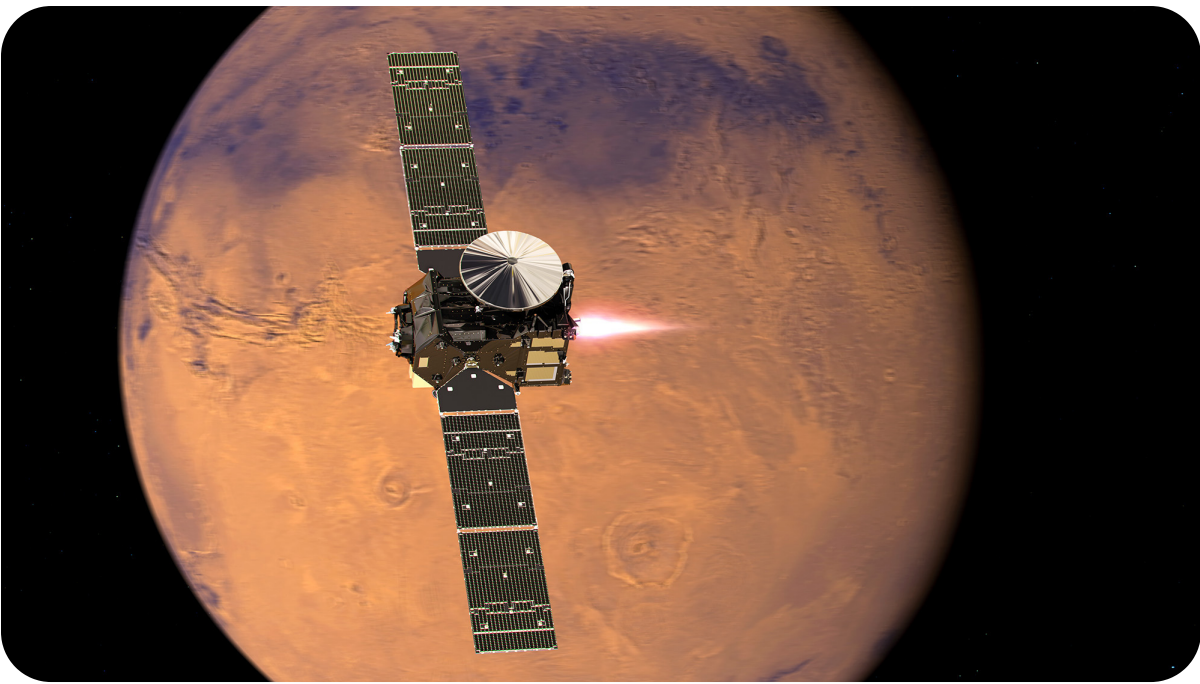


ExoMars arrives at the Red Planet!



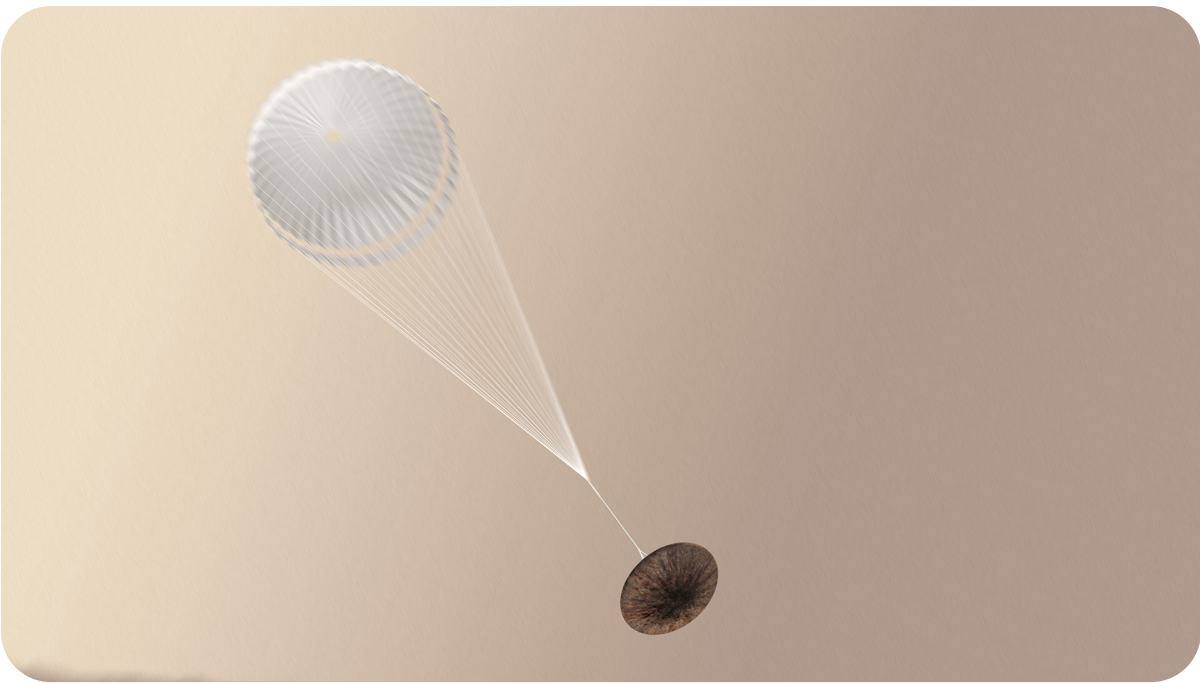
The Trace Gas Orbiter has used thrusters to change its orbit

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19 October 2016

ExoMars has reached the planet Mars! There are two parts to the ExoMars mission: a probe called the Trace Gas Orbiter, and a robotic lander called Schiaparelli.

The Trace Gas Orbiter successfully blasted its thrusters for over two hours in order to slow the spacecraft's speed and change its direction. This was needed to move it into orbit around Mars, rather than whizzing straight past. Everything went exactly to plan! The Trace Gas Orbiter will spend the next year using friction from Mars' atmosphere to make more changes to its orbit. When that is complete, it will begin studying the gases around Mars.



This picture shows what Schiaparelli would have looked like with its parachute out

[Access the image](#)

Meanwhile, the Schiaparelli lander sped on toward the surface of Mars. It is not yet known whether it landed safely, or if it crashed into ground. During Schiaparelli's 6-minute journey it sent updates using radio signals. These are being analysed by mission scientists so they can work out what has happened.



The ExoMars mission control team

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It seems that most parts of the plan, such as Schiaparelli slowing through Mars' atmosphere, ejecting the back part of its heat shield, and firing its parachute, worked well. But signals stopped a few moments before it was expected to touchdown on the surface. What happened during the very final part of Schiaparelli's journey is, right now, a mystery. But ESA scientists and engineers are busy gathering more data to find an answer.

Schiaparelli is designed to test new technology used to land on Mars. So even if some parts did not work as expected, the data sent back will be hugely useful to mission scientists as they will be able to make improvements for future landers!

Cool fact: The Trace Gas Orbiter is ESA's second probe around Mars. It joins Mars Express, which has been there for 13 years!

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