

The Refined Reconstructed Jewish Calendar of the Late Second Temple Period: Astronomical Advancements Enable Accuracy to the Day

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Introduction

Murphey presented the Reconstructed Jewish Calendar of the Late Second Temple Period in March of 2023.¹ The key finding which allowed the Jewish Calendar to be reconstituted was in salvaging the Jewish Calendar's unique 19-year Metonic Cycle from descriptions found in the Talmud. The recovered Metonic Cycle specifically defines those years that contain a 13th, or embolismic, month so that the lunar months may be optimally aligned to the solar year. Then, from an understanding of the Talmud's requirements for the Calendar to honor the vernal and autumnal equinoxes as solar "guide posts" to the seasons, each lunar month can be assigned a Jewish Calendar month-name. Calendrical synchronization to the annual cycle of seasons is substantiated by the ancient Gezer Calendar which specifically names those Jewish months which were coincident with the planting and harvesting of various crops.² This investigation defined an intercalation schedule where within the 19-Year Metonic Cycle, Cycle Years 3, 5, 8, 11, 13, 16, and 19 are embolismic and contain a 13th month named "Adar-II." Further confirmation of the identified Metonic Cycle was provided by comparing predicted modern calendrical results against actual horned moon sightings from Jerusalem by the Karaite Jews, who also used the finding of "abib barley" to establish which lunation is tied to the month of Nisan each year. Simply stated, systematic intercalation to mirror the solar year is the means by which a lunisolar calendar achieves its true purpose, which is to accurately and routinely predict the timing of the solar-based seasons which mark the pulse of an agrarian society.

This recovered Jewish intercalation schedule differs from the Babylonian Calendar documented by Parker and Dubberstein, which is often used by Bible researchers as the basis for Julian date conversions from Jewish Calendar dates, where its embolismic Cycle Years are 1, 4, 7, 10, 12, 15 and 18.³ This disparity leads to different Julian date equivalents being found between the Babylonian and Reconstructed Jewish Calendar of the Late Second Temple Period in Cycle Years 1, 2, 4, 7, 10, 12, 15 and 18, whereas the Julian date equivalents are generally similar for Cycle Years 3, 5, 6, 8, 9, 11, 13, 14, 16, 17 and 19. Specifically, over the years typically researched for the Crucifixion of Christ, 28 AD to 36 AD, it is discovered that the Julian date equivalents in the Reconstructed Jewish Calendar of the Late Second Temple Period differ from those presented in Parker and Dubberstein's Babylonian Calendar for the years 28 AD, 31 AD, 33 AD and 36 AD.

However, in the original presentation of the Reconstructed Jewish Calendar of the Late Second Temple Period, the dates determined for the first day of each Jewish month were not rigorously calculated. It is known that the Jews determined the first day of each month with the observation of the lunar phase known as the "horned moon" from the vantage point of Jerusalem. So, while the dates in the Reconstructed Jewish Calendar of the Late Second Temple Period have their basis in the ancient dates and times calculated by the renowned astronomer Fred Espenak for the new moon phase, a fixed

¹ Murphey, Charles F., "The Reconstructed Jewish Calendar of the Late Second Temple Period: The Alternative to the Babylonian Calendar for Determining Julian Date Equivalents," pp. 42-74, Link: https://www.academia.edu/98521852/The_Reconstructed_Jewish_Calendar_of_the_Late_Second_Temple_Period_The_Alternative_to_the_Babylonian_Calendar_for_Determining_Julian_Date_Equivalents

² Albright, W. F., "The Gezer Calendar," *Bulletin of the American Schools of Oriental Research*, no. 92, American Schools of Oriental Research, 1943, pp. 16–26, Link: <https://www.jstor.org/stable/1355268>

³ Parker, Richard A., and Dubberstein, Waldo H., ***Babylonian Chronology, 626 B.C. – A.D. 75***, 4th ed., Providence, Brown University Press, 1971

time of 23 hours for the moon's transition to the Jew's so-called "horned moon" phase was assumed.^{4,5} This approximation fails to account for the fact that the moon's orbit is not perfectly circular, but eccentric, such that the time for this transition can actually be longer or shorter than 23 hours.⁶ To be precise, the entire observed lunar cycle today varies from as little as 29 days, 6 hours, 32 minutes to as much as 29 days, 19 hours and 59 minutes, while in antiquity that variation was even wider.⁷ Relying simply upon the data presented later in this Paper, where a total of 1546 lunations are investigated over the 125-year period from 50 BC to 75 AD, the average time per lunation can be calculated as 125 years x 365.25 days/1546 = 29.53 days, or 29 days, 12 hours and 43 minutes. Due to this fact, the Ancients built lunisolar calendars with lunar months consisting of either 29 or 30 days.

New Astronomical Calculations Enable the Reconstructed Jewish Calendar to be Accurate to the Day

Recent conversations with Robert Klever of Germany revealed a new opportunity to bring exacting accuracy to the identification of the Julian Calendar date associated with the first day of each Jewish month. Klever shared his interactions with Dr. Rita Gautschy, Professor of Classical and Ancient Studies and Digital Humanities at the University of Basel in Switzerland, who has a PhD in Astronomy from the University of Vienna, among other degrees. Gautschy and Thomann have investigated the question of viewing the crescent moon at sunset from different locations in the Middle East by employing the treatment by Yallop who combined the various approaches documented by Schoch, Maunder and Bruin.^{8,9} These calculations define a value for "q" which relates to the visibility of the crescent moon from a particular location on consecutive evenings following the astronomical date of the new moon phase. On the day when the value for q first falls within the limits of either Yallop's Zone A, meaning that the crescent moon was easily observable, or Yallop's Zone B, when the moon could only be seen by the naked eye under perfect weather conditions, then the first day of that Jewish month may be identified. Gautschy and Thomann's study, which reviewed centuries of documented Islamic sightings of the crescent moon, further led them to the conclusion that these ancient observers were very competent at their task, such that in the presence of clear weather conditions (as required for a Zone B sighting), there was a high probability of viewing the moon on the day prior to when it would otherwise be considered as easily seen (defined as Zone A).¹⁰ This finding then fostered the suggestion of a further study based upon the correlation of documented unsuccessful early crescent moon sightings (Zone B) to uncover historical weather trends of "cloudiness" over various Middle Eastern viewing locations.¹¹ Subsequently, Gautschy restated Yallop's range for values of q within these two zones by using topocentric calculations in order to account for an observation site on the Earth's surface, such as from Jerusalem or Babylon, to yield the limits seen below:^{12,13}

⁴ Espenak, Fred, "Phases of the Moon: 1-100 AD," Accessed 17 August 2021, Link:

<http://astropixels.com/ephemeris/phasescat/phases0001.html>

⁵ Murphey, "The Reconstructed Jewish Calendar of the Late Second Temple Period: The Alternative to the Babylonian Calendar for Determining Julian Date Equivalents," p. 39

⁶ Personal conversations with Dr. Peter Moore shortly after the original Paper "The Reconstructed Jewish Calendar of the Late Second Temple Period: The Alternative to the Babylonian Calendar for Determining Julian Date Equivalents" was posted on Academia.edu in 2023. Moore's PhD dissertation covered the calculations to account for this phenomenon.

⁷ Gautschy, Rita, "Last and first sightings of the lunar crescent," Link: <https://gautschy.ch/~rita/archast/mond/mondeng.html>

⁸ Gautschy, R. and Thomann, J., "Dating Historical Arabic Observations," *Proceedings of the International Astronomical Union*, 2018; 14(A30), pp. 163-166, doi:10.1017/S1743921319003983

⁹ Yallop, B. D., "A Method for Predicting the First Sighting of the New Crescent Moon," *NAO Technical Note*, No. 69, 1997.

¹⁰ Gautschy and Thomann, "Dating Historical Arabic Observations," pp. 165-166

¹¹ Ibid.

¹² Pursuant to a personal email conversation with Dr. Gautschy on 11/11/2024

¹³ Gautschy, "Last and first sightings of the lunar crescent," Link: <https://gautschy.ch/~rita/archast/mond/mondeng.html>

Zone A: $q > +0.095$ = crescent moon is easily visible

Zone B: $+0.095 \geq q > -0.135$ = crescent moon is only visible under perfect conditions

Gautschy's list of calculated sightings of the horned moon from Jerusalem may be acquired by downloading from a website address.^{14,15} In this listing, when the value of q falls into Zone B, that value and its associated date are noted as likely for setting the first day of the new month. The significance is that a Zone B sighting always occurs earlier in the lunar cycle, such that a date when the crescent moon may first be seen under perfect conditions caps the preceding lunar month at 29 days, while also setting the first day in what will become a 30-day lunar month. The exception to this observation is in those rare cases when one Zone B-initiated month falls immediately after another, then both of these months will each consist of 30 days.

This recent astronomical treatment brings two significant enhancements to the Reconstructed Jewish Calendar of the Late Second Temple Period. First, an astronomically rigorous, and therefore more accurate, determination can now be made to identify the first day for each Jewish month as observed specifically from Jerusalem. Second, a qualitative assessment of accuracy may also be assigned to the Julian Calendar date fixed to the first day of each Jewish month. Stated differently, it is now possible to assign confidence to the two possible Julian Calendar dates which could have begun each Jewish month, those candidates being the dates which follow the 29th and 30th day of the preceding month. For example, if it is known that the day associated with the beginning of a particular month had a q value falling within the range for Yallop's Zone B, then it is possible that this sighting may have been missed due to unfavorable atmospheric conditions. In that case, this Jewish month would have actually begun on the following day when the crescent moon was readily apparent as it fell into Yallop's Zone A. By honoring the previously recovered Metonic Cycle behind the original Reconstructed Jewish Calendar of the Late Second Temple Period, and now incorporating these more precisely determined first-of-month dates, a new upgraded version named the "**Refined Reconstructed Jewish Calendar of the Late Second Temple Period**" results.

The Talmud details the official process which designated the first day of each new month. At the sunset which marked both the end of the 29th day and the beginning of the 30th day in that Jewish month, hopeful observers in the environs of Jerusalem would look just above the western horizon and search for a thin crescent moon. If seen, these observers would then come into Jerusalem in the daylight hours which followed, to the courtyard known as the "House of Jacob," to describe precisely how the crescent moon appeared to them on the previous evening.¹⁶ Seventy-one judges were there to adjudicate whether there were two credible witnesses who agreed on their sightings of the moon.¹⁷ If so, the Head of the Court would declare that very day, on what would otherwise be the 30th day in the then-current Jewish month, as "sanctified" and recognized instead as the first day of the new month.¹⁸ Below is a timeline to illustrate how the timing of events would have played out in the case of an early viewing of the moon with a Zone B value of .072 to define the first day of Tammuz in 30 AD. After the Court had found two credible witnesses who had observed the horned moon at sunset on the previous evening, that sunset having denoted the end of Sivan 29, the following day would have then been sanctified as Tammuz 1 and equivalent to June 21 on the Julian Calendar. The Court's ruling thus capped the Jewish month of Sivan at 29 days, such that it would be described as "defective" or "missing" instead of being a "full" month of 30 days.¹⁹

¹⁴ Gautschy, R., "Jewish Calendar," Link: <https://gautschy.ch/~rita/archast/mond/jewcal.html>

¹⁵ Gautschy, R., "First Visibility of the Lunar Crescent in Jerusalem," Link:

<https://www.gautschy.ch/~rita/archast/mond/Jerusalemerste.txt>

¹⁶ **Babylonian Talmud**, Rosh Hashanah 23b:6, William Davidson Edition – English, Link:

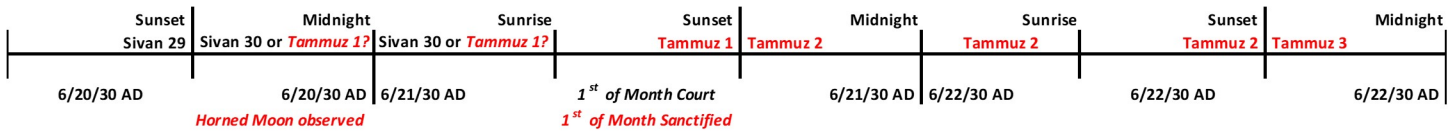
https://www.sefaria.org/Rosh_Hashanah.23b.6?lang=bi

¹⁷ Ibid.

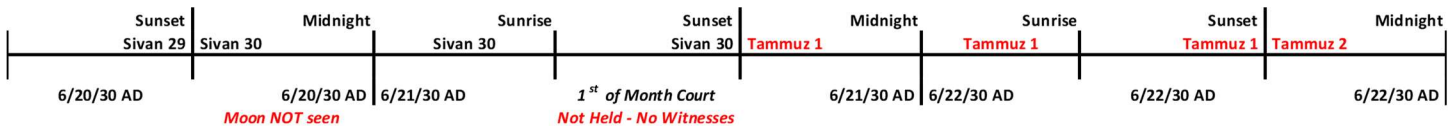
¹⁸ **Babylonian Talmud**, Rosh Hashanah 24a:16, William Davidson Edition – English, Link:

https://www.sefaria.org/Rosh_Hashanah.24a.16?lang=bi

¹⁹ Chabad.org, "The Jewish Month," Link: https://www.chabad.org/library/article_cdo/aid/3921740/jewish/The-Jewish-Month.htm



The Talmud further explains that if no witnesses came to this meeting of the Court during the daylight hours on the 30th day of the month to testify as to the presence of the crescent moon, their absence alone signified that the moon had not been seen on the previous evening at sundown. In this case, at sundown that evening, when the 30th day of that Jewish month ended, the very next day would default to be recognized as the first day of the new month.²⁰ Therefore, under this alternative scenario, Tammuz 1 in 30 AD would have instead followed the day of Sivan 30, such that the Julian Calendar equivalent to Tammuz 1 would then be June 22 as described in the following timeline:



So, why is this new-found ability to distinguish between Zone B and Zone A sightings important? This means that when investigating the start of a Jewish month which has both Zone B and Zone A candidate dates, it is now necessary to define the two possible dating scenarios in order to present a realistic handling of the mapping of Julian Calendar dates to days in the Jewish Calendar. When dealing with the physical world, as history does, uncertainty must be acknowledged and managed. For decades, many Bible Researchers have used Parker and Dubberstein's documented Babylonian Calendar as a proxy for converting Jewish Calendar dates to Julian Calendar dates, where that mapping presented a simple a one-to-one correspondence.²¹ Parker and Dubberstein do state that their first-of-month dates "may be wrong by one day," but then add that "this uncertainty is unimportant" without any in-depth discussion of the very real uncertainty behind their posted Julian dates.²² Compounding this oversight, even though Parker and Dubberstein readily admit that some Jewish months may have begun a day earlier due to Jerusalem's more western location, many subsequent Researchers have slavishly copied the Julian equivalent dates assigned to the first of the Babylonian months to also define the first day of each Jewish Calendar month.²³ This chilling lack of concern neglects how the very real difference in geographic locations materially affects the suitability of tying Parker and Dubberstein's Julian Calendar dates to Jewish Calendar dates, especially concerning those early lunar sightings from Jerusalem which limited the preceding month to only 29 days. Indeed, Gautschy's work reveals that many of Parker and Dubberstein's first-of-month dates should be adjusted to fall one day earlier to account for the moon being observable from Jerusalem while in Zone B.²⁴

Updated astronomical calculations are the solution to bring one-day accuracy to the Reconstructed Jewish Calendar of the Late Second Temple Period. In addition, Gautschy's astronomical results reveal several of Parker and Dubberstein's listed dates for Babylon to be patently incorrect; these are specific instances where Parker and Dubberstein's Babylonian Calendar first-of-month dates precede dates set by observations of the crescent moon in Yallop's Zone A as seen from Jerusalem, a situation which is physically impossible. These incorrect and corrected dates identified within the years from 50 BC to 75 AD are listed below, along with their associated q values which Gautschy calculated for observing the moon

²⁰ Chabad.org, "The Jewish Month," Link: https://www.chabad.org/library/article_cdo/aid/3921740/jewish/The-Jewish-Month.htm

²¹ Parker and Dubberstein, **Babylonian Chronology, 626 B.C. – A.D. 75**, pp. 27-47

²² Ibid., p. 25

²³ Ibid.

²⁴ This Paper, pp. 8-49

from Babylon.²⁵ Note that the q values calculated for these first-of-month dates published by Parker and Dubberstein all fall well below the Zone B cutoff value of -0.135, thereby indicating that the crescent moon was not yet visible in Babylon:²⁶

Parker & Dubberstein Babylonian Calendar Dates - Corrected					
Babylonian Month	Year	P&D Date	Previous Evening q Value (Not Zone A nor B)	Gautschy Date	Previous Evening q Value (All Zone A)
Arahsamnu	31 BC	10/20	-0.441	10/21	0.708
Ululu	23 BC	8/24	-0.218	8/25	0.902
Arahsamnu	8 BC	11/4	-0.305	11/5	1.100
Abu	3 AD	8/18	-0.254	8/19	1.279
Aiaru	11 AD	4/23	-0.631	4/24	0.876
Ululu	37 AD	8/31	-0.249	9/1	1.281
Tebet	43 AD	1/1	-0.460	1/2	1.058
Addaru	62 AD	3/1	-0.398	3/2	1.330
Kislimu	71 AD	12/12	-0.281	12/13	1.155

So, what is the true magnitude of the problem where there are two possible start dates for a Jewish month? As covered previously, it is a known fact that the Jews were intently watching the western sky during the sundown marking the end of the 29th day of each month. If the moon was not seen at that time, then the next, or 30th day would be left to stand as the last day of that then-current month. Reading directly from the tables in this Paper which list the lunar-defined first days for Jewish months in the Refined Reconstructed Jewish Calendar of the Late Second Temple Period over the 125-year period from 50 BC to 75 AD, a total of 1546 lunations are addressed. Of these, 280 months may have been called one day earlier when at the close of the 29th day the horned moon was seen while in Yallop's Zone B. On average, this means that there are two possible starting dates associated with 9 different months within every period of 4 years, or in about 18.11% of the lunations examined. In these cases, both scenarios must be presented to describe the possibilities that either the Zone B or Zone A sighting could have set the first day of the month. Gautschy and Thomann enjoy an advantage over Parker and Dubberstein's work since they had access to a more complete set of historically recorded, analogous Islamic sightings over centuries; this documentary evidence led them to conclude that observers were highly likely to identify Zone B sightings of the crescent moon.²⁷ Therefore, when a Researcher is presented with an early sighting of a Zone B moon to cap the preceding month at 29 days, followed by a Zone A appearance which would instead cap a 30-day Jewish month, the early sighting should be favored over the later. Nonetheless, both cases should be described. This is the treatment presented in the Refined Reconstructed Jewish Calendar of the Late Second Temple Period.

In summary, it is understood that there is a degree of uncertainty associated with fixing the first day of a Jewish month to a Julian date when the moon appeared early while in Yallop's Zone B, primarily due to the fact that its sighting was dependent upon the presence of perfect viewing conditions over Jerusalem at that specific point in time. Given that fact, it is now incumbent upon the Researcher to account for not just one, but two possible calendar scenarios when working to ascertain the weekday of any particular Jewish Calendar date within such a lunar month. To simplify the work for Researchers seeking to ascribe weekdays to Jewish historical dates, this Refined Reconstructed Jewish Calendar of the

²⁵ Gautschy, "Last and first sightings of the lunar crescent," Link:

<https://www.gautschy.ch/~rita/archast/mond/mondeng.html#download> At bottom of this Paper, under *Data Download* section, go to "Babylon" and select under column "download q-values" which leads to the Link:

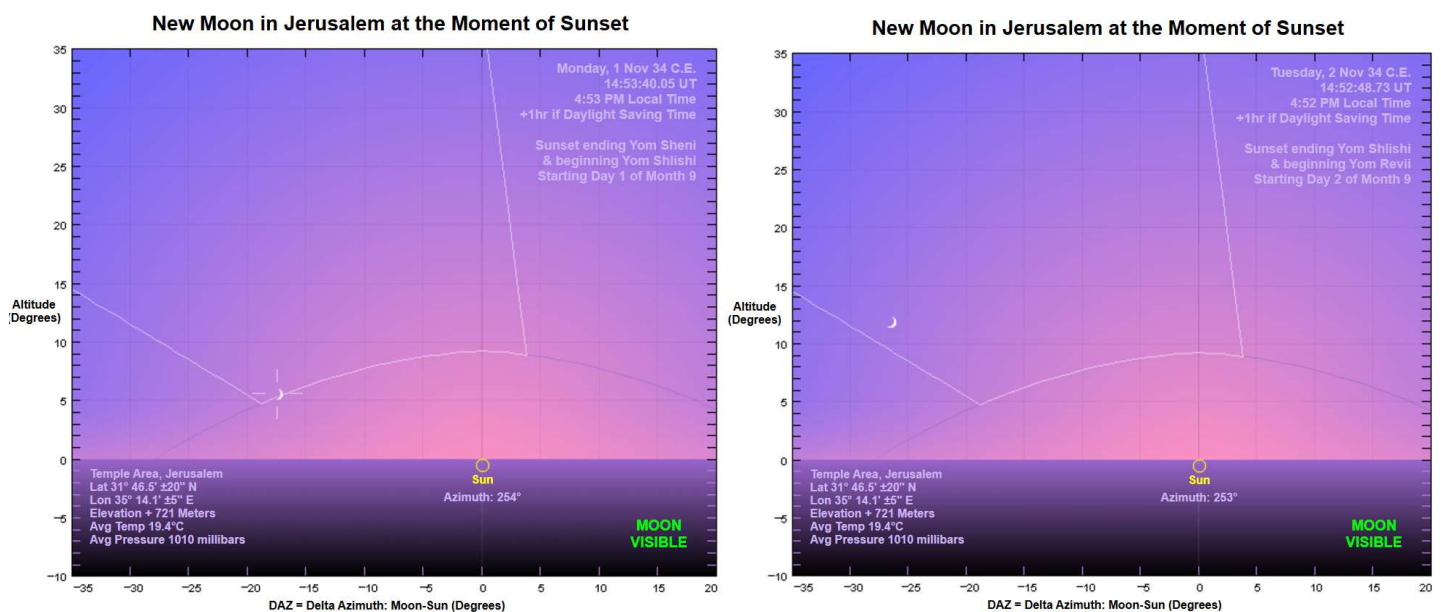
<https://www.gautschy.ch/~rita/archast/mond/Babylonqwerte.txt>

²⁶ Parker and Dubberstein, **Babylonian Chronology, 626 B.C. – A.D. 75**, pp. 45-47

²⁷ Gautschy and Thomann, "Dating Historical Arabic Observations," pp. 165-166

Late Second Temple Period accounts for both Zone A and Zone B sightings and includes not just the Julian Calendar equivalents for Jewish Calendar dates under these two scenarios, but also names the weekdays associated with the 1st, 14th and 21st days in each Jewish month from 50 BC through 75 AD.

Reconstructions of the view at sunset while looking to the west from Jerusalem on various historical dates can be found online.²⁸ However, since the exact manner of calculating the astronomical results on this particular site is not clearly documented, these graphics should be viewed as approximations. Nonetheless, it does provide the Reader with an intuitive feel for the appearance of the evening sky immediately after sunset on November 1 in 34 AD when a q value of -0.068 placed the crescent moon within Yallop's Zone B.²⁹ The graphic below presents the moon as being low on the horizon and further highlights it with crosshairs. An accompanying note on the TorahCalendar.com site explains, "When the crescent moon is located close to the curved white visibility line, it is shown inside a set of crosshairs. In cases like this, the new moon will be barely visible and sighting it will require a perfectly clear sky."³⁰ This note indeed matches the description for sighting the moon when within Yallop's Zone B. For comparison, the adjoining graphic next illustrates the following evening of November 2 in 34 AD when the moon is solidly within Yallop's Zone A where the moon is better illuminated with a larger crescent and located higher in the sky, making it much more easy to see after sundown.³¹



Reading the observation dates presented above on the graphical displays, it is important to note that in accordance with established practice, the astronomically-calculated Julian date assigned to the first evening when the horned moon may have been observed is not the Julian date which is mated to the first day of the new Jewish month. This is because the convention is that Jewish dates and Julian dates overlap during their respective daylight hours. Looking at the graphic on the left, since the horned moon is observed shortly after sunset, the Jewish date has already rolled to the succeeding day while the Julian date remains as listed above, November 1, until it rolls to the next Julian date of November 2 later that night at midnight. So, by incrementing the Julian date attached to the evening sighting of the horned moon by 1 day, the Jewish date and the Julian date then honor the convention and are in agreement by overlapping during the upcoming daylight hours. Consequently, in the case above which is looking to set the first day in the Jewish month of Cheshvan in 34 AD, we see that its Julian Calendar equivalent would be November 2, a Tuesday, if the moon had been observed early from Jerusalem under perfect weather conditions. On the other hand, if this early sighting had been missed for any reason,

²⁸ TorahCalendar.com, Copyright © 2008 through 2024, Link: <https://torahcalendar.com/MOON.asp?JDN=1733781&TDAY=1>

²⁹ Ibid.

³⁰ Ibid.

³¹ TorahCalendar.com, Copyright © 2008 through 2024, Link: <https://torahcalendar.com/MOON.asp?JDN=1733782&TDAY=2>

then the graphic on the right shows how Cheshvan 1 would have instead been fixed to November 3, a Wednesday, as its Julian equivalent, and the crescent moon would have been easily visible in Yallop's Zone A at that sunset marking the end of Tishrei 30. In conclusion, since there is a degree of uncertainty associated with a Zone B sighting, both of these cases must be presented when investigating the Julian dates and associated weekdays for the month of Cheshvan in 34 AD.

Summary

The Reconstructed Jewish Calendar of the Late Second Temple Period presented in March of 2023 was groundbreaking in both identifying and proving the 19-year Metonic Cycle employed by the Jews during the life and ministry of Christ. However, the assignment of a fixed time of 23 hours for the transition from the new moon to the horned moon phase in the original Reconstructed Jewish Calendar of the Late Second Temple Period carried error into those dates listed for the first day in each Jewish month. Now, by retaining the previously identified Metonic Cycle and employing the Julian dates revealed by recent, and more robust, astronomical calculations which also yield the crescent moon's apparent visibility in Yallop's Zone A and Zone B as observed from Jerusalem, a more accurate chronological tool is found in the Refined Reconstructed Jewish Calendar of the Late Second Temple Period for the years 50 BC through 75 AD. Gautschy's restated values for q within Zone A and B are:³²

Zone A: $q > +0.095$ = crescent moon is easily visible

Zone B: $+0.095 \geq q > -0.135$ = crescent moon is only visible under perfect conditions

Below is the Legend which applies to the following listing for the years 50 BC through 75 AD which are explicitly described in the **Refined Reconstructed Jewish Calendar of the Late Second Temple Period**:

Legend: Explanation of Fonts and Colors in Annual Tables for the Refined Reconstructed Jewish Calendar of the Late Second Temple Period (50 BC - 75 AD)
1. The Jewish month of Adar-II is always highlighted in Bold Red Font as it is an intercalated month which is found only in Cycle Years 3, 5, 8, 11, 13, 16 and 19.
2. Only in association with their earliest possible starting dates, the Jewish months of Nisan and Tishrei are displayed in Bold Font , as these two months are highlighted in the Talmud to be coincident with the solar seasons of Spring and Autumn.
3. Any Jewish month which may start with an early sighting requiring perfect conditions (Yallop's Zone B) has its entire line displayed in Bold Red Font .
4. In case perfect viewing conditions were not present for a Jewish month which could have started early, the entire line associated with the following day when the moon is easily seen (Yallop's Zone A) is displayed in <i>Italicized Red Font</i> .
5. Normal Black Font is used for the common situation where the first day of a Jewish month is identified by a crescent moon which is easily observed (Yallop's Zone A).

