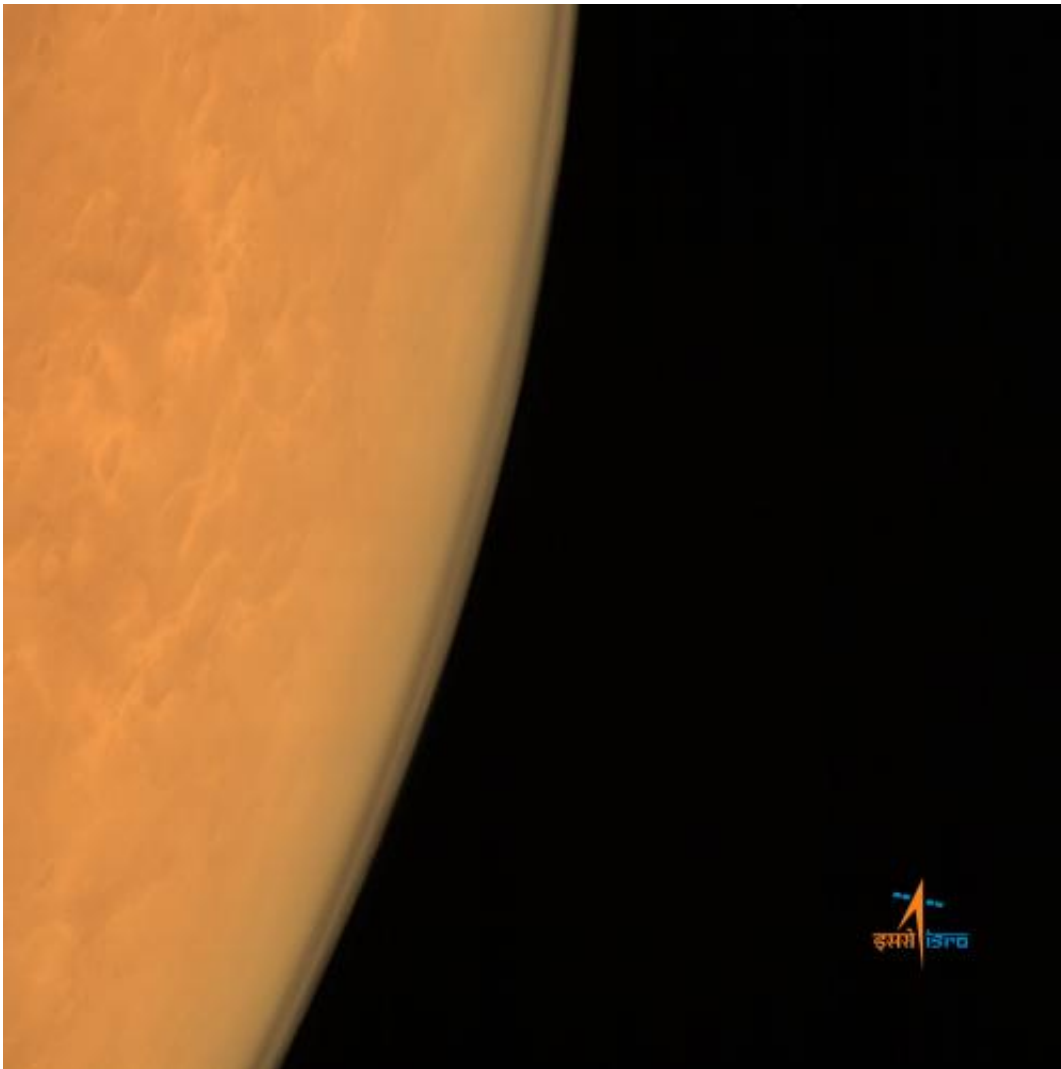


MOM eyes the limb of Mars after historic arrival

September 29 2014, by Ken Kremer



ISRO's Mars Orbiter Mission captures the limb of Mars with the Mars Color Camera from an altitude of 8449 km soon after achieving orbit on Sept. 23/24, 2014 . Credit: ISRO

India's maiden interplanetary voyager, the Mars Orbiter Mission (MOM) has transmitted a breathtaking new image eyeing the limb of Mars and its atmosphere against the blackness of space.

The beautiful Martian image is only MOM's second since successfully braking into orbit during the 'history creating' insertion maneuver days ago on Sept. 23/24.

The MOM orbiter was designed and developed by the Indian Space Research Organization (ISRO), India's [space agency](#), which released the image on Sept 25, about a day after MOM arrived.

The limb image was taken using MOM's Mars Color Camera (MCC) from an altitude of 8449 kilometers and shows more of an 'Orange Planet' rather than a 'Red Planet.'

"A shot of Martian atmosphere. I'm getting better at it. No pressure," tweeted ISRO at MOM's newly established twitter account after entering orbit.

The image has a spatial resolution of 439 meters and is centered around Lat: 20.01N and Lon:31.54E.

MOM's goal is to study Mars atmosphere , surface environments, morphology, and mineralogy with a 15 kg (33 lb) suite of five indigenously built science instruments. It will also sniff for methane, a potential marker for biological activity.

"The view is nice up here," ISRO tweeted.

MOM's first image taken shortly after orbital arrival showed a heavily cratered region of the Red Planet taken by the MCC tri-color camera from a slightly lower altitude of 7300 kilometers with a [spatial resolution](#)

of 376 meters.



ISRO's Mars Orbiter Mission captures its first image of Mars from a height of 7300 km. Credit: ISRO

Following MOM's successful Mars Orbital Insertion (MOI) maneuver, India became the newest member of an elite club of only four entities who have launched probes that successfully investigated Mars – following the Soviet Union, the United States and the European Space

Agency (ESA).

MOM is now circling Mars in a highly elliptical orbit whose nearest point to Mars (periapsis) is at 421.7 km and farthest point (apoapsis) at 76,993.6 km. The inclination of orbit with respect to the equatorial plane of Mars is 150 degree, as intended, ISRO reports.

The \$73 million mission is expected to last at least six months.

MOM's success follows closely on the heels of NASA's MAVEN orbiter which also successfully achieved orbit barely two days earlier on Sept. 21 and could last 10 years or more.

Source: [Universe Today](#)

Citation: MOM eyes the limb of Mars after historic arrival (2014, September 29) retrieved 16 June 2024 from <https://phys.org/news/2014-09-mom-eyes-limb-mars-historic.html>

<p>This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.</p>
--