

Mars Express takes amazing photo of the Red Planet!

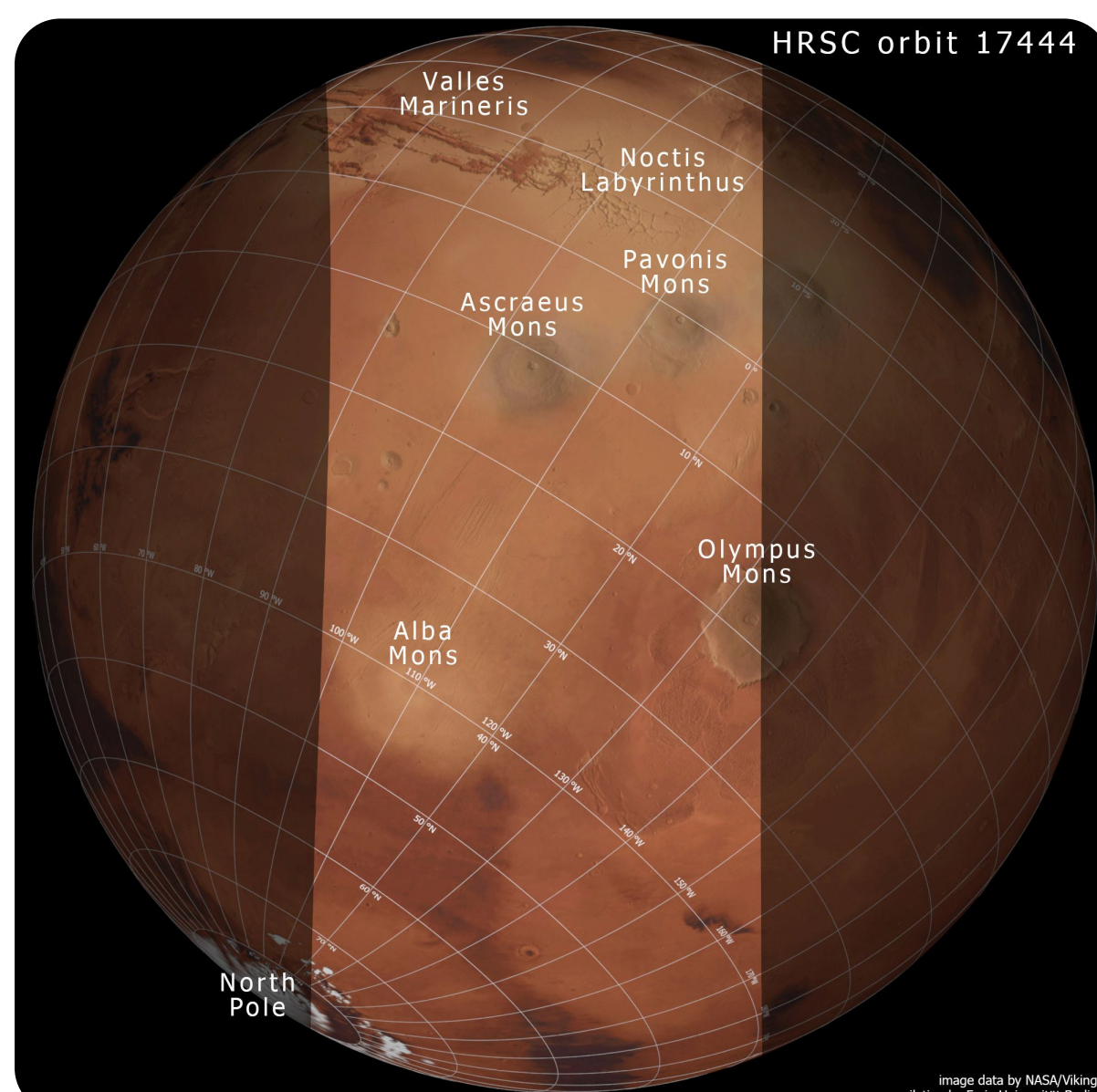


Check out the *Mare Explorer* photo! What features can you see?

[Access the image](#)

15 years ago, ESA's Mars Express mission was launched to investigate the Red Planet! To celebrate this anniversary, an incredible new photo of Mars has been released. The stunning picture shows a vast region on Mars called Tharsis, which is one of the most interesting places on the entire surface. Tharsis has gigantic volcanoes, sweeping canyons, and fractured ground.

Can you see the faint blue haze at the top of the picture? That is the planet's upper horizon. The dark patches at the top-left are part of Valles Marineris, the largest canyon in the Solar System. A little further down and you come to some cracks in the surface, called Noctis Labyrinthus. What about the two dark circles? They are actually extinct volcanoes called Ascræus Mons and Pavonis Mons. Each one is more than 20km high! At the bottom of the image is Mars' northern polar ice cap. (The photo is angled so that north is at the bottom-left).



This map shows

Tharsis covers roughly a quarter of the Martian surface, and is between Mars' southern highlands and northern lowlands. Most of the area is between 2 and 10km high – taller than most other areas on Mars. It was probably made long ago when molten rock, called magma,

The Mars Express craft has certainly achieved a lot during the last 15 years. It has studied immense volcanoes, canyons, polar ice caps, ancient impact craters, and made maps of water, volcanism, and minerals. It has even provided data to make thousands of 3D images



Mars Express is s

All of the discoveries made by Mars Express have helped us to better understand the Red Planet. We now know that it was once warmer and wetter – conditions that could have allowed life to thrive. Future missions to Mars will build on the work of Mars Express. ESA's *ExoMars* launch in 2020 will send a rover to Mars to find out if

Although Mars Express is now quite an old craft, recent software updates have given it new life. There are hopes that it could keep working through to the mid-2020s. Perhaps it has yet more discoveries to make!