

COUNTWISE DISTRIBUTION: Brij Saros 33*27*9 =8019-years Years, Leap days (div.4/skip128th) & Leap Weeks [div.6 +87 KLWks]

“The use of 19-year Metonic cycle of 5*47=235 lunation, using ‘V-Tithi of ratio interval 138W/965’ in 6932 ½ tithi, make for lunar & solar alignments. 33-year Solar Cycle, 27-year Lunar Cycle & 19-year Metonic cycle make up the 16929 year ‘saros’, but a smaller cycle of 33 (solar cycle)*27 (lunar cycle)*9 (cycle of indiction) =8019 years make for reasonably accurate combination. However, 33*15*19 i.e. 9405 years are indicative of a 9405-Year Saros, ahargana or ‘heap of days’ for Sun-Earth-Moon alignments. Among these ‘Saros cycles’ 33*27*9 i.e. 8019-year is short, to qualify”.

This distribution is based on my New SAROS of 33 x 27 x 9 Cycles =2673*3 = 8019-years.

8019-years =2928877.118961973839 days (99181.12834818121 lunation) =7*[52+1/6+87/8019] =418411 Weeks. This give me a Mean Year value =7[(52+1/6)+87/8019] = 365.24261129817 days. BUT can be worked along 128-year/ 896-year cycles to aimed Mean Year value: 7*(52+1/6+477/2688) =365.2421875 days. This has: Lunation per Year ‘Ratio’ =99181/8019 [99181.12432/8019 =12.3682659084674 (Actual: 12.36826641079701). Additional Keplers’ Leap Weeks (count from Y2049th year): [2049+8019 =10068+6 = 10074 to begin NEXT cycle].

Era of Creation is linked as (BC 4712+24 =BC 4736) & Kali Era as: BC 3102+30 =BC 3072.

896-years/128-years separation from ‘BC/AD : YEAR ZERO CE’

-4736	-4688	-4480	-3584	-3072	-2688	-1792	-0896	-0768	-0640
-0512	-0384	-0256	-0128	BC/AD	0128	0256	0384	0512	0640
0768	0896	1024	1152	1280	1920	2048	2176	2304	2432
2560	2688	2816	2944	3840	4736	5632	6528	7424	8320

KEPLERS’ ADDITIONAL LEAP WEEKS: 8019-Years/1423 Leap Weeks Cycle

YEARS AD		8019 - Year Cycle	Years during which (Additional) Keplers’ LEAP YEARS i.e. *(53rd Week) shall also fall									
FROM	TO	# I thro X	1	2	3	4	5	6*	7	8	9	10
-4736	BC/AD	I	-4736	****	-3072	****	-2176	****	-1276	-0547	****	-0091
BC/AD	0910	II	BC/AD	0091	0182	0273	0364	0455	0547	0638	0729	0820
0911	1822	III	0911	1003	1094	1185	1276	1367	1459	1550	1641	1732
1823	2734	IV	1823	1915	2006 th	2097	2188	2279	2371	2462	2553	2644
2735	3646	V	2735	2827	2918	3009	3100	3191	3238	3374	3465	3556
3647	4558	VI	3647	3739	3830	3921	4012	4103	4195	4286	4377	4468
4559	5470	VII	4559	4651	4742	4833	4924	5015	5107	5198	5289	5380
5471	6382	VIII	5471	5563	5654	5745	5836	5927	6019	6110	6201	6292
6383	7294	IX	6383	6475	6566	6657	6748	6839	6931	7022	7113	7204
7295	8206	X	7295	7387	7478	7569	7660	7751	7843	7934	8025	8116

ADDITIONAL Leap Weeks ‘(other than those divisible by six (6))’ are spaced 91-years apart, UNLESS that year happen to be naturally divisible by six, when the ALWk is shifted to 92nd YEAR from prior such adjustment.

