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Gravity increased by lunar surface temperature JAMES KEENE,

None — Quantitatively large effects of lunar surface temperature on apparent gravitational force measured by lunar laser ranging (LLR) and lunar perigee may challenge widely accepted theories of gravity. LLR data grouped by days from full moon shows the moon is about 5 percent closer to earth at full moon compared to 8 days before or after full moon. In a second, related result, moon perigees were least distant in days closer to full moon. Moon phase was used as proxy independent variable for lunar surface temperature. The results support the prediction by binary mechanics that gravitational force increases with object surface temperature.

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