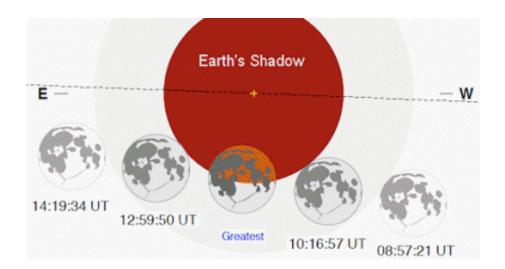


Big Lunar Eclipse

June 25 2010



The Moon's path through Earth's shadow on June 26th. Image credit: F. Espenak/GSFC.

(PhysOrg.com) -- This Saturday morning, June 26th, there's going to be a lunar eclipse—and for many residents of the USA, it's going to be a big one.

The <u>eclipse</u> begins at 3:17 am PDT (10:17 UT) when the <u>Moon</u> enters the sunset-colored shadow of Earth. By 4:38 am PDT (11:38 UT), the moment of greatest eclipse, 54% of the Moon's diameter will be covered. From beginning to end, the event lasts almost three hours.

Although the eclipse is only partial, it will be magnified in size and charm by the "Moon Illusion"--a result of the eclipse occurring close to



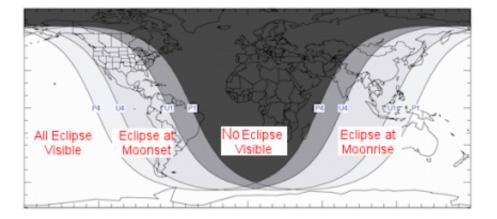
the horizon from viewing sites in the USA.

For reasons not fully understood by <u>astronomers</u> or psychologists, lowhanging Moons look unnaturally large when they beam through trees, buildings and other foreground objects. In fact, a low Moon is no wider than any other Moon—cameras prove it—but the human brain insists otherwise.

Who are we to argue?

The effect will be particularly strong in western and central parts of the USA and Canada where the Moon will be setting as the eclipse reaches maximum. (Observing tip: Look low and to the west just before dawn.) The fact that the extra size is just an illusion in no way detracts from the beauty.

People in New England and northeastern Canada will justmiss it. The Moon sets shortly before the eclipse begins.



A global map of eclipse visibility. US readers should note that the eclipse will not be visible from New England and only briefly visible along most of the Atlantic seaboard. Image Credit: F. Espenak/GSFC



Halfway around the world, observers in India, Japan, and parts of East Asia will experience the same phenomenon. They'll see the eclipse on Saturday evening as the Moon is rising. The Moon Illusion will be fully active as Earth's shadow sweeps across low-hanging lunar terrain.

It almost makes you feel sorry for people living on the dreamy islands of the South Pacific. There the eclipse takes place directly overhead, high in the midnight sky where the Moon Illusion does not work. That's okay. A partial lunar eclipse is a beautiful thing all by itself.

Enjoy the show!

Provided by Science@NASA

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