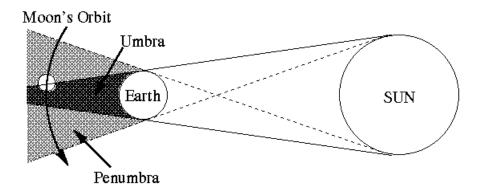
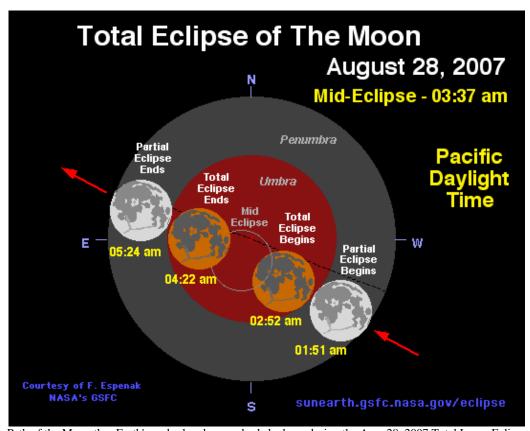
Some Basics

The eclipse is a cosmic event taking place in space or (say) our solar system. As such, it occurs at the same instant for all of us on earth. However, visibility from earth varies with local latitude-longitude and hence local time. The **visible umbral duration** (i.e. entry-exit duration of moon along its orbit in the darker shade region in the sketch below) is called the **grahaNapuNyakAlam**.



Geometry of a Lunar Eclipse (sizes exaggerated)

Total Lunar Eclipse of August 28, 2007 (*source*: NASA)



Path of the Moon thru Earth's umbral and penumbral shadows during the Aug. 28, 2007 Total Lunar Eclipse (Pacific Daylight Time)

Aug. 28, 2007, Moline, IL

<u>Full Moon</u> @ 5:34am; <u>Dawn</u> @ 5:54am; <u>Sunrise</u> @ 6:24am;

grahaNapuNyakAlam: 3:51am - 7:24am

Visible Event in Sky*	CDT	anushTHAnams
Moon Just Begins To Enter Umbra (i.e grahaNapuNyakAlam Begins)	03:51 am	Sankalpam : After grahaNapuNyakAlam starts; Siras-snAnam & Shower with sankalpam. (say) 4am - 4:30am.
Entire Moon in Umbra (i.e. Total Eclipse Begins)	04:52 am	Wear : Dry vastrams (incldg. top) or paTTu & wear UrdhvapuNDrams (12)
Mid-Eclipse	05:37 am	sandhyA : sandhyAvandanam. At eclipse, chant only 10 gAyatrI-s followed by 10 ashTHAksharam-s
Wild Lengse	03.37 am	right after gAyatrI; then upastAnam, etc as usual.
Moon Begins To Leave Umbra (i.e. Total Eclipse Ends)	06:22 am	AcArya- : from guru-paramaguru-sarvaguru on to perumAL namaskAram tiruvaDi-s & AcArya taniyans
		Japam : 5:30am-6:30am: Trisecret (or dvayam only).
Partial Eclipse Ends (i.e. grahaNapuNyakAlam Ends)	07:24 am	tarpaNam: tarpaNam during the period between the start and of vimOcanam (i.e. before the end of grahaNapuNyakAlam). Start grahaNa-tarpaNam at (say) 6:30 am and before (say) 7:15 am
		Post-eclipse shower is NOT mandatory.

We may not be able to view the Eclipsed Moon when it is in low-altitude in the sky and/or when visibility is poor because of the weather.

aDiyEn Krishnaswamy 08/17/07