Penumbral Lunar Eclipse of 1980 Jul 27

Ecliptic Conjunction = 18:54:28.8 TD (= 18:53:37.8 UT)
Greatest Eclipse = 19:08:59.0 TD (= 19:08:08.0 UT)

Penumbral Magnitude = 0.2535 P. Radius = 1.2580° Gamma = 1.4138
Umbral Magnitude = -0.7264 U. Radius = 0.7330° Axis = 1.3901°

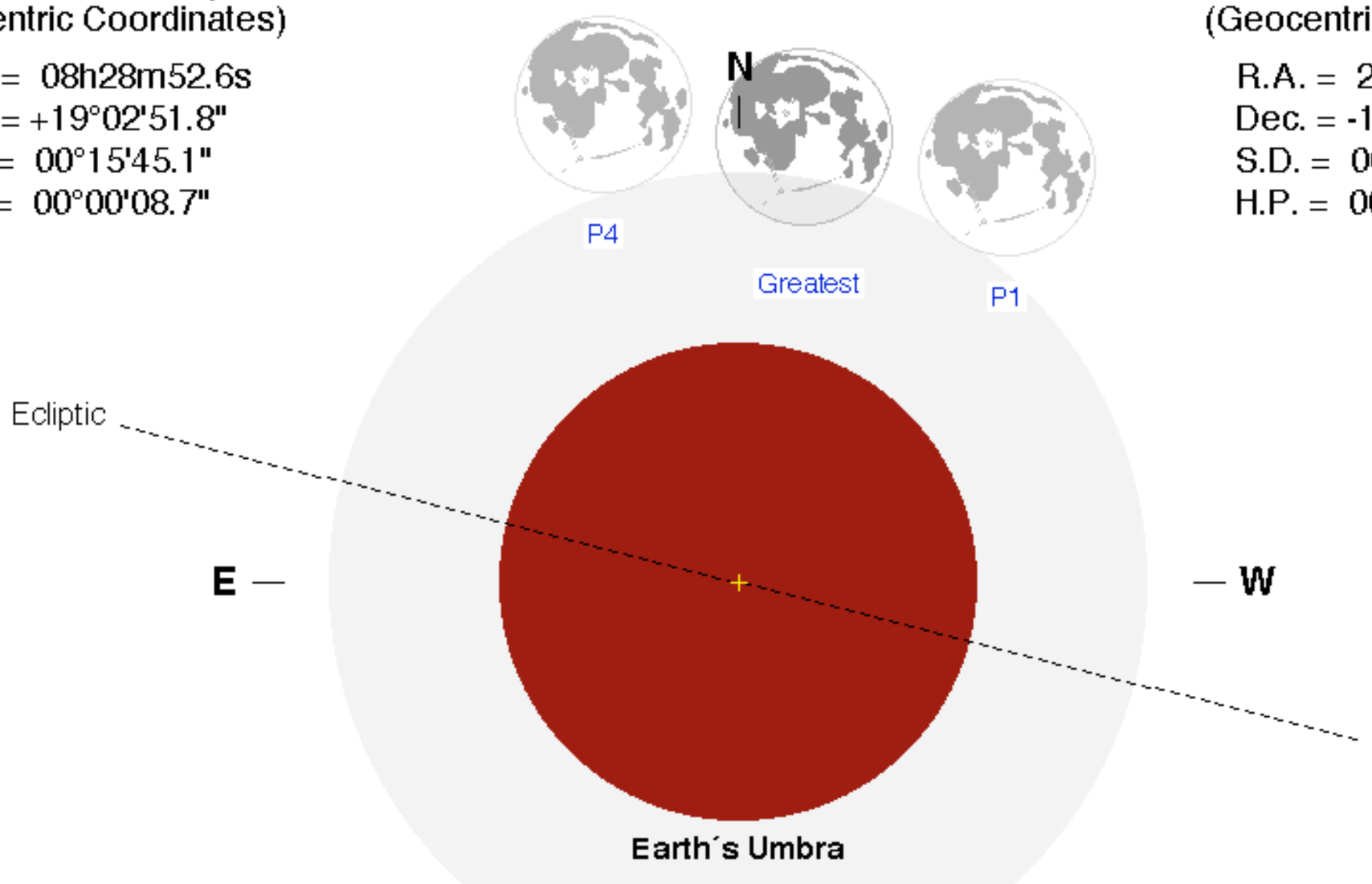
Saros Series = 109 Member = 71 of 73

Sun at Greatest Eclipse
(Geocentric Coordinates)

