

## Chapter Seven

# **2015 to 2034**

# **Spring Equinox Eclipse Metonic**

## 2015 to 2034 Spring Equinox Eclipse Metonic

This is a summary of the Solar Eclipse Chapter we are living in.

March 20 is the current day of Spring Equinox.

There was a total solar eclipse on March 20 2015.

There will be a total solar eclipse on March 20 2034.

These dates are exactly 19 years apart, or 6,940 days.

There were 26 complete solar eclipses during that 19 year time span. 12 are total. 12 are Ring of fires. 2 of them are hybrids.

Two solar eclipses show up on Spring Equinoxes in the time we live. The time we live in is the 2,000<sup>th</sup> anniversary of the adulthood and ministry of Jesus. As it happens, our eclipses happen to mirror that time. There was a solar eclipse on March 19/20 two weeks before Jesus traditionally was crucified.

Welcome to Draco-Metonic reality, God's cosmic timekeeping. More about this in the next chapter.

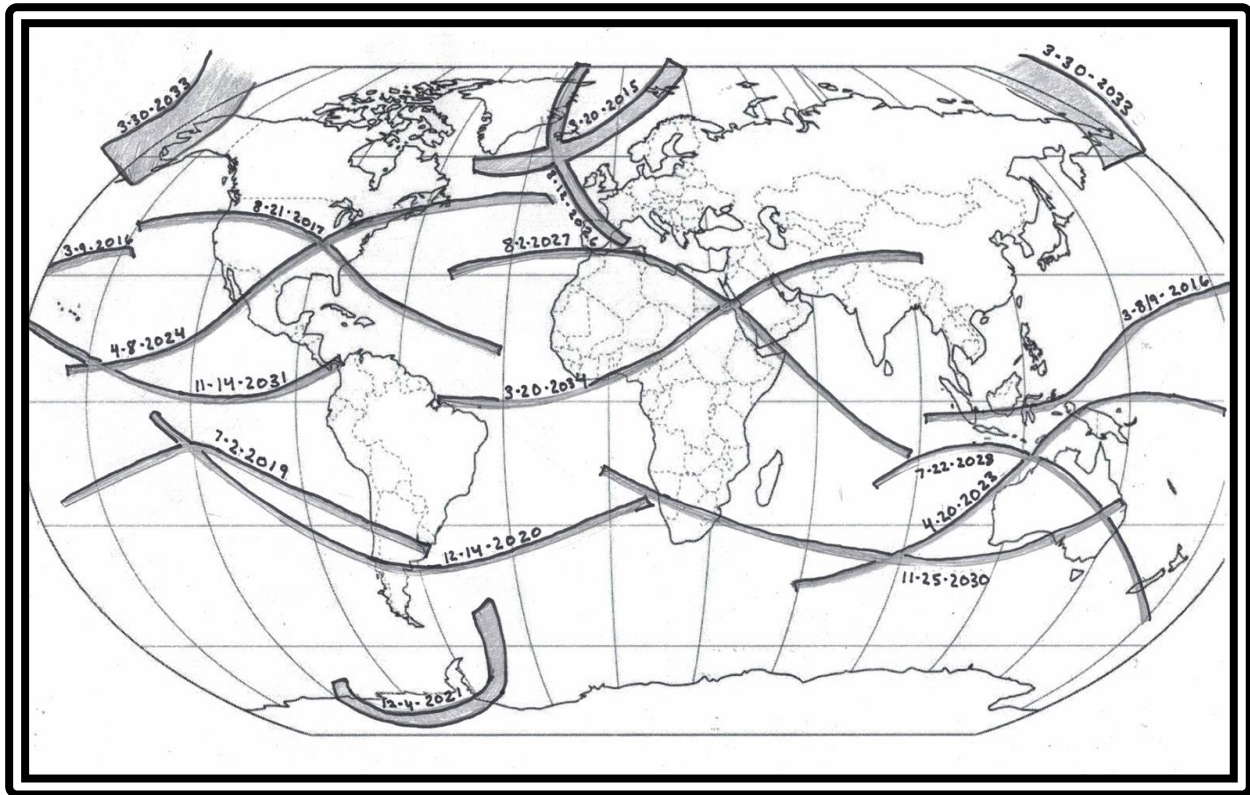
In this chapter we briefly look at all complete solar eclipses (and a few famous lunar eclipses) between the Spring Equinoxes of 2015 and 2034. I have chosen the Spring Equinox Eclipses to define this Metonic. Any eclipse date would do as a starting point, because eclipses come in cycles, not in some straight line. But since there happen to be Equinox Eclipses in our current history, that makes a logical place to start for a number of reasons.

**Why is the Spring Equinox Important?** The Spring Equinox is an ancient signpost for cultures of the northern latitudes. It is the first day of the year for billions of people, or signals when that first day starts. It helps define the religious calendars of half the world. Symbolically, it is where day and night are equal length. A new moon on Spring Equinox is a somewhat rare occasion in and of itself. A solar eclipse added to that is tremendously rare.

There have been only 7 complete eclipses on March 20<sup>th</sup> between 403 BC and 2014 AD. Of those: 3 were total, 2 hybrid and two annular. Only two of these touched major civilizations. Between 2015 and 2053 there are 3 March 20 eclipses.

Let's survey all complete solar eclipses on earth in the 2015 to 2034 Spring Equinox Metonic. We begin with an overview and then break down the individual eclipses into smaller units.

## All Total Eclipses Between March 20 2015 and March 20 2034

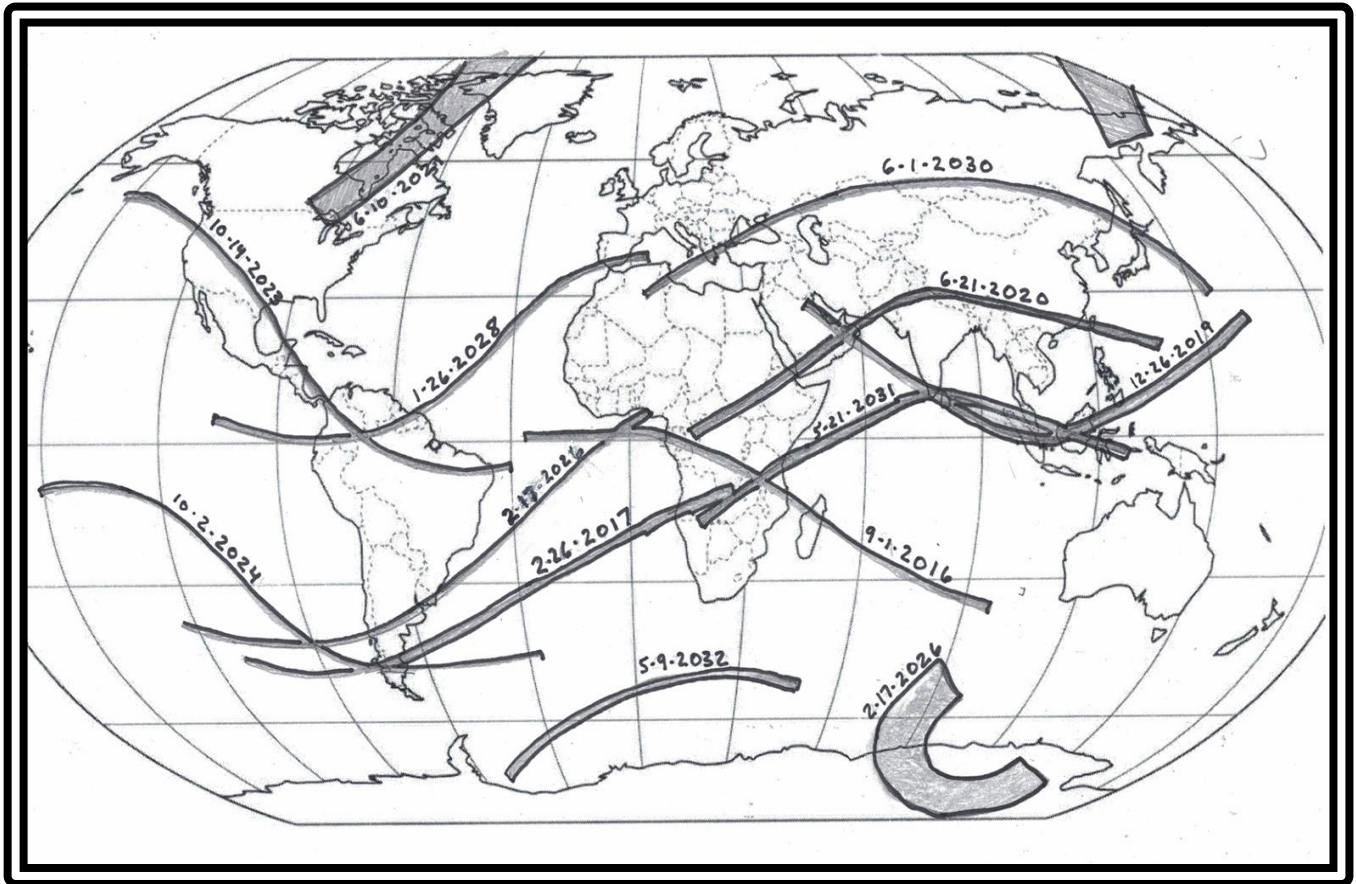


### 19 Year Spring Equinox Metonic Totals 2015 to 2034

- 2015 Mar 20 North Pole Spring Equinox (Saros 120)
- 2016 Mar 9 Indonesia/ Malaysia (Saros 130)
- 2017 Aug 21 Great American Eclipse (Saros 145)
- 2020 Dec 14 Electoral College Eclipse (Saros 142)
- 2021 Dec 4 Antarctica (Saros 152)
- 2023 Apr 20 Hitler Birthday Hybrid Australia/New Guinea (Saros 129)
- 2024 Apr 8 Great North American Eclipse (Saros 139)
- 2026 Aug 12 Spain/Reykjavik (Saros 126)
- 2027 Aug 2 Valley of the Kings (Saros 136)
- 2028 Jul 22 Botany Bay/ Australia Judgment (Saros 146)
- 2030 Nov 25 British Empire/ JFK Jr. 70<sup>th</sup> Birthday (Saros 133)
- 2031 Nov 14 Panama Isthmus Hybrid (Saros 143)
- 2033 Mar 30 Bering Strait 2,000 Anniversary of Christ Entry to Jerusalem (Saros 120)
- 2034 Mar 20 Great Civilization (Saros 130)

This is the first Mar 20 Metonic since the Mar 20 Metonic of 1643 to 1662. There are twelve totals and two hybrids mapped. Looking at the dates, you will notice many of them are exactly one lunar year apart. You will see around 11 days removed from one solar year eclipse date to the next solar year eclipse date. For instance, look at the first two on the list, and then the others. The first eclipse is Mar 20 2015. The second is Mar 9 2016. One lunar year is 354.3 days. Same phase of the moon, of course. Solar eclipses only happen at new moon.

