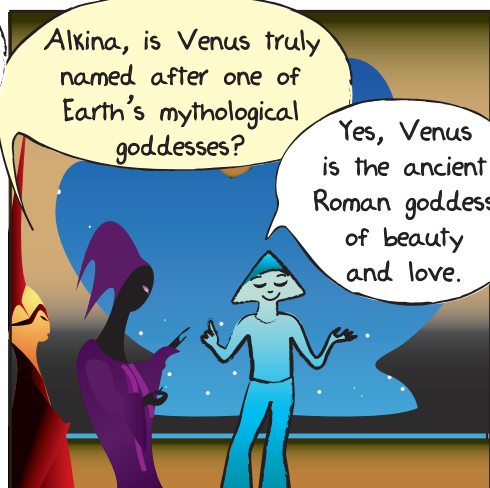
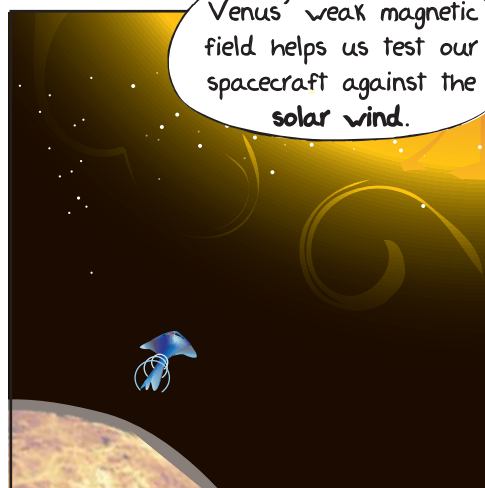
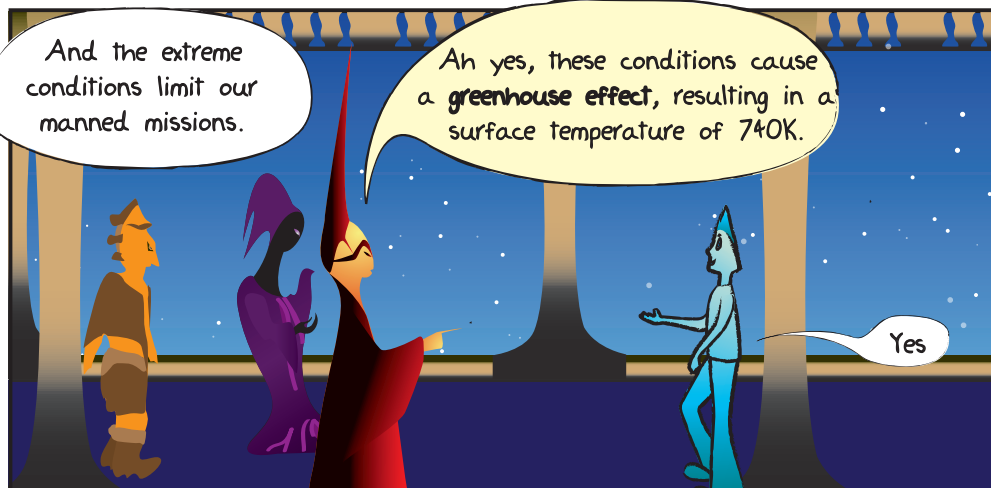
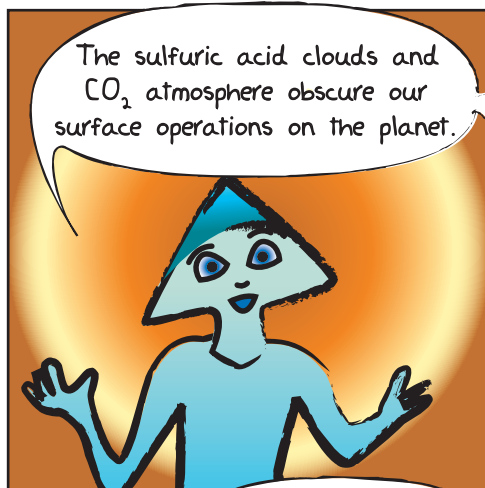
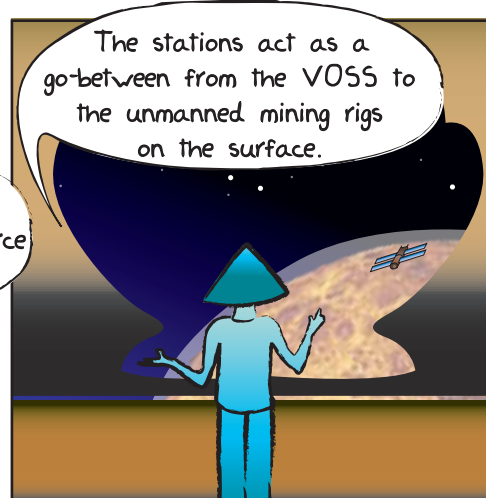
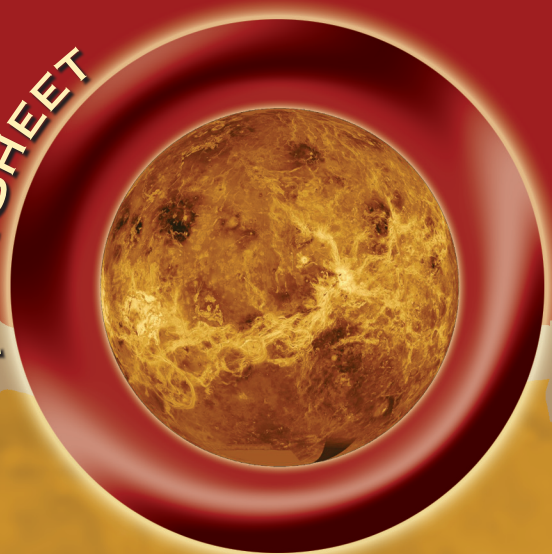




