

(25934)2001 DC74 occults UCAC4 601-047895

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

[Date] 2026. 1.16 [Approx hour] 13.7
[Star] UCAC4 601-047895 VMag=13.25 RMag=12.84
[Asteroid] (25934)2001 DC74 17.95 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] D1: 13h49m45.980s +/- 0.099s (UTC) S/N=8.77 Ctt=86.0
R1: 13h49m46.362s +/- 0.012s (UTC) S/N=8.36
D2: 13h49m46.727s +/- 0.011s (UTC) S/N=8.70
R2: 13h49m47.739s +/- 0.012s (UTC) S/N=8.30
[Predicted Time error] 0.187 sec [RUWE] 0.95

[Recorded] From 13h49m00s
To 13h50m30s

[Mag. drop] D1: Measured: Mag Drop (measured): 4.36 Mag. ; Predicted:
Mag Drop (predicted): 4.7 Mag.
R1: Measured: Mag Drop (measured): 4.38 Mag. ;
Predicted: Mag Drop (predicted): 4.7 Mag.
D2: Measured: Mag Drop (measured): 3.97 Mag. ;
Predicted: Mag Drop (predicted): 4.7 Mag.
R2: Measured: Mag Drop (measured): 3.99 Mag. ;
Predicted: Mag Drop (predicted): 4.7 Mag.

[Telescope] Aperture: 40cm Type: Classical Cassegrain
F=2.6 (Reducer x0.26)
[Camera] Analog or Digital video , Model= ASI462MM
[Exposure] Set: 99.3msec, Measure: 99.3msec
[Setting] Area: 1936x600 ; Binning=2
Gain: 400 ; Brightness: 0 ; High Speed Mode: Off
[Time keep] GPS ; Model: GT502MGG(PPSPUcorrection-0.0057098s)
[Evidence] GPS Time Log : Recorded ; Screen shot: Recorded

[Condition] Stability: Strong flickering Transparency: Fog
[Remarks] The light curve showed two disappearances and two
reappearances. These two disappearances and two reappearances were also
visible to the naked eye on the monitor.
Only the first disappearance was a slow mag drop.
Due to the effects of yellow sand, the sky was not clear.

[Additional comment]
Capture : ZWO ASI 462MM imaging data to PC using
SharpCap4.1.14013.0
Photometry analysis : Analyzed with software.limovie1.0.1.8 Pneuma
Photometry method : PSF photometry / Aperture photometry
(Sharp4.1 ON, Star's Angular Diameter=ON)
Data Release Site:
https://drive.google.com/drive/folders/15P9kfXcjYsE7zknM85qmsC8ABObsf-
bU?usp=sharing

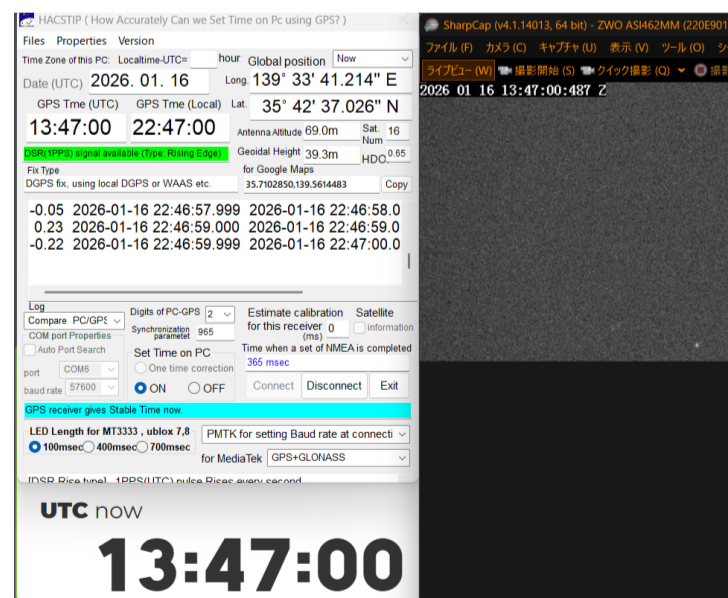
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<Event>
<Date>2026|1|16|13.7</Date>
<Details>
<Star>UCAC4|601-
047895|0||0.000000000|0.000000000|0.00|0.00|0.00|0|0.00000000|0.0000
00|25.00|25.00|25.00|0</Star>
<Asteroid>25934|2001
DC74|0.00000000|0.00000000|0.00000000|0.00000000|0.00000000|0.00000000|1.

