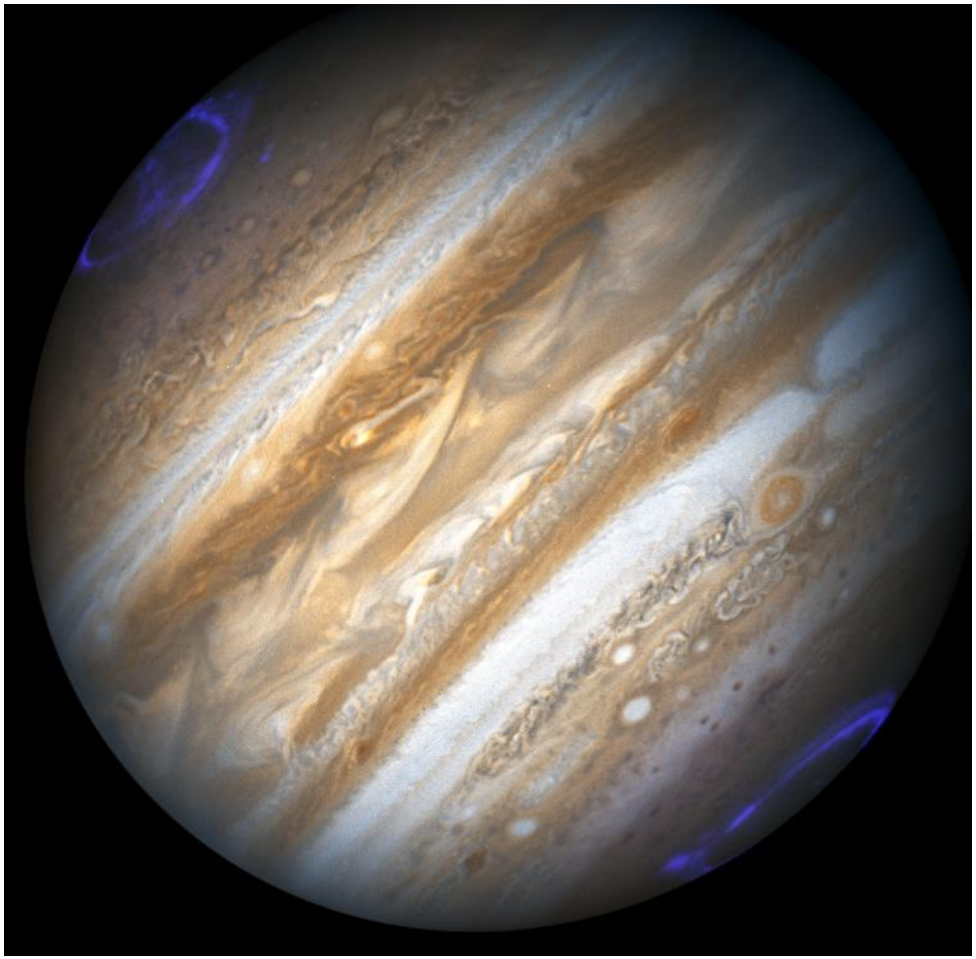
Jupiter المشتري



معلومات عن المشتري

Orbital semimajor axis	5.20 A.U. 778.4 million km
Orbital eccentricity	0.048
Perihelion	4.95 A.U. 740.7 million km
Aphelion	5.46 A.U. 816.1 million km
Mean orbital speed	13.1 km/s
Sidereal orbital period	11.86 tropical years
Synodic orbital period	398.88 solar days
Orbital inclination to the ecliptic	1.31°
Greatest angular diameter, as seen from Earth	50"
Mass	1.90×10^{27} kg 317.8 (Earth = 1)
Equatorial radius	71,492 km 11.21 (Earth = 1)
Mean density	1330 kg/m^3 0.241 (Earth = 1)
Surface gravity (at cloud tops)	24.8 m/s^2 2.53 (Earth = 1)
Escape speed	59.5 km/s
Sidereal rotation period	0.41 solar days
Axial tilt	3.08°
Surface magnetic field	13.89 (Earth = 1)
Magnetic axis tilt relative to rotation axis	9.6°
Surface temperature	124 K (at cloudtops)
Number of moons	16 (named), 28 (total)

