

Partial Solar Eclipse of 2018 Jul 13

Geocentric Conjunction = 03:08:59.5 UT J.D. = 2458312.631244
 Greatest Eclipse = 03:01:02.4 UT J.D. = 2458312.625723

Eclipse Magnitude = 0.3367 Gamma = -1.3541

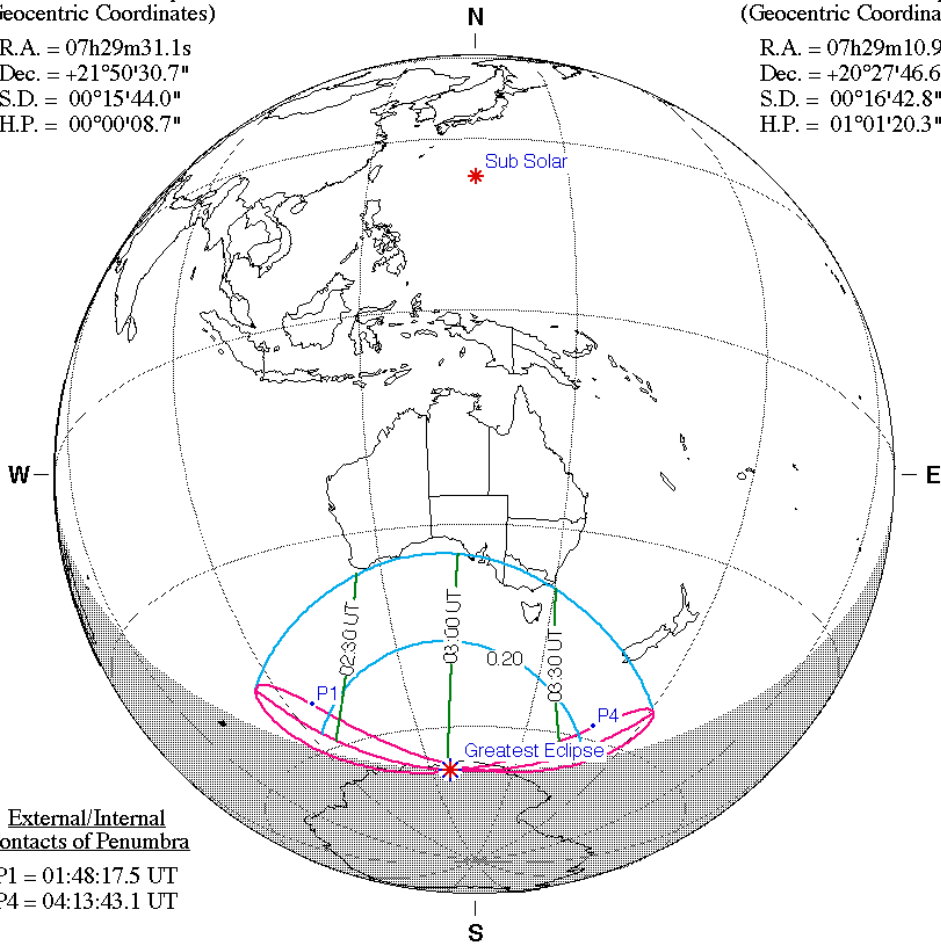
Saros Series = 117 Member = 69 of 71

Sun at Greatest Eclipse (Geocentric Coordinates)

R.A. = 07h29m31.1s
 Dec. = +21°50'30.7"
 S.D. = 00°15'44.0"
 H.P. = 00°00'08.7"

Moon at Greatest Eclipse (Geocentric Coordinates)

R.A. = 07h29m10.9s
 Dec. = +20°27'46.6"
 S.D. = 00°16'42.8"
 H.P. = 01°01'20.3"



External/Internal Contacts of Penumbra

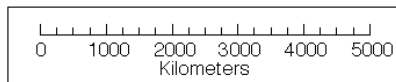
P1 = 01:48:17.5 UT
 P4 = 04:13:43.1 UT

Ephemeris & Constants

Eph. = Newcomb/ILE
 $\Delta T = 75.2$ s
 $k1 = 0.2724880$
 $k2 = 0.2722810$
 $\Delta b = 0.0''$ $\Delta l = 0.0''$

Geocentric Libration (Optical + Physical)

$l = -0.38^\circ$
 $b = 1.79^\circ$
 $c = 10.14^\circ$
 Brown Lun. No. = 1182



F. Espenak, NASA's GSFC - Fri, Jul 2,
sunearth.gsfc.nasa.gov/eclipse/eclipse.html