

(13147)Foglia occults UCAC4 417-056415

***** Asteroid occultation Report *****

[Date] 2025.12.4 [Approx hour] 20.8
[Star] UCAC4 417-056415 VMag=11.25 RMag=10.53
[Asteroid] (13147)Foglia 19.27 mag.

[Observer] 1: Katsuhiko Kitazaki 2:
[Location] ,JP
[Longitude] 140o5'9.9" E
[Latitude] 36o11'42.7" N
[Altitude] 21m
[Datum] WGS84

[Event time] D: 20h44m56.722s +/- 0.004s (UTC) S/N=4.85
R: 20h44m56.851s +/- 0.005s (UTC) S/N=4.28
[Predicted Time error] 0.050 sec [RUWE] 1.05

[Recorded] From 20h43m0s
To 20h46m0s

[Mag. drop] D: Measured: Mag Drop (measured): 2.70 Mag. ; Predicted:
Mag Drop (predicted): 8.0 Mag.
R: Measured: Mag Drop (measured): 2.60 Mag. ; Predicted:
Mag Drop (predicted): 8.0 Mag.

[Telescope] Aperture: 28cm Type: SCT F=2.3 (Reducer x0.23)
[Camera] Analog or Digital video , Model= ASI290MM
[Exposure] Set: 20.8msec, Measure: 20.8msec
[Setting] Area: 1936x600 ; Binning=2
Gain: 485 ; Brightness: 198 ; High Speed Mode: Off
[Time keep] GPS ; Model: GT502MGG(PPSPUcorrection -0.0069403s)
[Evidence] GPS Time Log : Recorded ; Screen shot: Recorded

[Condition] Stability: Strong flickering Transparency: Clear
[Remarks] Due to the winter pressure pattern, scintillation was significant.
Although this occurred during twilight, it did not affect measurements or analysis.
An asteroid occultation was confirmed, but a satellite occultation could not be confirmed.

The forecasted magnitude drop was 8.0 mag, but the actual magnitude drop was 2.7-2.8 mag. This may be influenced by a double star.

Data Release Site

https://drive.google.com/drive/folders/1o7xWEiEnSLEyxkwPj1dzzRWBHZaD VWOC?usp=sharing

[Additional comment]

Capture : ZWO ASI290MM imaging data to PC using SharpCapSharpCap4.1.13800.0

Photometry analysis : Analyzed with software.limovie1.0.1.8 Pneuma

Photometry method : PSF photometry

(Sharp4.1 ON,Tracking OFF, Linked Tracking=ON, Star's Angular Diameter=ON)

<Observations>

<Event>

<Date>2025|12|4|20.8</Date>

<Details>

<Star>UCAC4|417-

056415|0||0.000000000|0.00000000|0.00|0.00|0.00|0|0.0000000|0.00000000|25.00|25.00|25.00|0</Star>

<Asteroid>13147|Foglia|0.00000000|0.00000000|0.00000000|0.00000000|0.00000000|0.00000000|1.00000|0.00000|0.0|1.0|20.00</Asteroid>

</Details>

<Observations>

<Observer>

<ID>1|Katsuhiko Kitazaki||0||JP|+140 5 9.9|+36 11 42.7|21|28|3|a|a</ID>

<Conditions>3|1|4.56||Due to the winter pressure pattern, scintillation was significant. Although this occurred during twilight, it did not affect measurements or analysis. An asteroid occultation was confirmed, but a satellite occultation could not be confirmed.

The forecasted magnitude drop was 8.0 mag, but the actual magnitude drop was 2.7-2.8 mag. This may be influenced by a double star.</Conditions>

<D>20 44 56.722|D|0.004||| </D>

<R>20 44 56.851|R|0.005||| </R>

</Observer>

</Observations>

<LastEdited>2023|7|17</LastEdited>

</Event>

</Observations>

Text-based Light curve

(13147)_20251204_204455_Katsuhiko_Kitazaki.dat

Date: 2025-12-4 20:44:55.90: 1.75: 85

Star: 0: 0: 0: 0: 0-0-0: 417-056415

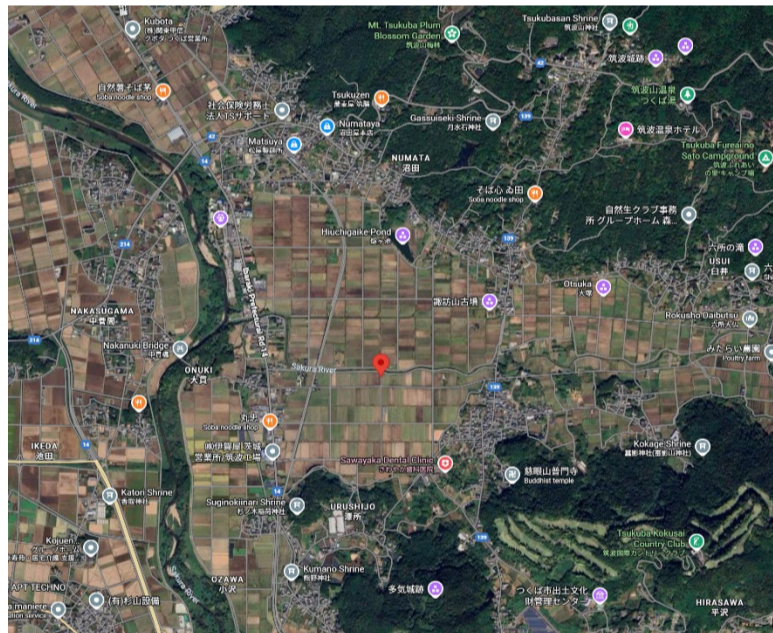
Observer: +140:5:9.9: +36:11:42.7: 21: Katsuhiko Kitazaki

