



Astrodienst Ephemeris Tables for the year 1643

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 1643
geocentric

JANUARY 1643 GC

00:00 UT

Day	Sid.t	☉	☽	♊	♋	♌	♍	♎	♏	♐	♑	♒	♓	♈	♉	Day
T 1	6 41 43	10°33'06	24°8'5	17°35'	24°59'	6°35'	13°36'	19°41'	15°32'	0°52'	2°R38	10°R 1	9°48'	17°16'	8°R37	T 1
F 2	6 45 39	11°34'15	6°11'45	18°37'	25°44'	6°53'	13°46'	19°45'	15°35'	0°54'	2°11'38	9°52'	9°44'	17°22'	8°11'34	F 2
S 3	6 49 36	12°35'24	19°15'	19°43'	26°27'	7°11'	13°57'	19°49'	15°37'	0°56'	2°37'	9°41'	9°41'	17°29'	8°31'	S 3
S 4	6 53 32	13°36'32	1°36'36	20°51'	27°9'	7°30'	14°7'	19°53'	15°40'	0°58'	2°36'	9°27'	9°38'	17°36'	8°28'	S 4
M 5	6 57 29	14°37'41	13°49'	22°2'	27°50'	7°49'	14°18'	19°58'	15°42'	1°0'	2°35'	9°13'	9°35'	17°43'	8°26'	M 5
T 6	7 1 26	15°38'49	25°53'	23°14'	28°30'	8°9'	14°28'	20°2'	15°44'	1°1'	2°34'	8°58'	9°32'	17°49'	8°23'	T 6
W 7	7 5 22	16°39'56	7°12'51	24°29'	29°8'	8°29'	14°39'	20°7'	15°47'	1°3'	2°33'	8°45'	9°29'	17°56'	8°20'	W 7
T 8	7 9 19	17°41'03	19°43'	25°45'	29°46'	8°49'	14°50'	20°11'	15°49'	1°5'	2°33'	8°33'	9°25'	18°3'	8°18'	T 8
F 9	7 13 15	18°42'10	1°17'32	27°2'	0°11'21	9°10'	15°1'	20°16'	15°51'	1°6'	2°32'	8°25'	9°22'	18°9'	8°15'	F 9
S 10	7 17 12	19°43'17	13°21'	28°21'	0°56'	9°31'	15°12'	20°21'	15°53'	1°8'	2°31'	8°20'	9°19'	18°16'	8°13'	S 10
S 11	7 21 8	20°44'24	25°13'	29°41'	1°29'	9°53'	15°23'	20°26'	15°55'	1°10'	2°31'	8°17'	9°16'	18°23'	8°10'	S 11
M 12	7 25 5	21°45'30	7°12'13	1°32'2	2°0'	10°15'	15°34'	20°31'	15°57'	1°11'	2°30'	8°D17	9°13'	18°29'	8°8'	M 12
T 13	7 29 1	22°46'36	19°27'	2°24'	2°30'	10°37'	15°46'	20°36'	15°59'	1°13'	2°29'	8°R17	9°9'	18°36'	8°5'	T 13
W 14	7 32 58	23°47'41	1°11'59	3°48'	2°58'	11°0'	15°57'	20°41'	16°1'	1°14'	2°28'	8°17'	9°6'	18°43'	8°3'	W 14
T 15	7 36 55	24°48'46	14°55'	5°12'	3°25'	11°23'	16°9'	20°46'	16°3'	1°16'	2°28'	8°15'	9°3'	18°49'	8°1'	T 15
F 16	7 40 51	25°49'51	28°19'	6°37'	3°50'	11°46'	16°21'	20°51'	16°5'	1°17'	2°27'	8°11'	9°0'	18°56'	7°59'	F 16
S 17	7 44 48	26°50'56	12°17'13	8°3'	4°13'	12°10'	16°32'	20°56'	16°7'	1°19'	2°27'	8°4'	8°57'	19°3'	7°57'	S 17
S 18	7 48 44	27°52'00	26°37'	9°30'	4°34'	12°34'	16°44'	21°2'	16°9'	1°20'	2°26'	7°55'	8°54'	19°10'	7°55'	S 18
M 19	7 52 41	28°53'03	11°32'27	10°57'	4°53'	12°58'	16°56'	21°7'	16°11'	1°22'	2°25'	7°45'	8°50'	19°16'	7°53'	M 19
T 20	7 56 37	29°54'06	26°35'	12°25'	5°10'	13°23'	17°8'	21°13'	16°12'	1°23'	2°25'	7°34'	8°47'	19°23'	7°51'	T 20
W 21	8 0 34	0°55'08	11°55'08	13°54'	5°25'	13°47'	17°20'	21°18'	16°14'	1°25'	2°24'	7°24'	8°44'	19°30'	7°49'	W 21
T 22	8 4 30	1°56'09	27°3'	15°24'	5°38'	14°13'	17°33'	21°24'	16°15'	1°26'	2°24'	7°16'	8°41'	19°36'	7°48'	T 22
F 23	8 8 27	2°57'09	12°11'2	16°55'	5°48'	14°38'	17°45'	21°30'	16°17'	1°27'	2°23'	7°11'	8°38'	19°43'	7°46'	F 23
S 24	8 12 24	3°58'07	26°40'	18°26'	5°57'	15°4'	17°57'	21°35'	16°18'	1°29'	2°23'	7°9'	8°35'	19°50'	7°45'	S 24
S 25	8 16 20	4°59'04	10°17'53	19°58'	6°3'	15°30'	18°10'	21°41'	16°20'	1°30'	2°22'	7°D 9	8°31'	19°56'	7°43'	S 25
M 26	8 20 17	6°0'00	24°4'1	21°30'	6°6'	15°56'	18°22'	21°47'	16°21'	1°31'	2°22'	7°9'	8°28'	20°3'	7°42'	M 26
T 27	8 24 13	7°0'55	8°8'5	23°3'	6°R 8	16°22'	18°35'	21°53'	16°22'	1°32'	2°21'	7°R10	8°25'	20°10'	7°40'	T 27
W 28	8 28 10	8°1'49	21°6'	24°37'	6°6'	16°49'	18°48'	21°59'	16°24'	1°33'	2°21'	7°9'	8°22'	20°16'	7°39'	W 28
T 29	8 32 6	9°2'41	3°11'50	26°12'	6°3'	17°16'	19°0'	22°5'	16°25'	1°35'	2°21'	7°6'	8°19'	20°23'	7°38'	T 29
F 30	8 36 3	10°3'31	16°19'	27°47'	5°56'	17°43'	19°13'	22°11'	16°26'	1°36'	2°20'	7°0'	8°15'	20°30'	7°37'	F 30
S 31	8 39 59	11°4'20	28°11'36	29°32'3	5°11'47	18°10'	19°11'26	22°11'18	16°27'	1°37'	2°11'20	6°52'	8°12'	20°37'	7°11'36	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	lat	
T 1	23s 4	15n26	3s30	21s 8	1n46	13s19	0s 7	15n 6	1n26	7s34	1s12	6s 7	2s12	16s11	0n22	18s46	1n38	9n 3	11s54	3s58	3s53	11n47	16n38	5s12		
F 2	22 59	17 20	4 12	21 23	1 37	12 57	0n 2	15 12	1 27	7 30	1 12	6 5	2 11	16 11	0 22	18 47	1 38	9 3	11 53	3 55	3 52	11 46	16 38	5 12		
S 3	22 53	18 23	4 41	21 37	1 28	12 34	0 10	15 19	1 28	7 26	1 12	6 3	2 11	16 12	0 22	18 47	1 38	9 3	11 53	3 51	3 51	11 45	16 38	5 12		
S 4	22 47	18 32	4 57	21 51	1 19	12 11	0 19	15 26	1 29	7 22	1 12	6 1	2 11	16 13	0 22	18 47	1 38	9 3	11 53	3 45	3 49	11 43	16 37	5 12		
M 5	22 41	17 49	4 59	22 4	1 11	11 48	0 28	15 33	1 29	7 17	1 11	5 59	2 11	16 13	0 22	18 48	1 38	9 3	11 53	3 39	3 48	11 42	16 37	5 12		
T 6	22 34	16 18	4 47	22 17	1 2	11 26	0 38	15 40	1 30	7 13	1 11	5 57	2 11	16 14	0 22	18 48	1 38	9 3	11 53	3 34	3 47	11 40	16 37	5 12		
W 7	22 27	14 6	4 22	22 29	0 53	11 3	0 48	15 47	1 31	7 9	1 11	5 55	2 10	16 15	0 22	18 48	1 38	9 3	11 52	3 28	3 46	11 39	16 36	5 12		
T 8	22 19	11 20	3 47	22 41	0 44	10 41	0 58	15 54	1 31	7 4	1 11	5 53	2 10	16 15	0 22	18 49	1 38	9 3	11 52	3 24	3 44	11 37	16 36	5 11		
F 9	22 11	8 7	3 1	22 51	0 36	10 18	1 8	16 2	1 32	7 0	1 11	5 51	2 10	16 16	0 22	18 49	1 38	9 4	11 52	3 21	3 43	11 36	16 36	5 11		
S 10	22 2	4 35	2 8	23 1	0 27	9 57	1 18	16 9	1 33	6 56	1 11	5 49	2 10	16 17	0 22	18 49	1 38	9 4	11 52	3 19	3 42	11 34	16 36	5 11		
S 11	21 53	0 51	1 9	23 10	0 19	9 35	1 29	16 17	1 33	6 51	1 10	5 47	2 10	16 17	0 22	18 50	1 38	9 4	11 51	3 18	3 41	11 33	16 36	5 11		
M 12	21 43	2s57	0 6	23 18	0 11	9 13	1 40	16 24	1 34	6 47	1 10	5 45	2 10	16 18	0 22	18 50	1 38	9 4	11 51	3 17	3 39	11 31	16 35	5 11		
T 13	21 33	6 43	0n59	23 25	0 2	8 52	1 51	16 32	1 34	6 42	1 10	5 43	2 10	16 18	0 22	18 50	1 38	9 4	11 51	3 17	3 38	11 30	16 35	5 10		
W 14	21 23	10 16	2 2	23 31	0s 5	8 31	2 3	16 39	1 35	6 37	1 10	5 41	2 9	16 19	0 22	18 50	1 38	9 4	11 51	3 17	3 37	11 28	16 35	5 10		
T 15	21 12	13 27	3 2	23 36	0 13	8 11	2 15	16 47	1 35	6 33	1 10	5 39	2 9	16 19	0 22	18 51	1 38	9 4	11 50	3 17	3 36	11 27	16 35	5 10		
F 16	21 1	16 2	3 33	23 40	0 21	7 51	2 27	16 55	1 36	6 28	1 10	5 37	2 9	16 20	0 22	18 51	1 39	9 4	11 50	3 15	3 34	11 25	16 35	5 10		
S 17	20 50	17 48	4 33	23 42	0 28	7 31	2 39	17 2	1 36	6 23	1 10	5 34	2 9	16 20	0 22	18 51	1 39	9 4	11 50	3 12	3 33	11 24	16 35	5 10		
S 18	20 38	18 30	4 57	23 44	0 35	7 12	2 51	17 10	1 37	6 19	1 9	5 32	2 9	16 21	0 22	18 51	1 39	9 4	11 50	3 9	3 32	11 22	16 35	5 9		
M 19	20 25	17 59	5 2	23 44	0 42	6 53	3 4	17 18	1 37	6 14	1 9	5 30	2 9	16 21	0 22	18 52	1 39	9 5	11 49	3 5	3 31	11 21	16 35	5 9		
T 20	20 12	16 12	4 46	23 43	0 49	6 35	3 17	17 26	1 37	6 9	1 9	5 28	2 9	16 22	0 22	18 52	1 39	9 5	11 49	3 0	3 29	11 19	16 34	5 9		
W 21	19 59	13 16	4 10	23 40	0 55	6 17	3 30	17 34	1 38	6 4	1 9	5 25	2 8	16 22	0 22	18 52	1 39	9 5	11 49	2 57	3 28	11 18	16 34	5 9		
T 22	19 46	9 26	3 16	23 37	1 2	6 0	3 43	17 41	1 38	5 59	1 9	5 23	2 8	16 23	0 22	18 52	1 39	9 5	11 49	2 54	3 27	11 16	16 34	5 9		
F 23	19 32	5 4	2 10	23 32	1 8	5 44	3 57	17 49	1 38	5 54	1 9	5 20	2 8	16 23	0 22	18 53	1 39	9 5	11 48	2 52	3 26	11 14	16 34	5 8		
S 24	19 18	0 29	0 56	23 25	1 13	5 28	4 10	17 57	1 39	5 49	1 9	5 18	2 8	16 24	0 22	18 53	1 39	9 5	11 48	2 51	3 24	11 13	16 34	5 8		
S 25	19 3	4n 1	0s20	23 18	1 19	5 13	4 24	18 5	1 39	5 44	1 9	5 16	2 8	16 24	0 22	18 53	1 39	9 6	11 48	2 50	3 23	11 11	16 34	5 8		
M 26	18 48	8 9	1 32	23 9	1 24	4 59	4 38	18 13	1 39	5 39	1 9	5 13	2 8	16 24	0 22	18 53	1 39	9 6	11 48	2 51	3 22	11 10	16 34	5 8		
T 27	18 33	11 44	2 37	22 58	1 29	4 46	4 52	18 21	1 40	5 34	1 8	5 11	2 8	16 25	0 22	18 53	1 39	9 6	11 47	2 51	3 21	11 8	16 34	5 7		
W 28	18 18	14 39	3 33	22 47	1 34	4 33	5 6	18 29	1 40	5 29	1 8	5 8	2 8	16 25	0 22	18 54	1 39	9 6	11 47	2 50	3 19	11 7	16 34	5 7		
T 29	18 2	16 46	4 16	22 33	1 38	4 21	5 19	18 37	1 40	5 24	1 8	5 6	2 7	16 25	0 22	18 54	1 39	9 6	11 47	2 49	3 18	11 5	16 35	5 7		
F 30	17 45	18 2	4 46	22 19	1 42	4 11	5 33	18 45	1 40	5 19	1 8	5 3	2 7	16 26	0 22	18 54	1 39	9 7	11 47	2 47	3 17	11 4	16 35	5 7		
S 31	17s29	18n27	5s 2	22s 3	1s46	4s 1	5n47	18n53	1n40	5s14	1s 8	5s 1	2s 7	16s26	0n22	18s54	1n39	9n 7	11s46	2s44	3s16	11n 2	16n35	5s 6		

