

Supplementary Figure

FIGURE 20B - LUNAR LIMB PROFILE FOR JULY 22 AT 00:55 UT
Total Solar Eclipse of 2009 Jul 22

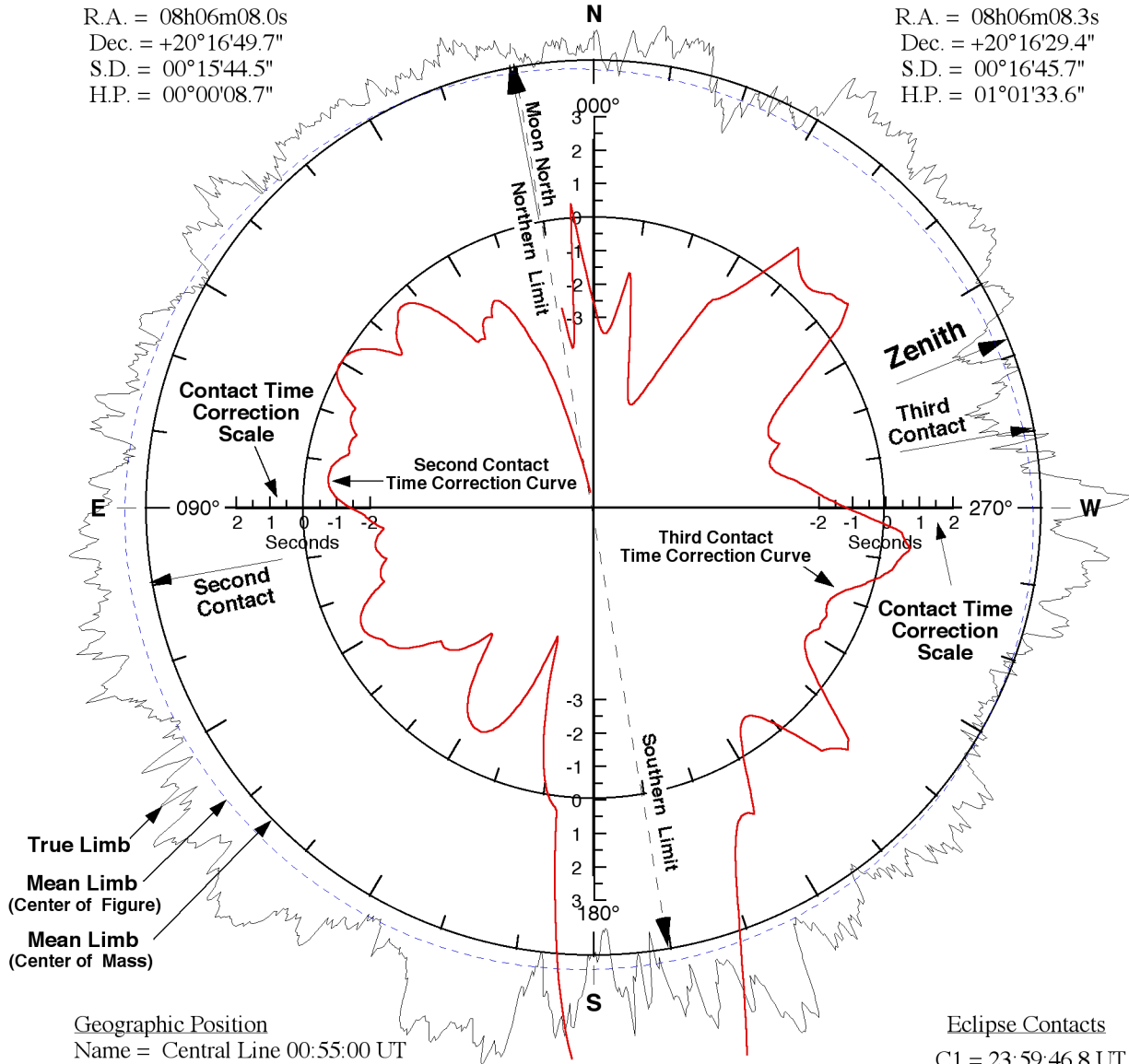
Maximum Eclipse = 00:55:00.0 UT
 Magnitude = 1.0648 Ratio = 1.0648

Sun at Maximum Eclipse
 (Topocentric Coordinates)

R.A. = 08h06m08.0s
 Dec. = +20°16'49.7"
 S.D. = 00°15'44.5"
 H.P. = 00°00'08.7"

Moon at Maximum Eclipse
 (Topocentric Coordinates)

R.A. = 08h06m08.3s
 Dec. = +20°16'29.4"
 S.D. = 00°16'45.7"
 H.P. = 01°01'33.6"



Geographic Position

Name = Central Line 00:55:00 UT
 Lat. = 24°22'25.8"N
 Long. = 081°53'14.6"E
 Elev. = 0.0 m

Ephemeris & Constants

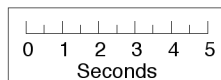
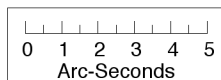
Eph. = DE200/LE200
 $\Delta T = 65.9$ s
 $k_1 = 0.2725076$
 $k_2 = 0.2722810$
 $\Delta b = 0.00''$ $\Delta l = 0.00''$

Calculated Center of Figure

$\Delta b' = -0.25''$ $\Delta l' = 0.46''$

Local Circumstances at Maximum Eclipse

Sun Alt. = 11.8° Path Width = 216.6 km
 Sun Azm. = 72.9° Duration = 03m38.4s
 PA(N.Limit) = 9.9° A. Vel. (M:S) = 0.561"/s



F. Espenak, NASA/GSFC - 2007 Dec 18

Eclipse Contacts

C1 = 23:59:46.8 UT
 C2 = 00:53:11.2 UT
 C3 = 00:56:49.6 UT
 C4 = 01:56:17.2 UT

Limb Corrected Contacts

C2* = 00:53:09.1 UT (-2.1s)
 C3* = 00:56:46.6 UT (-3.0s)

Topocentric Libration
 (Optical + Physical)

$l = 1.51^\circ$
 $b = -0.01^\circ$
 $c = 10.50^\circ$