

## **COMPONENTS FOR THE CORRECT CALENDAR**

About 15 years ago I provided on my website the dates for God's annual Feasts and Holy Days for future years. That calendar table only goes up to 2025. Now we are already in the year 2020, and so I feel that I should now extend that calendar all the way to the year 2040. I personally am hoping that we don't have to go that long before Jesus Christ will return and set up the Kingdom of God. But none of us know the year when Jesus Christ will return, and so I have arbitrarily selected the year 2040 for this calendar table.

So how do we go about establishing the correct calendar?

What are the factors or components that need to be considered? In this article I will lay out all the factors that I have taken into account in the calendar for determining God's annual Feasts and Holy Days. They are **the building blocks** for establishing the calendar dates that are presented in the second part of this article, and which dates are also found in the "Research Center" on my website.

If, after examining these factors, you are in agreement with the process I outline below, then you could use this process to work out for yourself the correct dates for any given year, if you are so inclined.

**NOTE!** At the end of this article there is a .PDF file attached with the dates and times for the 1st and 7th New Moon Conjunctions and Sunset Times in Jerusalem for the years 2020 - 2040.

## **THE PROCESS I HAVE FOLLOWED**

1) Express all times for equinoxes, lunar conjunctions and sunsets in **local Jerusalem Time** (local JT). The country of Israel is in the 30° East Time Zone (2 hours ahead of GMT), but Jerusalem is actually at 35.23° East. This means that local JT is **2 hours and 21 minutes** ahead of GMT, rather than just 2 hours ahead.

Using this local JT as the standard with all the data allows us to **maintain consistency when we go back into past centuries**, when time zones had not yet been established. In this way we don't use different standards for past centuries. Local JT also expresses more realistic times for Jerusalem for sunsets than the times expressed by the 30° East Time Zone.

[**Comment:** If you choose to use 2 hours ahead of GMT for Jerusalem, instead of 2 hours 21' ahead of GMT, you will also achieve correct results, provided that you use this 2 hours ahead of GMT consistently for all your data. Always consistently applying the same standard is a key to correct results.]

[**Comment:** All dates and times presented in this article are based on the Gregorian calendar.]

2) Note that most future dates will fall within **Daylight Saving Time** (DST) for Israel. The State of Israel currently uses DST for about 7 months in the year. The dates fluctuate slightly, but DST goes from approximately March 27 to approximately October 25 every year, which period very commonly, though not always, includes the first and the seventh new moon periods.

**I consistently ignore DST with all the data, because DST is an artificial time. So when you look up conjunction times and sunset times on the internet, you may sometimes notice a one hour difference between my tables and some of those sources on the internet. That is the result of them using DST for Israel.**

If you choose to use data with DST, then you need to be careful that you use it consistently for all the data, and not unintentionally forget it in some cases. Some websites include DST in their data for future years, and other websites don't use DST. If you are consistent in always applying DST correctly, then your results should also be correct. However, keep in mind: the equinox times for Israel are all **before** DST is applied. But the 1st conjunction is mostly, but not always, **after** DST has started for that year. That is something we need to take into account.

3) Establish the correct Date & Time for **the Spring Equinox**, Northern Hemisphere, for every year, and convert it to local JT. You can find that information on the internet. For the years 2020 - 2040 the date in local JT will always be March 20. I like to express the exact time in the 24-hour format for easier recognition in a tabular context, but using a.m./p.m. works just as well.

4) Then find **the first new moon conjunction** (in local JT) **on or after** the equinox. Very rarely there will be a new moon conjunction on the equinox. In that specific situation, with the expression "on the equinox" I mean "on the same day as the equinox", not necessarily at the exact same time of day. If the equinox and the lunar conjunction occur **between the same two sunsets**, then they are "on the same day".

5) **Evaluate** the time of the conjunction **against** the **Jerusalem sunset time** for that specific date. In March/April and in September/October sunset in Jerusalem is always between 5:00 p.m. and 7:00 p.m. (i.e. between 17:00 and 19:00 hours, but watch out for DST). Thus conjunctions at those times of a year before 5:00 p.m. are always before sunset. And conjunctions after 7:00 p.m. are always after sunset, even without us knowing the exact sunset times.

This means we only need to check for the exact sunset time when the conjunction occurs between 5:00 p.m. and 7:00 p.m.

6) Determine to which day the conjunction belongs.

**If it is before sunset, then the conjunction belongs to that day. Example: in 2025 the conjunction will be on March 29 at 13:19 hours. That is before sunset, and therefore that conjunction will be a part of March 29.**

**If it is at sunset or after sunset, then the conjunction belongs to the following day. Example: in 2024 the conjunction will be on April 8 at 20:42 hours. That is after sunset, and therefore that conjunction is already a part of April 9.**

7) Having determined the day to which the conjunction belongs, **go to the sunset after that conjunction** for the start of Day 1 of the 1st month. Always do this **consistently**, irrespective of the time of day or night when the conjunction occurs. Always go to the sunset that **follows** the conjunction.

Examples with the above data:

In **2025** Day 1 will start at sunset on March 29. So **March 30** will be Day 1 in 2025.

In **2024** Day 1 will start at sunset on April 9. So **April 10** will be Day 1 in 2024.

8) Having established Day 1 of the 1st month, then determine the dates for **Passover, Feast of Unleavened Bread** and **Pentecost** based on Leviticus 23. On the internet find a Gregorian Calendar for the year in question to help you with this process.

9) Now find the **7th conjunction** of the year, from the same source where you found the date and time for the 1st conjunction.

10) **Repeat Point #6** above with the data for the 7th conjunction, to establish the day to which the conjunction belongs.

11) **Repeat Point #7** above to **establish Day 1** of the 7th month.

**Note! There is no counting from the 1st month to the 7th month, or counting back from the 7th month to establish the 1st month, as is done in the Jewish calendar calculations. There are not a fixed number of days between those two conjunctions. Rather, both conjunctions are selected based on astronomically accurate data, and not on some antiquated formula, designed to rigidly and artificially link those two conjunctions in some inflexible relationship.**

12) Having established Day 1 of the 7th month, then determine the dates for **Trumpets, Atonement, Feast of Tabernacles** and the **Last Great Day** based on Leviticus 23.

13) **Repeat the whole process** for the next year, or for any other year of your own choice. You have determined an astronomically correct calendar that will provide you with the correct dates for all of God's annual observances in that year. Job done!

**Note!**

**You don't have to know anything about theoretical 19-year cycles. You don't have to know the length of a regular year or a leap year or a so-called 19-year cycle. You don't have to worry about avoiding certain "inconvenient days" of the week. You don't need any theoretical data for some kind of starting date in ancient antiquity. You don't need some elaborate convoluted system for converting theoretical Jewish calendar new moon conjunctions (i.e. "molads") first into Julian calendar dates and then into Gregorian calendar dates. You don't need to do any kind of calculations.**

And lastly:

**You don't need anyone to give you the authority to determine the correct dates for God's annual observances, provided you are going to use the astronomically correct data, in exactly the same way that you don't need anyone to give you the authority to establish the fact that three times three is equal to nine!**

You don't ever need authority from anyone before stating something that is true and correct! You don't need authority from someone for you to count correctly from 1-22. This is not to say that you may not count incorrectly in some cases, because some people may indeed count incorrectly from the conjunction date. But you don't need authority from anyone for you to correctly count seven consecutive Sabbath Days to establish a date for Pentecost. If you need help with these processes, then someone can probably help you. But you don't need any kind of formulas or algorithms. The only correct data you need is readily available on the internet from numerous different sources.

As long as everyone restricts himself/herself to **factually correct data**, nobody should ever come up with different dates! For three times three nobody ever comes up with an answer other than nine. The

only reason certain people do come up with different dates is because **those people don't accept the factually correct data**, or **they have decided to use a different set of rules** than the ones I am laying out here.

Let's look at what we do need in order to establish an astronomically correct calendar. **All we really need is:**

- 1) Astronomically accurate **equinox dates** and times.
- 2) Astronomically accurate **lunar conjunction dates** and times.
- 3) Astronomically accurate times for **sunsets** in Jerusalem.

All this accurate data is very easy to find on the internet. And Gregorian calendars for future years are equally easy to find on the internet. All the way through this process we always stay with the Gregorian calendar, the same calendar that the Jewish calendar calculations **eventually** get to.

