



Astrodienst Ephemeris Tables for the year 1631

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 1631
geocentric

JANUARY 1631 GC

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
W 1	6 41 20	10°27'32	20°15	25°45	28°13	7°41	9°10	14°50	20°R11	5°M24	21°R 5	3°R28	1°II53	8°V58	9°V53	W 1
T 2	6 45 16	11°28'44	3°52	27°15	29°18	8°27	9°21	14°55	20°M11	5°25	21°R 4	3°II25	1°50	9° 5	9°53	T 2
F 3	6 49 13	12°29'55	17°15	28°46	0°34	9°13	9°31	15° 0	20°10	5°26	21° 3	3°20	1°47	9°11	9°54	F 3
S 4	6 53 9	13°31'06	0°23	0°17	1°49	9°59	9°42	15° 5	20°10	5°27	21° 3	3°13	1°44	9°18	9°55	S 4
S 5	6 57 6	14°32'17	13°14	1°48	3° 5	10°45	9°54	15°10	20° 9	5°28	21° 2	3° 5	1°40	9°25	9°56	S 5
M 6	7 1 2	15°33'27	25°48	3°20	4°20	11°31	10° 5	15°14	20° 8	5°29	21° 2	2°57	1°37	9°31	9°56	M 6
T 7	7 4 59	16°34'37	8°16	4°52	5°35	12°17	10°16	15°19	20° 8	5°30	21° 1	2°50	1°34	9°38	9°57	T 7
W 8	7 8 56	17°35'46	20°12	6°25	6°51	13° 4	10°27	15°23	20° 7	5°31	21° 0	2°44	1°31	9°45	9°58	W 8
T 9	7 12 52	18°36'55	2°V 8	7°58	8° 6	13°50	10°39	15°28	20° 6	5°32	21° 0	2°41	1°28	9°52	9°59	T 9
F 10	7 16 49	19°38'02	13°59	9°32	9°22	14°36	10°51	15°32	20° 5	5°33	20°59	2°39	1°25	9°58	10° 1	F 10
S 11	7 20 45	20°39'09	25°49	11° 6	10°37	15°22	11° 2	15°37	20° 5	5°34	20°59	2°D39	1°21	10° 5	10° 2	S 11
S 12	7 24 42	21°40'15	7°845	12°41	11°52	16° 9	11°14	15°41	20° 4	5°35	20°58	2°40	1°18	10°12	10° 3	S 12
M13	7 28 38	22°41'21	19°50	14°16	13° 8	16°55	11°26	15°45	20° 3	5°36	20°58	2°41	1°15	10°18	10° 4	M13
T 14	7 32 35	23°42'26	2°II11	15°52	14°23	17°42	11°38	15°49	20° 2	5°37	20°57	2°R42	1°12	10°25	10° 6	T 14
W15	7 36 31	24°43'29	14°51	17°29	15°38	18°28	11°50	15°53	20° 1	5°37	20°57	2°41	1° 9	10°32	10° 7	W15
T 16	7 40 28	25°44'32	27°54	19° 5	16°54	19°15	12° 2	15°57	19°59	5°38	20°57	2°38	1° 6	10°38	10° 9	T 16
F 17	7 44 25	26°45'34	11°5919	20°43	18° 9	20° 1	12°14	16° 1	19°58	5°39	20°56	2°33	1° 2	10°45	10°10	F 17
S 18	7 48 21	27°46'36	25° 7	22°21	19°24	20°48	12°27	16° 5	19°57	5°39	20°56	2°25	0°59	10°52	10°12	S 18
S 19	7 52 18	28°47'36	9°Ω13	24° 0	20°40	21°34	12°39	16° 8	19°56	5°40	20°55	2°16	0°56	10°59	10°13	S 19
M20	7 56 14	29°48'36	23°34	25°39	21°55	22°21	12°51	16°12	19°54	5°41	20°55	2° 6	0°53	11° 5	10°15	M20
T 21	8 0 11	0°49'35	8°M 2	27°19	23°10	23° 7	13° 4	16°15	19°53	5°41	20°55	1°57	0°50	11°12	10°17	T 21
W22	8 4 7	1°50'33	22°32	28°59	24°26	23°54	13°17	16°19	19°52	5°42	20°55	1°50	0°46	11°19	10°18	W22
T 23	8 8 4	2°51'30	6°Δ57	0°41	25°41	24°41	13°29	16°22	19°50	5°42	20°54	1°44	0°43	11°25	10°20	T 23
F 24	8 12 0	3°52'27	21°14	2°23	26°56	25°27	13°42	16°25	19°49	5°43	20°54	1°42	0°40	11°32	10°22	F 24
S 25	8 15 57	4°53'23	5°M20	4° 5	28°12	26°14	13°55	16°28	19°47	5°43	20°54	1°D41	0°37	11°39	10°24	S 25
S 26	8 19 54	5°54'19	19°15	5°48	29°27	27° 1	14° 8	16°31	19°45	5°43	20°54	1°41	0°34	11°45	10°26	S 26
M27	8 23 50	6°55'14	2°Δ58	7°32	0°42	27°48	14°21	16°34	19°44	5°44	20°53	1°R42	0°31	11°52	10°28	M27
T 28	8 27 47	7°56'08	16°30	9°17	1°58	28°35	14°34	16°37	19°42	5°44	20°53	1°41	0°27	11°59	10°30	T 28
W29	8 31 43	8°57'01	29°52	11° 2	3°13	29°21	14°47	16°40	19°40	5°44	20°53	1°37	0°24	12° 5	10°32	W29
T 30	8 35 40	9°57'53	13°Ω 4	12°48	4°28	0°48	15° 0	16°43	19°39	5°45	20°53	1°31	0°21	12°12	10°34	T 30
F 31	8 39 36	10°58'45	26°Ω 4	14°35	5°43	0°55	15°13	16°M45	19°M37	5°M45	20°Ω53	1°II22	0°II18	12°V19	10°V36	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	23s 5	24s38	1s30	23s48	0s23	23s25	0n 3	24s 6	0s50	9s13	1s 9	14s11	2n14	4n37	0n47	11s40
T 2	22 59	26 3	2 38	23 57	0 30	23 28	0 1	24 3	0 50	9 9	1 9	14 12	2 15	4 37	0 47	11 41
F 3	22 54	25 56	3 35	24 5	0 36	23 31	0s 1	24 1	0 51	9 5	1 9	14 13	2 15	4 37	0 47	11 41
S 4	22 48	24 20	4 20	24 12	0 43	23 33	0 4	23 58	0 51	9 1	1 9	14 15	2 15	4 38	0 47	11 41
S 5	22 42	21 31	4 51	24 18	0 49	23 34	0 6	23 55	0 52	8 56	1 9	14 16	2 15	4 38	0 47	11 42
M 6	22 35	17 45	5 6	24 22	0 55	23 34	0 9	23 51	0 52	8 52	1 9	14 17	2 15	4 38	0 47	11 42
T 7	22 27	13 18	5 7	24 25	1 1	23 33	0 11	23 47	0 52	8 48	1 9	14 18	2 15	4 39	0 47	11 42
W 8	22 20	8 24	4 55	24 27	1 7	23 32	0 14	23 43	0 53	8 43	1 9	14 19	2 16	4 39	0 47	11 43
T 9	22 12	3 16	4 29	24 27	1 13	23 30	0 16	23 39	0 53	8 39	1 8	14 20	2 16	4 39	0 47	11 43
F 10	22 3	1n57	3 52	24 26	1 18	23 28	0 18	23 34	0 54	8 34	1 8	14 22	2 16	4 40	0 47	11 43
S 11	21 54	7 7	3 6	24 24	1 23	23 25	0 21	23 30	0 54	8 30	1 8	14 23	2 16	4 40	0 47	11 43
S 12	21 44	12 4	2 10	24 20	1 28	23 20	0 23	23 25	0 54	8 25	1 8	14 24	2 16	4 40	0 47	11 43
M13	21 35	16 38	1 9	24 15	1 32	23 16	0 25	23 19	0 55	8 20	1 8	14 25	2 16	4 41	0 48	11 44
T 14	21 24	20 36	0 3	24 9	1 37	23 10	0 28	23 14	0 55	8 16	1 8	14 26	2 17	4 41	0 48	11 44
W15	21 13	23 42	1n 5	24 1	1 41	23 4	0 30	23 8	0 56	8 11	1 8	14 27	2 17	4 42	0 48	11 44
T 16	21 2	25 39	2 11	23 51	1 45	22 57	0 32	23 2	0 56	8 6	1 8	14 28	2 17	4 42	0 48	11 44
F 17	20 51	26 11	3 12	23 40	1 48	22 49	0 35	22 55	0 56	8 1	1 7	14 28	2 17	4 43	0 48	11 44
S 18	20 39	25 8	4 3	23 28	1 51	22 41	0 37	22 49	0 57	7 57	1 7	14 29	2 17	4 43	0 48	11 45
S 19	20 27	22 29	4 40	23 14	1 54	22 32	0 39	22 42	0 57	7 52	1 7	14 30	2 18	4 44	0 48	11 45
M20	20 14	18 25	5 1	22 58	1 57	22 22	0 41	22 34	0 57	7 47	1 7	14 31	2 18	4 44	0 48	11 45
T 21	20 1	13 15	5 3	22 41	1 59	22 12	0 43	22 27	0 58	7 42	1 7	14 32	2 18	4 45	0 48	11 45
W22	19 47	7 20	4 45	22 22	2 1	22 1	0 45	22 19	0 58	7 37	1 7	14 33	2 18	4 45	0 48	11 45
T 23	19 34	1 3	4 9	22 2	2 2	21 49	0 47	22 11	0 58	7 32	1 7	14 33	2 18	4 46	0 48	11 45
F 24	19 19	5s14	3 18	21 40	2 3	21 37	0 49	22 3	0 59	7 27	1 7	14 34	2 19	4 47	0 48	11 45
S 25	19 5	11 12	2 16	21 17	2 4	21 24	0 51	21 55	0 59	7 22	1 7	14 35	2 19	4 47	0 48	11 45
S 26	18 50	16 31	1 6	20 52	2 4	21 10	0 53	21 46	0 59	7 17	1 7	14 35	2 19	4 48	0 48	11 45
M27	18 35	20 54	0s 7	20 26	2 4	20 56	0 55	21 37	1 0	7 12	1 7	14 36	2 19	4 49	0 48	11 46
T 28	18 19	24 6	1 18	19 57	2 4	20 41	0 57	21 28	1 0	7 7	1 6	14 37	2 19	4 49	0 48	11 46
W29	18 3	25 53	2 24	19 28	2 3	20 25	0 58	21 19	1 0	7 1	1 6	14 37	2 20	4 50	0 48	11 46
T 30	17 47	26 11	3 21	18 56	2 1	20 9	1 0	21 9	1 1	6 56	1 6	14 38	2 20	4 51	0 48	11 46
F 31	17s31	25s 1	4s 7	18s23	1s59	19s53	1s 2	20s59	1s 1	6s51	1s 6	14s38	2n20	4n52	0n48	11s46