00000|0.00000|0.0|1.0|20.00</Asteroid>
</Details>
<Observations>
<Observer>
<ID>1|Katsuhiko Kitazaki||0|Musashino, Tokyo|JP|+139 33
41.2|+35 42 37.0|66| |40|6|a|a</ID>
<Conditions>3|1|8.56||The light curve showed two disappearances
and two reappearances. These two disappearances and two reappearances were
also visible to the naked eye on the monitor.
Only the first disappearance was a slow mag drop.</Conditions>
<D>13 49 45.980|D|0.099||| </D>
<R>13 49 46.362|R|0.012||| </R>
</Observer>
<Observer>
<ID>2|Katsuhiko Kitazaki||0|Musashino, Tokyo|JP|+139 33
41.2|+35 42 37.0|66| |40|6|a|a</ID>
<Conditions>3|1|8.50||The light curve showed two disappearances
and two reappearances. These two disappearances and two reappearances were
also visible to the naked eye on the monitor.
Only the first disappearance was a slow mag drop.</Conditions>
<D>13 49 46.727|D|0.011||| </D>
<R>13 49 47.739|R|0.012||| </R>
</Observer>
</Observations>
<LastEdited>2023|7|17</LastEdited>
</Event>
</Observations>

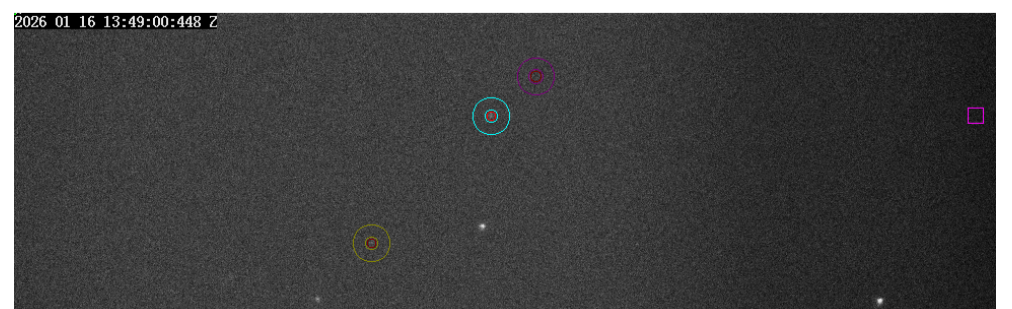
Text-based Light curve
(25934)_20260116_134942_Katsuhiko_Kitazaki.dat

Date: 2026-1-16 13:49:42.60: 8.34: 85
Star: 0: 0: 0: 0: 0-0-0: 601-047895
Observer: +139:33:41.2: +35:42:37.0: 66: Katsuhiko Kitazaki
Object: Asteroid: 25934: 2001 DC74
Values:1046:1285:1014:938:1234:1012:1079:962:1092:848:1090:1087:1095:12
78:985:933:1077:872:988:1133:1446:1061:1387:1265:1033:1030:1130:1152:11
91:1265:1032:1115:740:491:266:134:-82:7:645:1097:1139:1103:105:78:-
10:31:222:182:168:
35:22:128:773:1042:1101:1492:1185:1222:1066:1051:1041:1284:1251:1066:11
50:1289:1236:1084:1122:1095:1051:1238:807:1268:1072:957:1216:941:1304:1
203:983:914:966:1059:1246

