

Chapter Eight

The Metonic Calendar/ The Cosmic Clock

The Metonic Calendar. There is a Cosmic Clock.

The Metonic Calendar is the proof of the Cosmic Clock. To appreciate the Metonic Calendar, we need to literally take our time. It is a simple phenomenon, but it's still easy to get mixed up in simple phenomenon. If we take a few minutes to process each aspect, however, you may learn something that few in the history of the world have known, a secret held close by only the most learned monks, astronomers, magi and mystics.

The Metonic Cosmic Clock repeats at 19 solar year intervals, 19 eclipse year intervals and at exactly 391 year intervals and then approximately 490 year intervals.

This Metonic moment's position of the moon and sun in relation to earth are almost identical to what they were 19 solar years ago and 19 years from now. This position repeats even more perfectly at the 391 year mark.

This Saros moment's position is also almost identical gravitationally as it was 19 eclipse years ago (18 years 11 days and 8 hours—which is the same as 19 solar years minus one lunar year.) It will again attain such perfection 2,290 years from now.

None of this is conjecture. None of this is theory. It is real. But first we need to confront Time.

First: Eclipses Happen in Time and Space, like Stories do

Time is space. Time is a space where stories take place, where maximum expression can exhibit its function of the creation of growth and identity. Eclipses occur in time and space, and are one of the only repeatable phenomenon that could be used as a benchmark of great time spans, larger than individual months or years, or somewhat arbitrary groupings of time such as decades or centuries. Eclipses occur independently of observers but obtain their meaning *from* observers. It's a perspective, beauty in the eyes of beholders, a relational reality.

A solar eclipse is a brief cosmic story, containing bold and important characters. It has action, suspense, hints of the danger of an eternal and universal death, a mystic climax scene of pure union, a revelation of hidden secrets, final victory and a moral. Of course, it also has love. It's a love story.

The plot: Light is unexpectedly attacked by a consuming darkness. Darkness seems to conquer for a while. Not that long ago, people were struck with terror when the life-giving Sun appeared to be eaten alive. Animals respond perplexed and anxious. Finally, the disc of the sun is covered. Night falls in the day. In the midst of eclipse, a surreal heavenly glow (the Corona-The Crown) is revealed around the sun. The sun's blinding glare is subdued in a transcendent rarity. Humans can actually stare at the edges of his glorious light for the first and maybe last time. We see the crown, the angelic light that drifts from his edges-not his face, which remains obscured by that strange little dead moon of ours. Finally, bit by bit, the tension eases as Light returns victorious. Life returns to normal. Was a lesson learned?

In this work I present the idea that it's not only the physical eclipses that bear significance, that

fleeting cosmic moment, but also that meaning is found in the eclipse paths they took, the residue of story they left behind. The last chapter on The Saros made the case that these paths are predictable for a reason. They are too easy to understand to be chance, and the proof is in the co-ordination of three separate cosmic calendars at the 19-eclipse year mark. In this last part of human history, a few interested souls took the time to draw out these paths. Now we have these maps. There are all these shadows that were written on the earth. Do they say something?

I say eclipses tell stories, or perhaps they sing. I think it's obvious eclipses they do, but stories are not a matter of scientific logic or argument. An eclipse story is like music. The meaning can't be explained without damaging the story it seeks to express. Instead, a song is presented. It is played. I present the circumstances of complete eclipses and let the story come to the listener.

I don't claim the gift of eclipse interpretation. I do hope to present them faithfully.

I can't explain a Bob Dylan song. I can listen to it. I can memorize it and play it back for you on the guitar. There it is. It's not perfect, but I learned all the words. You can decide if you like it or not. That's all we can do with eclipses. The stories of eclipses, just like all stories, are not cut and dry science lessons. They don't belong to anybody. Rather, they belong to everybody, just like music. They can be odd, confusing, often intense. Sometimes they provoke emotion. The paths of history remind us that real people were there under those eclipses. When we begin to learn about those people and what they went through, and we start thinking about Light and Darkness and His story...well...

Fortuitously, as it so happens, complete solar eclipses last about as long as a short concert or play or movie. A couple of hours. It all comes down to that climax in the middle, when either totality or annularity comes to call. Totality can last anywhere from a few seconds to more than 7 minutes. Annularity (Ring of Fire completeness) can last up to 12 minutes or so, the length of a long song (*bye bye miss American pie?* Or maybe *In a Gadda da Vida?* -the album cut).

