

# Total Lunar Eclipse of 2008 Feb 20

Eclipse Predictions by Fred Espenak, NASA's GSFC

Geocentric Conjunction = 10:48:27.4 PM EST

Greatest Eclipse = 10:26:04.8 PM EST

Penumbral Magnitude = 2.1707

P. Radius = 1.2473°

Gamma = -0.3993

Umbral Magnitude = 1.1110

U. Radius = 0.6973°

Axis = 0.3802°

Saros Series = 133 Member = 26 of 71

## Sun at Greatest Eclipse (Geocentric Coordinates)

R.A. = 22h15m30.0s

Dec. = -10°48'31.5"

S.D. = 00°16'10.5"

H.P. = 00°00'08.9"

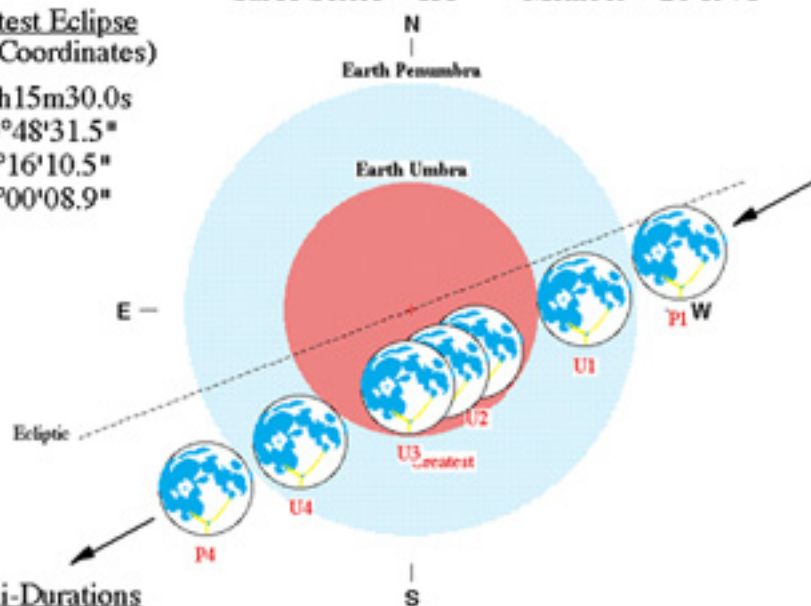
## Moon at Greatest Eclipse (Geocentric Coordinates)

R.A. = 10h14m48.4s

Dec. = +10°28'07.7"

S.D. = 00°15'34.2"

H.P. = 00°57'08.5"



## Eclipse Semi-Durations

Penumbral = 02h51m09s

Umbral = 01h43m04s

Total = 00h25m29s

Eph. = Newcomb/ILE

$\Delta T = 65.2$  s

## Eclipse Contacts

P1 = 7:34:59 PM EST

U1 = 8:42:59 PM EST

U2 = 10:00:34 PM EST

U3 = 10:51:32 PM EST

U4 = 12:09:07 PM EST (1/21)

P4 = 01:17:16 PM EST (1/21)

F. Espenak, NASA's GSFC - 2004 Jul 07

<http://sunearth.gsfc.nasa.gov/eclipse/eclipse.html>

