

Jupiter's moon count jumps to 92, most in solar system

February 3 2023, by Marcia Dunn



This photo made available by NASA shows the planet Jupiter, captured by the Hubble Space Telescope, on June 27, 2019. On Friday, Feb. 3, 2023, scientists said they have discovered 12 new moons around the gas giant, putting the total count at a record-breaking 92. That's more than any other planet in our solar system. Credit: NASA, ESA, A. Simon/Goddard Space Flight Center, M.H. Wong/University of California, Berkeley via AP

Astronomers have discovered 12 new moons around Jupiter, putting the total count at a record-breaking 92.

That's more than any other planet in our solar system. Saturn, the one-time leader, comes in a close second with 83 confirmed moons.

The Jupiter moons were added recently to a list kept by the International Astronomical Union's Minor Planet Center, said Scott Sheppard of the Carnegie Institution, who was part of the team.

They were discovered using telescopes in Hawaii and Chile in 2021 and 2022, and their orbits were confirmed with follow-up observations.

These newest moons range in size from 0.6 miles to 2 miles (1 kilometer to 3 kilometers), according to Sheppard.

"I hope we can image one of these outer moons close-up in the near future to better determine their origins," he said in an email Friday.

In April, the European Space Agency is sending a spacecraft to Jupiter to study the planet and some of its biggest, [icy moons](#). And next year, NASA will launch the Europa Clipper to explore Jupiter's moon of the same name, which could harbor an ocean beneath its frozen crust.

Sheppard—who discovered a slew of moons around Saturn a few years ago and has taken part in 70 moon discoveries so far around Jupiter—expects to keep adding to the lunar tally of both gas giants.

Jupiter and Saturn are loaded with small moons, believed to be fragments of once bigger moons that collided with one another or with comets or asteroids, Sheppard said. The same goes for Uranus and Neptune, but they're so distant that it makes [moon](#)-spotting even harder.

For the record, Uranus has 27 confirmed moons, Neptune 14, Mars two and Earth one. Venus and Mercury come up empty.

Jupiter's newly discovered moons have yet to be named. Sheppard said only half of them are big enough—at least 1 mile (1.5 kilometers) or so—to warrant a name.

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