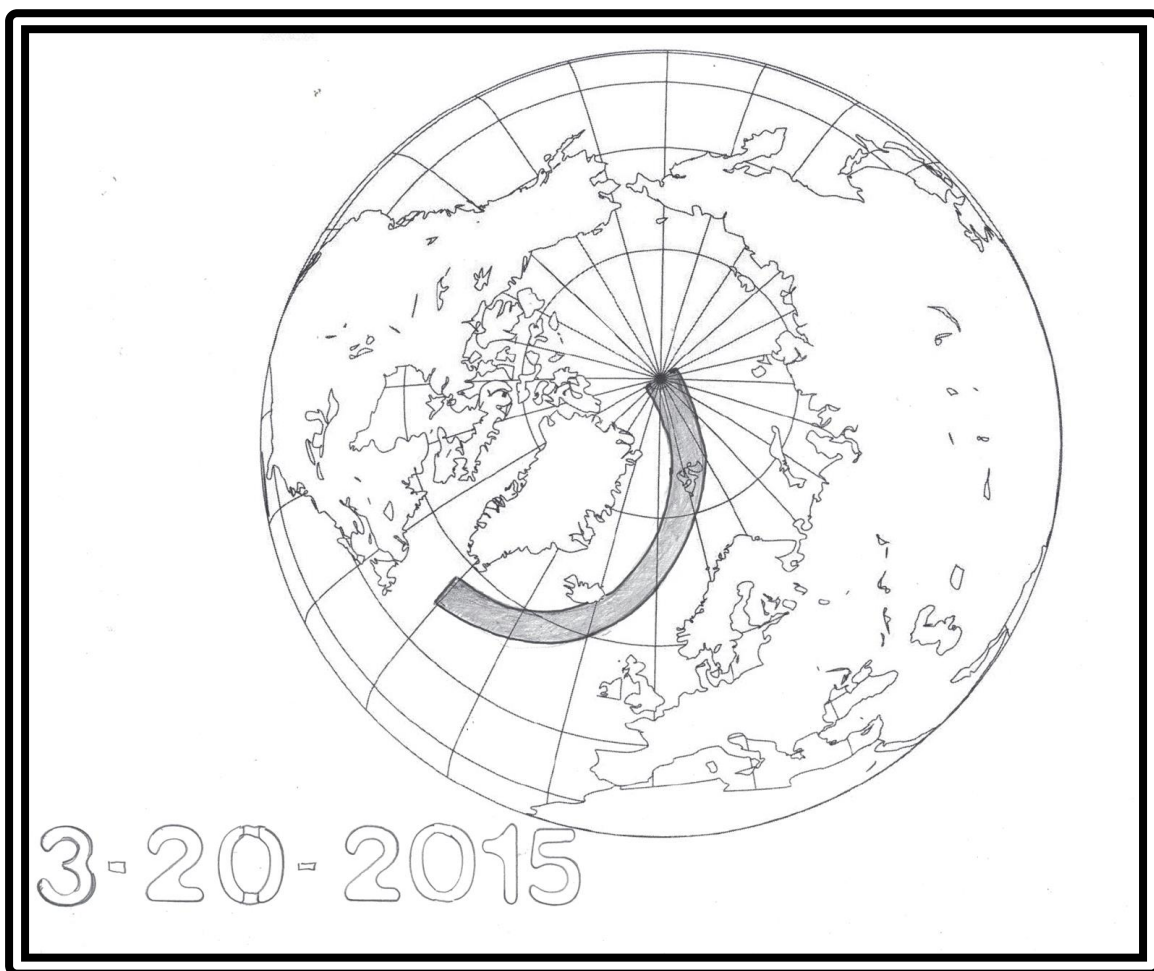
## All Ring of Fires 2015 to 2034



### Ring of Fires 2015 to 2034

- 2016 Sep 1 Africa (Saros 135)
- 2017 Feb 26 South America to Africa (Saros 140)
- 2019 Dec 26 Tsunami Anniversary Indonesia/Sri Lanka (Saros 132)
- 2020 Jun 21 Pandemic Summer Solstice Father's Day (Saros 137)
- 2021 Jun 10 Canadian Judgment Thunder Bay (Saros 147)
- 2023 Oct 14 Great American Ring of Fire (Saros 134)
- 2024 Oct 2 Pacific to Patagonia (Saros 144)
- 2026 Feb 17 Antarctica (Saros 131)
- 2027 Feb 6 Slave Trade Route Eclipse Rio to Africa (Saros 131)
- 2028 Jan 26 Spain Ring of Fire (141)
- 2030 Jun 1 Athens/Istanbul Great Eurasian Ring of Fire (Saros 128)
- 2031 May 21 Dar Es Salaam/Thiruvananthapuram Temple of the Sun/ Indonesia (Saros 138)

Here are the 12 Ring of Fires in 19 years. There is a Ring of Fire across South America on Sep 12 2034, but that is outside the Spring Equinox Metonic, which ends on Mar 20 2034.



## The 2015 Spring Equinox North Pole Eclipse

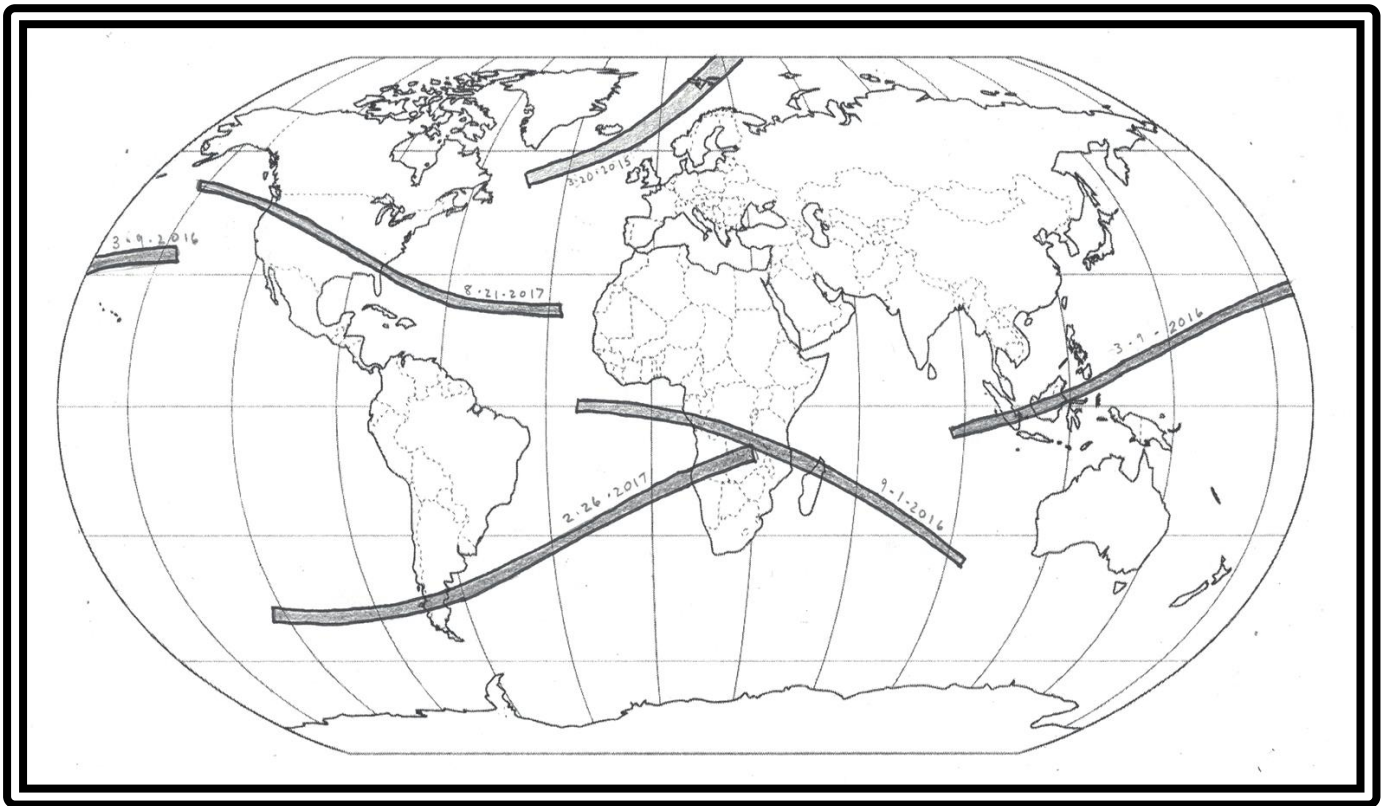
Spring Equinox Eclipse March 20 2015 ends directly at the north pole.

