

Kepler Project Information Packet

Selected Exoplanet Data

Name	Located in habitable zone? (Y/N)	Orbital period (days)	Planet-star radius ratio	Planetary radius (Earth radii)	Orbit semi-major axis (AU)	Equilibrium temperature (K)	Star effective temperature (K)	Star surface gravity (log ₁₀ (cm/s ²))	Star mass (M_{\odot})
Kepler-174 d	N	247.354265	0.032383	2.1	0.6448	194	4590	4.655	0.583
Kepler-441 b	N	207.247959	0.028131	1.93	0.5843	194	4243	4.632	0.617
Kepler-296 f	Y	63.3366606	0.030405	1.23	0.2253	199	3517	4.881	0.38
Kepler-440 b	Y	101.1114976	0.028269	1.47	0.334	201	3813	4.767	0.485
Kepler-62 f	Y	267.283301	0.019955	1.42	0.699	205	4797	4.612	0.637
Kepler-452 b	Y	384.845905	0.0137	1.19	0.988785	220.5	5578	4.578	
Kepler-296 e	Y	34.14189	0.026852	1.08	0.1492	244	3517	4.881	0.38
Kepler-87 c	N	573.95023	0.035127	4.96	1.3423	259	5991	4.205	0.977
Kepler-442 b	Y	112.306839	0.021815	1.56	0.393	260	4569	4.615	0.641
Kepler-62 e	Y	122.3863812	0.024288	1.73	0.4152	265	4797	4.612	0.637
Kepler-235 e	Y	46.18415	0.037059	1.94	0.2014	265	3887	4.783	0.51
Kepler-155 c	Y	52.6615836	0.029877	1.76	0.2267	271	3985	4.721	0.56
Kepler-438 b	Y	35.23318	0.019296	0.98	0.1648	273	3688	4.788	0.479
Kepler-445 d	N	8.15273115	0.1146	2.363	0.0438403	305	3327	5.113	

Exoplanet Data Table Column Definitions (continued on the next page)

- *Orbital period* measures the amount of time between consecutive planetary transits, measured in days.
- *Planet-star radius ratio* is the planet's radius divided by its star's radius and is unitless. The Earth-Sun radius ratio is 0.00915.
- *Planetary radius* compares the planet's radius with Earth's radius by using a ratio unit called *Earth radii*. A score of 1 means the planet has the same radius as Earth; a score higher than 1 means the planet's radius is larger than Earth's radius by a factor (e.g. a score of 1.5 means the planet has a radius 1.5 times larger than Earth's); a score lower than 1 means the planet's radius is smaller than Earth's by a factor.

- *Orbit semi-major axis* describes the size of the planet's orbit. Assuming an elliptical orbit, it measures half of the long axis of the orbit. The distance is measured using the *astronomical unit (AU)*; 1 AU is the average distance between Earth and the Sun.
- *Equilibrium temperature* measures the approximation of the planet's temperature in kelvin. This approximation averages the changes in temperatures between day and night sides of the planet, but it does not give information about how much fluctuation occurs. *Kelvin* is the base unit of thermodynamic temperature, which is equal to degrees Celsius plus 273.15. Earth's equilibrium temperature is 260 K.
- *Star effective temperature* is the temperature of the star in Kelvin. The star effective temperature of the sun is 5780 K.
- *Star surface gravity* is the log of the acceleration due to gravity ($\log g$) at the surface of the star. The Sun's value is 4.44.
- *Star mass* is the mass of the star in *solar mass (M_{\odot})*. The solar mass unit compares a star's mass with the Sun's mass just as Earth radii compares a planet's radius with Earth's radius. Solar mass is equal to approximately 1.99×10^{30} kilograms.

