

Draft proposals for calendar reform

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<1r>

Annis

$365 \frac{1}{4}$ d. – 11'. 13". 92

$365 \frac{1}{4}$ – 11'. 31". 2

$365 \frac{1}{4}$ – 10'. 56. 64

$365 \frac{1}{4}$ – 10'. 48" Ann. Greg

10'. 48" // 10'. 56". 64 // 11'. 13'. 92 // 11'. 31". 2 in annis 5000 facit $37 \frac{1}{2}$, 38, 39, 40 dies respective.

Observationes Hipparchi

Anno

Periodi 3 Calippi	Ante Christum	Alexandriæ	Temp. appar Grenovici	Temp. med Grenovici	Locus ☉ ex calculo si annus $365 \frac{1}{4}$ dies – 11'
17	162	Sept 27 sub occas. ☉	27. ^d 3. ^h 44'		
20	159	Sept 27 sub ort ☉	26. 15. 44		
21	158	Sept 27 in ips. merid.	26. 21. 44		
32	147	Sept 26 media nocte	26. 9. 44		
33	146	Sept 27 mane	26. 15. 44		
32	146	Mar 24 mane et iterum hora diei 5 ^{ta}	23. 15. 44 & 23. 20. 44		
36	143	Sept. 26 vesp.	26. 3. 44		
43	135	Mart 23 circa med. noct	23. 9. 44		
49	128	Mart 23 sub occas. ☉	23. 3. 44		
	162			26. 22. 59	

		Sept 27. $13\frac{1}{4}$		
	158	Sept 27. $12\frac{1}{2}$	26. 22. 14	
	146	Sept 27. $10\frac{1}{4}$	26. 19. 59	
	159	Sept. 27. $1\frac{3}{4}$	26. 11. 29	
	147	Sept. 26. $23\frac{1}{2}$	26. 9. 14	
	143	Sept. 26 $22\frac{3}{4}$	26 8. 29	
17	162.	Sept. 27. 00.44	27. 06. 0	– 5. 16
20	159	Sept. 26. 18.11	26. 18. 0	+ 0. 11
21	158	Sept. 27. 00.00	27. 00. 0	+ 0. 00
32	147	Sept. 26. 15.59	26. 12. 0	+ 3. 59
33	146	Sept. 26. 21.48	26. 18. 0	+ 3. 48
36	143	Sept. 26. 15.15	26. 06. 0	+ 9. 15
				(6) + 12. 29
32	146	Mar 23. 20. 1	23. 20. 30.	(2. 5 – 0. 29
43	135	Mar 23. 12. 0	23. 12. 0	– 0. 0
49	128	Mar 23. 4.43	23. 06. 0	– 1. 17
50.				3) – 1. 46 ($35\frac{1}{3}$

– 7.' 14'' æq. t.

Diff merid 2^h 15'

Temp appar mediocre cor Alexand	Temp appar Alexand	Temp. appar. Grenovici
	26. 22. 39	26. 20. 24
	26. 16. 6	26. 13. 51
	26. 21. 55	26. 19.40
	26. 13. 54	26. 11. 39
	26. 19. 43	26. 17. 28
	26. 13. 10	26. 9. 55
	23. 20. 36	23 18. 21
	23. 12. 35	23. 10. 20
	23. 5. 18	23. 3. 3

And at the end of every 500 years the larger period of lunar months which shall or should be then running shall contain only 45 lunar months & the three lesser periods of which that larger period consists shall each of them contain only 15 lunar months, the two last months of the two periods containing 17 months being omitted.

The advantage of this Calendar above the Gregorian in respect of the solar y is that in the Gregorian the Solar year errs a day in 5000 years & by that error recedes from the state it had in the age of Christ, in this it errs a day in 10000 years & by that error approaches the state it had in the age of Christ so that in 30000 years the equinox will fall on the 24th of March as it did in the age of Christ & in 110000 years the beginning of January will fall on the winter solstice as it ought to do. Also the reckoning by 500, 1000, 1500 &c runs in rounder & fewer numbers then that by 400, 800, 1200, 1600. And tho the Kalendars differ yet they will agree in stile for 700 years to come.

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The advantage in respect of the Lunar year is much greater. For in the Gregorian Kalendar the full Moon on which Easter depends is not to be found with out the help of three or four Tables, & when you have that full moon there is no rule in that Kalendar for finding the other full moons & the new moons throughout the year. But in this Kalendar all the new & full Moons are found perpetually without any Tables at all or any other reckoning then the continuall addition of 30 & 29 days which is so very easy a work that any Novice may perform it. And besides this rule is exacter then the Gregorian for that errs thre hours in 39 years this errs but 3 hours in five hundred years.

[Editorial Note 1]

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The advantage of this Kalendar above the Gregorian in respect of the solar year is that the solar year in the Gregorian errs a day in 5000 years & by that error recedes from the state it had in the age of Christ, in this it errs a day in 10000 years & by that error approaches the state it had in the age of Christ so that in 30000 years the equinox will fall on the 24th of March as it did in the age of Christ & in 110000 years the beginning of January will fall on the winter solstice as it ought to do. Also the reckoning by 500, 1000, 1500 &c runs in rounder & fewer numbers then that by 400, 800, 1200, 1600 &c. And tho the Kalendars differ yet they will agree in stile for 700 years to come.

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[Editorial Note 1] Folio 2r is blank. A series of calculations on f. 2v is here omitted from the transcription.
