

# Partial Lunar Eclipse of 1777 Jan 23

Ecliptic Conjunction = 16:31:47.3 TD (= 16:31:30.7 UT)

Greatest Eclipse = 16:24:08.7 TD (= 16:23:52.2 UT)

Penumbral Magnitude = 1.6547

P. Radius = 1.2196°

Gamma = 0.6723

Umbral Magnitude = 0.5944

U. Radius = 0.6782°

Axis = 0.6300°

Saros Series = 130

Member = 21 of 72

Sun at Greatest Eclipse  
(Geocentric Coordinates)

R.A. = 20h25m48.3s

Dec. = -19°14'56.1"

S.D. = 00°16'14.6"

H.P. = 00°00'08.9"

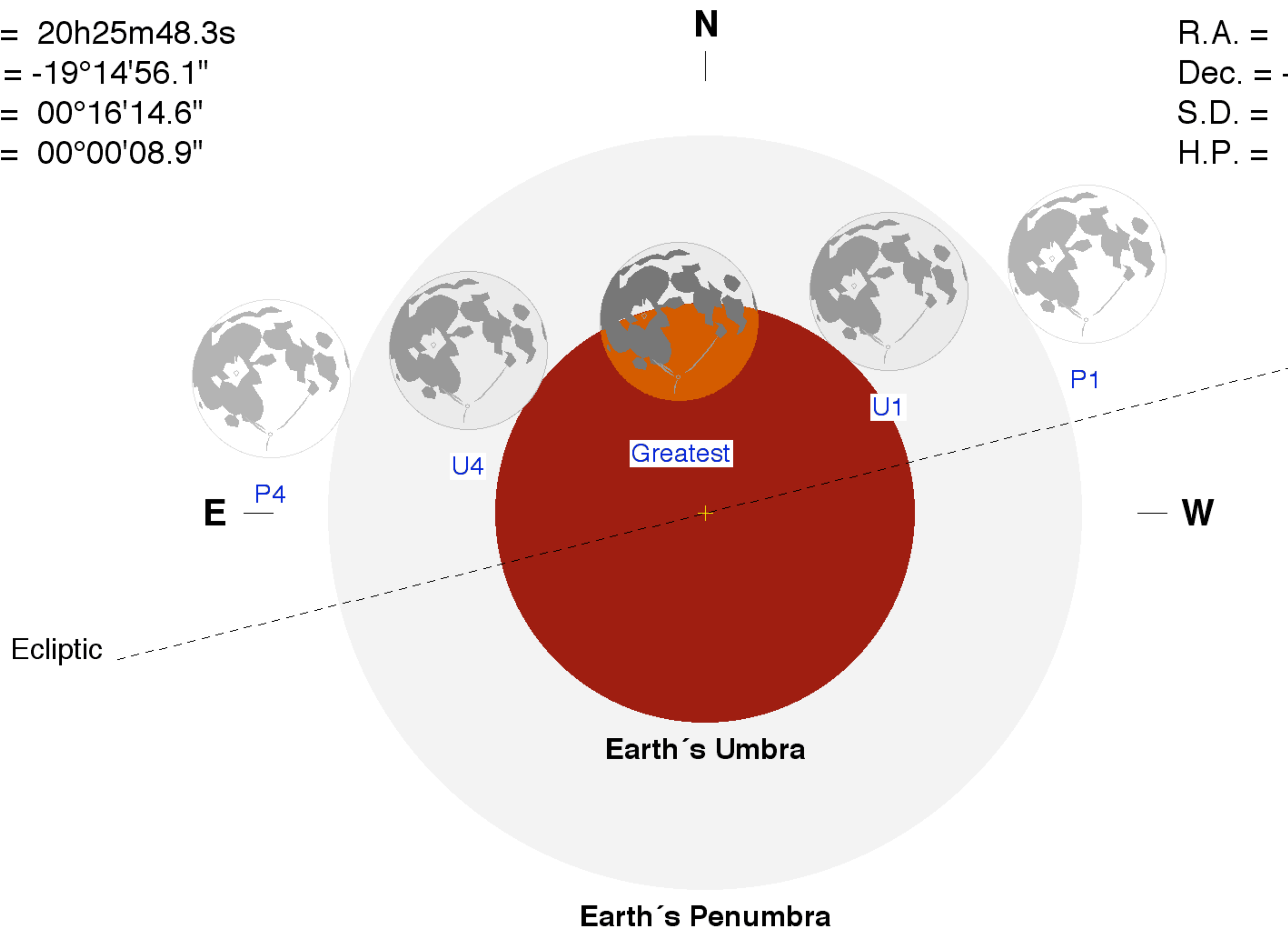
Moon at Greatest Eclipse  
(Geocentric Coordinates)

R.A. = 08h26m10.7s

Dec. = +19°52'21.9"

S.D. = 00°15'19.2"

H.P. = 00°56'13.3"



## Eclipse Durations

Penumbral = 05h24m16s

Umbral = 02h47m32s

## Eclipse Contacts

P1 = 13:41:45 UT

U1 = 15:00:03 UT

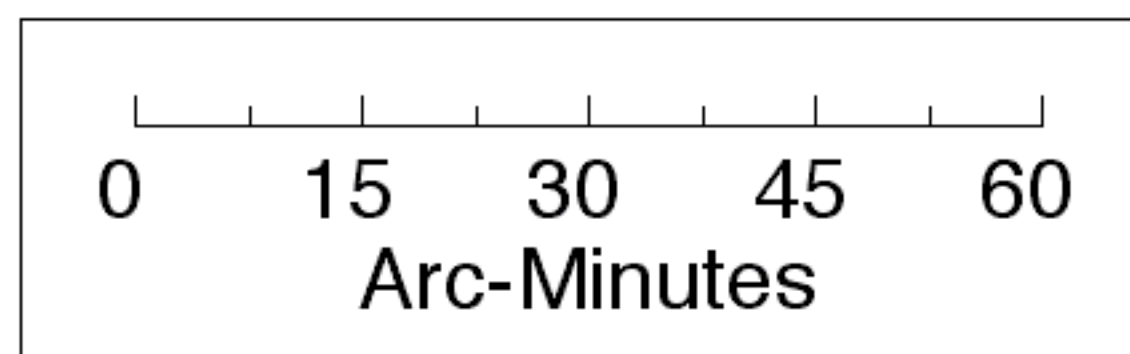
U4 = 17:47:34 UT

P4 = 19:06:01 UT

$\Delta T = 17$  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)

