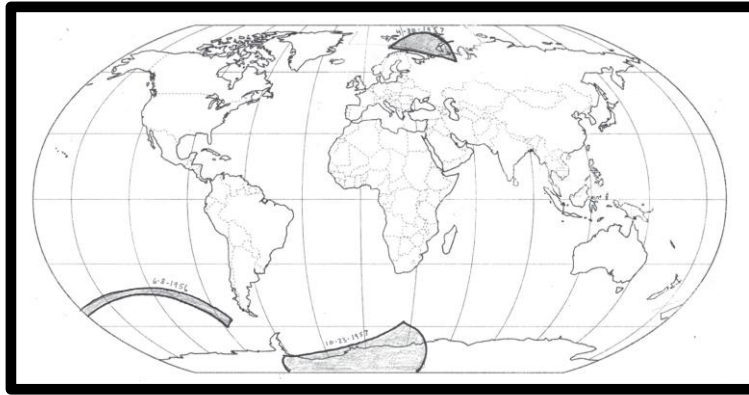


Chapter 12

# **All World Eclipses 1956 to 2014**



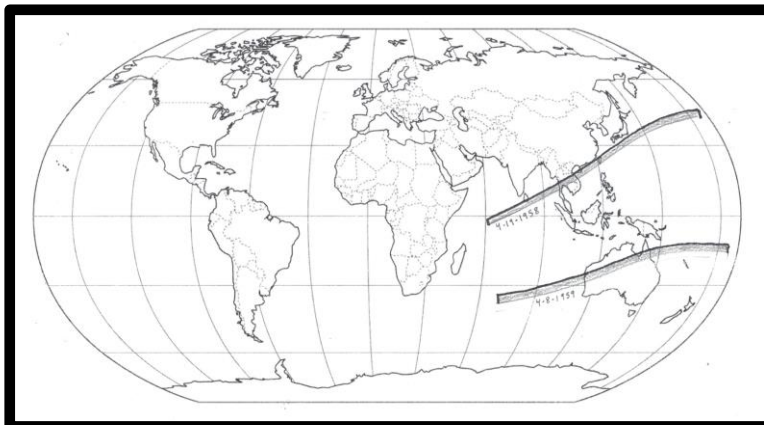
## 1956 to 1957 Not Much Going On

**1956 Jun 8 Total Deep South Pacific - Saros 146**

**1957 Apr 30 Ring of Fire Hitler Death Day -Saros 118**

**1957 Oct 23 Total Antarctica -Saros 123**

Proof that not every year something exciting is going on in the eclipse world. The Apr 30 1957 eclipse is the 12<sup>th</sup> anniversary of Hitler's suicide in Berlin.

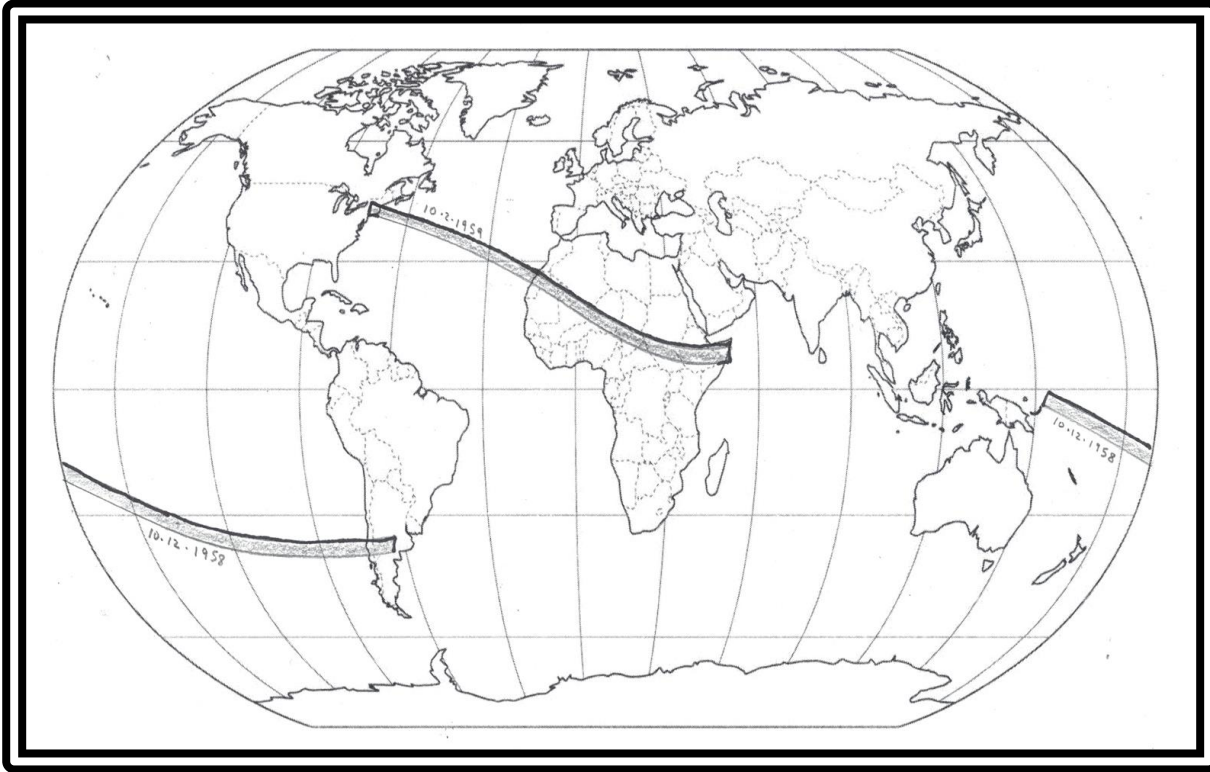


partial occurs 12-2-1956

## 1958 to 1959 Ring of Fires

**1958 Apr 19 Ring of Fire Darwin Death Day Vietnam/ Bangkok Two -Saros 128** On the 4-19 Hitler birthday/ Darwin Death Day Metonic, yet another Ring of Fire eclipse heads straight for Southeast Asia. You will likely not find anything quite so remarkable as this eclipse swarm. Yes, Bangkok is again in the path of Annularity for the fourth time in 10 years (odds for this happening randomly I calculate at about one in 500 million, but its unclear whether anyone has any clue how to calculate such a thing!). The path then proceeds once again over Angkor Wat in Cambodia and divides Vietnam for the fourth time in 10 years. Total annularity again in Taipei, Taiwan.

**1959 Apr 8 Ring of Fire Australia -Saros 138** Buddha's Birthday in Japan. The April 8 Metonic appears for the first time. It will appear in the USA 65 years later 4-8-2024.

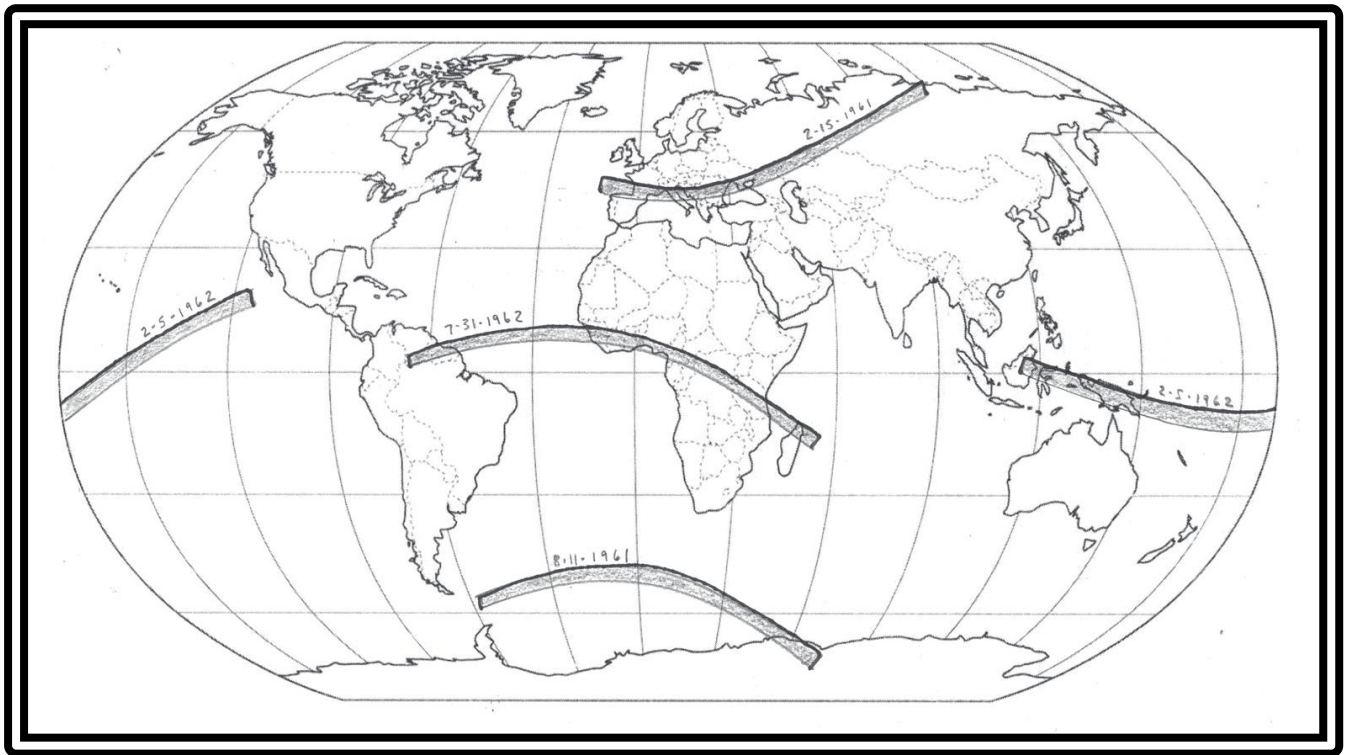


### 1958 and 1959 Total Eclipses (One lunar year apart)

**1958 Oct 12 Total Santiago Chile Single City -Saros 133** Every now and then an eclipse only impacts a single city. On the 466th anniversary to the day after Columbus discovers America a total eclipse travels the entire Pacific Ocean without touching major land mass to end at sunset over the city of Santiago, Chile. Eclipse occurred 5 weeks after Presidential elections (the first that featured candidacy of Salvador Allende, who would be overthrown by a CIA backed coup on 9-11-1973)

**1959 Oct 2 Boston Single City to Africa JFK Eclipse -Saros 143** Total Eclipse begins just west of Boston and gives that city a total solar eclipse for the first time since 1806 ( it won't have another until 2200) just as its most famous modern son is campaigning for the Presidency of the United States. Kennedy gives a speech that night on the campaign trail in Rochester, New York. It is the only major city in America to witness the eclipse. Kennedy would be elected President the following year on Nov. 8th, the day after a transit of Mercury was visible across the Sun's face from the western hemisphere. Something that occurs about 13 times a century. There are repeated cosmic associations in the 20th century that seem to bring associations of John F. Kennedy. Total Eclipse heads across the Atlantic before reaching Africa, bringing totality to Senegal and Mali (both of whose Presidents visited Kennedy in the White House, a first for either of those countries) The shadow crosses the continent. Saros 143 (Kennedy would turn 43 seven months after eclipse). Last total eclipse in Saros 143 occurred Oct 24 1995 on the 50<sup>th</sup> anniversary of the United Nations, over Vietnam and Southeast Asia.

*partials on 3-27-1960 and 9-20-1960*



## 1961 and 1962

**1961 Feb 15 Total Europe and USSR -Saros 120**

**1961 Aug 11 Ring of Fire Extreme South Atlantic -Saros 125**

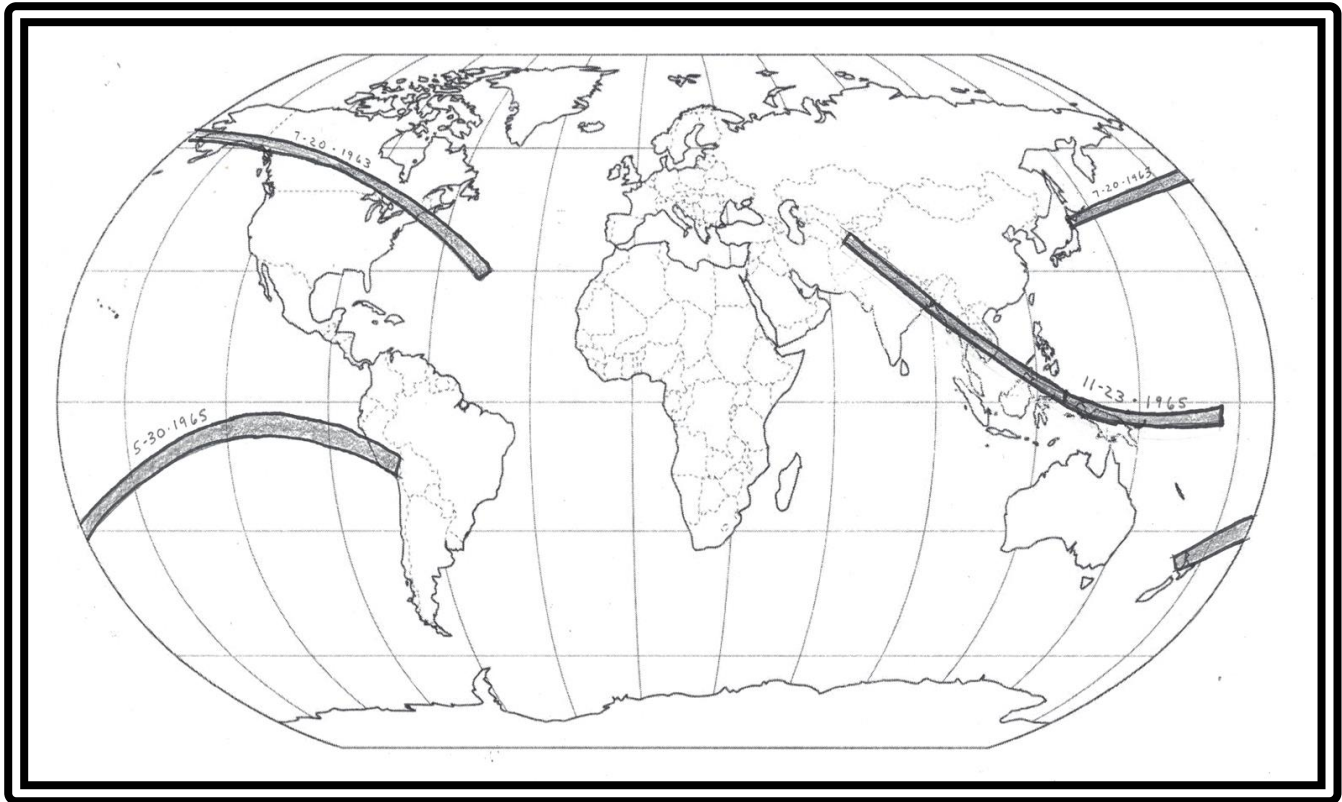
**1962 Feb 5 Total Borneo/ New Guinea -Saros 130**

**1962 Jul 31 Ring of Fire South America to Africa -Saros 130**

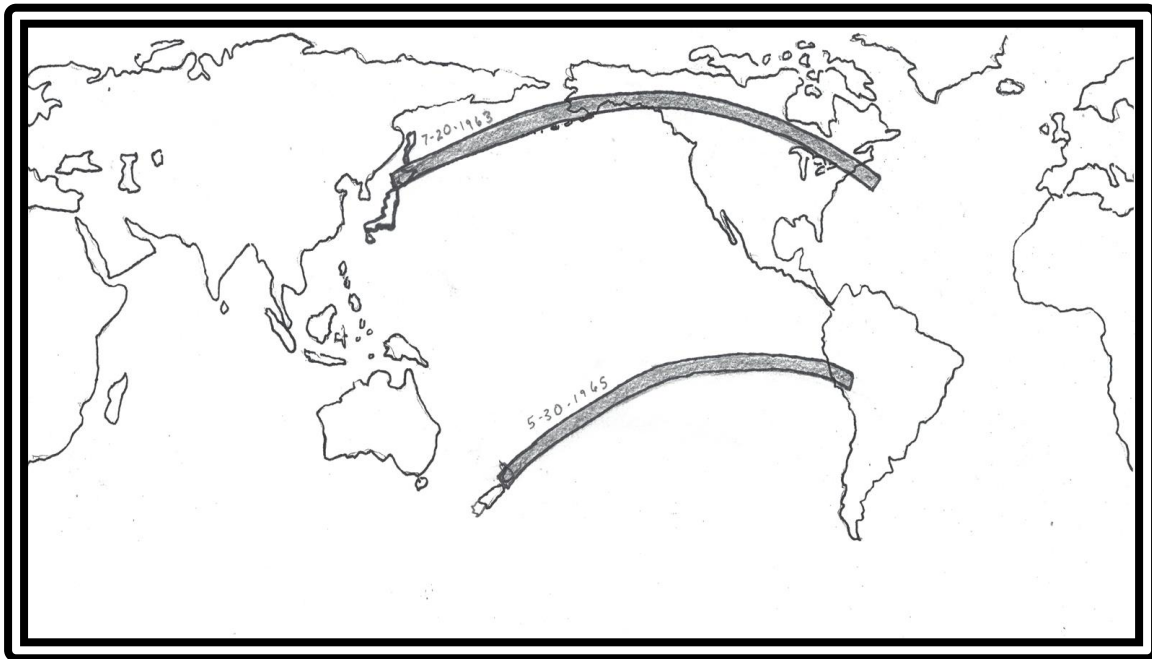
**1961 Feb 15 Europe and USSR Total (Saros 120)** Total solar eclipse begins at sunrise just off France, divides France, Italy, the Balkans and then bisects the USSR-- the amazing Saros 120. Great cities in totality include Bordeaux, Turin, Monaco, San Marino, Sarajevo, Sofia, Bucharest, Florence, Sevastopol, Mariupol, Volgograd, Ufa. Six months before beginning of construction of Berlin Wall (88% coverage in Berlin)

**1962 Feb 5 Borneo/ New Guinea Total (Saros 130)** It sure seems like New Guinea had a lot of eclipses. There are five in the island group between 1944 and 1965. This 1962 Feb 4 Total eclipse goes directly over the site of Kolombangara Island, where JFK's boat PT 109 sank almost 19 years before on the night of August 1 and 2<sup>nd</sup>, 1943.

