Penumbral Lunar Eclipse of 2012 Nov 28

Ecliptic Conjunction = 14:47:02.7 TD (= 14:45:54.7 UT)
Greatest Eclipse = 14:34:07.1 TD (= 14:32:59.1 UT)

Penumbral Magnitude = 0.9155 P. Radius = 1.1811° Gamma = -1.0869
Umbral Magnitude = -0.1873 U. Radius = 0.6406° Axis = 0.9774°

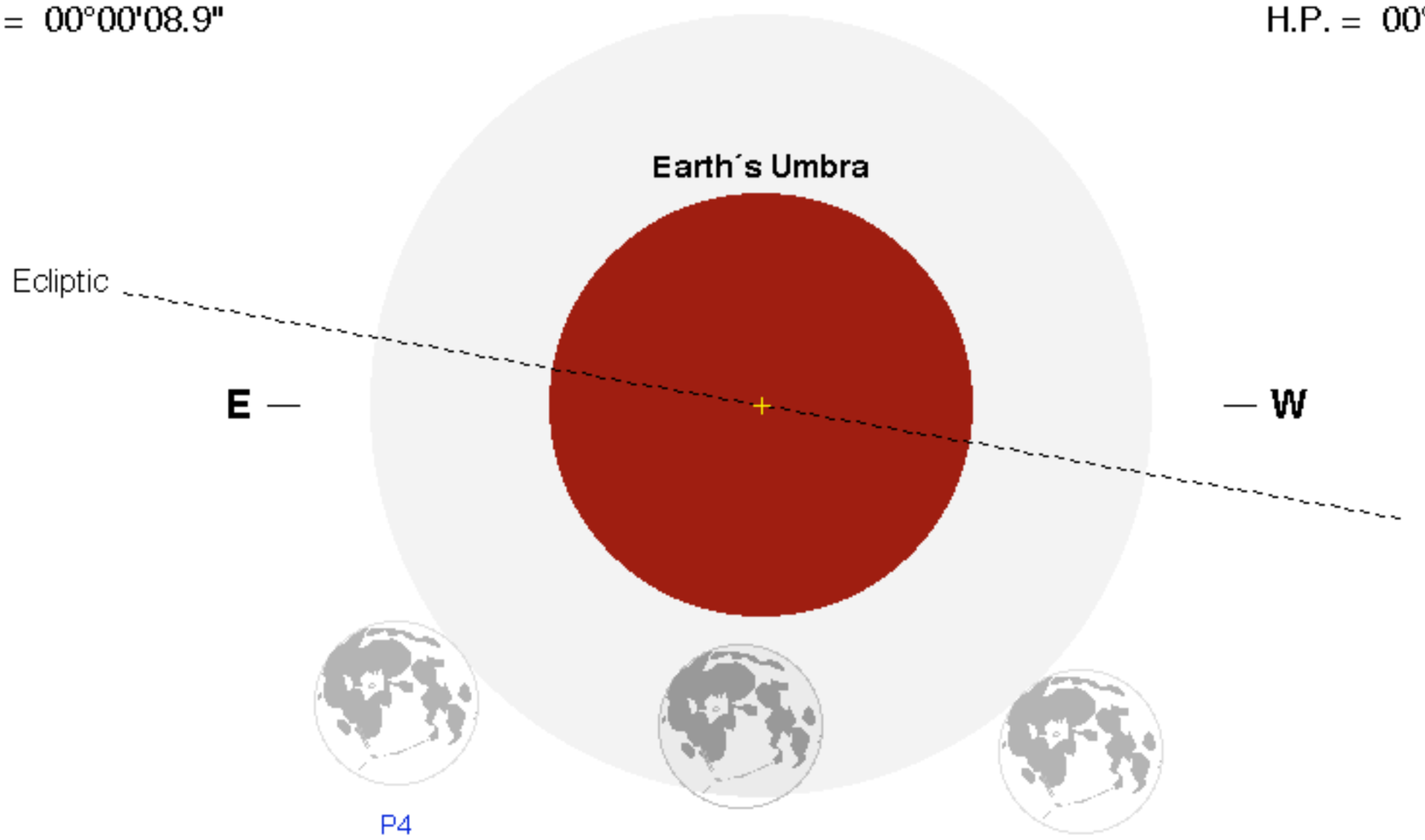
Saros Series = 145 Member = 11 of 71

<u>Sun at Greatest Eclipse</u>
(Geocentric Coordinates)

R.A. = 16h19m43.5s
Dec. = -21°26'15.1"
S.D. = 00°16'12.8"
H.P. = 00°00'08.9"

