

[6] The Biblical Calendar

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MARA-TIME 1.0

Reference Day Calendar

Friday

May 3, 2024 A.D. 01 Nisan 25, 5784 C.E.

05:38:45 A.M.

"In all your ways acknowledge Him, and He will direct your paths." Prov. 3:6

Local Time Zone:	-6	Greenwich Mean Time (Zulu):	11:38:45 A.M.		
Julian Date:	2460433.5	Golden Year:	8	Jerusalem Time:	01:38:45 P.M.
Julian Day:	124 of 366	Jewish Leap Years:	3,6,8,11,14,17,19	Jewish Day:	231 of 383

Reference Date {From Iyar 5, 5708 C.E. {May 14, 1948 A.D.}: +0027748

Quit	Display Holy Days	Compute a Date	Compute Multiple Year Data	Rules For Constructing the Modern Jewish	About Mara-Time	Set Program Defaults
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Note: Between 6:00 p.m. and midnight the Jewish day is the following day. This program changes Jewish days displayed based on local time.

Note: the above clock reads the time from your computer system time

57°F Cloudy 3:38 AM 5/3/2024

Maratime.exe 5.0 Compatible with Windows Vista, Windows 7, Windows 10, Windows 11?

The Jewish calendar calculations were privately made by the Sanhedrin during the years of the second temple. Those calculations were first publicly released by Hillel II in the fourth century A.D. A number of changes were made by the Sanhedrin after the crucifixion of Jesus which in the opinion of this author were deliberate attempts to draw attention away from Jesus' fulfillment of the holy days. All Jewish calendar dates are based on Jerusalem time.

This program was originally written in BASIC in the late 1980's and re-written in Quick BASIC in 1993. In January, 2007 it was re-written in Visual BASIC 5.0, in 2012 it was re-written in Visual BASIC 2010 to be compatible with Windows 8 and Windows 10.

Greenwich, England has been the home of Greenwich Mean Time (GMT) since 1884. GMT is sometimes called Greenwich Meridian Time because it is measured from the Greenwich Meridian Line at the Royal Observatory in Greenwich, England. Greenwich is the place from where all time zones are measured -- Longitude Zero degrees. Longitude Zero is sometimes referred to as Zulu {for zero} time zone. New moon times are based on Jewish calculations which use an average time for lunar months. In reality the moon speeds up when closer to the earth and slows down when further from the earth. This causes the new moon times to vary from actual observatory times.

[G-4] Reference Day/Holy Day Calendar 5708 C.E. - 5860 C.E.
{1947 A.D. - 2100 A.D.}

** The following calendar data of Holy Days is still being analyzed and is presented here to make future research by others easier. The number of days between "Holy Days" can be obtained by simply subtracting their Reference Days.

The Holy Days listed are:

Rosh Hashanah- The Jewish New Year on their modern calendar. The first day of the month of Tishri. The seventh month of the Jewish calendar. The required time for the blowing of the trumpets. (Lev. 23:20) Rosh Hashanah will always occur in September or October of the year.

Yom Kippur- The Day of Atonement, the tenth day of the seventh month Tishri) (Lev. 23:27)

Succoth- Feast of Tabernacles- begins the 15th day of the seventh month (Lev. 23:34)

Hanukah- Beginning of the Jewish Feast of Lights (not a Scriptural Holy Day, but included here because it is considered holy to modern Jews.

Christmas- a holy day to Christians, although the exact day of Jesus birth is questionable

New Year (Gregorian -- January 1) added for reference purposes only

Nisan 1- The first day of the first month of the year {First month according to Exodus 12:2}

Nisan 14- Biblical Passover (Lev. 23:5)

Nisan 15- Modern Jewish Passover

Easter {Biblical} - First Fruits Offering- Sunday following the first Saturday which occurs on or after the Biblical Passover in accordance with the holy day of Jesus' resurrection. (Lev. 23:10-11)

Easter {Modern}- The first Sunday, after the fourteenth day of the ecclesiastical moon {nearly full moon} which occurs on or after the vernal equinox. Easter is computed according to the Gregorian method after 1582 A.D. [Easter can occur any time from March 22 to April 25.]

Israel's Birth-Jewish - Israel's re-birth on the Jewish Calendar {Iyar 5}

Israel's Birth-Gregorian - Israel's re-birth on the Gregorian Calendar {May 14}

Shavouth- 50 days from Modern Passover - Jewish Pentecost

Pentecost- 50 days from Modern Easter - Christian Pentecost

Ab 9- the 9th of the month of Ab, the day which according to Jewish tradition is the exact day that both temples were destroyed.

The **Gregorian Date** is our modern Gregorian calendar.

The **Julian Star Date** used by observatories and for space flights is computed from the arbitrary date of Jan. 1, 4713 B.C., at noon Greenwich mean time.

The **Reference Date** is computed from May 14, 1948 A.D., Iyar 5, 5708 C.E. [The day Israel became a nation.] {On my original calendar I had used September 15, 1947 A.D., Tishri 1, 5708 C.E. as the reference date, but have now changed it to the actual date of Israel's rebirth.}

The **reference date** can be computed by subtracting **2432685** from the astronomical Julian Star Date.

The following data was computed by the **Maratime.exe** calendar program which I wrote for this purpose in the 1980's and have updated through the years. It is available at www.TheWordNotes.com and is compatible from Windows Vista to Windows 10 but has not been tested in Windows 11. Jewish dates have been verified by using the book Comprehensive Jewish Calendar, by Arthur Spier {ISBN 0-87306-288-4}

GY – Golden Year – The Jewish calendar follows the Golden Year 19 year cycle. Every 19 years the lunar calendar approximately re-aligns with the solar calendar. The Golden year can be computed by dividing the Jewish year by 19 yielding a remainder which will be the Golden Year. Golden Years 3, 6, 8, 11, 14, 17, and 19 are leap years on the Jewish calendar and will have 13 months rather than 12 months.

{Data is contained in the file: [reference.pdf](#)}

The following data is available in ASCII text format for computation in the file: [rdcal.txt](#)

For the purposes of this study I've included Reference Data from [2021](#) to [2029](#). A complete set of data from 1947 to 2100 is available at www.TheWordNotes.com

Holy Day	Day	Jewish	Gregorian	Julian	Reference
Rosh Hashanah Present (Trumpets) GY - 8	Saturday	07 Tishri 1, 5784	9/16/2023	2460203	27518
Yom Kippur (Atonement)	Monday	07 Tishri 10, 5784	9/25/2023	2460212	27527
Succoth (Tabernacles)	Saturday	07 Tishri 15, 5784	9/30/2023	2460217	27532
Hanukah (Kislev 25)*	Friday	09 Kislev 25, 5784	12/8/2023	2460286	27601
Christmas (Dec. 25)+	Monday	10 Tebeth 13, 5784	12/25/2023	2460303	27618
New Years (Jan. 1)+	Monday	10 Tebeth 20, 5784	1/1/2024	2460310	27625
Purim (Adar 14 or Adar2 14 [Feast of Lots])*	Sunday	13 Adar II 14, 5784	3/24/2024	2460393	27708
Nisan 1 (Nisan 1)+	Tuesday	01 Nisan 1, 5784	4/9/2024	2460409	27724
Biblical Passover (Nisan 14)	Monday	01 Nisan 14, 5784	4/22/2024	2460422	27737
Pesa (Jewish Passover - Nisan 15)*	Tuesday	01 Nisan 15, 5784	4/23/2024	2460423	27738

Holy Day	Day	Jewish	Gregorian	Julian	Reference
Easter (Biblical-1st Sunday after Passover)	Sunday	01 Nisan 20, 5784	4/28/2024	2460428	27743
Easter (Modern)+	Sunday	13 Adar II 21, 5784	3/31/2024	2460400	27715
Israel's Anniv. Jewish (Iyar 5)*	Monday	02 Iyar 5, 5784	5/13/2024	2460443	27758
Israel's Anniv. Gregorian (May 14)+	Tuesday	02 Iyar 6, 5784	5/14/2024	2460444	27759
Shavouth (50 days from Jewish Passover)*	Wednesday	03 Sivan 6, 5784	6/12/2024	2460473	27788
Biblical Pentecost (49 days from Biblical Easter)	Sunday	03 Sivan 10, 5784	6/16/2024	2460477	27792
Pentecost (49 days from Modern Easter)+	Sunday	02 Iyar 11, 5784	5/19/2024	2460449	27764
Ab 9 (Destruction of Temples)*	Tuesday	05 Ab 9, 5784	8/13/2024	2460535	27850

