

ECLIPSES DURING 2024 (Fred Espenak)

Figure 2

Total Solar Eclipse of 2024 Apr 08

Greatest Eclipse = 18:18:29.4 TT (= 18:17:20.2 UTC)

Eclipse Magnitude = 1.0566

Saros Series = 139

Gamma = 0.3431

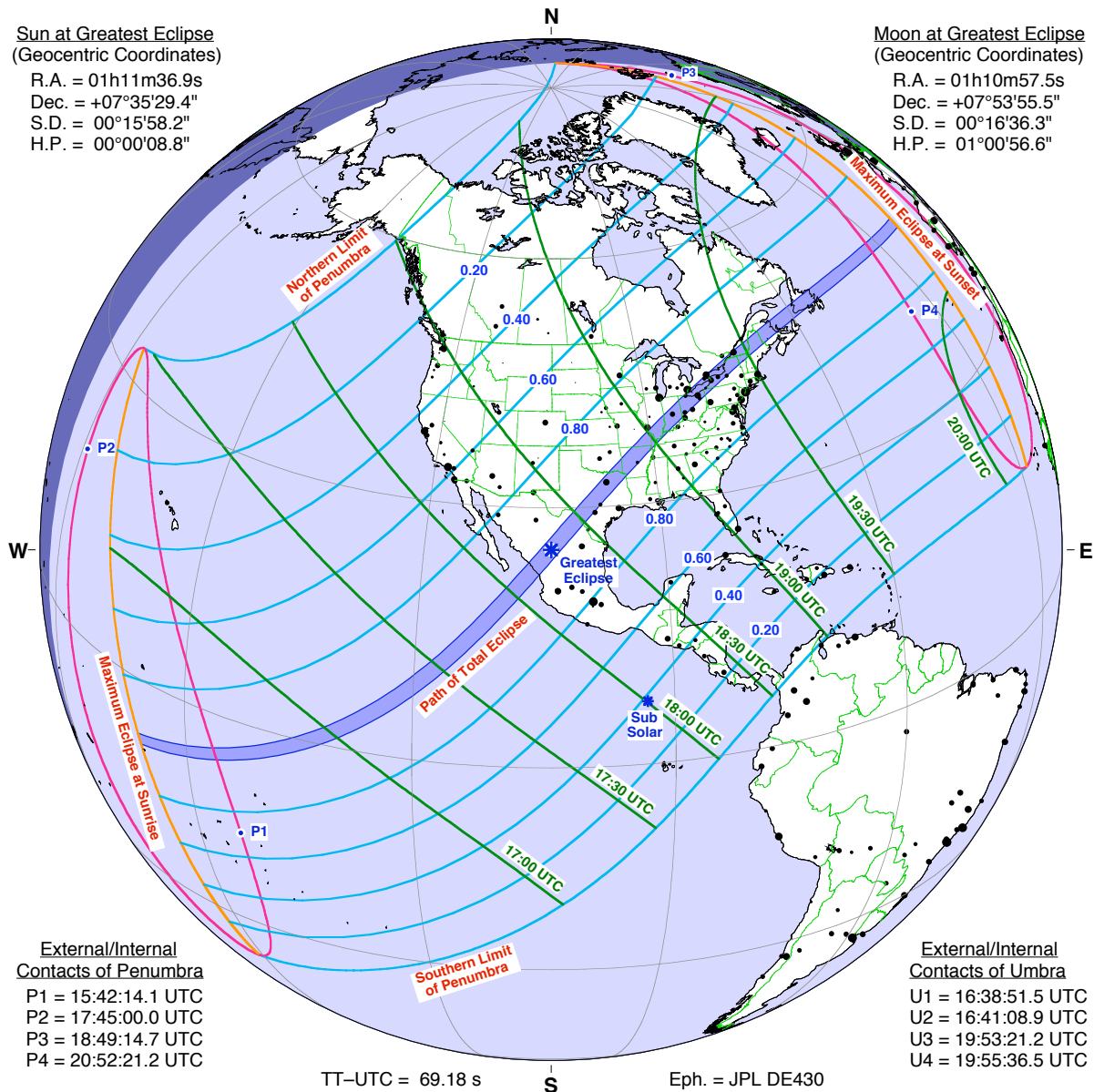
Saros Member = 30 of 71

Sun at Greatest Eclipse
(Geocentric Coordinates)

R.A. = 01h11m36.9s
Dec. = +07°35'29.4"
S.D. = 00°15'58.2"
H.P. = 00°00'08.8"

Moon at Greatest Eclipse
(Geocentric Coordinates)

R.A. = 01h10m57.5s
Dec. = +07°53'55.5"
S.D. = 00°16'36.3"
H.P. = 01°00'56.6"



External/Internal
Contacts of Penumbra
P1 = 15:42:14.1 UTC
P2 = 17:45:00.0 UTC
P3 = 18:49:14.7 UTC
P4 = 20:52:21.2 UTC

External/Internal
Contacts of Umbra
U1 = 16:38:51.5 UTC
U2 = 16:41:08.9 UTC
U3 = 19:53:21.2 UTC
U4 = 19:55:36.5 UTC

TT-UTC = 69.18 s

Eph. = JPL DE430

Circumstances at Greatest Eclipse: 18:17:20.2 UTC

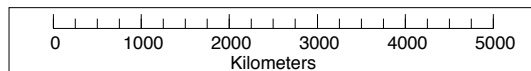
Lat. = 25°17.4'N
Long. = 104°08.9'W
Path Width = 197.5 km

Sun Alt. = 69.8°
Sun Azm. = 149.4°
Duration = 04m28.1s

Circumstances at Greatest Duration: 18:19:36.1 UTC

Lat. = 25°56.1'N
Long. = 103°31.3'W
Path Width = 197.0 km

Sun Alt. = 69.7°
Sun Azm. = 153.3°
Duration = 04m28.2s



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Adapted from *21st Century Canon of Solar Eclipses*, Fred Espenak, 2016.