

Exploring Venus and Jupiter with ESA's Venus Express and NASA's Juno Mission

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In April 2006, the Venus Express Spacecraft was inserted into orbit around Venus and has been returning data that is helping scientists make new discoveries. Venus has been explored in the past by many missions from the US and the Soviet Union, and soon even Japan will launch a mission to Venus. These missions have ranged from flyby spacecraft, orbiters, instrumented probes descending down to the surface, and even balloons.

Juno, NASA's second New Frontiers mission is currently being developed to explore Jupiter with an orbiting spacecraft, with the main purpose to investigate Jupiter's interior structure, its deep atmosphere, its intense magnetosphere and aurora. Juno follows the fly-by survey missions of Pioneer 10, Pioneer 11, Voyager 1, and Voyager 2, and a deeper exploration by Galileo Orbiter over a period of several years.

These missions have been and will be carried out to help us understand how the planets evolved, and understand the differences between the planets.

What have we learned?