ASTRODIENST EPHEMERIS for the year 1643

geocentric

MARCH 1643 GC

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
S 1	10 34 20	10 ^h 17'56	19 ^h 47'	21 ^h 27'	21°R40	2 ^h 39'	26 ^h 4'	25 ^h 36'	16°R35	1 ^h 54'	2 ^h 20'	5°R21	6 ^h 40'	23 ^h 50'	7 ^h 40'	S 1
M 2	10 38 16	11°17'58	1 ^h 42'	23°19'	21°21'	3°11'	26°18'	25°43'	16 ^h 35'	1°54'	2°20'	5 ^h 17'	6°37'	23°57'	7°41'	M 2
T 3	10 42 13	12°17'58	13°33'	25°10'	21° 4'	3°43'	26°33'	25°51'	16°34'	1°54'	2°20'	5°13'	6°34'	24° 4'	7°42'	T 3
W 4	10 46 9	13°17'55	25°22'	26°59'	20°49'	4°16'	26°47'	25°58'	16°34'	1°R54	2°21'	5° 9'	6°31'	24°10'	7°44'	W 4
T 5	10 50 6	14°17'51	7 ^h 13'	28°46'	20°37'	4°48'	27° 1'	26° 5'	16°33'	1°54'	2°21'	5° 6'	6°27'	24°17'	7°45'	T 5
F 6	10 54 2	15°17'44	19° 6'	0 ^h 30'	20°27'	5°20'	27°16'	26°13'	16°32'	1°54'	2°22'	5° 5'	6°24'	24°24'	7°47'	F 6
S 7	10 57 59	16°17'36	1 ^h 4	2°10'	20°19'	5°53'	27°30'	26°20'	16°31'	1°54'	2°22'	5°D 4'	6°21'	24°30'	7°49'	S 7
S 8	11 1 55	17°17'26	13° 9'	3°47'	20°14'	6°25'	27°45'	26°27'	16°31'	1°54'	2°22'	5° 4'	6°18'	24°37'	7°51'	S 8
M 9	11 5 52	18°17'14	25°23'	5°19'	20°D12	6°58'	27°59'	26°35'	16°30'	1°53'	2°23'	5° 5'	6°15'	24°44'	7°52'	M 9
T 10	11 9 48	19°17'00	7 ^h 48'	6°47'	20°12'	7°31'	28°14'	26°42'	16°29'	1°53'	2°23'	5° 6'	6°11'	24°50'	7°54'	T 10
W11	11 13 45	20°16'44	20°27'	8° 9'	20°14'	8° 4'	28°28'	26°50'	16°28'	1°53'	2°24'	5° 7'	6° 8'	24°57'	7°56'	W11
T 12	11 17 42	21°16'27	3 ^h 23'	9°26'	20°19'	8°36'	28°43'	26°57'	16°27'	1°53'	2°24'	5° 8'	6° 5'	25° 4'	7°58'	T 12
F 13	11 21 38	22°16'08	16°38'	10°36'	20°26'	9° 9'	28°57'	27° 5'	16°26'	1°53'	2°25'	5°R 9'	6° 2'	25°11'	8° 0'	F 13
S 14	11 25 35	23°15'47	0 ^h 15'	11°39'	20°36'	9°42'	29°12'	27°12'	16°24'	1°52'	2°26'	5° 9'	5°59'	25°17'	8° 3'	S 14
S 15	11 29 31	24°15'24	14°15'	12°36'	20°47'	10°16'	29°26'	27°19'	16°23'	1°52'	2°26'	5° 8'	5°56'	25°24'	8° 5'	S 15
M16	11 33 28	25°15'00	28°37'	13°26'	21° 1'	10°49'	29°41'	27°27'	16°22'	1°52'	2°27'	5° 7'	5°52'	25°31'	8° 7'	M16
T 17	11 37 24	26°14'34	13 ^h 38'	14° 8'	21°16'	11°22'	29°55'	27°34'	16°21'	1°51'	2°27'	5° 6'	5°49'	25°37'	8°10'	T 17
W18	11 41 21	27°14'06	28°13'	14°42'	21°34'	11°55'	0 ^h 10'	27°42'	16°19'	1°51'	2°28'	5° 5'	5°46'	25°44'	8°12'	W18
T 19	11 45 17	28°13'37	13 ^h 15'	15° 8'	21°54'	12°29'	0°24'	27°49'	16°18'	1°50'	2°29'	5° 5'	5°43'	25°51'	8°15'	T 19
F 20	11 49 14	29°13'05	28°14'	15°27'	22°15'	13° 2'	0°39'	27°57'	16°17'	1°50'	2°29'	5°D 4'	5°40'	25°57'	8°17'	F 20
S 21	11 53 11	0 ^h 12'31	13 ^h 4'	15°38'	22°38'	13°36'	0°53'	28° 4'	16°15'	1°49'	2°30'	5° 4'	5°37'	26° 4'	8°20'	S 21
S 22	11 57 7	1°11'55	27°35'	15°R41	23° 3'	14°10'	1° 8'	28°12'	16°14'	1°49'	2°31'	5° 5'	5°33'	26°11'	8°23'	S 22
M23	12 1 4	2°11'17	11 ^h 44'	15°37'	23°30'	14°43'	1°22'	28°19'	16°12'	1°48'	2°31'	5° 5'	5°30'	26°17'	8°25'	M23
T 24	12 5 0	3°10'37	25°27'	15°25'	23°58'	15°17'	1°37'	28°27'	16°11'	1°47'	2°32'	5° 5'	5°27'	26°24'	8°28'	T 24
W25	12 8 57	4° 9'54	8 ^h 44'	15° 7'	24°28'	15°51'	1°51'	28°34'	16° 9'	1°47'	2°33'	5° 5'	5°24'	26°31'	8°31'	W25
T 26	12 12 53	5° 9'09	21°36'	14°42'	24°59'	16°25'	2° 6'	28°42'	16° 7'	1°46'	2°34'	5°R 5'	5°21'	26°37'	8°34'	T 26
F 27	12 16 50	6° 8'22	4 ^h 48'	14°12'	25°32'	16°59'	2°21'	28°49'	16° 6'	1°45'	2°35'	5°D 5'	5°17'	26°44'	8°37'	F 27
S 28	12 20 46	7° 7'33	16°22'	13°37'	26° 6'	17°33'	2°35'	28°56'	16° 4'	1°45'	2°35'	5° 5'	5°14'	26°51'	8°40'	S 28
S 29	12 24 43	8° 6'41	28°23'	12°57'	26°41'	18° 7'	2°50'	29° 4'	16° 2'	1°44'	2°36'	5° 6'	5°11'	26°57'	8°43'	S 29
M30	12 28 40	9° 5'46	10 ^h 16'	12°14'	27°18'	18°41'	3° 4'	29°11'	16° 0'	1°43'	2°37'	5° 6'	5° 8'	27° 4'	8°47'	M30
T 31	12 32 36	10 ^h 4'50	22 ^h 6'	11 ^h 28'	27°55'	19°15'	3°19'	29 ^h 19'	15 ^h 58'	1 ^h 42'	2°38'	5°D 6'	5°D 5'	27 ^h 11'	8°50'	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
S 1	7s43	17n 0	5s 4	3s52	0s31	6s34	8n10	22n24	1n42	2s35	1s 6	3s40	2s 5	16s28	0n22	18s56
M 2	7 20	15 15	4 41	2 58	0 20	6 47	8 3	22 30	1 42	2 29	1 6	3 37	2 5	16 28	0 22	18 56
T 3	6 58	12 51	4 7	2 3	0 9	6 59	7 55	22 37	1 42	2 23	1 6	3 34	2 5	16 28	0 22	18 56
W 4	6 35	9 55	3 22	1 9	0n 3	7 12	7 47	22 43	1 42	2 17	1 6	3 31	2 5	16 28	0 22	18 56
T 5	6 11	6 35	2 28	0 16	0 15	7 24	7 38	22 48	1 42	2 12	1 6	3 28	2 5	16 27	0 23	18 56
F 6	5 48	2 59	1 27	0n37	0 28	7 35	7 29	22 54	1 42	2 6	1 6	3 25	2 5	16 27	0 23	18 56
S 7	5 25	0s46	0 22	1 29	0 41	7 47	7 20	23 0	1 42	2 0	1 6	3 22	2 5	16 27	0 23	18 56
S 8	5 2	4 31	0n45	2 20	0 54	7 57	7 10	23 6	1 42	1 54	1 6	3 20	2 5	16 27	0 23	18 56
M 9	4 38	8 7	1 50	3 9	1 7	8 8	7 0	23 11	1 42	1 49	1 6	3 17	2 5	16 26	0 23	18 56
T 10	4 15	11 26	2 52	3 55	1 20	8 17	6 50	23 17	1 42	1 43	1 6	3 14	2 5	16 26	0 23	18 56
W11	3 51	14 16	3 46	4 40	1 33	8 27	6 39	23 22	1 42	1 37	1 6	3 11	2 5	16 26	0 23	18 55
T 12	3 28	16 27	4 30	5 22	1 46	8 35	6 29	23 27	1 42	1 31	1 6	3 8	2 5	16 25	0 23	18 55
F 13	3 4	17 49	5 1	6 1	1 59	8 43	6 18	23 32	1 41	1 25	1 6	3 5	2 5	16 25	0 23	18 55
S 14	2 41	18 13	5 16	6 38	2 11	8 51	6 7	23 37	1 41	1 20	1 6	3 2	2 5	16 25	0 23	18 55
S 15	2 17	17 32	5 13	7 11	2 23	8 57	5 56	23 42	1 41	1 14	1 6	2 59	2 5	16 24	0 23	18 55
M16	1 53	15 43	4 51	7 40	2 34	9 4	5 45	23 47	1 41	1 8	1 6	2 56	2 5	16 24	0 23	18 55
T 17	1 30	12 52	4 10	6 2	2 44	9 9	5 34	23 51	1 41	1 2	1 6	2 53	2 5	16 24	0 23	18 55
W18	1 6	9 8	3 11	8 28	2 54	9 14	5 24	23 56	1 41	0 56	1 6	2 50	2 5	16 23	0 23	18 55
T 19	0 42	4 47	1 58	8 46	3 2	9 18	5 13	24 0	1 41	0 51	1 6	2 47	2 5	16 23	0 23	18 54
F 20	0 19	0 7	0 38	9 0	3 9	9 22	5 2	24 4	1 41	0 45	1 6	2 44	2 5	16 23	0 23	18 54
S 21	0n 5	4n29	0s44	9 10	3 15	9 24	4 51	24 8	1 40	0 39	1 6	2 41	2 5	16 22	0 23	18 54
S 22	0 29	8 44	2 2	9 15	3 20	9 27	4 40	24 12	1 40	0 33	1 6	2 38	2 5	16 22	0 23	18 54
M23	0 52	12 22	3 10	9 17	3 23	9 28	4 29	24 16	1 40	0 27	1 6	2 35	2 5	16 21	0 23	18 54
T 24	1 16	15 12	4 5	9 14	3 25	9 29	4 19	24 20	1 40	0 22	1 6	2 32	2 5	16 21	0 23	18 54
W25	1 39	17 6	4 45	9 6	3 25	9 29	4 8	24 23	1 40	0 16	1 6	2 29	2 5	16 20	0 23	18 53
T 26	2 3	18 5	5 9	8 55	3 23	9 29	3 58	24 26	1 40	0 10	1 6	2 26	2 5	16 20	0 23	18 53
F 27	2 27	18 8	5 18	8 40	3 20	9 28	3 48	24 30	1 40	0 4	1 6	2 24	2 5	16 19	0 23	18 53
S 28	2 50	17 19	5 12	8 22	3 15	9 26	3 37	24 33	1 39	0n 1	1 6	2 21	2 5	16 19	0 23	18 53
S 29	3 13	15 45	4 52	8 0	3 8	9 24	3 27	24 36	1 39	0 7	1 6	2 18	2 5	16 18	0 23	18 53
M30	3 37	13 31	4 20	7 36	2 59	9 21	3 17	24 39	1 39	0 13	1 6	2 15	2 5	16 18	0 23	18 53
T 31	4n 0	10n45	3s37	7n 9	2n49	9s17	3n 7	24n41	1n39	0n19	1s 6	2s12	2s 6	16s17	0n23	18s52

Julian Day Number = 2321212.5, Delta T = 48.11 sec
 Ecliptic obliquity = 23°29'00, Nutation = 0°00'03, out-of-bounds declination in red
 Ayanamsha: Fagan/Bradley = 19°45'35, Lahiri = 18°52'35Greg. Calendar

ASTRODIENST EPHEMERIS for the year 1643
geocentric

APRIL 1643 GC

00:00 UT

Day	Sid.t	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
W 1	12 36 33	11° 35'	3° 55'	10° 41'	28° 34'	19° 50'	3° 33'	29° 26'	15° 57'	1° 41'	2° 39'	5° 7'	5° 2'	27° 17'	8° 53'	W 1
T 2	12 40 29	12° 25'	15° 48'	9° 53'	29° 14'	20° 24'	3° 47'	29° 33'	15° 55'	1° 40'	2° 40'	5° 8'	4° 58'	27° 24'	8° 57'	T 2
F 3	12 44 26	13° 14'	27° 47'	9° 6'	29° 56'	20° 58'	4° 2'	29° 41'	15° 53'	1° 40'	2° 41'	5° 8'	4° 55'	27° 31'	9° 0'	F 3
S 4	12 48 22	14° 04'	9° 55'	8° 20'	0° 38'	21° 33'	4° 16'	29° 48'	15° 51'	1° 39'	2° 42'	5° 8'	4° 52'	27° 37'	9° 4'	S 4
S 5	12 52 19	14° 59'34	22° 13'	7° 36'	1° 21'	22° 7'	4° 31'	29° 55'	15° 49'	1° 38'	2° 43'	5° 8'	4° 49'	27° 44'	9° 7'	S 5
M 6	12 56 15	15° 58'25	4° 43'	6° 54'	2° 5'	22° 42'	4° 45'	0° 3'	15° 47'	1° 37'	2° 44'	5° 7'	4° 46'	27° 51'	9° 11'	M 6
T 7	13 0 12	16° 57'14	17° 26'	6° 16'	2° 50'	23° 16'	5° 0'	0° 10'	15° 45'	1° 36'	2° 45'	5° 5'	4° 43'	27° 57'	9° 15'	T 7
W 8	13 4 8	17° 56'01	0° 23'	5° 42'	3° 36'	23° 51'	5° 14'	0° 17'	15° 42'	1° 35'	2° 46'	5° 4'	4° 39'	28° 4'	9° 18'	W 8
T 9	13 8 5	18° 54'46	13° 33'	5° 12'	4° 23'	24° 25'	5° 28'	0° 24'	15° 40'	1° 33'	2° 47'	5° 2'	4° 36'	28° 11'	9° 22'	T 9
F 10	13 12 2	19° 53'29	26° 59'	4° 47'	5° 11'	25° 0'	5° 43'	0° 32'	15° 38'	1° 32'	2° 48'	5° 0'	4° 33'	28° 17'	9° 26'	F 10
S 11	13 15 58	20° 52'11	10° 39'	4° 27'	5° 59'	25° 35'	5° 57'	0° 39'	15° 36'	1° 31'	2° 49'	4° 59'	4° 30'	28° 24'	9° 30'	S 11
S 12	13 19 55	21° 50'51	24° 34'	4° 12'	6° 49'	26° 9'	6° 11'	0° 46'	15° 34'	1° 30'	2° 50'	4° 59'	4° 27'	28° 31'	9° 34'	S 12
M13	13 23 51	22° 49'30	8° 43'	4° 2'	7° 39'	26° 44'	6° 25'	0° 53'	15° 31'	1° 29'	2° 51'	5° 0'	4° 23'	28° 37'	9° 38'	M13
T 14	13 27 48	23° 48'07	23° 5'	3° 58'	8° 29'	27° 19'	6° 40'	1° 0'	15° 29'	1° 28'	2° 52'	5° 1'	4° 20'	28° 44'	9° 42'	T 14
W15	13 31 44	24° 46'42	7° 36'	3° 58'	9° 21'	27° 54'	6° 54'	1° 7'	15° 27'	1° 27'	2° 53'	5° 2'	4° 17'	28° 51'	9° 46'	W15
T 16	13 35 41	25° 45'15	22° 12'	4° 3'	10° 13'	28° 29'	7° 8'	1° 14'	15° 25'	1° 25'	2° 54'	5° 3'	4° 14'	28° 57'	9° 50'	T 16
F 17	13 39 37	26° 43'47	6° 49'	4° 14'	11° 5'	29° 4'	7° 22'	1° 21'	15° 22'	1° 24'	2° 55'	5° 3'	4° 11'	29° 4'	9° 54'	F 17
S 18	13 43 34	27° 42'16	21° 20'	4° 29'	11° 58'	29° 39'	7° 36'	1° 28'	15° 20'	1° 23'	2° 56'	5° 3'	4° 8'	29° 11'	9° 58'	S 18
S 19	13 47 31	28° 40'44	5° 40'	4° 49'	12° 52'	0° 14'	7° 50'	1° 35'	15° 18'	1° 22'	2° 58'	5° 1'	4° 4'	29° 17'	10° 3'	S 19
M20	13 51 27	29° 39'10	19° 42'	5° 13'	13° 46'	0° 49'	8° 4'	1° 42'	15° 15'	1° 20'	2° 59'	4° 58'	4° 1'	29° 24'	10° 7'	M20
T 21	13 55 24	0° 37'35	3° 12'24	5° 42'	14° 41'	1° 24'	8° 18'	1° 49'	15° 13'	1° 19'	3° 0'	4° 54'	3° 58'	29° 31'	10° 11'	T 21
W22	13 59 20	1° 35'57	16° 42'	6° 15'	15° 37'	1° 59'	8° 32'	1° 56'	15° 10'	1° 18'	3° 1'	4° 50'	3° 55'	29° 37'	10° 16'	W22
T 23	14 3 17	2° 34'17	29° 38'	6° 52'	16° 32'	2° 34'	8° 46'	2° 3'	15° 8'	1° 16'	3° 2'	4° 46'	3° 52'	29° 44'	10° 20'	T 23
F 24	14 7 13	3° 32'35	12° 13'	7° 33'	17° 29'	3° 9'	9° 0'	2° 9'	15° 5'	1° 15'	3° 4'	4° 44'	3° 48'	29° 51'	10° 25'	F 24
S 25	14 11 10	4° 30'51	24° 29'	8° 17'	18° 26'	3° 45'	9° 14'	2° 16'	15° 3'	1° 13'	3° 5'	4° 42'	3° 45'	29° 57'	10° 29'	S 25
S 26	14 15 6	5° 29'05	6° 32'	9° 5'	19° 23'	4° 20'	9° 27'	2° 23'	15° 1'	1° 12'	3° 6'	4° 40'	3° 42'	0° 4'	10° 34'	S 26
M27	14 19 3	6° 27'17	18° 26'	9° 56'	20° 20'	4° 55'	9° 41'	2° 29'	14° 58'	1° 11'	3° 7'	4° 42'	3° 39'	0° 11'	10° 38'	M27
T 28	14 23 0	7° 25'27	0° 16'	10° 51'	21° 18'	5° 31'	9° 55'	2° 36'	14° 56'	1° 9'	3° 8'	4° 43'	3° 36'	0° 17'	10° 43'	T 28
W29	14 26 56	8° 23'35	12° 6'	11° 48'	22° 17'	6° 6'	10° 8'	2° 43'	14° 53'	1° 8'	3° 10'	4° 45'	3° 33'	0° 24'	10° 47'	W29
T 30	14 30 53	9° 21'41	24° 2'	12° 49'	23° 16'	6° 54'	10° 22'	2° 49'	14° 51'	1° 7'	3° 11'	4° 47'	3° 29'	0° 31'	10° 52'	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
W 1	4n23	7n32	2s45	6n40	2n38	9s13	2n58	24n44	1n39	0n24	1s 6	2s 9	2s 6	16s17	0n23	18s52	1n42	9n26	11s30	2s 2	2s 0	9n28	17n 3	4s50	
T 2	4 46	3 59	1 45	6 9	2 26	9 8	2 48	24 46	1 39	0 30	1 6	2 6	2 6	16 16	0 23	18 52	1 42	9 27	11 30	2 2	1 59	9 27	17 3	4 50	
F 3	5 9	0 16	0 41	5 38	2 12	9 2	2 39	24 49	1 38	0 36	1 6	2 3	2 6	16 16	0 23	18 52	1 42	9 27	11 30	2 3	1 58	9 25	17 4	4 50	
S 4	5 32	3s32	0n27	5 6	1 57	8 56	2 30	24 51	1 38	0 42	1 6	2 1	2 6	16 15	0 23	18 51	1 42	9 27	11 29	2 3	1 56	9 23	17 5	4 49	
S 5	5 55	7 13	1 33	4 35	1 42	8 50	2 21	24 53	1 38	0 47	1 6	1 58	2 6	16 14	0 23	18 51	1 42	9 28	11 29	2 2	1 55	9 22	17 6	4 49	
M 6	6 18	10 39	2 37	4 4	1 26	8 42	2 12	24 54	1 38	0 53	1 6	1 55	2 6	16 14	0 23	18 51	1 42	9 28	11 29	2 2	1 54	9 20	17 6	4 49	
T 7	6 40	13 39	3 34	3 34	1 10	8 34	2 3	24 56	1 38	0 59	1 6	1 52	2 6	16 13	0 23	18 51	1 42	9 28	11 29	2 2	1 52	9 19	17 7	4 49	
W 8	7 3	16 1	4 20	3 5	0 53	8 26	1 54	24 58	1 37	1 4	1 6	1 49	2 6	16 13	0 23	18 50	1 42	9 29	11 29	2 1	1 51	9 17	17 8	4 49	
T 9	7 25	17 36	4 55	2 38	0 37	8 17	1 46	24 59	1 37	1 10	1 6	1 46	2 7	16 12	0 23	18 50	1 43	9 29	11 28	2 0	1 50	9 15	17 8	4 49	
F 10	7 48	18 14	5 13	2 13	0 20	8 7	1 37	25 0	1 37	1 15	1 6	1 44	2 7	16 11	0 23	18 50	1 43	9 30	11 28	2 0	1 49	9 14	17 9	4 48	
S 11	8 10	17 49	5 15	1 50	0 4	7 57	1 29	25 1	1 37	1 21	1 6	1 41	2 7	16 11	0 23	18 50	1 43	9 30	11 28	1 59	1 47	9 12	17 10	4 48	
S 12	8 32	16 21	4 58	1 30	0s11	7 47	1 21	25 2	1 37	1 27	1 6	1 38	2 7	16 10	0 23	18 49	1 43	9 30	11 28	1 59	1 46	9 10	17 11	4 48	
M13	8 54	13 53	4 23	1 12	0 27	7 35	1 13	25 3	1 36	1 32	1 6	1 35	2 7	16 9	0 23	18 49	1 43	9 31	11 28	1 59	1 45	9 9	17 11	4 48	
T 14	9 15	10 31	3 32	0 57	0 41	7 24	1 5	25 3	1 36	1 38	1 6	1 33	2 7	16 9	0 23	18 49	1 43	9 31	11 27	2 0	1 44	9 7	17 12	4 48	
W15	9 37	6 29	2 26	0 44	0 55	7 11	0 58	25 4	1 36	1 43	1 6	1 30	2 7	16 8	0 23	18 49	1 43	9 32	11 27	2 0	1 42	9 6	17 13	4 47	
T 16	9 58	2 1	1 10	0 34	1 9	6 59	0 50	25 4	1 36	1 49	1 7	1 27	2 7	16 7	0 23	18 48	1 43	9 32	11 27	2 1	1 41	9 4	17 14	4 47	
F 17	10 19	2n34	0s10	0 26	1 21	6 46	0 43	25 4	1 35	1 55	1 7	1 24	2 7	16 7	0 23	18 48	1 43	9 32	11 27	2 1	1 40	9 2	17 14	4 47	
S 18	10 41	6 58	1 29	0 21	1 33	6 32	0 36	25 4	1 35	2 0	1 7	1 22	2 8	16 6	0 23	18 48	1 43	9 33	11 27	2 1	1 39	9 1	17 15	4 47	
S 19	11 1	10 54	2 41	0 19	1 45	6 18	0 29	25 4	1 35	2 6	1 7	1 19	2 8	16 5	0 23	18 48	1 43	9 33	11 27	2 0	1 37	8 59	17 16	4 47	
M20	11 22	14 8	3 42	0 19	1 55	6 3	0 22	25 4	1 35	2 11	1 7	1 17	2 8	16 5	0 23	18 47	1 43	9 33	11 26	1 59	1 36	8 57	17 17	4 47	
T 21	11 43	16 29	4 28	0 22	2 5	5 48	0 15	25 3	1 35	2 16	1 7	1 14	2 8	16 4	0 23	18 47	1 43	9 34	11 26	1 57	1 35	8 56	17 17	4 47	
W22	12 3	17 52	4 58	0 27	2 14	5 33	0 9	25 2	1 34	2 22	1 7	1 11	2 8	16 3	0 23	18 47	1 43	9 34	11 26	1 56	1 34	8 54	17 18	4 46	
T 23	12 23	18 16	5 13	0 34	2 22	5 17	0 2	25 2	1 34	2 27	1 7	1 9	2 8	16 3	0 23	18 46	1 43	9 35	11 26	1 54	1 32	8 53	17 19	4 46	
F 24	12 43	17 45	5 11	0 43	2 29	5 1	0s 4	25 1	1 34	2 33	1 7	1 6	2 8	16 2	0 23	18 46	1 43	9 35	11 26	1 53	1 31	8 51	17 20	4 46	
S 25	13 3	16 25	4 55	0 54	2 36	4 44	0 10	24 59	1 34	2 38	1 7	1 4	2 8	16 1	0 23	18 46	1 43	9 35	11 26	1 52	1 30	8 49	17 20	4 46	
S 26	13 22	14 22	4 27	1 8	2 42	4 27	0 16	24 58	1 33	2 43	1 7	1 1	2 9	16 0	0 23	18 45	1 43	9 36	11 25	1 52	1 28	8 48	17 21	4 46	
M27	13 42	11 44	3 47	1 23	2 47	4 10	0 22	24 57	1 33	2 49	1 7	0 58	2 9	16 0	0 23	18 45	1 43	9 36	11 25	1 52	1 27	8 46	17 22	4 46	
T 28	14 1	8 38	2 58	1 41	2 51	3 52	0 27	24 55	1 33	2 54	1 7	0 56	2 9	15 59	0 23	18 44	1 43	9 36	11 25	1 53	1 26	8 44	17 23	4 46	
W29	14 20	5 10	2 1	2 0	2 55	3 34	0 33	24 53	1 33	2 59	1 7	0 54	2 9	15 58	0 23	18 44	1 43	9 37	11 25	1 54	1 25	8 43	17 23	4 46	
T 30	14n38	1n29	0s59	2n20	2s58	3s16	0s38	24n51	1n32	3n 5	1s 8	0s51	2s 9	15s58	0n23	18s44	1n43	9n37	11s25	1s54	1s23	8n41	17n24	4s46	

