

Summary Information Sheet

SATURN

Saturn, named after the Roman god of agriculture, is the sixth major planet from the Sun. It is a gas giant like Jupiter and is well known for its amazing system of coloured rings. Due to its low density and fast rotation, Saturn has a bulging equator and is lighter than the same volume of water.



www.eso.org



www.eaae-astro.org/



One revolution around the Sun lasts 29.46 Earth years

Atmosphere
93% hydrogen,
6% helium and
ammonia, methane

Rings are made of countless pieces of icy rock

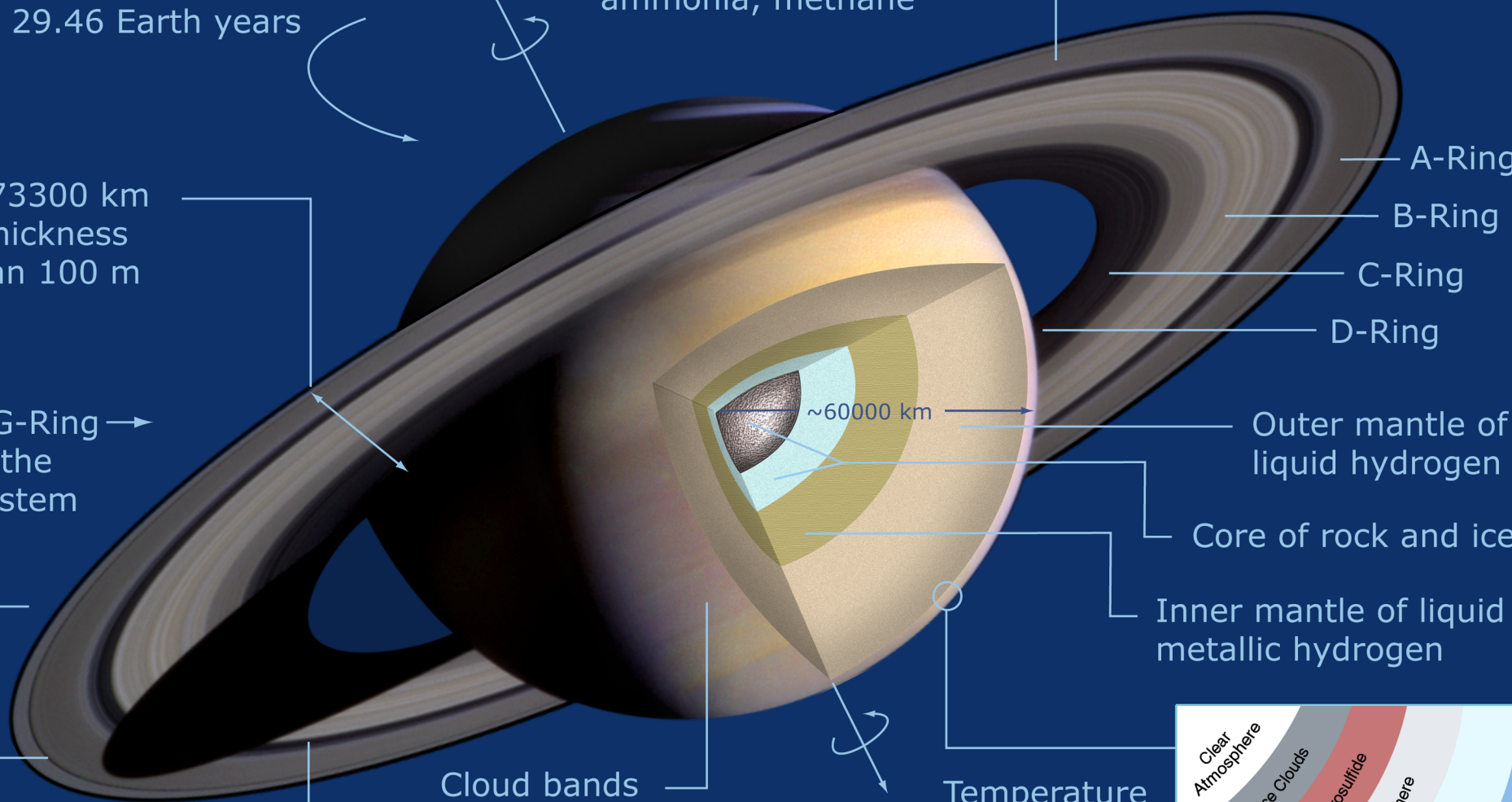
About 73300 km wide, thickness less than 100 m