R.A. = 08h28m52.6s
Dec. = +19°02'51.8"
S.D. = 00°15'45.1"
H.P. = 00°00'08.7"

Moon at Greatest Eclipse
(Geocentric Coordinates)

R.A. = 20h28m01.0s
Dec. = -17°40'21.1"
S.D. = 00°16'04.5"
H.P. = 00°58'59.7"



Eclipse Durations

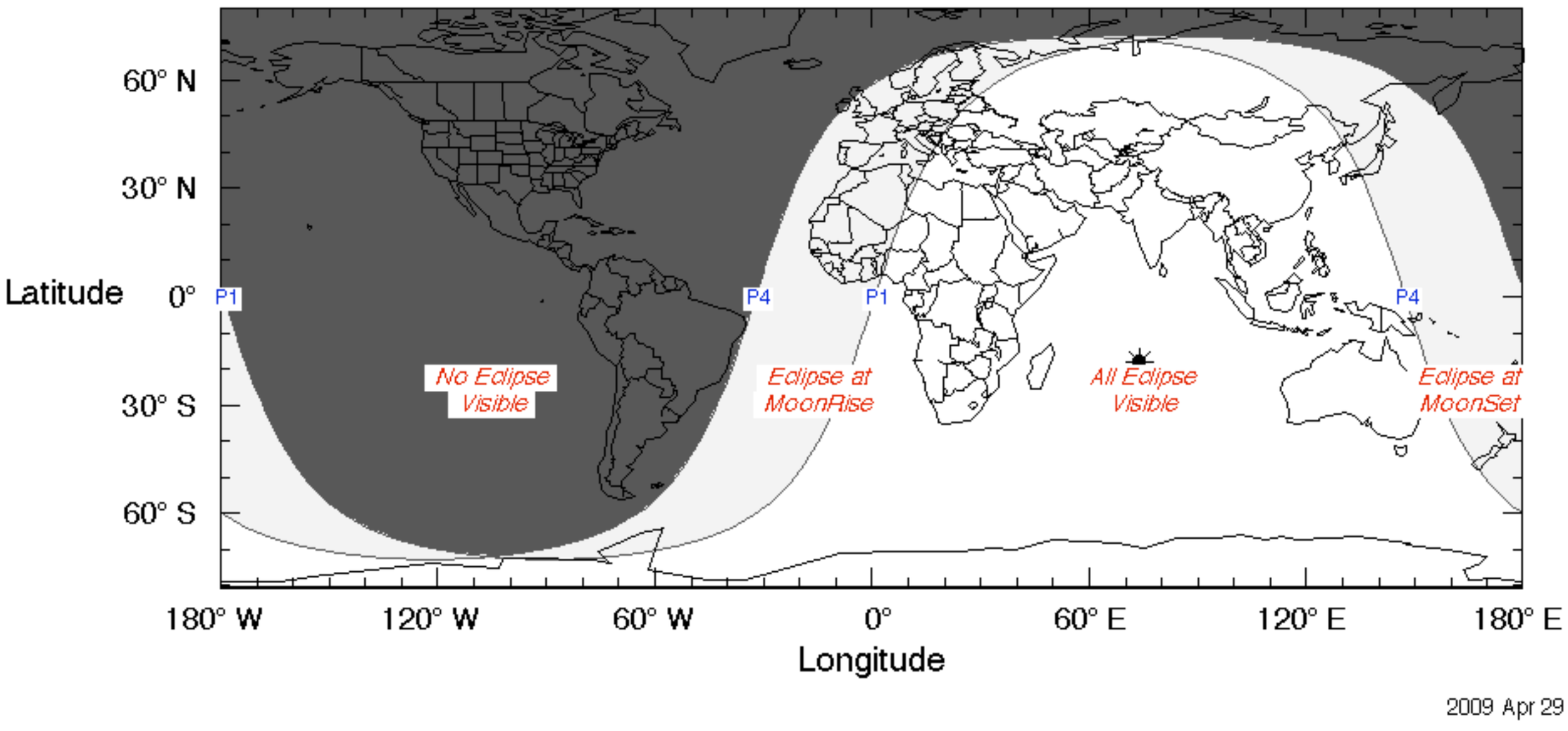
Penumbral = 02h17m33s

Eclipse Contacts

P1 = 17:59:29 UT
P4 = 20:17:02 UT

ΔT = 51 s
Rule = CdT (Danjon)
Eph. = VSOP87/ELP2000-85

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



2009 Apr 29