

(60286)1999 XG107 occults UCAC4 330-203298

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

[Date] 2025. 7. 9 [Approx hour] 17.3
[Star] UCAC4 330-203298 VMag=10.08 RMag=9.65
[Asteroid] (60286)1999 XG107 19.35 mag.

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

[Predicted Time error] 1.462 sec [RUWE] 0.95

[Recorded] From 17h14m00s
To 17h15m10s

[Mag. drop] D: Measured: ; Predicted:
R: Measured: ; Predicted: It was a miss.

[Telescope] Aperture: 40cm Type: Other F=2.5
[Camera] Analog or Digital video , Model= ASI290MM
[Exposure] Set: 62.2msec, Measure: 62.2msec
[Setting] Area: 1936x1096 ; Binning=2
Gain: 360 ; Brightness: 0 ; High Speed Mode: Off
[Time keep] GPS ; Model: GT502MGG
[Evidence] GPS Time Log : Recorded ; Screen shot: Recorded

[Condition] Stability: Strong flickering Transparency: Fog
[Remarks] The light curve shows a mag drop of 0.58mag-0.62mag at 17h14m14.169s-17h14m14.173s, but since the prediction's mag drop is 9.4mag (V band), there is no geometric occultation, and it is judged to be due to scintillation or diffraction, so it is reported as a miss.

[Additional comment]
Capture : ZWO ASI290MM imaging data to PC using SharpCap4.1.13193.0
Photometry analysis : Analyzed with software.limovie1.0.1.8 Pneuma
Photometry method : PSF photometry
(Sharp4.1 ON,Tracking OFF, Linked Tracking=OFF,Star's Angular Diameter=ON,Mag drop considered=ON)
Data Release Site
https://drive.google.com/drive/folders/10uy1CliSpXKk9epjKbXWBtCfQCtVylj?usp=sharing

<Observations>

<Event>
<Date>2025|7|9|17.3</Date>
<Details>
<Star>UCAC4|330-203298|0|0.000000000|0.000000000|0.00|0.00|0.00|0|0.00000000|0.00000000|25.00|25.00|25.00|0</Star>
<Asteroid>60286|1999 XG107|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|Musasino, Tokyo|JP|+139 33 41.2|+35 42 37.0|66| |40|6|a|a</ID>
<Conditions>3|2|||The light curve shows a mag drop of -0.58 at around 17h14m14s, but since the prediction's mag drop is -9.4mag (V band), it is judged to be due to diffraction and reported as a miss.</Conditions>
<D>17 14 14.1|M||| </D>
<R>17 14 14.1|M||| </R>
</Observer>

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

Text-based Light curve
(60286)_20250709_171411_Katsuhiko_Kitazaki.dat

Date: 2025-7-9 17:14:11.55: 5.23: 85
Star: 0: 0: 0: 0: 0-0-0: 330-203298
Observer: +139:33:41.2: +35:42:37.0: 66: Katsuhiko Kitazaki
Object: Asteroid: 60286: 1999 XG107
Values:1151:1267:1057:1001:993:1095:1051:1129:912:954:948:970:1125:886:9
95:917:970:1012:1002:916:942:1064:1014:793:834:1050:957:1046:1075:938:10
55:1206:1150:1019:1155:1110:1055:1172:1230:1049:1447:1330:597:1155:1008
:894:860:825:1090:
1024:929:1037:1301:1243:1047:1107:1100:1137:1025:1107:1011:1111:1053:92
6:1083:1027:932:1093:1154:1142:947:1028:980:1020:1268:943:949:934:1129:1
163:1258:962:986:1100:986

