NATIONAL

Newly found comet expected to be brighter than stars

by: Dustin Lattimer
Posted: Mar 30, 2023 / 07:56 AM CDT
Updated: Mar 30, 2023 / 07:56 AM CDT

(Image courtesy: Shutterstock)

Astronomers have found a new comet, and it's something to look forward to

MORE FOUR STATE NEWS:

| Missouri

- Barry County
- Barton County
- Jasper County
- Lawrence County

C/2023 A3 (Tsuchinshan-Atlas): What to Expect This Autumn?

Sep 12, 2024 | ~7 min

Topics: Small Bodies | Skywatching

Soon, by early October, you'll be able to see Comet C/2023 A3 (Tsuchinshan-ATLAS) with your own eyes. Use the free Sky Tonight app to find out **when and**


Comet Tsuchinshan-Atlas (C/2023 A3)
Key Dates
How to Find it
Best Locations
Photography Tips
@RichardsRocketry

SEPTEMBER 2024

Possible Best Days

Possible Worse Days

MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY	SUNDAY
23	24	25	26	27	28	29

Magnitude

OCTOBER 2024

Altitude

MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY	SUNDAY
30	1	2	3	4 ← Morning Views Only	5	6
7	8	9	10	11 ⊢ Evening Views Only →	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30	31	1	2	3

Twilight

Influence

Moon

2024 Vandenberg SFB Mission

vandenberg.spaceforce.mil/News/Article-Displa...

1.00

U.S. SPACE FORCE'S
WEST COAST SPACEPORT

0:07 / 1:47

2024 Vandenberg SFB Mission Video

As Vandenberg SFB paves the way as the Gateway to the Future, our mission, partners, and objectives have honed in to assure access to space, now and in the future. This video entails who Space Launch Delta 30 is and our mission, our partners and their missions, and the Guardians, Airmen and government civilians that make the mission happen. (U.S. Space Force video by Senior Airman Kadielle Shaw)

DETAILS DOWNLOAD SHARE

Rocket Launch Schedule | Kenn

kennedyspacecenter.com/launches-and-events

MENU

KENNEDY SPACE CENTER

NASA | Kennedy Space Center VISITOR COMPLEX

TICKETS CART 0 HOTEL PACKAGES

HOME > LAUNCHES & EVENTS

UPCOMING EVENTS AT KENNEDY SPACE CENTER

LAUNCHES & EVENTS

VIEW ROCKET LAUNCHES & BE INSPIRED

Come face-to-face with space during special events at Kennedy Space Center. Visitors can watch rockets blast off, meet astronauts and celebrate holidays in space, just to name a few. Make space in your travels for unique and inspiring experiences during your Florida

SEPTEMBER 2024

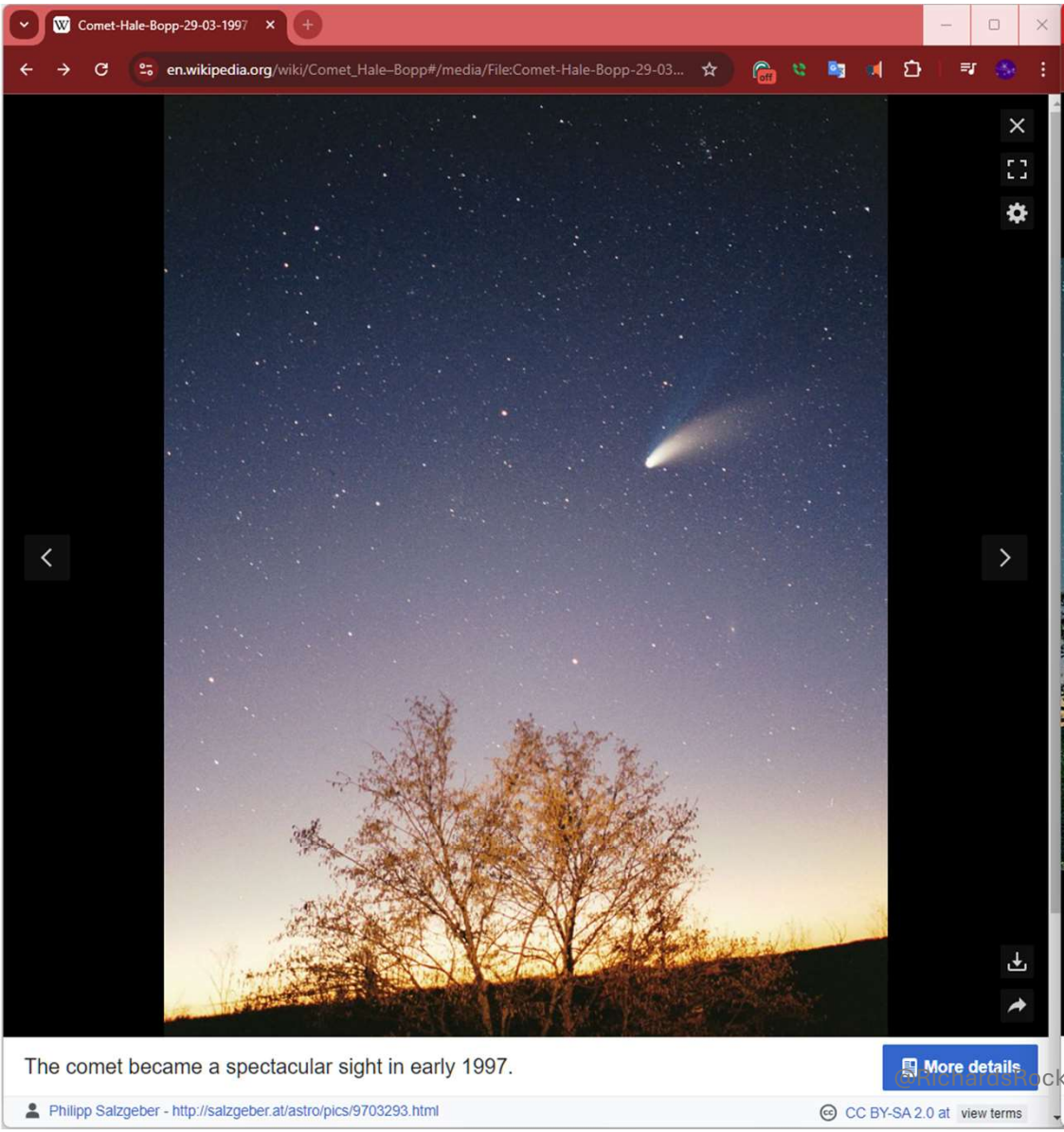
Possible Best Days

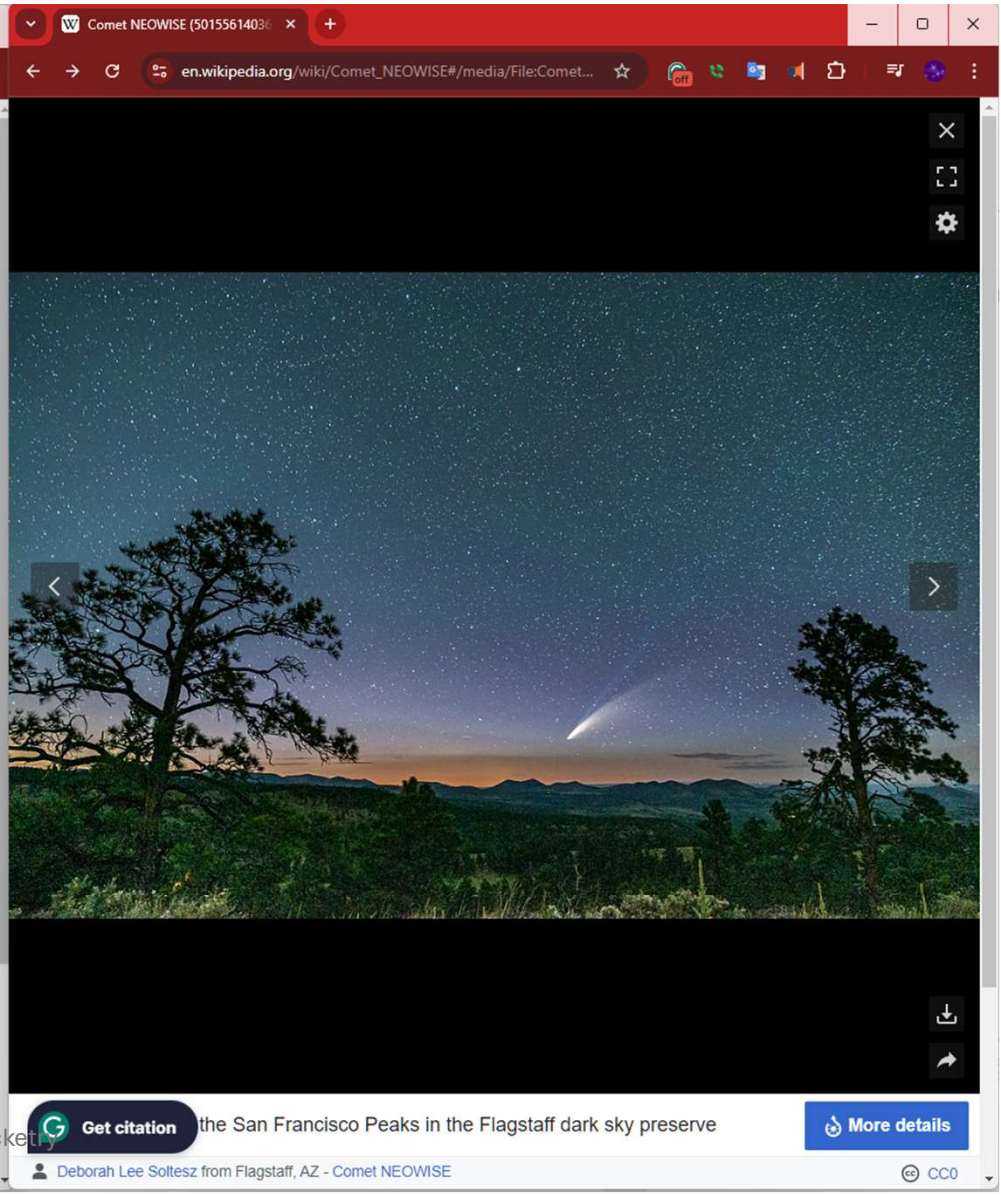
Possible Worse Days

MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY	SUNDAY
23	24	25	26	27	28	29

OCTOBER 2024

MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY	SUNDAY
30	1	2	3	4 ← Morning Views Only	5	6 ⊣
7	8	9	10	11 ⊢ ening Vi	12 Only	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30	31	1	2	3





Comet Tsuchinshan-Atlas (C/2023 A3)

Possible Best Days for C/2023 A3

SEPTEMBER 2024

Worst to Best

MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY	SUNDAY
23	24	25	26	27	28	29

OCTOBER 2024

MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY	SUNDAY
30	1	2			5	6
7	8	9			12	13
14	15			18	19	20
21	22				26	27
28	29	30	31	1	2	3

@RichardsRocketry

Tsuchinshan-ATLAS

SPACE AND PHYSICS ASTRONOMY

PUBLISHED 5 days ago

Comet Tsuchinshan-ATLAS Still Alive – Becoming Visible To The Naked Eye Is Back On The Table

Surprise, Earth! I bet you thought you'd seen the last of me...

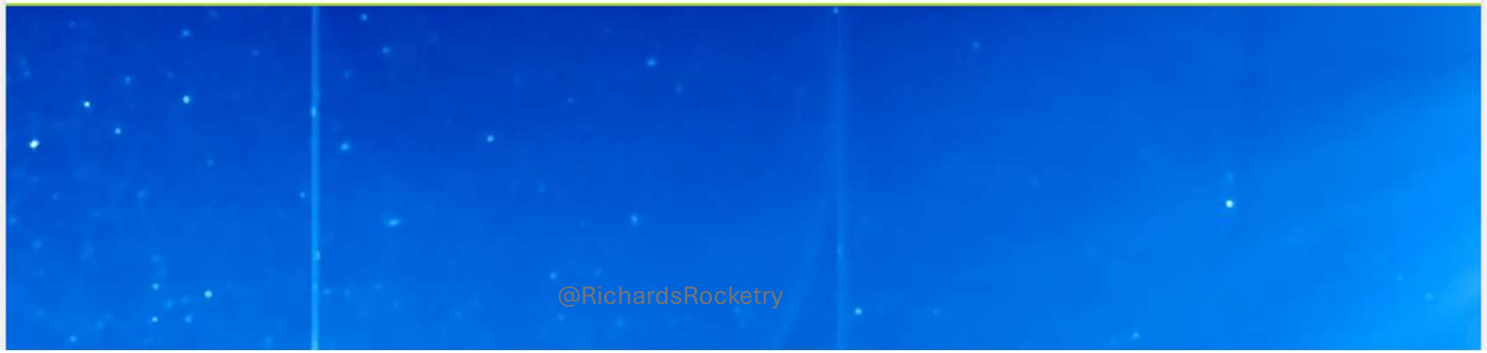
DR. ALFREDO CARPINETI

Senior Staff Writer & Space Correspondent

Edited by Francesca Benson

DOWNLOAD PDF VERSION

57 Shares



METEOR SHOWER CALENDAR 2024-2025

A meteor shower is a celestial event in which a number of meteors are observed to radiate, or originate, from one point in the night sky called Radiant. These meteors are caused by streams of cosmic debris called meteoroids entering Earth's atmosphere at extremely high speeds on parallel trajectories. The Meteor Data Center of the IAU lists over 900 suspected meteor showers of which about 100 are well established.

The meteor showers listed below are the easiest to observe and provide the most activity. Particular attention should be noted to the time and moonlight conditions. All these showers are best seen after midnight. Some are not even visible until after midnight. Showers that peak with the moon's phase greater than one half illuminated (first quarter to last quarter) will be affected by moonlight and difficult to observe.

While the time each shower is best seen remains much the same year after year, the moonlight conditions change considerably from one year to the next. As we approach the date of each shower's maximum, be sure to consult the latest AMS article about Meteor Showers, which will provide in depth information on each shower and how to best view it.

When is the next meteor shower?

Orionids
Status: Active from September 26th to November 22nd
Peak: Oct 20-21 2024 (Moon 83% full.)

Southern Taurids
Status: Active from September 23rd to December 8th
Peak: Nov 4-5 2024 (Moon 11% full.)

Next Peak night
Oct 20-21, 2024

Orionids

Next period of activity: September 26th, 2024 to November 22nd, 2024

The Orionids are a medium strength shower that sometimes reaches high strength activity. In a normal year the Orionids produce 10-20 shower members at maximum. In exceptional years, such as 2006-2009, the peak rates were on par with the Perseids (50-75 per hour). Recent displays have produced low to average displays of this shower. In 2024, a waning gibbous moon will rise during the late evening hours and will severely hamper views of this display.

Shower details - **Radiant:** 06:21 +15.6° - **ZHR:** 20 - **Velocity:** 41 miles/sec (swift - 66km/sec) - **Parent Object:** 1P/Halley

Next Peak - The Orionids will next peak on the Oct 20-21, 2024 night. On this night, the moon will be 83% full.