أقمار المشتري

معلومات عن بعض أقمار المشتري

أقمار جاليلو الأربعة

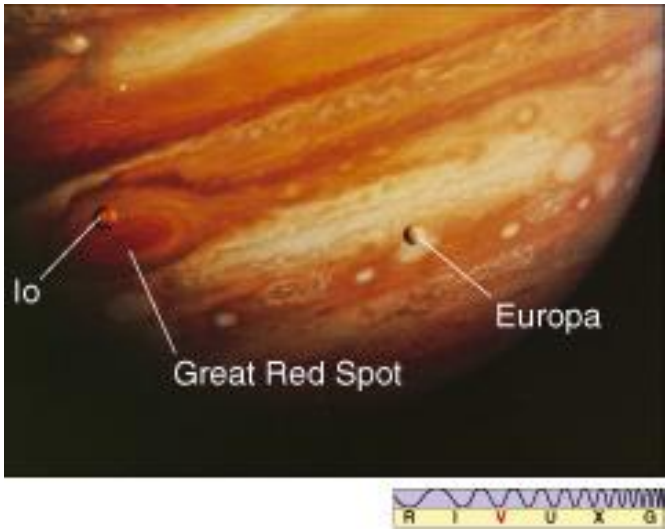


TABLE 11.1 The Moons of Jupiter*

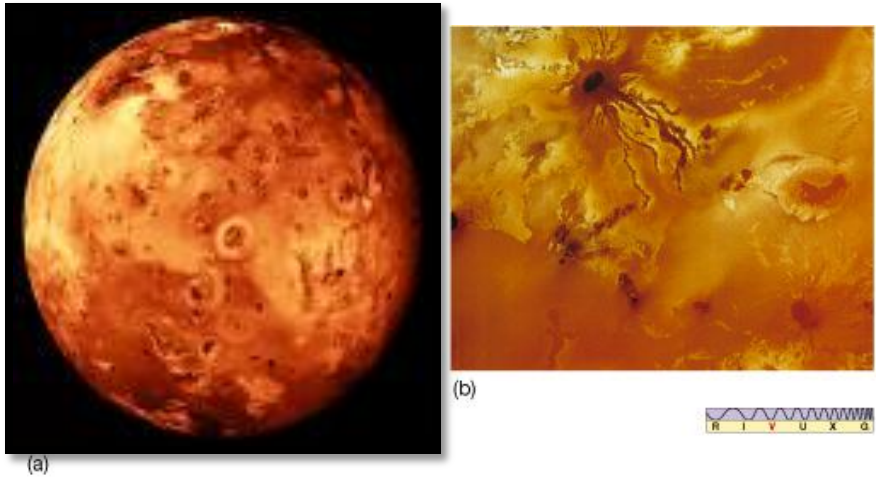
NAME	DISTANCE FROM JUPITER (km)	DISTANCE FROM JUPITER (planet radii)	ORBIT PERIOD (days)	SIZE (longest diameter, km)	MASS** (Earth Moon masses)	DENSITY (kg/m³)	DENSITY (g/cm³)
Metis	128,000	1.79	0.29	40			
Adrastea	129,000	1.80	0.30	20			
Amalthea	181,000	2.54	0.50	260			
Thebe	222,000	3.10	0.67	100			
Io	422,000	5.90	1.77	3640	1.22	3500	3.5
Europa	671,000	9.38	3.55	3130	0.65	3000	3.0
Ganymede	1,070,000	15.0	7.15	5270	2.02	1900	1.9
Callisto	1,880,000	26.3	16.7	4800	1.46	1900	1.9
Leda	11,100,000	155	239	10			
Himalia	11,500,000	161	251	170			
Lysithea	11,700,000	164	259	24			
Elara	11,700,000	164	260	80			
Ananke	21,200,000	297	−631†	20			
Carme	22,600,000	316	−692†	30			
Pasiphae	23,500,000	329	−735†	36			
Sinope	23,700,000	332	−758†	28			

