

# Penumbral Lunar Eclipse of 2042 Sep 29

Ecliptic Conjunction = 10:35:31.0 TD (= 10:34:04.2 UT)

Greatest Eclipse = 10:45:46.5 TD (= 10:44:19.7 UT)

Penumbral Magnitude = 0.9528

P. Radius = 1.3004°

Gamma = -1.0261

Umbral Magnitude = -0.0031

U. Radius = 0.7682°

Axis = 1.0483°

Saros Series = 118    Member = 53 of 74

## Sun at Greatest Eclipse (Geocentric Coordinates)

R.A. = 12h23m37.3s

Dec. = -02°33'13.5"

S.D. = 00°15'57.9"

H.P. = 00°00'08.8"

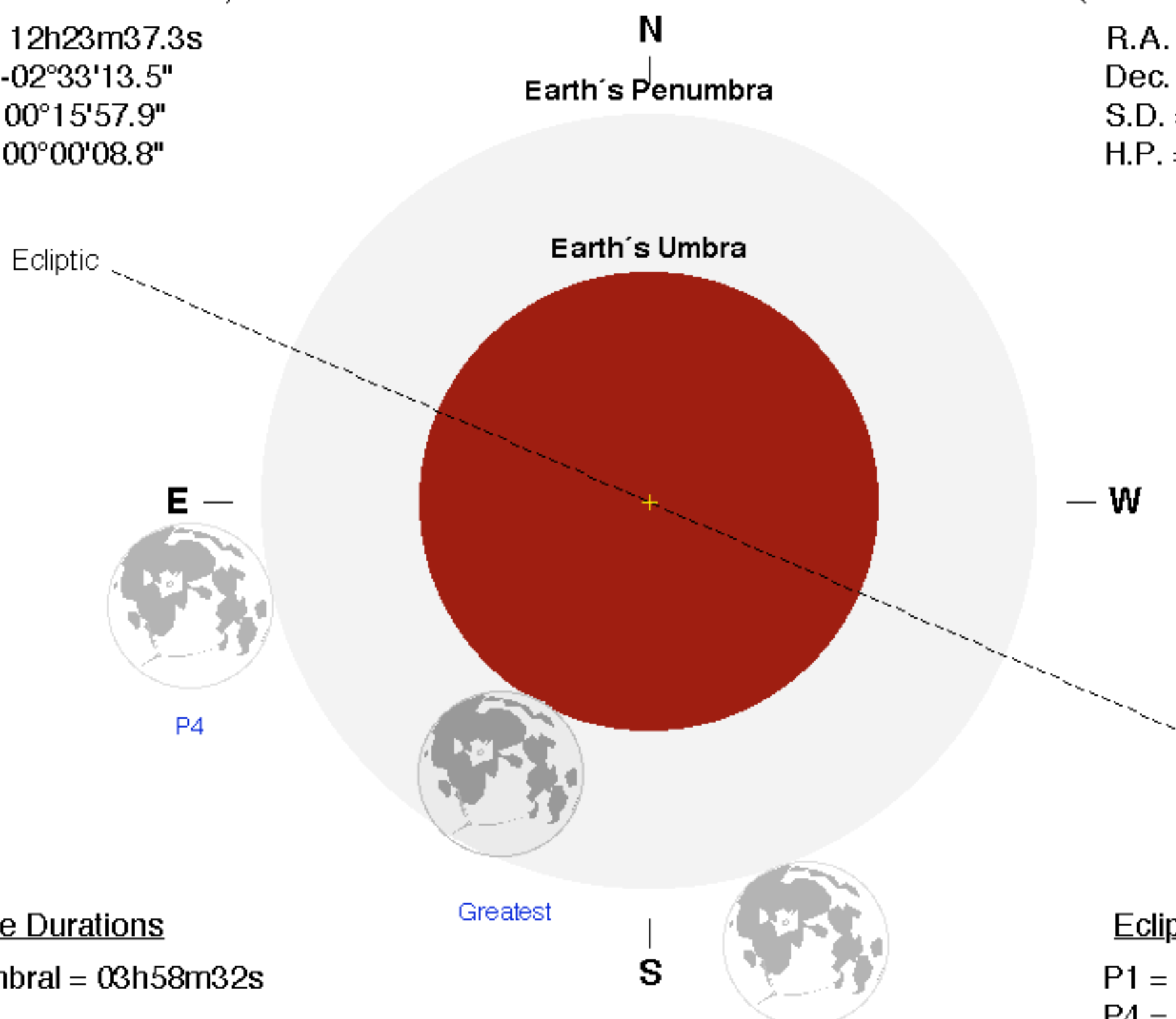
## Moon at Greatest Eclipse (Geocentric Coordinates)

R.A. = 00h25m38.7s

Dec. = +01°38'07.1"

S.D. = 00°16'42.1"

H.P. = 01°01'17.9"



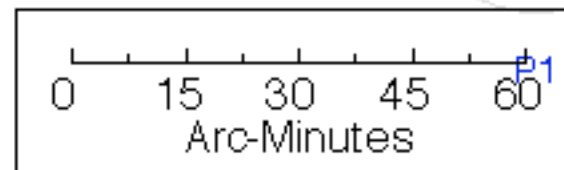
## Eclipse Durations

Penumbral = 03h58m32s

## Eclipse Contacts

P1 = 08:45:03 UT

P4 = 12:43:35 UT



$\Delta T = 87$  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)