Saros 120 and Saros 130 have prominent positions in Spring Equinox Metonic (2033 and 2034)



1963 to 1965 Death of JFK/ War in Vietnam (above)



1963 and 1965 Pacific View (above)

**1963 Jul 20 Japan to USA (Maine) Total JFK Premonition -Saros 145**

**1965 May 29/30 JFK Birth Metonic Total - Saros 127**

**1965 Nov 22/23 JFK Death Day Metonic Vietnam Ring of Fire -Saros 132**

**Jul 20 1963 Total Eclipse Only Maine (Saros 145)** 6 years to the day before Apollo 11 astronauts stepped on the moon. 39 days before the March on Washington that featured both Martin Luther King and Bob Dylan. Dylan's "Blowin' in the Wind" was climbing the pop charts at the time (Peter, Paul and Mary version) and was at number 14. It would eventually reach number 2 on August 14.

The Eclipse occurs 125 days before the assassination of John F. Kennedy. It occurs 18 years (minus 17 days) after the twin atomic bombs were dropped by the US on Japan—this eclipse begins in Japan (the island of Hokkaido,) bisects the six-year-old state of Alaska before cutting across Canada. It touches the USA only in Maine, with totality in Bangor. The last point of land touched in North America is Bethel's Point, Nova Scotia. Bethel means "house of God" in Hebrew, where both Abraham and Jacob built altars in the Bible's Book of Genesis.

Four months later, John F. Kennedy would be shot dead in Dallas Texas (35 % coverage). His hometown Boston saw 95% coverage. 97+% totality at Bush family haven of Kennebunkport, Maine. Washington DC had 77% coverage. Eclipse marks the beginnings of the 60's, as far as cultural and solar eclipse associations go. The first Beatles record to be released in America happened two days later on Jul 22 1963. It was "Please Please Me". The decade culturally will end 7 eclipse years later with the March 7, 1970 USA eclipse. Saros 145 appeared at the Atom Bomb eclipse of July 9 1945, Liverpool 1927 and again for USA Divided Aug 21 2017 ,then with coda at Beijing/Pyongyang/Tokyo on Sep 2 2035

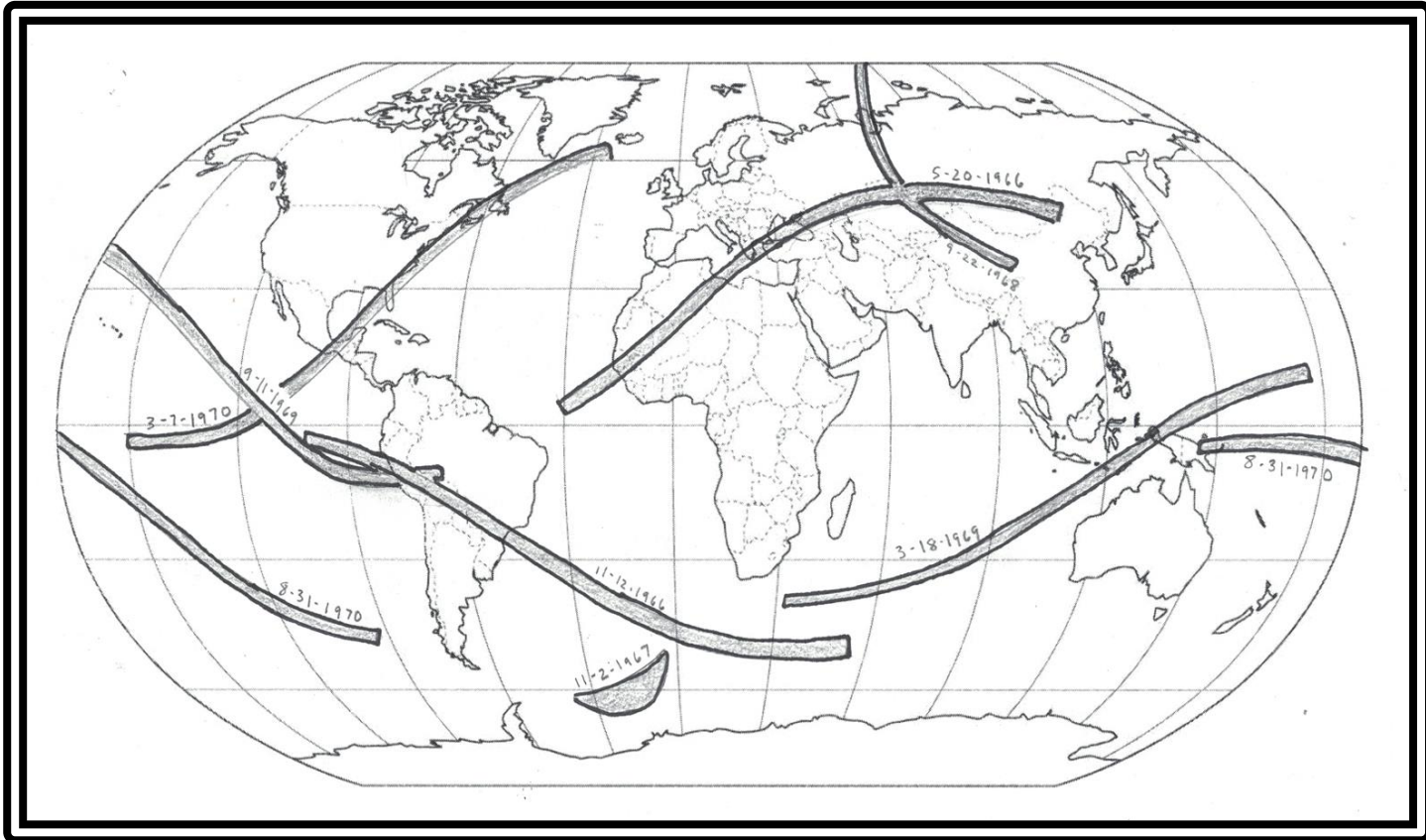
**1965 May 29/30 JFK Birth Metonic New Zealand to Peru Total (Saros 127)** Only the tiniest portion of extreme northern New Zealand sees totality at sunrise 48 years and one day after the birth of John F. Kennedy. JFK was born on May 29 1917 in Brookline, Massachusetts. The eclipse travels only over a couple of small islands as it crosses the Pacific to end just after reaching Peru at sunset. It shadows the Nazca Lines (75% coverage at sunset). This is the first complete eclipse on earth after the murder of JFK on 11-22-1963. Eclipse occurs approximately the same time the author of this work's family emigrated to New Zealand where he was conceived approximately Sep 1966 in Wellington.

**1965 Nov 22/23 JFK Death Metonic Vietnam Ring of Fire (Saros 132)** Essentially the two year anniversary of the execution of JFK. Due to time zones and Metonic reality it is typically marked as Nov 23 ( UCT) , but it was Nov 22 in USA when eclipse began. A ring of Fire Eclipse again heads to Southeast Asia from Turkmenistan across Afghanistan and Pakistan, Kashmir into Thailand, Cambodia and Vietnam (their 6th solar eclipse in 17 years) then out through Indonesia and Asia. By the end of 1965 more than a half million US troops were in Vietnam. In the week before the eclipse 240 US servicemen had been killed, the most ever up until that time.

***A partial solar eclipse occurs 1-14-1964 MLK Birthday Metonic, the day before his 35<sup>th</sup> birthday, the first solar eclipse after JFK assassination and two weeks after Dec 30 1963 total lunar eclipse over USA which occurred 38 days after the assassination.***

***Also partials on 6-10-1964, 12-4-1964***

## 1966 to 1970 Solar Eclipses



1966 May 20 Ring of Fire Columbus Death Day Africa/ Greece/ USSR -Saros 137

1966 Nov 12 Total Peru and South America -Saros 142

1967 Nov 2 Total Antarctic Ocean -Saros 152

1968 Sep 22 Total Fall Equinox USSR to China -Saros 124

1969 Mar 18 Indian Ocean/ New Guinea -Saros 129

1969 Sep 11 Ring of Fire Pacific to Peru -Saros 134

1970 Mar 7 Total Mexico/USA/Canada -Saros 139

1970 Aug 31 Ring of Fire New Guinea to South Pacific ( Saros 144)

A six-year span from 1965 to 1970 saw complete solar eclipses in each of the six years, the first time that had happened since World War One era 1914 to 1919.

**1966 May 20 Ring of Fire Columbus Death Day Africa/ Greece/ USSR (Saros 137)** Very nearly a total, with greater than 99% coverage on the centerline. It occurred on the 460<sup>th</sup> anniversary of the death of Christopher Columbus. Annularity over Tripoli Libya, Athens Greece and Istanbul Turkey. Sevastopol and Astrakhan in USSR. Ends over China.

**1966 Nov 12 Peru and South America Total (Saros 142)** One of three eclipses in Peru 1965 to 1969.

**1967 Nov 2 Antarctic Ocean Total (Saros 152)** One lunar year later, the only complete eclipse of 1967. 1967 saw the Blood Moon Lunar Tetrads surrounding the six-day war in Jerusalem.

**1968 Sep 22 Fall Equinox USSR to China Total (Saros 124)** The last complete eclipse of Saros Cycle 124, which brought the World War One eclipse of 8-21-1914. A month after The Soviet Union invades Czechoslovakia, an Autumn equinox Eclipse bisects the USSR from north to south and ends in China. Eclipse occurred one week after USSR performed the first orbit of the moon with unmanned space craft. The craft was recovered in the Indian Ocean the day before eclipse.

**1969 Mar 18 Indian Ocean/ New Guinea Ring of Fire (Saros 129)** The seemingly endless New Guinea eclipses keep on coming!

**1969 Sep 11 Pacific to Peru Ring of Fire (Saros 134)** The 9-11 Metonic arrives on the last of the Peruvian three eclipse swarm of 1965 to 1969. It will appear once more in 1988 Mogadishu sunrise, Saros 134, note resemblance of path to 10-14-2023 American Ring of Fire

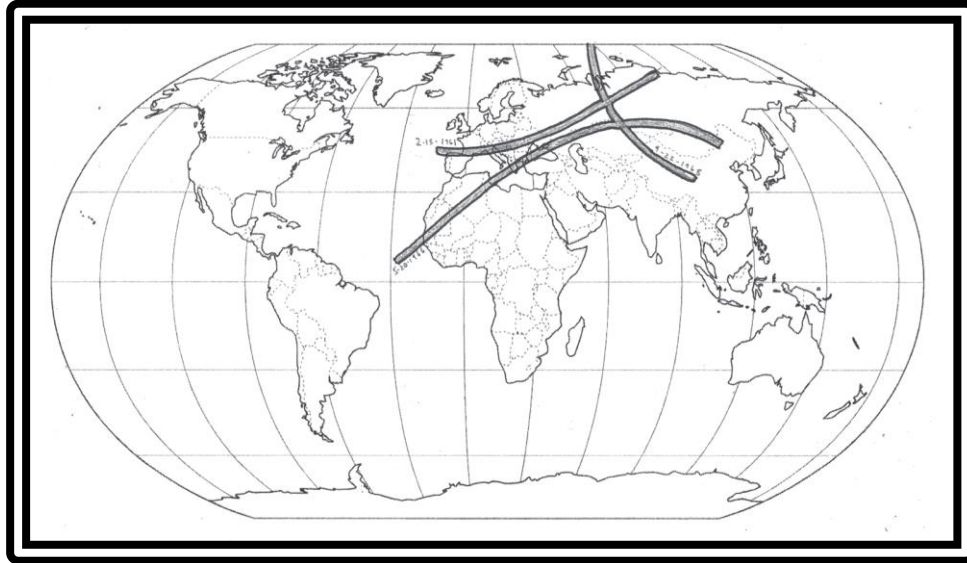
**1970 Mar 7 Mexico/USA/Canada Total (Saros 139)** Total Eclipse. The southeastern seaboard had mostly cloudy weather though Florida remained fair. 93% totality at Cape Canaveral 230 days after men landed on the moon. Totality at Charleston South Carolina, the greatest Slave Port in North America. 95 % totality in Washington D.C., 96% in New York and 97% in Boston. The end of the sixties, eclipse wise. Nine days after beginning of US bombing of Cambodia, which killed more than 100,000. The Beatles announced their break-up a month later. Eclipse is in a Hepton pair with July 20 1963 USA eclipse. Closer look in USA section.

**1970 Aug 31 New Guinea Sunrise Ring of Fire (Saros 144)** As the title suggests, yet again in New Guinea! The island, which is slightly larger than Texas, receives 6 complete eclipses between 1955 and 1970, and 9 complete eclipses between 1944 and 1984!

*partial eclipses occur on 5-9-1967, 3-28-1968, 2-25-1971, 7-22-1971, 8-20-1971*



## Focus on USSR Eclipses



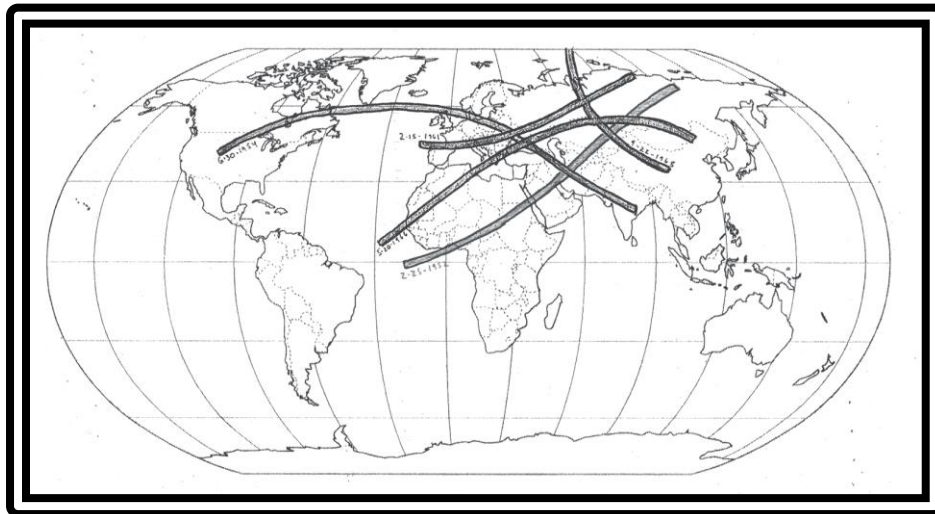
### 1961 to 1968 USSR Octon Cross (above)

1961 Feb 15 Total France through USSR -Saros 120

1966 May 20 Ring of Fire Columbus Death Metonic- Saros 137

1968 Sep 22 Total Fall Equinox USSR to China ( Saros 124)

A double Octon is 8 eclipse years or 2776 days. That is 7 years, 7 months and 7 days in solar years.



### Full USSR Swarm 1952 to 1968 (above)

1952 Feb 25 Africa/ Iran/ USSR Total (Saros 139)

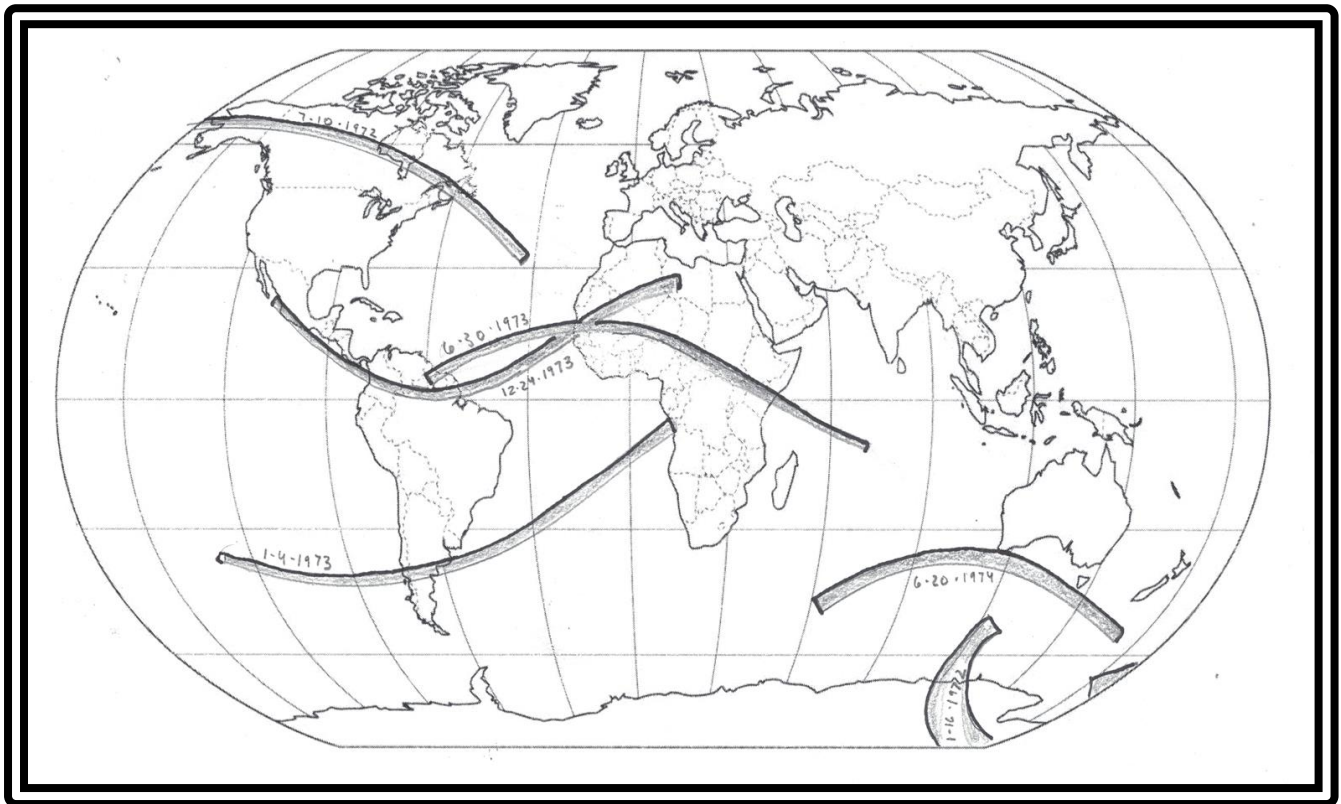
1954 Jun 30 USA to USSR Total (Saros 126)

1961 Feb 15 France through USSR Total (Saros 120)

May 20 1966 Columbus Death Metonic Ring of Fire (Saros 137)

Sep 22 1968 Fall Equinox USSR to China Total (Saros 124)

Four of the five complete eclipses in the 16-year period are totals. Includes Iran Shahrud Tav. By comparison, in 52 years between 2008 and 2060, the former USSR receives no total eclipses.



