FIGURE 3.1: ORTHOGRAPHIC PROJECTION MAP OF THE ECLIPSE PATH

Total Solar Eclipse of 2010 Jul 11

Ecliptic Conjunction = 19:41:33.5 TD (= 19:40:27.3 UT)
Greatest Eclipse = 19:34:37.6 TD (= 19:33:31.4 UT)

Eclipse Magnitude = 1.0580 Gamma = -0.6788

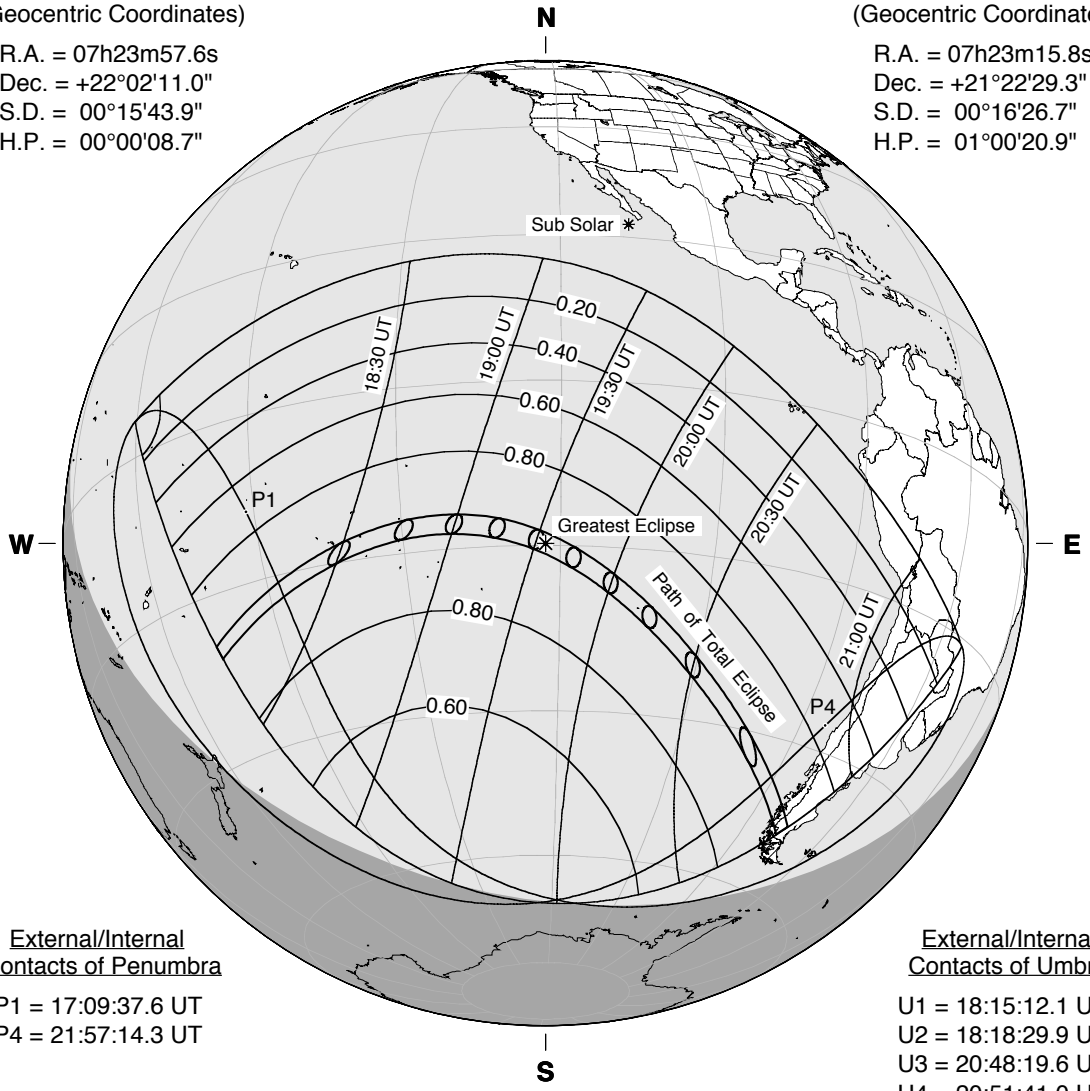
Saros Series = 146 Member = 27 of 76

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

R.A. = 07h23m57.6s
Dec. = +22°02'11.0"
S.D. = 00°15'43.9"
H.P. = 00°00'08.7"

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

R.A. = 07h23m15.8s
Dec. = +21°22'29.3"
S.D. = 00°16'26.7"
H.P. = 01°00'20.9"



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

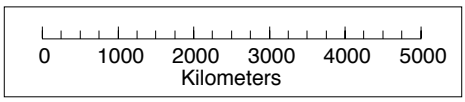
P1 = 17:09:37.6 UT
P4 = 21:57:14.3 UT

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

U1 = 18:15:12.1 UT
U2 = 18:18:29.9 UT
U3 = 20:48:19.6 UT
U4 = 20:51:41.0 UT

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

Lat. = 19°44.9'S Sun Alt. = 47.1°
Long. = 121°52.5'W Sun Azm. = 13.5°
Path Width = 258.6 km Duration = 05m20.2s



<u>Constants & Ephemeris</u>

ΔT = 66.2 s
k1 = 0.2725076
k2 = 0.2722810
Δb = 0.0" Δl = 0.0"
Eph. = JPL DE200/LE200

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

l = -3.25°
b = 0.86°
c = 6.62°

Brown Lun. No. = 1083

NASA 2010 Eclipse Bulletin, Espenak & Anderson