

Total Solar Eclipse of 1860 Jul 18

Ecliptic Conjunction = 14:20:40.8 TD (= 14:20:33.1 UT)

Greatest Eclipse = 14:26:24.3 TD (= 14:26:16.6 UT)

Eclipse Magnitude = 1.0500 Gamma = 0.5487

Saros Series = 124 Member = 46 of 73

Sun at Greatest Eclipse (Geocentric Coordinates)

R.A. = 07h52m23.3s

Dec. = +20°56'51.5"

S.D. = 00°15'44.4"

H.P. = 00°00'08.7"

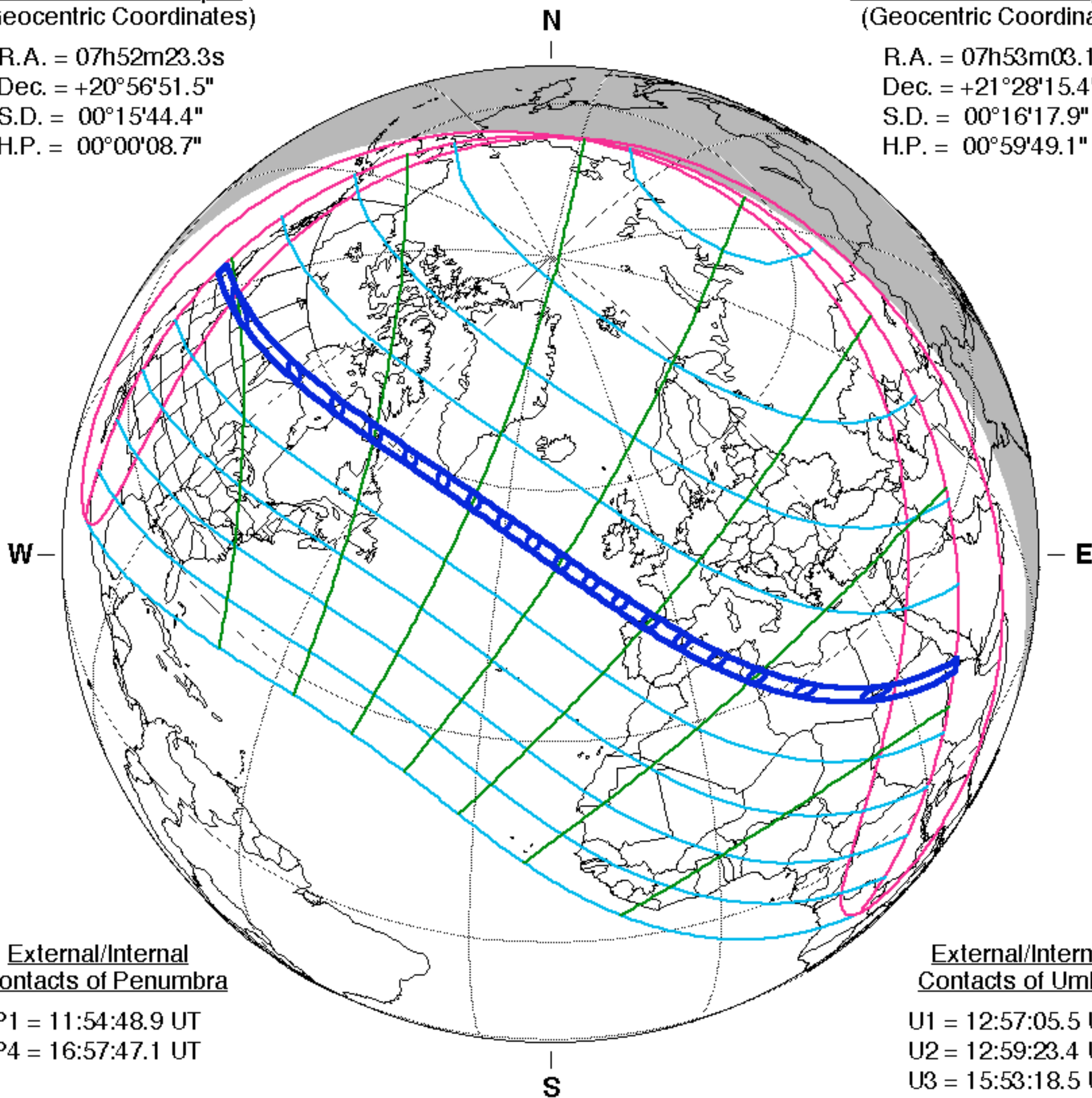
Moon at Greatest Eclipse (Geocentric Coordinates)

R.A. = 07h53m03.1s

Dec. = +21°28'15.4"

S.D. = 00°16'17.9"

H.P. = 00°59'49.1"



External/Internal Contacts of Penumbra

P1 = 11:54:48.9 UT

P4 = 16:57:47.1 UT

External/Internal Contacts of Umbra

U1 = 12:57:05.5 UT

U2 = 12:59:23.4 UT

U3 = 15:53:18.5 UT

U4 = 15:55:40.3 UT

Local Circumstances at Greatest Eclipse

Lat. = 52°28.6'N

Sun Alt. = 56.5°

Long. = 020°20.5'W

Sun Azm. = 205.5°

Path Width = 198.2 km Duration = 03m38.5s

Constants & Ephemeris

$\Delta T = 7.7$ s

$k1 = 0.2724880$

$k2 = 0.2722810$

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

Eph. = VSOP87/ELP2000-82

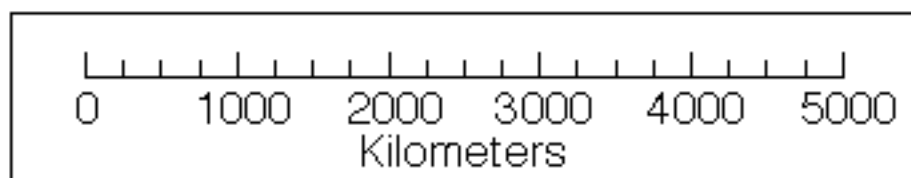
Geocentric Libration (Optical + Physical)

$l = -3.72^\circ$

$b = -0.71^\circ$

$c = 9.35^\circ$

Brown Lun. No. = -772



F. Espenak, NASA's GSFC

eclipse.gsfc.nasa.gov/eclipse.html