



TOI - 560c

**Fast Facts:**

TYPE

Mini-Neptune

RADIUS OF THE PLANET

2,384 +/- 0,066 Radius Earth

MASS OF THE PLANET

$9.70^{+1.80}_{-1.70} M_{\text{EARTH}}$

ORBITAL PERIOD

18.8797 Days

DISTANCE TO HOST STAR

0,12 a.u.

DENSITY

4,1 g/cm<sup>3</sup>

DISCOVERED

2021 by the TESS survey

CHARACTERISTICS

believed to be similar to Neptune

COMPOSITION

Rocky

TEMPERATURE

225 ± 15 °C

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Compared to KELT-3b, TOI-560c is almost tropical, though it is still hundreds of degrees Celsius warmer than the Earth.

Cheops observed this mysterious exoplanet on the **23 January 2023** at **13:12 CET**. By analysing this data we have discovered that TOI 560c is...

a rocky planet, since it has a density of 4.1 g/cm<sup>3</sup>, has about two times the radius of the Earth and around ten times its mass. Its orbital period is almost nineteen days long and is very close to its host star (the distance between the two is that of 0,12 astronomical units). TOI - 560c also has a very warm temperature, having an average temperature of 225 °C, which indicates that it is not suitable for life.

In comparison to the planets in the Solar System, TOI-560c... is closer to its host star than any planet in the Solar System is close to the Sun; has a density similar to that of Uranus; has a mass that is 9,7 times higher than Earth's and around half of the radius of Uranus. TOI-560c's temperature is comparable to Mercury's temperature.

TOI-560, also known as HD 73583, is a small orange-red star in the Hydra constellation, around 103 light years away from Earth. TOI-560 is smaller and cooler than our Sun. Besides TOI-560c, there is a second planet orbiting this star, TOI-560b.

Mass of the star =  $0.73 \pm 0.02 M_{\text{Sun}}$

Radius of the star =  $0.65 \pm 0.02 R_{\text{Sun}}$