It's the only complete eclipse of 2015. It occurred two weeks before a Passover Lunar Eclipse of Apr 4 2015, exactly 47 years after murder of Martin Luther King and 1982 years and one day after traditional date of Jesus Crucifixion (33 AD Apr 3). This is the first solar eclipse after the famous Oct 8 2014 Feast of Tabernacles Blood Moon Lunar eclipse.

Visible from Svalbard Islands, one of the northernmost inhabited places on earth. The Eclipse ended immediately at the North Pole, but I have found no evidence of anyone traveling to the North Pole to see it. Of course, that can be a rough place to get to. Maybe Santa and Rudolph saw it.

It is unclear whether any documented total solar eclipse has ever ended directly at the North or South Pole or if any will happen again. It was an extraordinary geographic and cosmic occurrence.

This is the Solar beginning of the Metonic which ends 19 years later with the 2034 Equinox Eclipse. This is also the second to last complete eclipse of the Saros 120 personality (more on what that means later), which has been a star of eclipse history for centuries. Saros 120's last eclipse, on 2033 Mar 30, is its coup de grace.



## 2015 to 2017 Lunar Year Triad and Duo

The Triad: Three eclipses each separated by one lunar year. See dates go 11 days back each eclipse.

**2015 Mar 20 Spring Equinox North Pole Eclipse Total (Saros 120)**

**2016 Mar 9 Nyepi Day Indonesia and Malaysia Total (Saros 130)**

**2017 Feb 26 South America to Africa Ring of Fire (Saros 140)**

Duo: Two eclipses separated by one lunar year

**2016 Sep 1 Africa Ring of Fire (Saros 135)**

**2017 Aug 21 Great USA Eclipse Total (Saros 145)**

**2015 Mar 20 North Pole Eclipse Total (Saros 120)**-discussed at beginning of chapter.

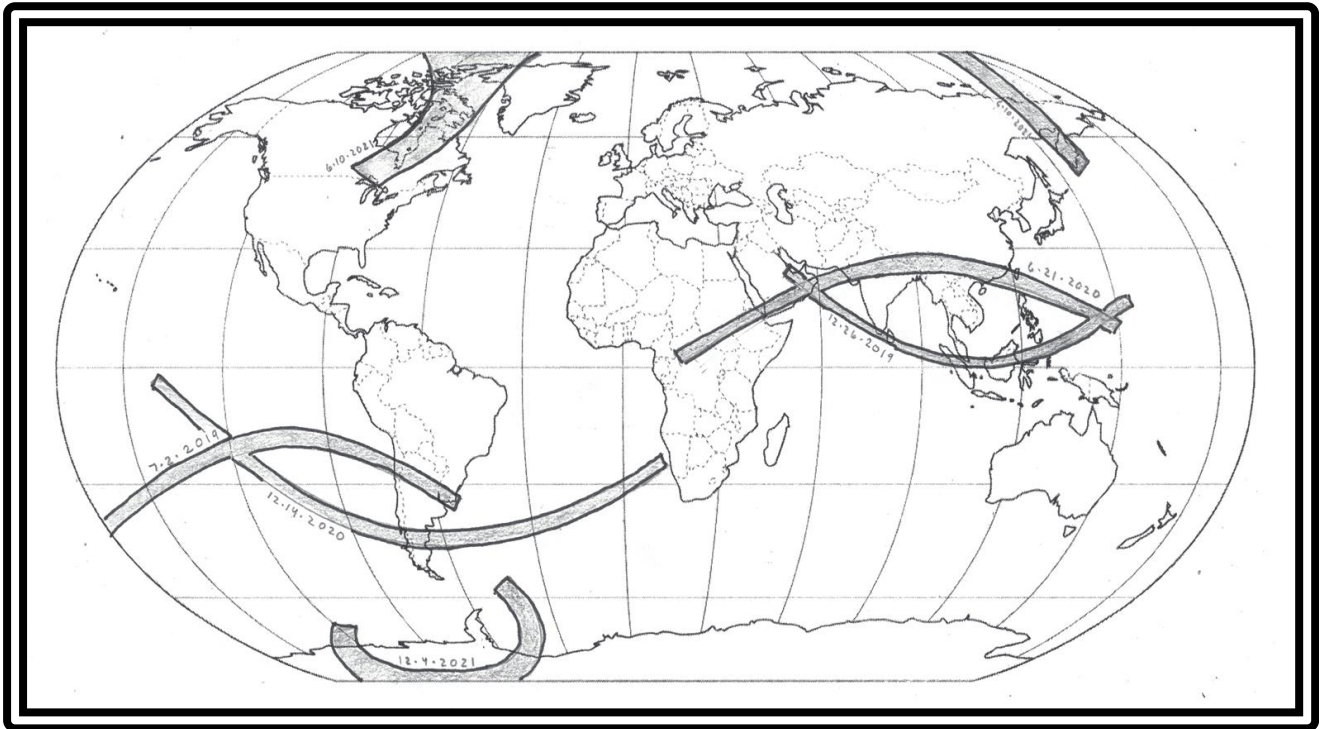
**2016 Mar 9 Nyepi Day Indonesia and Malaysia Total (Saros 130)** occurred on holiday of Nyepi, when most Indonesians take a day of silence.

**2016 Sep 1 Africa Ring of Fire (Saros 135)** From Gabon to Congo, Tanzania through Madagascar

**2017 Feb 26 South America to Africa Ring of Fire (Saros 140)**

**2017 Aug 21 Great USA Eclipse Total (Saros 145)** discussed at length elsewhere. Hepton Cycle Monday Eclipse. The most viewed American eclipse of all time. America Divided. First major city in totality was Salem, Oregon--the largest US city named after Jerusalem. The last city in the path is Charleston, South Carolina --the apex of the American slave trade. Occurs 38 years after the last total eclipse visible in the US, which occurred on Feb 26, 1979. Note date of prior eclipse in 2017.

*Partials occur on 9-13-2015, 2-15-2018, 7-13-2018, 8-11-2018, 1-6-2019.*



## 2019 to 2021 Double Pandemic Eclipse Triad

- 2019 Jul 2 Pope Francis Buenos Aires Hepton Total (Saros 127)**
- 2019 Dec 26 Tsunami Anniversary on Tsunami Path Ring of Fire (Saros 132)**
- 2020 Jun 21 Summer Solstice Father's Day Pandemic Ring of Fire (Saros 137)**
- 2020 Dec 14 Electoral College Total (Saros 142)**
- 2021 Jun 10 Canadian Judgment Ring of Fire (Saros 147)**
- 2021 Dec 4 Antarctica Total (Saros 152)**

In the two years of the big pandemic, interesting artistic balance and geographic/ Metonic peculiarities. South Asia is framed nicely in an eye or fish created by 6-month eclipses. In the western hemisphere, a similar duo is formed by eclipses over almost 18 months.

The 2019 Dec 26 and 2020 Jun 21 eclipses cross in two places. The far eastern cross has apex on southern tip of Guam. Its western cross has an apex in the desert just south of city of Nizwa, Oman.

**2019 Jul 2 Pope Francis Middle of Year Buenos Aires Hepton Total (Saros 127)** The second eclipse of the Monday Hepton Series. At the exact midpoint of Calendar year, the 183<sup>rd</sup> day of the Gregorian solar calendar year with 182 left to go. Crosses South America (Totality entering at La Serena ("calm"), Chile. Totality over San Juan (Saint John), Argentina, ending at sunset at Pope Francis birthplace of Buenos Aires, Argentina, 2302 days after his becoming Pope. Leaves nation at Dolores (sorrows),

**2019 Dec 26 Tsunami Anniversary on Tsunami Path Ring of Fire (Saros 132)** On the 15th anniversary of the greatest recorded Tsunami in human history, an annular solar eclipse follows the Tsunami path of Dec 26 2004 backwards between Arabia and Indonesia. Path is the one on the most lower right of map. Beginning in the Middle east at sunrise-44% coverage at Baghdad (Babylon), 60% coverage at Tehran, Iran. Annularity begins just north of Saudi capital of Riyadh, with 87% coverage. First true

annularity is seen in ancient oasis city of Hofuf, Saudi Arabia, near the largest oil field in the world. Hofuf is said to be the burial place of Laila and Majnoon, stars of the most popular love story in the Arab and Muslim world. The Queen of Sheba is said to have visited this city from her kingdom in Yemen. Eclipse crosses Oman, where tsunami waves went ashore on Dec 26 2004. Eclipse annularity crosses Indian Ocean, southern India and Sri Lanka, where more than 30,000 people died in the tsunami. Eclipse passes over Aceh Province of Indonesia, close to the epicenter of the earthquake. Crosses Malaysia and Singapore. Eclipse ends after Guam.

A truly strange and remarkably unnoticed synchronicity of calendars, eclipses, geologic events and geography. This eclipse occurs in the very days that the first reports of what became known as Covid-19 are being analyzed in Wuhan, China (Wuhan has 18% coverage around sunset)

**2020 Jun 21 Summer Solstice Father's Day Pandemic Ring of Fire (Saros 137) Summer Solstice.** Father's Day. Very close to total eclipse with 99% coverage at many places. Begins in Africa at sunrise in the Congo, crosses Sudan and Ethiopia. Through the Red Sea and Yemen. Pakistan (91% in Karachi—annularity in Sukkur), Northern India (94% in New Delhi). Bisepts Tibet (94% in Lhasa). Crosses nearly 2,000 miles of China, exiting directly over city of Xiamen, then crossing Taiwan (92% at Taipei) as the Pandemic shuts the world down. 83% annularity in Wuhan, China.

