

Eclipses During 2020

Figure 3

Annular Solar Eclipse of 2020 Jun 21

Greatest Eclipse = 06:41:15.4 TD (= 06:40:05.4 UT1)

Eclipse Magnitude = 0.9940

Saros Series = 137

Gamma = 0.1209

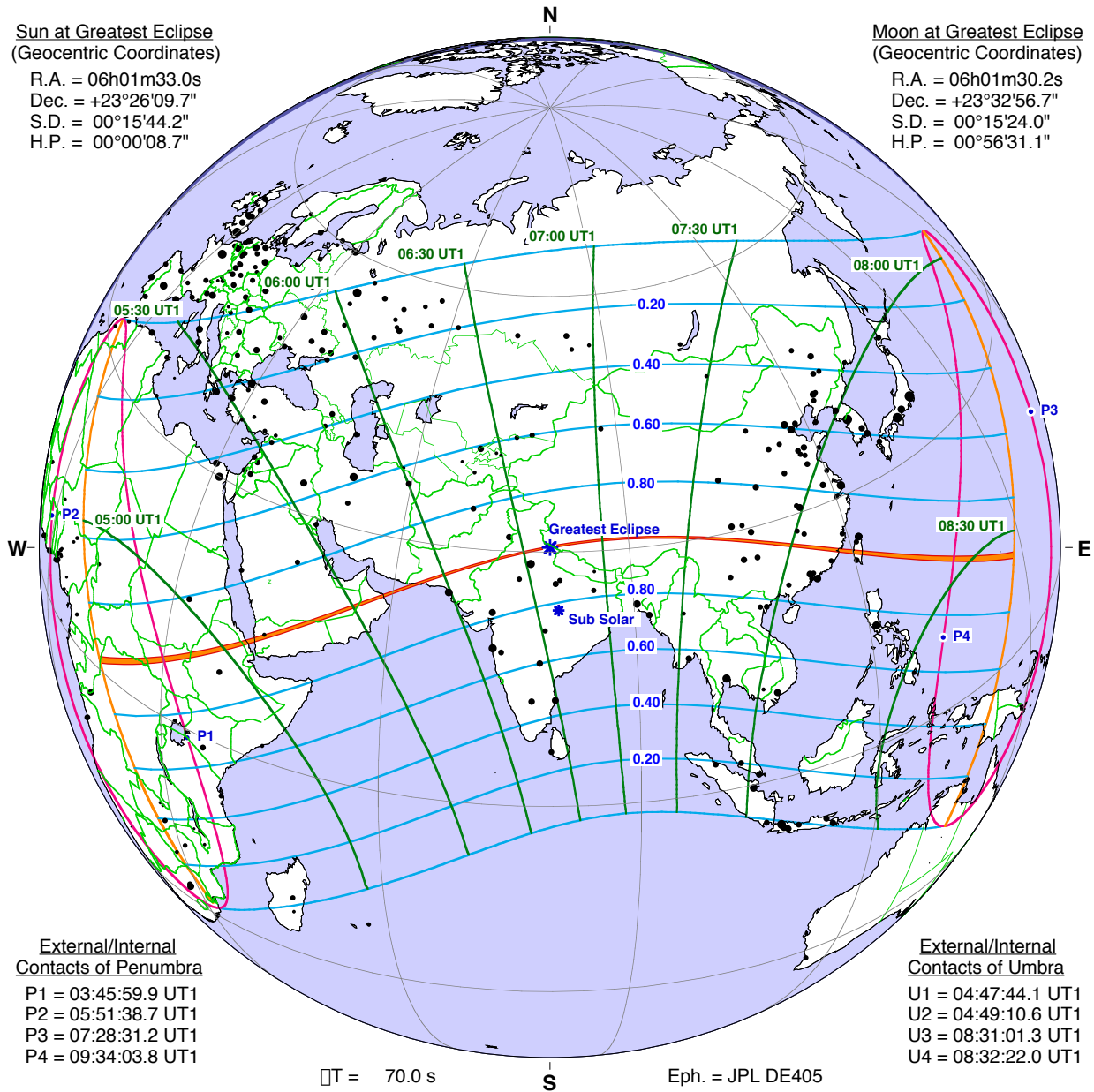
Saros Member = 36 of 70

Sun at Greatest Eclipse
(Geocentric Coordinates)

R.A. = 06h01m33.0s
Dec. = +23°26'09.7"
S.D. = 00°15'44.2"
H.P. = 00°00'08.7"

Moon at Greatest Eclipse
(Geocentric Coordinates)

R.A. = 06h01m30.2s
Dec. = +23°32'56.7"
S.D. = 00°15'24.0"
H.P. = 00°56'31.1"



External/Internal
Contacts of Penumbra

P1 = 03:45:59.9 UT1
P2 = 05:51:38.7 UT1
P3 = 07:28:31.2 UT1
P4 = 09:34:03.8 UT1

External/Internal
Contacts of Umbra

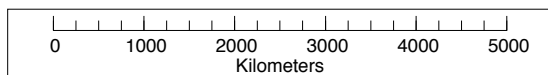
U1 = 04:47:44.1 UT1
U2 = 04:49:10.6 UT1
U3 = 08:31:01.3 UT1
U4 = 08:32:22.0 UT1

Circumstances at Greatest Eclipse: 06:40:05.4 UT1

Lat. = 30°31.2'N Sun Alt. = 82.9°
Long. = 079°40.0'E Sun Azm. = 174.2°
Path Width = 21.2 km Duration = 00m38.2s

Circumstances at Greatest Duration: 04:48:27.4 UT1

Lat. = 01°16.1'N Sun Alt. = 0.0°
Long. = 017°47.9'E Sun Azm. = 66.6°
Path Width = 85.2 km Duration = 01m22.4s



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