Julian Day Number = 2316770.5, Delta T = 57.16 sec
Ecliptic obliquity = 23°29'18", Nutation = - 0°00'15", out-of-bounds declination in red
Ayanamsha: Fagan/Bradley = 19°35'24", Lahiri = 18°42'25"Greg. Calendar

ASTRODIENST EPHEMERIS for the year 1631

geocentric

FEBRUARY 1631 GC

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
S 1	8 43 33	11 ⁵⁹ 35	8 ⁵⁴	16 ²²	6 ⁵⁹	1 ⁴²	15 ²⁷	16 ⁴⁸	19 ^{R35}	5 ⁴⁵	20 ^{R53}	1 ^{R10}	0 ^{II} 15	12 ^V 25	10 ^V 39	S 1
S 2	8 47 29	13° 0'23	21°31	18°10	8°14	2°29	15°40	16°50	19 ^{III} 33	5°45	20 ^{III} 53	0 ^{II} 57	0°12	12°32	10°41	S 2
M 3	8 51 26	14° 1'11	3 ^{II} 55	19°58	9°29	3°16	15°54	16°52	19°31	5°45	20°53	0°44	0° 8	12°39	10°43	M 3
T 4	8 55 23	15° 1'57	16° 8	21°46	10°44	4° 3	16° 7	16°54	19°29	5°45	20°D53	0°31	0° 5	12°46	10°46	T 4
W 5	8 59 19	16° 2'41	28°10	23°35	12° 0	4°50	16°21	16°56	19°27	5°45	20°53	0°20	0° 2	12°52	10°48	W 5
T 6	9 3 16	17° 3'24	10 ^V 4	25°24	13°15	5°37	16°34	16°58	19°25	5°R45	20°53	0°12	29 ^{III} 59	12°59	10°50	T 6
F 7	9 7 12	18° 4'05	21°54	27°14	14°30	6°24	16°48	17° 0	19°23	5°45	20°53	0° 6	29°56	13° 6	10°53	F 7
S 8	9 11 9	19° 4'45	3 ^{II} 42	29° 3	15°45	7°11	17° 1	17° 2	19°21	5°45	20°53	0° 3	29°52	13°12	10°55	S 8
S 9	9 15 5	20° 5'23	15°35	0 ^{II} 52	17° 0	7°58	17°15	17° 4	19°19	5°45	20°53	0° 2	29°49	13°19	10°58	S 9
M10	9 19 2	21° 5'59	27°38	2°40	18°16	8°45	17°29	17° 5	19°16	5°45	20°53	0° 2	29°46	13°26	11° 1	M10
T 11	9 22 58	22° 6'34	9 ^{II} 56	4°27	19°31	9°32	17°43	17° 7	19°14	5°45	20°53	0° 2	29°43	13°32	11° 3	T 11
W12	9 26 55	23° 7'07	22°35	6°14	20°46	10°19	17°57	17° 8	19°12	5°45	20°54	0° 0	29°40	13°39	11° 6	W12
T 13	9 30 52	24° 7'38	5 ^{II} 39	7°59	22° 1	11° 6	18°11	17° 9	19°10	5°45	20°54	29 ^{III} 57	29°37	13°46	11° 9	T 13
F 14	9 34 48	25° 8'07	19°11	9°42	23°16	11°53	18°25	17°10	19° 7	5°44	20°54	29°50	29°33	13°52	11°12	F 14
S 15	9 38 45	26° 8'35	3 ^{II} 10	11°22	24°31	12°41	18°39	17°11	19° 5	5°44	20°54	29°41	29°30	13°59	11°14	S 15
S 16	9 42 41	27° 9'01	17°34	13° 0	25°46	13°28	18°53	17°12	19° 3	5°44	20°54	29°29	29°27	14° 6	11°17	S 16
M17	9 46 38	28° 9'24	2 ^{III} 18	14°35	27° 1	14°15	19° 7	17°13	19° 0	5°43	20°55	29°17	29°24	14°12	11°20	M17
T 18	9 50 34	29° 9'47	17°13	16° 5	28°16	15° 2	19°21	17°14	18°58	5°43	20°55	29° 6	29°21	14°19	11°23	T 18
W19	9 54 31	0 ^{II} 10'07	2 ^{III} 10	17°31	29°32	15°49	19°35	17°15	18°56	5°43	20°55	28°56	29°17	14°26	11°26	W19
T 20	9 58 27	1°10'26	16°59	18°52	0 ^{II} 47	16°36	19°49	17°15	18°53	5°42	20°56	28°49	29°14	14°33	11°29	T 20
F 21	10 2 24	2°10'44	1 ^{III} 35	20° 7	2° 2	17°23	20° 3	17°16	18°51	5°42	20°56	28°45	29°11	14°39	11°32	F 21
S 22	10 6 21	3°11'00	15°53	21°15	3°17	18°11	20°17	17°16	18°48	5°41	20°56	28°43	29° 8	14°46	11°35	S 22
S 23	10 10 17	4°11'15	29°51	22°16	4°32	18°58	20°32	17°16	18°46	5°41	20°57	28°43	29° 5	14°53	11°38	S 23
M24	10 14 14	5°11'29	13 ^{II} 30	23°10	5°47	19°45	20°46	17°16	18°43	5°40	20°57	28°42	29° 2	14°59	11°41	M24
T 25	10 18 10	6°11'41	26°52	23°56	7° 2	20°32	21° 0	17°R16	18°41	5°39	20°58	28°41	28°58	15° 6	11°44	T 25
W26	10 22 7	7°11'51	9 ^{II} 58	24°33	8°16	21°19	21°15	17°16	18°38	5°39	20°58	28°38	28°55	15°13	11°48	W26
T 27	10 26 3	8°12'00	22°50	25° 1	9°31	22° 7	21°29	17°16	18°36	5°38	20°59	28°31	28°52	15°19	11°51	T 27
F 28	10 30 0	9 ^{II} 12'07	5 ^{III} 31	25 ^{II} 20	10 ^{II} 46	22 ^{III} 54	21 ^{II} 43	17 ^{III} 16	18 ^{III} 33	5 ^{III} 37	20 ^{III} 59	28 ^{III} 22	28 ^{III} 49	15 ^{IV} 26	11 ^{IV} 54	F 28