Second: Let's Review Conventional Calendar Time

The Metonic Cycle is Cosmic Timekeeping, time that intersects with time. It is dazzlingly four dimensional. To conceive of the Cosmic Clock, let's consider in the time we already know best. I start with basics: conventional calendar time.

Calendar Time? Calendar time is the agreement that time can be a quantifiable space measured by an accumulation of days. Calendar Time can be dissected into chunks like hours, days or weeks; it can also be spread out like peanut butter over terms or decades or centuries. But at the foundation of time is the day, the month, and the year. Natural, repeating phenomenon create our basic notions of day, month and year. While there are a few different calendars, most typically revolve around combinations of the lunar month and solar year. There are exceptions, such as with the Bahai, who have 19 months of 19 days, still adding up to close to a solar. For most of the rest of the world, people usually try to make a year out of the motions and appearance of moon and sun.

First, the Good Old Fashioned Day. The rotation of the earth allows for day and night. This is generally the first notion of time recognized by small children and animals. From morning to evening and back is one day. That, I believe, even in these challenging times, is something we can all agree on. Or can we? Then why did George Van Den Bergh say "*a day is 48 hours*"? Think globally.

Second, the Lunar Month. The revolution of the moon around the earth, and its accompanying visible phases, allows for the idea of month (“moon”-th). It takes 29.53 days from New Moon to New Moon, the generally accepted beginning and end of the lunar month for nearly all human societies. It is calendar time based on a visible and agreed-upon cosmic reality.

Third, the Solar Year. The revolution of the earth around the sun creates the solar year. Egypt created the first known Solar calendar with 12 months of 30 days each and 5 days added at the end as early as 4,000 B.C. Did you know the Egyptian New Year is September 11th? Weird, huh?

Most early civilizations recognized the reality of the solar year early on. The observation of seasons and the rising of the sun in the exact same spot (i.e. from your village you can see the sun come up again over that mountain or rock or tree) after 365 days are clear, repeatable phenomenon that can be agreed upon. Solar Years encourage such collective observances as Solstices and Equinoxes naturally. “New Years” typically begin for most ancient societies on Spring Equinox or Winter Solstice.

I know this is all primary school stuff, but we must build towards the Cosmic Clock.

Conventional Calendar Time Subdivisions

Each basic unit of Calendar Time has important subdivisions and amalgamations. Let's briefly touch on those, and how they relate to our study of eclipses and the Metonic Cycle.

The Hour: the hour is an interesting human creation established by sun and constellation movements. It was made more precise with the advent of the clock in the 14th Century. Greenwich mean time (Greenwich England) was an agreed upon Universal Human Clock established 11-1-1884. Universal Atomic Time was established 1-1-1960. Since the world now had atoms at their disposal, the new world coordinating the world's clocks to the same radioactive beat.

The use of 60 minutes and 60 seconds in an hour is a vestige from the Babylonian, Greek and other culture’s 360 day year. The 360-day year, with a five day leap added on at the end was a typical solar year. There are 3600 seconds in an hour. 3600 is the number the Saros was mistakenly named for.

The Month is divided into weeks and amalgamated into a year. The lunar month of 29.53 days is a precise representation. The months of Rome (which we live under) are grouped around the 30 day mark.

The Seven Day Week originated in Mesopotamia and is established in Genesis, the first Book of the Bible. Roman Emperor Constantine officially adopted it in 321 AD. The week is the most logical division of the cycles of the moon with its four defined geometric appearances. New Moon/ Quarter Moon/ Half Moon/Full moon/ Quarter Moon. 7 days per each arrives at 28 days, within a day and a half of a full lunar month. Not sure what to do with the next day and a half? Me either.

52 weeks x 7 (364 days) is very close to the true solar year. There have been other lengths for weeks in history for other societies but the 7 day week won out across the world in the end.

The year is divided into seasons or months and amalgamated into generations or decades or lifetimes.

