(370)Modestia occults UCAC4 585-027122

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

[Date] 2025.12.30 [Approx hour] 10.3
[Star] UCAC4 585-027122 VMag=11.21 RMag=10.39
[Asteroid] (370)Modestia 13.43 mag.

[Observer] 1: Katsuhiko Kitazaki 2:
[Location] Showa, Gunma, JP
[Longitude] 139o03'56.3" E
[Latitude] 36o35'51.4" N
[Altitude] 481m
[Datum] WGS84

[Event time] D: 10h22m13.311s +/- 0.007s (UTC) S/N=7.97
D: 10h22m13.311s +/- 0.007s (UTC) S/N=7.97
R: 10h22m17.344s +/- 0.699s (UTC) S/N=0.6
R: 10h22m17.037s +/- 0.010s (UTC) S/N=5.8
[Predicted Time error] 0.201 sec [RUWE] 1.30

[Recorded] From 10h21m1s
To 10h23m10s

[Mag. drop] D: Measured: Mag Drop (measured): 2.00 Mag. ; Predicted: Mag Drop (predicted): 2.4 Mag.
D: Measured: Mag Drop (measured): 2.00 Mag. ; Predicted: Mag Drop (predicted): 2.4 Mag.
R: Measured: ; Predicted:
R: Measured: ; Predicted:

[Telescope] Aperture: 28cm Type: SCT F=2.3
[Camera] Analog or Digital video , Model= ASI462MM
[Exposure] Set: 55.8msec, Measure: 55.8msec
[Setting] Area: 1936x600 ; Binning=2
Gain: 400 ; Brightness: 90 ; High Speed Mode: Off
[Time keep] GPS ; Model: GT502MGG(PPSPUcorrection -0.0092844s)
[Evidence] GPS Time Log : Recorded ; Screen shot: Recorded

[Condition] Stability: Strong flickering Transparency: Thin cloud <2
[Remarks] In the light curve during disappearance, there was no step, but in the light curve during reappearance, there was a step.It is unknown whether a Mag Drop caused by a satellite occultation.

[Additional comment]
Capture : ZWO ASI462MM imaging data to PC using SharpCap4.1.14013.0
Photometry analysis : Analyzed with software.limovie1.0.1.8 Pneuma
Photometry method：PSF photometry
(Sharp4.1 ON, Double Star Analyzing=ON, Star's Angular Diameter=ON)

Data Release Site:
https://drive.google.com/drive/folders/1OZsQAIEk7_0vvq5XbvhlYFu7VrIgYSOI?usp=sharing

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<Observations>
<Event>
<Date>2025|12|30|10.3</Date>
<Details>
<Star>UCAC4|585-027122|0||0.0000000000|0.000000000|0.00|0.00|0.00|0|0.00000000|0.0000000|25.00|25.00|25.00|0</Star>

<Asteroid>370|Modestia|0.00000000|0.00000000|0.0000000|0.0000000|0.0000000|0.0000000|1.00000|0.00000|0.0|1.0|20.00</Asteroid>
</Details>
<Observations>
<Observer>
<ID>1|Katsuhiko Kitazaki||0|Showa, Gunma|JP|+139 03 56.3|+36 35 51.4|481| |28|3|a|a</ID>
<Conditions>3|3|6.88||In the light curve during disappearance, there was no step, but in the light curve during reappearance, there was a step.It is unknown whether a Mag Drop caused by a satellite occultation.</Conditions>
<D>10 22 13.311|D|0.007||| </D>
<R>10 22 17.037|R|0.010||| </R>
</Observer>
</Observations>
<LastEdited>2023|7|17</LastEdited>
</Event>
</Observations>

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Text-based Light curve
(370)_20251230_102210_Katsuhiko_Kitazaki.dat

Date: 2025-12-30 10:22:10.72: 9.43: 170
Star: 0: 0: 0: 0: 0-0-0: 585-027122
Observer: +139:03:56.3: +36:35:51.4: 481: Katsuhiko Kitazaki
Object: Asteroid: 370: Modestia
Values:1203:1581:1056:1419:1471:1594:1321:1139:1299:1485:1407:1473:1565:1560:1345:1306:1098:1484:1371:1361:1221:1264:1047:1476:1259:1317:1437:1218:1368:1264:1457:1398:1649:1475:1372:1569:1488:1164:1087:1182:1238:1699:1404:1326:1144:1323:1214:260:146:
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191:200:240:278:151:242:168:267:171:190:218:180:167:294:245:374:333:298:272:412:1121:1721:1748:1688:1180:1430:1485:1656:1591:1590:1296:1412:1353:1437:1566:1185:1481:1470:1530:1384:1522:1413:1238:1253:1262:1238:1340:1443:1252:1240:
1649:1232:1311:1220:1499:1361:1413:1384:1311:1512:1234:1394:1072:1346:1371:1397:1114:928:1393:1383:1133

