Total Lunar Eclipse of 2003 Nov 09

Ecliptic Conjunction = 01:14:26.0 TD  ( = 01:13:21.5 UT )
Greatest Eclipse = 01:19:36.0 TD  ( = 01:18:33.5 UT )

Penumbral Magnitude = 2.1139  P. Radius = 1.1816°  Gamma = -0.4319
Umbral Magnitude = 1.0178  U. Radius = 0.6434°  Axis = 0.3991°

Saros Series = 126  Member = 45 of 72

Sun at Greatest Eclipse
(Geocentric Coordinates)
R.A. = 14h54m39.9s
Dec. = -16°41'23.6"'
S.D. = 00°16'06.7"
H.P. = 00°00'08.9"

Moon at Greatest Eclipse
(Geocentric Coordinates)
R.A. = 02h55m37.1s
Dec. = +16°19'48.8"
S.D. = 00°14'43.8"
H.P. = 00°54'00.6"

Eclipse Durations
Penumbral = 09h33m10s
Umbral = 03h31m25s
Total = 00h21m58s

ΔT = 64 s
Rule = CdT (Danjon)
Eph. = VSOP87/ELP2000-85

Eclipse Contacts
P1 = 22:16:59 UT
U1 = 23:32:50 UT
U2 = 01:07:34 UT
U3 = 01:29:32 UT
U4 = 03:04:15 UT
P4 = 04:20:08 UT

F. Espenak, NASA's GSFC
eclipse.gsfc.nasa.gov/eclipse.html

60° N
30° N
0°
30° S
60° S
180° W
120° W
60° W
0°
60° E
120° E
180° E

2003 Apr 29