Twelve “Moons” brings the Lunar Year of 354.43 days, which is 11 days off of a solar year. To follow 12 lunar months as a lunar year requires the insertion of an 11-day leap week to accommodate solar calendar reality. The Luni-solar calendar has been a feature of human societies for Millennia. In the luni-solar calendar, the month is still created by the moon, retaining its individual obvious time marking characteristics. The visible changing of the moon's phases add a reality to the month not necessarily available in Roman solar calendars. Current lunar-solar calendars include the Chinese, Muslim, Jewish, Hindu and Vietnamese cultures.

The current division of the solar calendar familiar to western culture takes the “true” solar year, 365.25 days, and shapes months of various lengths with no regard to lunar phases. It had its origins in the Julian Calendar first decreed by Julius Caesar in 45 B.C. which honored various Roman gods and such. Julius Caesar even got the month of July named after him- and a knife in the back. The Julian calendar had a leap year, adding a single day every 4 years.

This became cemented more accurately by the Gregorian Calendar in 1582 which gave us the proper leap year arrangement we currently enjoy, skipping fourth year leap years at the turn of each century.

To recap calendar time. A lunar year is 354.3 days. That is 12 full cycles of the moon. A solar year is 365.25 days. That is one full revolution of the earth around the sun.

The Lunar Year appears in Eclipse repetitions.

Eclipses often occur exactly one lunar year apart from each other in triads.

Example: There was a Ring of Fire Eclipse from Indonesia to Sri Lanka on Dec 26, 2019.

One lunar year later, there was a Total Solar Eclipse in South America on Dec 14, 2020.

One lunar year later, there was a Total Solar Eclipse in Antarctica on Dec 4 2021.

These eclipses are separated by 12 Moons (354.3 days). Of course, each lands on the new moon.

There was a partial solar eclipse on April 30 2022—77 years after Hitler's death day. One lunar year later there is a solar eclipse on April 20 2023—134 years after Hitler's birth day.

These are just two examples. The phenomenon is persistent, but the pattern skips around.

The lunar year repetition happens because a Saros Cycle is exactly 19 eclipse years long. 19 eclipse years is 19 solar years minus one lunar year, believe it or not.

The Saros is its own cosmic time impulse interacting with the larger Metonic Cosmic Clock.

The Metonic Cycle itself is the phenomenon of **repeating dates in the eclipse calendar** due to God's precise alignment of lunar, solar and eclipse cycles calendar every 19 solar years.

Metonic dates (repeating eclipse dates) can show up at 19 year, 38 year, or 57 year intervals, then it lurches 8 years, and sometimes comes back. Rarely a repeating date can show back up at 84 years, and even 103 years! But they don't repeat forever. Eventually the date moves on until the next time they re-align, around 500 years later.

Example: There was an August 21 1914 eclipse that announced World War I.
19 years later on August 21 1933 there was the Jerusalem Ring of Fire.
84 years after that there was an August 21 2017 eclipse that announced the division of America.
Between these eclipses were a couple eclipses on August 20 and one on August 22.
Were they all related? Absolutely. They are repeating Metonic dates which represent real repetitive cosmic alignments of sun, earth and moon. dignified by the irrefutable appearance of solar and lunar eclipses, clicks of a cosmic clock which also acknowledges solar and lunar years, as well as Saros Cycles. The dates must change. They move on. Time marches on. By 2044, The Aug 21 Metonic has moved forward to Aug 23.

What's a Metonic Day? It's the time around the day in question. It signals the heartbeat of the cosmic clock finding common ground among three calendars in real space and time.

A Day is 48 Hours: One would think that a day would be a concrete phenomenon. Sun comes up. Sun goes down. It turns out, however, as Copernicus and Kepler discovered, that this thing we call a day could also be described as a local illusion.

Or, as George Van Den Bergh points out in his book, *The Universe in Space and Time*
"A day is 48 hours."

Or as country singer Alan Jackson croons, "It's five o'clock somewhere."

The earth is spinning, chasing its terrestrial tail. When it's supper here, it's breakfast somewhere. Even in a single nation it can be two days at once. We've even drawn an International Date Line on the Pacific Ocean, where you can step on one side of the ship and it's today and then step on the other side of the ship and it's tomorrow, or maybe yesterday. It can be difficult to fathom the reality of a day on a rotating host, which is subject to our old friend, perspective.

Van Den Bergh says flatly and confidently, "A Day is 48 hours".

Myself? I found a globe. I spun it around. That's the only way it made sense, and it did... I guess.