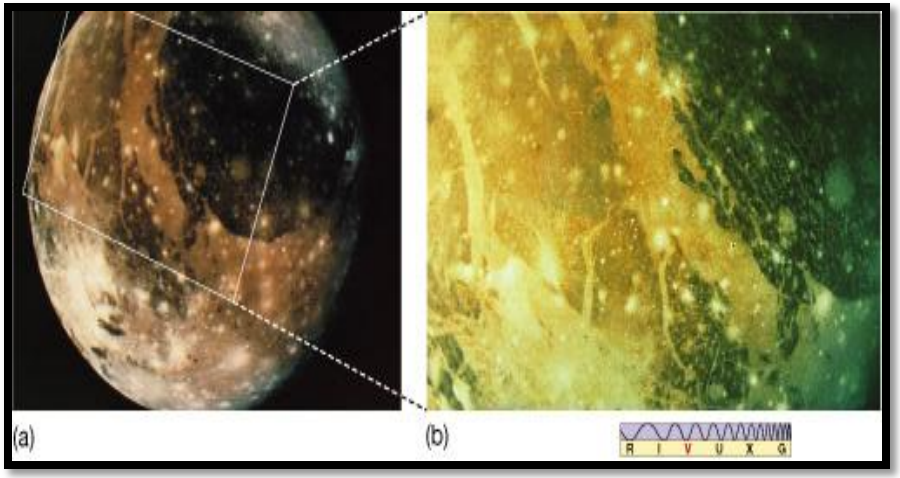
*Does not include the 12 recently discovered small moons described in the text. All are small and move on inclined, eccentric, mainly retrograde orbits some 16–25 million km from the planet.

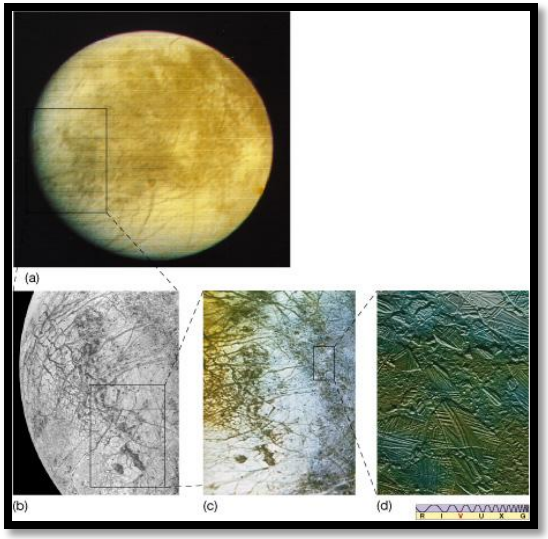
**Mass of Earth's Moon = 7.4×10^{22} kg = 3.9×10^{-5} Jupiter masses.

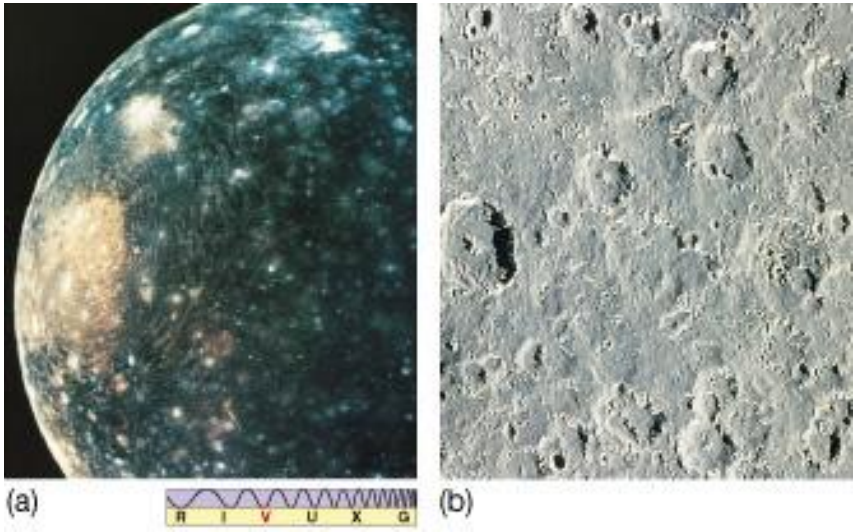
†Indicates a retrograde orbit.

