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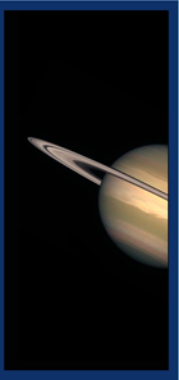
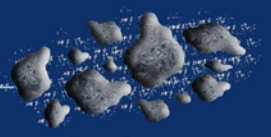
Summary Information Sheet

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.





Rings are made of countless pieces of icy rock

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

One revolution around the Sun lasts 29.46 Earth years

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

A-Ring

B-Ring

C-Ring

D-Ring

~60000 km

Outer mantle of liquid hydrogen

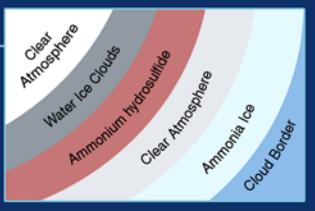
Core of rock and ice

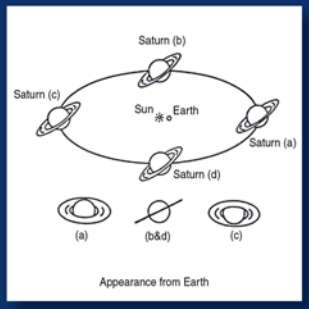
Inner mantle of liquid metallic hydrogen

Cloud bands

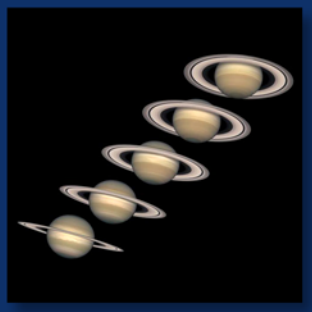
Inclination of the Equator to orbital plane 26° 44'

Temperature of the upper atmosphere layer -190 °C

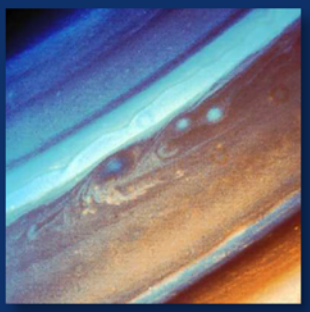




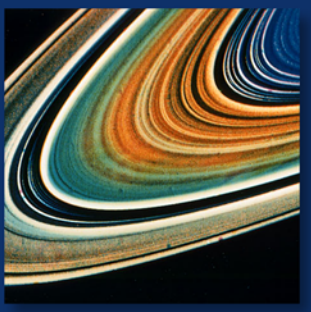
Saturn and its various ring aspects



Seasonal changes on Saturn



The upper cloud deck



Ring system

Physical Data

Property	Saturn	Jupiter	Earth
Distance from the Sun	1432 million km	779 million km	150 million km
Rotation period	10 hrs 14 min	9 hrs 55 min	23 hrs 56 min
Equatorial radius	60268 km	71500 km	6378 km
Mass	5.69 x 10^{26} kg	1.899 x 10^{27} kg	5.97 x 10^{24} kg
Density	700 kg/m^3	1330 kg/m^3	5520 kg/m^3
Satellites	30$^+$	60$^+$	1

For comparison

Images: ESO, ESA, NASA, except otherwise stated

Concept: B. Mackowiak