



HABITABLE PLANETS



OVERVIEW

Exoplanets

Transit

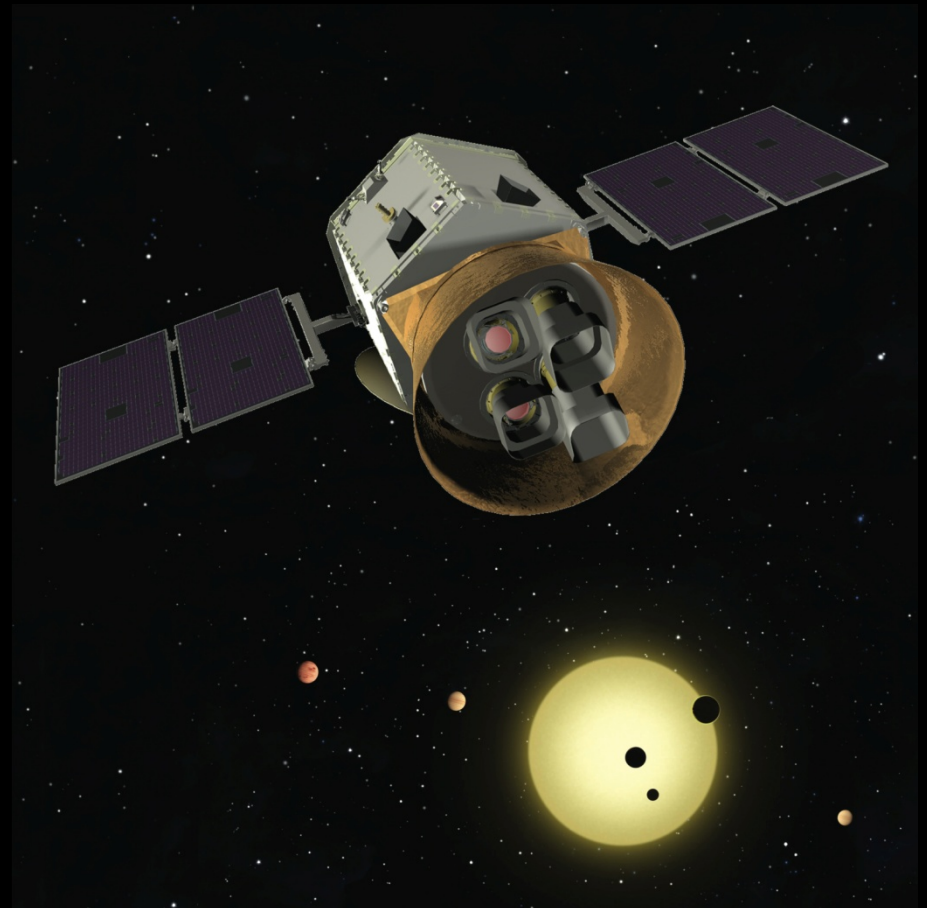
Habitable zone

Habitable planets

Kepler mission

WHAT IS A EXOPLANET?

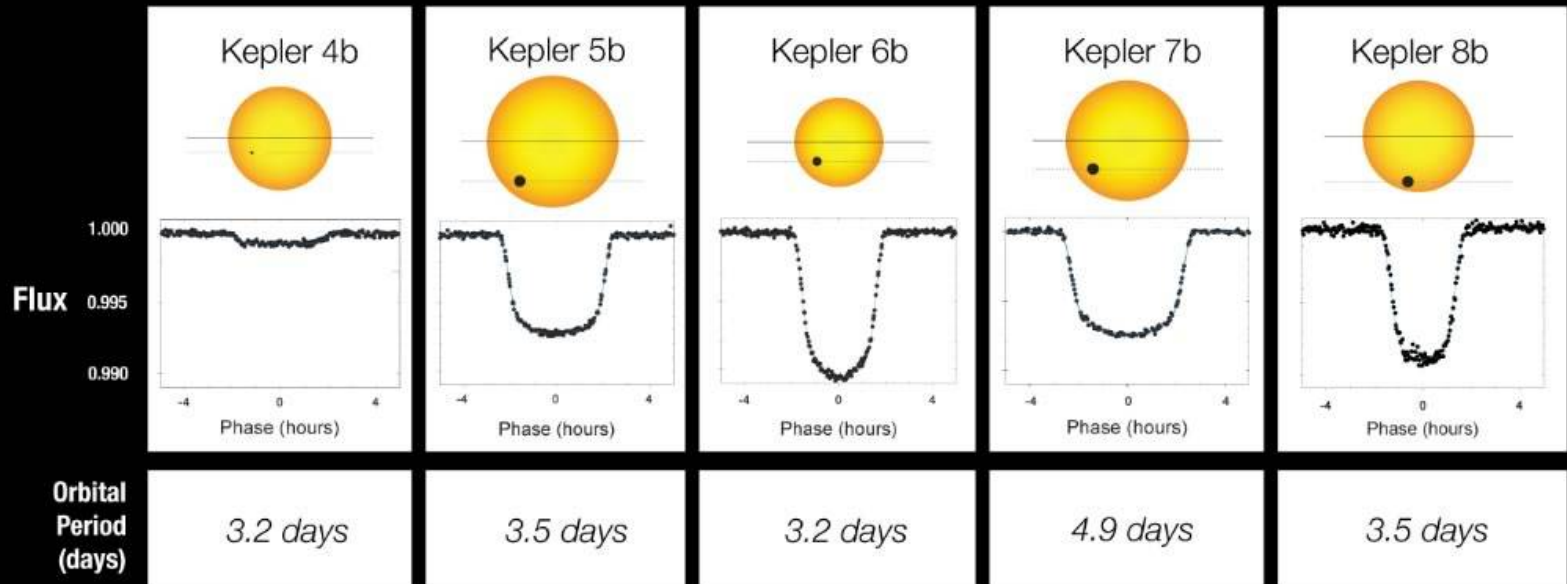
- An **exoplanet** or extrasolar planet is a planet that orbits a star other than the Sun.
- Over 3000 **exoplanets** have been discovered since 1988
- 3412 planets in 2554 planetary systems, including 578 multiple planetary systems, have been confirmed, as of 23 May 2016