A comment about the Jewish calendar calculations:

**Starting out with Jewish calendar data, when you really want to establish some Gregorian calendar dates, is begging for problems! If you want to know Gregorian calendar dates for God's annual Feasts and Holy Days (and that is all that the Jewish calendar calculations are intended to produce), why would you want to involve some other calendar (i.e. the Jewish calendar) to get those Gregorian dates? Why? Why not just stay with the Gregorian calendar all the way through this process? After all, all of the required correct astronomical data (i.e. equinox times, lunar conjunction times, and sunset times) is readily available in Gregorian dates from many sources on the internet. You can just look up this accurate data, without doing any theoretical (and also somewhat flawed!) calculations, which will eventually lead you to Gregorian dates. Why take such a convoluted road to your destination?**

Next:

**Regarding accurate data: I am not concerned with "seconds" and "leap seconds" and "milliseconds", etc. For calendar purposes, times expressed to the nearest minute are accurate enough. This allows us to treat Greenwich Mean Time (GMT) and Universal Time (UT, UT1) as synonymous, because for all practical purposes they are the same. And the data below for the next 20 years shows that adding seconds and milliseconds to the lunar conjunction times and the sunset times and the equinox times would not make any difference in the results achieved for any given year.**

But here is something we should understand:

**The Jewish calendar calculations depend on a comparison between two completely different calculations. One calculation is designed to establish the (Gregorian calendar) day of the week for the conjunction. The other calculation is designed to establish the Gregorian calendar day of the month for the conjunction. The results achieved by these two independent calculations are only considered correct if the number of hours and parts of an hour (i.e. "halakim") are identical for both calculations. If they differ by even one halak (that is three-and-one-third seconds) then there is a mistake somewhere, and the results are not acceptable. The mistake has to be found.**

So with the Jewish calendar the time of the molad must be determined to a theoretical accuracy of the exact halak. In other words: with the Jewish calendar calculations **theoretical precision down to the**

**level of three-and-one-third seconds is absolutely essential** ... even though in actual fact that calculation will at times be **up to 15 hours in error**, when the results of those calculations are compared to the astronomically correct time for the conjunction.

So with the Jewish calendar calculations even parts of a second are extremely important, and they cannot be ignored. That's always the case when you have to establish something by means of calculations. Calculations always have to be very precise.

By contrast, when you can establish a correct calendar by simply copying **correct data** that has been determined by scientists and astronomers, then you don't need any **further** calculations. And if you don't need any further calculations, then fractions of a minute are insignificant and can readily be ignored, because there is no way that parts of one minute could somehow influence the decision for establishing the day of the conjunction.

You know the indictment that Jesus Christ leveled at the Pharisees in Matthew 23:23.

Woe unto you, scribes and Pharisees, hypocrites! for **you pay tithe of mint and anise and cummin, and have omitted the weightier matters of the law** ... (Matthew 23:23)

This also applies to how they deal with the calendar. They make a point of supposedly achieving an accuracy of **within three-and-one-third seconds**. This supposed accuracy is achieved and confirmed by two independent calculations. And then, having supposedly achieved such accuracy, then they callously **postpone that result by 86,400 seconds** (that's 24 hours), and not infrequently by even more.

The three-and-one-third seconds are like tithing mint, anise and cummin. And postponing by 86,400 seconds and more is like omitting the weightier matters of the law. They are picky with three seconds, and callous with over 86,000 seconds.

Anyway, the above process describes how all the dates for the years 2020 - 2040 in the latter part of this article have been established.

We can summarize the above in the form of 7 steps as follows:

1. **Look up** the date and time for the first conjunction after the spring equinox.
2. **Convert** this to local Jerusalem time.
3. **Determine** whether this is before or after sunset in Jerusalem.
4. **Select** the sunset that **follows** the conjunction to be the start of Day 1 of the first month of the year.
5. **Apply** the instructions in Leviticus 23 to determine the dates for Passover, Unleavened Bread and Pentecost.
6. **Repeat steps 1-4** for the seventh conjunction.
7. **Apply** the instructions in Leviticus 23 to determine the dates for Trumpets, Atonement, Tabernacles and the Last Great Day.

And that is all there is to it! **That is it!** Nothing else is needed!

## **SOME ADDITIONAL COMMENTS**

1) For the data for the 21 years (2020 - 2040 inclusive) under review here for determining the correct dates for the annual Feasts and Holy Days, we can establish the start of **the first month** for all these years without needing the precise sunset time for any year, except for **the year 2037**. In the year 2037 the conjunction will be on April 15 at 6:29 p.m., in the middle of the period that requires precise sunset verification. Apart from 2037 none of the other first month conjunctions will occur between 5:00 p.m. and 7:00 p.m.

2) We can also establish the start of **the seventh month** for all 21 years without needing the precise sunset times at that time of year, except for **the years 2026 and 2034**. In the year 2026 the seventh conjunction will be at 6:11 p.m., thus also squarely in the middle of the period when we need the precise sunset time to determine the correct day for the conjunction. And in 2034 the seventh conjunction will be at 6:35 p.m., and so the precise sunset time will then also be needed.

So for the data for 21 first new moons and 21 seventh new moons (i.e. 42 conjunctions in total) we only need to verify the sunset time for three specific conjunctions. For the other 39 conjunctions we can easily establish the correct day of the conjunction without knowing precise sunset times.

3) In the present century **the spring equinox** will commonly fall on March 20, and later in the century occasionally on March 19, Jerusalem time. In the 21 years under review here the spring equinox always falls on March 20, Jerusalem time, and the exact time of the equinox is never a real concern except for the two years of **2023** and **2034**. For the other 19 years under consideration the new moons are far enough away from the spring equinox, without us needing to know the precise time of day for the equinox. And obviously, the first new moon conjunction can never be one or more days before the equinox. The season of spring only starts with the equinox.

4) For the record: in 2023 the **spring equinox** will be on March 20 at 11:45 p.m. (local JT). The **new moon conjunction** will be on March 21 at 7:44 p.m. This means that in 2023 there will be a new moon conjunction on **the day after** the vernal equinox, and that will then be the first new moon of the new year.

In 2034 the **spring equinox** will be on March 20 at 3:39 p.m. (local JT). The **new moon conjunction** will be on March 20 at 12:35 p.m. So there will be a new moon conjunction about 3 hours before the spring equinox. But the spring equinox and the new moon conjunction will be **on the same day!** They will both be between the same two sunsets.

5) There are **6 years** in the period 2020 - 2040 where the dates I provide are **one lunar month later** than the Jewish calendar dates for those years. Those 6 years are: 2021, 2026, 2029, 2032, 2037 and 2040. In all 6 of those years the Jewish calendar starts the year with a **new moon conjunction that is still in the winter**. Therefore in each case the following new moon conjunction must be used as the first new moon in the spring.

In all 6 of those years the **spring equinox** will be at various times on **March 20**, in terms of local Jerusalem Time. In those 6 years the new moon conjunctions used for the 1st month of the year **by the Jewish calendar** are all before March 20. Here are the actual times for the new moon conjunctions for those 6 years, the new moons that are inappropriately used by the Jewish calendar, expressed in local JT:

2021 = new moon = **March 13**, 12:42 (12:42 p.m.)

2026 = new moon = **March 19**, 03:44 (3:44 a.m.)

2029 = new moon = **March 15**, 06:40 (6:40 a.m.)

2032 = new moon = **March 11**, 18:45 (6:45 p.m.)

2037 = new moon = **March 17**, 01:57 (1:57 a.m.)

2040 = new moon = **March 13**, 04:07 (4:07 a.m.)

[**Comment:** As an aside, if there really were perfect 19-year cycles, then the new moon in 2040 should be at exactly the same time of day as 19 years earlier, in 2021. The fact that the new moon in 2040 is approximately 8½ hours short of exactly 19 years later, illustrates the gradual drifting through the seasons of all 19-year periods. That drifting through the seasons is something that Church of God Jewish calendar proponents refuse to acknowledge, though Jewish authorities freely acknowledge this drifting. With the years 2021 and 2040 you can see the evidence for this drifting.]

All the new moons for the above 6 years are still in the winter, and therefore they all signal the start of a 13th month for the years that had started in the previous spring. That is, the years starting in 2020, 2025, 2028, 2031, 2036 and 2039 will all have 13 months.

6) **A lunar conjunction** can occur at **any time of the day**. Sometimes the conjunction may be near the start of a new day. At other times it may be near the end of a day (e.g. perhaps only an hour before sunset). Mostly the conjunction occurs more than an hour before or after the nearest sunset. On extremely rare occasions a conjunction may occur right at sunset, Jerusalem Time, as will be the case in 2037.

Irrespective of the time of day when the conjunction may occur, I have **consistently started Day 1** of the month (for both, the 1st month, and also the 7th month) **with the sunset that follows the conjunction**. Shortly I will explain my reasons for doing so.

