

Supplementary Figure

FIGURE 20E - LUNAR LIMB PROFILE FOR JULY 22 AT 04:15 UT

Total Solar Eclipse of 2009 Jul 22

Maximum Eclipse = 04:15:00.0 UT

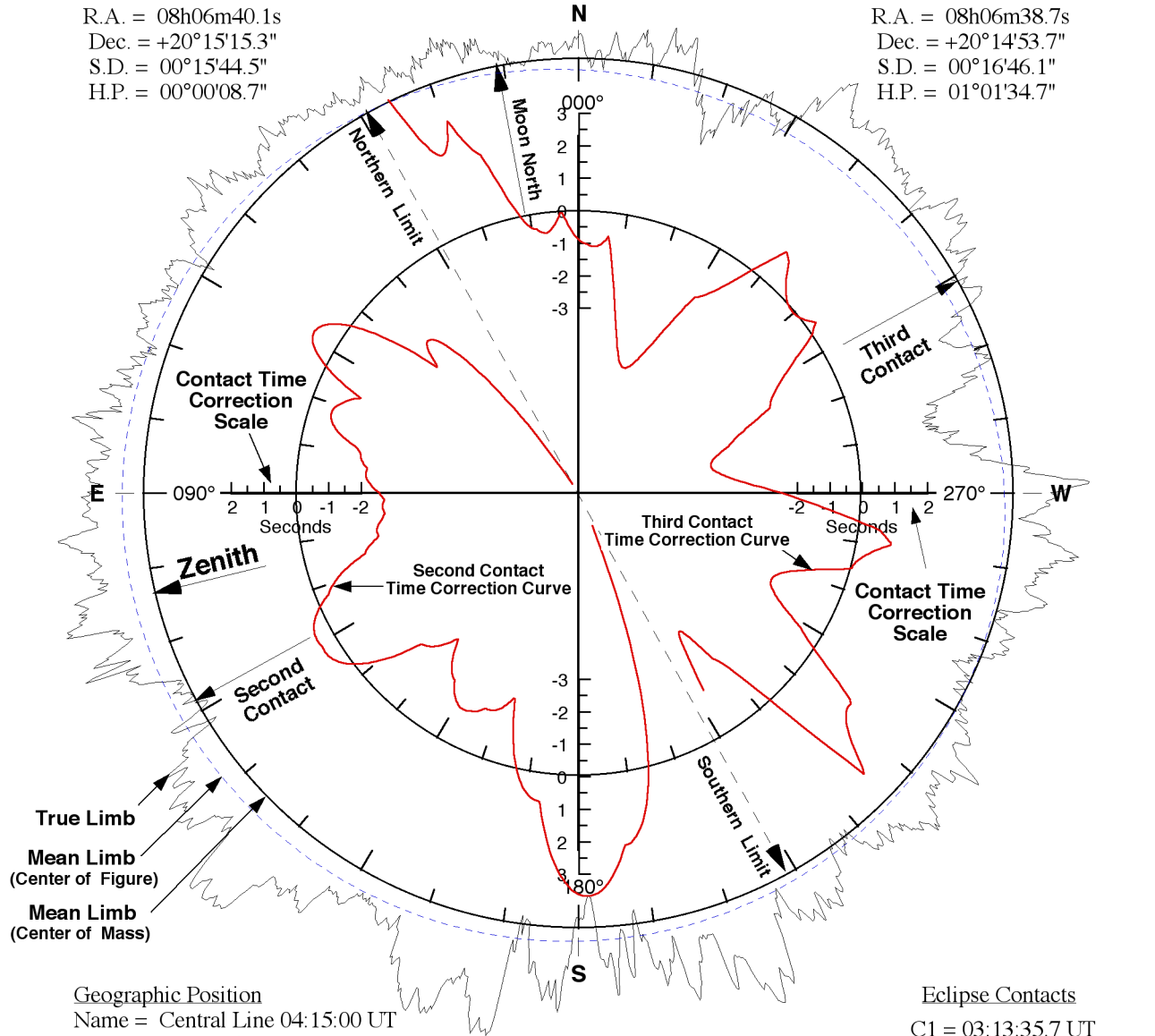
Sun at Maximum Eclipse
(Topocentric Coordinates)

R.A. = 08h06m40.1s
Dec. = +20°15'15.3"
S.D. = 00°15'44.5"
H.P. = 00°00'08.7"

Magnitude = 1.0652 Ratio = 1.0652

Moon at Maximum Eclipse
(Topocentric Coordinates)

R.A. = 08h06m38.7s
Dec. = +20°14'53.7"
S.D. = 00°16'46.1"
H.P. = 01°01'34.7"

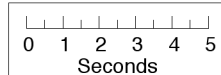
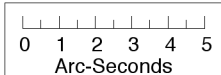


Geographic Position
Name = Central Line 04:15:00 UT
Lat. = 07°46'15.7"S
Long. = 169°32'02.8"W
Elev. = 0.0 m

Ephemeris & Constants
Eph. = DE200/LE200
 $\Delta T = 65.9$ s
k1 = 0.2725076
k2 = 0.2722810
 $\Delta b = 0.00''$ $\Delta l = 0.00''$

Calculated Center of Figure
 $\Delta b' = -0.27''$ $\Delta l' = 0.49''$

Local Circumstances at Maximum Eclipse
Sun Alt. = 13.4° Path Width = 220.4 km
Sun Azm. = 293.0° Duration = 03m40.1s
PA(N.Limit) = 28.8° A. Vel. (M:S) = 0.559"/s



Eclipse Contacts
C1 = 03:13:35.7 UT
C2 = 04:13:09.6 UT
C3 = 04:16:49.7 UT
C4 = 05:10:24.0 UT

Limb Corrected Contacts
C2* = 04:13:10.1 UT (0.5s)
C3* = 04:16:48.0 UT (-1.7s)

Topocentric Libration
(Optical + Physical)
l = -0.19°
b = -0.01°
c = 10.54°

F. Espenak, NASA/GSFC - 2007 Dec 18