

# Penumbral Lunar Eclipse of 2009 Feb 09

Ecliptic Conjunction = 14:50:16.0 TD (= 14:49:09.8 UT)

Greatest Eclipse = 14:39:22.0 TD (= 14:38:15.8 UT)

Penumbral Magnitude = 0.8994

P. Radius = 1.2866°

Gamma = -1.0640

Umbral Magnitude = -0.0882

U. Radius = 0.7463°

Axis = 1.0681°

Saros Series = 143

Member = 18 of 73

## Sun at Greatest Eclipse (Geocentric Coordinates)

R.A. = 21h33m30.0s

Dec. = -14°30'07.1"

S.D. = 00°16'12.6"

H.P. = 00°00'08.9"

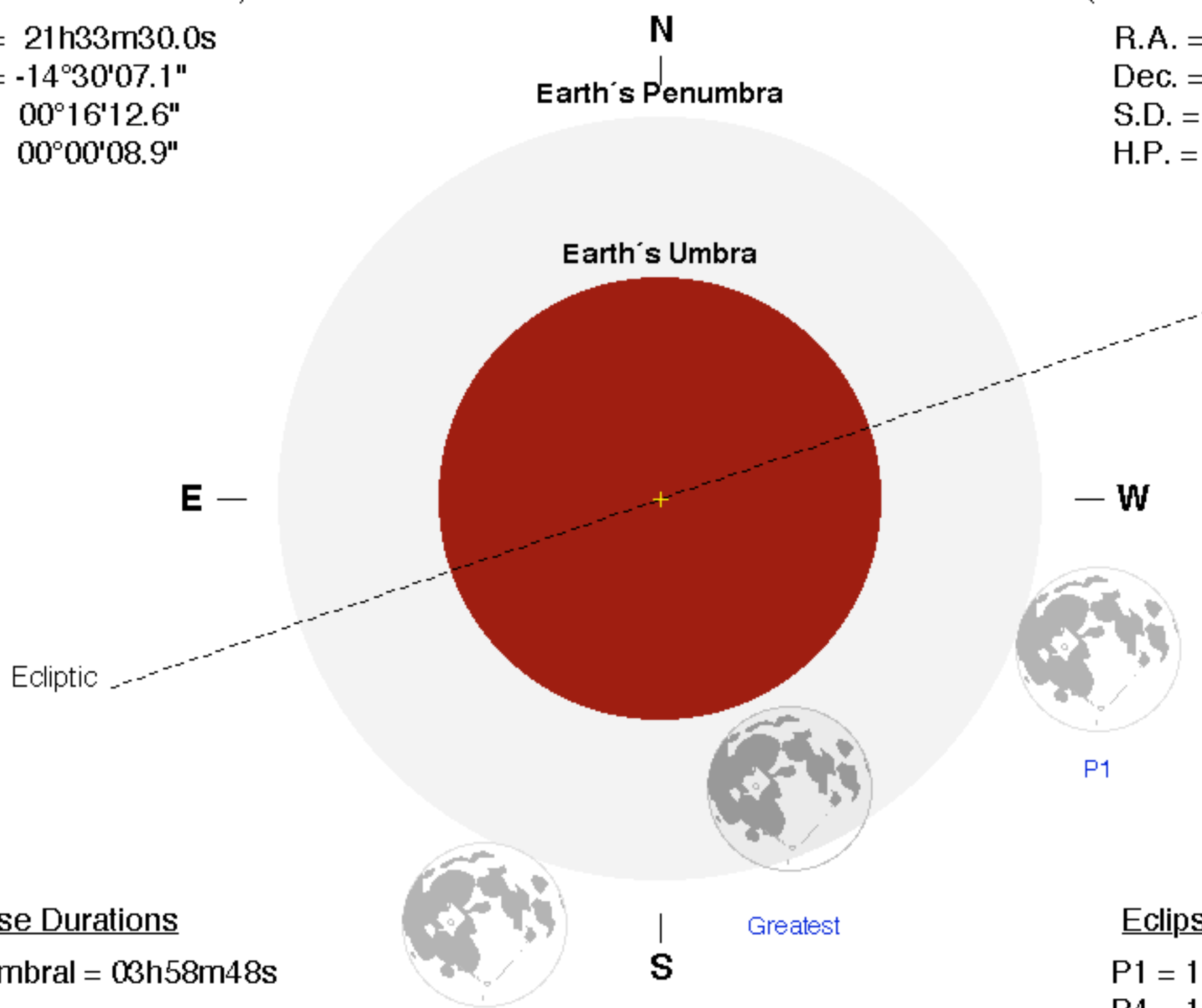
## Moon at Greatest Eclipse (Geocentric Coordinates)

R.A. = 09h31m42.1s

Dec. = +13°31'37.2"

S.D. = 00°16'24.8"

H.P. = 01°00'14.1"



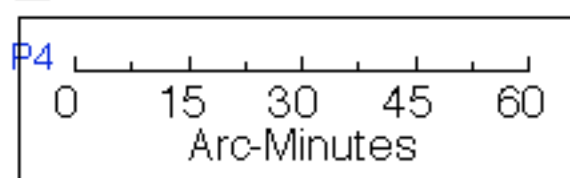
## Eclipse Durations

Penumbral = 03h58m48s

## Eclipse Contacts

P1 = 12:38:50 UT

P4 = 16:37:39 UT



$\Delta T = 66$  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)