Holy Day	Day	Jewish	Gregorian	Julian	Reference
Rosh Hashanah Present (Trumpets) GY - 9	Thursday	07 Tishri 1, 5785	10/3/2024	2460586	27901
Yom Kippur (Atonement)	Saturday	07 Tishri 10, 5785	10/12/2024	2460595	27910
Succoth (Tabernacles)	Thursday	07 Tishri 15, 5785	10/17/2024	2460600	27915
Hanukah (Kislev 25)*	Thursday	09 Kislev 25, 5785	12/26/2024	2460670	27985
Christmas (Dec. 25)+	Wednesday	09 Kislev 24, 5785	12/25/2024	2460669	27984
New Years (Jan. 1)+	Wednesday	10 Tebeth 1, 5785	1/1/2025	2460676	27991
Purim (Adar 14 or Adar2 14 [Feast of Lots])*	Friday	12 Adar 14, 5785	3/14/2025	2460748	28063
Nisan 1 (Nisan 1)+	Sunday	01 Nisan 1, 5785	3/30/2025	2460764	28079
Biblical Passover (Nisan 14)	Saturday	01 Nisan 14, 5785	4/12/2025	2460777	28092
Pesa (Jewish Passover - Nisan 15)*	Sunday	01 Nisan 15, 5785	4/13/2025	2460778	28093
Easter (Biblical-1st Sunday after Passover)	Sunday	01 Nisan 15, 5785	4/13/2025	2460778	28093
Easter (Modern)+	Sunday	01 Nisan 22, 5785	4/20/2025	2460785	28100

Holy Day	Day	Jewish	Gregorian	Julian	Reference
Israel's Anniv. Jewish (Iyar 5)*	Saturday	02 Iyar 5, 5785	5/3/2025	2460798	28113
Israel's Anniv. Gregorian (May 14)+	Wednesday	02 Iyar 16, 5785	5/14/2025	2460809	28124
Shavouth (50 days from Jewish Passover)*	Monday	03 Sivan 6, 5785	6/2/2025	2460828	28143
Biblical Pentecost (49 days from Biblical Easter)	Sunday	03 Sivan 5, 5785	6/1/2025	2460827	28142
Pentecost (49 days from Modern Easter)+	Sunday	03 Sivan 12, 5785	6/8/2025	2460834	28149
Ab 9 (Destruction of Temples)*	Sunday	05 Ab 9, 5785	8/3/2025	2460890	28205

Holy Day	Day	Jewish	Gregorian	Julian	Reference
Rosh Hashanah Present (Trumpets) GY - 10	Tuesday	07 Tishri 1, 5786	9/23/2025	2460941	28256
Yom Kippur (Atonement)	Thursday	07 Tishri 10, 5786	10/2/2025	2460950	28265
Succoth (Tabernacles)	Tuesday	07 Tishri 15, 5786	10/7/2025	2460955	28270
Hanukah (Kislev 25)*	Monday	09 Kislev 25, 5786	12/15/2025	2461024	28339
Christmas (Dec. 25)+	Thursday	10 Tebeth 5, 5786	12/25/2025	2461034	28349
New Years (Jan. 1)+	Thursday	10 Tebeth 12, 5786	1/1/2026	2461041	28356
Purim (Adar 14 or Adar2 14 [Feast of Lots])*	Tuesday	12 Adar 14, 5786	3/3/2026	2461102	28417
Nisan 1 (Nisan 1)+	Thursday	01 Nisan 1, 5786	3/19/2026	2461118	28433
Biblical Passover (Nisan 14)	Wednesday	01 Nisan 14, 5786	4/1/2026	2461131	28446
Pesa (Jewish Passover - Nisan 15)*	Thursday	01 Nisan 15, 5786	4/2/2026	2461132	28447
Easter (Biblical-1st Sunday after Passover)	Sunday	01 Nisan 18, 5786	4/5/2026	2461135	28450
Easter (Modern)+	Sunday	01 Nisan 18, 5786	4/5/2026	2461135	28450

Israel's Anniv. Jewish (Iyar 5)*	Wednesday	02 Iyar 5, 5786	4/22/2026	2461152	28467
Israel's Anniv. Gregorian (May 14)+	Thursday	02 Iyar 27, 5786	5/14/2026	2461174	28489
Shavouth (50 days from Jewish Passover)*	Friday	03 Sivan 6, 5786	5/22/2026	2461182	28497
Biblical Pentecost (49 days from Biblical Easter)	Sunday	03 Sivan 8, 5786	5/24/2026	2461184	28499
Pentecost (49 days from Modern Easter)+	Sunday	03 Sivan 8, 5786	5/24/2026	2461184	28499
Ab 9 (Destruction of Temples)*	Thursday	05 Ab 9, 5786	7/23/2026	2461244	28559

Holy Day	Day	Jewish	Gregorian	Julian	Reference
Rosh Hashanah Present (Trumpets) GY - 11	Saturday	07 Tishri 1, 5787	9/12/2026	2461295	28610
Yom Kippur (Atonement)	Monday	07 Tishri 10, 5787	9/21/2026	2461304	28619
Succoth (Tabernacles)	Saturday	07 Tishri 15, 5787	9/26/2026	2461309	28624
Hanukah (Kislev 25)*	Saturday	09 Kislev 25, 5787	12/5/2026	2461379	28694
Christmas (Dec. 25)+	Friday	10 Tebeth 15, 5787	12/25/2026	2461399	28714
New Years (Jan. 1)+	Friday	10 Tebeth 22, 5787	1/1/2027	2461406	28721
Purim (Adar 14 or Adar2 14 [Feast of Lots])*	Tuesday	13 Adar II 14, 5787	3/23/2027	2461487	28802
Nisan 1 (Nisan 1)+	Thursday	01 Nisan 1, 5787	4/8/2027	2461503	28818
Biblical Passover (Nisan 14)	Wednesday	01 Nisan 14, 5787	4/21/2027	2461516	28831
Pesa (Jewish Passover - Nisan 15)*	Thursday	01 Nisan 15, 5787	4/22/2027	2461517	28832
Easter (Biblical-1st Sunday after Passover)	Sunday	01 Nisan 18, 5787	4/25/2027	2461520	28835
Easter (Modern)+	Sunday	13 Adar II 19, 5787	3/28/2027	2461492	28807

Israel's Anniv. Jewish (Iyar 5)*	Wednesday	02 Iyar 5, 5787	5/12/2027	2461537	28852
Israel's Anniv. Gregorian (May 14)+	Friday	02 Iyar 7, 5787	5/14/2027	2461539	28854
Shavouth (50 days from Jewish Passover)*	Friday	03 Sivan 6, 5787	6/11/2027	2461567	28882
Biblical Pentecost (49 days from Biblical Easter)	Sunday	03 Sivan 8, 5787	6/13/2027	2461569	28884
Pentecost (49 days from Modern Easter)+	Sunday	02 Iyar 9, 5787	5/16/2027	2461541	28856
Ab 9 (Destruction of Temples)*	Thursday	05 Ab 9, 5787	8/12/2027	2461629	28944

Holy Day	Day	Jewish	Gregorian	Julian	Reference
Rosh Hashanah Present (Trumpets) GY - 12	Saturday	07 Tishri 1, 5788	10/2/2027	2461680	28995
Yom Kippur (Atonement)	Monday	07 Tishri 10, 5788	10/11/2027	2461689	29004
Succoth (Tabernacles)	Saturday	07 Tishri 15, 5788	10/16/2027	2461694	29009
Hanukah (Kislev 25)*	Saturday	09 Kislev 25, 5788	12/25/2027	2461764	29079
Christmas (Dec. 25)+	Saturday	09 Kislev 25, 5788	12/25/2027	2461764	29079
New Years (Jan. 1)+	Saturday	10 Tebeth 2, 5788	1/1/2028	2461771	29086
Purim (Adar 14 or Adar2 14 [Feast of Lots])*	Sunday	12 Adar 14, 5788	3/12/2028	2461842	29157
Nisan 1 (Nisan 1)+	Tuesday	01 Nisan 1, 5788	3/28/2028	2461858	29173
Biblical Passover (Nisan 14)	Monday	01 Nisan 14, 5788	4/10/2028	2461871	29186
Pesa (Jewish Passover - Nisan 15)*	Tuesday	01 Nisan 15, 5788	4/11/2028	2461872	29187
Easter (Biblical-1st Sunday after Passover)	Sunday	01 Nisan 20, 5788	4/16/2028	2461877	29192
Easter (Modern)+	Sunday	01 Nisan 20, 5788	4/16/2028	2461877	29192