## 1972 to 1974 Last eclipses of Summer Solstice Eve Metonic

1972 Jan 15/16 Ring of Fire MLK Birthday Metonic Antarctica -Saros 121

1972 Jul 10 Total "You're So Vain" Nova Scotia -Saros 126

1973 Jan 4 Ring of Fire South America to Africa -Saros 131

1973 Jun 30 Total South America through Heart of Africa -Saros 136

1973 Dec 24 Ring of Fire Christmas Eve Central America to Africa -Saros 141

1974 Jun 20 Total Eclipse Island Summer Solstice Eve -Saros 146

The sixties are over and a new world struggles to re-shape itself. Africa will be at the epicenter of a great eclipse swarm in the mid-1970's.

On a lighter note, two very famous songs address eclipses in this time frame. "You're so Vain" by Carly Simon goes to number one in 1972 while name-checking the 1972 Nova Scotia Total Eclipse.

Also, Pink Floyd's song "Eclipse" finishes up the album "Dark Side of the Moon", released Mar 1 1973. It goes on to become one of the biggest selling pieces of music in human history.

*And all that is now*

*And all that is gone*

*And all that's to come*

*And everything under the sun is in tune;*

*But the sun is eclipsed by the moon.*

**Eclipse.** Roger Waters

**1971 Jan 15/16 MLK Birthday Metonic Antarctica Ring of Fire (Saros 121)** Notably on the Martin Luther King Birthday Metonic. Eclipse begins on January 15<sup>th</sup> local time just before midnight in the Antarctic regions where daylight lasts nearly all day and extends into full eclipse on January 16 local time. The eclipse occurs on what would have been Martin Luther King's 42<sup>nd</sup> birthday back in the USA. He had been murdered less than four years prior. There had also been a partial solar eclipse on his birthday Metonic four years prior to his death on Jan. 14/15 1964, the first solar eclipse on earth after JFK assassination. The 1972 eclipse is the first complete eclipse to land precisely on MLK birthday in centuries. Very few likely witnessed this eclipse.

**1972 July 10 You're So Vain Nova Scotia Total (Saros 126)** July 10 1972 sees only one total solar eclipse. It travels across the extreme northern latitudes of USSR and Canada. The eclipse is notable for inspiring the lyric Carly Simon's number one hit "You're So Vain" ( also one of the biggest hits of the entire decade of the 1970's). The lyric says famously, "*Then you flew your Learjet up to Nova Scotia to see a total eclipse of the sun*"

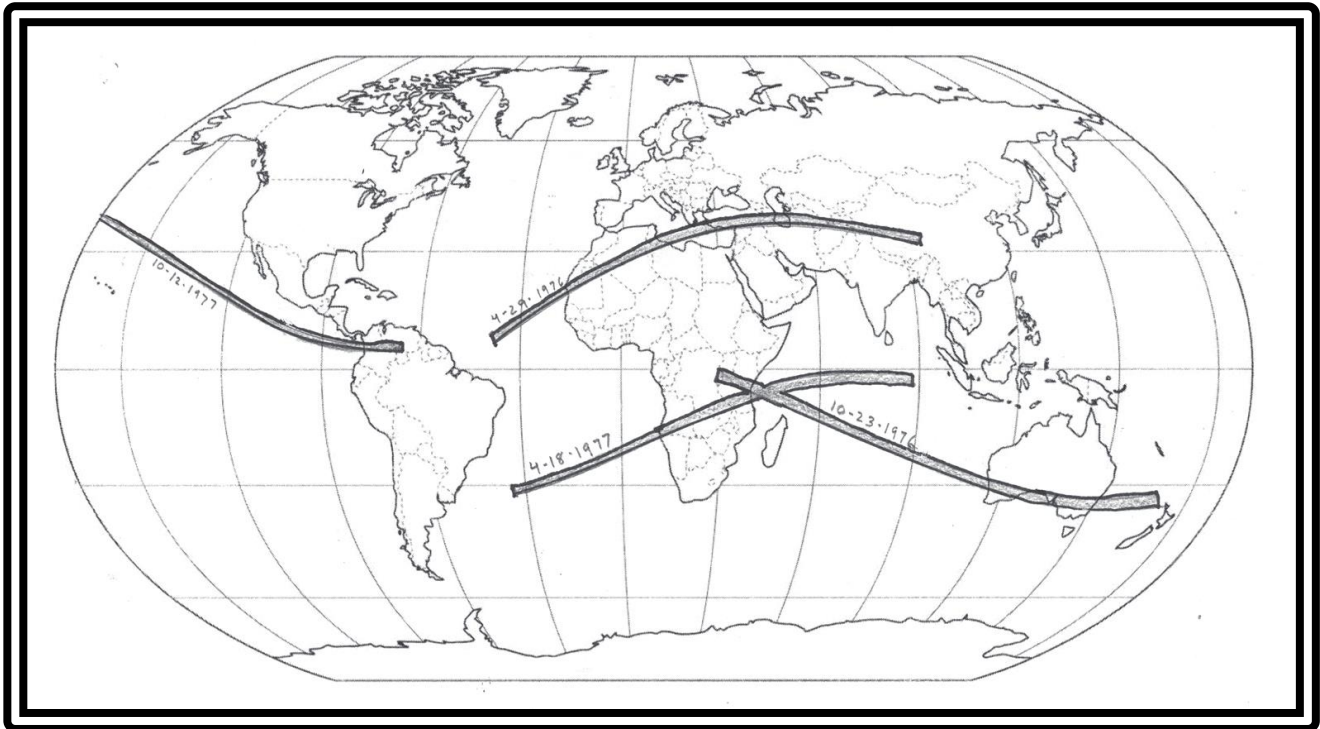
**1973 Jan 4 South America to Africa Ring of Fire (Saros 131)** Annularity ends just a few miles from African Coast of Gabon.

**1973 Jun 30 South America through Heart of Africa (Saros 136)** Eclipse begins in Guyana just south of Georgetown. 99% coverage at famous massacre/mass suicide site of Jonestown, which occurred 5 years later on 11-18-1978 and killed 909 people. Crosses Atlantic and Africa. At 7 minutes and 4 seconds, this was the last total eclipse to last more than 7 minutes until 2150. It was a carefully studied eclipse. A specialized commercial cruise by the S.S. Canberra traveled from New York City to the Canary Islands and Dakar, Senegal, observing totality in the Atlantic. That cruise's passengers included notables in the scientific community such as Neil Armstrong, Scott Carpenter, Isaac Asimov, Walter Sullivan, and a 15-year old Neil deGrasse Tyson. The great Saros 136.

**1973 Dec 24 Christmas Eve America to Africa Ring of Fire (Saros 141)** Eclipse occurs on Anthony Fauci's 43<sup>rd</sup> birthday. It is the third eclipse to connect South America and Africa in 1973. Annularity in Central America and Colombia including Bogotá, southern Venezuela, Brazil, Guyana again. Path crosses ocean and touches Cape Verde islands. It intersects the Jun 30 1973 path outside of Mauritania. including the capital city Nouakchott. Then to Mali and Algeria. The duration of annularity at maximum eclipse was 12 minutes, 2.37 seconds. It would be the last eclipse with duration over 12 minutes until 3080 AD.

**1974 Jun 20 Eclipse Island Solstice Eve Total (Saros 146)** The last eclipse of the Summer Solstice Eve Metonic of 1955 to 1974. This is the only complete eclipse on planet Earth between Christmas 1973 and April 29, 1976. During a time frame of 679 days, no land on Earth experiences a complete eclipse except these few thousand square miles of the extreme corner of Southwest Australia several hundred miles south of Perth. The last land touched is Eclipse Island, named in 1791 by George Vancouver who observed a partial solar eclipse there. 1974 to 1975 is perhaps the quietest time for eclipses in this study. The next total occurs on Oct 23 1976. It passes just north of this one, bringing 97% coverage to Eclipse Island.

*Partials occur on 12-13-1974, 5-11-1975, and 11-3-1975*



## 1976 and 1977 Dar Es Salaam Cross/ Beginning Hitler Death Eve Metonic

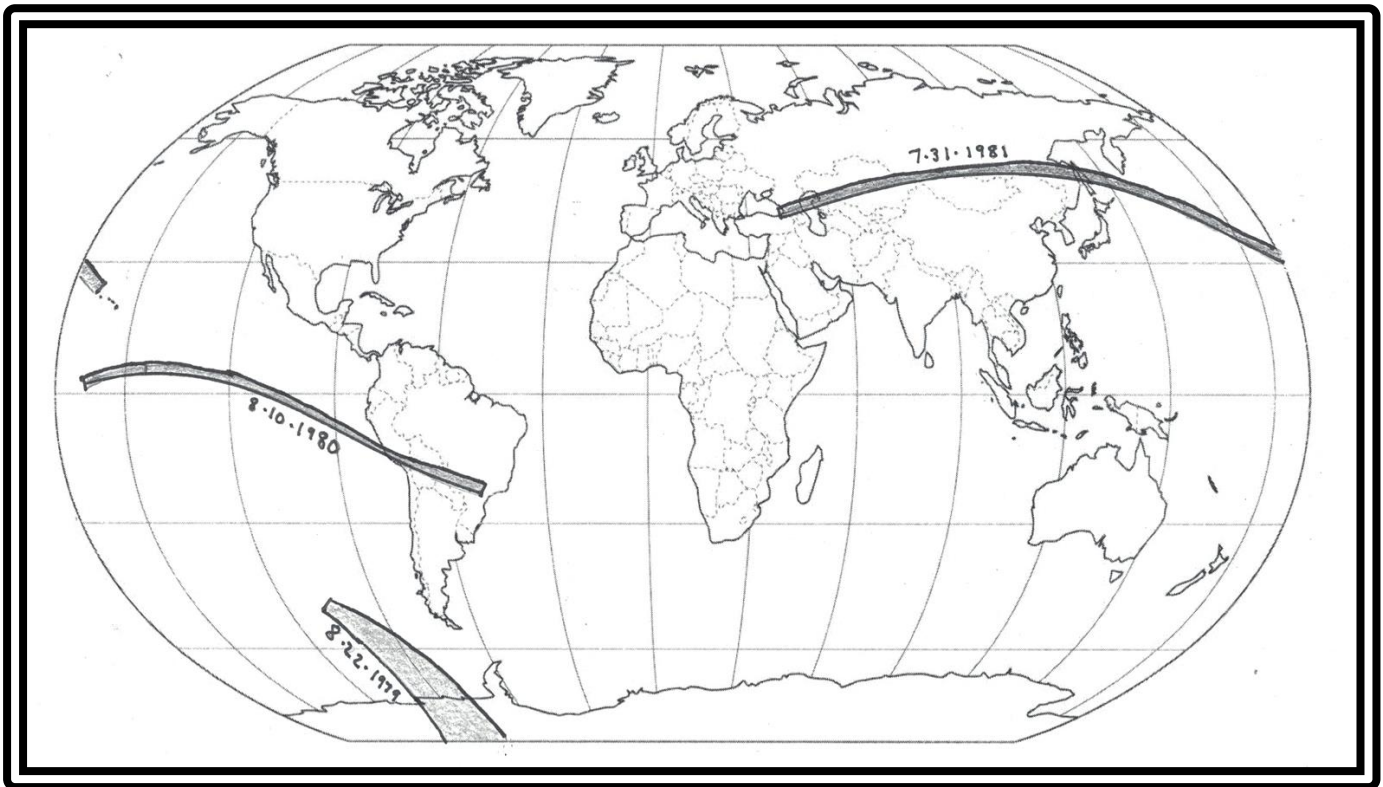
**1976 Apr 29 Third Mauritania in 3 years/ Mideast to China Ring of Fire (Saros 128)** The Hitler Death Metonic (4-30) slips backward a day 19 years after an Apr 30 1957 eclipse. West coast of Mauritania Africa gets its third complete eclipse in 3 years (it had two in 1973). Tripoli, Libya sees total annularity 3 weeks after student protests erupted on April 7 1976 which led to public executions a year later. The path crosses Mediterranean, bisects Turkey and Southern Soviet Republics, ends in China.

**1976 Oct 23 Dar Es Salaam Africa to Australia Total (Saros 133)** Interesting path connects city of Dar Es Salaam, Tanzania ("place of peace" ) with Melbourne Australia on October 23 1976.

**1977 Apr 18 Dar Es Salaam Ring of Fire (Saros 138)** The 4-19 Darwin Death/ Hitler Birth Day Metonic slips backwards to 4-18 for the first time since 1931 after two eclipses on 4-19 date. The only major city to experience annularity in the eclipse is Dar Es Salaam, Tanzania-- which was just eclipsed 6 months before--Tanzania adopts its modern constitution a week later on Apr 25 1977.

**1977 Oct 12 Columbus Day in Colombia Total (Saros 143)** Almost no country in totality except Colombia, the only nation on earth named after Columbus, on the 485th anniversary of the discovery of the New World on 10-12-1492. Totality in Bogota. The eclipse accompanied national civil strife. This is last complete eclipse on earth before 1979 Mt. Saint Helens Eclipse, and had 17% totality at Mount Saint Helens. Maximum eclipse of the 1977 eclipse occurred at 123 degrees west longitude, within a single degree of the crater of Mount Saint Helens and Seattle's longitude (122 degrees). Eclipse ended just east of Puerto Ayacucho ( "soul or spirit" in native tongue) in Venezuela.

*Partials occur on 4-7-1978 and 10-2-1978*



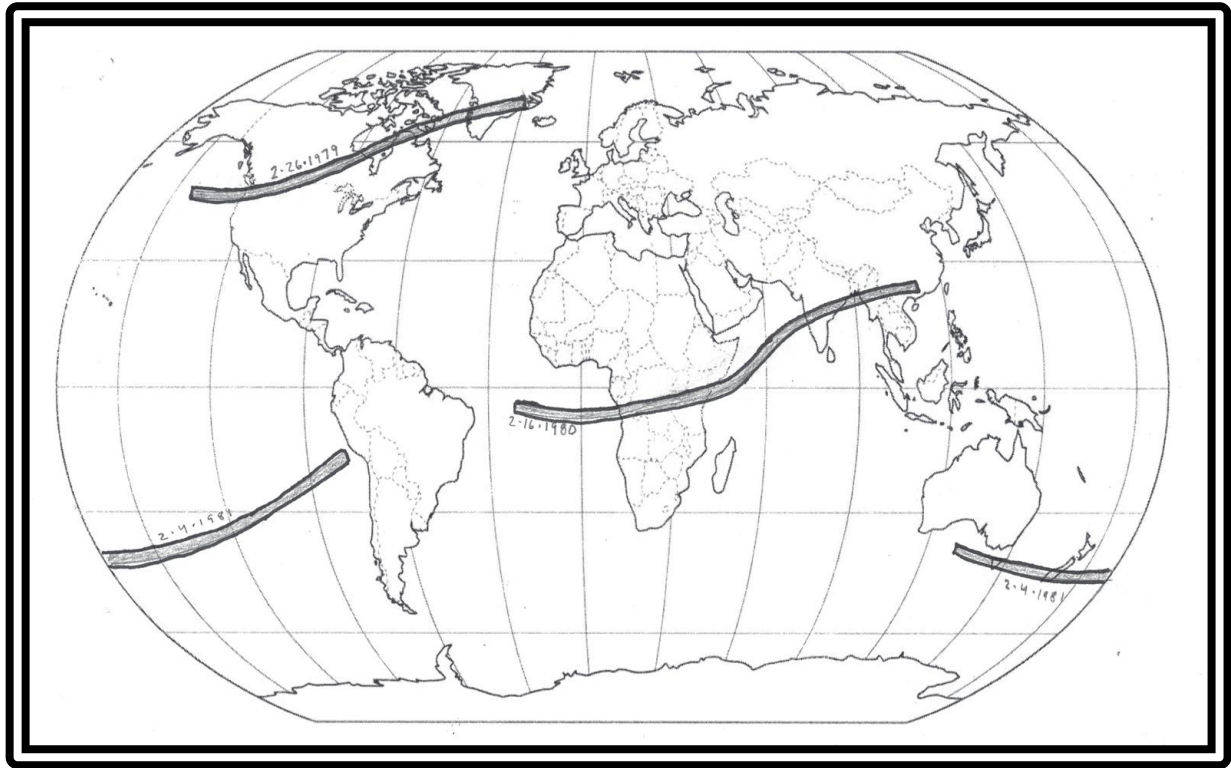
### 1979 to 1981 Triad One—August Lunar Years

For comparison's sake, we separate the two Lunar year Triads of 1979 to 1981. The "August" one is composed of two annulars and a total, each separated by exactly one lunar year.