***

Stellarium Mobile - Star Map

apps.apple.com/us/app/stellarium-mobile-star-map/id1458716890

App Store Preview

Stellarium Mobile - Star Map 4+

Watch night sky, find stars

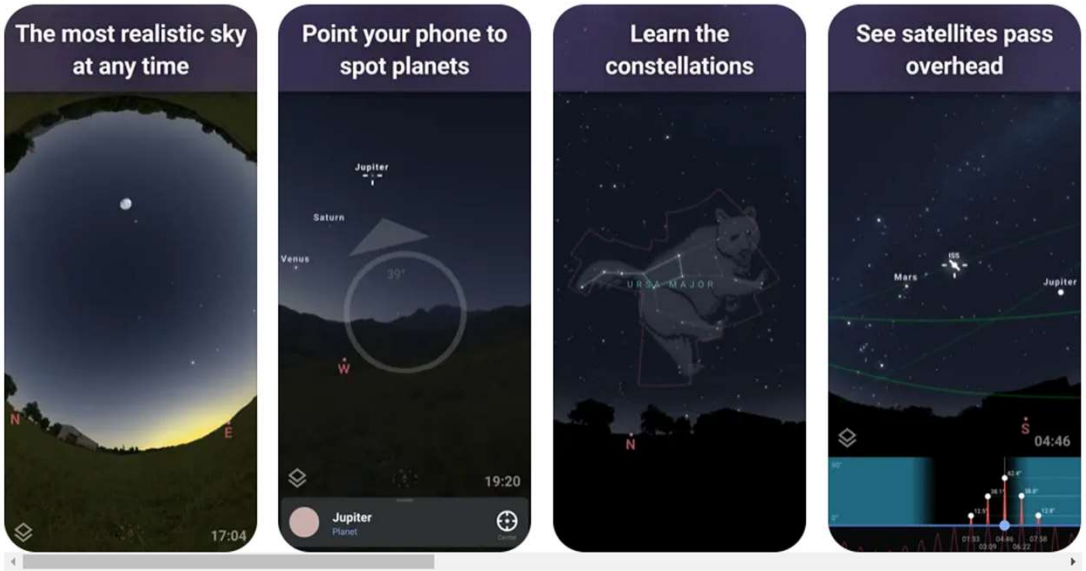
Noctua Software Ltd

#113 in Education

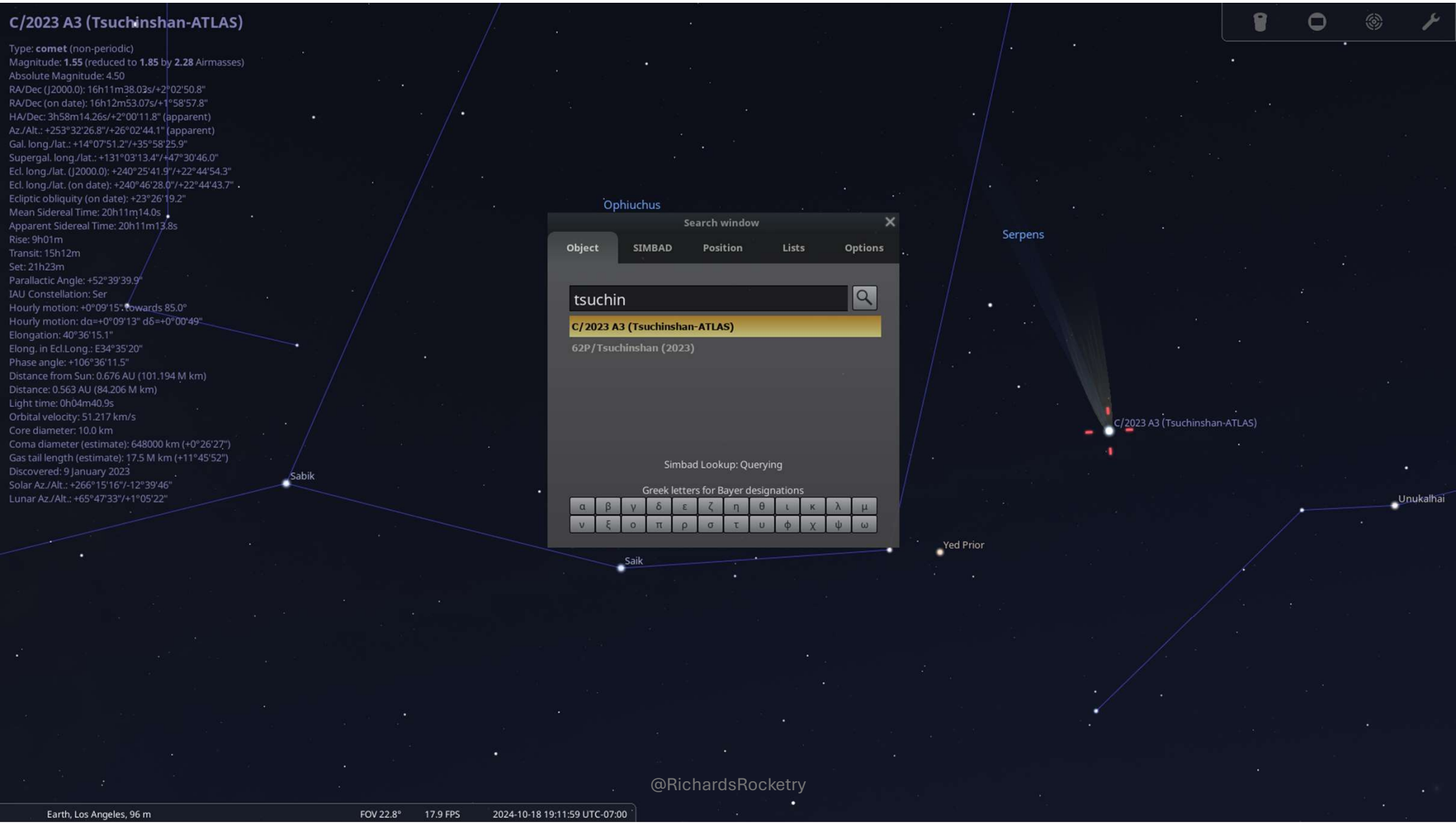
★★★★★ 4.8 • 27.6K Ratings

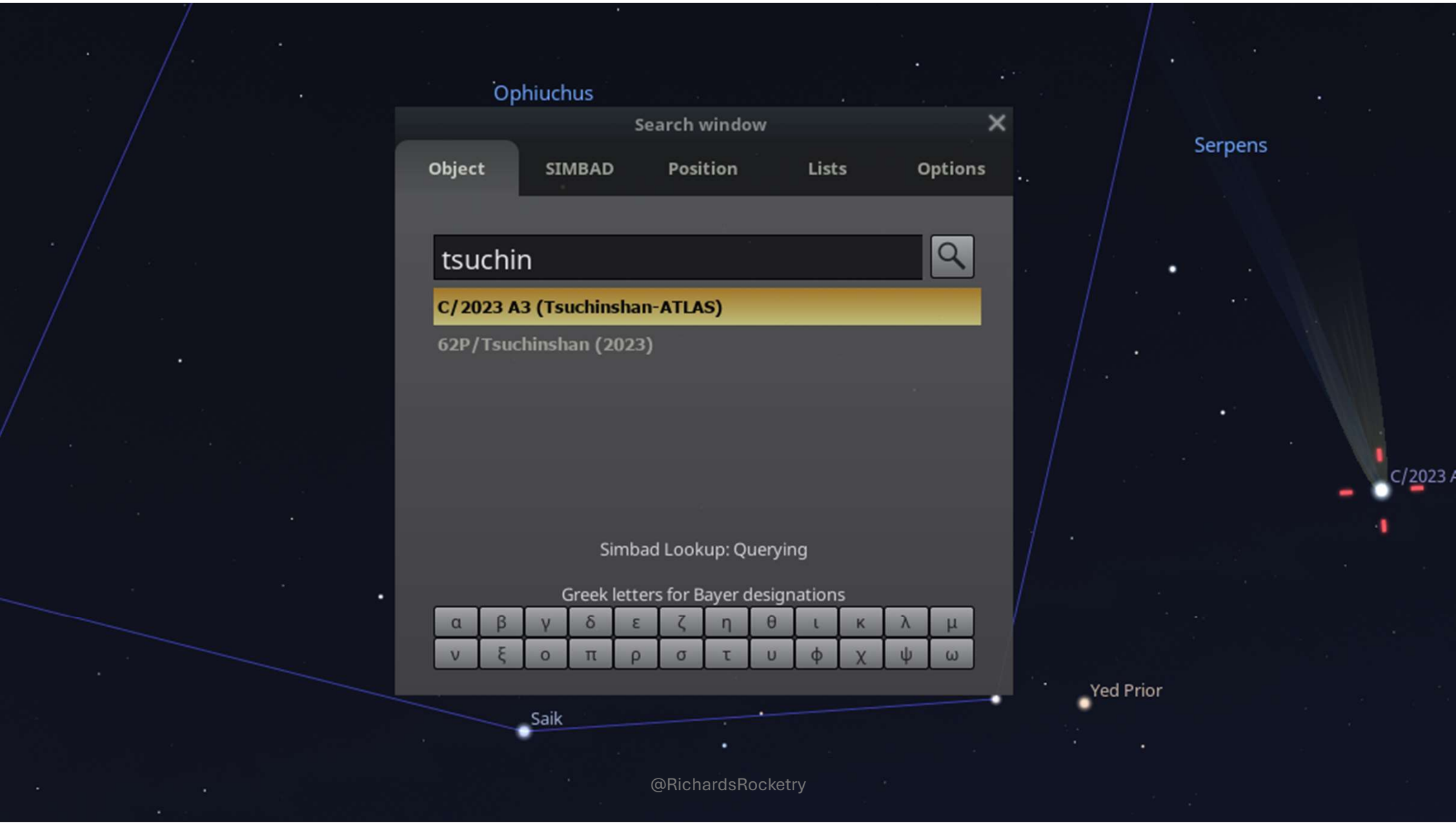
Free · Offers In-App Purchases

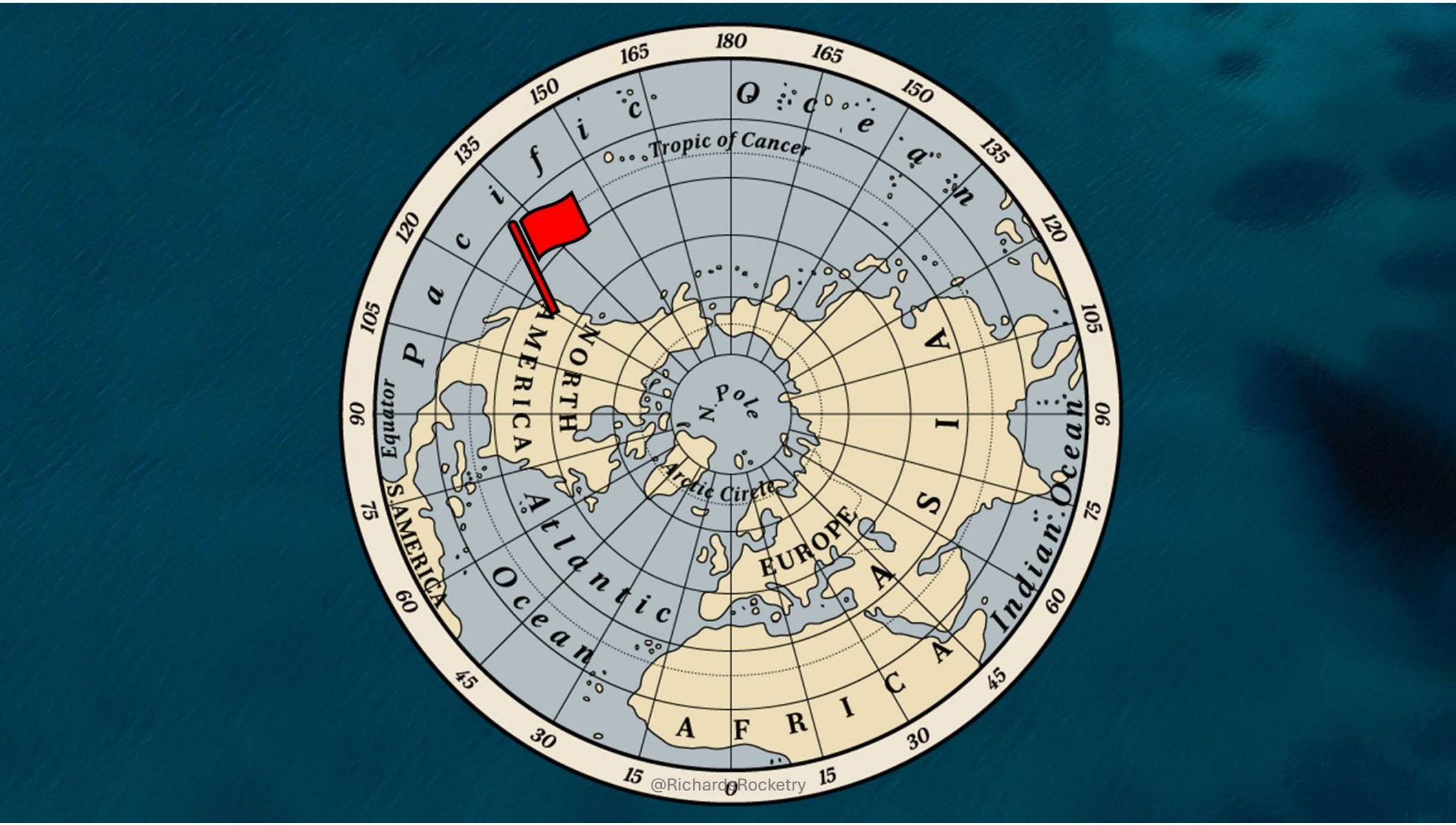
Screenshots iPhone iPad



Stellarium Mobile is a planetarium app that shows exactly what you see when you look up at the stars.

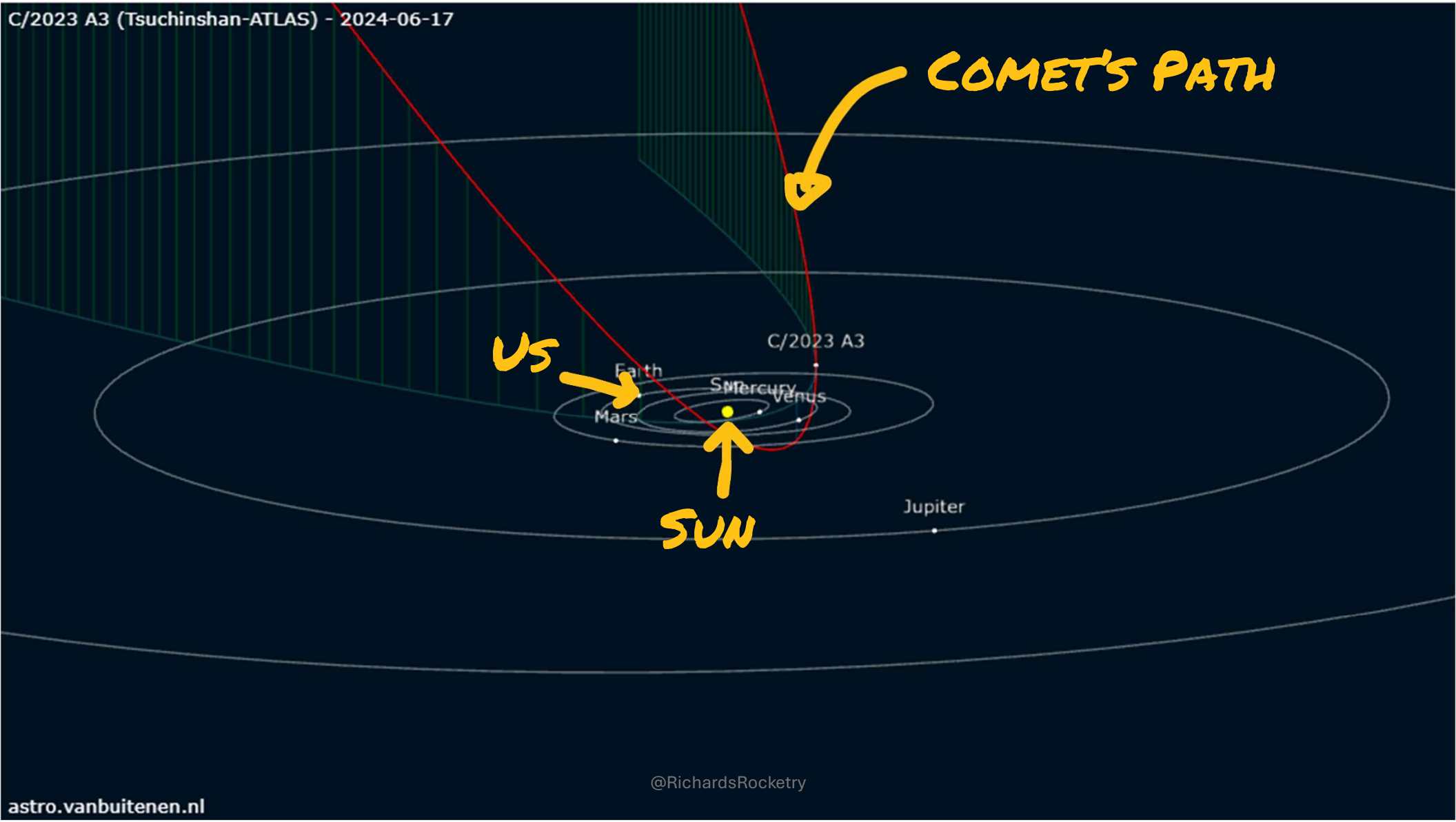

C/2023 A3 (Tsuchinshan-ATLAS)
Type: comet (non-periodic)
Magnitude: 1.55 (reduced to 1.85 by 2.28 Airmasses)
Absolute Magnitude: 4.50
RA/Dec (J2000.0): 16h11m38.03s/+2°02'50.8"
RA/Dec (on date): 16h12m53.07s/+1°58'57.8"
HA/Dec: 3h58m14.26s/+2°00'11.8" (apparent)
Az./Alt.: +253°32'26.8"/+26°02'44.1" (apparent)
Gal. long./lat.: +14°07'51.2"/+35°58'25.9"
Supergal. long./lat.: +131°03'13.4"/+47°30'46.0"
Ecl. long./lat. (J2000.0): +240°25'41.9"/+22°44'54.3"
Ecl. long./lat. (on date): +240°46'28.0"/+22°44'43.7"
Ecliptic obliquity (on date): +23°26'19.2"
Mean Sidereal Time: 20h11m14.0s
Apparent Sidereal Time: 20h11m13.8s
Rise: 9h01m
Transit: 15h12m
Set: 21h23m
Parallactic Angle: +52°39'39.9"
IAU Constellation: Ser
Hourly motion: +0°09'15" towards 85.0°
Hourly motion: dα=+0°09'13" dδ=+0°00'49"
Elongation: 40°36'15.1"
Elong. in Ecl.Long.: E34°35'20"
Phase angle: +106°36'11.5"
Distance from Sun: 0.676 AU (101.194 M km)
Distance: 0.563 AU (84.206 M km)
Light time: 0h04m40.9s
Orbital velocity: 51.217 km/s
Core diameter: 10.0 km
Coma diameter (estimate): 648000 km (+0°26'27")
Gas tail length (estimate): 17.5 M km (+11°45'52")
Discovered: 9 January 2023
Solar Az./Alt.: +266°15'16"/-12°39'46"
Lunar Az./Alt.: +65°47'33"/+1°05'22"
Ophiuchus
Search window
Object
SIMBAD
Position
Lists
Options
tsuchin
C/2023 A3 (Tsuchinshan-ATLAS)
62P/Tsuchinshan (2023)
Simbad Lookup: Querying
Greek letters for Bayer designations
α β γ δ ε ζ η θ ι κ λ μ
ν ξ ο π ρ σ τ υ φ χ ψ ω
Serpens
C/2023 A3 (Tsuchinshan-ATLAS)
Sabik
Saik
Yed Prior
Unukalhai
@RichardsRocketry
Earth, Los Angeles, 96 m
FOV 22.8°
17.9 FPS
2024-10-18 19:11:59 UTC-07:00