Object: Asteroid: 13147: Foglia

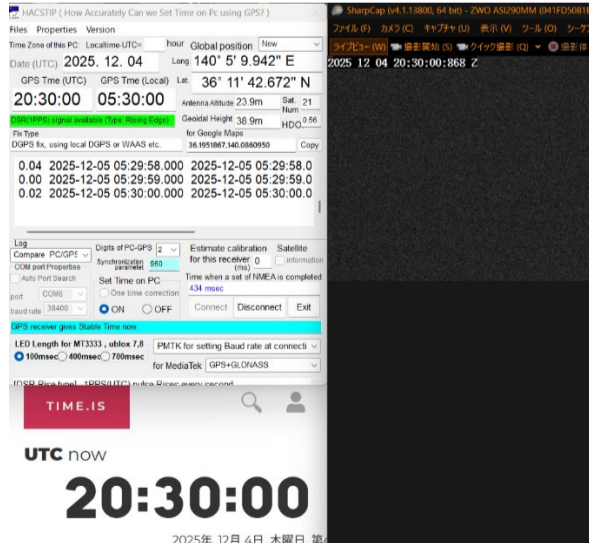
Values:1147:1139:1231:1107:918:789:1329:818:1059:815:1398:1037:1188:1117:971:883:1104:695:837:879:966:881:888:902:843:946:802:720:735:573:1129:1153:1075:868:793:645:1013:898:1067:998:60:-94:282:-11:172:70:653:1152:987:

954:905:871:972:818:648:952:898:1176:720:1018:1005:894:996:867:730:1180:970:1132:935:983:1096:713:678:777:894:802:1007:1092:1308:963:765:681:808:830:967

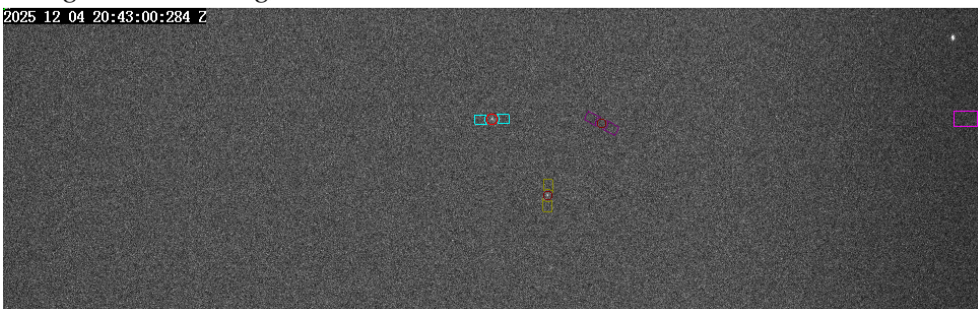
Observation Point



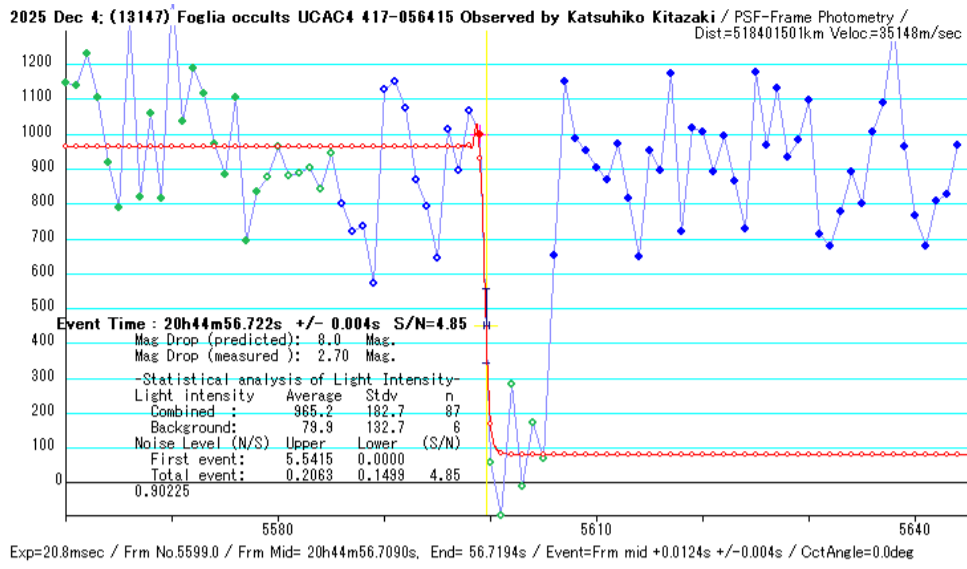
UTC Time Evidence



Target Star Position (Target star = Blue, Comparison star = Yellow, Pink = Background metering)



Time analysis of disappearance



Time analysis of reappearance