³² Gautschy, "Last and first sightings of the lunar crescent," Link: <https://gautschy.ch/~rita/archast/mond/mondeng.html>

Lunation Number	Julian Year 50 BC Cycle Year # 6	Gautschi First Day of Jewish Month	Yallop Zone B *	Zone B Value of q	Weekday of First Day of Jewish Month	Days in Month	14th of Jewish Month	Weekday of 14th & 21st	21st of Jewish Month
1	Shevat	1/28			Friday	29	2/10	Thursday	2/17
2	Adar	2/26	*	0.069	Saturday	30	3/11	Friday	3/18
Alternate 2	Adar	2/27	Zone A		Sunday	29	3/12	Saturday	3/19
3	Nisan	3/28			Monday	30	4/10	Sunday	4/17
4	Iyar	4/27			Wednesday	29	5/10	Tuesday	5/17
5	Sivan	5/26	*	-0.010	Thursday	30	6/8	Wednesday	6/15
Alternate 5	Sivan	5/27	Zone A		Friday	29	6/9	Thursday	6/16
6	Tammuz	6/25			Saturday	30	7/8	Friday	7/15
7	Av	7/25			Monday	29	8/7	Sunday	8/14
8	Elul	8/23			Tuesday	30	9/5	Monday	9/12
9	Tishrei	9/22			Thursday	29	10/5	Wednesday	10/12
10	Cheshvan	10/21			Friday	29	11/3	Thursday	11/10
11	Kislev	11/19	*	0.092	Saturday	30	12/2	Friday	12/9
Alternate 11	Kislev	11/20	Zone A		Sunday	29	12/3	Saturday	12/10
12	Tevet	12/19			Monday	29	1/1	Sunday	1/8
Lunation Number	Julian Year 49 BC Leap Year Cycle Year # 7	Gautschi First Day of Jewish Month	Yallop Zone B *	Zone B Value of q	Weekday of First Day of Jewish Month	Days in Month	14th of Jewish Month	Weekday of 14th & 21st	21st of Jewish Month
1	Shevat	1/17			Monday	30	1/30	Sunday	2/6
2	Adar	2/16			Wednesday	29	2/29	Tuesday	3/7
3	Nisan	3/16			Thursday	30	3/29	Wednesday	4/5
4	Iyar	4/15			Saturday	29	4/28	Friday	5/5
5	Sivan	5/14	*	0.027	Sunday	30	5/27	Saturday	6/3
Alternate 5	Sivan	5/15	Zone A		Monday	29	5/28	Sunday	6/4
6	Tammuz	6/13			Tuesday	30	6/26	Monday	7/3
7	Av	7/13			Thursday	29	7/26	Wednesday	8/2
8	Elul	8/11	*	-0.012	Friday	30	8/24	Thursday	8/31
Alternate 8	Elul	8/12	Zone A		Saturday	29	8/25	Friday	9/1
9	Tishrei	9/10			Sunday	29	9/23	Saturday	9/30
10	Cheshvan	10/9	*	-0.056	Monday	30	10/22	Sunday	10/29
Alternate 10	Cheshvan	10/10	Zone A		Tuesday	29	10/23	Monday	10/30
11	Kislev	11/8			Wednesday	30	11/21	Tuesday	11/28
12	Tevet	12/8			Friday	29	12/21	Thursday	12/28
Lunation Number	Julian Year 48 BC Cycle Year # 8	Gautschi First Day of Jewish Month	Yallop Zone B *	Zone B Value of q	Weekday of First Day of Jewish Month	Days in Month	14th of Jewish Month	Weekday of 14th & 21st	21st of Jewish Month
1	Shevat	1/6			Sunday	29	1/19	Saturday	1/26
2	Adar	2/4	*	0.051	Monday	30	2/17	Sunday	2/24
Alternate 2	Adar	2/5	Zone A		Wednesday	29	2/18	Tuesday	2/25
3	Adar-II	3/6			Thursday	29	3/19	Wednesday	3/26
4	Nisan	4/4			Thursday	30	4/17	Wednesday	4/24
5	Iyar	5/4			Saturday	29	5/17	Friday	5/24
6	Sivan	6/2			Sunday	30	6/15	Saturday	6/22
7	Tammuz	7/2			Tuesday	29	7/15	Monday	7/22
8	Av	7/31	*	0.057	Wednesday	30	8/13	Tuesday	8/20
Alternate 8	Av	8/1	Zone A		Thursday	29	8/14	Wednesday	8/21
9	Elul	8/30			Friday	30	9/12	Thursday	9/19
10	Tishrei	9/29			Sunday	29	10/12	Saturday	10/19
11	Cheshvan	10/28	*	-0.017	Monday	30	11/10	Sunday	11/17
Alternate 11	Cheshvan	10/29	Zone A		Tuesday	29	11/11	Monday	11/18
12	Kislev	11/27			Wednesday	30	12/10	Tuesday	12/17
13	Tevet	12/27			Friday	29	1/9	Thursday	1/16

Lunation Number	Julian Year 47 BC Cycle Year # 9	Gautschi First Day of Jewish Month	Yallop Zone B *	Zone B Value of q	Weekday of First Day of Jewish Month	Days in Month	14th of Jewish Month	Weekday of 14th & 21st	21st of Jewish Month
1	Shevat	1/25			Saturday	29	2/7	Friday	2/14
2	Adar	2/23	*	-0.047	Sunday	30	3/8	Saturday	3/15
Alternate 2	Adar	2/24	Zone A		Monday	29	3/9	Sunday	3/16
3	Nisan	3/25			Tuesday	29	4/7	Monday	4/14
4	Iyar	4/23			Wednesday	29	5/6	Tuesday	5/13
5	Sivan	5/22	*	-0.086	Thursday	30	6/4	Wednesday	6/11
Alternate 5	Sivan	5/23	Zone A		Friday	29	6/5	Thursday	6/12
6	Tammuz	6/21			Saturday	29	7/4	Friday	7/11
7	Av	7/20	*	0.049	Sunday	30	8/2	Saturday	8/9
Alternate 7	Av	7/21	Zone A		Monday	29	8/3	Sunday	8/10
8	Elul	8/19			Tuesday	30	9/1	Monday	9/8
9	Tishrei	9/18			Thursday	30	10/1	Wednesday	10/8
10	Cheshvan	10/18			Saturday	29	10/31	Friday	11/7
11	Kislev	11/16	*	-0.052	Sunday	30	11/29	Saturday	12/6
Alternate 11	Kislev	11/17	Zone A		Monday	29	11/30	Sunday	12/7
12	Tevet	12/16			Tuesday	30	12/29	Monday	1/5
Lunation Number	Julian Year 46 BC Cycle Year # 10	Gautschi First Day of Jewish Month	Yallop Zone B *	Zone B Value of q	Weekday of First Day of Jewish Month	Days in Month	14th of Jewish Month	Weekday of 14th & 21st	21st of Jewish Month
1	Shevat	1/15			Thursday	29	1/28	Wednesday	2/4
2	Adar	2/13			Friday	29	2/26	Thursday	3/5
3	Nisan	3/14	*	-0.086	Saturday	30	3/27	Friday	4/3
Alternate 3	Nisan	3/15	Zone A		Sunday	29	3/28	Saturday	4/4
4	Iyar	4/13			Monday	29	4/26	Sunday	5/3
5	Sivan	5/12			Tuesday	29	5/25	Monday	6/1
6	Tammuz	6/10	*	0.076	Wednesday	30	6/23	Tuesday	6/30
Alternate 6	Tammuz	6/11	Zone A		Thursday	29	6/24	Wednesday	7/1
7	Av	7/10			Friday	29	7/23	Thursday	7/30
8	Elul	8/8			Saturday	30	8/21	Friday	8/28
9	Tishrei	9/7			Monday	30	9/20	Sunday	9/27
10	Cheshvan	10/7			Wednesday	29	10/20	Tuesday	10/27
11	Kislev	11/5	*	-0.125	Thursday	30	11/18	Wednesday	11/25
Alternate 11	Kislev	11/6	Zone A		Friday	29	11/19	Thursday	11/26
12	Tevet	12/5	*	0.029	Saturday	30	12/18	Friday	12/25
Alternate 12	Tevet	12/6	Zone A		Sunday	29	12/19	Saturday	12/26
Lunation Number	Julian Year 45 BC Leap Year Cycle Year # 11	Gautschi First Day of Jewish Month	Yallop Zone B *	Zone B Value of q	Weekday of First Day of Jewish Month	Days in Month	14th of Jewish Month	Weekday of 14th & 21st	21st of Jewish Month
1	Shevat	1/4			Monday	30	1/17	Sunday	1/24
2	Adar	2/3			Wednesday	29	2/16	Tuesday	2/23
3	Adar-II	3/3			Thursday	29	3/16	Wednesday	3/23
4	Nisan	4/1	*	-0.082	Friday	30	4/14	Thursday	4/21
Alternate 4	Nisan	4/2	Zone A		Saturday	29	4/15	Friday	4/22
5	Iyar	5/1			Sunday	29	5/14	Saturday	5/21
6	Sivan	5/30			Monday	29	6/12	Sunday	6/19
7	Tammuz	6/28			Tuesday	30	7/11	Monday	7/18
8	Av	7/28			Thursday	29	8/10	Wednesday	8/17
9	Elul	8/26			Friday	30	9/8	Thursday	9/15
10	Tishrei	9/25			Sunday	30	10/8	Saturday	10/15
11	Cheshvan	10/25			Tuesday	29	11/7	Monday	11/14
12	Kislev	11/23	*	-0.030	Wednesday	30	12/6	Tuesday	12/13
Alternate 12	Kislev	11/24	Zone A		Thursday	29	12/7	Wednesday	12/14
13	Tevet	12/23			Friday	29	1/5	Thursday	1/12

Lunation Number	Julian Year 44 BC Cycle Year # 12	Gautschi First Day of Jewish Month	Yallop Zone B *	Zone B Value of q	Weekday of First Day of Jewish Month	Days in Month	14th of Jewish Month	Weekday of 14th & 21st	21st of Jewish Month
1	Shevat	1/22			Sunday	29	2/4	Saturday	2/11
2	Adar	2/20	*	0.079	Monday	30	3/5	Sunday	3/12
Alternate 2	Adar	2/21	Zone A		Tuesday	29	4/4	Monday	4/11
3	Nisan	3/22			Wednesday	29	5/3	Tuesday	5/10
4	Iyar	4/20	*	0.039	Thursday	30	6/2	Wednesday	6/9
Alternate 4	Iyar	4/21	Zone A		Friday	29	7/1	Thursday	7/8
5	Sivan	5/20			Saturday	29	7/30	Friday	8/6
6	Tammuz	6/18			Sunday	29	8/29	Saturday	9/5
7	Av	7/17			Monday	30	9/27	Sunday	10/4
8	Elul	8/16			Wednesday	29	10/27	Tuesday	11/3
9	Tishrei	9/14			Thursday	30	11/26	Wednesday	12/3
10	Cheshvan	10/14			Saturday	30	12/25	Friday	1/1
11	Kislev	11/13			Monday	29	#REF!	Sunday	#REF!
12	Tevet	12/12			Tuesday	30	#REF!	Monday	#REF!
Lunation Number	Julian Year 43 BC Cycle Year # 13	Gautschi First Day of Jewish Month	Yallop Zone B *	Zone B Value of q	Weekday of First Day of Jewish Month	Days in Month	14th of Jewish Month	Weekday of 14th & 21st	21st of Jewish Month
1	Shevat	1/11			Thursday	29	1/24	Wednesday	1/31
2	Adar	2/9	*	0.024	Friday	30	2/22	Thursday	3/1
Alternate 2	Adar	2/10	Zone A		Saturday	29	2/23	Friday	3/2
3	Adar-II	3/11			Sunday	30	3/24	Saturday	3/31
4	Nisan	4/10			Tuesday	29	4/23	Monday	4/30
5	Iyar	5/9			Wednesday	30	5/22	Tuesday	5/29
6	Sivan	6/8			Friday	29	6/21	Thursday	6/28
7	Tammuz	7/7			Saturday	29	7/20	Friday	7/27
8	Av	8/5	*	-0.009	Sunday	30	8/18	Saturday	8/25
Alternate 8	Av	8/6	Zone A		Monday	29	8/19	Sunday	8/26
9	Elul	9/4			Tuesday	30	9/17	Monday	9/24
10	Tishrei	10/4			Thursday	29	10/17	Wednesday	10/24
11	Cheshvan	11/2			Friday	30	11/15	Thursday	11/22
12	Kislev	12/2			Sunday	29	12/15	Saturday	12/22
13	Tevet	12/31			Monday	29	1/13	Sunday	1/20
Lunation Number	Julian Year 42 BC Cycle Year # 14	Gautschi First Day of Jewish Month	Yallop Zone B *	Zone B Value of q	Weekday of First Day of Jewish Month	Days in Month	14th of Jewish Month	Weekday of 14th & 21st	21st of Jewish Month
1	Shevat	1/29	*	-0.048	Tuesday	30	2/11	Monday	2/18
Alternate 12	Shevat	1/30	Zone A		Wednesday	29	2/12	Tuesday	2/19
2	Adar	2/28			Thursday	30	3/13	Wednesday	3/20
3	Nisan	3/30			Saturday	29	4/12	Friday	4/19
4	Iyar	4/28	*	0.095	Sunday	30	5/11	Saturday	5/18
Alternate 4	Iyar	4/29	Zone A		Monday	29	5/12	Sunday	5/19
5	Sivan	5/28			Tuesday	29	6/10	Monday	6/17
6	Tammuz	6/26	*	-0.007	Wednesday	30	7/9	Tuesday	7/16
Alternate 6	Tammuz	6/27	Zone A		Thursday	29	7/10	Wednesday	7/17
7	Av	7/26			Friday	30	8/8	Thursday	8/15
8	Elul	8/25			Sunday	29	9/7	Saturday	9/14
9	Tishrei	9/23			Monday	30	10/6	Sunday	10/13
10	Cheshvan	10/23			Wednesday	29	11/5	Tuesday	11/12
11	Kislev	11/21			Thursday	29	12/4	Wednesday	12/11
12	Tevet	12/20	*	0.017	Friday	30	1/2	Thursday	1/9
Alternate 12	Tevet	12/21	Zone A		Saturday	29	1/3	Friday	1/10

Lunation Number	Julian Year 41 BC Leap Year Cycle Year # 15	Gautschi First Day of Jewish Month	Yallop Zone B *	Zone B q Value	Weekday of First Day of Jewish Month	Days in Month	14th of Jewish Month	Weekday of 14th & 21st	21st of Jewish Month
1	Shevat	1/19			Sunday	29	2/1	Saturday	2/8
2	Adar	2/17			Monday	30	3/1	Sunday	3/8
3	Nisan	3/18			Wednesday	29	3/31	Tuesday	4/7
4	Iyar	4/16	*	0.072	Thursday	30	4/29	Wednesday	5/6
Alternate 4	Iyar	4/17	Zone A		Friday	29	4/30	Thursday	5/7
5	Sivan	5/16			Saturday	30	5/29	Friday	6/5
6	Tammuz	6/15			Monday	29	6/28	Sunday	7/5
7	Av	7/14	*	0.039	Tuesday	30	7/27	Monday	8/3
Alternate 7	Av	7/15	Zone A		Wednesday	29	7/28	Tuesday	8/4
8	Elul	8/13			Thursday	30	8/26	Wednesday	9/2
9	Tishrei	9/12			Saturday	29	9/25	Friday	10/2
10	Cheshvan	10/11	*	-0.115	Sunday	30	10/24	Saturday	10/31
Alternate 10	Cheshvan	10/12	Zone A		Monday	29	10/25	Sunday	11/1
11	Kislev	11/10			Tuesday	29	11/23	Monday	11/30
12	Tevet	12/9			Wednesday	29	12/22	Tuesday	12/29
Lunation Number	Julian Year 40 BC Cycle Year # 16	Gautschi First Day of Jewish Month	Yallop Zone B *	Zone B Value of q	Weekday of First Day of Jewish Month	Days in Month	14th of Jewish Month	Weekday of 14th & 21st	21st of Jewish Month
1	Shevat	1/7			Thursday	30	1/20	Wednesday	1/27
2	Adar	2/6			Saturday	29	2/19	Friday	2/26
3	Adar-II	3/7			Sunday	30	3/20	Saturday	3/27
4	Nisan	4/6			Tuesday	29	4/19	Monday	4/26
5	Iyar	5/5			Wednesday	30	5/18	Tuesday	5/25
6	Sivan	6/4			Friday	29	6/17	Thursday	6/24
7	Tammuz	7/3	*	-0.021	Saturday	30	7/16	Friday	7/23
Alternate 7	Tammuz	7/4	Zone A		Sunday	29	7/17	Saturday	7/24
8	Av	8/2	*	-0.016	Monday	30	8/15	Sunday	8/22
Alternate 8	Av	8/3	Zone A		Tuesday	29	8/16	Monday	8/23
9	Elul	9/1	*	0.056	Wednesday	30	9/14	Tuesday	9/21
Alternate 9	Elul	9/2	Zone A		Thursday	29	9/15	Wednesday	9/22
10	Tishrei	10/1			Friday	29	10/14	Thursday	10/21
11	Cheshvan	10/30	*	-0.121	Saturday	30	11/12	Friday	11/19
Alternate 11	Cheshvan	10/31	Zone A		Sunday	29	11/13	Saturday	11/20
12	Kislev	11/29			Monday	29	12/12	Sunday	12/19
13	Tevet	12/28			Tuesday	29	1/10	Monday	1/17
Lunation Number	Julian Year 39 BC Cycle Year # 17	Gautschi First Day of Jewish Month	Yallop Zone B *	Zone B Value of q	Weekday of First Day of Jewish Month	Days in Month	14th of Jewish Month	Weekday of 14th & 21st	21st of Jewish Month
1	Shevat	1/26			Wednesday	30	2/8	Tuesday	2/15
2	Adar	2/25			Friday	29	3/10	Thursday	3/17
3	Nisan	3/26			Saturday	29	4/8	Friday	4/15
4	Iyar	4/24	*	0.065	Sunday	30	5/7	Saturday	5/14
Alternate 4	Iyar	4/25	Zone A		Monday	29	5/8	Sunday	5/15
5	Sivan	5/24			Tuesday	29	6/6	Monday	6/13
6	Tammuz	6/22	*	-0.087	Wednesday	30	7/5	Tuesday	7/12
Alternate 6	Tammuz	6/23	Zone A		Thursday	29	7/6	Wednesday	7/13
7	Av	7/22	*	0.004	Friday	30	8/4	Thursday	8/11
Alternate 7	Av	7/23	Zone A		Saturday	29	8/5	Friday	8/12
8	Elul	8/21	*	-0.002	Sunday	30	9/3	Saturday	9/10
Alternate 8	Elul	8/22	Zone A		Monday	29	9/4	Sunday	9/11
9	Tishrei	9/20			Tuesday	30	10/3	Monday	10/10
10	Cheshvan	10/20			Thursday	29	11/2	Wednesday	11/9
11	Kislev	11/18			Friday	30	12/1	Thursday	12/8
12	Tevet	12/18			Sunday	29	12/31	Saturday	1/7

Lunation Number	Julian Year 38 BC Cycle Year # 18	Gautschi First Day of Jewish Month	Yallop Zone B *	Zone B q Value	Weekday of First Day of Jewish Month	Days in Month	14th of Jewish Month	Weekday of 14th & 21st	21st of Jewish Month
1	Shevat	1/16			Monday	29	1/29	Sunday	2/5
2	Adar	2/14			Tuesday	30	2/27	Monday	3/6
3	Nisan	3/16			Thursday	29	3/29	Wednesday	4/5
4	Iyar	4/14			Friday	29	4/27	Thursday	5/4
5	Sivan	5/13			Saturday	30	5/26	Friday	6/2
6	Tammuz	6/12			Monday	29	6/25	Sunday	7/2
7	Av	7/11	*	-0.120	Tuesday	30	7/24	Monday	7/31
Alternate 7	Av	7/12	Zone A		Wednesday	29	7/25	Tuesday	8/1
8	Elul	8/10	*	0.042	Thursday	30	8/23	Wednesday	8/30
Alternate 8	Elul	8/11	Zone A		Friday	29	8/24	Thursday	8/31
9	Tishrei	9/9			Saturday	30	9/22	Friday	9/29
10	Cheshvan	10/9			Monday	29	10/22	Sunday	10/29
11	Kislev	11/7	*	-0.127	Tuesday	30	11/20	Monday	11/27
Alternate 11	Kislev	11/8	Zone A		Wednesday	29	11/21	Tuesday	11/28
12	Tevet	12/7			Thursday	30	12/20	Wednesday	12/27
Lunation Number	Julian Year 37 BC Leap Year Cycle Year # 19	Gautschi First Day of Jewish Month	Yallop Zone B *	Zone B q Value	Weekday	Days in Month	14th of Jewish Month	Weekday of 14th & 21st	21st of Jewish Month
1	Shevat	1/5	*	-0.072	Friday	30	1/18	Thursday	1/25
Alternate 1	Shevat	1/6	Zone A		Saturday	29	1/19	Friday	1/26
2	Adar	2/4			Sunday	29	2/17	Saturday	2/24
3	Adar-II	3/4	*	0.078	Monday	30	3/17	Sunday	3/24
Alternate 3	Adar-II	3/5	Zone A		Tuesday	29	3/18	Monday	3/25
4	Nisan	4/3			Wednesday	29	4/16	Tuesday	4/23
5	Iyar	5/2			Thursday	29	5/15	Wednesday	5/22
6	Sivan	5/31	*	0.025	Friday	30	6/13	Thursday	6/20
Alternate 6	Sivan	6/1	Zone A		Saturday	29	6/14	Friday	6/21
7	Tammuz	6/30			Sunday	30	7/13	Saturday	7/20
8	Av	7/30			Tuesday	29	8/12	Monday	8/19
9	Elul	8/28			Wednesday	30	9/10	Tuesday	9/17
10	Tishrei	9/27			Friday	29	10/10	Thursday	10/17
11	Cheshvan	10/26	*	-0.082	Saturday	30	11/8	Friday	11/15
Alternate 11	Cheshvan	10/27	Zone A		Sunday	29	11/9	Saturday	11/16
12	Kislev	11/25			Monday	30	12/8	Sunday	12/15
13	Tevet	12/25			Wednesday	29	1/7	Tuesday	1/14
Lunation Number	Julian Year 36 BC Cycle Year # 1	Gautschi First Day of Jewish Month	Yallop Zone B *	Zone B q Value	Weekday	Days in Month	14th of Jewish Month	Weekday of 14th & 21st	21st of Jewish Month
1	Shevat	1/23			Thursday	30	2/5	Wednesday	2/12
2	Adar	2/22			Saturday	29	3/7	Friday	3/14
3	Nisan	3/23	*	0.087	Sunday	30	4/5	Saturday	4/12
Alternate 3	Nisan	3/24	Zone A		Monday	29	4/6	Sunday	4/13
4	Iyar	4/22			Tuesday	29	5/5	Monday	5/12
5	Sivan	5/21			Wednesday	30	6/3	Tuesday	6/10
6	Tammuz	6/20			Friday	29	7/3	Thursday	7/10
7	Av	7/19			Saturday	30	8/1	Friday	8/8
8	Elul	8/18			Monday	29	8/31	Sunday	9/7
9	Tishrei	9/16			Tuesday	30	9/29	Monday	10/6
10	Cheshvan	10/16			Thursday	29	10/29	Wednesday	11/5
11	Kislev	11/14			Friday	30	11/27	Thursday	12/4
12	Tevet	12/14			Sunday	29	12/27	Saturday	1/3

Lunation Number	Julian Year 35 BC Cycle Year # 2	Gautschy First Day of Jewish Month	Yallop Zone B *	Zone B q Value	Weekday	Days in Month	14th of Jewish Month	Weekday of 14th & 21st	21st of Jewish Month
1	Shevat	1/12			Monday	30	1/25	Sunday	2/1
2	Adar	2/11			Wednesday	30	2/24	Tuesday	3/3
3	Nisan	3/13			Friday	29	3/26	Thursday	4/2
4	Iyar	4/11			Saturday	30	4/24	Friday	5/1
5	Sivan	5/11			Monday	29	5/24	Sunday	5/31
6	Tammuz	6/9			Tuesday	30	6/22	Monday	6/29
7	Av	7/9			Thursday	29	7/22	Wednesday	7/29
8	Elul	8/7			Friday	30	8/20	Thursday	8/27
9	Tishrei	9/6			Sunday	29	9/19	Saturday	9/26
10	Cheshvan	10/5			Monday	29	10/18	Sunday	10/25
11	Kislev	11/3			Tuesday	30	11/16	Monday	11/23
12	Tevet	12/3			Thursday	29	12/16	Wednesday	12/23
Lunation Number	Julian Year 34 BC Cycle Year # 3	Gautschy First Day of Jewish Month	Yallop Zone B *	Zone B q Value	Weekday	Days in Month	14th of Jewish Month	Weekday of 14th & 21st	21st of Jewish Month
1	Shevat	1/1			Friday	30	1/14	Thursday	1/21
2	Adar	1/31			Sunday	30	2/13	Saturday	2/20
3	Adar-II	3/2			Tuesday	30	3/15	Monday	3/22
4	Nisan	4/1			Thursday	29	4/14	Wednesday	4/21
5	Iyar	4/30			Friday	30	5/13	Thursday	5/20
6	Sivan	5/30			Sunday	29	6/12	Saturday	6/19
7	Tammuz	6/28			Monday	30	7/11	Sunday	7/18
8	Av	7/28			Wednesday	29	8/10	Tuesday	8/17
9	Elul	8/26			Thursday	29	9/8	Wednesday	9/15
10	Tishrei	9/24	*	-0.023	Friday	30	10/7	Thursday	10/14
Alternate 10	Tishrei	9/25	Zone A		Saturday	29	10/8	Friday	10/15
11	Cheshvan	10/24			Sunday	29	11/6	Saturday	11/13
12	Kislev	11/22			Monday	29	12/5	Sunday	12/12
13	Tevet	12/21	*	-0.132	Tuesday	30	1/3	Monday	1/10
Alternate 13	Tevet	12/22	Zone A		Wednesday	29	1/4	Tuesday	1/11
Lunation Number	Julian Year 33 BC Leap Year Cycle Year # 4	Gautschy First Day of Jewish Month	Yallop Zone B *	Zone B q Value	Weekday	Days in Month	14th of Jewish Month	Weekday of 14th & 21st	21st of Jewish Month
1	Shevat	1/20			Thursday	30	2/2	Wednesday	2/9
2	Adar	2/19			Saturday	30	3/3	Friday	3/10
3	Nisan	3/20			Monday	29	4/2	Sunday	4/9
4	Iyar	4/18			Tuesday	30	5/1	Monday	5/8
5	Sivan	5/18			Thursday	30	5/31	Wednesday	6/7
6	Tammuz	6/17			Saturday	29	6/30	Friday	7/7
7	Av	7/16			Sunday	30	7/29	Saturday	8/5
8	Elul	8/15			Tuesday	29	8/28	Monday	9/4
9	Tishrei	9/13			Wednesday	29	9/26	Tuesday	10/3
10	Cheshvan	10/12			Thursday	30	10/25	Wednesday	11/1
11	Kislev	11/11			Saturday	29	11/24	Friday	12/1
12	Tevet	12/10			Sunday	30	12/23	Saturday	12/30