**1979 Aug 22 Antarctica Ring of Fire (Saros 125)** The 8-21 Metonic leaps a day forward. It returns to its 8-21 position for the USA Divided Aug 21 2017 eclipse. Two days after Bob Dylan releases "Slow Train Coming", his first Gospel Album (and 19th Studio record) on August 20th, 1979 (a date also on the Aug 21 Metonic)

**1980 Aug 10 Temple Destruction Metonic South America Ring of Fire (Saros 135)** The 1910<sup>th</sup> anniversary of the final destruction of the Hebrew Temple in Jerusalem. From Pacific across Peru, Bolivia and into Brazil, total annularity in La Paz (The Peace), Ends just before Sao Paulo, Brazil.

**1981 Jul 31 USSR Judgment Total (Saros 145)** The last decade of the Soviet Union's power begins with cross-country eclipse roughly defining its southern border that touches no other nations. Seven years later, Lithuania will secede. Within a decade both Georgia and Kazakhstan, where eclipse bisects, will declare their independence. Another cross-country eclipse defines the northern border in 1990. USSR will officially dissolve on December 26, 1991 (12-26 is also a current Metonic date). The last complete eclipse on earth for 680 days, until Jun 11 1983.



## 1979 to 1981 Triad Two-Brave New World-February

Notice that exact lunar years separate the three eclipses.

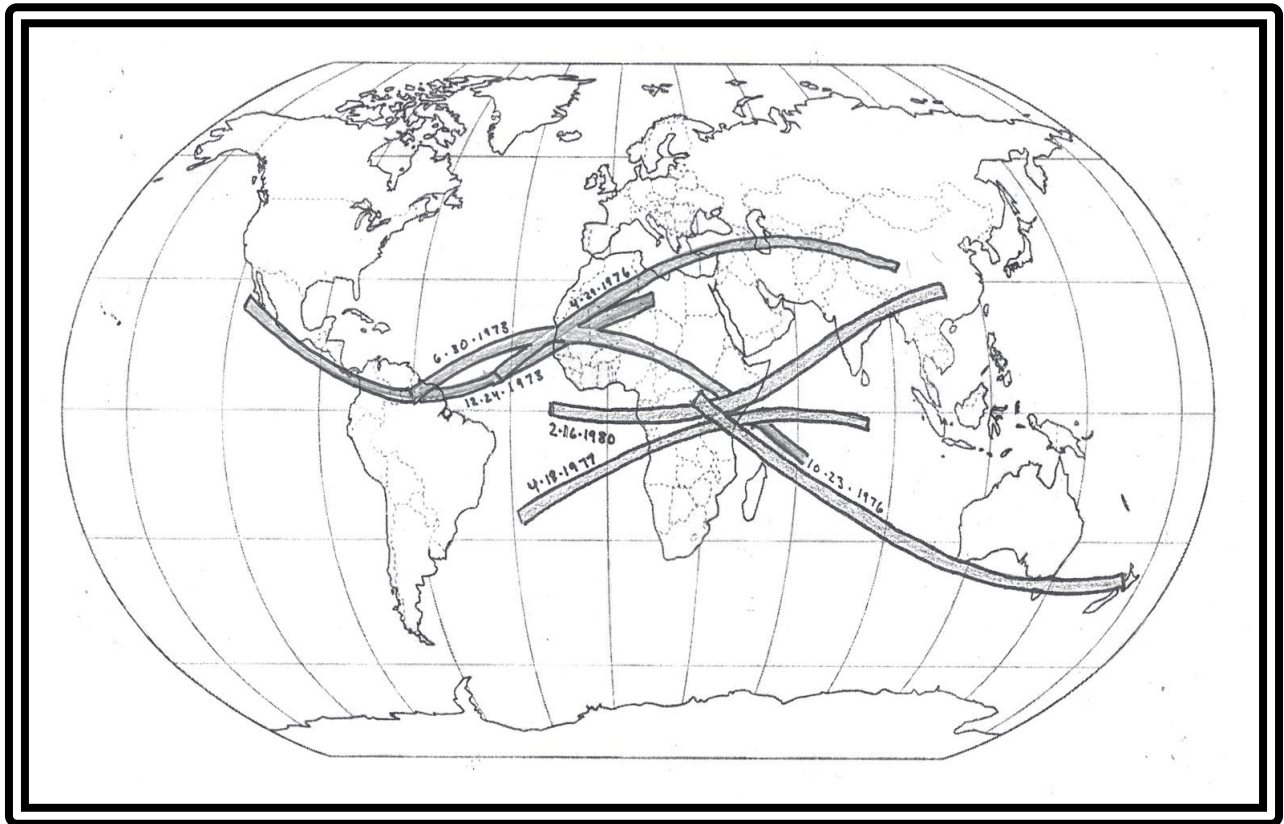
**1979 Feb 26 Total Brave New World Microsoft/ Mount Saint Helens Eclipse Total (Saros 120)** Totality over Mount Saint Helens. 388 days before she awoke with an earthquake on the Spring Equinox of March 20 1980, and 447 days before she exploded to the due north in the direction of Seattle and Microsoft on May 18 1980 in the largest volcanic eruption in modern North American History. Eclipse occurs seven weeks after Bill Gates and Paul Allen move Microsoft Corporation to Gate's hometown of Bellevue, Washington (99.64% Totality) The beginning of the technological era. The final era of the American Empire and the creation of the last world empire of the machine. The number one song in America was "Do you think I'm Sexy" by Rod Stewart. The number one show was "Three's Company". Salem and Portland Oregon in Totality. Crosses 5 northwestern states before bisecting Canada (Totality in Winnipeg). Saros Cycle 120. See USA eclipses.

**1980 Feb 16 Africa/ Tanzania's third in 3 years Total (Saros 130)** One lunar year after USA eclipse, Totality crosses Africa from the slave coast across Africa, bisects India (centerline of totality in Brahmapur—"abode of Brahma") and Myanmar before ending in China . Part of Dar Es Salaam swarm.

**1981 Feb 4 Tasmania/ New Zealand Ring of Fire ( Saros 140)** Annularity in Hobart, Tasmania.

*Partials occur on 1-25-1982, 6-21-1982, 7-20-1982, and 12-15-1982*

## Focus on 1973 to 1980 African Hepton Cluster

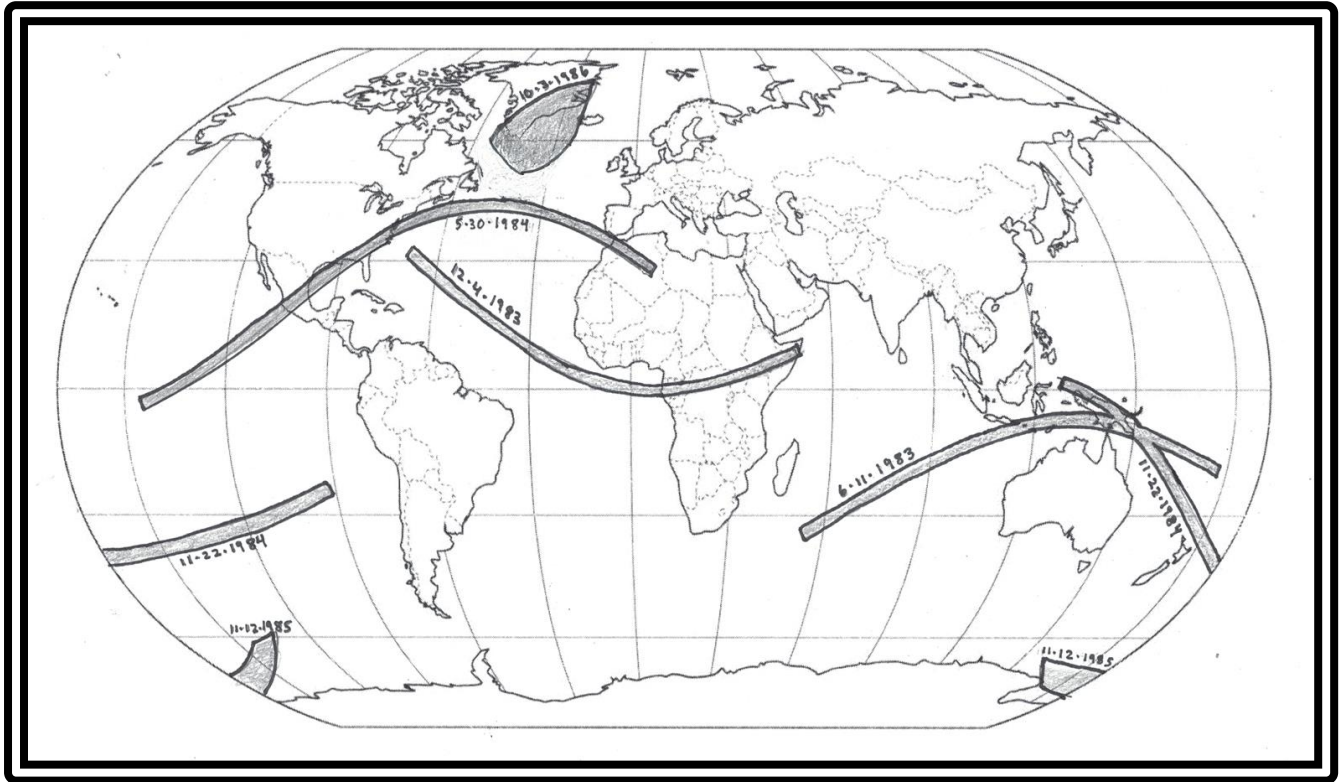


### 1973 to 1980 African Hepton Cluster

- 1973 Jun 30 South America through Heart of Africa (Saros 136)**
- 1973 Dec 24 Christmas Eve America to Africa (Saros 141)**
- 1976 Apr 29 Third Mauritania in 3 years/ Mideast to China Ring of Fire (Saros 128)**
- 1976 Oct 23 Dar Es Salaam Africa to Australia Total (Saros 133)**
- 1977 Apr 18 Dar Es Salaam Ring of Fire (Saros 138)**
- 1980 Feb 16 Africa/ Tanzania's third in 3 years Total (Saros 130)**

In the space of 7 eclipse years (2422 days) two clusters occur over Africa. One (between 1973 and 1976 over the course of 1033 days) has an epicenter on the western edge of the nation of Mauritania, near capital of Nouakchott. The other (between 1976 and 1980 over 846 days) has an epicenter near the capital of Tanzania, Dar Es Salaam.

The 6-30-1973 and 2-16-1980 solar eclipses (Saros 136 and 130) are a matching Hepton Pair exactly seven eclipse years apart, both occurring on Saturday. Together they bookend the larger cluster. These two eclipses also cross each other, in the Indian Ocean several hundred miles east of Kenya.



## 1983 to 1986 Last JFK Metonic/ New Guinea Cross

1983 Jun 11 Total New Guinea- Saros 127

1983 Dec 4 Ring of Fire Africa -Saros 132

1984 May 30 Ring of Fire JFK 67<sup>th</sup> Birthday USA -Saros 137

1984 Nov 22 Total JFK 21<sup>st</sup> Anniversary of Death Day New Guinea -Saros 142

1985 Nov 12 Total Antarctica -Saros 152

1986 Oct 3 North Atlantic -Saros 124

**1983 Jun 11 New Guinea Total (Saros 127)** Eclipse over capital of Port Moresby, New Guinea, part of New Guinea Cross. Totality also in Java, Indonesia.

**1983 Dec 4 Africa Ring of Fire (Saros 132)** Ring of Fire crosses continent to end precisely at sunset over the easternmost point of the continent, Ras Hafun, Gobolki Bari, Somalia.

**1984 May 30 JFK 67<sup>th</sup> Birthday USA Ring of Fire/ Almost Total ( Saros 137)** Almost as close to a total eclipse as you can get without being a total, featuring a peak of 99.77% in Virginia. JFK Birthday Metonic. His actual birthday is May 29 but that's how Metonic works, sliding on the hours around a date. He would have been celebrating his 67th Birthday 12 hours before the eclipse began if he'd not been murdered 21 years before. Besides 1984 was a leap year, and if we hadn't leapt 12 weeks before, it would be May 29.

Reagan and George Bush in the White House. 95% coverage in Washington DC.



Ring of Fire begins in Mexico and Crosses eastern USA before heading to Africa. Perfect Annularity in Atlanta, Martin Luther King's home, with 99.5 % coverage exactly 5900 days after he was murdered on 4-4-1968 in Memphis (85% coverage). He would have been 55 in 1984.  
90% in JFK's birthplace of Brookline Massachusetts, 80% in Dallas, Texas, where he was murdered.  
93% in New York City.

Perfect annularity along thin path in the Deep South goes directly over New Orleans, birthplace of Lee Harvey Oswald and site of famous JFK conspiracy trial at 99%. Exits USA at Assateague Island, Maryland. The eclipse crosses the Atlantic Ocean and enters Africa over Casablanca ("white house") Province of Morocco, just north of Marrakesh ("Land of God") --ends in desert of the Sahara

**Nov 22 1984 JFK 21<sup>st</sup> Anniversary of Death Day/ New Guinea Cross Total (Saros 142)** Just as the solar eclipse prior brings the JFK birthday Metonic for the last time, so the 21st anniversary of the Kennedy Assassination is cosmically acknowledged on 11-22-1984. These linked 5-30 and 11-22 eclipses are the only two solar eclipses of 1984, and the last over inhabited terrain until 1987. The only nation in the 11-22 path is Papua New Guinea, with totality in the capital of Port Moresby for the second time in a year and a half.

New Guinea? One of the most famous war stories in American history involves the heroics of young Lieutenant John F. Kennedy, who miraculously helped save his crew after their small boat was rammed by a Japanese destroyer on August 3 1943 in the Solomon islands of New Guinea, which is inside the eclipse path of the Nov 22 1984 eclipse. The story of JFK's heroism as he helped save his shipwrecked crew was enshrined in both book and movie, and Kennedy's indisputable bravery helped propel him to the Presidency 20 years later.

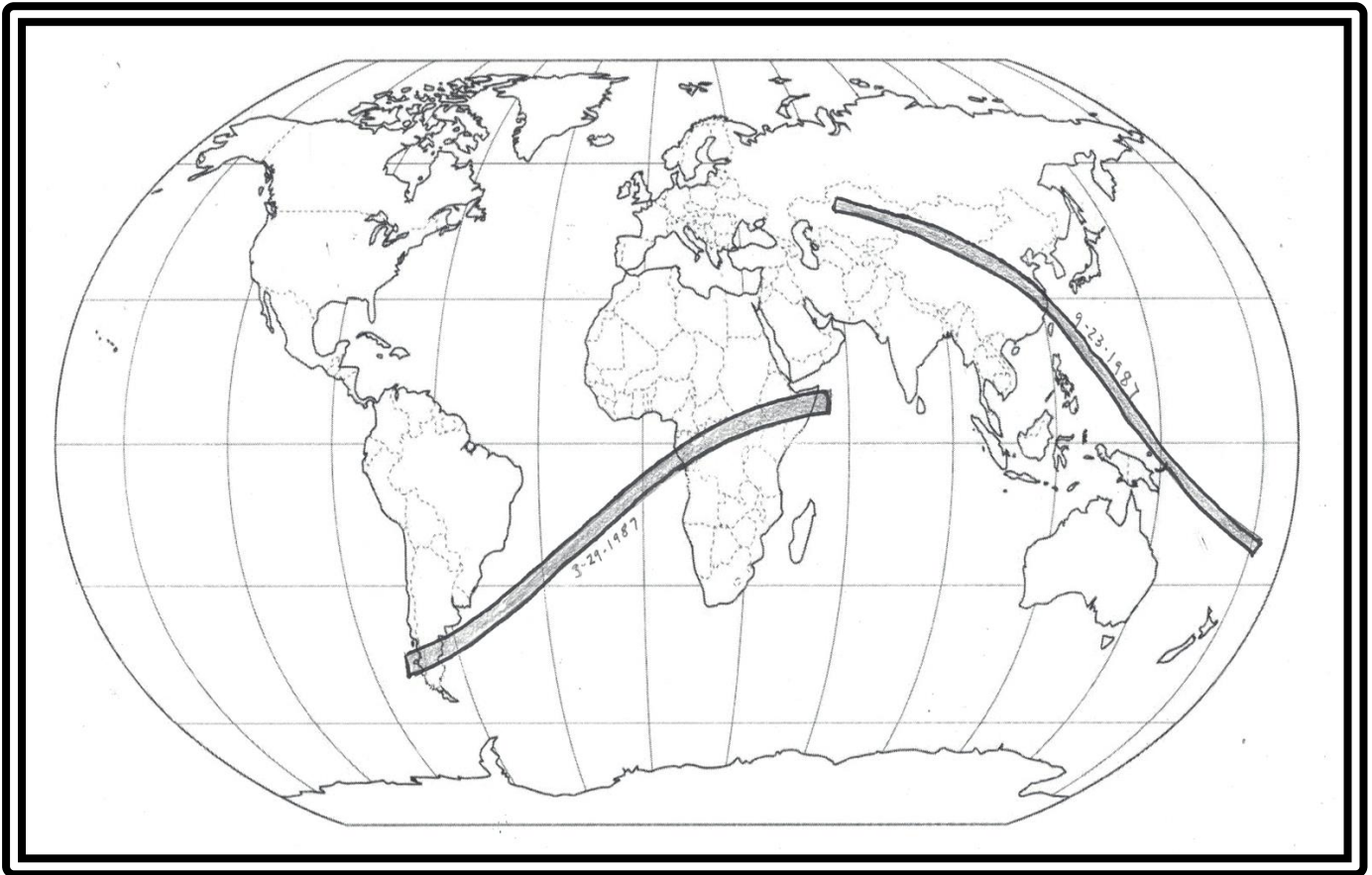
An extremely powerful Nor'easter began impacting the United States' November 22, 1984, beginning unusually south between Florida and Cuba. The Presidential elections happened 16 days prior, on Nov. 6, one of the largest landslides in US history, with Reagan/Bush defeating the Walter Mondale ticket 525 electoral votes to 13, even winning JFK's home state of Massachusetts with 51.22 percent of the vote. The number one song in America was "Wake me up before you Go Go" by Wham. 1984 would be the last year that the JFK Birthday and Death day metonics would appear in the same year. They began in 1919, when he was 2 years old. Both brother Robert Kennedy (11-20-1925) and son John F. Kennedy Jr. (Nov 25 1960) were born around that same November Metonic where he died.