Sometimes this means Day 1 starts an hour or two after a conjunction, while at the other extreme Day 1 may only start 24 hours after a conjunction (i.e. when the conjunction occurs right at sunset in Jerusalem). [Comment: I will elaborate on this later when I present the data for 2037.]

7) **A lunar conjunction** can also occur on **any day of the year**. Sometimes a conjunction may precede the equinox by only a few hours with a sunset between those two events. At other times it may follow the equinox by only a few hours, also with a sunset between those two events. And in one case (2034) the conjunction and the equinox are on the same day.

I have consistently accepted sunset as the start and end of a day. If there is a conjunction on the day before the equinox (e.g. as will be the case in 2026), then that conjunction is to be considered as the start of the last month of the old year (i.e. it will be **a 13th month**). And the next conjunction must be accepted as the first new moon of the new year. Any conjunction that occurs on **the day before the equinox** is still a part of winter. This approach I have applied consistently to the data for the years 2020 - 2040.

Now let's consider another issue some people raise.

## **NEVER START WITH THE SUNSET BEFORE THE CONJUNCTION**

The month must **never** start with the sunset that **precedes the day of the conjunction**. And the year

must **never** start with a conjunction that **precedes the day of the equinox**.

There are people who challenge these two criteria. So it is important to explain this in detail.

When God gives us a marker for identifying holy time (e.g. the Holy Day of Trumpets is a new moon day), then **that holy time can never start before that marker has been met**.

As far as the calendar is concerned, there are **three types of markers** that God has established, all of them in the sky. One marker is **sunset**, another marker is **a lunar conjunction**, and the third marker is **the spring equinox**.

1) Sunset is God's marker for the start of every day, and a specific sunset is God's marker for the start of **the weekly Sabbath**.

2) Lunar conjunctions (two specific ones each year) are God's markers for us to then determine the **annual Feasts and Holy Days**.

3) The spring equinox is God's marker for determining **the start of a new year**.

Let's see how these markers need to be applied.

In Genesis 1 **God** established perfect 30-day monthly cycles and perfect 360-day yearly cycles. Those perfect cycles continued until some time after King David and before the start of the Babylonian captivity. At some point before the Babylonian captivity started, God caused those perfect cycles to become seriously corrupted. Ever since that time we have had to deal with corrupted monthly and yearly cycles.

Here is how these markers function:

1) As long as **the perfect cycles** existed, **every month** started **on** the day of the lunar conjunction, and **every year** started **on** the spring equinox (i.e. spring equinox from Exodus 12 onwards), which always coincided with the first new moon conjunction of the year.

2) Ever since the monthly and yearly **cycles** have been **corrupted**, **every month** has always started **after** the new moon conjunction day, and every year has also always started **after** the first new moon in the spring, i.e. **after** the spring equinox.

Can you follow?

When all three markers (equinox, conjunction and sunset) are in perfect alignment, then Day 1 of every year will always start with the sunset that is also the time of the equinox, and also the time of the lunar conjunction. That is the perfect system: lunar cycles of exactly 30 days each and yearly cycles of exactly 360 days each both starting together at sunset in Jerusalem at the precise time of the equinox. A new year always starts **precisely at the point when the 3 markers all occur together**. There are no delays or postponements.

Consider an analogy:

Think of **a running race**, where there are **3 runners** standing at the starting line. The names of the 3 runners are: Sunset, Lunar Conjunction, and Spring Equinox. All 3 stand at the starting line together, and when the starter's gun is fired, they all start at exactly the same moment. But our 3 runners each have **a different circuit** to run. Runner "Spring Equinox" has a 360-day circuit; runner "Lunar Conjunction" has a 30-day circuit; and runner "Sunset" has a 1-day circuit to run.



When runner "Sunset" reaches the starting line for the 30th time, runner "Lunar Conjunction" returns to the starting line for the 1st time. And thereafter runners "Sunset" and "Lunar Conjunction" meet again **at the starting line** after every 30 circuits by runner "Sunset". But runner "Spring Equinox" is nowhere in sight. Then, after runner "Sunset" has run his circuit 360 times, in which time runner "Lunar Conjunction" has run his circuit exactly 12 times, then runner "Spring Equinox" finally returns to the starting line for the 1st time. And at that point **all 3 runners cross the starting line at exactly the same moment**.

And **the race starts all over again** at that exact split-second when all 3 cross the starting line together. And within that greater race, runners "Sunset" and "Lunar Conjunction" have their own private races. After every 30 circuits by runner "Sunset" these two runners start their own private race all over again at the exact split-second when both of them together cross the starting line.

What is my point with this analogy?

My point is that with this system of perfect cycles there is never a moment's postponement or delay. **The day starts** the split-second when sunset crosses the starting line. **The month starts** the split-second when both sunset and the lunar conjunction together cross the starting line. **The year starts** the split-second when all 3 (sunset, lunar conjunction and equinox) together cross the starting line.

**That's the system God established in Genesis.**

So **why** did God corrupt those perfect cycles? Is the corruption a blessing from God, or is it a curse from God? **Corruption is a curse!** It is a penalty! It is a consequence of transgressions against God!

Okay, so is a curse from God supposed to make life easier? Or is a curse supposed to make life more difficult? A curse **always makes life more difficult!** It was a curse when God drove Adam and Eve out of the garden, and that curse made life more difficult for them. God-imposed curses always make life more difficult. And corrupting the perfect solar and lunar cycles has made life **more difficult**; it has made establishing the correct calendar more difficult than it used to be, before those cycles were corrupted.

In our context: once the monthly and yearly cycles had been corrupted by God, it meant that **our 3 runners would never again cross the starting line together!** When runner "Sunset" crosses the starting line for the 30th time, runner "Lunar Conjunction" has already crossed the starting line ahead of him, because runner "Lunar Conjunction" now needs less than 30 full days to complete his circuit. Runner "Lunar Conjunction" has become faster than he used to be. Meanwhile runner "Spring Equinox" has become slower than he used to be, and when he finally crosses the starting line after 365¼ days, the other two runners are nowhere in sight, and in time they will both overlap runner "Spring Equinox".

Now when these 3 runners never again cross the starting line together, then **we need some rules**, if we want to maintain our calendar. Let's see it from God's point of view.

Previously with the perfect cycles the situation was:

- 1) When do we start the **day**? When "Sunset" crosses the starting line.
- 2) When do we start the **month**? When "Sunset" and "Lunar Conjunction" cross the starting line **together**.
- 3) When do we start the **year**? When "Sunset" and "Lunar Conjunction" and "Spring Equinox" cross the starting line **together**.

Now that these three cycles are no longer perfectly synchronized, how does God expect us to handle

this?

**The day only needs "Sunset" to cross the starting line. The day does not require any cooperation with other runners. So the day is just fine. Therefore a new day can always start immediately when runner "Sunset" crosses the starting line.**

But **the month** depends on two different runners, who are expected to cooperate. When those two runners don't cooperate and don't cross the starting line together, then **one has to be given priority over the other**. So does "Sunset" take priority over "Lunar Conjunction", or does "Lunar Conjunction" take priority over "Sunset"? Who is more important before God? Who comes first? The answer is that in this monthly relationship **"Lunar Conjunction" must always receive priority over "Sunset"**. So "Lunar Conjunction" has to cross the starting line before "Sunset". And then "Sunset" can follow. So when "Lunar Conjunction" crosses the starting line, then **the "Sunset" after that** can start Day 1 of the month.

**The year depends on all 3 runners cooperating and crossing the starting line together. Now when they don't cross the starting line together, then a hierarchy of priority has to be established. To start a new year, which runner must come first, which runner must come second, and which runner then always comes third? Who has to wait for whom? There is a hierarchy here that God expects us to recognize. Who is most important for establishing the yearly cycle in an environment of corrupt cycles?**

To establish the yearly cycle, the **1st runner** to cross the starting line must always be **"Spring Equinox"**. When "Spring Equinox" has not yet crossed the starting line, then a new year cannot possibly start. The other two runners cannot start a new year without the presence of "Spring Equinox".

After "Spring Equinox" has crossed the starting line, the requirements for the monthly cycle become the next deciding factor. As we saw above, in this process "Lunar Conjunction" takes priority over "Sunset". So the **2nd runner** to cross the starting line in this environment of corrupt cycles must always be **"Lunar Conjunction"**. But the year cannot yet start, because the 3rd runner has not yet crossed the starting line. And so the year can only start when the **3rd runner** (i.e. **"Sunset"**) also crosses the starting line right after Lunar Conjunction.

