

Total Solar Eclipse of 1733 May 13

Ecliptic Conjunction = 17:10:43.4 TD (= 17:10:32.6 UT)

Greatest Eclipse = 17:18:28.8 TD (= 17:18:18.0 UT)

Eclipse Magnitude = 1.0656 Gamma = 0.7712

Saros Series = 114 Member = 61 of 72

Sun at Greatest Eclipse (Geocentric Coordinates)

R.A. = 03h21m42.2s

Dec. = +18°30'22.2"

S.D. = 00°15'48.5"

H.P. = 00°00'08.7"

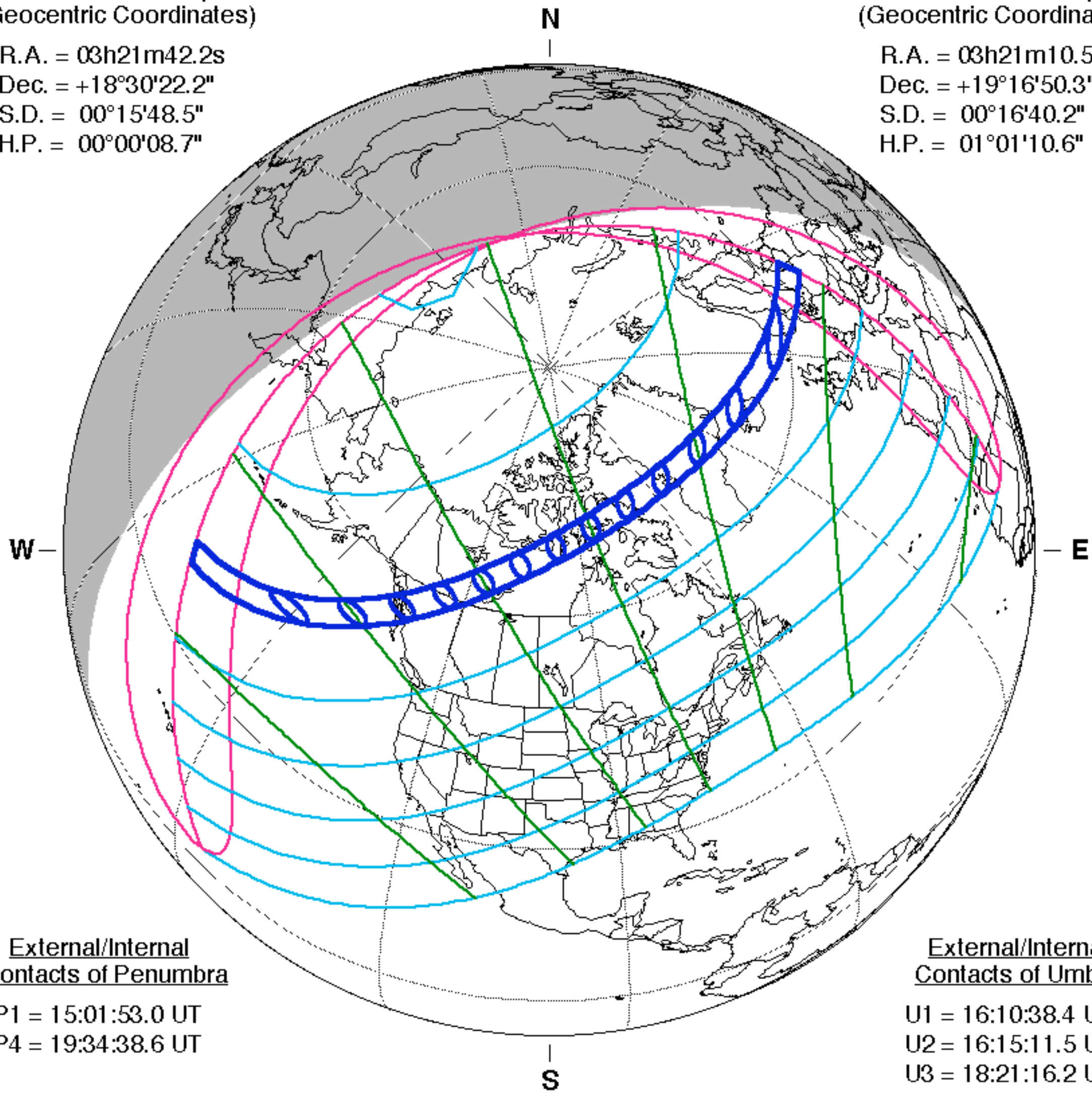
Moon at Greatest Eclipse (Geocentric Coordinates)

R.A. = 03h21m10.5s

Dec. = +19°16'50.3"

S.D. = 00°16'40.2"

H.P. = 01°01'10.6"



External/Internal Contacts of Penumbra

P1 = 15:01:53.0 UT

P4 = 19:34:38.6 UT

External/Internal Contacts of Umbra

U1 = 16:10:38.4 UT

U2 = 16:15:11.5 UT

U3 = 18:21:16.2 UT

U4 = 18:25:48.0 UT

Local Circumstances at Greatest Eclipse

Lat. = 67°51.2'N

Sun Alt. = 39.2°

Long. = 099°28.3'W

Sun Azm. = 156.7°

Path Width = 338.8 km Duration = 04m06.1s

Constants & Ephemeris

$\Delta T = 10.8$ s

$k_1 = 0.2724880$

$k_2 = 0.2722810$

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

Eph. = VSOP87/ELP2000-82

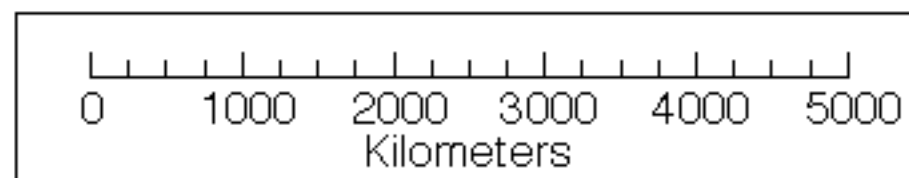
Geocentric Libration (Optical + Physical)

$l = 1.41^\circ$

$b = -0.99^\circ$

$c = -16.24^\circ$

Brown Lun. No. = -2345



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eclipse.gsfc.nasa.gov/eclipse.html