**1985 Nov 12 Antarctica Total (Saros 152)**

**1986 Oct 3 North Atlantic (Saros 124)**

1985 and 1986 "eclipses over nowhere" are the only complete eclipses of their respective years, and it's likely very few witnessed them. Isolation peculiarity: After the extraordinary paired JFK eclipses of 1984, there are no complete eclipses over any populated region of the planet until March 29, 1987...a total of 857 days or more than two years without a population center witnessing a complete eclipse. In fact, it will be nearly four years between true Total eclipses, Nov 12 1985 to Mar 19 1988.

*Partials occur on 5-19-1985 and 4-9-1986*



## 1987: The Palindrome Eclipses

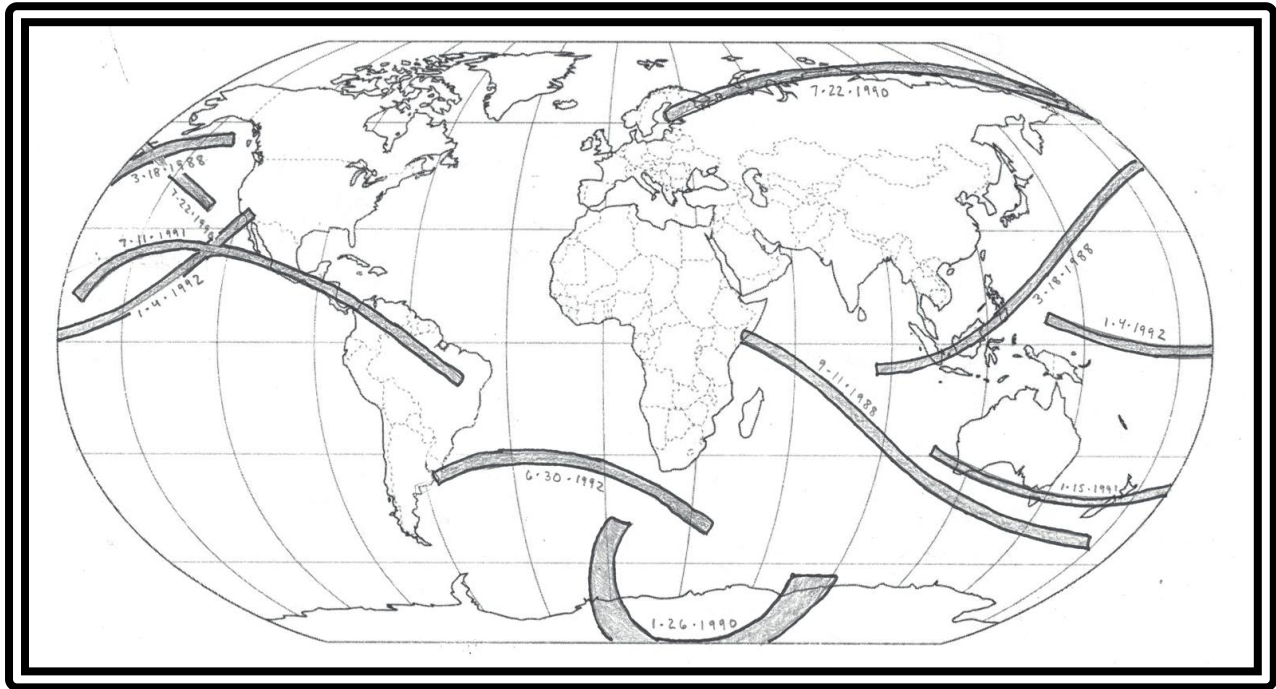
**3-29-1987 Patagonia to Horn of Africa Hybrid (Saros 129)**

**9-23- 1987 Kazakhstan/ China/ South Pacific Ring of Fire (Saros 134)**

The first eclipse is on 3-29 and the second is on 9-23, which is a palindrome between the only complete eclipses of 1987. Speaking of numeric of 3-29-87, it so happens  $3 \times 29 = 87$ . 3-29-87 is also 87 days from New Years Day 1987 and 9-23-1987 is 100 days from New Year's Day 1988. Of course  $3 + 29 = 32$  and  $9 + 23$  also equals 32 ( 32 is found in the first two numbers of the first eclipse and backwards in the second and third numbers of the second eclipse). But of course, it's just number fun and impossible to conclude anything from, except that numbers sure are funny, sometimes. These eclipses bare a distinct geometric similarity to 1933 Ring of Fires.

**3-29-1987 Patagonia to Horn of Africa Hybrid (Saros 129)** A Total solar eclipse exits South America at Caleta Olivia ( Olive Branch) Argentina and crosses Africa for the second time in four years.

**9-23-1987 Kazakhstan/ China/ South Pacific Fall Equinox Ring of Fire** From Kazakhstan (Independent 4 years later) through China with total Annularity in Shanghai. Ends past northern Solomon Islands, place of JFK death day eclipse less than 3 years before. (10<sup>th</sup> eclipse over nation of New Guinea in 43 years). Saros cycle 134, Jerusalem ring of fire of Aug 21 1933 and USA ring of fire Oct 14 2023



## 1988 to 1993 Minimum of Continental Land/ Lots of Peculiarities

**1988 Mar 18 Total Indonesia/ Borneo/ Pinatubo to Aleutians Saros 139**

**1988 Sep 11 Ring of Fire Mogadishu Sunrise Single City- Saros 144**

**1990 Jul 22 Total USSR Last Judgment - Saros 126**

**1990 Jan 26 Ring of Fire Antarctica -Saros 121**

**1991 Jan 15 Ring of Fire MLK Birthday Australia/New Zealand -Saros 131**

**1991 Jul 11 Total Temple of the Sun...Mexico City/ Central and South America -Saros 136**

**1992 Jan 4 Ring of Fire Southern California Single City Sunset -Saros 141**

**1992 Jun 30 Total Single City Montevideo Uruguay -Saros 146**

Only a very small portion of earth's land surface is crossed between Sep 1987 and May 1994. Three Single City eclipses in four years. LA Metropolis is considered single city for 1992 eclipse.

**1988 Mar 18 Indonesia/ Borneo/ Pinatubo to Aleutians Total (Saros 139)** This Pacific Total eclipse makes an x in combination with the 9-23-1987 eclipse (centerpoint northeast of the Philippines. Mount Pinatubo (70 % coverage) of the Philippines erupts 3 years and 3 months and 3 days later in the 2nd largest volcanic eruption of the 20th century. Saros 139 returns for USA Apr 8 2024.

**1988 Sep 11 Mogadishu Sunrise Single City Ring of Fire (Saros 144)** Eclipse begins in Mogadishu, Somalia at sunrise on 9-11-1988, the ancient Egyptian New Year, 13 years before the 9-11 terror attacks. Path of annularity touches no other land before dying in the ocean south of New Zealand. 1988 began genocide in Somalia of Isaaq tribesmen. 3 months before the election of George H.W. Bush in the USA. Five years before infamous Battle of Mogadishu ("Blackhawk Down") on Oct 3 1993 where USA forces fought Somali militiamen. Good example of the Single City phenomenon which gets highlighted in this section. No other population besides Mogadishu. The Metonic Date of 9-11 is highlighted in a total eclipse for the first time in centuries. Odd numeric parallel with 8-11-1999 eclipse, which ended the 20<sup>th</sup> century. 9-11-1988/8-11-1999.

**1990 Jul 22 USSR Judgment Total (Saros 126)** Nine years minus nine days after the USSR Judgment of Jul 31 1981 (Saros 145) which loosely followed the southern border of the Soviet Union without touching any other nation. Eclipse travels the northern length of the Soviet Union before crossing the Aleutian Islands of the USA. This eclipse only touches one other nation (Finland at sunrise and a few of the US Aleutian Islands towards evening) while defining the northern border of the USSR. 1990 was the year that the USSR lost 6 of its republics. Eclipse happens ten days after Boris Yeltsin quit the Communist Party, 8 months after fall of Berlin Wall and 15 months before the official dissolution of the USSR on December 26 1991 (which is also a Metonic date).

**1990 Jan 26 Antarctica Ring of Fire (Saros 121)** Lewis Mumford, one of America's greatest minds, dies on this very day. He was author of Myth of the Machine (and many more).

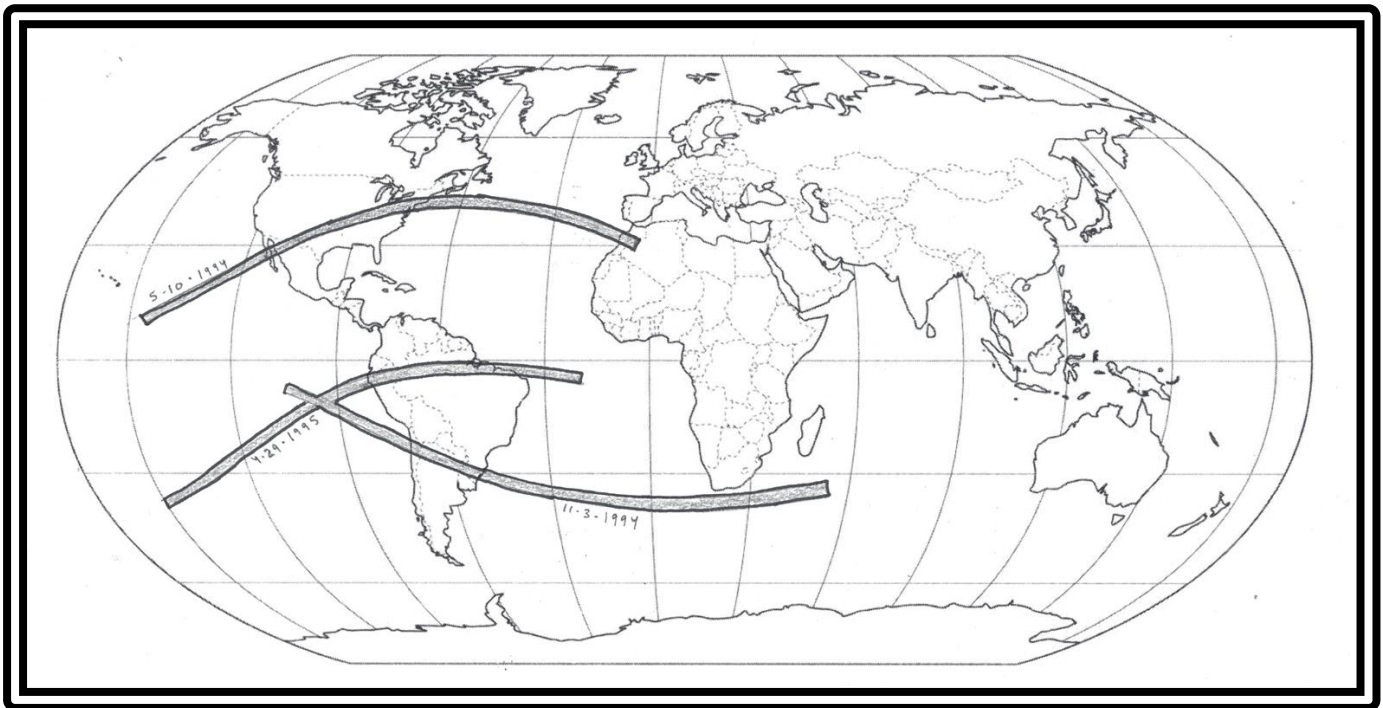
**1991 Jan 15 MLK Birthday Australia Ring of Fire (Saros 131)** Ring of Fire on what would have been Martin Luther King's 62nd birthday. Path touches Perth Australia, the island of Tasmania again, and straddles New Zealand, Annularity in Wellington. 2 days before Persian Gulf War air campaign.

**1991 Jul 11 Temple of the Sun/Hawaii/ Mexico City/ Central-South America Total (Saros 136)** Totality for entire Big Island of Hawaii (including Kilauea volcano), first total eclipse there since 1850. Continues across Mexico (including totality in Mexico City—Aztec temples of Sun and Moon 470 years after their conquest by Spain and Popocatepetl Volcano), touching every nation of central America (totality in San Salvador and Guatemala City) and extending through Colombia before ending in Brazil. In the middle of Central American Crisis that saw wars throughout the region, 2 years before the Zapatista conflict in Mexico. 27 days after eruption of Mount Pinatubo in the Philippines. Saros 136's last eclipse of 20<sup>th</sup> Century and the longest total eclipse until 2132.

**1992 Jan 4 Southern California Metropolis Single City Sunset Ring of Fire (Saros 141)** A ring of fire travels 7,000 miles across the Pacific to end immediately over Southern California (and Tijuana Mexico) at sunset over the ocean. San Diego had a good view. Clouds obscured the eclipse in Los Angeles (but it still happened). 9 days after Soviet Union officially dissolved. George HW Bush is President. Beginning of 500th year since Columbus arrived in the New World...look what we made of it! Michael Jackson had the number one song with "Black or White". Nirvana's "Smells like Teen Spirit" was number 13. 114 days after eclipse, on Apr 29 (also a Metonic date), the worst riots in Southern California history break out in Los Angeles after the acquittal of police officers involved in the beating of motorist Rodney King. 64 people died and more than 2300 were injured.

**1992 Jun 30 Single City Montevideo Uruguay Total (Saros 146)** In our site's eclipse history there's only one example of a single city eclipse (Boston JFK eclipse 1959). Suddenly in time there are 3 single city eclipses in less than 4 years--Mogadishu, LA Metropolis and this one. June 30 1992 brings totality to Montevideo Uruguay at sunrise and afterward finds nowhere else but ocean. Montevideo means roughly " I see a mountain". 104 days shy of the 500th anniversary of Columbus finding New World. Buenos Aires Argentina is a near miss at 93 % totality. where Jorge Bergoglio (who becomes Pope Francis) is first promoted to auxiliary bishop in Buenos Aires in 1992. Bergoglio was born 3 days after the ring of fire eclipse of Dec 14, 1936. He becomes the first Pope from the Western hemisphere.