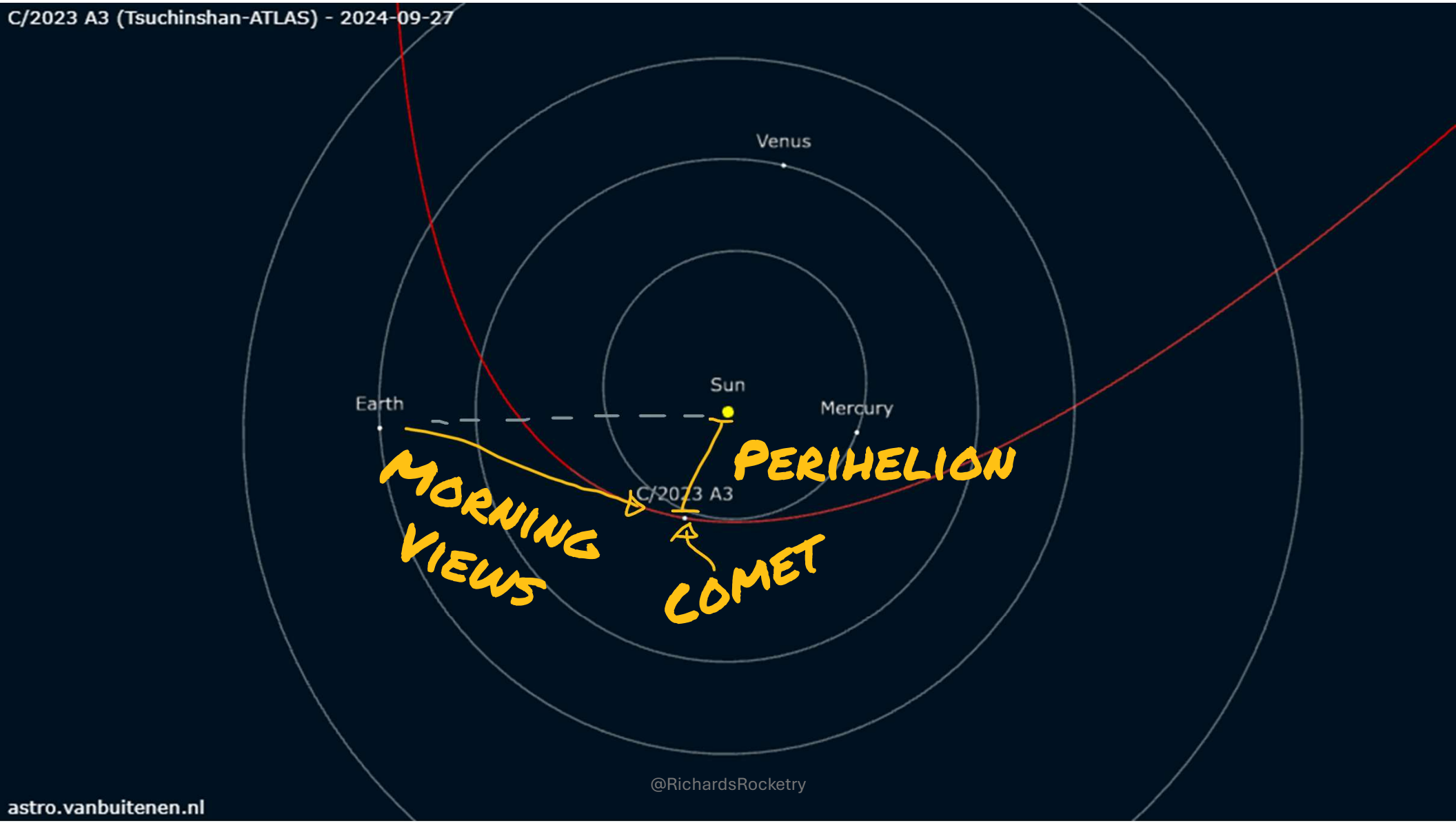

Ophiuchus
Search window
Object
SIMBAD
Position
Lists
Options
tsuchin
C/2023 A3 (Tsuchinshan-ATLAS)
62P/Tsuchinshan (2023)
Simbad Lookup: Querying
Greek letters for Bayer designations
α β γ δ ε ζ η θ ι κ λ μ
ν ξ ο π ρ σ τ υ φ χ ψ ω
Serpens
C/2023
Yed Prior
Saik
@RichardsRocketry

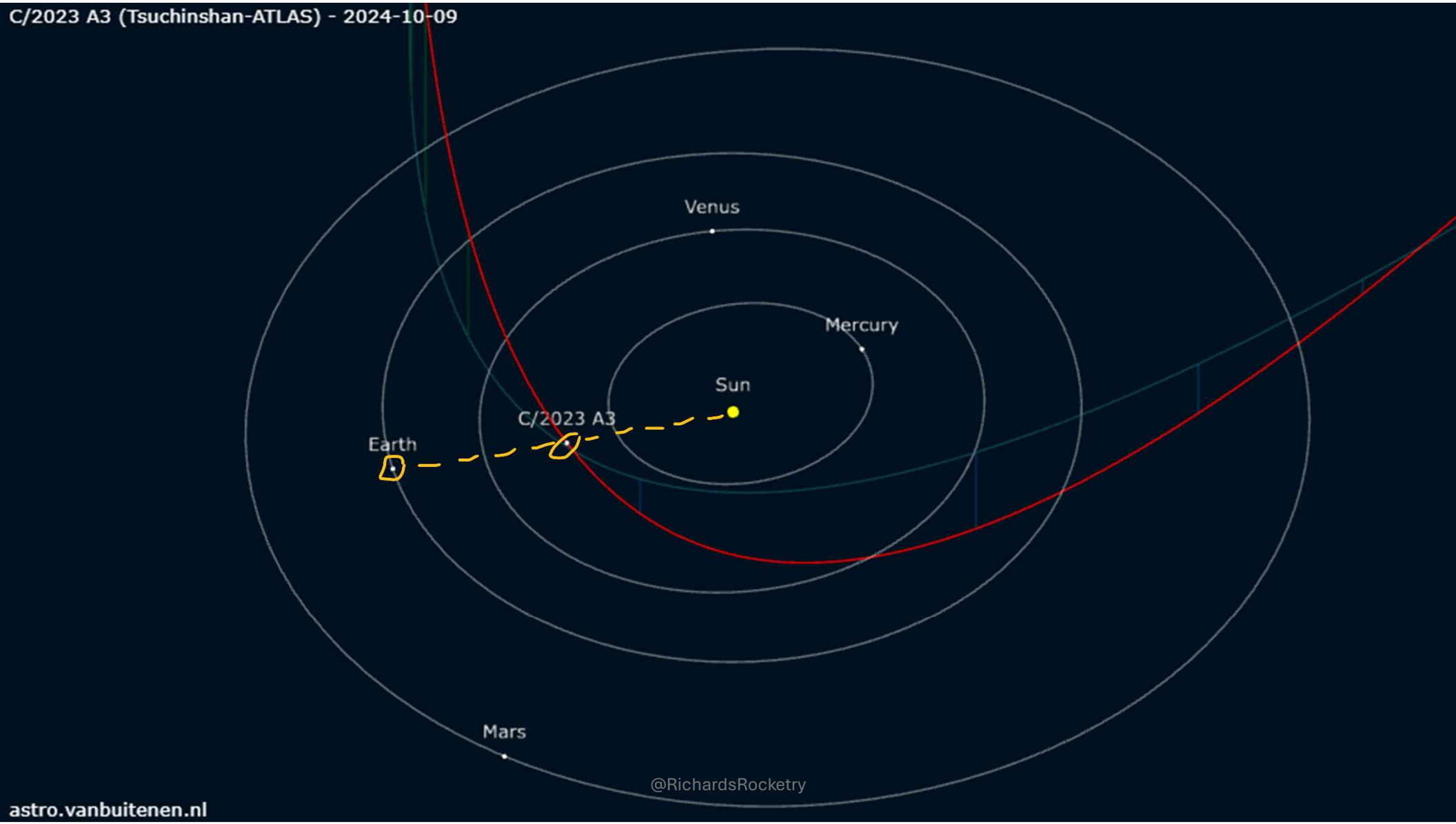

180
165
150
135
120
105
90
75
60
45
30
15
0
Pacific Ocean
Tropic of Cancer
Equator
NORTH AMERICA
S. AMERICA
Atlantic Ocean
N. Pole
Arctic Circle
EUROPE
ASIA
AFRICA
Indian Ocean
@RichardsRocketry

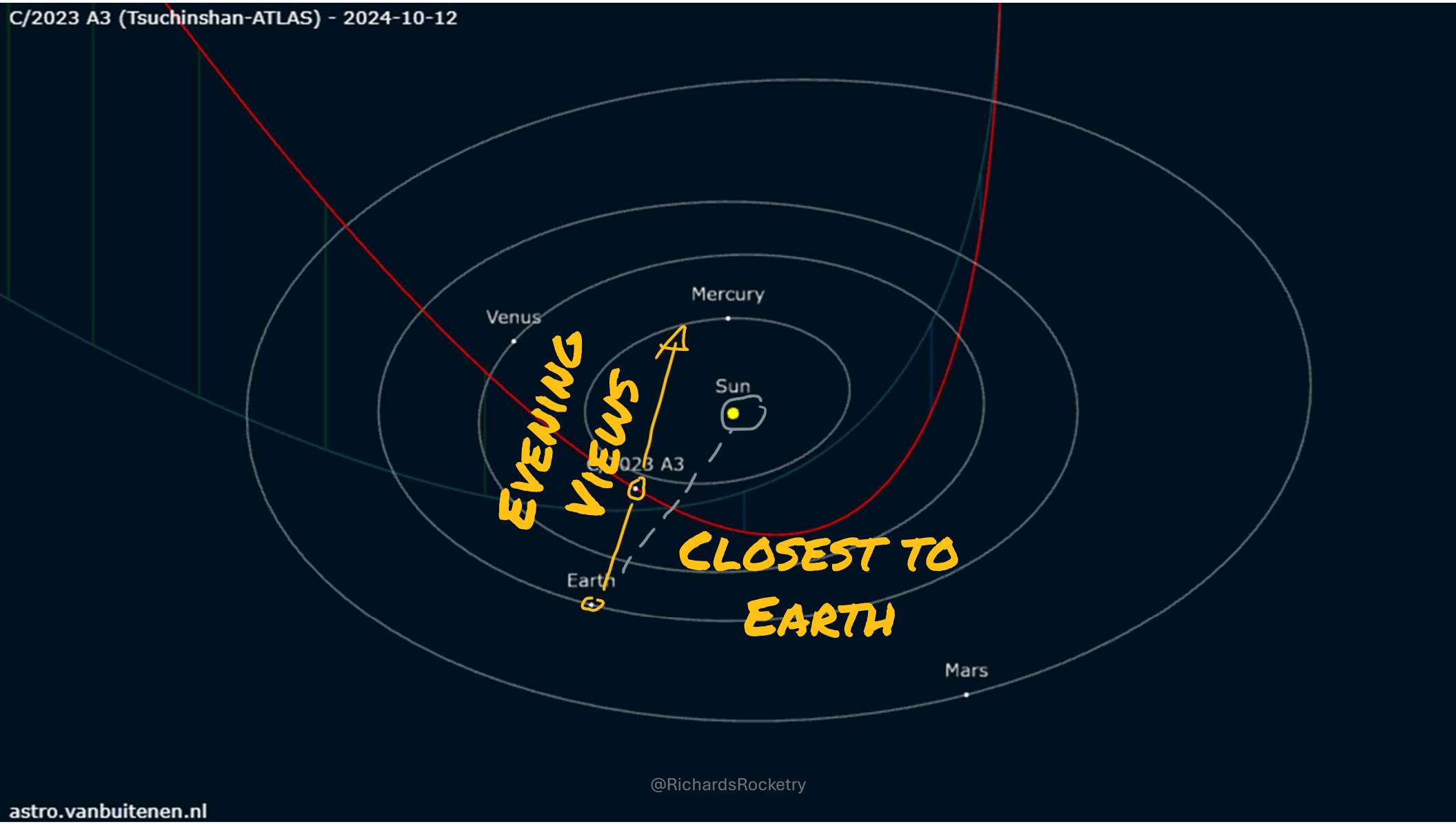

RichardsRocketry.com
@RichardsRocketry

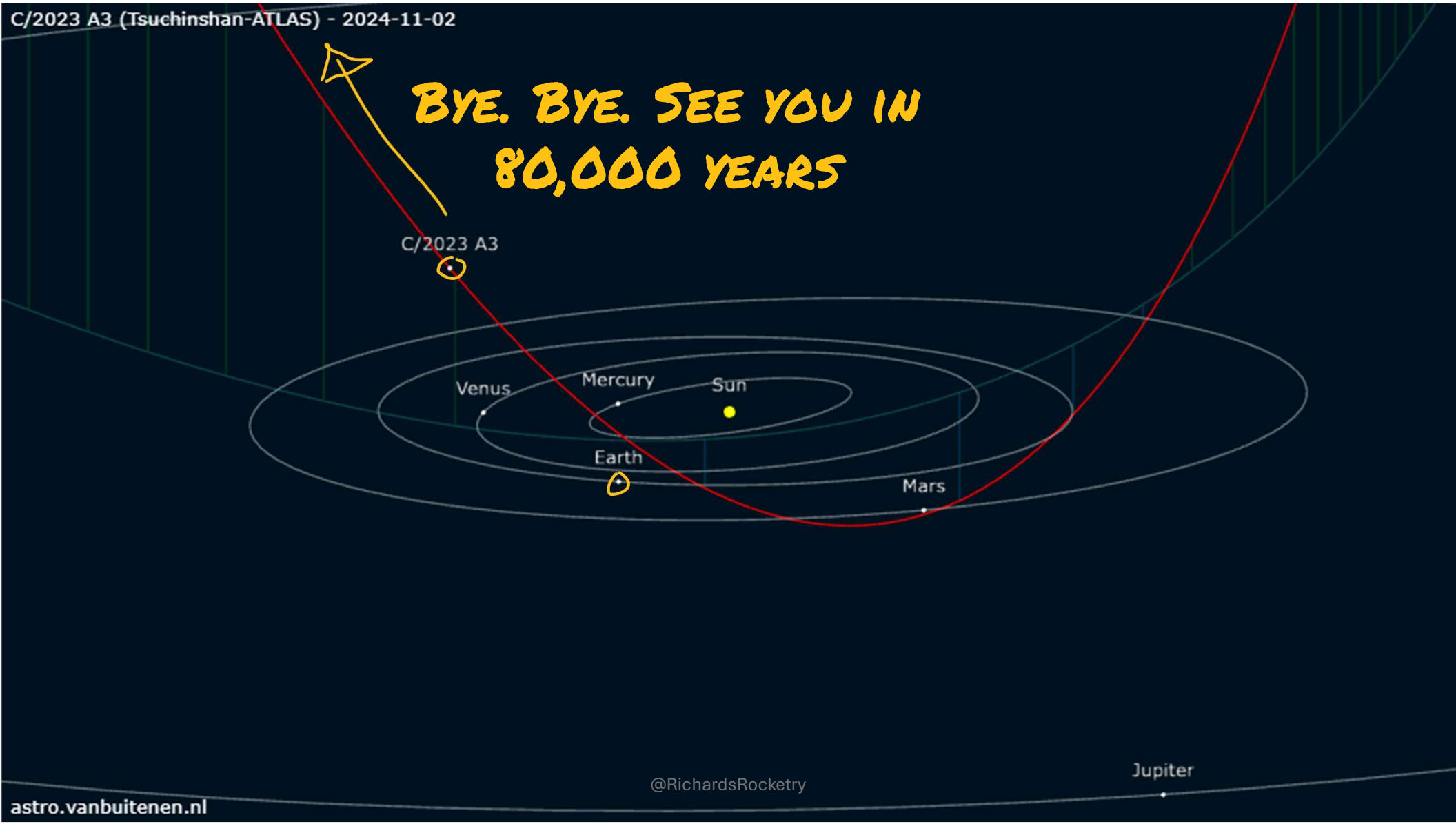

Key Dates
September 27 (Morning) (Perihelion)
September 27 - October 3 (Brief Morning)
October 7 - October 10 (Disappears)
October 12-13 (Brief Evening) (Apparent Brightest)
October 14-17 (Evening) (Gibbous to Full Moon)
October 18 - 19 (Moonless Early Evening) (Longer Tail)
October 20 - November (Comet Dimming)
@RichardsRocketry


C/2023 A3 (Tsuchinshan-ATLAS) - 2024-06-17
Comet's Path
Us
C/2023 A3
Earth
Sun
Mercury
Venus
Mars
Sun
Jupiter
@RichardsRocketry
astro.vanbuitenen.nl


C/2023 A3 (Tsuchinshan-ATLAS) - 2024-09-27
Venus
Sun
Earth
Mercury
C/2023 A3
PERIHELION
MORNING VIEWS
COMET
@RichardsRocketry
astro.vanbuitenen.nl


