

(134)Soprosyne occults UCAC4 523-000537

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

[Date] 2025.11. 3 [Approx hour] 14.0
[Star] UCAC4 523-000537 VMag=12.88 RMag=12.38
[Asteroid] (134)Soprosyne 12.28 mag.

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

[Event time] D: 13h52m42.100s +/- 0.016s (UTC) S/N=4.06
R: 13h52m54.063s +/- 0.023s (UTC) S/N=3.28
[Predicted Time error] 0.635 sec [RUWE] 1.15

[Recorded] From 13h52m30s
To 13h53m30s

[Mag. drop] D: Measured: Mag Drop (measured): 0.50 Mag. ; Predicted:
Mag Drop (predicted): 0.5 Mag.
R: Measured: Mag Drop (measured): 0.49 Mag. ; Predicted:
Mag Drop (predicted): 0.5 Mag.

[Telescope] Aperture: 40cm Type: Other F=2.6
[Camera] Analog or Digital video , Model= ASI290MM
[Exposure] Set: 55.8msec, Measure: 55.8msec
[Setting] Area: 1936x600 ; Binning=2
Gain: 400 ; Brightness: 64 ; High Speed Mode: Off
[Time keep] GPS ; Model: GT502MGG
[Evidence] GPS Time Log : None ; Screen shot: Recorded

[Condition] Stability: Strong flickering Transparency: Clear
[Remarks] The Mag Drop was low at 0.5mag, resulting in poor signal-to-
noise ratio. Pressing the "Disconnect" button should save the Time Log by
disconnecting the HACSTIP from the GPS receiver, but the Time Log was not
saved.

[Additional comment]
Capture : ZWO ASI290MM imaging data to PC using SharpCap4.1.13800.0
Photometry analysis : Analyzed with software.limovie1.0.1.8 Pneuma
Photometry method : PSF photometry(Sharp4.1 ON,Star's Angular
Diameter=ON)
Data Release Site
https://drive.google.com/drive/folders/1-
WKsCWmkjXknSy8OaqHY4cftAUhCMJOM?usp=sharing

<Observations>

<Event>
<Date>2025|11|3|14.0</Date>
<Details>
<Star>UCAC4|523-
000537|0||0.000000000|0.00000000|0.00|0.00|0.00|0|0.0000000|0.00000
00|25.00|25.00|25.00|0</Star>

<Asteroid>134|Soprosyne|0.00000000|0.00000000|0.0000000|0.0000000|0.
0000000|0.0000000|1.00000|0.00000|0.0|1.0|20.00</Asteroid>
</Details>

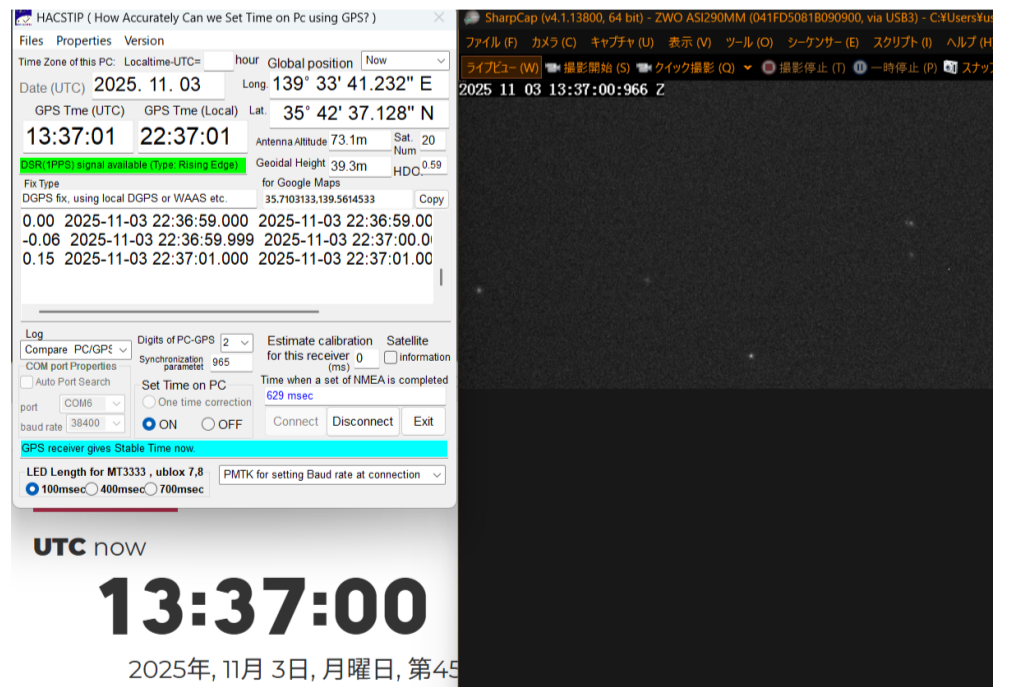
<Observations>
<Observer>
<ID>1|Katsuhiko Kitazaki||0|Musashino, Tokyo|JP|+139 33
41.2|+35 42 37.0|66|40|6|a|a</ID>
<Conditions>3|1|3.67||Mag Drop was low at 0.5mag, resulting in poor
S/N. When shutting down HACSTIP, I accidentally pressed the x button
instead of the Exit button, causing the Time Log to not be saved.</Conditions>

