

Asteroid occults Target Star

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

[Date ] 2025. 3.17 [Approx hour] 10.1
[Star ] UCAC4 508-042902 VMag=11.18 RMag=10.36
[Asteroid ] (881)Athene 17.36 mag.

[Observer ] 1: Katsuhiko Kitazaki 2:
[Location ] Musasino, Tokyo, JP
[Longitude ] 139o33'41.2" E
[Latitude ] 35o42'37.0" N
[Altitude ] 66m
[Datum ] WGS84

[Event time] D: 10h58m29.888s +/- 0.085s (UTC) S/N=14.10 Ctt=42.2
R: 10h58m37.858s +/- 0.058s (UTC) S/N=16.67 Ctt=19.8
[Predicted Time error] 1.689 sec [RUWE] 1.05

[Recorded ] From 10h57m30s
To 10h59m30s

[Mag. drop ] D: Measured: Mag Drop (measured): 4.29 Mag. ; Predicted:
Mag Drop (predicted): 6.2 Mag.
R: Measured: Mag Drop (measured): 4.34 Mag. ; Predicted:
Mag Drop (predicted): 6.2 Mag.

[Telescope ] Aperture: 40cm Type: Classical Cassegrain
F=2.5 (Reducer x0.25)

[Camera ] Analog or Digital video , Model= ASI290MM
[Exposure ] Set: 34.4msec, Measure: 34.4msec
[Setting ] Area: 1936x600 ; Binning=2
Gain: 375 ; Brightness: 65 ; High Speed Mode: Off
[Time keep ] GPS ; Model: GHS-OSD(PPSPUcorrection -0.0095269s)
[Evidence ] GPS Time Log : Recorded ; Screen shot: Recorded

[Condition ] Stability: Slight flickering Transparency: Clear
[Remarks ] Disappearance and Reappearance were very slow.

[Additional comment]
Capture : ZWO ASI290MM imaging data to PC using SharpCap4.1.13193.0
Photometry analysis : Analyzed with software.limovie1.0.1.5 Pneuma
Photometry method : PSF photometry
(Sharp4.1 ON,Tracking ON, Linked Tracking=ON, Star's Angular
Diameter=ON/OFF)
Data Release Site
https://drive.google.com/drive/folders/1IZbGGLuY\_4zGpdUNWWxBFlqCKz
5fiYpp?usp=sharing

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<Observations>

<Event>
<Date>2025|3|17|10.1</Date>
<Details>
<Star>UCAC4|508-
042902|0||0.000000000|0.00000000|0.00|0.00|0.00|0|0.00000000|0.00000
00|25.00|25.00|25.00|0</Star>
<Asteroid>881|Athene|0.00000000|0.00000000|0.00000000|0.00000000|0.0000
000|0.00000000|1.00000|0.00000|0.0|1.0|20.00</Asteroid>
</Details>
<Observations>
<Observer>
<ID>1|Katsuhiko Kitazaki||0|Musasino, Tokyo|JP|+139 33 41.2|+35
42 37.0|66| |40|6|a|a</ID>
<Conditions>2|1|15.39||Disappearance and Reappearance were very
slow.</Conditions>
<D>10 58 29.888|D|0.085||| </D>