C/2023 A3 (Tsuchinshan-ATLAS) - 2024-10-09
Venus
Mercury
Sun
C/2023 A3
Earth
Mars
@RichardsRocketry
astro.vanbuitenen.nl


C/2023 A3 (Tsuchinshan-ATLAS) - 2024-10-12
Venus
Mercury
Sun
C/2023 A3
Earth
Mars
EVENING VIEWS
CLOSEST TO EARTH
@RichardsRocketry
astro.vanbuitenen.nl


C/2023 A3 (Tsuchinshan-ATLAS) - 2024-11-02
Bye. Bye. See you in 80,000 years
C/2023 A3
Venus
Mercury
Sun
Earth
Mars
Jupiter
@RichardsRocketry
astro.vanbuitenen.nl


Comet Neowise traveling with the tail in front in the evening sky
@RichardsRocketry

Date	Comet Rise Time	Comet duration w/ sunrise/set	Magnitude	Time Sun +/- 1 hour	Alt° at Sun +/- 1 hour	Moon Illumination	Moonrise	Moonset	Moon Illumination	Sunrise	Sunset
Friday, September 27,	5:28 AM	1:17	2.81	5:45 AM	3°	22%	1:54 AM	4:29 PM	22%	6:45 AM	6:41 PM
Saturday, September 28,	5:27 AM	1:18	2.70	5:45 AM	3°	14%	2:55 AM	5:00 PM	14%	6:45 AM	6:40 PM
Sunday, September 29,	5:28 AM	1:18	2.61	5:46 AM	3°	8%	3:54 AM	5:26 PM	8%	6:46 AM	6:39 PM
Monday, September 30,	5:30 AM	1:17	2.53	5:47 AM	3°	4%	4:51 AM	5:50 PM	4%	6:47 AM	6:37 PM
Tuesday, October 1,	5:32 AM	1:15	2.46	5:47 AM	2°	Set	5:47 AM	6:13 PM	1%	6:47 AM	6:36 PM
Wednesday, October 2,	5:36 AM	1:12	2.40	5:48 AM	2°	Set	6:42 AM	6:35 PM	0%	6:48 AM	6:34 PM
Thursday, October 3,	5:41 AM	1:08	2.36	5:49 AM	1°	Set	7:37 AM	6:59 PM	1%	6:49 AM	6:33 PM
Friday, October 4,	5:48 AM	1:02	2.32	5:50 AM	0°	Set	8:34 AM	7:25 PM	4%	6:50 AM	6:32 PM
Saturday, October 5,	5:56 AM	0:54	2.29	5:50 AM	-1°	Set	9:32 AM	7:55 PM	9%	6:50 AM	6:30 PM
Sunday, October 6,	6:05 AM	0:46	2.28	5:51 AM	-3°	Set	10:32 AM	8:30 PM	15%	6:51 AM	6:29 PM
Monday, October 7,	6:18 AM	0:34	2.28	5:52 AM	-5°	Set	11:33 AM	9:11 PM	23%	6:52 AM	6:28 PM
Tuesday, October 8,			2.29				12:33 PM	10:01 PM	32%	6:53 AM	6:26 PM
Wednesday, October 9,			2.31				1:30 PM	10:59 PM	42%	6:53 AM	6:25 PM
Thursday, October 10,			2.37				2:21 PM	12:03 AM	53%	6:54 AM	6:24 PM
Friday, October 11,	7:23 PM	1:00	2.45	7:23 PM	0°	65%	3:06 PM	12:03 AM	65%	6:55 AM	6:23 PM
Saturday, October 12,	7:43 PM	1:22	2.54	7:21 PM	4°	75%	3:45 PM	1:12 AM	75%	6:56 AM	6:21 PM
Sunday, October 13,	8:02 PM	1:42	2.66	7:20 PM	8°	85%	4:19 PM	2:23 AM	85%	6:57 AM	6:20 PM
Monday, October 14,	8:22 PM	2:03	2.80	7:19 PM	12°	93%	4:51 PM	3:35 AM	93%	6:57 AM	6:19 PM
Tuesday, October 15,	8:40 PM	2:22	2.96	7:18 PM	16°	98%	5:21 PM	4:47 AM	98%	6:58 AM	6:18 PM
Wednesday, October 16,	8:56 PM	2:40	3.13	7:16 PM	19°	99%	5:52 PM	5:59 AM	99%	6:59 AM	6:16 PM
Thursday, October 17,	9:10 PM	2:55	3.31	7:15 PM	22°	100%	6:25 PM	7:13 AM	100%	7:00 AM	6:15 PM
Friday, October 18,	9:22 PM	3:08	3.50	7:14 PM	25°	99%	7:03 PM	8:29 AM	99%	7:01 AM	6:14 PM
Saturday, October 19,	9:33 PM	3:20	3.70	7:13 PM	27°	Set	7:47 PM	9:45 AM	95%	7:01 AM	6:13 PM
Sunday, October 20,	9:40 PM	3:28	3.89	7:12 PM	30°	Set	8:39 PM	10:58 AM	88%	7:02 AM	6:12 PM
Monday, October 21,	9:49 PM	3:39	4.09	7:10 PM	31°	Set	9:37 PM	12:06 PM	79%	7:03 AM	6:10 PM
Tuesday, October 22,	9:57 PM	3:48	4.28	7:09 PM	33°	Set	10:40 PM	1:04 PM	69%	7:04 AM	6:09 PM
Wednesday, October 23,	10:03 PM	3:55	4.47	7:08 PM	34°	Set	11:44 PM	1:51 PM	58%	7:05 AM	6:08 PM
Thursday, October 24,	10:08 PM	4:01	4.65	7:07 PM	35°	Set	12:47 AM	2:30 PM	48%	7:06 AM	6:07 PM
Friday, October 25,	10:12 PM	4:06	4.83	7:06 PM	37°	Set	1:48 AM	3:02 PM	37%	7:07 AM	6:06 PM
Saturday, October 26,	10:14 PM	4:09	5.01	7:05 PM	37°	Set	2:45 AM	3:30 PM	28%	7:07 AM	6:05 PM
Sunday, October 27,	10:18 PM	4:14	5.18	7:04 PM	38°	Set	3:41 AM	3:55 PM	20%	7:08 AM	6:04 PM

* Times and comet angles are based on a Los Angeles, California location. Times and altitude angles will change based on your viewing spot, even within the same time zone.

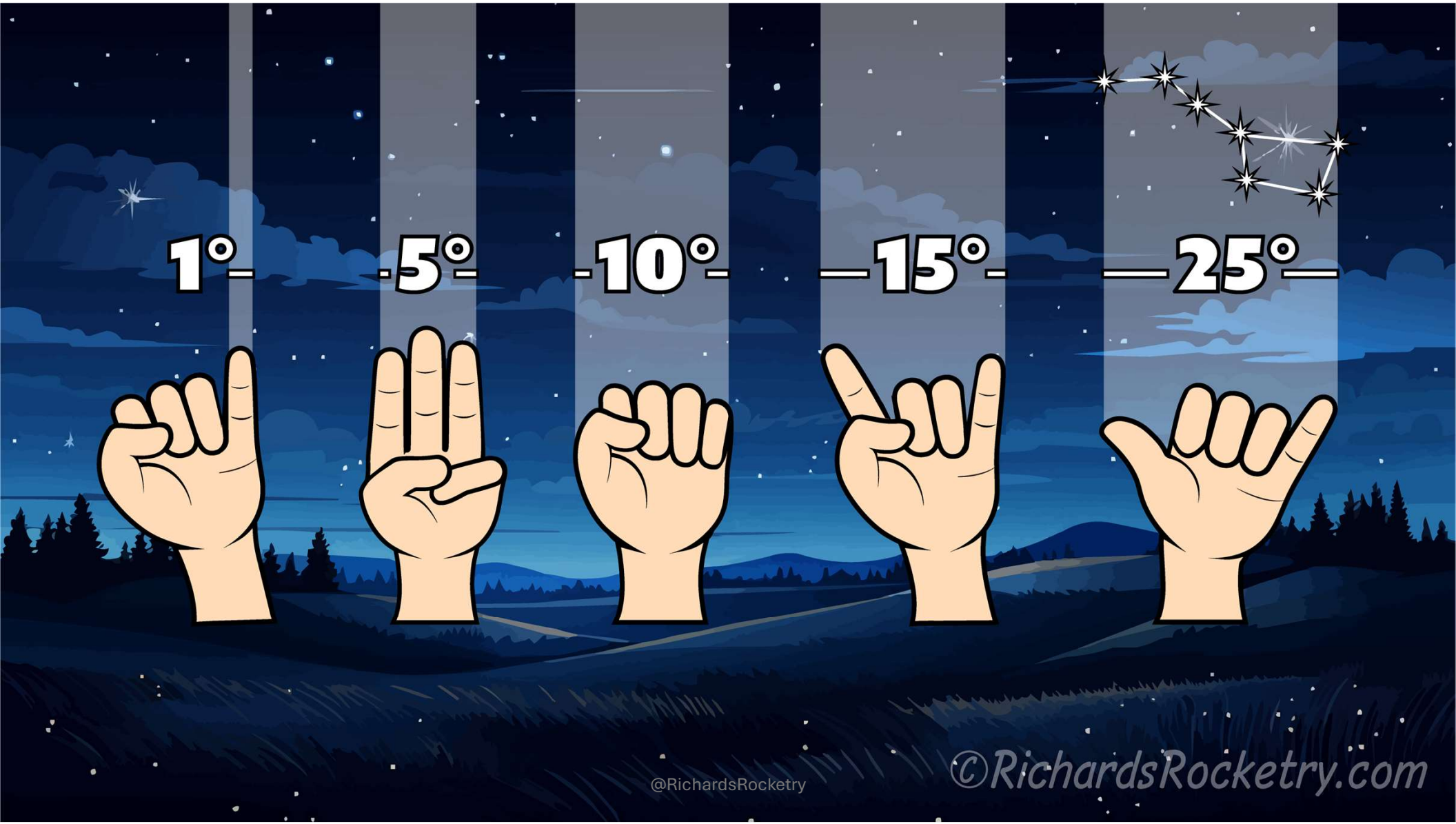
SEPTEMBER 2024

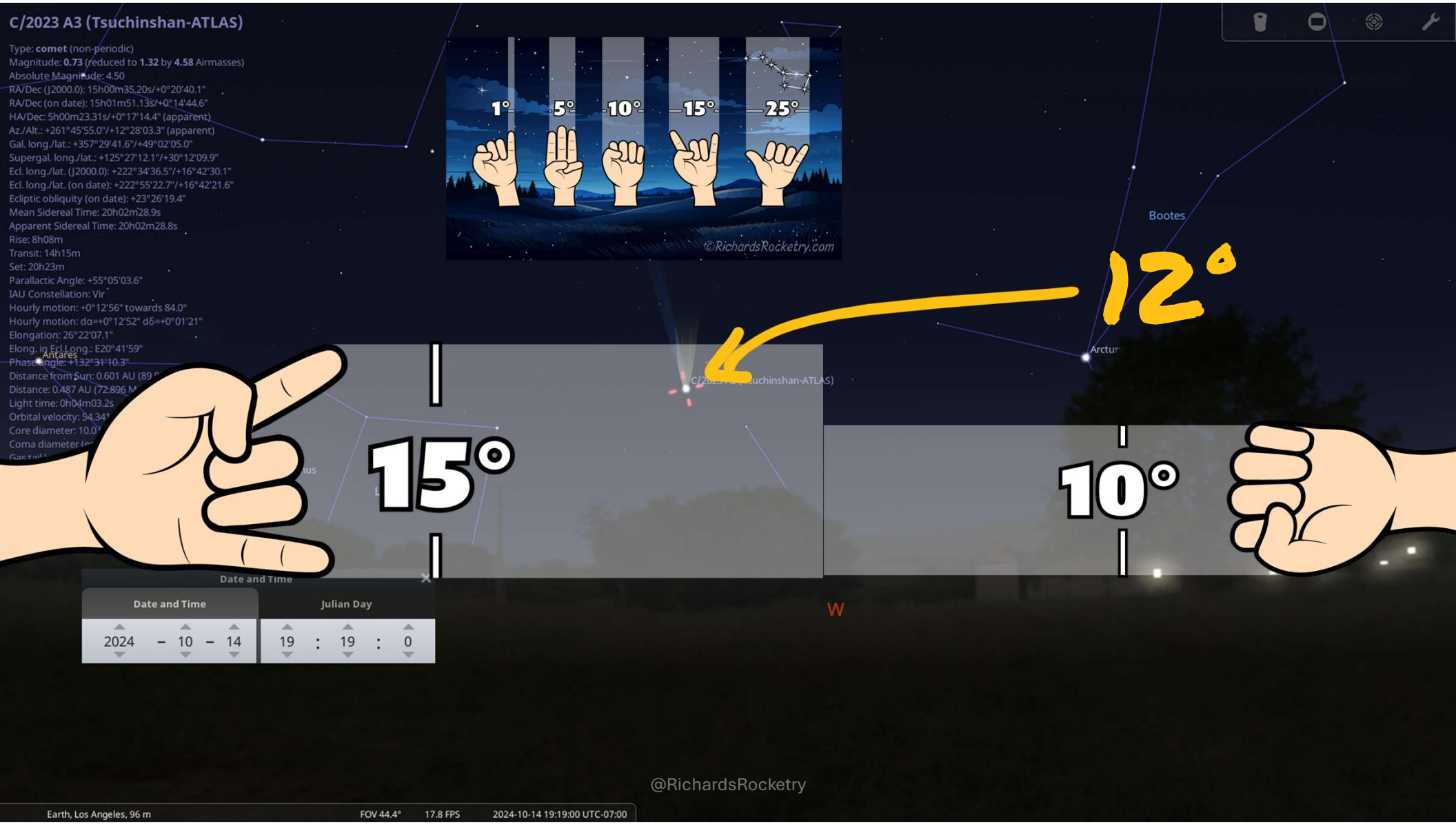
Possible Best Days Possible Worse Days

MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY	SUNDAY
23	24	25	26	27	28	29

OCTOBER 2024

MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY	SUNDAY
30	1	2	3	4 ← Morning Views Only	5	6 ⊣
7	8	9	10	11 ⊢ Evening Views Only	12	13 →
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30	31	1	2	3


1°
5°
10°
15°
25°
@RichardsRocketry
©RichardsRocketry.com


C/2023 A3 (Tsuchinshan-ATLAS)
Type: comet (non-periodic)
Magnitude: 0.73 (reduced to 1.32 by 4.58 Airmasses)
Absolute Magnitude: 4.50
RA/Dec (J2000.0): 15h00m35.20s/+0°20'40.1"
RA/Dec (on date): 15h01m51.13s/+0°14'44.6"
HA/Dec: 5h00m23.31s/+0°17'14.4" (apparent)
Az./Alt.: +261°45'55.0"/+12°28'03.3" (apparent)
Gal. long./lat.: +357°29'41.6"/+49°02'05.0"
Supergal. long./lat.: +125°27'12.1"/+30°12'09.9"
Ecl. long./lat. (J2000.0): +222°34'36.5"/+16°42'30.1"
Ecl. long./lat. (on date): +222°55'22.7"/+16°42'21.6"
Ecliptic obliquity (on date): +23°26'19.4"
Mean Sidereal Time: 20h02m28.9s
Apparent Sidereal Time: 20h02m28.8s
Rise: 8h08m
Transit: 14h15m
Set: 20h23m
Parallactic Angle: +55°05'03.6"
IAU Constellation: Vir
Hourly motion: +0°12'56" towards 84.0°
Hourly motion: dα=+0°12'52" dδ=+0°01'21"
Elongation: 26°22'07.1"
Elong. in Ecl Long.: E20°41'59"
Phase Angle: +132°31'10.3"
Distance from Sun: 0.601 AU (89
Distance: 0.487 AU (72.896 M
Light time: 0h04m03.2s
Orbital velocity: 54.34
Core diameter: 10.0
Coma diameter (6
Gas tail
1°
5°
10°
15°
25°
©RichardsRocketry.com
Bootes
12°
Antares
Arctur
C/2023 A3 (Tsuchinshan-ATLAS)
15°
10°
Date and Time
Date and Time
Julian Day
2024 – 10 – 14
19 : 19 : 0
W
@RichardsRocketry
Earth, Los Angeles, 96 m
FOV 44.4°
17.8 FPS
2024-10-14 19:19:00 UTC-07:00

September 27 – October 3 (Morning)