**2020 Dec 14 Electoral College Total (Saros 142)** The precise midpoint of the 2017 and 2024 USA Hepton eclipses. Dec 14 2020. That day (which is also the 221<sup>st</sup> anniversary of George Washington's death on 1799 Dec 14), between 10am and 5pm Eastern time, the Electoral College certifies Joe Biden and Kamala Harris as President and Vice-President of the United States of America.

5,000 miles away, this total solar eclipse--same hemisphere, same time. Full eclipse occurred between 9:30 am and 1pm Eastern Standard Time. Very little of the eclipse path crossed land. Still, maximum eclipse did occur on land, in Argentina near the town of Neuquen (a palindrome). If followed north, longitude of Neuquen intersects with eastern Maine. Eclipse crosses Atlantic and stops just west of Namibia, dying in the ocean before it can reach Africa.

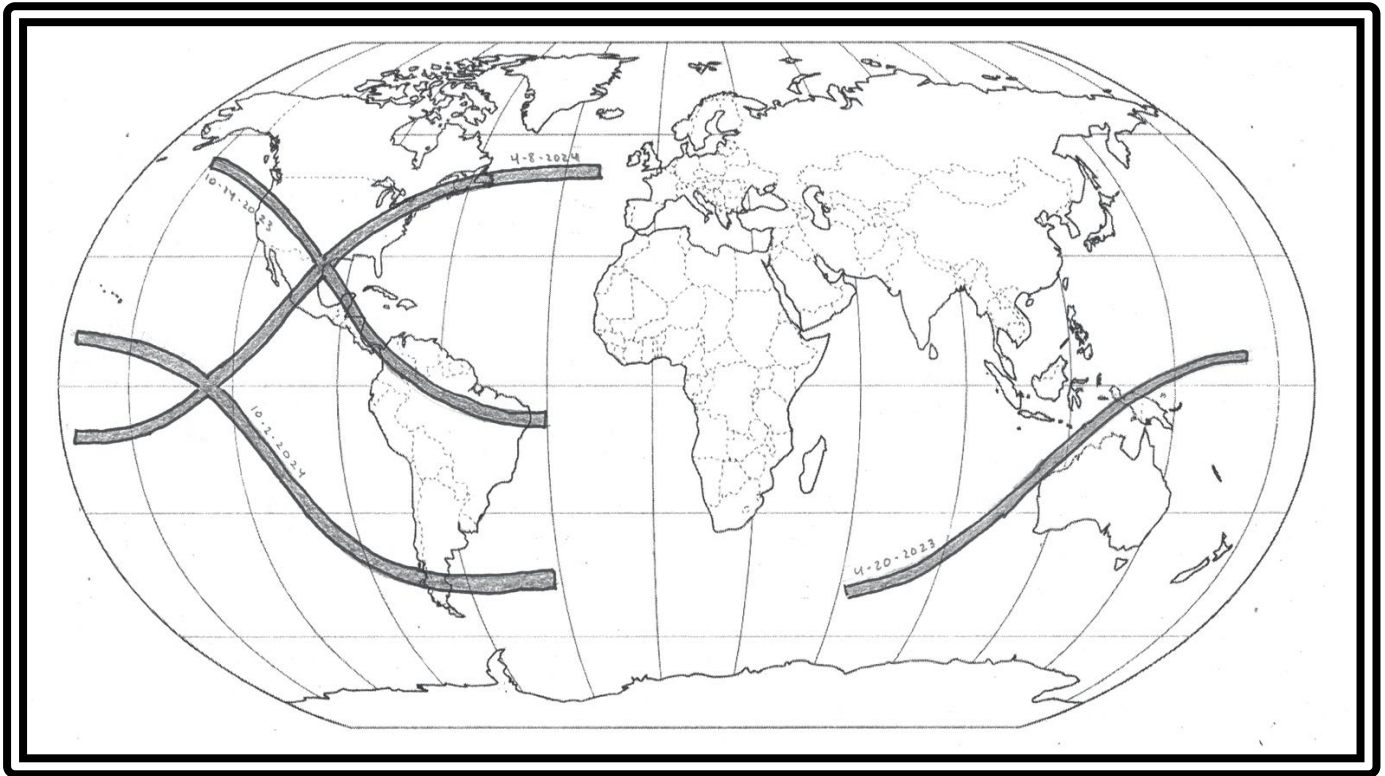
The Hepton Cycle in action. A significant Monday Total Solar eclipse perfectly spaced between two other Total Solar Monday eclipses. All of them western hemisphere. All of them with significant relations to the USA. 7 eclipse seasons--1211 days-- in either direction brings you to the USA Eclipse Judgments of 2017 Aug 21 and 2024 Apr 8 (which themselves are exactly 7 eclipse years apart).

**2021 Jun 10 Canadian Judgment/ Canada to Siberia Ring of Fire (Saros 147)** Eclipse begins at sunrise in southern Ontario, Canada, literally on the border of the US and Canada, near Thunder Bay. It traverses south to north through Canada and Greenland, then ends in extreme Northeast Russia. Occurs in the midst of the beginnings of the Canadian lockdown.

**2021 Dec 4 Antarctica (Saros 152)** A few hardy souls took the trip to Antarctica to witness the last true total eclipse for two and a half years. This is the fourth complete eclipse for Saros 152. Its first complete eclipse occurred on 1967 Nov 2, in the midst of the Jerusalem Blood Moons.

*Partial occur on 4-30-2022 ( the 70<sup>th</sup> anniversary of Hitler's death) and on 10-25-2022, 77<sup>th</sup> Anniversary of United nations + one day*





## 2023 and 2024

**2023 Apr 20 Hitler Birthday Metonic Hybrid (Saros 129)**

**2023 Oct 14 Great American Ring of Fire (Saros 134)**

**2024 Oct 2 Pacific to Deseado Massif Ring of Fire (Saros 144)**

**2024 Apr 8 Great North American Eclipse Total (Saros 139)**

Almost no land in the Eastern hemisphere is affected by eclipses.

Only one true total here, the April 8 2024 eclipse. That separates it out dramatically.

In fact, it's the only total eclipse on earth between the 2021 Antarctica and the 2026 Spanish Judgment, nearly five years.

The April 8 2024 is also the first total eclipse to cross an inhabited area since 2019 July 2 Buenos Aires eclipse, which would mean it stands out as the only total eclipse over established populations between 2019 and 2026, more than seven years. The April 8 2024 American eclipse goes over more population centers than any eclipse in the history of the western hemisphere.

The peculiarity appears accented.

The South Texas Tav is visible in upper left. It is the cross formed by the intersection of the 2023 and 2024 eclipses. Its apex is in the hill country near Utopia, Texas, which is southwest of San Antonio (which also is in the path of both eclipses). Much more detail is found elsewhere in this work.

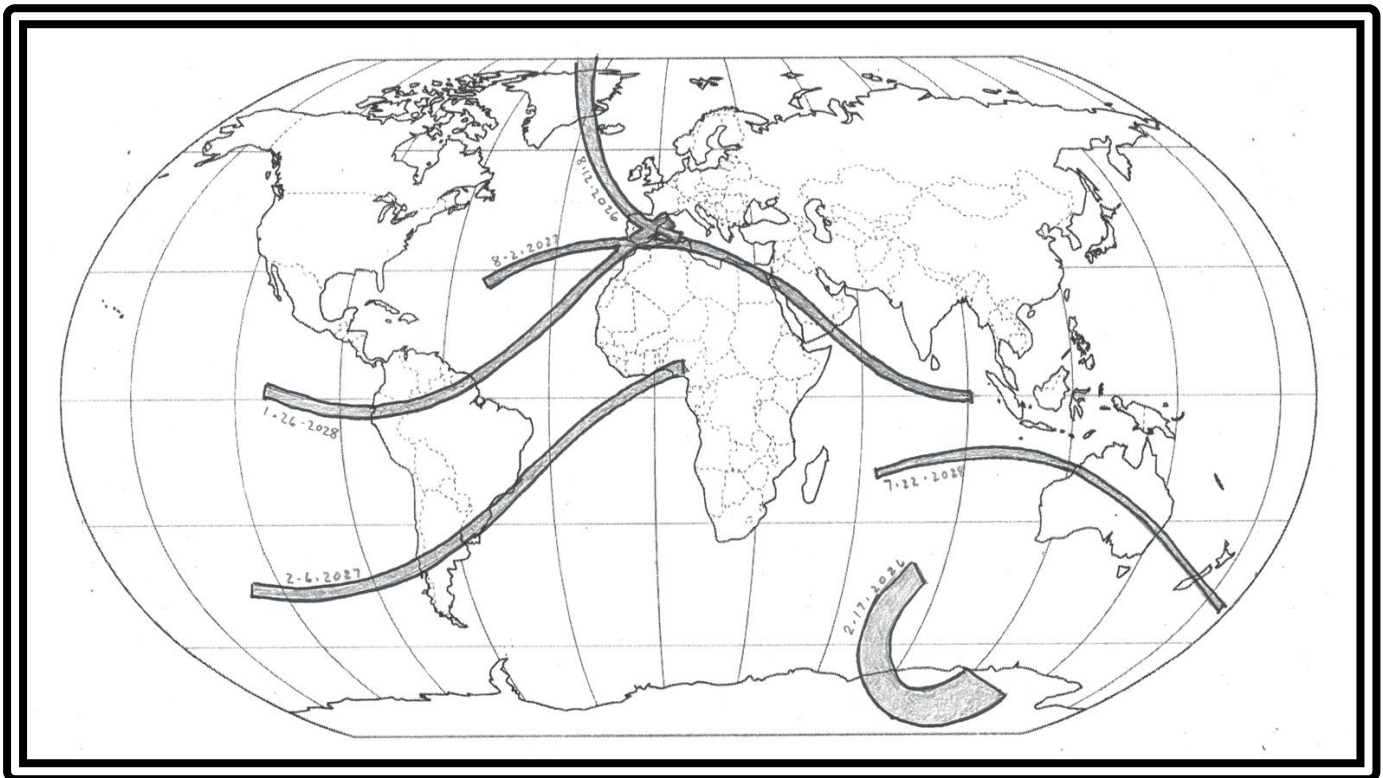
**2023 Apr 20 Hitler Birthday Metonic Hybrid (Saros 129)** Adolf Hitler's birthday ( April 20) and death day (April 30) are on a perpetually linked Metonic, around 10 days apart, they show up in linked eclipses one lunar year apart throughout history at certain points around every 500 years. In this case, a partial solar eclipse occurred 2022 Apr 30, on the 77<sup>th</sup> anniversary of the death of Adolf Hitler. That partial brought with it a total lunar eclipse visible from the Americas on Nov 8, USA election day. In 2023, after a century of eclipses lingering on the April 19 (Darwin Death Day) eclipse occurs on the exact day of Hitler's birth 134 years before on April 20 1889. The next eclipse after this (Great American Ring of Fire) will be Saros 134 (note the 134's) but that's getting almost silly! Very little land experiences totality. Eclipse begins in Indian Ocean and avoids land, heads north outside Australia . Only a few hundred square miles of the extreme northwestern edge of the Australian land mass experiences true eclipse, and it is an astonishing 100.00% coverage, over the one true town of any size, the town of Exmouth, home to interesting military and scientific infrastructure as well as tourism and kangaroos. Eclipse travels over narrow strip of Timor and Papua before again avoiding nearly all land and dying south of Micronesia. Note 4-20 numeric, which has become inexplicably popularized in USA in recent years.

