

# Total Solar Eclipse of 1715 May 03

Ecliptic Conjunction = 09:29:19.1 TD (= 09:29:09.5 UT)

Greatest Eclipse = 09:36:30.0 TD (= 09:36:20.4 UT)

Eclipse Magnitude = 1.0632      Gamma = 0.7112

Saros Series = 114      Member = 60 of 72

## Sun at Greatest Eclipse (Geocentric Coordinates)

R.A. = 02h39m10.9s

Dec. = +15°32'02.4"

S.D. = 00°15'50.8"

H.P. = 00°00'08.7"

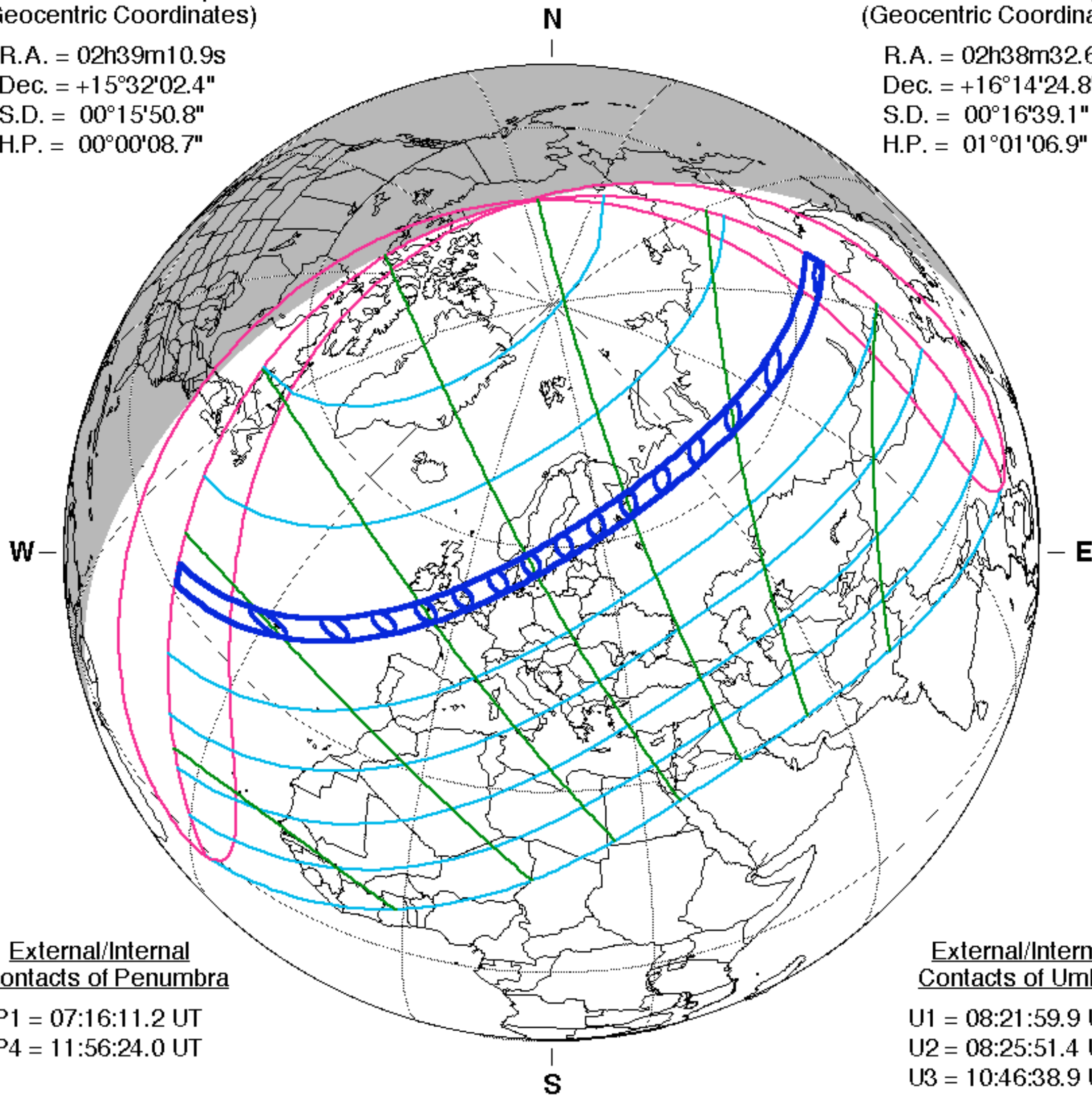
## Moon at Greatest Eclipse (Geocentric Coordinates)

R.A. = 02h38m32.6s

Dec. = +16°14'24.8"

S.D. = 00°16'39.1"

H.P. = 01°01'06.9"



## External/Internal Contacts of Penumbra

P1 = 07:16:11.2 UT

P4 = 11:56:24.0 UT

## External/Internal Contacts of Umbra

U1 = 08:21:59.9 UT

U2 = 08:25:51.4 UT

U3 = 10:46:38.9 UT

U4 = 10:50:28.9 UT

## Local Circumstances at Greatest Eclipse

Lat. = 59°23.2'N

Sun Alt. = 44.4°

Long. = 017°53.7'E

Sun Azm. = 156.5°

Path Width = 295.2 km      Duration = 04m14.0s

## Constants & Ephemeris

$\Delta T = 9.6$  s

$k_1 = 0.2724880$

$k_2 = 0.2722810$

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

Eph. = VSOP87/ELP2000-82

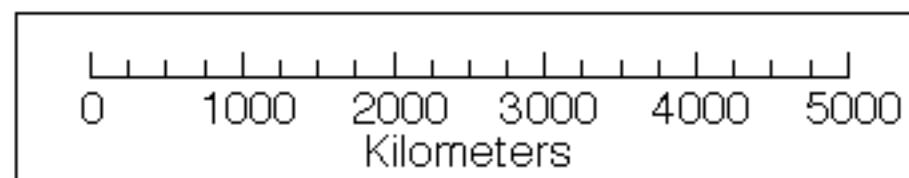
## Geocentric Libration (Optical + Physical)

$l = 1.61^\circ$

$b = -0.91^\circ$

$c = -19.37^\circ$

Brown Lun. No. = -2568



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[eclipse.gsfc.nasa.gov/eclipse.html](http://eclipse.gsfc.nasa.gov/eclipse.html)