

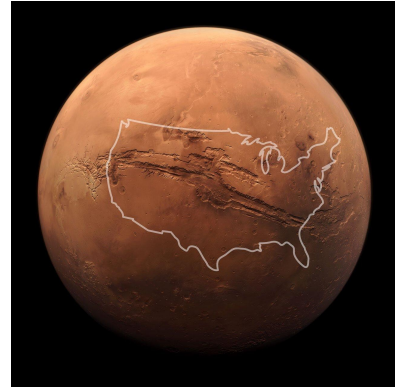
Mission to Mars

Stage 1 - Location

We found 9 essential things that we have to take into account when choosing the landing site:

- 1) There must be mountains.
- 2) It has to be a valley.
- 3) The valley has to have space for humans to investigate.
- 4) There doesn't have to be extreme cold or extreme heat.
- 5) It has to have an exit

- 6) They can't be near hazards (tiny craters, volcanoes, etc.).
- 7) It has to have a stable surface.
- 8) Space to land.
- 9) There must be no wind at the moment of landing.



Looking for all those qualities, we found the Valle Marineris that ticks all the boxes, and is to the east of the Tharsis region. It is 4,500 km long, 200 km wide and around 11 km deep, covering a quarter of the planet's equatorial circumference. As it is, that is why landing is not a problem and it could be done as many times as you want. Being 11 km deep, the temperature would be warmer. It was discovered in 1970 and its name is a tribute to the NASA Mariner probe.

By covering a little more than the territory of the United States from coast to coast, it is the largest cleft of all those known in the solar system. In December 2021 it was published on a website that Valle marineris has an amount of water that is the size of the Netherlands.

And with that amount of water, we could plant seeds and start a little life on Mars.

Many scientists think that Valles Marineris is a tectonic fault on the Martian surface, formed during the cooling process of the planet, affected by the uplift of the crust and increased by erosive processes. Near the eastern edges of the canyon, channels can be seen that may have been caused by watercourses or carbon dioxide.