Total Solar Eclipse of 1868 Aug 18

Ecliptic Conjunction = 05:11:42.7 TD (= 05:11:40.4 UT)
Greatest Eclipse = 05:12:09.7 TD (= 05:12:07.5 UT)

Eclipse Magnitude = 1.0756 Gamma = -0.0443

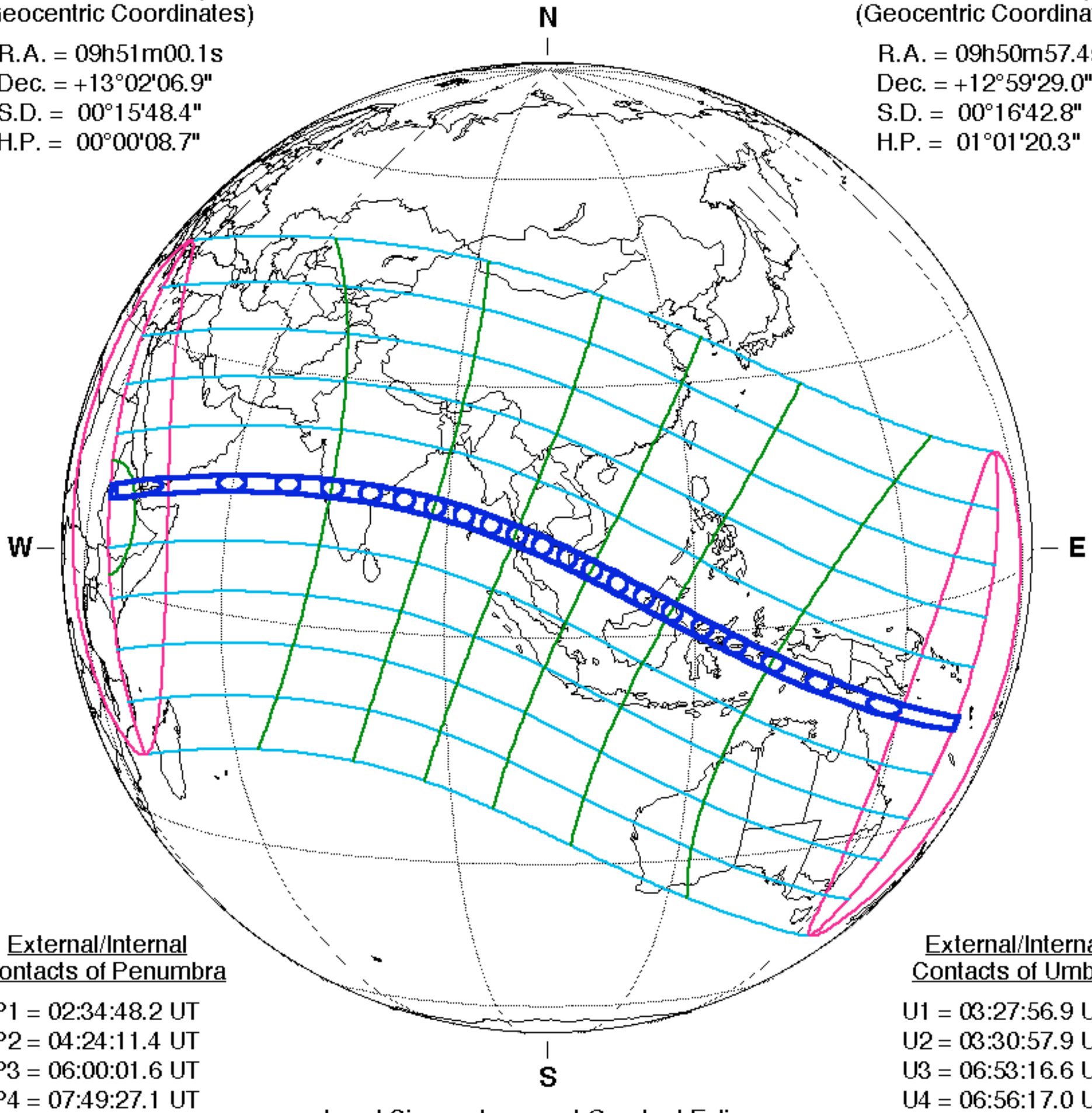
Saros Series = 133 Member = 37 of 72

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

R.A. = 09h51m00.1s
Dec. = +13°02'06.9"
S.D. = 00°15'48.4"
H.P. = 00°00'08.7"

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

R.A. = 09h50m57.4s
Dec. = +12°59'29.0"
S.D. = 00°16'42.8"
H.P. = 01°01'20.3"



<u>External/Internal Contacts of Penumbra</u>

P1 = 02:34:48.2 UT
P2 = 04:24:11.4 UT
P3 = 06:00:01.6 UT
P4 = 07:49:27.1 UT

<u>External/Internal Contacts of Umbra</u>

U1 = 03:27:56.9 UT
U2 = 03:30:57.9 UT
U3 = 06:53:16.6 UT
U4 = 06:56:17.0 UT

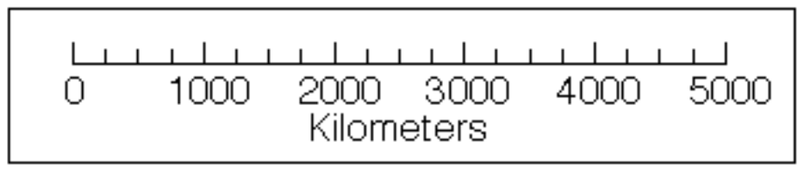
<u>Local Circumstances at Greatest Eclipse</u>

Lat. = 10°38.3'N Sun Alt. = 87.5°
Long. = 102°14.7'E Sun Azm. = 14.3°

Path Width = 245.1 km Duration = 06m46.9s

<u>Constants & Ephemeris</u>

ΔT = 2.2 s
k1 = 0.2724880
k2 = 0.2722810
Δb = 0.0" Δl = 0.0"
Eph. = VSOP87/ELP2000-82



<u>Geocentric Libration</u>
(Optical + Physical)

l = 0.78°
b = 0.07°
c = 21.19°

Brown Lun. No. = -672

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eclipse.gsfc.nasa.gov/eclipse.html