



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.



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

Cloud bands

Inclination of the Equator to orbital plane 26° 44'

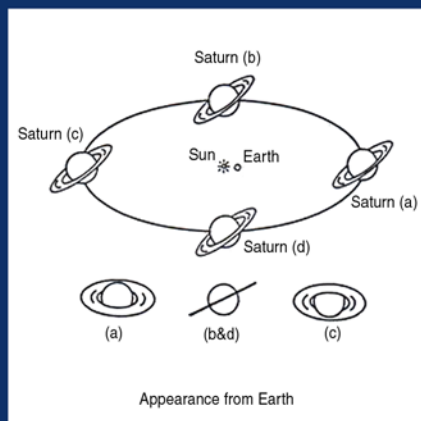
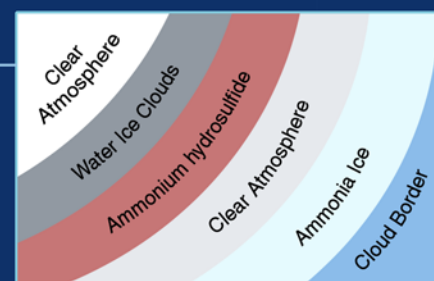
~60000 km

Outer mantle of liquid hydrogen

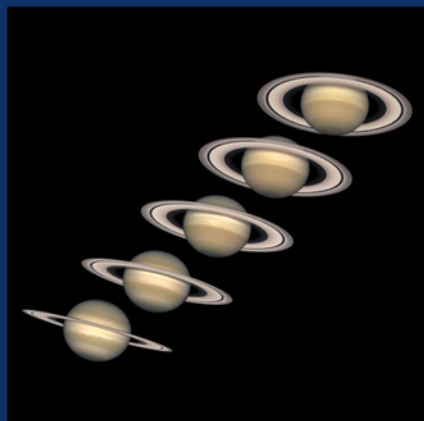
Core of rock and ice

Inner mantle of liquid metallic hydrogen

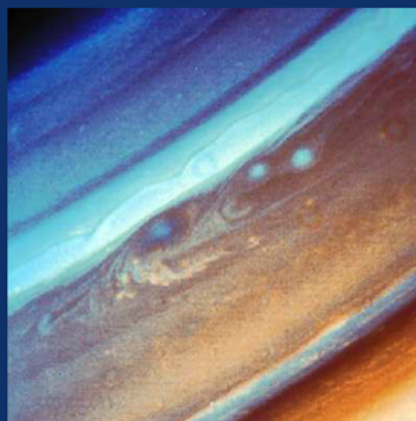
Temperature of the upper atmosphere layer -190 °C



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