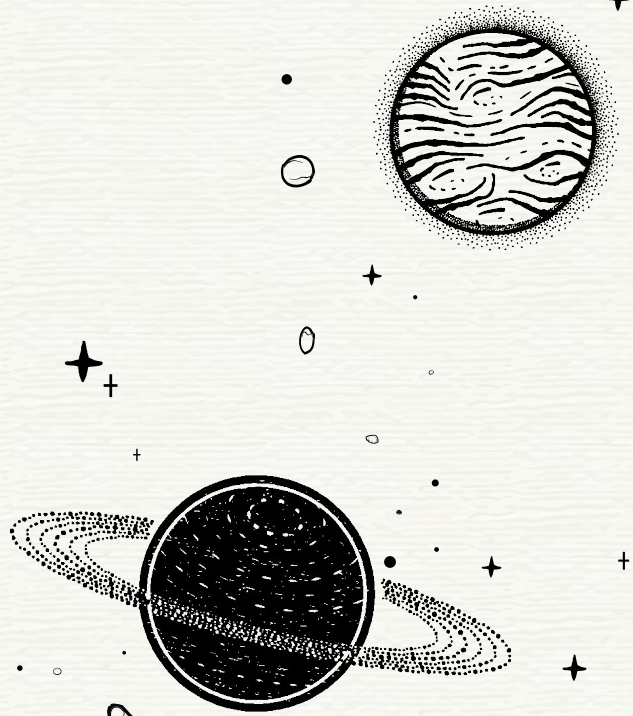
ASTROLINK

Exploring Comet C/2023 A3

(Tsuchinshan-ATLAS)



Quick Introductions

Welcome, everyone! Today we will explore **Comet C/2023 A3**.

Quick Facts:

- **Discovery Date:** January 2023
- **Orbital Period:** 80,000 years

Agenda Highlights:

- Discovering the comet.
- Live telescope session with Astrolink.
- Latest updates and why it's special.
- Interactive discussion.

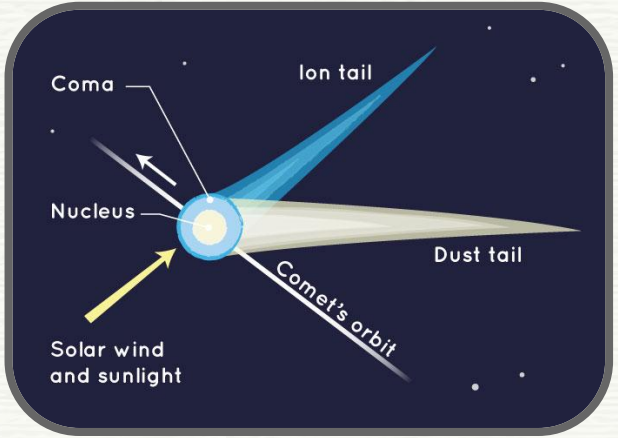
What is a Comet?

Definition

Comets are icy celestial bodies that release gas and dust, forming a glowing coma and tail when near the Sun

Key Characteristics

- Nucleus composed of ice, dust, and organic materials.
- Often called "cosmic snowballs."



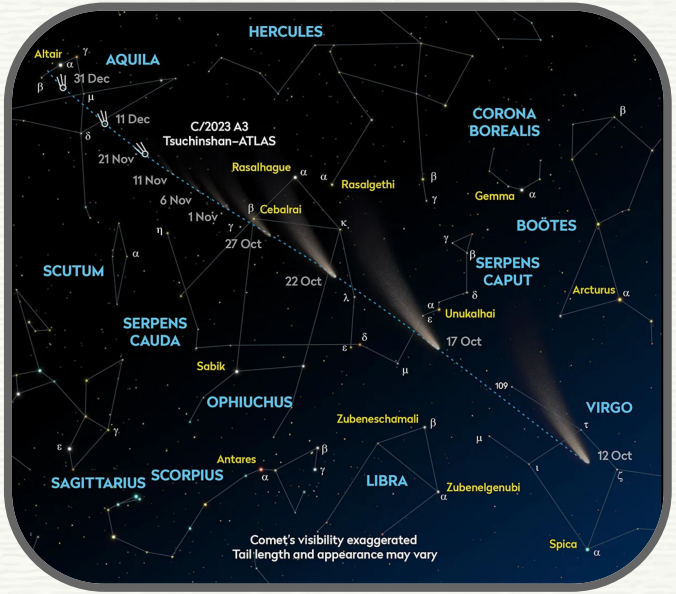
Discovery of C/2023 A3

When and Where:

- Discovered in January 2023.

Who Found It:

- Independently discovered by:
  - Tsuchinshan Observatory in China.
  - ATLAS project in Hawaii.



Introducing Astrolink

What Is Astrolink?

- A platform providing remote access to professional telescopes worldwide.

Why We're Using It Today:

- Allows us to observe Comet C/2023 A3 live

Live Observation Session

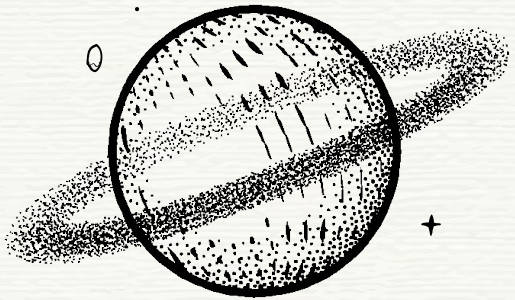
Fun Facts

Did You Know?