*Partials occur on 3-7-1989, 8-31-1989, 12-24-1992, 5-21-1993, and 11-13-1993*



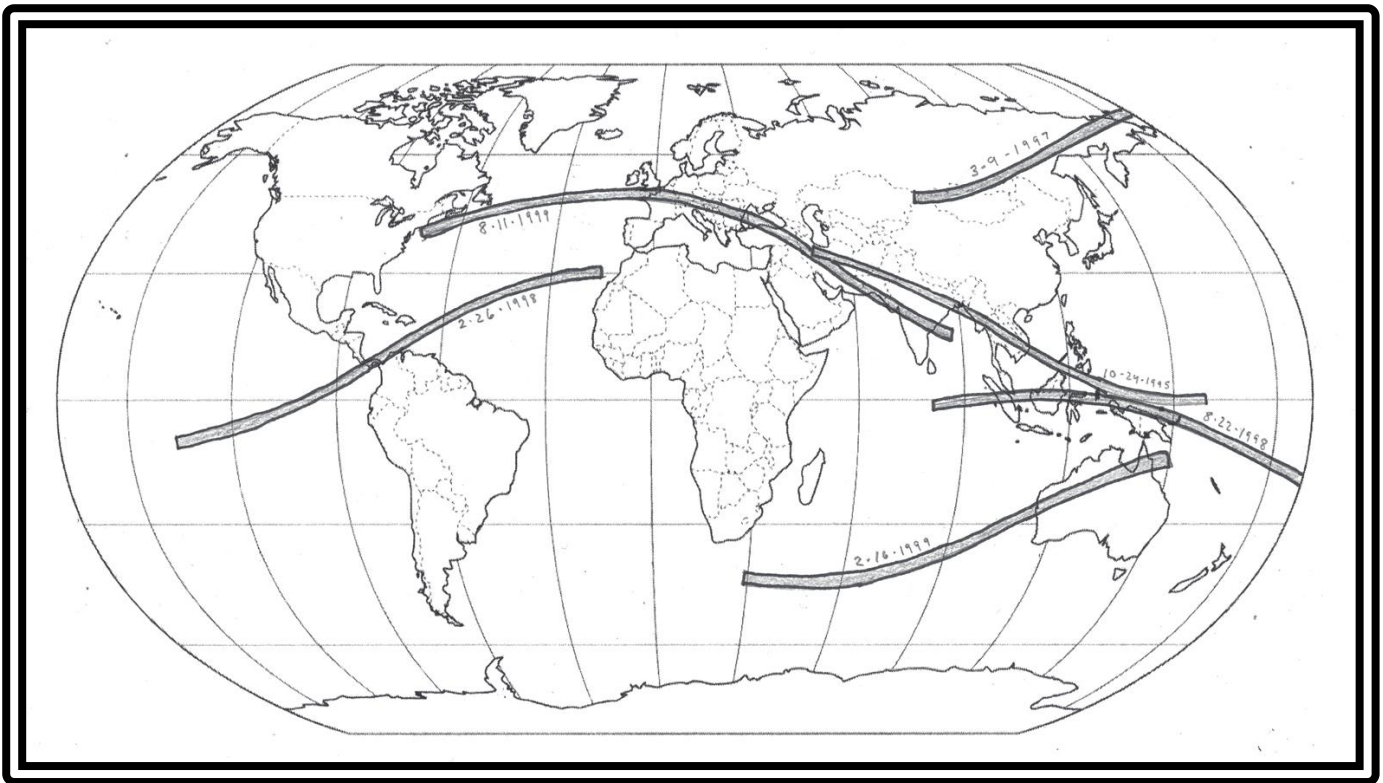
## 1994 to 1995

**1994 May 10 Ring of Fire USA to Africa -Saros 128** The last complete eclipse in the USA for 18 years until the May 20 2012 Midland Sunset Ring of Fire eclipse brings the same Saros 128 back to the USA. Eclipse starts in the Pacific, bisects northern Mexico before crossing the heartland of the United States and exiting through the Bush family center of Kennebunkport Maine. Serial killer John Wayne Gacy is executed on this very day in Joliet Illinois, in the path of annularity. Metropolitan Chicago, home of Barrack Obama, is scraped by path. True Annularity in many cities, including El Paso, Amarillo, Lubbock, Tulsa, Joplin, Detroit, Springfield, Cleveland, Buffalo, Albany. The ring of fire crosses the Atlantic and ends at sunset over City of Casablanca (white house) Morocco. George W. Bush wins the Texas State Governorship in 1994 six months later. Path goes by W. Bush childhood home of Midland at 87% coverage, ranch at Crawford sees 80% coverage. Austin has 77%. Kennebunkport, Maine is in full Annularity. W. Bush birthplace of New Haven Connecticut sees 85% and Washington DC sees 80%. 6 years later he would be running for President.

"The Sign" by Ace of Base was the number one song in the USA.

**1994 Nov 3 Total Nazca Lines South America -Saros 133** Total eclipse bisects northern South America. Totality on mysterious Nazca lines in Peru and Asuncion, Paraguay. Exits in Brazil.

**1995 Apr 29 Ring of Fire South America -Saros 138** Eclipse crosses Peru and northern Brazil...Path enters Peru at Piura, the oldest colonial city in Peru, and third oldest in South America, founded by Spanish Conquistador Pizarro in 1532 and the first to declare independence from Spain ( in 1821--- path travels across northern Brazil, total annularity at Belem (Portuguese for Bethlehem), and exits continent at Fortaleza ("strength"). annularity just north of Natal ("Nativity")



## 1995 to 1999 Last Solar Eclipses of the Second Millennium (UN Metonic)

The United Nations Metonic begins Oct 24 1995 and ends Oct 24 2014.

October 24 is United Nations Day, which celebrates the ratification of their charter on Oct 24 1945.

**1995 Oct 24 Total United Nations Iran Sunrise/ South Asia/ SE Asia -Saros 143**

**1997 Mar 9 Total Russia -Saros 120**

**1998 Feb 26 Total American Isthmus -Saros 130**

**1998 Aug 22 Ring of Fire Indonesia/ New Guinea -Saros 135**

**1999 Feb 16 Ring of Fire Australia Cross-Country -Saros 140**

**1999 Aug 11 Total End of Millennium—Great Civilization Judgment - Saros 145**

**Oct 24 1995 United Nations Day Iran Sunrise/ South Asia/ SE Asia Total (Saros 143)** On the 50<sup>th</sup> anniversary Of the United Nations Charter (“United Nations Day”). 30 years after the end of the Southeast Asia Eclipse Swarm of 1944 to 1965. Eclipse begins at sunrise south of Tehran (97% totality), crosses Iran, goes across Kandahar Province in Afghanistan (US Invades almost exactly six years later). Eclipse crosses Pakistan, totality over ancient city of Bahawalpur, crosses Northern India (totality in Allahabad-” City of God”), nations of Myanmar, Thailand, temple of Angkor Wat in Cambodia, Vietnam (3 months after normalized relations with USA). Eclipse exits Asia near Sandakan in Malaysia.

**1997 Mar 9 Mongolia/ Russia Total (Saros 120)** The only complete eclipse of 1997 begins at the eastern border of Kazakhstan five years after their independence, crosses northern Mongolia 790 years after its founding by Genghis Khan and heads across eastern Siberia in Russia before dying in the Arctic Ocean. 300 years after Peter the Great became the first Tsar to travel outside his country’s borders. (1697 to England and France) Two months before Russia signed agreement with NATO to “avoid future war”. Eclipse crosses largely uninhabited regions of Mongolia and Eastern Siberia.

**1998 Feb 26 American Isthmus Total (Saros 130)** A small patch of ground experiences totality on the 19th anniversary of the USA Mount Saint Helens Eclipse of Feb 26 1979. Path touches Galapagos Islands, and then isthmus of Panama just south of the canal zone. It scrapes northern borders of Colombia and Venezuela, with totality in Maracaibo, nicknamed "land of the beloved sun" founded 477 years before. Eclipse heads to Caribbean, including Montserrat, which was still in the throes of a series of volcanic eruptions. Last town in totality was St. John's, on island of Antigua.

**Volcanic Allusions:** After beginning erupting in 1995, tremendous eruptions in the summer of 1997 destroy the capital of Plymouth in Montserrat and render much of the island uninhabitable. The volcanoes of Saint Helens and Montserrat (two of the most explosive in the western hemisphere in the 20th century) are linked by Metonic Total Solar eclipses of Feb 26 1979 and Feb 26 1998.

**1998 Aug 22 Indonesia/ New Guinea Ring of Fire (Saros 135)** Aug 21 Metonic continues a brief lurch forward into 8-22. Path of Annularity close to epicenter of Dec 26 2004 Great Earthquake/ Tsunami southwest of Banda Aceh, Sumatra which occurs six years later and will kill more than a quarter of a million people. Annularity heads over Malaysia and Solomon Islands. Ends after Vanuatu Islands. 8-22 becomes 8-21 again in 2017 USA Cross Country Eclipse.

**1999 Feb 16 Australia Cross-Country No Cities Ring of Fire (Saros 140)** Only the tiniest Australian towns such as Walkaway (pop. 270) Mullewa (Pop. 356) and Lakeland Downs (pop.299), experience the annularity of the second to last solar eclipse of the Second Millennium as it travels nearly 2,000 miles across the continent. The largest town in the path appears to be Tennant Creek (pop. 3,000)

*partials on 4-17-1996, 10-12-1996, 9-2-1997*

## **Focus on August 11 1999 End of the Millennium Eclipse-Saros 145**

143 days before the 21st Century begins, an extraordinary path of totality ends the 20<sup>th</sup> Century and the Second Millennium on the unusual numeric of 8-11-1999. One of the most watched eclipses of all time, it crossed densely populated areas across Europe, the Mideast and South Asia.

**USA:** This 1999 path of totality begins at sunrise a few hundred miles from the East Coast of USA (26% totality in New York City, 62% in Boston, 72% in Kennebunkport, Maine). Eclipse is 26 days after death of John F. Kennedy Jr. and wife Carolyn in plane crash off Martha's Vineyard (60% totality) which happened on July 16 1999 (exactly 54 years after test of first A-Bomb).

Eclipse is exactly 84 eclipse years from the 11-22-1919 JFK Premonition USA Eclipse and exactly 16 eclipse years from DC Ring of Fire May 30 1984. Exactly 57 eclipse years (a full eclipse triple Metonic) from 1945's A- Bomb Eclipse.

Occurs 11 months after founding of Google, a few months before founding of Gates Foundation, two months after George W. Bush announced candidacy for White House, four months from Y2K hysteria and the changing of the millennium.

"Genie in a Bottle" by Christina Aguilera was the Number One song in the USA.

**European Union:** 1999 was the year of the introduction of the Euro Monetary denomination, and the creation of the Eurozone. The Euro and Eurozone was launched on Jan 1st 1999.

**England:** Eclipse crosses Plymouth and Truro in England, and the Port of Penzance ("holy headland"). England's first Total eclipse since the Liverpool eclipse of 1927.

**France:** The Eclipse Path goes across the entirety of Northern France, scraping Metropolitan Paris. Totality in **Luxembourg** and Strasbourg.

**Germany:** The first total eclipse in Germany since Aug 19 1887 Berlin Sunrise Eclipse 19 months before Hitler was born. The eclipse path across southern Germany and the province of Bavaria. Totality in the town of Branau Aum Inn (Austria) where Adolf Hitler was born 110 years before on 4-20-1889. Totality in Munich, Germany, where he began his rise to power. 66 years after the Nazis seized power in 1933.

**Austria:** Mozart's birthplace of Salzburg; also **Hungary**, and **Romania**--including totality in Bucharest.

**Turkey:** The eclipse bisects Turkey. Six days later on Aug 17, the worst earthquake in modern Turkish history devastates the city of Izmit (96% coverage) and surrounding region, killing 20,000. Major damage in capital of Istanbul. (95 %). One of the most dramatic examples of eclipse/disaster associations in our survey. The epicenter of quake was less than 45 miles from path of totality.

**Iraq:** The eclipse passes over Mosul, Iraq and the ruins of the ancient city of Nineveh. Four years later, US troops invade Iraq.

**Nineveh:** mentioned many times in the Bible, Nineveh, the great capital of Assyria, was where the Prophet Jonah showed up after being spit out by the whale. It was the place he had been told by God to warn of God's impending judgment. There was a total solar eclipse in Nineveh on 762 BC Jun 15. See "Sign of Jonah" Path of the August 11 1999 eclipse intersects with the August 21 1914 World War One Eclipse path near Nineveh. The two eclipses are separated by 84 solar years plus one lunar year.

**Iran:** The eclipse cuts the Persian nation in half. Its second total eclipse in four years. Totality over the great city of Isfahan.

**Pakistan:** Totality in Karachi, the 12th largest city in the world.

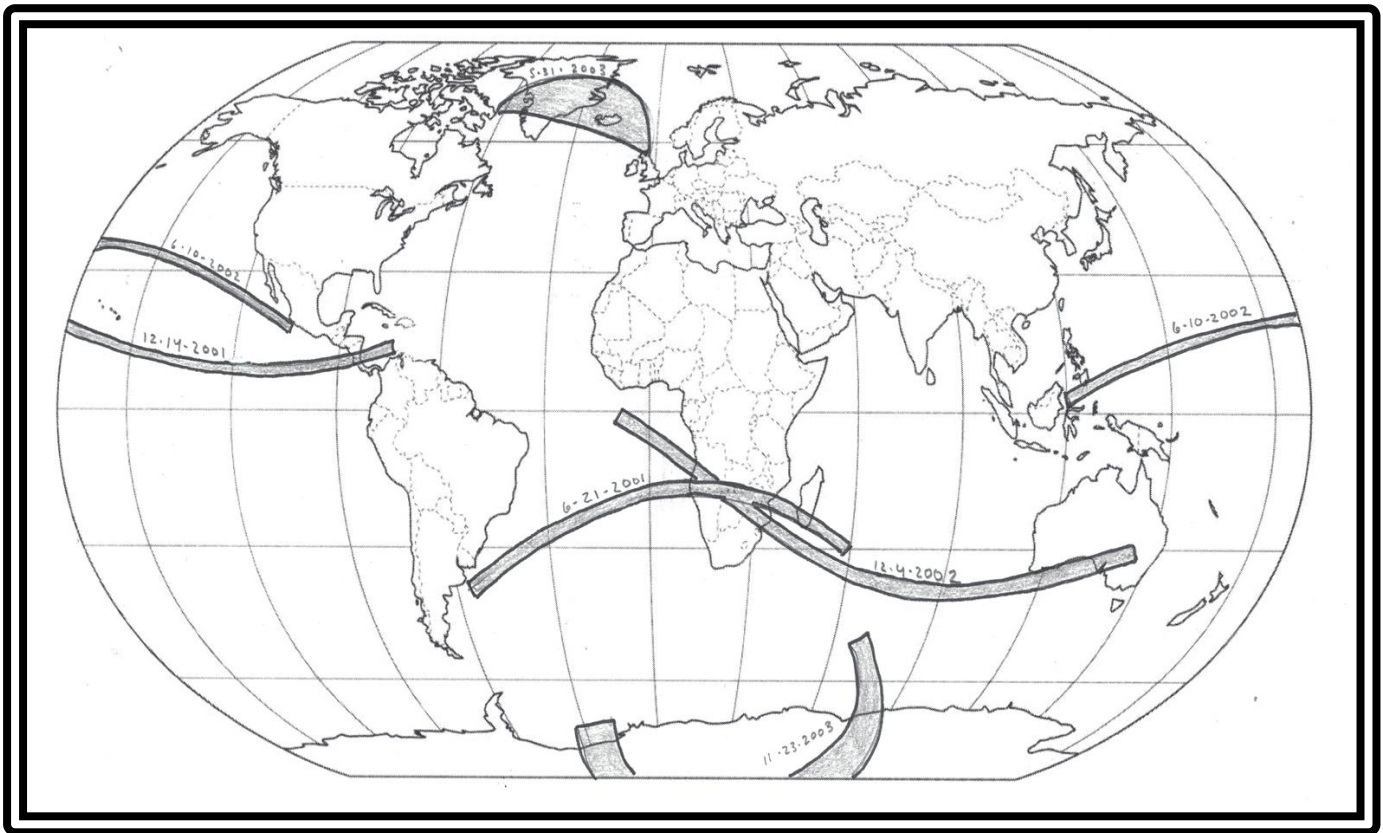
**India:** Eclipse crosses the entire nation of India, exiting in totality with centerline at Srikakulam, a sacred city for both Hindus and Buddhist and site of Buddhist Heritage site Salindaham, the location of the Arasavalli Sun Temple --the ("abode of the Sun god")--one of two major sun temples in India.

The Aug 11 1999 Eclipse is one of the most incredible displays of the cosmic art of the Master, our God, who made and placed the sun and moon and stars and knows all the empires. The August 11 1999 eclipse has enough levels to be worthy of study for ages.

If the traditional date of 1 BC is accepted for the birth of Jesus Christ, then this eclipse, one of the greatest eclipses of all time, fell on the 2,000<sup>th</sup> solar year anniversary of that event. The eclipse also occurs one day after the Aug 10 Temple Destruction Metonic. (Temple destroyed on 8-10-70 AD)

Saros Cycle 145's next engagement with planet earth comes August 21 2017. It crossed the length of the USA. Next up, it crosses Beijing, Pyongyang and Tokyo Sep 2 2035.





## 2000 to 2003 Start of the New Millennium---Very Little Land

**2001 Jun 21 Total Solstice South America to Africa -Saros 127**

**2001 Dec 14 Ring of Fire Pan- American Isthmus/ Washington's Death Metonic -Saros 132**

**2002 Jun 10 Ring of Fire Pacific Ocean -Saros 137**

**2002 Dec 4 Total Africa to Australia -Saros 147**

**2003 May 31 Ring of Fire Greenland Iceland -Saros 147**

**2003 Nov 23 Total Antarctica -Saros 152**

The first four eclipses of this section have exactly 19 year corresponding eclipses in 2020 and 2021. Jun 21 and Dec 14 appear again as eclipses in 2020. Jun 10 and Dec 4 do the same in 2021.

The African Total Eclipses of 2001 and 2002 intersect on the coast of Angola, south of Luanda, the notorious slave port where millions of slaves were shipped to the Americas. One of the most interesting things about this map of eclipses is how very little populated land is in totality. A tiny portion of the western hemisphere (Iceland, the Pan-American Isthmus and a chunk of the Mexican Coast), Southern Africa, a few Pacific Islands, and a largely uninhabited chunk of Australia. From the amazing density of population covered by the August 11 1999 End of Millennium Eclipse, for six years perhaps only a few million people (mostly in Southern Africa and Costa Rica) would have the opportunity to witness a complete eclipse. North and South America, Europe, Asia and most of Africa are free of eclipses from August 1999 to October 2005. The Dec 14 2001 eclipse, the first after 9-11, only touches two tiny Islands in the Philippines, and then only the Island of Saipan, site of a major battle of World War II. That Eclipse ends just after entering Mexico south of Puerto Vallarta.

**2001 Jun 21 Solstice South America to Africa Total (Saros 127)** The first complete eclipse in almost two years and the first since the last eclipse of the 20<sup>th</sup> Century on Aug 11 1999. The first complete eclipse of the 21st Century contains two 21's 21-2001. Also, the last six digits of the eclipse, 21-2001 when added individually, add up to the first digit, 6. But, whatever...

The path begins just off the Eastern Coast of South America (29% coverage in Buenos Aires) crosses the ocean into the Slave Coast of Angola and crosses Southern Africa, ending just after Madagascar. 82 days before 9-11 attacks. Saros 127, which reappears in Pope Francis Eclipse of 7-1-2019, and was also responsible for the 8-8-1496 so-called "Mayan Apocalypse" Eclipse. The Summer Solstice reappears as eclipse date in 19 years for Pandemic Ring of Fire of Jun 21 2020.

