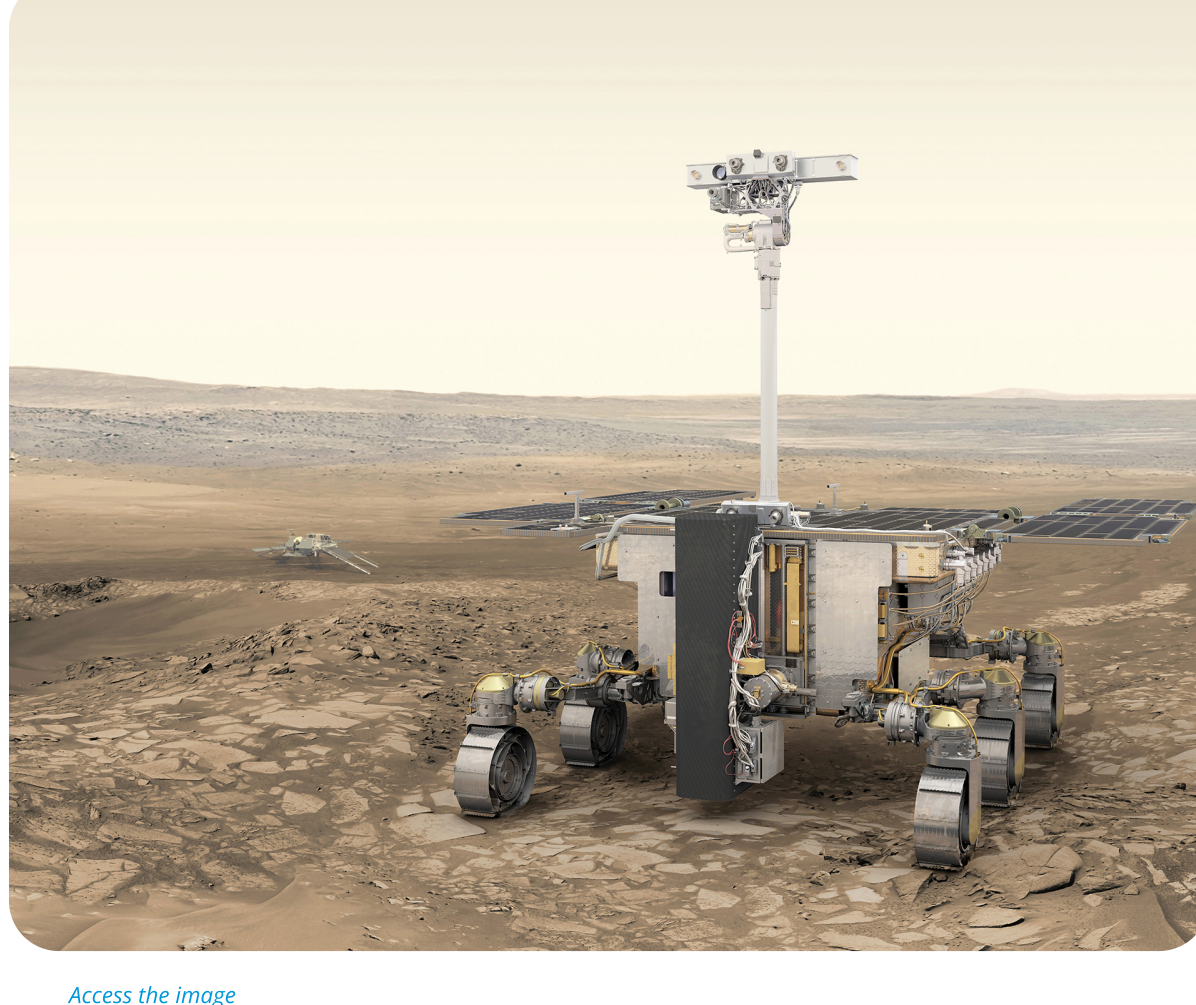


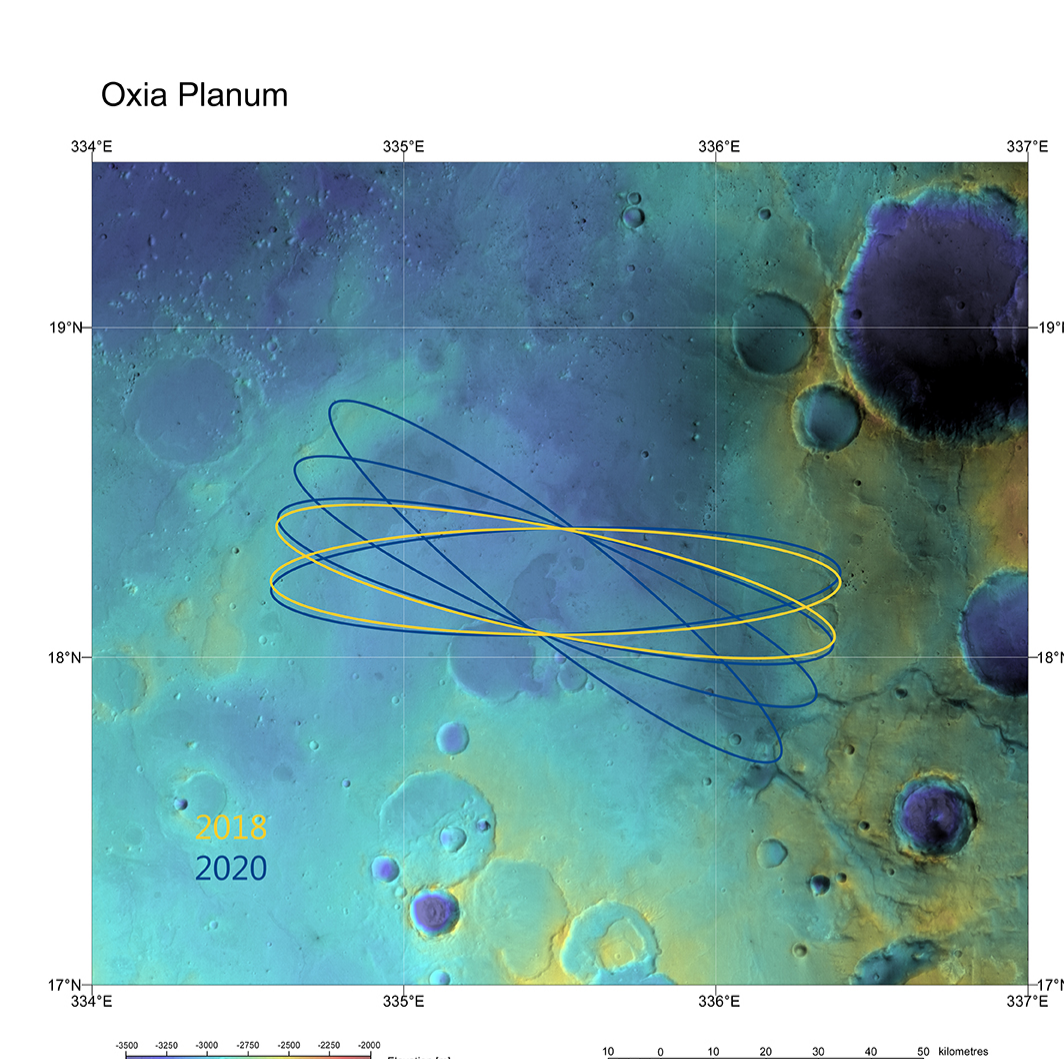
Two possible landing sites chosen for ESA's ExoMars Rover



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In the year 2020 an ESA robot called the ExoMars Rover will land on the red planet Mars. The ExoMars Rover will have two main tasks: exploring just below the surface of Mars, and searching for life. Mission planners have been carefully studying maps of Mars to decide on the best location to land the robot. Now only two options are left!