**2023 Oct 14 Great American Ring of Fire (Saros 134)** Looked at in much closer detail in the USA section. Bisecting the western US, totality entering Oregon, crossing the Four Corners and exiting the nation at Corpus Christi ("Body of Christ") Texas. Crossing the Yucatan and much of Central America. Exiting Brazil at the city of Natal, translated "Nativity" in Portuguese. Exactly 555.5 eclipse years after Mayan Apocalypse Eclipse of August 8, 1496. Occurs on exact 531<sup>st</sup> anniversary (10-14-1492) of first colonial crime in western hemisphere, the abduction and enslavement of 7 native youths by Columbus on Island he named San Salvador ("Holy Savior") with 48% coverage.

**2024 Apr 8 Great North American Eclipse Total (Saros 139)** Looked at much closer in USA Eclipse section. Certainly, the most significant eclipse, population-wise, in the history of the United States. Hepton Cycle. Monday Eclipse. Total Solar Eclipse. Judgment Eclipse. First true total eclipse to cross Mexico, USA and Canada overland since any of those nation's founding. Finishes both Tavs and the Aleph over the USA (2nd Tav pictured above). 8 days after Easter, 2422 days from USA eclipse of 2017, 1211 days after Election Eclipse of 2020, 177 days after Ring of Fire eclipse of 2023 Oct 14. Path of totality enters at Mazatlan, Mexico; it crosses Mexico, the USA (dozens of cities and towns) and Eastern Canada-- exits near St. Johns in province of Newfoundland and Labrador

**1024 Oct 2 Pacific to Deseado Massif Ring of Fire (Saros 144)** Like the 2023 Eclipse, almost no land except a small strip of extreme South America, including the Deseado Massif, supposedly some of the oldest rock on earth. Only town of size in path of Annularity appears to be Puerto San Julian on the eastern flank of Argentina.

*Partials occur on 3-29-2025, 9-21-2025.*



## 2026 to 2028 Spanish Judgment/ Botany Bay

**2026 Feb 17 Antarctica Ring of Fire (Saros 121)**

**2026 Aug 12 Spain/Reykjavik Total (Saros 126)**

**2027 Feb 6 500<sup>th</sup> Anniversary Slave Trade Judgment/Rio de Janeiro to Africa (Saros 131)**

**2027 Aug 2 Great Valley of the Kings Total/ Spain (Saros 136)**

**2028 Jan 26 Spanish Third Eclipse in 18 months on “Australia Day” Ring of Fire (Saros 141)**

**2028 Jul 22 Australia- Botany Bay and Sydney/New Zealand (Saros 146)**

Five of the six eclipses in this time frame are quite extraordinary and they occur in a row 177 days apart. Coming off two partials in 2025 and a nondescript Antarctica Ring of Fire in early 2026, the next five eclipses hit like a ton of bricks of meaning. They create a very unusual balanced triad with Spain in the crosshairs. Also, Australia begins its 15-year eclipse swarm in earnest, and an interesting Rio Slave Trade eclipse. Beautiful symmetric swirl is formed by the three colliding Spanish eclipses.

**2026 Feb 17 Antarctica Ring of Fire (Saros 121)** The second to last complete eclipse for Saros 121. Its last is scheduled for 2-28-2044. It began life in 944 and had its first complete eclipse in 1070.

**2026 Aug 12 Spain/Reykjavik Total (Saros 126)** First total eclipse in Spain for last 112 years. They last had a total eclipse in 1905. Spain's first of 3 complete eclipses in 18 months, two of them totals. 500 years after Spain began the African Slave Trade to the New World (1526). Eclipse occurs 128 years to the day of the peace treaty that ended the Spanish-American War on Aug 12 1898, basically ending the 600 year old Spanish Empire. The extraordinary path of this eclipse avoids almost all human populations, curling around the British Isles—91% coverage in London, 92% in Paris. The only other nation to experience totality besides Spain is Iceland. Amazingly that occurs only on the bare sliver of

western coast that includes its capital of Reykjavik (whose metro area contains 60% of Iceland's population). Eclipse manages to enter Iberian Peninsula at just the right angle, without crossing the border of neighbors Britain, Portugal or France. For instance, the village of St. Jean de Luz in southern France has 99.7% coverage but no place in France has true totality. In Portugal, the village of Labiados in the extreme north experiences 99.99% coverage. A few square miles of apparently uninhabited Portuguese territory in the Pyrenees has totality but no established towns. Lisbon, Portugal has 95%.

Spain is another story. The eclipse bisects the northern half of the nation, bringing totality to a third of its land mass. There is totality in parts of metropolitan Madrid. Toledo has 99.4% Eclipse. Enters Spain at city of La Coruna ("crown") and ends in the Mediterranean just past Spain's Balearic Islands.

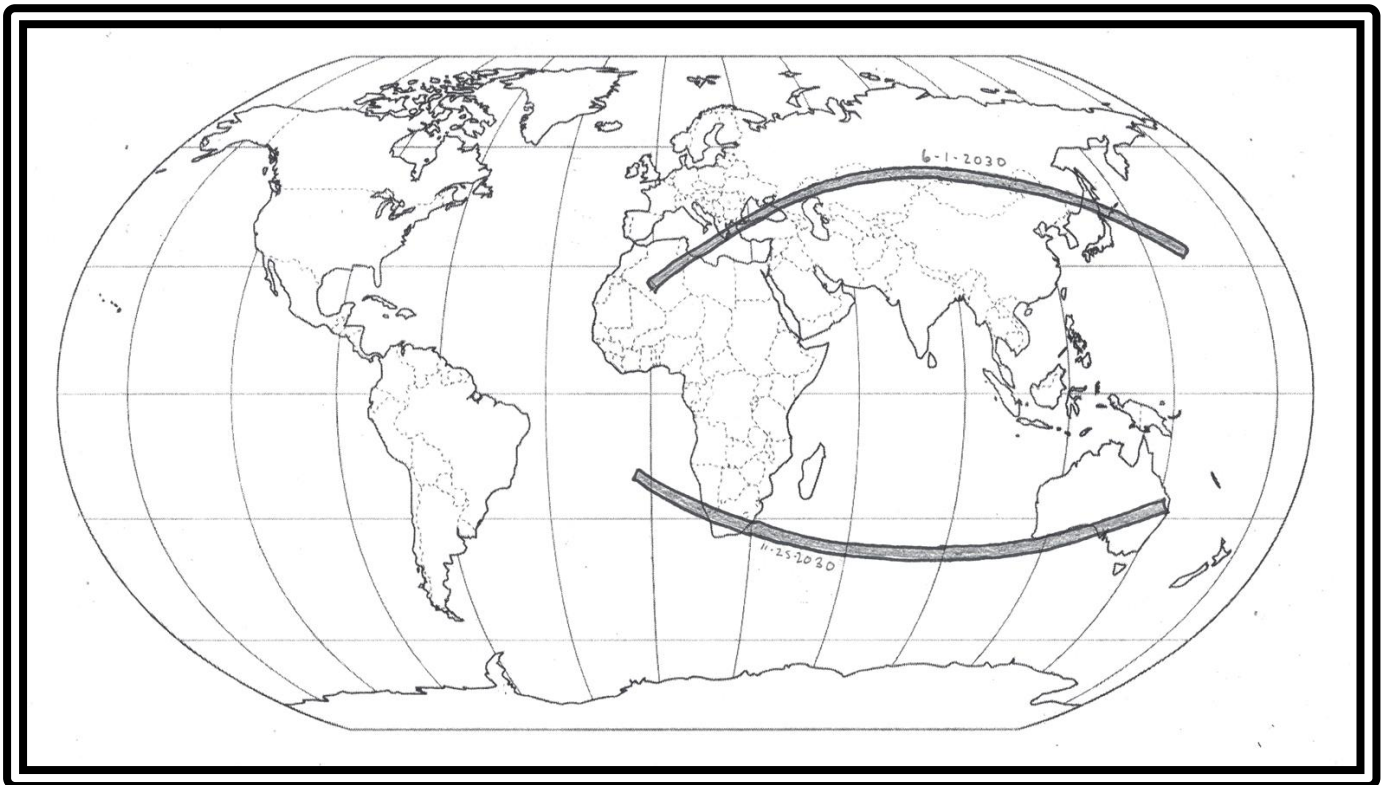
**2027 Feb 6 500<sup>th</sup> Anniversary Slave Trade /Rio de Janeiro to Africa Ring of Fire (Saros 131)** Just after Spain appears in the crosshairs, the 500 year old transatlantic slave trade is highlighted by this Ring of Fire. 500th Anniversary year of the importation of African slaves to South America by Portuguese slave traders, the eclipse path traces backwards the maritime routes followed by slave traders from South America to the northern "Slave Coast of Africa"--Benin, Ghana and Nigeria--ending totality over notorious port of Porto-Novo in Benin, one of the centers of the Slave Trade. Totality just offshore of Rio De Janeiro, Brazil - the largest slave port in the history of the world.

