



Astrodienst Ephemeris Tables for the year 1587

tropical geocentric zodiac

contains Sun, Moon, Mercury, Venus, Mars, Jupiter, Saturn, Uranus, Neptune, Pluto, True Node, Moon's Node, Lilith, Chiron

Programming
Dieter Koch and Alois Treindl
based on Swiss Ephemeris
Code D5EPX

ASTRODIENST EPHEMERIS for the year 1587
geocentric

JANUARY 1587 GC

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
T 1	6 40 0	10°38'25"	26°19'19"	19°34'09"	27°28'28"	28°10'19"	25°42'10"	6°10'25"	28°21'19"	8°7'12"	12°55'12"	18°26'18"	26°4'21"	T 1		
F 2	6 43 56	11°9'35"	10°21'19"	21°19'28"	28°26'10"	10°11'25"	25°42'10"	6°10'25"	28°21'19"	8°8'12"	12°56'12"	12°52'18°33'	26°3'26°3'	F 2		
S 3	6 47 53	12°10'45"	24°26'22"	22°58'29"	29°3'28°45'	10°2'25°43'	6°12'28°18'	8°8'12°56'	12°49'18°40'	26°3'26°3'	S 3					
S 4	6 51 50	13°11'55"	8°34'24"	24°37'29°59'	29°4'29°54'	9°54'25°43'	6°15'28°16'	8°8'12°54'	12°46'18°46'	26°3'26°3'	S 4					
M 5	6 55 46	14°13'05"	22°43'26"	16°01'49°54'	29°22'29°46'	9°46'25°44'	6°17'28°14'	8°8'12°51'	12°42'18°53'	26°3'26°3'	M 5					
T 6	6 59 43	15°14'16"	6°47'50"	27°54'14°49'	29°41'14°38'	25°45'6°20'	28°13'8°9'	12°44'12°39'	18°59'26°D 3'	T 6						
W 7	7 3 39	16°15'26"	20°54'29°33'	2°43'29°58'	9°30'25°46'	6°22'28°11'	8°9'12°34'	12°36'19°6'	26°3'26°3'	W 7						
T 8	7 7 36	17°16'36"	4°34'48"	18°10'33°37'	0°15'9°22'	25°47'6°25'	28°9'8°9'	12°22'12°33'	19°13'26°3'	T 8						
F 9	7 11 32	18°17'45"	18°29'47°24'	4°29'0°32'	9°14'25°48'	6°27'28°8'	8°10'12°9'	12°30'19°19'	26°3'26°3'	F 9						
S 10	7 15 29	19°18'54"	18°53'42°23'	5°22'0°49'	9°6'25°50'	6°30'28°6'	8°10'11°56'	12°27'19°26'	26°3'26°3'	S 10						
S 11	7 19 25	20°20'03"	14°58'5°58'	6°13'1°5'	8°59'25°51'	6°32'28°4'	8°11'11°44'	12°23'19°33'	26°4'21"	S 11						
M 12	7 23 22	21°21'11"	27°43'7°31'	7°3'1°20'	8°51'25°53'	6°35'28°3'	8°11'11°35'	12°20'19°39'	26°4'21"	M 12						
T 13	7 27 19	22°22'18"	10°9'9°2'	7°53'1°35'	8°43'25°54'	6°38'28°1'	8°12'11°28'	12°17'19°46'	26°4'21"	T 13						
W 14	7 31 15	23°23'24"	22°19'10°30'	8°42'1°49'	8°35'25°56'	6°40'27°59'	8°12'11°24'	12°14'19°53'	26°5'26°5'	W 14						
T 15	7 35 12	24°24'29"	4°16'11°56'	9°30'2°3'	8°28'25°58'	6°43'27°58'	8°13'11°23'	12°11'19°59'	26°5'26°5'	T 15						
F 16	7 39 8	25°25'33"	16°6'13°19'	10°17'2°17'	8°20'26°0'	6°46'27°56'	8°13'11°D23'	12°7'20°6'	26°6'26°6'	F 16						
S 17	7 43 5	26°26'36"	27°53'14°37'	11°3'2°30'	8°13'26°2'	6°49'27°54'	8°14'11°R23'	12°4'20°13'	26°7'26°7'	S 17						
S 18	7 47 1	27°27'39"	9°44'15°51'	11°48'2°42'	8°6'26°4'	6°51'27°53'	8°14'11°22'	12°1'20°19'	26°7'26°7'	S 18						
M 19	7 50 58	28°28'40"	21°44'16°59'	12°32'2°54'	7°59'26°7'	6°54'27°51'	8°15'11°19'	11°58'20°26'	26°8'26°8'	M 19						
T 20	7 54 54	29°29'40"	3°48'18°1'	13°15'3°5'	7°52'26°9'	6°57'27°49'	8°16'11°14'	11°55'20°33'	26°9'26°9'	T 20						
W 21	7 58 51	08°30'39"	16°29'18°55'	13°57'3°16'	7°45'26°12'	7°0'27°47'	8°16'11°7'	11°52'20°39'	26°10'26°10'	W 21						
T 22	8 2 48	1°31'37"	29°22'19°42'	14°37'3°26'	7°38'26°14'	7°3'27°46'	8°17'10°57'	11°48'20°46'	26°11'26°11'	T 22						
F 23	8 6 44	2°32'34"	12°36'20°20'	15°17'3°36'	7°31'26°17'	7°6'27°44'	8°18'10°45'	11°45'20°52'	26°12'26°12'	F 23						
S 24	8 10 41	3°33'30"	26°10'20°49'	15°55'3°45'	7°24'26°20'	7°9'27°42'	8°18'10°34'	11°42'20°59'	26°13'26°13'	S 24						
S 25	8 14 37	4°34'25"	10°10'21°7'	16°31'3°53'	7°18'26°23'	7°12'27°41'	8°19'10°23'	11°39'21°6'	26°14'26°14'	S 25						
M 26	8 18 34	5°35'19"	24°10'21°R15'	17°7'4°1'	7°12'26°26'	7°15'27°39'	8°20'10°13'	11°36'21°12'	26°15'26°15'	M 26						
T 27	8 22 30	6°36'11"	8°25'21°11'	17°41'4°8'	7°5'26°29'	7°18'27°37'	8°20'10°7'	11°32'21°19'	26°17'26°17'	T 27						
W 28	8 26 27	7°37'03"	22°44'20°56'	18°13'4°15'	6°59'26°32'	7°21'27°36'	8°21'10°3'	11°29'21°26'	26°18'26°18'	W 28						
T 29	8 30 23	8°37'54"	7°21°20°31'	18°44'4°21'	6°53'26°35'	7°24'27°34'	8°22'10°D 2'	11°26'21°32'	26°19'26°19'	T 29						
F 30	8 34 20	9°38'44"	21°17'19°54'	19°13'4°26'	6°48'26°39'	7°27'27°32'	8°23'10°2'	11°23'21°39'	26°21'26°21'	F 30						
S 31	8 38 17	10°39'33"	5°25'19°28'	19°41'4°41'	4°31'6°42'	26°42'26°42'	7°30'27°31'	8°24'10°R 3'	11°20'21°46'	26°22'26°22'	S 31					

Day	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂
	decl	decl lat	decl lat	decl lat	decl lat	decl lat	decl lat	decl lat	decl lat	decl lat	decl lat	decl lat	decl lat	decl lat	decl lat	decl lat	decl lat
T 1	23s 6	0n 8	1s 27	24s 9	2s 8	13s 14	0s 48	3n 12	2n 39	23n 12	0n 7	7n 35	2s 32	9s 59	0s 45	20n 14	0s 18
F 2	23 1	4s 19	0 14	23 53	2 7	12 49	0 42	3 5	2 41	23 13	0 7	7 35	2 32	9 58	0 45	20 14	0 18
S 3	22 56	8 33	1n 0	23 36	2 6	12 23	0 36	2 58	2 42	23 14	0 7	7 36	2 32	9 57	0 45	20 15	0 18
S 4	22 50	12 19	2 11	23 17	2 4	11 57	0 29	2 52	2 43	23 14	0 7	7 36	2 32	9 56	0 45	20 15	0 18
M 5	22 44	15 22	3 14	22 56	2 2	11 32	0 23	2 46	2 44	23 15	0 7	7 37	2 31	9 55	0 45	20 15	0 18
T 6	22 37	17 29	4 4	22 34	1 59	11 6	0 16	2 40	2 45	23 16	0 8	7 38	2 31	9 54	0 45	20 16	0 18
W 7	22 30	18 32	4 39	22 10	1 56	10 40	0 9	2 34	2 47	23 17	0 8	7 38	2 31	9 53	0 45	20 16	0 18
T 8	22 22	18 27	4 58	21 45	1 51	10 14	0 2	2 28	2 48	23 17	0 8	7 39	2 30	9 52	0 45	20 16	0 18
F 9	22 14	17 17	4 59	21 18	1 47	9 48	0n 6	2 22	2 49	23 18	0 8	7 40	2 30	9 51	0 45	20 17	0 18
S 10	22 6	15 11	4 43	20 50	1 41	9 22	0 13	2 17	2 51	23 19	0 8	7 40	2 30	9 50	0 45	20 17	0 18
S 11	21 57	12 22	4 12	20 21	1 35	8 55	0 21	2 12	2 52	23 19	0 8	7 41	2 29	9 49	0 45	20 17	0 18
M 12	21 47	9 1	3 29	19 50	1 28	8 29	0 29	2 7	2 53	23 20	0 8	7 42	2 29	9 48	0 45	20 18	0 18
T 13	21 38	5 21	2 38	19 19	1 20	8 3	0 37	2 2	2 54	23 21	0 9	7 43	2 29	9 47	0 45	20 18	0 18
W 14	21 28	1 32	1 39	18 47	1 11	7 37	0 45	1 58	2 56	23 21	0 9	7 44	2 29	9 46	0 45	20 19	0 18
T 15	21 17	2n 17	0 38	18 13	1 1	7 11	0 54	1 53	2 57	23 22	0 9	7 45	2 28	9 45	0 45	20 19	0 18
F 16	21 6	5 58	0 25	17 40	0 59	6 46	1 3	1 49	2 58	23 23	0 9	7 46	2 28	9 44	0 45	20 19	0 18
S 17	20 55	9 24	1 27	17 6	0 39	6 20	1 12	1 45	3 0	23 23	0 9	7 47	2 28	9 43	0 45	20 20	0 18
S 18	20 43	12 28	2 25	16 33	0 26	5 54	1 21	1 41	3 1	23 24	0 9	7 48	2 27	9 42	0 45	20 20	0 18
M 19	20 31	15 4	3 17	15 59	0 13	5 29	1 30	1 38	3 2	23 24	0 9	7 49	2 27	9 41	0 45	20 20	0 18
T 20	20 18	17 2	4 2	15 27	0n 1	5 4	1 40	1 35	3 4	23 25	0 9	7 50	2 27	9 40	0 44	20 21	0 18
W 21	20 5	18 14	4 36	14 56	0 16	4 39	1 49	1 32	3 5	23 25	0 10	7 51	2 27	9 39	0 44	20 21	0 18
T 22	19 52	18 33	4 57	14 26	0 32	4 14	1 59	1 29	3 6	23 26	0 10	7 53	2 26	9 38	0 44	20 21	0 18
F 23	19 38	17 52	5 2	13 58	0 49	3 50	2 9	1 26	3 8	23 26	0 10	7 54	2 26	9 37	0 44	20 22	0 18
S 24	19 24	16 11	4 52	13 33	1 6	3 26	2 19	1 24	3 9	23 27	0 10	7 55	2 26	9 36	0 44	20 22	0 18
S 25	19 10	13 32	4 24	13 11	1 23	3 2	2 30	1 22	3 10	23 27	0 10	7 56	2 25	9 34	0 44	20 22	0 18
M 26	18 55	10 3	3 39	12 52	1 41	2 38	2 40	1 20	3 12	23 28	0 10	7 58	2 25	9 33	0 44	20 23	0 18
T 27	18 40	5 57	2 40	12 36	1 58	2 15	2 51	1 18	3 13	23 28	0 10	7 59	2 25	9 32	0 44	20 23	0 18
W 28	18 24	1 30	1 31	12 25	2 15	1 52	3 2	1 17	3 14	23 29	0 10	8 1	2 25	9 31	0 44	20 23	0 18
T 29	18 9	3s 3	0 16	12 17	2 32	1 30	3 13	1 15	3 15	23 29	0 11	8 2	2 24	9 30	0 44	20 24	0 18
F 30	17 52	7 24	1n 0	12 14	2 47	1 8	3 25	1 15	3 17	23 30	0 11	8 4	2 24	9 29	0 44	20 24	0 18
S 31	17s 36	11s 17	2n 12	12s 15	3n 1	0s 47	3n 36	1n 14	3n 18	23n 30	0n 11	8n 5	2s 24	9s 27	0s 44	20n 24	0s 18

Julian Day Number = 2300699.5, Delta T = 108.13 sec
Ecliptic obliquity = 23°29'25", Nutation = 0°00'04", out-of-bounds declination in red
Ayanamsha: Fagan/Bradley = 18°58'35", Lahiri = 18°05'36"Greg. Calendar