Based on Works of: © BRIJ BHUSHAN VIJ

[Year 2007th can form the first year in continuation of Gregorian CE, if Year 2006 is considered that had a Leap Week, in fact a Keplers’ Leap Week . Next KLW falls in year 2097th].

YEAR 0000+ (i.e. AD 1 CE)

0001 0002 0003 Leap 0005 LWk 0007 Leap 0009 0010 0011 LWk 0013 0014 0015 Leap 0017 LWk 0019 Leap 0021 0022 0023 LWk 0025 0026 0027 Leap 0029 LWk 0031 Leap 0033 0034 0035 LWk 0037 0038 0039 Leap

0041 LWk 0043 Leap 0045 0046 0047 LWk 0049 0050 0051 Leap 0053 LWk 0055 Leap 0057 0058 0059LWk
0061 0062 0063 Leap 0065 LWk 0067 Leap 0069 0070 0071 LWk 0073 0074 0075 Leap 0077 LWk 0079 Leap
0081 0082 0083 LWk 0085 0086 0087 Leap 0089 LWk 0091 Leap 0093 0094 0095 LWk 0097 0098 0099 Leap
0101 LWk 0103 Leap 0105 0106 0107 LWk 0109 0110 0111 Leap 0013 LWk 0015 Leap 0117 0118 0119 LWk
0121 0122 0123 Leap 0125 LWk 0127 No Leap

0129 0130 0131 LWk 0133 0134 0135 Leap 0137 LWk 0139 Leap
0141 0142 0143 LWk 0145 0146 0147 Leap 0149 LWk 0151 Leap 0153 0154 0155 LWk 0157 0158 0159 Leap
0161 LWk 0163 Leap 0165 0166 0167 LWk 0169 0170 0171 Leap 0173 LWk 0175 Leap 0177 0178 0179 LWk
0181 0182 0183 Leap 0185 LWk 0187 Leap 0189 0190 0191 LWk 0193 0194 0195 Leap 0197 LWk 0199 Leap
0201 0202 0203 LWk 0205 0206 0207 Leap 0209 LWk 0211 Leap 0213 0214 0215 LWk 0217 0218 0219 Leap
0221 LWk 0223 Leap 0225 0226 0227 LWk 0029 0230 0231 Leap 0233 LWk 0235 Leap 0237 0238 0239 LWk
0241 0242 0243 Leap 0245 LWk 0247 Leap 0249 0250 0251 LWk 0253 0254 0255 No Leap

0257 LWk 0259 Leap
0261 0262 0263 LWk 0265 0266 0267 Leap 0269 LWk 0271 Leap 0273 0274 0275 LWk 0277 0278 0279 Leap
0281 LWk 0283 Leap 0285 0286 0287 LWk 0289 0290 0291 Leap 0293 LWk 0295 Leap 0297 0298 0299 LWk
0301 0302 0303 Leap 0305 LWk 0307 Leap 0309 0310 0311 LWk 0313 0314 0315 Leap 0317 LWk 0319 Leap
0321 0322 0323 LWk 0325 0326 0327 Leap 0329 LWk 0331 Leap 0333 0334 0335 LWk 0337 0338 0339 Leap
0341 LWk 0343 Leap 0345 0346 0347 LWk 0349 0350 0351 Leap 0353 LWk 0355 Leap 0357 0358 0359 LWk
0361 0362 0363 0364 0365 LWk 0367 Leap 0369 0370 0371 LWk 0373 0374 0375 Leap 0377 LWk 0379 Leap
0381 0382 0383 LWk (No Leap)