أقمار جاليلو عن قرب

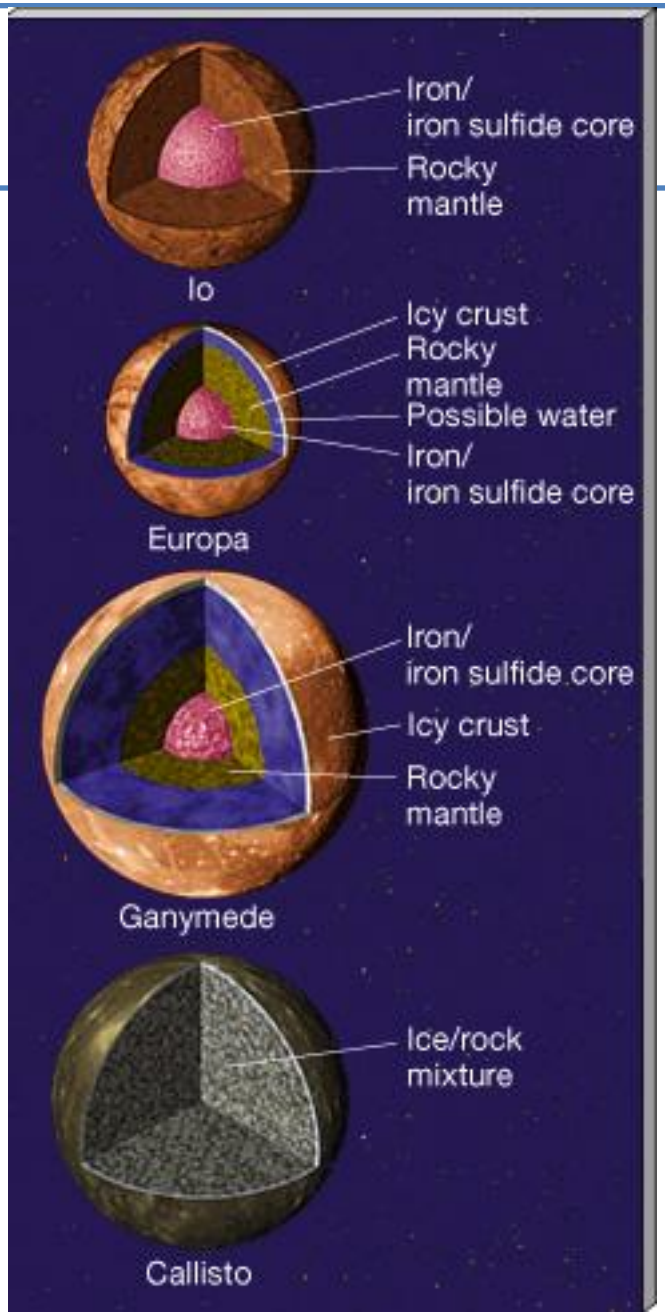




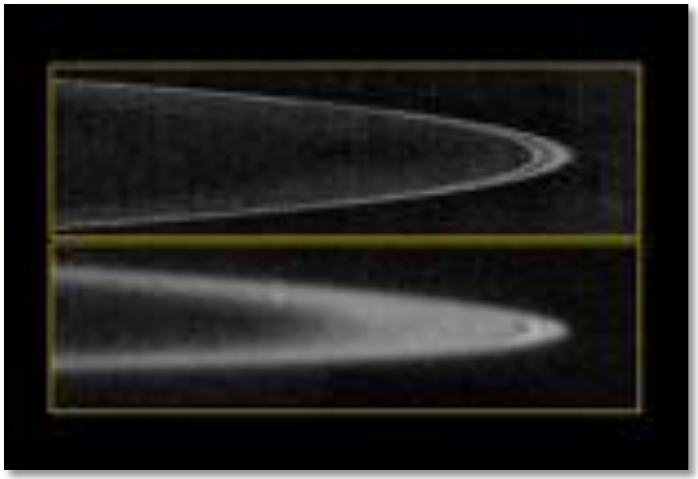


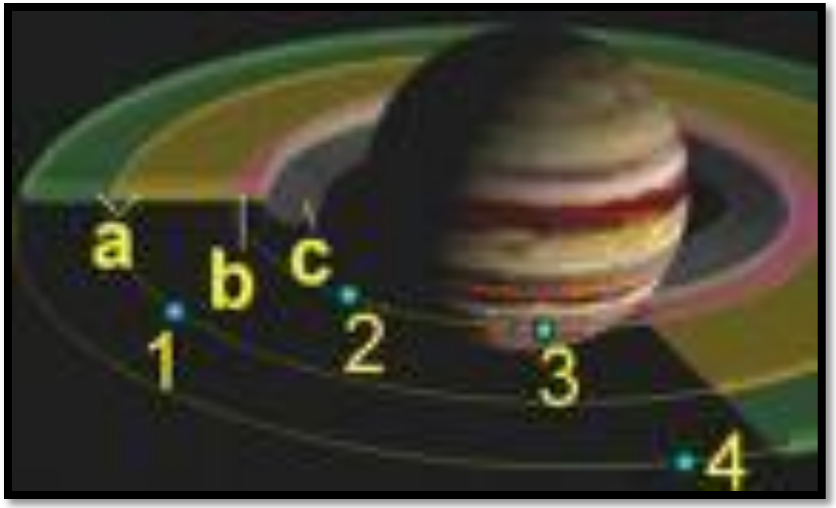


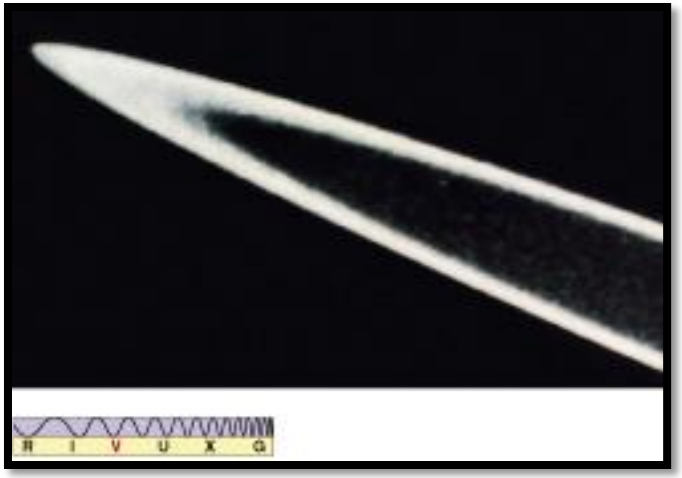