ASTRODIENST EPHEMERIS for the year 1587

geocentric

FEBRUARY 1587 GC

00:00 UT

Day	Sid.t	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
S 1	8 42 13	11°40'21	19°18'27	18°R14	20°H 7	4°A35	6°R36	26°Y46	7°H34	27°R29	8°Y25	10°R 3	11°A17	21°Y52	26°Y24	S 1
M 2	8 46 10	12°41'08	3°A22	17°A13	20°31	4°38	6°B31	26°50	7°37	27°B27	8°25	10°A 1	11°13	21°59	26°25	M 2
T 3	8 50 6	13°41'55	17° 8	16° 6	20°53	4°40	6°26	26°53	7°40	27°26	8°26	9°56	11°10	22° 6	26°27	T 3
W 4	8 54 3	14°42'40	0°B46	14°56	21°14	4°42	6°21	26°57	7°43	27°24	8°27	9°50	11° 7	22°12	26°29	W 4
T 5	8 57 59	15°43'24	14°13	13°45	21°32	4°43	6°16	27° 1	7°46	27°23	8°28	9°41	11° 4	22°19	26°30	T 5
F 6	9 1 56	16°44'07	27°29	12°35	21°49	4°R43	6°12	27° 5	7°50	27°21	8°29	9°31	11° 1	22°26	26°32	F 6
S 7	9 5 52	17°44'48	10°A30	11°27	22° 3	4°43	6° 7	27°10	7°53	27°20	8°30	9°21	10°58	22°32	26°34	S 7
S 8	9 9 49	18°45'28	23°18	10°23	22°15	4°42	6° 3	27°14	7°56	27°18	8°31	9°13	10°54	22°39	26°36	S 8
M 9	9 13 46	19°46'07	5°H50	9°24	22°25	4°40	5°59	27°18	8° 0	27°16	8°32	9° 6	10°51	22°45	26°38	M 9
T 10	9 17 42	20°46'44	18° 8	8°32	22°33	4°37	5°55	27°23	8° 3	27°15	8°33	9° 1	10°48	22°52	26°40	T 10
W11	9 21 39	21°47'19	0°Y13	7°46	22°38	4°34	5°51	27°27	8° 6	27°13	8°34	8°59	10°45	22°59	26°42	W11
T 12	9 25 35	22°47'53	12° 8	7° 8	22°41	4°29	5°47	27°32	8°10	27°12	8°35	8°D58	10°42	23° 5	26°44	T 12
F 13	9 29 32	23°48'25	23° 57	6°38	22°R42	4°24	5°44	27°37	8°13	27°10	8°36	8°59	10°38	23°12	26°46	F 13
S 14	9 33 28	24°48'55	5°B44	6°15	22°40	4°19	5°41	27°41	8°16	27° 9	8°37	9° 1	10°35	23°19	26°48	S 14
S 15	9 37 25	25°49'23	17°35	6° 0	22°35	4°12	5°38	27°46	8°20	27° 7	8°38	9° 2	10°32	23°25	26°51	S 15
M16	9 41 21	26°49'49	29°34	5°52	22°28	4° 5	5°35	27°51	8°23	27° 6	8°40	9°R 2	10°29	23°32	26°53	M16
T 17	9 45 18	27°50'14	11°H46	5°D51	22°19	3°56	5°32	27°56	8°26	27° 5	8°41	9° 1	10°26	23°39	26°55	T 17
W18	9 49 15	28°50'36	24°17	5°57	22° 7	3°48	5°30	28° 1	8°30	27° 3	8°42	8°58	10°23	23°45	26°58	W18
T 19	9 53 11	29°50'57	7°B10	6° 9	21°52	3°38	5°28	28° 6	8°33	27° 2	8°43	8°54	10°19	23°52	27° 0	T 19
F 20	9 57 8	0°H51'15	20°28	6°27	21°35	3°27	5°26	28°12	8°37	27° 0	8°44	8°48	10°16	23°59	27° 3	F 20
S 21	10 1 4	1°51'32	4°Q11	6°50	21°15	3°16	5°24	28°17	8°40	26°59	8°45	8°42	10°13	24° 5	27° 5	S 21
S 22	10 5 1	2°51'47	18°18	7°19	20°54	3° 4	5°22	28°22	8°44	26°58	8°47	8°36	10°10	24°12	27° 8	S 22
M23	10 8 57	3°51'59	2°H44	7°52	20°29	2°51	5°21	28°28	8°47	26°57	8°48	8°31	10° 7	24°19	27°11	M23
T 24	10 12 54	4°52'10	17°24	8°30	20° 3	2°38	5°20	28°33	8°50	26°55	8°49	8°28	10° 4	24°25	27°13	T 24
W25	10 16 50	5°52'20	2°A10	9°12	19°35	2°24	5°19	28°39	8°54	26°54	8°50	8°D26	10° 0	24°32	27°16	W25
T 26	10 20 47	6°52'27	16°55	9°57	19° 5	2° 9	5°18	28°45	8°57	26°53	8°51	8°26	9°57	24°38	27°19	T 26
F 27	10 24 43	7°52'33	1°H33	10°46	18°33	1°53	5°17	28°50	9° 1	26°52	8°53	8°28	9°54	24°45	27°22	F 27
S 28	10 28 40	8°H52'37	15°H58	11°A39	17°H59	1°A37	5°A17	28°Y56	9°H 4	26°B50	8°Y54	8°A29	9°A51	24°Y52	27°Y25	S 28

Day	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂
	decl	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	lat
S 1	17s19	14s30	3n15	12s20	3n13	0s26	3n48	1n14	3n19	23n30	0n11	8n 7	2s24	9s26	0s44	20n25	0s18	12s11	16s54	3s59
M 2	17 2	16 51	4 6	12 28	3 24	0 6	4 0	1 14	3 21	23 31	0 11	8 8	2 23	9 25	0 44	20 25	0 18	12 10	16 54	3 58
T 3	16 45	18 11	4 42	12 40	3 32	0n14	4 11	1 14	3 22	23 31	0 11	8 10	2 23	9 24	0 44	20 25	0 18	12 9	16 54	3 57
W 4	16 27	18 27	5 2	12 54	3 38	0 33	4 23	1 14	3 23	23 31	0 11	8 11	2 23	9 23	0 44	20 26	0 18	12 9	16 54	3 54
T 5	16 9	17 41	5 5	13 11	3 42	0 51	4 36	1 15	3 24	23 32	0 11	8 13	2 22	9 21	0 44	20 26	0 18	12 8	16 53	3 51
F 6	15 51	15 57	4 51	13 30	3 43	1 9	4 48	1 16	3 26	23 32	0 11	8 15	2 22	9 20	0 44	20 26	0 18	12 8	16 53	3 47
S 7	15 33	13 26	4 22	13 50	3 42	1 26	5 0	1 17	3 27	23 32	0 12	8 17	2 22	9 19	0 44	20 27	0 18	12 7	16 53	3 43
S 8	15 14	10 18	3 41	14 10	3 39	1 42	5 12	1 19	3 28	23 33	0 12	8 18	2 22	9 18	0 44	20 27	0 18	12 6	16 52	3 39
M 9	14 55	6 46	2 49	14 31	3 33	1 57	5 25	1 21	3 29	23 33	0 12	8 20	2 21	9 16	0 44	20 27	0 18	12 6	16 52	3 37
T 10	14 36	3 1	1 50	14 51	3 26	2 12	5 37	1 23	3 30	23 33	0 12	8 22	2 21	9 15	0 44	20 28	0 18	12 5	16 52	3 35
W11	14 16	0n48	0 47	15 11	3 18	2 25	5 49	1 25	3 32	23 34	0 12	8 24	2 21	9 14	0 44	20 28	0 18	12 4	16 52	3 34
T 12	13 57	4 33	0s17	15 30	3 8	2 38	6 2	1 28	3 33	23 34	0 12	8 26	2 21	9 13	0 44	20 28	0 18	12 4	16 51	3 34
F 13	13 37	8 4	1 20	15 48	2 57	2 49	6 14	1 31	3 34	23 34	0 12	8 28	2 20	9 11	0 44	20 29	0 18	12 3	16 51	3 34
S 14	13 17	11 16	2 20	16 5	2 46	2 59	6 26	1 34	3 35	23 34	0 12	8 30	2 20	9 10	0 44	20 29	0 18	12 2	16 51	3 35
S 15	12 56	14 0	3 14	16 20	2 34	3 8	6 38	1 38	3 36	23 35	0 12	8 31	2 20	9 9	0 44	20 29	0 18	12 2	16 51	3 35
M16	12 36	16 11	4 0	16 34	2 21	3 16	6 49	1 41	3 37	23 35	0 12	8 33	2 20	9 7	0 44	20 29	0 18	12 1	16 50	3 35
T 17	12 15	17 40	4 37	16 47	2 8	3 23	7 1	1 46	3 38	23 35	0 13	8 35	2 19	9 6	0 44	20 30	0 18	12 1	16 50	3 35
W18	11 54	18 21	5 1	16 58	1 55	3 29	7 12	1 50	3 39	23 35	0 13	8 37	2 19	9 5	0 44	20 30	0 18	12 0	16 50	3 34
T 19	11 33	18 7	5 11	17 7	1 42	3 33	7 23	1 55	3 39	23 35	0 13	8 40	2 19	9 4	0 44	20 30	0 18	11 59	16 50	3 32
F 20	11 12	16 54	5 5	17 16	1 29	3 36	7 33	1 59	3 40	23 36	0 13	8 42	2 19	9 2	0 44	20 31	0 18	11 59	16 49	3 30
S 21	10 50	14 42	4 41	17 22	1 17	3 37	7 43	2 5	3 41	23 36	0 13	8 44	2 19	9 1	0 44	20 31	0 18	11 58	16 49	3 27
S 22	10 29	11 34	4 0	17 27	1 4	3 37	7 52	2 10	3 42	23 36	0 13	8 46	2 18	9 0	0 44	20 31	0 18	11 57	16 49	3 25
M23	10 7	7 41	3 3	17 31	0 52	3 36	8 1	2 16	3 42	23 36	0 13	8 48	2 18	8 58	0 44	20 31	0 18	11 57	16 49	3 23
T 24	9 45	3 16	1 53	17 32	0 40	3 33	8 9	2 22	3 43	23 36	0 13	8 50	2 18	8 57	0 44	20 32	0 18	11 56	16 49	3 22
W25	9 23	1s23	0 34	17 33	0 28	3 29	8 17	2 28	3 43	23 36	0 13	8 52	2 18	8 56	0 44	20 32	0 18	11 55	16 48	3 21
T 26	9 0	5 57	0n46	17 32	0 16	3 24	8 24	2 34	3 44	23 36	0 13	8 55	2 17	8 55	0 44	20 32	0 18	11 55	16 48	3 21
F 27	8 38	10 6	2 3	17 29	0 5	3 17	8 30	2 41	3 44	23 37	0 13	8 57	2 17	8 53	0 44	20 32	0 18	11 54	16 48	3 22
S 28	8s16	13s36	3n12	17s25	0s 5	3n 9	8n35	2n47	3n45	23n37	0n14	8n59	2s17	8s52	0s44	20n33	0s18	11s53	16s48	3s22

Julian Day Number = 2300730.5, Delta T = 107.99 sec
 Ecliptic obliquity = 23°29'25", Nutation = 0°00'05", out-of-bounds declination in red
 Ayanamsha: Fagan/Bradley = 18°58'40", Lahiri = 18°05'40"Greg. Calendar

ASTRODIENST EPHEMERIS for the year 1587

geocentric

MARCH 1587 GC

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
S 1	10 32 37	9♂52'40	0♂10	12♂35	17°R25	1°R20	5°R16	29°Y 2	9♂ 8	26°R49	8°Y55	8♂30	9♂48	24°Y58	27°Y27	S 1
M 2	10 36 33	10°52'41	14° 4	13°33	16♂49	1♂ 2	5°D16	29° 8	9°11	26♂48	8°57	8°R31	9°44	25° 5	27°30	M 2
T 3	10 40 30	11°52'41	27°43	14°34	16°12	0°44	5♂16	29°14	9°15	26°47	8°58	8°30	9°41	25°12	27°33	T 3
W 4	10 44 26	12°52'39	11♂ 5	15°38	15°35	0°25	5°17	29°20	9°18	26°46	8°59	8°27	9°38	25°18	27°36	W 4
T 5	10 48 23	13°52'35	24°12	16°44	14°57	0° 6	5°17	29°26	9°21	26°45	9° 0	8°24	9°35	25°25	27°39	T 5
F 6	10 52 19	14°52'30	7♂ 5	17°52	14°20	29♂46	5°18	29°32	9°25	26°44	9° 2	8°21	9°32	25°32	27°43	F 6
S 7	10 56 16	15°52'22	19°45	19° 3	13°42	29°26	5°19	29°39	9°28	26°43	9° 3	8°17	9°29	25°38	27°46	S 7
S 8	11 0 12	16°52'13	2♂12	20°15	13° 5	29° 5	5°20	29°45	9°32	26°42	9° 4	8°13	9°25	25°45	27°49	S 8
M 9	11 4 9	17°52'02	14°28	21°30	12°28	28°43	5°21	29°51	9°35	26°41	9° 6	8°11	9°22	25°52	27°52	M 9
T 10	11 8 6	18°51'49	26°34	22°46	11°53	28°21	5°23	29°58	9°39	26°40	9° 7	8° 9	9°19	25°58	27°55	T 10
W11	11 12 2	19°51'34	8°Y32	24° 4	11°18	27°59	5°24	0♂ 4	9°42	26°39	9° 9	8°D 9	9°16	26° 5	27°58	W11
T 12	11 15 59	20°51'17	20°23	25°23	10°45	27°37	5°26	0°11	9°45	26°38	9°10	8° 9	9°13	26°12	28° 2	T 12
F 13	11 19 55	21°50'57	2♂11	26°45	10°13	27°14	5°28	0°17	9°49	26°37	9°11	8°10	9° 9	26°18	28° 5	F 13
S 14	11 23 52	22°50'36	13°58	28° 7	9°43	26°51	5°31	0°24	9°52	26°37	9°13	8°12	9° 6	26°25	28° 8	S 14
S 15	11 27 48	23°50'12	25°49	29°32	9°15	26°28	5°33	0°31	9°55	26°36	9°14	8°13	9° 3	26°32	28°12	S 15
M16	11 31 45	24°49'46	7♂48	0♂58	8°49	26° 5	5°36	0°37	9°59	26°35	9°15	8°14	9° 0	26°38	28°15	M16
T 17	11 35 41	25°49'18	19°58	2°25	8°25	25°41	5°39	0°44	10° 2	26°34	9°17	8°15	8°57	26°45	28°19	T 17
W18	11 39 38	26°48'47	2♂26	3°54	8° 3	25°18	5°42	0°51	10° 6	26°34	9°18	8°R15	8°54	26°51	28°22	W18
T 19	11 43 35	27°48'14	15°16	5°24	7°43	24°55	5°45	0°58	10° 9	26°33	9°20	8°14	8°50	26°58	28°26	T 19
F 20	11 47 31	28°47'39	28°28	6°56	7°26	24°31	5°48	1° 5	10°12	26°33	9°21	8°14	8°47	27° 5	28°29	F 20
S 21	11 51 28	29°47'02	12♂ 7	8°29	7°11	24° 8	5°52	1°12	10°15	26°32	9°23	8°12	8°44	27°11	28°33	S 21
S 22	11 55 24	0°Y46'22	26°14	10° 3	6°59	23°45	5°55	1°19	10°19	26°31	9°24	8°12	8°41	27°18	28°36	S 22
M23	11 59 21	1°45'40	10♂45	11°39	6°49	23°22	5°59	1°26	10°22	26°31	9°25	8°11	8°38	27°25	28°40	M23
T 24	12 3 17	2°44'55	25°36	13°16	6°42	22°59	6° 3	1°33	10°25	26°30	9°27	8°10	8°35	27°31	28°44	T 24
W25	12 7 14	3°44'09	10♂39	14°55	6°37	22°36	6° 8	1°40	10°28	26°30	9°28	8°D10	8°31	27°38	28°47	W25
T 26	12 11 10	4°43'20	25°46	16°35	6°34	22°14	6°12	1°47	10°32	26°29	9°30	8°10	8°28	27°45	28°51	T 26
F 27	12 15 7	5°42'30	10♂47	18°16	6°D34	21°52	6°17	1°54	10°35	26°29	9°31	8°11	8°25	27°51	28°55	F 27
S 28	12 19 3	6°41'38	25°35	19°59	6°36	21°31	6°21	2° 1	10°38	26°29	9°33	8°11	8°22	27°58	28°58	S 28
S 29	12 23 0	7°40'44	10♂ 4	21°43	6°41	21°10	6°26	2° 9	10°41	26°28	9°34	8°11	8°19	28° 5	29° 2	S 29
M30	12 26 57	8°39'48	24°10	23°29	6°48	20°49	6°31	2°16	10°44	26°28	9°35	8°R11	8°15	28°11	29° 6	M30
T 31	12 30 53	9°Y38'50	7♂52	25♂16	6♂57	20♂29	6♂37	2♂23	10♂48	26♂28	9°Y37	8°D11	8♂12	28°Y18	29°Y10	T 31

