

Annular Solar Eclipse of -0898 Apr 21

Ecliptic Conjunction = 05:04:04.4 TD (= 22:32:14.9 UT)

Greatest Eclipse = 04:53:45.3 TD (= 22:21:55.7 UT)

Eclipse Magnitude = 0.9591 Gamma = 0.8964

Saros Series = 53 Member = 22 of 84

Sun at Greatest Eclipse (Geocentric Coordinates)

R.A. = 01h17m12.5s

Dec. = +08°17'49.5"

S.D. = 00°15'45.5"

H.P. = 00°00'08.7"

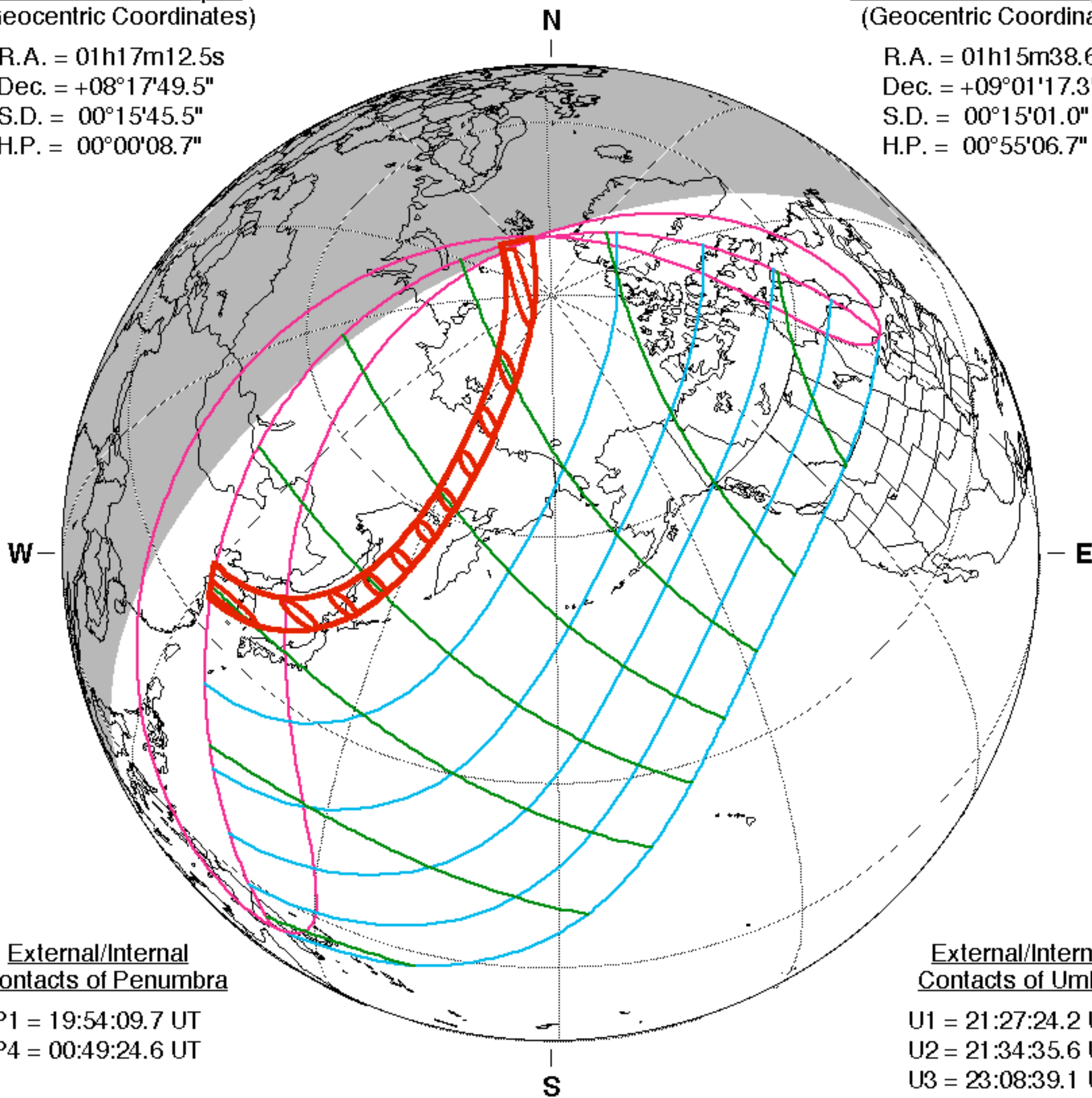
Moon at Greatest Eclipse (Geocentric Coordinates)

R.A. = 01h15m38.6s

Dec. = +09°01'17.3"

S.D. = 00°15'01.0"

H.P. = 00°55'06.7"



External/Internal Contacts of Penumbra

P1 = 19:54:09.7 UT

P4 = 00:49:24.6 UT

External/Internal Contacts of Umbra

U1 = 21:27:24.2 UT

U2 = 21:34:35.6 UT

U3 = 23:08:39.1 UT

U4 = 23:15:56.1 UT

Local Circumstances at Greatest Eclipse

Lat. = 58°09.2'N

Sun Alt. = 26.0°

Long. = 151°17.9'E

Sun Azm. = 118.6°

Path Width = 330.3 km Duration = 03m04.4s

Constants & Ephemeris

$\Delta T = 23509.6$ s

$k_1 = 0.2724880$

$k_2 = 0.2722810$

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

Eph. = VSOP87/ELP2000-82

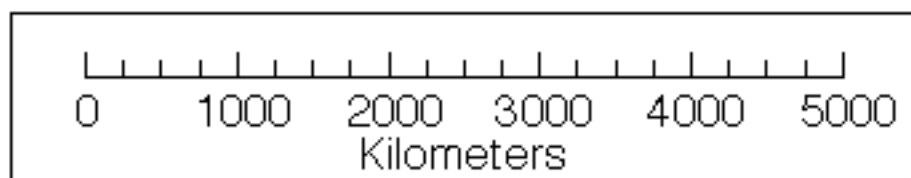
Geocentric Libration (Optical + Physical)

$l = 3.71^\circ$

$b = -1.09^\circ$

$c = -20.92^\circ$

Brown Lun. No. = -34887



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eclipse.gsfc.nasa.gov/eclipse.html