UTC Time Evidence

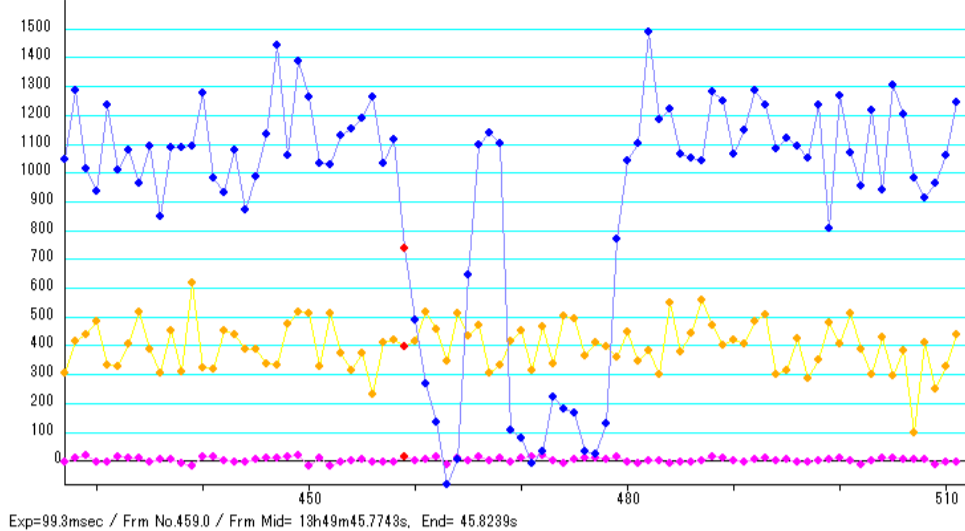


Target Star Position (Target star = Blue, Comparison star = Yellow, Pink =
Background metering)



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

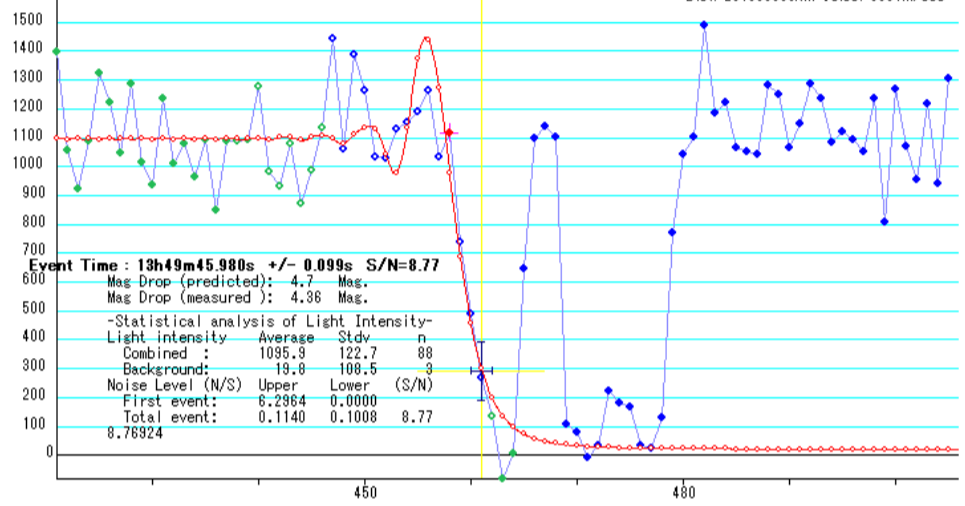
2026 Jan 16: (25934) 2001 DC74 occults UCAC4 601-047895 Observed by Katsuhiko Kitazaki / PSF-Frame Photometry /