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
S 1	17s14	22s33	4s39	17s49	1s57	19s35	1s 3	20s49	1s 1	6s46	1s 6	14s39	2n20	4n52	0n48	11s46	1n48	4n32	13s57	20n26	20n15	1n24	5n39	1n33	
S 2	16 57	19 2	4 57	17 13	1 53	19 17	1 5	20 39	1 1	6 41	1 6	14 39	2 20	4 53	0 48	11 46	1 48	4 32	13 57	20 24	20 14	1 27	5 39	1 33	
M 3	16 39	14 45	5 0	16 36	1 50	18 59	1 7	20 28	1 2	6 35	1 6	14 40	2 21	4 54	0 48	11 46	1 49	4 33	13 56	20 21	20 13	1 31	5 40	1 33	
T 4	16 22	9 56	4 50	15 57	1 46	18 40	1 8	20 17	1 2	6 30	1 6	14 40	2 21	4 55	0 48	11 46	1 49	4 33	13 56	20 18	20 13	1 34	5 41	1 32	
W 5	16 4	4 48	4 27	15 16	1 41	18 20	1 9	20 6	1 2	6 25	1 6	14 41	2 21	4 55	0 48	11 46	1 49	4 33	13 56	20 16	20 12	1 37	5 42	1 32	
T 6	15 45	0n27	3 52	14 34	1 35	18 0	1 11	19 55	1 2	6 19	1 6	14 41	2 21	4 56	0 48	11 46	1 49	4 33	13 55	20 14	20 11	1 40	5 43	1 32	
F 7	15 27	5 39	3 7	13 51	1 29	17 40	1 12	19 43	1 3	6 14	1 6	14 41	2 21	4 57	0 48	11 45	1 49	4 34	13 55	20 13	20 11	1 43	5 44	1 32	
S 8	15 8	10 40	2 15	13 7	1 22	17 19	1 13	19 32	1 3	6 9	1 6	14 41	2 22	4 58	0 48	11 45	1 49	4 34	13 55	20 12	20 10	1 46	5 44	1 32	
S 9	14 49	15 20	1 16	12 21	1 15	16 57	1 15	19 20	1 3	6 3	1 6	14 42	2 22	4 59	0 48	11 45	1 49	4 34	13 54	20 12	20 9	1 49	5 45	1 32	
M10	14 30	19 28	0 13	11 35	1 7	16 35	1 16	19 8	1 3	5 58	1 6	14 42	2 22	5 0	0 48	11 45	1 49	4 35	13 54	20 12	20 9	1 53	5 46	1 32	
T 11	14 10	22 51	0n52	10 48	0 58	16 13	1 17	18 55	1 4	5 52	1 5	14 42	2 22	5 1	0 48	11 45	1 49	4 35	13 54	20 12	20 8	1 56	5 47	1 31	
W12	13 50	25 13	1 56	10 0	0 48	15 50	1 18	18 43	1 4	5 47	1 5	14 42	2 23	5 2	0 48	11 45	1 49	4 36	13 53	20 12	20 7	1 59	5 48	1 31	
T 13	13 30	26 18	2 56	9 11	0 38	15 26	1 19	18 30	1 4	5 41	1 5	14 43	2 23	5 2	0 48	11 45	1 49	4 36	13 53	20 11	20 7	2 2	5 49	1 31	
F 14	13 10	25 53	3 49	8 22	0 27	15 3	1 20	18 17	1 4	5 36	1 5	14 43	2 23	5 3	0 48	11 45	1 49	4 36	13 53	20 9	20 6	2 5	5 50	1 31	
S 15	12 50	23 51	4 29	7 33	0 16	14 38	1 21	18 4	1 4	5 30	1 5	14 43	2 23	5 4	0 48	11 45	1 49	4 37	13 52	20 7	20 5	2 8	5 51	1 31	
S 16	12 29	20 15	4 54	6 45	0 4	14 14	1 21	17 51	1 5	5 25	1 5	14 43	2 23	5 5	0 49	11 44	1 49	4 37	13 52	20 5	20 4	2 11	5 52	1 31	
M17	12 8	15 20	5 0	5 57	0n 9	13 49	1 22	17 37	1 5	5 19	1 5	14 43	2 24	5 6	0 49	11 44	1 49	4 37	13 52	20 2	20 4	2 15	5 53	1 31	
T 18	11 47	9 26	4 45	5 9	0 23	13 24	1 23	17 24	1 5	5 13	1 5	14 43	2 24	5 7	0 49	11 44	1 49	4 38	13 52	20 0	20 3	2 18	5 54	1 31	
W19	11 26	2 59	4 12	4 23	0 36	12 58	1 23	17 10	1 5	5 8	1 5	14 43	2 24	5 8	0 49	11 44	1 50	4 38	13 51	19 58	20 2	2 21	5 55	1 30	
T 20	11 5	3s35	3 21	3 39	0 50	12 32	1 24	16 56	1 5	5 2	1 5	14 43	2 24	5 9	0 49	11 44	1 50	4 38	13 51	19 56	20 2	2 24	5 56	1 30	
F 21	10 43	9 54	2 18	2 56	1 5	12 5	1 24	16 42	1 6	4 57	1 5	14 43	2 24	5 10	0 49	11 43	1 50	4 39	13 51	19 55	20 1	2 27	5 57	1 30	
S 22	10 22	15 33	1 7	2 15	1 20	11 39	1 25	16 27	1 6	4 51	1 5	14 43	2 25	5 11	0 49	11 43	1 50	4 39	13 50	19 55	20 0	2 30	5 58	1 30	
S 23	10 0	20 16	0s 6	1 38	1 34	11 12	1 25	16 13	1 6	4 45	1 5	14 42	2 25	5 12	0 49	11 43	1 50	4 40	13 50	19 55	20 0	2 34	5 59	1 30	
M24	9 38	23 45	1 17	1 3	1 49	10 44	1 26	15 58	1 6	4 40	1 5	14 42	2 25	5 13	0 49	11 43	1 50	4 40	13 50	19 55	19 59	2 37	6 0	1 30	
T 25	9 15	25 50	2 23	0 32	2 3	10 17	1 26	15 43	1 6	4 34	1 5	14 42	2 25	5 14	0 49	11 42	1 50	4 40	13 49	19 54	19 58	2 40	6 2	1 30	
W26	8 53	26 26	3 19	0 4	2 17	9 49	1 26	15 28	1 6	4 28	1 5	14 42	2 26	5 15	0 49	11 42	1 50	4 41	13 49	19 54	19 58	2 43	6 3	1 30	
T 27	8 31	25 34	4 5	0n19	2 31	9 21	1 26	15 13	1 6	4 23	1 5	14 42	2 26	5 16	0 49	11 42	1 50	4 41	13 49	19 52	19 57	2 46	6 4	1 29	
F 28	8s 8	23s24	4s37	0n39	2n44	8s52	1s26	14s58	1s 6	4s17	1s 5	14s41	2n26	5n17	0n49	11s42	1n50	4n42	13s48	19n50	19n56	2n49	6n 5	1n29	

Julian Day Number = 2316801.5, Delta T = 57.10 sec

Ecliptic obliquity = 23°29'19, Nutation = - 0°00'13, out-of-bounds declination in red

Ayanamsha: Fagan/Bradley = 19°35'29, Lahiri = 18°42'29Greg. Calendar

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ASTRODIENST EPHEMERIS for the year 1631
geocentric

