Annular Solar Eclipse of 1766 Aug 05

Ecliptic Conjunction = 17:49:47.6 TD (= 17:49:32.2 UT)
Greatest Eclipse = 17:56:57.8 TD (= 17:56:42.4 UT)

Eclipse Magnitude = 0.9433 Gamma = 0.6023

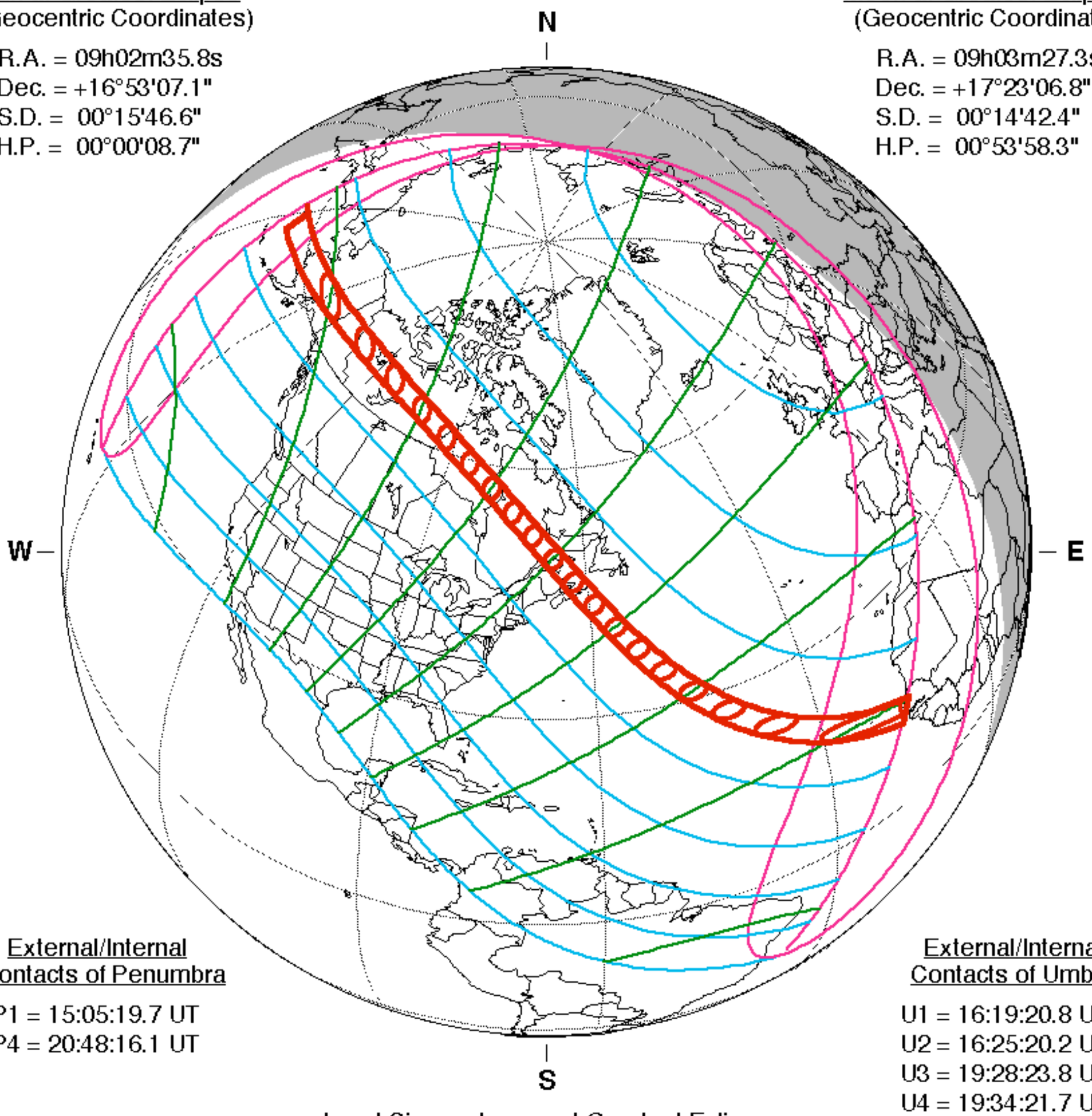
Saros Series = 122 Member = 44 of 70

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

R.A. = 09h02m35.8s
Dec. = +16°53'07.1"
S.D. = 00°15'46.6"
H.P. = 00°00'08.7"

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

R.A. = 09h03m27.3s
Dec. = +17°23'06.8"
S.D. = 00°14'42.4"
H.P. = 00°53'58.3"



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

P1 = 15:05:19.7 UT
P4 = 20:48:16.1 UT

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

U1 = 16:19:20.8 UT
U2 = 16:25:20.2 UT
U3 = 19:28:23.8 UT
U4 = 19:34:21.7 UT

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

Lat. = 50°11.0'N Sun Alt. = 52.7°
Long. = 066°57.2'W Sun Azm. = 214.2°
Path Width = 260.2 km Duration = 05m15.5s

<u>Constants & Ephemeris</u>

ΔT = 15.4 s
k1 = 0.2724880
k2 = 0.2722810
Δb = 0.0" Δl = 0.0"
Eph. = VSOP87/ELP2000-82

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

l = -0.51°
b = -0.69°
c = 15.06°

Brown Lun. No. =-1934

0 1000 2000 3000 4000 5000
Kilometers

F. Espenak, NASA's GSFC

eclipse.gsfc.nasa.gov/eclipse.html