

Insert: Simulated image of a gibbous earth as would be seen by an observer standing on the moon. Main panel: Lunar image from December 12, 1999 from the Big Bear Solar Observatory. A neutral density filter attenuates the sunlit crescent in the upper right, making the earthshine visible on the balance of the lunar disk. Precise comparison of the intensities of the two fiducial regions indicated allows monitoring of the earth's changing reflectance.