

# Figure 5

## Total Solar Eclipse of 2021 Dec 04

Greatest Eclipse = 07:34:37.9 TD (= 07:33:27.3 UT1)

Eclipse Magnitude = 1.0367  
Gamma = -0.9526

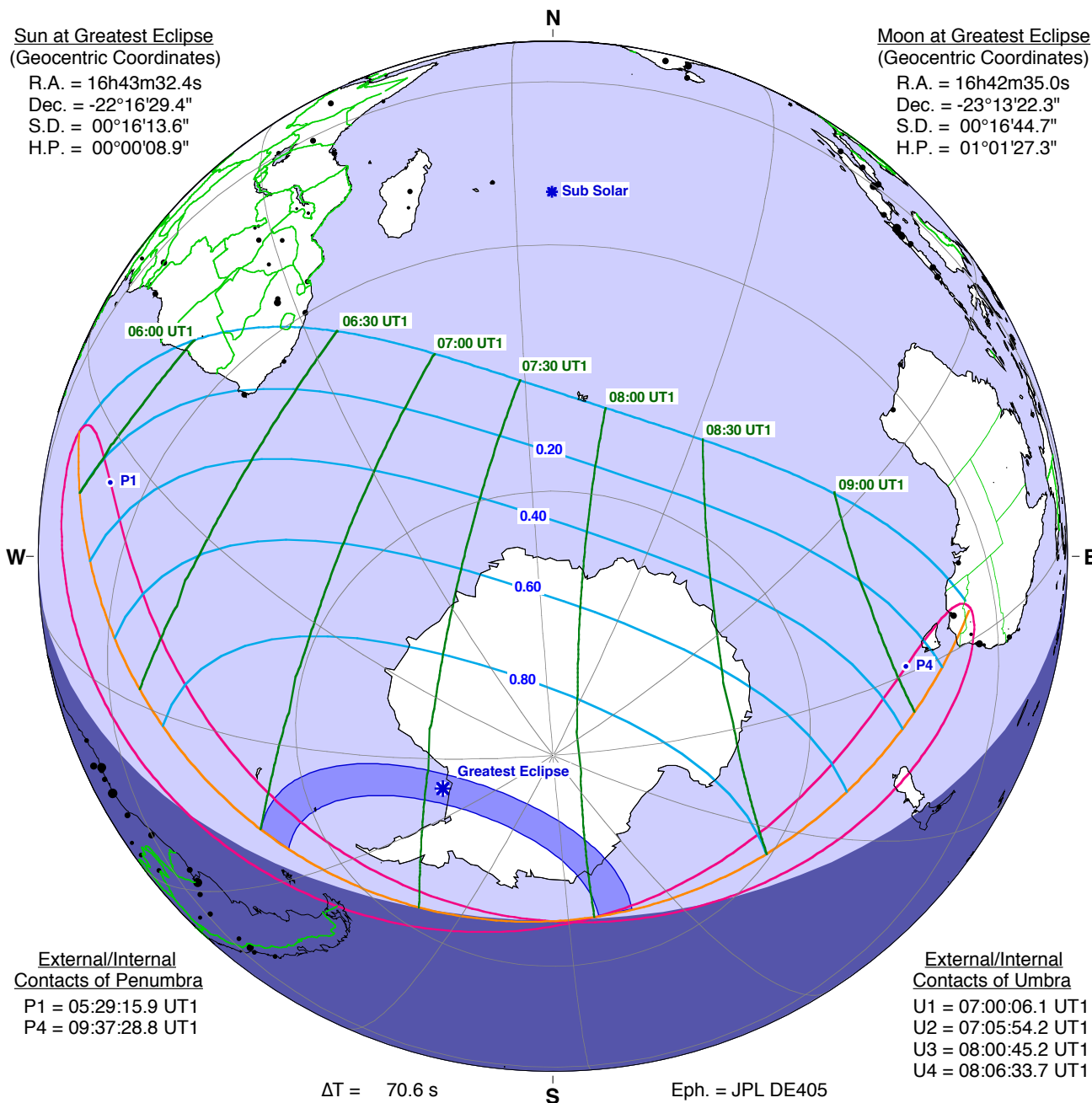
Saros Series = 152  
Saros Member = 13 of 70

Sun at Greatest Eclipse  
(Geocentric Coordinates)

R.A. = 16h43m32.4s  
Dec. = -22°16'29.4"  
S.D. = 00°16'13.6"  
H.P. = 00°00'08.9"

Moon at Greatest Eclipse  
(Geocentric Coordinates)

R.A. = 16h42m35.0s  
Dec. = -23°13'22.3"  
S.D. = 00°16'44.7"  
H.P. = 01°01'27.3"



External/Internal  
Contacts of Penumbra  
P1 = 05:29:15.9 UT1  
P4 = 09:37:28.8 UT1

External/Internal  
Contacts of Umbra  
U1 = 07:00:06.1 UT1  
U2 = 07:05:54.2 UT1  
U3 = 08:00:45.2 UT1  
U4 = 08:06:33.7 UT1

$\Delta T = 70.6$  s

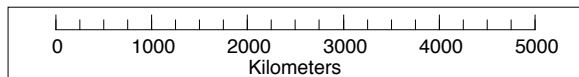
Eph. = JPL DE405

Circumstances at Greatest Eclipse: 07:33:27.3 UT1

Lat. = 76°46.6'S      Sun Alt. = 17.2°  
Long. = 046°13.7'W      Sun Azm. = 114.8°  
Path Width = 418.8 km      Duration = 01m54.4s

Circumstances at Greatest Duration: 07:33:29.6 UT1

Lat. = 76°47.7'S      Sun Alt. = 17.2°  
Long. = 046°16.7'W      Sun Azm. = 114.8°  
Path Width = 418.7 km      Duration = 01m54.4s



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Courtesy of 21<sup>st</sup> Century Canon of Solar Eclipses, Fred Espenak, Astropixels Publishing, 2016.

F. Espenak, "Eclipses During 2021", **Observer's Handbook – 2021**, Royal Astronomical Society of Canada