ASTRODIENST EPHEMERIS for the year 1643
geocentric

MAY 1643 GC

00:00 UT

Day	Sid.t	☉	☽	♊	♋	♌	♍	♎	♏	♐	♑	♒	♓	♈	♉	Day
F 1	14 34 49	10♌19'45	6♊ 7	13♊52	24♋15	7♌17	10♊36	2♊56	14°R48	1°R 5	3♊12	4°R47	3♊26	0♊37	10♊57	F 1
S 2	14 38 46	11°17'47	18°25	14°58	25°14	7°52	10°49	3° 2	14♌46	1♌ 3	3°14	4♌46	3°23	0°44	11° 2	S 2
S 3	14 42 42	12°15'48	0♌57	16° 7	26°14	8°28	11° 3	3° 8	14°43	1° 2	3°15	4°44	3°20	0°51	11° 6	S 3
M 4	14 46 39	13°13'46	13°46	17°19	27°14	9° 3	11°16	3°15	14°40	1° 0	3°16	4°39	3°17	0°57	11°11	M 4
T 5	14 50 35	14°11'44	26°51	18°33	28°15	9°39	11°29	3°21	14°38	0°59	3°17	4°33	3°14	1° 4	11°16	T 5
W 6	14 54 32	15° 9'39	10♌11	19°49	29°16	10°14	11°43	3°27	14°35	0°57	3°19	4°27	3°10	1°11	11°21	W 6
T 7	14 58 29	16° 7'34	23°45	21° 8	0♊17	10°50	11°56	3°33	14°33	0°56	3°20	4°20	3° 7	1°17	11°26	T 7
F 8	15 2 25	17° 5'27	7♌31	22°30	1°18	11°26	12° 9	3°40	14°30	0°54	3°21	4°14	3° 4	1°24	11°31	F 8
S 9	15 6 22	18° 3'19	21°25	23°53	2°20	12° 1	12°22	3°46	14°28	0°53	3°23	4°10	3° 1	1°31	11°36	S 9
S 10	15 10 18	19° 1'09	5♌27	25°19	3°22	12°37	12°35	3°52	14°25	0°51	3°24	4° 7	2°58	1°37	11°41	S 10
M 11	15 14 15	19°58'58	19°34	26°48	4°25	13°13	12°48	3°58	14°23	0°49	3°25	4°D 6	2°54	1°44	11°46	M 11
T 12	15 18 11	20°56'46	3♋44	28°18	5°27	13°48	13° 1	4° 4	14°20	0°48	3°27	4° 7	2°51	1°51	11°51	T 12
W 13	15 22 8	21°54'33	17°56	29°51	6°30	14°24	13°14	4° 9	14°18	0°46	3°28	4° 8	2°48	1°57	11°56	W 13
T 14	15 26 4	22°52'19	2♊ 9	1♌26	7°33	15° 0	13°27	4°15	14°15	0°45	3°29	4°R 9	2°45	2° 4	12° 1	T 14
F 15	15 30 1	23°50'04	16°20	3° 3	8°36	15°36	13°40	4°21	14°13	0°43	3°31	4° 8	2°42	2°11	12° 6	F 15
S 16	15 33 57	24°47'47	0♌25	4°42	9°40	16°12	13°52	4°27	14°10	0°41	3°32	4° 5	2°39	2°17	12°11	S 16
S 17	15 37 54	25°45'30	14°22	6°24	10°44	16°48	14° 5	4°32	14° 8	0°40	3°33	4° 0	2°35	2°24	12°16	S 17
M 18	15 41 51	26°43'11	28° 6	8° 7	11°48	17°23	14°17	4°38	14° 5	0°38	3°35	3°53	2°32	2°31	12°21	M 18
T 19	15 45 47	27°40'51	11♊34	9°53	12°52	17°59	14°30	4°43	14° 3	0°36	3°36	3°45	2°29	2°37	12°26	T 19
W 20	15 49 44	28°38'29	24°45	11°41	13°56	18°35	14°42	4°49	14° 1	0°35	3°37	3°35	2°26	2°44	12°32	W 20
T 21	15 53 40	29°36'07	7♌36	13°32	15° 1	19°11	14°54	4°54	13°58	0°33	3°39	3°26	2°23	2°51	12°37	T 21
F 22	15 57 37	0♊33'43	20° 9	15°24	16° 6	19°47	15° 7	4°59	13°56	0°32	3°40	3°18	2°20	2°57	12°42	F 22
S 23	16 1 33	1°31'17	2♌25	17°19	17°10	20°23	15°19	5° 5	13°53	0°30	3°42	3°12	2°16	3° 4	12°47	S 23
S 24	16 5 30	2°28'50	14°27	19°15	18°16	20°59	15°31	5°10	13°51	0°28	3°43	3° 8	2°13	3°11	12°52	S 24
M 25	16 9 27	3°26'22	26°21	21°14	19°21	21°36	15°43	5°15	13°49	0°27	3°44	3° 6	2°10	3°17	12°58	M 25
T 26	16 13 23	4°23'52	8♊11	23°15	20°26	22°12	15°55	5°20	13°46	0°25	3°46	3°D 6	2° 7	3°24	13° 3	T 26
W 27	16 17 20	5°21'21	20° 1	25°17	21°32	22°48	16° 7	5°25	13°44	0°24	3°47	3° 7	2° 4	3°31	13° 8	W 27
T 28	16 21 16	6°18'49	1♌59	27°22	22°38	23°24	16°18	5°30	13°42	0°22	3°48	3°R 7	2° 0	3°37	13°13	T 28
F 29	16 25 13	7°16'15	14° 7	29°28	23°43	24° 0	16°30	5°35	13°40	0°20	3°50	3° 7	1°57	3°44	13°19	F 29
S 30	16 29 9	8°13'40	26°32	1♊35	24°50	24°36	16°42	5°39	13°37	0°19	3°51	3° 4	1°54	3°51	13°24	S 30
S 31	16 33 6	9♊11'04	9♌15	3♊44	25°56	25♌13	16°53	5°44	13♌35	0♌17	3♊53	3♌ 0	1♌51	3♊57	13♊29	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	decl	decl	decl	decl	decl	decl	decl	decl	decl	decl	decl	decl	decl
F 1	14n57	2s19	0n 7	2n43	3s 0	2s57	0s43	24n49	1n32	3n10	1s 8	0s49	2s 9	15s57	0n23	18s44	1n43	9n37	11s25	1s54	1s22	8n39	17n25	4s45											
S 2	15 15	6 6	1 14	3 7	3 2	2 38	0 48	24 47	1 32	3 15	1 8	0 46	2 9	15 56	0 23	18 44	1 43	9 38	11 25	1 54	1 21	8 38	17 26	4 45											
S 3	15 33	9 40	2 18	3 33	3 3	2 19	0 53	24 44	1 32	3 20	1 8	0 44	2 10	15 55	0 23	18 43	1 43	9 38	11 24	1 53	1 20	8 36	17 26	4 45											
M 4	15 50	12 53	3 16	4 0	3 3	1 59	0 58	24 42	1 31	3 25	1 8	0 41	2 10	15 55	0 23	18 43	1 43	9 38	11 24	1 51	1 18	8 35	17 27	4 45											
T 5	16 8	15 30	4 5	4 28	3 3	1 39	1 3	24 39	1 31	3 31	1 8	0 39	2 10	15 54	0 23	18 43	1 43	9 39	11 24	1 49	1 17	8 33	17 28	4 45											
W 6	16 25	17 22	4 42	4 58	3 2	1 19	1 7	24 36	1 31	3 36	1 8	0 37	2 10	15 53	0 23	18 42	1 43	9 39	11 24	1 46	1 16	8 31	17 28	4 45											
T 7	16 42	18 16	5 4	5 29	3 0	0 59	1 11	24 33	1 31	3 41	1 8	0 34	2 10	15 52	0 23	18 42	1 43	9 40	11 24	1 44	1 15	8 30	17 29	4 45											
F 8	16 58	18 8	5 9	6 1	2 58	0 38	1 15	24 29	1 30	3 46	1 8	0 32	2 10	15 52	0 23	18 42	1 43	9 40	11 24	1 41	1 13	8 28	17 30	4 45											
S 9	17 14	16 54	4 56	6 34	2 55	0 17	1 19	24 26	1 30	3 51	1 8	0 30	2 11	15 51	0 23	18 41	1 43	9 40	11 24	1 39	1 12	8 26	17 31	4 45											
S 10	17 30	14 40	4 25	7 9	2 52	0n 4	1 23	24 22	1 30	3 56	1 9	0 28	2 11	15 50	0 23	18 41	1 43	9 41	11 24	1 38	1 11	8 25	17 31	4 45											
M 11	17 46	11 32	3 37	7 44	2 48	0 25	1 27	24 19	1 30	4 1	1 9	0 25	2 11	15 49	0 23	18 41	1 43	9 41	11 24	1 38	1 9	8 23	17 32	4 45											
T 12	18 2	7 43	2 37	8 21	2 43	0 47	1 31	24 15	1 29	4 6	1 9	0 23	2 11	15 49	0 23	18 40	1 43	9 41	11 24	1 38	1 8	8 21	17 33	4 45											
W 13	18 17	3 27	1 26	8 58	2 38	1 9	1 34	24 11	1 29	4 11	1 9	0 21	2 11	15 48	0 23	18 40	1 43	9 42	11 23	1 39	1 7	8 20	17 33	4 45											
T 14	18 31	1n 1	0 11	9 36	2 33	1 31	1 37	24 6	1 29	4 15	1 9	0 19	2 11	15 47	0 23	18 40	1 43	9 42	11 23	1 39	1 6	8 18	17 34	4 45											
F 15	18 46	5 26	1s 5	10 15	2 27	1 53	1 41	24 2	1 28	4 20	1 9	0 17	2 12	15 47	0 22	18 39	1 43	9 42	11 23	1 39	1 4	8 16	17 35	4 45											
S 16	19 0	9 30	2 17	10 55	2 20	2 15	1 44	23 57	1 28	4 25	1 9	0 15	2 12	15 46	0 22	18 39	1 43	9 42	11 23	1 38	1 3	8 15	17 35	4 45											
S 17	19 14	13 0	3 19	11 35	2 13	2 37	1 47	23 53	1 28	4 30	1 9	0 13	2 12	15 45	0 22	18 39	1 43	9 43	11 23	1 36	1 2	8 13	17 36	4 45											
M 18	19 28	15 44	4 9	12 16	2 5	3 0	1 49	23 48	1 28	4 35	1 10	0 11	2 12	15 44	0 22	18 38	1 43	9 43	11 23	1 33	1 1	8 11	17 37	4 45											
T 19	19 41	17 32	4 43	12 57	1 57	3 22	1 52	23 43	1 27	4 39	1 10	0 9	2 12	15 44	0 22	18 38	1 43	9 43	11 23	1 29	0 59	8 10	17 37	4 45											
W 20	19 54	18 21	5 2	13 39	1 49	3 45	1 55	23 38	1 27	4 44	1 10	0 7	2 13	15 43	0 22	18 38	1 43	9 44	11 23	1 26	0 58	8 8	17 38	4 45											
T 21	20 6	18 11	5 5	14 20	1 40	4 8	1 57	23 32	1 27	4 49	1 10	0 5	2 13	15 42	0 22	18 37	1 43	9 44	11 23	1 22	0 57	8 6	17 39	4 45											
F 22	20 18	17 8	4 53	15 2	1 31	4 30	1 59	23 27	1 26	4 53	1 10	0 3	2 13	15 42	0 22	18 37	1 43	9 44	11 23	1 19	0 56	8 5	17 39	4 45											
S 23	20 30	15 19	4 27	15 44	1 21	4 53	2 1	23 21	1 26	4 58	1 10	0 1	2 13	15 41	0 22	18 37	1 43	9 45	11 23	1 17	0 54	8 3	17 40	4 45											
S 24	20 42	12 51	3 50	16 26	1 11	5 16	2 3	23 15	1 26	5 2	1 10	0n 1	2 13	15 40	0 22	18 36	1 43	9 45	11 23	1 15	0 53	8 1	17 41	4 45											
M 25	20 53	9 52	3 4	17 7	1 1	5 39	2 5	23 9	1 26	5 7	1 10	0 3	2 14	15 39	0 22	18 36	1 43	9 45	11 23	1 14	0 52	8 0	17 41	4 45											
T 26	21 4	6 31	2 9	17 48	0 51	6 2	2 7	23 3	1 25	5 11	1 11	0 4	2 14	15 39	0 22	18 36	1 43	9 45	11 23	1 14	0 51	7 58	17 42	4 45											
W 27	21 14	2 54	1 10	18 28	0 40	6 25	2 9	22 57	1 25	5 16	1 11	0 6	2 14	15 38	0 22	18 35	1 43	9 46	11 23	1 14	0 49	7 56	17 42	4 45											
T 28	21 24	0s53	0 6	19 8	0 29	6 48	2 10	22 51	1 25	5 20	1 11	0 8	2 14	15 37	0 22	18 35	1 43	9 46	11 23	1 15	0 48	7 55	17 43	4 45											
F 29	21 34	4 41	0n58	19 46	0 18	7 11	2 12	22 44	1 24	5 24	1 11	0 10	2 15	15 37	0 22	18 35	1 43	9 46	11 23	1 14	0 47	7 53	17 44	4 45											
S 30	21 43	8 22	2 2	20 24	0 8	7 34	2 13	22 37	1 24	5 29	1 11	0 11	2 15	15 36	0 22	18 34	1 43	9 46	11 23	1 13	0 45	7 51	17 44	4 45											
S 31	21n52	11s45	3n 0	20n59	0n 3	7n57	2s14	22n30	1n24	5n33	1s11	0n13	2s15	15s36	0n22	18s34	1n43	9n47	11s23	1s12	0s44	7n50	17n45	4s45											

