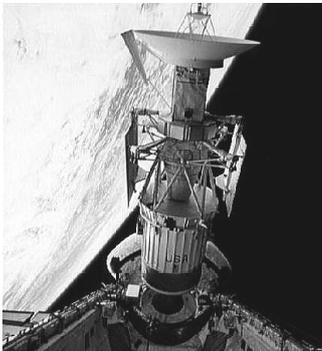


# Magellan at Venus

Mapping our sister planet



The Magellan spacecraft was the first planetary explorer to be launched by the Space Shuttle when it was carried aloft by Atlantis on 4 May, 1989.

Atlantis took Magellan into low Earth orbit, where it was released from the shuttle's cargo bay and after moving away to a safe distance, it fired its own solid-fuel motor

called the Inertial Upper Stage (IUS) to send it on its way to Venus.

Magellan looped around the Sun one and a half times, for gravity assist fly-bys, before arriving at Venus on 10 August, 1990.

During its four year orbit around Venus between 1990 and 1994, the spacecraft created the most detailed map to date of the planet's surface using sophisticated imaging radar equipment. After concluding its radar mapping, Magellan also made global maps of Venus's gravity field.

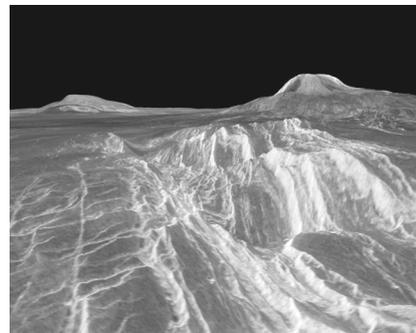
Flight controllers then tested a new manoeuvring technique called aerobraking, which uses a planet's atmosphere to slow or steer a spacecraft. The spacecraft made a dramatic plunge into the thick, hot Venusian atmosphere on 12 October, 1994, and was crushed by the pressure of the Venus' atmosphere.

The mission was declared an absolute success with more than 98 percent of the planet's surface mapped by the imaging radar and the collection of high-resolution gravity data for Venus.

The lessons learned from Magellan's aerodynamic dive into the Venusian atmosphere have been used in subsequent planetary missions including Mars Global Surveyor and 2001 Mars Odyssey.

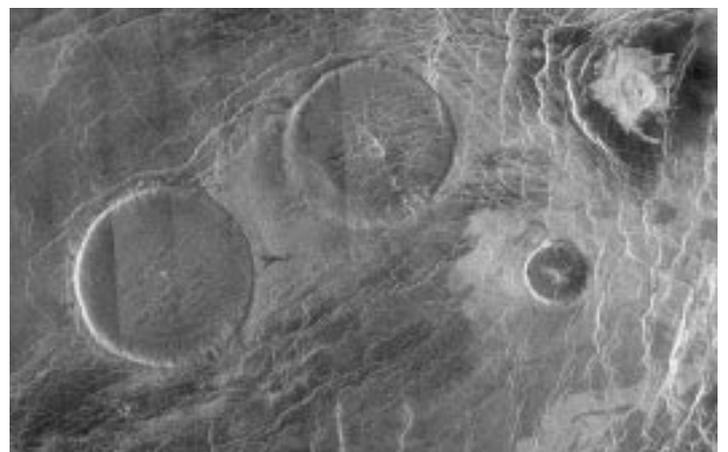
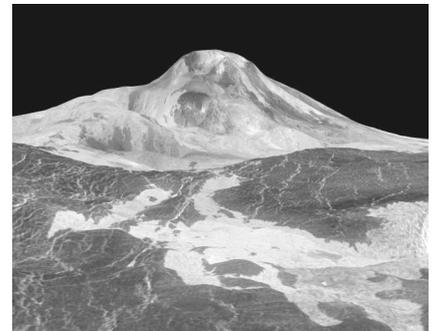
Further information on the Magellan mission can be found on the World Wide Web at

<http://www.jpl.nasa.gov/magellan/>



Data collected by the Magellan spacecraft was used to develop 3-D computer generated images of the surface of Venus

These 3-D images helped scientists to learn more about the mountains, valleys, and volcanoes that exist on the surface.



Radar images bounced off the surface enabled the spacecraft to 'see' through the thick Venusian clouds, revealing a cratered terrain.