0385 0386 0387 Leap 0389 LWk 0391 Leap 0393 0394 0395 LWk 0397 0398 0399 Leap
0401 LWk 0403 Leap 0405 0406 0407 LWk 0409 0410 0411 Leap 0413 LWk 0415 Leap 0417 0418 0419 LWk
0421 0422 0423 Leap 0425 LWk 0427 Leap 0429 0430 0431 LWk 0433 0434 0435 Leap 0437 LWk 0439 Leap
0441 0442 0443 LWk 0445 0446 0447 Leap 0449 LWk 0451 Leap 0453 0454 0455 LWk 0457 0458 0459 Leap
0461LWk 0463 Leap 0465 0466 0467 LWk 0469 0470 0471 Leap 0473 LWk 0475 Leap 0477 0478 0479 LWk
0481 0482 0483 Leap 0485 LWk 0487 Leap 0489 0490 0491 LWk 0493 0494 0495 Leap 0497 LWk 0499 Leap
0501 0502 0503 LWk 0505 0506 0507 Leap 0509 LWk 0511 No Leap

0513 0514 0515 LWk 0517 0518 0519 Leap
0521 LWk 0523 Leap 0525 0526 0527 LWk 0529 0530 0531 Leap 0533 LWk 0535 Leap 0537 0538 0539 LWk
0541 0542 0543 Leap 0545 LWk 0547 Leap 0549 0550 0551 LWk 0553 0554 0555 Leap 0557 LWk 0559 Leap
0561 0562 0563 LWk 0565 0566 0567 Leap 0569 LWk 0571 Leap 0573 0574 0575 LWk 0577 0578 0579 Leap
0581 LWk 0583 Leap 0585 0586 0587 LWk 0589 0590 0591 Leap 0593 LWk 0595 Leap 0597 0598 0599 LWk
0601 0602 0603 Leap 0605 LWk 0607 Leap 0609 0610 0611 LWk 0613 0614 0615 Leap 0617 LWk 0619 Leap
0621 0622 0623 LWk 0625 0626 0627 Leap 0629 LWk 0631 Leap 0633 0634 0635 LWk 0637 0638 0639 No Leap

0641 LWk 0643 Leap 0645 0646 0647 LWk 0649 0650 0651 Leap 0653 LWk 0655 Leap 0657 0658 0659 LWk
0661 0662 0663 Leap 0665 LWk 0667 Leap 0669 0670 0671 LWk 0673 0674 0675 Leap 0677 LWk 0679 Leap
0681 0682 0683 LWk 0685 0686 0687 Leap 0689 LWk 0691 Leap 0693 0694 0695 LWk 0697 0698 0699 Leap
0701 LWk 0703 Leap 0705 0706 0707 LWk 0709 0710 0711 Leap 0713 LWk 0715 Leap 0717 0718 0719 LWk
0721 0722 0723 Leap 0725 LWk 0727 Leap 0729 0730 0731 LWk 0733 0734 0735 Leap 0737 LWk 0739 Leap
0741 0742 0743 LWk 0745 0746 0747 Leap 0749 LWk 0751 Leap 0753 0754 0755 LWk 0757 0758 0759 Leap
0761 LWk 0763 Leap 0765 0766 0767 LWk (No Leap)

0769 0770 0771 Leap 0773 LWk 0775 Leap 0777 0778 0779 LWk
0781 0782 0783 Leap 0785 LWk 0787 Leap 0789 0790 0791 LWk 0793 0794 0795 Leap 0797 LWk 0799 0820
0801 0802 0803 LWk 0805 0806 0807 Leap 0809 LWk 0811 Leap 0813 0814 0815 LWk 0817 0818 0819 Leap
0821 LWk 0823 Leap 0825 0826 0827 LWk 0829 0830 0831 Leap 0833 LWk 0835 Leap 0837 0838 0839 LWk
0841 0842 0843 Leap 0845 LWk 0847 Leap 0849 0850 0851 LWk 0853 0854 0855 Leap 0857 LWk 0859 Leap
0861 0862 0863 LWk 0865 0866 0867 Leap 0869 LWk 0871 Leap 0873 0874 0875 LWk 0877 0878 0879 Leap
0881 LWk 0883 Leap 0885 0886 0887 LWk 0889 0890 0891 Leap 0893 LWk 0895 No Leap

This distribution is based on my New SAROS of $2673 \times 3 = 8019$ -year of 33 x 27 x 9 Cycles. This give
me a Mean Year value $= 7[(52+1/6)+87/8019] = 365.24261129815$ days.