KEPLER SPACECRAFT

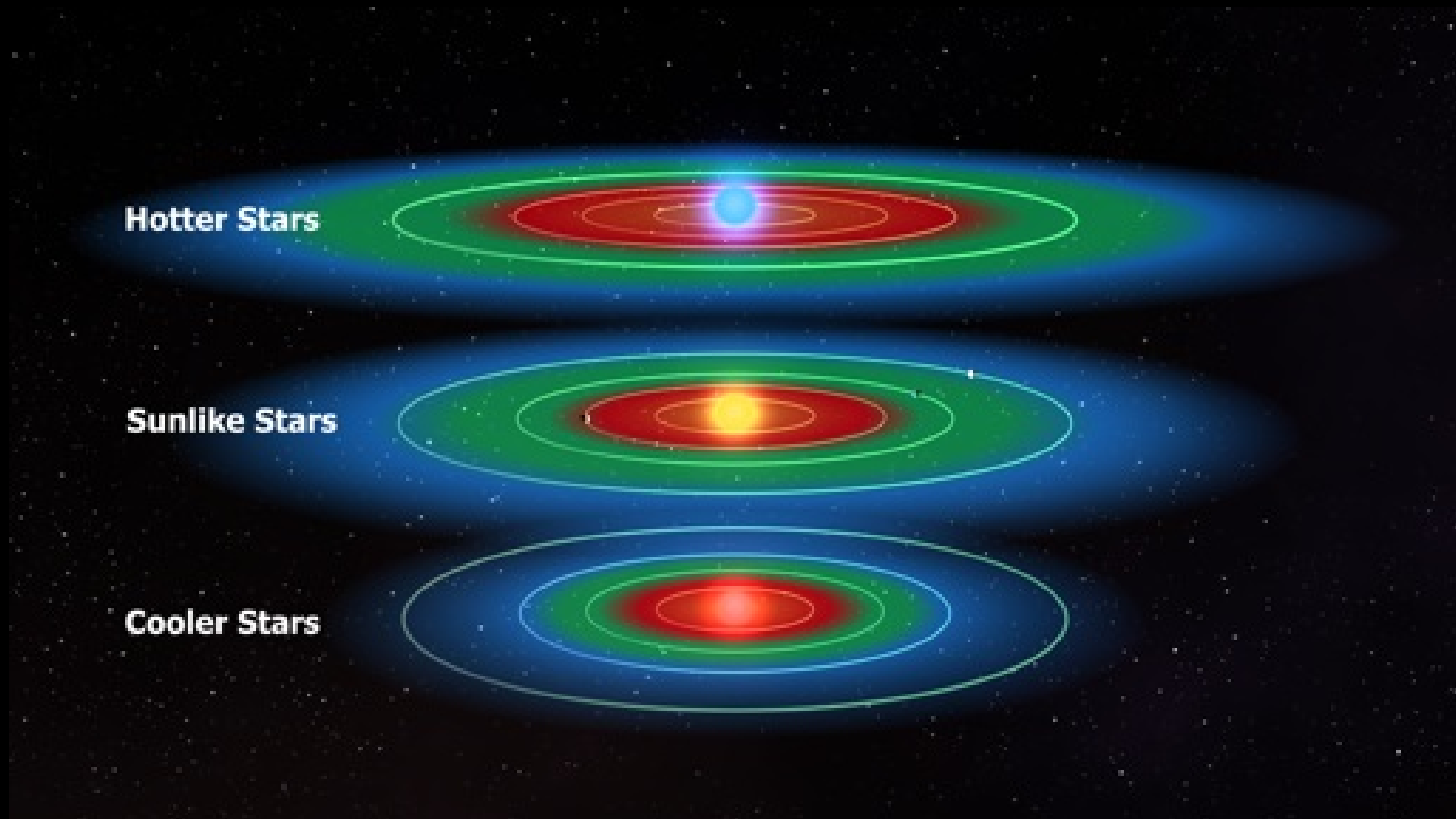
- NASA launched *Kepler* in March 2009
- The spacecraft is dedicated to the discovery of extrasolar planets by the **transit method** from solar orbit.