MARCH 1631 GC

00:00 UT

Day	Sid.t	☉	☽	♊	♋	♌	♍	♎	♏	♐	♑	♒	♓	♈	♉	Day
S 1	10 33 56	10♈12'12	18♌2	25♈30	12♈1	23♌41	21♈58	17°R16	18°R30	5°R37	21♈0	28°R10	28♌46	15♈33	11♈57	S 1
S 2	10 37 53	11°12'16	0♈23	25°R31	13°16	24°28	22°12	17♌15	18♌28	5♌36	21°0	27♌56	28°43	15°39	12°1	S 2
M 3	10 41 50	12°12'17	12°35	25°22	14°31	25°15	22°27	17°14	18°25	5°35	21°1	27°42	28°39	15°46	12°4	M 3
T 4	10 45 46	13°12'17	24°38	25°5	15°46	26°3	22°41	17°14	18°23	5°34	21°1	27°29	28°36	15°53	12°7	T 4
W 5	10 49 43	14°12'15	6♈34	24°40	17°1	26°50	22°56	17°13	18°20	5°33	21°2	27°18	28°33	15°59	12°10	W 5
T 6	10 53 39	15°12'10	18°25	24°7	18°16	27°37	23°10	17°12	18°17	5°33	21°3	27°9	28°30	16°6	12°14	T 6
F 7	10 57 36	16°12'04	0♈13	23°27	19°30	28°24	23°24	17°11	18°15	5°32	21°3	27°3	28°27	16°13	12°17	F 7
S 8	11 1 32	17°11'55	12°1	22°42	20°45	29°11	23°39	17°10	18°12	5°31	21°4	26°59	28°23	16°19	12°21	S 8
S 9	11 5 29	18°11'45	23°53	21°52	22°0	29°58	23°53	17°9	18°10	5°30	21°5	26°D58	28°20	16°26	12°24	S 9
M10	11 9 25	19°11'32	5♈54	20°59	23°15	0♈46	24°8	17°8	18°7	5°29	21°5	26°58	28°17	16°33	12°28	M10
T 11	11 13 22	20°11'17	18°10	20°3	24°29	1°33	24°23	17°6	18°4	5°28	21°6	26°R59	28°14	16°39	12°31	T 11
W12	11 17 18	21°10'59	0♈44	19°6	25°44	2°20	24°37	17°5	18°2	5°27	21°7	26°58	28°11	16°46	12°35	W12
T 13	11 21 15	22°10'40	13°44	18°10	26°59	3°7	24°52	17°3	17°59	5°26	21°8	26°56	28°8	16°53	12°38	T 13
F 14	11 25 12	23°10'18	27°11	17°15	28°14	3°54	25°6	17°1	17°57	5°25	21°8	26°52	28°4	17°0	12°42	F 14
S 15	11 29 8	24°9'53	11♌9	16°23	29°28	4°41	25°21	17°0	17°54	5°23	21°9	26°45	28°1	17°6	12°45	S 15
S 16	11 33 5	25°9'27	25°35	15°34	0♈43	5°28	25°35	16°58	17°51	5°22	21°10	26°36	27°58	17°13	12°49	S 16
M17	11 37 1	26°8'58	10♌26	14°49	1°57	6°15	25°50	16°56	17°49	5°21	21°11	26°27	27°55	17°20	12°52	M17
T 18	11 40 58	27°8'27	25°33	14°9	3°12	7°2	26°4	16°54	17°46	5°20	21°12	26°18	27°52	17°26	12°56	T 18
W19	11 44 54	28°7'54	10♌47	13°34	4°27	7°50	26°19	16°52	17°44	5°19	21°13	26°10	27°49	17°33	12°59	W19
T 20	11 48 51	29°7'19	25°57	13°5	5°41	8°37	26°33	16°49	17°41	5°18	21°13	26°4	27°45	17°40	13°3	T 20
F 21	11 52 47	0♈6'42	10♌53	12°42	6°56	9°24	26°48	16°47	17°39	5°16	21°14	26°1	27°42	17°46	13°7	F 21
S 22	11 56 44	1°6'03	25°29	12°24	8°10	10°11	27°2	16°45	17°36	5°15	21°15	26°D0	27°39	17°53	13°10	S 22
S 23	12 0 41	2°5'23	9♌41	12°13	9°25	10°58	27°17	16°42	17°34	5°14	21°16	26°1	27°36	18°0	13°14	S 23
M24	12 4 37	3°4'41	23°28	12°D7	10°39	11°45	27°31	16°40	17°31	5°12	21°17	26°2	27°33	18°6	13°18	M24
T 25	12 8 34	4°3'57	6♈51	12°7	11°53	12°32	27°46	16°37	17°29	5°11	21°18	26°R2	27°29	18°13	13°21	T 25
W26	12 12 30	5°3'11	19°53	12°13	13°8	13°19	28°0	16°34	17°26	5°10	21°19	26°1	27°26	18°20	13°25	W26
T 27	12 16 27	6°2'24	2♌38	12°24	14°22	14°5	28°15	16°32	17°24	5°8	21°20	25°58	27°23	18°26	13°29	T 27
F 28	12 20 23	7°1'35	15°7	12°40	15°37	14°52	28°29	16°29	17°21	5°7	21°21	25°52	27°20	18°33	13°32	F 28
S 29	12 24 20	8°0'43	27°25	13°2	16°51	15°39	28°44	16°26	17°19	5°6	21°22	25°45	27°17	18°40	13°36	S 29
S 30	12 28 16	8°59'50	9♈33	13°27	18°5	16°26	28°58	16°23	17°16	5°4	21°23	25°36	27°14	18°46	13°40	S 30
M31	12 32 13	9♈58'55	21♈34	13♈58	19♈20	17♈13	29♈13	16♌20	17♌14	5♌3	21♈24	25♌27	27♌10	18♈53	13♈44	M31