Israel's Anniv. Jewish (Iyar 5)*	Monday	02 Iyar 5, 5788	5/1/2028	2461892	29207
Israel's Anniv. Gregorian (May 14)+	Sunday	02 Iyar 18, 5788	5/14/2028	2461905	29220
Shavouth (50 days from Jewish Passover)*	Wednesday	03 Sivan 6, 5788	5/31/2028	2461922	29237
Biblical Pentecost (49 days from Biblical Easter)	Sunday	03 Sivan 10, 5788	6/4/2028	2461926	29241
Pentecost (49 days from Modern Easter)+	Sunday	03 Sivan 10, 5788	6/4/2028	2461926	29241
Ab 9 (Destruction of Temples)*	Tuesday	05 Ab 9, 5788	8/1/2028	2461984	29299

Holy Day	Day	Jewish	Gregorian	Julian	Reference
Rosh Hashanah Present (Trumpets) GY - 13	Thursday	07 Tishri 1, 5789	9/21/2028	2462035	29350
Yom Kippur (Atonement)	Saturday	07 Tishri 10, 5789	9/30/2028	2462044	29359
Succoth (Tabernacles)	Thursday	07 Tishri 15, 5789	10/5/2028	2462049	29364
Hanukah (Kislev 25)*	Wednesday	09 Kislev 25, 5789	12/13/2028	2462118	29433
Christmas (Dec. 25)+	Monday	10 Tebeth 7, 5789	12/25/2028	2462130	29445
New Years (Jan. 1)+	Monday	10 Tebeth 14, 5789	1/1/2029	2462137	29452
Purim (Adar 14 or Adar2 14 [Feast of Lots])*	Thursday	12 Adar 14, 5789	3/1/2029	2462196	29511
Nisan 1 (Nisan 1)+	Saturday	01 Nisan 1, 5789	3/17/2029	2462212	29527
Biblical Passover (Nisan 14)	Friday	01 Nisan 14, 5789	3/30/2029	2462225	29540
Pesa (Jewish Passover - Nisan 15)*	Saturday	01 Nisan 15, 5789	3/31/2029	2462226	29541
Easter (Biblical-1st Sunday after Passover)	Sunday	01 Nisan 16, 5789	4/1/2029	2462227	29542
Easter (Modern)+	Sunday	01 Nisan 16, 5789	4/1/2029	2462227	29542

Israel's Anniv. Jewish (Iyar 5)*	Friday	02 Iyar 5, 5789	4/20/2029	2462246	29561
Israel's Anniv. Gregorian (May 14)+	Monday	02 Iyar 29, 5789	5/14/2029	2462270	29585
Shavouth (50 days from Jewish Passover)*	Sunday	03 Sivan 6, 5789	5/20/2029	2462276	29591
Biblical Pentecost (49 days from Biblical Easter)	Sunday	03 Sivan 6, 5789	5/20/2029	2462276	29591
Pentecost (49 days from Modern Easter)+	Sunday	03 Sivan 6, 5789	5/20/2029	2462276	29591
Ab 9 (Destruction of Temples)*	Saturday	05 Ab 9, 5789	7/21/2029	2462338	29653

See [The Reference Day Calendar / Holy Days -- 1947AD- 2100 AD Explanation and Reference Day Calendar Day Data](#) at www.TheWordNotes.com.

[G-2] The Jewish Calendar -- Old and New Calendars

After all of the work on the "Prophetic Calendar" I realized that the "Prophetic Calendar" does not coincide with any modern-day calendar. I began to be curious as to how the prophetic dates of Daniel would fit with the Modern Jewish calendar. We must first realize that the Modern Jewish calendar is not the same calendar Daniel was familiar with since a number of revisions in the calendar have taken place through the years {Just as changes have been made in the Julian/Gregorian calendar since the days of Jesus}. Daniel could not have foreseen the Modern Jewish calendar, and could not understand how the dates he was given might fit together on a calendar which would be in use about 2500 years in his future. However, the reference to the antichrist's desire to change "times" {calendars} {Dan. 7:25} in the future suggests that the antichrist will realize the importance of a calendar {in particular the Jewish calendar} in use during his lifetime and will deliberately change the calendar to turn attention away from the prophecies of Daniel and the Revelation. The following gives the setup of the Modern Jewish calendar:

**** Jewish Calendar - Modern ****

MONTH 1 – {07} Tishri - 30 days {Sept/Oct} .}[Rosh Hashanah, Feast of Trumpets,
Day of Atonement {Yom Kippur},Feast of Tabernacles]

MONTH 2 – {08} Heshvan - 29 or 30 days {Oct/Nov} [Normally 29, but in excessive years
30 days]

MONTH 3 – {09} Kislev - 30 or 29 days {Nov/Dec} [Normally 30, but in defective years 29
days]

MONTH 4 – {10} Tebeth - 29 days {Dec/Jan}

MONTH 5 – {11} Shebat - 30 days {Jan/Feb}

MONTH 6 – {12} Adar - 29 or 30 days {Feb/Mar} [Normally 29, but 30 on leap years]

MONTH 7 – {13} Adar II (leap year only) - 29 days

MONTH 8 – {01} Nisan - 30 days {Mar/Apr}

MONTH 9 – {02} Iyar - 29 days {Apr/May}

MONTH 10 – {03} Sivan - 30 days {May/June}

MONTH 11 – {04} Tammuz - 29 days {June/July}

MONTH 12 – {05} Ab - 30 days {July/Aug}

MONTH 13 – {06} Ellul - 29 days {Aug/Sept}

**** Jewish Calendar - {The Lord's Calendar for the Jews} ****

{As set in Exodus 12:2 and Leviticus 25}

MONTH 1 – {01}Nisan {March/April} [Nisan 10 {Palm Sunday}, Passover, Easter]

MONTH 2 – {02}Iyar {April/May}

MONTH 3 – {03}Sivan {May/June} [Pentecost {Feast of Weeks}]

MONTH 4 – {04}Tammuz {June/July}

MONTH 5 – {05}Ab {July/Aug.}

MONTH 6 – {06}Ellul {Aug./Sep.}

MONTH 7 – {07}Tishri {Sep./Oct.} [Rosh Hashanah, Feast of Trumpets,
Day of Atonement {Yom Kippur}, Feast of Tabernacles]

MONTH 8 – {08}Heshvan {Oct/Nov}

MONTH 9 – {09}Kislev {Nov/Dec}

MONTH 10 – {10}Tebeth {Dec/Jan}

MONTH 11 – {11}Shebat {Jan/Feb}

MONTH 12 – {12}Adar {Feb/Mar} {Purim}

MONTH 13 – {13}Adar II {Purim}

We call the bottom calendar the "Old" Jewish calendar. In reality, the "New" or "Modern" Jewish calendar at the top is supposedly the older calendar! The first month of the year supposedly originally began in September/October, but was changed by the Lord's command in Exodus 12:2 to the month of Nisan in March/April {the month of the Passover}. Modern Jews still change their calendar year based on the old calendar {since the new year – Rosh Hashanah begins in Tishri} and have also changed the Passover from the evening of the 14th of Nisan to the evening of the 15th. Many believe, and it is my opinion, that these changes were intended to draw attention away from the crucifixion of Jesus and His fulfillment of prophecy. While at chaplain school, a Jewish rabbi told me that the Jews are the only people who celebrate the new year {Rosh Hashanah} during the **SEVENTH** month rather than the **FIRST** month. I believe there are prophetic reasons why this is true! {Possibly because this is time of the year Armageddon will take place, and possibly the Rapture. I am not 100% sold on the idea that the rapture must be at Rosh Hashanah {Although that is the next holy day to be fulfilled and it is the Feast of Trumpets}, but I do not have enough Biblical evidence to conclude that this is a wrong interpretation.}

Rules for construction of the Modern Jewish calendar: [From: The Comprehensive Hebrew Calendar by Arthur Spier, Feldheim Publishers, Jerusalem/New York, 1981]

{Note: The Jewish day begins at 6:00 p.m., not 12:00 a.m. as on the Gregorian calendar.}

One hour = 1080 Halakim (parts); one Helek (part) = 76 Regaim (moments); one part = 3 1/3 seconds; **1 moment = 5/114 seconds** {See I Cor. 15:52}

Tishri will always begin in September or October.