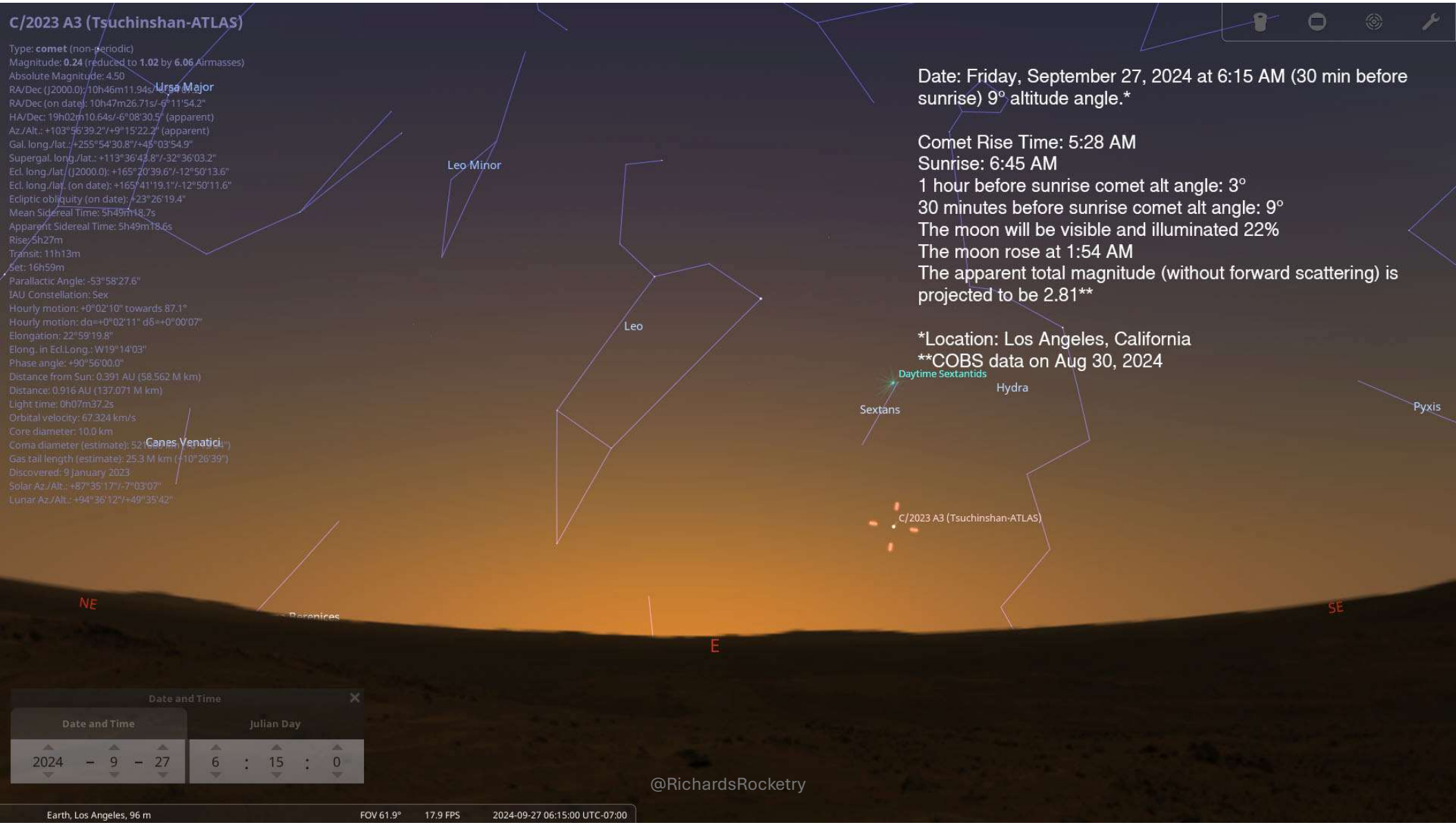
- Moon visible, but crescent size/low illumination.
- Comet becoming brighter.
- Sunrise is at 6:45.
  - 3 degrees altitude at 1 hour before the sun
  - Atmosphere interference lower than 3 degrees
  - Dawn Sun glow

Date	Comet Rise/Set Time	Comet duration w/ sunrise/set	Magnitude	Time Sun +/- 1 hour	Alt° at Sun +/- 1 hour	Moon Illumination	Moonrise	Moonset	Moon Illumination	Sunrise	Sunset
Friday, September 27,	5:28 AM	1:17	2.81	5:45 AM	3°	22%	1:54 AM	4:29 PM	22%	6:45 AM	6:41 PM
Saturday, September 28,	5:27 AM	1:18	2.70	5:45 AM	3°	14%	2:55 AM	5:00 PM	14%	6:45 AM	6:40 PM
Sunday, September 29,	5:28 AM	1:18	2.61	5:46 AM	3°	8%	3:54 AM	5:26 PM	8%	6:46 AM	6:39 PM
Monday, September 30,	5:30 AM	1:17	2.53	5:47 AM	3°	4%	4:51 AM	5:50 PM	4%	6:47 AM	6:37 PM
Tuesday, October 1,	5:32 AM	1:15	2.46	5:47 AM	2°	Set	5:47 AM	6:13 PM	1%	6:47 AM	6:36 PM
Wednesday, October 2,	5:36 AM	1:12	2.40	5:48 AM	2°	Set	6:42 AM	6:35 PM	0%	6:48 AM	6:34 PM
Thursday, October 3,	5:41 AM	1:08	2.36	5:49 AM	[illegible]	Set	7:37 AM	6:59 PM	1%	6:49 AM	6:33 PM

Date: Friday, September 27, 2024 at 5:45 AM (1 hour before sunrise) 3° altitude angle.*

Comet Rise Time: 5:28 AM
Sunrise: 6:45 AM
1 hour before sunrise comet alt angle: 3°
30 minutes before sunrise comet alt angle: 9°
The moon will be visible and illuminated 22%
The moon rose at 1:54 AM
The apparent total magnitude (without forward scattering) is projected to be 2.81**

*Location: Los Angeles, California
**COBS data on Aug 30, 2024


C/2023 A3 (Tsuchinshan-ATLAS)
Type: comet (non-periodic)
Magnitude: 0.24 (reduced to 1.02 by 6.06 Airmasses)
Absolute Magnitude: 4.50
RA/Dec (J2000.0): 10h46m11.94s/-6°08'30.5"
RA/Dec (on date): 10h47m26.71s/-6°11'54.2"
HA/Dec: 19h02m10.64s/-6°08'30.5" (apparent)
Az./Alt.: +103°56'39.2"/+9°15'22.2" (apparent)
Gal. long./lat.: +255°54'30.8"/+45°03'54.9"
Supergal. long./lat.: +113°36'43.8"/-32°36'03.2"
Ecl. long./lat. (J2000.0): +165°20'39.6"/-12°50'13.6"
Ecl. long./lat. (on date): +165°41'19.1"/-12°50'11.6"
Ecliptic obliquity (on date): +23°26'19.4"
Mean Sidereal Time: 5h49m18.7s
Apparent Sidereal Time: 5h49m18.6s
Rise: 5h27m
Transit: 11h13m
Set: 16h59m
Parallactic Angle: -53°58'27.6"
IAU Constellation: Sex
Hourly motion: +0°02'10" towards 87.1°
Hourly motion: dα=+0°02'11" dδ=+0°00'07"
Elongation: 22°59'19.8"
Elong. in Ecl.Long.: W19°14'03"
Phase angle: +90°56'00.0"
Distance from Sun: 0.391 AU (58.562 M km)
Distance: 0.916 AU (137.071 M km)
Light time: 0h07m37.2s
Orbital velocity: 67.324 km/s
Core diameter: 10.0 km
Coma diameter (estimate): 52
Gas tail length (estimate): 25.3 M km (+10°26'39")
Discovered: 9 January 2023
Solar Az./Alt.: +87°35'17"/-7°03'07"
Lunar Az./Alt.: +94°36'12"/+49°35'42"
Ursa Major
Leo Minor
Leo
Canes Venatici
Date: Friday, September 27, 2024 at 6:15 AM (30 min before sunrise) 9° altitude angle.*
Comet Rise Time: 5:28 AM
Sunrise: 6:45 AM
1 hour before sunrise comet alt angle: 3°
30 minutes before sunrise comet alt angle: 9°
The moon will be visible and illuminated 22%
The moon rose at 1:54 AM
The apparent total magnitude (without forward scattering) is projected to be 2.81**
*Location: Los Angeles, California
**COBS data on Aug 30, 2024
Daytime Sextantids
Hydra
Sextans
Pyxis
C/2023 A3 (Tsuchinshan-ATLAS)
NE
E
SE
Date and Time
Date and Time
Julian Day
2024 - 9 - 27
6 : 15 : 0
@RichardsRocketry
Earth, Los Angeles, 96 m
FOV 61.9°
17.9 FPS
2024-09-27 06:15:00 UTC-07:00

October 12 - 13 (Evening) (Closest to Earth)

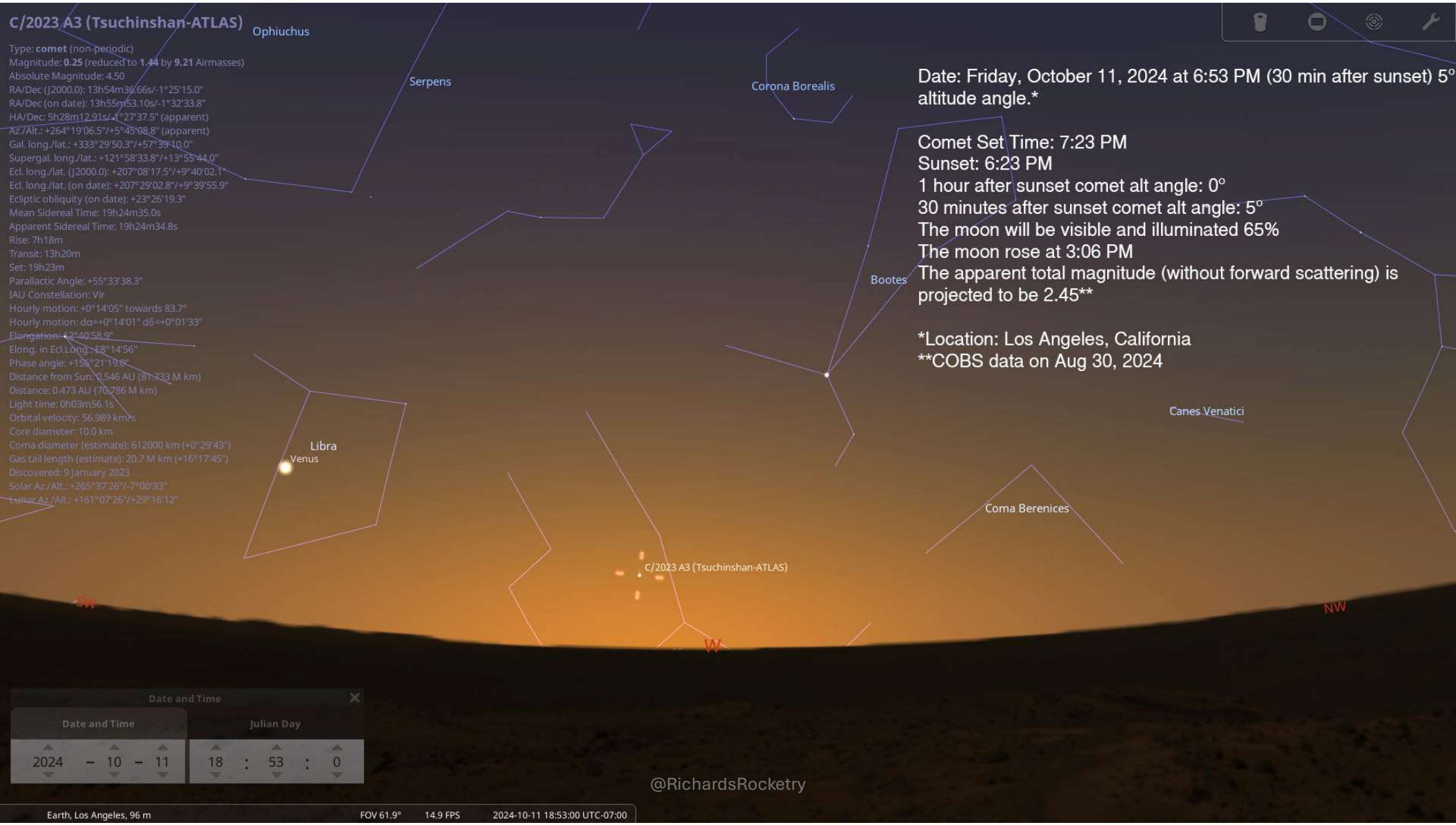
Date	Comet Rise/Set Time	Comet duration w/ sunrise/set	Magnitude	Time Sun +/- 1 hour	Alt° at Sun +/- 1 hour	Moon Illumination	Moonrise	Moonset	Moon Illumination	Sunrise	Sunset
Friday, October 11,	7:23 PM	1:00	2.45	7:23 PM	0°	65%	3:06 PM	12:03 AM	65%	6:55 AM	6:23 PM
Saturday, October 12,	7:43 PM	1:22	2.54	7:21 PM	4°	75%	3:45 PM	1:12 AM	75%	6:56 AM	6:21 PM
Sunday, October 13,	8:02 PM	1:42	2.66	7:20 PM	8°	85%	4:19 PM	2:23 AM	85%	6:57 AM	6:20 PM

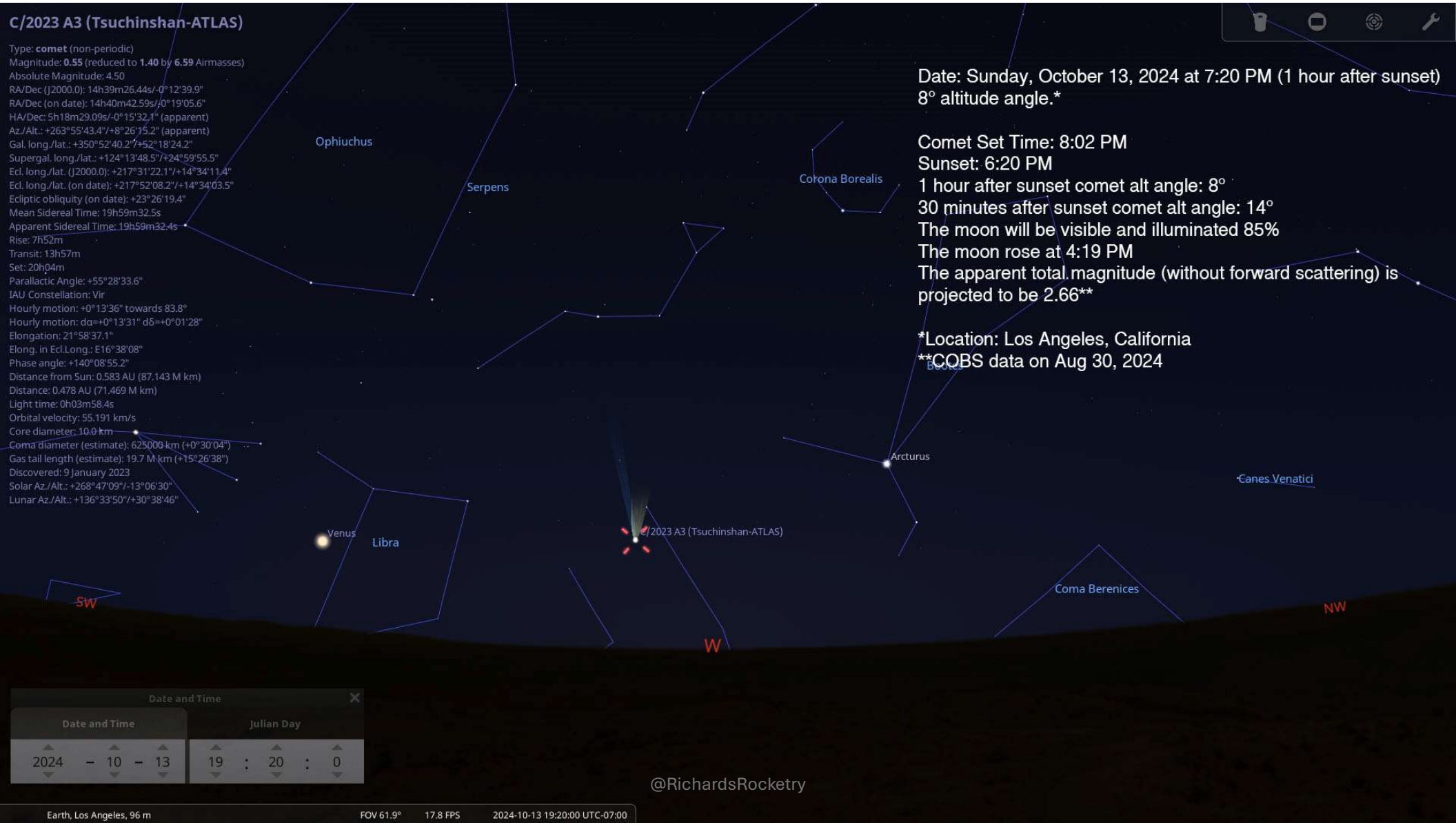
- Bright moon
- Comet becoming dimmer but, it proximity to Earth may make these the brightest days.
- Comet is low to the horizon
- Dusk Sun glow

Date: Friday, October 11, 2024 at 7:23 PM (1 hour after sunset) 0° altitude angle.*

Comet Set Time: 7:23 PM
Sunset: 6:23 PM
1 hour after sunset comet alt angle: 0°
30 minutes after sunset comet alt angle: 5°
The moon will be visible and illuminated 65%
The moon rose at 3:06 PM
The apparent total magnitude (without forward scattering) is projected to be 2.45**

