Figure 1

Total Solar Eclipse of 2015 Mar 20

Ecliptic Conjunction = 09:37:18.2 TD (= 09:36:10.7 UT)
Greatest Eclipse = 09:46:46.6 TD (= 09:45:39.1 UT)

Eclipse Magnitude = 1.0446 Gamma = 0.9454

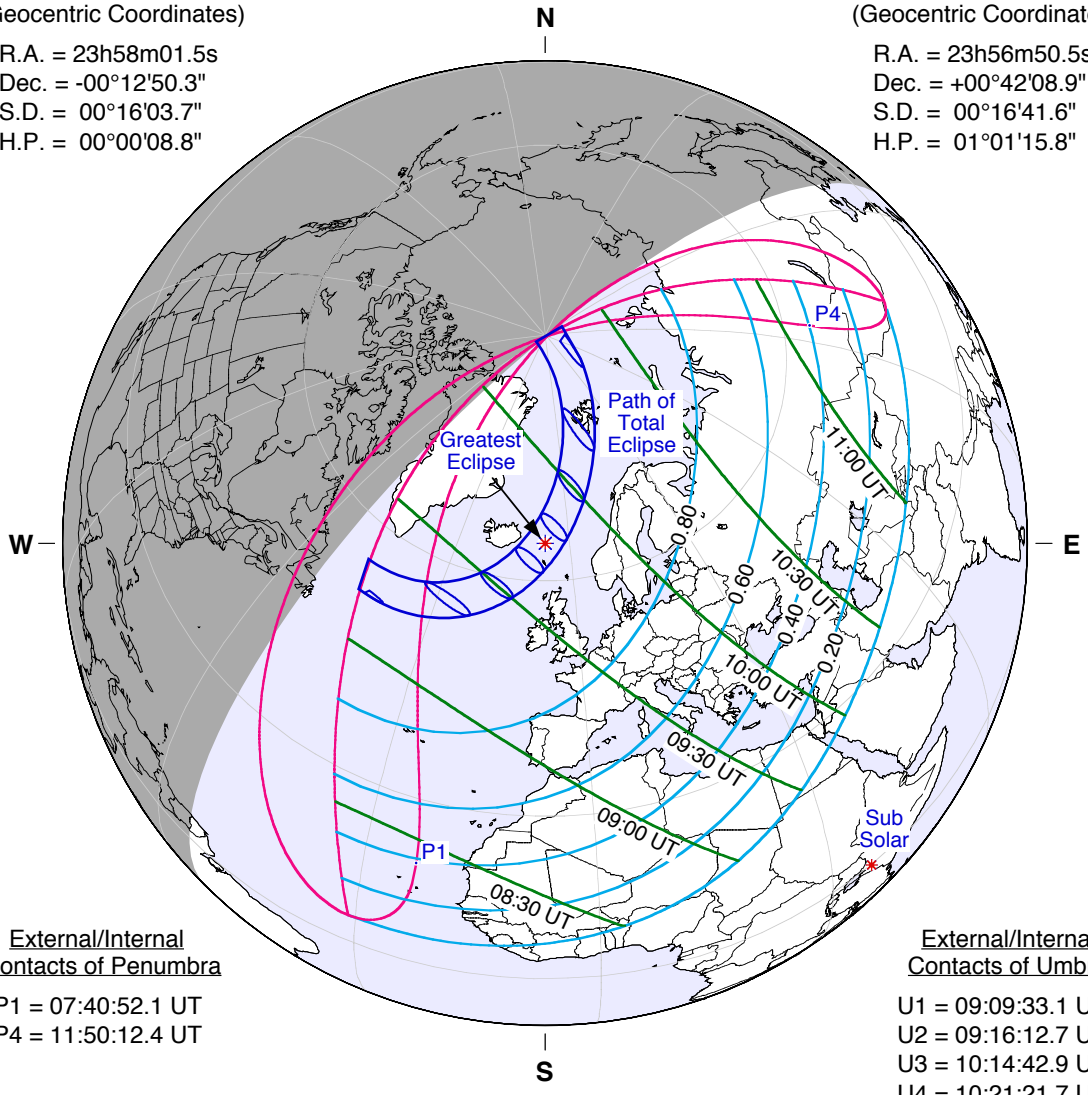
Saros Series = 120 Member = 61 of 71

Sun at Greatest Eclipse
(Geocentric Coordinates)

R.A. = 23h58m01.5s
Dec. = -00°12'50.3"
S.D. = 00°16'03.7"
H.P. = 00°00'08.8"

Moon at Greatest Eclipse
(Geocentric Coordinates)

R.A. = 23h56m50.5s
Dec. = +00°42'08.9"
S.D. = 00°16'41.6"
H.P. = 01°01'15.8"



External/Internal Contacts of Penumbra

P1 = 07:40:52.1 UT
P4 = 11:50:12.4 UT

External/Internal Contacts of Umbra

U1 = 09:09:33.1 UT
U2 = 09:16:12.7 UT
U3 = 10:14:42.9 UT
U4 = 10:21:21.7 UT

Local Circumstances at Greatest Eclipse

Lat. = 64°26.1'N Sun Alt. = 18.5°
Long. = 006°39.4'W Sun Azm. = 135.0°
Path Width = 462.7 km Duration = 02m46.9s

0 1000 2000 3000 4000 5000
Kilometers

Constants & Ephemeris

ΔT = 67.5 s
k1 = 0.2724880
k2 = 0.2722810
Δb = 0.0" Δl = 0.0"
Eph. = VSOP87/ELP2000-85

Geocentric Libration
(Optical + Physical)

l = 1.22°
b = -1.22°
c = -24.92°
Brown Lun. No. = 1141

F. Espenak, NASA's GSFC

eclipse.gsfc.nasa.gov/eclipse.html

2014 Jun 23

"Eclipses During 2015", F. Espenak, **Observer's Handbook – 2015**, Royal Astronomical Society of Canada