Nisan will always begin in March or April.

Tishri 1 must occur on the new moon {which must be calculated to the **nearest minute based on Jerusalem time**} with the following exceptions:

Dehioth {Postponements }

a. ** When it {Rosh Hashanah} occurs on a Sunday, Wednesday, or Friday, it is postponed to the following day. **{This prevents Biblical Passover from occurring on a Thursday and Nisan 10 {our Palm Sunday [Ex. 12:2-5]} from occurring on a Sunday. I believe this change was intentionally made by the Sanhedrin after Jesus' lifetime. See note at bottom of article.}**

b. When the new moon occurs at noon or later Tishri is postponed to the next day (and to the following day if this would cause it to land on Sunday, Wednesday, or Friday).

The Jewish calendar follows the "Golden Cycle" based on the 19 year solar cycle. {The "Golden Cycle" is the number of years it take for the lunar months to re-align with the solar years -- 19 solar years equals approximately 235 lunar months -- 6939.689621913 days} The following years in the cycle are "leap" years: 3, 6, 8, 11, 14, 17, and 19th years. These years have thirteen months. The thirteenth month is call ADAR II on the Jewish calendar. Common years may have 353 days, 354 days, or 355 days. Leap years have 383 days, 384 days, or 385 days. To determine the length of the year, you must calculate when the next Rosh Hoshanah New Moon will occur, determine if Rosh Hoshanah must be postponed due to the above rules, and you must know whether it is a leap year or not.

Then based on these rules, the months of Heshvan, Kislev, and Adar are adjusted to fulfill the requirements as follows:

c. When it occurs on a Tuesday in a common year 204 parts [after 3 a.m.,] it is postponed to the following day and because the following day is Wednesday it is postponed an additional day.

d. When it occurs on a common year succeeding a leap year, and 589 parts [after 9 a.m.] it is postponed to the following day.

Based on the above rules, Rosh Hashanah will actually not fall on the true new moon but will be postponed to the following day more than 60% of the time!

Length of regular year:

353 days -- 12 months, alternately having 30 and 29 days, except Kislev has 29 days instead of 30 days [**defective** common year]

354 days -- 12 months, alternately having 30 and 29 days [**normal** common year]

355 days -- 12 months, alternately having 30 and 29 days, except Heshvan, with 30 days instead of 29 [**excessive** common year]

Length of leap year:

383 days -- 12 months, alternately having 30 and 29 days, except Kislev has 29 days instead of 30 days, with 1 additional month, Adar I will have 30 days [**defective** leap year]

384 days -- 12 months, alternately having 30 and 29 days, with 1 additional month, Adar I will have 30 days [**normal** leap year]

385 days -- 12 months, alternately having 30 and 29 days, except Heshvan with 30 days instead of 29 days, and one additional month, Adar I will have 30 days [**excessive** leap year]

Rosh Hashanah, Tishri 1, 5757, {Sept. 14, 1996} is the beginning of the 19th year in the leap year cycle and is therefore a leap year. To determine whether a year is a leap year, divide the year by 19; the remainder is the year in the cycle. {The year **5757** divided by **19** yields 303 with a remainder of **0** which means it is the 19th year in the cycle.}

The exact New Moon is computed from observatory data which yields 29.530588437 days from New Moon to New Moon. {29 days 12 hr 44 min 2.841 sec} The exact rules for calendar construction are given in Arthur Spier's book: The Comprehensive Hebrew Calendar, Feldheim Publishers, 1981, New York and Jerusalem [ISBN# 0-87306-288-4].

For anyone interested, I have written a computer program [Maratime.exe] which will calculate the Jewish calendar months using the astronomical star date calendar for any year past, present, or future and will give the reference dates for certain holy days. This information is given for the years 1947 A.D. - 2100 A.D. on my website. See articles below.

The Reference Date given with the calendar dates uses Friday, Iyar 5, 5708 C.E. {May 14, 1948} as reference date - 0 and computes all dates relative to this date. By doing this anyone can quickly determine the number of days between any two Jewish holy days by simple subtraction.

The following three sections: {Originally based on Arthur Spier's book: The Comprehensive Hebrew Calendar have now been re-worked and completely computer generated and verified using my own program Maratime.exe referred to above and double validated with Arthur Spier's book. }

The Jewish calendar calculations were privately made by a handful of men on the Sanhedrin during the time of the second temple {about 430 B.C to 69 A.D.}. Those calculations were first made public by Hillel II during the fourth century A.D. {around 358 A.D.} due to fears the Jewish calendar information might be lost in the dispersion of the Jews {page 2 -The Comprehensive Hebrew Calendar}. It is the opinion of this author that changes were made by the Sanhedrin following Jesus' death to draw attention away from the fact that **Nisan 10 {our **Palm Sunday** [Ex. 12:2-5]}, the **Passover**, the **First Fruits Offering**, and **Pentecost** were fulfilled by **Jesus THE Passover** sacrifice as the **Lamb without blemish**:

1) Biblical **Passover** according to Lev. 23:4-6 begins **the evening of the 14th day** of Nisan; modern **Passover** {Pesa} is on the 15th of the month.

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2) Biblical **Pentecost** according to Lev. 23:15-16 is counted **50 days** from (and including) the **First Fruits Offering** {Easter}; modern **Pentecost** {Shavouth} is counted **50 days** from modern **Passover** {Pesa}.

3) **Nisan 10** {our **Palm Sunday** [Ex. 12:2-5]} cannot occur on the modern Jewish calendar on a Sunday. The above rule “**a.**” marked by “**” prevents that from occurring. See [What Day of the Week Was Jesus Crucified?](http://www.TheWordNotes.com) at www.TheWordNotes.com.

While Jewish scholars would argue that the above are “interpretation” issues rather than actual changes to the modern Jewish calendar, it is my opinion that these changes were intentional changes made by the Sanhedrin after Jesus' death. The Jews' religion requires them to worship on specific days; the Sanhedrin did not want the calendar to be constantly reminding them that **Jesus fulfilled the holy days!** Since the calendar calculations were secretly made by the Sanhedrin all the way up to the 4th century A.D. there is no way I can actually prove this to be true, nor is there any way for anyone to disprove this opinion.

Note: all calculations must be carried out to 12 digits of accuracy. {8 digits to the right of the decimal}; which means a standard 8 digit calculator can't be used. When writing the program: **Maratime.exe** in 1988, it took about a month to write the program (I was a full-time high school teacher and bus driver at the time) and about a month to de-bug various issues. When I ran the program my dates did not match with Arthur Spier's data, even though I had followed all of his calculations to the letter. Finally, the Lord led me to do the calculations by hand. As soon as I completed the first set of calculations, I knew immediately what the problem was: **Computers and all calculators by default round all numbers to eight digits!** I re-wrote parts of the program and told the computer to use **double-digit accuracy** and the problem was resolved! **All dates matched exactly.] These calculations were done during the time of the second temple [from around 433 B.C. to 70 A.D.] without the aid of computers or calculators!!!**

[G-1] THE PROPHETIC CALENDAR

Notes on Construction of the Prophetic Calendar:

1. This calendar is based on a 360 day year which is indicated in Gen. 7-8 as the original time period of the first calendar. See **How Long Was A Day In Genesis**
2. The feasts and holy days are based on Lev. 23-25.
3. The number of days counted: 2300; 1335; 1290; and 1260; come from Dan. 8:14; 12:12; 12:11; 12:7; and Rev. 12:6,14 respectively.
4. The last seven year time period is based upon Dan. 9:24-27.
5. The Year of Jubilee is based upon Lev. 25.

6. The month designations are Jewish but the calendar differs from the modern Jewish calendar in the following ways:
- a. This calendar begins the year with the month Nisan (March-April) which is the first month of the year according to Lev. 23. The modern Jewish calendar also refers to Nisan as the first month, but not as the first month of the new year! (Rosh Hoshanah) Modern Jews celebrate Rosh Hashanah (New Year) in the seventh month (Tishri.) The original calendar supposedly began in September-October {Tishri} but was changed by the Lord's command in Exodus 12:2
 - b. This calendar makes no provision for leap days, leap months, or leap years since these are not provided for in Scripture.

WHY THIS CALENDAR WAS CONSTRUCTED IN THE FIRST PLACE!