**2027 Aug 2 Valley of the Kings Egypt/ Spain/Mecca Total (Saros 136)** Looked at closer in Middle East section. The great Saros 136 comes to the most famous Necropolis on earth. Hepton Cycle Monday Eclipse. Judgment Eclipse. Exactly one lunar year after Spanish Judgment of Aug 12 2026. 1211 days after USA Little Egypt Tav. Passing directly over the straits of Gibraltar, hugging the north Coast of Africa (totality in Tripoli) before diving south through Egypt over the Nile and the Valley of the Kings with Maximum Eclipse in Luxor (ancient Thebes),the metropolis of the sun gods and necropolis of the Pharaohs. Next into Saudi Arabia-including totality in the holy city of Mecca. Exiting into Gulf of Oman through Yemen, passing over the most eastern part of Africa, the Horn, where scientists claim humanity originated, before ceasing in the southernmost Maldives in the Indian ocean.

**2028 Jan 26 Spain's Third Eclipse in 18 Months on "Australia Day" Ring of Fire ( Saros 141)** They just keep coming! Spain's 3rd eclipse in 18 months. Across the breadth of the Amazon of South America, including Brazil. Crossing the Atlantic, entering Portugal at historic port of Sagres ("holy"). Eclipse just south of Lisbon, one of the oldest cities in the world. Like 2026, Ending just beyond border of Spain, stopping dead at border of France. Occurs on Australia Day, or 240 years after first convicts arrived in Botany Bay, Australia (Jan 26 1778). Australia hosts the next eclipse 177 days later.

**2028 Jul 22 Australia/ Botany Bay and Sydney-New Zealand Total (Saros 146)** 177 days after "Australia Day" Eclipse and one lunar year from Mideast Eclipse of 2027 Aug 2. 19 solar years to the day after 2009 July 22 Wuhan Total eclipse. Australia is bisected with centerline of totality directly over Sydney and Botany Bay, where the first prisoners were brought to colonize the continent 240 years earlier on the date of the last eclipse on earth 1-22, in 1788. Also crosses southern island of New Zealand, exiting over city of Dunedin, one of the oldest European settlements in New Zealand.

*Partials occur on 1-14-2029, 5-12-2029, 7-11-2029, and 12-5-2029.*



## 2030 Eclipses-Both Occur in Eastern Hemisphere

**2030 June 1 Athens/ Istanbul Ring of Fire—Africa to Japan (Saros 128)**

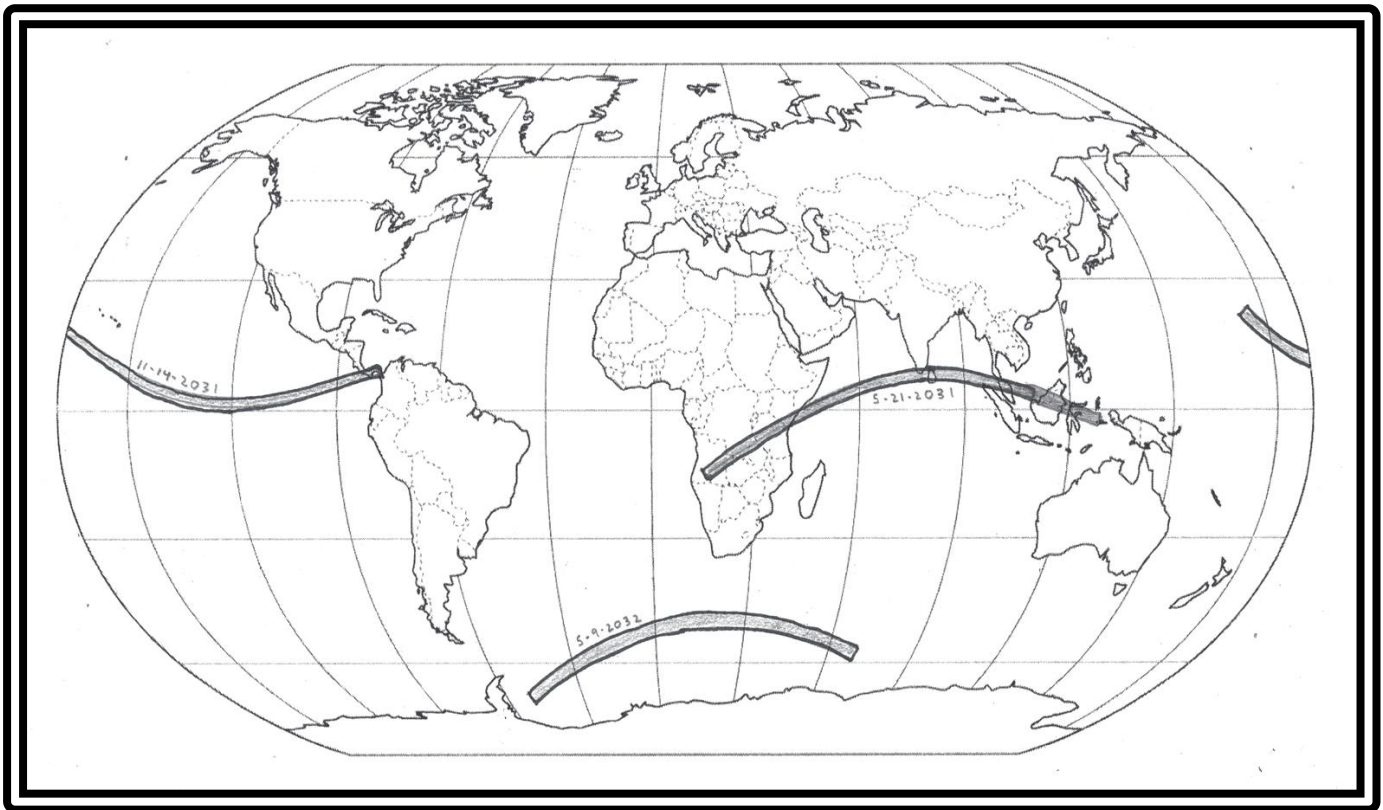
**2030 Nov 25 British Empire-South Africa to Australia Total (Saros 133)**

The 2030 eclipses have unusual symmetry. The two eclipses begin and end very near to each other on similar longitudinal lines.

**2030 June 1 Athens/ Istanbul Ring of Fire—Africa to Japan (Saros 128)** An extraordinary path beginning at sunrise near Gara Samani, Algeria (which has a dinosaur named after it). Eclipse crosses Libya (again!), the Mediterranean, Turkey, war-torn regions of Crimea and Southern Ukraine (annularity in Mariupol), follows the entire southern border of Russia and exits after crossing Japan. Great cities along the path include Tripoli (second complete eclipse in 3 years), Athens, Istanbul, (Constantinople). Sevastopol and Volgograd in Russia and Sapporo, Japan. 71% in Moscow, 75% in Kyiv, 63% in Jerusalem. 32% in Wuhan.

**2030 Nov 25 British Empire-South Africa to Australia (Saros 133)** Hepton Cycle Monday Eclipse. 1211 days from 8-2-2027 Mideast Eclipse. 2422 days from USA 4-8-2024 eclipse. Creating an extraordinary cup of Empire (see all land masses to north of eclipse) Almost all open ocean except crossing entirety of South Africa (totality in Durban) and southern Australia. Enters first at tiny town of Mount Mary. Reaching almost perfectly to the Gold Coast just north of Brisbane.

Occurs on what would have been JFK Jr's 70<sup>th</sup> Birthday.



