

Officials Detect 2,000 Planets Outside Milky Way For First Time

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For the first time ever, astrophysicists have discovered a large group of exoplanets outside of the Milky Way galaxy, according to a study published Friday in *The Astrophysical Journal Letters*.

University of Oklahoma researchers were able to detect an estimated 2,000 planets, ranging in mass from the size of Earth's moon to the mass of the Jupiter, by examining data gathered by the National Aeronautics and Space Administration's Chandra X-ray Observatory.

Though exoplanets have been found before, what distinguishes this find from previous ones is that this is the first time that there has been confirmed evidence of planets outside of our galaxy.



## [NASA Goddard](#)

Researchers managed to detect the extragalactic planets by using gravitational microlensing, an astronomical phenomenon that allows scientists to find objects in space by using light bent by a gravitational field.

"We are very excited about this discovery, this is the first time anyone has discovered planets outside our galaxy," Xinyu Dai, lead researcher of the study, said in a statement. "These small planets are the best candidate for the signature we observed in this study using the microlensing technique. We analyzed the high frequency of the signature by modeling the data to determine the mass."

In a separate statement, fellow study author Eduardo Guerras indicated that the planets are in a galaxy roughly 3.8 billion light years away.

"This galaxy is located 3.8 billion light years away and there is not the slightest chance of observing these planets directly, not even with the best telescope one can imagine in a science fiction scenario," Guerras noted. "However, we are able to study them, unveil their presence and even have an idea of their masses."

"This is very cool science," he added.

In addition to using the Chandra observatory, Dai and Guerras also used microlensing models designed at the university's OU Supercomputing Center for Education and Research.