

Partial Lunar Eclipse of 1778 Dec 04

Ecliptic Conjunction = 05:20:18.7 TD (= 05:20:02.0 UT)

Greatest Eclipse = 05:27:52.4 TD (= 05:27:35.7 UT)

Penumbral Magnitude = 1.4769

P. Radius = 1.3058°

Gamma = -0.7448

Umbral Magnitude = 0.5054

U. Radius = 0.7645°

Axis = 0.7615°

Saros Series = 112 Member = 52 of 72

Sun at Greatest Eclipse
(Geocentric Coordinates)

R.A. = 16h43m02.0s

Dec. = -22°17'19.9"

S.D. = 00°16'14.3"

H.P. = 00°00'08.9"

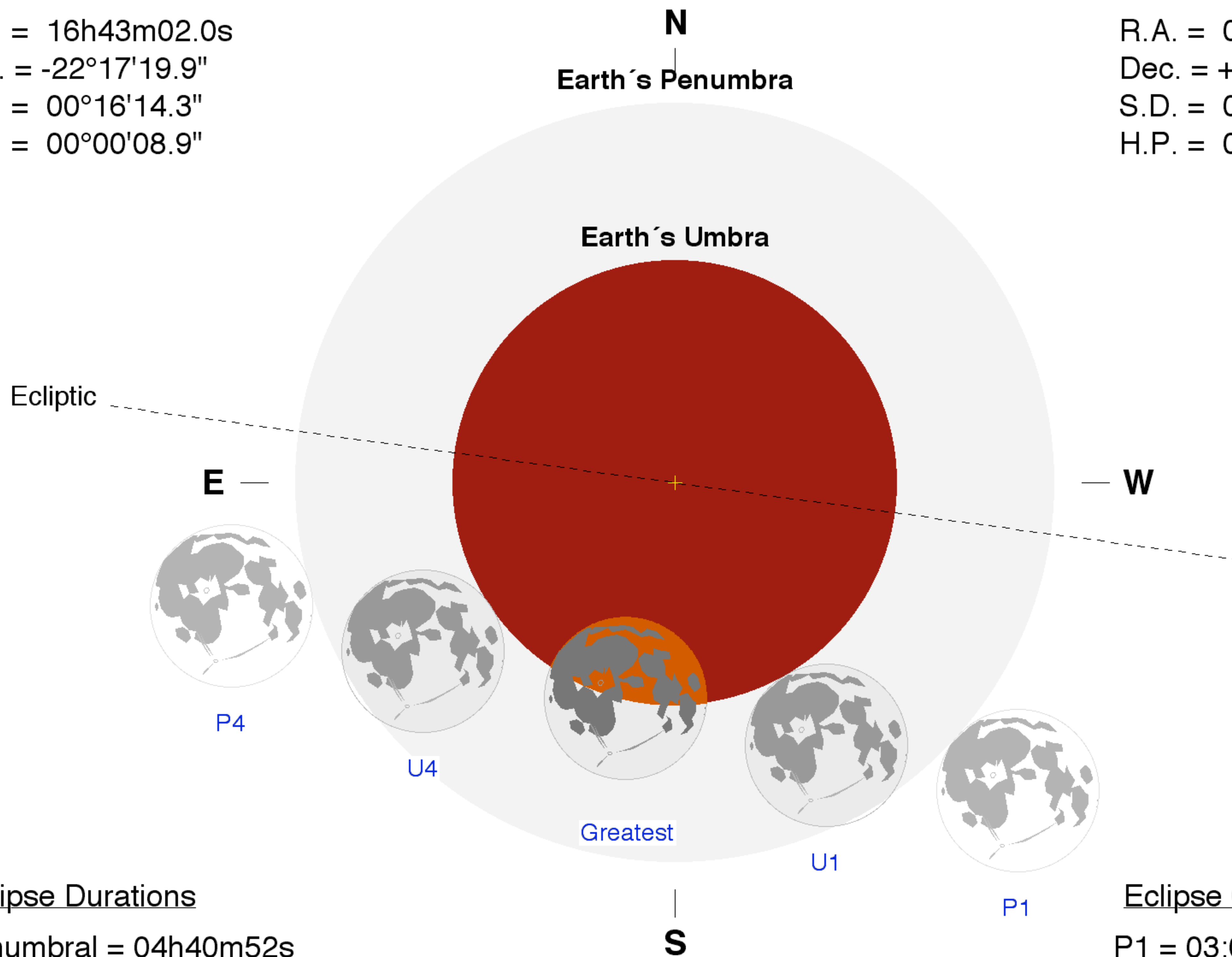
Moon at Greatest Eclipse
(Geocentric Coordinates)

R.A. = 04h43m46.7s

Dec. = +21°32'49.9"

S.D. = 00°16'43.0"

H.P. = 01°01'20.9"



Eclipse Durations

Penumbral = 04h40m52s

Umbral = 02h24m08s

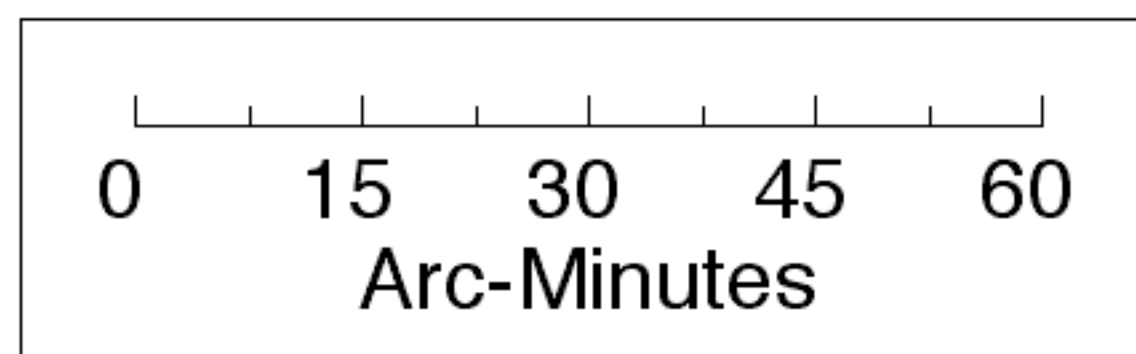
Eclipse Contacts

P1 = 03:07:09 UT

U1 = 04:15:33 UT

U4 = 06:39:40 UT

P4 = 07:48:01 UT



$\Delta T = 17 \text{ s}$

Rule = CdT (Danjon)

Eph. = VSOP87/ELP2000-85

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