*Location: Los Angeles, California
**COBS data on Aug 30, 2024


C/2023 A3 (Tsuchinshan-ATLAS)
Type: comet (non-periodic)
Magnitude: 0.25 (reduced to 1.44 by 9.21 Airmasses)
Absolute Magnitude: 4.50
RA/Dec (J2000.0): 13h54m36.66s/-1°25'15.0"
RA/Dec (on date): 13h55m53.10s/-1°32'33.8"
HA/Dec: 5h28m12.91s/-1°27'37.5" (apparent)
Az./Alt.: +264°19'06.5"/+5°45'08.8" (apparent)
Gal. long./lat.: +333°29'50.3"/+57°39'10.0"
Supergal. long./lat.: +121°58'33.8"/+13°55'44.0"
Ecl. long./lat. (J2000.0): +207°08'17.5"/+9°40'02.1"
Ecl. long./lat. (on date): +207°29'02.8"/+9°39'55.9"
Ecliptic obliquity (on date): +23°26'19.3"
Mean Sidereal Time: 19h24m35.0s
Apparent Sidereal Time: 19h24m34.8s
Rise: 7h18m
Transit: 13h20m
Set: 19h23m
Parallactic Angle: +55°33'38.3"
IAU Constellation: Vir
Hourly motion: +0°14'05" towards 83.7°
Hourly motion: dα=+0°14'01" dδ=+0°01'33"
Elongation: +2°40'58.9"
Elong. in Ecl.Long.: E8°14'56"
Phase angle: +156°21'19.6"
Distance from Sun: 0.546 AU (81.733 M km)
Distance: 0.473 AU (70.786 M km)
Light time: 0h03m56.1s
Orbital velocity: 56.989 km/s
Core diameter: 10.0 km
Coma diameter (estimate): 612000 km (+0°29'43")
Gas tail length (estimate): 20.7 M km (+16°17'45")
Discovered: 9 January 2023
Solar Az./Alt.: +265°37'26"/-7°00'33"
Lunar Az./Alt.: +161°07'26"/+29°16'12"
Ophiuchus
Serpens
Corona Borealis
Bootes
Canes Venatici
Coma Berenices
Libra
Venus
C/2023 A3 (Tsuchinshan-ATLAS)
SW
W
NW
Date: Friday, October 11, 2024 at 6:53 PM (30 min after sunset) 5° altitude angle.*
Comet Set Time: 7:23 PM
Sunset: 6:23 PM
1 hour after sunset comet alt angle: 0°
30 minutes after sunset comet alt angle: 5°
The moon will be visible and illuminated 65%
The moon rose at 3:06 PM
The apparent total magnitude (without forward scattering) is projected to be 2.45**
*Location: Los Angeles, California
**COBS data on Aug 30, 2024
Date and Time
Date and Time
Julian Day
2024 - 10 - 11
18 : 53 : 0
@RichardsRocketry
Earth, Los Angeles, 96 m
FOV 61.9°
14.9 FPS
2024-10-11 18:53:00 UTC-07:00



Date: Sunday, October 13, 2024 at 7:20 PM (1 hour after sunset) 8° altitude angle.*

Comet Set Time: 8:02 PM
Sunset: 6:20 PM
1 hour after sunset comet alt angle: 8°
30 minutes after sunset comet alt angle: 14°
The moon will be visible and illuminated 85%
The moon rose at 4:19 PM
The apparent total magnitude (without forward scattering) is projected to be 2.66**

*Location: Los Angeles, California
**COBS data on Aug 30, 2024

October 14 – 17 (Evening)

- Bright moon
- Comet higher each day
- Darker longer after sunset

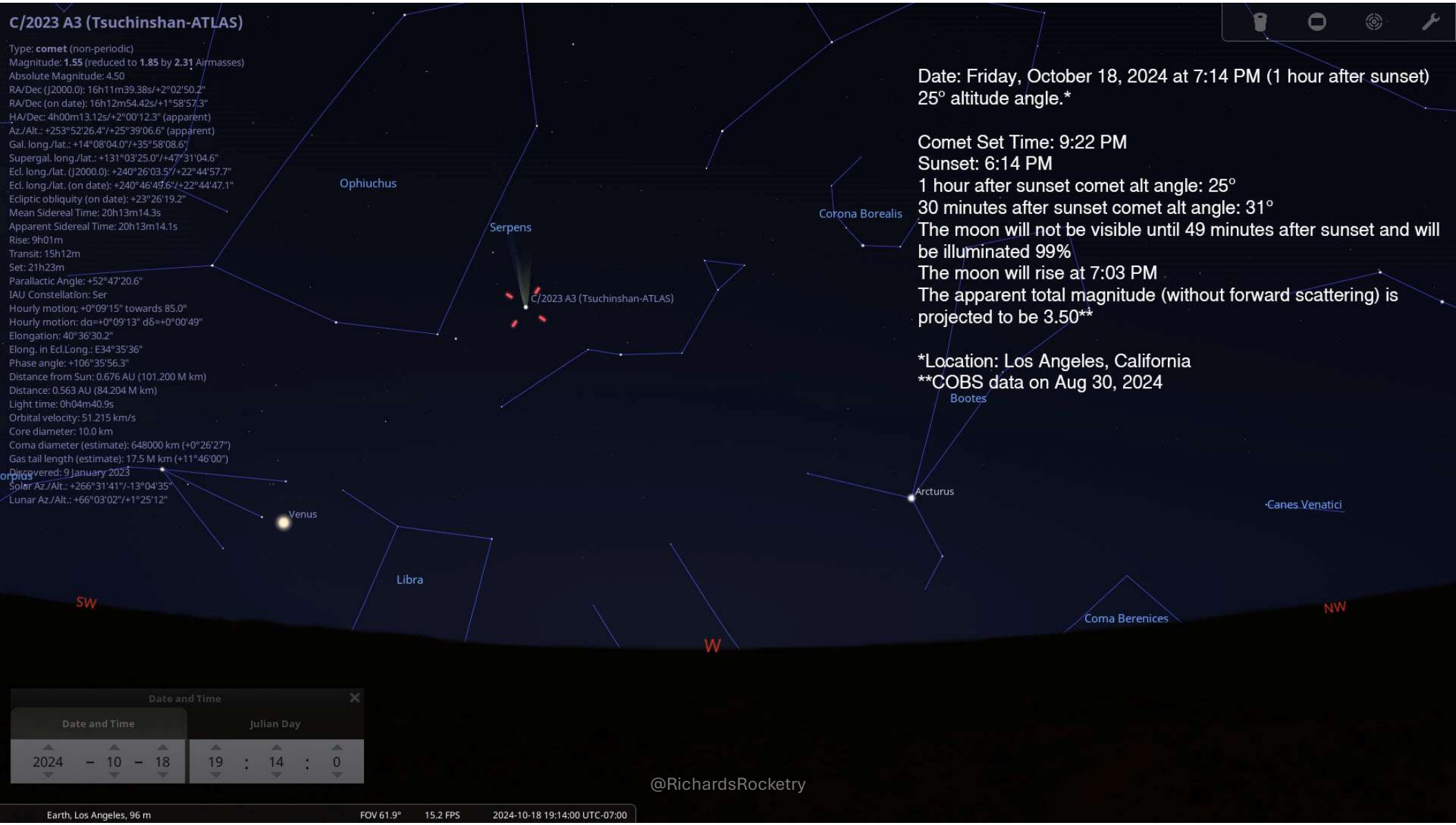
Date	Comet Rise/Set Time	Comet duration w/ sunrise/set	Magnitude	Time Sun +/- 1 hour	Alt° at Sun +/- 1 hour	Moon Illumination	Moonrise	Moonset	Moon Illumination	Sunrise	Sunset
Sunday, October 13,	8:02 PM	1:42	2.66	7:20 PM	8°	85%	4:19 PM	2:23 AM	85%	6:57 AM	6:20 PM
Monday, October 14,	8:22 PM	2:03	2.80	7:19 PM	12°	93%	4:51 PM	3:35 AM	93%	6:57 AM	6:19 PM
Tuesday, October 15,	8:40 PM	2:22	2.96	7:18 PM	16°	98%	5:21 PM	4:47 AM	98%	6:58 AM	6:18 PM
Wednesday, October 16,	8:56 PM	2:40	3.13	7:16 PM	19°	99%	5:52 PM	5:59 AM	99%	6:59 AM	6:16 PM
Thursday, October 17,	9:10 PM	2:55	3.31	7:15 PM	22°	100%	6:25 PM	7:13 AM	100%	7:00 AM	6:15 PM


C/2023 A3 (Tsuchinshan-ATLAS)
Type: comet (non-periodic)
Magnitude: 0.92 (reduced to 1.38 by 3.56 Airmasses)
Absolute Magnitude: 4.50
RA/Dec (J2000.0): 15h20m32.21s/+0°51'05.5"
RA/Dec (on date): 15h21m47.92s/+0°45'41.4"
HA/Dec: 4h43m26.25s/+0°47'38.3" (apparent)
Az./Alt.: +259°40'28.3"/+16°13'27.2" (apparent)
Gal. long./lat.: +2°56'07.2"/+45°38'05.4"
Supergal. long./lat.: +126°44'54.7"/+35°05'45.1"
Ecl. long./lat. (J2000.0): +227°27'00.7"/+18°35'50.2"
Ecl. long./lat. (on date): +227°47'47.0"/+18°35'40.9"
Ecliptic obliquity (on date): +23°26'19.4"
Mean Sidereal Time: 20h05m25.3s
Apparent Sidereal Time: 20h05m25.1s
Rise: 8h23m
Transit: 14h31m
Set: 20h40m
Parallactic Angle: +54°36'21.5"
IAU Constellation: Ser
Hourly motion: +0°12'06" towards 84.2°
Hourly motion: dα=+0°12'02" dδ=+0°01'14"
Elongation: 30°28'16.7"
Elong. in Ecl.Long.: E24°34'58"
Phase angle: +125°19'02.3"
Distance from Sun: 0.620 AU (92.680 M km)
Distance: 0.501 AU (74.949 M km)
Light time: 0h04m10.0s
Orbital velocity: 53.517 km/s
Core diameter: 10.0 km
Coma diameter (estimate): 636000 km (+0°29'10")
Gas tail length (estimate): 18.8 M km (+14°06'13")
Discovered: 9 January 2023
Solar Az./Alt.: +267°56'09"/-13°11'20"
Lunar Az./Alt.: +105°30'45"/+22°38'57"
Ophiuchus
Serpens
Corona Borealis
Bootes
C/2023 A3 (Tsuchinshan-ATLAS)
Arcturus
Canes Venatici
Venus
Libra
Coma Berenices
SW
W
NW
Date: Tuesday, October 15, 2024 at 7:18 PM (1 hour after sunset)
16° altitude angle.*
Comet Set Time: 8:40 PM
Sunset: 6:18 PM
1 hour after sunset comet alt angle: 16°
30 minutes after sunset comet alt angle: 22°
The moon will be visible and illuminated 98%
The moon rose at 5:21 PM
The apparent total magnitude (without forward scattering) is projected to be 2.96**
*Location: Los Angeles, California
**COBS data on Aug 30, 2024
Date and Time
Date and Time
Julian Day
2024 – 10 – 15
19 : 18 : 0
@RichardsRocketry
Earth, Los Angeles, 96 m
FOV 61.9°
17.8 FPS
2024-10-15 19:18:00 UTC-07:00

October 18 - 20 (Evening)

Date	Comet Rise/Set Time	Comet duration w/ sunrise/set	Magnitude	Time Sun +/- 1 hour	Alt° at Sun +/- 1 hour	Moon Illumination	Moonrise	Moonset	Moon Illumination	Sunrise	Sunset
Friday, October 18,	9:22 PM	3:08	3.50	7:14 PM	25°	99%	7:03 PM	8:29 AM	99%	7:01 AM	6:14 PM
Saturday, October 19,	9:33 PM	3:20	3.70	7:13 PM	27°	Set	7:47 PM	9:45 AM	95%	7:01 AM	6:13 PM
Sunday, October 20,	9:40 PM	3:28	3.89	7:12 PM	30°	Set	8:39 PM	10:58 AM	88%	7:02 AM	6:12 PM

- Big 20° tail possible without the moon
- Comet higher each day but dimming
- 18th of October: 45 minutes without the moon
- 19th of October: 1 hour and a half without the moon
- 20th of October: 2 hours and 20 min w/o the moon


C/2023 A3 (Tsuchinshan-ATLAS)
Type: comet (non-periodic)
Magnitude: 1.55 (reduced to 1.85 by 2.31 Airmasses)
Absolute Magnitude: 4.50
RA/Dec (J2000.0): 16h11m39.38s/+2°02'50.2"
RA/Dec (on date): 16h12m54.42s/+1°58'57.3"
HA/Dec: 4h00m13.12s/+2°00'12.3" (apparent)
Az./Alt.: +253°52'26.4"/+25°39'06.6" (apparent)
Gal. long./lat.: +14°08'04.0"/+35°58'08.6"
Supergal. long./lat.: +131°03'25.0"/+47°31'04.6"
Ecl. long./lat. (J2000.0): +240°26'03.5"/+22°44'57.7"
Ecl. long./lat. (on date): +240°46'45.6"/+22°44'47.1"
Ecliptic obliquity (on date): +23°26'19.2"
Mean Sidereal Time: 20h13m14.3s
Apparent Sidereal Time: 20h13m14.1s
Rise: 9h01m
Transit: 15h12m
Set: 21h23m
Parallactic Angle: +52°47'20.6"
IAU Constellation: Ser
Hourly motion: +0°09'15" towards 85.0°
Hourly motion: dα=+0°09'13" dδ=+0°00'49"
Elongation: 40°36'30.2"
Elong. in Ecl.Long.: E34°35'36"
Phase angle: +106°35'56.3"
Distance from Sun: 0.676 AU (101.200 M km)
Distance: 0.563 AU (84.204 M km)
Light time: 0h04m40.9s
Orbital velocity: 51.215 km/s
Core diameter: 10.0 km
Coma diameter (estimate): 648000 km (+0°26'27")
Gas tail length (estimate): 17.5 M km (+11°46'00")
Discovered: 9 January 2023
Solar Az./Alt.: +266°31'41"/-13°04'35"
Lunar Az./Alt.: +66°03'02"/+1°25'12"
Ophiuchus
Serpens
Corona Borealis
Bootes
Arcturus
Canes Venatici
Venus
Libra
Coma Berenices
SW
W
NW
Date: Friday, October 18, 2024 at 7:14 PM (1 hour after sunset)
25° altitude angle.*
Comet Set Time: 9:22 PM
Sunset: 6:14 PM
1 hour after sunset comet alt angle: 25°
30 minutes after sunset comet alt angle: 31°
The moon will not be visible until 49 minutes after sunset and will be illuminated 99%
The moon will rise at 7:03 PM
The apparent total magnitude (without forward scattering) is projected to be 3.50**
*Location: Los Angeles, California
**COBS data on Aug 30, 2024
Date and Time
Date and Time
Julian Day
2024 – 10 – 18
19 : 14 : 0
@RichardsRocketry
Earth, Los Angeles, 96 m
FOV 61.9°
15.2 FPS
2024-10-18 19:14:00 UTC-07:00

October 21 – November (Evening)

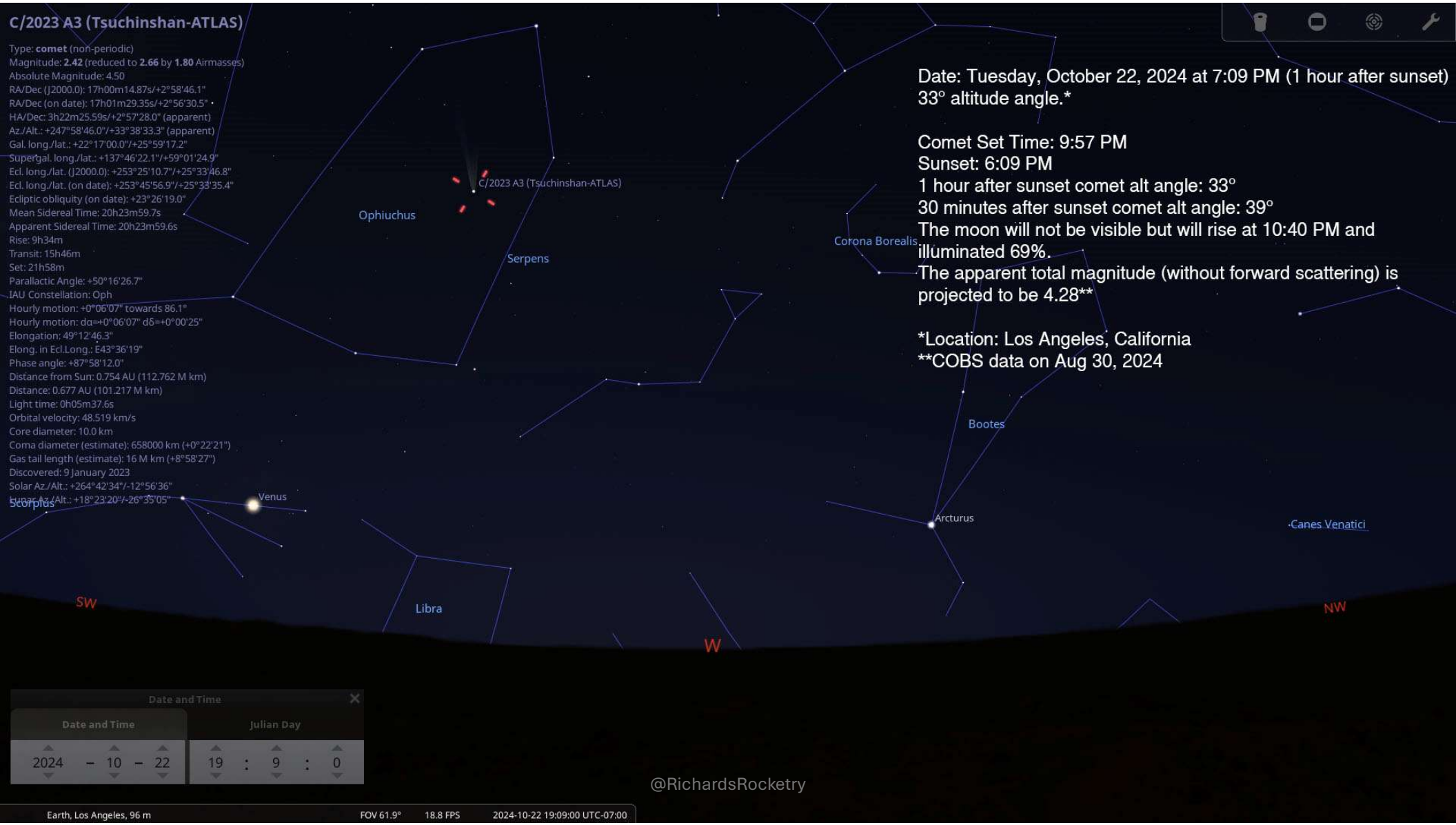
Date	Comet Rise/Set Time	Comet duration w/ sunrise/set	Magnitude	Time Sun +/- 1 hour	Alt° at Sun +/- 1 hour	Moon Illumination	Moonrise	Moonset	Moon Illumination	Sunrise	Sunset
Sunday, October 20,	9:40 PM	3:28	3.89	7:12 PM	30°	Set	8:39 PM	10:58 AM	88%	7:02 AM	6:12 PM
Monday, October 21,	9:49 PM	3:39	4.09	7:10 PM	31°	Set	9:37 PM	12:06 PM	79%	7:03 AM	6:10 PM
Tuesday, October 22,	9:57 PM	3:48	4.28	7:09 PM	33°	Set	10:40 PM	1:04 PM	69%	7:04 AM	6:09 PM
Wednesday, October 23,	10:03 PM	3:55	4.47	7:08 PM	34°	Set	11:44 PM	1:51 PM	58%	7:05 AM	6:08 PM
Thursday, October 24,	10:08 PM	4:01	4.65	7:07 PM	35°	Set		2:30 PM	48%	7:06 AM	6:07 PM
Friday, October 25,	10:12 PM	4:06	4.83	7:06 PM	37°	Set	1:48 AM	3:02 PM	37%	7:07 AM	6:06 PM
Saturday, October 26,	10:14 PM	4:09	5.01	7:05 PM	37°	Set	2:45 AM	3:30 PM	28%	7:07 AM	6:05 PM
Sunday, October 27,	10:18 PM	4:14	5.18	7:04 PM	38°	Set	3:41 AM	3:55 PM	20%	7:08 AM	6:04 PM