ASTRODIENST EPHEMERIS for the year 1643
geocentric

JUNE 1643 GC

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
M 1	16 37 2	10II 8'28	22III 20	5II 54	27V 2	25II 49	17V 4	5V 49	13R 33	0R 15	3II 54	2R 52	1II 48	4II 13	13II 35	M 1
T 2	16 40 59	11° 5'50	5II 45	8° 5	28° 9	26° 25	17° 16	5° 53	13II 31	0II 14	3° 55	2II 43	1° 45	4° 11	13° 40	T 2
W 3	16 44 56	12° 3'11	19° 30	10° 17	29° 15	27° 1	17° 27	5° 57	13° 29	0° 12	3° 57	2° 32	1° 41	4° 17	13° 45	W 3
T 4	16 48 52	13° 0'32	3II 30	12° 29	0II 22	27° 38	17° 38	6° 2	13° 27	0° 11	3° 58	2° 22	1° 38	4° 24	13° 51	T 4
F 5	16 52 49	13° 57'52	17° 42	14° 41	1° 29	28° 14	17° 49	6° 6	13° 25	0° 9	3° 59	2° 12	1° 35	4° 31	13° 56	F 5
S 6	16 56 45	14° 55'11	1II 59	16° 53	2° 36	28° 50	18° 0	6° 10	13° 23	0° 8	4° 1	2° 4	1° 32	4° 37	14° 1	S 6
S 7	17 0 42	15° 52'29	16° 18	19° 4	3° 43	29° 27	18° 11	6° 14	13° 21	0° 6	4° 2	1° 59	1° 29	4° 44	14° 7	S 7
M 8	17 4 38	16° 49'48	0II 34	21° 15	4° 50	0II 3	18° 21	6° 18	13° 19	0° 4	4° 3	1° 56	1° 26	4° 51	14° 12	M 8
T 9	17 8 35	17° 47'06	14° 45	23° 25	5° 58	0° 39	18° 32	6° 22	13° 17	0° 3	4° 5	1° 55	1° 22	4° 57	14° 17	T 9
W10	17 12 31	18° 44'23	28° 49	25° 33	7° 5	1° 16	18° 43	6° 26	13° 15	0° 1	4° 6	1° 55	1° 19	5° 4	14° 22	W10
T 11	17 16 28	19° 41'40	12V 46	27° 41	8° 13	1° 52	18° 53	6° 30	13° 13	29II 59	4° 7	1° 55	1° 16	5° 11	14° 28	T 11
F 12	17 20 25	20° 38'57	26° 36	29° 46	9° 21	2° 29	19° 3	6° 34	13° 11	29° 58	4° 9	1° 53	1° 13	5° 17	14° 33	F 12
S 13	17 24 21	21° 36'14	10II 17	1II 50	10° 29	3° 5	19° 13	6° 37	13° 9	29° 57	4° 10	1° 49	1° 10	5° 24	14° 38	S 13
S 14	17 28 18	22° 33'30	23° 49	3° 53	11° 37	3° 42	19° 24	6° 41	13° 7	29° 55	4° 11	1° 42	1° 6	5° 31	14° 44	S 14
M15	17 32 14	23° 30'46	7II 10	5° 53	12° 45	4° 18	19° 34	6° 44	13° 6	29° 54	4° 13	1° 32	1° 3	5° 37	14° 49	M15
T 16	17 36 11	24° 28'02	20° 18	7° 51	13° 53	4° 55	19° 43	6° 48	13° 4	29° 53	4° 14	1° 20	1° 0	5° 44	14° 54	T 16
W17	17 40 7	25° 25'17	3II 13	9° 47	15° 1	5° 32	19° 53	6° 51	13° 2	29° 51	4° 15	1° 8	0° 57	5° 51	15° 0	W17
T 18	17 44 4	26° 22'32	15° 52	11° 41	16° 10	6° 8	20° 3	6° 54	13° 1	29° 50	4° 17	0° 55	0° 54	5° 57	15° 5	T 18
F 19	17 48 0	27° 19'46	28° 17	13° 33	17° 18	6° 45	20° 12	6° 57	12° 59	29° 48	4° 18	0° 44	0° 51	6° 4	15° 10	F 19
S 20	17 51 57	28° 17'00	10II 27	15° 23	18° 27	7° 22	20° 22	7° 0	12° 58	29° 47	4° 19	0° 35	0° 47	6° 11	15° 15	S 20
S 21	17 55 54	29° 14'13	22° 27	17° 11	19° 35	7° 58	20° 31	7° 3	12° 56	29° 46	4° 20	0° 28	0° 44	6° 17	15° 21	S 21
M22	17 59 50	0II 11'26	4II 19	18° 56	20° 44	8° 35	20° 40	7° 6	12° 55	29° 44	4° 22	0° 24	0° 41	6° 24	15° 26	M22
T 23	18 3 47	1° 8'39	16° 7	20° 39	21° 53	9° 12	20° 49	7° 9	12° 53	29° 43	4° 23	0° 23	0° 38	6° 31	15° 31	T 23
W24	18 7 43	2° 5'50	27° 57	22° 20	23° 2	9° 49	20° 58	7° 11	12° 52	29° 42	4° 24	0° 22	0° 35	6° 37	15° 36	W24
T 25	18 11 40	3° 3'02	9II 53	23° 59	24° 11	10° 25	21° 7	7° 14	12° 51	29° 40	4° 25	0° 22	0° 31	6° 44	15° 41	T 25
F 26	18 15 36	4° 0'13	22° 2	25° 36	25° 20	11° 2	21° 15	7° 16	12° 49	29° 39	4° 27	0° 21	0° 28	6° 51	15° 47	F 26
S 27	18 19 33	4° 57'24	4II 29	27° 10	26° 29	11° 39	21° 24	7° 19	12° 48	29° 38	4° 28	0° 19	0° 25	6° 57	15° 52	S 27
S 28	18 23 29	5° 54'34	17° 18	28° 42	27° 38	12° 16	21° 32	7° 21	12° 47	29° 36	4° 29	0° 14	0° 22	7° 4	15° 57	S 28
M29	18 27 26	6° 51'45	0II 31	0II 11	28° 48	12° 53	21° 40	7° 23	12° 46	29° 35	4° 30	0° 7	0° 19	7° 11	16° 2	M29
T 30	18 31 23	7° 48'55	14II 9	1II 39	29° 57	13° 30	21° 48	7° 25	12° 45	29° 34	4° 31	29° 57	0° 16	7° 17	16° 7	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	decl	lat
M 1	22n 1	14s40	3n51	21n33	0n14	8n20	2s15	22n23	1n24	5n37	1s11	0n15	2s15	15s35	0n22	18s34	1n43	9n47	11s23	1s 9	0s43	7n48	17n45	4s45			
T 2	22 9	16 52	4 30	22 6	0 24	8 43	2 16	22 16	1 23	5 41	1 12	0 16	2 15	15 34	0 22	18 33	1 43	9 47	11 23	1 5	0 42	7 46	17 46	4 45			
W 3	22 17	18 10	4 55	22 36	0 34	9 6	2 17	22 9	1 23	5 45	1 12	0 18	2 16	15 34	0 22	18 33	1 43	9 47	11 22	1 1	0 40	7 45	17 46	4 45			
T 4	22 24	18 24	5 2	23 4	0 44	9 29	2 17	22 1	1 23	5 49	1 12	0 19	2 16	15 33	0 22	18 33	1 43	9 48	11 22	0 56	0 39	7 43	17 47	4 45			
F 5	22 31	17 30	4 51	23 29	0 53	9 51	2 18	21 54	1 22	5 54	1 12	0 21	2 16	15 32	0 22	18 32	1 43	9 48	11 22	0 53	0 38	7 41	17 47	4 45			
S 6	22 38	15 29	4 23	23 52	1 2	10 14	2 18	21 46	1 22	5 58	1 12	0 22	2 16	15 32	0 22	18 32	1 43	9 48	11 23	0 49	0 37	7 40	17 48	4 45			
S 7	22 44	12 32	3 37	24 12	1 11	10 36	2 19	21 38	1 22	6 1	1 12	0 23	2 17	15 31	0 22	18 32	1 43	9 48	11 23	0 47	0 35	7 38	17 49	4 46			
M 8	22 50	8 50	2 38	24 30	1 18	10 58	2 19	21 30	1 21	6 5	1 13	0 25	2 17	15 31	0 22	18 31	1 43	9 49	11 23	0 46	0 34	7 36	17 49	4 46			
T 9	22 55	4 38	1 30	24 45	1 26	11 21	2 19	21 22	1 21	6 9	1 13	0 26	2 17	15 30	0 22	18 31	1 43	9 49	11 23	0 46	0 33	7 35	17 50	4 46			
W10	23 0	0 13	0 16	24 56	1 32	11 43	2 19	21 14	1 21	6 13	1 13	0 28	2 17	15 30	0 22	18 31	1 43	9 49	11 23	0 46	0 32	7 33	17 50	4 46			
T 11	23 5	4n11	0s57	25 6	1 38	12 4	2 19	21 5	1 20	6 17	1 13	0 29	2 18	15 29	0 22	18 31	1 43	9 49	11 23	0 46	0 30	7 31	17 50	4 46			
F 12	23 9	8 18	2 7	25 12	1 43	12 26	2 19	20 56	1 20	6 21	1 13	0 30	2 18	15 29	0 22	18 30	1 43	9 49	11 23	0 45	0 29	7 29	17 51	4 46			
S 13	23 13	11 57	3 8	25 15	1 47	12 48	2 19	20 48	1 20	6 24	1 14	0 31	2 18	15 28	0 22	18 30	1 43	9 50	11 23	0 43	0 28	7 28	17 51	4 46			
S 14	23 16	14 55	3 58	25 16	1 51	13 9	2 18	20 39	1 19	6 28	1 14	0 32	2 18	15 27	0 22	18 30	1 43	9 50	11 23	0 41	0 26	7 26	17 52	4 46			
M15	23 19	17 2	4 34	25 15	1 54	13 30	2 18	20 30	1 19	6 32	1 14	0 34	2 19	15 27	0 22	18 29	1 43	9 50	11 23	0 37	0 25	7 24	17 52	4 46			
T 16	23 22	18 13	4 55	25 11	1 56	13 51	2 17	20 21	1 19	6 35	1 14	0 35	2 19	15 26	0 22	18 29	1 43	9 50	11 23	0 32	0 24	7 23	17 53	4 47			
W17	23 24	18 26	5 0	25 4	1 57	14 12	2 17	20 11	1 18	6 39	1 14	0 36	2 19	15 26	0 22	18 29	1 43	9 50	11 23	0 27	0 23	7 21	17 53	4 47			
T 18	23 26	17 44	4 51	24 56	1 58	14 32	2 16	20 2	1 18	6 42	1 14	0 37	2 19	15 26	0 22	18 29	1 43	9 51	11 23	0 22	0 21	7 19	17 54	4 47			
F 19	23 27	16 11	4 27	24 45	1 58	14 52	2 15	19 52	1 18	6 45	1 15	0 38	2 20	15 25	0 22	18 28	1 43	9 51	11 23	0 17	0 20	7 18	17 54	4 47			
S 20	23 28	13 56	3 52	24 32	1 57	15 12	2 14	19 43	1 17	6 49	1 15	0 39	2 20	15 25	0 22	18 28	1 43	9 51	11 23	0 14	0 19	7 16	17 54	4 47			
S 21	23 29	11 7	3 6	24 17	1 56	15 31	2 13	19 33	1 17	6 52	1 15	0 39	2 20	15 24	0 22	18 28	1 43	9 51	11 23	0 11	0 18	7 14	17 55	4 47			
M22	23 29	7 53	2 13	24 1	1 54	15 51	2 12	19 23	1 17	6 55	1 15	0 40	2 20	15 24	0 22	18 28	1 43	9 51	11 23	0 10	0 16	7 13	17 55	4 48			
T 23	23 29	4 20	1 15	23 43	1 51	16 10	2 11	19 13	1 16	6 59	1 15	0 41	2 21	15 23	0 22	18 27	1 43	9 51	11 23	0 9	0 15	7 11	17 56	4 48			
W24	23 28	0 37	0 13	23 24	1 48	16 28	2 10	19 3	1 16	7 2	1 16	0 42	2 21	15 23	0 22	18 27	1 43	9 51	11 23	0 9	0 14	7 9	17 56	4 48			
T 25	23 27	3s 9	0n50	23 3	1 44	16 47	2 8	18 52	1 16	7 5	1 16	0 43	2 21	15 23	0 22	18 27	1 43	9 52	11 23	0 9	0 13	7 7	17 56	4 48			
F 26	23 25	6 52	1 52	22 41	1 39	17 5	2 7	18 42	1 15	7 8	1 16	0 43	2 22	15 22	0 22	18 27	1 43	9 52	11 23	0 8	0 11	7 6	17 57	4 48			
S 27	23 23	10 22	2 50	22 18	1 34	17 22	2 5	18 31	1 15	7 11	1 16	0 44	2 22	15 22	0 22	18 26	1 42	9 52	11 23	0 7	0 10	7 4	17 57	4 49			
S 28	23 21	13 29	3 41	21 54	1 28	17 40	2 4	18 21	1 15	7 14	1 16	0 45	2 22	15 22	0 22	18 26	1 42	9 52	11 24	0 6	0 9	7 2	17 57	4 49			
M29	23 18	16 1	4 22	21 29	1 22	17 56	2 2	18 10	1 15	7 17	1 17	0 45	2 22	15 21	0 22	18 26	1 42	9 52	11 24	0 3	0 7	7 1	17 58	4 49			
T 30	23n15	17s44	4n50	21n 3	1n15	18n13	2s 0	17n59	1n14	7n19	1s17	0n46	2s23	15s21	0n22	18s26	1n42	9n52	11s24	0n 1	0s 6	6n59	17n58	4s49			

ASTRODIENST EPHEMERIS for the year 1643

geocentric

JULY 1643 GC

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
W 1	18 35 19	8°46'05	28°12	3°04	1°11	14°07	21°56	7°27	12°R44	29°R33	4°II32	29°R46	0°12	7°24	16°II12	W 1
T 2	18 39 16	9°43'15	12°33	4°27	2°16	14°44	22° 4	7°29	12°M43	29°M32	4°34	29°M35	0° 9	7°31	16°17	T 2
F 3	18 43 12	10°40'25	27°11	5°47	3°26	15°21	22°12	7°31	12°42	29°31	4°35	29°25	0° 6	7°37	16°22	F 3
S 4	18 47 9	11°37'35	11°54	7° 5	4°36	15°58	22°19	7°32	12°41	29°29	4°36	29°16	0° 3	7°44	16°27	S 4
S 5	18 51 5	12°34'46	26°35	8°20	5°45	16°35	22°26	7°34	12°40	29°28	4°37	29°11	29°M59	7°50	16°32	S 5
M 6	18 55 2	13°31'57	11°8	9°33	6°55	17°12	22°34	7°35	12°39	29°27	4°38	29° 8	29°57	7°57	16°37	M 6
T 7	18 58 58	14°29'08	25°30	10°44	8° 5	17°49	22°41	7°37	12°38	29°26	4°39	29°D 7	29°53	8° 4	16°42	T 7
W 8	19 2 55	15°26'20	9°38	11°51	9°15	18°26	22°48	7°38	12°38	29°25	4°40	29°R 7	29°50	8°10	16°47	W 8
T 9	19 6 52	16°23'33	23°31	12°56	10°26	19° 3	22°54	7°39	12°37	29°24	4°41	29° 7	29°47	8°17	16°52	T 9
F 10	19 10 48	17°20'46	7°10	13°58	11°36	19°40	23° 1	7°40	12°36	29°23	4°42	29° 5	29°44	8°24	16°57	F 10
S 11	19 14 45	18°18'00	20°35	14°58	12°46	20°17	23° 7	7°41	12°36	29°22	4°44	29° 2	29°41	8°30	17° 1	S 11
S 12	19 18 41	19°15'15	3°II47	15°54	13°56	20°55	23°14	7°42	12°35	29°21	4°45	28°55	29°37	8°37	17° 6	S 12
M13	19 22 38	20°12'30	16°47	16°47	15° 7	21°32	23°20	7°43	12°35	29°21	4°46	28°47	29°34	8°44	17°11	M13
T 14	19 26 34	21° 9'46	29°34	17°36	16°17	22° 9	23°26	7°44	12°34	29°20	4°47	28°36	29°31	8°50	17°16	T 14
W15	19 30 31	22° 7'03	12°510	18°23	17°28	22°46	23°32	7°44	12°34	29°19	4°48	28°24	29°28	8°57	17°20	W15
T 16	19 34 27	23° 4'20	24°34	19° 5	18°39	23°24	23°37	7°45	12°34	29°18	4°49	28°13	29°25	9° 4	17°25	T 16
F 17	19 38 24	24° 1'37	6°II47	19°44	19°49	24° 1	23°43	7°45	12°33	29°17	4°50	28° 3	29°22	9°10	17°30	F 17
S 18	19 42 21	24°58'55	18°50	20°20	21° 0	24°38	23°48	7°45	12°33	29°17	4°50	27°54	29°18	9°17	17°34	S 18
S 19	19 46 17	25°56'14	0°M44	20°51	22°11	25°16	23°53	7°45	12°33	29°16	4°51	27°48	29°15	9°24	17°39	S 19
M20	19 50 14	26°53'33	12°33	21°18	23°22	25°53	23°58	7°R45	12°33	29°15	4°52	27°45	29°12	9°30	17°43	M20
T 21	19 54 10	27°50'52	24°19	21°40	24°33	26°31	24° 3	7°45	12°33	29°14	4°53	27°D44	29° 9	9°37	17°48	T 21
W22	19 58 7	28°48'12	6°II8	21°58	25°44	27° 8	24° 8	7°45	12°D33	29°14	4°54	27°44	29° 6	9°44	17°52	W22
T 23	20 2 3	29°45'32	18° 4	22°12	26°55	27°46	24°12	7°45	12°33	29°13	4°55	27°45	29° 3	9°50	17°57	T 23
F 24	20 6 0	0°II42'53	0°M11	22°20	28° 6	28°23	24°16	7°44	12°33	29°13	4°56	27°R45	28°59	9°57	18° 1	F 24
S 25	20 9 56	1°40'15	12°37	22°R24	29°17	29° 1	24°20	7°44	12°33	29°12	4°57	27°44	28°56	10° 4	18° 5	S 25
S 26	20 13 53	2°37'37	25°24	22°22	0°529	29°38	24°24	7°43	12°33	29°12	4°57	27°42	28°53	10°10	18°10	S 26
M27	20 17 50	3°34'59	8°M38	22°15	1°40	0°M16	24°28	7°43	12°34	29°11	4°58	27°38	28°50	10°17	18°14	M27
T 28	20 21 46	4°32'23	22°19	22° 3	2°51	0°53	24°32	7°42	12°34	29°11	4°59	27°31	28°47	10°24	18°18	T 28
W29	20 25 43	5°29'47	6°Z29	21°46	4° 3	1°31	24°35	7°41	12°34	29°10	5° 0	27°24	28°43	10°30	18°22	W29
T 30	20 29 39	6°27'12	21° 2	21°24	5°14	2° 9	24°38	7°40	12°35	29°10	5° 1	27°16	28°40	10°37	18°26	T 30
F 31	20 33 36	7°II24'37	5°54	20°II57	6°526	2°M46	24°Y41	7°Y39	12°M35	29°M 9	5°II 1	27°M 9	28°M37	10°M43	18°II30	F 31