Lunation Number	Julian Year 32 BC Cycle Year # 5	Gautschi First Day of Jewish Month	Yallop Zone B *	Zone B q Value	Weekday	Days in Month	14th of Jewish Month	Weekday of 14th & 21st	21st of Jewish Month
1	Shevat	1/9			Tuesday	29	1/22	Monday	1/29
2	Adar	2/7			Wednesday	30	2/20	Tuesday	2/27
3	Adar-II	3/9			Friday	29	3/22	Thursday	3/29
4	Nisan	4/7			Saturday	30	4/20	Friday	4/27
5	Iyar	5/7			Monday	30	5/20	Sunday	5/27
6	Sivan	6/6			Wednesday	29	6/19	Tuesday	6/26
7	Tammuz	7/5	*	-0.105	Thursday	30	7/18	Wednesday	7/25
Alternate 7	<i>Tammuz</i>	<i>7/6</i>	<i>Zone A</i>		<i>Friday</i>	<i>29</i>	<i>7/19</i>	<i>Thursday</i>	<i>7/26</i>
8	Av	8/4			Saturday	30	8/17	Friday	8/24
9	Elul	9/3			Monday	29	9/16	Sunday	9/23
10	Tishrei	10/2			Tuesday	29	10/15	Monday	10/22
11	Cheshvan	10/31			Wednesday	30	11/13	Tuesday	11/20
12	Kislev	11/30			Friday	29	12/13	Thursday	12/20
13	Tevet	12/29			Saturday	30	1/11	Friday	1/18
Lunation Number	Julian Year 31 BC Cycle Year # 6	Gautschi First Day of Jewish Month	Yallop Zone B *	Zone B q Value	Weekday	Days in Month	14th of Jewish Month	Weekday of 14th & 21st	21st of Jewish Month
1	Shevat	1/28			Monday	29	2/10	Sunday	2/17
2	Adar	2/26			Tuesday	30	3/11	Monday	3/18
3	Nisan	3/28			Thursday	29	4/10	Wednesday	4/17
4	Iyar	4/26			Friday	30	5/9	Thursday	5/16
5	Sivan	5/26			Sunday	29	6/8	Saturday	6/15
6	Tammuz	6/24	*	-0.025	Monday	30	7/7	Sunday	7/14
Alternate 6	<i>Tammuz</i>	<i>6/25</i>	<i>Zone A</i>		<i>Tuesday</i>	<i>29</i>	<i>7/8</i>	<i>Monday</i>	<i>7/15</i>
7	Av	7/24			Wednesday	30	8/6	Tuesday	8/13
8	Elul	8/23			Friday	29	9/5	Thursday	9/12
9	Tishrei	9/21			Saturday	30	10/4	Friday	10/11
10	Cheshvan	10/21			Monday	29	11/3	Sunday	11/10
11	Kislev	11/19	*	0.091	Tuesday	30	12/2	Monday	12/9
Alternate 11	<i>Kislev</i>	<i>11/20</i>	<i>Zone A</i>		<i>Wednesday</i>	<i>29</i>	<i>12/3</i>	<i>Tuesday</i>	<i>12/10</i>
12	Tevet	12/19			Thursday	29	1/1	Wednesday	1/8
Lunation Number	Julian Year 30 BC Cycle Year # 7	Gautschi First Day of Jewish Month	Yallop Zone B *	Zone B q Value	Weekday	Days in Month	14th of Jewish Month	Weekday of 14th & 21st	21st of Jewish Month
1	Shevat	1/17			Friday	30	1/30	Thursday	2/6
2	Adar	2/16			Sunday	29	3/1	Saturday	3/8
3	Nisan	3/17			Monday	29	3/30	Sunday	4/6
4	Iyar	4/15	*	-0.066	Tuesday	30	4/28	Monday	5/5
Alternate 4	<i>Iyar</i>	<i>4/16</i>	<i>Zone A</i>		<i>Wednesday</i>	<i>29</i>	<i>4/29</i>	<i>Tuesday</i>	<i>5/6</i>
5	Sivan	5/15			Thursday	29	5/28	Wednesday	6/4
6	Tammuz	6/13	*	-0.060	Friday	30	6/26	Thursday	7/3
Alternate 6	<i>Tammuz</i>	<i>6/14</i>	<i>Zone A</i>		<i>Saturday</i>	<i>29</i>	<i>6/27</i>	<i>Friday</i>	<i>7/4</i>
7	Av	7/13			Sunday	30	7/26	Saturday	8/2
8	Elul	8/12			Tuesday	29	8/25	Monday	9/1
9	Tishrei	9/10	*	0.093	Wednesday	30	9/23	Tuesday	9/30
Alternate 9	<i>Tishrei</i>	<i>9/11</i>	<i>Zone A</i>		<i>Thursday</i>	<i>29</i>	<i>9/24</i>	<i>Wednesday</i>	<i>10/1</i>
10	Cheshvan	10/10			Friday	30	10/23	Thursday	10/30
11	Kislev	11/9			Sunday	29	11/22	Saturday	11/29
12	Tevet	12/8	*	-0.052	Monday	30	12/21	Sunday	12/28
Alternate 12	<i>Tevet</i>	<i>12/9</i>	<i>Zone A</i>		<i>Tuesday</i>	<i>29</i>	<i>12/22</i>	<i>Monday</i>	<i>12/29</i>

Lunation Number	Julian Year 29 BC Leap Year Cycle Year # 8	Gautschi First Day of Jewish Month	Yallop Zone B *	Zone B q Value	Weekday	Days in Month	14th of Jewish Month	Weekday of 14th & 21st	21st of Jewish Month
1	Shevat	1/7			Wednesday	29	1/20	Tuesday	1/27
2	Adar	2/5	*	-0.033	Thursday	30	2/18	Wednesday	2/25
Alternate 2	Adar	2/6	Zone A		Friday	29	2/19	Thursday	2/26
3	Adar-II	3/6			Saturday	29	3/19	Friday	3/26
4	Nisan	4/4			Sunday	29	4/17	Saturday	4/24
5	Iyar	5/3	*	-0.003	Monday	30	5/16	Sunday	5/23
Alternate 5	Iyar	5/4	Zone A		Tuesday	29	5/17	Monday	5/24
6	Sivan	6/2			Wednesday	29	6/15	Tuesday	6/22
7	Tammuz	7/1			Thursday	30	7/14	Wednesday	7/21
8	Av	7/31			Saturday	29	8/13	Friday	8/20
9	Elul	8/29			Sunday	30	9/11	Saturday	9/18
10	Tishrei	9/28			Tuesday	30	10/11	Monday	10/18
11	Cheshvan	10/28			Thursday	30	11/10	Wednesday	11/17
12	Kislev	11/27			Saturday	29	12/10	Friday	12/17
13	Tevet	12/26	*	-0.093	Sunday	30	1/8	Saturday	1/15
Alternate 13	Tevet	12/27	Zone A		Monday	29	1/9	Sunday	1/16
Lunation Number	Julian Year 28 BC Cycle Year # 9	Gautschi First Day of Jewish Month	Yallop Zone B *	Zone B q Value	Weekday	Days in Month	14th of Jewish Month	Weekday of 14th & 21st	21st of Jewish Month
1	Shevat	1/25			Tuesday	29	2/7	Monday	2/14
2	Adar	2/23	*	-0.042	Wednesday	30	3/8	Tuesday	3/15
Alternate 2	Adar	2/24	Zone A		Thursday	29	3/9	Wednesday	3/16
3	Nisan	3/25			Friday	29	4/7	Thursday	4/14
4	Iyar	4/23			Saturday	29	5/6	Friday	5/13
5	Sivan	5/22	*	0.015	Sunday	30	6/4	Saturday	6/11
Alternate 5	Sivan	5/23	Zone A		Monday	29	6/5	Sunday	6/12
6	Tammuz	6/21			Tuesday	29	7/4	Monday	7/11
7	Av	7/20			Wednesday	29	8/2	Tuesday	8/9
8	Elul	8/18	*	-0.052	Thursday	30	8/31	Wednesday	9/7
Alternate 8	Elul	8/19	Zone A		Friday	29	9/1	Thursday	9/8
9	Tishrei	9/17			Saturday	30	9/30	Friday	10/7
10	Cheshvan	10/17			Monday	30	10/30	Sunday	11/6
11	Kislev	11/16			Wednesday	30	11/29	Tuesday	12/6
12	Tevet	12/16			Friday	29	12/29	Thursday	1/5
Lunation Number	Julian Year 27 BC Cycle Year # 10	Gautschi First Day of Jewish Month	Yallop Zone B *	Zone B q Value	Weekday	Days in Month	14th of Jewish Month	Weekday of 14th & 21st	21st of Jewish Month
1	Shevat	1/14			Saturday	30	1/27	Friday	2/3
2	Adar	2/13			Monday	29	2/26	Sunday	3/5
3	Nisan	3/14	*	0.074	Tuesday	30	3/27	Monday	4/3
Alternate 3	Nisan	3/15	Zone A		Wednesday	29	3/28	Tuesday	4/4
4	Iyar	4/13			Thursday	29	4/26	Wednesday	5/3
5	Sivan	5/12			Friday	29	5/25	Thursday	6/1
6	Tammuz	6/10	*	0.066	Saturday	30	6/23	Friday	6/30
Alternate 6	Tammuz	6/11	Zone A		Sunday	29	6/24	Saturday	7/1
7	Av	7/10			Monday	29	7/23	Sunday	7/30
8	Elul	8/8			Tuesday	29	8/21	Monday	8/28
9	Tishrei	9/6	*	-0.023	Wednesday	30	9/19	Tuesday	9/26
Alternate 9	Tishrei	9/7	Zone A		Thursday	29	9/20	Wednesday	9/27
10	Cheshvan	10/6			Friday	30	10/19	Thursday	10/26
11	Kislev	11/5			Sunday	30	11/18	Saturday	11/25
12	Tevet	12/5			Tuesday	29	12/18	Monday	12/25

Lunation Number	Julian Year 26 BC Cycle Year # 11	Gautschi First Day of Jewish Month	Yallop Zone B *	Zone B q Value	Weekday	Days in Month	14th of Jewish Month	Weekday of 14th & 21st	21st of Jewish Month
1	Shevat	1/3	*	0.038	Wednesday	30	1/16	Tuesday	1/23
Alternate 1	Shevat	1/4	Zone A		Thursday	29	1/17	Wednesday	1/24
2	Adar	2/2			Friday	30	2/15	Thursday	2/22
3	Adar-II	3/4			Sunday	29	3/17	Saturday	3/24
4	Nisan	4/2			Monday	30	4/15	Sunday	4/22
5	Iyar	5/2			Wednesday	29	5/15	Tuesday	5/22
6	Sivan	5/31			Thursday	29	6/13	Wednesday	6/20
7	Tammuz	6/29			Friday	30	7/12	Thursday	7/19
8	Av	7/29			Sunday	29	8/11	Saturday	8/18
9	Elul	8/27			Monday	30	9/9	Sunday	9/16
10	Tishrei	9/26			Wednesday	29	10/9	Tuesday	10/16
11	Cheshvan	10/25			Thursday	30	11/7	Wednesday	11/14
12	Kislev	11/24			Saturday	29	12/7	Friday	12/14
13	Tevet	12/23	*	-0.091	Sunday	30	1/5	Saturday	1/12
Alternate 13	Tevet	12/24	Zone A		Monday	29	1/6	Sunday	1/13
Lunation Number	Julian Year 25 BC Leap Year Cycle Year # 12	Gautschi First Day of Jewish Month	Yallop Zone B *	Zone B q Value	Weekday	Days in Month	14th of Jewish Month	Weekday of 14th & 21st	21st of Jewish Month
1	Shevat	1/22			Tuesday	30	2/4	Monday	2/11
2	Adar	2/21			Thursday	29	3/5	Wednesday	3/12
3	Nisan	3/21	*	0.075	Friday	30	4/3	Thursday	4/10
Alternate 3	Nisan	3/22	Zone A		Saturday	29	4/4	Friday	4/11
4	Iyar	4/20			Sunday	29	5/3	Saturday	5/10
5	Sivan	5/19	*	-0.089	Monday	30	6/1	Sunday	6/8
Alternate 5	Sivan	5/20	Zone A		Tuesday	29	6/2	Monday	6/9
6	Tammuz	6/18			Wednesday	29	7/1	Tuesday	7/8
7	Av	7/17			Thursday	30	7/30	Wednesday	8/6
8	Elul	8/16			Saturday	29	8/29	Friday	9/5
9	Tishrei	9/14	*	0.094	Sunday	30	9/27	Saturday	10/4
Alternate 9	Tishrei	9/15	Zone A		Monday	29	9/28	Sunday	10/5
10	Cheshvan	10/14			Tuesday	29	10/27	Monday	11/3
11	Kislev	11/12	*	0.008	Wednesday	30	11/25	Tuesday	12/2
Alternate 11	Kislev	11/13	Zone A		Thursday	29	11/26	Wednesday	12/3
12	Tevet	12/12			Friday	29	12/25	Thursday	1/1
Lunation Number	Julian Year 24 BC Cycle Year # 13	Gautschi First Day of Jewish Month	Yallop Zone B *	Zone B q Value	Weekday	Days in Month	14th of Jewish Month	Weekday of 14th & 21st	21st of Jewish Month
1	Shevat	1/10			Saturday	30	1/23	Friday	1/30
2	Adar	2/9			Monday	29	2/22	Sunday	3/1
3	Adar-II	3/10	*	0.078	Tuesday	30	3/23	Monday	3/30
Alternate 3	Adar-II	3/11	Zone A		Wednesday	29	3/24	Tuesday	3/31
4	Nisan	4/9			Thursday	30	4/22	Wednesday	4/29
5	Iyar	5/9			Saturday	29	5/22	Friday	5/29
6	Sivan	6/7			Sunday	30	6/20	Saturday	6/27
7	Tammuz	7/7			Tuesday	29	7/20	Monday	7/27
8	Av	8/5	*	0.035	Wednesday	30	8/18	Tuesday	8/25
Alternate 8	Av	8/6	Zone A		Thursday	29	8/19	Wednesday	8/26
9	Elul	9/4			Friday	30	9/17	Thursday	9/24
10	Tishrei	10/4			Sunday	29	10/17	Saturday	10/24
11	Cheshvan	11/2			Monday	29	11/15	Sunday	11/22
12	Kislev	12/1	*	-0.017	Tuesday	30	12/14	Monday	12/21
Alternate 12	Kislev	12/2	Zone A		Wednesday	29	12/15	Tuesday	12/22
13	Tevet	12/31			Thursday	29	1/13	Wednesday	1/20

Lunation Number	Julian Year 23 BC Cycle Year # 14	Gautschi First Day of Jewish Month	Yallop Zone B *	Zone B q Value	Weekday	Days in Month	14th of Jewish Month	Weekday of 14th & 21st	21st of Jewish Month
1	Shevat	1/29			Friday	30	2/11	Thursday	2/18
2	Adar	2/28			Sunday	29	3/13	Saturday	3/20
3	Nisan	3/29			Monday	30	4/11	Sunday	4/18
4	Iyar	4/28			Wednesday	29	5/11	Tuesday	5/18
5	Sivan	5/27			Thursday	30	6/9	Wednesday	6/16
6	Tammuz	6/26			Saturday	30	7/9	Friday	7/16
7	Av	7/26			Monday	30	8/8	Sunday	8/15
8	Elul	8/25			Wednesday	29	9/7	Tuesday	9/14
9	Tishrei	9/23			Thursday	30	10/6	Wednesday	10/13
10	Cheshvan	10/23			Saturday	29	11/5	Friday	11/12
11	Kislev	11/21			Sunday	29	12/4	Saturday	12/11
12	Tevet	12/20	*	0.053	Monday	30	1/2	Sunday	1/9
Alternate 12	<i>Tevet</i>	<i>12/21</i>	<i>Zone A</i>		<i>Tuesday</i>	<i>29</i>	<i>1/3</i>	<i>Monday</i>	<i>1/10</i>
Lunation Number	Julian Year 22 BC Cycle Year # 15	Gautschi First Day of Jewish Month	Yallop Zone B *	Zone B q Value	Weekday	Days in Month	14th of Jewish Month	Weekday of 14th & 21st	21st of Jewish Month
1	Shevat	1/19			Wednesday	29	2/1	Tuesday	2/8
2	Adar	2/17			Thursday	29	3/2	Wednesday	3/9
3	Nisan	3/18	*	0.004	Friday	30	3/31	Thursday	4/7
Alternate 3	<i>Nisan</i>	<i>3/19</i>	<i>Zone A</i>		<i>Saturday</i>	<i>29</i>	<i>4/1</i>	<i>Friday</i>	<i>4/8</i>
4	Iyar	4/17			Sunday	29	4/30	Saturday	5/7
5	Sivan	5/16			Monday	30	5/29	Sunday	6/5
6	Tammuz	6/15			Wednesday	30	6/28	Tuesday	7/5
7	Av	7/15			Friday	30	7/28	Thursday	8/4
8	Elul	8/14			Sunday	30	8/27	Saturday	9/3
9	Tishrei	9/13			Tuesday	29	9/26	Monday	10/3
10	Cheshvan	10/12	*	0.038	Wednesday	30	10/25	Tuesday	11/1
Alternate 10	<i>Cheshvan</i>	<i>10/13</i>	<i>Zone A</i>		<i>Thursday</i>	<i>29</i>	<i>10/26</i>	<i>Wednesday</i>	<i>11/2</i>
11	Kislev	11/11			Friday	29	11/24	Thursday	12/1
12	Tevet	12/10			Saturday	29	12/23	Friday	12/30
Lunation Number	Julian Year 21 BC Leap Year Cycle Year # 16	Gautschi First Day of Jewish Month	Yallop Zone B *	Zone B q Value	Weekday	Days in Month	14th of Jewish Month	Weekday of 14th & 21st	21st of Jewish Month
1	Shevat	1/8			Sunday	30	1/21	Saturday	1/28
2	Adar	2/7			Tuesday	29	2/20	Monday	2/27
3	Adar-II	3/7			Wednesday	29	3/20	Tuesday	3/27
4	Nisan	4/5			Thursday	30	4/18	Wednesday	4/25
5	Iyar	5/5			Saturday	29	5/18	Friday	5/25
6	Sivan	6/3			Sunday	30	6/16	Saturday	6/23
7	Tammuz	7/3			Tuesday	30	7/16	Monday	7/23
8	Av	8/2			Thursday	30	8/15	Wednesday	8/22
9	Elul	9/1			Saturday	30	9/14	Friday	9/21
10	Tishrei	10/1			Monday	29	10/14	Sunday	10/21
11	Cheshvan	10/30			Tuesday	30	11/12	Monday	11/19
12	Kislev	11/29			Thursday	29	12/12	Wednesday	12/19
13	Tevet	12/28			Friday	29	1/10	Thursday	1/17

Lunation Number	Julian Year 20 BC Cycle Year # 17	Gautschy First Day of Jewish Month	Yallop Zone B *	Zone B q Value	Weekday	Days in Month	14th of Jewish Month	Weekday of 14th & 21st	21st of Jewish Month
1	Shevat	1/26			Saturday	30	2/8	Friday	2/15
2	Adar	2/25			Monday	29	3/10	Sunday	3/17
3	Nisan	3/26			Tuesday	29	4/8	Monday	4/15
4	Iyar	4/24			Wednesday	30	5/7	Tuesday	5/14
5	Sivan	5/24			Friday	29	6/6	Thursday	6/13
6	Tammuz	6/22			Saturday	30	7/5	Friday	7/12
7	Av	7/22			Monday	30	8/4	Sunday	8/11
8	Elul	8/21			Wednesday	30	9/3	Tuesday	9/10
9	Tishrei	9/20			Friday	29	10/3	Thursday	10/10
10	Cheshvan	10/19			Saturday	30	11/1	Friday	11/8
11	Kislev	11/18			Monday	29	12/1	Sunday	12/8
12	Tevet	12/17			Tuesday	30	12/30	Monday	1/6
Lunation Number	Julian Year 19 BC Cycle Year # 18	Gautschy First Day of Jewish Month	Yallop Zone B *	Zone B q Value	Weekday	Days in Month	14th of Jewish Month	Weekday of 14th & 21st	21st of Jewish Month
1	Shevat	1/16			Thursday	29	1/29	Wednesday	2/5
2	Adar	2/14			Friday	30	2/27	Thursday	3/6
3	Nisan	3/16			Sunday	29	3/29	Saturday	4/5
4	Iyar	4/14			Monday	29	4/27	Sunday	5/4
5	Sivan	5/13			Tuesday	30	5/26	Monday	6/2
6	Tammuz	6/12			Thursday	29	6/25	Wednesday	7/2
7	Av	7/11			Friday	30	7/24	Thursday	7/31
8	Elul	8/10			Sunday	30	8/23	Saturday	8/30
9	Tishrei	9/9			Tuesday	29	9/22	Monday	9/29
10	Cheshvan	10/8			Wednesday	30	10/21	Tuesday	10/28
11	Kislev	11/7			Friday	29	11/20	Thursday	11/27
12	Tevet	12/6			Saturday	30	12/19	Friday	12/26
Lunation Number	Julian Year 18 BC Cycle Year # 19	Gautschy First Day of Jewish Month	Yallop Zone B *	Zone B q Value	Weekday	Days in Month	14th of Jewish Month	Weekday of 14th & 21st	21st of Jewish Month
1	Shevat	1/5			Monday	30	1/18	Sunday	1/25
2	Adar	2/4			Wednesday	29	2/17	Tuesday	2/24
3	Adar-II	3/5			Thursday	30	3/18	Wednesday	3/25
4	Nisan	4/4			Saturday	29	4/17	Friday	4/24
5	Iyar	5/3			Sunday	29	5/16	Saturday	5/23
6	Sivan	6/1	*	-0.081	Monday	30	6/14	Sunday	6/21
Alternate 10	Sivan	6/2	Zone A		Tuesday	29	6/15	Monday	6/22
7	Tammuz	7/1			Wednesday	29	7/14	Tuesday	7/21
8	Av	7/30	*	-0.020	Thursday	30	8/12	Wednesday	8/19
Alternate 8	Av	7/31	Zone A		Friday	29	8/13	Thursday	8/20
9	Elul	8/29			Saturday	29	9/11	Friday	9/18
10	Tishrei	9/27	*	0.031	Sunday	30	10/10	Saturday	10/17
Alternate 10	Tishrei	9/28	Zone A		Monday	29	10/11	Sunday	10/18
11	Cheshvan	10/27			Tuesday	29	11/9	Monday	11/16
12	Kislev	11/25			Wednesday	30	12/8	Tuesday	12/15
13	Tevet	12/25			Friday	30	1/7	Thursday	1/14

Lunation Number	Julian Year 17 BC Leap Year Cycle Year # 1	Gautschi First Day of Jewish Month	Yallop Zone B *	Zone B q Value	Weekday	Days in Month	14th of Jewish Month	Weekday of 14th & 21st	21st of Jewish Month
1	Shevat	1/24			Sunday	29	2/6	Saturday	2/13
2	Adar	2/22	*	0.074	Monday	30	3/6	Sunday	3/13
Alternate 2	Adar	2/23	Zone A		Tuesday	29	3/7	Monday	3/14
3	Nisan	3/23			Wednesday	30	4/5	Tuesday	4/12
4	Iyar	4/22			Friday	29	5/5	Thursday	5/12
5	Sivan	5/21			Saturday	30	6/3	Friday	6/10
6	Tammuz	6/20			Monday	29	7/3	Sunday	7/10
7	Av	7/19			Tuesday	30	8/1	Monday	8/8
8	Elul	8/18			Thursday	29	8/31	Wednesday	9/7
9	Tishrei	9/16			Friday	29	9/29	Thursday	10/6
10	Cheshvan	10/15			Saturday	30	10/28	Friday	11/4
11	Kislev	11/14			Monday	29	11/27	Sunday	12/4
12	Tevet	12/13			Tuesday	30	12/26	Monday	1/2
Lunation Number	Julian Year 16 BC Cycle Year # 2	Gautschi First Day of Jewish Month	Yallop Zone B *	Zone B q Value	Weekday	Days in Month	14th of Jewish Month	Weekday of 14th & 21st	21st of Jewish Month
1	Shevat	1/12			Thursday	29	1/25	Wednesday	2/1
2	Adar	2/10			Friday	30	2/23	Thursday	3/2
3	Nisan	3/12			Sunday	30	3/25	Saturday	4/1
4	Iyar	4/11			Tuesday	29	4/24	Monday	5/1
5	Sivan	5/10	*	-0.101	Wednesday	30	5/23	Tuesday	5/30
Alternate 5	Sivan	5/11	Zone A		Thursday	29	5/24	Wednesday	5/31
6	Tammuz	6/9			Friday	30	6/22	Thursday	6/29
7	Av	7/9			Sunday	29	7/22	Saturday	7/29
8	Elul	8/7			Monday	30	8/20	Sunday	8/27
9	Tishrei	9/6			Wednesday	29	9/19	Tuesday	9/26
10	Cheshvan	10/5			Thursday	29	10/18	Wednesday	10/25
11	Kislev	11/3			Friday	29	11/16	Thursday	11/23
12	Tevet	12/2	*	0.044	Saturday	30	12/15	Friday	12/22
Alternate 5	Tevet	12/3	Zone A		Sunday	29	12/16	Saturday	12/23
Lunation Number	Julian Year 15 BC Cycle Year # 3	Gautschi First Day of Jewish Month	Yallop Zone B *	Zone B q Value	Weekday	Days in Month	14th of Jewish Month	Weekday of 14th & 21st	21st of Jewish Month
1	Shevat	1/1			Monday	29	1/14	Sunday	1/21
2	Adar	1/30	*	-0.066	Tuesday	30	2/12	Monday	2/19
Alternate 2	Adar	1/31	Zone A		Wednesday	29	2/13	Tuesday	2/20
3	Adar-II	3/1			Thursday	30	3/14	Wednesday	3/21
4	Nisan	3/31			Saturday	30	4/13	Friday	4/20
5	Iyar	4/30			Monday	29	5/13	Sunday	5/20
6	Sivan	5/29			Tuesday	30	6/11	Monday	6/18
7	Tammuz	6/28			Thursday	30	7/11	Wednesday	7/18
8	Av	7/28			Saturday	29	8/10	Friday	8/17
9	Elul	8/26			Sunday	29	9/8	Saturday	9/15
10	Tishrei	9/24	*	-0.040	Monday	30	10/7	Sunday	10/14
Alternate 10	Tishrei	9/25	Zone A		Tuesday	29	10/8	Monday	10/15
11	Cheshvan	10/24			Wednesday	29	11/6	Tuesday	11/13
12	Kislev	11/22			Thursday	29	12/5	Wednesday	12/12
13	Tevet	12/21	*	0.042	Friday	30	1/3	Thursday	1/10
Alternate 13	Tevet	12/22	Zone A		Saturday	29	1/4	Friday	1/11