<D>13 52 42.100|D|0.016||| </D>
<R>13 52 54.063|R|0.023||| </R>
</Observer>
</Observations>
<LastEdited>2023|7|17</LastEdited>
</Event>
</Observations>

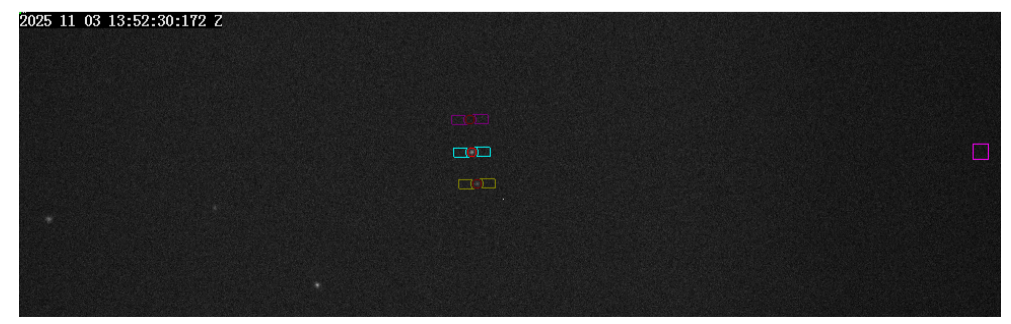
Text-based Light curve
(134)_20251103_135238_Katsuhiko_Kitazaki.dat

Date: 2025-11-3 13:52:38.79: 18.92: 340
Star: 0: 0: 0: 0: 0-0-0: 523-000537
Observer: +139:33:41.2: +35:42:37.0: 66: Katsuhiko Kitazaki
Object: Asteroid: 134: Soprosyne
Values:1490:1191:1528:1327:1355:1349:1298:1140:1536:1327:1234:1322:1292
:1249:1310:1037:1298:1435:1150:1221:1271:1482:1463:1297:1462:1408:1265:
1213:1376:1197:1431:1347:1566:1256:1191:1301:1148:1370:1498:1568:1193:1
191:1337:1721:1401:1102:1242:1256:1163:
1149:1364:1307:1335:1492:1220:1353:1474:1321:1329:1176:906:680:795:910:
788:743:970:855:824:746:832:918:858:876:848:855:655:719:838:763:776:879:6
94:802:921:937:1001:939:1027:818:983:1037:887:1033:957:1039:940:819:834:
806:914:822:872:759:973:974:801:740:849:1000:1040:854:795:935:990:936:77
3:1054:958:924:907:1073:1060:886:972:952:979:1030:818:934:1003:891:988:9
85:1011:879:1116:832:916:932:882:992:841:736:739:792:917:967:988:
902:1089:907:844:918:835:958:966:1089:1076:864:909:795:772:919:1060:925:
965:883:803:826:863:866:711:793:791:859:834:944:769:919:792:854:923:909:7
47:918:882:645:802:658:920:691:872:864:767:770:740:817:737:
912:774:1021:934:973:800:901:733:915:1169:1037:855:848:925:1065:835:948:
969:940:1043:851:1103:919:900:947:929:954:972:998:1016:963:984:984:1119:
1058:870:847:970:960:1088:1146:1007:960:1070:974:920:1021:1041:1002:954:
1012:849:823:933:921:962:881:770:1050:1001:1084:858:859:904:921:846:874:
689:853:1041:867:939:776:871:1025:1257:1579:1383:1445:1441:1484:1504:15
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8:1418:1535:1283:
1389:1675:1161:1194:1096:1322:1448:1195:1250:1196:1350:1231:1201:1154:1
290:1398:1229:1247:1176:1441:1336:1549:1397:1236:1002:1297:1210:1474:13
65:1188:1266:1259:1054:1544:1262:1206:1241:1391:1230:1338:1654