Day	☉	☽	♊	♋	♌	♍	♎	♏	♐	♑	♒	♓	♈	♉	Day
S 1	7s45 20s 8	4s56 0n54 2n56	8s24 1s26 14s42	1s 7 4s11 1s 5	14s41 2n26 5n18	0n49 11s41 1n50	4n42 13s48 19n48	19n55 2n53 6n 6	1n29						
S 2	7 23 16 2	5 0 1 4 3 6	7 55 1 26 14 26	1 7 4 6 1 5	14 41 2 26 5 19	0 49 11 41 1 50	4 43 13 48 19 45	19 55 2 56 6 7	1 29						
M 3	7 0 11 19	4 50 1 9 3 16	7 26 1 26 14 11	1 7 4 0 1 5	14 40 2 27 5 20	0 49 11 41 1 50	4 43 13 48 19 41	19 54 2 59 6 9	1 29						
T 4	6 37 6 14	4 28 1 10 3 24	6 56 1 26 13 55	1 7 3 54 1 5	14 40 2 27 5 21	0 49 11 40 1 50	4 43 13 47 19 38	19 53 3 2 6 10	1 29						
W 5	6 14 0 58	3 54 1 6 3 31	6 27 1 25 13 39	1 7 3 48 1 5	14 39 2 27 5 22	0 49 11 40 1 50	4 44 13 47 19 36	19 53 3 5 6 11	1 29						
T 6	5 51 4n19	3 9 0 57 3 35	5 57 1 25 13 22	1 7 3 43 1 5	14 39 2 27 5 23	0 49 11 40 1 50	4 44 13 47 19 34	19 52 3 8 6 12	1 29						
F 7	5 27 9 26	2 17 0 44 3 38	5 28 1 25 13 6	1 7 3 37 1 5	14 39 2 27 5 24	0 49 11 39 1 50	4 45 13 46 19 32	19 51 3 11 6 13	1 29						
S 8	5 4 14 13	1 19 0 27 3 39	4 58 1 24 12 50	1 7 3 31 1 5	14 38 2 28 5 25	0 49 11 39 1 50	4 45 13 46 19 32	19 51 3 15 6 15	1 28						
S 9	4 41 18 31	0 16 0 6 3 38	4 28 1 24 12 33	1 7 3 25 1 5	14 38 2 28 5 26	0 49 11 39 1 50	4 46 13 46 19 31	19 50 3 18 6 16	1 28						
M10	4 17 22 7	0n47 0s17 3 35	3 57 1 23 12 16	1 7 3 20 1 5	14 37 2 28 5 27	0 49 11 38 1 51	4 46 13 45 19 31	19 49 3 21 6 17	1 28						
T 11	3 54 24 48	1 50 0 44 3 30	3 27 1 22 12 0	1 7 3 14 1 5	14 36 2 28 5 28	0 49 11 38 1 51	4 47 13 45 19 31	19 48 3 24 6 18	1 28						
W12	3 30 26 19	2 50 1 12 3 23	2 57 1 22 11 43	1 7 3 8 1 5	14 36 2 28 5 29	0 49 11 38 1 51	4 47 13 45 19 31	19 48 3 27 6 20	1 28						
T 13	3 7 26 28	3 42 1 42 3 14	2 26 1 21 11 26	1 7 3 2 1 5	14 35 2 29 5 30	0 49 11 37 1 51	4 47 13 45 19 31	19 47 3 30 6 21	1 28						
F 14	2 43 25 5	4 25 1 23 3 4	1 56 1 20 11 8	1 7 2 56 1 5	14 35 2 29 5 31	0 49 11 37 1 51	4 48 13 44 19 30	19 46 3 34 6 22	1 28						
S 15	2 19 22 9	4 53 2 44 2 53	1 25 1 19 10 51	1 7 2 51 1 5	14 34 2 29 5 32	0 49 11 36 1 51	4 48 13 44 19 28	19 46 3 37 6 24	1 28						
S 16	1 56 17 47	5 4 3 15 2 40	0 55 1 18 10 34	1 7 2 45 1 5	14 33 2 29 5 33	0 49 11 36 1 51	4 49 13 44 19 26	19 45 3 40 6 25	1 28						
M17	1 32 12 13	4 55 3 45 2 26	0 24 1 17 10 16	1 7 2 39 1 5	14 32 2 29 5 34	0 49 11 35 1 51	4 49 13 44 19 24	19 44 3 43 6 26	1 28						
T 18	1 8 5 50	4 26 4 13 2 12	0n 7 1 16 9 59	1 7 2 33 1 5	14 32 2 29 5 35	0 49 11 35 1 51	4 50 13 43 19 22	19 43 3 46 6 28	1 27						
W19	0 45 0s57	3 37 4 40 1 57	0 37 1 15 9 41	1 7 2 28 1 5	14 31 2 30 5 36	0 49 11 35 1 51	4 50 13 43 19 20	19 43 3 49 6 29	1 27						
T 20	0 21 7 39	2 34 5 5 1 42	1 8 1 14 9 24	1 7 2 22 1 5	14 30 2 30 5 37	0 49 11 34 1 51	4 51 13 43 19 19	19 42 3 53 6 30	1 27						
F 21	0n 3 13 51	1 20 5 29 1 27	1 39 1 13 9 6	1 7 2 16 1 5	14 29 2 30 5 38	0 49 11 34 1 51	4 51 13 43 19 18	19 41 3 56 6 32	1 27						
S 22	0 26 19 8	0 3 5 49 1 11	2 9 1 11 8 48	1 7 2 10 1 5	14 29 2 30 5 39	0 49 11 33 1 51	4 52 13 42 19 18	19 41 3 59 6 33	1 27						
S 23	0 50 23 9	1s13 6 8 0 56	2 40 1 10 8 30	1 7 2 5 1 5	14 28 2 30 5 40	0 49 11 33 1 51	4 52 13 42 19 18	19 40 4 2 6 34	1 27						
M24	1 14 25 41	2 22 6 24 0 41	3 10 1 8 8 12	1 7 1 59 1 5	14 27 2 30 5 41	0 49 11 32 1 51	4 52 13 42 19 18	19 39 4 5 6 36	1 27						
T 25	1 37 26 40	3 21 6 38 0 26	3 41 1 7 7 54	1 7 1 53 1 5	14 26 2 31 5 42	0 49 11 32 1 51	4 53 13 42 19 18	19 38 4 8 6 37	1 27						
W26	2 1 26 7	4 9 6 49 0 12	4 11 1 5 7 36	1 7 1 47 1 5	14 25 2 31 5 43	0 49 11 31 1 51	4 53 13 41 19 18	19 38 4 12 6 38	1 27						
T 27	2 24 24 11	4 42 6 58 0s 2	4 42 1 4 7 18	1 7 1 42 1 5	14 24 2 31 5 44	0 49 11 31 1 51	4 54 13 41 19 17	19 37 4 15 6 40	1 27						
F 28	2 48 21 8	5 2 7 4 0 16	5 12 1 2 7 0	1 7 1 36 1 5	14 23 2 31 5 45	0 49 11 30 1 51	4 54 13 41 19 16	19 36 4 18 6 41	1 27						
S 29	3 11 17 12	5 7 7 8 0 29	5 42 1 1 6 41	1 6 1 30 1 5	14 22 2 31 5 46	0 49 11 30 1 51	4 55 13 41 19 14	19 36 4 21 6 42	1 27						
S 30	3 34 12 36	4 58 7 9 0 41	6 12 0 59 6 23	1 6 1 24 1 5	14 21 2 31 5 47	0 48 11 29 1 51	4 55 13 40 19 12	19 35 4 24 6 44	1 26						
M31	3n58 7s35	4s36 7s 8 0s53	6n42 0s57 6s 4	1s 6 1s19 1s 5	14s20 2n32 5n48	0n48 11s29 1n51	4n56 13s40 19n10	19n34 4n27 6n45	1n26						

Julian Day Number = 2316829.5, Delta T = 57.04 sec
Ecliptic obliquity = 23°29'19, Nutation = -0°00'13, out-of-bounds declination in red
Ayanamsha: Fagan/Bradley = 19°35'32, Lahiri = 18°42'33Greg. Calendar