Exp=99.3msec / Frm No.459.0 / Frm Mid= 13h49m45.7743s, End= 45.8239s

Time analysis of first disappearance

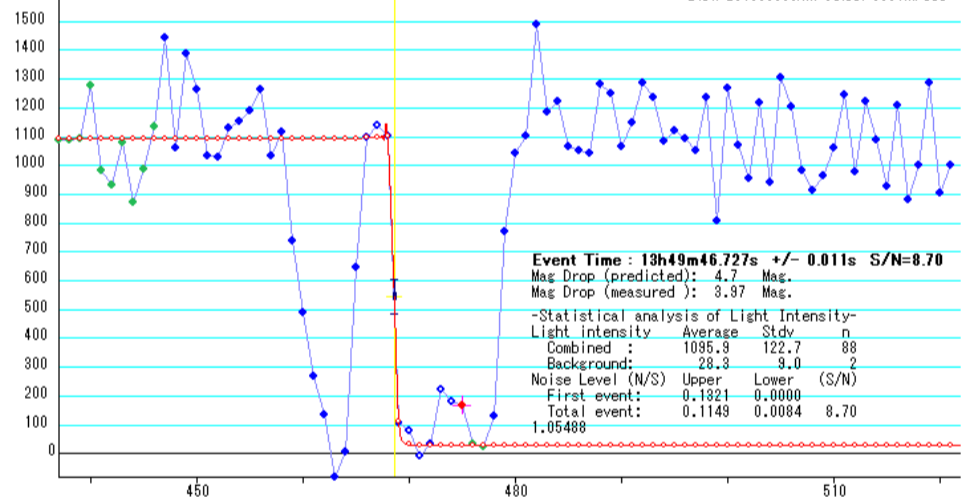
2026 Jan 16: (25934) 2001 DC74 occults UCAC4 601-047895 Observed by Katsuhiko Kitazaki / PSF-Frame Photometry /
Dist=264638633km Veloc=8904m/sec



Exp=99.3msec / Frm No.458.0 / Frm Mid= 13h49m45.6749s, End= 45.7246s / Event=Frm mid +0.3049s +/-0.099s / CctAngle=86.0deg

Time analysis of second disappearance

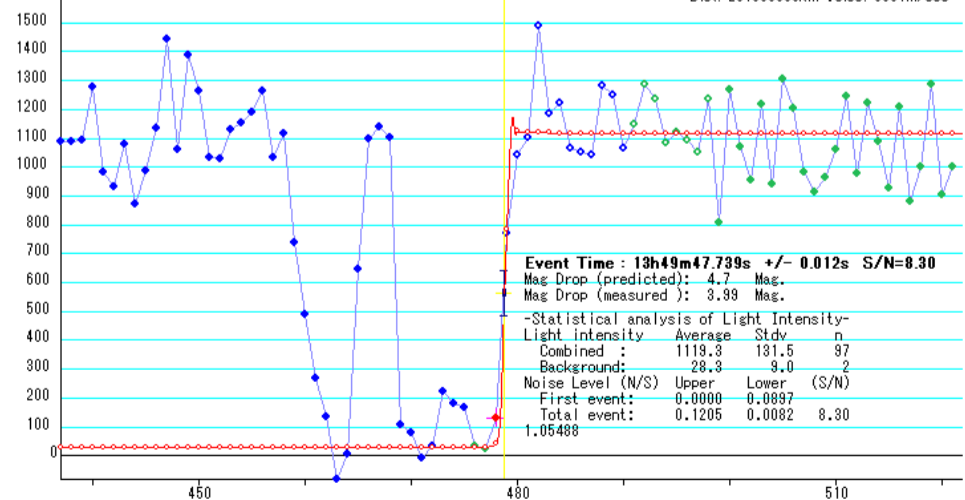
2026 Jan 16: (25934) 2001 DC74 occults UCAC4 601-047895 Observed by Katsuhiko Kitazaki / PSF-Frame Photometry /
Dist=264638633km Veloc=8904m/sec



Exp=99.3msec / Frm No.475.0 / Frm Mid= 13h49m47.3631s, End= 47.4128s / Event=Frm mid -0.6366s +/-0.011s / CctAngle=0.0deg

Time analysis of second reappearance

2026 Jan 16: (25934) 2001 DC74 occults UCAC4 601-047895 Observed by Katsuhiko Kitazaki / PSF-Frame Photometry /
Dist=264638633km Veloc=8904m/sec



Exp=99.3msec / Frm No.478.0 / Frm Mid= 13h49m47.6610s, End= 47.7107s / Event=Frm mid +0.0782s +/-0.012s / CctAngle=0.0deg