<u>Moon at Greatest Eclipse</u>
(Geocentric Coordinates)

R.A. = 04h20m01.1s
Dec. = +20°27'44.8"
S.D. = 00°14'42.2"
H.P. = 00°53'57.7"

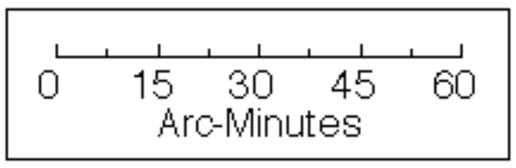


<u>Eclipse Durations</u>

Penumbral = 04h35m59s

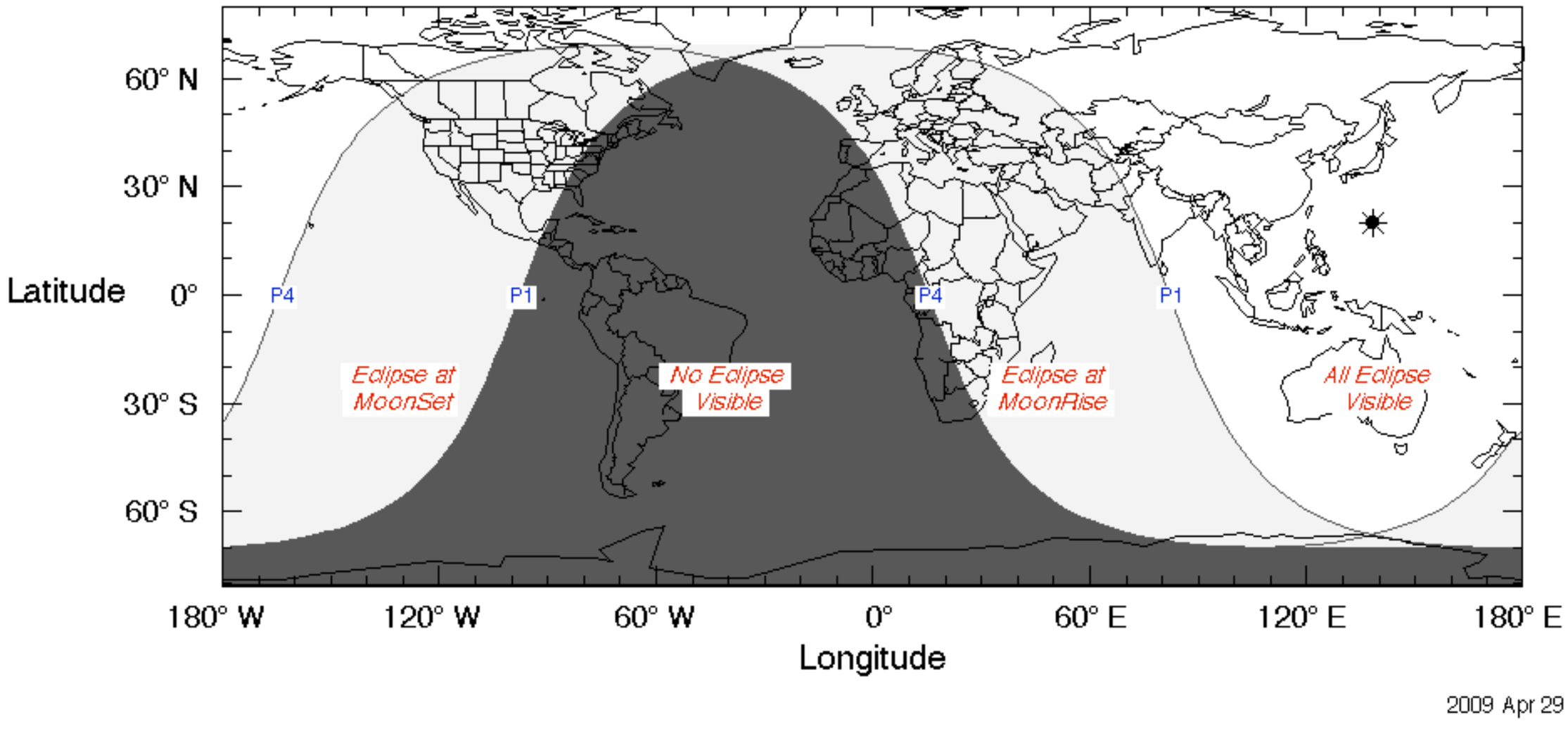
<u>Eclipse Contacts</u>

P1 = 12:14:59 UT
P4 = 16:50:59 UT



ΔT = 68 s
Rule = CdT (Danjon)
Eph. = VSOP87/ELP2000-85

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



2009 Apr 29