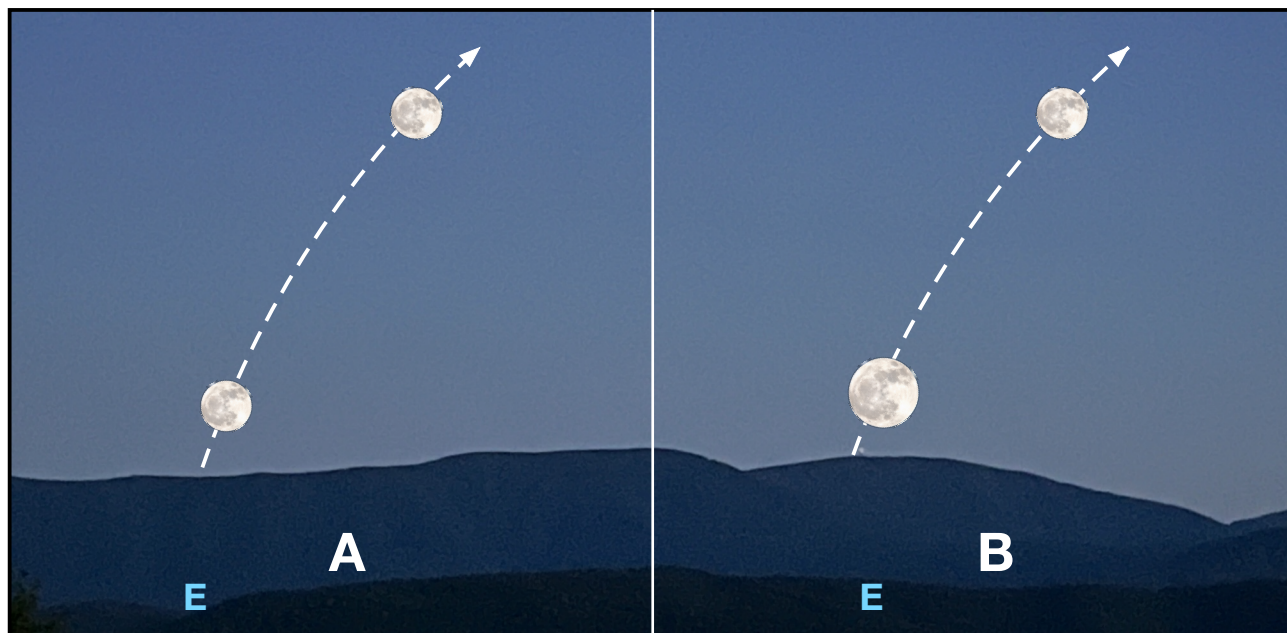




# The Big Moon Illusion

*a naked eye and camera activity*



Which is more correct: A or B?

Casual skywatchers since the time of the ancient Greeks have seen the just risen moon as appearing much larger than after it has climbed higher in the sky.

A common explanation of the “Big Moon Illusion” is that when the moon’s apparent size is compared to familiar landscape objects, such as distant houses and trees, our minds interpret the moon as being quite large. Then, when it moves higher in the sky, there are no nearby comparison objects. The moon’s apparent size then appears to shrink, making it seem to lie much farther away. While sounding plausible, this reasoning does not explain why the same effect occurs at the beach when the moon is seen hovering just above a flat, featureless ocean horizon, or in the desert when the moon is cast against sweeping sand formations. Studies have sought a deeper psychological explanation.

See the big moon illusion for yourself on the evening of June 20, 21, or 22. From a location that has a low horizon line, look to the east at sunset for the rising moon, or, on the following morning, to the west before sunrise.

1. Isolate the moon by viewing it through a narrow tube, such as a drinking straw. Note its size compared to the tube’s field of view. Wait two hours or more and repeat the observation. (If it is a morning observation, first look a couple of hours before sunrise.)
2. Use a digital camera at full optical zoom and take an image of the rising moon. Be sure the camera is properly focused and that the image is not overexposed. Again, wait a couple of hours, then take another image. Download both images on a computer and view them at the same image scale.

**Are the moon sizes the same?**