

Total Lunar Eclipse of 2004 Oct 28

Ecliptic Conjunction = 03:08:27.1 TD (= 03:07:22.4 UT)

Greatest Eclipse = 03:05:11.3 TD (= 03:04:06.7 UT)

Penumbral Magnitude = 2.3637

P. Radius = 1.2130°

Gamma = 0.2846

Umbral Magnitude = 1.3081

U. Radius = 0.6764°

Axis = 0.2655°

Saros Series = 136

Member = 19 of 72

Sun at Greatest Eclipse (Geocentric Coordinates)

R.A. = 14h11m00.6s

Dec. = -13°12'05.3"

S.D. = 00°16'06.0"

H.P. = 00°00'08.9"

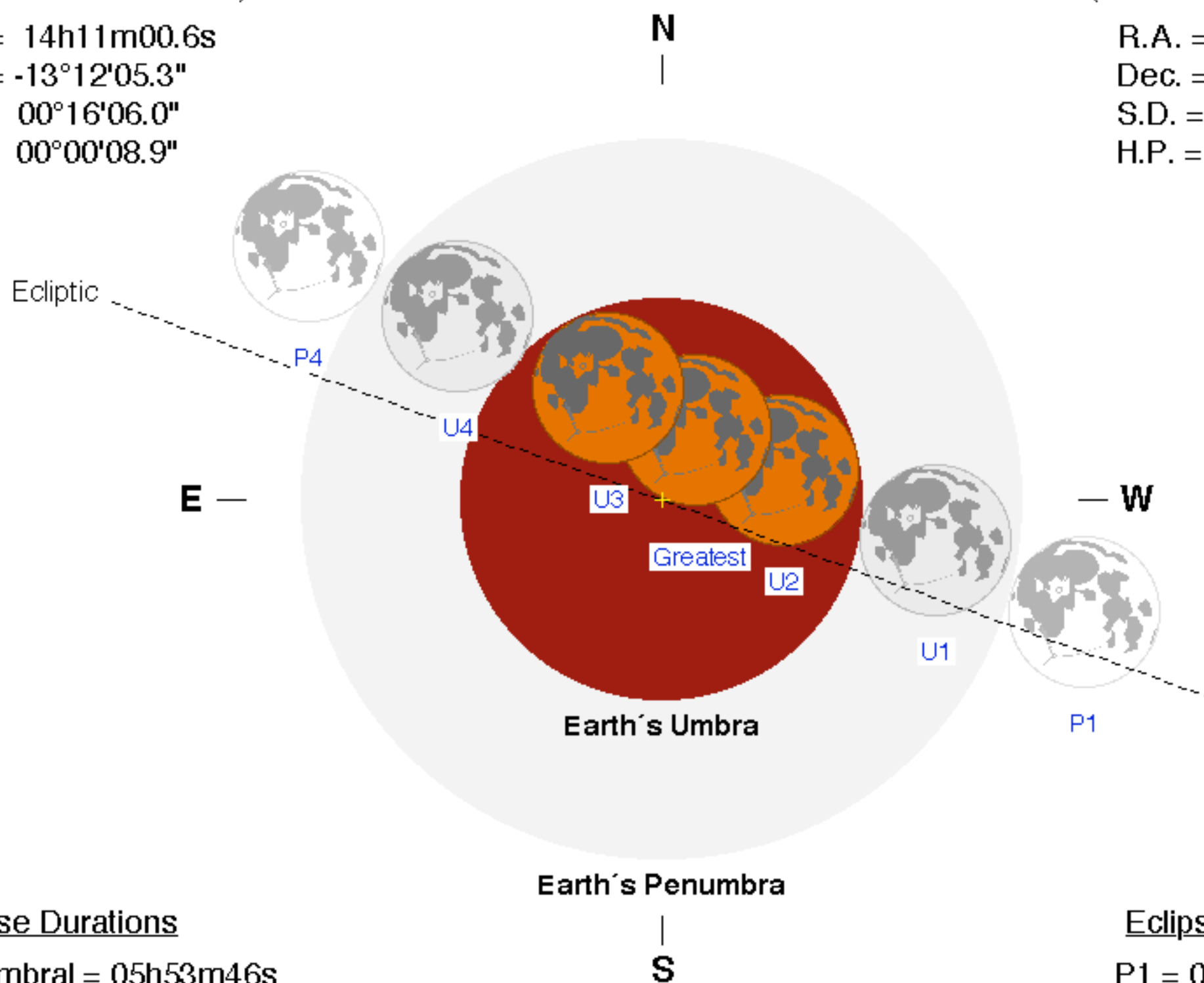
Moon at Greatest Eclipse (Geocentric Coordinates)

R.A. = 02h10m32.6s

Dec. = +13°26'29.6"

S.D. = 00°15'15.1"

H.P. = 00°55'58.4"



Eclipse Durations

Penumbral = 05h53m46s

Umbral = 03h38m40s

Total = 01h20m29s

$\Delta T = 65$ s

Rule = CdT (Danjon)

Eph. = VSOP87/ELP2000-85

Eclipse Contacts

P1 = 00:07:17 UT

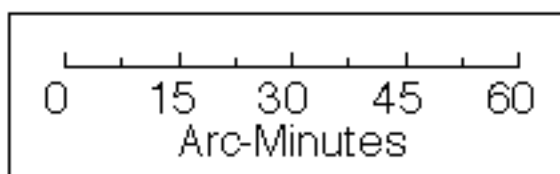
U1 = 01:14:45 UT

U2 = 02:23:51 UT

U3 = 03:44:20 UT

U4 = 04:53:26 UT

P4 = 06:01:03 UT



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