ASTRODIENST EPHEMERIS for the year 1631
geocentric

MAY 1631 GC

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
T 1	14 34 26	10 ⁸ 13'40	5 ⁸ 59	23 ⁷ 2	27 ⁸ 31	11 ⁷ 11	6 ⁷ 24	14 ⁰ R16	16 ⁰ R17	4 ⁰ R14	22 ⁸ 2	24 ⁰ R32	25 ⁸ 32	22 ⁷ 20	15 ⁷ 36	T 1
F 2	14 38 23	11 ⁰ 11'44	17 ⁰ 51	24 ⁰ 51	28 ⁰ 45	11 ⁰ 56	6 ⁰ 37	14 ⁰ M11	16 ⁰ M16	4 ⁰ M12	22 ⁰ 3	24 ⁰ 831	25 ⁰ 29	22 ⁰ 26	15 ⁰ 40	F 2
S 3	14 42 19	12 ⁰ 9'47	29 ⁰ 48	26 ⁰ 41	29 ⁰ 58	12 ⁰ 42	6 ⁰ 51	14 ⁰ 7	16 ⁰ 15	4 ⁰ 10	22 ⁰ 4	24 ⁰ D31	25 ⁰ 26	22 ⁰ 33	15 ⁰ 43	S 3
S 4	14 46 16	13 ⁰ 7'48	11 ⁰ II52	28 ⁰ 34	1 ⁰ II12	13 ⁰ 28	7 ⁰ 4	14 ⁰ 2	16 ⁰ 14	4 ⁰ 9	22 ⁰ 6	24 ⁰ 32	25 ⁰ 22	22 ⁰ 40	15 ⁰ 46	S 4
M 5	14 50 12	14 ⁰ 5'47	24 ⁰ 6	0 ⁰ 828	2 ⁰ 25	14 ⁰ 14	7 ⁰ 17	13 ⁰ 58	16 ⁰ 13	4 ⁰ 7	22 ⁰ 7	24 ⁰ 33	25 ⁰ 19	22 ⁰ 46	15 ⁰ 50	M 5
T 6	14 54 9	15 ⁰ 3'45	6 ⁰ 32	2 ⁰ 24	3 ⁰ 39	14 ⁰ 59	7 ⁰ 30	13 ⁰ 53	16 ⁰ 12	4 ⁰ 6	22 ⁰ 9	24 ⁰ 33	25 ⁰ 16	22 ⁰ 53	15 ⁰ 53	T 6
W 7	14 58 6	16 ⁰ 1'41	19 ⁰ 13	4 ⁰ 22	4 ⁰ 52	15 ⁰ 45	7 ⁰ 43	13 ⁰ 49	16 ⁰ 11	4 ⁰ 4	22 ⁰ 10	24 ⁰ 34	25 ⁰ 13	23 ⁰ 0	15 ⁰ 56	W 7
T 8	15 2 2	16 ⁰ 59'35	2 ⁰ 12	6 ⁰ 22	6 ⁰ 6	16 ⁰ 30	7 ⁰ 56	13 ⁰ 44	16 ⁰ 10	4 ⁰ 2	22 ⁰ 11	24 ⁰ 35	25 ⁰ 10	23 ⁰ 6	16 ⁰ 0	T 8
F 9	15 5 59	17 ⁰ 57'27	15 ⁰ 31	8 ⁰ 23	7 ⁰ 19	17 ⁰ 16	8 ⁰ 8	13 ⁰ 40	16 ⁰ 9	4 ⁰ 1	22 ⁰ 13	24 ⁰ R35	25 ⁰ 6	23 ⁰ 13	16 ⁰ 3	F 9
S 10	15 9 55	18 ⁰ 55'17	29 ⁰ 12	10 ⁰ 26	8 ⁰ 32	18 ⁰ 1	8 ⁰ 21	13 ⁰ 35	16 ⁰ 9	3 ⁰ 59	22 ⁰ 14	24 ⁰ 35	25 ⁰ 3	23 ⁰ 20	16 ⁰ 6	S 10
S 11	15 13 52	19 ⁰ 53'06	13 ⁰ M17	12 ⁰ 31	9 ⁰ 45	18 ⁰ 47	8 ⁰ 34	13 ⁰ 31	16 ⁰ 8	3 ⁰ 58	22 ⁰ 15	24 ⁰ 35	25 ⁰ 0	23 ⁰ 26	16 ⁰ 10	S 11
M12	15 17 48	20 ⁰ 50'52	27 ⁰ 43	14 ⁰ 37	10 ⁰ 59	19 ⁰ 32	8 ⁰ 46	13 ⁰ 26	16 ⁰ 7	3 ⁰ 56	22 ⁰ 17	24 ⁰ 34	24 ⁰ 57	23 ⁰ 33	16 ⁰ 13	M12
T 13	15 21 45	21 ⁰ 48'37	12 ⁰ A27	16 ⁰ 45	12 ⁰ 12	20 ⁰ 17	8 ⁰ 59	13 ⁰ 22	16 ⁰ 7	3 ⁰ 55	22 ⁰ 18	24 ⁰ 34	24 ⁰ 54	23 ⁰ 40	16 ⁰ 16	T 13
W14	15 25 41	22 ⁰ 46'21	27 ⁰ 25	18 ⁰ 54	13 ⁰ 25	21 ⁰ 2	9 ⁰ 11	13 ⁰ 18	16 ⁰ 6	3 ⁰ 53	22 ⁰ 19	24 ⁰ 34	24 ⁰ 51	23 ⁰ 46	16 ⁰ 19	W14
T 15	15 29 38	23 ⁰ 44'03	12 ⁰ M28	21 ⁰ 3	14 ⁰ 38	21 ⁰ 48	9 ⁰ 23	13 ⁰ 13	16 ⁰ 5	3 ⁰ 52	22 ⁰ 21	24 ⁰ 34	24 ⁰ 47	23 ⁰ 53	16 ⁰ 22	T 15
