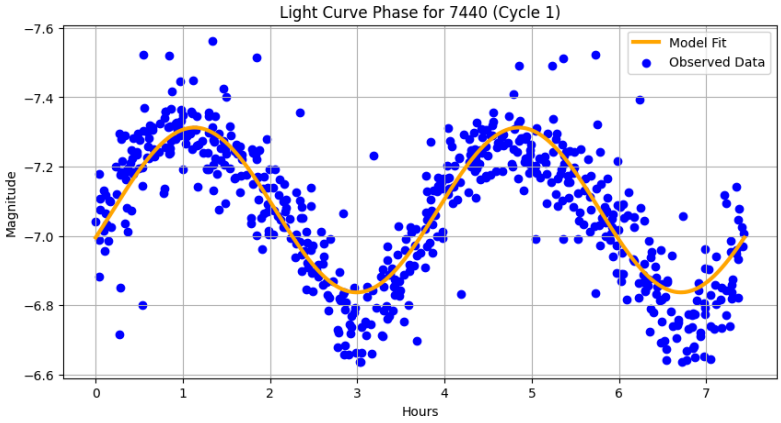


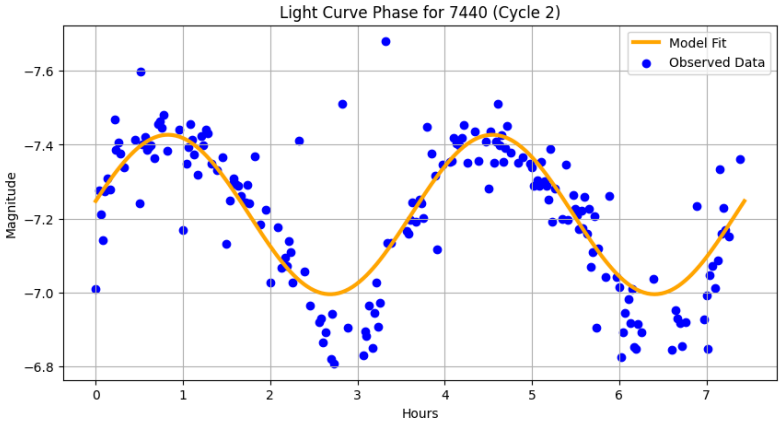


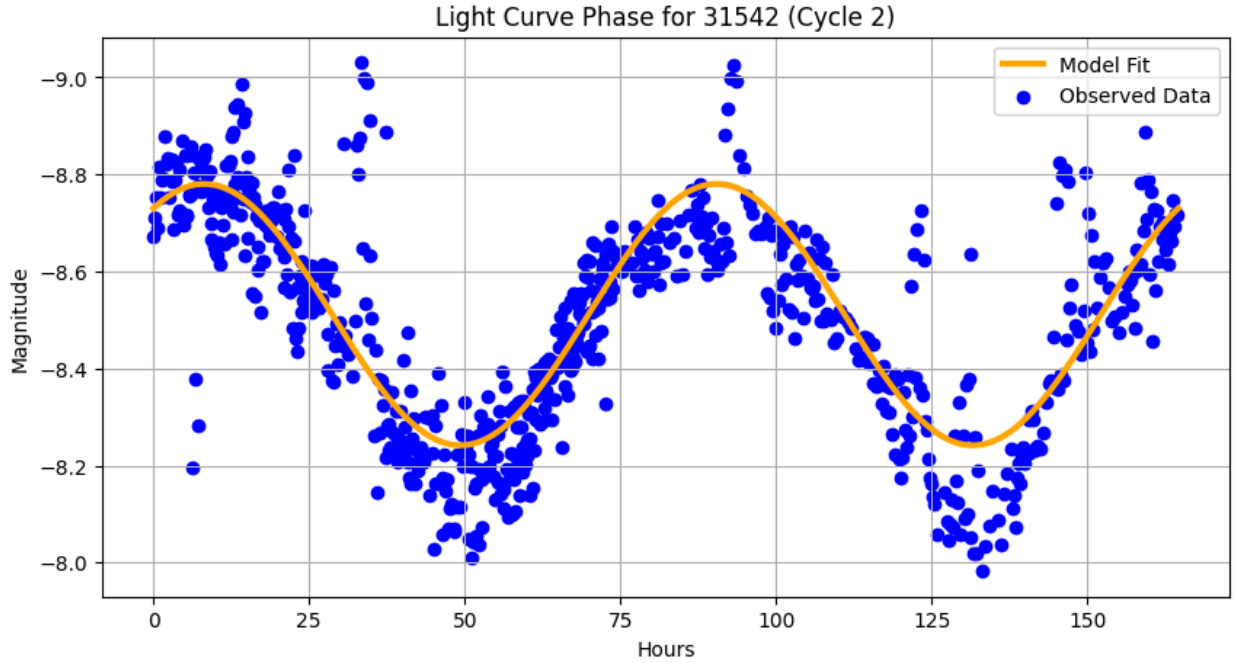
From Cycle 2:

