

How did scientists find the two new planets?

But the scientists also used data from ground-based telescopes to confirm the existence of the two new planets. These telescopes measured the "wobble" of the star, caused by the gravitational tugs from orbiting planets, which yields the planets' mass.

How many exoplanets have been discovered?

NASA's Transiting Exoplanet Survey Satellite (TESS) launched in 2018 and has identified thousands of exoplanet candidates and confirmed over 320 planets. NASA's flagship space telescopes Spitzer, Hubble, and most recently the James Webb Space Telescope have also been used to discover and study exoplanets.

Which planet is the first habitable Earth-size planet spotted by NASA?

TOI 700 is the first potentially habitable Earth-size planet spotted by NASA's planet-hunting TESS mission. Artist's impression of the exoplanet WASP-121 b. It belongs to the class of hot Jupiters. Due to its proximity to the central star, the planet's rotation is tidally locked to its orbit around it.

When was the first exoplanet discovered?

Just about 31 years ago, in 1992, the first exoplanets were confirmed when scientists detected twin planets Poltergeist and Phobos orbiting the pulsar PSR B1257+12. In March 2022, just last year, scientists celebrated passing 5,000 exoplanets discovered.

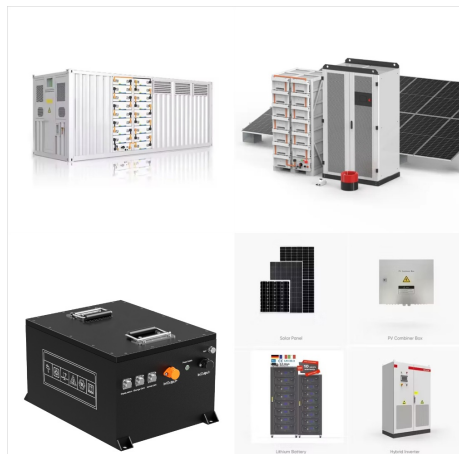
What planets are on a 37-day orbit?

In 2020, Gilbert and others announced the discovery of the Earth-size, habitable-zone planet d, which is on a 37-day orbit, along with two other worlds. The innermost planet, TOI 700 b, is about 90% Earth's size and orbits the star every 10 days. TOI 700 c is over 2.5 times bigger than Earth and completes an orbit every 16 days.

Are there any exoplanets in the universe?

Small, cool M dwarf stars like TOI 700 are common in the universe, and many have been found to host exoplanets in recent years, like the TRAPPIST-1 system and its seven exoplanets that the James Webb Space Telescope will observe.

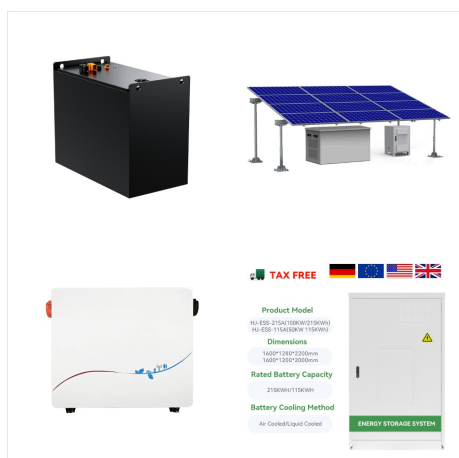
# RECENTLY DISCOVERED PLANETS IN OUR SOLAR SYSTEM



Researchers confirmed an exoplanet, a planet that orbits another star, using NASA's James Webb Space Telescope for the first time. Formally classified as LHS 475 b, the planet is almost exactly the same size as our own, clocking in at 99% of Earth's diameter.



This artist's impression shows a close-up view of Proxima d, a planet candidate recently found orbiting the red dwarf star Proxima Centauri, the closest star to the Solar System. The planet is

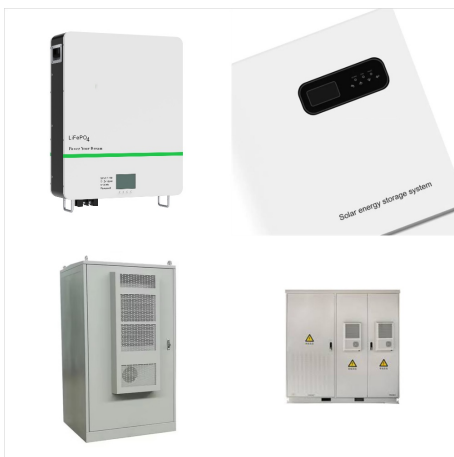


Although LHS 475 b is closer to its star than any planet in our solar system, its red dwarf star is less than half the temperature of the Sun, A newly discovered "super-Earth" dwells in the habitable zone of its parent star ??? and might have a roughly Earth-sized companion. January 31, 2024

# RECENTLY DISCOVERED PLANETS IN OUR SOLAR SYSTEM



Finding just three planets around this spinning star essentially opened the floodgates, said Alexander Wolszczan, the lead author on the paper that, 30 years ago, unveiled the first planets to be confirmed outside our solar system. "If you can find planets around a neutron star, planets have to be basically everywhere," Wolszczan said.



Astronomers announced today the first discovery of a new class of planets beyond our solar system about 10 to 20 times the size of Earth - far smaller than any previously detected. This artist's concept shows the newly discovered Neptune-sized extrasolar planet circling the star Gliese 436. In this depiction, the planet appears gaseous like



Most known exoplanets orbit closely around their stars, but the MIT-led TESS mission has discovered a rare system containing two planets with much more distant orbits, one of which has the longest orbital period that TESS has detected to date. The planets are circling TOI-4600, a nearby star that is 815 light years from Earth.