F 16	15 33 35	24 ⁰ 41'43	27 ⁰ 28	23 ⁰ 14	15 ⁰ 51	22 ⁰ 33	9 ⁰ 36	13 ⁰ 9	16 ⁰ 5	3 ⁰ 50	22 ⁰ 22	24 ⁰ 34	24 ⁰ 44	24 ⁰ 0	16 ⁰ 25	F 16
S 17	15 37 31	25 ⁰ 39'23	12 ⁰ A16	25 ⁰ 25	17 ⁰ 5	23 ⁰ 18	9 ⁰ 48	13 ⁰ 4	16 ⁰ 5	3 ⁰ 49	22 ⁰ 23	24 ⁰ 34	24 ⁰ 41	24 ⁰ 6	16 ⁰ 28	S 17
S 18	15 41 28	26 ⁰ 37'01	26 ⁰ 46	27 ⁰ 37	18 ⁰ 18	24 ⁰ 3	10 ⁰ 0	13 ⁰ 0	16 ⁰ 4	3 ⁰ 47	22 ⁰ 25	24 ⁰ 34	24 ⁰ 38	24 ⁰ 13	16 ⁰ 31	S 18
M19	15 45 24	27 ⁰ 34'38	10 ⁰ 33	29 ⁰ 49	19 ⁰ 31	24 ⁰ 48	10 ⁰ 12	12 ⁰ 56	16 ⁰ 4	3 ⁰ 46	22 ⁰ 26	24 ⁰ 33	24 ⁰ 35	24 ⁰ 20	16 ⁰ 34	M19
T 20	15 49 21	28 ⁰ 32'14	24 ⁰ 53	2 ⁰ II0	20 ⁰ 44	25 ⁰ 33	10 ⁰ 24	12 ⁰ 52	16 ⁰ 4	3 ⁰ 44	22 ⁰ 27	24 ⁰ 33	24 ⁰ 32	24 ⁰ 26	16 ⁰ 37	T 20
W21	15 53 17	29 ⁰ 29'49	7 ⁰ A47	4 ⁰ 11	21 ⁰ 57	26 ⁰ 18	10 ⁰ 36	12 ⁰ 47	16 ⁰ 4	3 ⁰ 43	22 ⁰ 29	24 ⁰ 32	24 ⁰ 28	24 ⁰ 33	16 ⁰ 40	W21
T 22	15 57 14	0 ⁰ II27'23	20 ⁰ 37	6 ⁰ 21	23 ⁰ 10	27 ⁰ 2	10 ⁰ 48	12 ⁰ 43	16 ⁰ 3	3 ⁰ 41	22 ⁰ 30	24 ⁰ 32	24 ⁰ 25	24 ⁰ 40	16 ⁰ 43	T 22
F 23	16 1 10	1 ⁰ 24'56	3 ⁰ 7	8 ⁰ 31	24 ⁰ 23	27 ⁰ 47	10 ⁰ 59	12 ⁰ 39	16 ⁰ 3	3 ⁰ 40	22 ⁰ 32	24 ⁰ D32	24 ⁰ 22	24 ⁰ 46	16 ⁰ 46	F 23
S 24	16 5 7	2 ⁰ 22'29	15 ⁰ 19	10 ⁰ 39	25 ⁰ 35	28 ⁰ 32	11 ⁰ 11	12 ⁰ 35	16 ⁰ D3	3 ⁰ 39	22 ⁰ 33	24 ⁰ 32	24 ⁰ 19	24 ⁰ 53	16 ⁰ 49	S 24
S 25	16 9 4	3 ⁰ 20'00	27 ⁰ 19	12 ⁰ 45	26 ⁰ 48	29 ⁰ 17	11 ⁰ 23	12 ⁰ 31	16 ⁰ 3	3 ⁰ 37	22 ⁰ 34	24 ⁰ 33	24 ⁰ 16	25 ⁰ 0	16 ⁰ 52	S 25
M26	16 13 0	4 ⁰ 17'30	9 ⁰ Y11	14 ⁰ 50	28 ⁰ 1	0 ⁰ 8	11 ⁰ 34	12 ⁰ 27	16 ⁰ 3	3 ⁰ 36	22 ⁰ 36	24 ⁰ 34	24 ⁰ 12	25 ⁰ 6	16 ⁰ 55	M26
T 27	16 16 57	5 ⁰ 15'00	20 ⁰ 59	16 ⁰ 53	29 ⁰ 14	0 ⁰ 46	11 ⁰ 45	12 ⁰ 23	16 ⁰ 3	3 ⁰ 34	22 ⁰ 37	24 ⁰ 35	24 ⁰ 9	25 ⁰ 13	16 ⁰ 57	T 27
W28	16 20 53	6 ⁰ 12'29	2 ⁰ 848	18 ⁰ 54	0 ⁰ 827	1 ⁰ 30	11 ⁰ 57	12 ⁰ 19	16 ⁰ 4	3 ⁰ 33	22 ⁰ 38	24 ⁰ 36	24 ⁰ 6	25 ⁰ 20	17 ⁰ 0	W28
T 29	16 24 50	7 ⁰ 9'57	14 ⁰ 40	20 ⁰ 53	1 ⁰ 40	2 ⁰ 15	12 ⁰ 8	12 ⁰ 15	16 ⁰ 4	3 ⁰ 32	22 ⁰ 40	24 ⁰ 36	24 ⁰ 3	25 ⁰ 26	17 ⁰ 3	T 29
F 30	16 28 46	8 ⁰ 7'24	26 ⁰ 38	22 ⁰ 49	2 ⁰ 52	2 ⁰ 59	12 ⁰ 19	12 ⁰ 11	16 ⁰ 4	3 ⁰ 31	22 ⁰ 41	24 ⁰ R37	24 ⁰ 0	25 ⁰ 33	17 ⁰ 5	F 30
S 31	16 32 43	9 ⁰ II4'50	8 ⁰ II46	24 ⁰ II43	4 ⁰ 8	3 ⁰ 844	12 ⁰ Y30	12 ⁰ M7	16 ⁰ M4	3 ⁰ M29	22 ⁰ 842	24 ⁰ 836	23 ⁰ 857	25 ⁰ Y40	17 ⁰ Y8	S 31

