

# Total Solar Eclipse of -1301 Jun 05

Ecliptic Conjunction = 10:44:30.5 TD (= 02:07:46.1 UT)

Greatest Eclipse = 10:47:32.1 TD (= 02:10:47.7 UT)

Eclipse Magnitude = 1.0805      Gamma = 0.2982

Saros Series = 26      Member = 40 of 72

## Sun at Greatest Eclipse (Geocentric Coordinates)

R.A. = 03h53m40.4s

Dec. = +20°38'11.2"

S.D. = 00°15'43.2"

H.P. = 00°00'08.6"

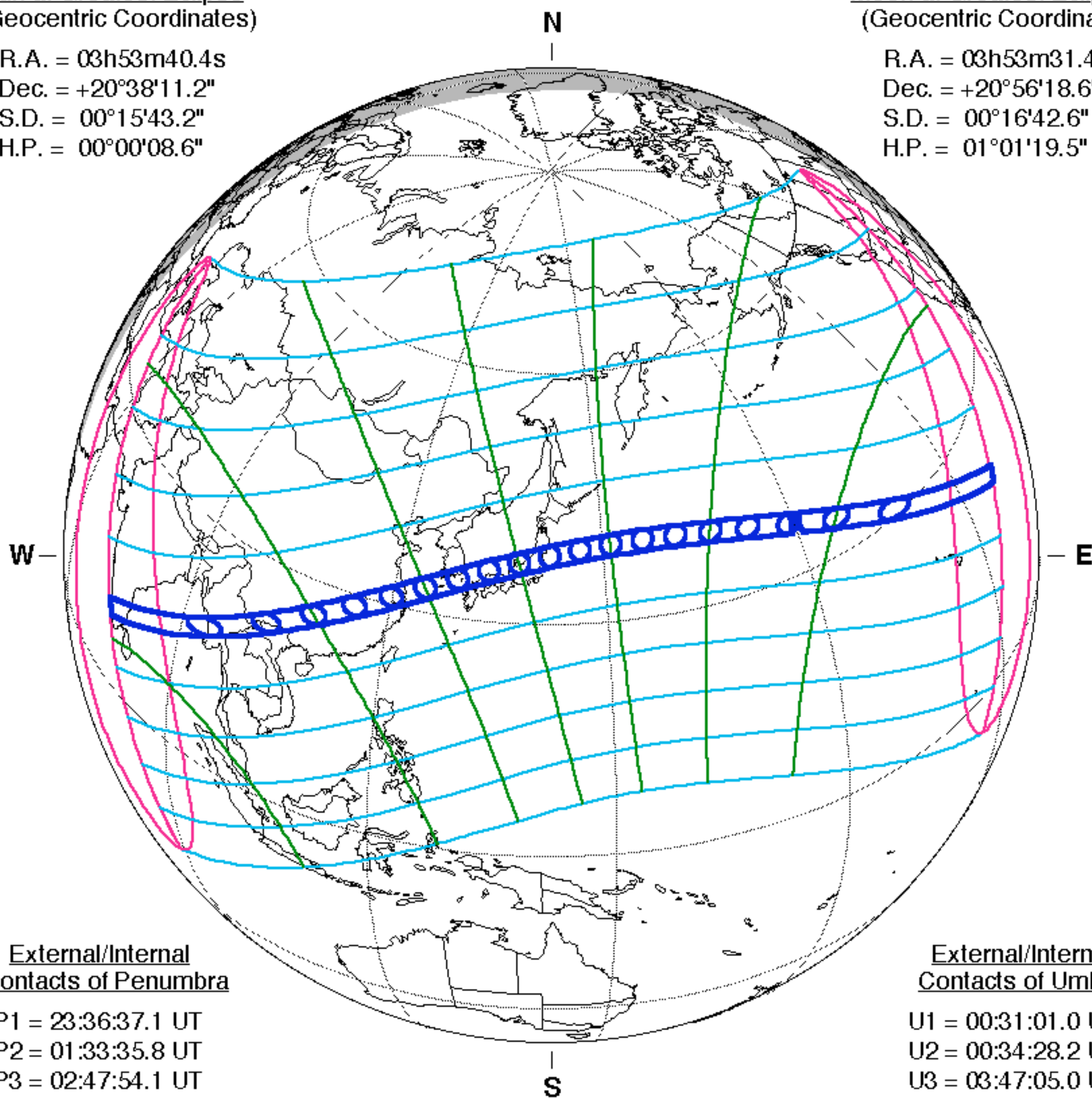
## Moon at Greatest Eclipse (Geocentric Coordinates)

R.A. = 03h53m31.4s

Dec. = +20°56'18.6"

S.D. = 00°16'42.6"

H.P. = 01°01'19.5"



## External/Internal Contacts of Penumbra

P1 = 23:36:37.1 UT

P2 = 01:33:35.8 UT

P3 = 02:47:54.1 UT

P4 = 04:44:57.3 UT

## External/Internal Contacts of Umbra

U1 = 00:31:01.0 UT

U2 = 00:34:28.2 UT

U3 = 03:47:05.0 UT

U4 = 03:50:31.6 UT

## Local Circumstances at Greatest Eclipse

Lat. = 38°03.6'N

Sun Alt. = 72.4°

Long. = 142°20.0'E

Sun Azm. = 172.3°

Path Width = 272.1 km      Duration = 06m24.7s

## Constants & Ephemeris

$\Delta T = 31004.5$  s

$k_1 = 0.2724880$

$k_2 = 0.2722810$

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

Eph. = VSOP87/ELP2000-82

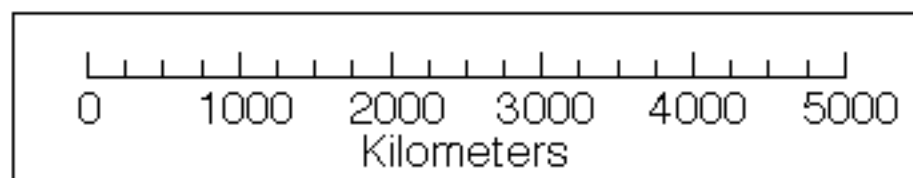
## Geocentric Libration (Optical + Physical)

$l = 0.74^\circ$

$b = -0.33^\circ$

$c = -13.73^\circ$

Brown Lun. No. = -39870



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