

Total Lunar Eclipse of 2090 Mar 15

Ecliptic Conjunction = 23:44:44.5 TD (= 23:41:44.8 UT)

Greatest Eclipse = 23:48:30.6 TD (= 23:45:30.9 UT)

Penumbral Magnitude = 2.1659

P. Radius = 1.3004°

Gamma = -0.3674

Umbral Magnitude = 1.2012

U. Radius = 0.7643°

Axis = 0.3747°

Saros Series = 124 Member = 53 of 74

Sun at Greatest Eclipse (Geocentric Coordinates)

R.A. = 23h44m53.4s

Dec. = -01°38'05.9"

S.D. = 00°16'05.0"

H.P. = 00°00'08.8"

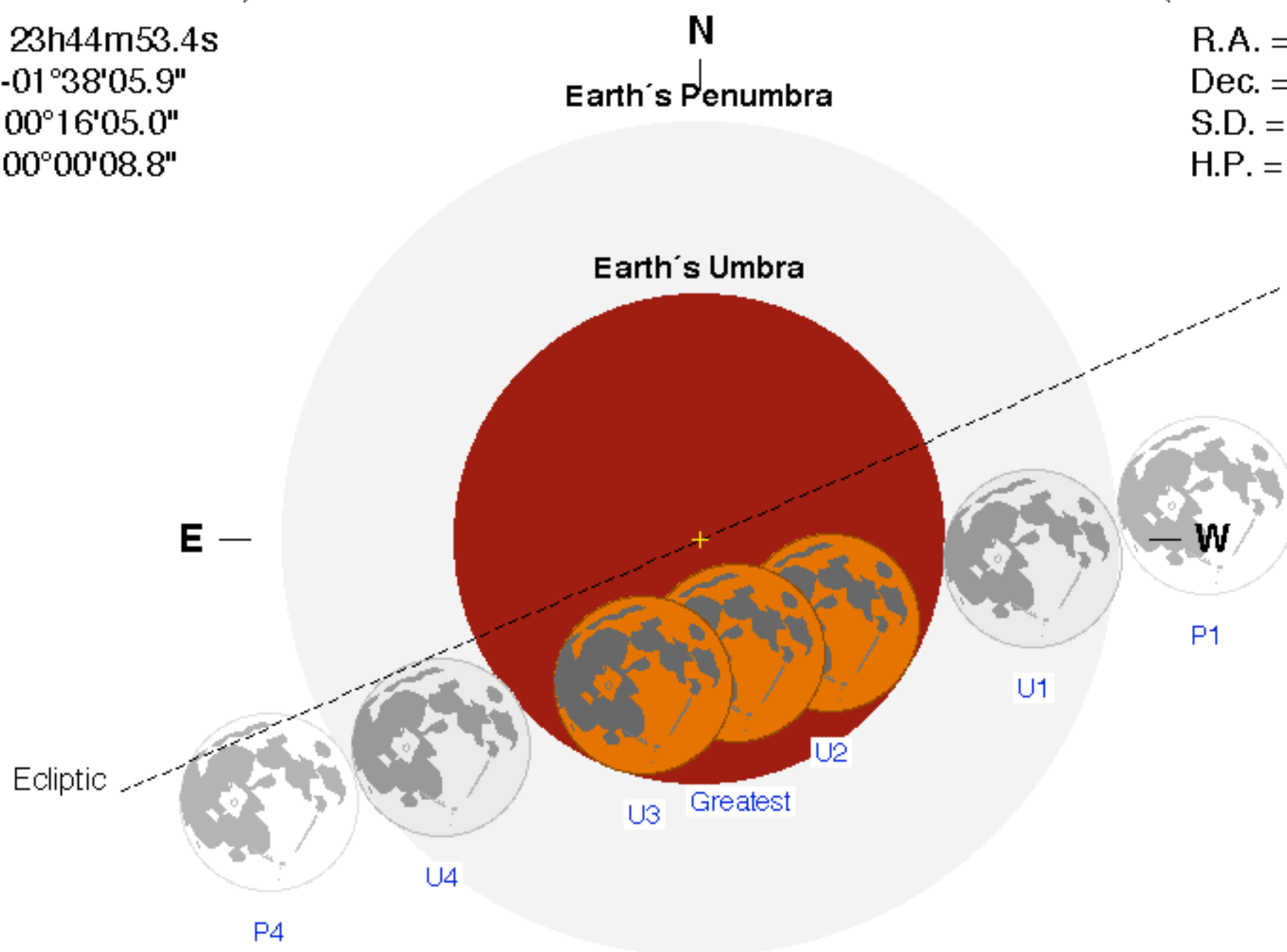
Moon at Greatest Eclipse (Geocentric Coordinates)

R.A. = 11h44m26.1s

Dec. = +01°16'41.0"

S.D. = 00°16'40.3"

H.P. = 01°01'11.0"



Eclipse Durations

Penumbral = 05h11m16s

Umbral = 03h17m28s

Total = 01h03m00s

$\Delta T = 180$ s

Rule = CdT (Danjon)

Eph. = VSOP87/ELP2000-85

Eclipse Contacts

P1 = 21:09:54 UT

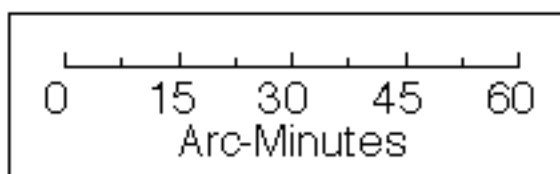
U1 = 22:06:47 UT

U2 = 23:14:00 UT

U3 = 00:17:01 UT

U4 = 01:24:14 UT

P4 = 02:21:10 UT



F. Espenak, NASA's GSFC
eclipse.gsfc.nasa.gov/eclipse.html