UTC Time Evidence

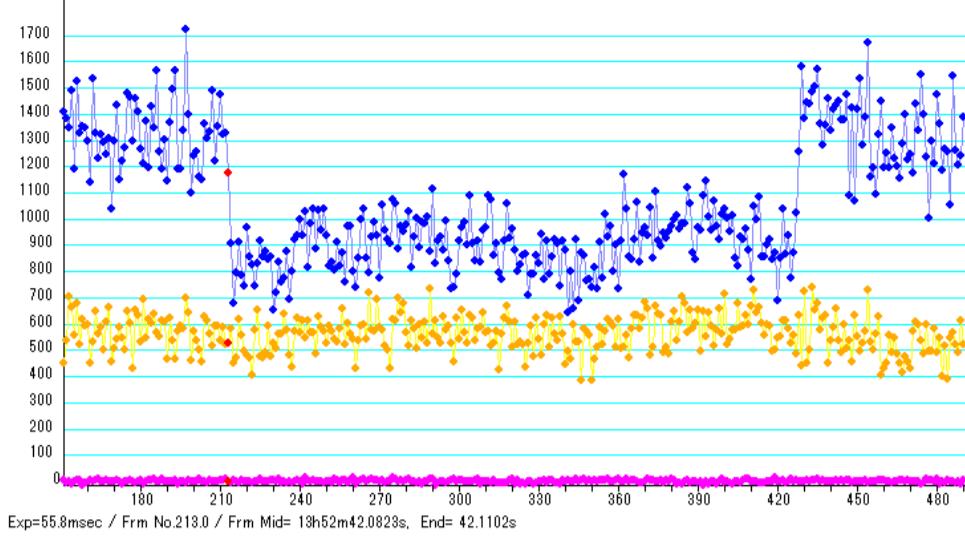


Target Star Position (Target star = Blue, Comparison star = Yellow, Pink =
Background metering)



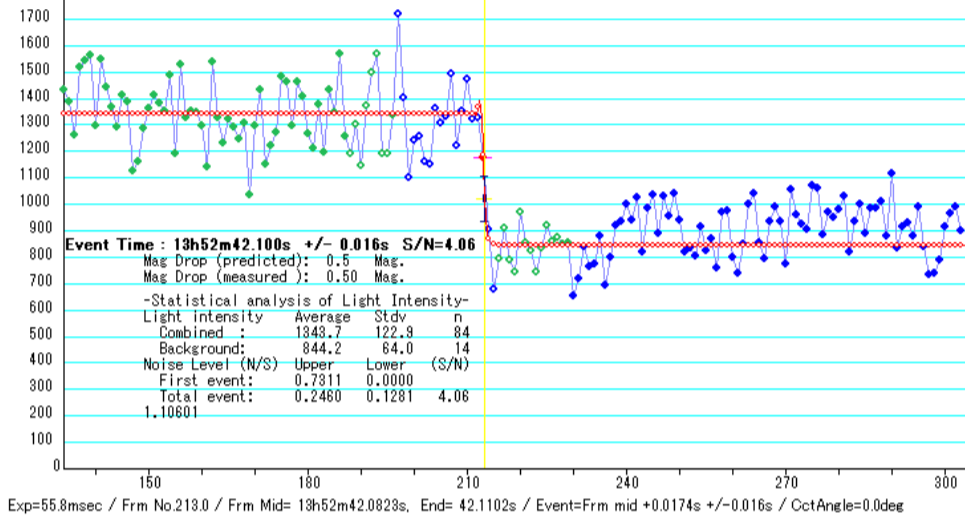
Light curve (Target star = Blue line, Target star = Yellow line)

2025 Nov 3; (134) Sophrosyne occults UCAC4 523-000537 Observed by Katsuhiko Kitazaki / PSF-Frame Photometry /



Time analysis of disappearance

2025 Nov 3; (134) Sophrosyne occults UCAC4 523-000537 Observed by Katsuhiko Kitazaki / PSF-Frame Photometry /
Dist=217275947km Veloc=6636m/sec



Time analysis of reappearance

2025 Nov 3; (134) Sophrosyne occults UCAC4 523-000537 Observed by Katsuhiko Kitazaki / PSF-Frame Photometry /
Dist=217275947km Veloc=6636m/sec

