

Total Lunar Eclipse of 2090 Sep 08

Ecliptic Conjunction = 22:47:22.9 TD (= 22:44:22.0 UT)

Greatest Eclipse = 22:52:29.3 TD (= 22:49:28.5 UT)

Penumbral Magnitude = 2.1167

P. Radius = 1.1759°

Gamma = 0.4257

Umbral Magnitude = 1.0377

U. Radius = 0.6467°

Axis = 0.3830°

Saros Series = 129

Member = 42 of 71

Sun at Greatest Eclipse (Geocentric Coordinates)

R.A. = 11h11m25.3s

Dec. = +05°12'29.1"

S.D. = 00°15'52.5"

H.P. = 00°00'08.7"

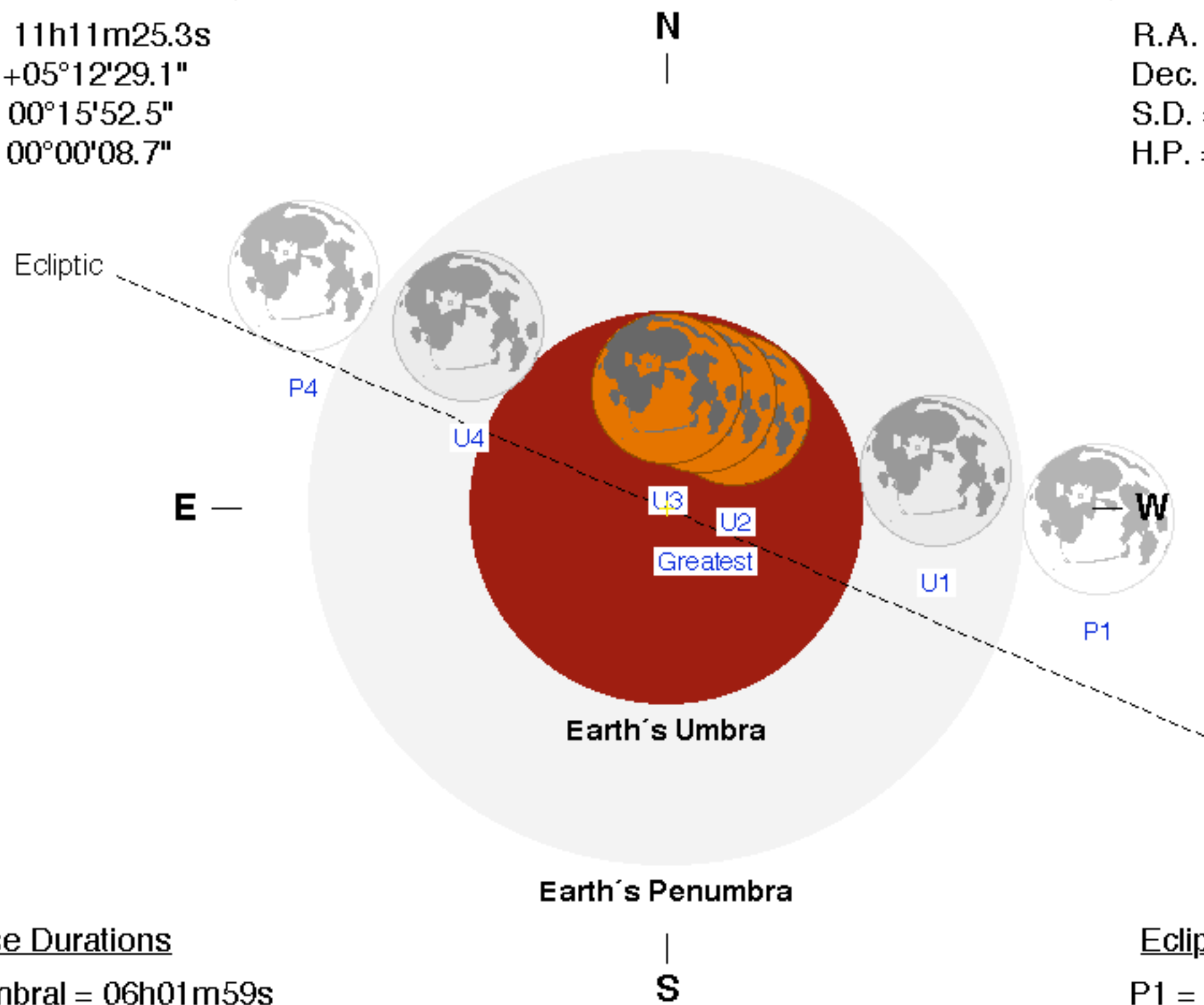
Moon at Greatest Eclipse (Geocentric Coordinates)

R.A. = 23h10m58.1s

Dec. = -04°50'31.2"

S.D. = 00°14'42.7"

H.P. = 00°53'59.5"



Eclipse Durations

Penumbral = 06h01m59s

Umbral = 03h33m05s

Total = 00h31m51s

$\Delta T = 181$ s

Rule = CdT (Danjon)

Eph. = VSOP87/ELP2000-85

Eclipse Contacts

P1 = 19:48:30 UT

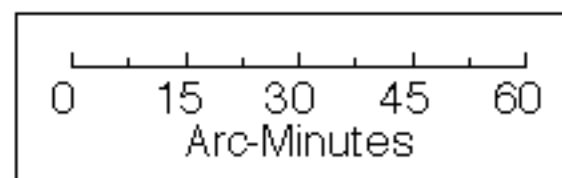
U1 = 21:02:56 UT

U2 = 22:33:33 UT

U3 = 23:05:24 UT

U4 = 00:36:01 UT

P4 = 01:50:29 UT



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eclipse.gsfc.nasa.gov/eclipse.html