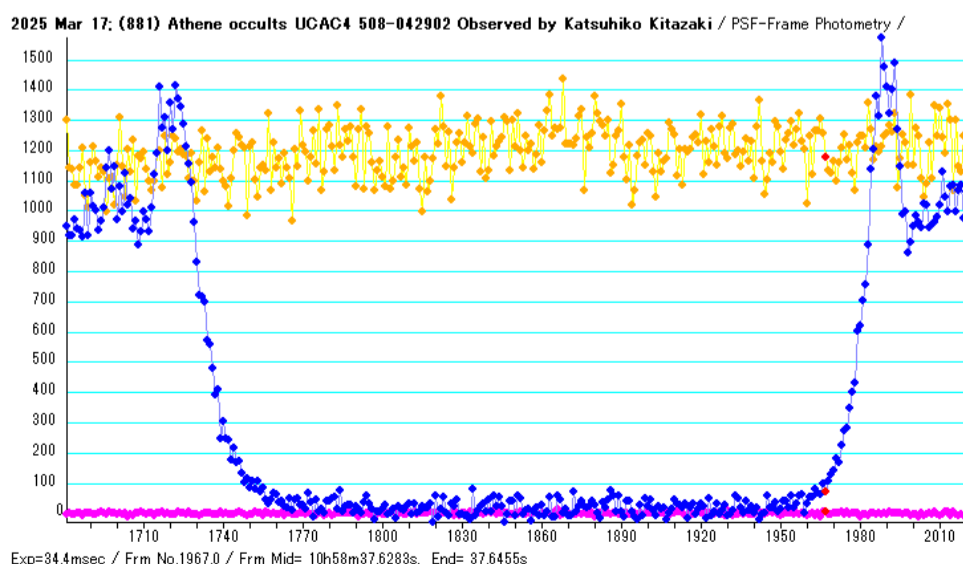
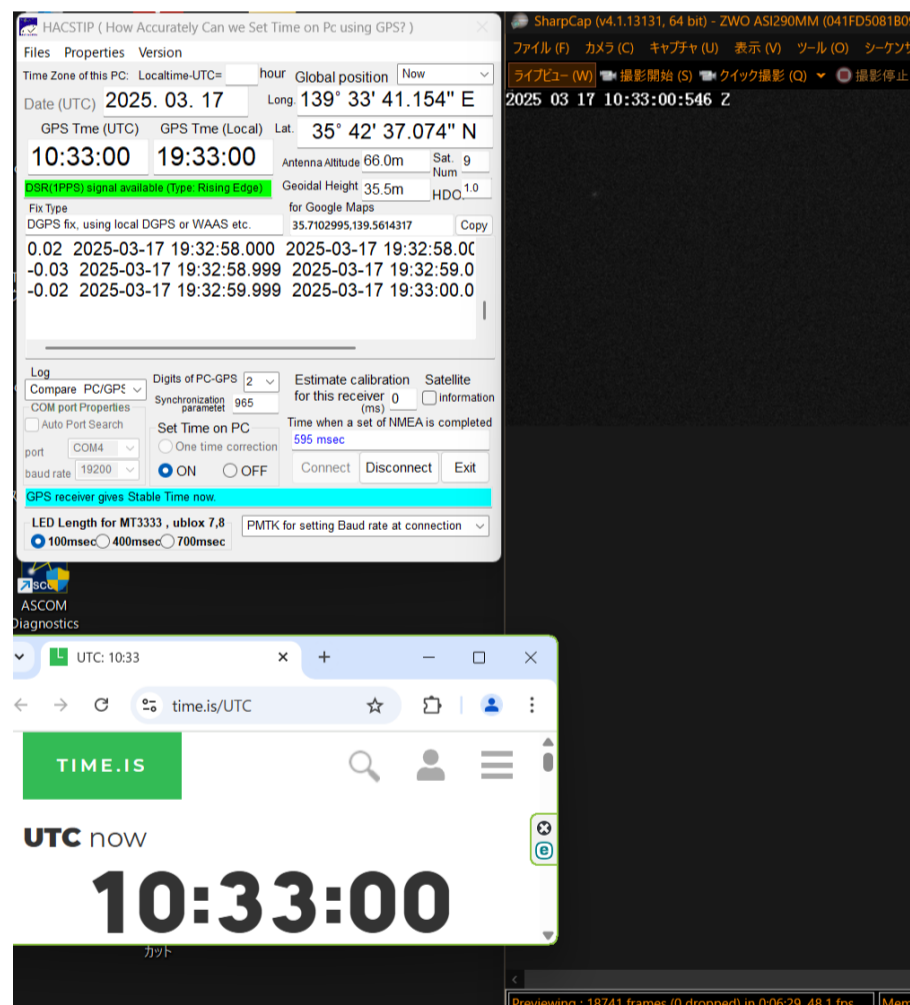
<R>10 58 37.858|R|0.058||| </R>
</Observer>
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<LastEdited>2023|7|17</LastEdited>
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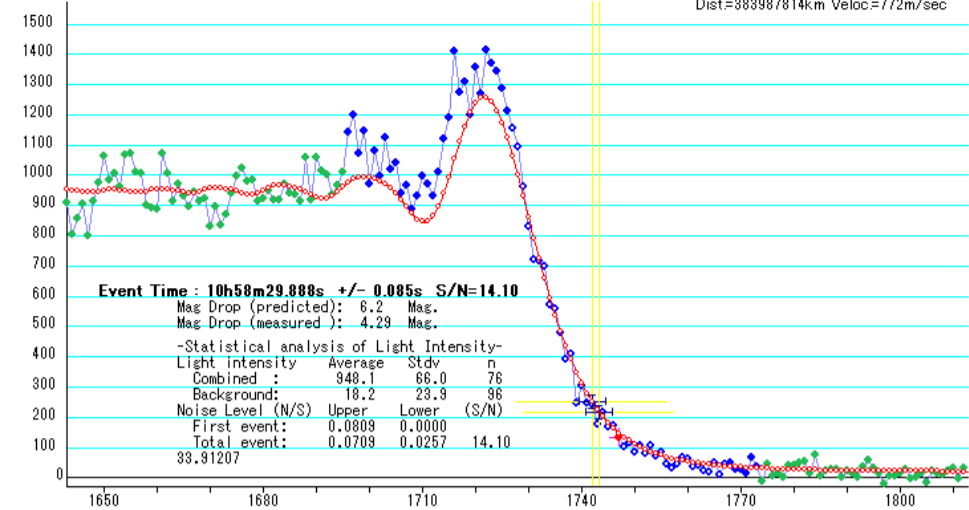
Text-based Light curve
(881)\_20250317\_105835\_Katsuhiko\_Kitazaki.dat

