Moon melding made titan a chimera

Science, Astronomy

Titan is a moon with a planet like and fully developed atmosphere. The moon has a thick atmosphere preventing people from learning more of its surface characteristics in the period of voyager missions. The moon is known to be composed of 50% ice and 50% half rocky material. Titan is similar to other moons of Saturn. Unlike other moon, Titan is dense due to its higher gravity and large size. The atmosphere of Titan is composed of double cloud layers of 200km and 300km, which is equivalent to 125 miles and 186 miles respectively above the surface.

Titan do not have a magnetic field and at times it orbits around the magnetosphere of Saturn. This makes the Titan not to be exposed to the Solar winds. Solar winds is known to remove and ionize the atmosphere’s particles. Since Titan has a dense atmosphere that has hydrocarbons, scientists predicted that Titan has lakes of ethane and liquid methane on the surface. Voyager encountered the moon in 1980 and in 1981. The scientist was not in a position to see beneath the thick layer of the cloud. 25 years, spacecraft of Cassini was able to see the clouds and mapped the surface of the moon. The Radar images proved that Titan has a liquid lake. In summary, Titan was discovered by Christian Huygens in 1655. The diameter of the moon is 5151 km with 1, 221, 850 km from the Saturn. The rotational and orbital period of the moon is 15. 9 days, with an orbital eccentricity and inclination of 0. 0292 and 0. 33 degrees respectively. Additionally, the moon has mean surface temperature of -178 degree Celsius with a main atmospheric component of Nitrogen ('Astrophile: Moon melding made Titan a chimera', 2012).

References

Astrophile: Moon melding made Titan a chimera. (2012). New Scientist, 216(2888), 15. doi: 10. 1016/s0262-4079(12)62741-9