



Image credit: NASA

[Download Image Here](#)

Hey, Who Let the Air Out of the Moon?!

You can thank atmospheric refraction for this droll little optical illusion.

In this image from August of 2016, sunlight reflected off of the Moon's surface is bent as it passes through Earth's atmosphere. By the time it arrives at the camera lens peering through the space station's cupola window, something's off.

Misshapen, yes. Permanent, no. Light travels fastest through a vacuum, slower through a medium – like air, for example. Where the atmosphere is denser its velocity is somewhat slower, and the light is bent, or refracted. Atmospheric refraction displaces stars from their expected location, and warps the shape of larger objects like the Sun and Moon. These 'altered states' are most noticeable just above the horizon, where the atmosphere is densest

