

Total Solar Eclipse of 2015 Mar 20

Ecliptic Conjunction = 09:37:18.2 TD (= 09:36:10.6 UT)

Greatest Eclipse = 09:46:46.8 TD (= 09:45:39.2 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°12'50.4"

S.D. = 00°16'03.7"

H.P. = 00°00'08.8"

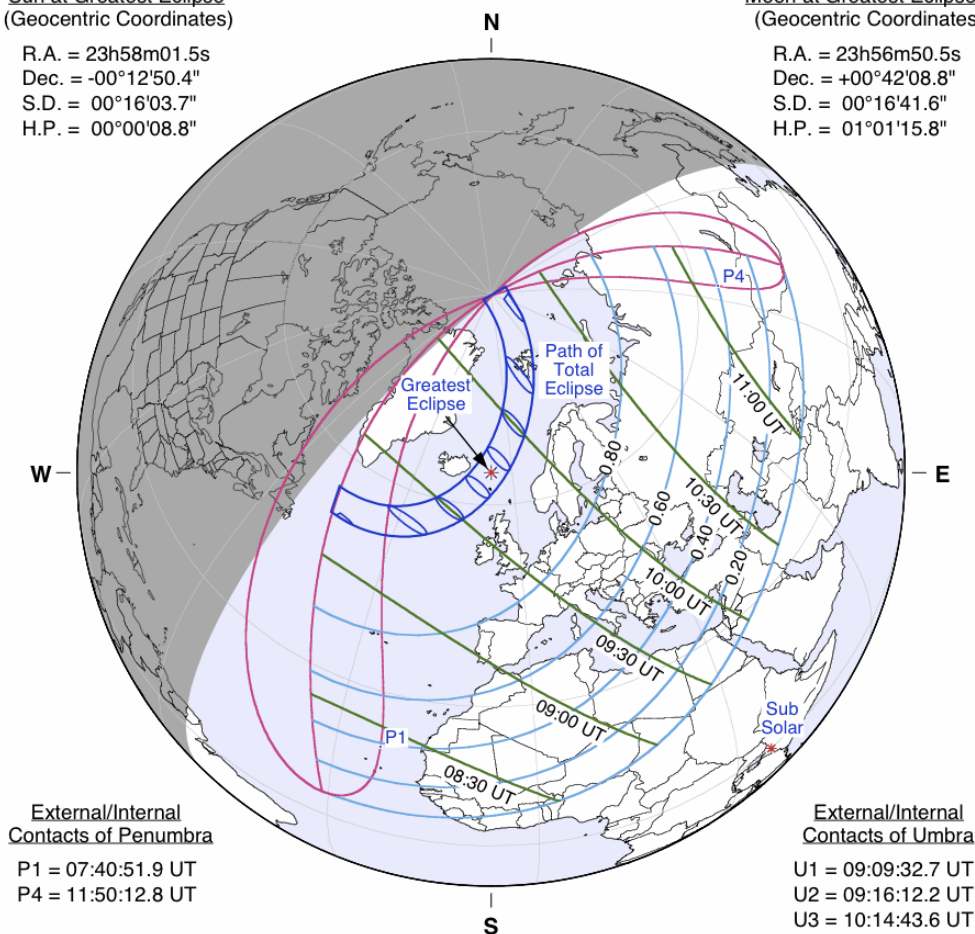
Moon at Greatest Eclipse (Geocentric Coordinates)

R.A. = 23h56m50.5s

Dec. = +00°42'08.8"

S.D. = 00°16'41.6"

H.P. = 01°01'15.8"



External/Internal Contacts of Penumbra

P1 = 07:40:51.9 UT

P4 = 11:50:12.8 UT

External/Internal Contacts of Umbra

U1 = 09:09:32.7 UT

U2 = 09:16:12.2 UT

U3 = 10:14:43.6 UT

U4 = 10:21:22.3 UT

Constants & Ephemeris

$\Delta T = 67.6$ s

$k1 = 0.2725076$

$k2 = 0.2722810$

$\Delta b = 0.0''$ $\Delta l = 0.0''$

Eph. = JPL DE405

Circumstances at Greatest Eclipse: 09:45:39.2 UT

Lat. = 64°25.9'N Sun Alt. = 18.5°

Long. = 006°38.8'W Sun Azm. = 135.0°

Path Width = 462.6 km Duration = 02m46.9s

Circumstances at Greatest Duration: 09:45:16.6 UT

Lat. = 64°17'N Sun Alt. = 18.5°

Long. = 006°54'W Duration = 02m46.9s

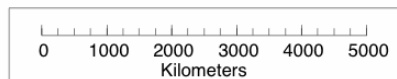
Geocentric Libration (Optical + Physical)

$l = 1.22^\circ$

$b = -1.22^\circ$

$c = -24.92^\circ$

Brown Lun. No. = 1141



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