

Partial Lunar Eclipse of 1999 Jul 28

Ecliptic Conjunction = 11:25:50.6 TD (= 11:24:47.0 UT)

Greatest Eclipse = 11:34:46.5 TD (= 11:33:42.8 UT)

Penumbral Magnitude = 1.4342

P. Radius = 1.2027°

Gamma = 0.7862

Umbral Magnitude = 0.3966

U. Radius = 0.6776°

Axis = 0.7300°

Saros Series = 119

Member = 61 of 83

Sun at Greatest Eclipse (Geocentric Coordinates)

R.A. = 08h29m15.8s

Dec. = +19°01'23.5"

S.D. = 00°15'45.0"

H.P. = 00°00'08.7"

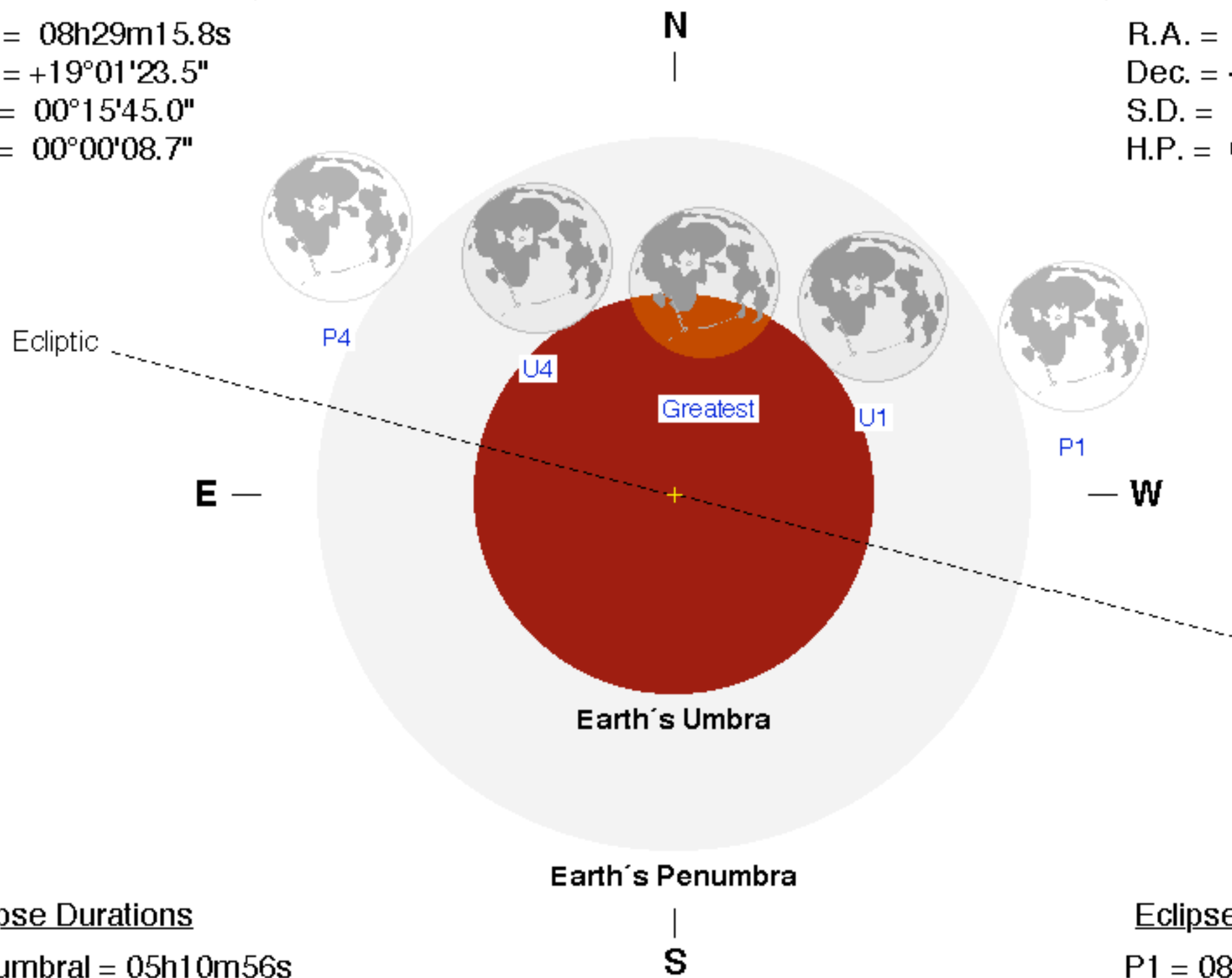
Moon at Greatest Eclipse (Geocentric Coordinates)

R.A. = 20h28m49.2s

Dec. = -18°18'02.9"

S.D. = 00°15'10.7"

H.P. = 00°55'42.4"



Eclipse Durations

Penumbral = 05h10m56s

Umbral = 02h22m32s

Eclipse Contacts

P1 = 08:58:15 UT

U1 = 10:22:31 UT

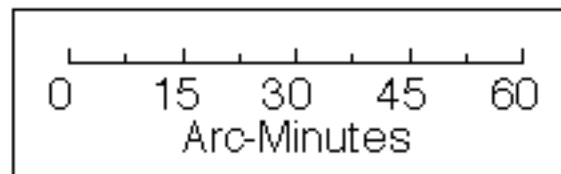
U4 = 12:45:03 UT

P4 = 14:09:11 UT

$\Delta T = 64$ s

Rule = CdT (Danjon)

Eph. = VSOP87/ELP2000-85



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

