

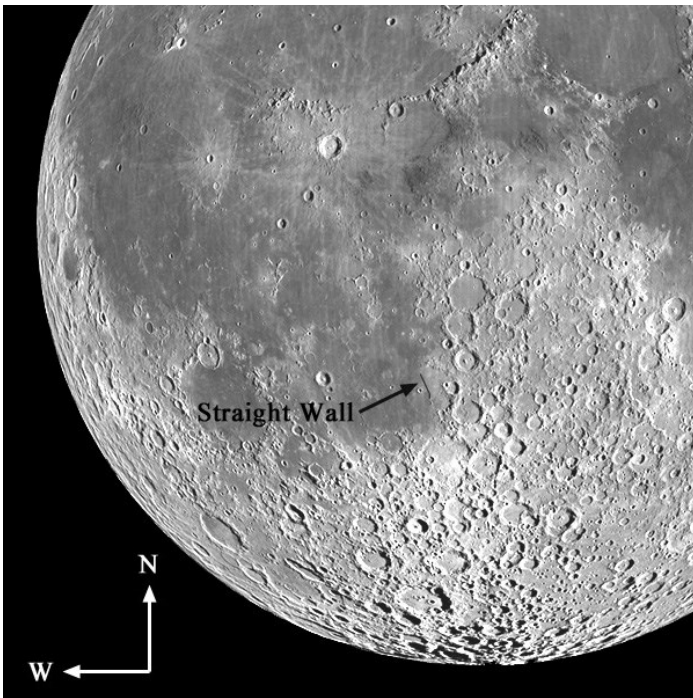
Straight Wall

What It Is

Straight Wall, also known in moon atlases as Rupes Recta, is a fault line on the moon. Its origin is not well understood but is likely linked in some way to the lava flooding of Mare Nubium, where it resides.

When To See It

Straight Wall is elusive and challenging in a small telescope. Look for it as a hairlike shadow about 8 or 9 days after new moon, or as a straight bright line about 22 or 23 days after new moon. In either case, Straight Wall will likely be spotted on only one night of the two because of changing lighting conditions. It's easier to spot as a dark line than as a bright one, and the moon phase for doing that is conveniently placed in the early evening instead of after midnight.



Where It Is

Straight Wall is located in the far southeastern portion of Mare Nubium. Its location in the dark, flat mare region but near the rough, cratered edge of the mare is part of what makes it challenging to see in a small telescope. Its small size also makes it challenging to spot!

Why It's Cool

Straight Wall appears dark near the waxing half moon because it is a cliff casting a shadow on the surface to its west. The cliff height is estimated to be between 250 and 450 meters (about 800 to 1500 feet). Detailed imagery from Japan's unpiloted Kaguya spacecraft orbiting the moon shows that there is a depression running along the base of the cliff. Some lunar geologists think this feature formed when Mare Nubium flooded with lava over 3 billion years ago. Evidence suggests that the area to the west of Straight Wall sank slightly after cooling, creating the cliff along the fault line.

Straight Wall appears bright near the waning half moon because at that time sunlight is lighting up the cliff face rather than casting a shadow.