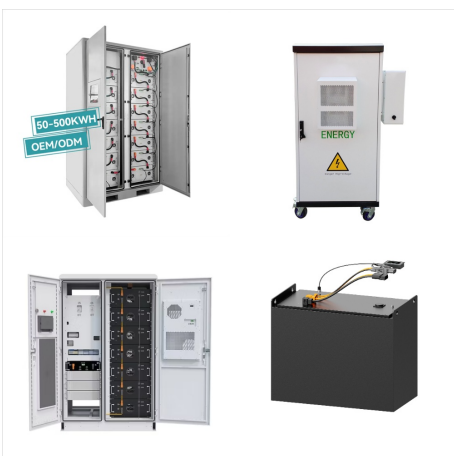
# RECENTLY DISCOVERED PLANETS IN OUR SOLAR SYSTEM



Using data from NASA's Transiting Exoplanet Survey Satellite, scientists have identified an Earth-size world, called TOI 700 e, orbiting within the habitable zone of its star ??? the range of distances where liquid water could occur on a planet's surface. The world is 95% Earth's size and likely rocky. Astronomers previously discovered three planets in this system, called ???



An exoplanet is any planet beyond our solar system. Most of them orbit other stars, but some free-floating exoplanets, called rogue planets, are untethered to any star. We've confirmed more than 5,600 exoplanets out of the billions that we believe exist.



On Aug. 24, 2023, more than three decades after the first confirmation of planets beyond our own solar system, scientists announced the discovery of six new exoplanets, stretching that number to 5,502.



# RECENTLY DISCOVERED PLANETS IN OUR SOLAR SYSTEM



A system of seven sweltering planets has been revealed by continued study of data from NASA's retired Kepler space telescope: Each one is bathed in more radiant heat from their host star per area than any planet in our solar system. Also unlike any of our immediate neighbors, all seven planets in this system, named Kepler-385, are larger than Earth but ???



And in January, the telescope discovered an exoplanet outside our solar system that shares similar qualities with Earth. Slightly smaller than Earth, the exoplanet named LHS 475 b was found to be



Astronomers previously discovered three planets in this system, called TOI 700 b, c, and d. Planet d also orbits in the habitable zone. But scientists needed an additional year of TESS observations to discover TOI 700 e.

# RECENTLY DISCOVERED PLANETS IN OUR SOLAR SYSTEM



The six newly discovered planets are between two and three times the size of Earth. Although our own solar system does not contain any sub-Neptunes, they are thought to be the most common type



Pluto was considered the ninth major planet in our solar system until the definition of "planet" was changed by the International Astronomical Union (IAU) in 2016. This new definition reclassified Pluto as a dwarf planet. Even before the IAU action, back when it was discovered, it was thought that Pluto was as massive as Earth.



The existence of a moon located outside our solar system has never been confirmed but a new NASA-led study may provide indirect evidence for one. New research done at NASA's Jet Propulsion Laboratory reveals ???

# RECENTLY DISCOVERED PLANETS IN OUR SOLAR SYSTEM



The timeline of discovery of Solar System planets and their natural satellites charts the progress of the discovery of new bodies over history. Each object is listed in chronological order of its discovery (multiple dates occur when the moments of imaging, observation, and publication differ), identified through its various designations (including temporary and permanent schemes), and ???



The existence of a moon located outside our solar system has never been confirmed but a new NASA-led study may provide indirect evidence for one. New research done at NASA's Jet Propulsion Laboratory reveals potential signs of a rocky, volcanic moon orbiting an exoplanet 635 light-years from Earth.



This artist's impression shows a close-up view of Proxima d, a planet candidate recently found orbiting the red dwarf star Proxima Centauri, the closest star to the Solar System. The planet is

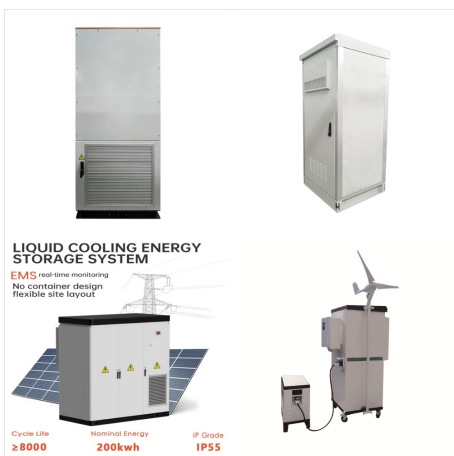
# RECENTLY DISCOVERED PLANETS IN OUR SOLAR SYSTEM



The more than 5,000 exoplanets confirmed in our galaxy so far include a variety of types ??? some that are similar to planets in our solar system, others vastly different. Among these are a mysterious variety known as "super-Earths" because they are ???



A newly discovered "super-Earth" dwells in the habitable zone of its parent star ??? and might have a roughly Earth-sized companion. planets beyond our solar system. The newest spaceborne instruments, including those onboard NASA's James Webb Space Telescope, are designed not just to detect these distant worlds, but to reveal some of



NASA's Transiting Exoplanet Survey Satellite (TESS) will find similar planets in the habitable zone in the stellar backyard of our solar system in 2018. One of TESS's goals is to find planets orbiting nearby M-dwarf stars like Proxima Centauri. "It's great news just to know that M-dwarf planets could be as common as we think they are," Seager said.



# RECENTLY DISCOVERED PLANETS IN OUR SOLAR SYSTEM



Two teams of scientists have discovered a theoretically habitable planet, smaller than Earth but bigger than Venus, orbiting a small star about 40 light-years away.. The exoplanet, named Gliese