Date: 2025-3-17 10:58:35.43: 5.81: 170
Star: 0: 0: 0: 0: 0-0-0: 508-042902
Observer: +139:33:41.2: +35:42:37.0: 66: Katsuhiko Kitazaki
Object: Asteroid: 881: Athene
Values:-8:24:15:17:-18:4:15:46:33:26:18:32:-16:19:30:-3:16:30:25:-16:48:-
5:4:31:-5:12:27:-7:-4:10:60:49:20:4:42:11:24:3:19:-22:-3:1:57:21:19:35:6:13:42:
42:18:58:21:31:57:63:3:35:56:52:81:69:63:100:72:106:128:141:183:170:226:27
4:284:349:402:432:603:620:702:756:888:1139:1203:1378:1312:1572:1476:1411
:1324:1401:1489:1269:1149:988:996:862:896:951:985:
962:945:1023:1018:943:953:963:980:1021:1131:1046:998:1082:1085:996:1068:
1086:977:1062:1082:1027:996:965:1124:974:1125:1089:1064:1058:1101:1063:
1023:1084:991:930:1054:954:954:1024:949:928:980:1028:1036:1004:1131:952:
983:1146:1006:
1005:842:1074:1024:1010:1044:1125:927:1004:1103:985:1034:1088:1025:1057
:972:1012:1074:1082:1085:1030

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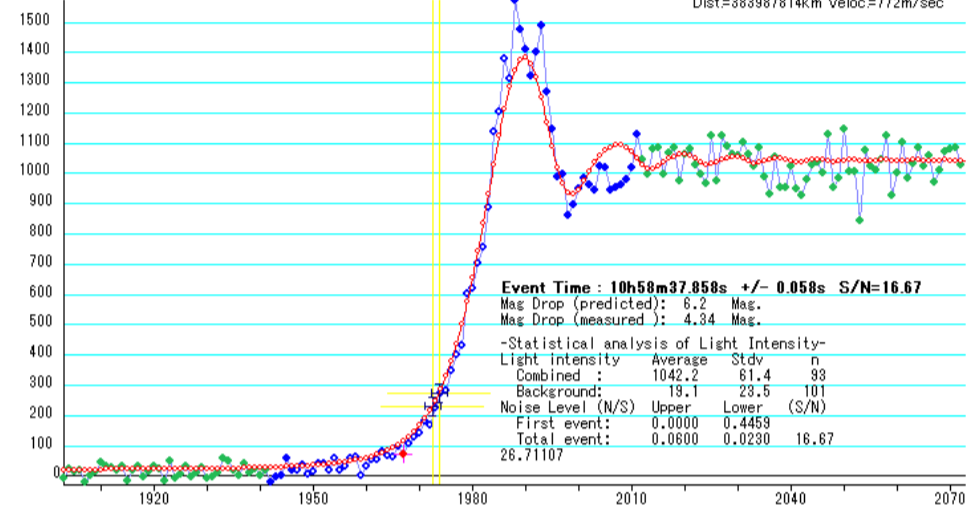


2025 Mar 17: (881) Athene occults UCAC4 508-042902 Observed by Katsuhiko Kitazaki / PSF-Frame Photometry /  
 Dist=383987814km Veloc=772m/sec



Exp=34.4msec / Frm No.1747.0 / Frm Mid= 10h58m30.0592s, End= 30.0764s / Event=Frm mid -0.1712s +/-0.083s / OctAngle=42.2deg

2025 Mar 17: (881) Athene occults UCAC4 508-042902 Observed by Katsuhiko Kitazaki / PSF-Frame Photometry /  
 Dist=383987814km Veloc=772m/sec



Exp=34.4msec / Frm No.1967.0 / Frm Mid= 10h58m37.6283s, End= 37.6455s / Event=Frm mid +0.2300s +/-0.055s / OctAngle=19.8deg