Lunation Number	Julian Year 14 BC Cycle Year # 4	Gautschi First Day of Jewish Month	Yallop Zone B *	Zone B q Value	Weekday	Days in Month	14th of Jewish Month	Weekday of 14th & 21st	21st of Jewish Month
1	Shevat	1/20			Sunday	29	2/2	Saturday	2/9
2	Adar	2/18	*	0.006	Monday	30	3/3	Sunday	3/10
Alternate 2	Adar	2/19	Zone A		Tuesday	29	3/4	Monday	3/11
3	Nisan	3/20			Wednesday	30	4/2	Tuesday	4/9
4	Iyar	4/19			Friday	29	5/2	Thursday	5/9
5	Sivan	5/18			Saturday	30	5/31	Friday	6/7
6	Tammuz	6/17			Monday	30	6/30	Sunday	7/7
7	Av	7/17			Wednesday	29	7/30	Tuesday	8/6
8	Elul	8/15	*	-0.070	Thursday	30	8/28	Wednesday	9/4
Alternate 8	Elul	8/16	Zone A		Friday	29	8/29	Thursday	9/5
9	Tishrei	9/14			Saturday	29	9/27	Friday	10/4
10	Cheshvan	10/13			Sunday	30	10/26	Saturday	11/2
11	Kislev	11/12			Tuesday	29	11/25	Monday	12/2
12	Tevet	12/11			Wednesday	30	12/24	Tuesday	12/31
Lunation Number	Julian Year 13 BC Leap Year Cycle Year # 5	Gautschi First Day of Jewish Month	Yallop Zone B *	Zone B q Value	Weekday	Days in Month	14th of Jewish Month	Weekday of 14th & 21st	21st of Jewish Month
1	Shevat	1/10			Friday	29	1/23	Thursday	1/30
2	Adar	2/8			Saturday	29	2/21	Friday	2/28
3	Adar-II	3/8	*	0.029	Sunday	30	3/21	Saturday	3/28
Alternate 3	Adar-II	3/9	Zone A		Monday	29	3/22	Sunday	3/29
4	Nisan	4/7			Tuesday	29	4/20	Monday	4/27
5	Iyar	5/6	*	0.050	Wednesday	30	5/19	Tuesday	5/26
Alternate 5	Iyar	5/7	Zone A		Thursday	29	5/20	Wednesday	5/27
6	Sivan	6/5			Friday	30	6/18	Thursday	6/25
7	Tammuz	7/5			Sunday	29	7/18	Saturday	7/25
8	Av	8/3	*	-0.074	Monday	30	8/16	Sunday	8/23
Alternate 8	Av	8/4	Zone A		Tuesday	29	8/17	Monday	8/24
9	Elul	9/2			Wednesday	30	9/15	Tuesday	9/22
10	Tishrei	10/2			Friday	29	10/15	Thursday	10/22
11	Cheshvan	10/31			Saturday	30	11/13	Friday	11/20
12	Kislev	11/30			Monday	29	12/13	Sunday	12/20
13	Tevet	12/29			Tuesday	30	1/11	Monday	1/18
Lunation Number	Julian Year 12 BC Cycle Year # 6	Gautschi First Day of Jewish Month	Yallop Zone B *	Zone B q Value	Weekday	Days in Month	14th of Jewish Month	Weekday of 14th & 21st	21st of Jewish Month
1	Shevat	1/28			Thursday	29	2/10	Wednesday	2/17
2	Adar	2/26			Friday	29	3/11	Thursday	3/18
3	Nisan	3/27	*	0.032	Saturday	30	4/9	Friday	4/16
Alternate 3	Nisan	3/28	Zone A		Sunday	29	4/10	Saturday	4/17
4	Iyar	4/26			Monday	29	5/9	Sunday	5/16
5	Sivan	5/25			Tuesday	30	6/7	Monday	6/14
6	Tammuz	6/24			Thursday	29	7/7	Wednesday	7/14
7	Av	7/23	*	0.019	Friday	30	8/5	Thursday	8/12
Alternate 7	Av	7/24	Zone A		Saturday	29	8/6	Friday	8/13
8	Elul	8/22			Sunday	30	9/4	Saturday	9/11
9	Tishrei	9/21			Tuesday	29	10/4	Monday	10/11
10	Cheshvan	10/20	*	0.083	Wednesday	30	11/2	Tuesday	11/9
Alternate 10	Cheshvan	10/21	Zone A		Thursday	29	11/3	Wednesday	11/10
11	Kislev	11/19			Friday	30	12/2	Thursday	12/9
12	Tevet	12/19			Sunday	29	1/1	Saturday	1/8

Lunation Number	Julian Year 11 BC Cycle Year # 7	Gautschi First Day of Jewish Month	Yallop Zone B *	Zone B q Value	Weekday	Days in Month	14th of Jewish Month	Weekday of 14th & 21st	21st of Jewish Month
1	Shevat	1/17			Monday	30	1/30	Sunday	2/6
2	Adar	2/16			Wednesday	29	3/1	Tuesday	3/8
3	Nisan	3/17			Thursday	29	3/30	Wednesday	4/6
4	Iyar	4/15	*	0.005	Friday	30	4/28	Thursday	5/5
Alternate 4	Iyar	4/16	Zone A		Saturday	29	4/29	Friday	5/6
5	Sivan	5/15			Sunday	29	5/28	Saturday	6/4
6	Tammuz	6/13			Monday	30	6/26	Sunday	7/3
7	Av	7/13			Wednesday	29	7/26	Tuesday	8/2
8	Elul	8/11			Thursday	30	8/24	Wednesday	8/31
9	Tishrei	9/10			Saturday	29	9/23	Friday	9/30
10	Cheshvan	10/9			Sunday	30	10/22	Saturday	10/29
11	Kislev	11/8			Tuesday	30	11/21	Monday	11/28
12	Tevet	12/8			Thursday	30	12/21	Wednesday	12/28
Lunation Number	Julian Year 10 BC Cycle Year # 8	Gautschi First Day of Jewish Month	Yallop Zone B *	Zone B q Value	Weekday	Days in Month	14th of Jewish Month	Weekday of 14th & 21st	21st of Jewish Month
1	Shevat	1/7			Saturday	29	1/20	Friday	1/27
2	Adar	2/5			Sunday	30	2/18	Saturday	2/25
3	Adar-II	3/7			Tuesday	29	3/20	Monday	3/27
4	Nisan	4/5			Wednesday	29	4/18	Tuesday	4/25
5	Iyar	5/4	*	-0.047	Thursday	30	5/17	Wednesday	5/24
Alternate 5	Iyar	5/5	Zone A		Friday	29	5/18	Thursday	5/25
6	Sivan	6/3			Saturday	29	6/16	Friday	6/23
7	Tammuz	7/2			Sunday	29	7/15	Saturday	7/22
8	Av	7/31	*	0.055	Monday	30	8/13	Sunday	8/20
Alternate 8	Av	8/1	Zone A		Tuesday	29	8/14	Monday	8/21
9	Elul	8/30			Wednesday	29	9/12	Tuesday	9/19
10	Tishrei	9/28	*	0.015	Thursday	30	10/11	Wednesday	10/18
Alternate 10	Tishrei	9/29	Zone A		Friday	29	10/12	Thursday	10/19
11	Cheshvan	10/28			Saturday	30	11/10	Friday	11/17
12	Kislev	11/27			Monday	30	12/10	Sunday	12/17
13	Tevet	12/27			Wednesday	30	1/9	Tuesday	1/16
Lunation Number	Julian Year 9 BC Leap Year Cycle Year # 9	Gautschi First Day of Jewish Month	Yallop Zone B *	Zone B q Value	Weekday	Days in Month	14th of Jewish Month	Weekday of 14th & 21st	21st of Jewish Month
1	Shevat	1/26			Friday	29	2/8	Thursday	2/15
2	Adar	2/24			Saturday	30	3/8	Friday	3/15
3	Nisan	3/25			Monday	29	4/7	Sunday	4/14
4	Iyar	4/23			Tuesday	29	5/6	Monday	5/13
5	Sivan	5/22	*	-0.044	Wednesday	30	6/4	Tuesday	6/11
Alternate 5	Sivan	5/23	Zone A		Thursday	29	6/5	Wednesday	6/12
6	Tammuz	6/21			Friday	29	7/4	Thursday	7/11
7	Av	7/20			Saturday	29	8/2	Friday	8/9
8	Elul	8/18			Sunday	30	8/31	Saturday	9/7
9	Tishrei	9/17			Tuesday	29	9/30	Monday	10/7
10	Cheshvan	10/16	*	-0.041	Wednesday	30	10/29	Tuesday	11/5
Alternate 10	Cheshvan	10/17	Zone A		Thursday	29	10/30	Wednesday	11/6
11	Kislev	11/15			Friday	30	11/28	Thursday	12/5
12	Tevet	12/15			Sunday	30	12/28	Saturday	1/4

Lunation Number	Julian Year 8 BC Cycle Year # 10	Gautschy First Day of Jewish Month	Yallop Zone B *	Zone B q Value	Weekday	Days in Month	14th of Jewish Month	Weekday of 14th & 21st	21st of Jewish Month
1	Shevat	1/14			Tuesday	29	1/27	Monday	2/3
2	Adar	2/12			Wednesday	30	2/25	Tuesday	3/4
3	Nisan	3/14			Friday	30	3/27	Thursday	4/3
4	Iyar	4/13			Sunday	29	4/26	Saturday	5/3
5	Sivan	5/12			Monday	29	5/25	Sunday	6/1
6	Tammuz	6/10			Tuesday	30	6/23	Monday	6/30
7	Av	7/10			Thursday	29	7/23	Wednesday	7/30
8	Elul	8/8			Friday	29	8/21	Thursday	8/28
9	Tishrei	9/6	*	0.003	Saturday	30	9/19	Friday	9/26
Alternate 9	<i>Tishrei</i>	<i>9/7</i>	<i>Zone A</i>		<i>Sunday</i>	<i>29</i>	<i>9/20</i>	<i>Saturday</i>	<i>9/27</i>
10	Cheshvan	10/6			Monday	30	10/19	Sunday	10/26
11	Kislev	11/5			Wednesday	29	11/18	Tuesday	11/25
12	Tevet	12/4			Thursday	30	12/17	Wednesday	12/24
Lunation Number	Julian Year 7 BC Cycle Year # 11	Gautschy First Day of Jewish Month	Yallop Zone B *	Zone B q Value	Weekday	Days in Month	14th of Jewish Month	Weekday of 14th & 21st	21st of Jewish Month
1	Shevat	1/3			Saturday	29	1/16	Friday	1/23
2	Adar	2/1			Sunday	30	2/14	Saturday	2/21
3	Adar-II	3/3			Tuesday	30	3/16	Monday	3/23
4	Nisan	4/2			Thursday	29	4/15	Wednesday	4/22
5	Iyar	5/1			Friday	30	5/14	Thursday	5/21
6	Sivan	5/31			Sunday	29	6/13	Saturday	6/20
7	Tammuz	6/29			Monday	30	7/12	Sunday	7/19
8	Av	7/29			Wednesday	29	8/11	Tuesday	8/18
9	Elul	8/27			Thursday	30	9/9	Wednesday	9/16
10	Tishrei	9/26			Saturday	29	10/9	Friday	10/16
11	Cheshvan	10/25			Sunday	30	11/7	Saturday	11/14
12	Kislev	11/24			Tuesday	29	12/7	Monday	12/14
13	Tevet	12/23			Wednesday	30	1/5	Tuesday	1/12
Lunation Number	Julian Year 6 BC Cycle Year # 12	Gautschy First Day of Jewish Month	Yallop Zone B *	Zone B q Value	Weekday	Days in Month	14th of Jewish Month	Weekday of 14th & 21st	21st of Jewish Month
1	Shevat	1/22			Friday	29	2/4	Thursday	2/11
2	Adar	2/20			Saturday	30	3/5	Friday	3/12
3	Nisan	3/22			Monday	29	4/4	Sunday	4/11
4	Iyar	4/20			Tuesday	30	5/3	Monday	5/10
5	Sivan	5/20			Thursday	29	6/2	Wednesday	6/9
6	Tammuz	6/18	*	-0.024	Friday	30	7/1	Thursday	7/8
Alternate 6	<i>Tammuz</i>	<i>6/19</i>	<i>Zone A</i>		<i>Saturday</i>	<i>29</i>	<i>7/2</i>	<i>Friday</i>	<i>7/9</i>
7	Av	7/18			Sunday	30	7/31	Saturday	8/7
8	Elul	8/17			Tuesday	29	8/30	Monday	9/6
9	Tishrei	9/15	*	-0.004	Wednesday	30	9/28	Tuesday	10/5
Alternate 9	<i>Tishrei</i>	<i>9/16</i>	<i>Zone A</i>		<i>Thursday</i>	<i>29</i>	<i>9/29</i>	<i>Wednesday</i>	<i>10/6</i>
10	Cheshvan	10/15			Friday	29	10/28	Thursday	11/4
11	Kislev	11/13	*	-0.019	Saturday	30	11/26	Friday	12/3
Alternate 11	<i>Kislev</i>	<i>11/14</i>	<i>Zone A</i>		<i>Sunday</i>	<i>29</i>	<i>11/27</i>	<i>Saturday</i>	<i>12/4</i>
12	Tevet	12/13			Monday	29	12/26	Sunday	1/2

Lunation Number	Julian Year 5 BC Leap Year Cycle Year # 13	Gautschi First Day of Jewish Month	Yallop Zone B *	Zone B q Value	Weekday	Days in Month	14th of Jewish Month	Weekday of 14th & 21st	21st of Jewish Month
1	Shevat	1/11			Tuesday	29	1/24	Monday	1/31
2	Adar	2/9	*	0.057	Wednesday	30	2/22	Tuesday	2/29
Alternate 2	Adar	2/10	Zone A		Thursday	29	2/23	Wednesday	3/1
3	Adar-II	3/10			Friday	29	3/23	Thursday	3/30
4	Nisan	4/8	*	0.075	Saturday	30	4/21	Friday	4/28
Alternate 4	Nisan	4/9	Zone A		Sunday	29	4/22	Saturday	4/29
5	Iyar	5/8			Monday	29	5/21	Sunday	5/28
6	Sivan	6/6	*	-0.059	Tuesday	30	6/19	Monday	6/26
Alternate 6	Sivan	6/7	Zone A		Wednesday	29	6/20	Tuesday	6/27
7	Tammuz	7/6			Thursday	30	7/19	Wednesday	7/26
8	Av	8/5			Saturday	30	8/18	Friday	8/25
9	Elul	9/4			Monday	30	9/17	Sunday	9/24
10	Tishrei	10/4			Wednesday	29	10/17	Tuesday	10/24
11	Cheshvan	11/2			Thursday	29	11/15	Wednesday	11/22
12	Kislev	12/1	*	-0.083	Friday	30	12/14	Thursday	12/21
Alternate 12	Kislev	12/2	Zone A		Saturday	29	12/15	Friday	12/22
13	Tevet	12/31			Sunday	29	1/13	Saturday	1/20
Lunation Number	Julian Year 4 BC Cycle Year # 14	Gautschi First Day of Jewish Month	Yallop Zone B *	Zone B q Value	Weekday	Days in Month	14th of Jewish Month	Weekday of 14th & 21st	21st of Jewish Month
1	Shevat	1/29			Monday	29	2/11	Sunday	2/18
2	Adar	2/27			Tuesday	30	3/12	Monday	3/19
3	Nisan	3/29			Thursday	29	4/11	Wednesday	4/18
4	Iyar	4/27			Friday	30	5/10	Thursday	5/17
5	Sivan	5/27			Sunday	29	6/9	Saturday	6/16
6	Tammuz	6/25			Monday	30	7/8	Sunday	7/15
7	Av	7/25			Wednesday	30	8/7	Tuesday	8/14
8	Elul	8/24			Friday	30	9/6	Thursday	9/13
9	Tishrei	9/23			Sunday	30	10/6	Saturday	10/13
10	Cheshvan	10/23			Tuesday	29	11/5	Monday	11/12
11	Kislev	11/21			Wednesday	29	12/4	Tuesday	12/11
12	Tevet	12/20	*	0.027	Thursday	30	1/2	Wednesday	1/9
Alternate 12	Tevet	12/21	Zone A		Friday	29	1/3	Thursday	1/10
Lunation Number	Julian Year 3 BC Cycle Year # 15	Gautschi First Day of Jewish Month	Yallop Zone B *	Zone B q Value	Weekday	Days in Month	14th of Jewish Month	Weekday of 14th & 21st	21st of Jewish Month
1	Shevat	1/19			Saturday	29	2/1	Friday	2/8
2	Adar	2/17			Sunday	29	3/2	Saturday	3/9
3	Nisan	3/18			Monday	30	3/31	Sunday	4/7
4	Iyar	4/17			Wednesday	29	4/30	Tuesday	5/7
5	Sivan	5/16			Thursday	29	5/29	Wednesday	6/5
6	Tammuz	6/14	*	0.011	Friday	30	6/27	Thursday	7/4
Alternate 6	Tammuz	6/15	Zone A		Saturday	29	6/28	Friday	7/5
7	Av	7/14			Sunday	30	7/27	Saturday	8/3
8	Elul	8/13			Tuesday	30	8/26	Monday	9/2
9	Tishrei	9/12			Thursday	30	9/25	Wednesday	10/2
10	Cheshvan	10/12			Saturday	29	10/25	Friday	11/1
11	Kislev	11/10	*	-0.086	Sunday	30	11/23	Saturday	11/30
Alternate 11	Kislev	11/11	Zone A		Monday	29	11/24	Sunday	12/1
12	Tevet	12/10			Tuesday	29	12/23	Monday	12/30

Lunation Number	Julian Year 2 BC Cycle Year # 16	Gautschi First Day of Jewish Month	Yallop Zone B *	Zone B q Value	Weekday	Days in Month	14th of Jewish Month	Weekday of 14th & 21st	21st of Jewish Month
1	Shevat	1/8			Wednesday	30	1/21	Tuesday	1/28
2	Adar	2/7			Friday	29	2/20	Thursday	2/27
3	Adar-II	3/8			Saturday	29	3/21	Friday	3/28
4	Nisan	4/6			Sunday	30	4/19	Saturday	4/26
5	Iyar	5/6			Tuesday	29	5/19	Monday	5/26
6	Sivan	6/4			Wednesday	29	6/17	Tuesday	6/24
7	Tammuz	7/3	*	-0.069	Thursday	30	7/16	Wednesday	7/23
Alternate 7	Tammuz	7/4	Zone A		Friday	29	7/17	Thursday	7/24
8	Av	8/2			Saturday	30	8/15	Friday	8/22
9	Elul	9/1			Monday	30	9/14	Sunday	9/21
10	Tishrei	10/1			Wednesday	30	10/14	Tuesday	10/21
11	Cheshvan	10/31			Friday	29	11/13	Thursday	11/20
12	Kislev	11/29			Saturday	30	12/12	Friday	12/19
13	Tevet	12/29			Monday	29	1/11	Sunday	1/18
Lunation Number	Julian Year 1 BC Leap Year Cycle Year # 17	Gautschi First Day of Jewish Month	Yallop Zone B *	Zone B q Value	Weekday	Days in Month	14th of Jewish Month	Weekday of 14th & 21st	21st of Jewish Month
1	Shevat	1/27			Tuesday	30	2/9	Monday	2/16
2	Adar	2/26			Thursday	29	3/10	Wednesday	3/17
3	Nisan	3/26			Friday	29	4/8	Thursday	4/15
4	Iyar	4/24			Saturday	30	5/7	Friday	5/14
5	Sivan	5/24			Monday	29	6/6	Sunday	6/13
6	Tammuz	6/22			Tuesday	30	7/5	Monday	7/12
7	Av	7/22			Thursday	29	8/4	Wednesday	8/11
8	Elul	8/20			Friday	30	9/2	Thursday	9/9
9	Tishrei	9/19			Sunday	29	10/2	Saturday	10/9
10	Cheshvan	10/18	*	-0.133	Monday	30	10/31	Sunday	11/7
Alternate 10	Cheshvan	10/19	Zone A		Tuesday	29	11/1	Monday	11/8
11	Kislev	11/17			Wednesday	30	11/30	Tuesday	12/7
12	Tevet	12/17			Friday	29	12/30	Thursday	1/6
BC Years Above						BC Years Above			
			AD Years Below						
Lunation Number	Julian Year 1 AD Cycle Year # 18	Gautschi First Day of Jewish Month	Yallop Zone B *	Zone B q Value	Weekday	Days in Month	14th of Jewish Month	Weekday of 14th & 21st	21st of Jewish Month
1	Shevat	1/15			Saturday	30	1/28	Friday	2/4
2	Adar	2/14			Monday	30	2/27	Sunday	3/6
3	Nisan	3/16			Wednesday	29	3/29	Tuesday	4/5
4	Iyar	4/14			Thursday	29	4/27	Wednesday	5/4
5	Sivan	5/13	*	0.064	Friday	30	5/26	Thursday	6/2
Alternate 5	Sivan	5/14	Zone A		Saturday	29	5/27	Friday	6/3
6	Tammuz	6/12			Sunday	29	6/25	Saturday	7/2
7	Av	7/11			Monday	30	7/24	Sunday	7/31
8	Elul	8/10			Wednesday	29	8/23	Tuesday	8/30
9	Tishrei	9/8			Thursday	30	9/21	Wednesday	9/28
10	Cheshvan	10/8			Saturday	29	10/21	Friday	10/28
11	Kislev	11/6			Sunday	30	11/19	Saturday	11/26
12	Tevet	12/6			Tuesday	29	12/19	Monday	12/26

Lunation Number	Julian Year 2 AD Cycle Year # 19	Gautschi First Day of Jewish Month	Yallop Zone B *	Zone B q Value	Weekday	Days in Month	14th of Jewish Month	Weekday of 14th & 21st	21st of Jewish Month
1	Shevat	1/4			Wednesday	30	1/17	Tuesday	1/24
2	Adar	2/3			Friday	30	2/16	Thursday	2/23
3	Adar-II	3/5			Sunday	29	3/18	Saturday	3/25
4	Nisan	4/3			Monday	30	4/16	Sunday	4/23
5	Iyar	5/3			Wednesday	29	5/16	Tuesday	5/23
6	Sivan	6/1	*	-0.039	Thursday	30	6/14	Wednesday	6/21
Alternate 6	Sivan	6/2	Zone A		Friday	29	6/15	Thursday	6/22
7	Tammuz	7/1			Saturday	29	7/14	Friday	7/21
8	Av	7/30	*	-0.093	Sunday	30	8/12	Saturday	8/19
Alternate 8	Av	7/31	Zone A		Monday	29	8/13	Sunday	8/20
9	Elul	8/29			Tuesday	29	9/11	Monday	9/18
10	Tishrei	9/27			Wednesday	30	10/10	Tuesday	10/17
11	Cheshvan	10/27			Friday	29	11/9	Thursday	11/16
12	Kislev	11/25			Saturday	29	12/8	Friday	12/15
13	Tevet	12/24			Sunday	30	1/6	Saturday	1/13
Lunation Number	Julian Year 3 AD Cycle Year # 1	Gautschi First Day of Jewish Month	Yallop Zone B *	Zone B q Value	Weekday	Days in Month	14th of Jewish Month	Weekday of 14th & 21st	21st of Jewish Month
1	Shevat	1/23			Tuesday	30	2/5	Monday	2/12
2	Adar	2/22			Thursday	29	3/7	Wednesday	3/14
3	Nisan	3/23	*	0.029	Friday	30	4/5	Thursday	4/12
Alternate 3	Nisan	3/24	Zone A		Saturday	29	4/6	Friday	4/13
4	Iyar	4/22			Sunday	30	5/5	Saturday	5/12
5	Sivan	5/22			Tuesday	29	6/4	Monday	6/11
6	Tammuz	6/20	*	-0.090	Wednesday	30	7/3	Tuesday	7/10
Alternate 6	Tammuz	6/21	Zone A		Thursday	29	7/4	Wednesday	7/11
7	Av	7/20			Friday	30	8/2	Thursday	8/9
8	Elul	8/19			Sunday	29	9/1	Saturday	9/8
9	Tishrei	9/17			Monday	29	9/30	Sunday	10/7
10	Cheshvan	10/16			Tuesday	29	10/29	Monday	11/5
11	Kislev	11/14	*	0.024	Wednesday	30	11/27	Tuesday	12/4
Alternate 11	Kislev	11/15	Zone A		Thursday	29	11/28	Wednesday	12/5
12	Tevet	12/14			Friday	29	12/27	Thursday	1/3
Lunation Number	Julian Year 4 AD Leap Year Cycle Year # 2	Gautschi First Day of Jewish Month	Yallop Zone B *	Zone B q Value	Weekday	Days in Month	14th of Jewish Month	Weekday of 14th & 21st	21st of Jewish Month
1	Shevat	1/12			Saturday	30	1/25	Friday	2/1
2	Adar	2/11			Monday	29	2/24	Sunday	3/2
3	Nisan	3/11	*	-0.037	Tuesday	30	3/24	Monday	3/31
Alternate 3	Nisan	3/12	Zone A		Wednesday	29	3/25	Tuesday	4/1
4	Iyar	4/10			Thursday	30	4/23	Wednesday	4/30
5	Sivan	5/10			Saturday	30	5/23	Friday	5/30
6	Tammuz	6/9			Monday	29	6/22	Sunday	6/29
7	Av	7/8	*	-0.010	Tuesday	30	7/21	Monday	7/28
Alternate 7	Av	7/9	Zone A		Wednesday	29	7/22	Tuesday	7/29
8	Elul	8/7			Thursday	29	8/20	Wednesday	8/27
9	Tishrei	9/5	*	-0.101	Friday	30	9/18	Thursday	9/25
Alternate 9	Tishrei	9/6	Zone A		Saturday	29	9/19	Friday	9/26
10	Cheshvan	10/5			Sunday	29	10/18	Saturday	10/25
11	Kislev	11/3			Monday	29	11/16	Sunday	11/23
12	Tevet	12/2	*	0.093	Tuesday	30	12/15	Monday	12/22
Alternate 12	Tevet	12/3	Zone A		Wednesday	29	12/16	Tuesday	12/23