Choosing a landing site is very difficult. It must be at a low level rather than on top of a mountain or volcano. This is to give the lander as much time falling through the thin Martian atmosphere as possible so that parachutes can slow it down before reaching the ground. Also, the landing site should not have any steep slopes or large rocks, as these could make a landing even more dangerous.



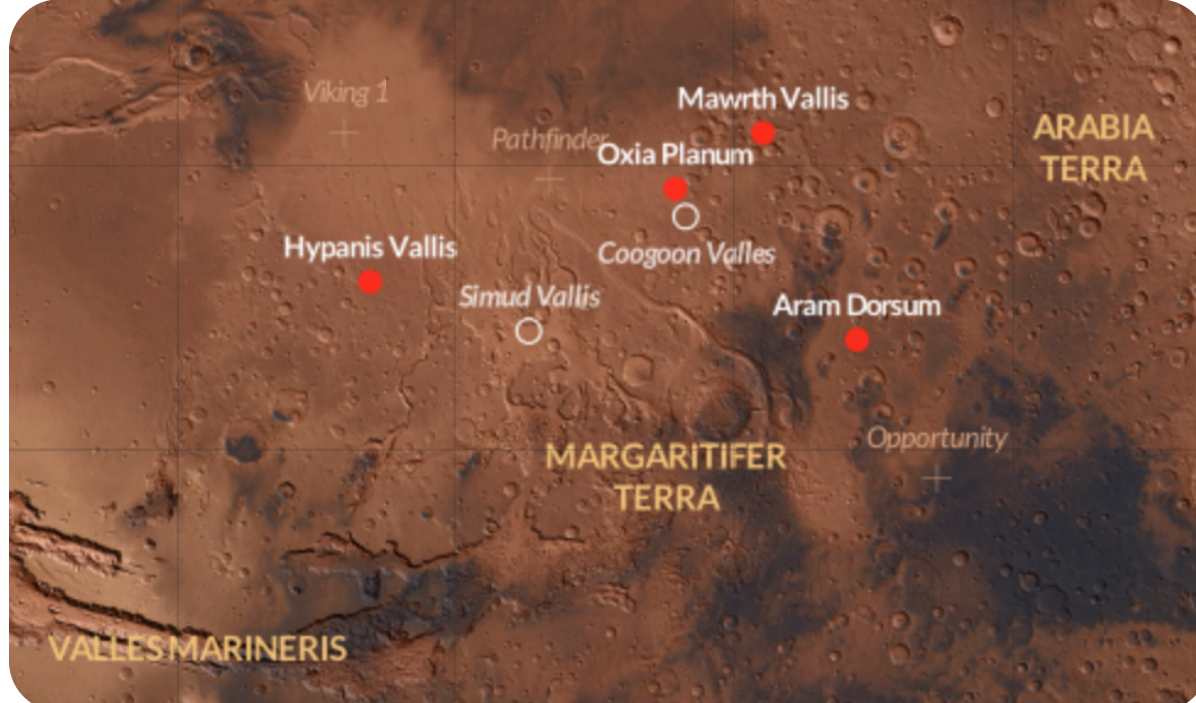
Oxia Planum

An area of Mars called Oxia Planum looks very promising, and has been chosen as one of the possible landing sites. It can be found a little north of Mars' equator. Around 4 billion years ago Oxia Planum was very different to today. There were rivers of water flowing into huge plains. Although now the water is long-gone, the Exomars Rover could study the area and search for signs of life that may have existed then, as well as investigating layers of minerals.



Mawrth Vallis

A few hundred kilometres away is the second potential landing site, called Mawrth Vallis. It is thought that in the past this area was very wet for a long time, perhaps even for hundreds of millions of years. Ponds of water that existed then could have been home to strange forms of life.



ExoMars landing site candidates

The final decision on which landing site to aim for will be taken a year before the ExoMars Rover lands on the surface. Meanwhile, scientists are busy gathering more information to help them choose. They are looking at which area has the best sites for the ExoMars Rover to use its drill to investigate beneath the surface, and which has the smoothest surface to

Cool fact: The ExoMars Mission is a joint project between ESA and the Russian space agency Roscosmos.

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