Day	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂
	decl	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	lat
S 1	7s53	16s12	4n 7	17s19	0s16	2n59	8n39	2n54	3n45	23n37	0n14	9n 1	2s17	8s51	0s44	20n33
M 2	7 30	17 48	4 46	17 12	0 26	2 48	8 42	3 2	3 45	23 37	0 14	9 4	2 17	8 49	0 44	20 33
T 3	7 7	18 19	5 9	17 4	0 35	2 37	8 45	3 9	3 45	23 37	0 14	9 6	2 16	8 48	0 44	20 33
W 4	6 44	17 49	5 14	16 54	0 45	2 24	8 46	3 16	3 45	23 37	0 14	9 8	2 16	8 47	0 44	20 34
T 5	6 21	16 21	5 3	16 42	0 53	2 10	8 47	3 24	3 45	23 37	0 14	9 10	2 16	8 45	0 44	20 34
F 6	5 58	14 4	4 36	16 29	1 2	1 55	8 46	3 32	3 45	23 37	0 14	9 13	2 16	8 44	0 44	20 34
S 7	5 35	11 11	3 56	16 15	1 10	1 39	8 45	3 40	3 45	23 37	0 14	9 15	2 16	8 43	0 44	20 34
S 8	5 12	7 49	3 6	15 59	1 17	1 23	8 42	3 48	3 44	23 37	0 14	9 18	2 16	8 42	0 44	20 34
M 9	4 48	4 10	2 7	15 42	1 25	1 6	8 39	3 56	3 44	23 37	0 14	9 20	2 15	8 40	0 44	20 35
T 10	4 25	0 24	1 4	15 24	1 31	0 49	8 34	4 4	3 44	23 37	0 14	9 22	2 15	8 39	0 44	20 35
W11	4 1	3n21	0s 2	15 4	1 38	0 31	8 29	4 13	3 43	23 37	0 14	9 25	2 15	8 38	0 44	20 35
T 12	3 38	6 57	1 7	14 43	1 44	0 13	8 23	4 21	3 42	23 37	0 14	9 27	2 15	8 36	0 44	20 35
F 13	3 14	10 14	2 9	14 20	1 49	0s 5	8 16	4 29	3 41	23 37	0 15	9 30	2 15	8 35	0 44	20 35
S 14	2 51	13 7	3 6	13 56	1 54	0 23	8 9	4 38	3 41	23 37	0 15	9 32	2 15	8 34	0 44	20 36
S 15	2 27	15 27	3 55	13 31	1 59	0 42	8 0	4 46	3 40	23 37	0 15	9 35	2 14	8 33	0 44	20 36
M16	2 4	17 9	4 34	13 4	2 3	1 0	7 51	4 54	3 39	23 37	0 15	9 37	2 14	8 31	0 44	20 36
T 17	1 40	18 6	5 2	12 37	2 7	1 17	7 42	5 2	3 37	23 37	0 15	9 40	2 14	8 30	0 44	20 36
W18	1 16	18 12	5 16	12 7	2 10	1 35	7 32	5 11	3 36	23 37	0 15	9 42	2 14	8 29	0 44	20 36
T 19	0 53	17 24	5 15	11 37	2 13	1 52	7 21	5 19	3 35	23 37	0 15	9 45	2 14	8 28	0 44	20 36
F 20	0 29	15 39	4 58	11 5	2 16	2 8	7 10	5 27	3 34	23 37	0 15	9 47	2 14	8 26	0 44	20 36
S 21	0 5	12 58	4 24	10 32	2 18	2 24	6 59	5 35	3 32	23 37	0 15	9 50	2 13	8 25	0 44	20 37
S 22	0n18	9 28	3 33	9 58	2 19	2 39	6 47	5 42	3 30	23 37	0 15	9 52	2 13	8 24	0 44	20 37
M23	0 42	5 17	2 27	9 22	2 20	2 54	6 36	5 50	3 29	23 37	0 15	9 55	2 13	8 23	0 44	20 37
T 24	1 6	0 41	1 9	8 45	2 21	3 8	6 24	5 58	3 27	23 36	0 15	9 57	2 13	8 21	0 44	20 37
W25	1 29	4s 1	0n14	8 7	2 21	3 21	6 11	6 5	3 25	23 36	0 15	10 0	2 13	8 20	0 44	20 37
T 26	1 53	8 29	1 36	7 28	2 21	3 33	5 59	6 12	3 23	23 36	0 15	10 3	2 13	8 19	0 44	20 37
F 27	2 16	12 22	2 52	6 48	2 20	3 45	5 47	6 19	3 21	23 36	0 16	10 5	2 13	8 18	0 44	20 37
S 28	2 40	15 24	3 54	6 6	2 18	3 56	5 34	6 25	3 19	23 36	0 16	10 8	2 13	8 17	0 44	20 37
S 29	3 3	17 23	4 41	5 23	2 17	4 6	5 22	6 32	3 17	23 36	0 16	10 10	2 12	8 15	0 44	20 37
M30	3 27	18 13	5 9	4 39	2 14	4 15	5 9	6 38	3 15	23 35	0 16	10 13	2 12	8 14	0 44	20 38
T 31	3n50	17s58	5n18	3s54	2s12	4s23	4n57	6n44	3n13	23n35	0n16	10n15	2s12	8s13	0s44	20n38

Julian Day Number = 2300758.5, Delta T = 107.87 sec
Ecliptic obliquity = 23°29'26", Nutation = 0°00'04", out-of-bounds declination in red
Ayanamsha: Fagan/Bradley = 18°58'43", Lahiri = 18°05'44"Greg. Calendar

ASTRODIENST EPHEMERIS for the year 1587

geocentric

MAY 1587 GC

00:00 UT

Day	Sid.t	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
F 1	14 33 6	9♂53'03	26♂12	27♂10	24♂42	15♂47	10♂30	6♂19	12♂11	26♂36	10♂20	7♂49	6♂34	1♂44	1♂11	F 1
S 2	14 37 3	10°51'05	8♂29	28°53	25°33	15°50	10°39	6°27	12°13	26°37	10°21	7°51	6°31	1°51	1°15	S 2
S 3	14 40 59	11°49'06	20°33	0♂31	26°25	15°54	10°49	6°34	12°15	26°38	10°22	7°53	6°27	1°58	1°19	S 3
M 4	14 44 56	12°47'06	2♂28	2° 6	27°17	15°58	10°59	6°42	12°17	26°39	10°24	7°R54	6°24	2° 4	1°23	M 4
T 5	14 48 52	13°45'05	14°17	3°38	28°10	16° 3	11° 8	6°50	12°19	26°39	10°25	7°54	6°21	2°11	1°26	T 5
W 6	14 52 49	14°43'02	26° 4	5° 5	29° 3	16° 9	11°18	6°57	12°22	26°40	10°26	7°52	6°18	2°18	1°30	W 6
T 7	14 56 46	15°40'57	7♂52	6°29	29°57	16°16	11°28	7° 5	12°23	26°41	10°27	7°49	6°15	2°24	1°34	T 7
F 8	15 0 42	16°38'51	19°42	7°49	0♂52	16°23	11°38	7°13	12°25	26°42	10°29	7°43	6°12	2°31	1°38	F 8
S 9	15 4 39	17°36'44	1♂38	9° 5	1°47	16°31	11°49	7°20	12°27	26°43	10°30	7°37	6° 8	2°38	1°42	S 9
S 10	15 8 35	18°34'35	13°40	10°18	2°42	16°39	11°59	7°28	12°29	26°44	10°31	7°29	6° 5	2°44	1°46	S 10
M 11	15 12 32	19°32'24	25°50	11°26	3°38	16°49	12° 9	7°36	12°31	26°45	10°32	7°22	6° 2	2°51	1°50	M 11
T 12	15 16 28	20°30'12	8♂11	12°30	4°35	16°58	12°20	7°43	12°33	26°47	10°33	7°15	5°59	2°58	1°53	T 12
W 13	15 20 25	21°27'58	20°43	13°30	5°32	17° 9	12°30	7°51	12°34	26°48	10°35	7° 9	5°56	3° 4	1°57	W 13
T 14	15 24 21	22°25'43	3♂13	14°26	6°29	17°20	12°41	7°58	12°36	26°49	10°36	7° 6	5°52	3°11	2° 1	T 14
F 15	15 28 18	23°23'26	16°35	15°17	7°27	17°31	12°52	8° 6	12°38	26°50	10°37	7° 4	5°49	3°18	2° 5	F 15
S 16	15 32 15	24°21'07	29°59	16° 4	8°25	17°43	13° 2	8°14	12°39	26°51	10°38	7°D 4	5°46	3°24	2° 9	S 16
S 17	15 36 11	25°18'47	13♂45	16°47	9°23	17°56	13°13	8°21	12°41	26°52	10°39	7° 5	5°43	3°31	2°12	S 17
M 18	15 40 8	26°16'25	27°55	17°25	10°22	18° 9	13°24	8°29	12°42	26°54	10°40	7° 6	5°40	3°38	2°16	M 18
T 19	15 44 4	27°14'02	12♂26	17°59	11°21	18°23	13°35	8°36	12°44	26°55	10°41	7°R 6	5°37	3°44	2°20	T 19
W 20	15 48 1	28°11'37	27°17	18°28	12°21	18°37	13°46	8°43	12°45	26°56	10°42	7° 4	5°33	3°51	2°23	W 20
T 21	15 51 57	29° 9'10	12♂21	18°52	13°21	18°52	13°58	8°51	12°47	26°58	10°43	7° 1	5°30	3°58	2°27	T 21
F 22	15 55 54	0♂6'43	27°30	19°12	14°21	19° 8	14° 9	8°58	12°48	26°59	10°44	6°55	5°27	4° 4	2°31	F 22
S 23	15 59 50	1° 4'14	12♂34	19°27	15°22	19°24	14°20	9° 6	12°49	27° 0	10°45	6°47	5°24	4°11	2°34	S 23
S 24	16 3 47	2° 1'45	27°23	19°37	16°23	19°40	14°32	9°13	12°50	27° 2	10°46	6°39	5°21	4°18	2°38	S 24
M 25	16 7 44	2°59'14	11♂50	19°43	17°24	19°57	14°43	9°20	12°52	27° 3	10°47	6°31	5°18	4°24	2°41	M 25
T 26	16 11 40	3°56'43	25°49	19°R44	18°25	20°14	14°55	9°28	12°53	27° 5	10°48	6°24	5°14	4°31	2°45	T 26
W 27	16 15 37	4°54'11	9♂19	19°41	19°27	20°32	15° 6	9°35	12°54	27° 6	10°49	6°19	5°11	4°37	2°48	W 27
T 28	16 19 33	5°51'38	22°22	19°33	20°29	20°50	15°18	9°42	12°55	27° 8	10°50	6°16	5° 8	4°44	2°52	T 28
F 29	16 23 30	6°49'04	4♂59	19°21	21°31	21° 9	15°30	9°49	12°56	27° 9	10°51	6°D15	5° 5	4°51	2°55	F 29
S 30	16 27 26	7°46'29	17°16	19° 5	22°34	21°28	15°41	9°56	12°57	27°12	10°52	6°16	5° 2	4°57	2°59	S 30
S 31	16 31 23	8♂43'54	29♂19	18♂45	23♂37	21♂47	15♂53	10♂ 4	12♂58	27♂12	10♂53	6♂16	4♂58	5♂ 4	3♂ 2	S 31

Day	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
	decl	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	
F 1	14n49	9s32	3n29	21n35	2n 4	2s14	0s 9	7n21	1n53	23n22	0n18	11n36	2s10	7s42	0s45	F 1
S 2	15 7	6 1	2 34	22 4	2 10	2 0	0 15	7 17	1 50	23 21	0 18	11 39	2 10	7 41	0 45	S 2
S 3	15 25	2 19	1 34	22 30	2 15	1 46	0 22	7 14	1 48	23 21	0 18	11 41	2 10	7 40	0 45	S 3
M 4	15 43	1n26	0 30	22 54	2 20	1 31	0 28	7 10	1 45	23 20	0 18	11 44	2 10	7 40	0 45	M 4
T 5	16 0	5 6	0s35	23 16	2 23	1 15	0 34	7 5	1 43	23 19	0 18	11 46	2 10	7 39	0 45	T 5
W 6	16 17	8 34	1 38	23 35	2 26	1 0	0 40	7 1	1 40	23 18	0 18	11 49	2 10	7 38	0 45	W 6
T 7	16 34	11 42	2 36	23 52	2 28	0 43	0 46	6 56	1 38	23 18	0 18	11 51	2 10	7 37	0 45	T 7
F 8	16 51	14 22	3 28	24 6	2 29	0 27	0 52	6 51	1 36	23 17	0 18	11 54	2 10	7 37	0 45	F 8
S 9	17 7	16 26	4 11	24 18	2 29	0 10	0 57	6 46	1 33	23 16	0 18	11 56	2 10	7 36	0 45	S 9
S 10	17 23	17 48	4 43	24 29	2 28	0n 7	1 3	6 40	1 31	23 15	0 18	11 59	2 10	7 35	0 45	S 10
M 11	17 39	18 23	5 3	24 37	2 26	0 25	1 8	6 35	1 29	23 14	0 18	12 1	2 10	7 35	0 45	M 11
T 12	17 55	18 6	5 9	24 42	2 23	0 43	1 13	6 29	1 26	23 13	0 18	12 4	2 10	7 34	0 45	T 12
W 13	18 10	16 56	5 1	24 46	2 19	1 1	1 18	6 23	1 24	23 12	0 18	12 6	2 10	7 33	0 45	W 13
T 14	18 25	14 55	4 37	24 49	2 15	1 19	1 22	6 16	1 22	23 11	0 18	12 8	2 10	7 33	0 45	T 14
F 15	18 40	12 6	3 59	24 49	2 9	1 38	1 27	6 10	1 20	23 10	0 19	12 11	2 10	7 32	0 46	F 15
S 16	18 54	8 35	3 7	24 48	2 3	1 57	1 31	6 3	1 17	23 9	0 19	12 13	2 10	7 32	0 46	S 16
S 17	19 8	4 31	2 3	24 44	1 55	2 16	1 35	5 56	1 15	23 8	0 19	12 16	2 10	7 31	0 46	S 17
M 18	19 22	0 5	0 49	24 40	1 47	2 36	1 39	5 49	1 13	23 7	0 19	12 18	2 11	7 30	0 46	M 18
T 19	19 35	4s29	0n29	24 34	1 37	2 56	1 43	5 42	1 11	23 6	0 19	12 20	2 11	7 30	0 46	T 19
W 20	19 48	8 52	1 47	24 26	1 27	3 16	1 46	5 34	1 9	23 5	0 19	12 23	2 11	7 29	0 46	W 20
T 21	20 1	12 45	2 58	24 17	1 16	3 36	1 50	5 26	1 7	23 4	0 19	12 25	2 11	7 29	0 46	T 21
F 22	20 13	15 47	3 57	24 6	1 4	3 56	1 53	5 18	1 5	23 3	0 19	12 27	2 11	7 28	0 46	F 22
S 23	20 25	17 44	4 39	23 55	0 51	4 17	1 56	5 10	1 3	23 2	0 19	12 30	2 11	7 28	0 46	S 23
S 24	20 37	18 26	5 2	23 42	0 37	4 37	1 59	5 2	1 1	23 1	0 19	12 32	2 11	7 28	0 46	S 24
M 25	20 48	17 54	5 5	23 28	0 22	4 58	2 2	4 54	0 59	23 0	0 19	12 34	2 11	7 27	0 46	M 25
T 26	20 59	16 18	4 49	23 13	0 7	5 19	2 5	4 45	0 57	22 58	0 19	12 36	2 11	7 27	0 46	T 26
W 27	21 10	13 49	4 17	22 57	0s 9	5 40	2 7	4 36	0 55	22 57	0 19	12 39	2 11	7 26	0 46	W 27
T 28	21 20	10 44	3 33	22 40	0 25	6 1	2 10	4 27	0 53	22 56	0 19	12 41	2 11	7 26	0 46	T 28
F 29	21 30	7 14	2 40	22 22	0 42	6 22	2 12	4 18	0 51	22 55	0 19	12 43	2 11	7 26	0 46	F 29
S 30	21 39	3 30	1 40	22 4	0 59	6 43	2 14	4 9	0 50	22 53	0 19	12 45	2 11	7 25	0 46	S 30
S 31	21n48	0n18	0n37	21n45	1s16	7n 5	2s16	4n 0	0n48	22n52	0n20	12n47	2s11	7s25	0s46	S 31

