

Cosmology/Astrophysics News

An aerial photograph of a desert landscape. In the center-left, there is a large, crumpled object with red and white stripes, resembling a flag or a piece of fabric. To the right of this object, there is a dark, rounded rock sitting on the sand. The ground is sandy with scattered small green bushes and patches of light-colored sand.

OSIRIS asteroid sample returned to Earth

September 2023 for Rose City Astronomers SIG

<http://101iq.com/RCA>

Nature – August 31, 2023

- India lands on Moon's south pole
 - <https://www.nature.com/articles/d41586-023-02690-7>
- A bold spacecraft reveals source of the sun's mysterious wind
 - <https://www.nature.com/articles/d41586-023-02668-5>
- A binary pulsar in a 53-minute orbit
 - <https://www.nature.com/articles/s41586-023-06308-w>

Science – September 1, 2023

- Indian Moon lander begins search for ice
 - <https://www.science.org/content/article/india-makes-history-landing-spacecraft-near-moon-s-south-pole>
- Magnetic field halts accretion
 - <https://arxiv.org/pdf/2309.00200.pdf>

Nature – September 7, 2023

- Detection of stellar light from quasar host galaxies at redshifts above 6
 - <https://www.nature.com/articles/s41586-023-06345-5>
- Formation of the methyl cation by photochemistry in a protoplanetary disk
 - <https://www.nature.com/articles/s41586-023-06307-x>

Science – September 8, 2023

- Did interstellar debris fall to the sea floor?
 - <https://www.science.org/content/article/did-interstellar-debris-fall-sea-floor-claim-meets-sea-doubt>
- Simulated galaxies in the early universe
 - <https://phys.org/news/2023-07-simulations-formation-galaxies-cosmic-large-scale.html>
- Evidence for a radiation belt around a brown dwarf
 - <https://www.science.org/doi/10.1126/science.adg6635>

Nature – September 14, 2023

- Solar maximum: Historic flare's intensity revised
 - <https://iopscience.iop.org/article/10.3847/2041-8213/acd853/meta>
- An alien meteorite probably didn't slam into Earth. How will we know if one does?
 - <https://www.nature.com/articles/d41586-023-02823-y>
- India's sun mission will investigate space weather
 - <https://www.nature.com/articles/d41586-023-02811-2>
- Interstellar dust revealed by light from cosmic dawn
 - <https://www.nature.com/articles/d41586-023-02766-4>
- Subsecond periodic radio oscillations in a microquasar
 - <https://www.nature.com/articles/s41586-023-06336-6>

Science – September 15, 2023

- No cosmology/astrophysics this issue.

Nature – September 21, 2023

- India's Moon mission: Four things Chandrayaan-3 has taught scientists
 - <https://www.nature.com/articles/d41586-023-02852-7>
- Polarized thermal emission from dust in a galaxy at redshift 2.6
 - <https://www.nature.com/articles/s41586-023-06346-4>

Science – September 22, 2023

- Solar max set to arrive sooner than expected and stronger

- <https://www.science.org/content/article/peak-solar-activity-arriving-sooner-expected-reaching-levels-not-seen-20-years>

- The distribution of CO₂ on Europa indicates an internal source of carbon

- <https://astrobiology.com/2023/09/the-distribution-of-co2-on-europa-indicates-an-internal-source-of-carbon.html>

Miscellaneous

- I will post this monthly news possibly with zero or more videos and links to watch, as for example, these:
 - <https://www.youtube.com/watch?v=kF2QhM32ctk>
 - <https://www.youtube.com/watch?v=9F3WRMIZEy4>
 - <https://www.youtube.com/watch?v=HgTiMEfWkHE>
 - <https://www.youtube.com/watch?v=F360SGAI8Y>