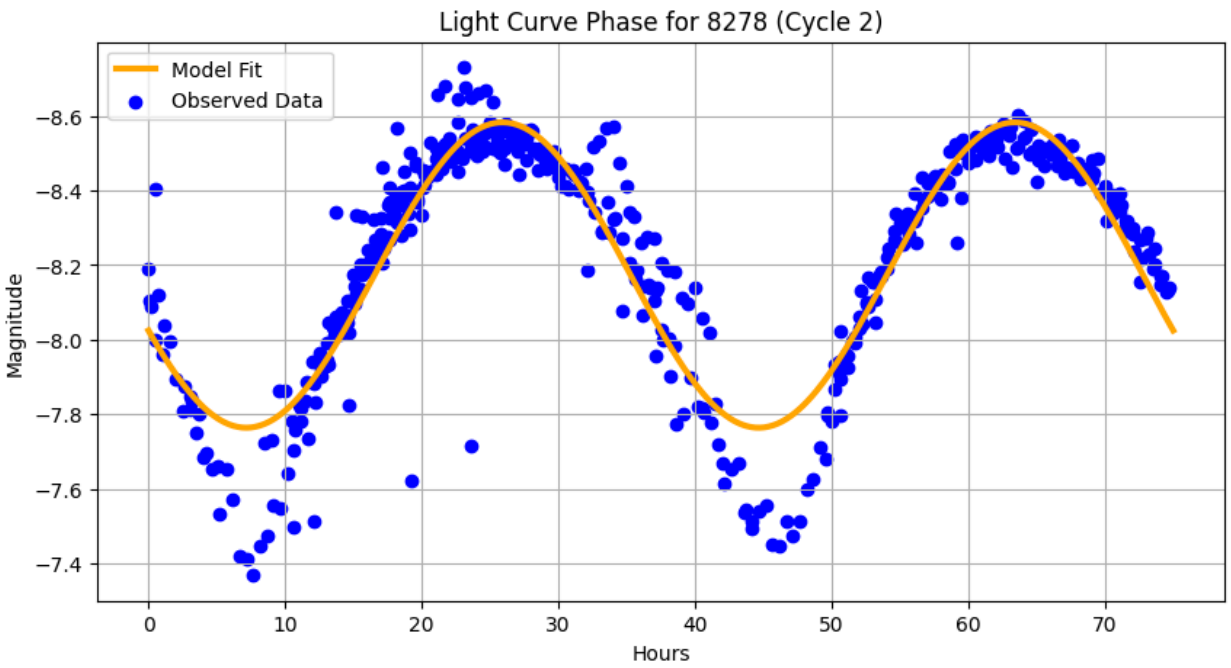
*In both cycle 1 and cycle 2:
Asteroid 7440 displays a stable and well-defined rotational signature across both Cycle 1 and Cycle 2 observations. The consistency in its light curve shape and period across different viewing angles suggests a **reliably rotating, elongated or mildly irregular body**. The smooth sinusoidal fits in both datasets further indicate that the object is **not tumbling or binary**, but

