



# Characterizing the Lunar Atmosphere: First Results From LADEE Sodium Observations

- The Ultraviolet/Visible Spectrometer (UVS) has made unprecedented maps of systematic changes in sodium in the lunar atmosphere.
- UVS finds that the sodium abundance varies with lunar phase, increasing as the Moon approaches its fullest. Additionally, the sodium abundance increases with meteoroid showers, but decreases when it is shaded from the solar wind by the Earth's magnetotail.
- These changes suggest a combination of sodium sources, including solar wind particles and meteoroids bombarding the surface releasing sodium from the lunar rocks and soil.
- These variations, combined with other LADEE observations, will constrain the processes at work at the moon, and other airless bodies in the solar system.

