



TOI - 560c



**Fast Facts:**

TYPE

Mini-Neptune

RADIUS OF THE PLANET

2.46 R<sub>E</sub>

MASS OF THE PLANET

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

ORBITAL PERIOD

18.8797 days

DISTANCE TO HOST STAR

0.125 au

DENSITY

3.6 g cm<sup>-3</sup>

DISCOVERED

2021 by the TESS survey

CHARACTERISTICS

believed to be similar to Neptune

COMPOSITION

rocky

TEMPERATURE

225 ± 15 °C

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...

**The planet is close to its star. It is probably a rocky planet, given its density. Temperature on the surface is too high for the planet to be in the habitable zone.**

In comparison to the planets in the Solar System, TOI-560c...

**It is about four times closer to its star than Mercury to the Sun. Its density is close to the average density of Mars, but much higher than density of gas giants. There are no Solar system planets with similar radius and mass.**

**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 =  $0.73 \pm 0.02 M_{Sun}$

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