Metonic Days and Metonic anniversaries

I bring up Metonic anniversaries, solar year anniversaries and eclipse year anniversaries at many places throughout the work. The Metonic day is flexible one day in either direction.

For example, take President John F. Kennedy, whose birth and death days are reflected distinctly in the 20th Century Metonic. His actual Massachusetts birthday is May 29 1917. Still, I have never found mentioned in any records the hour of his birth. It could have been 2 in the morning. It could have been 11 at night. It may very well have been that everyone in his vicinity agreed it was truly May 29 when he poked his head out. But whatever the clock said when he arrived, it is still true that other people on earth were living in either May 28 or May 30. What does that mean?

Time is a construct, but it's not entirely illusion. Time is a space for story created by cosmic reality. It's flexible but not irrational. This flexibility has its limits. May 29 maybe the same as May 28 because they exist simultaneously on earth. But I can't logically say that June 2nd is the same as May 29. Why? Because it's not. Even two days before a date (May 27) and two days after a date (May 31) is not a reasonable, logical anniversary for May 29. No way can you confuse a date two days apart with an

anniversary of the date itself. It just feels false even considering it.

But the day before? The day after? That's a different story. Why? Because time has a fluid nature as it tries to mark a single day on a spinning planet. I believe we actually feel this property of time, though we may never have described it. I have personally found it particularly affects the senses as you *approach* an anniversary. There is almost a doppler effect, where an approaching date has more significance than a departing one. The same sensation is common in eclipses, as people and animals are far more excited as the eclipse approaches climax than as it leaves.

In this work, I often say that something is “on” a Metonic if it's in that in that fluid one-day place. If I am discussing the May 29 Metonic, a May 28 or May 30 date is clearly within that parameter. I won't ever say it's on the Metonic if its two days away in either direction. When the Metonic truly lines up, you can feel it.

OK, so here's a perfect Metonic line-up, with a catch. Let's continue with the JFK example. May 29 1919 was JFK's second birthday. On that day there is a very famous total solar eclipse in South America (“Einstein's Eclipse”). Now, in this case, we find it to be exactly May 29 in the exact same time zones. Also, it's only two years from JFK's birth, with no leap year in between. That's a nearly perfect anniversary! That's an easy one, it seems. Well, it's great and all, but it's not the Metonic reality we are considering. All we learned is that two years went by and hey, now there's an eclipse! That's not cosmic timekeeping.

Cosmic timekeeping is when you travel 19 years from May 29 1919 and find another eclipse, again on May 29 1938. Which we do. That's a Metonic date. Then it's 1984 (65 years after 1919) and we have a May 30 eclipse over New Orleans, Washington DC and Atlanta. It would have been JFK's 77th birthday just hours before this eclipse if he hadn't been murdered years before. The date is officially May 30, not May 29. But 1984 was a leap year. If we hadn't added a day 12 weeks before, it would still be May 29. See? There are too many artificial variables to impose a human clock-driven 24-hour prison on the concept of a single day. Real Time is too fluid a property to be so constrained.

For the purposes of this work, if it's within a day of the Metonic in question, it might be worthy of mention. Maybe it is, maybe it isn't. I'm just piling up peculiarities. What interests me most is the apparent resonance of anniversaries of various kinds in the Metonic Calendar. We consistently find the same dates appearing in eclipses every 19 years. Then 38 (2x 19) years intervene and we might find the same dates appearing or maybe it's started to move.,.

The Metonic Cycle-How Peculiar is it? The numbers.

Hold on to our hats. If we get this right, we know more about the cosmic clock than nearly every soul in history. This is the greatest conglomeration of coincidences in the reality we call Time.

The Metonic Cycle is named after Meton of Athens (5th century B.C.) who first wrote about it, though it was also known by ancient astronomers of both hemispheres. The Metonic Cycle is the intersection of the lunar and solar calendars which occurs almost precisely every 19 year Solar Years.

19 solar years is the same as 235 lunar months.

Say it again, 19 solar years equals exactly 235 lunar months. Whatever phase of the moon it is today, it will be that same phase 19 years from now.

