## **Quaoar (Dwarf Planet Candidate)**

Diameter: 1,121 km - hier: 1.1 mm Mass: 1.4\*10<sup>21</sup> kg Surface temperature: -220 °C Distance to the Sun: 6.50 billion km - here: 6.50 km Orbital period: 287 years Number of moons: 1 Sponsored by: Dr. Manfred Dietrich, Müllrose

## **Dwarf Planet Candidate Quaoar**



Picture (Quaoar with his moon Weywot): Author: Hubble Space Telescope/Michael E. Brown https://en.wikipedia.org/wiki/50000\_Quaoar#/media/File:Quaoar-weywot\_hst.jpg

The candidate was named Quaoar after the creator power from the creation myth of the North American Tongva Indians who live in the Los Angeles area. Quaoar orbits the sun in a nearly perfect circular path. It is classified as a Cubewano/CKBO or Distant Object. Crystalline water ice and ammonia hydrate have been detected on its surface. The existence of crystalline ice requires temperatures higher than 110 Kelvin. Radioactive decay processes in its interior are required to reach this temperature. Quaoar has a small moon named Weywot.

## Important data of Quaoar:

Semi-major axis:	43.69 AU (about 6,555 mio. km)
Eccentricity:	0.04
Perihelion – Aphelion:	41.964 AU – 45.42 AU
Ecliptic inclination:	8°
Sidereal orbit period:	287 a
Average orbital speed:	4.47 km/s
Mean diameter:	1,121 km
Mass:	about 0.0002 Earth masses (1.3 until 1,5*10 <sup>21</sup> kg)
Mean density:	2.01 g/cm <sup>3</sup>
Sidereal rotation period:	8.8400 h

Link: https://en.wikipedia.org/wiki/50000 Quaoar