

An Early Morning Eclipse

— Howard L. Cohen

August brings this year's second total eclipse of the Moon but observers will need to rise before the rooster crows to catch this one

Last March, Earth experienced its first total lunar eclipse since 2004. Florida observers expected to see the Moon rise in eclipse but, unfortunately, cloudy weather hid the eclipsed Moon from view. However, Florida observers now get a second chance to see a lunar eclipse in 2007 though this time the Moon will *rise* during eclipse.

In Gainesville, just before four o'clock on the morning of Tuesday, August 28, the Moon will enter Earth's penumbral shadow. About one hour later, the Moon's eastern limb will show a noticeable "bite" as the lunar disk begins its march into Earth's umbral shadow. After about another hour totality starts but, unluckily for the East Coast, maximum eclipse occurs near time of sunrise. Thus, Florida observers will see the Moon sink below the western horizon as the sky rapidly brightens from a rising Sun.

Florida residents know August usually brings strong thunderstorms but such storms often dissipate during the evening and early morning skies can be clear. So, perhaps an early morning eclipse in August brings the best chance of viewing this celestial event though we will miss the final curtain call. After all, half an eclipse is better than none at all. So, get up before the roosters crow to see this one.

2007 August 28 Total Lunar Eclipse Timetable for Gainesville

Moon Enters Penumbra	03:52 a.m. EDT	(Moon's altitude 36°)
Moon Enters Umbra	04:51 a.m. EDT	(Moon's altitude 26°)
Start of Totality	05:52 a.m. EDT	(Moon's altitude 15°)
Maximum Eclipse	06:37 a.m. EDT	(Moon's altitude 6°)
Sunrise	07:04 a.m. EDT	(Moon's altitude 1°)
MOONSET	07:08 a.m. EDT	(Moon's altitude 0°)
End of Totality	07:23 a.m. EDT	(Moon's altitude -4°)
Moon Leaves Umbra	08:24 a.m. EDT	(Moon's altitude -16°)
Moon Leaves Penumbra	09:22 a.m. EDT	(Moon's altitude -28°)

And for late risers, know that 2008 February 20 brings yet another total lunar eclipse for Gainesville! This time the eclipse runs from about 7:30 p.m. EST Feb. 20 to about 1:15 a.m. the next morning so we will have the opportunity to see the whole show.