This calendar was constructed as a result of personal studies in Biblical prophecy and the inspiration that significant events in Christian history have coincided with the feasts and holy days ordained by God in Lev. 23-25. Note that **these holy days are not the Jews' holy days, but God's holy days. (Lev. 23:2)** From the Christian perspective we know that our Lord was slain as the 'Passover Lamb' without blemish (Lev. 23:12; I Cor. 5:7) at the required time of the **Passover**. (Mat. 26f; Mark 14f; Luke 22; John 13f) We also know that our Lord arose from the dead on the day after the Sabbath following the Passover as the **first fruits** unto the Lord. (Mat. 28; Mark 16; Luke 24; John 20; Lev. 23:11; I Cor. 15: 20) that we might be acceptable before the Lord (Lev. 23:12; Rom. 3:21-26; 8:1-14.) We are further aware of the fact that the out-pouring of the Holy Spirit at **Pentecost** (Lev. 23:15-17; Acts 2) was also significant and the same holy day that the Jews received the Law of Moses following their exodus from Egypt.

The results of this insight led me to connect the **Passover** during the Jewish flight into the wilderness from the pharaoh with the future Jewish flight into the wilderness from the anti-christ. (The length of time for the latter, future event is given as **1260 days** according to Rev. 12:6,14 and Dan. 12:7) Since 1260 days is exactly 3 1/2 years on a 360 day calendar I decided to create a seven year calendar, place all the holy days upon it and in the middle of the seven year calendar on the **Passover** place the number **1260 days**. From this point I counted downward to day one and upward to **day 2300**. Day one turned out to be the day before the **Feast of Tabernacles** of the seventh year! (The Feast of Tabernacles is called the Feast of the Lord in Lev. 23:39) (See also Is. 25:6-12.) Immediately I was reminded of Rev. 19:9- "Blessed are those who are invited to the marriage supper of the Lamb."

But this is only the beginning of the discoveries. Upon counting upward to **2300 days** I discovered that the **day 2300** {when the treaty is signed by the anti-christ} occurs **10 days before Pentecost** during the first year. At first I didn't associate that day with any important day so I recounted the days to be sure no error had been made. Finally satisfied that no errors had been made I remembered that something very important did occur **10 days** before Pentecost. **Our Lord ascended into heaven on that day!** (See Acts 1.)

In this scenario the last seven years would have to begin with day **2520** also starting with the **Feast of Tabernacles** before the beginning of the seven years! [Seven complete years of 360 days is 2520 days.] The two witnesses of the Revelation witness for **1260 days** and are killed by the anti-christ **1260 days** before Armageddon. So they would have to begin their testimony on a **Feast of Tabernacles** before the last seven years.

Scenario #2

Later, I realized there is also another scenario with the **360 day calendar**.

If the last seven years [**day 2520**] begins with **Nisan 1** and the two witnesses begin their ministry **at that time**, the **2300 day** count {when the treaty is made} would be on a **Yom Kippur**, the abolition of the sacrifices on **day 1290** would be on a **Purim**, the two witnesses would be killed on a **Rosh Hashanah**, and Armageddon would end on the last day of the twelfth month [Adar 30] at the end of the seven years.

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I added three and a half years to the beginning of the last seven years to see where the **day 1335** of Daniel would fit, but have found nothing of significance.

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There is nothing in either calendar scenario that suggests when the **Rapture** could occur, but we know it must occur **before or when** the two witnesses **begin their testimony**. Nor does either scenario suggest when the **Russian invasion** of Israel will occur, but it also must take place **before the two witnesses begin their testimony**.

I do need to emphasize that no calendar in existence today has 360 days in a year!

I have done a computer analysis checking when each of the **numbers of Daniel** might occur on the **modern Jewish calendar**. The volume of data was so overwhelming that I have not done anything with it except to see that the data does not appear to follow either of the above scenarios! It is posted on my website so anyone interested can view the data for themselves.

TENTH YEAR BEFORE JUBILEE

NISAN ((MAR-APR))							IYAR ((APR-MAY))							SIVAN((MAY-JUN))						
SUN	MON	TUE	WED	THU	FRI	SAT	SUN	MON	TUE	WED	THU	FRI	SAT	SUN	MON	TUE	WED	THU	FRI	SAT
					1	2	1	2	3	4	5	6	7			1	2	3	4	5
				{3433}	{3600}											PENTECOST				
3	4	5	6	7	8	9	8	9	10	11	12	13	14	6	7	8	9	10	11	12
		PASSOVER FEAST OF																		
10	11	12	13	14	15	16	15	16	17	18	19	20	21	13	14	15	16	17	18	19
UNLEAVENED BREAD																				
17	18	19	20	21	22	23	22	23	24	25	26	27	28	20	21	22	23	24	25	26
EASTER																				
24	25	26	27	28	29	30	29	30						27	28	29	30			
TAMMUZ ((JUN-JUL))							AB ((JUL-AUG))							ELLUL ((AUG-SEP))						
SUN	MON	TUE	WED	THU	FRI	SAT	SUN	MON	TUE	WED	THU	FRI	SAT	SUN	MON	TUE	WED	THU	FRI	SAT
					1	2	3						1		1	2	3	4	5	6
4	5	6	7	8	9	10	2	3	4	5	6	7	8	7	8	9	10	11	12	13
11	12	13	14	15	16	17	9	10	11	12	13	14	15	14	15	16	17	18	19	20
18	19	20	21	22	23	24	16	17	18	19	20	21	22	21	22	23	24	25	26	27
25	26	27	28	29	30		23	24	25	26	27	28	29	28	29	30				
							30													

TISHRI ((SEP-OCT))							HESHVAN ((OCT-NOV))							KISLEV ((NOV-DEC))							
SUN	MON	TUE	WED	THU	FRI	SAT	SUN	MON	TUE	WED	THU	FRI	SAT	SUN	MON	TUE	WED	THU	FRI	SAT	
							ROSH HASHANAH														
							1														
2	3	4	5	6	7	8	7	8	9	10	11	12	13	5	6	7	8	9	10	11	
							YOM KIPPUR														
9	10	11	12	13	14	15	14	15	16	17	18	19	20	12	13	14	15	16	17	18	
							FEAST OF TABERNACLES							HANUKKAH							
16	17	18	19	20	21	22	21	22	23	24	25	26	27	19	20	21	22	23	24	25	
23	24	25	26	27	28	29	28	29	30					26	27	28	29	30			
30																					

TEBETH ((DEC-JAN))							SHEBAT ((JAN-FEB))							ADAR ((FEB-MAR))							
SUN	MON	TUE	WED	THU	FRI	SAT	SUN	MON	TUE	WED	THU	FRI	SAT	SUN	MON	TUE	WED	THU	FRI	SAT	
							1							1							
3	4	5	6	7	8	9	8	9	10	11	12	13	14	6	7	8	9	10	11	12	
							PURIM														
10	11	12	13	14	15	16	15	16	17	18	19	20	21	13	14	15	16	17	18	19	
17	18	19	20	21	22	23	22	23	24	25	26	27	28	20	21	22	23	24	25	26	
24	25	26	27	28	29	30	29	30					27	28	29	30	2714	2881			

EIGHTH YEAR BEFORE JUBILEE

NISAN ((MAR-APR))							IYAR ((APR-MAY))							SIVAN((MAY-JUN))						
SUN	MON	TUE	WED	THU	FRI	SAT	SUN	MON	TUE	WED	THU	FRI	SAT	SUN	MON	TUE	WED	THU	FRI	SAT
			{2713} (2880)	<u>1</u>	2	3							1		1	2	3	4	5	6
4	5	6	7	8	9	10	2	3	4	5	6	7	8	<u>7</u>	8	9	10	11	12	13
		PASSOVER		FEAST OF									PENTECOST							
11	12	13	<u>14</u>	<u>15</u>	<u>16</u>	<u>17</u>	9	10	11	12	13	14	15	14	15	16	17	18	19	20
UNLEAVENED BREAD																				
<u>18</u>	<u>19</u>	<u>20</u>	<u>21</u>	22	23	24	16	17	18	19	20	21	22	21	22	23	24	25	26	27
EASTER																				
25	26	27	28	29	30		23	24	25	26	27	28	29	28	29	30				
						30														
TAMMUZ ((JUN-JUL))							AB ((JUL-AUG))							ELLUL ((AUG-SEP))						
SUN	MON	TUE	WED	THU	FRI	SAT	SUN	MON	TUE	WED	THU	FRI	SAT	SUN	MON	TUE	WED	THU	FRI	SAT
			1	2	3	4							1	1	2	3	4	5	6	7
5	6	7	8	9	10	11	2	3	4	5	6	7	8	8	9	10	11	12	13	14
12	13	14	15	16	17	18	<u>9</u>	10	11	12	13	14	15	15	16	17	18	19	20	21
19	20	21	22	23	24	25	16	17	18	19	20	21	22	22	23	24	25	26	27	28
26	27	28	29	30			23	24	25	26	27	28	29	29	30					
						30														

