

(103130)1999 XR196 occults UCAC4 561-038518

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

[Date] 2025. 1.26 [Approx hour] 13.8
[Star] UCAC4 561-038518 VMag=12.96 RMag=12.21
[Asteroid] (103130)1999 XR196 18.93 mag.

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

[Predicted Time error] 0.172 sec [RUWE] 1.1

[Recorded] From 13h43m30s
To 13h45m30s

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

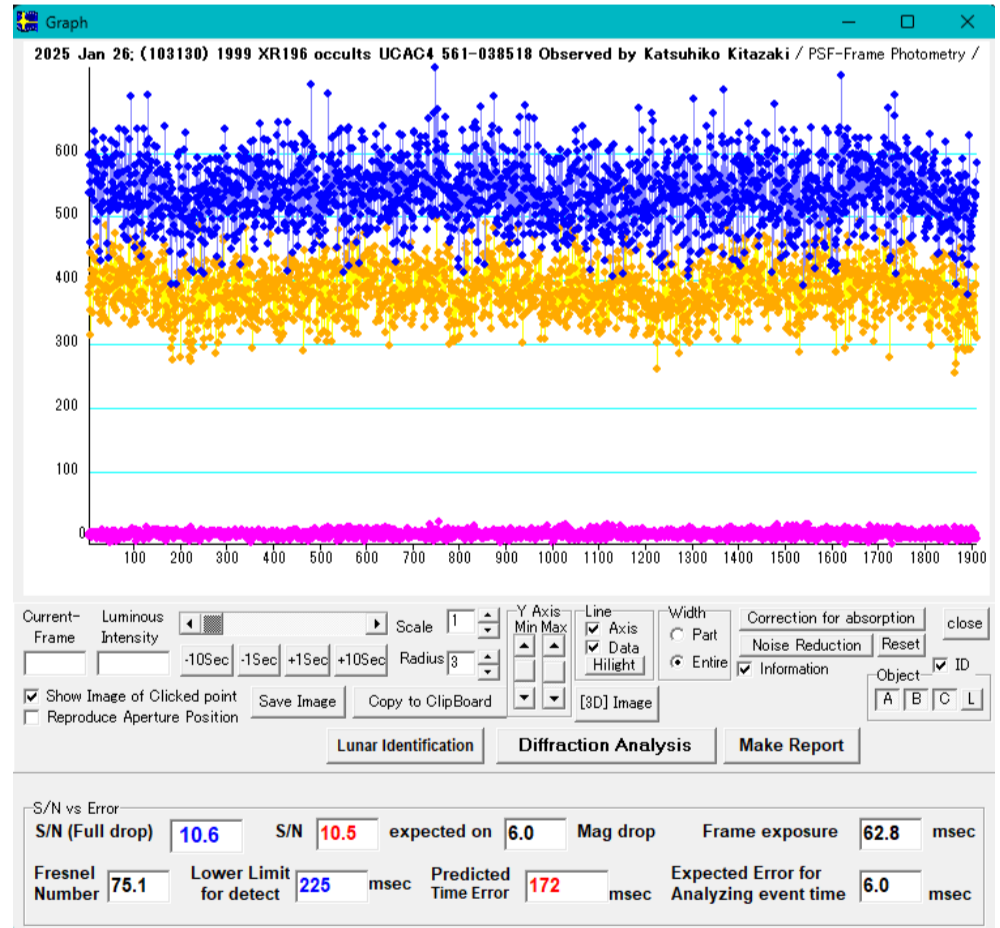
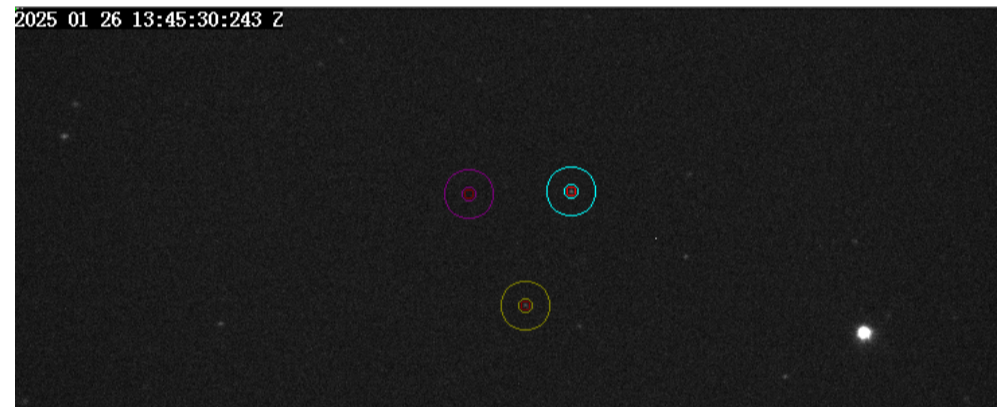
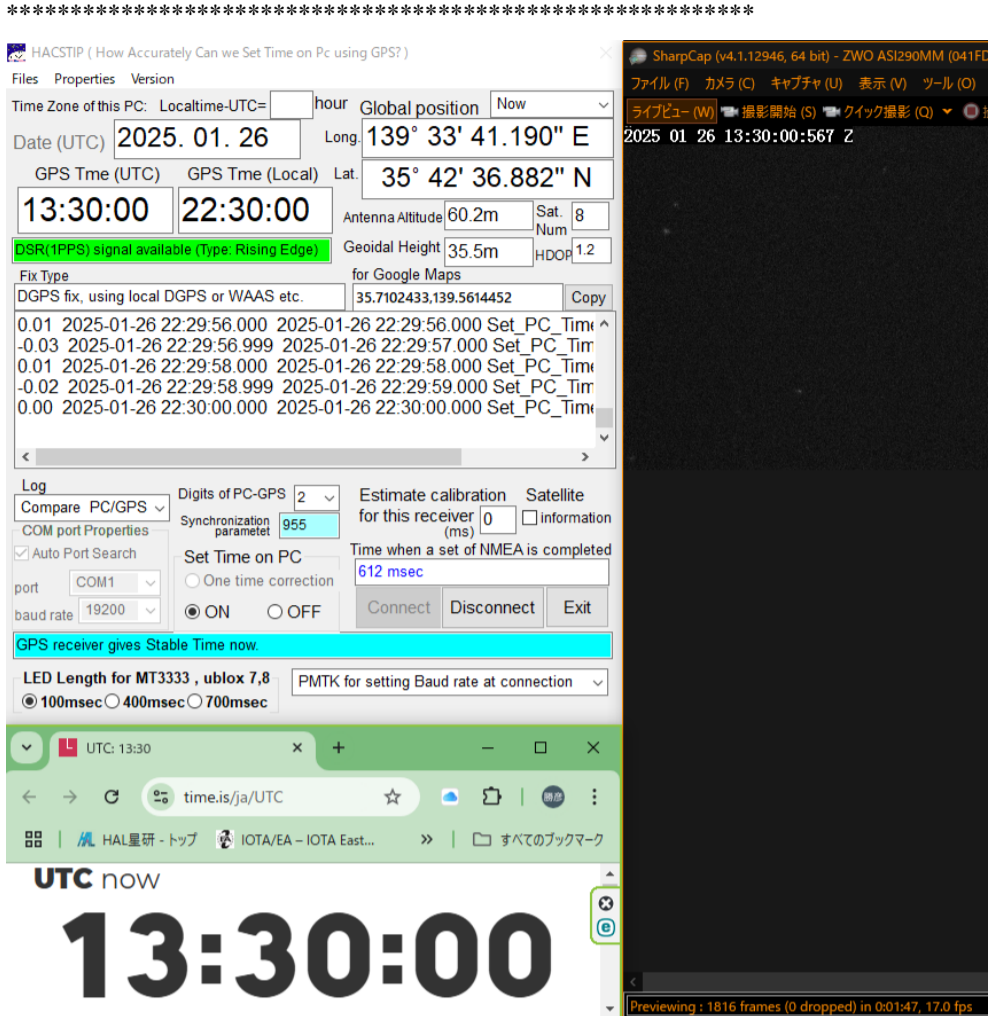
[Telescope] Aperture: 40cm Type: Other F=2.5
[Camera] Analog or Digital video , Model= ASI290MM
[Exposure] Set: 62.8msec, Measure: 62.8msec
[Setting] Area: 1936x600 ; Binning=2
Gain: 380 ; Brightness: 70 ; High Speed Mode: Off
[Time keep] GPS ; Model: GHS-OSD (PPSPUcorrection -0.0062587s)
[Evidence] GPS Time Log : Recorded ; Screen shot: Recorded

