Total Solar Eclipse of 2017 Aug 21

Ecliptic Conjunction = 18:31:19.6 TD (= 18:30:11.2 UT)
Greatest Eclipse = 18:26:40.3 TD (= 18:25:31.8 UT)

Eclipse Magnitude = 1.0306 Gamma = 0.4367

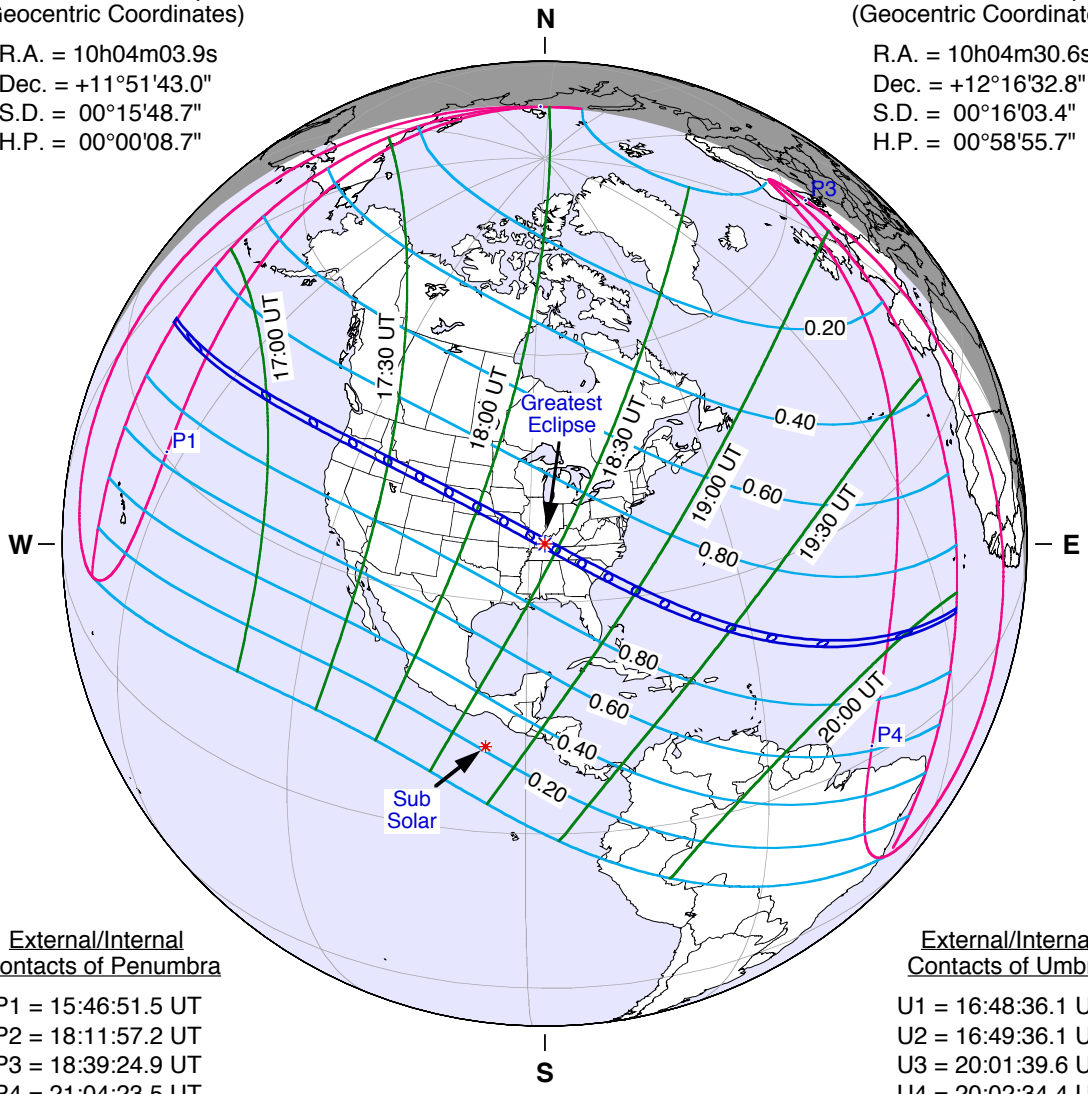
Saros Series = 145 Member = 22 of 77

Sun at Greatest Eclipse
(Geocentric Coordinates)

R.A. = 10h04m03.9s
Dec. = +11°51'43.0"
S.D. = 00°15'48.7"
H.P. = 00°00'08.7"

Moon at Greatest Eclipse
(Geocentric Coordinates)

R.A. = 10h04m30.6s
Dec. = +12°16'32.8"
S.D. = 00°16'03.4"
H.P. = 00°58'55.7"



External/Internal Contacts of Penumbra

P1 = 15:46:51.5 UT
P2 = 18:11:57.2 UT
P3 = 18:39:24.9 UT
P4 = 21:04:23.5 UT

Constants & Ephemeris

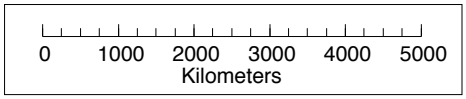
ΔT = 68.4 s
k1 = 0.2725076
k2 = 0.2722810
Δb = 0.0" Δl = 0.0"
Eph. = JPL DE405

Circumstances at Greatest Eclipse: 18:25:31.8 UT

Lat. = 36°58.0'N Sun Alt. = 63.9°
Long. = 087°40.3'W Sun Azm. = 197.9°
Path Width = 114.7 km Duration = 02m40.1s

Circumstances at Greatest Duration: 18:21:49.2 UT

Lat. = 37°35'N Sun Alt. = 63.8°
Long. = 089°07'W Duration = 02m40.2s



External/Internal Contacts of Umbra

U1 = 16:48:36.1 UT
U2 = 16:49:36.1 UT
U3 = 20:01:39.6 UT
U4 = 20:02:34.4 UT

Geocentric Libration
(Optical + Physical)

l = 4.64°
b = -0.57°
c = 21.90°

Brown Lun. No. = 1171

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