Key to Lunar Eclipse Catalog

Cat Num — sequential Catalog Number assigned to each eclipse from 1 to 12,064

Calendar Date — Julian or Gregorian date of Greatest Eclipse (Julian date used prior to 1582 Oct 04)

TD of Greatest Eclipse — Terrestrial Dynamical Time of Greatest Eclipse

ΔT — arithmetic difference between Terrestrial Dynamical Time Universal Time (seconds)

Luna Num — number of synodic months, or lunations, since New Moon on 2000 Jan 06

Saros Num — Saros Series Number of eclipse

Ecl Type — Lunar Eclipse Type

N = Penumbral Lunar Eclipse
P = Partial Lunar Eclipse
T = Total Lunar Eclipse
m = Middle eclipse of Saros series
+ = Central total eclipse (Moon's center passes north of shadow axis)
– = Central total eclipse (Moon's center passes south of shadow axis)
* = Total penumbral eclipse
b = Saros series begins (first penumbral eclipse in a Saros series)
e = Saros series ends (last penumbral eclipse in a Saros series)

QSE — Quincena Solar Eclipse Parameter

p = Partial Solar Eclipse
a = Annular Solar Eclipse
t = Total Solar Eclipse
h = Hybrid Solar Eclipse

Gamma — minimum distance from center of Moon to axis of Earth's umbral shadow cone

Pen Mag — Penumbral Magnitude; fraction of the Moon's diameter immersed in penumbra

Um Mag — Umbral Magnitude; fraction of the Moon's diameter immersed in umbra

Phase Durations

Pen — duration from contact P1 to P4 (minutes)
Par — duration from contact U1 to U4 (minutes)
Total — duration from contact U2 to U3 (minutes)

Greatest in Zenith
Lat & Long — latitude and longitude where Moon appears in zenith at greatest eclipse