Total Lunar Eclipse of 2080 Sep 29

Ecliptic Conjunction = 01:56:23.0 TD (= 01:53:44.6 UT)
Greatest Eclipse = 01:52:41.8 TD (= 01:50:03.4 UT)

Penumbral Magnitude = 2.2967 P. Radius = 1.2056° Gamma = 0.3203
Umbral Magnitude = 1.2443 U. Radius = 0.6735° Axis = 0.2972°

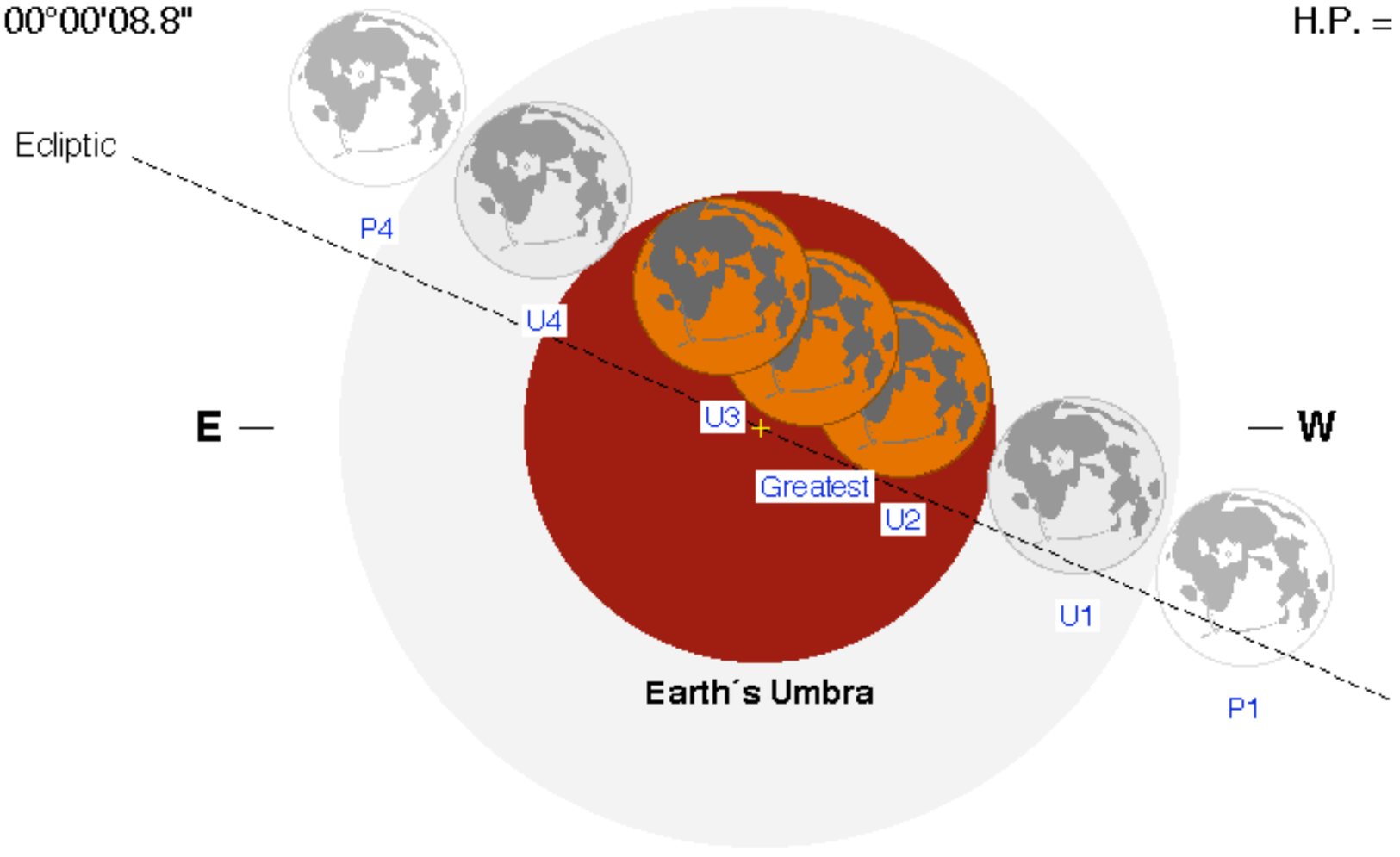
Saros Series = 138 Member = 33 of 83

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

R.A. = 12h25m10.2s
Dec. = -02°43'10.4"
S.D. = 00°15'57.8"
H.P. = 00°00'08.8"