Julian Day Number = 2300819.5, Delta T = 107.60 sec
 Ecliptic obliquity = 23°29'25, Nutation = 0°00'01, out-of-bounds declination in red
 Ayanamsha: Fagan/Bradley = 18°58'52, Lahiri = 18°05'52Greg. Calendar

ASTRODIENST EPHEMERIS for the year 1587
geocentric

JUNE 1587 GC

00:00 UT

Day	Sid.t	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
M 1	16 35 19	9Ⅱ41'18	11Ⅳ11	18°R22	24Ⅳ40	22Ⅳ7	16°5	10Ⅲ11	12Ⅳ59	27°14	10Ⅳ53	6°R16	4Ⅱ55	5Ⅲ11	3Ⅲ6	M 1
T 2	16 39 16	10°38'42	22°59	17Ⅱ56	25°43	22°28	16°17	10°18	13° 0	27°16	10°54	6Ⅱ15	4°52	5°17	3° 9	T 2
W 3	16 43 13	11°36'05	4Ⅲ46	17°27	26°47	22°48	16°29	10°25	13° 0	27°17	10°55	6°11	4°49	5°24	3°12	W 3
T 4	16 47 9	12°33'27	16°36	16°56	27°50	23° 9	16°41	10°32	13° 1	27°19	10°56	6° 5	4°46	5°31	3°15	T 4
F 5	16 51 6	13°30'49	28°32	16°24	28°54	23°31	16°54	10°39	13° 2	27°21	10°57	5°56	4°43	5°37	3°19	F 5
S 6	16 55 2	14°28'10	10Ⅱ36	15°51	29°58	23°53	17° 6	10°45	13° 2	27°22	10°57	5°45	4°39	5°44	3°22	S 6
S 7	16 58 59	15°25'30	22°50	15°17	1Ⅲ3	24°15	17°18	10°52	13° 3	27°24	10°58	5°33	4°36	5°51	3°25	S 7
M 8	17 2 55	16°22'50	5Ⅲ14	14°44	2° 7	24°38	17°30	10°59	13° 3	27°26	10°59	5°21	4°33	5°57	3°28	M 8
T 9	17 6 52	17°20'09	17°48	14°11	3°12	25° 1	17°43	11° 6	13° 4	27°28	11° 0	5°10	4°30	6° 4	3°31	T 9
W10	17 10 48	18°17'27	0Ⅱ34	13°39	4°17	25°24	17°55	11°13	13° 4	27°29	11° 0	5° 0	4°27	6°11	3°35	W10
T 11	17 14 45	19°14'44	13°32	13° 9	5°22	25°48	18° 8	11°19	13° 5	27°31	11° 1	4°53	4°24	6°17	3°38	T 11
F 12	17 18 42	20°12'01	26°43	12°42	6°27	26°12	18°20	11°26	13° 5	27°33	11° 2	4°49	4°20	6°24	3°41	F 12
S 13	17 22 38	21° 9'16	10Ⅳ9	12°17	7°33	26°37	18°33	11°32	13° 5	27°35	11° 2	4°47	4°17	6°31	3°44	S 13
S 14	17 26 35	22° 6'31	23°51	11°56	8°38	27° 2	18°45	11°39	13° 6	27°37	11° 3	4°D47	4°14	6°37	3°46	S 14
M15	17 30 31	23° 3'45	7Ⅱ51	11°38	9°44	27°27	18°58	11°45	13° 6	27°39	11° 3	4°R47	4°11	6°44	3°49	M15
T 16	17 34 28	24° 0'59	22° 7	11°24	10°50	27°52	19°10	11°52	13° 6	27°41	11° 4	4°46	4° 8	6°51	3°52	T 16
W17	17 38 24	24°58'11	6Ⅲ40	11°14	11°56	28°18	19°23	11°58	13° 6	27°43	11° 4	4°43	4° 4	6°57	3°55	W17
T 18	17 42 21	25°55'24	21°24	11° 8	13° 2	28°44	19°36	12° 5	13°R 6	27°45	11° 5	4°38	4° 1	7° 4	3°58	T 18
F 19	17 46 17	26°52'35	6Ⅱ15	11°D 7	14° 8	29°10	19°49	12°11	13° 6	27°46	11° 6	4°30	3°58	7°11	4° 1	F 19
S 20	17 50 14	27°49'47	21° 3	11°11	15°15	29°37	20° 1	12°17	13° 6	27°48	11° 6	4°20	3°55	7°17	4° 3	S 20
S 21	17 54 11	28°46'58	5Ⅲ42	11°20	16°21	0Ⅱ4	20°14	12°23	13° 6	27°50	11° 6	4° 9	3°52	7°24	4° 6	S 21
M22	17 58 7	29°44'08	20° 2	11°33	17°28	0°31	20°27	12°29	13° 6	27°52	11° 7	3°58	3°49	7°31	4° 9	M22
T 23	18 2 4	0Ⅲ41'19	3Ⅲ59	11°51	18°35	0°58	20°40	12°35	13° 5	27°54	11° 7	3°48	3°45	7°38	4°11	T 23
W24	18 6 0	1°38'30	17°30	12°14	19°42	1°26	20°53	12°41	13° 5	27°56	11° 8	3°41	3°42	7°44	4°14	W24
T 25	18 9 57	2°35'40	0Ⅲ34	12°41	20°49	1°54	21° 6	12°47	13° 5	27°59	11° 8	3°36	3°39	7°51	4°16	T 25
F 26	18 13 53	3°32'51	13°13	13°14	21°57	2°22	21°19	12°53	13° 5	28° 1	11° 8	3°33	3°36	7°58	4°19	F 26
S 27	18 17 50	4°30'02	25°33	13°51	23° 4	2°51	21°32	12°59	13° 4	28° 3	11° 9	3°32	3°33	8° 4	4°21	S 27
S 28	18 21 47	5°27'13	7Ⅳ36	14°33	24°12	3°19	21°45	13° 5	13° 4	28° 5	11° 9	3°32	3°29	8°11	4°23	S 28
M29	18 25 43	6°24'25	19°30	15°19	25°19	3°48	21°58	13°10	13° 3	28° 7	11° 9	3°32	3°26	8°18	4°26	M29
T 30	18 29 40	7°21'36	1Ⅲ18	16Ⅱ11	26Ⅲ27	4Ⅱ17	22°11	13Ⅲ16	13Ⅳ3	28°9	11Ⅳ10	3Ⅱ30	3Ⅱ23	8Ⅲ24	4Ⅲ28	T 30

Day	☉	☾		♂		♀		♂		♂		♂		♂		♂		♂		♂		♂		♂	
	decl	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat
M 1	21n57	4n 2	0s26	21n26	1s33	7n26	2s18	3n50	0n46	22n51	0n20	12n49	2s11	7s25	0s46	20n30	0s16	11s14	16s55	2s30	1s58	10n50	12n 1	0s35	
T 2	22 5	7 35	1 28	21 6	1 51	7 48	2 20	3 40	0 44	22 49	0 20	12 52	2 11	7 24	0 46	20 30	0 16	11 14	16 55	2 29	1 56	10 51	12 2	0 35	
W 3	22 13	10 51	2 26	20 47	2 7	8 9	2 21	3 31	0 42	22 48	0 20	12 54	2 11	7 24	0 46	20 29	0 16	11 14	16 56	2 28	1 55	10 53	12 3	0 35	
T 4	22 21	13 41	3 18	20 28	2 24	8 31	2 23	3 21	0 41	22 46	0 20	12 56	2 12	7 24	0 46	20 29	0 16	11 14	16 56	2 25	1 54	10 54	12 4	0 35	
F 5	22 28	15 57	4 1	20 8	2 40	8 52	2 24	3 11	0 39	22 45	0 20	12 58	2 12	7 24	0 46	20 29	0 16	11 14	16 56	2 22	1 53	10 56	12 6	0 35	
S 6	22 35	17 34	4 34	19 50	2 55	9 13	2 25	3 0	0 37	22 43	0 20	13 0	2 12	7 23	0 46	20 28	0 16	11 14	16 57	2 17	1 51	10 57	12 7	0 35	
S 7	22 41	18 24	4 55	19 32	3 10	9 35	2 26	2 50	0 36	22 42	0 20	13 2	2 12	7 23	0 46	20 28	0 16	11 14	16 57	2 13	1 50	10 59	12 7	0 36	
M 8	22 47	18 22	5 2	19 15	3 23	9 56	2 27	2 39	0 34	22 40	0 20	13 4	2 12	7 23	0 46	20 28	0 16	11 14	16 57	2 8	1 49	11 0	12 8	0 36	
T 9	22 53	17 26	4 55	18 59	3 35	10 17	2 28	2 29	0 32	22 39	0 20	13 6	2 12	7 23	0 46	20 27	0 16	11 14	16 58	2 3	1 47	11 1	12 9	0 36	
W10	22 58	15 38	4 33	18 44	3 46	10 39	2 28	2 18	0 31	22 37	0 20	13 8	2 12	7 23	0 47	20 27	0 16	11 14	16 58	1 59	1 46	11 3	12 10	0 36	
T 11	23 3	13 1	3 57	18 31	3 56	11 0	2 29	2 7	0 29	22 36	0 20	13 10	2 12	7 23	0 47	20 27	0 16	11 14	16 58	1 57	1 45	11 4	12 11	0 36	
F 12	23 8	9 42	3 7	18 19	4 5	11 21	2 29	1 56	0 28	22 34	0 20	13 12	2 12	7 23	0 47	20 26	0 16	11 14	16 59	1 55	1 44	11 6	12 12	0 36	
S 13	23 12	5 49	2 7	18 9	4 12	11 42	2 30	1 45	0 26	22 32	0 20	13 14	2 12	7 23	0 47	20 26	0 16	11 14	16 59	1 54	1 42	11 7	12 13	0 36	
S 14	23 15	1 34	0 58	18 1	4 18	12 3	2 30	1 34	0 25	22 31	0 20	13 15	2 13	7 23	0 47	20 26	0 16	11 14	16 59	1 54	1 41	11 9	12 14	0 36	
M15	23 18	2s52	0n16	17 54	4 22	12 23	2 30	1 22	0 23	22 29	0 21	13 17	2 13	7 22	0 47	20 25	0 16	11 15	17 0	1 54	1 40	11 10	12 15	0 36	
T 16	23 21	7 14	1 31	17 49	4 25	12 44	2 30	1 11	0 22	22 27	0 21	13 19	2 13	7 22	0 47	20 25	0 16	11 15	17 0	1 54	1 39	11 12	12 16	0 36	
W17	23 24	11 15	2 40	17 47	4 26	13 4	2 30	0 59	0 20	22 26	0 21	13 21	2 13	7 22	0 47	20 25	0 16	11 15	17 0	1 53	1 37	11 13	12 17	0 37	
T 18	23 26	14 36	3 40	17 46	4 27	13 24	2 30	0 47	0 19	22 24	0 21	13 23	2 13	7 22	0 47	20 24	0 16	11 15	17 1	1 51	1 36	11 15	12 17	0 37	
F 19	23 27	17 2	4 26	17 46	4 26	13 44	2 29	0 36	0 17	22 22	0 21	13 25	2 13	7 23	0 47	20 24	0 16	11 15	17 1	1 48	1 35	11 16	12 18	0 37	
S 20	23 28	18 19	4 53	17 49	4 23	14 4	2 29	0 24	0 16	22 20	0 21	13 26	2 13	7 23	0 47	20 23	0 16	11 15	17 1	1 44	1 34	11 18	12 19	0 37	
S 21	23 29	18 22	5 1	17 54	4 20	14 24	2 28	0 12	0 14	22 18	0 21	13 28	2 13	7 23	0 47	20 23	0 15	11 15	17 2	1 39	1 32	11 19	12 20	0 37	
M22	23 29	17 13	4 49	18 0	4 15	14 43	2 27	0s 0	0 13	22 17	0 21	13 30	2 14	7 23	0 47	20 23	0 15	11 15	17 2	1 35	1 31	11 20	12 21	0 37	
T 23	23 29	15 4	4 21	18 8	4 10	15 2	2 27	0 13	0 12	22 15	0 21	13 32	2 14	7 23	0 47	20 22	0 15	11 16	17 2	1 31	1 30	11 22	12 21	0 37	
W24	23 29	12 10	3 38	18 17	4 3	15 21	2 26	0 25	0 10	22 13	0 21	13 33	2 14	7 23	0 47	20 22	0 15	11 16	17 3	1 28	1 29	11 23	12 22	0 37	
T 25	23 28	8 43	2 45	18 28	3 56	15 40	2 25	0 37	0 9	22 11	0 21	13 35	2 14	7 23	0 47	20 22	0 15	11 16	17 3	1 26	1 27	11 25	12 23	0 37	
F 26	23 27	4 59	1 45	18 40	3 48	15 58	2 24	0 50	0 7	22 9	0 21	13 36	2 14	7 23	0 47	20 21	0 15	11 16	17 4	1 25	1 26	11 26	12 24	0 38	
S 27	23 25	1 8	0 42	18 53	3 39	16 17	2 23	1 2	0 6	22 7	0 21	13 38	2 14	7 24	0 47	20 21	0 15	11 16	17 4	1 25	1 25	11 28	12 24	0 38	
S 28	23 23	2n42	0s22	19 8	3 29	16 34	2 21	1 15	0 5	22 5	0 21	13 40	2 14	7 24	0 47	20 20	0 15	11 17	17 4	1 24	1 23	11 29	12 25	0 38	
M29	23 20	6 21	1 24	19 23	3 19	16 52	2 20	1 28	0 4	22 3	0 22	13 41	2 15	7 24	0 47	20 20	0 15	11 17	17 5	1 24	1 22	11 31	12 26	0 38	
T 30	23n17	9n45	2s21	19n39	3s 8	17n 9	2s19	1s40	0n 2	22n 1	0n22	13n43	2s15	7s24	0s47	20n20	0s15	11s17	17s 5	1s24	1s21	11n32	12n26	0s38	

