

Supplementary Figure

FIGURE 20D - LUNAR LIMB PROFILE FOR JULY 22 AT 03:45 UT

Total Solar Eclipse of 2009 Jul 22

Maximum Eclipse = 03:45:00.0 UT

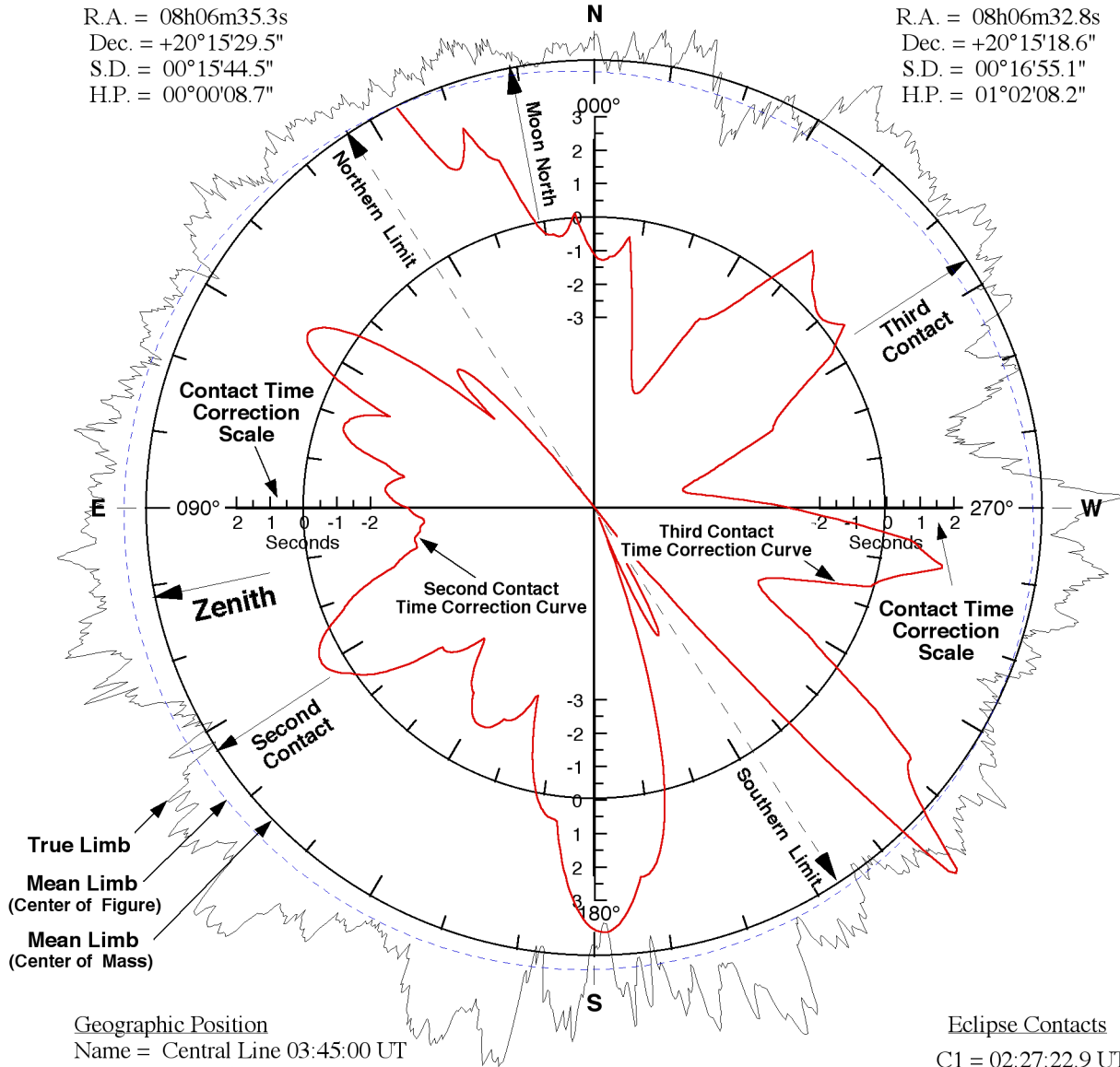
Magnitude = 1.0747 Ratio = 1.0747

Sun at Maximum Eclipse
(Topocentric Coordinates)

R.A. = 08h06m35.3s
Dec. = +20°15'29.5"
S.D. = 00°15'44.5"
H.P. = 00°00'08.7"

Moon at Maximum Eclipse
(Topocentric Coordinates)

R.A. = 08h06m32.8s
Dec. = +20°15'18.6"
S.D. = 00°16'55.1"
H.P. = 01°02'08.2"



Geographic Position

Name = Central Line 03:45:00 UT
Lat. = 07°03'54.0"N
Long. = 167°37'21.2"E
Elev. = 0.0 m

Ephemeris & Constants

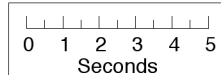
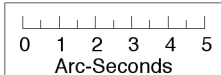
Eph. = DE200/LE200
 $\Delta T = 65.9$ s
k1 = 0.2725076
k2 = 0.2722810
 $\Delta b = 0.00''$ $\Delta l = 0.00''$

Calculated Center of Figure

$\Delta b' = -0.27''$ $\Delta l' = 0.49''$

Local Circumstances at Maximum Eclipse

Sun Alt. = 47.0° Path Width = 250.0 km
Sun Azm. = 292.3° Duration = 05m14.2s
PA(N.Limit) = 33.2° A. Vel. (M:S) = 0.449"/s



F. Espenak, NASA/GSFC - 2007 Dec 18

Eclipse Contacts

C1 = 02:27:22.9 UT
C2 = 03:42:22.3 UT
C3 = 03:47:36.5 UT
C4 = 04:53:17.0 UT

Limb Corrected Contacts

C2* = 03:42:22.5 UT (0.3s)
C3* = 03:47:36.2 UT (-0.2s)

Topocentric Libration
(Optical + Physical)

l = 0.07°
b = -0.01°
c = 10.54°