In the original system with perfect cycles all 3 runners always crossed the starting line together to start a new year. With the present corrupted cycles all 3 runners must also all cross the starting line before a new year can start. But **there is a hierarchy** for the order in which they have to cross the starting line: runner "Spring Equinox" first, then runner "Lunar Conjunction", and always last comes runner "Sunset". And the moment when the last runner crosses the starting line, **then the next year starts**.

What this means is:

"Sunset" can never cross the starting line before "Lunar Conjunction" for starting a new month; and "Lunar Conjunction" can never cross the starting line before "Spring Equinox" for starting a new year.

Think of it this way: **the fast runners can't start until the slower runners are in the process of crossing the starting line**. "Sunset" is a faster runner than "Lunar Conjunction", and so "Sunset" has to let "Lunar Conjunction" start first. Similarly, "Lunar Conjunction" is a faster runner than "Spring Equinox", and so "Lunar Conjunction" has to let "Spring Equinox" start first.

**So for a new year to start:**

1) Runner "Spring Equinox" must be either at the starting line (that's March 20 in this present century),

or already somewhat less than a full lunar cycle past the starting line (i.e. before April 18).

2) After that runner "Lunar Conjunction" must be either at or past the starting line, the starting line being March 20 in this century.

3) Runner "Sunset" then always follows immediately after runner "Lunar Conjunction" has crossed the starting line, i.e. Day 1 starts with **the sunset that follows** the lunar conjunction.

[**Comment:** When I say that runner "Spring Equinox" can be "past the starting line" I mean that **the cycle towards the next spring equinox** has already started. The equinox itself obviously does not move. The 3 runners represent **the cycles** that are involved, not the pinpointed events after which they are named. They represent the cycle from one sunset to the next, the cycle from one conjunction to the next, and the cycle from one spring equinox to the next spring equinox.]

To continue.

Once there are corrupt cycles in existence, which corrupt cycles God has imposed as a penalty for our sins, cycles that are at odds with the other cycles, **then** we are forced to start every month **after** the lunar conjunction, and start every year **after** the equinox! We can't possibly have a perfect calendar in a system which God has deliberately made imperfect, as a penalty for our sins.

The month starts with the sunset **after** the day of the conjunction. And in a year where the conjunction and the equinox are on the same day, as in 2034, the year starts with the sunset **after** the day of both the equinox and the conjunction. The previous sunset had preceded the equinox; that sunset had crossed the starting line too early, which made it ineligible to start the new year. Therefore the next sunset has to be used.

When God corrupted the perfect solar and lunar cycles, a part of the penalty was that we would always be forced to start our months and our years **after** the 3 conditions have been met. That is a consequence of our 3 runners not crossing the starting line together.

And so ever since the Babylonian captivity, and the days of Ezra, and the time of the New Testament and down to our modern times, **based on visual observations of the first new crescent**, the month has always started on the day **after** the conjunction, and sometimes two days after the conjunction. And the year has always started **at least** on the day **after** the equinox, and sometimes even 28 days after the equinox.

Back in Old and New Testament times it was impossible to correctly establish "the starting line", i.e. the exact time of the lunar conjunction and of the spring equinox (i.e. exact to within less than an hour). And whenever you are not able to **accurately** establish the starting line, then you will always have to err on the safe side, by starting the new month as soon **as you have evidence that the starting line has indeed been crossed**. That is to ensure that **we do not preempt God** by proclaiming the new month before all three required markers have crossed the starting line **in the correct sequence**.

So from the time of Ezra down into New Testament times the Jews always proclaimed the new month based on **eyewitnesses** having seen the first faint crescent of the new moon.

Jewish authorities acknowledge that even during New Testament times **the calendar was based on such eyewitness reports**. The calculated Jewish calendar simply did not exist before Hillel II installed it in 359/360 A.D. Any claims to the contrary are blatant lies.

Now note!

By the time eyewitnesses are able to see the first sliver of a new crescent, **at least 16 hours** (and the point here is still true even if we would go down to 13 or 14 hours for argument's sake) **have passed** since the "Lunar Conjunction runner" crossed the starting line. So when the Jewish authorities then proclaimed the sunset that had just passed minutes earlier to be the start of the 1st Day of the new month, then that sunset was in fact 16 hours or more after the "Lunar Conjunction runner" had crossed the starting line. And on many occasions it would even have been from 20 - 35+ hours after the conjunction.

In the system that was employed from the Babylonian captivity until well past the lives of all the New Testament apostles **it was impossible** to ever start Day 1 of a month with **the sunset before** the conjunction. It couldn't be done! That is because with visual observations they were not able to accurately establish the time of the lunar conjunction. They always only saw the new crescent well after the time of the lunar conjunction, well after runner "Lunar Conjunction" had crossed the starting line. And furthermore, they fully accepted that in their specific circumstances a new month (in their view) should start with the first visible new crescent.

The sunset with which Day 1 of every month in the Jewish calendar was started back then was **always after the conjunction**. That's the best they could do with the corrupted cycles they had to deal with (and which corrupted cycles we today still have to deal with).

It was when Hillel II established the present calculated Jewish calendar in 359/360 A.D. that the "3 runners" were given completely new instructions. **The formula** Hillel II established, without any approval from God, **decided the order** in which these 3 runners would in future cross the starting line. Or, to be more exact, that formula basically said: **we'll give all of you a turn at being first**.

With Hillel's calendar, **runner "Spring Equinox"** would mostly still cross the starting line first, but a lot of the time he would only cross the starting line **in third place**, i.e. when Hillel's formula demanded that the first month should start in the winter. In those cases runner "Lunar Conjunction" and runner "Sunset" would both cross the starting line before runner "Spring Equinox".

In addition, runners "Lunar Conjunction" and "Sunset" would both take turns in crossing the starting line ahead of the other. So their sequence was also no longer predictable. **"The formula"** had taken over full control of the race, with **no hierarchy whatsoever** amongst the 3 runners. The 3 runners had become puppets of "the formula" devised by Hillel II.

The result of Hillel's 360 A.D. calculations was that **for the first time ever**, since the time of Adam, **certain lunar conjunctions** before the spring equinox became eligible to start the first month of a new year. And **for the first time ever certain sunsets** that precede lunar conjunctions became eligible to start new months (there are 12 or 13 conjunctions per year). This includes placing many of the new moons that don't affect determining the placement of all the annual observances (i.e. new moons 2-6 and 8-12 or 13), also after the sunset with which they started the new month.

So for over 4,300 years before Hillel II all years had always started with **either** all 3 runners crossing the starting line together, **or** with runner "Spring Equinox" always crossing first, and runner "Lunar Conjunction" always crossing second, and runner "Sunset" always crossing the starting line last, but **right on the heels of** runner "Lunar Conjunction".

**That 4,300+ years old system was discarded and replaced by an upstart "Formula" introduced by the Pharisee Hillel II. I call it "an upstart" because it had never existed before, and then in 359/360 A.D. it suddenly came out of nowhere, usurping the status and position of the 4,300 years+ established system. What was it again that Jesus Christ called the Pharisees? Hmm, I don't seem to be able to put my finger on the right Scriptures. Oh well ...**

We could almost liken Hillel's calculated calendar to a coup d'etat directed against the old order.

Except for the corrupt calculated Jewish calendar, there has **never** been a time when the month started on the day **before** the lunar conjunction. And again, except for the corrupt Jewish calendar, there has **never** been a time when the year started **before** the equinox day.

**The penalty God imposed when God corrupted the heavenly cycles was not so that we would preempt the timing which those corrupt cycles would establish. The penalty God imposed was to force us "to start late", as it were, in establishing the months and the years. We start the first month late, i.e. from 1-28 days into spring. And we start each month late, i.e. with the sunset after the conjunction. That is what God has forced us to do.**

From the time of the Babylonian captivity up to the end of the New Testament period, the only way the calendar was established was by visually **looking for the first new crescent** of the new lunar cycle. And when eyewitnesses can see the first faint crescent, then that is always **at least the day after** the conjunction, and sometimes even two days after the conjunction.

[**Comment:** In other articles I have quoted from the 1956 book by Richard A. Parker and Waldo H. Dubberstein entitled "Babylonian Chronology **626 B.C. to A.D. 75**". That book was published by Brown University Press, Providence, Rhode Island, USA. In that book Parker and Dubberstein present the new-moon tables of Karl Schoch, as found in "The Venus Tablets of Ammizaduga" by S. Langdon and J. K. Fotheringham (published in London in 1928). **Parker and Dubberstein checked all the new-moon tables.** Then they published the date of every single new moon from Nisan 626 B.C. to the new moon of Adar in 76 A.D. The point is that for that entire 700-year period **visual observations** of the new crescents were the only means people had to establish the start of every new month. And that system meant that every month always started at least one day after the day of the conjunction. The sunset for starting Day 1 of every month was **always after the conjunction.**]

For over 2000 years after the Babylonian captivity, going well past the time of Christopher Columbus, looking for the first crescent of the new moon was the only way people could keep track of lunar months. That includes the period of Jesus Christ's ministry and the time of the original apostles.