**2001 Dec 14 Pan- American Isthmus/ Washington's Death Metonic Ring of Fire ( Saros 132)** The path of Annularity goes over almost no land, except a tiny portion of Central America, straddling the border of Costa Rica and Nicaragua, including annularity over town of Liberia. Dec 14 2001 was the 202<sup>nd</sup> Anniversary of George Washington's death. This is the first complete eclipse since the Sep 11 2001 attacks 94 days prior. 16 % coverage in Washington DC and 5% coverage in New York City. 54% coverage in Miami. Eclipse true annularity path ends in the ocean north of Venezuela about 74 degrees west longitude, the same longitude as New York City, 2200 miles away as the crow flies. See isthmus cluster. Dec 14 shows up again in Electoral Eclipse of 2020.

**2002 Jun 10 Pacific Ocean Ring of Fire (Saros 137)** Indonesian Islands to sunset on coast of Mexico over the Pacific Ocean, almost no land. 71 % coverage in Los Angeles. "Foolish" by Ashanti was the Number One song in the USA. Metonic reappears in 6-10-2021 Canadian Judgment.

**2002 Dec 4 Africa to Australia Total (Saros 147)** Southern Africa gets their second total eclipse in 18 months. It crosses southern Indian ocean before crossing a nearly uninhabited portion of Australia. Path stops near Queensland/New South Wales border very close to the location of the Australian Tav of 2028 and 2030. The Dec 4 date returns in 19 years with the 12-4-2021 Antarctica Eclipse

**2003 May 31 Greenland/Iceland Ring of Fire (Saros 147)** JFK Birthday has officially moved away from Metonic, now that it's two days removed from his May 29th Birthday. Ring of Fire over Greenland, Iceland and Extreme northern United Kingdom. Number One song in UK was "Ignition" by R. Kelly.

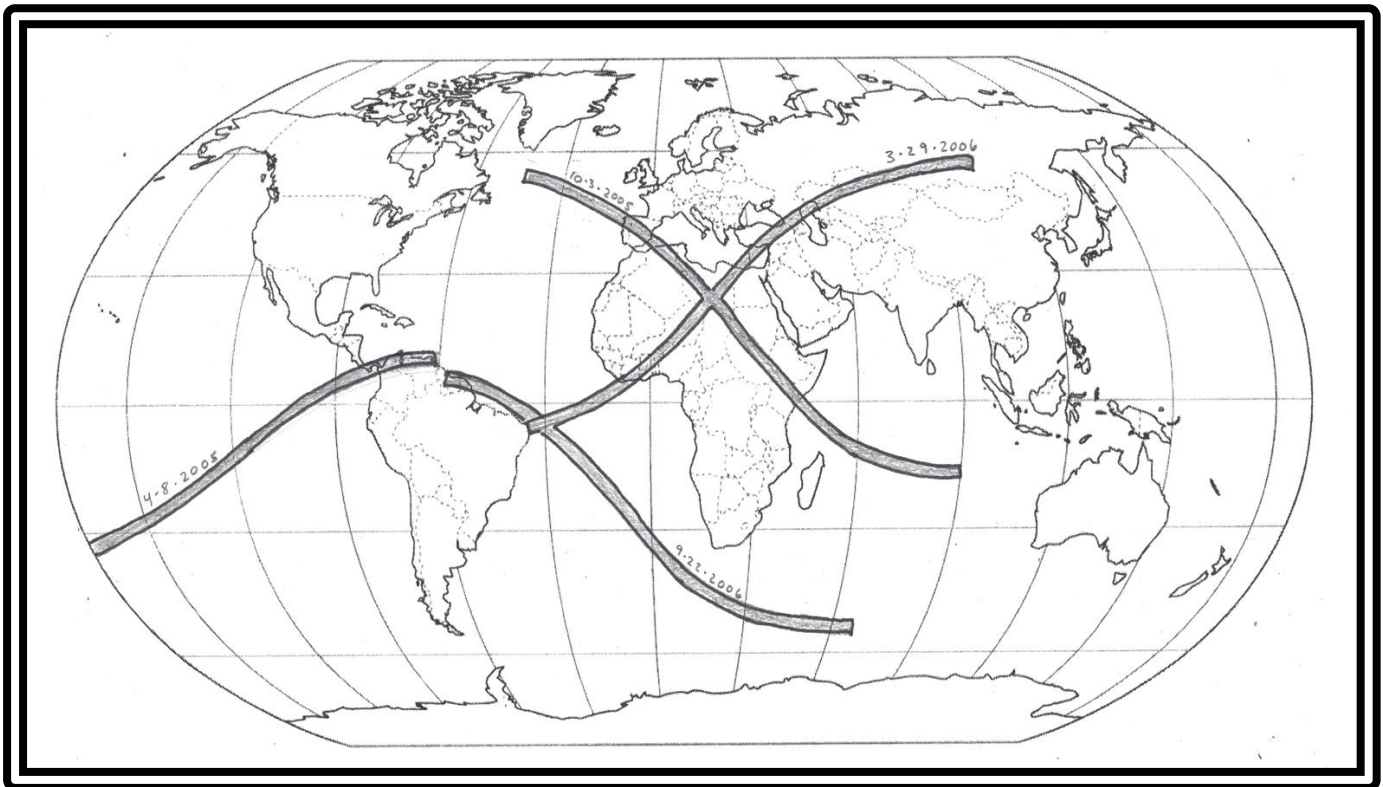
**2003 Nov 23/24 Antarctica Total (Saros 152)** Was anybody there? Hard to say. JFK death Metonic shifts further away from where it was 19 years before (11-22) in 1984, beginning the move away from the Nov. 22 date that began in 1900. By 2030 it will be all the way to 11-25 (JFK Jr's Birthday). Antarctica gets the only total eclipse on earth of 2003.

*The year 2000 has four partial eclipses, including two in July (the first time two eclipses occur in one month since 1880). 2-5-2000, 7-1-2000, 7-31-2000, and Christmas 12-25-2000 over USA ...*

Between the two July eclipses was one of the greatest solar storms on record, the Bastille Day event of July 14 2000.

12-25-2000 is last solar eclipse on true Christmas for 755 years. Two more "sort-of" Christmas eclipses happen in 2038 and 2057 due to long Antarctic days and the international date line.

Christmas 2000: A Hint that Jesus was indeed born in traditional year? There was a Christmas solar eclipse in 1 BC.



### **2005 to 2006 Libyan Tav/ Second Half of Turkish Cross/ Isthmus Again**

- 2005 Apr 8 Total Isthmus Third time in Seven Years -Saros 129**
- 2005 Oct 3 Ring of Fire Spain Through Africa Libyan Tav -Saros 134**
- 2006 Mar 29 Total Second Line of Great Turkish Cross -Saros 139**
- 2006 Sep 22 Ring of Fire Fall Equinox South America to Ocean -Saros 144**

It's now been 10 years (1994 and 1995) since any eclipse has crossed the continental land masses of the western hemisphere except at the isthmus and extreme northern South America. Meanwhile, a profound double Tav over the Mideast and North Africa takes shape.

A 177-day Cross with the Oct 3 2005 Ring of Fire and the Mar 29 2006 Turkish eclipse intersect over south central Libya, in the nearly unpopulated desert of the Sahara.

**2005 Apr 8 Isthmus Third time in Seven Years Total (Saros 129)** Eclipse covers almost exactly the same land as the Dec 14 2001 eclipse at a 1211 day interval but comes from an opposite mirrored convex. A tiny stripe of true totality through Panama and Northern Venezuela. Exactly 19 years before Great North American Eclipse of Apr 8 2024. Buddha's Birthday (Japan).

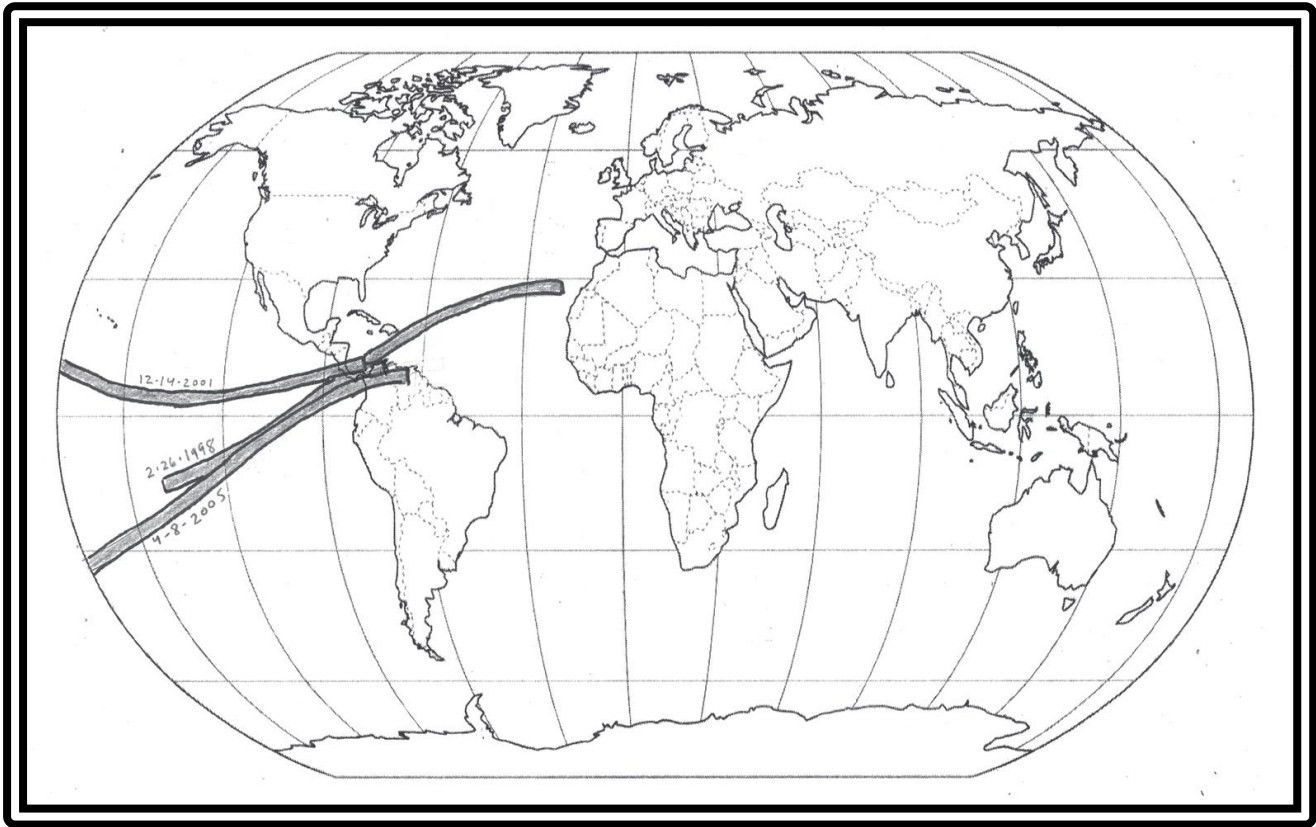
**2005 Oct 3 Spain Through Africa Ring of Fire—Libyan Tav (Saros 134)** Ring of Fire Eclipse crosses Spain and Northern Portugal. 500 years since the retirement of Christopher Columbus and petition to the King for New World titles after his return from last voyage in 1504. 500 years since the arrival of conquistador Hernan Cortes in the New World. Total annularity path squarely on Madrid and Toledo as it bisects Spain. Path goes over Algiers, Algeria 500 years almost to the week after Spanish defeated the Algerians and began 300 years of control (Battle of Mers-el Kebir Sep 13 1505). Eclipses cross Africa. Libya divided NW to SE six years before it was wrecked by civil war and NATO bombing.. Crosses Darfur, Sudan during early years of Genocide. Crosses Kenya ten months after Barack Obama starts brief career as a US Senator on January 3 2005, Obama's father was from Kenya, which saw 80% coverage in his home Rachuonyo district.

**2006 Mar 29 Second Line of Great Turkish Cross Total (Saros 139)** Looked at in depth in Mideast Eclipses, the second line of the Hepton Turkish Cross. A path that creates three intersections. It intersects with the next 2006 eclipse (ring of fire) just east of South America. It crosses the last eclipse (Oct 3 2005) over the doomed nation of Libya (NATO bombing in 2011), then crosses the 8-11-1999 20th Century Judgment eclipse with a total Hepton Cross over the middle of Turkey.

Totality begins directly over city of Natal, Brazil ("Nativity " in Portuguese. Crosses Atlantic to enter Gold Coast of Africa at Accra, Ghana 39 years almost to the day after Martin Luther King's visit there in March of 1957. In Libya, it intersects the path of the eclipse of Oct 3 2005, which occurred 6 lunar months before. The path of totality goes over the Mediterranean before entering Turkey. 7 and ½ weeks before 500th anniversary of death of Columbus on 5-20-1506).

The two total eclipses of 1999 and 2006 are spaced 2422 days apart. They are Hepton eclipses exactly 7 eclipse years apart both occurring on Wednesday. The intersection of those two great paths is in Northern Turkey about 200 miles east of Ankara in the region of Tokat, an ancient city from the time of the Hitittes, which became a Roman stronghold. It was home to a thriving Armenian Christian community until what happened during WWI. These same Saros eclipses (145 and 139) create the cross over the USA in 2017 and 2024. The 2006 path heads on to bisect Georgia 20 months before its war with Russia then crosses Kazakhstan, including Totality at mysterious Capital of Nur-Sultan, formerly known as Astana. Path of totality ends just after crossing over Kyzyl, the capital of Tuva in Russia. Tuvans are famous for their unusual throat singing.

**2006 Sep 22 Fall Equinox Top of South America to Ocean (Saros 144)** Fall equinox Metonic. Ring of Fire. The eclipse begins over extreme Northwestern South America. New Amsterdam, Guyana and Paramiribo, the capital of Suriname, are in the initial path of annularity. Then no more land as it heads to the ocean. If you look at this path and the path of the Mar 29 total eclipse occurring 6 months prior you will see they form an interesting Tav intersection in the ocean east of South America.



### Isthmus Cluster 1998 to 2005

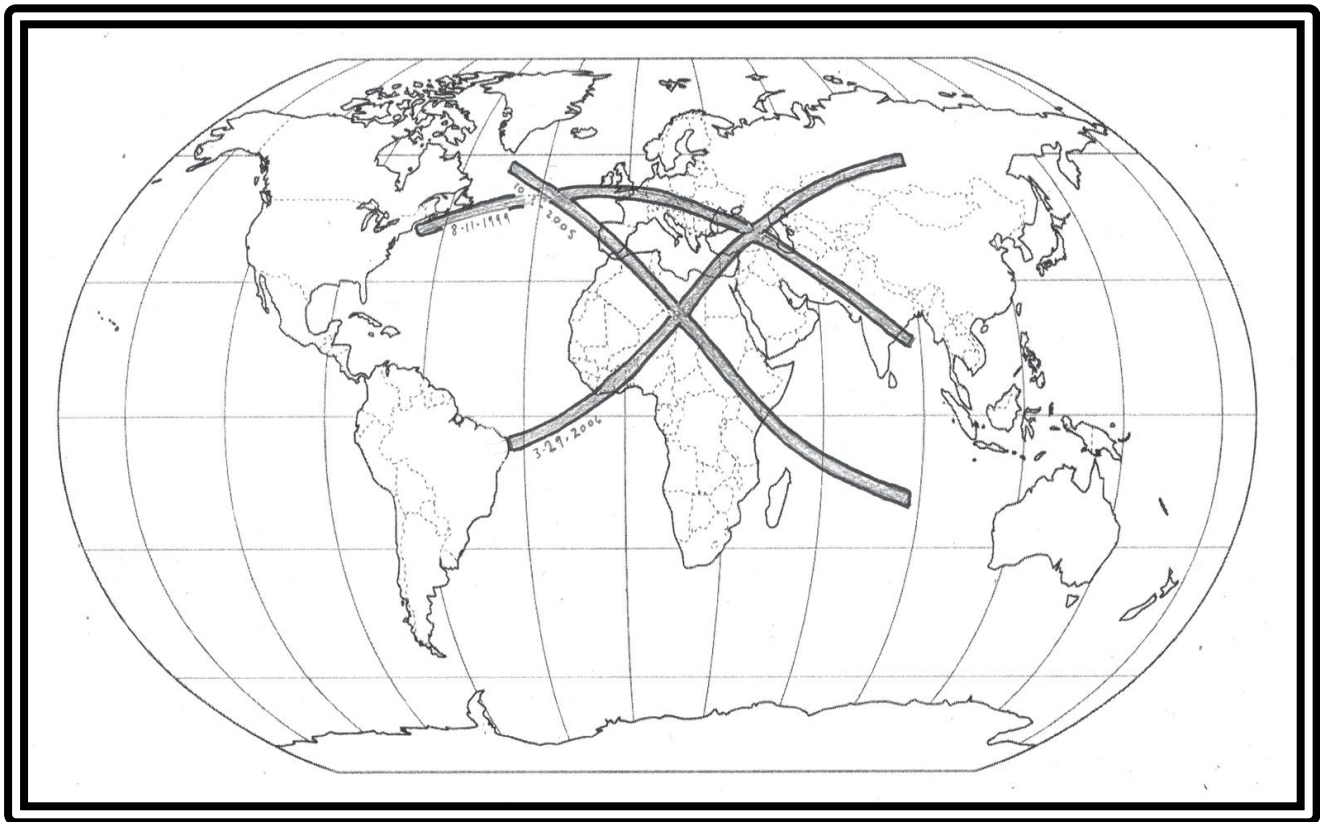
In a span of 7 years plus 40 days, there are three Pan-American Isthmus solar eclipses. All three dates are linked metonically (exact 19-year spacings) with other interesting American Eclipses.

