FIGURE 1

Annular Solar Eclipse of 2012 May 20

Ecliptic Conjunction = 23:48:07.8 TD (= 23:47:01.2 UT)
Greatest Eclipse = 23:53:53.3 TD (= 23:52:46.6 UT)

Eclipse Magnitude = 0.9439 Gamma = 0.4828

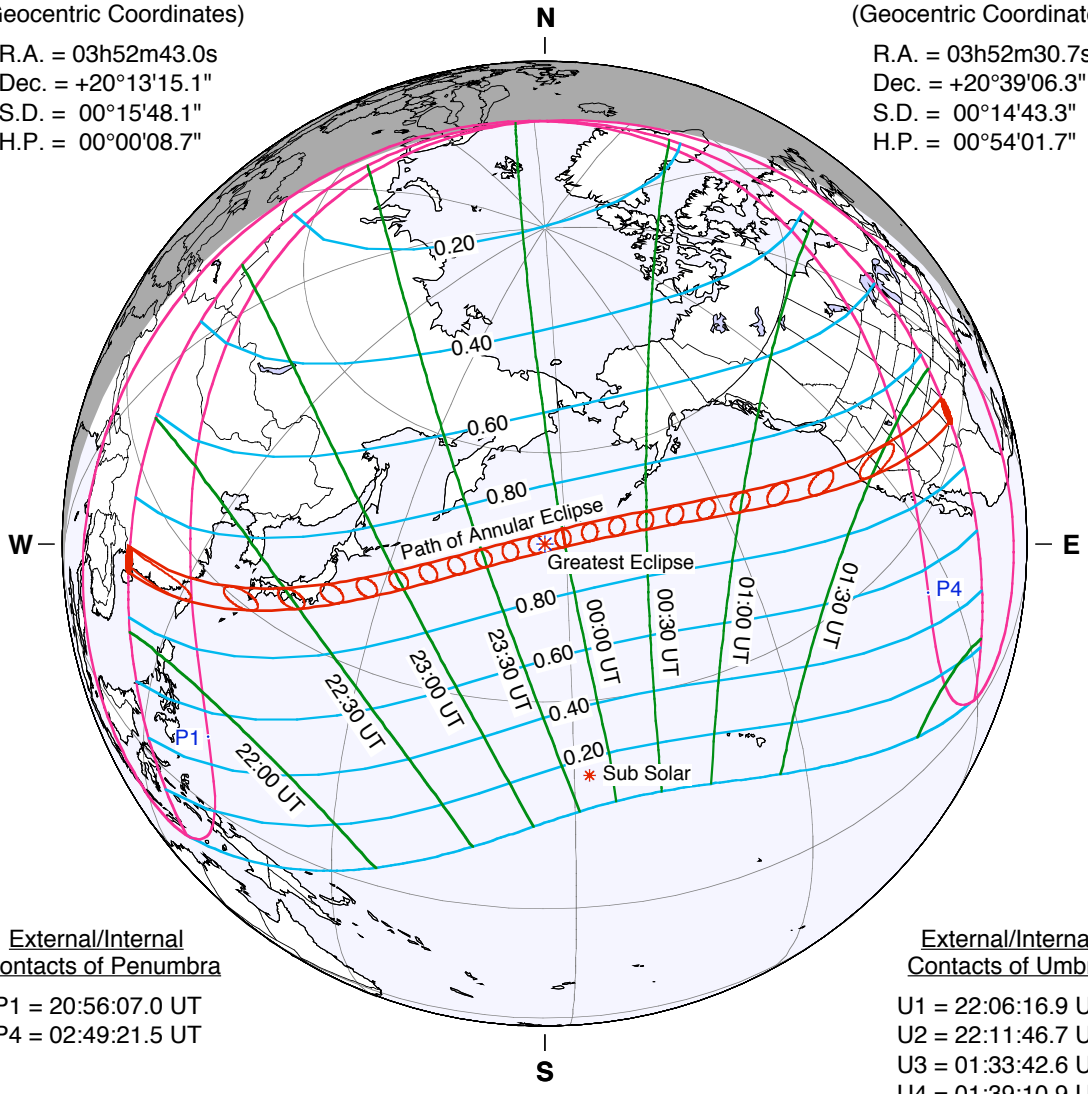
Saros Series = 128 Member = 58 of 73

Sun at Greatest Eclipse
(Geocentric Coordinates)

R.A. = 03h52m43.0s
Dec. = +20°13'15.1"
S.D. = 00°15'48.1"
H.P. = 00°00'08.7"

Moon at Greatest Eclipse
(Geocentric Coordinates)

R.A. = 03h52m30.7s
Dec. = +20°39'06.3"
S.D. = 00°14'43.3"
H.P. = 00°54'01.7"



External/Internal Contacts of Penumbra

P1 = 20:56:07.0 UT
P4 = 02:49:21.5 UT

External/Internal Contacts of Umbra

U1 = 22:06:16.9 UT
U2 = 22:11:46.7 UT
U3 = 01:33:42.6 UT
U4 = 01:39:10.9 UT

Local Circumstances at Greatest Eclipse

Lat. = 49°05.7'N Sun Alt. = 60.9°
Long. = 176°16.5'E Sun Azm. = 171.0°
Path Width = 236.9 km Duration = 05m46.3s

Constants & Ephemeris

ΔT = 66.7 s
k1 = 0.2724880
k2 = 0.2722810
Δb = 0.0" Δl = 0.0"
Eph. = VSOP87/ELP2000-85

0 1000 2000 3000 4000 5000
Kilometers

Geocentric Libration
(Optical + Physical)

l = -1.31°
b = -0.56°
c = -13.67°
Brown Lun. No. = 1106

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eclipse.gsfc.nasa.gov/eclipse.html

Generated on 2011 Jun 06