(Next Cycle)

0897 0898 0899 0900

0901 0902 0903 0904 0905 0906 0907 0908 0909 0910 0911 **0912** 0913 0914 0915 0916 0917 0918 0919 0920

Other Saros Cycles:

- (a) **8910-year:** 33 (solar cycle)*27 (lunar cycle)*10 (metric cycle) = 3254307.90995774871 days = 464901 Weeks = (110201.253720201345 lunation). This gives Mean Year = [7*(52+1/6+48/4455)] = 365.2420875420875421 days; & Lunation/year = 12.368237934904602 is NOT acceptable].
- (b) **9405-year:** 33 (solar cycle)*19 (Metonic cycle)*15 (Indiction cycle) = 3435102.793844290305 days = 490729 (9405*52+1567+102) Weeks = (116323.545593545864181 lunation). This gives Mean Year = [7*(52+1/6+102/9405)] = 365.2425837320574163 days; & Lunation/year = 12.36820839978735 is NOT acceptable].
- (c) **16929-year:** 33 (solar cycle)*27 (lunar Cycle)*19 (Metonic cycle) = 6183185.028919722549 days = 883312 (16929*52+2821+183) Weeks = (209382.38206838255553 lunation). This gives Mean Year = [7*(52+1/6+183/16929)] = 365.2423356370725 days; & Lunation/year = 12.3682438419281 is NOT acceptable]

NOTE: I find my choice on comparisons 8019-year SAROS give acceptable Lunation/year 'ratio' 12.36825040529.

Ratio Lunations per Year (for some other cycles worked)

Lunation per Year (for approximation) = 235/19 = 12.368421052631578947.....

Year2000 = 365.242189669781 days; and Lunation = 29.53058881 days

Actual, Ratio Y₂₀₀₀: Ln = **12.36826641079701** (Actual, 12.368266410797008419013640385317). This can be expressed as a continuous fraction:

$$= 12 + \frac{1}{2 + \frac{1}{1 + \frac{1}{2 + \frac{1}{1 + \frac{1}{1 + \frac{1}{17 + \frac{1}{2 + \frac{1}{1 + \frac{1}{179 + \frac{1}{1 + \frac{1}{10 + \frac{1}{33}}}}}}}}}}}}}}}$$

Some Comparison:

Cycles	Lunations	Ratio Ln/yr	Mean Year (days)	[5*47=235 Ln distribution]
19	235	12.3684210526	365.263157894737	[5*47] lunation
33	408	12.3636363636364	365.2424242424242	[2x(4*47+16] lunation
90	1113	12.3666666666667	365.1949482836667	[4*235+3*47+32] lunation
96	1187	12.36458333333333	365.1334262236449	[5*235+12] lunation
228	2820	12.36842105263	365.2467563341639	[12*235] lunation
128	1583	12.3671875	365.210328798671875	[6*235+3*47+32] lunation
231	2857	12.3679653679654	365.2332996977066	[12*235+37] lunation
293	3624	12.368600682594	365.25206091276874	[15*235+2*47+5] lunation
353	4366	12.368271954674221	365.2423533837394	[18*235+2*47+42] lunation
834	10315	12.36810551558753	365.2374383395084	[43*235+4*47+22] lunation
896	11082	12.36830357142857	365.24328704511156	[47*235+37] lunation
1040	12863	12.368269230769231	365.2422729452212	[54*235+3*47+32] lunation
2688	33246	12.36830357142857	365.24328704511156	[141*235+2*47+17] lunation
8019	99181	12.3682659084674	365.24261129817	[211*19+1+211*19] lunation
8910	110201	12.368237934904602	365.2420875420875	[(234*19)+9+9(234*19)] lunation
9405	116323	12.36820839978735	365.24258373205742	[495*19] lunation
16929	209382	12.3682438419281	365.2423356370725	[891*19] lunation