

# Penumbral Lunar Eclipse of 2053 Aug 29

Ecliptic Conjunction = 07:54:13.1 TD (= 07:52:32.8 UT)

Greatest Eclipse = 08:05:50.3 TD (= 08:04:09.9 UT)

Penumbral Magnitude = 1.0191

P. Radius = 1.1963°

Gamma = 1.0164

Umbral Magnitude = -0.0330

U. Radius = 0.6684°

Axis = 0.9358°

Saros Series = 119

Member = 64 of 83

## Sun at Greatest Eclipse (Geocentric Coordinates)

R.A. = 10h32m52.4s

Dec. = +09°08'07.0"

S.D. = 00°15'50.2"

H.P. = 00°00'08.7"

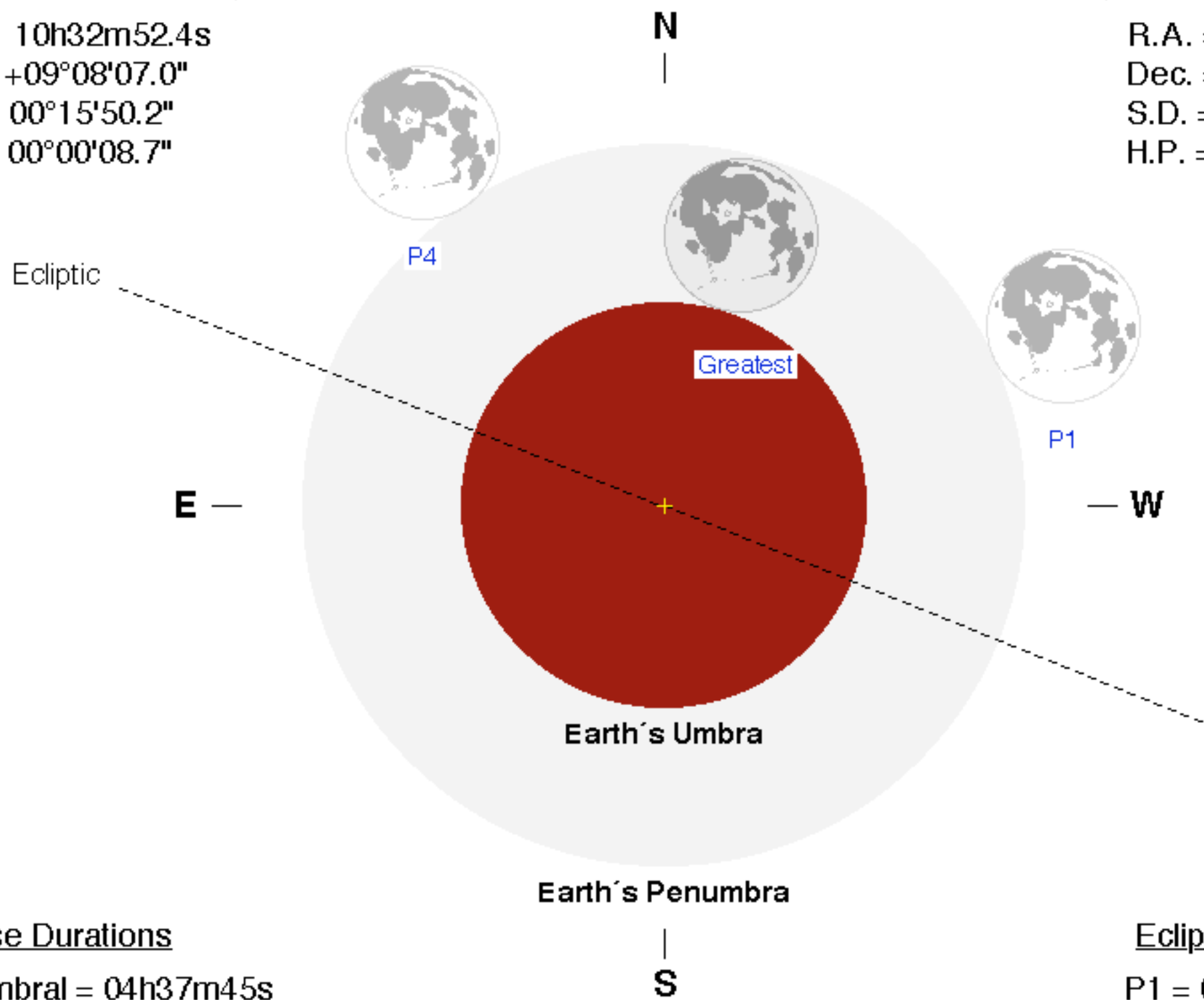
## Moon at Greatest Eclipse (Geocentric Coordinates)

R.A. = 22h31m49.7s

Dec. = -08°14'08.8"

S.D. = 00°15'03.1"

H.P. = 00°55'14.5"



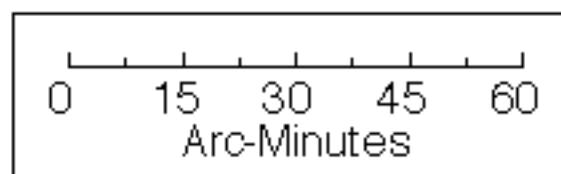
## Eclipse Durations

Penumbral = 04h37m45s

## Eclipse Contacts

P1 = 05:45:20 UT

P4 = 10:23:05 UT



$\Delta T = 100$  s

Rule = CdT (Danjon)

Eph. = VSOP87/ELP2000-85

F. Espenak, NASA's GSFC

[eclipse.gsfc.nasa.gov/eclipse.html](http://eclipse.gsfc.nasa.gov/eclipse.html)