- Moon gone
- Comet higher each day but dimming (Mag 4 to 5)
- Longer duration in sky each night

  Oct 21: 3 hours 40 minutes

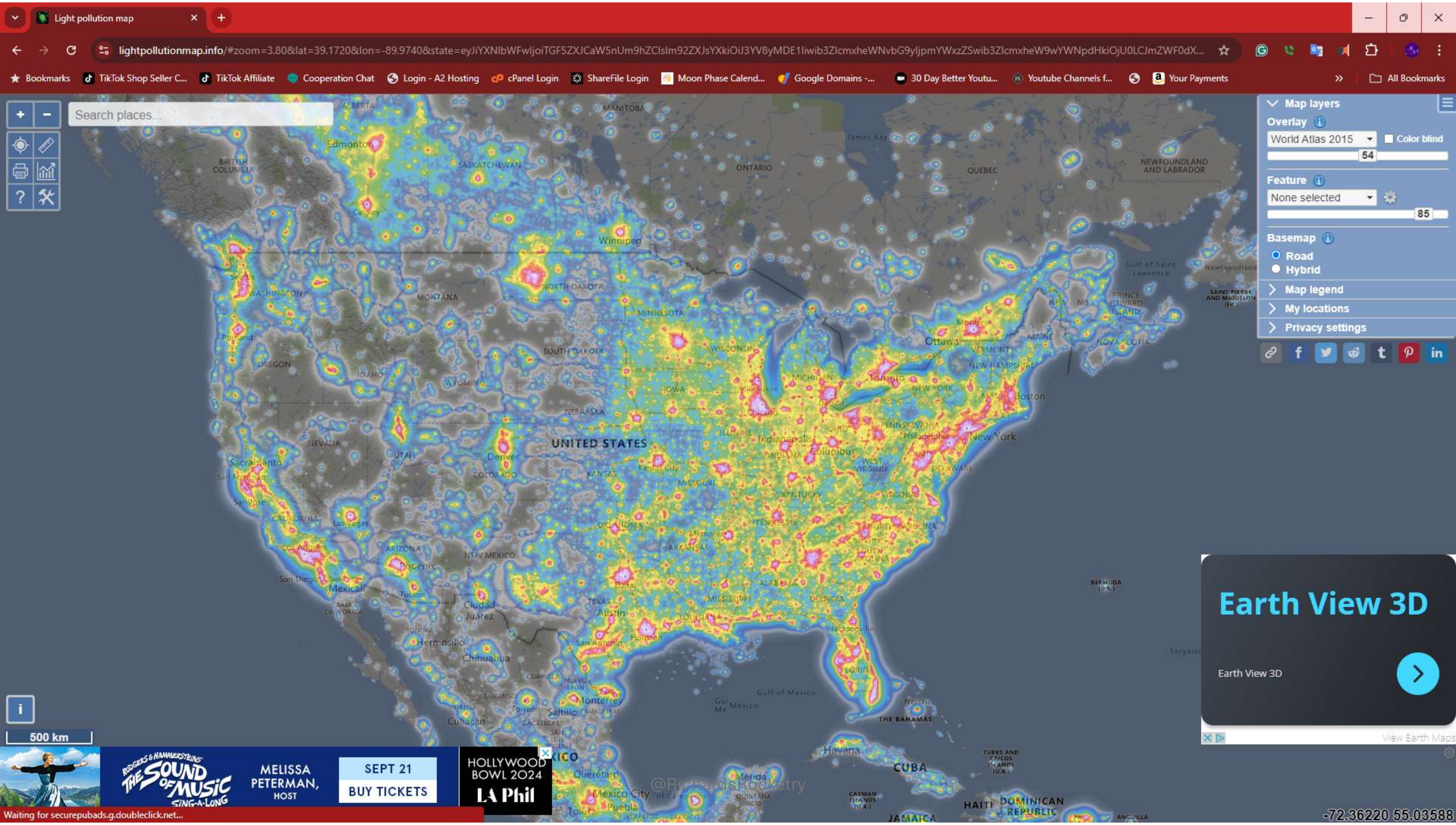
  Oct 22: 3 hours 50 minutes

  Oct 24: 4 hours

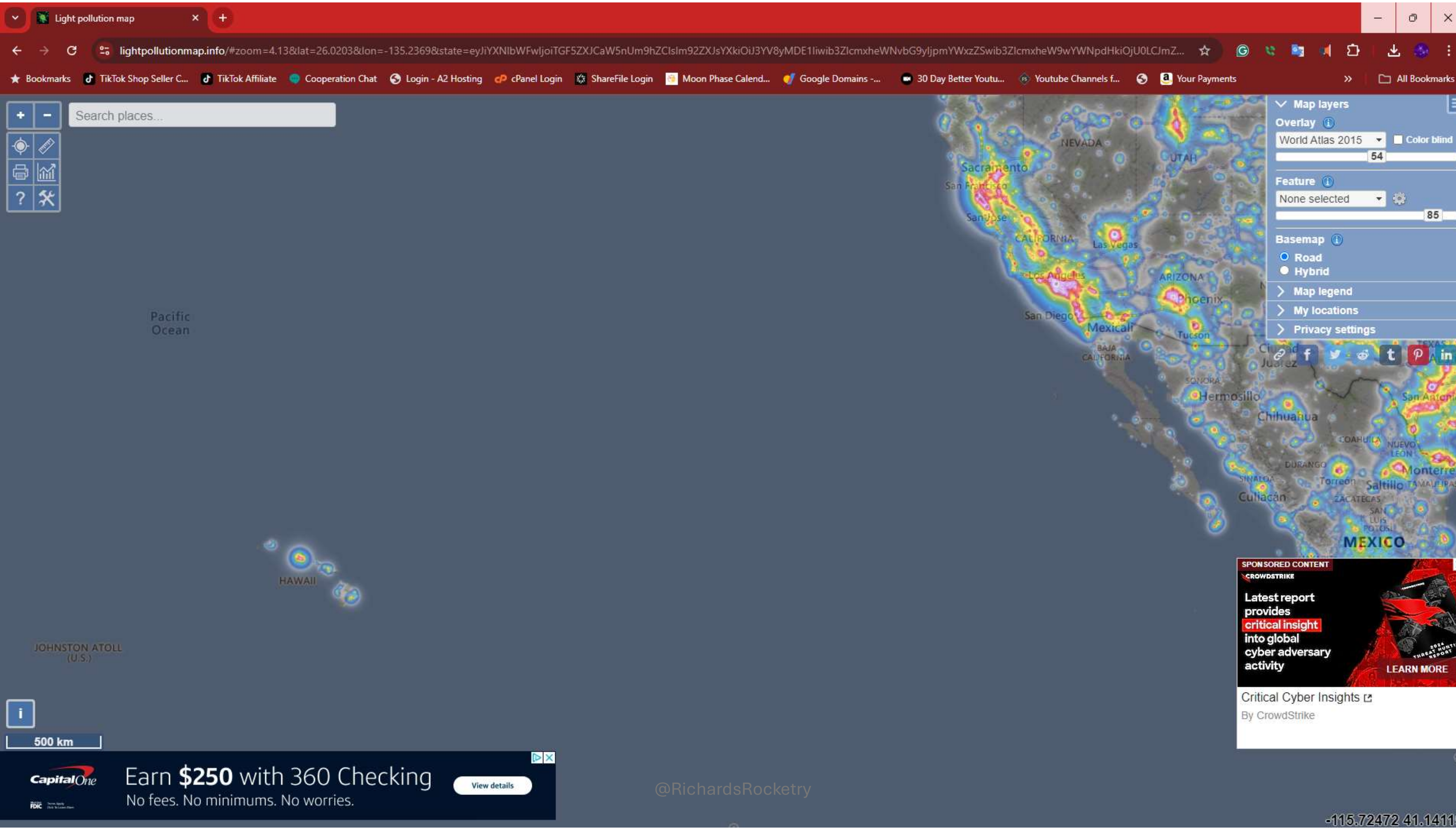

C/2023 A3 (Tsuchinshan-ATLAS)
Type: comet (non-periodic)
Magnitude: 2.42 (reduced to 2.66 by 1.80 Airmasses)
Absolute Magnitude: 4.50
RA/Dec (J2000.0): 17h00m14.87s/+2°58'46.1"
RA/Dec (on date): 17h01m29.35s/+2°56'30.5"
HA/Dec: 3h22m25.59s/+2°57'28.0" (apparent)
Az./Alt.: +247°58'46.0"/+33°38'33.3" (apparent)
Gal. long./lat.: +22°17'00.0"/+25°59'17.2"
Supergal. long./lat.: +137°46'22.1"/+59°01'24.9"
Ecl. long./lat. (J2000.0): +253°25'10.7"/+25°33'46.8"
Ecl. long./lat. (on date): +253°45'56.9"/+25°33'35.4"
Ecliptic obliquity (on date): +23°26'19.0"
Mean Sidereal Time: 20h23m59.7s
Apparent Sidereal Time: 20h23m59.6s
Rise: 9h34m
Transit: 15h46m
Set: 21h58m
Parallactic Angle: +50°16'26.7"
IAU Constellation: Oph
Hourly motion: +0°06'07" towards 86.1°
Hourly motion: dα=+0°06'07" dδ=+0°00'25"
Elongation: 49°12'46.3"
Elong. in Ecl.Long.: E43°36'19"
Phase angle: +87°58'12.0"
Distance from Sun: 0.754 AU (112.762 M km)
Distance: 0.677 AU (101.217 M km)
Light time: 0h05m37.6s
Orbital velocity: 48.519 km/s
Core diameter: 10.0 km
Coma diameter (estimate): 658000 km (+0°22'21")
Gas tail length (estimate): 16 M km (+8°58'27")
Discovered: 9 January 2023
Solar Az./Alt.: +264°42'34"/-12°56'36"
Lunar Az./Alt.: +18°23'20"/-26°35'05"
C/2023 A3 (Tsuchinshan-ATLAS)
Ophiuchus
Serpens
Corona Borealis
Bootes
Arcturus
Canes Venatici
Scorpius
Venus
Libra
SW
W
NW
Date: Tuesday, October 22, 2024 at 7:09 PM (1 hour after sunset)
33° altitude angle.*
Comet Set Time: 9:57 PM
Sunset: 6:09 PM
1 hour after sunset comet alt angle: 33°
30 minutes after sunset comet alt angle: 39°
The moon will not be visible but will rise at 10:40 PM and illuminated 69%.
The apparent total magnitude (without forward scattering) is projected to be 4.28**
*Location: Los Angeles, California
**COBS data on Aug 30, 2024
Date and Time
Date and Time
Julian Day
2024 – 10 – 22
19 : 9 : 0
@RichardsRocketry
Earth, Los Angeles, 96 m
FOV 61.9°
18.8 FPS
2024-10-22 19:09:00 UTC-07:00

LOCATION, LOCATION, LOCATION

- Dark sky
- Unobstructed horizon
- Weather (Cloud) forecasts



Light pollution map
lightpollutionmap.info/#zoom=3.80&lat=39.1720&lon=-89.9740&state=eyJiYXNlbWFwIjoiTGF5ZXJCaW5nUm9hZCIsIm92ZXJsYXkiOiJ3YV8yMDE1Iiwib3ZlcmxheWNvbG9yIjpmYWxzZSwib3ZlcmxheW9wYWNpdHkiOjU0LCJmZWF0dX...
Bookmarks
TikTok Shop Seller C...
TikTok Affiliate
Cooperation Chat
Login - A2 Hosting
cPanel Login
ShareFile Login
Moon Phase Calend...
Google Domains -...
30 Day Better Youtu...
Youtube Channels f...
Your Payments
All Bookmarks
Search places...
Map layers
Overlay
World Atlas 2015
Color blind
54
Feature
None selected
85
Basemap
Road
Hybrid
Map legend
My locations
Privacy settings
UNITED STATES
Edmonton
Calgary
Winnipeg
Ottawa
Toronto
Chicago
Indianapolis
Columbus
New York
Boston
Philadelphia
Denver
Sacramento
Phoenix
Mexicali
Hermosillo
Chihuahua
Monterrey
Austin
Houston
Havana
CUBA
Earth View 3D
Earth View 3D
500 km
MELISSA PETERMAN, HOST
SEPT 21
BUY TICKETS
HOLLYWOOD BOWL 2024
LA Phil
Waiting for securepubads.g.doubleclick.net...
-72.36220 55.03588


Light pollution map
lightpollutionmap.info/#zoom=4.13&lat=26.0203&lon=-135.2369&state=eyJiYXNlbWFwIjoiTGF5ZXJCaW5nUm9hZCIsIm92ZXJsYXkiOiJ3YV8yMDE1Iiwib3ZlcmxheWNvbG9yIjpmYWxzZSwib3ZlcmxheW9wYWNpdHkiOjU0LCJmZ...
Bookmarks
TikTok Shop Seller C...
TikTok Affiliate
Cooperation Chat
Login - A2 Hosting
cPanel Login
ShareFile Login
Moon Phase Calend...
Google Domains -...
30 Day Better Youtu...
Youtube Channels f...
Your Payments
All Bookmarks
Search places...
Map layers
Overlay
World Atlas 2015
Color blind
54
Feature
None selected
85
Basemap
Road
Hybrid
Map legend
My locations
Privacy settings
Pacific Ocean
HAWAII
JOHNSTON ATOLL (U.S.)
NEVADA
UTAH
Sacramento
San Francisco
San Jose
CALIFORNIA
Las Vegas
Los Angeles
ARIZONA
Phoenix
San Diego
Mexicali
Tucson
BAJA CALIFORNIA
Ciudad Juárez
SONORA
Hermosillo
Chihuahua
San Antonio
COAHUILA
NUEVO LEÓN
Monterrey
DURANGO
SINALOA
Torreón
Saltillo
TAMAULIPAS
Culiacán
ZACATECAS
SAN LUIS POTOSÍ
MEXICO
SPONSORED CONTENT
CROWDSTRIKE
Latest report provides critical insight into global cyber adversary activity
LEARN MORE
Critical Cyber Insights
By CrowdStrike
500 km
Capital One
Earn $250 with 360 Checking
No fees. No minimums. No worries.
View details
@RichardsRocketry
-115.72472 41.14119

