

Figure 8

Partial Lunar Eclipse of 2009 Dec 31

Ecliptic Conjunction = 19:13:51.1 TD (= 19:12:45.1 UT)
 Greatest Eclipse = 19:23:45.9 TD (= 19:22:39.9 UT)

Penumbral Magnitude = 1.0555 P. Radius = 1.2997° Gamma = 0.9766
 Umbral Magnitude = 0.0763 U. Radius = 0.7575° Axis = 0.9921°

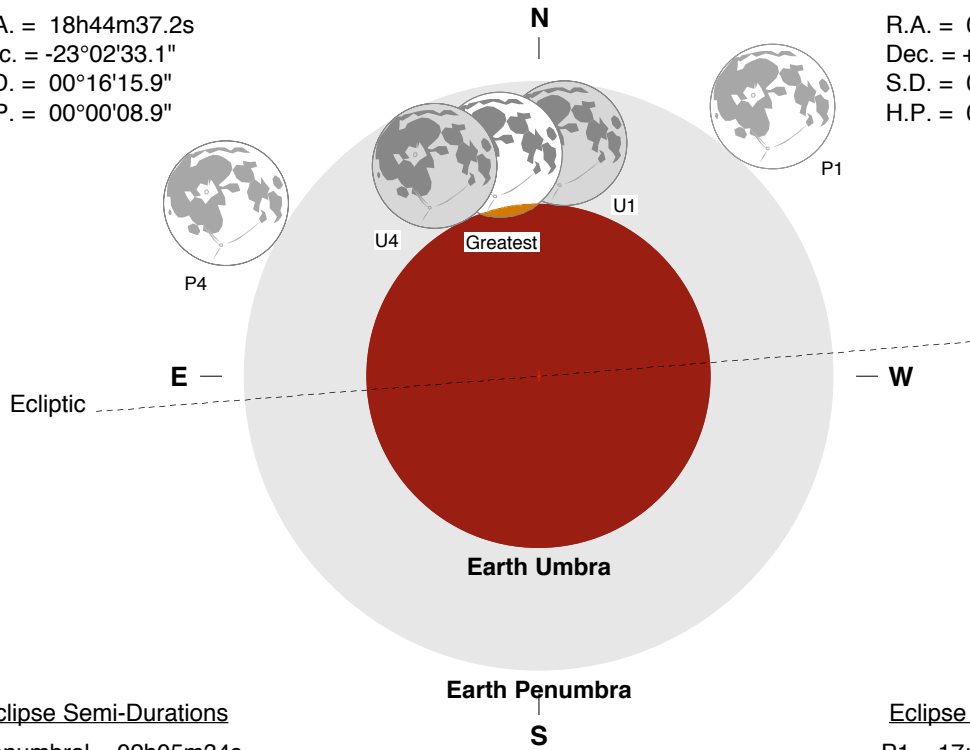
Saros Series = 115 Member = 57 of 72

Sun at Greatest Eclipse
(Geocentric Coordinates)

R.A. = 18h44m37.2s
 Dec. = -23°02'33.1"
 S.D. = 00°16'15.9"
 H.P. = 00°00'08.9"

Moon at Greatest Eclipse
(Geocentric Coordinates)

R.A. = 06h45m22.4s
 Dec. = +24°01'10.5"
 S.D. = 00°16'36.6"
 H.P. = 01°00'57.6"



Eclipse Semi-Durations

Penumbral = 02h05m34s
 Umbral = 00h29m59s

Eclipse Contacts

P1 = 17:17:07 UT
 U1 = 18:52:44 UT
 U4 = 19:52:42 UT
 P4 = 21:28:15 UT

$\Delta T = 66.0$ s

Rule = CdT (Danjon)

Eph. = VSOP87/ELP2000-85

F. Espenak, NASA's GSFC
<http://eclipse.gsfc.nasa.gov/eclipse.html>