The Metonic cycle synchronizes the solar year and the lunar month. Check it out:

A Solar year = 365.24 days. $365.24 \times 19 = 6,939.60$ days

It is usually rounded to 6,940 days. The difference between 19 solar years and 235 Lunar months is only about *two hours*. In other words, by extraordinary Cosmic arrangement, these two primary cosmic patterns align with each other in nearly perfect arrangement every 19 solar years. What does that mean? Simply put: if there is a new moon tonight, there will be a new moon 19 years from now on this same date, give or take two hours. Likewise, 19 years ago on this date, there was the same phase of the moon as there is tonight. After a couple of centuries, the date shifts slightly ahead due to slight offsets of calendar time and orbital reality.

It is not some kind of mathematical necessity that the two primary astronomical calendars of humanity should align so precisely in such an accessible time frame as every 19 years. They could just as easily have aligned only once every 214 years or every 672 years given different orbital realities. Indeed, it's unclear if *anyone* has calculated *any* number where sun and moon synchronize so closely at a solar year anniversary!

The Metonic cycle is a convenient synchronicity still utilized for calculating movable feasts such as Easter. The Metonic cycle was known to the Celts, who used it as their "Great Year". It was used by the Babylonians, Persians, Chinese, Hebrew, Mayan and other ancient societies.

But the synchronicity is not nearly over yet. As cool as it is to have such an alignment, the synchronicity becomes downright astonishing as we approach the deeper secrets of Draconic-Metonic Reality. Ladies and gentlemen, here comes the Eclipse year.

The Draconic Month, Draconic Year and the Eclipse Season

There is a kind of year that hardly anyone knows about except astronomers. But it is a year, nevertheless.. It is the eclipse year or Draconic Year. The dragon year.

Here's the full scientific explanation from Encyclopedia Britannica:

The draconic, or nodical, month of 27.212220 days (27 days 5 hours 5 minutes 35.8 seconds) is the time between the Moon's passages through the same node, or intersection of its orbit with the ecliptic, the apparent pathway of the Sun. The moon's draconic period of revolution (the so-called draconic month of 27.2 days) has important significance in the theory of solar and lunar eclipses. The period of time it takes the Sun to travel from the Moon's North (or South) Node around the zodiac and back is called the "Draconic Year". Because the Moon's Nodes move backwards 19-20 degrees a year, the Draconic Year is shorter than the usual calendar year by several weeks. Its average length is 346.62005 days.

The difference between a solar year and a draconic year is very close to 19 days. In the draconic

month of 27.2 days, sun and moon are crossing the ecliptic plane. When they return around to about the same spot, an eclipse year has elapsed.

The term “draconic” (or dragon-like) is connected with an idea of the ancients, according to which the sun and moon are devoured by a dragon during an eclipse.

The facts:

Is there a Draconic Day? I don't think there is a draconic day.

Draconic week? There appears to be a Draconic/Metonic week, about 11 Days 8 hours long. 33 of these weeks fit in a year. You can see it appear in these calendars, but it's difficult to pin down.

The draconic month: The draconic, or nodical, month of 27.212220 days (27 days 5 hours 5 minutes 35.8 seconds) is the time between the Moon's passages through the same node, or intersection of its orbit with the ecliptic, the apparent pathway of the Sun. It takes less time than the phases of the moon take to complete (29.5 days).

The Draconic Year/ The Eclipse Year is the time taken for the Sun (as seen from the Earth) to complete one revolution with respect to the same lunar node (a point where the Moon's orbit intersects this ecliptic plane). Eclipses occur only when both the Sun and the Moon are near these nodes.

In layman's terms, an eclipse year is the time it takes for the moon and sun to sort of line up in the same place in relation to each other and the earth again. It is a year based in relations of three cosmic entities from a cosmic perspective.

There are two eclipse seasons every eclipse year, approximately 173 days apart. The duration of the eclipse year is 346.62 days. Eclipses within an eclipse year often occur 177 days apart, which is exactly half of one lunar year. An eclipse season is one of only two periods during each year when eclipses can occur, due to variations in the angle of the moon in relation to the sun. Each season lasts about 35 days and repeats just short of six months later; thus two full eclipse seasons always occur each year. That does not mean there are always complete eclipses during that time, but often there are.

The Eclipse Year is a very real alignment of these three great objects-Sun, Moon and Earth.

Again, I know I am repeating. There are three types of years:

The one we most recognize: **Solar Year** of 365.24 days: The time it takes for the earth to revolve around the sun.

