

ECLIPSES DURING 2024 (Fred Espenak)

Figure 6

Annular Solar Eclipse of 2024 Oct 02

Greatest Eclipse = 18:46:13.3 TT (= 18:45:04.1 UTC)

Eclipse Magnitude = 0.9326

Saros Series = 144

Gamma = -0.3509

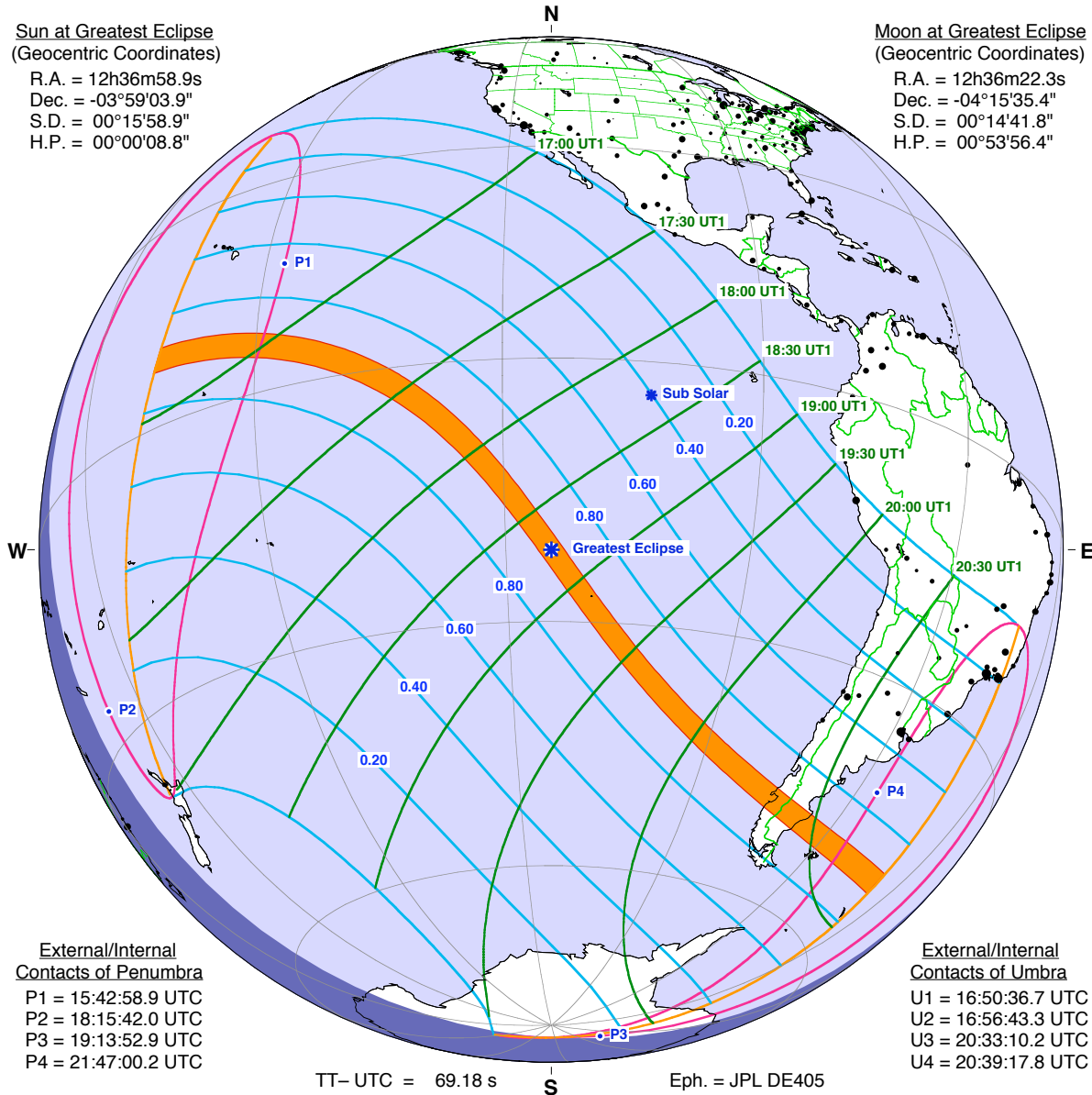
Saros Member = 17 of 70

Sun at Greatest Eclipse
(Geocentric Coordinates)

R.A. = 12h36m58.9s
Dec. = -03°59'03.9"
S.D. = 00°15'58.9"
H.P. = 00°00'08.8"

Moon at Greatest Eclipse
(Geocentric Coordinates)

R.A. = 12h36m22.3s
Dec. = -04°15'35.4"
S.D. = 00°14'41.8"
H.P. = 00°53'56.4"



External/Internal
Contacts of Penumbra

P1 = 15:42:58.9 UTC
P2 = 18:15:42.0 UTC
P3 = 19:13:52.9 UTC
P4 = 21:47:00.2 UTC

External/Internal
Contacts of Umbra

U1 = 16:50:36.7 UTC
U2 = 16:56:43.3 UTC
U3 = 20:33:10.2 UTC
U4 = 20:39:17.8 UTC

TT-UTC = 69.18 s

Eph. = JPL DE405

Circumstances at Greatest Eclipse: 18:45:04.1 UTC

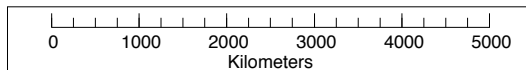
Lat. = 21°57.2'S
Long. = 114°30.5'W
Path Width = 266.5 km

Sun Alt. = 69.3°
Sun Azm. = 31.1°
Duration = 07m25.1s

Circumstances at Greatest Duration: 18:53:01.9 UTC

Lat. = 23°57.8'S
Long. = 112°56.3'W
Path Width = 264.4 km

Sun Alt. = 68.9°
Sun Azm. = 19.6°
Duration = 07m25.4s



©2022 F. Espenak
www.EclipseWise.com

Adapted from *21st Century Canon of Solar Eclipses*, Fred Espenak, 2016.