

Partial Lunar Eclipse of 1991 Dec 21

Ecliptic Conjunction = 10:24:08.9 TD (= 10:23:10.6 UT)

Greatest Eclipse = 10:33:59.5 TD (= 10:33:01.2 UT)

Penumbral Magnitude = 1.0651

P. Radius = 1.3010°

Gamma = 0.9709

Umbral Magnitude = 0.0876

U. Radius = 0.7591°

Axis = 0.9877°

Saros Series = 115 Member = 56 of 72

Sun at Greatest Eclipse (Geocentric Coordinates)

R.A. = 17h55m52.1s

Dec. = -23°26'13.9"

S.D. = 00°16'15.5"

H.P. = 00°00'08.9"

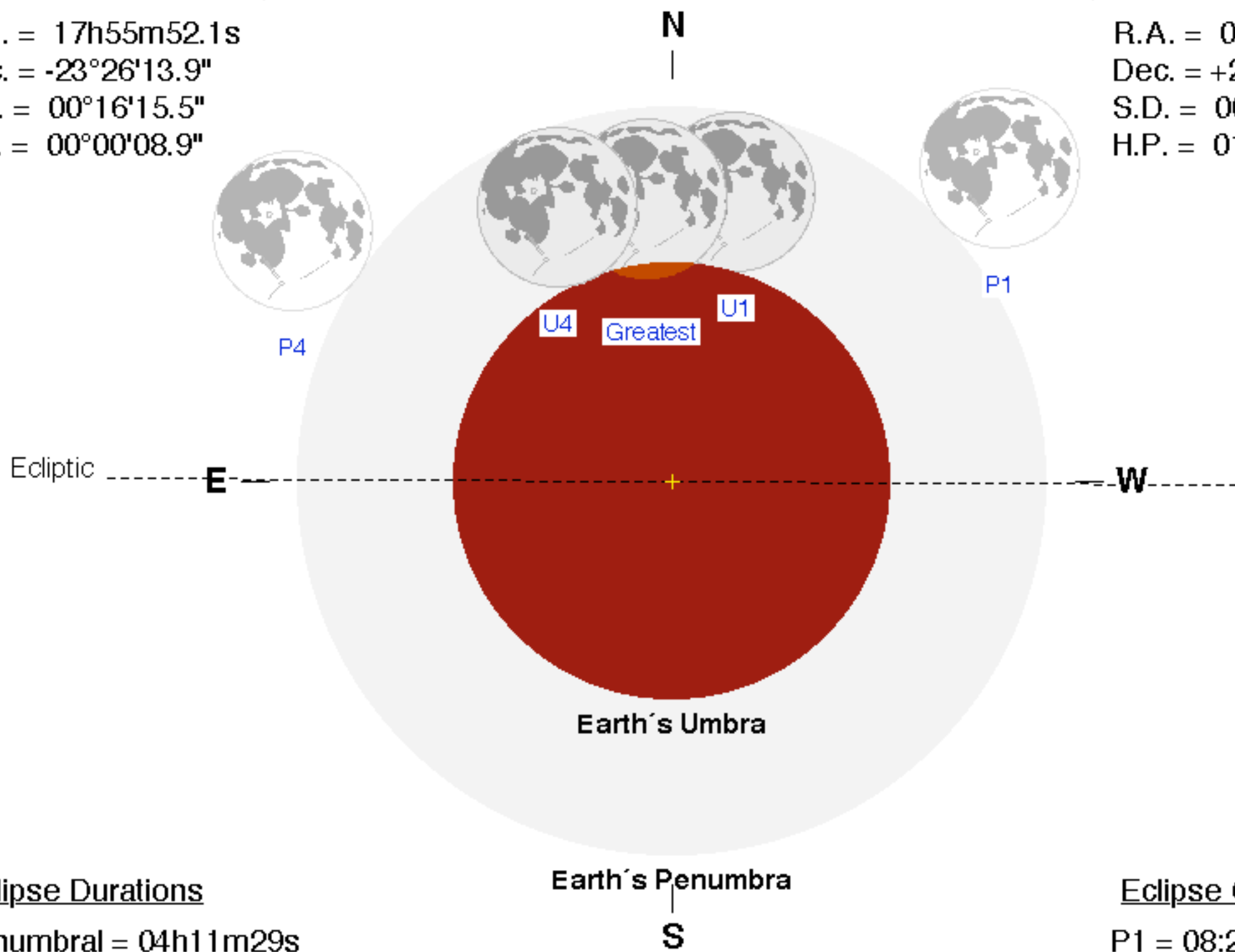
Moon at Greatest Eclipse (Geocentric Coordinates)

R.A. = 05h56m15.5s

Dec. = +24°25'15.4"

S.D. = 00°16'38.0"

H.P. = 01°01'02.6"



Eclipse Durations

Penumbral = 04h11m29s

Umbral = 01h04m04s

$\Delta T = 58$ s

Rule = CdT (Danjon)

Eph. = VSOP87/ELP2000-85

Eclipse Contacts

P1 = 08:27:18 UT

U1 = 10:01:02 UT

U4 = 11:05:06 UT

P4 = 12:38:46 UT

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