TISHRI ((SEP-OCT))							HESHVAN ((OCT-NOV))							KISLEV ((NOV-DEC))						
SUN	MON	TUE	WED	THU	FRI	SAT	SUN	MON	TUE	WED	THU	FRI	SAT	SUN	MON	TUE	WED	THU	FRI	SAT
		<u>1</u>	2	3	4	5					1	2	3							1
	ROSH HASHANAH		YOM KIPPUR																	
6	7	8	9	<u>10</u>	11	12	4	5	6	7	8	9	10	2	3	4	5	6	7	8
			FEAST OF TABERNACLES																	
13	{14}	<u>15</u>	<u>16</u>	<u>17</u>	<u>18</u>	<u>19</u>	11	12	13	14	15	16	17	9	10	11	12	13	14	15
	{2520}																			
<u>20</u>	<u>21</u>	22	23	24	25	26	18	19	20	21	22	23	24	16	17	18	19	20	21	22
																HANUKKAH				
27	28	29	<u>30</u>				25	26	27	28	29	30	23	24	<u>25</u>	26	27	28	29	
			{2504}																	

TEBETH ((DEC-JAN))							SHEBAT ((JAN-FEB))							ADAR ((FEB-MAR))							
SUN	MON	TUE	WED	THU	FRI	SAT	SUN	MON	TUE	WED	THU	FRI	SAT	SUN	MON	TUE	WED	THU	FRI	SAT	
	1	2	3	4	5	6				1	2	3	4						1	2	
7	8	9	10	11	12	13	5	6	7	8	9	10	11	3	4	5	6	7	8	9	
																			PURIM		
14	15	16	17	18	19	20	12	13	14	15	16	17	18	10	11	12	13	<u>14</u>	15	16	
21	22	23	24	25	26	27	19	20	21	22	23	24	25	17	18	19	20	21	22	23	
28	29	30					26	27	28	29	30			24	25	26	27	28	29	<u>30</u>	

{2354} {2521}

****BEGINNING OF ISRAEL'S LAST SEVEN YEARS
** SEVENTH YEAR BEFORE JUBILEE**

NISAN ((MAR-APR))							IYAR ((APR-MAY))							SIVAN((MAY-JUN))						
SUN	MON	TUE	WED	THU	FRI	SAT	SUN	MON	TUE	WED	THU	FRI	SAT	SUN	MON	TUE	WED	THU	FRI	SAT
<u>1</u>	2	3	4	5	6	7			1	2	3	4	5				1	2	3	
{2353}	{2520}				PASSOVER									PENTECOST						
8	9	10	11	12	13	<u>14</u>	6	7	8	9	10	11	12	{4}	5	6	7	8	9	10
FEAST OF UNLEAVENED BREAD														{1335} DAN. 12:12 {End of 1335 days?}						
<u>15</u>	<u>16</u>	<u>17</u>	<u>18</u>	<u>19</u>	<u>20</u>	<u>21</u>	13	14	15	16	17	18	19	11	12	13	14	15	16	17
EASTER																				
22	23	24	25	26	27	28	20	21	22	23	{24}	25	26	18	19	20	21	22	23	24
														{2300} BEGINNING OF LAST 2300 DAYS?						
29	30						27	28	29	30				25	26	27	28	29	30	

TAMMUZ ((JUN-JUL))							AB ((JUL-AUG))							ELLUL ((AUG-SEP))						
SUN	MON	TUE	WED	THU	FRI	SAT	SUN	MON	TUE	WED	THU	FRI	SAT	SUN	MON	TUE	WED	THU	FRI	SAT
						1		1	2	3	4	5	6				1	2	3	4
2	3	4	5	6	7	8	7	8	<u>9</u>	10	11	12	13	5	6	7	8	9	10	11
9	10	11	12	13	14	15	14	15	16	17	18	19	20	12	13	14	15	16	17	18
16	17	18	19	20	21	22	21	22	23	24	25	26	27	19	20	21	22	23	24	25
23	24	25	26	27	28	29	28	29	30					26	27	28	29	30		

TISHRI ((SEP-OCT))							HESHVAN ((OCT-NOV))							KISLEV ((NOV-DEC))						
SUN	MON	TUE	WED	THU	FRI	SAT	SUN	MON	TUE	WED	THU	FRI	SAT	SUN	MON	TUE	WED	THU	FRI	SAT
ROSH HASHANAH																				
					<u>1</u>	2	1	2	3	4	5	6	7			1	2	3	4	5
3	4	5	6	7	8	9	8	9	10	11	12	13	14	6	7	8	9	10	11	12
YOM KIPPUR -----> [2300] DAN. 8:14 BEGINNING OF LAST 2300 DAYS?																				
<u>10</u>	11	12	13	14	<u>15</u>	<u>16</u>	15	16	17	18	19	20	21	13	14	15	16	17	18	19
FEAST OF TABERNACLES														HANUKKAH						
<u>17</u>	<u>18</u>	<u>19</u>	<u>20</u>	<u>21</u>	22	23	22	23	24	25	26	27	28	20	21	22	23	24	<u>25</u>	26
24	25	26	27	28	29	30	29	30						27	28	29	30			

TEBETH ((DEC-JAN))							SHEBAT ((JAN-FEB))							ADAR ((FEB-MAR))						
SUN	MON	TUE	WED	THU	FRI	SAT	SUN	MON	TUE	WED	THU	FRI	SAT	SUN	MON	TUE	WED	THU	FRI	SAT
				1	2	3						1		1	2	3	4	5	6	
4	5	6	7	8	9	10	2	3	4	5	6	7	8	7	8	9	10	11	12	13
														PURIM						
11	12	13	14	15	16	17	9	10	11	12	13	14	15	<u>14</u>	15	16	17	18	19	20
18	19	20	21	22	23	24	16	17	18	19	20	21	22	21	22	23	24	25	26	27
25	26	27	28	29	30		23	24	25	26	27	28	29	28	29	<u>30</u>				
						30									{1994}	{2161}				

SIXTH YEAR BEFORE JUBILEE

NISAN ((MAR-APR))							IYAR ((APR-MAY))							SIVAN((MAY-JUN))							
SUN	MON	TUE	WED	THU	FRI	SAT	SUN	MON	TUE	WED	THU	FRI	SAT	SUN	MON	TUE	WED	THU	FRI	SAT	
			<u>1</u>	2	3	4						1	2	1	2	3	4	5	6	7	
		{1993}	(2160)												PENTECOST						
5	6	7	8	9	10	11	3	4	5	6	7	8	9		<u>8</u>	9	10	11	12	13	14
		PASSOVER	FEAST OF UNLEAVENED																		
12	13	<u>14</u>	<u>15</u>	<u>16</u>	<u>17</u>	<u>18</u>	10	11	12	13	14	15	16		15	16	17	18	19	20	21
BREAD																					
<u>19</u>	<u>20</u>	<u>21</u>	22	23	24	25	17	18	19	20	21	22	23		22	23	24	25	26	27	28
EASTER																					
26	27	28	29	30			24	25	26	27	28	29	30		29	30					

TAMMUZ ((JUN-JUL))							AB ((JUL-AUG))							ELLUL ((AUG-SEP))							
SUN	MON	TUE	WED	THU	FRI	SAT	SUN	MON	TUE	WED	THU	FRI	SAT	SUN	MON	TUE	WED	THU	FRI	SAT	
		1	2	3	4	5					1	2	3							1	
6	7	8	9	10	11	12	4	5	6	7	8	<u>9</u>	10		2	3	4	5	6	7	8
13	14	15	16	17	18	19	11	12	13	14	15	16	17		9	10	11	12	13	14	15
20	21	22	23	24	25	26	18	19	20	21	22	23	24		16	17	18	19	20	21	22
27	28	29	30				25	26	27	28	29	30			23	24	25	26	27	28	29
															30						