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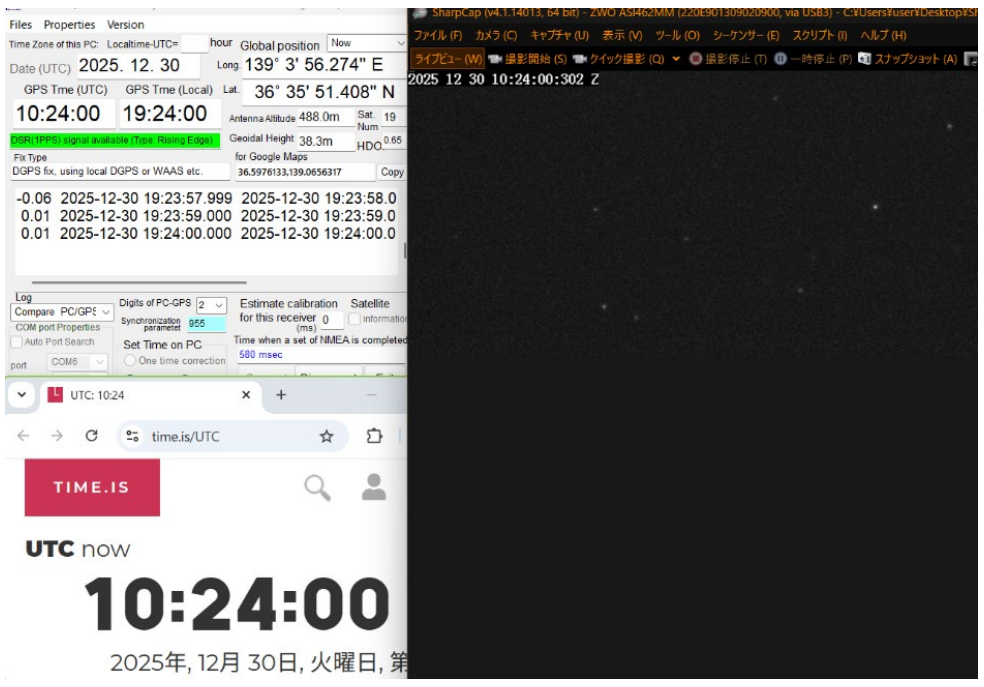
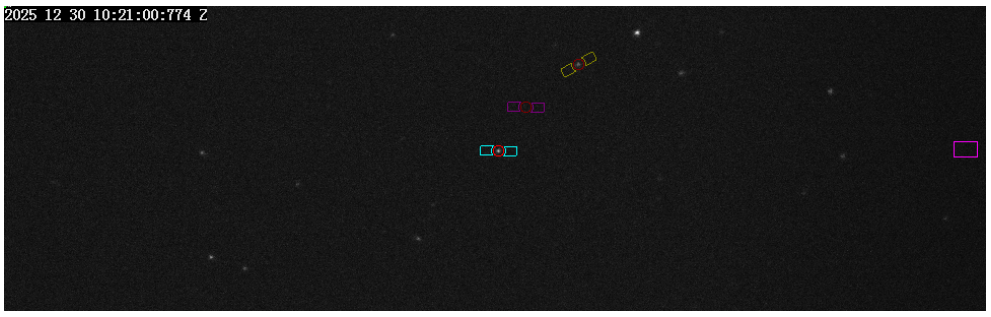
Observation Point