ASTRODIENST EPHEMERIS for the year 1587
geocentric

JULY 1587 GC

00:00 UT

Day	Sid.t	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
W 1	18 33 36	8♂18'48	13♂ 8	17♂ 6	27♂35	4♂47	22♂24	13♂21	13°R 2	28♂11	11°V10	3°R26	3♂20	8♂31	4♂30	W 1
T 2	18 37 33	9°16'01	25° 2	18° 6	28°43	5°17	22°37	13°27	13°K 1	28°13	11°10	3♂20	3°17	8°38	4°32	T 2
F 3	18 41 29	10°13'13	7♂ 4	19°11	29°51	5°47	22°51	13°32	13° 1	28°15	11°10	3°11	3°14	8°44	4°35	F 3
S 4	18 45 26	11°10'26	19°18	20°20	1♂ 0	6°17	23° 4	13°38	13° 0	28°17	11°11	2°59	3°10	8°51	4°37	S 4
S 5	18 49 22	12° 7'39	1♂44	21°33	2° 8	6°47	23°17	13°43	12°59	28°20	11°11	2°47	3° 7	8°58	4°39	S 5
M 6	18 53 19	13° 4'53	14°24	22°51	3°16	7°18	23°30	13°48	12°58	28°22	11°11	2°34	3° 4	9° 4	4°41	M 6
T 7	18 57 16	14° 2'07	27°17	24°12	4°25	7°49	23°43	13°53	12°58	28°24	11°11	2°22	3° 1	9°11	4°43	T 7
W 8	19 1 12	14°59'21	10♂23	25°38	5°34	8°20	23°57	13°58	12°57	28°26	11°11	2°12	2°58	9°18	4°44	W 8
T 9	19 5 9	15°56'35	23°40	27° 8	6°42	8°51	24°10	14° 3	12°56	28°28	11°11	2° 5	2°55	9°24	4°46	T 9
F 10	19 9 5	16°53'49	7♂ 7	28°42	7°51	9°23	24°23	14° 8	12°55	28°30	11°11	2° 0	2°51	9°31	4°48	F 10
S 11	19 13 2	17°51'04	20°45	0♂19	9° 0	9°54	24°36	14°13	12°54	28°33	11°11	1°58	2°48	9°38	4°50	S 11
S 12	19 16 58	18°48'18	4♂33	2° 0	10° 9	10°26	24°50	14°18	12°53	28°35	11°R11	1°D58	2°45	9°44	4°52	S 12
M13	19 20 55	19°45'33	18°32	3°45	11°18	10°59	25° 3	14°22	12°52	28°37	11°11	1°R58	2°42	9°51	4°53	M13
T 14	19 24 51	20°42'47	2♂40	5°33	12°28	11°31	25°16	14°27	12°50	28°39	11°11	1°57	2°39	9°58	4°55	T 14
W15	19 28 48	21°40'03	16°57	7°24	13°37	12° 3	25°30	14°31	12°49	28°41	11°11	1°55	2°35	10° 4	4°56	W15
T 16	19 32 45	22°37'18	1♂21	9°18	14°46	12°36	25°43	14°36	12°48	28°44	11°11	1°51	2°32	10°11	4°58	T 16
F 17	19 36 41	23°34'34	15°47	11°14	15°56	13° 9	25°56	14°40	12°47	28°46	11°11	1°44	2°29	10°18	4°59	F 17
S 18	19 40 38	24°31'50	0♂11	13°13	17° 5	13°42	26°10	14°44	12°45	28°48	11°11	1°35	2°26	10°24	5° 0	S 18
S 19	19 44 34	25°29'06	14°27	15°14	18°15	14°15	26°23	14°48	12°44	28°50	11°11	1°25	2°23	10°31	5° 2	S 19
M20	19 48 31	26°26'24	28°29	17°17	19°25	14°49	26°36	14°53	12°43	28°53	11°11	1°15	2°20	10°38	5° 3	M20
T 21	19 52 27	27°23'41	12♂12	19°21	20°35	15°23	26°49	14°57	12°41	28°55	11°10	1° 6	2°16	10°44	5° 4	T 21
W22	19 56 24	28°21'00	25°34	21°26	21°45	15°56	27° 3	15° 0	12°40	28°57	11°10	0°59	2°13	10°51	5° 5	W22
T 23	20 0 20	29°18'20	8♂33	23°31	22°55	16°30	27°16	15° 4	12°38	28°59	11°10	0°54	2°10	10°58	5° 6	T 23
F 24	20 4 17	0♂15'40	21°10	25°38	24° 5	17° 4	27°29	15° 8	12°37	29° 1	11°10	0°52	2° 7	11° 4	5° 7	F 24
S 25	20 8 14	1°13'01	3°V29	27°44	25°15	17°39	27°43	15°12	12°35	29° 4	11° 9	0°D52	2° 4	11°11	5° 8	S 25
S 26	20 12 10	2°10'24	15°34	29°50	26°25	18°13	27°56	15°15	12°33	29° 6	11° 9	0°52	2° 1	11°18	5° 9	S 26
M27	20 16 7	3° 7'48	27°29	1♂56	27°36	18°48	28° 9	15°19	12°32	29° 8	11° 9	0°53	1°57	11°24	5°10	M27
T 28	20 20 3	4° 5'12	9♂19	4° 1	28°46	19°23	28°23	15°22	12°30	29°10	11° 8	0°R53	1°54	11°31	5°11	T 28
W29	20 24 0	5° 2'38	21°10	6° 5	29°57	19°58	28°36	15°25	12°28	29°13	11° 8	0°51	1°51	11°38	5°12	W29
T 30	20 27 56	6° 0'06	3♂ 7	8° 8	1♂ 7	20°33	28°49	15°29	12°27	29°15	11° 8	0°48	1°48	11°44	5°12	T 30
F 31	20 31 53	6♂57'34	15♂14	10♂10	2♂18	21♂ 8	29♂ 2	15♂32	12♂25	29♂17	11°V 7	0♂42	1♂45	11♂51	5♂13	F 31

Day	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂
	decl	decl lat	decl lat	decl lat	decl lat	decl lat	decl lat	decl lat	decl lat	decl lat	decl lat	decl lat	decl lat	decl lat	decl lat	decl lat
W 1	23n14	12n44	3s13	19n56	2s57	17n26	2s17	1s53	0n 1	21n59	0n22	13n44	2s15	7s24	0s47	20n19
T 2	23 10	15 14	3 57	20 13	2 45	17 43	2 16	2 6	0s 0	21 57	0 22	13 46	2 15	7 25	0 47	20 19
F 3	23 6	17 5	4 31	20 30	2 33	17 59	2 14	2 19	0 1	21 55	0 22	13 47	2 15	7 25	0 47	20 18
S 4	23 1	18 12	4 52	20 48	2 20	18 15	2 12	2 32	0 3	21 52	0 22	13 49	2 15	7 25	0 47	20 18
S 5	22 56	18 28	5 1	21 6	2 8	18 30	2 11	2 46	0 4	21 50	0 22	13 50	2 16	7 26	0 47	20 17
M 6	22 51	17 50	4 54	21 23	1 55	18 45	2 9	2 59	0 5	21 48	0 22	13 51	2 16	7 26	0 48	20 17
T 7	22 45	16 17	4 33	21 40	1 42	19 0	2 7	3 12	0 6	21 46	0 22	13 53	2 16	7 26	0 48	20 17
W 8	22 39	13 52	3 57	21 57	1 28	19 14	2 5	3 25	0 7	21 44	0 22	13 54	2 16	7 27	0 48	20 16
T 9	22 32	10 42	3 8	22 13	1 15	19 28	2 3	3 39	0 9	21 41	0 22	13 55	2 16	7 27	0 48	20 16
F 10	22 25	6 56	2 8	22 27	1 2	19 41	2 0	3 52	0 10	21 39	0 22	13 57	2 16	7 28	0 48	20 15
S 11	22 18	2 46	0 59	22 41	0 49	19 54	1 58	4 6	0 11	21 37	0 22	13 58	2 17	7 28	0 48	20 15
S 12	22 10	1s36	0n14	22 53	0 36	20 6	1 56	4 20	0 12	21 35	0 23	13 59	2 17	7 28	0 48	20 14
M13	22 2	5 56	1 27	23 3	0 23	20 18	1 54	4 33	0 13	21 32	0 23	14 0	2 17	7 29	0 48	20 14
T 14	21 53	9 59	2 35	23 12	0 10	20 30	1 51	4 47	0 14	21 30	0 23	14 1	2 17	7 29	0 48	20 14
W15	21 45	13 30	3 35	23 19	0n 2	20 41	1 49	5 1	0 15	21 28	0 23	14 3	2 17	7 30	0 48	20 13
T 16	21 35	16 12	4 21	23 23	0 13	20 51	1 46	5 14	0 16	21 25	0 23	14 4	2 17	7 30	0 48	20 13
F 17	21 26	17 54	4 51	23 25	0 25	21 1	1 44	5 28	0 17	21 23	0 23	14 5	2 18	7 31	0 48	20 12
S 18	21 16	18 27	5 3	23 25	0 35	21 11	1 41	5 42	0 18	21 20	0 23	14 6	2 18	7 31	0 48	20 12
S 19	21 5	17 49	4 55	23 22	0 45	21 20	1 39	5 56	0 19	21 18	0 23	14 7	2 18	7 32	0 48	20 11
M20	20 55	16 6	4 30	23 16	0 54	21 28	1 36	6 10	0 20	21 16	0 23	14 8	2 18	7 32	0 48	20 11
T 21	20 44	13 30	3 49	23 8	1 3	21 36	1 33	6 24	0 21	21 13	0 23	14 9	2 18	7 33	0 48	20 10
W22	20 32	10 15	2 57	22 57	1 11	21 44	1 30	6 38	0 22	21 11	0 23	14 10	2 19	7 34	0 48	20 10
T 23	20 20	6 35	1 56	22 43	1 18	21 50	1 28	6 52	0 23	21 8	0 24	14 11	2 19	7 34	0 48	20 10
F 24	20 8	2 43	0 52	22 27	1 24	21 57	1 25	7 6	0 24	21 6	0 24	14 12	2 19	7 35	0 48	20 9
S 25	19 56	1n10	0s14	22 8	1 30	22 2	1 22	7 20	0 25	21 3	0 24	14 12	2 19	7 36	0 48	20 9
S 26	19 43	4 56	1 18	21 46	1 34	22 7	1 19	7 34	0 26	21 0	0 24	14 13	2 19	7 36	0 48	20 8
M27	19 30	8 27	2 18	21 22	1 38	22 12	1 16	7 48	0 27	20 58	0 24	14 14	2 20	7 37	0 48	20 8
T 28	19 17	11 36	3 11	20 56	1 41	22 16	1 13	8 2	0 28	20 55	0 24	14 15	2 20	7 38	0 48	20 7
W29	19 3	14 17	3 56	20 28	1 44	22 19	1 10	8 16	0 29	20 53	0 24	14 16	2 20	7 38	0 48	20 7
T 30	18 49	16 23	4 32	19 58	1 45	22 22	1 7	8 30	0 30	20 50	0 24	14 16	2 20	7 39	0 48	20 6
F 31	18n34	17n46	4s56	19n26	1n46	22n24	1s 4	8s45	0s31	20n47	0n24	14n17	2s21	7s40	0s48	20n 6

Julian Day Number = 2300880.5, Delta T = 107.33 sec
Ecliptic obliquity = 23°29'25", Nutation = 0°00'01", out-of-bounds declination in red
Ayanamsha: Fagan/Bradley = 18°59'00", Lahiri = 18°06'01Greg. Calendar

ASTRODIENST EPHEMERIS for the year 1587

geocentric

AUGUST 1587 GC

00:00 UT

Day	Sid.t	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
S 1	20 35 49	7♏55°04	27♏35	12♏11	3♏29	21♏44	29♏16	15♏35	12°R23	29♏19	11°R 7	0°R35	1♏41	11♏58	5♏14	S 1
S 2	20 39 46	8°52'35	10♏11	14°11	4°40	22°19	29°29	15°38	12♏21	29°21	11°Y 7	0♏26	1°38	12° 4	5°14	S 2
M 3	20 43 43	9°50'07	23° 5	16°10	5°51	22°55	29°42	15°40	12°19	29°24	11° 6	0°17	1°35	12°11	5°15	M 3
T 4	20 47 39	10°47'41	6♏17	18° 7	7° 2	23°31	29°55	15°43	12°17	29°26	11° 6	0° 9	1°32	12°18	5°15	T 4
W 5	20 51 36	11°45'15	19°44	20° 2	8°13	24° 7	0♏ 8	15°46	12°15	29°28	11° 5	0° 2	1°29	12°24	5°15	W 5
T 6	20 55 32	12°42'51	3♏25	21°56	9°24	24°43	0°21	15°48	12°13	29°30	11° 5	29♏57	1°26	12°31	5°16	T 6
F 7	20 59 29	13°40'27	17°16	23°49	10°35	25°20	0°35	15°51	12°11	29°32	11° 4	29°55	1°22	12°38	5°16	F 7
S 8	21 3 25	14°38'05	1♏16	25°40	11°47	25°56	0°48	15°53	12° 9	29°35	11° 4	29°D54	1°19	12°45	5°16	S 8
S 9	21 7 22	15°35'44	15°21	27°30	12°58	26°33	1° 1	15°55	12° 7	29°37	11° 3	29°55	1°16	12°51	5°16	S 9
M10	21 11 18	16°33'23	29°30	29°18	14° 9	27°10	1°14	15°57	12° 5	29°39	11° 2	29°56	1°13	12°58	5°R16	M10
T 11	21 15 15	17°31'04	13♏40	1♏ 5	15°21	27°47	1°27	15°59	12° 3	29°41	11° 2	29°R57	1°10	13° 5	5°16	T 11
W12	21 19 12	18°28'46	27°51	2°50	16°32	28°24	1°40	16° 1	12° 1	29°43	11° 1	29°56	1° 7	13°11	5°16	W12
T 13	21 23 8	19°26'29	12♏ 0	4°34	17°44	29° 1	1°53	16° 3	11°59	29°45	11° 1	29°54	1° 3	13°18	5°16	T 13
F 14	21 27 5	20°24'13	26° 5	6°16	18°56	29°39	2° 6	16° 5	11°57	29°47	11° 0	29°51	1° 0	13°25	5°16	F 14
S 15	21 31 1	21°21'58	10♏ 3	7°57	20° 8	0♏16	2°19	16° 6	11°54	29°49	10°59	29°46	0°57	13°31	5°15	S 15
S 16	21 34 58	22°19'44	23°52	9°37	21°19	0°54	2°32	16° 8	11°52	29°52	10°58	29°40	0°54	13°38	5°15	S 16
M17	21 38 54	23°17'31	7♏28	11°15	22°31	1°32	2°44	16° 9	11°50	29°54	10°58	29°34	0°51	13°45	5°15	M17
T 18	21 42 51	24°15'20	20°49	12°52	23°43	2° 9	2°57	16°10	11°48	29°56	10°57	29°29	0°47	13°51	5°14	T 18
W19	21 46 47	25°13'11	3♏53	14°27	24°55	2°47	3°10	16°12	11°46	29°58	10°56	29°25	0°44	13°58	5°14	W19
T 20	21 50 44	26°11'02	16°40	16° 1	26° 8	3°26	3°23	16°13	11°43	29°59	10°56	29°23	0°41	14° 5	5°13	T 20
F 21	21 54 40	27° 8'56	29°10	17°34	27°20	4° 4	3°36	16°14	11°41	0♏ 2	10°55	29°D22	0°38	14°11	5°13	F 21
S 22	21 58 37	28° 6'51	11°Y25	19° 5	28°32	4°42	3°48	16°14	11°39	0° 4	10°54	29°23	0°35	14°18	5°12	S 22
S 23	22 2 34	29° 4'48	23°27	20°35	29°44	5°21	4° 1	16°15	11°36	0° 6	10°53	29°24	0°32	14°25	5°11	S 23
M24	22 6 30	0♏ 2'47	5♏22	22° 4	0♏57	6° 0	4°13	16°16	11°34	0° 8	10°52	29°26	0°28	14°31	5°10	M24
T 25	22 10 27	1° 0'47	17°13	23°31	2° 9	6°38	4°26	16°16	11°32	0°10	10°52	29°27	0°25	14°38	5°10	T 25
W26	22 14 23	1°58'50	29° 4	24°57	3°22	7°17	4°39	16°17	11°29	0°12	10°51	29°R28	0°22	14°45	5° 9	W26
T 27	22 18 20	2°56'54	11♏ 2	26°21	4°34	7°56	4°51	16°17	11°27	0°14	10°50	29°28	0°19	14°51	5° 8	T 27
F 28	22 22 16	3°55'01	23°10	27°44	5°47	8°35	5° 3	16°17	11°25	0°16	10°49	29°26	0°16	14°58	5° 7	F 28
S 29	22 26 13	4°53'09	5♏32	29° 6	7° 0	9°15	5°16	16°18	11°22	0°18	10°48	29°24	0°12	15° 5	5° 6	S 29
S 30	22 30 9	5°51'20	18°13	0♏26	8°13	9°54	5°28	16°R18	11°20	0°20	10°47	29°21	0° 9	15°12	5° 4	S 30
M31	22 34 6	6♏49'32	1♏15	1♏44	9♏25	10♏34	5♏40	16♏17	11♏17	0♏21	10°Y46	29♏17	0♏ 6	15♏18	5♏ 3	M31

