

Moon Tethys

Mass: $6.2 \cdot 10^{20}$ kg

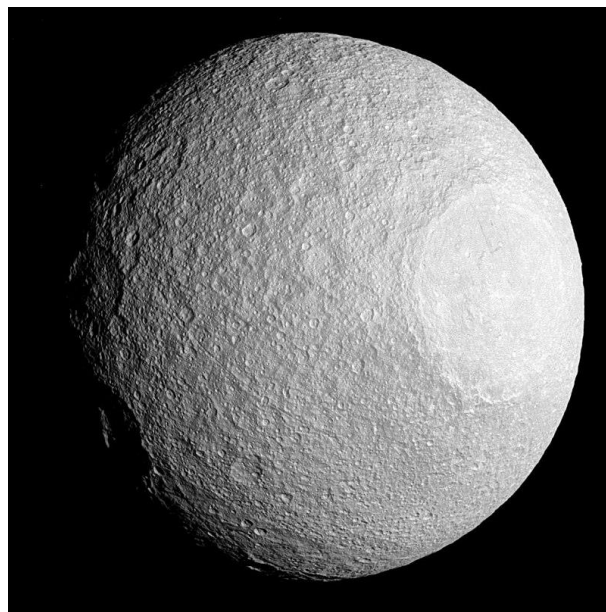
Orbital period: 1.9 days

Distance: 294,672 km - here: 29.5 cm

Diameter: 1,066 km - here: 1.1 mm

Sponsored by: Jana-Maria Seiferth, Author and
Dr. Joachim Haase, Dresden

Moon Tethys



Picture (Tethys):

Author: NASA/JPL-Caltech/Space Science Institute

[https://en.wikipedia.org/wiki/Tethys_\(moon\)#/media/File:PIA18317-SaturnMoon-Tethys-Cassini-20150411.jpg](https://en.wikipedia.org/wiki/Tethys_(moon)#/media/File:PIA18317-SaturnMoon-Tethys-Cassini-20150411.jpg)

The moon got its name from the Titaness Tethys from Greek mythology. She is a sister of Kronos (Roman: Saturn). She is also the mother of Europa, who belongs to the Okeanids. The moon Tethys has an almost circular orbit and has a bound rotation, which causes Tethys to give always Saturn the same cold shoulder. In the orbit of Tethys are two other moons, Telesto and Calypso. These are running ahead of Tethys in the Lagrange point L4 and 60° behind it in the point L5. In addition, Tethys has nearly a 4:3 orbital resonance with the nearest inner moon Enceladus and nearly a 2:3 resonance with its outer orbital neighbour Dione. It has a density lower than water.

Important data of Tethys:

Semi-major axis:	294,619 km
Periapsis – Apoapsis:	294,589 km – 294,648 km
Eccentricity:	0.0001
Inclination (Saturn):	1.120°
Sidereal rotation period:	1.89 d
Average orbital speed:	11.35 km/s
Mean diameter:	1,062.2 km
Mass:	about 0.0001 Earth masses: ($6.17 \cdot 10^{20}$ kg)
Mean density:	0.98 g/cm ³
Sidereal orbital period:	1.89 days
Axis tilt:	0.034°
Surface gravity:	0.147 m/s ²
Escape velocity:	394 m/s
Surface temperature:	–187 °C (86 K)

Link: [https://en.wikipedia.org/wiki/Tethys_\(moon\)](https://en.wikipedia.org/wiki/Tethys_(moon))