There has never been a precedent of starting a day **before** the time of sunset. And so nobody is attempting to do that, in a calendar context. Likewise, there has also never been a month where starting the month **before** the actual time of the conjunction has had God's approval. And starting a year **before** the equinox likewise has never had God's approval.

Consider the following:

In the same way as it would be totally inappropriate to "average out" sunset times, in order to determine when to keep God's weekly Sabbath, so likewise is it **totally inappropriate to "average out" lunar conjunctions**, which are God's markers for determining His annual observances. Within the annual cycle each of the 12 (or 13) lunar cycles has a different length. If God wanted us to "average out" these cycles, then God would not have changed them away from all being equal in length. But that is precisely what the Jewish calendar calculations do ... they falsely assume that all 12 or 13 lunar cycles in the year are of equal length. So God deliberately altered the length of every lunar cycle, and the Jewish calendar calculations say: as far as we are concerned, all cycles are still of equal length. We'll just use an average, and that should be good enough.

The point is:

All lunar cycles **used to be** of the same length. But after God had corrupted these cycles, we can't

pretend that they are all still the same length, as they used to be. God expects us to **face up to reality**.

Now when those differences could not yet be **accurately** predicted, then taking the first visible crescent as the starting marker for a new month was **the best that they could do**. Is there a better way to determine the start of every month than relying on visual observations? **Certainly!** The "better way" requires us to be able to very accurately predict the exact time of the conjunction. In that way we get back closer to the original standards, which standards God deliberately corrupted as a penalty for our sins. But if you are simply not able to know the accurate conjunction times, then taking the first visible crescent is the best you can do. And therefore **in those circumstances that is what you have to do**.

However, **when your circumstances change**, to where you can now accurately predict the precise time for all lunar conjunctions (i.e. accurate to within a few seconds), then you certainly need to make full use of this access to accurate information. And then you should no longer rely on the previous make-do standard of using first visibility of the new crescent.

Here is why we today need to reject reliance on first visibility of the new crescent.

God is very precise in His dealings. **The equinox** is a very specific point in time, irrespective of where on earth we happen to be. The equinox occurs at the exact same moment in time for someone in New York and for another person in Sydney, Australia (though these two people would have different local times). Similarly, **the lunar conjunction** occurs at a very specific point in time, irrespective of where on earth we happen to be. Very specific points in time can be converted into local time for every other place on earth. But they are still the exact same point in time. Lunar conjunctions and the equinox express **objective times**. The calendar itself is also objective.

But **first visibility** of the new crescent represents **a very subjective piece of information!** First visibility represents **a period of 24 hours** ... from when the first people on earth could first see the new crescent, until the last people on earth have the opportunity to see the new crescent. First visibility is in effect **a sliding event** around the world, coming to different people at different times.

Furthermore, first visibility is also subjective because it relies on a person's eyesight. If we go out together to look for the new crescent, and you say that you can see it, but I cannot see it, even while looking at the place where you are pointing, do I have to accept your claim that you did see it? Or do I in my integrity say, I didn't see it, and therefore it hasn't appeared yet? What if I went out without you to look for the crescent? Or should we rely on **"calculated first visibility"**, irrespective of whether anyone can see it or not? But if we are going to resort to calculations, then why not calculate the real thing (i.e. the conjunction), instead of some theoretical first visibility?

It doesn't make sense to rely on **theoretical first visibility** in Jerusalem, when none of God's people today happen to live there, **to confirm** that theoretical visibility. "Visibility" means that **we do some looking**. But if we ourselves are not going to do any looking, why establish some theoretical first visibility standard?

My point here is simple:

The lunar conjunction is one specific point in time, that can be accurately predicted, and which is totally objective. **First visibility**, on the other hand, **is an extremely subjective standard**. By whose eyesight is first visibility determined? Do you have to possess the visual acumen of an eagle, to qualify for determining first visibility? Or will the visual abilities of the average middle-aged person represent an acceptable standard to qualify as a witness for the first new crescent?

**The subjectivity of first visibility of the new crescent is also evidenced by the fact that first**

visibility will sometimes be only 16 hours after the conjunction, but at other times it will be 17 or 18 or 19 or 20 or 21 or 22 or 23 or 24 or 25 or 26 or ... 35 hours after the conjunction. When we say that for a specific location (e.g. Jerusalem) first visibility is possible after 16 hours have passed since the conjunction, that does not mean that it will always be only 16 hours.

For example: if, at the time of year when sunset is at 6:00 p.m., the conjunction occurs at 7:00 a.m. , then the first new crescent will not yet be visible at that 6:00 p.m. sunset 11 hours later. Therefore in that situation first visibility will only be at sunset the following evening, **35 hours after the conjunction**. In that situation first visibility will start the new month **two sunsets after the conjunction**. That was acceptable when we didn't have access to more accurate data (i.e. in NT times); but starting a new month **two sunsets** after the conjunction is not acceptable when we are fully aware of the correct time for every conjunction in the year.

Next, **the idea of quizzing witnesses** (as the Jewish religious leaders in N.T. times reportedly did) by showing them some charts of different phases of the moon **is ridiculous!** That is information that any child in school today can easily learn before finishing high school. There is nothing mysterious about what that first crescent should look like, and where in the sky it should be. So for us today quizzing witnesses, who claim to have seen the new crescent, would be a farce.

Further, who will be the ultimate authority in establishing the dates for first visibility? As I said earlier, if first visibility is all you have available to you, then obviously, you need to use it. But if we have **access to far more accurate data** than reliance on first visibility, then we most certainly need to make use of that more accurate data.

The goal is to get back as close as possible to that "starting line" once the third runner has crossed it. First visibility is always **after** that starting line has been crossed by 2 of our 3 runners (i.e. first 16-35 hours earlier by runner "Lunar Conjunction", and then just minutes before first visibility by runner "Sunset").

Using first visibility is not for us today.

Okay, so much for why I have used the data that I have used. Now let's look at the dates for the next 20 years.

## **REGARDING THE DATA BELOW FOR THE YEARS 2020 - 2040**

For the data below: I have in every case highlighted in **bold type** the "**First Day of the First Month**" and the "**First Day of the Seventh Month**". The reason is that these are the only two dates in the year that must be correctly established by considering the actual lunar conjunctions and the Jerusalem sunset times.

Once these two dates have been correctly established, all the annual days that are mentioned in Leviticus chapter 23 automatically follow, based on the instructions that are spelled out in Leviticus 23. Once these two days (first day of the first month, and first day of the seventh month) have been established based on **astronomically correct information**, there is no possibility for any other dates for the Passover or the annual Feasts or the Holy Days than the dates that I have listed here. (I am here not dealing with the issue of some people misinterpreting and/or misapplying the instructions in Leviticus 23. That is a different subject.)

**For every year below I have also provided the time of the spring equinox, even though this**

information is not strictly needed, except for the three years mentioned earlier. But knowing the time of day for the spring equinox helps to put into perspective just how many days into spring the first new moon in every year actually occurs, how far runner "Spring Equinox" has come past the starting line before runner "Lunar Conjunction" finally reaches the starting line.

So here is the data for these 21 years, all in local Jerusalem time. Keep in mind that the Passover is observed after sunset on **the previous evening**, and that **all these days start at sunset on the previous evening**.

The precise times for the new moon conjunctions are based on information posted on various websites. Different sources for this information may occasionally vary by a minute or two. Where I have come across such differences, I have checked that out. And even with such minor differences (i.e. by a minute or two) in no instance would these minor differences result in Holy Day dates that differ from the ones I have presented in these tables. Note also that **the day of the week is never a consideration for the establishment of all of the dates below**, with the obvious exception that the Day of Pentecost always falls on a Sunday.

**THE YEARS 2020 - 2040** = all times are given in local Jerusalem Time, i.e. 2 hours 21 minutes ahead of GMT.

#### **YEAR: 2020**

TIME OF THE EQUINOX = March 20, 06:10 (6:10 a.m.)

FIRST NEW MOON IN THE SPRING = March 24, 11:49 (11:49 a.m.)