Day	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
	decl	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	
S 1	18n20	18n22	5s 6	18n53	1n47	22n26	1s 1	8s59	0s32	20n45	0n24	14n18	2s21	7s40	0s48	20n 6
S 2	18 5	18 5	5 2	18 18	1 46	22 26	0 58	9 13	0 33	20 42	0 24	14 18	2 21	7 41	0 48	20 5
M 3	17 49	16 52	4 43	17 42	1 45	22 27	0 55	9 27	0 34	20 39	0 25	14 19	2 21	7 42	0 48	20 5
T 4	17 34	14 44	4 8	17 4	1 43	22 26	0 52	9 41	0 35	20 37	0 25	14 19	2 21	7 43	0 48	20 4
W 5	17 18	11 46	3 19	16 26	1 41	22 25	0 49	9 55	0 35	20 34	0 25	14 20	2 22	7 43	0 48	20 4
T 6	17 2	8 8	2 18	15 47	1 38	22 24	0 46	10 9	0 36	20 31	0 25	14 20	2 22	7 44	0 48	20 3
F 7	16 45	4 0	1 8	15 6	1 35	22 21	0 43	10 24	0 37	20 29	0 25	14 21	2 22	7 45	0 48	20 3
S 8	16 29	0s23	0n 7	14 25	1 31	22 19	0 40	10 38	0 38	20 26	0 25	14 21	2 22	7 46	0 48	20 2
S 9	16 12	4 47	1 23	13 44	1 27	22 15	0 36	10 52	0 39	20 23	0 25	14 22	2 22	7 46	0 48	20 2
M10	15 54	8 55	2 33	13 2	1 23	22 11	0 33	11 6	0 40	20 20	0 25	14 22	2 23	7 47	0 48	20 2
T 11	15 37	12 33	3 35	12 19	1 18	22 6	0 30	11 20	0 40	20 18	0 25	14 23	2 23	7 48	0 48	20 1
W12	15 19	15 27	4 23	11 37	1 12	22 1	0 27	11 34	0 41	20 15	0 25	14 23	2 23	7 49	0 49	20 1
T 13	15 1	17 24	4 55	10 53	1 7	21 55	0 24	11 48	0 42	20 12	0 26	14 23	2 23	7 50	0 49	20 0
F 14	14 43	18 16	5 10	10 10	1 1	21 48	0 21	12 2	0 43	20 9	0 26	14 23	2 24	7 51	0 49	20 0
S 15	14 25	18 2	5 5	9 27	0 54	21 41	0 18	12 16	0 43	20 6	0 26	14 24	2 24	7 51	0 49	19 59
S 16	14 6	16 43	4 43	8 43	0 48	21 33	0 15	12 30	0 44	20 3	0 26	14 24	2 24	7 52	0 49	19 59
M17	13 47	14 29	4 6	7 59	0 41	21 25	0 12	12 44	0 45	20 1	0 26	14 24	2 24	7 53	0 49	19 58
T 18	13 28	11 30	3 15	7 16	0 34	21 16	0 9	12 58	0 46	19 58	0 26	14 24	2 25	7 54	0 49	19 58
W19	13 9	8 1	2 15	6 32	0 26	21 6	0 6	13 12	0 46	19 55	0 26	14 24	2 25	7 55	0 49	19 58
T 20	12 49	4 13	1 9	5 49	0 19	20 55	0 3	13 25	0 47	19 52	0 26	14 24	2 25	7 56	0 49	19 57
F 21	12 29	0 19	0 1	5 6	0 11	20 45	0n 0	13 39	0 48	19 49	0 26	14 25	2 25	7 57	0 49	19 57
S 22	12 9	3n31	1s 6	4 23	0 3	20 33	0 3	13 53	0 49	19 46	0 27	14 25	2 25	7 58	0 49	19 56
S 23	11 49	7 9	2 8	3 40	0s 5	20 21	0 6	14 6	0 49	19 44	0 27	14 25	2 26	7 59	0 49	19 56
M24	11 29	10 26	3 5	2 58	0 13	20 8	0 9	14 20	0 50	19 41	0 27	14 25	2 26	7 59	0 49	19 55
T 25	11 8	13 17	3 53	2 15	0 21	19 55	0 12	14 33	0 51	19 38	0 27	14 24	2 26	8 0	0 49	19 55
W26	10 48	15 35	4 31	1 34	0 29	19 41	0 15	14 47	0 51	19 35	0 27	14 24	2 26	8 1	0 49	19 55
T 27	10 27	17 13	4 58	0 52	0 38	19 27	0 18	15 0	0 52	19 32	0 27	14 24	2 27	8 2	0 49	19 54
F 28	10 6	18 7	5 13	0 12	0 46	19 12	0 20	15 14	0 53	19 29	0 27	14 24	2 27	8 3	0 49	19 54
S 29	9 44	18 10	5 13	0s29	0 55	18 56	0 23	15 27	0 53	19 26	0 27	14 24	2 27	8 4	0 49	19 53
S 30	9 23	17 20	4 58	1 9	1 4	18 40	0 26	15 40	0 54	19 23	0 28	14 24	2 27	8 5	0 49	19 53
M31	9n 1	15n35	4s27	1s48	1s12	18n23	0n28	15s53	0s55	19n20	0n28	14n23	2s27	8s 6	0s49	19n53

Julian Day Number = 2300911.5, Delta T = 107.19 sec
 Ecliptic obliquity = 23°29'25, Nutation = 0°00'02, out-of-bounds declination in red
 Ayanamsha: Fagan/Bradley = 18°59'05, Lahiri = 18°06'05Greg. Calendar

ASTRODIENST EPHEMERIS for the year 1587

geocentric

OCTOBER 1587 GC

00:00 UT

Day	Sid.t	☉	☽	♊	♋	♌	♍	♎	♏	♐	♑	♒	♓	♈	♉	Day
T 1	0 36 19	7♌ 9'00	20♏42	16°R 1	17♏30	1♊51	11♏28	15°R23	10°R 6	1♌ 9	10°R13	29♏11	28♏28	18♏46	4°R 2	T 1
F 2	0 40 16	8° 8'15	5♌17	14♌59	18°45	2°34	11°38	15♏19	10♏4	1°10	10°Y12	29°R11	28°24	18°52	4♏0	F 2
S 3	0 44 12	9° 7'31	20° 7	13°52	19°59	3°17	11°47	15°16	10° 2	1°11	10°10	29°10	28°21	18°59	3°57	S 3
S 4	0 48 9	10° 6'50	5♏4	12°41	21°14	4° 0	11°57	15°13	10° 0	1°12	10° 9	29° 9	28°18	19° 6	3°54	S 4
M 5	0 52 5	11° 6'11	19°59	11°30	22°28	4°43	12° 7	15° 9	9°58	1°13	10° 8	29° 8	28°15	19°12	3°52	M 5
T 6	0 56 2	12° 5'34	4♏46	10°19	23°43	5°26	12°16	15° 5	9°56	1°14	10° 7	29° 6	28°12	19°19	3°49	T 6
W 7	0 59 58	13° 4'59	19°16	9°11	24°57	6° 9	12°25	15° 2	9°54	1°15	10° 6	29° 5	28° 9	19°26	3°46	W 7
T 8	1 3 55	14° 4'25	3♏38	8° 7	26°12	6°53	12°35	14°58	9°52	1°16	10° 5	29° 4	28° 5	19°32	3°43	T 8
F 9	1 7 52	15° 3'54	17°18	7°10	27°27	7°36	12°44	14°54	9°51	1°17	10° 4	29°D 4	28° 2	19°39	3°41	F 9
S 10	1 11 48	16° 3'24	0♏47	6°21	28°42	8°19	12°53	14°50	9°49	1°18	10° 2	29° 4	27°59	19°46	3°38	S 10
S 11	1 15 45	17° 2'55	13°57	5°41	29°56	9° 3	13° 2	14°46	9°47	1°18	10° 1	29° 5	27°56	19°52	3°35	S 11
M12	1 19 41	18° 2'29	26°49	5°12	1♌11	9°47	13°10	14°42	9°45	1°19	10° 0	29° 7	27°53	19°59	3°32	M12
T 13	1 23 38	19° 2'04	9♏26	4°54	2°26	10°30	13°19	14°38	9°44	1°20	9°59	29° 8	27°49	20° 6	3°29	T 13
W14	1 27 34	20° 1'41	21°50	4°D47	3°41	11°14	13°28	14°34	9°42	1°21	9°58	29° 9	27°46	20°13	3°26	W14
T 15	1 31 31	21° 1'19	4°Y 4	4°51	4°56	11°58	13°36	14°30	9°40	1°21	9°57	29°R 9	27°43	20°19	3°23	T 15
F 16	1 35 27	22° 1'00	16°10	5° 6	6°10	12°42	13°44	14°25	9°39	1°22	9°55	29° 8	27°40	20°26	3°20	F 16
S 17	1 39 24	23° 0'43	28° 9	5°31	7°25	13°26	13°52	14°21	9°37	1°23	9°54	29° 6	27°37	20°33	3°17	S 17
S 18	1 43 20	24° 0'28	10♏3	6° 5	8°40	14°10	14° 0	14°17	9°36	1°23	9°53	29° 3	27°34	20°39	3°14	S 18
M19	1 47 17	25° 0'15	21°54	6°49	9°55	14°54	14° 8	14°12	9°34	1°24	9°52	28°58	27°30	20°46	3°11	M19
T 20	1 51 14	26° 0'04	3♏45	7°40	11°10	15°38	14°16	14° 8	9°33	1°24	9°51	28°53	27°27	20°53	3° 8	T 20
W21	1 55 10	26°59'55	15°37	8°39	12°25	16°23	14°24	14° 3	9°31	1°25	9°50	28°49	27°24	20°59	3° 5	W21
T 22	1 59 7	27°59'48	27°33	9°44	13°40	17° 7	14°31	13°59	9°30	1°25	9°49	28°45	27°21	21° 6	3° 2	T 22
F 23	2 3 3	28°59'44	9♏38	10°54	14°55	17°51	14°38	13°54	9°29	1°26	9°48	28°41	27°18	21°13	2°59	F 23
S 24	2 7 0	29°59'42	21°55	12°10	16°10	18°36	14°46	13°50	9°27	1°26	9°47	28°40	27°15	21°19	2°56	S 24
S 25	2 10 56	0♏59'41	4♏28	13°29	17°26	19°21	14°53	13°45	9°26	1°27	9°46	28°D39	27°11	21°26	2°53	S 25
M26	2 14 53	1°59'43	17°21	14°51	18°41	20° 5	15° 0	13°40	9°25	1°27	9°44	28°40	27° 8	21°33	2°50	M26
T 27	2 18 49	2°59'48	0♏40	16°17	19°56	20°50	15° 7	13°35	9°24	1°27	9°43	28°42	27° 5	21°40	2°47	T 27
W28	2 22 46	3°59'54	14°25	17°45	21°11	21°35	15°13	13°31	9°23	1°28	9°42	28°43	27° 2	21°46	2°44	W28
T 29	2 26 43	5° 0'02	28°38	19°15	22°26	22°20	15°20	13°26	9°22	1°28	9°41	28°R44	26°59	21°53	2°41	T 29
F 30	2 30 39	6° 0'13	13♏17	20°47	23°42	23° 4	15°26	13°21	9°21	1°28	9°40	28°43	26°55	22° 0	2°38	F 30
S 31	2 34 36	7♏0'25	28♏17	22♏20	24♏57	23♏49	15♏32	13♏16	9♏20	1♌28	9°Y39	28♏41	26♏52	22♏6	2♏35	S 31

