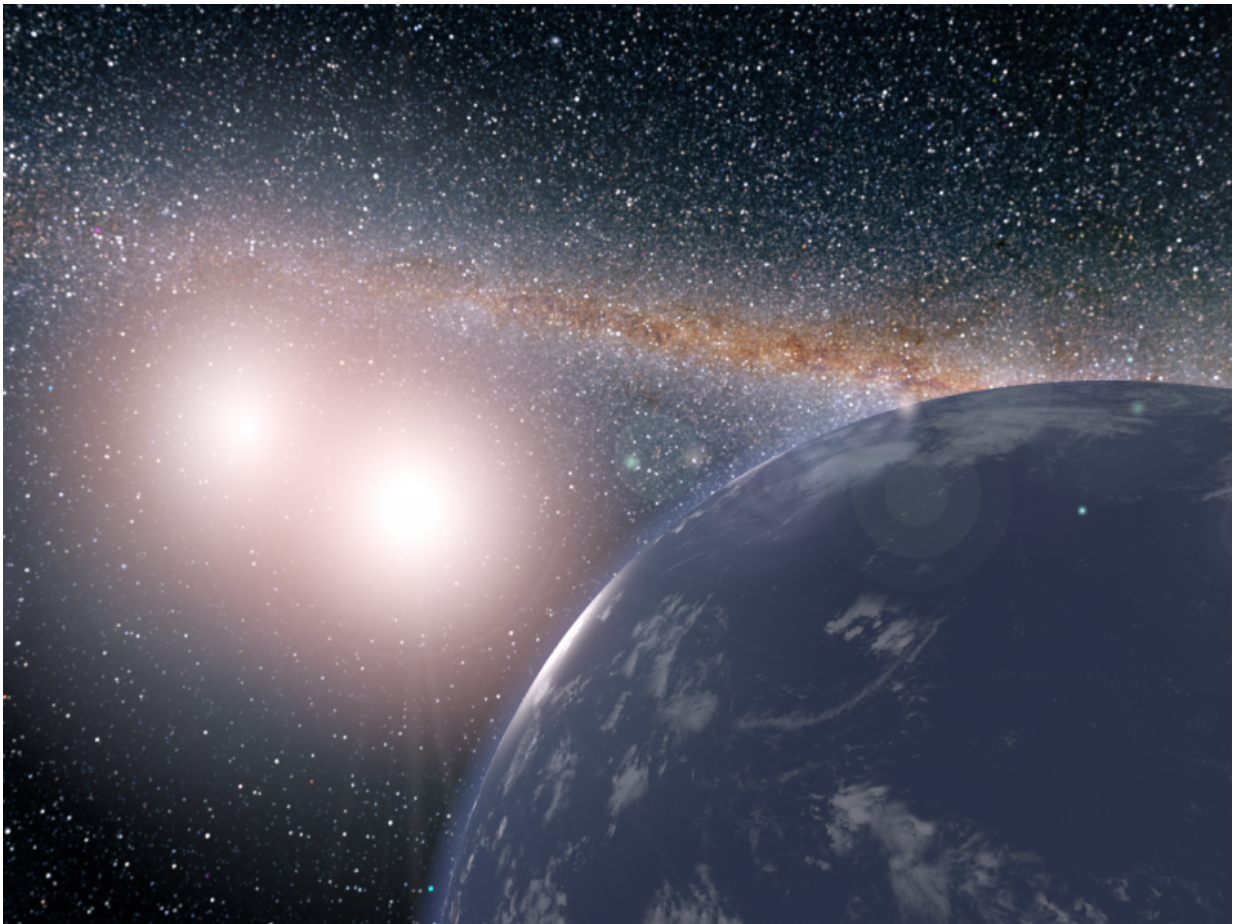


## Image: Illustration of an Earth-sized 'Tatooine' planet

May 5 2017

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Credit: NASA/JPL-Caltech

With two suns in its sky, Luke Skywalker's home planet Tatooine in

"Star Wars" looks like a parched, sandy desert world. In real life, thanks to observatories such as NASA's Kepler space telescope, we know that two-star systems can indeed support planets, although planets discovered so far around double-star systems are large and gaseous. Scientists wondered: If an Earth-size planet were orbiting two suns, could it support life?

It turns out, such a planet could be quite hospitable if located at the right distance from its two [stars](#), and wouldn't necessarily even have deserts. In a particular range of distances from two sun-like host stars, a planet covered in water would remain habitable and retain its water for a long time, [according to an April 6, 2017 study](#) in the journal *Nature Communications*.

This illustration shows a hypothetical planet covered in water around the binary star system of Kepler-35A and B. In reality, the stellar pair Kepler-35A and B host a planet called Kepler-35b, a giant planet about eight times the size of Earth, with an orbit of 131.5 Earth days. For their study, researchers neglected the gravitational influence of this planet and added a hypothetical water-covered, Earth-size planet around the Kepler-35 A and B stars. They examined how this planet's climate would behave as it orbited the host stars with periods between 341 and 380 days.

Provided by NASA

Citation: Image: Illustration of an Earth-sized 'Tatooine' planet (2017, May 5) retrieved 1 May 2024 from <https://phys.org/news/2017-05-image-earth-sized-tatooine-planet.html>

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