

Total Lunar Eclipse of 1982 Dec 30

Ecliptic Conjunction = 11:33:28.3 TD (= 11:32:35.3 UT)

Greatest Eclipse = 11:29:37.3 TD (= 11:28:44.3 UT)

Penumbral Magnitude = 2.1545

P. Radius = 1.3071°

Gamma = 0.3758

Umbral Magnitude = 1.1822

U. Radius = 0.7649°

Axis = 0.3845°

Saros Series = 134

Member = 25 of 73

Sun at Greatest Eclipse (Geocentric Coordinates)

R.A. = 18h36m44.9s

Dec. = -23°10'20.5"

S.D. = 00°16'15.9"

H.P. = 00°00'08.9"

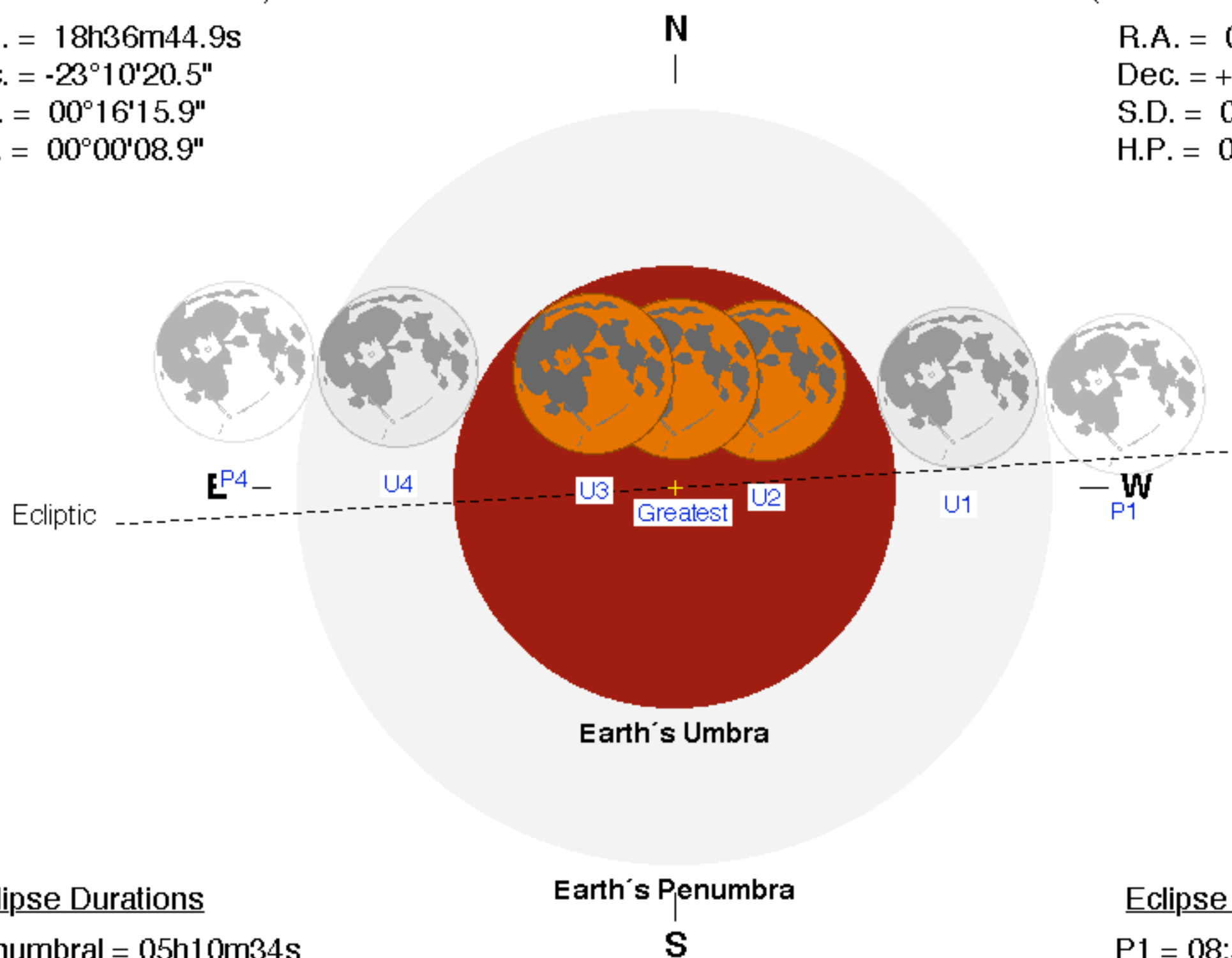
Moon at Greatest Eclipse (Geocentric Coordinates)

R.A. = 06h36m41.3s

Dec. = +23°33'23.8"

S.D. = 00°16'43.7"

H.P. = 01°01'23.7"



Eclipse Durations

Penumbral = 05h10m34s

Umbral = 03h15m53s

Total = 01h00m03s

$\Delta T = 53$ s

Rule = CdT (Danjon)

Eph. = VSOP87/ELP2000-85

Eclipse Contacts

P1 = 08:53:27 UT

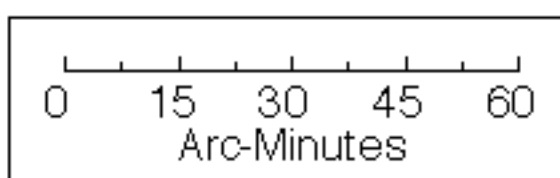
U1 = 09:50:48 UT

U2 = 10:58:43 UT

U3 = 11:58:46 UT

U4 = 13:06:41 UT

P4 = 14:04:01 UT



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

