

Penumbral Lunar Eclipse of 1991 Jan 30

Ecliptic Conjunction = 06:10:40.5 TD (= 06:09:42.9 UT)

Greatest Eclipse = 05:59:38.1 TD (= 05:58:40.4 UT)

Penumbral Magnitude = 0.8807

P. Radius = 1.2849°

Gamma = -1.0752

Umbral Magnitude = -0.1106

U. Radius = 0.7437°

Axis = 1.0770°

Saros Series = 143

Member = 17 of 73

Sun at Greatest Eclipse (Geocentric Coordinates)

R.A. = 20h49m07.1s

Dec. = -17°47'12.6"

S.D. = 00°16'14.2"

H.P. = 00°00'08.9"

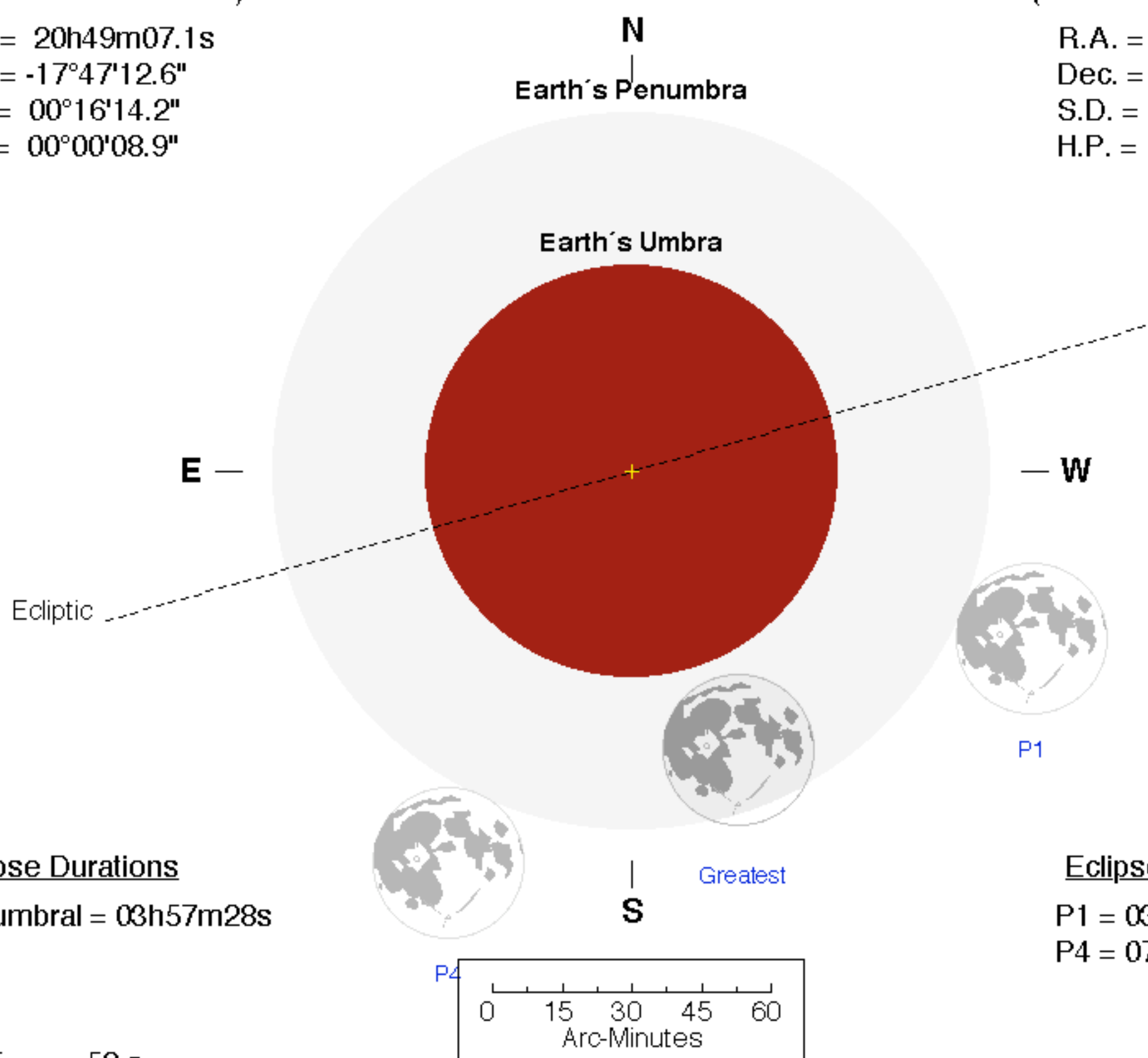
Moon at Greatest Eclipse (Geocentric Coordinates)

R.A. = 08h47m30.0s

Dec. = +16°46'52.9"

S.D. = 00°16'22.7"

H.P. = 01°00'06.5"



Eclipse Durations

Penumbral = 03h57m28s

Eclipse Contacts

P1 = 03:59:55 UT

P4 = 07:57:23 UT

$\Delta T = 58$ s

Rule = CdT (Danjon)

Eph. = VSOP87/ELP2000-85

F. Espenak, NASA's GSFC

eclipse.gsfc.nasa.gov/eclipse.html

