Total Lunar Eclipse of 2011 Dec 10

Geocentric Conjunction = 14:32:17.9 UT J.D. = 2455906.10576
Greatest Eclipse = 14:31:46.1 UT J.D. = 2455906.10539

Penumbral Magnitude = 2.2120 P. Radius = 1.2154° Gamma = -0.3883
Umbral Magnitude = 1.1105 U. Radius = 0.6632° Axis = 0.3571°

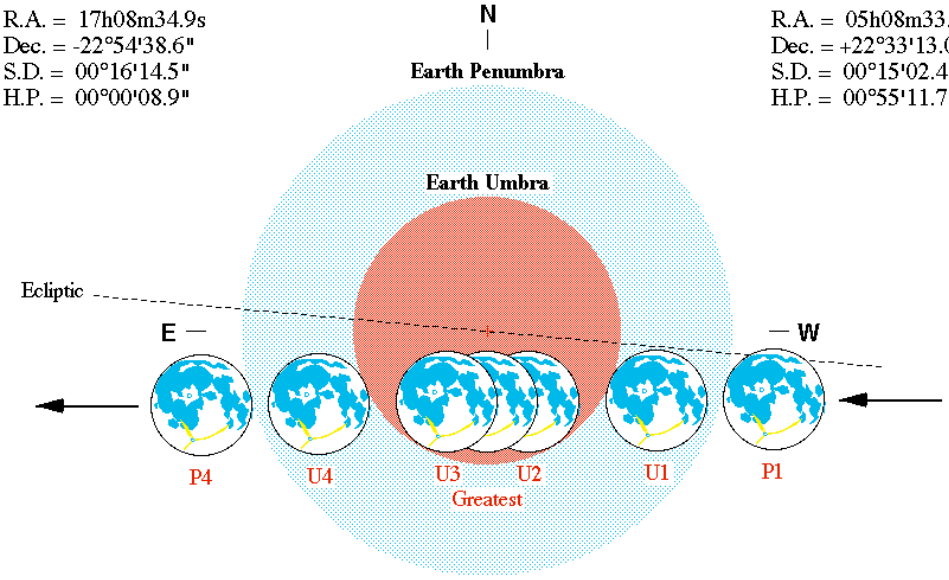
Saros Series = 135 Member = 23 of 71

Sun at Greatest Eclipse
(Geocentric Coordinates)

R.A. = 17h08m34.9s
Dec. = -22°54'38.6"
S.D. = 00°16'14.5"
H.P. = 00°00'08.9"

Moon at Greatest Eclipse
(Geocentric Coordinates)

R.A. = 05h08m33.8s
Dec. = +22°33'13.0"
S.D. = 00°15'02.4"
H.P. = 00°55'11.7"



Eclipse Semi-Durations

Penumbral = 02h59m57s
Umbral = 01h46m27s
Total = 00h26m08s

Eph. = Newcomb/ILE
ΔT = 68.5 s

0 15 30 45 60
Arc-Minutes

F. Espenak, NASA's GSFC - 2004 Jul 07
http://sunearth.gsfc.nasa.gov/eclipse/eclipse.html

Eclipse Contacts

P1 = 11:31:48 UT
U1 = 12:45:21 UT
U2 = 14:05:40 UT
U3 = 14:57:55 UT
U4 = 16:18:15 UT
P4 = 17:31:41 UT