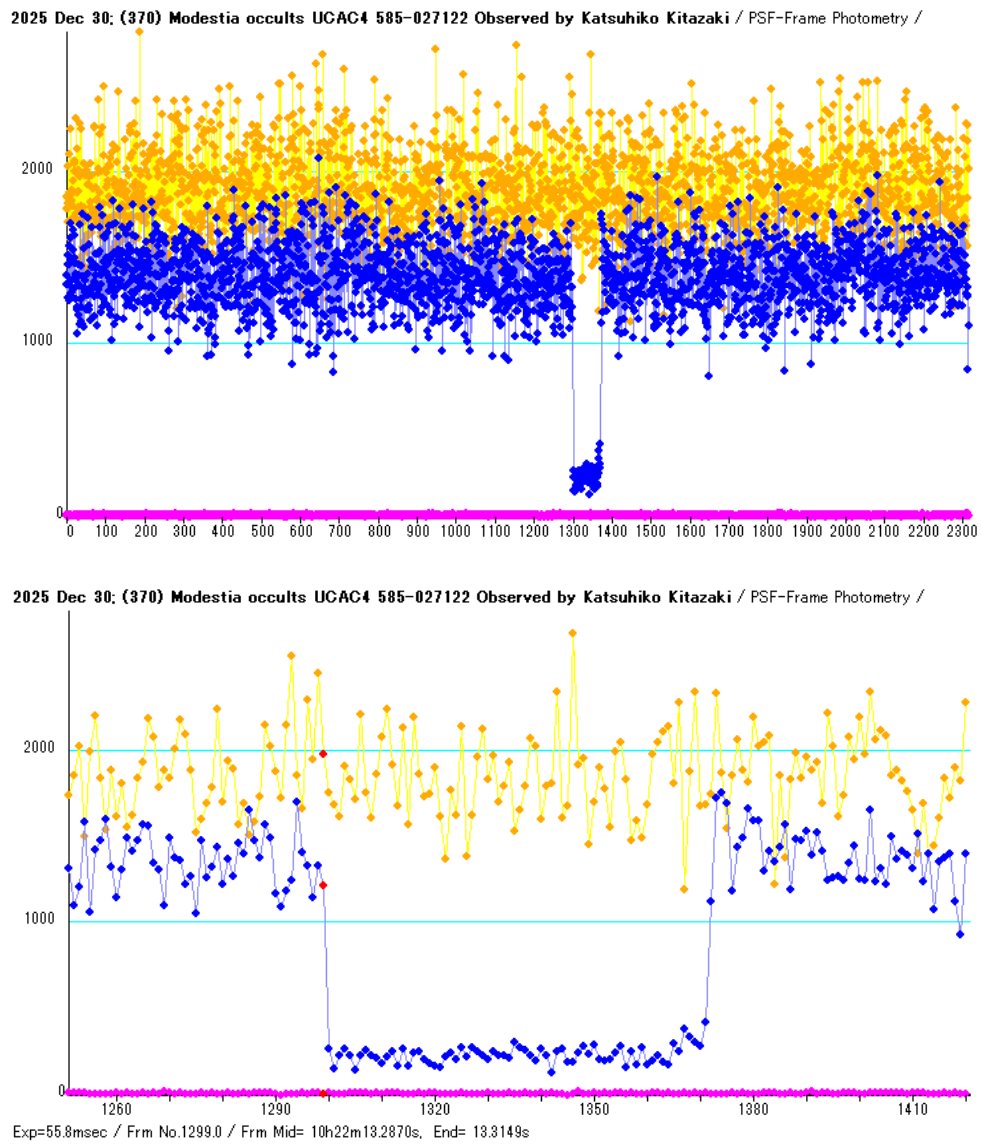
UTC Time Evidence



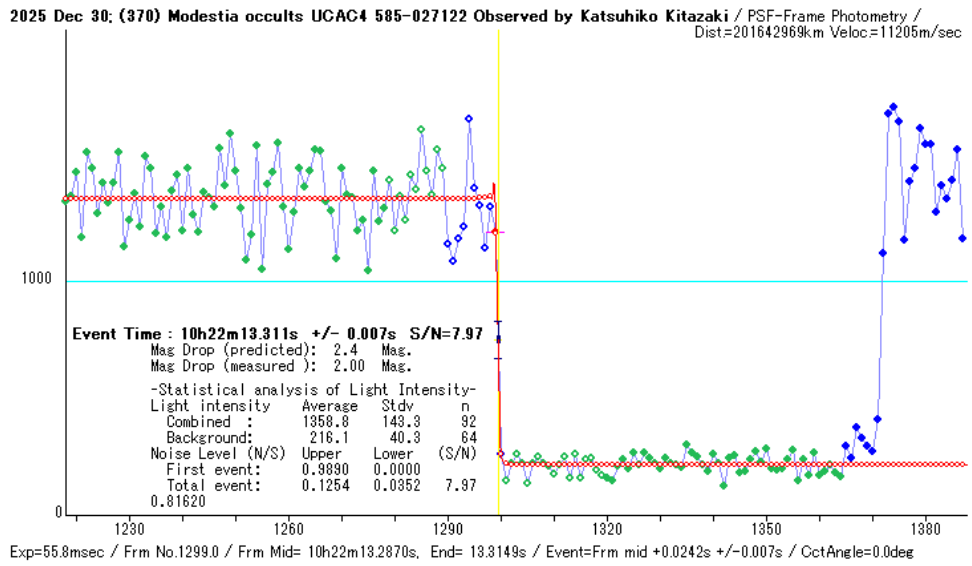
Target Star Position （Target star = Blue, Comparison star = Yellow, Pink = Background metering）



Light curve （Target star = Blue line, Target star = Yellow line
Background = Pink Line）



Time analysis of disappearance



Time analysis of reappearance