

# Total Solar Eclipse of 0840 May 05

Ecliptic Conjunction = 12:52:38.3 TD (= 12:08:57.5 UT)

Greatest Eclipse = 12:57:06.2 TD (= 12:13:25.4 UT)

Eclipse Magnitude = 1.0759      Gamma = 0.4402

Saros Series = 90      Member = 55 of 83

## Sun at Greatest Eclipse (Geocentric Coordinates)

R.A. = 03h05m03.5s

Dec. = +17°30'35.6"

S.D. = 00°15'46.3"

H.P. = 00°00'08.7"

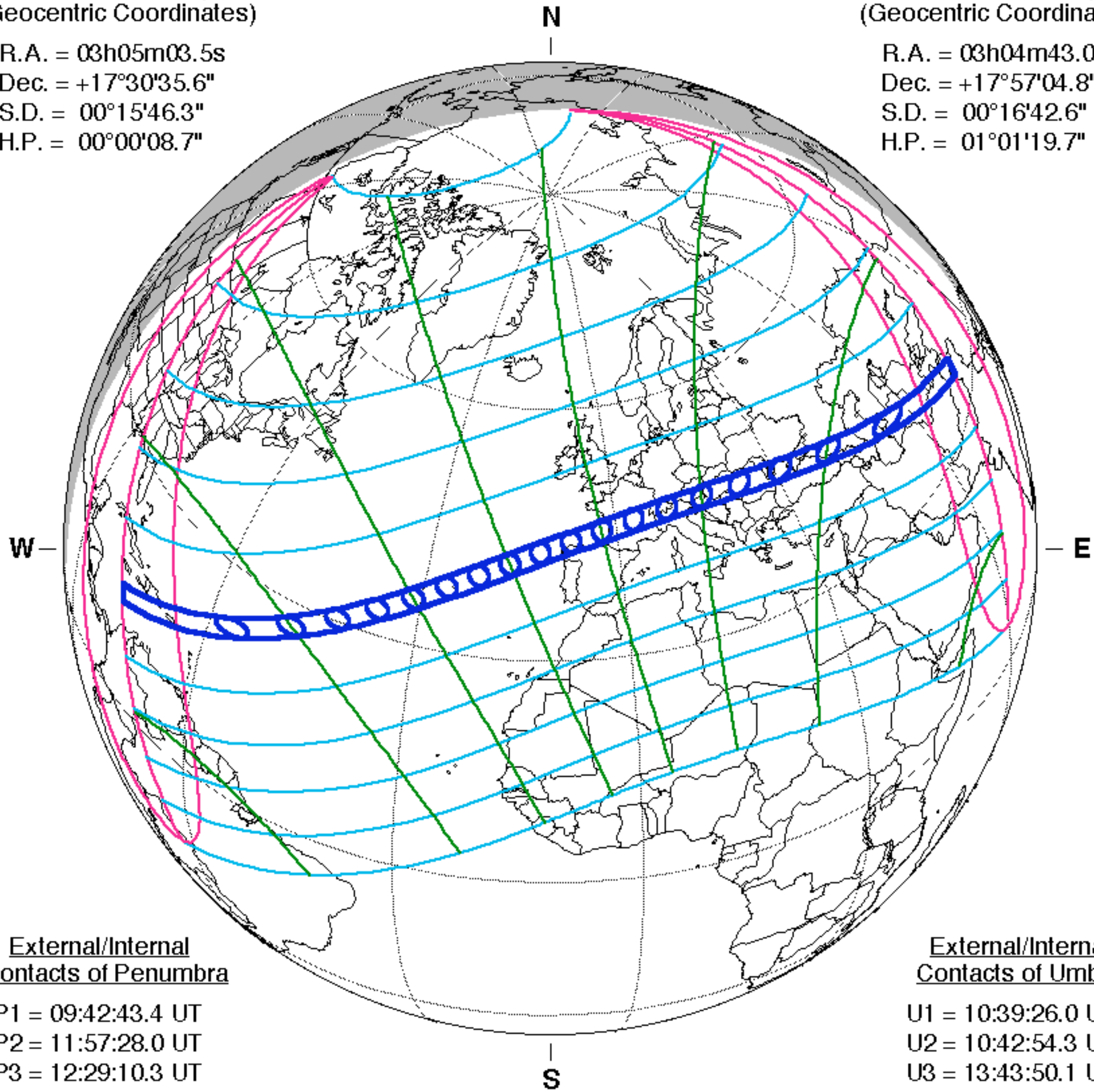
## Moon at Greatest Eclipse (Geocentric Coordinates)

R.A. = 03h04m43.0s

Dec. = +17°57'04.8"

S.D. = 00°16'42.6"

H.P. = 01°01'19.7"



## External/Internal Contacts of Penumbra

P1 = 09:42:43.4 UT

P2 = 11:57:28.0 UT

P3 = 12:29:10.3 UT

P4 = 14:44:02.8 UT

## External/Internal Contacts of Umbra

U1 = 10:39:26.0 UT

U2 = 10:42:54.3 UT

U3 = 13:43:50.1 UT

U4 = 13:47:19.3 UT

## Local Circumstances at Greatest Eclipse

Lat. = 43°18.9'N

Sun Alt. = 63.7°

Long. = 010°58.7'W

Sun Azm. = 166.4°

Path Width = 273.8 km      Duration = 05m46.2s

## Constants & Ephemeris

$\Delta T = 2620.8$  s

$k_1 = 0.2724880$

$k_2 = 0.2722810$

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

Eph. = VSOP87/ELP2000-82

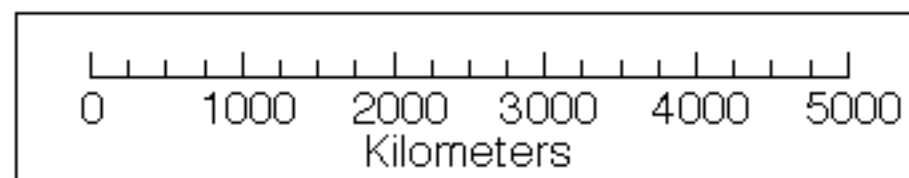
## Geocentric Libration (Optical + Physical)

$l = -0.74^\circ$

$b = -0.56^\circ$

$c = -17.59^\circ$

Brown Lun. No. = -13390



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