Lunation Number	Julian Year 5 AD Cycle Year # 3	Gautschi First Day of Jewish Month	Yallop Zone B *	Zone B q Value	Weekday	Days in Month	14th of Jewish Month	Weekday of 14th & 21st	21st of Jewish Month
1	Shevat	1/1			Thursday	29	1/14	Wednesday	1/21
2	Adar	1/30			Friday	30	2/12	Thursday	2/19
3	Adar-II	3/1			Sunday	29	3/14	Saturday	3/21
4	Nisan	3/30			Monday	30	4/12	Sunday	4/19
5	Iyar	4/29			Wednesday	30	5/12	Tuesday	5/19
6	Sivan	5/29			Friday	29	6/11	Thursday	6/18
7	Tammuz	6/27	*	-0.016	Saturday	30	7/10	Friday	7/17
Alternate 7	Tammuz	6/28	Zone A		Sunday	29	7/11	Saturday	7/18
8	Av	7/27			Monday	30	8/9	Sunday	8/16
9	Elul	8/26			Wednesday	29	9/8	Tuesday	9/15
10	Tishrei	9/24			Thursday	30	10/7	Wednesday	10/14
11	Cheshvan	10/24			Saturday	29	11/6	Friday	11/13
12	Kislev	11/22			Sunday	29	12/5	Saturday	12/12
13	Tevet	12/21	*	-0.011	Monday	30	1/3	Sunday	1/10
Alternate 13	Tevet	12/22	Zone A		Tuesday	29	1/4	Monday	1/11
Lunation Number	Julian Year 6 AD Cycle Year # 4	Gautschi First Day of Jewish Month	Yallop Zone B *	Zone B q Value	Weekday	Days in Month	14th of Jewish Month	Weekday of 14th & 21st	21st of Jewish Month
1	Shevat	1/20			Wednesday	29	2/2	Tuesday	2/9
2	Adar	2/18			Thursday	30	3/3	Wednesday	3/10
3	Nisan	3/20			Saturday	29	4/2	Friday	4/9
4	Iyar	4/18			Sunday	30	5/1	Saturday	5/8
5	Sivan	5/18			Tuesday	29	5/31	Monday	6/7
6	Tammuz	6/16	*	0.056	Wednesday	30	6/29	Tuesday	7/6
	Tammuz	6/17	Zone A		Thursday	29	6/30	Wednesday	7/7
7	Av	7/16			Friday	30	7/29	Thursday	8/5
8	Elul	8/15			Sunday	29	8/28	Saturday	9/4
9	Tishrei	9/13	*	-0.001	Monday	30	9/26	Sunday	10/3
	Tishrei	9/14	Zone A		Tuesday	29	9/27	Monday	10/4
10	Cheshvan	10/13			Wednesday	29	10/26	Tuesday	11/2
11	Kislev	11/11	*	-0.078	Thursday	30	11/24	Wednesday	12/1
	Kislev	11/12	Zone A		Friday	29	11/25	Thursday	12/2
12	Tevet	12/11			Saturday	30	12/24	Friday	12/31
Lunation Number	Julian Year 7 AD Cycle Year # 5	Gautschi First Day of Jewish Month	Yallop Zone B *	Zone B q Value	Weekday	Days in Month	14th of Jewish Month	Weekday of 14th & 21st	21st of Jewish Month
1	Shevat	1/10			Monday	29	1/23	Sunday	1/30
2	Adar	2/8			Tuesday	29	2/21	Monday	2/28
3	Adar-II	3/9	*	0.065	Wednesday	30	3/22	Tuesday	3/29
Alternate 3	Adar-II	3/10	Zone A		Thursday	29	3/23	Wednesday	3/30
4	Nisan	4/8			Friday	29	4/21	Thursday	4/28
5	Iyar	5/7			Saturday	30	5/20	Friday	5/27
6	Sivan	6/6			Monday	29	6/19	Sunday	6/26
7	Tammuz	7/5			Tuesday	30	7/18	Monday	7/25
8	Av	8/4			Thursday	29	8/17	Wednesday	8/24
9	Elul	9/2	*	0.083	Friday	30	9/15	Thursday	9/22
Alternate 10	Elul	9/3	Zone A		Saturday	29	9/16	Friday	9/23
10	Tishrei	10/2			Sunday	30	10/15	Saturday	10/22
11	Cheshvan	11/1			Tuesday	29	11/14	Monday	11/21
12	Kislev	11/30	*	0.020	Wednesday	30	12/13	Tuesday	12/20
Alternate 12	Kislev	12/1	Zone A		Thursday	29	12/14	Wednesday	12/21
13	Tevet	12/30			Friday	30	1/12	Thursday	1/19

Lunation Number	Julian Year 8 AD Leap Year Cycle Year # 6	Gautschi First Day of Jewish Month	Yallop Zone B *	Zone B q Value	Weekday	Days in Month	14th of Jewish Month	Weekday of 14th & 21st	21st of Jewish Month
1	Shevat	1/29			Sunday	29	2/11	Saturday	2/18
2	Adar	2/27			Monday	29	3/11	Sunday	3/18
3	Nisan	3/27	*	-0.024	Tuesday	30	4/9	Monday	4/16
Alternate 3	Nisan	3/28	Zone A		Wednesday	29	4/10	Tuesday	4/17
4	Iyar	4/26			Thursday	29	5/9	Wednesday	5/16
5	Sivan	5/25			Friday	29	6/7	Thursday	6/14
6	Tammuz	6/23	*	-0.101	Saturday	30	7/6	Friday	7/13
Alternate 6	Tammuz	6/24	Zone A		Sunday	29	7/7	Saturday	7/14
7	Av	7/23			Monday	29	8/5	Sunday	8/12
8	Elul	8/21	*	0.049	Tuesday	30	9/3	Monday	9/10
Alternate 8	Elul	8/22	Zone A		Wednesday	29	9/4	Tuesday	9/11
9	Tishrei	9/20			Thursday	30	10/3	Wednesday	10/10
10	Cheshvan	10/20			Saturday	29	11/2	Friday	11/9
11	Kislev	11/18	*	-0.070	Sunday	30	12/1	Saturday	12/8
Alternate 11	Kislev	11/19	Zone A		Monday	29	12/2	Sunday	12/9
12	Tevet	12/18	*	0.086	Tuesday	30	12/31	Monday	1/7
Alternate 12	Tevet	12/19	Zone A		Wednesday	29	1/1	Tuesday	1/8
Lunation Number	Julian Year 9 AD Cycle Year # 7	Gautschi First Day of Jewish Month	Yallop Zone B *	Zone B q Value	Weekday	Days in Month	14th of Jewish Month	Weekday of 14th & 21st	21st of Jewish Month
1	Shevat	1/17			Thursday	30	1/30	Wednesday	2/6
2	Adar	2/16			Saturday	29	3/1	Friday	3/8
3	Nisan	3/17			Sunday	29	3/30	Saturday	4/6
4	Iyar	4/15	*	-0.056	Monday	30	4/28	Sunday	5/5
Alternate 4	Iyar	4/16	Zone A		Tuesday	29	4/29	Monday	5/6
5	Sivan	5/15			Wednesday	29	5/28	Tuesday	6/4
6	Tammuz	6/13			Thursday	29	6/26	Wednesday	7/3
7	Av	7/12	*	0.037	Friday	30	7/25	Thursday	8/1
Alternate 7	Av	7/13	Zone A		Saturday	29	7/26	Friday	8/2
8	Elul	8/11			Sunday	29	8/24	Saturday	8/31
9	Tishrei	9/9			Monday	30	9/22	Sunday	9/29
10	Cheshvan	10/9			Wednesday	29	10/22	Tuesday	10/29
11	Kislev	11/7	*	-0.108	Thursday	30	11/20	Wednesday	11/27
Alternate 11	Kislev	11/8	Zone A		Friday	29	11/21	Thursday	11/28
12	Tevet	12/7	*	0.032	Saturday	30	12/20	Friday	12/27
Alternate 12	Tevet	12/8	Zone A		Sunday	29	12/21	Saturday	12/28
Lunation Number	Julian Year 10 AD Cycle Year # 8	Gautschi First Day of Jewish Month	Yallop Zone B *	Zone B q Value	Weekday	Days in Month	14th of Jewish Month	Weekday of 14th & 21st	21st of Jewish Month
1	Shevat	1/6			Monday	30	1/19	Sunday	1/26
2	Adar	2/5			Wednesday	29	2/18	Tuesday	2/25
3	Adar-II	3/6	*	-0.102	Thursday	30	3/19	Wednesday	3/26
Alternate 3	Adar-II	3/7	Zone A		Friday	29	3/20	Thursday	3/27
4	Nisan	4/5			Saturday	29	4/18	Friday	4/25
5	Iyar	5/4	*	-0.019	Sunday	30	5/17	Saturday	5/24
Alternate 5	Iyar	5/5	Zone A		Monday	29	5/18	Sunday	5/25
6	Sivan	6/3			Tuesday	29	6/16	Monday	6/23
7	Tammuz	7/2			Wednesday	29	7/15	Tuesday	7/22
8	Av	7/31			Thursday	30	8/13	Wednesday	8/20
9	Elul	8/30			Saturday	29	9/12	Friday	9/19
10	Tishrei	9/28			Sunday	30	10/11	Saturday	10/18
11	Cheshvan	10/28			Tuesday	29	11/10	Monday	11/17
12	Kislev	11/26	*	-0.130	Wednesday	30	12/9	Tuesday	12/16
Alternate 12	Kislev	11/27	Zone A		Thursday	29	12/10	Wednesday	12/17
13	Tevet	12/26			Friday	30	1/8	Thursday	1/15

Lunation Number	Julian Year 11 AD Cycle Year # 9	Gautschi First Day of Jewish Month	Yallop Zone B *	Zone B q Value	Weekday	Days in Month	14th of Jewish Month	Weekday of 14th & 21st	21st of Jewish Month
1	Shevat	1/25			Sunday	30	2/7	Saturday	2/14
2	Adar	2/24			Tuesday	29	3/9	Monday	3/16
3	Nisan	3/25			Wednesday	30	4/7	Tuesday	4/14
4	Iyar	4/24			Friday	29	5/7	Thursday	5/14
5	Sivan	5/23			Saturday	30	6/5	Friday	6/12
6	Tammuz	6/22			Monday	29	7/5	Sunday	7/12
7	Av	7/21			Tuesday	29	8/3	Monday	8/10
8	Elul	8/19			Wednesday	30	9/1	Tuesday	9/8
9	Tishrei	9/18			Friday	29	10/1	Thursday	10/8
10	Cheshvan	10/17			Saturday	30	10/30	Friday	11/6
11	Kislev	11/16			Monday	29	11/29	Sunday	12/6
12	Tevet	12/15	*	-0.114	Tuesday	30	12/28	Monday	1/4
Alternate 12	<i>Tevet</i>	<i>12/16</i>	<i>Zone A</i>		<i>Wednesday</i>	<i>29</i>	<i>12/29</i>	<i>Tuesday</i>	<i>1/5</i>
Lunation Number	Julian Year 12 AD Leap Year Cycle Year # 10	Gautschi First Day of Jewish Month	Yallop Zone B *	Zone B q Value	Weekday	Days in Month	14th of Jewish Month	Weekday of 14th & 21st	21st of Jewish Month
1	Shevat	1/14			Thursday	30	1/27	Wednesday	2/3
2	Adar	2/13			Saturday	29	2/26	Friday	3/4
3	Nisan	3/13			Sunday	30	3/26	Saturday	4/2
4	Iyar	4/12			Tuesday	30	4/25	Monday	5/2
5	Sivan	5/12			Thursday	29	5/25	Wednesday	6/1
6	Tammuz	6/10			Friday	29	6/23	Thursday	6/30
7	Av	7/9	*	-0.111	Saturday	30	7/22	Friday	7/29
Alternate 7	<i>Av</i>	<i>7/10</i>	<i>Zone A</i>		<i>Sunday</i>	<i>29</i>	<i>7/23</i>	<i>Saturday</i>	<i>7/30</i>
8	Elul	8/8			Monday	29	8/21	Sunday	8/28
9	Tishrei	9/6	*	-0.080	Tuesday	30	9/19	Monday	9/26
Alternate 9	<i>Tishrei</i>	<i>9/7</i>	<i>Zone A</i>		<i>Wednesday</i>	<i>29</i>	<i>9/20</i>	<i>Tuesday</i>	<i>9/27</i>
10	Cheshvan	10/6			Thursday	30	10/19	Wednesday	10/26
11	Kislev	11/5			Saturday	29	11/18	Friday	11/25
12	Tevet	12/4			Sunday	29	12/17	Saturday	12/24
Lunation Number	Julian Year 13 AD Cycle Year # 11	Gautschi First Day of Jewish Month	Yallop Zone B *	Zone B q Value	Weekday	Days in Month	14th of Jewish Month	Weekday of 14th & 21st	21st of Jewish Month
1	Shevat	1/2	*	0.015	Monday	30	1/15	Sunday	1/22
Alternate 1	<i>Shevat</i>	<i>1/3</i>	<i>Zone A</i>		<i>Tuesday</i>	<i>29</i>	<i>1/16</i>	<i>Monday</i>	<i>1/23</i>
2	Adar	2/1			Wednesday	29	2/14	Tuesday	2/21
3	Adar-II	3/2			Thursday	30	3/15	Wednesday	3/22
4	Nisan	4/1			Saturday	30	4/14	Friday	4/21
5	Iyar	5/1			Monday	29	5/14	Sunday	5/21
6	Sivan	5/30			Tuesday	30	6/12	Monday	6/19
7	Tammuz	6/29			Thursday	29	7/12	Wednesday	7/19
8	Av	7/28	*	0.061	Friday	30	8/10	Thursday	8/17
Alternate 8	<i>Av</i>	<i>7/29</i>	<i>Zone A</i>		<i>Saturday</i>	<i>29</i>	<i>8/11</i>	<i>Friday</i>	<i>8/18</i>
9	Elul	8/27			Sunday	30	9/9	Saturday	9/16
10	Tishrei	9/26			Tuesday	29	10/9	Monday	10/16
11	Cheshvan	10/25			Wednesday	30	11/7	Tuesday	11/14
12	Kislev	11/24			Friday	29	12/7	Thursday	12/14
13	Tevet	12/23			Saturday	29	1/5	Friday	1/12

Lunation Number	Julian Year 14 AD Cycle Year # 12	Gautschi First Day of Jewish Month	Yallop Zone B *	Zone B q Value	Weekday	Days in Month	14th of Jewish Month	Weekday of 14th & 21st	21st of Jewish Month
1	Shevat	1/21			Sunday	30	2/3	Saturday	2/10
2	Adar	2/20			Tuesday	29	3/5	Monday	3/12
3	Nisan	3/21			Wednesday	30	4/3	Tuesday	4/10
4	Iyar	4/20			Friday	29	5/3	Thursday	5/10
5	Sivan	5/19			Saturday	30	6/1	Friday	6/8
6	Tammuz	6/18			Monday	29	7/1	Sunday	7/8
7	Av	7/17	*	-0.046	Tuesday	30	7/30	Monday	8/6
Alternate 7	Av	7/18	Zone A		Wednesday	29	7/31	Tuesday	8/7
8	Elul	8/16	*	0.055	Thursday	30	8/29	Wednesday	9/5
Alternate 8	Elul	8/17	Zone A		Friday	29	8/30	Thursday	9/6
9	Tishrei	9/15			Saturday	30	9/28	Friday	10/5
10	Cheshvan	10/15			Monday	29	10/28	Sunday	11/4
11	Kislev	11/13	*	-0.086	Tuesday	30	11/26	Monday	12/3
Alternate 11	Kislev	11/14	Zone A		Wednesday	29	11/27	Tuesday	12/4
12	Tevet	12/13			Thursday	29	12/26	Wednesday	1/2
Lunation Number	Julian Year 15 AD Cycle Year # 13	Gautschi First Day of Jewish Month	Yallop Zone B *	Zone B q Value	Weekday	Days in Month	14th of Jewish Month	Weekday of 14th & 21st	21st of Jewish Month
1	Shevat	1/11			Friday	29	1/24	Thursday	1/31
2	Adar	2/9			Saturday	30	2/22	Friday	3/1
3	Adar-II	3/11			Monday	29	3/24	Sunday	3/31
4	Nisan	4/9			Tuesday	29	4/22	Monday	4/29
5	Iyar	5/8	*	0.019	Wednesday	30	5/21	Tuesday	5/28
Alternate 5	Iyar	5/9	Zone A		Thursday	29	5/22	Wednesday	5/29
6	Sivan	6/7			Friday	29	6/20	Thursday	6/27
7	Tammuz	7/6	*	-0.069	Saturday	30	7/19	Friday	7/26
Alternate 7	Tammuz	7/7	Zone A		Sunday	29	7/20	Saturday	7/27
8	Av	8/5	*	0.024	Monday	30	8/18	Sunday	8/25
Alternate 8	Av	8/6	Zone A		Tuesday	29	8/19	Monday	8/26
9	Elul	9/4	*	-0.018	Wednesday	30	9/17	Tuesday	9/24
Alternate 9	Elul	9/5	Zone A		Thursday	29	9/18	Wednesday	9/25
10	Tishrei	10/4	*	0.068	Friday	30	10/17	Thursday	10/24
Alternate 10	Tishrei	10/5	Zone A		Saturday	29	10/18	Friday	10/25
11	Cheshvan	11/3			Sunday	29	11/16	Saturday	11/23
12	Kislev	12/2	*	0.011	Monday	30	12/15	Sunday	12/22
Alternate 12	Kislev	12/3	Zone A		Tuesday	29	12/16	Monday	12/23
Lunation Number	Julian Year 16 AD Leap Year Cycle Year # 14	Gautschi First Day of Jewish Month	Yallop Zone B *	Zone B q Value	Weekday	Days in Month	14th of Jewish Month	Weekday of 14th & 21st	21st of Jewish Month
1	Tevet	1/1			Wednesday	29	1/14	Tuesday	1/21
2	Shevat	1/30			Thursday	29	2/12	Wednesday	2/19
3	Adar	2/28			Friday	30	3/12	Thursday	3/19
4	Nisan	3/29			Sunday	29	4/11	Saturday	4/18
5	Iyar	4/27			Monday	29	5/10	Sunday	5/17
6	Sivan	5/26			Tuesday	30	6/8	Monday	6/15
7	Tammuz	6/25			Thursday	29	7/8	Wednesday	7/15
8	Av	7/24	*	-0.050	Friday	30	8/6	Thursday	8/13
Alternate 8	Av	7/25	Zone A		Saturday	29	8/7	Friday	8/14
9	Elul	8/23	*	-0.013	Sunday	30	9/5	Saturday	9/12
Alternate 9	Elul	8/24	Zone A		Monday	29	9/6	Sunday	9/13
10	Tishrei	9/22	*	0.016	Tuesday	30	10/5	Monday	10/12
Alternate 10	Tishrei	9/23	Zone A		Wednesday	29	10/6	Tuesday	10/13
11	Cheshvan	10/22			Thursday	30	11/4	Wednesday	11/11
12	Kislev	11/21			Saturday	29	12/4	Friday	12/11
13	Tevet	12/20			Sunday	30	1/2	Saturday	1/9

Lunation Number	Julian Year 17 AD Cycle Year # 15	Gautschi First Day of Jewish Month	Yallop Zone B *	Zone B q Value	Weekday	Days in Month	14th of Jewish Month	Weekday of 14th & 21st	21st of Jewish Month
1	Shevat	1/19			Tuesday	29	2/1	Monday	2/8
2	Adar	2/17			Wednesday	29	3/2	Tuesday	3/9
3	Nisan	3/18	*	0.085	Thursday	30	3/31	Wednesday	4/7
Alternate 3	Nisan	3/19	Zone A		Friday	29	4/1	Thursday	4/8
4	Iyar	4/17			Saturday	29	4/30	Friday	5/7
5	Sivan	5/16			Sunday	29	5/29	Saturday	6/5
6	Tammuz	6/14			Monday	30	6/27	Sunday	7/4
7	Av	7/14			Wednesday	30	7/27	Tuesday	8/3
8	Elul	8/13			Friday	29	8/26	Thursday	9/2
9	Tishrei	9/11	*	0.011	Saturday	30	9/24	Friday	10/1
Alternate 9	Tishrei	9/12	Zone A		Sunday	29	9/25	Saturday	10/2
10	Cheshvan	10/11			Monday	30	10/24	Sunday	10/31
11	Kislev	11/10			Wednesday	29	11/23	Tuesday	11/30
12	Tevet	12/9	*	0.095	Thursday	30	12/22	Wednesday	12/29
Alternate 12	Tevet	12/10	Zone A		Friday	29	12/23	Thursday	12/30
Lunation Number	Julian Year 18 AD Cycle Year # 16	Gautschi First Day of Jewish Month	Yallop Zone B *	Zone B q Value	Weekday	Days in Month	14th of Jewish Month	Weekday of 14th & 21st	21st of Jewish Month
1	Shevat	1/8			Saturday	29	1/21	Friday	1/28
2	Adar	2/6	*	-0.048	Sunday	30	2/19	Saturday	2/26
Alternate 2	Adar	2/7	Zone A		Monday	29	2/20	Sunday	2/27
3	Adar-II	3/8			Tuesday	29	3/21	Monday	3/28
4	Nisan	4/6			Wednesday	30	4/19	Tuesday	4/26
5	Iyar	5/6			Friday	29	5/19	Thursday	5/26
6	Sivan	6/4			Saturday	29	6/17	Friday	6/24
7	Tammuz	7/3	*	-0.018	Sunday	30	7/16	Saturday	7/23
Alternate 7	Tammuz	7/4	Zone A		Monday	29	7/17	Sunday	7/24
8	Av	8/2			Tuesday	30	8/15	Monday	8/22
9	Elul	9/1			Thursday	29	9/14	Wednesday	9/21
10	Tishrei	9/30			Friday	30	10/13	Thursday	10/20
11	Cheshvan	10/30			Sunday	29	11/12	Saturday	11/19
12	Kislev	11/28			Monday	30	12/11	Sunday	12/18
13	Tevet	12/28			Wednesday	30	1/10	Tuesday	1/17
Lunation Number	Julian Year 19 AD Cycle Year # 17	Gautschi First Day of Jewish Month	Yallop Zone B *	Zone B q Value	Weekday	Days in Month	14th of Jewish Month	Weekday of 14th & 21st	21st of Jewish Month
1	Shevat	1/27			Friday	29	2/9	Thursday	2/16
2	Adar	2/25			Saturday	30	3/10	Friday	3/17
3	Nisan	3/27			Monday	29	4/9	Sunday	4/16
4	Iyar	4/25			Tuesday	30	5/8	Monday	5/15
5	Sivan	5/25			Thursday	29	6/7	Wednesday	6/14
6	Tammuz	6/23			Friday	30	7/6	Thursday	7/13
7	Av	7/23			Sunday	29	8/5	Saturday	8/12
8	Elul	8/21			Monday	30	9/3	Sunday	9/10
9	Tishrei	9/20			Wednesday	29	10/3	Tuesday	10/10
10	Cheshvan	10/19			Thursday	29	11/1	Wednesday	11/8
11	Kislev	11/17	*	-0.061	Friday	30	11/30	Thursday	12/7
Alternate 11	Kislev	11/18	Zone A		Saturday	29	12/1	Friday	12/8
12	Tevet	12/17			Sunday	30	12/30	Saturday	1/6

