

# Total Solar Eclipse of 1973 Jun 30

Ecliptic Conjunction = 11:39:28.4 TD (= 11:38:44.6 UT)

Greatest Eclipse = 11:38:40.6 TD (= 11:37:56.8 UT)

Eclipse Magnitude = 1.0792      Gamma = -0.0785

Saros Series = 136      Member = 35 of 71

## Sun at Greatest Eclipse (Geocentric Coordinates)

R.A. = 06h37m08.4s

Dec. = +23°10'06.3"

S.D. = 00°15'43.8"

H.P. = 00°00'08.6"

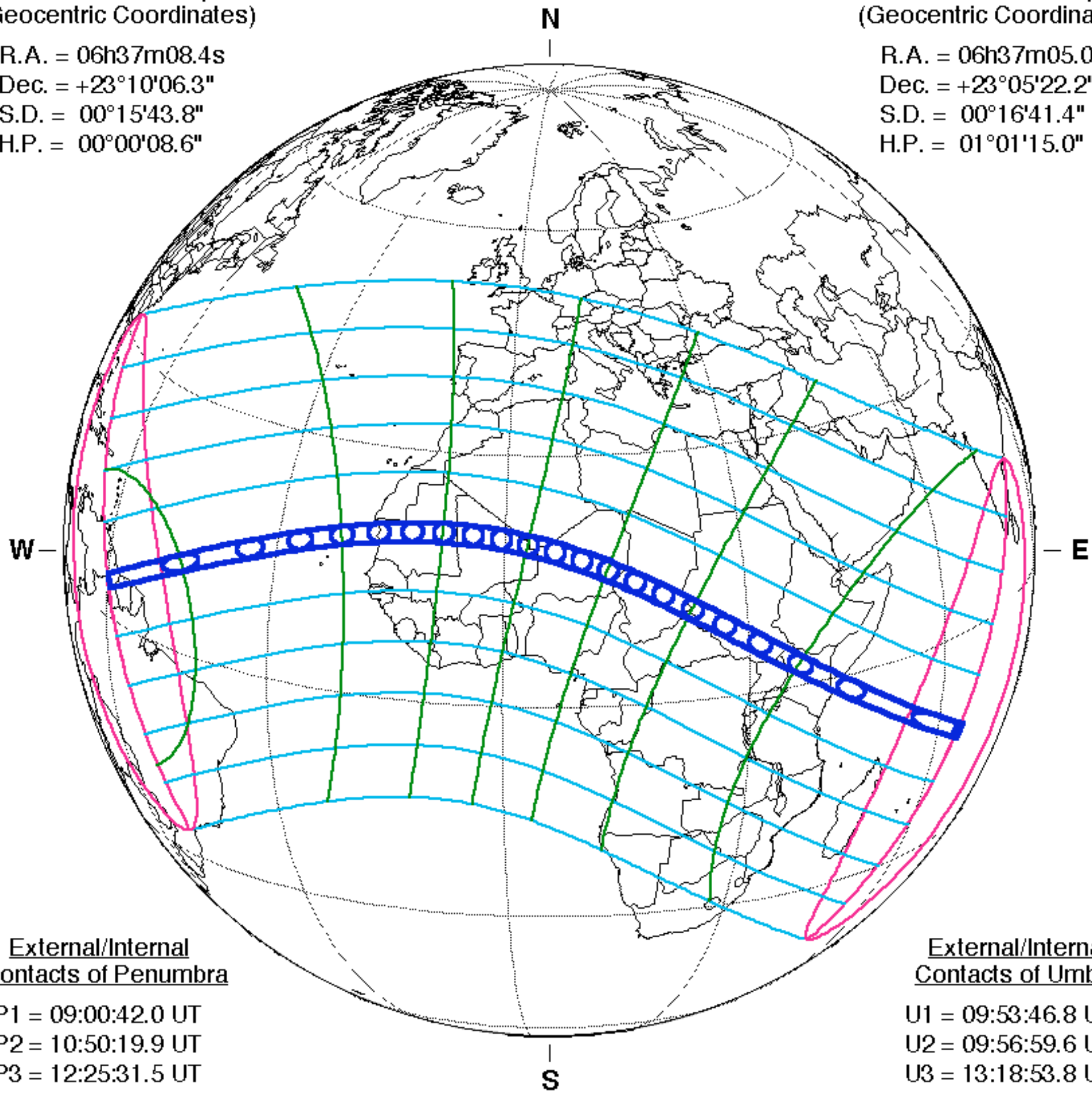
## Moon at Greatest Eclipse (Geocentric Coordinates)

R.A. = 06h37m05.0s

Dec. = +23°05'22.2"

S.D. = 00°16'41.4"

H.P. = 01°01'15.0"



## External/Internal Contacts of Penumbra

P1 = 09:00:42.0 UT

P2 = 10:50:19.9 UT

P3 = 12:25:31.5 UT

P4 = 14:15:12.2 UT

## External/Internal Contacts of Umbra

U1 = 09:53:46.8 UT

U2 = 09:56:59.6 UT

U3 = 13:18:53.8 UT

U4 = 13:22:05.4 UT

## Local Circumstances at Greatest Eclipse

Lat. = 18°50.3'N

Sun Alt. = 85.6°

Long. = 005°37.8'E

Sun Azm. = 9.3°

Path Width = 256.5 km      Duration = 07m03.5s

## Constants & Ephemeris

$\Delta T = 43.8$  s

$k_1 = 0.2724880$

$k_2 = 0.2722810$

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

Eph. = VSOP87/ELP2000-82

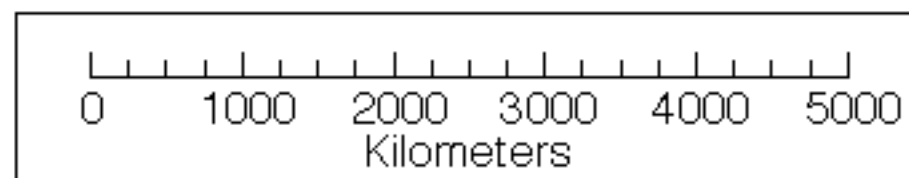
## Geocentric Libration (Optical + Physical)

$l = 1.08^\circ$

$b = 0.13^\circ$

$c = 2.16^\circ$

Brown Lun. No. = 625



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