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Summary Information Sheet

MARS

Mars, the fourth planet from the Sun, is named after the Roman god of war. Mars is known as the red planet because red iron-oxide dust and rocks cover its surface. Mars is more Earth-like than any other body in the Solar system.



Temperature ~ -55°C
min. -133°C, max. +27°C

North polar ice cap
(frozen carbon dioxide and water ice)

Permanently frozen soil

Crust, 40-50 km thick

Mantle of silicate rock
~1500 km thick

Solid iron-rich core
radius ~1700km

Olympus Mons

One revolution around
the Sun lasts
687 Earth days

Condensation clouds

Northern hemisphere with
many vast plains like
Lunae Planum formed of
solidified lava

Dust storm more
than 120 km/hr

Old dried-up river
systems = arroyos

Valles Marineris canyon
system, ten times
longer and four times
deeper than the Grand
Canyon in the USA

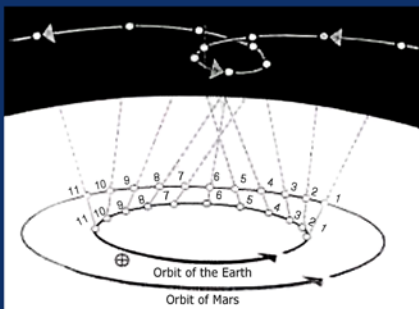
Southern hemisphere pitted with
craters and large impact basins

Inclination of the Equator
to orbital plane 25°11'

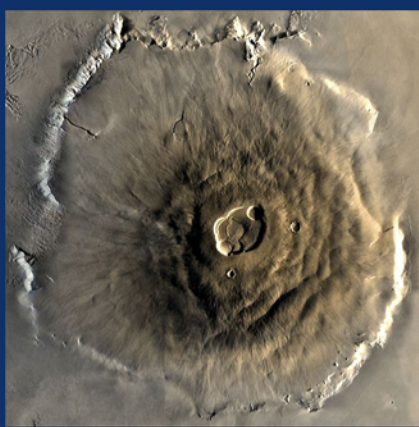
Dry, thin and
cold atmosphere
95% CO₂,
2,7% N,
1,6% Ar

Huge volcanos

South polar ice cap
Both caps shrink during
the martian summer



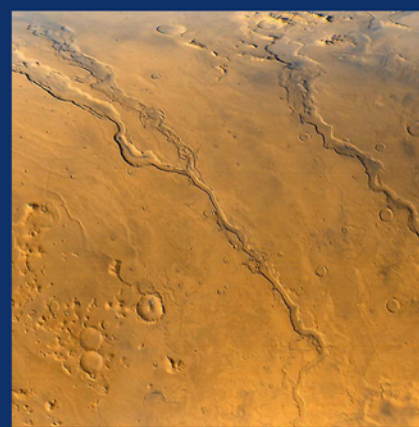
Mars loops in the sky



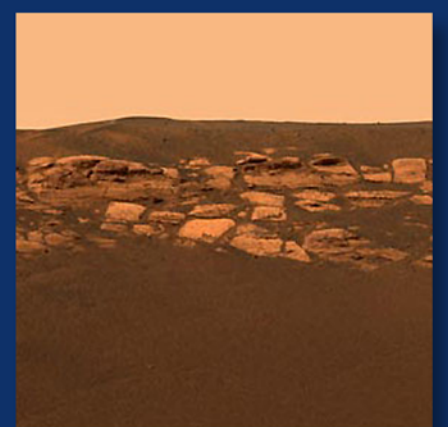
Olympus Mons



Cratered terrain and
reddish atmosphere



Old dried-up river bed
= arroyo



Surface seen by
SPIRIT 2004

Physical Data

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

Mars
228 million km
24 hrs 37 min
3397 km
6.42 x 10 ²³ kg
3940 kg/m ³
2

For comparison

Moon
150 million km
27 days 8 hrs
1738 km
7.35 x 10 ²² kg
3340 kg/m ³
0

Earth
150 million km
23 hrs 56 min
6378 km
5.97 x 10 ²⁴ kg
5520 kg/m ³
1