Lunation Number	Julian Year 20 AD Leap Year Cycle Year # 18	Gautschi First Day of Jewish Month	Yallop Zone B *	Zone B q Value	Weekday	Days in Month	14th of Jewish Month	Weekday of 14th & 21st	21st of Jewish Month
1	Shevat	1/16			Tuesday	29	1/29	Monday	2/5
2	Adar	2/14			Wednesday	30	2/27	Tuesday	3/5
3	Nisan	3/15			Friday	30	3/28	Thursday	4/4
4	Iyar	4/14			Sunday	29	4/27	Saturday	5/4
5	Sivan	5/13			Monday	30	5/26	Sunday	6/2
6	Tammuz	6/12			Wednesday	29	6/25	Tuesday	7/2
7	Av	7/11	*	0.085	Thursday	30	7/24	Wednesday	7/31
Alternate 7	Av	7/12	Zone A		Friday	29	7/25	Thursday	8/1
8	Elul	8/10			Saturday	29	8/23	Friday	8/30
9	Tishrei	9/8			Sunday	30	9/21	Saturday	9/28
10	Cheshvan	10/8			Tuesday	29	10/21	Monday	10/28
11	Kislev	11/6			Wednesday	29	11/19	Tuesday	11/26
12	Tevet	12/5			Thursday	30	12/18	Wednesday	12/25
Lunation Number	Julian Year 21 AD Cycle Year # 19	Gautschi First Day of Jewish Month	Yallop Zone B *	Zone B q Value	Weekday	Days in Month	14th of Jewish Month	Weekday of 14th & 21st	21st of Jewish Month
1	Shevat	1/4			Saturday	29	1/17	Friday	1/24
2	Adar	2/2			Sunday	30	2/15	Saturday	2/22
3	Adar-II	3/4			Tuesday	30	3/17	Monday	3/24
4	Nisan	4/3			Thursday	29	4/16	Wednesday	4/23
5	Iyar	5/2	*	0.051	Friday	30	5/15	Thursday	5/22
Alternate 5	Iyar	5/3	Zone A		Saturday	29	5/16	Friday	5/23
6	Sivan	6/1			Sunday	30	6/14	Saturday	6/21
7	Tammuz	7/1			Tuesday	29	7/14	Monday	7/21
8	Av	7/30	*	-0.073	Wednesday	30	8/12	Tuesday	8/19
Alternate 8	Av	7/31	Zone A		Thursday	29	8/13	Wednesday	8/20
9	Elul	8/29			Friday	29	9/11	Thursday	9/18
10	Tishrei	9/27			Saturday	29	10/10	Friday	10/17
11	Cheshvan	10/26	*	-0.120	Sunday	30	11/8	Saturday	11/15
Alternate 11	Cheshvan	10/27	Zone A		Monday	29	11/9	Sunday	11/16
12	Kislev	11/25			Tuesday	29	12/8	Monday	12/15
13	Tevet	12/24			Wednesday	30	1/6	Tuesday	1/13
Lunation Number	Julian Year 22 AD Cycle Year # 1	Gautschi First Day of Jewish Month	Yallop Zone B *	Zone B q Value	Weekday	Days in Month	14th of Jewish Month	Weekday of 14th & 21st	21st of Jewish Month
1	Shevat	1/23			Friday	29	2/5	Thursday	2/12
2	Adar	2/21			Saturday	30	3/6	Friday	3/13
3	Nisan	3/23			Monday	29	4/5	Sunday	4/12
4	Iyar	4/21	*	0.020	Tuesday	30	5/4	Monday	5/11
Alternate 4	Iyar	4/22	Zone A		Wednesday	29	5/5	Tuesday	5/12
5	Sivan	5/21			Thursday	30	6/3	Wednesday	6/10
6	Tammuz	6/20			Saturday	30	7/3	Friday	7/10
7	Av	7/20			Monday	29	8/2	Sunday	8/9
8	Elul	8/18	*	0.000	Tuesday	30	8/31	Monday	9/7
Alternate 8	Elul	8/19	Zone A		Wednesday	29	9/1	Tuesday	9/8
9	Tishrei	9/17			Thursday	29	9/30	Wednesday	10/7
10	Cheshvan	10/16			Friday	29	10/29	Thursday	11/5
11	Kislev	11/14	*	0.010	Saturday	30	11/27	Friday	12/4
Alternate 11	Kislev	11/15	Zone A		Sunday	29	11/28	Saturday	12/5
12	Tevet	12/14			Monday	29	12/27	Sunday	1/3

Lunation Number	Julian Year 23 AD Cycle Year # 2	Gautschi First Day of Jewish Month	Yallop Zone B *	Zone B q Value	Weekday	Days in Month	14th of Jewish Month	Weekday of 14th & 21st	21st of Jewish Month
1	Shevat	1/12			Tuesday	30	1/25	Monday	2/1
2	Adar	2/11			Thursday	29	2/24	Wednesday	3/3
3	Nisan	3/12			Friday	30	3/25	Thursday	4/1
4	Iyar	4/11			Sunday	29	4/24	Saturday	5/1
5	Sivan	5/10			Monday	30	5/23	Sunday	5/30
6	Tammuz	6/9			Wednesday	30	6/22	Tuesday	6/29
7	Av	7/9			Friday	30	7/22	Thursday	7/29
8	Elul	8/8			Sunday	29	8/21	Saturday	8/28
9	Tishrei	9/6			Monday	30	9/19	Sunday	9/26
10	Cheshvan	10/6			Wednesday	29	10/19	Tuesday	10/26
11	Kislev	11/4			Thursday	29	11/17	Wednesday	11/24
12	Tevet	12/3	*	0.082	Friday	30	12/16	Thursday	12/23
<i>Alternate 12</i>	<i>Tevet</i>	<i>12/4</i>	<i>Zone A</i>		<i>Saturday</i>	<i>29</i>	<i>12/17</i>	<i>Friday</i>	<i>12/24</i>
Lunation Number	Julian Year 24 AD Leap Year Cycle Year # 3	Gautschi First Day of Jewish Month	Yallop Zone B *	Zone B q Value	Weekday	Days in Month	14th of Jewish Month	Weekday of 14th & 21st	21st of Jewish Month
1	Shevat	1/2			Sunday	29	1/15	Saturday	1/22
2	Adar	1/31			Monday	30	2/13	Sunday	2/20
3	Adar-II	3/1			Wednesday	29	3/14	Tuesday	3/21
4	Nisan	3/30			Thursday	29	4/12	Wednesday	4/19
5	Iyar	4/28	*	-0.102	Friday	30	5/11	Thursday	5/18
<i>Alternate 5</i>	<i>Iyar</i>	<i>4/29</i>	<i>Zone A</i>		<i>Saturday</i>	<i>29</i>	<i>5/12</i>	<i>Friday</i>	<i>5/19</i>
6	Sivan	5/28			Sunday	30	6/10	Saturday	6/17
7	Tammuz	6/27			Tuesday	29	7/10	Monday	7/17
8	Av	7/26	*	-0.056	Wednesday	30	8/8	Tuesday	8/15
<i>Alternate 8</i>	<i>Av</i>	<i>7/27</i>	<i>Zone A</i>		<i>Thursday</i>	<i>29</i>	<i>8/9</i>	<i>Wednesday</i>	<i>8/16</i>
9	Elul	8/25			Friday	30	9/7	Thursday	9/14
10	Tishrei	9/24			Sunday	29	10/7	Saturday	10/14
11	Cheshvan	10/23			Monday	30	11/5	Sunday	11/12
12	Kislev	11/22			Wednesday	29	12/5	Tuesday	12/12
13	Tevet	12/21	*	0.050	Thursday	30	1/3	Wednesday	1/10
<i>Alternate 13</i>	<i>Tevet</i>	<i>12/22</i>	<i>Zone A</i>		<i>Friday</i>	<i>29</i>	<i>1/4</i>	<i>Thursday</i>	<i>1/11</i>
Lunation Number	Julian Year 25 AD Cycle Year # 4	Gautschi First Day of Jewish Month	Yallop Zone B *	Zone B q Value	Weekday	Days in Month	14th of Jewish Month	Weekday of 14th & 21st	21st of Jewish Month
1	Shevat	1/20			Saturday	29	2/2	Friday	2/9
2	Adar	2/18			Sunday	30	3/3	Saturday	3/10
3	Nisan	3/20			Tuesday	29	4/2	Monday	4/9
4	Iyar	4/18			Wednesday	29	5/1	Tuesday	5/8
5	Sivan	5/17	*	-0.039	Thursday	30	5/30	Wednesday	6/6
<i>Alternate 5</i>	<i>Sivan</i>	<i>5/18</i>	<i>Zone A</i>		<i>Friday</i>	<i>29</i>	<i>5/31</i>	<i>Thursday</i>	<i>6/7</i>
6	Tammuz	6/16			Saturday	29	6/29	Friday	7/6
7	Av	7/15	*	-0.095	Sunday	30	7/28	Saturday	8/4
<i>Alternate 7</i>	<i>Av</i>	<i>7/16</i>	<i>Zone A</i>		<i>Monday</i>	<i>29</i>	<i>7/29</i>	<i>Sunday</i>	<i>8/5</i>
8	Elul	8/14			Tuesday	30	8/27	Monday	9/3
9	Tishrei	9/13			Thursday	29	9/26	Wednesday	10/3
10	Cheshvan	10/12			Friday	30	10/25	Thursday	11/1
11	Kislev	11/11			Sunday	30	11/24	Saturday	12/1
12	Tevet	12/11			Tuesday	29	12/24	Monday	12/31

Lunation Number	Julian Year 26 AD Cycle Year # 5	Gautschi First Day of Jewish Month	Yallop Zone B *	Zone B q Value	Weekday	Days in Month	14th of Jewish Month	Weekday of 14th & 21st	21st of Jewish Month
1	Shevat	1/9	*	-0.014	Wednesday	30	1/22	Tuesday	1/29
Alternate 1	Shevat	1/10	Zone A		Thursday	29	1/23	Wednesday	1/30
2	Adar	2/8			Friday	29	2/21	Thursday	2/28
3	Adar-II	3/9	*	-0.003	Saturday	30	3/22	Friday	3/29
Alternate 3	Adar-II	3/10	Zone A		Sunday	29	3/23	Saturday	3/30
4	Nisan	4/8			Monday	29	4/21	Sunday	4/28
5	Iyar	5/7			Tuesday	29	5/20	Monday	5/27
6	Sivan	6/5	*	-0.037	Wednesday	30	6/18	Tuesday	6/25
Alternate 6	Sivan	6/6	Zone A		Thursday	29	6/19	Wednesday	6/26
7	Tammuz	7/5			Friday	29	7/18	Thursday	7/25
8	Av	8/3			Saturday	30	8/16	Friday	8/23
9	Elul	9/2			Monday	29	9/15	Sunday	9/22
10	Tishrei	10/1			Tuesday	30	10/14	Monday	10/21
11	Cheshvan	10/31			Thursday	30	11/13	Wednesday	11/20
12	Kislev	11/30			Saturday	30	12/13	Friday	12/20
13	Tevet	12/30			Monday	29	1/12	Sunday	1/19
Lunation Number	Julian Year 27 AD Cycle Year # 6	Gautschi First Day of Jewish Month	Yallop Zone B *	Zone B q Value	Weekday	Days in Month	14th of Jewish Month	Weekday of 14th & 21st	21st of Jewish Month
1	Shevat	1/28	*	0.057	Tuesday	30	2/10	Monday	2/17
Alternate 1	Shevat	1/29	Zone A		Wednesday	29	2/11	Tuesday	2/18
2	Adar	2/27			Thursday	29	3/12	Wednesday	3/19
3	Nisan	3/28	*	0.025	Friday	30	4/10	Thursday	4/17
Alternate 3	Nisan	3/29	Zone A		Saturday	29	4/11	Friday	4/18
4	Iyar	4/27			Sunday	29	5/10	Saturday	5/17
5	Sivan	5/26			Monday	29	6/8	Sunday	6/15
6	Tammuz	6/24	*	-0.039	Tuesday	30	7/7	Monday	7/14
Alternate 6	Tammuz	6/25	Zone A		Wednesday	29	7/8	Tuesday	7/15
7	Av	7/24			Thursday	29	8/6	Wednesday	8/13
8	Elul	8/22			Friday	29	9/4	Thursday	9/11
9	Tishrei	9/20	*	-0.081	Saturday	30	10/3	Friday	10/10
Alternate 9	Tishrei	9/21	Zone A		Sunday	29	10/4	Saturday	10/11
10	Cheshvan	10/20			Monday	30	11/2	Sunday	11/9
11	Kislev	11/19			Wednesday	30	12/2	Tuesday	12/9
12	Tevet	12/19			Friday	29	1/1	Thursday	1/8
Lunation Number	Julian Year 28 AD Leap Year Cycle Year # 7	Gautschi First Day of Jewish Month	Yallop Zone B *	Zone B q Value	Weekday	Days in Month	14th of Jewish Month	Weekday of 14th & 21st	21st of Jewish Month
1	Shevat	1/17	*	-0.074	Saturday	30	1/30	Friday	2/6
Alternate 1	Shevat	1/18	Zone A		Sunday	29	1/31	Saturday	2/7
2	Adar	2/16			Monday	30	2/29	Sunday	3/7
3	Nisan	3/17			Wednesday	29	3/30	Tuesday	4/6
4	Iyar	4/15			Thursday	30	4/28	Wednesday	5/5
5	Sivan	5/15			Saturday	29	5/28	Friday	6/4
6	Tammuz	6/13			Sunday	29	6/26	Saturday	7/3
7	Av	7/12	*	0.019	Monday	30	7/25	Sunday	8/1
Alternate 7	Av	7/13	Zone A		Tuesday	29	7/26	Monday	8/2
8	Elul	8/11			Wednesday	29	8/24	Tuesday	8/31
9	Tishrei	9/9			Thursday	29	9/22	Wednesday	9/29
10	Cheshvan	10/8	*	-0.076	Friday	30	10/21	Thursday	10/28
Alternate 10	Cheshvan	10/9	Zone A		Saturday	29	10/22	Friday	10/29
11	Kislev	11/7			Sunday	30	11/20	Saturday	11/27
12	Tevet	12/7			Tuesday	30	12/20	Monday	12/27

Lunation Number	Julian Year 29 AD Cycle Year # 8	Gautschy First Day of Jewish Month	Yallop Zone B *	Zone B q Value	Weekday	Days in Month	14th of Jewish Month	Weekday of 14th & 21st	21st of Jewish Month
1	Shevat	1/6			Thursday	29	1/19	Wednesday	1/26
2	Adar	2/4			Friday	30	2/17	Thursday	2/24
3	Adar-II	3/6			Sunday	30	3/19	Saturday	3/26
4	Nisan	4/5			Tuesday	29	4/18	Monday	4/25
5	Iyar	5/4			Wednesday	30	5/17	Tuesday	5/24
6	Sivan	6/3			Friday	29	6/16	Thursday	6/23
7	Tammuz	7/2			Saturday	29	7/15	Friday	7/22
8	Av	7/31			Sunday	30	8/13	Saturday	8/20
9	Elul	8/30			Tuesday	29	9/12	Monday	9/19
10	Tishrei	9/28			Wednesday	30	10/11	Tuesday	10/18
11	Cheshvan	10/28			Friday	29	11/10	Thursday	11/17
12	Kislev	11/26			Saturday	30	12/9	Friday	12/16
13	Tevet	12/26			Monday	29	1/8	Sunday	1/15
Lunation Number	Julian Year 30 AD Cycle Year # 9	Gautschy First Day of Jewish Month	Yallop Zone B *	Zone B q Value	Weekday	Days in Month	14th of Jewish Month	Weekday of 14th & 21st	21st of Jewish Month
1	Shevat	1/24			Tuesday	30	2/6	Monday	2/13
2	Adar	2/23			Thursday	30	3/8	Wednesday	3/15
3	Nisan	3/25			Saturday	29	4/7	Friday	4/14
4	Iyar	4/23			Sunday	30	5/6	Saturday	5/13
5	Sivan	5/23			Tuesday	29	6/5	Monday	6/12
6	Tammuz	6/21	*	0.072	Wednesday	30	7/4	Tuesday	7/11
Alternate 7	<i>Tammuz</i>	<i>6/22</i>	<i>Zone A</i>		<i>Thursday</i>	<i>29</i>	<i>7/5</i>	<i>Wednesday</i>	<i>7/12</i>
7	Av	7/21			Friday	29	8/3	Thursday	8/10
8	Elul	8/19			Saturday	30	9/1	Friday	9/8
9	Tishrei	9/18			Monday	29	10/1	Sunday	10/8
10	Cheshvan	10/17	*	0.017	Tuesday	30	10/30	Monday	11/6
Alternate 10	<i>Cheshvan</i>	<i>10/18</i>	<i>Zone A</i>		<i>Wednesday</i>	<i>29</i>	<i>10/31</i>	<i>Tuesday</i>	<i>11/7</i>
11	Kislev	11/16			Thursday	29	11/29	Wednesday	12/6
12	Tevet	12/15			Friday	30	12/28	Thursday	1/4
Lunation Number	Julian Year 31 AD Cycle Year # 10	Gautschy First Day of Jewish Month	Yallop Zone B *	Zone B q Value	Weekday	Days in Month	14th of Jewish Month	Weekday of 14th & 21st	21st of Jewish Month
1	Shevat	1/14			Sunday	29	1/27	Saturday	2/3
2	Adar	2/12			Monday	30	2/25	Sunday	3/4
3	Nisan	3/14			Wednesday	29	3/27	Tuesday	4/3
4	Iyar	4/12			Thursday	30	4/25	Wednesday	5/2
5	Sivan	5/12			Saturday	29	5/25	Friday	6/1
6	Tammuz	6/10	*	-0.008	Sunday	30	6/23	Saturday	6/30
Alternate 6	<i>Tammuz</i>	<i>6/11</i>	<i>Zone A</i>		<i>Monday</i>	<i>29</i>	<i>6/24</i>	<i>Sunday</i>	<i>7/1</i>
7	Av	7/10			Tuesday	30	7/23	Monday	7/30
8	Elul	8/9			Thursday	29	8/22	Wednesday	8/29
9	Tishrei	9/7	*	0.003	Friday	30	9/20	Thursday	9/27
Alternate 9	<i>Tishrei</i>	<i>9/8</i>	<i>Zone A</i>		<i>Saturday</i>	<i>29</i>	<i>9/21</i>	<i>Friday</i>	<i>9/28</i>
10	Cheshvan	10/7			Sunday	30	10/20	Saturday	10/27
11	Kislev	11/6			Tuesday	29	11/19	Monday	11/26
12	Tevet	12/5			Wednesday	29	12/18	Tuesday	12/25

Lunation Number	Julian Year 32 AD Leap Year Cycle Year # 11	Gautschi First Day of Jewish Month	Yallop Zone B *	Zone B q Value	Weekday	Days in Month	14th of Jewish Month	Weekday of 14th & 21st	21st of Jewish Month
1	Shevat	1/3			Thursday	30	1/16	Wednesday	1/23
2	Adar	2/2			Saturday	29	2/15	Friday	2/22
3	Adar-II	3/2			Sunday	29	3/15	Saturday	3/22
4	Nisan	3/31	*	-0.081	Monday	30	4/13	Sunday	4/20
Alternate 4	Nisan	4/1	Zone A		Tuesday	29	4/14	Monday	4/21
5	Iyar	4/30			Wednesday	29	5/13	Tuesday	5/20
6	Sivan	5/29	*	-0.026	Thursday	30	6/11	Wednesday	6/18
Alternate 6	Sivan	5/30	Zone A		Friday	29	6/12	Thursday	6/19
7	Tammuz	6/28			Saturday	30	7/11	Friday	7/18
8	Av	7/28			Monday	30	8/10	Sunday	8/17
9	Elul	8/27			Wednesday	30	9/9	Tuesday	9/16
10	Tishrei	9/26			Friday	29	10/9	Thursday	10/16
11	Cheshvan	10/25			Saturday	30	11/7	Friday	11/14
12	Kislev	11/24			Monday	29	12/7	Sunday	12/14
13	Tevet	12/23			Tuesday	29	1/5	Monday	1/12
Lunation Number	Julian Year 33 AD Cycle Year # 12	Gautschi First Day of Jewish Month	Yallop Zone B *	Zone B q Value	Weekday	Days in Month	14th of Jewish Month	Weekday of 14th & 21st	21st of Jewish Month
1	Shevat	1/21			Wednesday	30	2/3	Tuesday	2/10
2	Adar	2/20			Friday	29	3/5	Thursday	3/12
3	Nisan	3/21			Saturday	29	4/3	Friday	4/10
4	Iyar	4/19			Sunday	30	5/2	Saturday	5/9
5	Sivan	5/19			Tuesday	29	6/1	Monday	6/8
6	Tammuz	6/17			Wednesday	30	6/30	Tuesday	7/7
7	Av	7/17			Friday	30	7/30	Thursday	8/6
8	Elul	8/16			Sunday	30	8/29	Saturday	9/5
9	Tishrei	9/15			Tuesday	30	9/28	Monday	10/5
10	Cheshvan	10/15			Thursday	29	10/28	Wednesday	11/4
11	Kislev	11/13			Friday	30	11/26	Thursday	12/3
12	Tevet	12/13			Sunday	29	12/26	Saturday	1/2
Lunation Number	Julian Year 34 AD Cycle Year # 13	Gautschi First Day of Jewish Month	Yallop Zone B *	Zone B q Value	Weekday	Days in Month	14th of Jewish Month	Weekday of 14th & 21st	21st of Jewish Month
1	Shevat	1/11			Monday	29	1/24	Sunday	1/31
2	Adar	2/9			Tuesday	30	2/22	Monday	3/1
3	Adar-II	3/11			Thursday	29	3/24	Wednesday	3/31
4	Nisan	4/9			Friday	29	4/22	Thursday	4/29
5	Iyar	5/8			Saturday	30	5/21	Friday	5/28
6	Sivan	6/7			Monday	29	6/20	Sunday	6/27
7	Tammuz	7/6			Tuesday	30	7/19	Monday	7/26
8	Av	8/5			Thursday	30	8/18	Wednesday	8/25
9	Elul	9/4			Saturday	30	9/17	Friday	9/24
10	Tishrei	10/4			Monday	29	10/17	Sunday	10/24
11	Cheshvan	11/2	*	-0.068	Tuesday	30	11/15	Monday	11/22
Alternate 11	Cheshvan	11/3	Zone A		Wednesday	29	11/16	Tuesday	11/23
12	Kislev	12/2			Thursday	29	12/15	Wednesday	12/22
13	Tevet	12/31	*	-0.090	Friday	30	1/13	Thursday	1/20
Alternate 13	Tevet	1/1	Zone A		Saturday	29	1/14	Friday	1/21

Lunation Number	Julian Year 35 AD Cycle Year # 14	Gautschi First Day of Jewish Month	Yallop Zone B *	Zone B q Value	Weekday	Days in Month	14th of Jewish Month	Weekday of 14th & 21st	21st of Jewish Month
1	Shevat	1/30			Sunday	29	2/12	Saturday	2/19
2	Adar	2/28			Monday	30	3/13	Sunday	3/20
3	Nisan	3/30			Wednesday	29	4/12	Tuesday	4/19
4	Iyar	4/28			Thursday	29	5/11	Wednesday	5/18
5	Sivan	5/27			Friday	30	6/9	Thursday	6/16
6	Tammuz	6/26			Sunday	29	7/9	Saturday	7/16
7	Av	7/25			Monday	30	8/7	Sunday	8/14
8	Elul	8/24			Wednesday	30	9/6	Tuesday	9/13
9	Tishrei	9/23			Friday	29	10/6	Thursday	10/13
10	Cheshvan	10/22	*	-0.062	Saturday	30	11/4	Friday	11/11
Alternate 10	Cheshvan	10/23	Zone A		Sunday	29	11/5	Saturday	11/12
11	Kislev	11/21			Monday	30	12/4	Sunday	12/11
12	Tevet	12/21			Wednesday	29	1/3	Tuesday	1/10
Lunation Number	Julian Year 36 AD Leap Year Cycle Year # 15	Gautschi First Day of Jewish Month	Yallop Zone B *	Zone B q Value	Weekday	Days in Month	14th of Jewish Month	Weekday of 14th & 21st	21st of Jewish Month
1	Shevat	1/19			Thursday	30	2/1	Wednesday	2/8
2	Adar	2/18			Saturday	29	3/2	Friday	3/9
3	Nisan	3/18			Sunday	30	3/31	Saturday	4/7
4	Iyar	4/17			Tuesday	29	4/30	Monday	5/7
5	Sivan	5/16			Wednesday	29	5/29	Tuesday	6/5
6	Tammuz	6/14			Thursday	30	6/27	Wednesday	7/4
7	Av	7/14			Saturday	29	7/27	Friday	8/3
8	Elul	8/12	*	0.048	Sunday	30	8/25	Saturday	9/1
Alternate 8	Elul	8/13	Zone A		Monday	29	8/26	Sunday	9/2
9	Tishrei	9/11			Tuesday	30	9/24	Monday	10/1
10	Cheshvan	10/11			Thursday	29	10/24	Wednesday	10/31
11	Kislev	11/9			Friday	30	11/22	Thursday	11/29
12	Tevet	12/9			Sunday	29	12/22	Saturday	12/29
Lunation Number	Julian Year 37 AD Cycle Year # 16	Gautschi First Day of Jewish Month	Yallop Zone B *	Zone B q Value	Weekday	Days in Month	14th of Jewish Month	Weekday of 14th & 21st	21st of Jewish Month
1	Shevat	1/7			Monday	30	1/20	Sunday	1/27
2	Adar	2/6			Wednesday	30	2/19	Tuesday	2/26
3	Adar-II	3/8			Friday	29	3/21	Thursday	3/28
4	Nisan	4/6			Saturday	30	4/19	Friday	4/26
5	Iyar	5/6			Monday	29	5/19	Sunday	5/26
6	Sivan	6/4			Tuesday	29	6/17	Monday	6/24
7	Tammuz	7/3	*	-0.133	Wednesday	30	7/16	Tuesday	7/23
Alternate 7	Tammuz	7/4	Zone A		Thursday	29	7/17	Wednesday	7/24
8	Av	8/2			Friday	30	8/15	Thursday	8/22
9	Elul	9/1			Sunday	29	9/14	Saturday	9/21
10	Tishrei	9/30			Monday	29	10/13	Sunday	10/20
11	Cheshvan	10/29	*	0.057	Tuesday	30	11/11	Monday	11/18
Alternate 11	Cheshvan	10/30	Zone A		Wednesday	29	11/12	Tuesday	11/19
12	Kislev	11/28			Thursday	29	12/11	Wednesday	12/18
13	Tevet	12/27			Friday	30	1/9	Thursday	1/16