The source of our idea of month: **The Lunar Year**-354.3 days: 12 Lunar Months of 29.5 days each

And the secret year: The **Draconic (Eclipse) Year**: The time required for the Earth, Moon and Sun to precisely realign on an elliptic plane. 346.6 days

Here we go for the greatest coincidence in existence, the Draco Metonic Calendar:

The Metonic Calendar aligns both solar and lunar calendars every 19 years. And we just found out there is also a secret eclipse year, the “draconic” dragon year.

Now it gets absolutely amazing. Remember that the eclipse year involves a completely different cosmic perspective than a lunar or solar year. The Eclipse Year is an alignment of three objects on an elliptic plane irrelevant to both solar and lunar orbital necessities. The orbit of moon around sun is also kinked about 5 degrees, which means eclipses don't happen in the exact same spot.

It lines up, doesn't it? We know that already. But how close?

As we saw, the eclipse, or draconic month is 27.2 days. So it turns out that 255 Draconic months comes out to 6,939.11 days. That's very, very close to the 6,939.60 days of 19 solar years and the 6,939.68 days of the 235 lunar months. Only hours separate these huge arrangements of time which all align at exactly 19 solar year spans. These dates, these three calendars, are closely aligned enough that ECLIPSES CAN REPEAT on the same days of the year every 19 years for up to a century!

Recap of the Draco-Metonic Calendar:

Months:

Lunar month: 29.5 days

Eclipse (Draconic) month: 27.2 days

Years:

Solar Year: 365.25 days

Lunar Year: 354.3 days

Eclipse Year: 346.6 days

19 Year Draco-Metonic Alignment

19 solar years: 6939.6 days

235 lunar months: 6939.68 days

255 Draconic months 6939.11 days

The figure is typically rounded to 6,940. An extraordinary precision of alignment considering nearly 7,000 days. The reality is so impossible that it's unclear if any similar alignment at any point has ever been calculated. Is there any other group of solar years other than 19 that matches phases of the eclipse and lunar calendar so precisely within hours? Does anyone know?

Again: The Saros Cycle Alignment: 18 years, 11 days and 8 hours (exactly 19 eclipse years)

19 eclipse years: 6585 days

223 lunar months: 6585 days

239 anomalistic months (perigee to perigee) months 6585 days

The Saros has a separate almost perfect precision alignment that allows for precise eclipse prediction and history. There is no scientific "reason" for this alignment of different cosmic timekeeping, just as there is no scientific "reason" for the sun and moon being the same size in the sky. Science tends to acknowledge these realities only on its farthest back pages, merely offering them the trifling distinction of "coincidence". 19 solar years provides one alignment. 19 eclipse years provides the other alignment. Within these amazing cycles are other cycles.

So what's left to do? Well let's see if we can find our birthday in the Metonic! Probably about one in eight people can do so. Here are the current Metonic repeating eclipse dates graphed so that you can see their progression over the course of the last 120 years or so.

Metonic Date Shifts last 120 or so years

Current solar eclipse dates to help us visualize movements of the Metonic clock over the course of decades. There are about three impulses, or days, a month which reside in 11 day “weeks”. These go left to right. As you look down the row, you can see how the date itself slowly shifts over time.

1st Metonic Week	2nd Metonic Week	3rd Metonic Week
January		
1-1-1889	1-11-1899	1-22-1898
1-3-1908	1-14-1907	1-23-1917
1-5-2038	1-15-2010	1-26-2028
February		
2-1-1897	2-13-1896	2-23-1906
2-3-1916	2-14-1915	2-25-1952
2-5-2000	2-15-2018	2-26-1998
March		
3-6-1905	3-17-1904	3-26-1895
3-7-1932	3-17-1923	3-27-1960
3-9-2035	3-20-2015	3-29-2006
April		
4-6-1894	4-16-1893	4-26-1892
4-6-1903	4-17-1912	4-30-1957
4-8-2024	4-20-2023	4-29-2014
May		
5-7-1902	5-18-1901	5-28-1900
5-9-1967	5-20-1966	5-29-1917
5-10-2013	5-21-2031	6-1-2030
June		
6-8-1899	6-17-1909	6-28-1908
6-8-1918	6-19-1907	6-29-1927
6-10-2002	6-21-2020	7-01-2001
July		
7-10-1907	7-18-1898	7-29-1897
7-9-1945	7-20-1963	7-30-1916
7-11-2010	7-22-2009	8-2-2027