Day	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	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	
W 1	23n12	18s27 5n 1	20n36 1n 7	18n29 1s59	17n48 1n14	7n22 1s17	0n46 2s23	15s21 0n22	18s25 1n42	9n52 11s24	0n 6 0s 5	6n57 17n58	4s49			
T 2	23 8 18 1	4 54 20 9	1 0 18 45	1 57 17 37	1 13 7 25	1 17 0 47	2 23 15 20	0 22 18 25	1 42 9 52	11 24 0 10	0 4 6 55	17 58 4 50				
F 3	23 3 16 24	4 27 19 41	0 51 19 0	1 55 17 26	1 13 7 27	1 18 0 47	2 23 15 20	0 22 18 25	1 42 9 52	11 24 0 14	0 2 6 54	17 59 4 50				
S 4	22 58 13 41	3 43 19 13	0 42 19 15	1 53 17 14	1 13 7 30	1 18 0 48	2 24 15 20	0 21 18 25	1 42 9 53	11 24 0 17	0 1 6 52	17 59 4 50				
S 5	22 53 10 7	2 43 18 45	0 33 19 29	1 51 17 3	1 12 7 33	1 18 0 48	2 24 15 20	0 21 18 25	1 42 9 53	11 24 0 20	0n 0 6 50	17 59 4 50				
M 6	22 48 5 57	1 34 18 16	0 23 19 43	1 49 16 51	1 12 7 35	1 18 0 48	2 24 15 19	0 21 18 25	1 42 9 53	11 24 0 21	0 1 6 49	17 59 4 51				
T 7	22 42 1 30	0 19 17 47	0 13 19 57	1 47 16 39	1 12 7 37	1 18 0 49	2 25 15 19	0 21 18 24	1 42 9 53	11 24 0 21	0 3 6 47	18 0 4 51				
W 8	22 35 2n58	0s56 17 18	0 3 20 10	1 44 16 28	1 11 7 40	1 19 0 49	2 25 15 19	0 21 18 24	1 42 9 53	11 25 0 21	0 4 6 45	18 0 4 51				
T 9	22 28 7 12	2 6 16 50	0s 8 20 22	1 42 16 16	1 11 7 42	1 19 0 49	2 25 15 19	0 21 18 24	1 42 9 53	11 25 0 21	0 5 6 43	18 0 4 51				
F 10	22 21 10 58	3 8 16 21	0 20 20 34	1 40 16 4	1 11 7 44	1 19 0 49	2 25 15 19	0 21 18 24	1 42 9 53	11 25 0 22	0 6 6 42	18 0 4 52				
S 11	22 14 14 6	3 58 15 53	0 31 20 46	1 37 15 52	1 10 7 46	1 19 0 49	2 26 15 18	0 21 18 24	1 42 9 53	11 25 0 23	0 8 6 40	18 0 4 52				
S 12	22 6 16 27	4 34 15 25	0 43 20 57	1 35 15 39	1 10 7 49	1 20 0 50	2 26 15 18	0 21 18 24	1 42 9 53	11 25 0 26	0 9 6 38	18 1 4 52				
M13	21 58 17 55	4 56 14 57	0 55 21 7	1 33 15 27	1 9 7 51	1 20 0 50	2 26 15 18	0 21 18 23	1 42 9 53	11 25 0 29	0 10 6 37	18 1 4 52				
T 14	21 49 18 26	5 3 14 30	1 8 21 17	1 30 15 14	1 9 7 53	1 20 0 50	2 27 15 18	0 21 18 23	1 42 9 53	11 25 0 33	0 12 6 35	18 1 4 53				
W15	21 40 18 3	4 54 14 4	1 21 21 26	1 27 15 2	1 9 7 54	1 20 0 50	2 27 15 18	0 21 18 23	1 42 9 53	11 26 0 38	0 13 6 33	18 1 4 53				
T 16	21 30 16 47	4 52 13 39	1 33 21 35	1 25 14 49	1 8 7 56	1 21 0 49	2 27 15 18	0 21 18 23	1 42 9 53	11 26 0 43	0 14 6 31	18 1 4 53				
F 17	21 21 14 47	3 57 13 14	1 47 21 44	1 22 14 37	1 8 7 58	1 21 0 49	2 27 15 18	0 21 18 23	1 42 9 53	11 26 0 47	0 15 6 30	18 1 4 54				
S 18	21 10 12 10	3 12 12 51	2 0 21 51	1 20 14 24	1 8 8 0	1 21 0 49	2 28 15 18	0 21 18 23	1 42 9 53	11 26 0 50	0 17 6 28	18 1 4 54				
S 19	21 0 9 4	2 19 12 28	2 13 21 58	1 17 14 11	1 7 8 2	1 21 0 49	2 28 15 18	0 21 18 23	1 41 9 53	11 26 0 52	0 18 6 26	18 2 4 54				
M20	20 49 5 38	1 20 12 7	2 26 22 5	1 14 13 58	1 7 8 3	1 22 0 49	2 28 15 18	0 21 18 23	1 41 9 53	11 26 0 54	0 19 6 25	18 2 4 54				
T 21	20 38 1 59	0 18 11 47	2 40 22 11	1 11 13 45	1 6 8 5	1 22 0 48	2 29 15 18	0 21 18 22	1 41 9 53	11 26 0 54	0 20 6 23	18 2 4 55				
W22	20 26 1s45	0n45 11 29	2 53 22 16	1 9 13 31	1 6 8 6	1 22 0 48	2 29 15 18	0 21 18 22	1 41 9 53	11 27 0 54	0 22 6 21	18 2 4 55				
T 23	20 14 5 27	1 47 11 12	3 6 22 21	1 6 13 18	1 6 8 8	1 22 0 48	2 29 15 18	0 21 18 22	1 41 9 53	11 27 0 54	0 23 6 19	18 2 4 55				
F 24	20 2 8 59	2 45 10 57	3 19 22 25	1 3 13 5	1 5 8 9	1 23 0 47	2 29 15 18	0 21 18 22	1 41 9 53	11 27 0 54	0 24 6 18	18 2 4 56				
S 25	19 49 12 12	3 37 10 44	3 31 22 29	1 0 12 51	1 5 8 10	1 23 0 47	2 30 15 18	0 21 18 22	1 41 9 53	11 27 0 54	0 25 6 16	18 2 4 56				
S 26	19 37 14 56	4 20 10 34	3 43 22 32	0 57 12 38	1 5 8 11	1 23 0 46	2 30 15 18	0 21 18 22	1 41 9 53	11 27 0 55	0 27 6 14	18 2 4 56				
M27	19 23 17 0	4 51 10 25	3 55 22 34	0 54 12 24	1 4 8 12	1 23 0 46	2 30 15 18	0 21 18 22	1 41 9 53	11 27 0 57	0 28 6 12	18 2 4 57				
T 28	19 10 18 10	5 6 10 18	4 6 22 36	0 51 12 10	1 4 8 13	1 24 0 45	2 30 15 18	0 21 18 22	1 41 9 53	11 28 0 59	0 29 6 11	18 2 4 57				
W29	18 56 18 17	5 3 10 14	4 16 22 37	0 48 11 57	1 3 8 14	1 24 0 45	2 31 15 18	0 21 18 22	1 41 9 53	11 28 1 2	0 30 6 9	18 2 4 58				
T 30	18 42 17 12	4 41 10 13	4 25 22 37	0 46 11 43	1 3 8 15	1 24 0 44	2 31 15 19	0 21 18 22	1 41 9 53	11 28 1 5	0 32 6 7	18 2 4 58				
F 31	18n27 14s57	4n 0 10n14	4s33 22n37	0s43 11n29	1n 3 8n16	1s24 0n43	2s31 15s19	0n21 18s22	1n41 9n53	11s28 1n 8 0n33	6n 6 18n 2	4s58				

Julian Day Number = 2321334.5, Delta T = 47.88 sec
 Ecliptic obliquity = 23°28'58", Nutation = 0°00'00", out-of-bounds declination in red
 Ayanamsha: Fagan/Bradley =

ASTRODIENST EPHEMERIS for the year 1643

geocentric

AUGUST 1643 GC

00:00 UT

Day	Sid.t	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
S 1	20 37 32	8♂22°04	20♂56	20°R25	7♂38	3♂24	24♂44	7°R38	12♂36	29°R 9	5♂ 2	27°R 3	28♂34	10♂50	18♂34	S 1
S 2	20 41 29	9°19'32	5♂58	19♂49	8°49	4° 2	24°46	7°V37	12°36	29♂ 9	5° 3	26♂59	28°31	10°57	18°38	S 2
M 3	20 45 25	10°17'00	20°52	19° 9	10° 1	4°40	24°49	7°35	12°37	29° 9	5° 3	26°D57	28°28	11° 3	18°42	M 3
T 4	20 49 22	11°14'31	5°V32	18°25	11°13	5°17	24°51	7°34	12°37	29° 8	5° 4	26°58	28°24	11°10	18°46	T 4
W 5	20 53 19	12°12'02	19°52	17°39	12°25	5°55	24°53	7°32	12°38	29° 8	5° 5	26°59	28°21	11°17	18°50	W 5
T 6	20 57 15	13° 9'35	3♂52	16°51	13°37	6°33	24°55	7°31	12°39	29° 8	5° 5	27° 0	28°18	11°23	18°54	T 6
F 7	21 1 12	14° 7'10	17°30	16° 2	14°49	7°11	24°57	7°29	12°40	29° 8	5° 6	27°R 0	28°15	11°30	18°57	F 7
S 8	21 5 8	15° 4'46	0♂49	15°13	16° 1	7°49	24°58	7°27	12°41	29° 8	5° 6	26°59	28°12	11°37	19° 1	S 8
S 9	21 9 5	16° 2'23	13°49	14°25	17°13	8°27	24°59	7°25	12°42	29° 8	5° 7	26°56	28° 9	11°43	19° 5	S 9
M10	21 13 1	17° 0'02	26°35	13°38	18°25	9° 5	25° 0	7°23	12°42	29° 7	5° 8	26°51	28° 5	11°50	19° 8	M10
T 11	21 16 58	17°57'43	9♂ 6	12°54	19°38	9°43	25° 1	7°21	12°44	29°D 7	5° 8	26°45	28° 2	11°57	19°12	T 11
W12	21 20 54	18°55'25	21°26	12°13	20°50	10°21	25° 2	7°19	12°45	29° 7	5° 9	26°38	27°59	12° 3	19°15	W12
T 13	21 24 51	19°53'08	3♂36	11°37	22° 2	10°59	25° 2	7°16	12°46	29° 8	5° 9	26°32	27°56	12°10	19°18	T 13
F 14	21 28 48	20°50'53	15°37	11° 6	23°15	11°37	25° 3	7°14	12°47	29° 8	5°10	26°26	27°53	12°17	19°22	F 14
S 15	21 32 44	21°48'39	27°32	10°41	24°27	12°15	25°R 3	7°11	12°48	29° 8	5°10	26°21	27°49	12°23	19°25	S 15
S 16	21 36 41	22°46'27	9♂21	10°22	25°40	12°54	25° 3	7° 9	12°49	29° 8	5°10	26°18	27°46	12°30	19°28	S 16
M17	21 40 37	23°44'16	21° 8	10°11	26°52	13°32	25° 2	7° 6	12°51	29° 8	5°11	26°D17	27°43	12°37	19°31	M17
T 18	21 44 34	24°42'06	2♂55	10°D 7	28° 5	14°10	25° 2	7° 3	12°52	29° 8	5°11	26°17	27°40	12°43	19°35	T 18
W19	21 48 30	25°39'58	14°45	10°10	29°18	14°48	25° 1	7° 1	12°54	29° 8	5°12	26°18	27°37	12°50	19°38	W19
T 20	21 52 27	26°37'50	26°42	10°22	0♂31	15°27	25° 0	6°58	12°55	29° 9	5°12	26°20	27°34	12°56	19°41	T 20
F 21	21 56 23	27°33'45	8♂50	10°41	1°43	16° 5	24°59	6°55	12°57	29° 9	5°12	26°21	27°30	13° 3	19°43	F 21
S 22	22 0 20	28°33'40	21°14	11° 9	2°56	16°43	24°57	6°52	12°58	29° 9	5°13	26°22	27°27	13°10	19°46	S 22
S 23	22 4 17	29°31'37	3♂58	11°44	4° 9	17°22	24°56	6°48	13° 0	29°10	5°13	26°R22	27°24	13°16	19°49	S 23
M24	22 8 13	0♂29'35	17° 7	12°27	5°22	18° 0	24°54	6°45	13° 1	29°10	5°13	26°21	27°21	13°23	19°52	M24
T 25	22 12 10	1°27'34	0♂43	13°17	6°35	18°39	24°52	6°42	13° 3	29°11	5°13	26°19	27°18	13°30	19°54	T 25
W26	22 16 6	2°25'35	14°47	14°15	7°48	19°17	24°50	6°38	13° 5	29°11	5°14	26°17	27°15	13°36	19°57	W26
T 27	22 20 3	3°23'38	29°17	15°20	9° 2	19°56	24°48	6°35	13° 7	29°12	5°14	26°13	27°11	13°43	19°59	T 27
F 28	22 23 59	4°21'41	14♂10	16°31	10°15	20°34	24°45	6°31	13° 8	29°12	5°14	26°11	27° 8	13°50	20° 2	F 28
S 29	22 27 56	5°19'46	29°18	17°49	11°28	21°13	24°43	6°28	13°10	29°13	5°14	26° 8	27° 5	13°56	20° 4	S 29
S 30	22 31 52	6°17'53	14♂31	19°12	12°41	21°51	24°40	6°24	13°12	29°13	5°14	26° 7	27° 2	14° 3	20° 7	S 30
M31	22 35 49	7♂16'02	29♂40	20♂40	13♂55	22♂30	24°V37	6°V20	13♂14	29♂14	5♂14	26°D 7	26♂59	14♂10	20♂ 9	M31

Day	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂
	decl	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl
S 1	18n12	11s40	3n 2	10n17	4s39	22n36	0s40	11n15	1n 2	8n17	1s25	0n43	2s32	15s19	0n21	18s22
S 2	17 57	7 37	1 51	10 24	4 45	22 35	0 37	11 1	1 2	8 18	1 25	0 42	2 32	15 19	0 21	18 22
M 3	17 42	3 7	0 33	10 32	4 48	22 33	0 34	10 46	1 1	8 18	1 25	0 41	2 32	15 19	0 21	18 22
T 4	17 26	1n30	0s46	10 43	4 51	22 30	0 31	10 32	1 1	8 19	1 25	0 40	2 32	15 20	0 21	18 22
W 5	17 10	5 55	2 1	10 57	4 51	22 26	0 28	10 18	1 1	8 19	1 26	0 40	2 33	15 20	0 21	18 22
T 6	16 54	9 54	3 7	11 12	4 50	22 22	0 25	10 3	1 0	8 20	1 26	0 39	2 33	15 20	0 21	18 22
F 7	16 37	13 15	4 0	11 30	4 47	22 18	0 22	9 49	1 0	8 20	1 26	0 38	2 33	15 20	0 21	18 22
S 8	16 21	15 49	4 39	11 49	4 41	22 12	0 19	9 34	0 59	8 21	1 26	0 37	2 33	15 21	0 21	18 22
S 9	16 3 17	30	5 2	12 9	4 35	22 6	0 16	9 20	0 59	8 21	1 27	0 36	2 34	15 21	0 21	18 22
M10	15 46	18 16	5 10	12 31	4 26	22 0	0 13	9 5	0 59	8 21	1 27	0 35	2 34	15 21	0 20	18 22
T 11	15 29	18 8	5 3	12 53	4 15	21 53	0 10	8 50	0 58	8 21	1 27	0 34	2 34	15 22	0 20	18 22
W12	15 11	17 8	4 42	13 16	4 3	21 45	0 7	8 36	0 58	8 21	1 27	0 33	2 34	15 22	0 20	18 22
T 13	14 53	15 21	4 4	13 39	3 50	21 36	0 4	8 21	0 57	8 21	1 28	0 31	2 35	15 22	0 20	18 22
F 14	14 34	12 56	3 24	14 1	3 35	21 27	0 1	8 6	0 57	8 21	1 28	0 30	2 35	15 23	0 20	18 22
S 15	14 16	9 59	2 31	14 23	3 20	21 17	0n 1	7 51	0 57	8 21	1 28	0 29	2 35	15 23	0 20	18 22
S 16	13 57	6 40	1 31	14 44	3 3	21 7	0 4	7 36	0 56	8 20	1 28	0 28	2 35	15 24	0 20	18 23
M17	13 38	3 5	0 28	15 4	2 46	20 56	0 7	7 21	0 56	8 20	1 29	0 27	2 36	15 24	0 20	18 23
T 18	13 19	0s36	0n36	15 22	2 28	20 45	0 10	7 6	0 55	8 19	1 29	0 25	2 36	15 24	0 20	18 23
W19	12 59	4 17	1 40	15 38	2 10	20 32	0 13	6 50	0 55	8 19	1 29	0 24	2 36	15 25	0 20	18 23
T 20	12 40	7 50	2 39	15 53	1 52	20 20	0 15	6 35	0 54	8 18	1 29	0 23	2 36	15 25	0 20	18 23
F 21	12 20	11 6	3 33	16 5	1 34	20 6	0 18	6 20	0 54	8 18	1 30	0 21	2 36	15 26	0 20	18 23
S 22	12 0	13 57	4 18	16 14	1 16	19 52	0 21	6 4	0 54	8 17	1 30	0 20	2 37	15 26	0 20	18 23
S 23	11 40	16 12	4 51	16 21	0 59	19 38	0 23	5 49	0 53	8 16	1 30	0 18	2 37	15 27	0 20	18 23
M24	11 19	17 42	5 11	16 26	0 42	19 23	0 26	5 34	0 53	8 15	1 30	0 17	2 37	15 27	0 20	18 23
T 25	10 59	18 15	5 14	16 27	0 26	19 7	0 29	5 18	0 52	8 14	1 31	0 15	2 37	15 28	0 20	18 24
W26	10 38	17 43	4 59	16 25	0 10	18 51	0 31	5 3	0 52	8 13	1 31	0 14	2 37	15 28	0 20	18 24
T 27	10 17	16 1	4 24	16 20	0n 5	18 34	0 34	4 47	0 51	8 12	1 31	0 12	2 38	15 29	0 20	18 24
F 28	9 56	13 14	3 31	16 13	0 19	18 17	0 36	4 32	0 51	8 11	1 31	0 11	2 38	15 30	0 20	18 24
S 29	9 34	9 31	2 23	16 1	0 32	17 59	0 38	4 16	0 51	8 10	1 32	0 9	2 38	15 30	0 20	18 24
S 30	9 13	5 8	1 4	15 47	0 44	17 41	0 41	4 0	0 50	8 9	1 32	0 8	2 38	15 31	0 20	18 25
M31	8n51	0s26	0s20	15n30	0n55	17n22	0n43	3n45	0n50	8n 7	1s32	0n 6	2s38	15s31	0n20	18s25

Julian Day Number = 2321365.5, Delta T = 47.82 sec
 Ecliptic obliquity = 23°28'59, Nutation = 0°00'01, out-of-bounds declination in red
 Ayanamsha: Fagan/Bradley = 19°45'56, Lahiri = 18°52'56Greg. Calendar