Lunation Number	Julian Year 38 Cycle Year # 17	Gautschi First Day of Jewish Month	Yallop Zone B *	Zone B q Value	Weekday	Days in Month	14th of Jewish Month	Weekday of 14th & 21st	21st of Jewish Month
1	Shevat	1/26			Sunday	30	2/8	Saturday	2/15
2	Adar	2/25			Tuesday	29	3/10	Monday	3/17
3	Nisan	3/26			Wednesday	30	4/8	Tuesday	4/15
4	Iyar	4/25			Friday	29	5/8	Thursday	5/15
5	Sivan	5/24	*	-0.100	Saturday	30	6/6	Friday	6/13
Alternate 5	Sivan	5/25	Zone A		Sunday	29	6/7	Saturday	6/14
6	Tammuz	6/23			Monday	30	7/6	Sunday	7/13
7	Av	7/23			Wednesday	29	8/5	Tuesday	8/12
8	Elul	8/21			Thursday	30	9/3	Wednesday	9/10
9	Tishrei	9/20			Saturday	29	10/3	Friday	10/10
10	Cheshvan	10/19			Sunday	29	11/1	Saturday	11/8
11	Kislev	11/17			Monday	30	11/30	Sunday	12/7
12	Tevet	12/17			Wednesday	29	12/30	Tuesday	1/6
Lunation Number	Julian Year 39 AD Cycle Year # 18	Gautschi First Day of Jewish Month	Yallop Zone B *	Zone B q Value	Weekday	Days in Month	14th of Jewish Month	Weekday of 14th & 21st	21st of Jewish Month
1	Shevat	1/15			Thursday	30	1/28	Wednesday	2/4
2	Adar	2/14			Saturday	29	2/27	Friday	3/6
3	Nisan	3/15			Sunday	30	3/28	Saturday	4/4
4	Iyar	4/14			Tuesday	30	4/27	Monday	5/4
5	Sivan	5/14			Thursday	29	5/27	Wednesday	6/3
6	Tammuz	6/12	*	-0.021	Friday	30	6/25	Thursday	7/2
Alternate 6	Tammuz	6/13	Zone A		Saturday	29	6/26	Friday	7/3
7	Av	7/12			Sunday	30	7/25	Saturday	8/1
8	Elul	8/11			Tuesday	29	8/24	Monday	8/31
9	Tishrei	9/9			Wednesday	30	9/22	Tuesday	9/29
10	Cheshvan	10/9			Friday	29	10/22	Thursday	10/29
11	Kislev	11/7			Saturday	29	11/20	Friday	11/27
12	Tevet	12/6			Sunday	29	12/19	Saturday	12/26
Lunation Number	Julian Year 40 AD Leap Year Cycle Year # 19	Gautschi First Day of Jewish Month	Yallop Zone B *	Zone B q Value	Weekday	Days in Month	14th of Jewish Month	Weekday of 14th & 21st	21st of Jewish Month
1	Shevat	1/4	*	-0.037	Monday	30	1/17	Sunday	1/24
Alternate 1	Shevat	1/5	Zone A		Tuesday	29	1/18	Monday	1/25
2	Adar	2/3			Wednesday	29	2/16	Tuesday	2/23
3	Adar-II	3/3	*	-0.034	Thursday	30	3/16	Wednesday	3/23
Alternate 3	Adar-II	3/4	Zone A		Friday	29	3/17	Thursday	3/24
4	Nisan	4/2			Saturday	30	4/15	Friday	4/22
5	Iyar	5/2			Monday	29	5/15	Sunday	5/22
6	Sivan	5/31	*	-0.055	Tuesday	30	6/13	Monday	6/20
Alternate 6	Sivan	6/1	Zone A		Wednesday	29	6/14	Tuesday	6/21
7	Tammuz	6/30			Thursday	30	7/13	Wednesday	7/20
8	Av	7/30			Saturday	30	8/12	Friday	8/19
9	Elul	8/29			Monday	29	9/11	Sunday	9/18
10	Tishrei	9/27			Tuesday	29	10/10	Monday	10/17
11	Cheshvan	10/26	*	-0.11	Wednesday	30	11/8	Tuesday	11/15
Alternate 11	Cheshvan	10/27	Zone A		Thursday	29	11/9	Wednesday	11/16
12	Kislev	11/25			Friday	29	12/8	Thursday	12/15
13	Tevet	12/24			Saturday	29	1/6	Friday	1/13

Lunation Number	Julian Year 41 AD Cycle Year # 1	Gautschi First Day of Jewish Month	Yallop Zone B *	Zone B q Value	Weekday	Days in Month	14th of Jewish Month	Weekday of 14th & 21st	21st of Jewish Month
1	Shevat	1/22	*	-0.092	Sunday	30	2/4	Saturday	2/11
Alternate 1	Shevat	1/23	Zone A		Monday	29	2/5	Sunday	2/12
2	Adar	2/21			Tuesday	29	3/6	Monday	3/13
3	Nisan	3/22	*	0.084	Wednesday	30	4/4	Tuesday	4/11
Alternate 3	Nisan	3/23	Zone A		Thursday	29	4/5	Wednesday	4/12
4	Iyar	4/21			Friday	29	5/4	Thursday	5/11
5	Sivan	5/20	*	-0.108	Saturday	30	6/2	Friday	6/9
Alternate 5	Sivan	5/21	Zone A		Sunday	29	6/3	Saturday	6/10
6	Tammuz	6/19			Monday	29	7/2	Sunday	7/9
7	Av	7/19			Tuesday	0	8/1	Monday	8/8
8	Elul	8/18			Friday	29	8/31	Thursday	9/7
9	Tishrei	9/16	*	-0.094	Saturday	30	9/29	Friday	10/6
Alternate 9	Tishrei	9/17	Zone A		Sunday	29	9/30	Saturday	10/7
10	Cheshvan	10/16			Monday	29	10/29	Sunday	11/5
11	Kislev	11/14			Tuesday	30	11/27	Monday	12/4
12	Tevet	12/14			Thursday	29	12/27	Wednesday	1/3
Lunation Number	Julian Year 42 AD Cycle Year # 2	Gautschi First Day of Jewish Month	Yallop Zone B *	Zone B q Value	Weekday	Days in Month	14th of Jewish Month	Weekday of 14th & 21st	21st of Jewish Month
1	Shevat	1/12			Friday	30	1/25	Thursday	2/1
2	Adar	2/11			Sunday	29	2/24	Saturday	3/3
3	Nisan	3/12			Monday	29	3/25	Sunday	4/1
4	Iyar	4/10			Tuesday	30	4/23	Monday	4/30
5	Sivan	5/10			Thursday	29	5/23	Wednesday	5/30
6	Tammuz	6/8	*	0.068	Friday	30	6/21	Thursday	6/28
Alternate 6	Tammuz	6/9	Zone A		Saturday	29	6/22	Friday	6/29
7	Av	7/8			Sunday	30	7/21	Saturday	7/28
8	Elul	8/7			Tuesday	29	8/20	Monday	8/27
9	Tishrei	9/5	*	-0.068	Wednesday	30	9/18	Tuesday	9/25
Alternate 9	Tishrei	9/6	Zone A		Thursday	29	9/19	Wednesday	9/26
10	Cheshvan	10/5			Friday	30	10/18	Thursday	10/25
11	Kislev	11/4			Sunday	29	11/17	Saturday	11/24
12	Tevet	12/3			Monday	30	12/16	Sunday	12/23
Lunation Number	Julian Year 43 AD Cycle Year # 3	Gautschi First Day of Jewish Month	Yallop Zone B *	Zone B q Value	Weekday	Days in Month	14th of Jewish Month	Weekday of 14th & 21st	21st of Jewish Month
1	Shevat	1/2			Wednesday	29	1/15	Tuesday	1/22
2	Adar	1/31			Thursday	30	2/13	Wednesday	2/20
3	Adar-II	3/2			Saturday	29	3/15	Friday	3/22
4	Nisan	3/31			Sunday	29	4/13	Saturday	4/20
5	Iyar	4/29	*	0.064	Monday	30	5/12	Sunday	5/19
Alternate 5	Iyar	4/30	Zone A		Tuesday	29	5/13	Monday	5/20
6	Sivan	5/29			Wednesday	29	6/11	Tuesday	6/18
7	Tammuz	6/27			Thursday	30	7/10	Wednesday	7/17
8	Av	7/27			Saturday	29	8/9	Friday	8/16
9	Elul	8/25	*	0.005	Sunday	30	9/7	Saturday	9/14
Alternate 9	Elul	8/26	Zone A		Monday	29	9/8	Sunday	9/15
10	Tishrei	9/24			Tuesday	30	10/7	Monday	10/14
11	Cheshvan	10/24			Thursday	29	11/6	Wednesday	11/13
12	Kislev	11/22			Friday	30	12/5	Thursday	12/12
13	Tevet	12/22			Sunday	30	1/4	Saturday	1/11

Lunation Number	Julian Year 44 AD Leap Year Cycle Year # 4	Gautschi First Day of Jewish Month	Yallop Zone B *	Zone B q Value	Weekday	Days in Month	14th of Jewish Month	Weekday of 14th & 21st	21st of Jewish Month
1	Shevat	1/21			Tuesday	29	2/3	Monday	2/10
2	Adar	2/19			Wednesday	30	3/3	Tuesday	3/10
3	Nisan	3/20			Friday	29	4/2	Thursday	4/9
4	Iyar	4/18			Saturday	29	5/1	Friday	5/8
5	Sivan	5/17	*	-0.018	Sunday	30	5/30	Saturday	6/6
Alternate 5	Sivan	5/18	Zone A		Monday	29	5/31	Sunday	6/7
6	Tammuz	6/16			Tuesday	29	6/29	Monday	7/6
7	Av	7/15			Wednesday	30	7/28	Tuesday	8/4
8	Elul	8/14			Friday	29	8/27	Thursday	9/3
9	Tishrei	9/12			Saturday	30	9/25	Friday	10/2
10	Cheshvan	10/12			Monday	29	10/25	Sunday	11/1
11	Kislev	11/10			Tuesday	30	11/23	Monday	11/30
12	Tevet	12/10			Thursday	30	12/23	Wednesday	12/30
Lunation Number	Julian Year 45 AD Cycle Year # 5	Gautschi First Day of Jewish Month	Yallop Zone B *	Zone B q Value	Weekday	Days in Month	14th of Jewish Month	Weekday of 14th & 21st	21st of Jewish Month
1	Shevat	1/9			Saturday	30	1/22	Friday	1/29
2	Adar	2/8			Monday	29	2/21	Sunday	2/28
3	Adar-II	3/9			Tuesday	30	3/22	Monday	3/29
4	Nisan	4/8			Thursday	29	4/21	Wednesday	4/28
5	Iyar	5/7			Friday	29	5/20	Thursday	5/27
6	Sivan	6/5	*	-0.091	Saturday	30	6/18	Friday	6/25
Alternate 6	Sivan	6/6	Zone A		Sunday	29	6/19	Saturday	6/26
7	Tammuz	7/5			Monday	29	7/18	Sunday	7/25
8	Av	8/3			Tuesday	29	8/16	Monday	8/23
9	Elul	9/1	*	-0.012	Wednesday	30	9/14	Tuesday	9/21
Alternate 9	Elul	9/2	Zone A		Thursday	29	9/15	Wednesday	9/22
10	Tishrei	10/1			Friday	29	10/14	Thursday	10/21
11	Cheshvan	10/30	*	0.023	Saturday	30	11/12	Friday	11/19
Alternate 11	Cheshvan	10/31	Zone A		Sunday	29	11/13	Saturday	11/20
12	Kislev	11/29			Monday	30	12/12	Sunday	12/19
13	Tevet	12/29			Wednesday	30	1/11	Tuesday	1/18
Lunation Number	Julian Year 46 AD Cycle Year # 6	Gautschi First Day of Jewish Month	Yallop Zone B *	Zone B q Value	Weekday	Days in Month	14th of Jewish Month	Weekday of 14th & 21st	21st of Jewish Month
1	Shevat	1/28			Friday	29	2/10	Thursday	2/17
2	Adar	2/26	*	-0.066	Saturday	30	3/11	Friday	3/18
Alternate 2	Adar	2/27	Zone A		Sunday	29	3/11	Saturday	3/18
3	Nisan	3/28			Monday	30	4/10	Sunday	4/17
4	Iyar	4/27			Wednesday	29	5/10	Tuesday	5/17
5	Sivan	5/26			Thursday	29	6/8	Wednesday	6/15
6	Tammuz	6/24	*	-0.070	Friday	30	7/7	Thursday	7/14
Alternate 6	Tammuz	6/25	Zone A		Saturday	29	7/8	Friday	7/15
7	Av	7/24			Sunday	29	8/6	Saturday	8/13
8	Elul	8/22			Monday	29	9/4	Sunday	9/11
9	Tishrei	9/20	*	0.069	Tuesday	30	10/3	Monday	10/10
Alternate 9	Tishrei	9/21	Zone A		Wednesday	29	10/4	Tuesday	10/11
10	Cheshvan	10/20			Thursday	29	11/2	Wednesday	11/9
11	Kislev	11/18	*	-0.027	Friday	30	12/1	Thursday	12/8
Alternate 11	Kislev	11/19	Zone A		Saturday	29	12/2	Friday	12/9
12	Tevet	12/18			Sunday	30	12/31	Saturday	1/7

Lunation Number	Julian Year 47 AD Cycle Year # 7	Gautschi First Day of Jewish Month	Yallop Zone B *	Zone B q Value	Weekday	Days in Month	14th of Jewish Month	Weekday of 14th & 21st	21st of Jewish Month
1	Shevat	1/17			Tuesday	29	1/30	Monday	2/6
2	Adar	2/15	*	-0.079	Wednesday	30	2/28	Tuesday	3/7
Alternate 2	Adar	2/16	Zone A		Thursday	29	3/1	Wednesday	3/8
3	Nisan	3/17			Friday	30	3/30	Thursday	4/6
4	Iyar	4/16			Sunday	29	4/29	Saturday	5/6
5	Sivan	5/15	*	-0.037	Monday	30	5/28	Sunday	6/4
Alternate 5	Sivan	5/16	Zone A		Tuesday	29	5/29	Monday	6/5
6	Tammuz	6/14			Wednesday	29	6/27	Tuesday	7/4
7	Av	7/13			Thursday	30	7/26	Wednesday	8/2
8	Elul	8/12			Saturday	29	8/25	Friday	9/1
9	Tishrei	9/10			Sunday	29	9/23	Saturday	9/30
10	Cheshvan	10/9	*	-0.084	Monday	30	10/22	Sunday	10/29
Alternate 10	Cheshvan	10/10	Zone A		Tuesday	29	10/23	Monday	10/30
11	Kislev	11/8			Wednesday	30	11/21	Tuesday	11/28
12	Tevet	12/8			Friday	29	12/21	Thursday	12/28
Lunation Number	Julian Year 48 AD Leap Year Cycle Year # 8	Gautschi First Day of Jewish Month	Yallop Zone B *	Zone B q Value	Weekday	Days in Month	14th of Jewish Month	Weekday of 14th & 21st	21st of Jewish Month
1	Shevat	1/6			Saturday	30	1/19	Friday	1/26
2	Adar	2/5			Monday	29	2/18	Sunday	2/25
3	Adar-II	3/5			Tuesday	30	3/18	Monday	3/25
4	Nisan	4/4			Thursday	29	4/17	Wednesday	4/24
5	Iyar	5/3	*	-0.117	Friday	30	5/16	Thursday	5/23
Alternate 5	Iyar	5/4	Zone A		Saturday	29	5/17	Friday	5/24
6	Sivan	6/2			Sunday	30	6/15	Saturday	6/22
7	Tammuz	7/2			Tuesday	29	7/15	Monday	7/22
8	Av	7/31			Wednesday	30	8/13	Tuesday	8/20
9	Elul	8/30			Friday	29	9/12	Thursday	9/19
10	Tishrei	9/28			Saturday	30	10/11	Friday	10/18
11	Cheshvan	10/28			Monday	29	11/10	Sunday	11/17
12	Kislev	11/26			Tuesday	30	12/9	Monday	12/16
13	Tevet	12/26			Thursday	29	1/8	Wednesday	1/15
Lunation Number	Julian Year 49 AD Cycle Year # 9	Gautschi First Day of Jewish Month	Yallop Zone B *	Zone B q Value	Weekday	Days in Month	14th of Jewish Month	Weekday of 14th & 21st	21st of Jewish Month
1	Shevat	1/24			Friday	29	2/6	Thursday	2/13
2	Adar	2/22	*	-0.025	Saturday	30	3/7	Friday	3/14
Alternate 2	Adar	2/23	Zone A		Sunday	29	3/8	Saturday	3/15
3	Nisan	3/24			Monday	30	4/6	Sunday	4/13
4	Iyar	4/23			Wednesday	29	5/6	Tuesday	5/13
5	Sivan	5/22			Thursday	30	6/4	Wednesday	6/11
6	Tammuz	6/21			Saturday	29	7/4	Friday	7/11
7	Av	7/20			Sunday	30	8/2	Saturday	8/9
8	Elul	8/19			Tuesday	30	9/1	Monday	9/8
9	Tishrei	9/18			Thursday	29	10/1	Wednesday	10/8
10	Cheshvan	10/17	*	-0.044	Friday	30	10/30	Thursday	11/6
Alternate 10	Cheshvan	10/18	Zone A		Saturday	29	10/31	Friday	11/7
11	Kislev	11/16			Sunday	29	11/29	Saturday	12/6
12	Tevet	12/15	*	0.082	Monday	30	12/28	Sunday	1/4
Alternate 12	Tevet	12/16	Zone A		Tuesday	29	12/29	Monday	1/5

Lunation Number	Julian Year 50 AD Cycle Year # 10	Gautschi First Day of Jewish Month	Yallop Zone B *	Zone B q Value	Weekday	Days in Month	14th of Jewish Month	Weekday of 14th & 21st	21st of Jewish Month
1	Shevat	1/14			Wednesday	29	1/27	Tuesday	2/3
2	Adar	2/12			Thursday	29	2/25	Wednesday	3/4
3	Nisan	3/13			Friday	30	3/26	Thursday	4/2
4	Iyar	4/12			Sunday	29	4/25	Saturday	5/2
5	Sivan	5/11			Monday	30	5/24	Sunday	5/31
6	Tammuz	6/10			Wednesday	29	6/23	Tuesday	6/30
7	Av	7/9			Thursday	30	7/22	Wednesday	7/29
8	Elul	8/8			Saturday	30	8/21	Friday	8/28
9	Tishrei	9/7			Monday	30	9/20	Sunday	9/27
10	Cheshvan	10/7			Wednesday	30	10/20	Tuesday	10/27
11	Kislev	11/6			Friday	29	11/19	Thursday	11/26
12	Tevet	12/5			Saturday	29	12/18	Friday	12/25
Lunation Number	Julian Year 51 AD Cycle Year # 11	Gautschi First Day of Jewish Month	Yallop Zone B *	Zone B q Value	Weekday	Days in Month	14th of Jewish Month	Weekday of 14th & 21st	21st of Jewish Month
1	Shevat	1/3	*	0.059	Sunday	30	1/16	Saturday	1/23
Alternate 1	Shevat	1/4	Zone A		Monday	29	1/17	Sunday	1/24
2	Adar	2/2			Tuesday	29	2/15	Monday	2/22
3	Adar-II	3/3			Wednesday	29	3/16	Tuesday	3/23
4	Nisan	4/1			Thursday	30	4/14	Wednesday	4/21
5	Iyar	5/1			Saturday	29	5/14	Friday	5/21
6	Sivan	5/30			Sunday	29	6/12	Saturday	6/19
7	Tammuz	6/28	*	-0.007	Monday	30	7/11	Sunday	7/18
Alternate 7	Tammuz	6/29	Zone A		Tuesday	29	7/12	Monday	7/19
8	Av	7/28			Wednesday	30	8/10	Tuesday	8/17
9	Elul	8/27			Friday	30	9/9	Thursday	9/16
10	Tishrei	9/26			Sunday	30	10/9	Saturday	10/16
11	Cheshvan	10/26			Tuesday	30	11/8	Monday	11/15
12	Kislev	11/25			Thursday	29	12/8	Wednesday	12/15
13	Tevet	12/24			Friday	29	1/6	Thursday	1/13
Lunation Number	Julian Year 52 AD Leap Year Cycle Year # 12	Gautschi First Day of Jewish Month	Yallop Zone B *	Zone B q Value	Weekday	Days in Month	14th of Jewish Month	Weekday of 14th & 21st	21st of Jewish Month
1	Shevat	1/22			Saturday	30	2/4	Friday	2/11
2	Adar	2/21			Monday	29	3/5	Sunday	3/12
3	Nisan	3/21			Tuesday	29	4/3	Monday	4/10
4	Iyar	4/19			Wednesday	30	5/2	Tuesday	5/9
5	Sivan	5/19			Friday	29	6/1	Thursday	6/8
6	Tammuz	6/17			Saturday	29	6/30	Friday	7/7
7	Av	7/16	*	0.077	Sunday	30	7/29	Saturday	8/5
Alternate 7	Av	7/17	Zone A		Monday	29	7/30	Sunday	8/6
8	Elul	8/15			Tuesday	30	8/28	Monday	9/4
9	Tishrei	9/14			Thursday	30	9/27	Wednesday	10/4
10	Cheshvan	10/14			Saturday	30	10/27	Friday	11/3
11	Kislev	11/13			Monday	29	11/26	Sunday	12/3
12	Tevet	12/12			Tuesday	30	12/25	Monday	1/1

Lunation Number	Julian Year 53 AD Cycle Year # 13	Gautschi First Day of Jewish Month	Yallop Zone B *	Zone B q Value	Weekday	Days in Month	14th of Jewish Month	Weekday of 14th & 21st	21st of Jewish Month
1	Shevat	1/11			Thursday	29	1/24	Wednesday	1/31
2	Adar	2/9			Friday	30	2/22	Thursday	3/1
3	Adar-II	3/11			Sunday	29	3/24	Saturday	3/31
4	Nisan	4/9			Monday	29	4/22	Sunday	4/29
5	Iyar	5/8			Tuesday	30	5/21	Monday	5/28
6	Sivan	6/7			Thursday	29	6/20	Wednesday	6/27
7	Tammuz	7/6			Friday	29	7/19	Thursday	7/26
8	Av	8/4	*	-0.118	Saturday	30	8/17	Friday	8/24
Alternate 8	Av	8/5	Zone A		Sunday	29	8/18	Saturday	8/25
9	Elul	9/3			Monday	30	9/16	Sunday	9/23
10	Tishrei	10/3			Wednesday	30	10/16	Tuesday	10/23
11	Cheshvan	11/2			Friday	29	11/15	Thursday	11/22
12	Kislev	12/1			Saturday	30	12/14	Friday	12/21
13	Tevet	12/31			Monday	29	1/13	Sunday	1/20
Lunation Number	Julian Year 54 AD Cycle Year # 14	Gautschi First Day of Jewish Month	Yallop Zone B *	Zone B q Value	Weekday	Days in Month	14th of Jewish Month	Weekday of 14th & 21st	21st of Jewish Month
1	Shevat	1/29	*	-0.104	Tuesday	30	2/11	Monday	2/18
Alternate 1	Shevat	1/30	Zone A		Wednesday	29	2/12	Tuesday	2/19
2	Adar	2/28			Thursday	30	3/13	Wednesday	3/20
3	Nisan	3/30			Saturday	29	4/12	Friday	4/19
4	Iyar	4/28			Sunday	29	5/11	Saturday	5/18
5	Sivan	5/27			Monday	30	6/9	Sunday	6/16
6	Tammuz	6/26			Wednesday	29	7/9	Tuesday	7/16
7	Av	7/25			Thursday	30	8/7	Wednesday	8/14
8	Elul	8/24			Saturday	29	9/6	Friday	9/13
9	Tishrei	9/22	*	0.091	Sunday	30	10/5	Saturday	10/12
Alternate 9	Tishrei	9/23	Zone A		Monday	29	10/6	Sunday	10/13
10	Cheshvan	10/22			Tuesday	29	11/4	Monday	11/11
11	Kislev	11/20	*	0.039	Wednesday	30	12/3	Tuesday	12/10
Alternate 11	Kislev	11/21	Zone A		Thursday	29	12/4	Wednesday	12/11
12	Tevet	12/20			Friday	29	1/2	Thursday	1/9
Lunation Number	Julian Year 55 AD Cycle Year # 15	Gautschi First Day of Jewish Month	Yallop Zone B *	Zone B q Value	Weekday	Days in Month	14th of Jewish Month	Weekday of 14th & 21st	21st of Jewish Month
1	Shevat	1/18	*	-0.095	Saturday	30	1/31	Friday	2/7
Alternate 1	Shevat	1/19	Zone A		Sunday	29	2/1	Saturday	2/8
2	Adar	2/17			Monday	30	3/2	Sunday	3/9
3	Nisan	3/19			Wednesday	29	4/1	Tuesday	4/8
4	Iyar	4/17	*	0.045	Thursday	30	4/30	Wednesday	5/7
Alternate 4	Iyar	4/18	Zone A		Friday	29	5/1	Thursday	5/8
5	Sivan	5/17			Saturday	29	5/30	Friday	6/6
6	Tammuz	6/15			Sunday	30	6/28	Saturday	7/5
7	Av	7/15			Tuesday	29	7/28	Monday	8/4
8	Elul	8/13	*	-0.010	Wednesday	30	8/26	Tuesday	9/2
Alternate 8	Elul	8/14	Zone A		Thursday	29	8/27	Wednesday	9/3
9	Tishrei	9/12			Friday	29	9/25	Thursday	10/2
10	Cheshvan	10/11			Saturday	30	10/24	Friday	10/31
11	Kislev	11/10			Monday	29	11/23	Sunday	11/30
12	Tevet	12/9			Tuesday	30	12/22	Monday	12/29

Lunation Number	Julian Year 56 AD Leap Year Cycle Year # 16	Gautschi First Day of Jewish Month	Yallop Zone B *	Zone B q Value	Weekday	Days in Month	14th of Jewish Month	Weekday of 14th & 21st	21st of Jewish Month
1	Shevat	1/8			Thursday	29	1/21	Wednesday	1/28
2	Adar	2/6			Friday	30	2/19	Thursday	2/26
3	Adar-II	3/7			Sunday	30	3/20	Saturday	3/27
4	Nisan	4/6			Tuesday	29	4/19	Monday	4/26
5	Iyar	5/5			Wednesday	30	5/18	Tuesday	5/25
6	Sivan	6/4			Friday	29	6/17	Thursday	6/24
7	Tammuz	7/3	*	-0.074	Saturday	30	7/16	Friday	7/23
Alternate 7	Tammuz	7/4	Zone A		Sunday	29	7/17	Saturday	7/24
8	Av	8/2			Monday	30	8/15	Sunday	8/22
9	Elul	9/1			Wednesday	29	9/14	Tuesday	9/21
10	Tishrei	9/30			Thursday	29	10/13	Wednesday	10/20
11	Cheshvan	10/29			Friday	30	11/11	Thursday	11/18
12	Kislev	11/28			Sunday	29	12/11	Saturday	12/18
13	Tevet	12/27			Monday	29	1/9	Sunday	1/16
Lunation Number	Julian Year 57 AD Cycle Year # 17	Gautschi First Day of Jewish Month	Yallop Zone B *	Zone B q Value	Weekday	Days in Month	14th of Jewish Month	Weekday of 14th & 21st	21st of Jewish Month
1	Shevat	1/25			Tuesday	30	2/7	Monday	2/14
2	Adar	2/24			Thursday	30	3/9	Wednesday	3/16
3	Nisan	3/26			Saturday	29	4/8	Friday	4/15
4	Iyar	4/24			Sunday	30	5/7	Saturday	5/14
5	Sivan	5/24			Tuesday	30	6/6	Monday	6/13
6	Tammuz	6/23			Thursday	30	7/6	Wednesday	7/13
7	Av	7/23			Saturday	29	8/5	Friday	8/12
8	Elul	8/21			Sunday	30	9/3	Saturday	9/10
9	Tishrei	9/20			Tuesday	29	10/3	Monday	10/10
10	Cheshvan	10/19			Wednesday	29	11/1	Tuesday	11/8
11	Kislev	11/17			Thursday	29	11/30	Wednesday	12/7
12	Tevet	12/16	*	-0.035	Friday	30	12/29	Thursday	1/5
Alternate 12	Tevet	12/17	Zone A		Saturday	29	12/30	Friday	1/6
Lunation Number	Julian Year 58 AD Cycle Year # 18	Gautschi First Day of Jewish Month	Yallop Zone B *	Zone B q Value	Weekday	Days in Month	14th of Jewish Month	Weekday of 14th & 21st	21st of Jewish Month
1	Shevat	1/15			Sunday	29	1/28	Saturday	2/4
2	Adar	2/13			Monday	30	2/26	Sunday	3/5
3	Nisan	3/15			Wednesday	29	3/28	Tuesday	4/4
4	Iyar	4/13			Thursday	30	4/26	Wednesday	5/3
5	Sivan	5/13			Saturday	30	5/26	Friday	6/2
6	Tammuz	6/12			Monday	30	6/25	Sunday	7/2
7	Av	7/12			Wednesday	29	7/25	Tuesday	8/1
8	Elul	8/10	*	-0.115	Thursday	30	8/23	Wednesday	8/30
Alternate 8	Elul	8/11	Zone A		Friday	29	8/24	Thursday	8/31
9	Tishrei	9/9			Saturday	30	9/22	Friday	9/29
10	Cheshvan	10/9			Monday	29	10/22	Sunday	10/29
11	Kislev	11/7			Tuesday	29	11/20	Monday	11/27
12	Tevet	12/6			Wednesday	29	12/19	Tuesday	12/26