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

R.A. = 00h24m35.6s
Dec. = +02°58'46.1"
S.D. = 00°15'10.1"
H.P. = 00°55'40.3"



<u>Eclipse Durations</u>

Penumbral = 05h53m43s
Umbral = 03h37m22s
Total = 01h13m46s

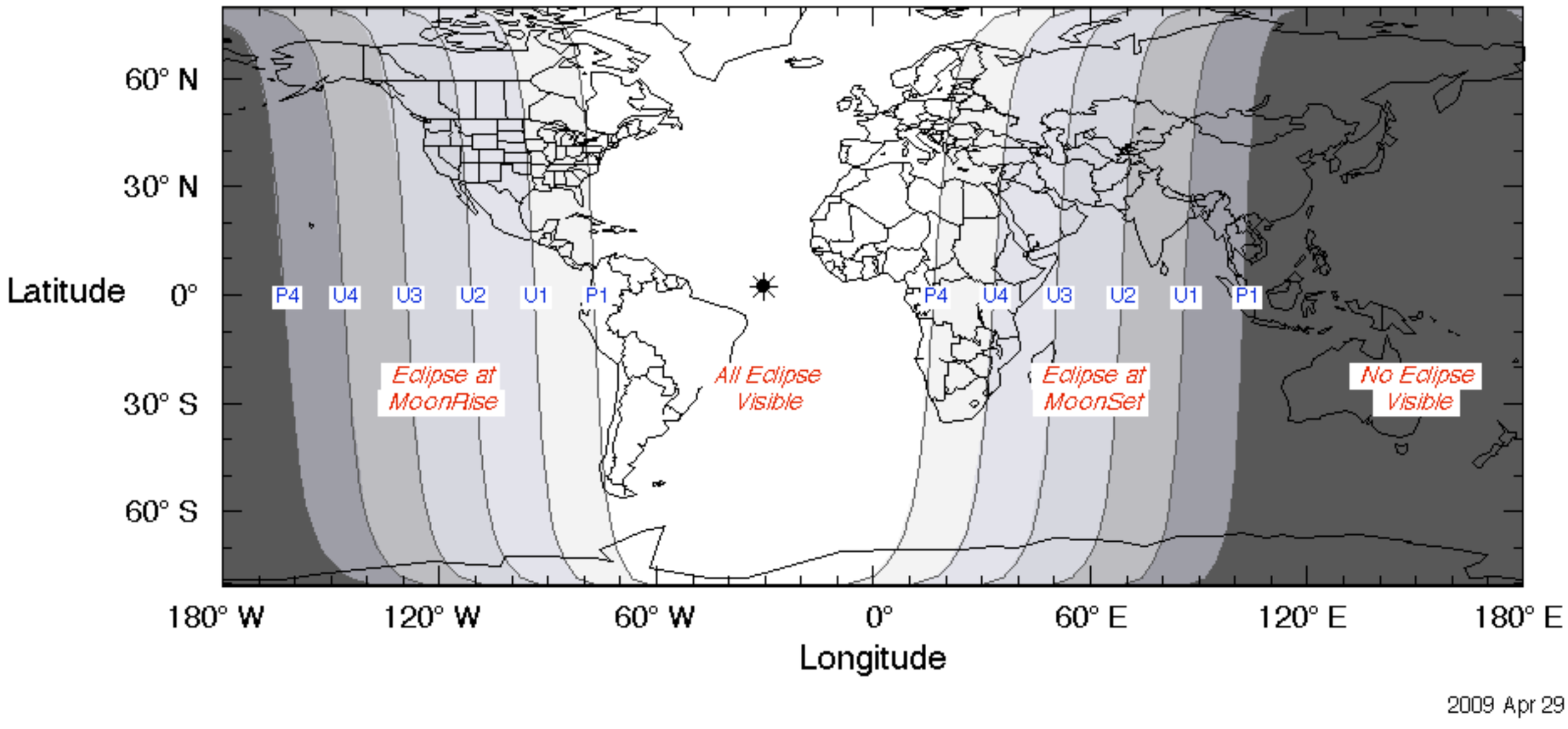
ΔT = 158 s
Rule = CdT (Danjon)
Eph. = VSOP87/ELP2000-85

0 15 30 45 60
Arc-Minutes

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

<u>Eclipse Contacts</u>

P1 = 22:53:10 UT
U1 = 00:01:24 UT
U2 = 01:13:11 UT
U3 = 02:26:58 UT
U4 = 03:38:46 UT
P4 = 04:46:53 UT



2009 Apr 29