## **Circumstances for Gainesville, Florida**

## 3. TOTAL LUNAR ECLIPSE OF 2015 APRIL 4

Visibility: Only partially visible from this location
Partial eclipse begins about hour before sunrise
Totality begins after sunrise and then lasts only about 5 minutes!

Umbral Magnitude	1.0008
Penumbral Magnitude	2.0792
Duration of Total Phase	0h05m
Duration of Umbral Eclipse	3h29m
Duration of Penumbral Eclipse	5h58m

Event	Date	Time (EDT)	Altitude†	Azimuth†
1. Penumbral Eclipse Starts	2015 Apr 04 (Sat)	5:01 AM	28°	245°
Start of Astronomical Twilight*	II	5:55 AM	_	_
2. Partial Eclipse Begins	II	6:16 AM	13°	256°
Start of Nautical Twilight*	II	6:24 AM	_	_
Start of Civil Twilight*	II	6:52 AM	_	_
Sun Rises*	II	7:16 AM	_	96°
Moon Sets*	II	7:20 AM	_	264°
3. Total Eclipes Begins	II	7:58 AM	-9°	_
4. GREATEST ECLIPSE	II	8:00 AM	-9°	_
5. Total Eclipes Ends	II	8:03 AM	-10°	_
6. Partial Eclipse Ends	11	9:45 AM	-31°	_
7. Penumbral Eclipse Ends	II	10:59 AM	-46°	_

<sup>\*</sup>Times for Gainesville, FL. Values may differ by several minutes for other Florida locations.

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

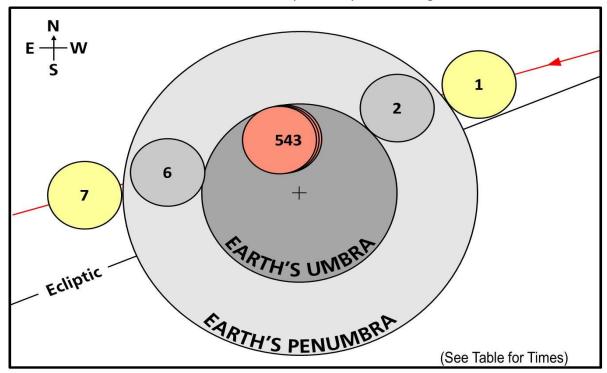


Chart and Diagram by HL Cohen From Eclipse Predictons/Map by Fred Espenak (NASA's GSFC, http://eclipse.gsfc.nasa.gov).