- Comets can sometimes develop two tails: one of dust and one of ionized gases.

Historical Context:

- Comets have been observed since ancient times and often interpreted as significant omens.



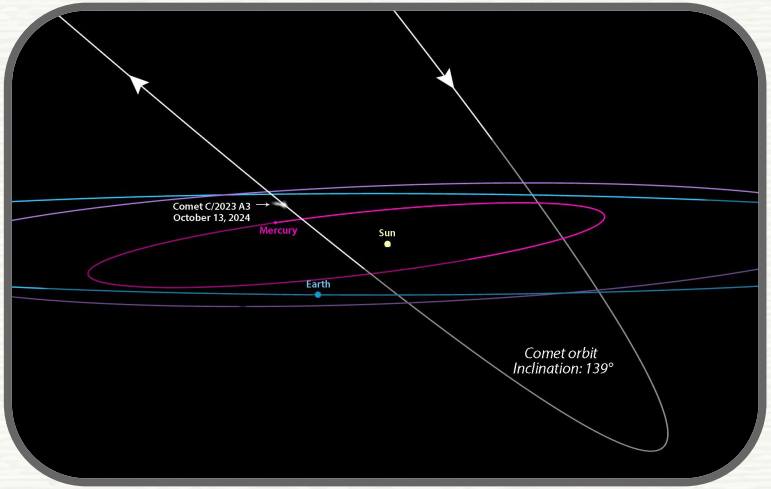
The Comet's Journey

Orbit Overview:

- Highly elongated orbit originating from the distant Oort Cloud.

Current Status:

- Inbound toward the inner solar system.
- Brightness increasing as it nears the Sun.



Where Is It Now?

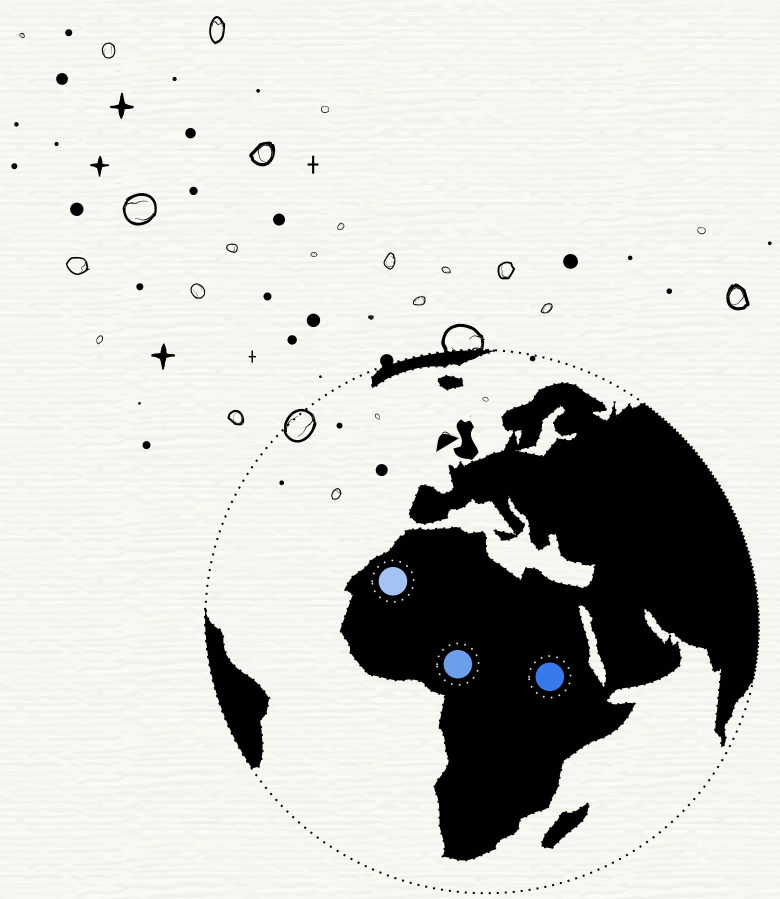
Current Position:

- Located in the constellation Serpens, at a distance of 84,336,965.9 kilometers from Earth.

Visibility:

- Observable with powerful telescopes like the one we're using.
- Not yet visible to the naked eye.

Predicting Its Brightness



Exciting Possibility:
May become bright enough to see without a telescope in late 2024.

01

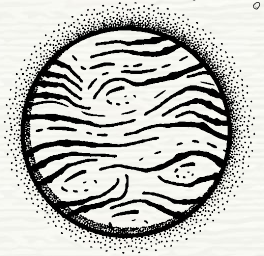
Expected Peak:
Anticipated around September-October 2024.

02

MERCURY
Comet brightness can be unpredictable, so stay tuned for updates.

03

Why This Comet Is Special



Scientific Opportunities:

- Studying materials unchanged since the solar system's formation.

Potential Spectacle:

- Could provide a remarkable display in the night sky.

Club Involvement:

- A unique opportunity for us to engage in observations and contribute to citizen science.

OPEN DISCUSSION!