



DATA SHEET

SOLAR SYSTEM: VENUS

Venus has a thick, toxic atmosphere of carbon dioxide (97% by volume). The planet is shrouded in thick, yellowish clouds of sulfuric acid aerosols that trap heat, causing a runaway greenhouse effect. It's the hottest planet in our solar system, even though Mercury is closer to the Sun.

Venus has a solid, rusty coloured surface covered in shield volcanoes, rifts, and intensely folded mountains, with expansive volcanic lava flows and vast, ridged plateaus. It is possible that the volcanoes are still active.

SOME FACTS ABOUT VENUS

1

Venus is just 0.7 Astronomical Units (AU) from the Sun. That's 108 million kilometres.

2

Surface temperatures on Venus are about 748 K (475°C), that's hot enough to melt lead.

3

Venus rotates backward on its axis compared to most planets in our solar system. This means the Sun rises in the west and sets in the east, opposite of what we see on Earth.

4

It's mean density is: $5.2 \times 10^3 \text{ kg m}^{-3}$. This is almost as high as Earth's.

5

It's comparative volume is 0.88 (Earth = 1)

6

The average surface of Venus is less than a billion years old, and possibly as young as 150 Ma, relatively young from a geological perspective. This is a major conundrum for planetary scientists: – What happened that made Venus completely resurface itself?

7

Venus rotates very slowly on its axis. One day on Venus lasts 243 Earth days. The planet orbits the Sun faster than Earth. One year on Venus takes only about 225 Earth days, making a Venusian day longer than its year.