August

8-9-1896
8-10-1915
8-12-2026

8-20-1895
8-21-1914
8-21-2017

8-30-1905
8-31-1913
9-1-2016

September

9-9-1904
9-11-1969
9-11-2007

9-18-1895
9-21-1903
9-22-2006

9-29-1894
9-30-1913
10-3-2005

October

10-9-1893
10-10-1912
10-14-2023

10-20-1893
10-22-1911
10-25-2022

10-31-1902
11-2-1910
11-3-2032

November

10-31-1902
11-2-1910
11-3-2032

11-11-1901

11-14-2031

11-22-1900
11-21-1938
11-25-2030

December

12-1-1890
12-3-1918
12-4-2021

12-13-1898
12-12-1909
12-14-2020

12-23-1908
12-25-1954
12-26-2019

Example of pattern---Merry Metonic Month of May

We now have a chance to look at macro patterns of the Metonic progression.

The spaces between years of similar-dated eclipses will be either 19 years or 8 years.

Metonic Solar Eclipse Days in May last 130 years or so.

First Impulse/Early Day in May Metonic (eclipses on each of these days)

5-7-1902— (Saros 146) after this, the 8 year lurch -, jumps 2 days with 8 year lurch

5-9-1910 – (Saros 117)-it shifts back to 19 year Metonic for three eclipses

5-9-1929— (Saros 127) then 19 years

5-9-1948 - (Saros 137) then 19 years

5-9-1967 -- (Saros 147)-here comes 8 year lurch again

5-11-1975-- (Saros 118) -and then back to 19 year Metonic

5-10-1994-- (Saros 128) then 19 years

5-10-2013-- (Saros 138) then 19 years

5-9-2032 --- (Saros 148)(then 8 year lurch)

5-11-2040---(Saros 119) Back to 19 years

5-11-2059—(Saros 129)

See the pattern? The Metonic (19 year) eclipses are linked for 3 eclipses, then an eight year lurch to the next number...Now look at the next week in May over course of 170 years.

Second Impulse/Middle Day in May Metonic

5-17-1882—(Saros 126) afterwards 19 years

5-18-1901---(saros 135) then 19 years

5-18-1920---(Saros 146) then 8 year lurch

5-19-1928 --(Saros 117) 19 years 3 times in a row

5-20-1947—(Saros 127)

5-20-1966—(Saros 137)

5-19-1985—(Saros 147) then 8 year lurch

5-21-1993—(Saros 118) then 19 years 3 times in a row

5-20-2012—(Saros 128)

5-21-2031---(Saros 138)

5-20-2050—(Saros 148) then 8 year lurch

5-22-2058--- (Saros 119)

The Great Metonic- Repeating eclipse dates can appear for up to a century, though there is no exact figure, and some dates don't repeat, or sometimes even appear. These dates do their thing and then disappear, only to line up very closely again after about 500 years. Once the Gregorian calendar arrives, it is replaced by the more exact 391-year interval. But our current metonic is the same as Jesus' metonic either way! It is a mind-blowing exploration of perceived time when you face the reality of orbital and ecliptic truth.

The following table is an example of four very different times in history with similar Metonics. Follow the dates left to right and see how closely these times match up.

List of repetitive solar eclipse Metonic dates in four historical time frames:

2015/2034	14 to 35 AD	554 to 575 AD	488 to 468 BC
(current)	(Jesus)	(end of Rome)	(Buddha/ Pythagoras)
2015 Mar 20	0014 Mar 19	0553 Mar 19	-468 Mar 19
2016 Mar 9	0015 Mar 9	0555 Mar 09	-487 Mar 09
2016 Sep 01	0015 Sep 2	0555 Sep 01	-487 Sep 01
2017 Feb 26	0016 Feb 26	0556 Feb 26	-486 Feb 26
2017 Aug 21	0016 Aug 21	0556 Aug 21	-486 Aug 22/21
2019 Jul 02	0018 Jul 01	0558 Jul 01	-484 Jul 01
2019 Dec 26	0018 Dec 26	0558 Dec 25	-484 Dec 25
2020 June 21	0019 Jun 21	0559 June 21	-483 Jun 21
2020 Dec 14	0019 Dec 15/14	0559 Dec 14	-483 Dec 15/14
2021 Jun 10	0020 Jun 10	0568 Jun 11	-482 Jun 10
2021 Dec 4	0020 Dec 03	0568 Dec 04	-482 Dec 04
2023 Apr 20	0022 Apr 19	0562 Apr 19	-480 Apr 19
2023 Oct 14	0022 Oct 14	0562 Oct 14	-480 Oct 14
2024 April 08	0023 Apr 09	0563 Apr 08	-479 Apr 9/8
2024 Oct 02	0023 Oct 03	0563 Oct 3	-479 Oct 02
2026 Feb 17	0025 Feb 16	0565 Feb 16	-477 Feb 17
2026 Aug 12	0025 Aug 12	0565 Aug 11	-477 Aug 12
2027 Feb 06	0026 Feb 05	0566 Feb 06	-476 Feb 06
2027 Aug 02	0026 Aug 01	0566 Aug 01	-476 Aug 0
2028 Jan 26	0027 Jan 27	0567 Jan 26	-475 Jan 25
2028 Jul 22	0027 Jul 22	0567 Jul 22	-475 Jul 22
2030 Jun 01	0029 Jun 01	0569 May 31	-473 Jun 01
2030 Nov 25	0029 Nov 24	0569 Nov 24	-473 Nov 25
2031 May 21	0030 May 21	0570 May 20	-472 May 20
2031 Nov 14	0020 Nov 14	0570 Nov 13	-472 Nov 14
2032 May 9	0031 May 10	0571 May 09	-471 May 09
2033 Mar 30	0032 Mar 29	0572 Mar 29	-478 mar 29
2034 Mar 20	0033 Mar 19	0573 Mar 19	-469 Mar 20

These patterns are virtually identical, considering leap years and orbits and time zones.

The Dates we live in:

Here's a few famous event anniversaries on Metonic eclipse dates we live in and around. Some are interesting and some trivial.

March 20-Spring Equinox

Mar 09—Parthenon consecrated in Athens 432 BC, US napalms Tokyo in 1945

September 11- Egyptian New Year

Feb 26-First color movie, Johnny Cash birthday, Anniversary of first recorded date of history, the Feb 26 747 coronation of King Nabonassar of Babylon.

Aug 21- Great Eclipse Metonic of 20th Century (three eclipses 1914,1933, 2017)

July 02-Jim Morrison died, President Garfield shot, first Wal-Mart opens.

Dec 25/26- Christmas/ Isaac Newton's Birthday

June 21-Summer Solstice

Dec 14-George Washington's Death Day in 1799

June 10-first witch hanged in Salem (1692) Italy enters WW2 (1940)

Dec 4-not much happens...Oh wait,...Led Zeppelin breaks up in 1980!

April 19-Darwin Death Day (1882)

April 20- Hitler Birthday (1889)

April 30 - Hitler Death Day

October 14- First colonial crime in Americas, the kidnapping of natives by Columbus...1492

April 08- Traditional date of Buddha's Birth (Japan). 8th day of fourth month of lunar calendar elsewhere).

Oct 02-Gandhi's Birthday

Feb 16- King Tuts' Tomb opened in 1922

Aug 12- First IBM personal computer in stores 1981.

Feb 06-Microchip patented 1959, Bob Marley and Ronald Reagan birthday

Aug 02- Iraq invades Kuwait in 1990. Pt-109 with JFK sinks in 1943

Jan 26-first convict ship in Australia (1788) India becomes Republic (1950)

Jul 22- Wuhan Eclipse of 7-22-2009...77 killed in Norway Terror attack 2011

June 01- Marilyn Monroe born in 1926, CNN debuts in 1980.

Sep 22 -Fall equinox

Nov 25-JFK Jr. born in 1960

May 20- Columbus Death Day in 1506

Nov 14-unusually quiet day. Oh wait, Charles (now King) born in 1948. Apollo 12 takes off in 1969.

May 9- Fourth and final voyage of Columbus launched 1502

March 30- Norah Jones is born in 1979. Queen Elizabeth dies in 2022.

Of note, four of the most important days of human civilization are represented in our current Metonic of the last hundred years: Spring Equinox, Summer Solstice, Fall Equinox and Christmas

Hopefully we have a little better idea of the Metonic Cycle now. We'll watch it unfold in the eclipses.