

# Penumbral Lunar Eclipse of 1984 Jun 13

Ecliptic Conjunction = 14:42:41.5 TD (= 14:41:47.5 UT)

Greatest Eclipse = 14:26:39.3 TD (= 14:25:45.3 UT)

Penumbral Magnitude = 0.0647

P. Radius = 1.2318°

Gamma = -1.5239

Umbral Magnitude = -0.9414

U. Radius = 0.7069°

Axis = 1.4589°

Saros Series = 149

Member = 1 of 72

## Sun at Greatest Eclipse (Geocentric Coordinates)

R.A. = 05h28m22.3s

Dec. = +23°14'34.9"

S.D. = 00°15'44.8"

H.P. = 00°00'08.7"

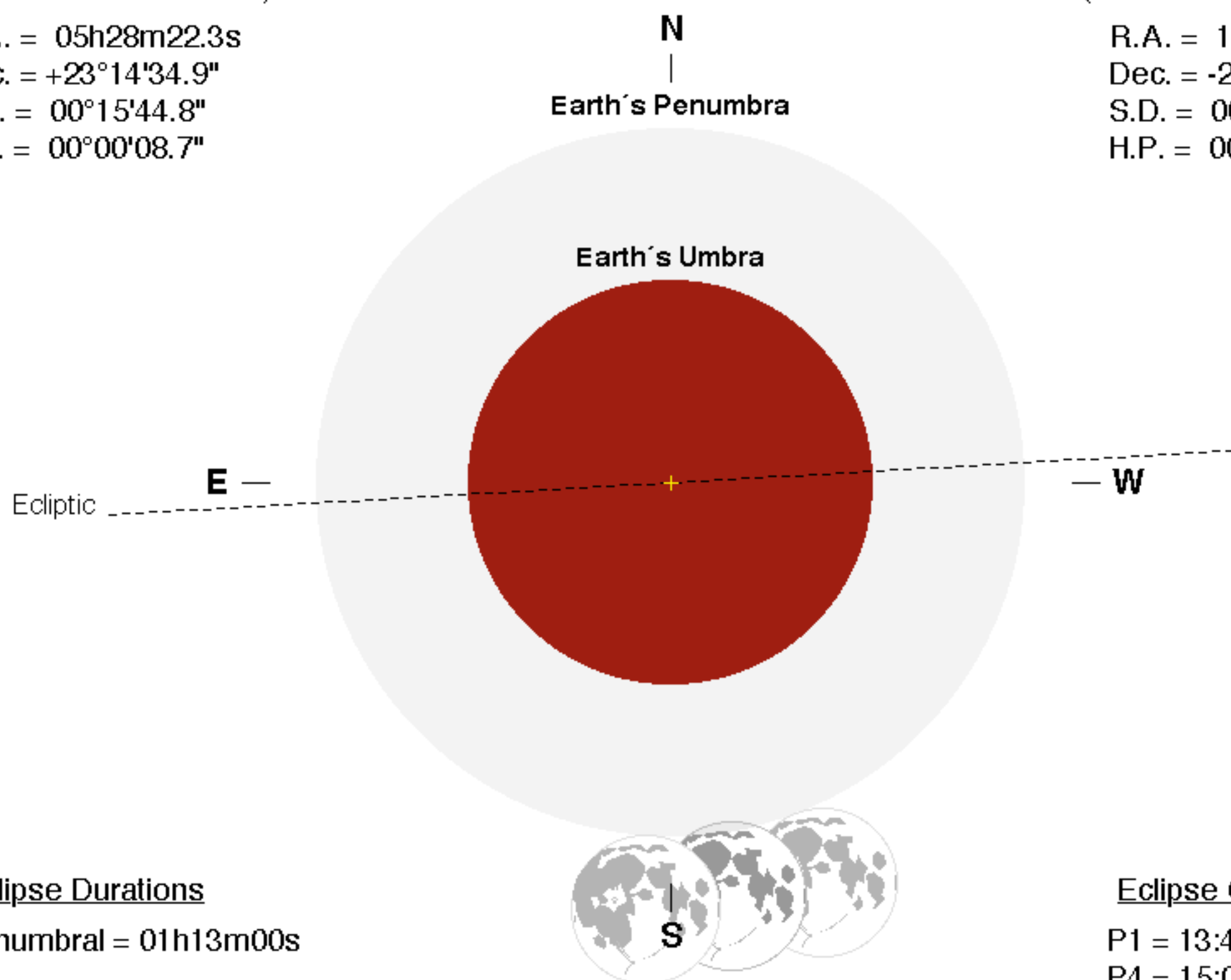
## Moon at Greatest Eclipse (Geocentric Coordinates)

R.A. = 17h27m24.9s

Dec. = -24°41'08.0"

S.D. = 00°15'39.1"

H.P. = 00°57'26.4"



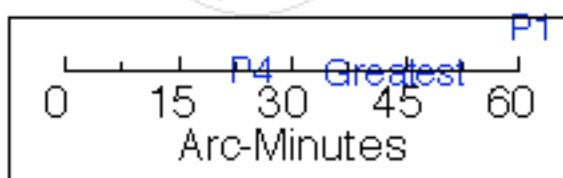
## Eclipse Durations

Penumbral = 01h13m00s

## Eclipse Contacts

P1 = 13:49:05 UT

P4 = 15:02:05 UT



$\Delta T = 54$  s

Rule = CdT (Danjon)

Eph. = VSOP87/ELP2000-85

F. Espenak, NASA's GSFC  
[eclipse.gsfc.nasa.gov/eclipse.html](http://eclipse.gsfc.nasa.gov/eclipse.html)