This special episode takes place long before the events in the regular *Epo's Chronicles*.





*Magellan Project, JPL, NASA*

## Notable Features

Venus, Earth's "Sister" planet, is only slightly smaller than Earth; the planet is only 18.5% less massive with 10% less surface area than Earth.

Venus' atmospheric pressure is 90 times greater than Earth's and is composed primarily of carbon dioxide (96.5%). This has caused a green-house effect, so much so, that it increases the planet's surface temperature to 740K. Venus' clouds are mostly composed of sulfuric acid. These conditions make Venus hostile to human life.

Venus lacks a strong magnetic field and is not protected from the solar winds as Earth is. It is thought that Venus' lack of plate tectonics, and possible solid core (hence lacking a dynamo), are reasons for the planet's weak magnetic field.

It takes Venus almost 225 days to orbit around the sun, but the planet spins so slowly on its axis that it takes over 240 earth days for one Venus day to complete. In other words, one day on Venus lasts for 5,832 hours. Also, Venus also spins in retrograde, meaning opposite to how all the other planets spin. This means that on Venus the sun rises in the west and sets in the east.

### Epo Data Overview: Venus

**Location:** Solar System, 2nd Planet from Sun at 0.72 AU.

**Distance from Earth:** 1.72 AU Max, 0.28 AU Min.

**Orbital Period:** 224.7 days

**Mass:**  $4.869 \times 10^{24}$  kg

**Diameter:** 12,103.6 km

**Surface Gravity:** 0.9g

**Surface Temperature:** 740 K (lead melts at 600 K)

**Natural Satellites:** None

### Is that all?

- Welcome to the Planets: Venus - JPL's Venus Page:  
<http://pds.jpl.nasa.gov/planets/choices/venus1.htm>
- Solar System Exploration: Venus – NASA's Venus page:  
<http://solarsystem.nasa.gov/planets/profile.cfm?Object=Venus>
- Youtube: Venus transit - Venus transit of Sun, 2006:  
<http://www.youtube.com/watch?v=InCpg-e1-0g>