ASTRODIENST EPHEMERIS for the year 1643
geocentric

SEPTEMBER 1643 GC

00:00 UT

Day	Sid.t	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
T 1	22 39 45	8 ^h 14'12"	14 ^h 36'	22 ^h 13'	15 ^h 08'	23 ^h 09'	24 ^h R33	6 ^h R17	13 ^h M16	29 ^h M15	5 ^h II14	26 ^h 07'	26 ^h 55'	14 ^h 16'	20 ^h II11	T 1
W 2	22 43 42	9 ^h 12'25"	29 ^h 12'	23 ^h 50'	16 ^h 21'	23 ^h 47'	24 ^h Y30	6 ^h Y13	13 ^h 18'	29 ^h 15'	5 ^h 14'	26 ^h ° 9	26 ^h 52'	14 ^h 23'	20 ^h 13'	W 2
T 3	22 47 39	10 ^h 10'39"	13 ^h 8'24"	25 ^h 30'	17 ^h 35'	24 ^h 26'	24 ^h 26'	6 ^h ° 9	13 ^h 21'	29 ^h 16'	5 ^h 15'	26 ^h 10'	26 ^h 49'	14 ^h 30'	20 ^h 15'	T 3
F 4	22 51 35	11 ^h ° 8'56"	27 ^h 10'	27 ^h 14'	18 ^h 49'	25 ^h ° 5	24 ^h 22'	6 ^h ° 5	13 ^h 23'	29 ^h 17'	5 ^h 15'	26 ^h 11'	26 ^h 46'	14 ^h 36'	20 ^h 17'	F 4
S 5	22 55 32	12 ^h ° 7'15"	10 ^h II31	29 ^h ° 0	20 ^h ° 2	25 ^h 44'	24 ^h 18'	6 ^h ° 1	13 ^h 25'	29 ^h 18'	5 ^h R15	26 ^h R11	26 ^h 43'	14 ^h 43'	20 ^h 19'	S 5
S 6	22 59 28	13 ^h ° 5'36"	23 ^h 30'	0 ^h 48'	21 ^h 16'	26 ^h 23'	24 ^h 14'	5 ^h 57'	13 ^h 27'	29 ^h 18'	5 ^h 15'	26 ^h 11'	26 ^h 40'	14 ^h 50'	20 ^h 21'	S 6
M 7	23 3 25	14 ^h ° 3'59"	6 ^h 9'	2 ^h 38'	22 ^h 29'	27 ^h ° 2	24 ^h 10'	5 ^h 53'	13 ^h 29'	29 ^h 19'	5 ^h 15'	26 ^h 10'	26 ^h 36'	14 ^h 56'	20 ^h 23'	M 7
T 8	23 7 21	15 ^h ° 2'24"	18 ^h 31'	4 ^h 30'	23 ^h 43'	27 ^h 41'	24 ^h ° 5	5 ^h 48'	13 ^h 32'	29 ^h 20'	5 ^h 14'	26 ^h ° 9	26 ^h 33'	15 ^h ° 3	20 ^h 24'	T 8
W 9	23 11 18	16 ^h ° 0'51"	0 ^h 41'	6 ^h 22'	24 ^h 57'	28 ^h 20'	24 ^h ° 0	5 ^h 44'	13 ^h 34'	29 ^h 21'	5 ^h 14'	26 ^h ° 7	26 ^h 30'	15 ^h ° 9	20 ^h 26'	W 9
T 10	23 15 14	16 ^h 59'20"	12 ^h 41'	8 ^h 15'	26 ^h 11'	28 ^h 59'	23 ^h 55'	5 ^h 40'	13 ^h 37'	29 ^h 22'	5 ^h 14'	26 ^h ° 6	26 ^h 27'	15 ^h 16'	20 ^h 27'	T 10
F 11	23 19 11	17 ^h 57'52"	24 ^h 34'	10 ^h ° 8	27 ^h 25'	29 ^h 38'	23 ^h 50'	5 ^h 35'	13 ^h 39'	29 ^h 23'	5 ^h 14'	26 ^h ° 5	26 ^h 24'	15 ^h 23'	20 ^h 29'	F 11
S 12	23 23 8	18 ^h 56'25"	6 ^h 23'	12 ^h ° 1	28 ^h 39'	0 ^h 17'	23 ^h 45'	5 ^h 31'	13 ^h 42'	29 ^h 24'	5 ^h 14'	26 ^h ° 4	26 ^h 20'	15 ^h 29'	20 ^h 30'	S 12
S 13	23 27 4	19 ^h 55'00"	18 ^h 10'	13 ^h 54'	29 ^h 53'	0 ^h 56'	23 ^h 40'	5 ^h 27'	13 ^h 44'	29 ^h 25'	5 ^h 14'	26 ^h ° 4	26 ^h 17'	15 ^h 36'	20 ^h 32'	S 13
M14	23 31 1	20 ^h 53'37"	29 ^h 58'	15 ^h 46'	1 ^h 07'	1 ^h 35'	23 ^h 34'	5 ^h 22'	13 ^h 47'	29 ^h 26'	5 ^h 14'	26 ^h D 4	26 ^h 14'	15 ^h 43'	20 ^h 33'	M14
T 15	23 34 57	21 ^h 52'16"	11 ^h 1 ^h 48'	17 ^h 39'	2 ^h 21'	2 ^h 14'	23 ^h 28'	5 ^h 18'	13 ^h 49'	29 ^h 27'	5 ^h 13'	26 ^h ° 4	26 ^h 11'	15 ^h 49'	20 ^h 34'	T 15
W16	23 38 54	22 ^h 50'57"	23 ^h 44'	19 ^h 30'	3 ^h 35'	2 ^h 53'	23 ^h 22'	5 ^h 13'	13 ^h 52'	29 ^h 28'	5 ^h 13'	26 ^h ° 4	26 ^h ° 8	15 ^h 56'	20 ^h 35'	W16
T 17	23 42 50	23 ^h 49'40"	5 ^h 1 ^h 47'	21 ^h 21'	4 ^h 49'	3 ^h 33'	23 ^h 16'	5 ^h ° 9	13 ^h 55'	29 ^h 29'	5 ^h 13'	26 ^h ° 4	26 ^h ° 5	16 ^h ° 3	20 ^h 36'	T 17
F 18	23 46 47	24 ^h 48'25"	18 ^h ° 1	23 ^h 12'	6 ^h ° 3	4 ^h 12'	23 ^h 10'	5 ^h ° 4	13 ^h 57'	29 ^h 31'	5 ^h 13'	26 ^h ° 5	26 ^h ° 1	16 ^h ° 9	20 ^h 37'	F 18
S 19	23 50 43	25 ^h 47'11"	0 ^h 2 ^h 29'	25 ^h ° 1	7 ^h 17'	4 ^h 51'	23 ^h ° 4	5 ^h ° 0	14 ^h ° 0	29 ^h 32'	5 ^h 12'	26 ^h R 5	25 ^h 58'	16 ^h 16'	20 ^h 38'	S 19
S 20	23 54 40	26 ^h 45'59"	13 ^h 13'	26 ^h 50'	8 ^h 32'	5 ^h 31'	22 ^h 57'	4 ^h 55'	14 ^h ° 3	29 ^h 33'	5 ^h 12'	26 ^h ° 5	25 ^h 55'	16 ^h 23'	20 ^h 38'	S 20
M21	23 58 37	27 ^h 44'49"	26 ^h 18'	28 ^h 38'	9 ^h 46'	6 ^h 10'	22 ^h 51'	4 ^h 50'	14 ^h ° 6	29 ^h 34'	5 ^h 12'	26 ^h D 5	25 ^h 52'	16 ^h 29'	20 ^h 39'	M21
T 22	0 2 33	28 ^h 43'41"	9 ^h 3 ^h 46'	0 ^h 24'	11 ^h ° 0	6 ^h 50'	22 ^h 44'	4 ^h 46'	14 ^h ° 9	29 ^h 36'	5 ^h 11'	26 ^h ° 5	25 ^h 49'	16 ^h 36'	20 ^h 40'	T 22
W23	0 6 30	29 ^h 42'35"	23 ^h 38'	2 ^h 10'	12 ^h 15'	7 ^h 29'	22 ^h 37'	4 ^h 41'	14 ^h 11'	29 ^h 37'	5 ^h 11'	26 ^h ° 5	25 ^h 46'	16 ^h 43'	20 ^h 40'	W23
T 24	0 10 26	0 ^h 41'30"	7 ^h 3 ^h 55'	3 ^h 56'	13 ^h 29'	8 ^h ° 9	22 ^h 30'	4 ^h 36'	14 ^h 14'	29 ^h 38'	5 ^h 11'	26 ^h ° 5	25 ^h 42'	16 ^h 49'	20 ^h 41'	T 24
F 25	0 14 23	1 ^h 40'27"	22 ^h 35'	5 ^h 40'	14 ^h 44'	8 ^h 48'	22 ^h 23'	4 ^h 32'	14 ^h 17'	29 ^h 40'	5 ^h 10'	26 ^h ° 6	25 ^h 39'	16 ^h 56'	20 ^h 41'	F 25
S 26	0 18 19	2 ^h 39'25"	7 ^h 3 ^h 32'	7 ^h 23'	15 ^h 58'	9 ^h 28'	22 ^h 16'	4 ^h 27'	14 ^h 20'	29 ^h 41'	5 ^h 10'	26 ^h ° 6	25 ^h 36'	17 ^h ° 2	20 ^h 41'	S 26
S 27	0 22 16	3 ^h 38'26"	22 ^h 40'	9 ^h ° 6	17 ^h 13'	10 ^h ° 7	22 ^h ° 9	4 ^h 22'	14 ^h 23'	29 ^h 42'	5 ^h ° 9	26 ^h R 6	25 ^h 33'	17 ^h ° 9	20 ^h 42'	S 27
M28	0 26 12	4 ^h 37'29"	7 ^h Y49'	10 ^h 47'	18 ^h 27'	10 ^h 47'	22 ^h ° 2	4 ^h 17'	14 ^h 26'	29 ^h 44'	5 ^h ° 9	26 ^h ° 6	25 ^h 30'	17 ^h 16'	20 ^h 42'	M28
T 29	0 30 9	5 ^h 36'33"	22 ^h 51'	12 ^h 28'	19 ^h 42'	11 ^h 27'	21 ^h 54'	4 ^h 13'	14 ^h 29'	29 ^h 45'	5 ^h ° 8	26 ^h ° 6	25 ^h 26'	17 ^h 22'	20 ^h R42	T 29
W30	0 34 5	6 ^h 35'40"	7 ^h 3 ^h 37'	14 ^h 8'	20 ^h 56'	12 ^h 6'	21 ^h Y47'	4 ^h Y 8	14 ^h M33	29 ^h M47	5 ^h II 8	26 ^h 07'	25 ^h 23'	17 ^h 29'	20 ^h II42	W30

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
T 1	8n30	4n13	1s41	15n 9	1n 5	17n 3	0n45	3n29	0n49	8n 6	1s32	0n 4	2s39	15s32	0n20	18s25	1n39	9n49	11s34	1n33	1n14	5n10	17n56	5s12	
W 2	8 8	8 30	2 53	14 45	1 13	16 43	0 48	3 13	0 49	8 5	1 33	0 3	2 39	15 33	0 20	18 25	1 39	9 49	11 35	1 32	1 15	5 8	17 55	5 13	
T 3	7 46	12 11	3 53	14 19	1 21	16 23	0 50	2 57	0 48	8 3	1 33	0 1	2 39	15 33	0 20	18 25	1 39	9 49	11 35	1 32	1 16	5 6	17 55	5 13	
F 4	7 24	15 3	4 37	13 50	1 28	16 2	0 52	2 41	0 48	8 1	1 33	0s 1	2 39	15 34	0 20	18 26	1 39	9 48	11 35	1 31	1 17	5 4	17 55	5 14	
S 5	7 2	17 2	5 5	13 18	1 34	15 41	0 54	2 26	0 48	8 0	1 33	0 3	2 39	15 35	0 20	18 26	1 39	9 48	11 35	1 31	1 19	5 2	17 54	5 14	
S 6	6 39	18 3	5 17	12 45	1 39	15 19	0 56	2 10	0 47	7 58	1 33	0 4	2 39	15 35	0 20	18 26	1 39	9 48	11 35	1 31	1 20	5 1	17 54	5 15	
M 7	6 17	18 8	5 12	12 9	1 42	14 57	0 58	1 54	0 47	7 56	1 34	0 6	2 39	15 36	0 20	18 26	1 39	9 48	11 36	1 32	1 21	4 59	17 54	5 15	
T 8	5 54	17 21	4 53	11 31	1 45	14 35	1 0	1 38	0 46	7 54	1 34	0 8	2 40	15 37	0 20	18 26	1 39	9 47	11 36	1 32	1 22	4 57	17 53	5 16	
W 9	5 32	15 47	4 21	10 51	1 47	14 12	1 2	1 22	0 46	7 52	1 34	0 10	2 40	15 38	0 20	18 27	1 38	9 47	11 36	1 33	1 24	4 55	17 53	5 16	
T 10	5 9	13 32	3 38	10 10	1 49	13 49	1 4	1 6	0 45	7 50	1 34	0 12	2 40	15 38	0 20	18 27	1 38	9 47	11 36	1 33	1 25	4 54	17 52	5 17	
F 11	4 46	10 45	2 46	9 28	1 49	13 25	1 5	0 50	0 45	7 48	1 34	0 13	2 40	15 39	0 20	18 27	1 38	9 47	11 37	1 34	1 26	4 52	17 52	5 17	
S 12	4 23	7 32	1 47	8 45	1 49	13 1	1 7	0 34	0 44	7 46	1 34	0 15	2 40	15 40	0 20	18 28	1 38	9 47	11 37	1 34	1 27	4 50	17 52	5 18	
S 13	4 0	4 1	0 44	8 0	1 48	12 36	1 9	0 18	0 44	7 44	1 35	0 17	2 40	15 41	0 20	18 28	1 38	9 46	11 37	1 34	1 29	4 48	17 51	5 18	
M14	3 37	0 21	0n22	7 15	1 46	12 12	1 10	0 2	0 43	7 42	1 35	0 19	2 40	15 41	0 20	18 28	1 38	9 46	11 37	1 34	1 30	4 47	17 51	5 19	
T 15	3 14	3s21	1 26	6 29	1 44	11 46	1 12	0s14	0 43	7 40	1 35	0 21	2 40	15 42	0 20	18 28	1 38	9 46	11 37	1 34	1 31	4 45	17 50	5 19	
W16	2 51	6 56	2 28	5 43	1 42	11 21	1 13	0 30	0 42	7 37	1 35	0 23	2 41	15 43	0 20	18 29	1 38	9 46	11 38	1 34	1 32	4 43	17 50	5 20	
T 17	2 27	10 16	3 24	4 57	1 39	10 55	1 15	0 46	0 42	7 35	1 35	0 25	2 41	15 44	0 20	18 29	1 38	9 45	11 38	1 34	1 34	4 41	17 49	5 20	
F 18	2 4	13 13	4 11	4 10	1 35	10 29	1 16	1 2	0 42	7 33	1 35	0 26	2 41	15 45	0 20	18 29	1 38	9 45	11 38	1 34	1 35	4 39	17 49	5 21	
S 19	1 41	15 36	4 47	3 22	1 31	10 3	1 17	1 18	0 41	7 30	1 36	0 28	2 41	15 46	0 19	18 30	1 38	9 45	11 38	1 34	1 36	4 38	17 48	5 21	
S 20	1 17	17 18	5 10	2 35	1 27	9 36	1 19	1 34	0 41	7 28	1 36	0 30	2 41	15 46	0 19	18 30	1 38	9 45	11 38	1 34	1 38	4 36	17 48	5 22	
M21	0 54	18 8	5 18	1 48	1 22	9 9	1 20	1 50	0 40	7 25	1 36	0 32	2 41	15 47	0 19	18 30	1 38	9 44	11 39	1 34	1 39	4 34	17 47	5 22	
T 22	0 30	17 59	5 9	1 1	1 17	8 42	1 21	2 6	0 40	7 23	1 36	0 34	2 41	15 48	0 19	18 31	1 38	9 44	11 39	1 34	1 40	4 32	17 47	5 23	
W23	0 7	16 46	4 42	0 14	1 12	8 14	1 22	2 23	0 39	7 20	1 36	0 36	2 41	15 49	0 19	18 31	1 38	9 44	11 39	1 34	1 41	4 31	17 46	5 24	
T 24	0s17	14 30	3 57	0s33	1 6	7 47	1 23	2 39	0 39	7 17	1 36	0 38	2 41	15 50	0 19	18 31	1 38	9 44	11 39	1 33	1 43	4 29	17 46	5 24	
F 25	0 40	11 14	2 56	1 20	1 0	7 19	1 24	2 55	0 38	7 15	1 36	0 40	2 41	15 51	0 19	18 32	1 38	9 43	11 39	1 33	1 44	4 27	17 45	5 25	
S 26	1 3	7 11	1 42	2 6	0 54	6 50	1 24	3 11	0 38	7 12	1 36	0 42	2 41	15 52	0 19	18 32	1 38	9 43	11 39	1 33	1 45	4 25	17 45	5 25	
S 27	1 27	2 38	0 19	2 53	0 48	6 22	1 25	3 27	0 37	7 9	1 36	0 44	2 41	15 53	0 19	18 32	1 38	9 43	11 40	1 33	1 46	4 23	17 44	5 26	
M28	1 50	2n 7	1s 5	3 38	0 42	5 53	1 26	3 43	0 37	7 6	1 36	0 45	2 41	15 54	0 19	18 33	1 37	9 43	11 40	1 33	1 48	4 22	17 43	5 26	
T 29	2 14	6 41	2 23	4 24	0 35	5 25	1 26	3 59	0 36	7 3	1 37	0 47	2 41	15 55	0 19	18 33	1 37	9 42	11 40	1 33	1 49	4 20	17 44	5 27	
W30	2s37	10n45	3s31	5s 9	0m29	4n56	1n27	4s15	0n36	7n 0	1s37	0s49	2s41	15s55	0n19	18s33	1n37	9n42	11s40	1n34	1n50	4n18	17n43	5s27	

