

CYCLES vs Mean Year/Mean Lunation Values & Tithi - count

YEARS	NO. of Days	Weeks	Mean Year	Mean Value (days)	LUNATION	Mean Lunation	Mean Value	TITHI's
1803	658531.6680 days	94076W	658532/1803	365.24237382141 days (365d 5h 49m 1s.09817)	22299.984	658532/22300	29.58295964 days (29d 12h 44 2s.368)	657849.5
3473	1268486.1247 days	181212W 2d	1268486/3473	365.24215375755831days (365d 5h 48m 42s.08465)	42954.989	1268486/42955	29.5305785124 days (29d 12h 44m1s.98)	1267172
YEAR =365.242189669781 days; Weeks/Yr =52.1774556671116 Lunation =29.53058881 days; Tithis'/YEAR = 364.863859118511748361 Ratio YEAR/Lunation =12.368266410797008419013640385317 TITHI =1.001036908813559322034 See also: http://www.brijvij.com/bb_896-yrs-159lwk.pdf								
128	46751.000277732	6678.7143	46751/128	365.2421875 days	1583.138101	46751/1583	29.53316487681617	46702.6
399	145731.633678243	20818.8048	145731/399	365.2406015037593985	4934.9168	145732/4935	29.53029381965552	145581
400	146096.8758679124	20870.9823	146097/400	365.2425	4947.30656	146097/4947	29.53244390539721	145946
½ *834	152305.9930922987	21757.999	152306/417	365.242206235011990407	5157.56709	152306½ /5157	29.53383750242389	152148
½ *896	163628.5009720619	23375.5001	163628½ /448	365.2421875 (??)	5540.98335	163628½ /5541	29.53049990976358	163459
				365.241910631741140216			29.530584278062	
649	237042.1811	33863.143	237042/649	365d5h48m21s.0786	8026.99877	237042/8027	29d12h44m2s.482	236796½
834	304611.9861845974	43515.998	304612/834	365.242206235011990407	10315.13418	304612/10315	29.53097430925836	304296
896	327257.0019441237	46751.0003	327257/896	365.2421875	11081.9667	327257/11082	29.53049990976358	326918
1730	631868.988128721	90266.9983	631869/1730	365.2421965317919075	21397.10089	631869/21397	29.53049990976358	631214½
3150	1150512.89745981	164359	1150513/3150	365.242222222222...2	38960.0392	1150513/38960	29.53062114989733	1153321
15570	5686820.89315849	812402.985	5686821/15570	365.2421965317919075	192573.908	5686821/192574	29.530621149897	5680930
			136466170/		4621180.	136466170/		
373632	136466169.8106996	19495167	373632	365.242190176430284344	1155989	4621180	29.5305895896719	136324813
25984	9490453.056	1355779	9490453/25984	365.2421875 days	321377.0325	9490453/321377	29.530591797173	9480622
25982	9489722.572	1355674.57	9489723/25982	365.24216765453 days	321352.2978	9489722/321352	29.53061440404142	9479893

896-years = [(13*33)+19] + [19+(13*33)]-years. I consider, the cycle, 'lunisolar' needing ONLY ONE 'tithi' to completing 11082nd lunation; also increasing Mean Lunation = (327257+1) days/11082 = 29.530590146183 days i.e. 29d 12h 44m 2s.9886, which is the current value. [Note: 29.53058881 days = 29d 12h 44m 2s.8732]. Both (26880-yr & 25984-yr cycles) have a mean year of exactly 365.2421875 days, which can be obtained from a 128-year cycle with 31 leap days or an 896-year cycle with 159 leap weeks. **[896-yrs = (15*59)+11; 834-yrs = (14*59)+8; 1730-yrs = (29*59)+19; 373632-years = [4x(1583*59)+11]** 1730-years/21397.10089 lunation; 9*1730 = 15570-years = (30*399)+(9*400)-years/192573.908 lunation NEED ONLY 27Tithi from 192574th lunation to complete itself. Karl and list people may recall & appreciate my posts during 2009 May thro 2010 February – especially around 2010 January 04 thro 14 worked for comparisons of my 1730-years vs 1803-year cycles to be linked for 'software development – Archetype Calendar; I linked built up of Harappa vs Hebrew calendars. Please see: http://www.brijvij.com/bb_re-9x1730.pdf. I claim to have developed the DIVIDE six (6) plan like the Leap Day (Feb 29) Rule to insert a Leap Week *plus a few Keplers' Leap Weeks, as per cycle plan* as: http://www.brijvij.com/bb_harappaTithi-Cycles.pdf.

The format has 4 equal QUARTERS, each of 91-days (13 weeks) with A World Peace Day of "Year XXXX" between last day - December 30th (Sunday) and before start of next year January 01 (Monday). July 31 is REMOVED and shifted as February 29th (all years). **Leap Sunday** is placed between June 30th (Sunday) and July 01st (Monday), like the Leap Day Rule but modified from div.4/skip 100th /count 400th -years **to DIVIDE 4/skip 128th-years**, to better Mean Year value = 365.2421875 days. This can also be achieved as suggested above, using 896-years/159 Leap Weeks (11082 lunation = 326918 tithi, of duration **1.00103690881356 day**). This 'tithi' approximates 966/965 day and 19-years – close to (5*47) = 235 lunar months. This has reference to my Home Page: <http://www.brijvij.com/>. I place the format and Rules, which may or may not need modifying: http://www.brijvij.com/bb_div-6_yr_st-n-drift.pdf. My Profile is based on my 40-year contributions, since 1970-71: http://www.brijvij.com/bbv_vip-brief.pdf. **Brij Bhushan Vij, Author**

M/T ratio and Fixing Tithi RE: Solar Years of Vj-Tithis (of 2/59 Lunar Month)

From:  **Brij Bhushan Vij** (metricvij@hotmail.com)

Sent: Fri 11/13/09 7:16 PM

To: calendar listserv (calndr-l@listserv.ecu.edu)

Victor, Karl CC, sirs:

Karl's study of ratio M/T may reveal interesting results, since most values may be out side the *18 to 19 range*. The important factor shall depend on the value for 'TITHI' which shall give different values for various Tithi values used!

My suggestion therefore is to fix THIS at 29 1/2 Tithi per lunation:

(a) 966 Solar days = 965 'tithi or phases' or Ratio, $966/965 = 1.00103626943$ (i.e. ONE lunation = $29.53058881/1.00103626943 = 29.5000188423$ Tithi). Thus, it can safely be fixed at 29 1/2 Tithi per lunar month

This, however, remain 2L/59th (about 966/965 or 138 Weeks/965th day).

lunar year, thus is 354 Tithi ($\times 1.00103626943 = 354.36683937822$ days). This would have a slight deviation of Mean Lunation = 29.530569948185 days i.e. about 1.5 second too short. THIS need arises, to my mind, so as to remove confusion about various tithi values, AND FIXES lunar Year at 354 Tithi! {=354.36706572 days}.

Regards,

Brij Bhushan Vij

(MJD 2455149)/1361+D-325W46-05 (G. Friday, 2009 November 13H19:28 (decimal) EST

[One Lunation/29 1/2 = 1.001036908813559322 day (1d 0h 1m 29s.5889) ; and Lunar Year = 12*29 1/2 = 354 Tithi = 354*1.001036908813559322 = 354.36706572 days].