

Figure 3

# Total Solar Eclipse of 2008 Aug 01

Ecliptic Conjunction = 10:13:38.3 TD (= 10:12:32.8 UT)

Greatest Eclipse = 10:22:11.8 TD (= 10:21:06.3 UT)

Eclipse Magnitude = 1.0394      Gamma = 0.8307

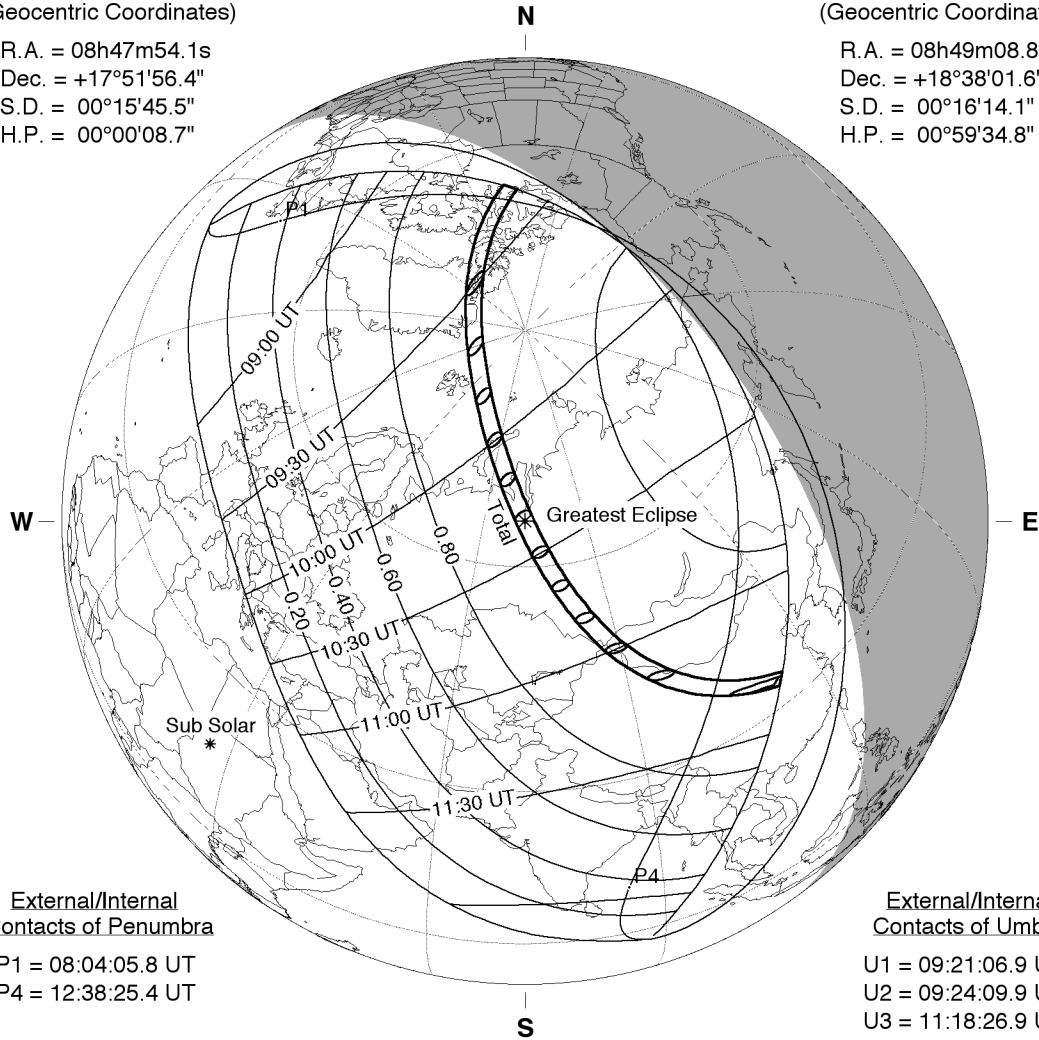
Saros Series = 126      Member = 47 of 72

Sun at Greatest Eclipse  
(Geocentric Coordinates)

R.A. = 08h47m54.1s  
Dec. = +17°51'56.4"  
S.D. = 00°15'45.5"  
H.P. = 00°00'08.7"

Moon at Greatest Eclipse  
(Geocentric Coordinates)

R.A. = 08h49m08.8s  
Dec. = +18°38'01.6"  
S.D. = 00°16'14.1"  
H.P. = 00°59'34.8"



External/Internal  
Contacts of Penumbra

P1 = 08:04:05.8 UT  
P4 = 12:38:25.4 UT

External/Internal  
Contacts of Umbra

U1 = 09:21:06.9 UT  
U2 = 09:24:09.9 UT  
U3 = 11:18:26.9 UT  
U4 = 11:21:25.1 UT

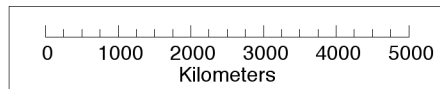
Local Circumstances at Greatest Eclipse

Lat. = 65°39.3'N      Sun Alt. = 33.5°  
Long. = 072°18.4'E      Sun Azm. = 235.2°

Constants & Ephemeris

$\Delta T = 65.5$  s  
 $k1 = 0.2724880$   
 $k2 = 0.2722810$   
 $\Delta b = 0.0''$     $\Delta l = 0.0''$   
Eph. = VSOP87/ELP2000-85

Path Width = 237.0 km      Duration = 02m27.1s



Geocentric Libration  
(Optical + Physical)

$l = 4.22^\circ$   
 $b = -1.02^\circ$   
 $c = 14.02^\circ$

Brown Lun. No. = 1059

F. Espenak, NASA's GSFC - 2007 Jun 01

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

Fred Espenak, "Eclipses During 2008," Observer's Handbook 2008,  
Royal Astronomical Society of Canada, University of Toronto Press, Toronto, 2007.