THE DAY OF THAT FIRST NEW MOON = March 24

**FIRST DAY OF THE FIRST MONTH = March 25**

PASSOVER (14TH DAY) = April 7

FIRST DAY OF UNLEAVENED BREAD = April 8

SEVENTH DAY OF UNLEAVENED BREAD = April 14

PENTECOST = May 31

SEVENTH NEW MOON OF THE YEAR = September 17, 13:21 (1:21 p.m.)

THE DAY OF THAT SEVENTH NEW MOON = September 17

**FIRST DAY OF THE SEVENTH MONTH = September 18**

THE HOLY DAY OF TRUMPETS = September 18

THE HOLY DAY OF ATONEMENT = September 27

FIRST DAY OF TABERNACLES = October 2



LAST GREAT DAY = October 9

**YEAR: 2021**

TIME OF THE EQUINOX = March 20, 11:58 (11:58 a.m.)

FIRST NEW MOON IN THE SPRING = April 12, 04:52 (4:52 a.m.)

THE DAY OF THAT FIRST NEW MOON = April 12

**FIRST DAY OF THE FIRST MONTH = April 13**

PASSOVER (14TH DAY) = April 26

FIRST DAY OF UNLEAVENED BREAD = April 27

SEVENTH DAY OF UNLEAVENED BREAD = May 3

PENTECOST = June 20

SEVENTH NEW MOON OF THE YEAR = October 6, 13:26 (1:26 p.m.)

THE DAY OF THAT SEVENTH NEW MOON = October 6

**FIRST DAY OF THE SEVENTH MONTH = October 7**

THE HOLY DAY OF TRUMPETS = October 7

THE HOLY DAY OF ATONEMENT = October 16

FIRST DAY OF TABERNACLES = October 21

LAST GREAT DAY = October 28

**YEAR: 2022**

TIME OF THE EQUINOX = March 20, 17:54 (5:54 p.m.)

FIRST NEW MOON IN THE SPRING = April 1, 08:45 (8:45 a.m.)

THE DAY OF THAT FIRST NEW MOON = April 1

**FIRST DAY OF THE FIRST MONTH = April 2**

PASSOVER (14TH DAY) = April 15

FIRST DAY OF UNLEAVENED BREAD = April 16

SEVENTH DAY OF UNLEAVENED BREAD = April 22

PENTECOST = June 5

SEVENTH NEW MOON OF THE YEAR = September 26, 01:15 (1:15 a.m.)

THE DAY OF THAT SEVENTH NEW MOON = September 26

**FIRST DAY OF THE SEVENTH MONTH = September 27**

THE HOLY DAY OF TRUMPETS = September 27

THE HOLY DAY OF ATONEMENT = October 6

FIRST DAY OF TABERNACLES = October 11

LAST GREAT DAY = October 18

**YEAR: 2023**

TIME OF THE EQUINOX = March 20, 23:45 (11:45 p.m.)

FIRST NEW MOON IN THE SPRING = March 21, 19:44 (7:44 p.m.)

THE DAY OF THAT FIRST NEW MOON = March 22

**FIRST DAY OF THE FIRST MONTH = March 23**

PASSOVER (14TH DAY) = April 5

FIRST DAY OF UNLEAVENED BREAD = April 6

SEVENTH DAY OF UNLEAVENED BREAD = April 12

PENTECOST = May 28

SEVENTH NEW MOON OF THE YEAR = September 15, 04:01 (4:01 a.m.)

THE DAY OF THAT SEVENTH NEW MOON = September 15

**FIRST DAY OF THE SEVENTH MONTH = September 16**

THE HOLY DAY OF TRUMPETS = September 16

THE HOLY DAY OF ATONEMENT = September 25

FIRST DAY OF TABERNACLES = September 30

LAST GREAT DAY = October 7

**YEAR: 2024**

TIME OF THE EQUINOX = March 20, 05:28 (5:28 a.m.)

FIRST NEW MOON IN THE SPRING = April 8, 20:42 (8:42 p.m.)

THE DAY OF THAT FIRST NEW MOON = April 9

**FIRST DAY OF THE FIRST MONTH = April 10**

PASSOVER (14TH DAY) = April 23

FIRST DAY OF UNLEAVENED BREAD = April 24

SEVENTH DAY OF UNLEAVENED BREAD = April 30

PENTECOST = June 16

SEVENTH NEW MOON OF THE YEAR = October 2, 21:10 (9:10 p.m.)

THE DAY OF THAT SEVENTH NEW MOON = October 3

**FIRST DAY OF THE SEVENTH MONTH = October 4**

THE HOLY DAY OF TRUMPETS = October 4

THE HOLY DAY OF ATONEMENT = October 13

FIRST DAY OF TABERNACLES = October 18

LAST GREAT DAY = October 25

**YEAR: 2025**

TIME OF THE EQUINOX = March 20, 11:23 (11:23 a.m.)

FIRST NEW MOON IN THE SPRING = March 29, 13:19 (1:19 p.m.)

THE DAY OF THAT FIRST NEW MOON = March 29

**FIRST DAY OF THE FIRST MONTH = March 30**

PASSOVER (14TH DAY) = April 12

FIRST DAY OF UNLEAVENED BREAD = April 13

SEVENTH DAY OF UNLEAVENED BREAD = April 19

PENTECOST = June 1

SEVENTH NEW MOON OF THE YEAR = September 21, 22:15 (10:15 p.m.)

THE DAY OF THAT SEVENTH NEW MOON = September 22

**FIRST DAY OF THE SEVENTH MONTH = September 23**

THE HOLY DAY OF TRUMPETS = September 23

THE HOLY DAY OF ATONEMENT = October 2

FIRST DAY OF TABERNACLES = October 7

LAST GREAT DAY = October 14

**YEAR: 2026**

TIME OF THE EQUINOX = March 20, 17:07 (5:07 p.m.)

FIRST NEW MOON IN THE SPRING = April 17, 14:12 (2:12 p.m.)

THE DAY OF THAT FIRST NEW MOON = April 17

**FIRST DAY OF THE FIRST MONTH = April 18**

PASSOVER (14TH DAY) = May 1

FIRST DAY OF UNLEAVENED BREAD = May 2

SEVENTH DAY OF UNLEAVENED BREAD = May 8

PENTECOST = June 21

SEVENTH NEW MOON OF THE YEAR = October 10, 18:11 (6:11 p.m.)

[Comment: On October 10 sunset will be 5:34 p.m. local JT]

THE DAY OF THAT SEVENTH NEW MOON = October 11

**FIRST DAY OF THE SEVENTH MONTH = October 12**

THE HOLY DAY OF TRUMPETS = October 12

THE HOLY DAY OF ATONEMENT = October 21

FIRST DAY OF TABERNACLES = October 26

LAST GREAT DAY = November 2

**YEAR: 2027**

TIME OF THE EQUINOX = March 20, 22:46 (10:46 p.m.)

FIRST NEW MOON IN THE SPRING = April 7, 02:12 (2:12 a.m.)

THE DAY OF THAT FIRST NEW MOON = April 7

**FIRST DAY OF THE FIRST MONTH = April 8**

PASSOVER (14TH DAY) = April 21

FIRST DAY OF UNLEAVENED BREAD = April 22

SEVENTH DAY OF UNLEAVENED BREAD = April 28

PENTECOST = June 13

SEVENTH NEW MOON OF THE YEAR = September 30, 04:57 (4:57 a.m.)

THE DAY OF THAT SEVENTH NEW MOON = September 30

**FIRST DAY OF THE SEVENTH MONTH = October 1**

THE HOLY DAY OF TRUMPETS = October 1

THE HOLY DAY OF ATONEMENT = October 10

FIRST DAY OF TABERNACLES = October 15

LAST GREAT DAY = October 22

**YEAR: 2028**

TIME OF THE EQUINOX = March 20, 4:38 (4:38 a.m.)

FIRST NEW MOON IN THE SPRING = March 26, 06:52 (6:52 a.m.)

THE DAY OF THAT FIRST NEW MOON = March 26

**FIRST DAY OF THE FIRST MONTH = March 27**

PASSOVER (14TH DAY) = April 9

FIRST DAY OF UNLEAVENED BREAD = April 10

SEVENTH DAY OF UNLEAVENED BREAD = April 16

PENTECOST = June 4

SEVENTH NEW MOON OF THE YEAR = September 18, 20:44 (8:44 p.m.)

THE DAY OF THAT SEVENTH NEW MOON = September 19

**FIRST DAY OF THE SEVENTH MONTH = September 20**

THE HOLY DAY OF TRUMPETS = September 20

THE HOLY DAY OF ATONEMENT = September 29

FIRST DAY OF TABERNACLES = October 4

LAST GREAT DAY = October 11

**YEAR: 2029**

TIME OF THE EQUINOX = March 20, 10:22 (10:22 a.m.)