TISHRI ((SEP-OCT))							HESHVAN ((OCT-NOV))							KISLEV ((NOV-DEC))												
SUN	MON	TUE	WED	THU	FRI	SAT	SUN	MON	TUE	WED	THU	FRI	SAT	SUN	MON	TUE	WED	THU	FRI	SAT						
ROSH HASHANAH													1	2	3	4				1	2					
	<u>1</u>	2	3	4	5	6							1	2	3	4										
		YOM KIPPUR																								
7	8	9	<u>10</u>	11	12	13	5	6	7	8	9	10	11	3	4	5	6	7	8	9						
FEAST OF TABERNACLES																										
14	<u>15</u>	<u>16</u>	<u>17</u>	<u>18</u>	<u>19</u>	<u>20</u>	12	13	14	15	16	17	18	10	11	12	13	14	15	16						
<u>21</u>	<u>22</u>	<u>23</u>	<u>24</u>	<u>25</u>	<u>26</u>	<u>27</u>	19	20	21	22	23	24	25	17	18	19	20	21	22	23						
28	29	30					26	27	28	29	30			24	HANUKKAH						<u>25</u>	26	27	28	29	30

TEBETH ((DEC-JAN))							SHEBAT ((JAN-FEB))							ADAR ((FEB-MAR))												
SUN	MON	TUE	WED	THU	FRI	SAT	SUN	MON	TUE	WED	THU	FRI	SAT	SUN	MON	TUE	WED	THU	FRI	SAT						
1	2	3	4	5	6	7							1	2	3	4	5							1	2	3
8	9	10	11	12	13	14	6	7	8	9	10	11	12	4	5	6	7	8	9	10						
15	16	17	18	19	20	21	13	14	15	16	17	18	19	11	12	13	<u>14</u>	15	16	17						
22	23	24	25	26	27	28	20	21	22	23	24	25	26	18	19	20	21	22	23	24						
29	30						27	28	29	30			25	26	27	28	29	<u>30</u>								

{1634} (1801)

FIFTH YEAR BEFORE JUBILEE

NISAN ((MAR-APR))							IYAR ((APR-MAY))							SIVAN((MAY-JUN))							
SUN	MON	TUE	WED	THU	FRI	SAT	SUN	MON	TUE	WED	THU	FRI	SAT	SUN	MON	TUE	WED	THU	FRI	SAT	
				{1633}	(1800)	<u>1</u>		1	2	3	4	5	6					1	2	3	4
2	3	4	5	6	7	8	7	8	9	10	11	12	13	<u>5</u>	6	7	8	9	10	11	
				PASSOVER										PENTECOST							
9	10	11	12	13	<u>14</u>	<u>15</u>	14	15	16	17	18	19	20	12	13	14	15	16	17	18	
FEAST OF UNLEAVENED BREAD																					
<u>16</u>	<u>17</u>	<u>18</u>	<u>19</u>	<u>20</u>	<u>21</u>	22	21	22	23	24	25	26	27	19	20	21	22	23	24	25	
EASTER																					
23	24	25	26	27	28	29	28	29	30					26	27	28	29	30			
30																					

TAMMUZ ((JUN-JUL))							AB ((JUL-AUG))							ELLUL ((AUG-SEP))							
SUN	MON	TUE	WED	THU	FRI	SAT	SUN	MON	TUE	WED	THU	FRI	SAT	SUN	MON	TUE	WED	THU	FRI	SAT	
					1	2	1	2	3	4	5	6	7			1	2	3	4	5	
3	4	5	6	7	8	9	8	<u>9</u>	10	11	12	13	14	6	7	8	9	10	11	12	
10	11	12	13	14	15	16	15	16	17	18	19	20	21	13	14	15	16	17	18	19	
17	18	19	20	21	22	23	22	23	24	25	26	27	28	20	21	22	23	24	25	26	
24	25	26	27	28	29	30	29	30						27	28	29	30				

**** FOURTH YEAR BEFORE JUBILEE ****

NISAN ((MAR-APR))							IYAR ((APR-MAY))							SIVAN((MAY-JUN))							
SUN	MON	TUE	WED	THU	FRI	SAT	SUN	MON	TUE	WED	THU	FRI	SAT	SUN	MON	TUE	WED	THU	FRI	SAT	
	{1273}	{1440}	1	2	3	4	5					1	2	3							1
6	7	8	9	10	11	12	4	5	6	7	8	9	10	2	3	4	5	6	7	8	
PASSOVER			FEAST OF UNLEAVENED BREAD											PENTECOST							
13	{14}	15	16	17	18	19	11	12	13	14	15	16	17	9	10	11	12	13	14	15	
{1260} TWO WITNESSES SLAIN- RAPTURED {3 1/2 DAYS LATER}-Abomination of Desolation?																					
20	21	22	23	24	25	26	18	19	20	21	22	23	24	16	17	18	19	20	21	22	
EASTER																					
27	28	29	30				25	26	27	28	29	30	23	24	25	26	27	28	29		
														30							

TAMMUZ ((JUN-JUL))							AB ((JUL-AUG))							ELLUL ((AUG-SEP))						
SUN	MON	TUE	WED	THU	FRI	SAT	SUN	MON	TUE	WED	THU	FRI	SAT	SUN	MON	TUE	WED	THU	FRI	SAT
	1	2	3	4	5	6				1	2	3	4							(1) 2
7	8	9	10	11	12	13	5	6	7	8	9	10	11	3	4	5	6	7	8	9
14	15	{16}	17	18	19	20	12	13	14	15	16	17	18	10	11	12	13	14	15	16
		{1335}																		
21	22	23	24	25	26	27	19	20	21	22	23	24	25	17	18	19	20	21	22	23
28	29	30					26	27	28	29	30			24	25	26	27	28	29	30

TISHRI ((SEP-OCT))							HESHVAN ((OCT-NOV))						KISLEV ((NOV-DEC))							
SUN	MON	TUE	WED	THU	FRI	SAT	SUN	MON	TUE	WED	THU	FRI	SAT	SUN	MON	TUE	WED	THU	FRI	SAT
ROSH HASHANAH																				
<u>1</u>	2	3	4	5	6	7	1	2	3	4	5							1	2	3
(1260) YOM KIPPUR																				
8	9	<u>10</u>	11	12	13	14	6	7	8	9	10	11	12	4	5	6	7	8	9	10
FEAST OF TABERNACLES																				
<u>15</u>	<u>16</u>	<u>17</u>	18	19	<u>20</u>	<u>21</u>	13	14	15	16	17	18	19	11	12	13	14	15	16	17
22	23	24	25	26	27	28	20	21	22	23	24	25	26	18	19	20	21	22	23	24
HANUKKAH																				
29	30						27	28	29	30				<u>25</u>	26	27	28	29	30	

TEBETH ((DEC-JAN))							SHEBAT ((JAN-FEB))						ADAR ((FEB-MAR))							
SUN	MON	TUE	WED	THU	FRI	SAT	SUN	MON	TUE	WED	THU	FRI	SAT	SUN	MON	TUE	WED	THU	FRI	SAT
						1	1	2	3	4	5	6					1	2	3	4
2	3	4	5	6	7	8	7	8	9	10	11	12	13	5	6	7	8	9	10	11
PURIM																				
9	10	11	12	13	14	15	14	15	16	17	18	19	20	12	13	<u>14</u>	15	16	17	18
16	17	18	19	20	21	22	21	22	23	24	25	26	27	19	20	21	22	23	24	25
23	24	25	26	27	28	29	28	29	30					26	27	28	29	<u>30</u>		
30																			<u>915</u>	<u>1081</u>

SECOND YEAR BEFORE JUBILEE

NISAN ((MAR-APR))							IYAR ((APR-MAY))							SIVAN((MAY-JUN))						
SUN	MON	TUE	WED	THU	FRI	SAT	SUN	MON	TUE	WED	THU	FRI	SAT	SUN	MON	TUE	WED	THU	FRI	SAT
	<u>1</u>	2	3	4	5	6				1	2	3	4						1	2
	{554} (720)																			
7	8	9	10	11	12	13	5	6	7	8	9	10	11	3	4	5	6	7	8	9
PASSOVER FEAST OF UNLEAVENED BREAD							PENTECOST													
<u>14</u>	<u>15</u>	<u>16</u>	<u>17</u>	<u>18</u>	<u>19</u>	<u>20</u>	12	13	14	15	16	17	18	<u>10</u>	11	12	13	14	15	16
<u>21</u>	22	23	24	25	26	27	19	20	21	22	23	24	25	17	18	19	20	21	22	23
EASTER																				
28	29	30					26	27	28	29	30			24	25	26	27	28	29	30
TAMMUZ ((JUN-JUL))							AB ((JUL-AUG))							ELLUL ((AUG-SEP))						
SUN	MON	TUE	WED	THU	FRI	SAT	SUN	MON	TUE	WED	THU	FRI	SAT	SUN	MON	TUE	WED	THU	FRI	SAT
1	2	3	4	5	6	7			1	2	3	4	5					1	2	3
8	9	10	11	12	13	14	6	7	8	<u>9</u>	10	11	12	4	5	6	7	8	9	10
15	16	17	18	19	20	21	13	14	15	16	17	18	19	11	12	13	14	15	16	17
22	23	24	25	26	27	28	20	21	22	23	24	25	26	18	19	20	21	22	23	24
29	30						27	28	29	30				25	26	27	28	29	30	

[C-5] How Long Was A Day In Genesis?

