

# Figure 1

## Annular Solar Eclipse of 2008 Feb 07

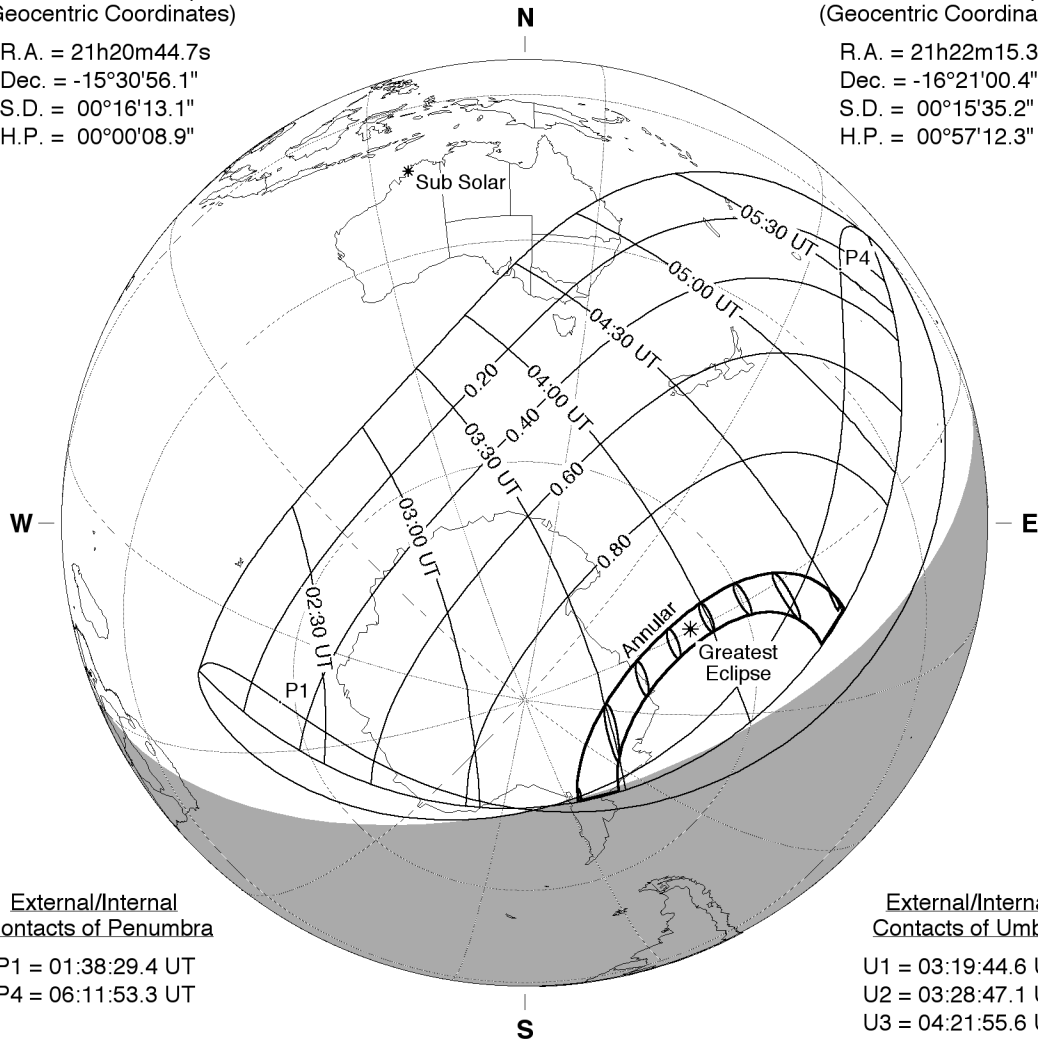
Ecliptic Conjunction = 03:45:36.0 TD (= 03:44:30.6 UT)  
 Greatest Eclipse = 03:56:10.5 TD (= 03:55:05.1 UT)  
 Eclipse Magnitude = 0.9650      Gamma = -0.9570  
 Saros Series = 121      Member = 60 of 71

**Sun at Greatest Eclipse**  
(Geocentric Coordinates)

R.A. = 21h20m44.7s  
 Dec. = -15°30'56.1"  
 S.D. = 00°16'13.1"  
 H.P. = 00°00'08.9"

**Moon at Greatest Eclipse**  
(Geocentric Coordinates)

R.A. = 21h22m15.3s  
 Dec. = -16°21'00.4"  
 S.D. = 00°15'35.2"  
 H.P. = 00°57'12.3"



**External/Internal Contacts of Penumbra**

P1 = 01:38:29.4 UT  
 P4 = 06:11:53.3 UT

**External/Internal Contacts of Umbra**

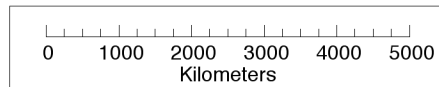
U1 = 03:19:44.6 UT  
 U2 = 03:28:47.1 UT  
 U3 = 04:21:55.6 UT  
 U4 = 04:30:51.2 UT

**Local Circumstances at Greatest Eclipse**

Lat. = 67°34.6'S      Sun Alt. = 16.3°  
 Long. = 150°29.9'W      Sun Azm. = 268.8°  
 Path Width = 444.4 km      Duration = 02m11.7s

**Constants & Ephemeris**

$\Delta T = 65.4$  s  
 $k1 = 0.2724880$   
 $k2 = 0.2722810$   
 $\Delta b = 0.0''$      $\Delta l = 0.0''$   
 Eph. = VSOP87/ELP2000-85



**Geocentric Libration (Optical + Physical)**

$l = -5.01^\circ$   
 $b = 1.24^\circ$   
 $c = -16.39^\circ$

Brown Lun. No. = 1053

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.