التركيب الداخلي لأقمار جاليلو



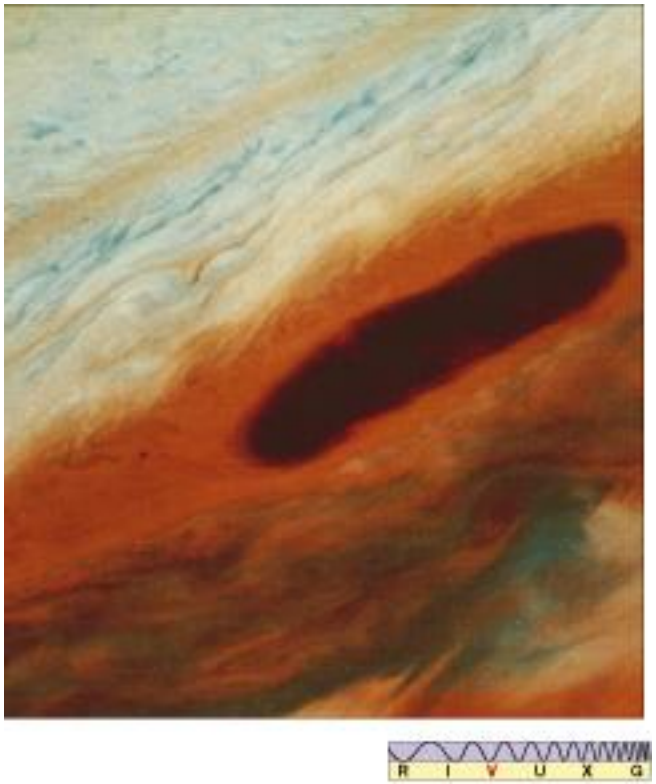
حلقات المشتري

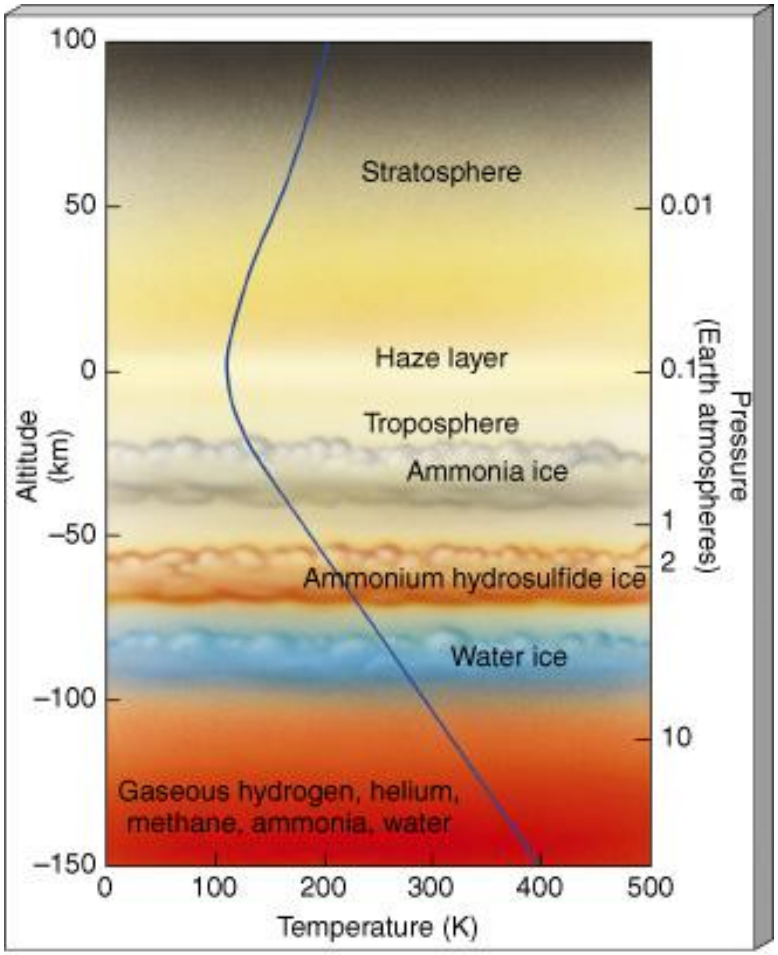




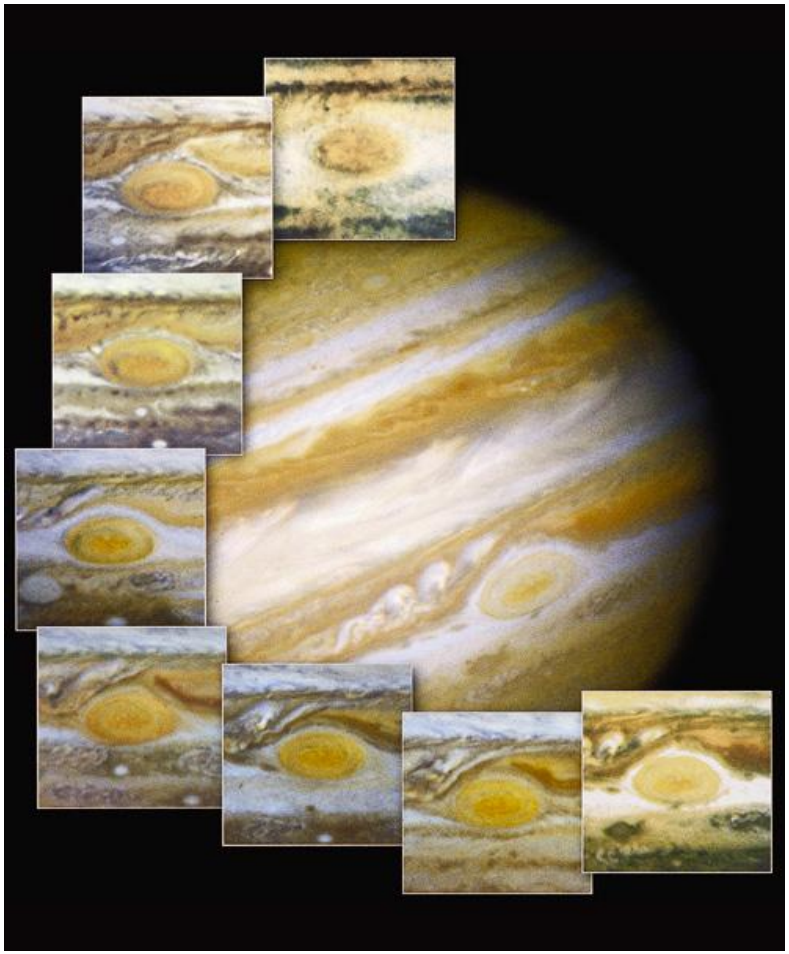


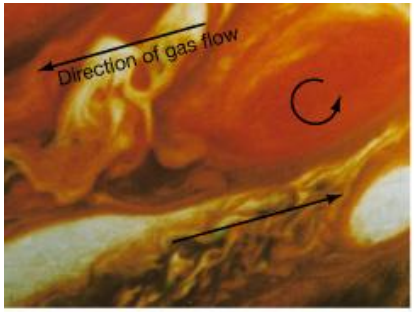