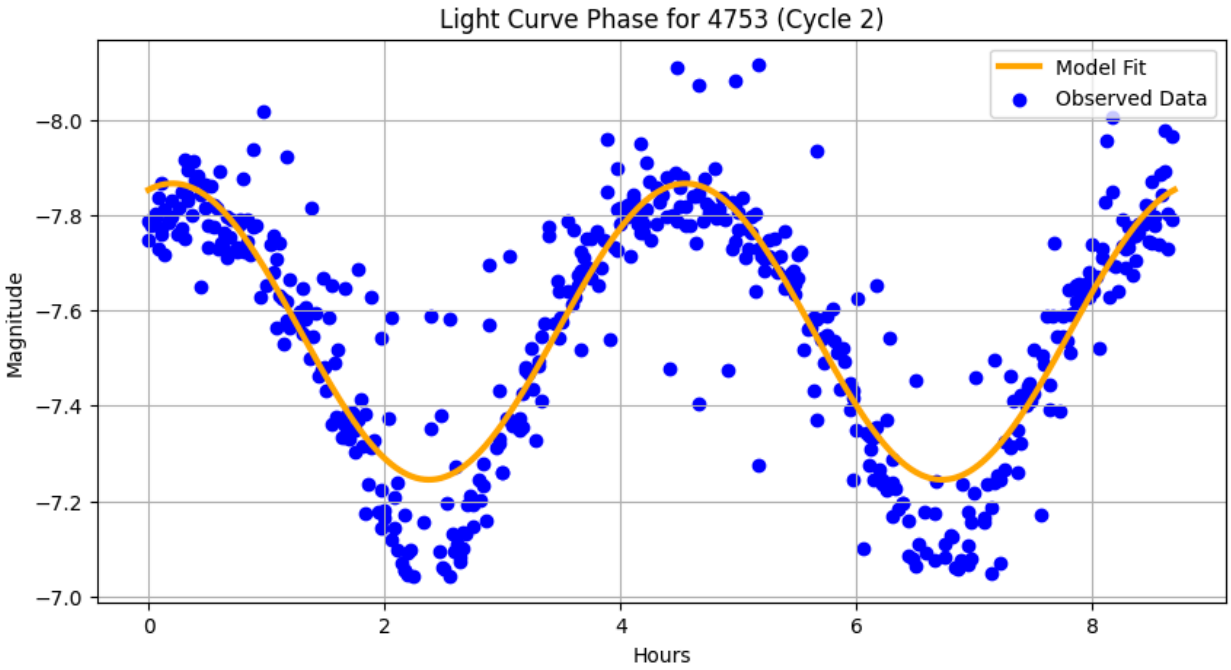
instead exhibits a **physically coherent shape** suitable for detailed modeling.