Lunation Number	Julian Year 59 AD Cycle Year # 19	Gautschi First Day of Jewish Month	Yallop Zone B *	Zone B q Value	Weekday	Days in Month	14th of Jewish Month	Weekday of 14th & 21st	21st of Jewish Month
1	Shevat	1/4	*	-0.031	Thursday	30	1/17	Wednesday	1/24
Alternate 1	Shevat	1/5	Zone A		Friday	29	1/18	Thursday	1/25
2	Adar	2/3			Saturday	29	2/16	Friday	2/23
3	Adar-II	3/4			Sunday	30	3/17	Saturday	3/24
4	Nisan	4/3			Tuesday	29	4/16	Monday	4/23
5	Iyar	5/2			Wednesday	30	5/15	Tuesday	5/22
6	Sivan	6/1			Friday	30	6/14	Thursday	6/21
7	Tammuz	7/1			Sunday	29	7/14	Saturday	7/21
8	Av	7/30	*	-0.084	Monday	30	8/12	Sunday	8/19
Alternate 8	Av	7/31	Zone A		Tuesday	29	8/13	Monday	8/20
9	Elul	8/29			Wednesday	30	9/11	Tuesday	9/18
10	Tishrei	9/28			Friday	29	10/11	Thursday	10/18
11	Cheshvan	10/27			Saturday	30	11/9	Friday	11/16
12	Kislev	11/26			Monday	29	12/9	Sunday	12/16
13	Tevet	12/25			Tuesday	30	1/7	Monday	1/14
Lunation Number	Julian Year 60 AD Leap Year Cycle Year # 1	Gautschi First Day of Jewish Month	Yallop Zone B *	Zone B q Value	Weekday	Days in Month	14th of Jewish Month	Weekday of 14th & 21st	21st of Jewish Month
1	Shevat	1/24			Thursday	29	2/6	Wednesday	2/13
2	Adar	2/22			Friday	29	3/6	Thursday	3/13
3	Nisan	3/22			Saturday	30	4/4	Friday	4/11
4	Iyar	4/21			Monday	29	5/4	Sunday	5/11
5	Sivan	5/20			Tuesday	30	6/2	Monday	6/9
6	Tammuz	6/19			Thursday	29	7/2	Wednesday	7/9
7	Av	7/18	*	-0.017	Friday	30	7/31	Thursday	8/7
Alternate 7	Av	7/19	Zone A		Saturday	29	8/1	Friday	8/8
8	Elul	8/17			Sunday	30	8/30	Saturday	9/6
9	Tishrei	9/16			Tuesday	29	9/29	Monday	10/6
10	Cheshvan	10/15	*	0.049	Wednesday	30	10/28	Tuesday	11/4
Alternate 10	Cheshvan	10/16	Zone A		Thursday	29	10/29	Wednesday	11/5
11	Kislev	11/14			Friday	29	11/27	Thursday	12/4
12	Tevet	12/13	*	-0.094	Saturday	30	12/26	Friday	1/2
Alternate 12	Tevet	12/14	Zone A		Sunday	29	12/27	Saturday	1/3
Lunation Number	Julian Year 61 AD Cycle Year # 2	Gautschi First Day of Jewish Month	Yallop Zone B *	Zone B q Value	Weekday	Days in Month	14th of Jewish Month	Weekday of 14th & 21st	21st of Jewish Month
1	Shevat	1/12			Monday	30	1/25	Sunday	2/1
2	Adar	2/11			Wednesday	29	2/24	Tuesday	3/3
3	Nisan	3/12			Thursday	29	3/25	Wednesday	4/1
4	Iyar	4/10	*	0.092	Friday	30	4/23	Thursday	4/30
Alternate 4	Iyar	4/11	Zone A		Saturday	29	4/24	Friday	5/1
5	Sivan	5/10			Sunday	29	5/23	Saturday	5/30
6	Tammuz	6/8			Monday	30	6/21	Sunday	6/28
7	Av	7/8			Wednesday	29	7/21	Tuesday	7/28
8	Elul	8/6			Thursday	30	8/19	Wednesday	8/26
9	Tishrei	9/5			Saturday	29	9/18	Friday	9/25
10	Cheshvan	10/4			Sunday	30	10/17	Saturday	10/24
11	Kislev	11/3			Tuesday	30	11/16	Monday	11/23
12	Tevet	12/3			Thursday	29	12/16	Wednesday	12/23

Lunation Number	Julian Year 62 AD Cycle Year # 3	Gautschi First Day of Jewish Month	Yallop Zone B *	Zone B q Value	Weekday	Days in Month	14th of Jewish Month	Weekday of 14th & 21st	21st of Jewish Month
1	Shevat	1/1	*	0.060	Friday	30	1/14	Thursday	1/21
Alternate 1	Shevat	1/2	Zone A		Saturday	29	1/15	Friday	1/22
2	Adar	1/31			Sunday	30	2/13	Saturday	2/20
3	Adar-II	3/2			Tuesday	29	3/15	Monday	3/22
4	Nisan	3/31			Wednesday	29	4/13	Tuesday	4/20
5	Iyar	4/29	*	-0.014	Thursday	30	5/12	Wednesday	5/19
Alternate 5	Iyar	4/30	Zone A		Friday	29	5/13	Thursday	5/20
6	Sivan	5/29			Saturday	29	6/11	Friday	6/18
7	Tammuz	6/27			Sunday	30	7/10	Saturday	7/17
8	Av	7/27			Tuesday	29	8/9	Monday	8/16
9	Elul	8/25			Wednesday	29	9/7	Tuesday	9/14
10	Tishrei	9/23	*	0.038	Thursday	30	10/6	Wednesday	10/13
Alternate 10	Tishrei	9/24	Zone A		Friday	29	10/7	Thursday	10/14
11	Cheshvan	10/23			Saturday	30	11/5	Friday	11/12
12	Kislev	11/22			Monday	29	12/5	Sunday	12/12
13	Tevet	12/21	*	0.016	Tuesday	30	1/3	Monday	1/10
Alternate 13	Tevet	12/22	Zone A		Wednesday	29	1/4	Tuesday	1/11
Lunation Number	Julian Year 63 AD Cycle Year # 4	Gautschi First Day of Jewish Month	Yallop Zone B *	Zone B q Value	Weekday	Days in Month	14th of Jewish Month	Weekday of 14th & 21st	21st of Jewish Month
1	Shevat	1/20			Thursday	30	2/2	Wednesday	2/9
2	Adar	2/19			Saturday	30	3/4	Friday	3/11
3	Nisan	3/21			Monday	29	4/3	Sunday	4/10
4	Iyar	4/19			Tuesday	29	5/2	Monday	5/9
5	Sivan	5/18	*	-0.064	Wednesday	30	5/31	Tuesday	6/7
Alternate 5	Sivan	5/19	Zone A		Thursday	29	6/1	Wednesday	6/8
6	Tammuz	6/17			Friday	29	6/30	Thursday	7/7
7	Av	7/16			Saturday	29	7/29	Friday	8/5
8	Elul	8/14	*	-0.073	Sunday	30	8/27	Saturday	9/3
Alternate 8	Elul	8/15	Zone A		Monday	29	8/28	Sunday	9/4
9	Tishrei	9/13			Tuesday	29	9/26	Monday	10/3
10	Cheshvan	10/12			Wednesday	30	10/25	Tuesday	11/1
11	Kislev	11/11			Friday	29	11/24	Thursday	12/1
12	Tevet	12/10	*	-0.042	Saturday	30	12/23	Friday	12/30
Alternate 12	Tevet	12/11	Zone A		Sunday	29	12/24	Saturday	12/31
Lunation Number	Julian Year 64 AD Leap Year Cycle Year # 5	Gautschi First Day of Jewish Month	Yallop Zone B *	Zone B q Value	Weekday	Days in Month	14th of Jewish Month	Weekday of 14th & 21st	21st of Jewish Month
1	Shevat	1/9			Monday	30	1/22	Sunday	1/29
2	Adar	2/8			Wednesday	30	2/21	Tuesday	2/28
3	Adar-II	3/9			Friday	29	3/22	Thursday	3/29
4	Nisan	4/7	*	0.045	Saturday	30	4/20	Friday	4/27
Alternate 4	Nisan	4/8	Zone A		Sunday	29	4/21	Saturday	4/28
5	Iyar	5/7			Monday	29	5/20	Sunday	5/27
6	Sivan	6/5	*	-0.017	Tuesday	30	6/18	Monday	6/25
Alternate 6	Sivan	6/6	Zone A		Wednesday	29	6/19	Tuesday	6/26
7	Tammuz	7/5			Thursday	29	7/18	Wednesday	7/25
8	Av	8/3			Friday	29	8/16	Thursday	8/23
9	Elul	9/1	*	0.036	Saturday	30	9/14	Friday	9/21
Alternate 9	Elul	9/2	Zone A		Sunday	29	9/15	Saturday	9/22
10	Tishrei	10/1			Monday	29	10/14	Sunday	10/21
11	Cheshvan	10/30			Tuesday	30	11/12	Monday	11/19
12	Kislev	11/29			Thursday	29	12/12	Wednesday	12/19
13	Tevet	12/28	*	-0.003	Friday	30	1/10	Thursday	1/17
Alternate 13	Tevet	12/29	Zone A		Saturday	29	1/11	Friday	1/18

Lunation Number	Julian Year 65 AD Cycle Year # 6	Gautschi First Day of Jewish Month	Yallop Zone B *	Zone B q Value	Weekday	Days in Month	14th of Jewish Month	Weekday of 14th & 21st	21st of Jewish Month
1	Shevat	1/27			Sunday	30	2/9	Saturday	2/16
2	Adar	2/26			Tuesday	29	3/11	Monday	3/18
3	Nisan	3/27	*	-0.034	Wednesday	30	4/9	Tuesday	4/16
Alternate 3	Nisan	3/28	Zone A		Thursday	29	4/10	Wednesday	4/17
4	Iyar	4/26			Friday	30	5/9	Thursday	5/16
5	Sivan	5/26			Sunday	29	6/8	Saturday	6/15
6	Tammuz	6/24			Monday	30	7/7	Sunday	7/14
7	Av	7/24			Wednesday	29	8/6	Tuesday	8/13
8	Elul	8/22			Thursday	29	9/4	Wednesday	9/11
9	Tishrei	9/20	*	0.029	Friday	30	10/3	Thursday	10/10
Alternate 9	Tishrei	9/21	Zone A		Saturday	29	10/4	Friday	10/11
10	Cheshvan	10/20			Sunday	29	11/2	Saturday	11/9
11	Kislev	11/18	*	0.086	Monday	30	12/1	Sunday	12/8
Alternate 11	Kislev	11/19	Zone A		Tuesday	29	12/2	Monday	12/9
12	Tevet	12/18			Wednesday	29	12/31	Tuesday	1/7
Lunation Number	Julian Year 66 AD Cycle Year # 7	Gautschi First Day of Jewish Month	Yallop Zone B *	Zone B q Value	Weekday	Days in Month	14th of Jewish Month	Weekday of 14th & 21st	21st of Jewish Month
1	Shevat	1/16	*	0.062	Thursday	30	1/29	Wednesday	2/5
Alternate 1	Shevat	1/17	Zone A		Friday	29	1/30	Thursday	2/6
2	Adar	2/15			Saturday	29	2/28	Friday	3/7
3	Nisan	3/16	*	-0.076	Sunday	30	3/29	Saturday	4/5
Alternate 3	Nisan	3/17	Zone A		Monday	29	3/30	Sunday	4/6
4	Iyar	4/15			Tuesday	30	4/28	Monday	5/5
5	Sivan	5/15			Thursday	29	5/28	Wednesday	6/4
6	Tammuz	6/13	*	-0.018	Friday	30	6/26	Thursday	7/3
Alternate 6	Tammuz	6/14	Zone A		Saturday	29	6/27	Friday	7/4
7	Av	7/13			Sunday	29	7/26	Saturday	8/2
8	Elul	8/11	*	-0.085	Monday	30	8/24	Sunday	8/31
Alternate 8	Elul	8/12	Zone A		Tuesday	29	8/25	Monday	9/1
9	Tishrei	9/10			Wednesday	30	9/23	Tuesday	9/30
10	Cheshvan	10/10			Friday	29	10/23	Thursday	10/30
11	Kislev	11/8			Saturday	30	11/21	Friday	11/28
12	Tevet	12/8			Monday	29	12/21	Sunday	12/28
Lunation Number	Julian Year 67 AD Cycle Year # 8	Gautschi First Day of Jewish Month	Yallop Zone B *	Zone B q Value	Weekday	Days in Month	14th of Jewish Month	Weekday of 14th & 21st	21st of Jewish Month
1	Shevat	1/6			Tuesday	29	1/19	Monday	1/26
2	Adar	2/4			Wednesday	30	2/17	Tuesday	2/24
3	Adar-II	3/6			Friday	29	3/19	Thursday	3/26
4	Nisan	4/4			Saturday	30	4/17	Friday	4/24
5	Iyar	5/4			Monday	29	5/17	Sunday	5/24
6	Sivan	6/2	*	0.024	Tuesday	30	6/15	Monday	6/22
Alternate 6	Sivan	6/3	Zone A		Wednesday	29	6/16	Tuesday	6/23
7	Tammuz	7/2			Thursday	30	7/15	Wednesday	7/22
8	Av	8/1			Saturday	29	8/14	Friday	8/21
9	Elul	8/30	*	0.079	Sunday	30	9/12	Saturday	9/19
Alternate 9	Elul	8/31	Zone A		Monday	29	9/13	Sunday	9/20
10	Tishrei	9/29			Tuesday	30	10/12	Monday	10/19
11	Cheshvan	10/29			Thursday	29	11/11	Wednesday	11/18
12	Kislev	11/27			Friday	30	12/10	Thursday	12/17
13	Tevet	12/27			Sunday	29	1/9	Saturday	1/16

Lunation Number	Julian Year Leap Year 68 AD Cycle Year # 9	Gautschi First Day of Jewish Month	Yallop Zone B *	Zone B q Value	Weekday	Days in Month	14th of Jewish Month	Weekday of 14th & 21st	21st of Jewish Month
1	Shevat	1/25			Monday	29	2/7	Sunday	2/14
2	Adar	2/23			Tuesday	30	3/7	Monday	3/14
3	Nisan	3/24			Thursday	29	4/6	Wednesday	4/13
4	Iyar	4/22			Friday	30	5/5	Thursday	5/12
5	Sivan	5/22			Sunday	29	6/4	Saturday	6/11
6	Tammuz	6/20			Monday	30	7/3	Sunday	7/10
7	Av	7/20			Wednesday	29	8/2	Tuesday	8/9
8	Elul	8/18	*	0.021	Thursday	30	8/31	Wednesday	9/7
Alternate 8	Elul	8/19	Zone A		Friday	29	9/1	Thursday	9/8
9	Tishrei	9/17	*	0.081	Saturday	30	9/30	Friday	10/7
Alternate 9	Tishrei	9/18	Zone A		Sunday	29	10/1	Saturday	10/8
10	Cheshvan	10/17			Monday	30	10/30	Sunday	11/6
11	Kislev	11/16			Wednesday	29	11/29	Tuesday	12/6
12	Tevet	12/15	*	0.065	Thursday	30	12/28	Wednesday	1/4
Alternate 12	Tevet	12/16	Zone A		Friday	29	12/29	Thursday	1/5
Lunation Number	Julian Year 69 AD Cycle Year # 10	Gautschi First Day of Jewish Month	Yallop Zone B *	Zone B q Value	Weekday	Days in Month	14th of Jewish Month	Weekday of 14th & 21st	21st of Jewish Month
1	Shevat	1/14			Saturday	29	1/27	Friday	2/3
2	Adar	2/12			Sunday	29	2/25	Saturday	3/4
3	Nisan	3/13			Monday	30	3/26	Sunday	4/2
4	Iyar	4/12			Wednesday	29	4/25	Tuesday	5/2
5	Sivan	5/11			Thursday	29	5/24	Wednesday	5/31
6	Tammuz	6/9			Friday	30	6/22	Thursday	6/29
7	Av	7/9			Sunday	29	7/22	Saturday	7/29
8	Elul	8/7	*	0.001	Monday	30	8/20	Sunday	8/27
Alternate 8	Elul	8/8	Zone A		Tuesday	29	8/21	Monday	8/28
9	Tishrei	9/6	*	0.057	Wednesday	30	9/19	Tuesday	9/26
Alternate 9	Tishrei	9/7	Zone A		Thursday	29	9/20	Wednesday	9/27
10	Cheshvan	10/6	*	0.038	Friday	30	10/19	Thursday	10/26
Alternate 10	Cheshvan	10/7	Zone A		Saturday	29	10/20	Friday	10/27
11	Kislev	11/5			Sunday	30	11/18	Saturday	11/25
12	Tevet	12/5			Tuesday	29	12/18	Monday	12/25
Lunation Number	Julian Year 70 AD Cycle Year # 11	Gautschi First Day of Jewish Month	Yallop Zone B *	Zone B q Value	Weekday	Days in Month	14th of Jewish Month	Weekday of 14th & 21st	21st of Jewish Month
1	Shevat	1/3			Wednesday	30	1/16	Tuesday	1/23
2	Adar	2/2			Friday	29	2/15	Thursday	2/22
3	Adar-II	3/3			Saturday	29	3/16	Friday	3/23
4	Nisan	4/1			Sunday	30	4/14	Saturday	4/21
5	Iyar	5/1			Tuesday	29	5/14	Monday	5/21
6	Sivan	5/30			Wednesday	29	6/12	Tuesday	6/19
7	Tammuz	6/28			Thursday	30	7/11	Wednesday	7/18
8	Av	7/28			Saturday	29	8/10	Friday	8/17
9	Elul	8/26	*	-0.053	Sunday	30	9/8	Saturday	9/15
Alternate 9	Elul	8/27	Zone A		Monday	29	9/9	Sunday	9/16
10	Tishrei	9/25	*	0.014	Tuesday	30	10/8	Monday	10/15
Alternate 10	Tishrei	9/26	Zone A		Wednesday	29	10/9	Tuesday	10/16
11	Cheshvan	10/25			Thursday	30	11/7	Wednesday	11/14
12	Kislev	11/24			Saturday	30	12/7	Friday	12/14
13	Tevet	12/24			Monday	29	1/6	Sunday	1/13

Lunation Number	Julian Year 71 AD Cycle Year # 12	Gautschi First Day of Jewish Month	Yallop Zone B *	Zone B q Value	Weekday	Days in Month	14th of Jewish Month	Weekday of 14th & 21st	21st of Jewish Month
1	Shevat	1/22			Tuesday	30	2/4	Monday	2/11
2	Adar	2/21			Thursday	29	3/6	Wednesday	3/13
3	Nisan	3/22			Friday	29	4/4	Thursday	4/11
4	Iyar	4/20			Saturday	30	5/3	Friday	5/10
5	Sivan	5/20			Monday	29	6/2	Sunday	6/9
6	Tammuz	6/18			Tuesday	29	7/1	Monday	7/8
7	Av	7/17			Wednesday	30	7/30	Tuesday	8/6
8	Elul	8/16			Friday	30	8/29	Thursday	9/5
9	Tishrei	9/15			Sunday	29	9/28	Saturday	10/5
10	Cheshvan	10/14	*	0.064	Monday	30	10/27	Sunday	11/3
Alternate 10	Cheshvan	10/15	Zone A		Tuesday	29	10/28	Monday	11/4
11	Kislev	11/13			Wednesday	30	11/26	Tuesday	12/3
12	Tevet	12/13			Friday	29	12/26	Thursday	1/2
Lunation Number	Julian Year Leap Year 72 AD Cycle Year # 13	Gautschi First Day of Jewish Month	Yallop Zone B *	Zone B q Value	Weekday	Days in Month	14th of Jewish Month	Weekday of 14th & 21st	21st of Jewish Month
1	Shevat	1/11			Saturday	30	1/24	Friday	1/31
2	Adar	2/10			Monday	29	2/23	Sunday	3/1
3	Adar-II	3/10	*	0.026	Tuesday	30	3/23	Monday	3/30
Alternate 3	Adar-II	3/11	Zone A		Wednesday	29	3/24	Tuesday	3/31
4	Nisan	4/9			Thursday	29	4/22	Wednesday	4/29
5	Iyar	5/8			Friday	30	5/21	Thursday	5/28
6	Sivan	6/7			Sunday	29	6/20	Saturday	6/27
7	Tammuz	7/6			Monday	29	7/19	Sunday	7/26
8	Av	8/4	*	-0.123	Tuesday	30	8/17	Monday	8/24
Alternate 8	Av	8/5	Zone A		Wednesday	29	8/18	Tuesday	8/25
9	Elul	9/3			Thursday	30	9/16	Wednesday	9/23
10	Tishrei	10/3			Saturday	29	10/16	Friday	10/23
11	Cheshvan	11/1			Sunday	30	11/14	Saturday	11/21
12	Kislev	12/1			Tuesday	29	12/14	Monday	12/21
13	Tevet	12/30			Wednesday	30	1/12	Tuesday	1/19
Lunation Number	Julian Year 73 AD Cycle Year # 14	Gautschi First Day of Jewish Month	Yallop Zone B *	Zone B q Value	Weekday	Days in Month	14th of Jewish Month	Weekday of 14th & 21st	21st of Jewish Month
1	Shevat	1/29			Friday	29	2/11	Thursday	2/18
2	Adar	2/27	*	-0.092	Saturday	30	3/12	Friday	3/19
Alternate 2	Adar	2/28	Zone A		Sunday	29	3/13	Saturday	3/20
3	Nisan	3/29			Monday	30	4/11	Sunday	4/18
4	Iyar	4/28			Wednesday	29	5/11	Tuesday	5/18
5	Sivan	5/27			Thursday	30	6/9	Wednesday	6/16
6	Tammuz	6/26			Saturday	29	7/9	Friday	7/16
7	Av	7/25			Sunday	30	8/7	Saturday	8/14
8	Elul	8/24			Tuesday	29	9/6	Monday	9/13
9	Tishrei	9/22			Wednesday	30	10/5	Tuesday	10/12
10	Cheshvan	10/22			Friday	29	11/4	Thursday	11/11
11	Kislev	11/20			Saturday	29	12/3	Friday	12/10
12	Tevet	12/19	*	0.085	Sunday	30	1/1	Saturday	1/8
Alternate 12	Tevet	12/20	Zone A		Monday	29	1/2	Sunday	1/9

Lunation Number	Julian Year 74 AD Cycle Year # 15	Gautschy First Day of Jewish Month	Yallop Zone B *	Zone B q Value	Weekday	Days in Month	14th of Jewish Month	Weekday of 14th & 21st	21st of Jewish Month
1	Shevat	1/18			Tuesday	29	1/31	Monday	2/7
2	Adar	2/16	*	-0.076	Wednesday	30	3/1	Tuesday	3/8
Alternate 2	Adar	2/17	Zone A		Thursday	29	3/2	Wednesday	3/9
3	Nisan	3/18			Friday	30	3/31	Thursday	4/7
4	Iyar	4/17			Sunday	29	4/30	Saturday	5/7
5	Sivan	5/16	*	-0.004	Monday	30	5/29	Sunday	6/5
Alternate 5	Sivan	5/17	Zone A		Tuesday	29	5/30	Monday	6/6
6	Tammuz	6/15			Wednesday	30	6/28	Tuesday	7/5
7	Av	7/15			Friday	29	7/28	Thursday	8/4
8	Elul	8/13	*	-0.088	Saturday	30	8/26	Friday	9/2
Alternate 8	Elul	8/14	Zone A		Sunday	29	8/27	Saturday	9/3
9	Tishrei	9/12			Monday	29	9/25	Sunday	10/2
10	Cheshvan	10/11			Tuesday	30	10/24	Monday	10/31
11	Kislev	11/10			Thursday	29	11/23	Wednesday	11/30
12	Tevet	12/9			Friday	29	12/22	Thursday	12/29
Lunation Number	Julian Year 75 AD Cycle Year # 16	Gautschy First Day of Jewish Month	Yallop Zone B *	Zone B q Value	Weekday	Days in Month	14th of Jewish Month	Weekday of 14th & 21st	21st of Jewish Month
1	Shevat	1/7			Saturday	30	1/20	Friday	1/27
2	Adar	2/6			Monday	29	2/19	Sunday	2/26
3	Adar-II	3/7			Tuesday	30	3/20	Monday	3/27
4	Nisan	4/6			Thursday	29	4/19	Wednesday	4/26
5	Iyar	5/5	*	-0.075	Friday	30	5/18	Thursday	5/25
Alternate 5	Iyar	5/6	Zone A		Saturday	29	5/19	Friday	5/26
6	Sivan	6/4			Sunday	30	6/17	Saturday	6/24
7	Tammuz	7/4			Tuesday	30	7/17	Monday	7/24
8	Av	8/3			Thursday	30	8/16	Wednesday	8/23
9	Elul	9/2			Saturday	29	9/15	Friday	9/22
10	Tishrei	10/1			Sunday	29	10/14	Saturday	10/21
11	Cheshvan	10/30			Monday	30	11/12	Sunday	11/19
12	Kislev	11/29			Wednesday	29	12/12	Tuesday	12/19
13	Tevet	12/28			Thursday	29	1/10	Wednesday	1/17
Lunation Number	Julian Year 76 AD Leap Year Cycle Year # 17	Gautschy First Day of Jewish Month	Yallop Zone B *	Zone B q Value	Weekday	Days in Month	14th of Jewish Month	Weekday of 14th & 21st	21st of Jewish Month
1	Shevat	1/26			Friday	30	2/8	Thursday	2/15
2	Adar	2/25			Sunday	29	3/9	Saturday	3/16
3	Nisan	3/25			Monday		4/7	Sunday	4/14