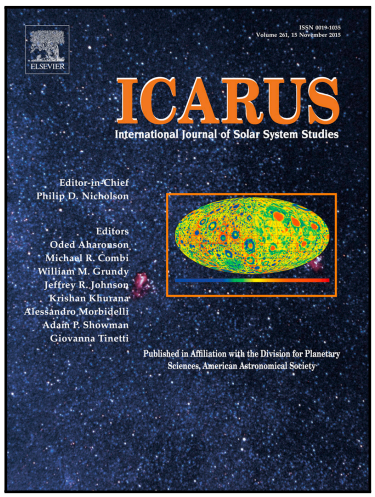

The Length of Lunar Crater Rays Explained Using Secondary Crater Scaling

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Highlights:

- Most ray lengths follow the trend: $Radius_{crater}^{1.27}$, except for the smallest craters, which have abnormally long rays
- Rays of larger craters are created when primary crater ejecta excavate bright, unweathered material from below the dark lunar soil
- Rays are primarily composed of locally derived material, but rays of small craters may be primary crater ejecta deposited on the surface