## 2031 and 2032 Last complete eclipses before 2033

**2031 May 21 Dar Es Salaam Ring of Fire. Africa to Indonesia/Malaysia (Saros 138)**

**2031 Nov 14 Hybrid/ Pan-American Isthmus Totality (Saros 143)**

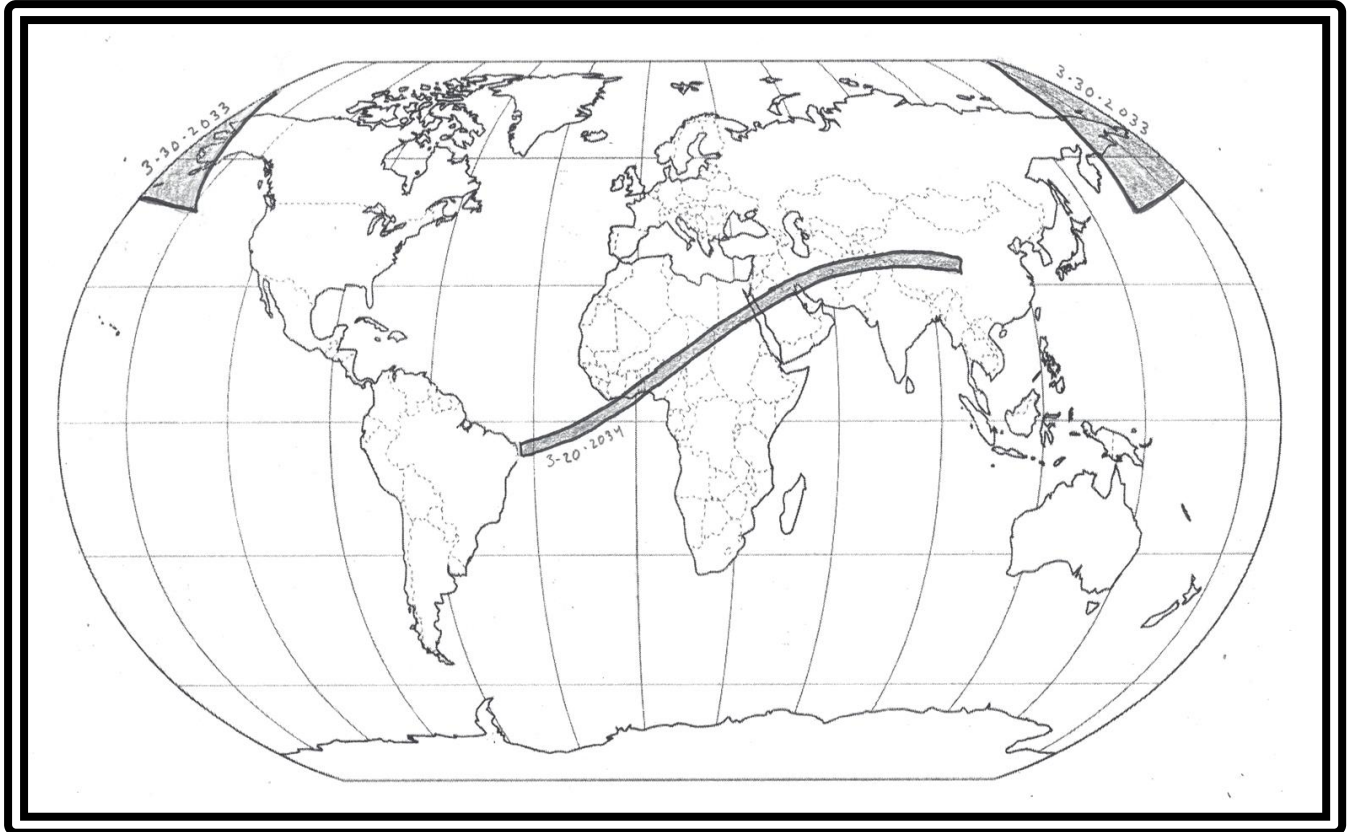
**2032 May 9 Antarctica (Saros 148)**

**2031 May 21 Dar Es Salaam Ring of Fire. Africa to Islands (Saros 138)** Ring of Fire--Africa to Indonesia...across the middle of Africa, beginning in Angola, exiting with annularity at Dar Es Salaam (place of peace) in Tanzania (3<sup>rd</sup> time in 60 years). Crosses Indian Ocean and grazes southern peninsula of India, grazing the Temple of the Sun in Thiruvananthapuram for the third time in 21 years. Crosses Sri Lanka, once again to trace the tsunami path backwards towards Indonesia. Annularity in Ernakulum (which means "the abode of Lord Shiva") and Jaffna, Sri Lanka. Goes just north of Kuala Lumpur over border of Thailand and Malaysia before ending in Indonesia.

**2031 Nov 14 Isthmus Totality (Saros 143)** Open ocean eclipse ( without touching a single island) ending with totality at sunset just a few miles before the Atlantic Ocean directly over the absurdly small patch of land that constitutes the most extraordinary land bridge on planet earth, the Panama Isthmus, The northern and southern hemispheres are connected in the last total eclipse before the eastern and western hemispheres will be connected in the Great 3-30-2033 Total Eclipse.

**2032 May 9 Antarctica Ocean Ring of Fire (Saros 148)** Is there any significance to this little eclipse that touches no land in the middle of nowhere? Or is it a cosmic re-alignment to provide the necessary positioning set-ups for the ones that do bear meaning? The 530<sup>th</sup> anniversary of Columbus setting sail on his fourth and last voyage in search of a passage to Asia (May 9<sup>th</sup> 1502). This is the last eclipse before the Great Bering Strait eclipse of 2033.

*partial occurs on 11-3-2032*



## **2033 and 2034- The Last Eclipses of Spring Equinox Metonic**

**2033 March 30 Bering Strait 2,000 Anniversary of Christ Entry to Jerusalem (Saros 120)**

**2034 March 20 Spring Equinox Great Civilizations Egypt Cross (Saros 130)**

These two incredible eclipses are considered together for a number of reasons.

Firstly, they stand independent of the eclipses around them. The March 30<sup>th</sup> eclipse is the first complete eclipse in 325 days, since May of 2032. It is the only complete solar eclipse in 2033- just as the 2015 North Pole eclipse was the only complete solar eclipse in 2015. Both belonged to Saros 120, which performs its last complete eclipse right here after centuries of stunning work. It is the first total eclipse since 2030 Nov 25.

The 2034 eclipse is the next solar eclipse of any kind on earth and occurs on the Equinox.

These two eclipses are exactly one lunar year apart and occur around the 2,000<sup>th</sup> anniversary of the traditional dating of the Crucifixion and Resurrection of Jesus Christ, Apr 3 33 AD. As you will see, the details of the March 30<sup>th</sup> eclipse are extraordinary.

Just as interesting is the aesthetic balance of the two eclipses when placed on a map. The Bering Strait eclipse necessarily must occupy both corners of the map at once, while the Great Civilizations Equinox eclipse is plainly positioned almost perfectly in the center of the world.

### **Mar 30 2033 Bering Strait 2,000 Anniversary of Christ Total (Saros 120)**

4 days before the traditional 2,000th Anniversary of the death of Jesus Christ on April 3 33 AD, a total solar eclipse perfectly crosses the Bering Strait, giving totality to both eastern and western hemispheres at the same time. This is the only place this could possibly happen, with both Russia and the USA having a total eclipse simultaneously. No other nation will experience totality.

Not only does eclipse cover two hemispheres simultaneously, it also straddles the international date line, so it simultaneously occurs on two days at once! The eclipse happens on 3-30 in the USA and 3-31 in Russia. Totality in Russian town of Provideniya ("Providence") and American town of Nome.

Definitely a Numeric oddity in the date of 3-30-2033. It is a completely balanced palindrome number, perhaps the only one in the entire survey. Abbreviation 3-30-33 is also balanced.

This eclipse is peculiar in its separation too. It is 18 months removed from the last total eclipse on earth (11-14-2031) which crossed perfectly the northern and southern hemispheres at the Panama Isthmus. It is one lunar year away from the next complete eclipse, the 2034 Spring Equinox Eclipse.

*The only other solar eclipse in 2033 is a partial on 9-23*

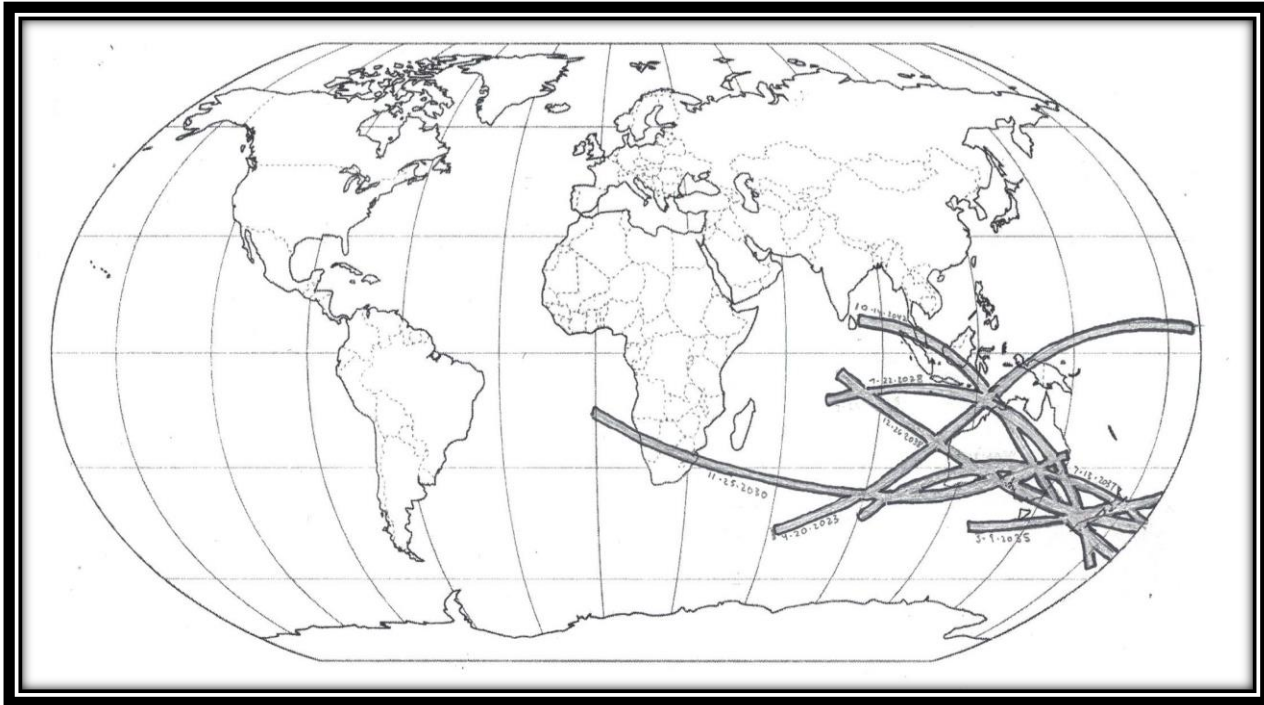
**Mar 20 2034 Spring Equinox Great Civilizations Egypt Cross Total (Saros 130)** Discussed in much greater detail elsewhere. The Spring Equinox Eclipse travels from the coast of South America across Africa to Egypt, scraping northern Medina (the last hometown of Mohammad) as it crosses Arabia, onward through Iran, Afghanistan, Pakistan (totality in Islamabad), India, Tibet and ending in China.