E- and G-Ring → outside the main system

F-Ring —

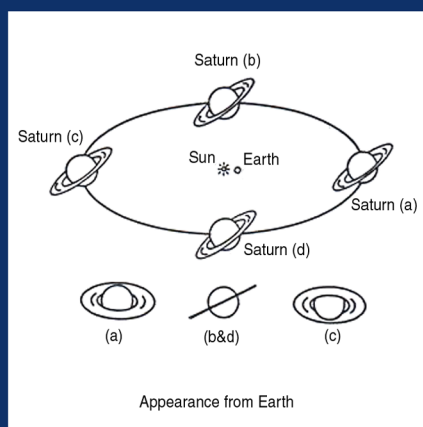
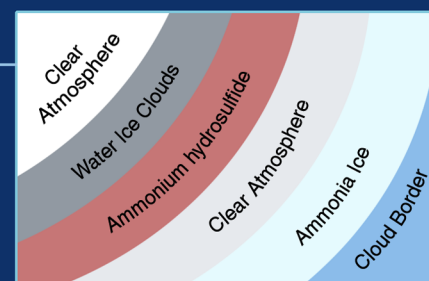
Encke's division

Cassini's division

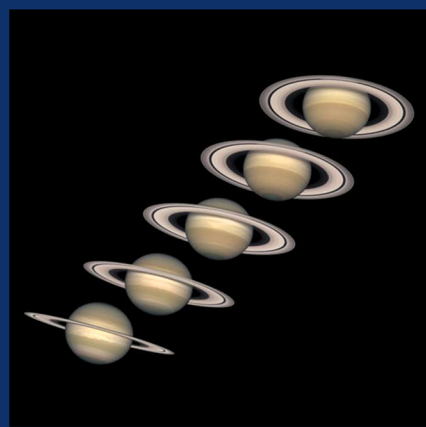


Inclination of the Equator to orbital plane 26° 44'

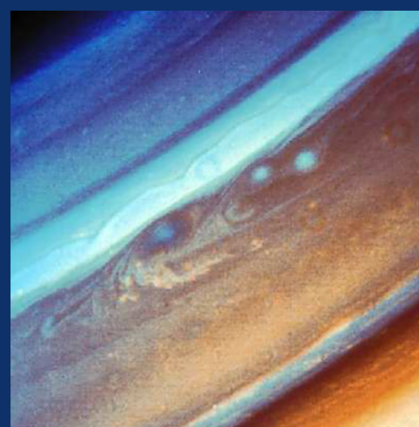
Temperature of the upper atmosphere layer -190 °C



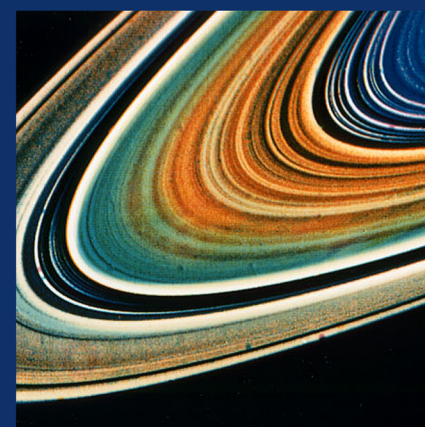
Saturn and its various ring aspects



Seasonal changes on Saturn



The upper cloud deck



Ring system

Physical Data

| Property |
|-----------------------|
| Distance from the Sun |
| Rotation period |
| Equatorial radius |
| Mass |
| Density |
| Satellites |

| Saturn |
|--------------------------|
| 1432 million km |
| 10 hrs 14 min |
| 60268 km |
| 5.69×10^{26} kg |
| 700 kg/m ³ |
| 30 ⁺ |

For comparison

| Jupiter |
|---------------------------|
| 779 million km |
| 9 hrs 55 min |
| 71500 km |
| 1.899×10^{27} kg |
| 1330 kg/m ³ |
| 60 ⁺ |

| Earth |
|--------------------------|
| 150 million km |
| 23 hrs 56 min |
| 6378 km |
| 5.97×10^{24} kg |
| 5520 kg/m ³ |
| 1 |