ASTRODIENST EPHEMERIS for the year 1643

geocentric

OCTOBER 1643 GC

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
T 1	0 38 2	7 ^h 34'49"	22 ^h 8'0"	15 ^h 47'	22 ^h 11'	12 ^h 46'	21 ^h R39	4 ^h R 3	14 ^h M36	29 ^h M48	5 ^h R 7	26 ^h R 3	25 ^h M20	17 ^h M36	20 ^h R42	T 1
F 2	0 41 59	8 ^h 34'00"	5 ^h 11'57"	17 ^h 25'	23 ^h 26'	13 ^h 26'	21 ^h Y31	3 ^h Y59	14 ^h 39'	29 ^h 50'	5 ^h II 7	26 ^h M 2	25 ^h 17'	17 ^h 42'	20 ^h II41	F 2
S 3	0 45 55	9 ^h 33'14"	19 ^h 27'	19 ^h 3'	24 ^h 40'	14 ^h 6'	21 ^h 24'	3 ^h 54'	14 ^h 42'	29 ^h 51'	5 ^h 6'	26 ^h 1'	25 ^h 14'	17 ^h 49'	20 ^h 41'	S 3
S 4	0 49 52	10 ^h 32'30"	2 ^h 30'	20 ^h 40'	25 ^h 55'	14 ^h 46'	21 ^h 16'	3 ^h 49'	14 ^h 45'	29 ^h 53'	5 ^h 6'	26 ^h 0'	25 ^h 11'	17 ^h 56'	20 ^h 41'	S 4
M 5	0 53 48	11 ^h 31'49"	15 ^h 10'	22 ^h 16'	27 ^h 10'	15 ^h 26'	21 ^h 8'	3 ^h 45'	14 ^h 49'	29 ^h 55'	5 ^h 5'	26 ^h D 0'	25 ^h 7'	18 ^h 2'	20 ^h 40'	M 5
T 6	0 57 45	12 ^h 31'09"	27 ^h 30'	23 ^h 51'	28 ^h 25'	16 ^h 6'	21 ^h 0'	3 ^h 40'	14 ^h 52'	29 ^h 56'	5 ^h 4'	26 ^h 0'	25 ^h 4'	18 ^h 9'	20 ^h 40'	T 6
W 7	1 1 41	13 ^h 30'32"	9 ^h 35'	25 ^h 25'	29 ^h 39'	16 ^h 46'	20 ^h 52'	3 ^h 36'	14 ^h 55'	29 ^h 58'	5 ^h 4'	26 ^h 1'	25 ^h 1'	18 ^h 16'	20 ^h 39'	W 7
T 8	1 5 38	14 ^h 29'58"	21 ^h 30'	26 ^h 59'	0 ^h 54'	17 ^h 26'	20 ^h 44'	3 ^h 31'	14 ^h 58'	29 ^h 59'	5 ^h 3'	26 ^h 3'	24 ^h 58'	18 ^h 22'	20 ^h 39'	T 8
F 9	1 9 34	15 ^h 29'25"	3 ^h M19	28 ^h 32'	2 ^h 9'	18 ^h 6'	20 ^h 36'	3 ^h 26'	15 ^h 2'	0 ^h 7 1	5 ^h 2'	26 ^h 5'	24 ^h 55'	18 ^h 29'	20 ^h 38'	F 9
S 10	1 13 31	16 ^h 28'55"	15 ^h 6'	0 ^h M 5	3 ^h 24'	18 ^h 46'	20 ^h 28'	3 ^h 22'	15 ^h 5'	0 ^h 3	5 ^h 2'	26 ^h 6'	24 ^h 51'	18 ^h 35'	20 ^h 37'	S 10
S 11	1 17 28	17 ^h 28'27"	26 ^h 54'	1 ^h 37'	4 ^h 39'	19 ^h 26'	20 ^h 20'	3 ^h 17'	15 ^h 9'	0 ^h 5	5 ^h 1'	26 ^h R 6	24 ^h 48'	18 ^h 42'	20 ^h 36'	S 11
M12	1 21 24	18 ^h 28'01"	8 ^h 46'	3 ^h 8'	5 ^h 54'	20 ^h 7'	20 ^h 12'	3 ^h 13'	15 ^h 12'	0 ^h 7	5 ^h 0'	26 ^h 5'	24 ^h 45'	18 ^h 49'	20 ^h 35'	M12
T 13	1 25 21	19 ^h 27'37"	20 ^h 44'	4 ^h 38'	7 ^h 9'	20 ^h 47'	20 ^h 3'	3 ^h 8'	15 ^h 15'	0 ^h 8	5 ^h 0'	26 ^h 4'	24 ^h 42'	18 ^h 55'	20 ^h 34'	T 13
W14	1 29 17	20 ^h 27'15"	2 ^h M50	6 ^h 8'	8 ^h 24'	21 ^h 27'	19 ^h 55'	3 ^h 4'	15 ^h 19'	0 ^h 10	4 ^h 59'	26 ^h 1'	24 ^h 39'	19 ^h 2'	20 ^h 33'	W14
T 15	1 33 14	21 ^h 26'55"	15 ^h 7'	7 ^h 37'	9 ^h 39'	22 ^h 8'	19 ^h 47'	3 ^h 0'	15 ^h 22'	0 ^h 12	4 ^h 58'	25 ^h 57'	24 ^h 36'	19 ^h 9'	20 ^h 32'	T 15
F 16	1 37 10	22 ^h 26'37"	27 ^h 34'	9 ^h 6'	10 ^h 54'	22 ^h 48'	19 ^h 39'	2 ^h 55'	15 ^h 26'	0 ^h 14	4 ^h 57'	25 ^h 52'	24 ^h 32'	19 ^h 15'	20 ^h 30'	F 16
S 17	1 41 7	23 ^h 26'21"	10 ^h 7 14	10 ^h 34'	12 ^h 9'	23 ^h 28'	19 ^h 31'	2 ^h 51'	15 ^h 29'	0 ^h 16	4 ^h 56'	25 ^h 48'	24 ^h 29'	19 ^h 22'	20 ^h 29'	S 17
S 18	1 45 3	24 ^h 26'07"	23 ^h 7'	12 ^h 1'	13 ^h 24'	24 ^h 9'	19 ^h 23'	2 ^h 47'	15 ^h 33'	0 ^h 18	4 ^h 56'	25 ^h 44'	24 ^h 26'	19 ^h 29'	20 ^h 28'	S 18
M19	1 49 0	25 ^h 25'54"	6 ^h 3 16	13 ^h 27'	14 ^h 39'	24 ^h 49'	19 ^h 15'	2 ^h 43'	15 ^h 36'	0 ^h 20	4 ^h 55'	25 ^h 41'	24 ^h 23'	19 ^h 35'	20 ^h 26'	M19
T 20	1 52 57	26 ^h 25'44"	19 ^h 41'	14 ^h 53'	15 ^h 55'	25 ^h 30'	19 ^h 7'	2 ^h 39'	15 ^h 40'	0 ^h 22	4 ^h 54'	25 ^h 40'	24 ^h 20'	19 ^h 42'	20 ^h 24'	T 20
W21	1 56 53	27 ^h 25'35"	3 ^h 25'	16 ^h 18'	17 ^h 10'	26 ^h 11'	18 ^h 59'	2 ^h 35'	15 ^h 44'	0 ^h 24	4 ^h 53'	25 ^h D40	24 ^h 17'	19 ^h 49'	20 ^h 23'	W21
T 22	2 0 50	28 ^h 25'27"	17 ^h 26'	17 ^h 42'	18 ^h 25'	26 ^h 51'	18 ^h 51'	2 ^h 31'	15 ^h 47'	0 ^h 26	4 ^h 52'	25 ^h 41'	24 ^h 13'	19 ^h 55'	20 ^h 21'	T 22
F 23	2 4 46	29 ^h 25'21"	1 ^h 46'	19 ^h 6'	19 ^h 40'	27 ^h 32'	18 ^h 43'	2 ^h 27'	15 ^h 51'	0 ^h 28	4 ^h 51'	25 ^h 42'	24 ^h 10'	20 ^h 2'	20 ^h 19'	F 23
S 24	2 8 43	0 ^h M25'17"	16 ^h 22'	20 ^h 28'	20 ^h 55'	28 ^h 13'	18 ^h 35'	2 ^h 23'	15 ^h 54'	0 ^h 30	4 ^h 50'	25 ^h 43'	24 ^h 7'	20 ^h 8'	20 ^h 17'	S 24
S 25	2 12 39	1 ^h 25'14"	1 ^h Y 9	21 ^h 50'	22 ^h 10'	28 ^h 53'	18 ^h 28'	2 ^h 19'	15 ^h 58'	0 ^h 32	4 ^h 50'	25 ^h R43	24 ^h 4'	20 ^h 15'	20 ^h 15'	S 25
M26	2 16 36	2 ^h 25'13"	16 ^h 3'	23 ^h 10'	23 ^h 26'	29 ^h 34'	18 ^h 20'	2 ^h 15'	16 ^h 2'	0 ^h 34	4 ^h 49'	25 ^h 42'	24 ^h 1'	20 ^h 22'	20 ^h 13'	M26
T 27	2 20 32	3 ^h 25'14"	0 ^h 3 54	24 ^h 30'	24 ^h 41'	0 ^h M15	18 ^h 12'	2 ^h 12'	16 ^h 5'	0 ^h 36	4 ^h 48'	25 ^h 39'	23 ^h 57'	20 ^h 28'	20 ^h 11'	T 27
W28	2 24 29	4 ^h 25'17"	15 ^h 36'	25 ^h 48'	25 ^h 56'	0 ^h 56'	18 ^h 5'	2 ^h 8'	16 ^h 9'	0 ^h 38	4 ^h 47'	25 ^h 34'	23 ^h 54'	20 ^h 35'	20 ^h 9'	W28
T 29	2 28 26	5 ^h 25'22"	0 ^h II 1	27 ^h 5'	27 ^h 11'	1 ^h 37	17 ^h 57	2 ^h 4'	16 ^h 13	0 ^h 40	4 ^h 46'	25 ^h 27'	23 ^h 51'	20 ^h 42'	20 ^h 7'	T 29
F 30	2 32 22	6 ^h 25'29"	14 ^h 2'	28 ^h 21'	28 ^h 27'	2 ^h 18	17 ^h 50	2 ^h 1'	16 ^h 16	0 ^h 42	4 ^h 45'	25 ^h 21'	23 ^h 48'	20 ^h 48'	20 ^h 5'	F 30
S 31	2 36 19	7 ^h M25'38"	27 ^h II37	29 ^h M35	29 ^h 42'	2 ^h M59	17 ^h Y43	1 ^h Y58	16 ^h M20	0 ^h 7 44	4 ^h II44	25 ^h M14	23 ^h M45	20 ^h M55	20 ^h II 2	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
T 1	3s 1	14n 4	4s23	5s53	0n22	4n27	1n27	4s31	0n35	6n58	1s37	0s51	2s41	15s56	0n19	18s34	1n37	9n42	11s40	1n34	1n51	4n16	17n42	5s28					
F 2	3 24	16 27	4 58	6 37	0 15	3 57	1 28	4 47	0 35	6 55	1 37	0 53	2 41	15 57	0 19	18 34	1 37	9 42	11 41	1 35	1 53	4 14	17 42	5 28					
S 3	3 48	17 50	5 15	7 21	0 8	3 28	1 28	5 3	0 34	6 52	1 37	0 55	2 41	15 58	0 19	18 34	1 37	9 41	11 41	1 35	1 54	4 13	17 41	5 29					
S 4	4 11	18 12	5 15	8 4	0 2	2 59	1 28	5 19	0 34	6 49	1 37	0 57	2 41	15 59	0 19	18 35	1 37	9 41	11 41	1 36	1 55	4 11	17 41	5 29					
M 5	4 34	17 39	5 0	8 46	0s 5	2 29	1 29	5 34	0 33	6 46	1 37	0 58	2 41	16 0	0 19	18 35	1 37	9 41	11 41	1 36	1 56	4 9	17 40	5 30					
T 6	4 57	16 16	4 31	9 28	0 12	1 59	1 29	5 50	0 33	6 43	1 37	1 0	2 41	16 1	0 19	18 36	1 37	9 41	11 41	1 35	1 58	4 7	17 40	5 30					
W 7	5 20	14 11	3 50	10 9	0 19	1 30	1 29	6 6	0 32	6 40	1 37	1 2	2 41	16 2	0 19	18 36	1 37	9 40	11 41	1 35	1 59	4 6	17 39	5 31					
T 8	5 44	11 31	3 0	10 50	0 26	1 0	1 29	6 22	0 32	6 37	1 37	1 4	2 41	16 3	0 19	18 36	1 37	9 40	11 42	1 34	2 0	4 4	17 39	5 31					
F 9	6 7	8 24	2 3	11 30	0 33	0 30	1 29	6 38	0 31	6 34	1 37	1 6	2 41	16 4	0 19	18 37	1 37	9 40	11 42	1 34	2 2	4 2	17 38	5 32					
S 10	6 29	4 57	1 1	12 9	0 40	0s 0	1 28	6 54	0 31	6 31	1 37	1 7	2 41	16 5	0 19	18 37	1 37	9 40	11 42	1 33	2 3	4 0	17 37	5 32					
S 11	6 52	1 18	0n 4	12 48	0 47	0 30	1 28	7 9	0 30	6 28	1 37	1 9	2 41	16 6	0 19	18 38	1 37	9 39	11 42	1 33	2 4	3 58	17 37	5 33					
M12	7 15	2s25	1 9	13 25	0 54	1 0	1 28	7 25	0 30	6 25	1 37	1 11	2 41	16 7	0 19	18 38	1 37	9 39	11 42	1 33	2 5	3 57	17 36	5 33					
T 13	7 38	6 4	2 12	14 3	1 1	1 30	1 28	7 41	0 29	6 22	1 37	1 13	2 41	16 8	0 19	18 38	1 37	9 39	11 42	1 34	2 7	3 55	17 36	5 34					
W14	8 0	9 31	3 9	14 39	1 7	2 0	1 27	7 56	0 29	6 19	1 37	1 14	2 41	16 9	0 19	18 39	1 37	9 38	11 42	1 35	2 8	3 53	17 35	5 34					
T 15	8 23	12 36	3 58	15 15	1 14	2 30	1 27	8 12	0 28	6 16	1 37	1 16	2 41	16 10	0 19	18 39	1 37	9 38	11 43	1 37	2 9	3 51	17 35	5 35					
F 16	8 45	15 10	4 36	15 50	1 21	3 0	1 26	8 27	0 28	6 13	1 37	1 17	2 41	16 11	0 19	18 40	1 37	9 38	11 43	1 39	2 10	3 49	17 34	5 35					
S 17	9 7	17 2	5 2	16 24	1 27	3 30	1 26	8 43	0 27	6 10	1 37	1 19	2 41	16 12	0 19	18 40	1 37	9 38	11 43	1 40	2 12	3 48	17 33	5 36					
S 18	9 29	18 5	5 13	16 57	1 33	4 0	1 25	8 58	0 27	6 7	1 36	1 21	2 40	16 13	0 19	18 41	1 37	9 37	11 43	1 42	2 13	3 46	17 33	5 36					
M19	9 51	18 12	5 8	17 29	1 39	4 30	1 24	9 14	0 26	6 4	1 36	1 22	2 40	16 14	0 19	18 41	1 37	9 37	11 43	1 43	2 14	3 44	17 32	5 37					
T 20	10 13	17 19	4 47	18 1	1 45	4 59	1 23	9 29	0 26	6 1	1 36	1 24	2 40	16 15	0 19	18 41	1 37	9 37	11 43	1 44	2 15	3 42	17 32	5 37					
W21	10 35	15 24	4 8	18 31	1 51	5 29	1 22	9 44	0 25	5 58	1 36	1 25	2 40	16 17	0 19	18 42	1 37	9 37	11 43	1 44	2 17	3 40	17 31	5 38					
T 22	10 56	12 33	3 14	19 1	1 57	5 58	1 22	9 59	0 24	5 55	1 36	1 27	2 40	16 18	0 19	18 42	1 36	9 36	11 43	1 43	2 18	3 39	17 30	5 38					
F 23	11 17	8 53	2 7	19 29	2 2	6 28	1 21	10 15	0 24	5 52	1 36	1 28	2 40	16 19	0 19	18 43	1 36	9 36	11 44	1 43	2 19	3 37	17 30	5 39					
S 24	11 38	4 36	0 51	19 57	2 7	6 57	1 20	10 30	0 23	5 49	1 36	1 30	2 40	16 20	0 19	18 43	1 36	9 36	11 44	1 42	2 20	3 35	17 29	5 39					
S 25	11 59	0n 0	0s30	20 23	2 12	7 26	1 18	10 45	0 23	5 46	1 36	1 31	2 40	16 21	0 19	18 44	1 36	9 36	11 44	1 42	2 22	3 33	17 29	5 40					
M26	12 20	4 39	1 49	20 49	2 17	7 55	1 17	11 0	0 22	5 44	1 36	1 32	2 40	16 22	0 19	18 44	1 36	9 35	11 44	1 43	2 23	3 31	17 28	5 40					
T 27	12 41	9 0	3 0	21 13	2 22	8 24	1 16	11 14	0 22	5 41	1 35	1 34	2 39	16 23	0 19	18 45	1 36	9 35	11 44	1 44	2 24	3 30	17 27	5 41					
W28	13 1	12 44	3 58	21 36	2 26	8 53	1 15	11 29	0 21	5 38	1 35	1 35	2 39	16 24	0 19	18 45	1 36	9 35	11 44	1 46	2 26	3 28	17 27	5 41					
T 29	13 21	15 37	4 40	21 58	2 29	9 21	1 13	11 44	0 21	5 35	1 35	1 36	2 39	16 25	0 19	18 45	1 36	9 35	11 44	1 49	2 27	3 26	17 26	5 42					
F 30	13 41	17 29	5 4	22 19	2 33	9 49	1 12	11 59	0 20	5 33	1 35	1 38	2 39	16 26	0 19	18 46	1 36	9 34	11 44	1 51	2 28	3 24	17 26	5 42					
S 31	14s 1	18n18	5s10	22s38	2s36	10s17	1n11	12s13	0n20	5n30	1s35	1s39	2s39	16s27	0n19	18s46	1n36	9n34	11s44	1n54	2n29	3n22	17n25	5s42					

ASTRODIENST EPHEMERIS for the year 1643

geocentric

NOVEMBER 1643 GC

00:00 UT

Day	Sid.t	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
S 1	2 40 15	8♉25'49	10♊46	0♈47	0♉57	3♉40	17°R36	1°R54	16♉24	0♈46	4°R43	25°R 9	23♉42	21♉ 2	20°R 0	S 1
M 2	2 44 12	9°26'02	23°30	1°58	2°13	4°21	17°V29	1°V51	16°27	0°48	4♉42	25°R 6	23°38	21° 8	19°II57	M 2
T 3	2 48 8	10°26'17	5♊52	3° 6	3°28	5° 2	17°22	1°48	16°31	0°50	4°41	25°D 5	23°35	21°15	19°55	T 3
W 4	2 52 5	11°26'34	17°58	4°12	4°43	5°43	17°15	1°45	16°35	0°53	4°40	25° 5	23°32	21°22	19°52	W 4
T 5	2 56 1	12°26'53	29°52	5°16	5°59	6°25	17° 9	1°42	16°39	0°55	4°39	25° 6	23°29	21°28	19°50	T 5
F 6	2 59 58	13°27'14	11♉40	6°16	7°14	7° 6	17° 2	1°39	16°42	0°57	4°38	25° 7	23°26	21°35	19°47	F 6
S 7	3 3 55	14°27'37	23°27	7°13	8°29	7°47	16°56	1°36	16°46	0°59	4°37	25°R 8	23°23	21°42	19°44	S 7
S 8	3 7 51	15°28'01	5♊17	8° 6	9°45	8°29	16°49	1°33	16°50	1° 1	4°36	25° 7	23°19	21°48	19°41	S 8
M 9	3 11 48	16°28'28	17°14	8°55	11° 0	9°10	16°43	1°31	16°54	1° 3	4°34	25° 5	23°16	21°55	19°38	M 9
T 10	3 15 44	17°28'56	29°22	9°39	12°16	9°52	16°37	1°28	16°57	1° 6	4°33	25° 0	23°13	22° 1	19°35	T 10
W11	3 19 41	18°29'26	11♉42	10°17	13°31	10°33	16°32	1°26	17° 1	1° 8	4°32	24°52	23°10	22° 8	19°32	W11
T 12	3 23 37	19°29'58	24°16	10°50	14°46	11°15	16°26	1°23	17° 5	1°10	4°31	24°43	23° 7	22°15	19°29	T 12
F 13	3 27 34	20°30'31	7♈ 3	11°16	16° 2	11°56	16°21	1°21	17° 8	1°12	4°30	24°32	23° 3	22°21	19°26	F 13
S 14	3 31 30	21°31'06	20° 3	11°34	17°17	12°38	16°15	1°19	17°12	1°15	4°29	24°22	23° 0	22°28	19°23	S 14
S 15	3 35 27	22°31'42	3♊15	11°44	18°33	13°20	16°10	1°17	17°16	1°17	4°28	24°12	22°57	22°35	19°20	S 15
M16	3 39 23	23°32'20	16°39	11°R45	19°48	14° 1	16° 5	1°15	17°20	1°19	4°27	24° 5	22°54	22°41	19°17	M16
T 17	3 43 20	24°32'58	0♉14	11°37	21° 4	14°43	16° 0	1°13	17°23	1°21	4°26	23°59	22°51	22°48	19°13	T 17
W18	3 47 17	25°33'38	13°59	11°18	22°19	15°25	15°56	1°11	17°27	1°23	4°25	23°57	22°48	22°55	19°10	W18
T 19	3 51 13	26°34'19	27°54	10°48	23°35	16° 7	15°52	1°10	17°31	1°26	4°23	23°D56	22°44	23° 1	19° 7	T 19
F 20	3 55 10	27°35'01	11♈59	10° 8	24°50	16°49	15°47	1° 8	17°34	1°28	4°22	23°57	22°41	23° 8	19° 3	F 20
S 21	3 59 6	28°35'44	26°14	9°17	26° 5	17°31	15°43	1° 7	17°38	1°30	4°21	23°R57	22°38	23°15	19° 0	S 21
S 22	4 3 3	29°36'28	10♉36	8°16	27°21	18°12	15°39	1° 5	17°42	1°33	4°20	23°56	22°35	23°21	18°56	S 22
M23	4 6 59	0♈37'13	25° 3	7° 7	28°36	18°54	15°36	1° 4	17°45	1°35	4°19	23°52	22°32	23°28	18°53	M23
T 24	4 10 56	1°37'59	9♈31	5°51	29°52	19°37	15°32	1° 3	17°49	1°37	4°18	23°46	22°28	23°34	18°49	T 24
W25	4 14 52	2°38'46	23°53	4°30	1♈ 7	20°19	15°29	1° 2	17°53	1°39	4°17	23°37	22°25	23°41	18°46	W25
T 26	4 18 49	3°39'35	8♉ 3	3° 7	2°23	21° 1	15°26	1° 1	17°56	1°42	4°15	23°26	22°22	23°48	18°42	T 26
F 27	4 22 46	4°40'24	21°56	1°46	3°38	21°43	15°23	1° 0	18° 0	1°44	4°14	23°14	22°19	23°54	18°38	F 27
S 28	4 26 42	5°41'15	5♊27	0°27	4°54	22°25	15°20	0°59	18° 4	1°46	4°13	23° 3	22°16	24° 1	18°35	S 28
S 29	4 30 39	6°42'08	18°36	29♉15	6° 9	23° 8	15°18	0°59	18° 7	1°48	4°12	22°52	22°13	24° 8	18°31	S 29
M30	4 34 35	7♈43'01	1♊21	28♉11	7♈25	23♉50	15°V16	0°V58	18♉11	1♈51	4♉11	22♉45	22♉ 9	24♉14	18♉27	M30