Day	☉	☾		♊		♋		♌		♍		♎		♏		♐		♑		♒	♓	♈	♉	♊	♋	♌	♍	♎	♏	♐	♑	♒	♓	
	decl	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	decl	decl	decl	decl	decl	decl	decl	decl	decl	decl	decl	decl	decl	decl
T 1	2s51	2n59	0s47	9s 6	3s 1	6n15	1n25	21s43	1s10	17n54	0n32	14n 2	2s33	8s33	0s48	19n43	0s15	12s 0	17s28	0n20	0n37	13n38	12n 7	0s50										
F 2	3 14	1s35	0n34	8 29	2 47	5 47	1 26	21 52	1 10	17 51	0 32	14 1	2 34	8 33	0 48	19 42	0 15	12 1	17 28	0 20	0 38	13 39	12 6	0 50										
S 3	3 37	6 8	1 54	7 49	2 32	5 18	1 27	22 1	1 11	17 49	0 32	14 0	2 34	8 34	0 48	19 42	0 15	12 1	17 28	0 20	0 39	13 40	12 5	0 50										
S 4	4 1	10 19	3 6	7 6	2 15	4 49	1 27	22 9	1 11	17 46	0 33	13 59	2 34	8 35	0 48	19 42	0 15	12 1	17 28	0 20	0 41	13 41	12 4	0 50										
M 5	4 24	13 50	4 6	6 21	1 57	4 20	1 28	22 18	1 11	17 44	0 33	13 58	2 34	8 36	0 48	19 42	0 15	12 2	17 28	0 21	0 42	13 43	12 3	0 50										
T 6	4 47	16 24	4 49	5 35	1 38	3 51	1 29	22 26	1 12	17 41	0 33	13 56	2 34	8 36	0 48	19 41	0 15	12 2	17 28	0 21	0 43	13 44	12 2	0 50										
W 7	5 11	17 52	5 12	4 50	1 17	3 22	1 29	22 34	1 12	17 39	0 33	13 55	2 34	8 37	0 48	19 41	0 15	12 3	17 28	0 22	0 44	13 45	12 1	0 50										
T 8	5 34	18 11	5 16	4 6	0 57	2 53	1 29	22 41	1 12	17 36	0 33	13 54	2 34	8 38	0 48	19 41	0 15	12 3	17 28	0 22	0 46	13 46	12 0	0 51										
F 9	5 57	17 24	5 1	3 24	0 36	2 23	1 30	22 49	1 13	17 34	0 34	13 53	2 35	8 38	0 48	19 41	0 15	12 4	17 28	0 22	0 47	13 48	11 58	0 51										
S 10	6 20	15 38	4 29	2 46	0 16	1 54	1 30	22 56	1 13	17 31	0 34	13 52	2 35	8 39	0 48	19 41	0 15	12 4	17 28	0 22	0 48	13 49	11 57	0 51										
S 11	6 43	13 5	3 45	2 13	0n 3	1 24	1 30	23 3	1 13	17 29	0 34	13 50	2 35	8 40	0 48	19 40	0 15	12 4	17 28	0 22	0 49	13 50	11 56	0 51										
M12	7 5	9 57	2 49	1 44	0 22	0 55	1 30	23 10	1 13	17 27	0 34	13 49	2 35	8 40	0 48	19 40	0 15	12 5	17 28	0 21	0 51	13 51	11 55	0 51										
T 13	7 28	6 24	1 47	1 21	0 39	0 25	1 30	23 17	1 14	17 24	0 34	13 48	2 35	8 41	0 48	19 40	0 15	12 5	17 28	0 21	0 52	13 53	11 54	0 51										
W14	7 51	2 38	0 40	1 4	0 55	0s 5	1 30	23 24	1 14	17 22	0 34	13 46	2 35	8 42	0 48	19 40	0 15	12 6	17 28	0 20	0 53	13 54	11 53	0 51										
T 15	8 13	1n12	0s27	0 53	1 9	0 35	1 30	23 30	1 14	17 20	0 35	13 45	2 35	8 42	0 48	19 40	0 15	12 6	17 28	0 20	0 55	13 55	11 52	0 51										
F 16	8 36	4 57	1 32	0 47	1 21	1 5	1 30	23 36	1 14	17 18	0 35	13 44	2 35	8 43	0 48	19 40	0 15	12 6	17 28	0 21	0 56	13 56	11 51	0 51										
S 17	8 58	8 28	2 33	0 47	1 32	1 35	1 30	23 42	1 15	17 15	0 35	13 42	2 35	8 43	0 48	19 39	0 15	12 7	17 28	0 22	0 57	13 58	11 50	0 52										
S 18	9 20	11 36	3 26	0 52	1 42	2 4	1 30	23 47	1 15	17 13	0 35	13 41	2 35	8 44	0 48	19 39	0 15	12 7	17 28	0 23	0 58	13 59	11 49	0 52										
M19	9 42	14 15	4 10	1 2	1 49	2 34	1 29	23 53	1 15	17 11	0 35	13 40	2 35	8 44	0 48	19 39	0 15	12 7	17 28	0 25	1 0	14 0	11 48	0 52										
T 20	10 4	16 18	4 44	1 17	1 56	3 4	1 29	23 58	1 15	17 9	0 36	13 38	2 35	8 45	0 48	19 39	0 15	12 8	17 28	0 27	1 1	14 1	11 46	0 52										
W21	10 26	17 40	5 5	1 36	2 0	3 34	1 28	24 3	1 16	17 7	0 36	13 37	2 35	8 45	0 48	19 39	0 15	12 8	17 27	0 28	1 2	14 2	11 45	0 52										
T 22	10 47	18 15	5 13	1 58	2 4	4 3	1 28	24 7	1 16	17 5	0 36	13 36	2 36	8 46	0 48	19 39	0 15	12 8	17 27	0 30	1 3	14 4	11 44	0 52										
F 23	11 8	18 2	5 7	2 23	2 6	4 33	1 27	24 12	1 16	17 3	0 36	13 34	2 36	8 46	0 48	19 39	0 15	12 9	17 27	0 31	1 5	14 5	11 43	0 52										
S 24	11 30	16 58	4 48	2 51	2 8	5 3	1 26	24 16	1 16	17 1	0 36	13 33	2 36	8 47	0 48	19 39	0 15	12 9	17 27	0 32	1 6	14 6	11 42	0 52										
S 25	11 51	15 4	4 14	3 22	2 8	5 32	1 26	24 20	1 16	16 59	0 37	13 31	2 36	8 47	0 48	19 39	0 15	12 9	17 27	0 32	1 7	14 7	11 41	0 52										
M26	12 12	12 23	3 27	3 55	2 7	6 2	1 25	24 23	1 16	16 57	0 37	13 30	2 36	8 48	0 48	19 39	0 15	12 10	17 27	0 32	1 8	14 9	11 40	0 52										
T 27	12 32	8 58	2 27	4 29	2 6	6 31	1 24	24 27	1 17	16 56	0 37	13 29	2 36	8 48	0 48	19 39	0 15	12 10	17 27	0 31	1 10	14 10	11 39	0 52										
W28	12 53	4 58	1 17	5 4	2 4	7 0	1 23	24 30	1 17	16 54	0 37	13 27	2 36	8 48	0 48	19 38	0 15	12 10	17 26	0 31	1 11	14 11	11 37	0 53										
T 29	13 13	0 32	0 1	5 41	2 1	7 29	1 22	24 33	1 17	16 52	0 37	13 26	2 36	8 49	0 48	19 38	0 15	12 10	17 26	0 30	1 12	14 12	11 36	0 53										
F 30	13 33	4s 3	1n18	6 19	1 58	7 58	1 21	24 35	1 17	16 50	0 38	13 24	2 36	8 49	0 48	19 38	0 15	12 11	17 26	0 31	1 14	14 13	11 35	0 53										
S 31	13s53	8s29	2n34	6s57	1n54	8s26	1n20	24s38	1s17	16n49	0n38	13n23	2s36	8s49	0s48	19n38	0s15	12s11	17s26	0n32	1n15	14n15	11n34	0s53										

ASTRODIENST EPHEMERIS for the year 1587

geocentric

NOVEMBER 1587 GC

00:00 UT

Day	Sid.t	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
S 1	2 38 32	8♉ 0'39	13♉30	23♉54	26♉12	24♉35	15♉38	13°R11	9°R19	1♉28	9°R38	28°R36	26♉49	22♉13	2°R32	S 1
M 2	2 42 29	9° 0'55	28°45	25°29	27°27	25°20	15°44	13♉ 7	9♉18	1°28	9°Y37	28♉30	26°46	22°20	2♉29	M 2
T 3	2 46 25	10° 1'13	13♉53	27° 4	28°43	26° 5	15°50	13° 2	9°17	1°28	9°36	28°24	26°43	22°26	2°26	T 3
W 4	2 50 22	11° 1'33	28°43	28°40	29°58	26°50	15°55	12°57	9°16	1°R29	9°35	28°18	26°40	22°33	2°23	W 4
T 5	2 54 18	12° 1'54	13♉ 9	0♉17	1♉13	27°35	16° 1	12°52	9°15	1°28	9°34	28°13	26°36	22°40	2°20	T 5
F 6	2 58 15	13° 2'16	27° 8	1°53	2°29	28°21	16° 6	12°47	9°15	1°28	9°33	28°10	26°33	22°47	2°17	F 6
S 7	3 2 12	14° 2'39	10♉40	3°30	3°44	29° 6	16°11	12°42	9°14	1°28	9°32	28°D 8	26°30	22°53	2°14	S 7
S 8	3 6 8	15° 3'04	23°45	5° 6	4°59	29°52	16°16	12°37	9°14	1°28	9°32	28° 9	26°27	23° 0	2°11	S 8
M 9	3 10 5	16° 3'31	6♉29	6°43	6°15	0♉37	16°21	12°32	9°13	1°28	9°31	28°10	26°24	23° 7	2° 8	M 9
T 10	3 14 1	17° 3'58	18°55	8°19	7°30	1°23	16°25	12°27	9°13	1°28	9°30	28°11	26°21	23°13	2° 5	T 10
W11	3 17 58	18° 4'27	1°Y 7	9°56	8°45	2° 9	16°30	12°23	9°12	1°28	9°29	28°R11	26°17	23°20	2° 2	W11
T 12	3 21 54	19° 4'58	13°10	11°32	10° 1	2°54	16°34	12°18	9°12	1°27	9°28	28°10	26°14	23°27	1°59	T 12
F 13	3 25 51	20° 5'29	25° 6	13° 8	11°16	3°40	16°38	12°13	9°11	1°27	9°27	28° 6	26°11	23°33	1°56	F 13
S 14	3 29 47	21° 6'03	6♉58	14°44	12°32	4°26	16°42	12° 8	9°11	1°27	9°26	28° 0	26° 8	23°40	1°54	S 14
S 15	3 33 44	22° 6'37	18°49	16°20	13°47	5°12	16°45	12° 3	9°11	1°27	9°26	27°52	26° 5	23°47	1°51	S 15
M16	3 37 41	23° 7'14	0♉41	17°56	15° 2	5°58	16°49	11°59	9°11	1°26	9°25	27°41	26° 1	23°54	1°48	M16
T 17	3 41 37	24° 7'51	12°34	19°31	16°18	6°44	16°52	11°54	9°11	1°26	9°24	27°30	25°58	24° 0	1°45	T 17
W18	3 45 34	25° 8'30	24°30	21° 7	17°33	7°30	16°55	11°49	9°11	1°25	9°23	27°18	25°55	24° 7	1°42	W18
T 19	3 49 30	26° 9'11	6♉31	22°42	18°49	8°16	16°58	11°45	9°D10	1°25	9°22	27° 8	25°52	24°14	1°40	T 19
F 20	3 53 27	27° 9'53	18°39	24°17	20° 4	9° 2	17° 1	11°40	9°10	1°24	9°22	26°59	25°49	24°20	1°37	F 20
S 21	3 57 23	28°10'37	0♉57	25°51	21°20	9°48	17° 4	11°35	9°11	1°24	9°21	26°53	25°46	24°27	1°34	S 21
S 22	4 1 20	29°11'23	13°29	27°26	22°35	10°34	17° 6	11°31	9°11	1°23	9°20	26°49	25°42	24°34	1°32	S 22
M23	4 5 16	0♉12'09	26°17	29° 1	23°51	11°20	17° 8	11°26	9°11	1°23	9°20	26°D48	25°39	24°40	1°29	M23
T 24	4 9 13	1°12'58	9♉26	0♉35	25° 6	12° 7	17°10	11°22	9°11	1°22	9°19	26°48	25°36	24°47	1°27	T 24
W25	4 13 10	2°13'48	23° 0	2°10	26°22	12°53	17°12	11°18	9°11	1°21	9°18	26°R49	25°33	24°54	1°24	W25
T 26	4 17 6	3°14'39	7♉ 0	3°44	27°37	13°39	17°14	11°13	9°12	1°21	9°18	26°48	25°30	25° 1	1°22	T 26
F 27	4 21 3	4°15'32	21°27	5°18	28°53	14°26	17°15	11° 9	9°12	1°20	9°17	26°46	25°26	25° 7	1°19	F 27
S 28	4 24 59	5°16'26	6♉19	6°52	0♉ 8	15°12	17°17	11° 5	9°13	1°19	9°17	26°41	25°23	25°14	1°17	S 28
S 29	4 28 56	6°17'22	21°29	8°27	1°24	15°59	17°18	11° 0	9°13	1°18	9°16	26°34	25°20	25°21	1°14	S 29
M30	4 32 52	7♉18'18	6♉48	10♉ 1	2♉39	16♉45	17♉19	10♉56	9♉14	1♉18	9°Y15	26♉24	25♉17	25♉27	1♉12	M30

Day	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
	decl	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	
S 1	14s13	12s26	3n39	7s36	1n49	8s55	1n19	24s40	1s17	16n47	0n38	13n21	2s36	8s50	0s48	19n38
M 2	14 32	15 33	4 29	8 15	1 44	9 23	1 18	24 42	1 17	16 46	0 38	13 20	2 36	8 50	0 47	19 38
T 3	14 51	17 33	5 0	8 54	1 39	9 51	1 16	24 43	1 17	16 44	0 38	13 19	2 36	8 50	0 47	19 38
W 4	15 10	18 20	5 9	9 34	1 34	10 19	1 15	24 45	1 18	16 43	0 39	13 17	2 36	8 51	0 47	19 38
T 5	15 29	17 53	4 59	10 13	1 28	10 46	1 13	24 46	1 18	16 41	0 39	13 16	2 36	8 51	0 47	19 38
F 6	15 47	16 21	4 31	10 52	1 22	11 14	1 12	24 46	1 18	16 40	0 39	13 14	2 36	8 51	0 47	19 38
S 7	16 5	13 56	3 49	11 31	1 16	11 41	1 11	24 47	1 18	16 39	0 39	13 13	2 35	8 51	0 47	19 38
S 8	16 23	10 52	2 55	12 9	1 10	12 8	1 9	24 47	1 18	16 37	0 39	13 11	2 35	8 51	0 47	19 38
M 9	16 41	7 23	1 55	12 47	1 3	12 34	1 7	24 47	1 18	16 36	0 40	13 10	2 35	8 52	0 47	19 38
T 10	16 58	3 38	0 50	13 25	0 57	13 0	1 6	24 47	1 18	16 35	0 40	13 9	2 35	8 52	0 47	19 38
W11	17 15	0n12	0s16	14 2	0 50	13 26	1 4	24 46	1 18	16 34	0 40	13 7	2 35	8 52	0 47	19 38
T 12	17 32	3 59	1 20	14 38	0 44	13 52	1 2	24 45	1 18	16 33	0 40	13 6	2 35	8 52	0 47	19 39
F 13	17 48	7 34	2 20	15 14	0 37	14 17	1 1	24 44	1 18	16 32	0 41	13 4	2 35	8 52	0 47	19 39
S 14	18 4	10 50	3 13	15 49	0 30	14 42	0 59	24 43	1 18	16 31	0 41	13 3	2 35	8 52	0 47	19 39
S 15	18 20	13 39	3 57	16 23	0 23	15 6	0 57	24 41	1 18	16 30	0 41	13 2	2 35	8 52	0 47	19 39
M16	18 36	15 54	4 32	16 57	0 16	15 30	0 55	24 39	1 18	16 29	0 41	13 0	2 35	8 52	0 47	19 39
T 17	18 51	17 29	4 54	17 30	0 9	15 54	0 53	24 37	1 18	16 28	0 41	12 59	2 35	8 52	0 47	19 39
W18	19 5	18 19	5 4	18 2	0 3	16 17	0 51	24 35	1 18	16 28	0 42	12 58	2 35	8 52	0 47	19 39
T 19	19 20	18 20	5 0	18 33	0s 4	16 40	0 49	24 32	1 18	16 27	0 42	12 56	2 34	8 52	0 47	19 39
F 20	19 34	17 31	4 43	19 3	0 11	17 3	0 47	24 29	1 18	16 26	0 42	12 55	2 34	8 52	0 47	19 39
S 21	19 48	15 53	4 13	19 33	0 17	17 25	0 45	24 25	1 18	16 26	0 42	12 54	2 34	8 52	0 47	19 39
S 22	20 1	13 28	3 30	20 1	0 24	17 46	0 43	24 22	1 18	16 25	0 43	12 53	2 34	8 52	0 47	19 39
M23	20 14	10 21	2 35	20 29	0 30	18 7	0 41	24 18	1 18	16 25	0 43	12 51	2 34	8 52	0 47	19 40
T 24	20 27	6 38	1 31	20 55	0 37	18 28	0 38	24 14	1 18	16 24	0 43	12 50	2 34	8 52	0 47	19 40
W25	20 39	2 29	0 20	21 20	0 43	18 48	0 36	24 9	1 18	16 24	0 43	12 49	2 34	8 52	0 47	19 40
T 26	20 51	1s57	0n54	21 45	0 49	19 7	0 34	24 4	1 17	16 24	0 44	12 48	2 33	8 51	0 47	19 40
F 27	21 2	6 25	2 7	22 8	0 55	19 26	0 32	23 59	1 17	16 23	0 44	12 47	2 33	8 51	0 47	19 40
S 28	21 14	10 37	3 14	22 30	1 1	19 45	0 29	23 54	1 17	16 23	0 44	12 45	2 33	8 51	0 46	19 40
S 29	21 24	14 11	4 8	22 52	1 7	20 2	0 27	23 49	1 17	16 23	0 44	12 44	2 33	8 51	0 46	19 41
M30	21s35	16s49	4n45	23s12	1s12	20s20	0n25	23s43	1s17	16n23	0n45	12n43	2s33	8s51	0s46	19n41