Whatever a person wants to believe about how long a day was in the first chapter of Genesis, it is a Biblical fact that nowhere in the Old Testament does the Hebrew word for "day" {yom [יום]} ever refer to anything other than a normal, **approximately 24 hour**, day when a **number** is attached to the word. **To say that the word had a different meaning in the first chapter of Genesis than it has in the rest of Scripture cannot be supported Biblically. The fourth commandment to observe the sabbath {Ex. 20:11} eliminates any question as to the fact that first chapter refers to literal days.**

By reviewing the book of Genesis concerning the Great Flood of Noah, some interesting calendar information can be determined as factual concerning the original calendar, and other things which we may not be able to prove Biblically with absolute certainty about the calendar may be **mathematically** and scientifically supported.

We know from the Genesis account of the Great Flood that the months mentioned had to be **30 days** in length (Gen. 7:11,24; 8:3-4). The account given indicates that there were 150 days in five months.

Gen 7:11 In the six hundredth year of Noah's life, in the second month, the seventeenth day of the month, the same day were all the fountains of the great deep broken up, and the windows of heaven were opened.

Gen 8:3-4 (3) And the waters returned from off the earth continually: and after the end of the **hundred and fifty days** the waters were abated.

(4) And the ark rested in the **seventh month, on the seventeenth day of the month**, upon the mountains of Ararat. [Exactly **five** months.]

(Astronomical data comes from: **Astronomy**, ninth edition, by Baker and Fredrich, copyright 1971.)

Earth's revolution about the sun (**Tropical Year**) [time from **vernal {spring} equinox** to **vernal equinox**]: **365.24220 days**

Synodic Month (time from **new moon** to **new moon**): **29.53059 days**

{Astronomical note: the calendar is based on the Tropical Year [time from vernal {spring} equinox to vernal equinox, not the **Sidereal Year** [time to return to the same location in relation to the constellations.] For a more technical explanation on these differences see the above mentioned book or others on Astronomy. }

Suppose that the earth's rotation on its own axis originally was faster so that the Synodic Month was **originally exactly 30.0 days**, but by some force the earth's rotation was slowed down to the present Synodic Month. Assume also that the earth's period of revolution about the sun remains constant. The result would be approximately a **371 day Tropical Year**. This is because the earth would rotate **371 times** on its axis during one complete orbit of the sun **due to its faster rotational speed**. {See the calculations below.} **The earth is now rotating slower**, because it doesn't make **30** complete rotations during the passage of a lunar cycle. It only makes **29.53059** rotations during the lunar cycle. The fact that the earth is presently rotating slower than it did even a hundred years ago is well documented. {This past December 31, 2005, atomic clocks all over the world were adjusted for the slow down that is presently still in progress.}

The slow down of the earth's rotation is caused by a number of factors. One cause is the fact that the mass of water on the surface of the earth increased during the time of Noah. Another reason is the fact that **the earth's radius is slightly larger today** than it was in the time of Noah. Still another cause is "tidal friction" caused by the motion of the tides. All of these factors would cause the earth's rotational speed to decrease, the first two would cause the rotation to slow down in order **to conserve angular momentum**. [Similar to an ice skater who slows down in rotational speed when he/she extends his/her arms.] [By the way, the increase in the earth's radius would also result in a lower atmospheric pressure today as compared to years past and experiments with the isobaric chamber at Glen Rose, Texas supports a wide range of scientific results of that increased atmospheric pressure.]

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If this slow down did in fact occur, we can calculate the actual length of a day at the time of Noah and prior to the flood by a **simple inverse proportion**. {It is an inverse proportion because as we speed up the earth's rotation on its own axis, the amount of time it takes to complete one full day cycle - day-night decreases.}

$$\frac{29.53059}{30.00000} = \frac{x}{24.0}$$

$$x = 23.62447 \text{ hours / day}$$

The actual slow down would amount to approximately 22.5 minutes per day. Thus the original day length would have been approximately 23 hours, 37.5 minutes long by our present time keeping methods.

To find the actual number of rotations of the earth on its own axis during one year using this faster rotational speed, we can use another **direct proportion**: {It is a direct proportion because as we speed up the earth's rotation on its own axis, the number of days from vernal {spring} equinox to vernal equinox increases.}

$$\frac{29.53059}{30.00000} = \frac{365.24220}{x}$$

$x = \mathbf{371.04799}$ days in a single tropical year.

According to **Kepler's laws**, the square of the time period of a planet's revolution around the sun is directly proportional to the cube of its average distance from the sun. The earth's mean {average} distance from the sun is: **149,598 kilometers {approximately 93 million miles}** It's actual distance from the sun is 1.7% less at its closest point {perihelion} and 1.7% more at its maximum distance {aphelion}.

By using **Kepler's laws**, we can determine the average distance from the sun the earth would have to be in order to have a **360 day** year using the faster rotation of the earth upon its axis:

$$\left| \frac{x}{149598 \text{ km}} \right|^3 = \left| \frac{360}{371.04799} \right|^2 \quad \text{----> } x = \mathbf{146,614 \text{ km}}$$

This is **1.995%** less than the earth's present mean distance from the sun. or **0.2995%** less than its present closest approach to the sun {perihelion}.

This means that the earth would receive slightly more solar heating than it would at the present distance from the sun. It also means there would be a greater evaporation of moisture from the surface of the earth into the earth's atmosphere. In *The Genesis Flood*, by J.C. Whitcomb, Jr. and H.M. Morris, it is proposed that at one time, namely before the Flood, the earth was enveloped by a vapor barrier which was largely dissipated at the time of the Flood. The increase in the earth's mass at the crust caused by the increased water on the surface of the earth may have caused the earth's rotation to slow down due to the laws of **conservation of angular** momentum. We also believe that the earth's radius increased slightly at the time of the flood although we can't **prove** this Biblically. As the earth's **surface** is cooling down [contrary to popular ideas] it is causing the earth's crust to **contract** causing geological plates to **compress** giving more earth quakes. **These calculations support these theories.**

Based on the above calculations we can conclude that the original year **could** have in fact consisted of **12 - 30 day lunar months totaling 360 days.**

With the dissipation of the earth's vapor barrier the earth's rotation was slowed down due to **conservation of angular momentum** and **instant climatic changes occurred freezing the polar caps and creating a mass of ice over a large portion of the earth.** {This mass of ice covered a large portion of North America.} See the section entitled: When Was The Ice Age?

Scriptural references: Earth's rotation stopped-- Josh. 10:12-14

Earth's rotation reversed-- Is. 38:4-8; II Ki. 20:8-11

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If the earth were pulled into its present elliptical orbit by a passing mass in the solar system, the cool down, however slight, may have precipitated the rain during the Great Flood. The destruction of the

planet **Ceres** {now the Ceres Asteroid Belt} may have been destroyed by that mass. See “**Musical Planets**” by Dr. Larry Mitcham at www.TheWordNotes.com

Our own calendar for the five months from February 1 to June 30 totals 150 days on a normal year – but not on a leap year! We also know that according to the law of Moses given by the Lord, that the Jews were

to mark off the months by the new moon and that there were **12 months** in a year. The thought occurred to me that perhaps the earth originally had exactly 12 lunar months in a year, but that this was changed either at the time of the Flood or some other early historical event. The following calculations imply that this hypothesis has **mathematical** support.