جو المشتري


R I V U X G

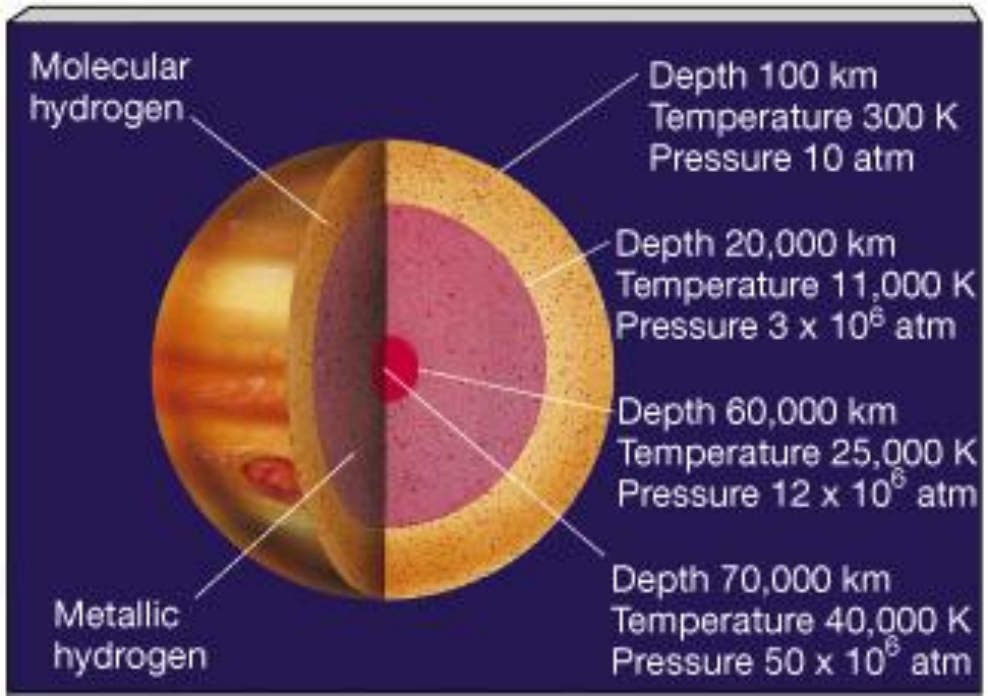

100
50
0
−50
−100
−150
Altitude (km)
Stratosphere
Haze layer
Troposphere
Ammonia ice
Ammonium hydrosulfide ice
Water ice
Gaseous hydrogen, helium, methane, ammonia, water
0.01
0.1
1
2
10
Pressure (Earth atmospheres)
0
100
200
300
400
500
Temperature (K)

البقعة الحمراء





السطح والتكوين الداخلي



مجاله المغناطيسي