Transit Light Curves



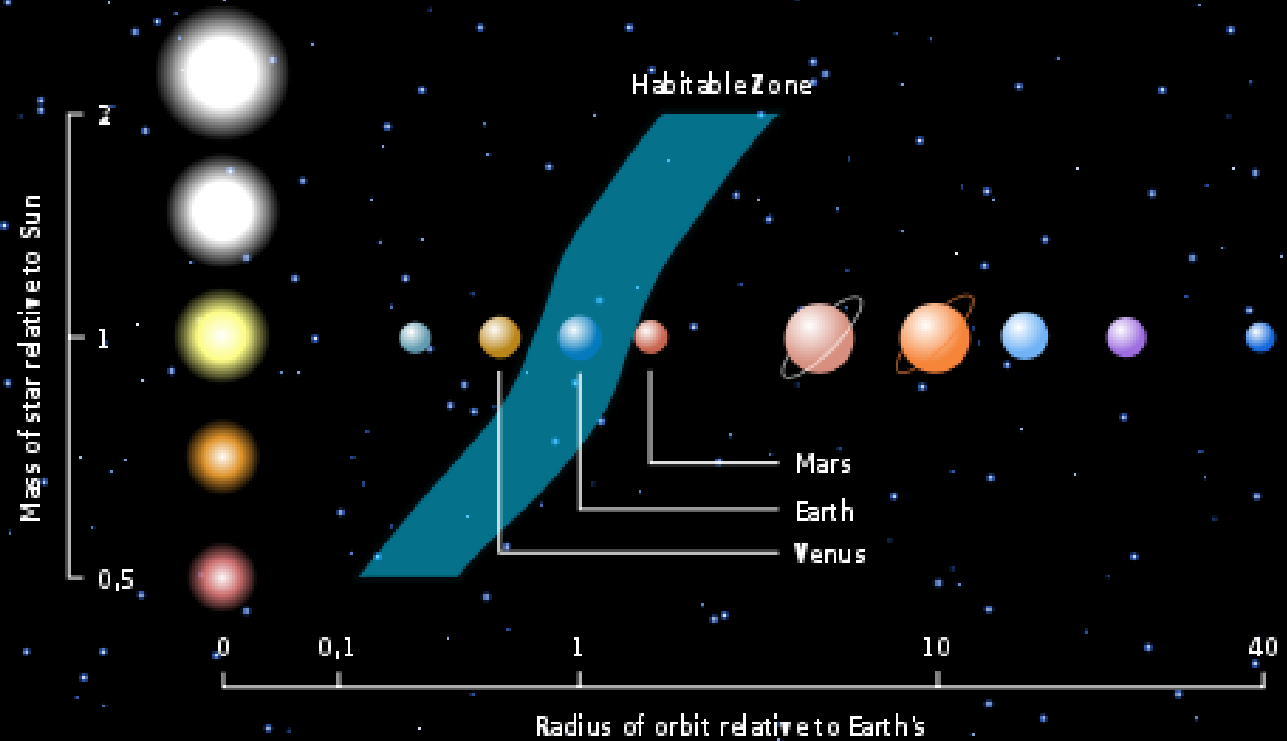
WHAT IS A HABITABLE ZONE ?

- ◆ The Habitable Zone is area around a star where liquid water can exist on the surface
- ◆ Continuously Habitable Zone is the region where water would exist over the entire star lifetime



WHAT IS A HABITABLE PLANET

- A Habitable Planet is a planet in the Habitable Zone of a star



RESOURCES

[Find your planet](https://www.planethunters.org/)

<https://www.planethunters.org/>

Movies

<https://www.youtube.com/watch?v=QL1RsvR7F78>

<https://www.youtube.com/watch?v=J2ohX-hOGpQ>