Jerusalem will see 74% coverage of the sun. Occurs of course on the Spring Equinox, only the ninth Spring Equinox eclipse in the last 2500 years. 19 years after North Pole Spring Equinox eclipse.

It is New Year's Day for Persian, Muslim, Zoroastrian and Bahai Calendars and New Year's Eve for India. It defines the coming of first month of Nisan for Jewish calendar, which begins the next day.



**Interesting Image: Here is the Australia/ New Zealand Eclipse Swarm 2023 to 2042  
Composed of seven Complete Solar Eclipses in 19 years**



## Lunar Eclipses



This work is not about lunar eclipses, but we should talk about them a bit. A lunar eclipse is a very different phenomenon than a solar eclipse, except for the fact that they both occur during eclipse seasons as the spheres begin to align on the perspective node. They often accompany each other on the eclipse nodes about 14 or 15 days apart.

Solar Eclipses must happen on the new moon. Lunar eclipses must happen on the full moon.

Since there is a certain plane, a node, where the earth, sun and moon align to lesser or greater degrees twice a year, when there is a solar eclipse, there will be a lunar eclipse. Lunar eclipses can be Total, Partial or Penumbral. A Penumbral Lunar Eclipse involves the lighter fringe shadow of earth. It is quite faint and can often happen without being noticeable.

In a lunar eclipse, the moon enters the shadow of the earth. Eclipses tend to last several hours, with maximum eclipse up to an hour and a half possible totality. Compare that to about 7 minutes maximum totality for a solar eclipse. That's because the solar eclipse is such a different phenomenon. In a solar eclipse, the moon must go in front of the sun, perfectly blocking it out. In the lunar eclipse, the moon enters the shadow of the earth.

In other words, complete solar eclipses involve a pinpoint shadow being cast upon the earth. Lunar eclipses involve viewing the moon entering the earth's rather large shadow which is being cast into space.

People have a much greater chance of witnessing a lunar eclipse during their lives than a solar eclipse. Lunar eclipses can easily cover half the world, and often more than that. Any place on earth will have a total lunar eclipse a few times per decade. Still, some folks don't see many of them due to the fact that they often happen when we're sleeping! Also, clouds can obscure a lunar eclipse. Many people don't know when lunar eclipses are happening or care about them when they do.

A single year with two total lunar eclipses happens about an average of every three years. Very occasionally, like 1982, you can have 3 total lunar eclipses in a single year.

Most lunar eclipses are not total. In fact, more than 60% are partial or penumbral. Penumbral lunar eclipses can often happen without being noticed. The impressiveness of a partial depends on the eclipse.

#### **A few words about Blood Moon Tetrads (2014 and 2015/ 2033 and 2034):**

Astronomers use the name Tetrad when there are four consecutive eclipse seasons which each contain a total lunar eclipse. That usually means two years in a row each with two Total lunar eclipses. That is four totals in a row, separated typically by around 177-day intervals. Tetrads live in cycles of around 600 years. For about 300 years, there are no tetrads. This is followed by a period of roughly 300 years where a tetrad occurs roughly every 15 to 20 years.

Currently, we are about halfway through the second half of a 300-year cycle.

There have been 7 Total Lunar Tetrads since 1900, and an 8<sup>th</sup> on the way. Here they are:

1909 to 1910.

1927 to 1928.

1949 to 1950.

1967 to 1968.

1985 to 1986.

2003 to 2004.

2014 to 2015.

2032 to 2033.

Far more unusual is when Tetrads land on Jewish High Holy Days. A Tetrad of four Total Lunar Eclipses landed on the high holy days of Judaism in both 2014 and 2015. That is, there was a total lunar eclipse each of those years on both Passover in the Spring; and Sukkot, the first day of the Feast of Tabernacles, in the Fall. These bookend a total solar eclipse on the Spring Equinox March 20 2015.

Here are the dates of the famous Blood Moon Tetrads:

April 14/15 2014—Passover Total Lunar Eclipse-October 8 2015—Sukkot Total Lunar Eclipse

March 20 2015 –Spring Equinox North Pole Eclipse ( Saros 120)

April 4 2015—Passover Total Lunar Eclipse-September 28 2015—Sukkot Total Lunar Eclipse

These eclipses created quite a bit of excitement and some doomsday prophecy, due to the unusual alignment with the Jewish calendar. Little attention was paid to the Spring Equinox Eclipse itself, and virtually none was paid to the incredible 19-year Solar Eclipse Metonic that it signaled (and which is the focus of this work).

### **The Blood Moon Tetrad of 2014**

**2014 Apr 14/15 Passover Total Lunar Eclipse.** The first eclipse, on the Jewish Passover, occurred April 14<sup>th</sup> and 15<sup>th</sup> 2014. It was visible primarily in the western hemisphere. Abraham Lincoln was shot at 10 pm the evening of the 14th of April 1865 on Good Friday/Passover and pronounced dead the morning of the 15<sup>th</sup> exactly 149 years before this eclipse. See personalities section for more. April 14<sup>th</sup> and 15<sup>th</sup> are also the 102<sup>nd</sup> anniversary of the sinking of Titanic, which struck an iceberg on the night of April 14 1912 and sank a few hours later in the early morning of April 15<sup>th</sup>.

**October 8 2014 Sukkot** The second lunar eclipse occurred on the first day of the Feast of Tabernacles. Visible through Americas and Asia.

**March 20 2015 –Spring Equinox North Pole Eclipse (Saros 120)** This extraordinary solar eclipse was looked at earlier in this section. It is an isolated eclipse, with no other complete solar eclipses in 2015.

**April 4 2015 Passover Lunar Eclipse** Visible throughout Americas and Asia. 47 years to the day after Martin Luther King (Apr 4 1968) was murdered in Memphis, Tennessee. King was killed 8 days before a Passover Total Lunar Eclipse *only* visible from the Americas April 12<sup>th</sup> and 13<sup>th</sup>, 1968. April 4<sup>th</sup> 33 AD is the traditional day for Jesus resting in the tomb on the Sabbath 1982 years before, on the day after he was crucified (by traditional dating) on April 3<sup>rd</sup>, 33 AD.

**September 27/28, 2015 Lunar Eclipse Sukkot** Visible in Europe, Mideast and Americas (including Jerusalem)

Interestingly, the 1949/1950 and 1967/1968 Tetrads also landed on Jewish high holy days. It is hard to overstate how rare this phenomenon is. Apparently, it happens on average only once every 500 years, and it has now happened 3 times in 75 years. Another High Holy Day Tetrad occurs in 2033 to 2034.

Notably, the High Holy Day Passover eclipse of 1949 Apr 13 occurred within the year that Israel declared independence, on 1948 May 14 and 98 days before the war was concluded on July 20 1949.

The 1967 April 24 Passover Eclipse occurred 40 days before the Six-Day War when Israel gained control of Jerusalem on June 7 1967.

A High Holy Day Tetrad also occurred in 1493/1494, beginning the next year after the expulsion of the Jews from Spain in 1492 and the "discovery" of America.

Two Total lunar eclipses occur in 1968, also on Passover (April 13, eight days after King murder) and Sukkot, October 6<sup>th</sup>.

The Jewish Temple in Jerusalem was fully destroyed by the Romans on August 10<sup>th</sup>, 70 AD after a several month siege. *Exactly* 2000 eclipse years from that date was August 21<sup>st</sup> 1968. 1968 was an exceptionally important year in the history of the world, for many reasons, not the least of which were the assassinations of both Martin Luther King and Robert Kennedy.

In the current 19-year period which contains the anniversary of the Crucifixion/Resurrection, a Tetrad of Total Lunar eclipses reappears in 2032 and 2033 and then in 2033 and 2034, there are also four lunar eclipses (though not all total) on the High Holy Days. 19 years after they did the same on the same days in 2014 and 2015. These upcoming lunar eclipses on holy days are:

April 14/15 2033 Passover Total Lunar  
October 8, 2033 Sukkot Total Lunar  
April 3 2034 Passover Penumbral Lunar  
September 28 2034 Sukkot Partial Lunar

This is essentially a Blood Moon Tetrad except two of the eclipses are not "Total".

The Passover eclipse of April 14 2033 would be 2,000 years and 11 days after the Crucifixion if the Lord died on April 3, 33 AD (the traditional date). It would also be exactly 168 years after the murder of Abraham Lincoln and 121 years since Titanic sank. The Passover lunar eclipse of April 3/4 2034 is on both the exact 2001<sup>st</sup> traditional anniversary of the Crucifixion and simultaneously 66 years after the murder of Martin Luther King.

The Tetrads of 2033 and 2034 sandwich a Spring Equinox Total Solar Eclipse, just as Tetrads sandwiched the Spring Equinox Eclipse of March 20 2015.