Julian Day Number = 2301003.5, Delta T = 106.78 sec
 Ecliptic obliquity = 23°29'25, Nutation = - 0°00'03, out-of-bounds declination in red
 Ayanamsha: Fagan/Bradley = 18°59'17, Lahiri = 18°06'18Greg. Calendar

ASTRODIENST EPHEMERIS for the year 1587

geocentric

DECEMBER 1587 GC

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
T 1	4 36 49	8°19'16	22°27'5	11°35'35	3°55'17	17°32'17	17°19'10	10°R52	9°14'14	1°R17	9°R15	26°R13	25°14'25	25°8'34	1°R10	T 1	
W 2	4 40 45	9°20'15	7°37'7	13°9'5	5°10'18	18°18'17	17°20'10	10°B48	9°15'14	1°16'14	9°Y14	26°11'25	25°11'25	25°41'18	1°8'8	W 2	
T 3	4 44 42	10°21'14	21°47'21	14°43'6	6°26'19	19°5'17	17°20'10	10°44'9	9°15'14	1°15'14	9°14'26	25°52'25	25°7'25	25°47'1	1°5'5	T 3	
F 4	4 48 39	11°22'14	5°58'16	16°17'7	41°19'52	17°R20	10°41'9	9°16'14	9°16'14	1°14'9	9°13'25	25°45'25	25°4'7	25°54'1	1°3'3	F 4	
S 5	4 52 35	12°23'15	19°38'17	17°52'8	8°57'20	38'17	17°20'10	10°37'9	9°17'13	1°13'9	9°13'25	25°41'25	25°1'1	26°1'1	1°1'1	S 5	
S 6	4 56 32	13°24'16	2°49'19	19°26'10	12°21'25	17°20'10	10°33'9	9°18'12	9°18'12	1°12'9	9°13'25	25°39'24	24°58'26	26°8'0	0°59'0	S 6	
M 7	5 0 28	14°25'18	15°34'21	21°0'11	28°22'12	17°19'10	10°29'9	9°19'11	9°19'11	1°11'9	9°12'25	25°D39	24°55'26	26°14'0	0°57'0	M 7	
T 8	5 4 25	15°26'21	27°58'22	22°35'12	43°22'59	17°19'10	10°26'9	9°20'10	9°20'10	1°10'9	9°12'25	25°R39	24°52'26	26°21'0	0°55'0	T 8	
W 9	5 8 21	16°27'23	10°7'24	24°9'13	59°23'46	17°18'10	10°22'9	9°21'10	9°21'10	1°9'9	9°11'25	25°38'24	24°48'26	26°28'0	0°53'0	W 9	
T 10	5 12 18	17°28'27	22°5'25	24°44'15	14°24'32	17°17'10	10°19'9	9°22'10	9°22'10	1°8'9	9°11'25	25°36'24	24°45'26	26°34'0	0°51'0	T 10	
F 11	5 16 14	18°29'30	3°56'27	18°16'25	30°17'15	10°16'9	9°23'10	9°23'10	9°23'10	1°7'9	9°11'25	25°30'24	24°42'26	26°41'0	0°50'0	F 11	
S 12	5 20 11	19°30'34	15°46'28	53°17'45	26°6'17	14'10	10°12'9	9°24'10	9°24'10	1°5'9	9°11'25	25°22'24	24°39'26	26°48'0	0°48'0	S 12	
S 13	5 24 8	20°31'39	27°36'0	28°19'1	26°53'17	12'10	10°9'9	9°25'10	9°25'10	1°4'9	9°10'25	25°11'24	24°36'26	26°55'0	0°46'0	S 13	
M14	5 28 4	21°32'44	9°11'2	3°20'16	27°40'17	10'10	10°6'9	9°26'10	9°26'10	1°3'9	9°10'25	24°57'24	24°32'27	27°1'0	0°44'0	M14	
T 15	5 32 1	22°33'50	21°28'3	3°37'21	21°32'28	27'17	10°3'9	9°28'10	9°28'10	1°2'9	9°10'25	24°42'24	24°29'27	27°8'0	0°43'0	T 15	
W16	5 35 57	23°34'56	3°33'5	12°22'47	29°14'17	6'10	10°1'9	9°29'10	9°29'10	1°1'9	9°10'25	24°27'24	24°26'27	27°15'0	0°41'0	W16	
T 17	5 39 54	24°36'03	15°44'6	47°24'3	0°1'17	4'9	9°58'9	9°30'0	9°30'0	0°59'9	9°9'24	24°13'24	24°23'27	27°21'0	0°40'0	T 17	
F 18	5 43 50	25°37'10	28°3'8	21°25'18	0°48'17	1'9	9°55'9	9°32'0	9°32'0	0°58'9	9°9'24	24°2'24	24°20'27	27°28'0	0°38'0	F 18	
S 19	5 47 47	26°38'18	10°31'9	55°26'34	1°35'16	58'9	9°53'9	9°33'0	9°33'0	0°57'9	9°9'23	25°53'24	24°17'27	27°35'0	0°37'0	S 19	
S 20	5 51 44	27°39'26	23°9'11	29°27'50	2°22'16	55'9	9°50'9	9°35'0	9°35'0	0°55'9	9°9'23	23°47'24	24°13'27	27°42'0	0°36'0	S 20	
M21	5 55 40	28°40'35	6°11'13	3°29'5	3°9'16	52'9	9°48'9	9°36'0	9°36'0	0°54'9	9°9'23	23°44'24	24°10'27	27°48'0	0°34'0	M21	
T 22	5 59 37	29°41'44	19°9'14	36°0'21	3°57'16	48'9	9°45'9	9°38'0	9°38'0	0°53'9	9°9'23	23°44'24	24°7'27	27°55'0	0°33'0	T 22	
W23	6 3 33	0°34'25	2°26'16	8°1'36	4°44'16	45'9	9°43'9	9°40'0	9°40'0	0°51'9	9°9'23	23°44'24	24°4'28	2°2'0	0°32'0	W23	
T 24	6 7 30	1°44'04	16°24'17	40°2'52	5°31'16	41'9	9°41'9	9°41'0	9°41'0	0°50'9	9°D 9	23°43'24	24°1'28	2°8'0	0°31'0	T 24	
F 25	6 11 26	2°45'15	0°11'19	10°4'7	6°18'16	37'9	9°39'9	9°43'0	9°43'0	0°48'9	9°9'23	23°41'23	23°58'28	28°15'0	0°30'0	F 25	
S 26	6 15 23	3°46'26	15°7'20	40°5'23	7°5'16	33'9	9°37'9	9°45'0	9°45'0	0°47'9	9°9'23	23°36'23	23°54'28	28°22'0	0°29'0	S 26	
S 27	6 19 19	4°47'38	29°58'22	7°6'38	7°52'16	29'9	9°36'9	9°47'0	9°47'0	0°45'9	9°9'23	23°28'23	23°51'28	28°28'0	0°28'0	S 27	
M28	6 23 16	5°48'50	15°1'23	33°7'54	8°40'16	24'9	9°34'9	9°49'0	9°49'0	0°44'9	9°9'23	23°18'23	23°48'28	28°35'0	0°27'0	M28	
T 29	6 27 13	6°50'02	0°3'24	57°9'9	9°27'16	20'9	9°32'9	9°51'0	9°51'0	0°42'9	9°9'23	23°6'23	23°45'28	28°42'0	0°26'0	T 29	
W30	6 31 9	7°51'14	15°3'26	18°10'25	10°14'16	15'9	9°31'9	9°53'0	9°53'0	0°41'9	9°9'23	22°55'23	23°42'28	28°49'0	0°26'0	W30	
T 31	6 35 6	8°52'26	29°34'27	36°11'40	11°1'16	10'10	9°30'9	9°55'0	9°55'0	0°39'9	9°Y 9	22°45'23	23°38'28	28°55'0	0°25'0	T 31	

Day	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂
	decl	decl lat	decl lat	decl lat	decl lat	decl lat	decl lat	decl lat	decl lat	decl lat	decl lat	decl lat	decl lat	decl lat	decl lat	decl lat	decl lat
T 1	21s44	18s15	5n 1	23s30	1s18	20s36	0n23	23s37	1s17	16n23	0n45	12n42	2s33	8s50	0s46	19n41	0s14
W 2	21 54	18 22	4 56	23 48	1 23	20 53	0 20	23 30	1 17	16 23	0 45	12 41	2 32	8 50	0 46	19 41	0 14
T 3	22 3	17 15	4 32	24 4	1 28	21 8	0 18	23 24	1 17	16 23	0 45	12 40	2 32	8 50	0 46	19 41	0 14
F 4	22 11	15 5	3 51	24 20	1 33	21 23	0 15	23 17	1 16	16 24	0 45	12 39	2 32	8 49	0 46	19 42	0 14
S 5	22 20	12 8	2 59	24 33	1 38	21 37	0 13	23 9	1 16	16 24	0 46	12 38	2 32	8 49	0 46	19 42	0 14
S 6	22 27	8 39	1 58	24 46	1 42	21 51	0 11	23 2	1 16	16 24	0 46	12 37	2 32	8 49	0 46	19 42	0 14
M 7	22 35	4 53	0 53	24 57	1 46	22 4	0 8	22 54	1 16	16 25	0 46	12 36	2 31	8 48	0 46	19 42	0 14
T 8	22 42	1 0	0s12	25 7	1 50	22 16	0 6	22 46	1 16	16 25	0 46	12 35	2 31	8 48	0 46	19 42	0 14
W 9	22 48	2n51	1 16	25 16	1 54	22 28	0 4	22 38	1 16	16 25	0 47	12 34	2 31	8 48	0 46	19 43	0 14
T 10	22 54	6 32	2 15	25 23	1 57	22 39	0 1	22 30	1 15	16 26	0 47	12 34	2 31	8 47	0 46	19 43	0 14
F 11	22 59	9 55	3 8	25 28	2 0	22 49	0s 1	22 21	1 15	16 27	0 47	12 33	2 30	8 47	0 46	19 43	0 14
S 12	23 4	12 54	3 52	25 32	2 3	22 59	0 4	22 12	1 15	16 27	0 47	12 32	2 30	8 46	0 46	19 43	0 14
S 13	23 9	15 21	4 26	25 35	2 6	23 8	0 6	22 3	1 15	16 28	0 48	12 31	2 30	8 46	0 46	19 44	0 14
M14	23 13	17 10	4 49	25 36	2 8	23 16	0 8	21 53	1 15	16 29	0 48	12 31	2 30	8 45	0 46	19 44	0 14
T 15	23 17	18 15	4 59	25 36	2 10	23 24	0 11	21 44	1 14	16 30	0 48	12 30	2 29	8 45	0 46	19 44	0 14
W16	23 20	18 31	4 56	25 34	2 11	23 31	0 13	21 34	1 14	16 31	0 48	12 29	2 29	8 44	0 46	19 45	0 14
T 17	23 23	17 57	4 39	25 31	2 12	23 37	0 16	21 23	1 14	16 32	0 49	12 29	2 29	8 44	0 46	19 45	0 14
F 18	23 25	16 32	4 9	25 26	2 12	23 42	0 18	21 13	1 14	16 33	0 49	12 28	2 29	8 43	0 46	19 45	0 14
S 19	23 27	14 19	3 27	25 19	2 12	23 47	0 20	21 2	1 13	16 34	0 49	12 27	2 28	8 42	0 46	19 45	0 14
S 20	23 28	11 24	2 34	25 11	2 12	23 51	0 23	20 51	1 13	16 35	0 49	12 27	2 28	8 42	0 46	19 46	0 14
M21	23 29	7 54	1 32	25 1	2 11	23 54	0 25	20 40	1 13	16 36	0 50	12 26	2 28	8 41	0 46	19 46	0 14
T 22	23 29	3 56	0 24	24 50	2 9	23 57	0 27	20 29	1 12	16 37	0 50	12 26	2 28	8 41	0 46	19 46	0 14
W23	23 29	0s19	0n47	24 37	2 7	23 58	0 29	20 17	1 12	16 39	0 50	12 26	2 27	8 40	0 46	19 47	0 14
T 24	23 29	4 40	1 57	24 23	2 4	23 59	0 32	20 6	1 12	16 40	0 50	12 25	2 27	8 39	0 45	19 47	0 14
F 25	23 28	8 52	3 2	24 7	2 1	23 59	0 34	19 54	1 12	16 41	0 50	12 25	2 27	8 39	0 45	19 47	0 14
S 26	23 26	12 38	3 56	23 49	1 57	23 59	0 36	19 41	1 11	16 43	0 51	12 25	2 27	8 38	0 45	19 48	0 14
S 27	23 24	15 41	4 36	23 31	1 52	23 58	0 38	19 29	1 11	16 44	0 51	12 24	2 26	8 37	0 45	19 48	0 14
M28	23 22	17 43	4 58	23 10	1 46	23 56	0 40	19 16	1 11	16 46	0 51	12 24	2 26	8 36	0 45	19 48	0 14
T 29	23 19	18 31	4 59	22 49	1 40	23 53	0 42	19 3	1 10	16 48	0 51	12 24	2 26	8 36	0 45	19 49	0 14
W30	23 15	18 1	4 39	22 27	1 32	23 49	0 45	18 50	1 10	16 49	0 52	12 24	2 25	8 35	0 45	19 49	0 14
T 31	23s12	16s19	4n 1	22s 3	1s24	23s45	0s47	18s37	1s10	16n51	0n52	12n23	2s25	8s34	0s45	19n49	0s14

Julian Day Number = 2301033.5, Delta T = 106.65 sec
 Ecliptic obliquity = 23°29'24", Nutation = - 0°00'02", out-of-bounds declination in red
 Ayanamsha: Fagan/Bradley = 18°59'21", Lahiri = 18°06'22Greg. Calendar