

Annular Solar Eclipse of -0423 Mar 21

Ecliptic Conjunction = 12:07:06.9 TD (= 07:43:29.9 UT)

Greatest Eclipse = 12:18:06.1 TD (= 07:54:29.1 UT)

Eclipse Magnitude = 0.9430 Gamma = 0.9433

Saros Series = 42 Member = 65 of 72

Sun at Greatest Eclipse (Geocentric Coordinates)

R.A. = 23h42m42.8s

Dec. = -01°53'54.8"

S.D. = 00°15'53.1"

H.P. = 00°00'08.7"

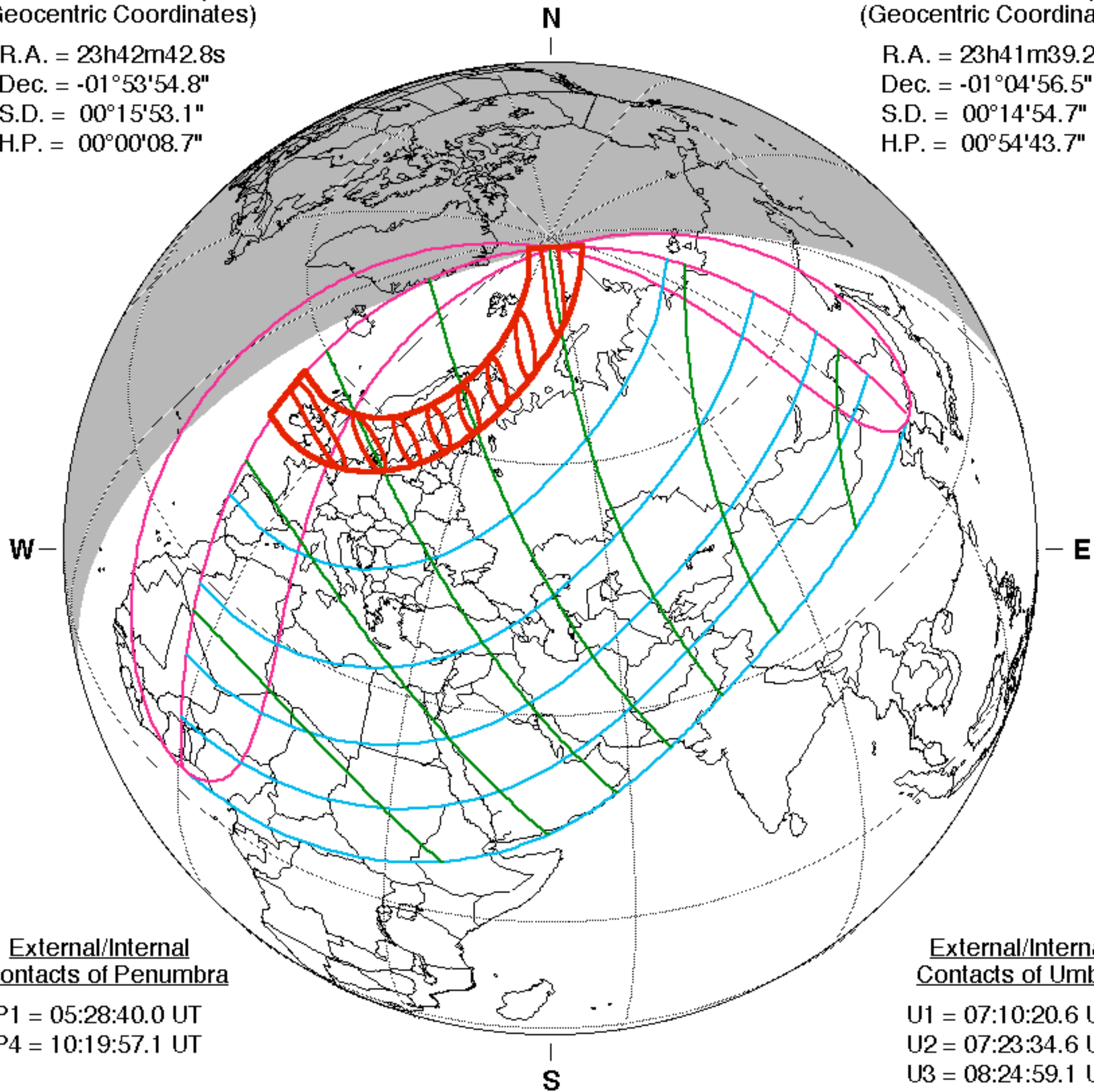
Moon at Greatest Eclipse (Geocentric Coordinates)

R.A. = 23h41m39.2s

Dec. = -01°04'56.5"

S.D. = 00°14'54.7"

H.P. = 00°54'43.7"



External/Internal Contacts of Penumbra

P1 = 05:28:40.0 UT

P4 = 10:19:57.1 UT

External/Internal Contacts of Umbra

U1 = 07:10:20.6 UT

U2 = 07:23:34.6 UT

U3 = 08:24:59.1 UT

U4 = 08:38:09.7 UT

Local Circumstances at Greatest Eclipse

Lat. = 62°49.0'N

Sun Alt. = 18.8°

Long. = 024°18.0'E

Sun Azm. = 137.8°

Path Width = 639.6 km Duration = 04m39.3s

Constants & Ephemeris

$\Delta T = 15817.0$ s

$k1 = 0.2724880$

$k2 = 0.2722810$

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

Eph. = VSOP87/ELP2000-82

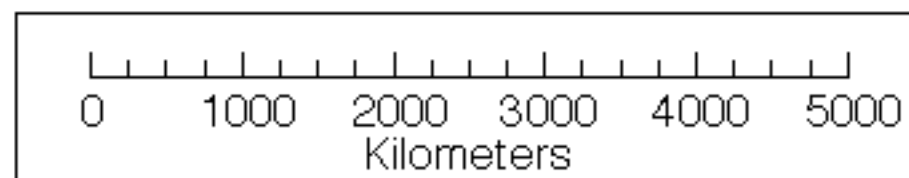
Geocentric Libration (Optical + Physical)

$l = -3.52^\circ$

$b = -1.12^\circ$

$c = -25.19^\circ$

Brown Lun. No. = -29013



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eclipse.gsfc.nasa.gov/eclipse.html