

# Penumbral Lunar Eclipse of 2016 Mar 23

Ecliptic Conjunction = 12:01:58.9 TD (= 12:00:49.3 UT)

Greatest Eclipse = 11:48:21.3 TD (= 11:47:11.8 UT)

Penumbral Magnitude = 0.7747

P. Radius = 1.1821°

Gamma = 1.1591

Umbral Magnitude = -0.3118

U. Radius = 0.6473°

Axis = 1.0469°

Saros Series = 142

Member = 18 of 74

## Sun at Greatest Eclipse (Geocentric Coordinates)

R.A. = 00h12m02.0s

Dec. = +01°18'11.0"

S.D. = 00°16'02.7"

H.P. = 00°00'08.8"

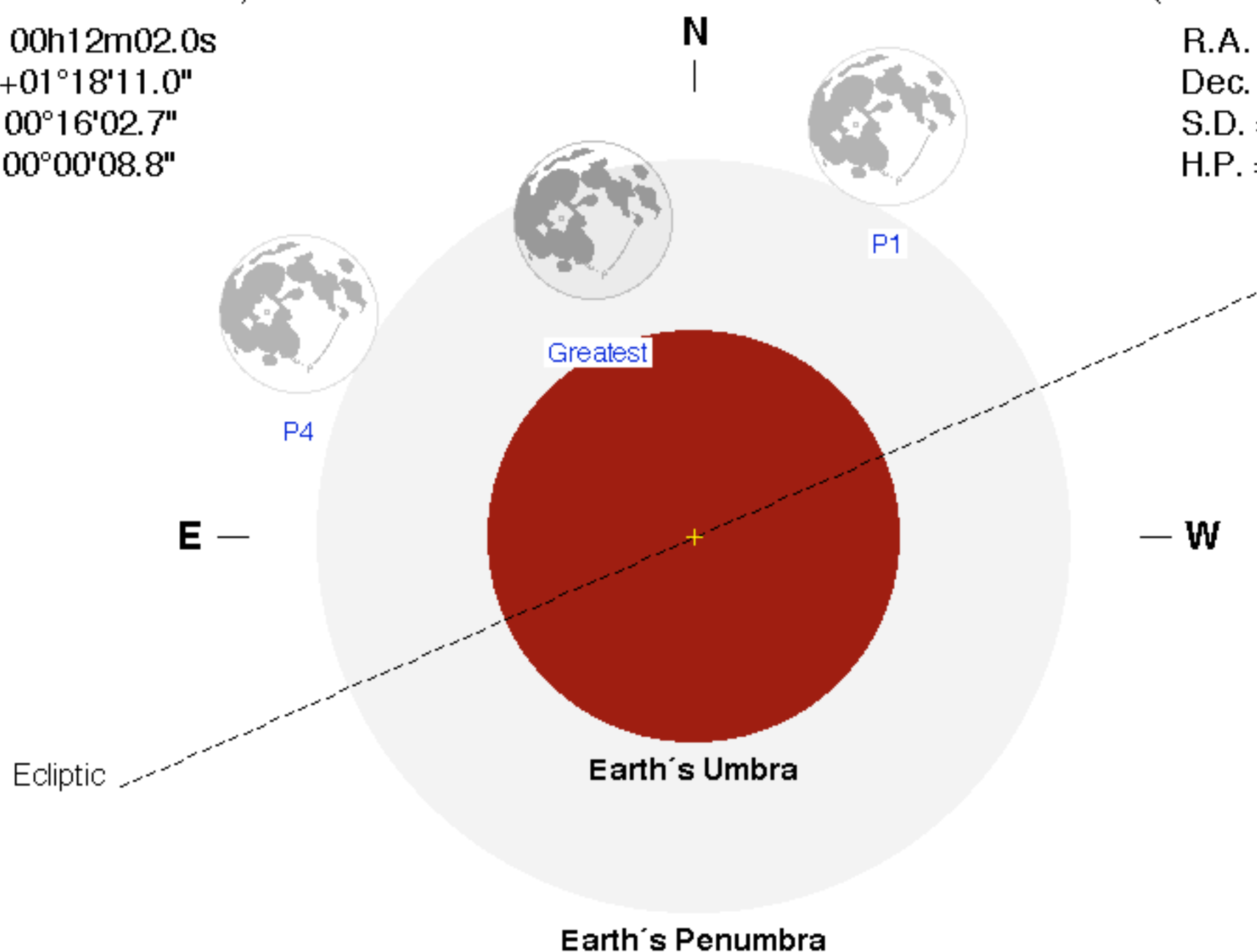
## Moon at Greatest Eclipse (Geocentric Coordinates)

R.A. = 12h13m18.5s

Dec. = -00°18'21.3"

S.D. = 00°14'46.0"

H.P. = 00°54'11.6"



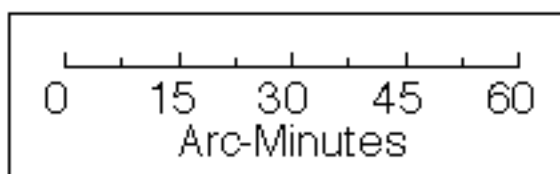
## Eclipse Durations

Penumbral = 04h15m22s

## Eclipse Contacts

P1 = 09:39:29 UT

P4 = 13:54:50 UT



$\Delta T = 70$  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)