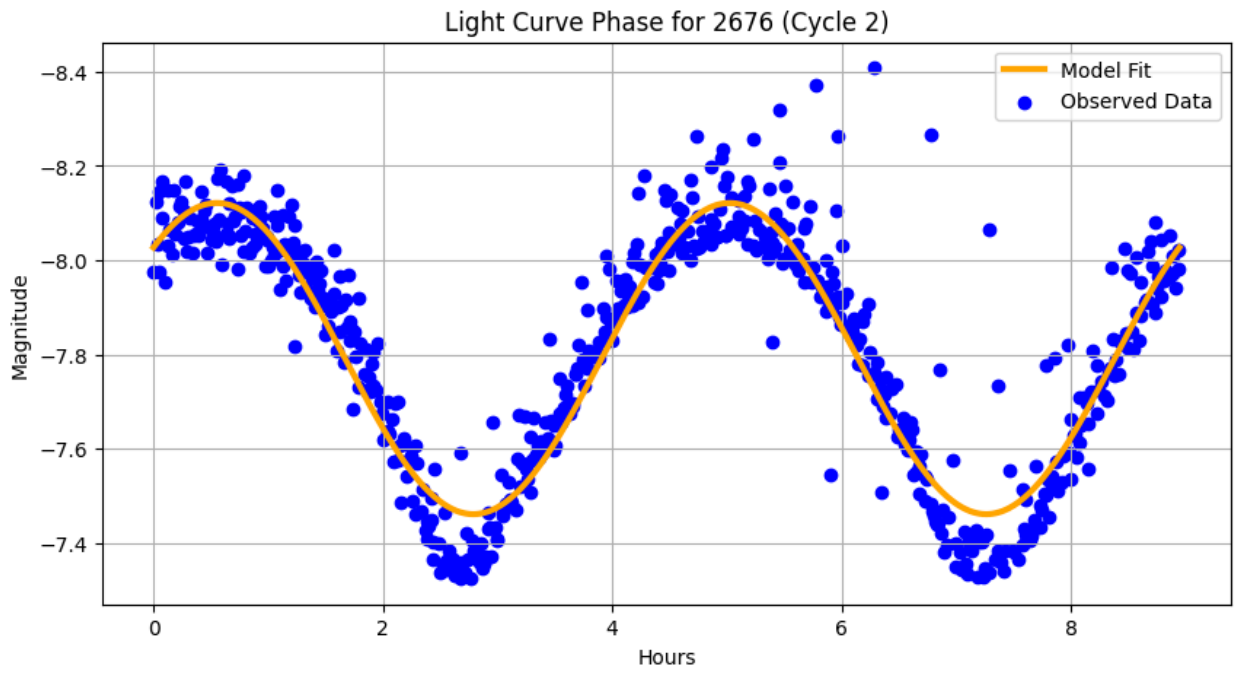


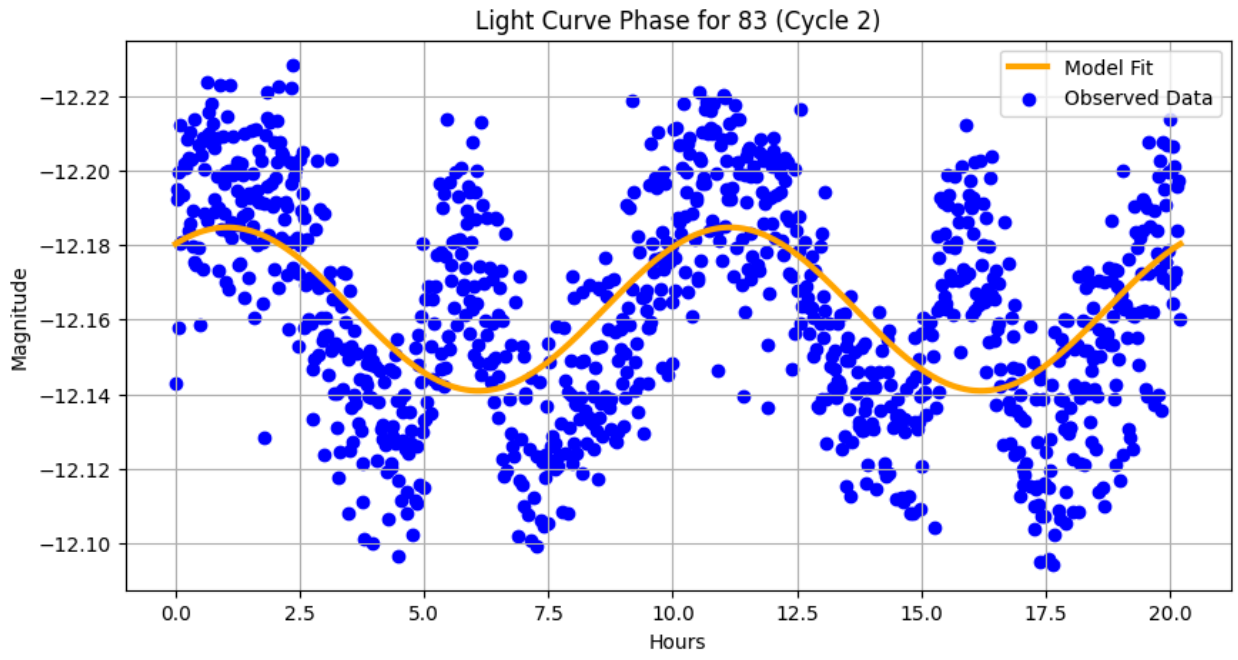


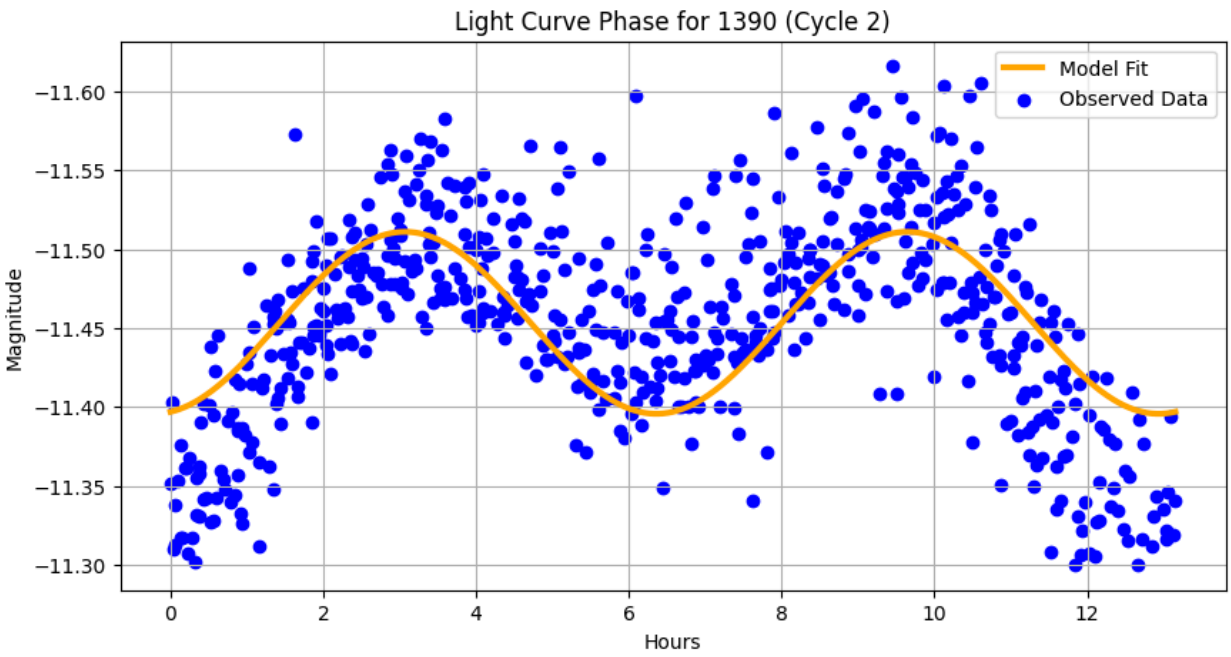



Light Curve Phase for 8278 (Cycle 2)
Model Fit
Observed Data
Magnitude
−8.6
−8.4
−8.2
−8.0
−7.8
−7.6
−7.4
0
10
20
30
40
50
60
70
Hours


Light Curve Phase for 4753 (Cycle 2)
Model Fit
Observed Data
Magnitude
−8.0
−7.8
−7.6
−7.4
−7.2
−7.0
0
2
4
6
8
Hours


Light Curve Phase for 2676 (Cycle 2)
Model Fit
Observed Data
Magnitude
Hours
−8.4
−8.2
−8.0
−7.8
−7.6
−7.4
0
2
4
6
8


Light Curve Phase for 83 (Cycle 2)
Model Fit
Observed Data
Magnitude
Hours
−12.22
−12.20
−12.18
−12.16
−12.14
−12.12
−12.10
0.0
2.5
5.0
7.5
10.0
12.5
15.0
17.5
20.0


Light Curve Phase for 1390 (Cycle 2)
Model Fit
Observed Data
Magnitude
−11.60
−11.55
−11.50
−11.45
−11.40
−11.35
−11.30
0
2
4
6
8
10
12
Hours