FIRST NEW MOON IN THE SPRING = April 14, 00:01 (12:01 a.m.)

THE DAY OF THAT FIRST NEW MOON = April 14

**FIRST DAY OF THE FIRST MONTH = April 15**

PASSOVER (14TH DAY) = April 28

FIRST DAY OF UNLEAVENED BREAD = April 29

SEVENTH DAY OF UNLEAVENED BREAD = May 5

PENTECOST = June 17

SEVENTH NEW MOON OF THE YEAR = October 7, 21:35 (9:35 p.m.)

THE DAY OF THAT SEVENTH NEW MOON = October 8

**FIRST DAY OF THE SEVENTH MONTH = October 9**

THE HOLY DAY OF TRUMPETS = October 9

THE HOLY DAY OF ATONEMENT = October 18

FIRST DAY OF TABERNACLES = October 23

LAST GREAT DAY = October 30

**YEAR: 2030**

TIME OF THE EQUINOX = March 20, 16:12 (4:12 p.m.)

FIRST NEW MOON IN THE SPRING = April 3, 00:23 (12:23 a.m.)

THE DAY OF THAT FIRST NEW MOON = April 3

**FIRST DAY OF THE FIRST MONTH = April 4**

PASSOVER (14TH DAY) = April 17

FIRST DAY OF UNLEAVENED BREAD = April 18

SEVENTH DAY OF UNLEAVENED BREAD = April 24

PENTECOST = June 9

SEVENTH NEW MOON OF THE YEAR = September 27, 12:15 (12:15 p.m.)

THE DAY OF THAT SEVENTH NEW MOON = September 27

**FIRST DAY OF THE SEVENTH MONTH = September 28**

THE HOLY DAY OF TRUMPETS = September 28

THE HOLY DAY OF ATONEMENT = October 7

FIRST DAY OF TABERNACLES = October 12

LAST GREAT DAY = October 19

#### **YEAR: 2031**

TIME OF THE EQUINOX = March 20, 22:02 (10:02 p.m.)

FIRST NEW MOON IN THE SPRING = March 23, 06:10 (6:10 a.m.)

THE DAY OF THAT FIRST NEW MOON = March 23

**FIRST DAY OF THE FIRST MONTH = March 24**

PASSOVER (14TH DAY) = April 6

FIRST DAY OF UNLEAVENED BREAD = April 7

SEVENTH DAY OF UNLEAVENED BREAD = April 13

PENTECOST = June 1

SEVENTH NEW MOON OF THE YEAR = September 16, 21:07 (9:07 p.m.)

THE DAY OF THAT SEVENTH NEW MOON = September 17

**FIRST DAY OF THE SEVENTH MONTH = September 18**

THE HOLY DAY OF TRUMPETS = September 18

THE HOLY DAY OF ATONEMENT = September 27

FIRST DAY OF TABERNACLES = October 2

LAST GREAT DAY = October 9

**YEAR: 2032**

TIME OF THE EQUINOX = March 20, 3:44 (3:44 a.m.)

FIRST NEW MOON IN THE SPRING = April 10, 05:00 (5:00 a.m.)

THE DAY OF THAT FIRST NEW MOON = April 10

**FIRST DAY OF THE FIRST MONTH = April 11**

PASSOVER (14TH DAY) = April 24

FIRST DAY OF UNLEAVENED BREAD = April 25

SEVENTH DAY OF UNLEAVENED BREAD = May 1

PENTECOST = June 13

SEVENTH NEW MOON OF THE YEAR = October 4, 15:47 (3:47 p.m.)

THE DAY OF THAT SEVENTH NEW MOON = October 4

**FIRST DAY OF THE SEVENTH MONTH = October 5**

THE HOLY DAY OF TRUMPETS = October 5

THE HOLY DAY OF ATONEMENT = October 14

FIRST DAY OF TABERNACLES = October 19

LAST GREAT DAY = October 26

**YEAR: 2033**

TIME OF THE EQUINOX = March 20, 9:44 (9:44 a.m.)



FIRST NEW MOON IN THE SPRING = March 30, 20:12 (8:12 p.m.)

THE DAY OF THAT FIRST NEW MOON = March 31

**FIRST DAY OF THE FIRST MONTH = April 1**

PASSOVER (14TH DAY) = April 14

FIRST DAY OF UNLEAVENED BREAD = April 15

SEVENTH DAY OF UNLEAVENED BREAD = April 21

PENTECOST = June 5

SEVENTH NEW MOON OF THE YEAR = September 23, 16:01 (4:01 p.m.)

THE DAY OF THAT SEVENTH NEW MOON = September 23

**FIRST DAY OF THE SEVENTH MONTH = September 24**

THE HOLY DAY OF TRUMPETS = September 24

THE HOLY DAY OF ATONEMENT = October 3

FIRST DAY OF TABERNACLES = October 8

LAST GREAT DAY = October 15

#### **YEAR: 2034**

TIME OF THE EQUINOX = March 20, 15:39 (3:39 p.m.)

FIRST NEW MOON IN THE SPRING = March 20, 12:35 (12:35 p.m.)

THE DAY OF THAT FIRST NEW MOON = March 20

**FIRST DAY OF THE FIRST MONTH = March 21**

PASSOVER (14TH DAY) = April 3

FIRST DAY OF UNLEAVENED BREAD = April 4

SEVENTH DAY OF UNLEAVENED BREAD = April 10

PENTECOST = May 28

[Comment: The equinox and the new moon conjunction will be on the same day! This results in the earliest possible start for the first month.]

SEVENTH NEW MOON OF THE YEAR = September 12, 18:35 (6:35 p.m.)

[Comment: Sunset on September 12 will be 6:10 p.m.; i.e. 25' **before** the conjunction.]

THE DAY OF THAT SEVENTH NEW MOON = September 13

**FIRST DAY OF THE SEVENTH MONTH = September 14**

THE HOLY DAY OF TRUMPETS = September 14

THE HOLY DAY OF ATONEMENT = September 23

FIRST DAY OF TABERNACLES = September 28

LAST GREAT DAY = October 5

**YEAR: 2035**

TIME OF THE EQUINOX = March 20, 21:24 (9:24 p.m.)

FIRST NEW MOON IN THE SPRING = April 8, 13:19 (1:19 p.m.)

THE DAY OF THAT FIRST NEW MOON = April 8

**FIRST DAY OF THE FIRST MONTH = April 9**

PASSOVER (14TH DAY) = April 22

FIRST DAY OF UNLEAVENED BREAD = April 23

SEVENTH DAY OF UNLEAVENED BREAD = April 29

PENTECOST = June 17

SEVENTH NEW MOON OF THE YEAR = October 1, 15:27 (3:27 p.m.)

THE DAY OF THAT SEVENTH NEW MOON = October 1

**FIRST DAY OF THE SEVENTH MONTH = October 2**

THE HOLY DAY OF TRUMPETS = October 2

THE HOLY DAY OF ATONEMENT = October 11

FIRST DAY OF TABERNACLES = October 16

LAST GREAT DAY = October 23

**YEAR: 2036**

TIME OF THE EQUINOX = March 20, 3:23 (3:23 a.m.)

FIRST NEW MOON IN THE SPRING = March 27, 23:17 (11:17 p.m.)

THE DAY OF THAT FIRST NEW MOON = March 28

**FIRST DAY OF THE FIRST MONTH = March 29**

PASSOVER (14TH DAY) = April 11

FIRST DAY OF UNLEAVENED BREAD = April 12

SEVENTH DAY OF UNLEAVENED BREAD = April 18

PENTECOST = June 1

SEVENTH NEW MOON OF THE YEAR = September 20, 04:12 (4:12 a.m.)

THE DAY OF THAT SEVENTH NEW MOON = September 20

**FIRST DAY OF THE SEVENTH MONTH = September 21**

THE HOLY DAY OF TRUMPETS = September 21

THE HOLY DAY OF ATONEMENT = September 30

FIRST DAY OF TABERNACLES = October 5

LAST GREAT DAY = October 12

### **YEAR: 2037**

TIME OF THE EQUINOX = March 20, 9:11 (9:11 a.m.)

FIRST NEW MOON IN THE SPRING = April 15, 18:29 (6:29 p.m.)

SUNSET on April 15 = 6:29 p.m.

[Comment: The conjunction and sunset will be **at the same time**, at the very beginning of April 16.]

### **SOME COMMENTS ON THE YEAR 2037**

The year 2037 presents a unique situation which **requires a judgment** in order to decide how to handle it. This is due to the first new moon conjunction in the spring being exactly at sunset in Jerusalem. What happens in this type of situation?

