



Gliese 12 b Potentially Habitable Exoplanet near Earth

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NASA has announced the discovery of an **Earth-sized, potentially habitable exoplanet** named **Gliese 12 b**, located just **40 light-years away from Earth**, making it one of the closest known potentially habitable planets to our solar system.

- Gliese 12 b has an **average surface temperature of 42 °C**, which is **lower** than the majority of the 5,000 or so exoplanets discovered so far.
 - The exoplanet is **slightly smaller than Earth**, with a size comparable to Venus.
- Gliese 12 b is a super-Earth exoplanet that orbits an **M-type (red dwarf) star, Gliese 12**, every 12.8 days. The star has a **total of seven planets**, all roughly the size of Earth and likely rocky.
 - Three of the planets orbiting Gliese 12 fall within the **habitable zone**, the distance from a star at which liquid water can exist on the surfaces of planets.
 - The host star is **metal-poor**, suggesting it may have **weaker magnetic fields** and more volcanism than Earth, which could help Gliese 12 b maintain an atmosphere.
- **NASA's Transiting Exoplanet Survey Satellite (TESS)** played a crucial role in the initial detection of Gliese 12 b, paving the way for further observations and analysis with the **James Webb Space Telescope**.

Read more: [Exoplanet](#)

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