Day	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
	decl	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	
S 1	14s20	18n 5	4s59	22s56	2s39	10s45	1n 9	12s28	0n19	5n28	1s35	1s40	2s39	16s28	0n19	18s47
M 2	14 40	16 57	4 33	23 13	2 41	11 12	1 8	12 42	0 18	5 25	1 34	1 41	2 39	16 29	0 19	18 47
T 3	14 59	15 2	3 55	23 28	2 42	11 39	1 6	12 57	0 18	5 23	1 34	1 42	2 38	16 30	0 19	18 48
W 4	15 18	12 30	3 8	23 42	2 43	12 6	1 4	13 11	0 17	5 20	1 34	1 43	2 38	16 31	0 19	18 48
T 5	15 36	9 28	2 13	23 54	2 44	12 33	1 3	13 25	0 17	5 18	1 34	1 44	2 38	16 33	0 19	18 49
F 6	15 54	6 5	1 12	24 5	2 44	12 59	1 1	13 39	0 16	5 16	1 34	1 45	2 38	16 34	0 19	18 49
S 7	16 12	2 28	0 9	24 14	2 43	13 25	0 59	13 53	0 16	5 13	1 33	1 46	2 38	16 35	0 19	18 50
S 8	16 30	1s16	0n55	24 21	2 41	13 51	0 57	14 7	0 15	5 11	1 33	1 47	2 37	16 36	0 19	18 50
M 9	16 48	4 59	1 56	24 26	2 39	14 16	0 56	14 21	0 15	5 9	1 33	1 48	2 37	16 37	0 19	18 50
T 10	17 5	8 34	2 54	24 30	2 35	14 41	0 54	14 35	0 14	5 7	1 33	1 49	2 37	16 38	0 19	18 51
W11	17 22	11 50	3 44	24 31	2 31	15 6	0 52	14 48	0 13	5 5	1 33	1 50	2 37	16 39	0 19	18 51
T 12	17 38	14 37	4 24	24 30	2 25	15 30	0 50	15 2	0 13	5 3	1 32	1 50	2 37	16 40	0 19	18 52
F 13	17 55	16 44	4 51	24 27	2 18	15 54	0 48	15 15	0 12	5 1	1 32	1 51	2 36	16 41	0 19	18 52
S 14	18 11	18 3	5 4	24 22	2 10	16 18	0 46	15 28	0 12	4 59	1 32	1 52	2 36	16 42	0 19	18 53
S 15	18 26	18 26	5 1	24 14	2 1	16 41	0 44	15 41	0 11	4 58	1 32	1 52	2 36	16 43	0 19	18 53
M16	18 41	17 47	4 42	24 3	1 50	17 3	0 42	15 55	0 10	4 56	1 31	1 53	2 36	16 44	0 19	18 54
T 17	18 56	16 7	4 7	23 49	1 37	17 25	0 39	16 7	0 10	4 55	1 31	1 54	2 36	16 45	0 19	18 54
W18	19 11	13 31	3 17	23 33	1 23	17 47	0 37	16 20	0 9	4 53	1 31	1 54	2 35	16 46	0 19	18 55
T 19	19 25	10 7	2 14	23 13	1 8	18 8	0 35	16 33	0 9	4 52	1 31	1 55	2 35	16 47	0 19	18 55
F 20	19 39	6 6	1 3	22 51	0 51	18 29	0 33	16 46	0 8	4 50	1 30	1 55	2 35	16 48	0 19	18 56
S 21	19 53	1 41	0s12	22 25	0 32	18 49	0 31	16 58	0 8	4 49	1 30	1 55	2 35	16 49	0 19	18 56
S 22	20 6	2n52	1 28	21 56	0 13	19 9	0 28	17 10	0 7	4 48	1 30	1 56	2 35	16 51	0 19	18 57
M23	20 19	7 16	2 38	21 25	0n 7	19 28	0 26	17 22	0 6	4 47	1 29	1 56	2 34	16 52	0 19	18 57
T 24	20 32	11 15	3 37	20 52	0 28	19 46	0 24	17 35	0 6	4 45	1 29	1 56	2 34	16 53	0 19	18 57
W25	20 44	14 32	4 23	20 18	0 48	20 4	0 22	17 46	0 5	4 44	1 29	1 56	2 34	16 54	0 19	18 58
T 26	20 55	16 54	4 51	19 43	1 8	20 22	0 19	17 58	0 5	4 44	1 29	1 57	2 34	16 55	0 19	18 58
F 27	21 7	18 13	5 2	19 8	1 26	20 39	0 17	18 10	0 4	4 43	1 28	1 57	2 33	16 56	0 19	18 59
S 28	21 18	18 27	4 55	18 36	1 44	20 55	0 14	18 21	0 3	4 42	1 28	1 57	2 33	16 57	0 19	18 59
S 29	21 28	17 41	4 33	18 6	1 59	21 11	0 12	18 33	0 3	4 41	1 28	1 57	2 33	16 58	0 19	19 0
M30	21s38	16n 3	3s57	17s39	2n12	21s26	0n10	18s44	0n 2	4n41	1s27	1s57	2s33	16s59	0n19	19s 0

Julian Day Number = 2321457.5, Delta T = 47.64 sec

Ecliptic obliquity = 23°28'59, Nutation = - 0°00'03, out-of-bounds declination in red

Ayanamsha: Fagan/Bradley = 19°46'09, Lahiri = 18°53'09Greg. Calendar

ASTRODIENST EPHEMERIS for the year 1643
geocentric

DECEMBER 1643 GC

00:00 UT

Day	Sid.t	☉	☽	♊	♋	♌	♍	♎	♏	♐	♑	♒	♓	♈	♉	Day
T 1	4 38 32	8♌43'56	13♏45	27°R17	8♌40	24♍32	15°R14	0°R58	18♍14	1♌53	4°R10	22°R39	22♍6	24♍21	18°R24	T 1
W 2	4 42 28	9°44'52	25°52	26♍34	9°56	25°15	15°Y12	0°Y58	18°18	1°55	4♊9	22♍37	22°3	24°28	18♊20	W 2
T 3	4 46 25	10°45'49	7♍48	26°2	11°11	25°57	15°10	0°57	18°21	1°57	4°7	22°D36	22°0	24°34	18°16	T 3
F 4	4 50 22	11°46'47	19°36	25°41	12°27	26°40	15°9	0°D57	18°25	2°0	4°6	22°R36	21°57	24°41	18°12	F 4
S 5	4 54 18	12°47'46	1♌24	25°D32	13°42	27°22	15°7	0°57	18°28	2°2	4°5	22°36	21°54	24°48	18°8	S 5
S 6	4 58 15	13°48'47	13°15	25°33	14°58	28°5	15°6	0°57	18°32	2°4	4°4	22°34	21°50	24°54	18°5	S 6
M 7	5 2 11	14°49'49	25°16	25°44	16°13	28°47	15°6	0°58	18°35	2°6	4°3	22°30	21°47	25°1	18°1	M 7
T 8	5 6 8	15°50'51	7♍31	26°4	17°29	29°30	15°5	0°58	18°39	2°8	4°2	22°24	21°44	25°7	17°57	T 8
W 9	5 10 4	16°51'55	20°2	26°32	18°44	0♌13	15°5	0°59	18°42	2°11	4°1	22°14	21°41	25°14	17°53	W 9
T 10	5 14 1	17°53'00	2♌52	27°7	20°0	0°56	15°D4	0°59	18°46	2°13	4°0	22°2	21°38	25°21	17°49	T 10
F 11	5 17 57	18°54'05	15°59	27°49	21°15	1°38	15°4	1°0	18°49	2°15	3°58	21°48	21°34	25°27	17°46	F 11
S 12	5 21 54	19°55'11	29°23	28°37	22°31	2°21	15°5	1°1	18°52	2°17	3°57	21°35	21°31	25°34	17°42	S 12
S 13	5 25 51	20°56'18	13♌1	29°30	23°46	3°4	15°5	1°2	18°56	2°19	3°56	21°22	21°28	25°41	17°38	S 13
M14	5 29 47	21°57'25	26°50	0♌27	25°2	3°47	15°6	1°3	18°59	2°22	3°55	21°12	21°25	25°47	17°34	M14
T 15	5 33 44	22°58'33	10♌46	1°28	26°17	4°30	15°7	1°4	19°2	2°24	3°54	21°5	21°22	25°54	17°30	T 15
W16	5 37 40	23°59'40	24°47	2°33	27°33	5°13	15°8	1°5	19°5	2°26	3°53	21°0	21°19	26°1	17°26	W16
T 17	5 41 37	25°0'48	8♌50	3°41	28°48	5°56	15°9	1°6	19°9	2°28	3°52	20°59	21°15	26°7	17°23	T 17
F 18	5 45 33	26°1'56	22°54	4°51	0♌4	6°39	15°10	1°8	19°12	2°30	3°51	20°59	21°12	26°14	17°19	F 18
S 19	5 49 30	27°3'04	6°Y58	6°4	1°19	7°22	15°12	1°9	19°15	2°32	3°50	20°58	21°9	26°21	17°15	S 19
S 20	5 53 26	28°4'12	21°3	7°19	2°35	8°6	15°14	1°11	19°18	2°34	3°49	20°57	21°6	26°27	17°11	S 20
M21	5 57 23	29°5'21	5♌6	8°36	3°50	8°49	15°16	1°13	19°21	2°36	3°48	20°53	21°3	26°34	17°8	M21
T 22	6 1 20	0♌6'29	19°6	9°54	5°6	9°32	15°18	1°15	19°24	2°38	3°47	20°46	21°0	26°41	17°4	T 22
W23	6 5 16	1°7'37	3♊0	11°14	6°21	10°15	15°21	1°17	19°27	2°41	3°46	20°36	20°56	26°47	17°0	W23
T 24	6 9 13	2°8'46	16°45	12°35	7°37	10°59	15°24	1°19	19°30	2°43	3°45	20°25	20°53	26°54	16°56	T 24
F 25	6 13 9	3°9'54	0♌16	13°57	8°52	11°42	15°27	1°21	19°33	2°45	3°44	20°12	20°50	27°0	16°53	F 25
S 26	6 17 6	4°11'03	13°32	15°20	10°7	12°26	15°30	1°23	19°36	2°47	3°43	19°59	20°47	27°7	16°49	S 26
S 27	6 21 2	5°12'12	26°30	16°44	11°23	13°9	15°33	1°26	19°39	2°49	3°42	19°48	20°44	27°14	16°46	S 27
M28	6 24 59	6°13'21	9♏9	18°9	12°38	13°53	15°37	1°28	19°42	2°51	3°41	19°39	20°40	27°20	16°42	M28
T 29	6 28 55	7°14'30	21°31	19°35	13°54	14°36	15°40	1°31	19°45	2°52	3°40	19°32	20°37	27°27	16°39	T 29
W30	6 32 52	8°15'39	3♊37	21°1	15°9	15°20	15°44	1°33	19°48	2°54	3°39	19°29	20°34	27°34	16°35	W30
T 31	6 36 49	9♌16'49	15♍32	22♌28	16♌25	16♌4	15°Y48	1°Y36	19♍50	2♌56	3♊38	19°D28	20♍31	27♍40	16♊32	T 31

Day	☉	☽	♊	♋	♌	♍	♎	♏	♐	♑	♒	♓	♈	♉	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	
T 1	21s48	13n41 3s11	17s16 2n23	21s40 0n7	18s55 0n2	4n40 1s27	1s57 2s32	17s0 0n19	19s1 1n36	9n28 11s45	2n55 3n8	2n26 17n7	5s52		
W 2	21 57	10 46 2 17	16 58 2 32	21 54 0 5	19 6 0 1	4 40 1 27	1 57 2 32	17 1 0 19	19 1 1 36	9 28 11 45	2 56 3 10	2 24 17 7	5 53		
T 3	22 6	7 27 1 18	16 44 2 38	22 7 0 3	19 16 0 0	4 39 1 26	1 56 2 32	17 2 0 19	19 1 1 36	9 28 11 45	2 57 3 11	2 22 17 6	5 53		
F 4	22 14	3 53 0 16	16 35 2 43	22 20 0 0	19 27 0s0	4 39 1 26	1 56 2 32	17 3 0 19	19 2 1 36	9 27 11 45	2 57 3 12	2 21 17 6	5 53		
S 5	22 22	0 9 0n47	16 30 2 45	22 31 0s2	19 37 0 1	4 39 1 26	1 56 2 31	17 4 0 19	19 2 1 36	9 27 11 45	2 57 3 13	2 19 17 5	5 53		
S 6	22 30	3s36 1 47	16 29 2 46	22 43 0 5	19 48 0 2	4 39 1 25	1 55 2 31	17 4 0 19	19 3 1 36	9 27 11 44	2 57 3 15	2 17 17 5	5 53		
M 7	22 37	7 15 2 44	16 33 2 46	22 53 0 7	19 58 0 2	4 39 1 25	1 56 2 31	17 5 0 19	19 3 1 36	9 27 11 44	2 59 3 16	2 15 17 4	5 53		
T 8	22 44	10 40 3 34	16 39 2 44	23 3 0 9	20 8 0 3	4 39 1 25	1 55 2 31	17 6 0 19	19 4 1 36	9 27 11 44	3 1 3 17	2 13 17 4	5 54		
W 9	22 50	13 41 4 15	16 48 2 41	23 12 0 12	20 17 0 3	4 39 1 25	1 55 2 30	17 7 0 19	19 4 1 36	9 27 11 44	3 5 3 18	2 11 17 3	5 54		
T 10	22 56	16 8 4 44	17 0 2 37	23 20 0 14	20 27 0 4	4 39 1 24	1 54 2 30	17 8 0 19	19 4 1 36	9 27 11 44	3 10 3 20	2 10 17 3	5 54		
F 11	23 1	17 48 4 59	17 14 2 32	23 28 0 16	20 36 0 5	4 39 1 24	1 54 2 30	17 9 0 19	19 5 1 36	9 27 11 44	3 15 3 21	2 8 17 3	5 54		
S 12	23 6	18 31 4 57	17 30 2 27	23 35 0 19	20 45 0 5	4 40 1 24	1 53 2 30	17 10 0 19	19 5 1 36	9 27 11 44	3 21 3 22	2 6 17 2	5 54		
S 13	23 10	18 13 4 39	17 47 2 21	23 41 0 21	20 54 0 6	4 40 1 23	1 53 2 29	17 11 0 19	19 6 1 36	9 26 11 44	3 26 3 23	2 4 17 2	5 54		
M14	23 14	16 49 4 5	18 6 2 14	23 47 0 23	21 3 0 7	4 41 1 23	1 52 2 29	17 12 0 19	19 6 1 36	9 26 11 44	3 30 3 25	2 2 17 1	5 54		
T 15	23 18	14 26 3 15	18 25 2 7	23 52 0 26	21 12 0 7	4 41 1 23	1 51 2 29	17 13 0 19	19 7 1 36	9 26 11 44	3 33 3 26	2 0 17 1	5 54		
W16	23 21	11 11 2 14	18 45 2 0	23 56 0 28	21 20 0 8	4 42 1 22	1 51 2 29	17 14 0 19	19 7 1 36	9 26 11 43	3 34 3 27	1 59 17 1	5 54		
T 17	23 23	7 17 1 4	19 5 1 52	23 59 0 30	21 29 0 8	4 43 1 22	1 50 2 28	17 15 0 19	19 7 1 36	9 26 11 43	3 35 3 28	1 57 17 0	5 54		
F 18	23 25	2 59 0s10	19 26 1 45	24 2 0 33	21 37 0 9	4 44 1 22	1 49 2 28	17 15 0 19	19 8 1 36	9 26 11 43	3 35 3 30	1 55 17 0	5 54		
S 19	23 27	1n30 1 24	19 46 1 37	24 3 0 35	21 44 0 10	4 45 1 21	1 48 2 28	17 16 0 19	19 8 1 36	9 26 11 43	3 35 3 31	1 53 16 59	5 54		
S 20	23 28	5 53 2 32	20 7 1 29	24 5 0 37	21 52 0 10	4 46 1 21	1 47 2 28	17 17 0 19	19 9 1 36	9 26 11 43	3 36 3 32	1 51 16 59	5 54		
M21	23 29	9 56 3 31	20 27 1 21	24 5 0 39	22 0 0 11	4 47 1 21	1 46 2 27	17 18 0 19	19 9 1 36	9 26 11 43	3 37 3 33	1 49 16 59	5 54		
T 22	23 29	13 25 4 17	20 47 1 13	24 4 0 41	22 7 0 12	4 48 1 20	1 45 2 27	17 19 0 19	19 9 1 36	9 26 11 43	3 40 3 35	1 48 16 58	5 54		
W23	23 29	16 6 4 47	21 6 1 4	24 3 0 43	22 14 0 12	4 49 1 20	1 44 2 27	17 20 0 19	19 10 1 36	9 26 11 42	3 44 3 36	1 46 16 58	5 54		
T 24	23 28	17 50 5 0	21 25 0 56	24 1 0 46	22 21 0 13	4 51 1 20	1 43 2 27	17 20 0 19	19 10 1 36	9 26 11 42	3 48 3 37	1 44 16 58	5 54		
F 25	23 27	18 33 4 56	21 43 0 48	23 59 0 48	22 27 0 14	4 52 1 20	1 42 2 26	17 21 0 19	19 10 1 36	9 26 11 42	3 53 3 38	1 42 16 57	5 54		
S 26	23 25	18 13 4 36	22 0 0 40	24 55 0 50	22 34 0 14	4 54 1 19	1 41 2 26	17 22 0 19	19 11 1 36	9 26 11 42	3 59 3 40	1 40 16 57	5 54		
S 27	23 23	16 56 4 2	22 17 0 32	23 51 0 52	22 40 0 15	4 55 1 19	1 40 2 26	17 23 0 19	19 11 1 36	9 26 11 42	4 3 3 41	1 38 16 57	5 54		
M28	23 20	14 50 3 17	22 33 0 24	23 46 0 54	22 46 0 16	4 57 1 19	1 39 2 26	17 24 0 19	19 12 1 36	9 26 11 42	4 7 3 42	1 37 16 57	5 54		
T 29	23 17	12 6 2 23	22 48 0 17	23 41 0 56	22 52 0 16	4 58 1 18	1 37 2 26	17 24 0 19	19 12 1 36	9 26 11 41	4 9 3 43	1 35 16 56	5 54		
W30	23 13	8 54 1 23	23 2 0 9	23 34 0 57	22 57 0 17	5 0 1 18	1 36 2 25	17 25 0 19	19 12 1 36	9 26 11 41	4 10 3 45	1 33 16 56	5 54		
T 31	23s9	5n23 0s21	23s15 0n1	23s27 0s59	23s3 0s18	5n2 1s18	1s35 2s25	17s26 0n19	19s13 1n36	9n26 11s41	4n11 3n46	1n31 16n56	5s54		

Julian Day Number = 2321487.5, Delta T = 47.58 sec
Ecliptic obliquity = 23°28'58", Nutation = - 0°00'03", out-of-bounds declination in red
Ayanamsha: Fagan/Bradley = 19°46'13", Lahiri = 18°53'13"Greg. Calendar