Theoretically, there are **two possible ways** to handle this. The two possibilities for the 1st Day of the 1st Month in 2037 are **either April 16 or April 17**.

With **April 16** as Day 1 of the new year, that Day 1 would have to **start with sunset on April 15**, at the very moment when sunset and the lunar conjunction both take place. In this case the year starts with **the very moment of the conjunction**.

With **April 17** as Day 1, that Day 1 would have to **start with sunset on April 16**, the next sunset after the day of the conjunction. In this case the year starts **24 hours after the conjunction**.

Let's start by examining the facts in this matter very closely.

Various different reliable sources for information regarding future conjunctions and future sunset times give the following information (all converted into local JT):

- 1) The time for the **conjunction** as 6:28 p.m, 6:29 p.m. or 6:30 p.m.
- 2) The time for **sunset** as 6:29 p.m. or 6:30 p.m.

In this situation it doesn't really make a difference whether the conjunction is a minute earlier than sunset, or whether sunset is a minute earlier than the conjunction. **For all practical purposes sunset and the conjunction will take place at the same time.**

Calendar decisions are not about arguing about one minute here or there. Sunset times may in reality well turn out to be a minute earlier or later, **depending on the location** in Jerusalem (viewed from a hill, or viewed from a valley floor) from which some theoretical observer would be watching the sun go down.

Furthermore, because this is something of a difficult situation, we need not yet commit ourselves to some final dates. We can wait until we get to around the year 2035 before making a final decision. If we do get to the year 2035, then a firm decision may need to be made. But **until then this is all only theoretical**. I suspect that all of us hope that God the Father will send Jesus Christ back to earth before we get to the year 2037.

I say these things because I strongly suspect that **people will be divided** over the dates for the year 2037. Some will insist on April 16 being the 1st Day of the 1st Month, and others will insist equally strongly on April 17. Therefore to avoid unnecessary divisions I say: we can have our opinions on this question, and I will lay out my opinion shortly, but **let's defer a final commitment** until about the year 2035. Let's wait to see if we get that far.

Here is how I myself assess the situation for 2037.

When the lunar conjunction occurs right at sunset, then we have runners "Lunar Conjunction" and "Sunset" crossing the starting line together. Now **if** that was also the exact time of **the equinox**, **then** it would be all 3 runners crossing the starting line together, **and then** Day 1 of the year should start at that very moment of sunset. It would be back to the original perfect conditions ... all 3 runners starting together.

However, when runners "Lunar Conjunction" and "Sunset" cross the starting line together around **the middle of April**, and thus obviously without runner "Spring Equinox", **then** that is not anywhere near the original perfect conditions. When the year starts weeks after the equinox, that is proof of corrupted conditions. So the first point to recognize is that this situation of "Lunar Conjunction" and "Sunset" crossing the starting line together is nothing more than an unintentional coincidence, and that **this does not reflect a return to perfect cycles**.

Next, let's recognize that when runners "Sunset" and "Lunar Conjunction" will cross the starting line

together at sunset on April 15 in 2037, then **that sunset will not be "after the conjunction"**! When they cross the starting line together, then **they both cross in second place**. Therefore runner "Sunset" will **not** be crossing the starting line in third place! But as long as the whole system is still corrupted, **runner "Lunar Conjunction" is supposed to take priority over runner "Sunset"**.

In this situation the only way for runner "Sunset" to still cross the starting line in third place, is for **the sunset on April 16** to be recognized as the start for the first month. That sunset will start the day we call April 17.

As long as the extant system is still corrupt, runner "Sunset" cannot be on a par with runner "Lunar Conjunction". Runner "Sunset" cannot be equal with runner "Lunar Conjunction". It is only very shortly before Jesus Christ returns that these three cycles will be restored, and again be "perfect cycles". That restoration of the perfect cycles is the underlying purpose for what we commonly refer to as "the Heavenly Signs", or Seal #6 (see Revelation 6:12-17). This purpose is discussed in some detail in my February 2020 article "GOD'S ORIGINAL PLAN & HOW IT WAS MODIFIED".

I could elaborate further, but this is why I personally believe that in 2037 the first day of the first month should be **April 17** (which day will start at sunset on April 16). And this is the date I will use for the year 2037 in this list.

However, as I indicated earlier, **this date is not written in stone**. Perhaps we will find valid reasons to change it to one day earlier? I don't know. As I said, for the year 2037 a judgment needs to be made. And so the dates I present for 2037 may need to be changed by one day. Let's wait till around 2035, and see if we actually get there. God's people are getting older, and many of us who are currently in our 60's or 70's or even 80's may not even be alive 15 years from now, to be present when such a judgment may need to be made. So why argue over something that may not occur in our own lifetimes?

Okay, now let's continue with the data for the year 2037.

THE DAY OF THAT FIRST NEW MOON = April 16

**FIRST DAY OF THE FIRST MONTH = April 17**

PASSOVER (14TH DAY) = April 30

FIRST DAY OF UNLEAVENED BREAD = May 1

SEVENTH DAY OF UNLEAVENED BREAD = May 7

PENTECOST = June 21

SEVENTH NEW MOON OF THE YEAR = October 9, 04:55 (4:55 a.m.)

THE DAY OF THAT SEVENTH NEW MOON = October 9

**FIRST DAY OF THE SEVENTH MONTH = October 10**

THE HOLY DAY OF TRUMPETS = October 10

THE HOLY DAY OF ATONEMENT = October 19

FIRST DAY OF TABERNACLES = October 24

LAST GREAT DAY = October 31

**YEAR: 2038**

TIME OF THE EQUINOX = March 20, 15:01 (3:01 p.m.)

FIRST NEW MOON IN THE SPRING = April 4, 19:03 (7:03 p.m.)

THE DAY OF THAT FIRST NEW MOON = April 5

**FIRST DAY OF THE FIRST MONTH = April 6**

PASSOVER (14TH DAY) = April 19

FIRST DAY OF UNLEAVENED BREAD = April 20

SEVENTH DAY OF UNLEAVENED BREAD = April 26

PENTECOST = June 13

SEVENTH NEW MOON OF THE YEAR = September 28, 21:17 (9:17 p.m.)

THE DAY OF THAT SEVENTH NEW MOON = September 29

**FIRST DAY OF THE SEVENTH MONTH = September 30**

THE HOLY DAY OF TRUMPETS = September 30

THE HOLY DAY OF ATONEMENT = October 9

FIRST DAY OF TABERNACLES = October 14

LAST GREAT DAY = October 21

**YEAR: 2039**

TIME OF THE EQUINOX = March 20, 20:53 (8:53 p.m.)

FIRST NEW MOON IN THE SPRING = March 24, 20:20 (8:20 p.m.)

THE DAY OF THAT FIRST NEW MOON = March 25

**FIRST DAY OF THE FIRST MONTH = March 26**

PASSOVER (14TH DAY) = April 8

FIRST DAY OF UNLEAVENED BREAD = April 9

SEVENTH DAY OF UNLEAVENED BREAD = April 15

PENTECOST = May 29

SEVENTH NEW MOON OF THE YEAR = September 18, 10:43 (10:43 a.m.)

THE DAY OF THAT SEVENTH NEW MOON = September 18

**FIRST DAY OF THE SEVENTH MONTH = September 19**

THE HOLY DAY OF TRUMPETS = September 19

THE HOLY DAY OF ATONEMENT = September 28

FIRST DAY OF TABERNACLES = October 3

LAST GREAT DAY = October 10

**YEAR: 2040**

TIME OF THE EQUINOX = March 20, 2:32 (2:32 a.m.)

FIRST NEW MOON IN THE SPRING = April 11, 16:21 (4:21 p.m.)

THE DAY OF THAT FIRST NEW MOON = April 11

**FIRST DAY OF THE FIRST MONTH = April 12**

PASSOVER (14TH DAY) = April 25

FIRST DAY OF UNLEAVENED BREAD = April 26

SEVENTH DAY OF UNLEAVENED BREAD = May 2

PENTECOST = June 17

SEVENTH NEW MOON OF THE YEAR = October 6, 07:46 (7:46 a.m.)

THE DAY OF THAT SEVENTH NEW MOON = October 6

**FIRST DAY OF THE SEVENTH MONTH = October 7**

THE HOLY DAY OF TRUMPETS = October 7

THE HOLY DAY OF ATONEMENT = October 16

FIRST DAY OF TABERNACLES = October 21

LAST GREAT DAY = October 28

May God intervene in this world's affairs **before** we get to the year of 2040.

Frank W. Nelte

Reference PDF: <https://www.franknelte.net/files/36.pdf>