



Rare NASA Visit to Uranus: A Cosmic Occurrence

Description

Editorial note: An iteration of this narrative was featured in CNN's Wonder Theory science newsletter. To receive it in your email inbox, [subscribe here](#).

CNN

The enigmas of space science—such as the inner workings of black holes, the genesis of galaxies, and the nature of dark matter—are concealed in the most distant corners of the cosmos.

Nonetheless, there remains a wealth of unknowns regarding our solar system, the celestial realm proximal to us.

Recent revelations from researchers have illuminated intriguing insights about Uranus, the seventh planet from our sun, and the hitherto unexplored side of the moon.

Existing comprehension of Uranus may be askew. Fresh findings propose that an anomalous event during the 1986 encounter of the Voyager 2 spacecraft potentially distorted the characterization of this icy giant.

Specifically, Voyager 2's observations of Uranus' magnetosphere strayed significantly from astronomers' anticipations.

A recent study revealed that the spacecraft's data gathering coincided with [rare intense solar wind conditions](#), occurring only 4% of the time, as explained by Jamie Jasinski, a space plasma physicist at NASA's Jet Propulsion Laboratory in Pasadena, California. These extraordinary circumstances likely distorted the collected data.

Fortunately, conducting a dedicated mission to investigate Uranus in the future is a priority for NASA, according to a report from 2022.



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Five decades ago this month, paleoanthropologist Don Johanson unearthed the world-famous fossil known as Lucy, providing the initial evidence that ancient hominins walked upright 3.2 million years ago.

The groundbreaking discovery almost eluded Johanson, who stumbled upon a fragment of bone in Ethiopia's Afar region on November 24, 1974. His fortuitous find sparked decades of scholarly inquiry into the human narrative.

Johanson and his team spent 2 ½ weeks delicately excavating Lucy's delicate remains, cementing her legacy as the first documented *Australopithecus afarensis* specimen and inaugurating a new phase in human evolutionary research.

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Scientists in California have pinpointed a novel sea slug species. This extraordinary creature possesses a gelatinous, bioluminescent body that emits light when threatened, dwelling in the profound, frigid depths between 3,300 feet (1,000 meters) and 13,100 feet (4,000 meters) beneath the ocean's surface.

What distinguishes *Bathylodeus caudactylus* is not only its appearance but also its habitat—far removed from the typical seafloor or coastal environments, residing in the midnight zone, a realm seldom explored by sea slugs.

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Vocabulary List:

1. **Enigmas** /ɪˈnɪɡ.mə/ (noun): Something that is mysterious or difficult to understand.
2. **Proximal** /ˈprɒk.sɪ.məl/ (adjective): Situated nearer to the center of the body or the point of attachment.
3. **Astronomers** /əˈstrɒn.ə.mərs/ (noun): Scientists who study celestial bodies and the universe.
4. **Hitherto** /ˈhɪð.ər.tuː/ (adverb): Up to this point in time; until now.
5. **Distorted** /dɪsˈtɔː.tɪd/ (adjective): Pulled or twisted out of shape; misrepresented.
6. **Gelatinous** /dʒəˈlæt.i.nəs/ (adjective): Having a jelly-like consistency.

Comprehension Questions



Multiple Choice

1. What are some enigmas of space science mentioned in the text?
Option: The inner workings of black holes
Option: The genesis of galaxies
Option: The nature of dark matter
Option: All of the above
2. Which planet is mentioned as the seventh planet from our sun in the text?
Option: Mars
Option: Jupiter
Option: Uranus
Option: Earth
3. Who unearthed the world-famous fossil known as Lucy?
Option: Christopher Columbus
Option: Don Johanson
Option: Isaac Newton
Option: Marie Curie
4. Where does the newly identified sea slug species, *Bathylodius caudactylus*, dwell?
Option: Surface waters
Option: Deep ocean trenches
Option: Coastal waters
Option: Polar regions
5. What did a recent study reveal about Voyager 2's observations of Uranus' magnetosphere?
Option: They were accurate
Option: They strayed significantly from astronomers' anticipations
Option: They were inconclusive
Option: They occurred in 2024
6. What is a primary focus for NASA according to a report from 2022?
Option: Exploring Mars
Option: Studying supernovas
Option: Investigating Uranus
Option: Building lunar habitats



True-False

7. There remains a wealth of unknowns regarding our solar system according to the text.
8. Don Johanson and his team spent one month excavating Lucy's remains.
9. Bathydevius caudactylus is a sea slug species residing in shallow coastal waters.
10. A recent study concluded that Voyager 2's observations of Uranus were accurate.
11. NASA has no plans to investigate Uranus in the future according to a report from 2022.
12. The enigmas of space science mentioned in the text include the nature of black holes.
13. The world-famous fossil known as Lucy provided evidence that ancient hominins walked upright 3.2 million years ago.
14. Scientists have pinpointed a novel sea slug species dwelling between 3,300 feet (1,000 meters) and 13,100 feet (4,000 meters) beneath the ocean's surface.

Gap-Fill

15. Existing comprehension of Uranus may be askew due to an anomalous event during the Voyager 2 spacecraft's encounter in _____.
16. Voyager 2's observations of Uranus' magnetosphere strayed significantly from astronomers' anticipations due to _____ conditions.
17. A recent study revealed that Voyager 2's data gathering coincided with only 4% of the time due to _____ conditions.
18. A dedicated mission to investigate Uranus is a priority for NASA based on a report from _____.



Answer

Multiple Choice: 1. All of the above 2. Uranus 3. Don Johanson 4. Deep ocean trenches 5. They strayed significantly from astronomers' anticipations 6. Investigating Uranus

True-False: 7. True 8. False 9. False 10. False 11. False 12. True 13. False 14. False

Gap-Fill: 15. 1986 16. rare intense solar wind 18. 2022

Answer

CATEGORY

1. Sci/Tech - LEVEL6

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