Date	Comet Rise Time	Comet duration w/ sunrise/set	Magnitude	Time Sun +/- 1 hour	Alt° at Sun +/- 1 hour	Moon Illumination	Moonrise	Moonset	Moon Illumination	Sunrise	Sunset
Friday, September 27,	5:28 AM	1:17	2.81	5:45 AM	3°	22%	1:54 AM	4:29 PM	22%	6:45 AM	6:41 PM
Saturday, September 28,	5:27 AM	1:18	2.70	5:45 AM	3°	14%	2:55 AM	5:00 PM	14%	6:45 AM	6:40 PM
Sunday, September 29,	5:28 AM	1:18	2.61	5:46 AM	3°	8%	3:54 AM	5:26 PM	8%	6:46 AM	6:39 PM
Monday, September 30,	5:30 AM	1:17	2.53	5:47 AM	3°	4%	4:51 AM	5:50 PM	4%	6:47 AM	6:37 PM
Tuesday, October 1,	5:32 AM	1:15	2.46	5:47 AM	2°	Set	5:47 AM	6:13 PM	1%	6:47 AM	6:36 PM
Wednesday, October 2,	5:36 AM	1:12	2.40	5:48 AM	2°	Set	6:42 AM	6:35 PM	0%	6:48 AM	6:34 PM
Thursday, October 3,	5:41 AM	1:08	2.36	5:49 AM	1°	Set	7:37 AM	6:59 PM	1%	6:49 AM	6:33 PM
Friday, October 4,	5:48 AM	1:02	2.32	5:50 AM	0°	Set	8:34 AM	7:25 PM	4%	6:50 AM	6:32 PM
Saturday, October 5,	5:56 AM	0:54	2.29	5:50 AM	-1°	Set	9:32 AM	7:55 PM	9%	6:50 AM	6:30 PM
Sunday, October 6,	6:05 AM	0:46	2.28	5:51 AM	-3°	Set	10:32 AM	8:30 PM	15%	6:51 AM	6:29 PM
Monday, October 7,	6:18 AM	0:34	2.28	5:52 AM	-5°	Set	11:33 AM	9:11 PM	23%	6:52 AM	6:28 PM
Tuesday, October 8,			2.29				12:33 PM	10:01 PM	32%	6:53 AM	6:26 PM
Wednesday, October 9,			2.31				1:30 PM	10:59 PM	42%	6:53 AM	6:25 PM
Thursday, October 10,			2.37				2:21 PM	12:03 AM	53%	6:54 AM	6:24 PM
Friday, October 11,	7:23 PM	1:00	2.45	7:23 PM	0°	65%	3:06 PM	12:03 AM	65%	6:55 AM	6:23 PM
Saturday, October 12,	7:43 PM	1:22	2.54	7:21 PM	4°	75%	3:45 PM	1:12 AM	75%	6:56 AM	6:21 PM
Sunday, October 13,	8:02 PM	1:42	2.66	7:20 PM	8°	85%	4:19 PM	2:23 AM	85%	6:57 AM	6:20 PM
Monday, October 14,	8:22 PM	2:03	2.80	7:19 PM	12°	93%	4:51 PM	3:35 AM	93%	6:57 AM	6:19 PM
Tuesday, October 15,	8:40 PM	2:22	2.96	7:18 PM	16°	98%	5:21 PM	4:47 AM	98%	6:58 AM	6:18 PM
Wednesday, October 16,	8:56 PM	2:40	3.13	7:16 PM	19°	99%	5:52 PM	5:59 AM	99%	6:59 AM	6:16 PM
Thursday, October 17,	9:10 PM	2:55	3.31	7:15 PM	22°	100%	6:25 PM	7:13 AM	100%	7:00 AM	6:15 PM
Friday, October 18,	9:22 PM	3:08	3.50	7:14 PM	25°	99%	7:03 PM	8:29 AM	99%	7:01 AM	6:14 PM
Saturday, October 19,	9:33 PM	3:20	3.70	7:13 PM	27°	Set	7:47 PM	9:45 AM	95%	7:01 AM	6:13 PM
Sunday, October 20,	9:40 PM	3:28	3.89	7:12 PM	30°	Set	8:39 PM	10:58 AM	88%	7:02 AM	6:12 PM
Monday, October 21,	9:49 PM	3:39	4.09	7:10 PM	31°	Set	9:37 PM	12:06 PM	79%	7:03 AM	6:10 PM
Tuesday, October 22,	9:57 PM	3:48	4.28	7:09 PM	33°	Set	10:40 PM	1:04 PM	69%	7:04 AM	6:09 PM
Wednesday, October 23,	10:03 PM	3:55	4.47	7:08 PM	34°	Set	11:44 PM	1:51 PM	58%	7:05 AM	6:08 PM
Thursday, October 24,	10:08 PM	4:01	4.65	7:07 PM	35°	Set	12:47 AM	2:30 PM	48%	7:06 AM	6:07 PM
Friday, October 25,	10:12 PM	4:06	4.83	7:06 PM	37°	Set	1:48 AM	3:02 PM	37%	7:07 AM	6:06 PM
Saturday, October 26,	10:14 PM	4:09	5.01	7:05 PM	37°	Set	2:45 AM	3:30 PM	28%	7:07 AM	6:05 PM
Sunday, October 27,	10:18 PM	4:14	5.18	7:04 PM	38°	Set	3:41 AM	3:55 PM	20%	7:08 AM	6:04 PM

* Times and comet angles are based on a Los Angeles, California location. Times and altitude angles will change based on your viewing spot, even within the same time zone.

Joshua Tree Astronomy Arts Theater

Clear Sky Chart

legend page

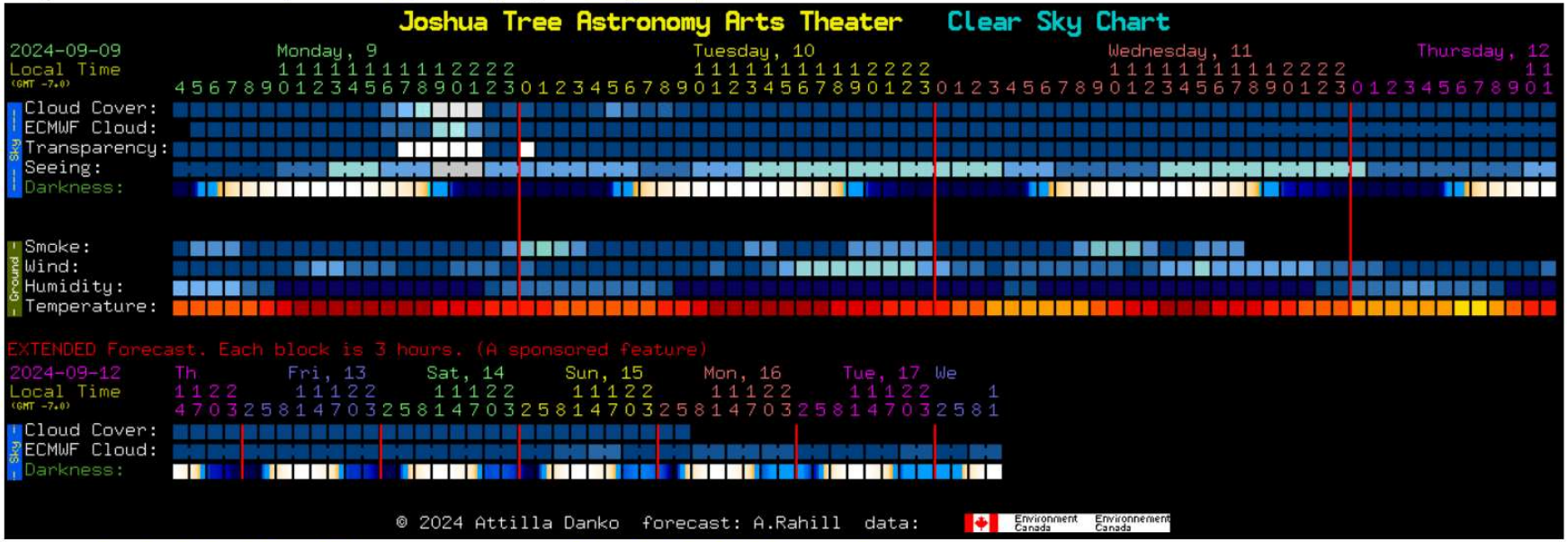
Image Control

1. Hold your mouse over a block to explain color and details.
2. Click on a forecast block to show full forecast map
3. Check box to Display color legend: ☐

Other Charts

All	List	Map
California:	List	Map
Within 60 mi:	List	Map
Within 180 mi:	List	Map

Last updated 2024-09-09 04:31:03. No Image below? Read this. Not showing todays data? Clear your cache.



Used by the Southern California Desert Video Astronomers. Located at Joshua Tree Lake RV & Campground.

Page Contents

What is it?

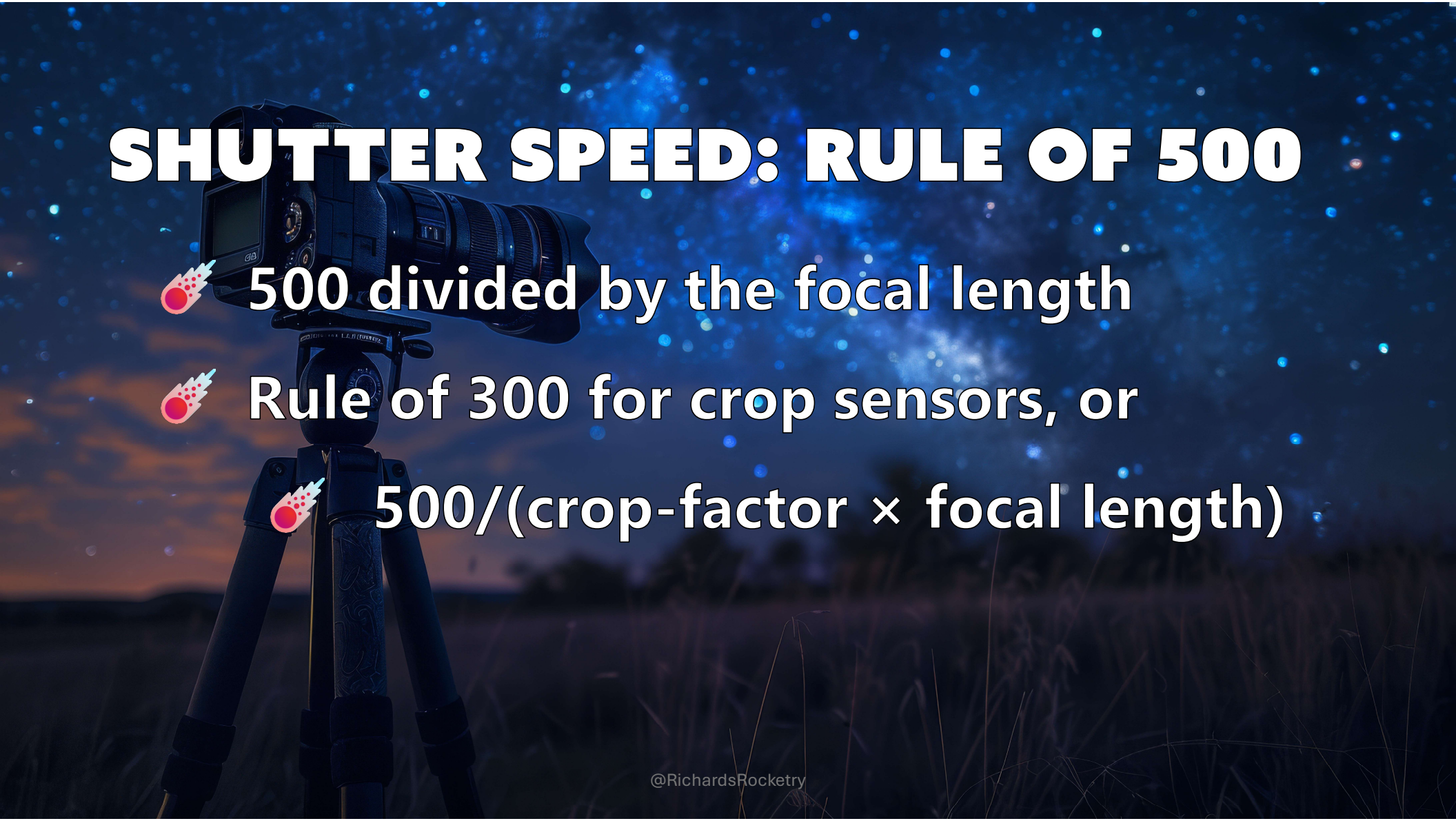
Sun & Moon Data | Road Map | Topo Map | Civil Weather | Satellites: Predictions

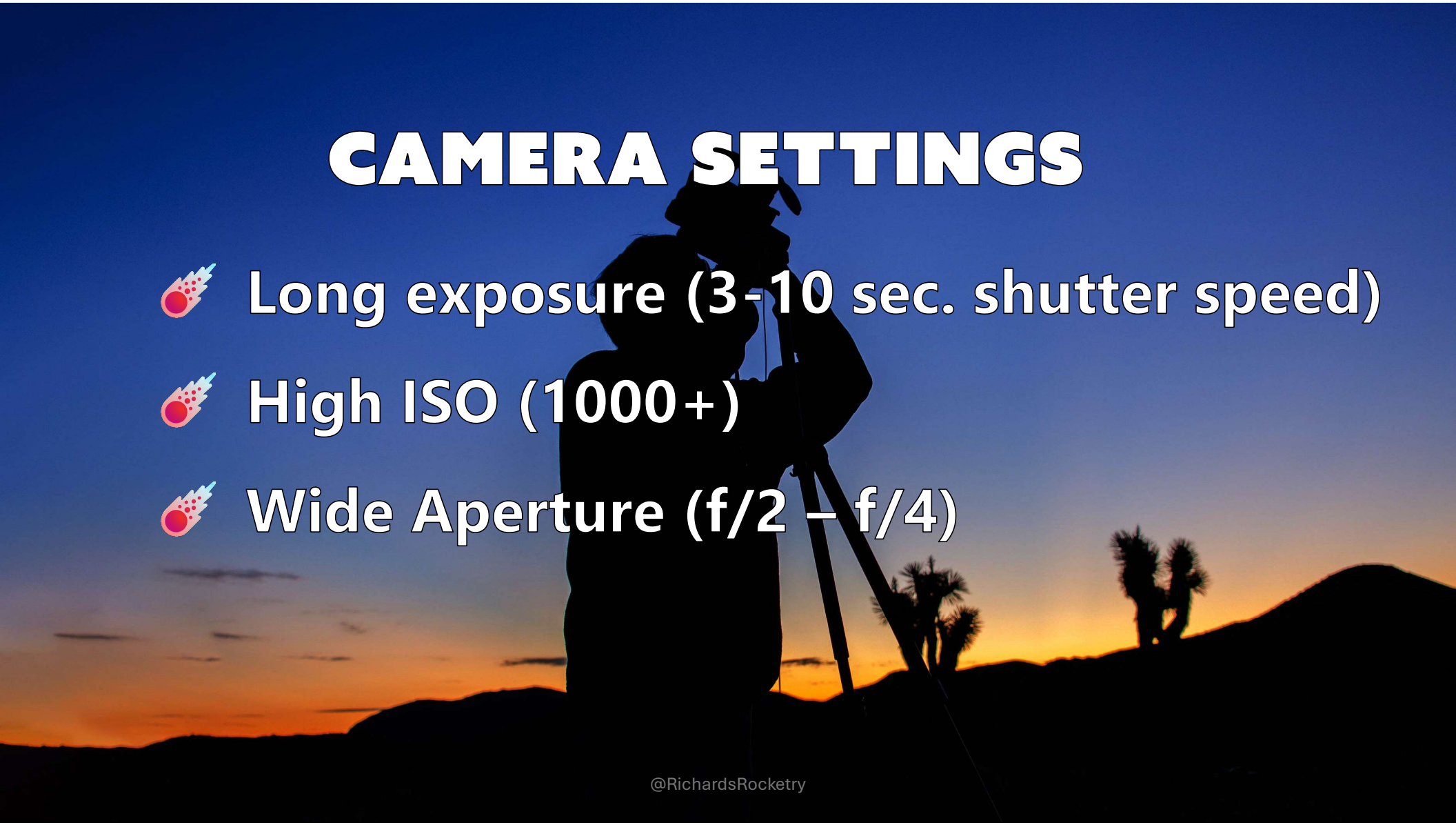

NO SERVICE
@RichardsRocketry


@RichardsRocketry


SOUTHERN CALIFORNIA SPOTS
Joshua Tree National Park
Cerro Noroeste
Anza-Borrego
@RichardsRocketry


PHOTOGRAPHY EQUIPMENT
Telephoto Lens
Tripod
Remote Shutter Release
@RichardsRocketry


SHUTTER SPEED: RULE OF 500
500 divided by the focal length
Rule of 300 for crop sensors, or
500/(crop-factor × focal length)
@RichardsRocketry


CAMERA SETTINGS
Long exposure (3-10 sec. shutter speed)
High ISO (1000+)
Wide Aperture (f/2 – f/4)
@RichardsRocketry


FOCUS TIPS
Use a bright star/planet
Back off Infinity ∞ a little
Test until sharp
@RichardsRocketry


PRACTICE
Some days are short duration
Practice adjusting settings quickly
Tape to set star focus the night before
@RichardsRocketry


C/2020 F3 Neowise
Altitude 4 degrees above NE
1h 20m before sunrise
Moon 63% illuminated
Magnitude: 0.8
Tail approximately 12° long
f/2.9
105mm focal length
Full frame sensor
Exposure 6 seconds
@RichardsRocketry

SEPTEMBER 2024

Possible Best Days Possible Worse Days

MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY	SUNDAY
23	24	25	26	27	28	29

OCTOBER 2024

MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY	SUNDAY
30	1	2	3	4 ← Morning Views Only	5	6 ⊣
7	8	9	10	11 ⊢ Evening Views Only	12	13 →
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30	31	1	2	3