

THE TETRAD TOTAL LUNAR ECLIPSES OF 2014-2015

Circumstances for Gainesville, Florida

1. TOTAL LUNAR ECLIPSE OF 2014 APRIL 15

Visibility: Entire eclipse visible from this location

Penumbral eclipse ends during morning twilight

Bright star *Spica* (stellar visual magnitude +1.0) in *Virgo* 1.5° S.W. of Moon at Mid-Eclipse!

Umbral Magnitude	1.2907
Penumbral Magnitude	2.3182
Duration of Total Phase	1h18m
Duration of Umbral Eclipse	3h35m
Duration of Penumbral Eclipse	5h44m

Event	Date	Time (EDT)	Altitude†	Azimuth†
1. Penumbral Eclipse Starts	2014 Apr 15 (Tue)	12:54 AM	49°	169°
2. Partial Eclipse Begins	"	1:58 AM	49°	192°
3. Total Eclipses Begins	"	3:07 AM	43°	215°
4. MID-ECLIPSE	"	3:46 AM	38°	225°
5. Total Eclipses Ends	"	4:25 AM	31°	233°
6. Partial Eclipse Ends	"	5:33 AM	19°	245°
Start of Astronomical Twilight*	"	5:40 AM	—	—
Start of Nautical Twilight*	"	6:10 AM	—	—
Start of Civil Twilight*	"	6:38 AM	—	—
7. Penumbral Eclipse Ends	"	6:38 AM	6°	254°
Sun Rises*	"	7:03 AM	—	78°
Moon Sets*	"	7:11 AM	—	258°

*Times for Gainesville, FL. Values may differ by several minutes for other Florida locations.

†Altitude & azimuth for Gainesville, FL. Values may differ by several degrees for other Florida locations.