**1998 Feb 26 American Isthmus Total (Saros 130)** Feb 26 is the same calendar date as Feb 26 1979 Mount Saint Helens Total Eclipse (Saros 120) and Feb 26 2017 Ring of Fire scheduled South America to Africa. (Saros 140)

**2001 Dec 14 Pan- American Isthmus/ Washington's Death Metonic Ring of Fire (Saros 132)** This eclipse is 19 years before the Electoral College Eclipse of Dec 14 2020.

**2005 Apr 8 Buddha Birthday Isthmus Third time in Seven Years Total (Saros 129)** 19 years after this eclipse will come the Great North American Eclipse of 4-8-2024.

## Mediterranean Aleph 1999 to 2006



### 1999 to 2006 Mediterranean Aleph

How beautiful is this? A neatly divided Center of the Historic Western World over the course of 2422 days. Within the small triangle created by the A are the nations of Spain, France, Germany, Austria, Italy, Greece, Libya and Turkey.

This pattern, with the same eclipse time spacing, reappears over America beginning 18 years and 11 days and 8 hours later (19 eclipse years) involving the same Saros Personalities.

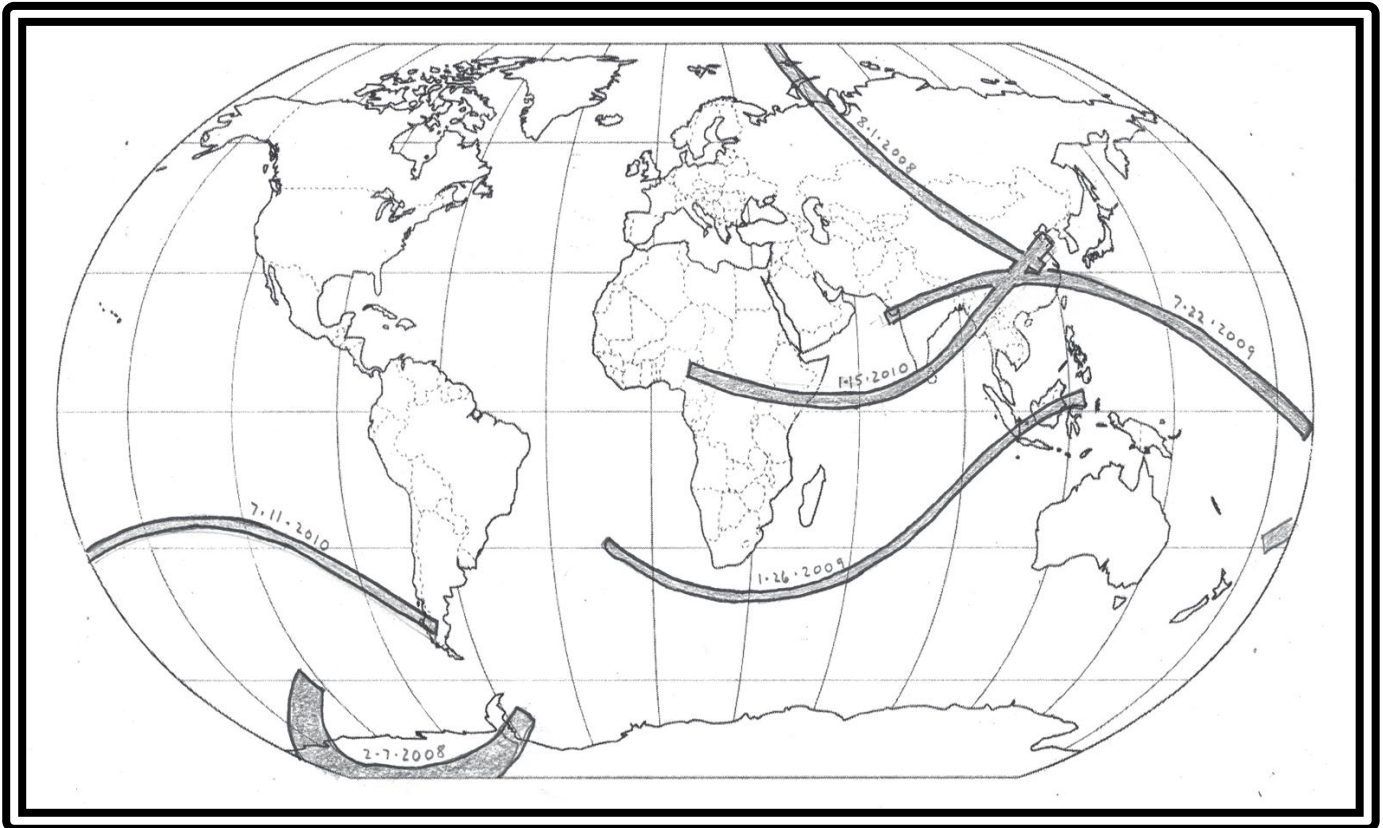
**1999 Aug 11 End of Millennium—Great Civilization Judgment (Saros 145)**

**2005 Oct 3 Spain Through Africa Ring of Fire—Libyan Tav (Saros 134)**

**2006 Mar 29 Second Line of Great Turkish Cross Total (Saros 139)**

*partials occur on 3-19-2007(next Metonic on 8-year lurch to Spring Equinox 2015 North Pole Eclipse) and on 9-11-2007—last solar eclipse on the 9-11 Metonic (Egyptian New Year)*

## 2008 to 2010 China Cluster/ Wuhan Totality/ Chongqing Cross



## 2008 to 2010 China Cluster/ Wuhan Totality/ Chongqing Cross

**2008 Feb 7 Ring of Fire Antarctica -Saros 121**

**2008 Aug 1 Total Northern latitudes/ Russia/ China -Saros 126**

**2009 Jan 26 Ring of Fire Australia Day South Atlantic to Indonesia -Saros 131**

**2009 Jul 22 Wuhan Totality -Saros 136**

**2010 Jan 15 Ring of Fire MLK Birthday Africa to China -Saros 141**

**2010 Jul 11 Easter Island Total -Saros 146**

**2008 Aug 1 Northern latitudes/ Russia/ China Total (Saros 126)** August 1 2008 brings a total solar eclipse from the extreme north of North America across the top of Greenland and then down through the Siberian wilderness into China. Path of totality ending at Luohe, China at sunset. 90% coverage at Beijing, 70% at Wuhan. Occurs one week before start of Russia/Georgia War on August 7 2008.

**2009 Jul 22 Wuhan Totality (Saros 136)** Ten years before the Pandemic begins and the world changes forever; The total eclipse of 2009 puts Wuhan, China, almost perfectly in the centerline of totality.

At 6 minutes and 39 seconds, the July 22 2009 Total solar eclipse is the longest of the 21st Century. It begins just west of India and crosses many important cities: totality in Surat, Indore, Jabalpur, Allahabad (City of God), Varanasi. Patni etc...Totality at the Taj Mahal. Totality over nearly the entire mysterious mountain kingdom of Bhutan 8 weeks before a major earthquake there. Path traverses Tibet (95% in Lhasa) and then heads to China. The eclipse goes over the great city of Shanghai, which

becomes at that moment the most-populous city in the history of the world to experience a total eclipse (metro pop. 40 million). The path crosses mostly ocean for the next several thousand miles, before dying in the Marshall Islands, site of USA nuclear tests following World War Two, including the famous island atolls of Bikini and Eniwetok, where the US controlled until 1990's and bombed with some of the largest destructive weapons in the history of man-- are in totality. The great Saros Cycle 136 returns for The Valley of the Kings eclipse in 2027.

**2010 Jan 15 MLK Birthday Chongqing Cross Ring of Fire (Saros 141)** The Martin Luther King Birthday Metonic on what would have been his 81st birthday. King visited Africa and India, both of which are in this eclipse. 177 days after the Great Wuhan Eclipse, eclipse begins in Cameroon, Africa and crosses the continent through Uganda (Annularity in Kampala), Kenya (Annularity in Nairobi). The annularity path crosses the home and birthplace of US President Barrack Obama's father Barrack Obama Sr. in the Rachuonyo District of Kenya, just as President Obama begins his second year in office.

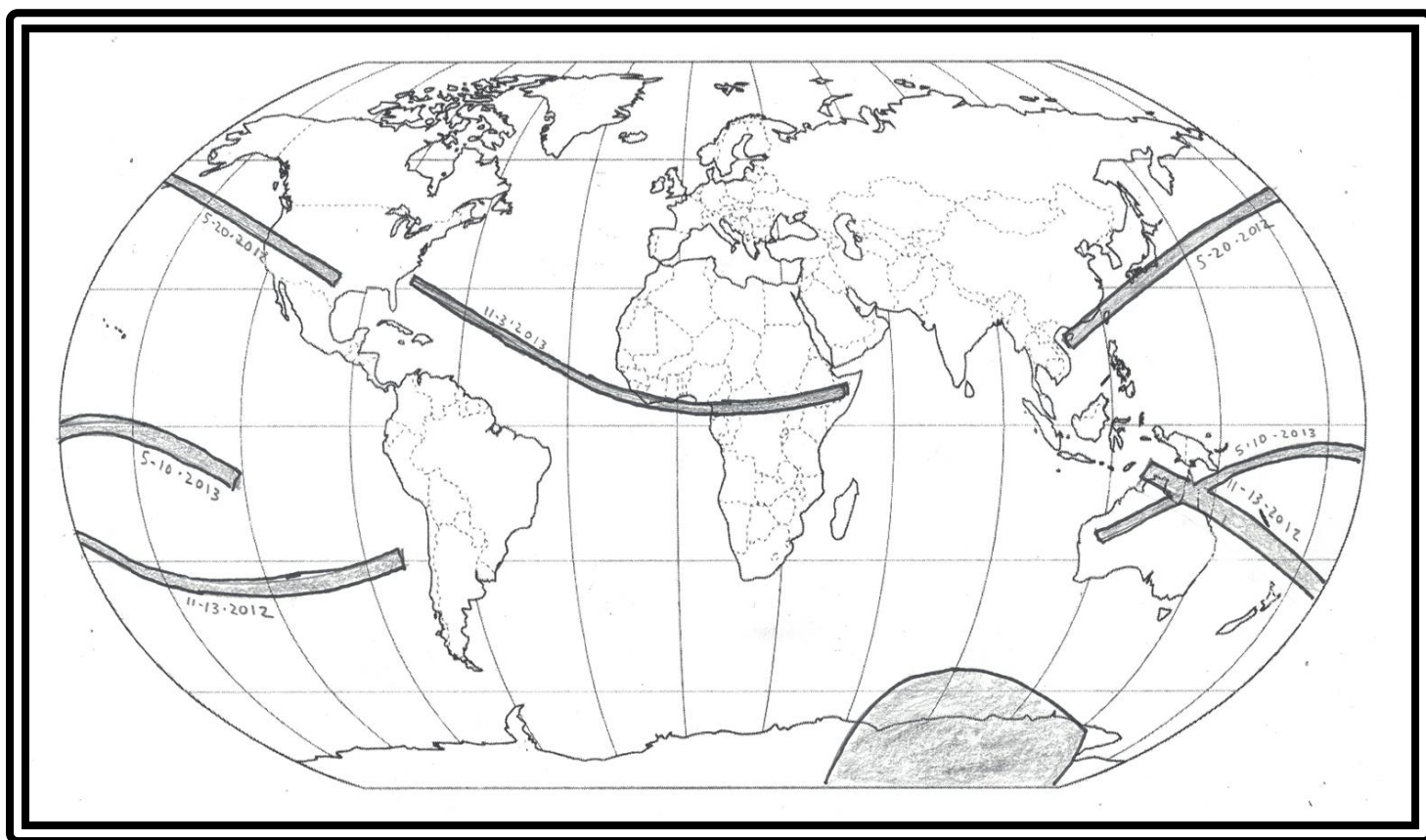
Path heads across the Indian ocean to cross extreme southern India for India's second eclipse in 6 months, including annularity at The Sri Padmanabhaswamy Temple of the Sun in Thiruvananthapuram. It is known as the world's richest temple, near where the lost city of Ophir was believed to be visited by Kings Solomon's ships around 1000 BC. Eclipse bisects Myanmar (annularity in Mandalay) and then bisects China (second eclipse in 177 days) before ending just after China's extreme northeastern border at Rongcheng, eclipse remains on the Chinese side of the Yellow Sea stopping just short of the Korean border. 80% coverage in Wuhan. If overlaid with the path of the 2009 eclipse 177 days prior, an X is seen across the nation of China, with its epicenter west of Wuhan, and very near the ancient city of Chongqing- geographically, at 31,000 square miles, the largest city in the world. On the other side of the world, an earthquake hit Haiti 60 hours earlier, one of the deadliest disasters in the history of the western hemisphere, killing 200,000 people.

**2010 Jul 11 Easter Island Total (Saros 146)** Hey, it's the 7-11 Metonic. Let's say you're an eclipse. Where would you want to go? Maybe you'd want to be the first total eclipse in 1400 years to cross Easter Island, one of the most mysterious and isolated places on planet earth, a tiny speck of land on a vast ocean with a tragic yet enduring history, the famous home of gigantic carved stone heads gazing off across the ocean's horizon. This solar eclipse travels almost entirely over open ocean before reaching Easter Island. Afterwards it travels to South America without making it to the other side. Manages to cross Patagonian city of El Calafete, and town of Esperanza ( "hope"), Argentina at sunset .

The Easter Island eclipse occurred precisely during the playing of the 2010 World Cup Soccer final between the Netherlands and Spain. The Dutch had been the first colonizers of Easter Island in the 1700's. Spain had asserted linguistic control, via Chile, in 1888. Easter Islanders speak Spanish. A soccer match between two extinct empires took place while a total eclipse crossed their most mysterious of conquests, the great watching heads of Easter Island. Spain won the match 1 -0.

*partials occur on 1-4-2011, 6-1-2011, 7-1-2011, 11-25, 2011*





**2012 to 2014. End of 10-24 United Nations Metonic.  
Last Eclipses before Spring Equinox Series**

**2012 May 20 Ring of Fire Columbus Death Day/ Vietnam Sunrise/ Midland Sunset -Saros 128**

**2012 Nov 13 Total Darwin Australia -Saros 133**

**2013 May 10 Ring of Fire Darwin Cross/ Solomon Islands -Saros 138**

**2013 Nov 3 Hybrid Africa -Saros 143**

**2014 Apr 29 Ring of Fire Antarctica -Saros 148**

**May 20 2012 Columbus Death Day/Vietnam Sunrise/ Midland, Texas Sunset Ring of Fire (Saros 128)**

Spanning the gulf between East and West. Eclipse begins in the northernmost part of Vietnam at Sunrise just east of Hanoi. China gets its 3rd eclipse in 4 years along the coast, Annularity in Taipei, Taiwan. Annularity in Tokyo, Japan. Path crosses Pacific to USA. It crosses Mount Shasta, Reno, Zion National Park (Utah), much of the Navajo Indian reservation (including 3 of 4 of their most sacred mountains-- San Francisco Peaks, Navajo Mtn, and Mount Taylor). Annularity over the cross of the four corners cross. Chaco Canyon, Santa Fe and Albuquerque. Goes just north of White Sands Atom Bomb Site (87%). Annularity over Roswell, home of real-life space aliens!

The path enters West Texas and ends at sunset over George W. Bush's boyhood home of Midland. It has been 10 years since US forces invaded the Middle East under his Presidency and 21 years since they did so under his Father's Presidency.

During the day May 20 2012, President Obama hosts the NATO Summit in Chicago, Illinois. The theme was "smart defense". Chicago has 49% coverage.

5-20 is the day Columbus died in Spain in 1506, supposedly murmuring his last words "Father into thy hands I commit my Spirit", also some of the last words of Jesus Christ (Luke 23:46).

5-20-2012 is the 520th anniversary of the discovery of America. Columbus died in 1506 on 5-20. 506 years later is eclipse, the 520<sup>th</sup> anniversary of discovery of America. Numerically odd.

**2012 Nov 12 Darwin Australia Total (Saros 133)** Speaking of numbers, an eclipse on 11-12-2012. Total solar eclipse begins at sunrise just outside of Darwin Australia-named for the famed evolutionist who was born 200 years and 9 months before on Feb 12 1812. He published Origin of Species on Nov 24 1859, 153 years minus 11 days before. The eclipse travels across the extreme northern coast of Australia through city of Cairns and over the Great Barrier Reef.

**2013 May 10 Queensland Cross/ Solomon Islands Ring of Fire (Saros 138)** 177 days later Australia gets a second eclipse-again barely any land. Apex in Queensland Northern Australia ...exiting over the Great Barrier Reef and into the Solomon Islands, this time again perfectly passing over the wreckage of John Kennedy's famous boat PT 109. near the island of Kolombongara. Exactly 30 eclipse years after the same location was crossed by a total eclipse on 11-22-1984, the 21<sup>st</sup> anniversary of JFK's murder.

**2013 Nov 3Africa Hybrid (Saros 143)** Hybrid solar eclipse. A very thin path of totality crosses the Atlantic (19% coverage at Charleston South Carolina at Sunrise, enters Gabon just south of Libreville and crosses the continent (Congo, Kenya, Ethiopia) . Totality path becomes tinier as it goes but does manage to include Gulu, Uganda. It has only a few miles width of true totality as it dies over Somalia.

**2014 Apr 30 Antarctica Ring of Fire (Saros 148)** On Hitler Death Day Metonic 69 years after his suicide in Berlin. Two weeks after the Blood Moon Total Lunar Eclipse on Passover of April 14/15. Area of true annularity smaller than map suggests.

*partial occurs 10-23-2014 (Saros 153)*