

FIGURE 4

# Partial Solar Eclipse of 2014 Oct 23

Ecliptic Conjunction = 21:57:46.8 TD (= 21:56:39.5 UT)

Greatest Eclipse = 21:45:38.7 TD (= 21:44:31.4 UT)

Eclipse Magnitude = 0.8114      Gamma = 1.0908

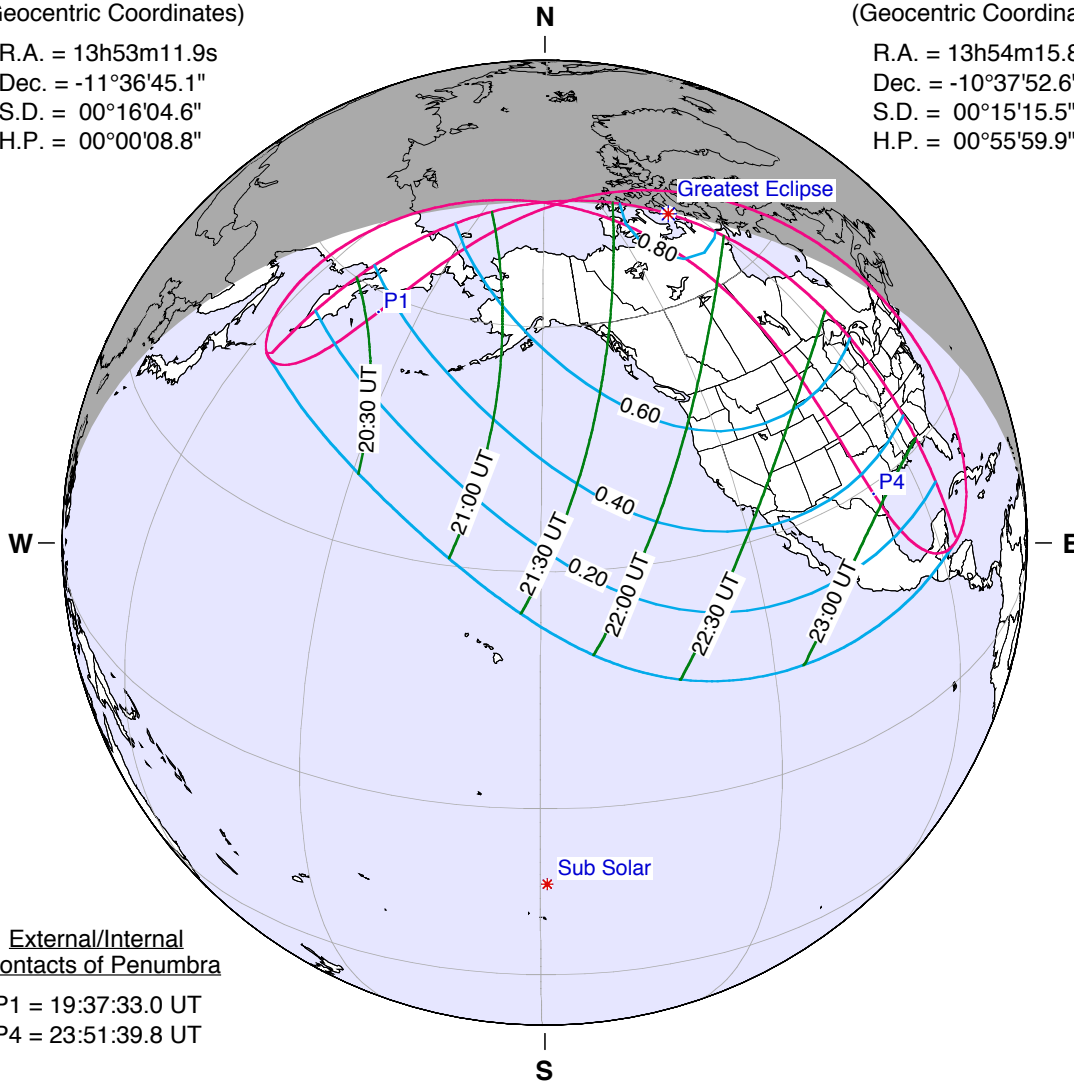
Saros Series = 153      Member = 9 of 70

Sun at Greatest Eclipse  
(Geocentric Coordinates)

R.A. = 13h53m11.9s  
Dec. = -11°36'45.1"  
S.D. = 00°16'04.6"  
H.P. = 00°00'08.8"

Moon at Greatest Eclipse  
(Geocentric Coordinates)

R.A. = 13h54m15.8s  
Dec. = -10°37'52.6"  
S.D. = 00°15'15.5"  
H.P. = 00°55'59.9"

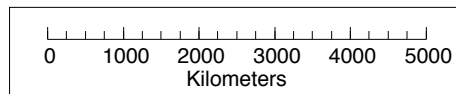


External/Internal  
Contacts of Penumbra

P1 = 19:37:33.0 UT  
P4 = 23:51:39.8 UT

Constants & Ephemeris

$\Delta T = 67.4$  s  
 $k1 = 0.2724880$   
 $k2 = 0.2722810$   
 $\Delta b = 0.0''$      $\Delta l = 0.0''$   
Eph. = VSOP87/ELP2000-85



Geocentric Libration  
(Optical + Physical)

$l = -4.52^\circ$   
 $b = -1.27^\circ$   
 $c = 21.96^\circ$   
Brown Lun. No. = 1136

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