[Condition] Stability: Steady Transparency: Clear
[Remarks] The latest Prediction had an 83% probability, but the
observation result was Miss.
The latest Prediction of JPL's updated orbital elements showed that the
Occultation zone had moved about 2 km, so there was a risk.

[Additional comment]
Capture : ZWO ASI290MM imaging data to PC using SharpCap4.1.12946.0
Photometry analysis : Analyzed with software.limovie1.0.0.7B Pneuma.
Photometry method: PSF photometry
(Sharp4.1 ON,Tracking OFF,Linked Tracking ON)
Data Release Site
https://www.data-box.jp/pdir/7cb711f891cb40d6b7de1c580c5e2e8f

<Observations>
<Event>
<Date>2025|1|26|13.8</Date>
<Details>
<Star>UCAC4|561-
038518|0||0.000000000|0.000000000|0.00|0.00|0.00|0|0.00000000|0.00000
00|25.00|25.00|25.00|0</Star>
<Asteroid>103130|1999
XR196|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|JPN|+139 33
41.2|+35 42 37.0|66| |40|6|a|a</ID>
<Conditions>1|1|||The latest Prediction had an 83% probability, but
the observation result was Miss.
The latest Prediction of JPL's updated orbital elements showed that the
Occultation zone had moved about 2 km, so there was a risk.
</Conditions>
<D> . |D||| </D>
<R> . |R||| </R>
</Observer>

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



S/N vs Error
S/N (Full drop) 10.6 S/N 10.5 expected on 6.0 Mag drop Frame exposure 62.8 msec
Fresnel Number 75.1 Lower Limit for detect 225 msec Predicted Time Error 172 msec Expected Error for Analyzing event time 6.0 msec