Day	☉	☾		♀		♀		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂	
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ASTRODIENST EPHEMERIS for the year 1631

geocentric

JUNE 1631 GC

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Day	Sid.t	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
S 1	16 36 39	10 ^{II} 2'16	21 ^{II} 3	26 ^{II} 35	5 ^{III} 18	4 ^{III} 28	12 ^{IV} 41	12°R 4	16 ^{III} 5	3°R28	22 ^{III} 43	24°R35	23 ^{III} 53	25 ^{IV} 46	17 ^{IV} 10	S 1
M 2	16 40 36	10°59'40	3 ^{III} 33	28°24	6°30	5°12	12°52	12 ^{III} 0	16° 5	3 ^{III} 27	22°45	24 ^{III} 33	23°50	25°53	17°13	M 2
T 3	16 44 33	11°57'04	16°16	0 ^{III} 11	7°43	5°56	13° 2	11°56	16° 6	3°26	22°46	24°31	23°47	26° 0	17°15	T 3
W 4	16 48 29	12°54'26	29°12	1°55	8°56	6°40	13°13	11°53	16° 6	3°24	22°47	24°28	23°44	26° 6	17°18	W 4
T 5	16 52 26	13°51'48	12 ^{II} 24	3°36	10° 8	7°24	13°23	11°49	16° 7	3°23	22°49	24°26	23°41	26°13	17°20	T 5
F 6	16 56 22	14°49'09	25°50	5°15	11°21	8° 8	13°34	11°46	16° 8	3°22	22°50	24°24	23°38	26°20	17°23	F 6
S 7	17 0 19	15°46'28	9 ^{III} 32	6°51	12°33	8°52	13°44	11°43	16° 8	3°21	22°51	24°D23	23°34	26°26	17°25	S 7
S 8	17 4 15	16°43'46	23°30	8°25	13°46	9°36	13°54	11°39	16° 9	3°20	22°52	24°23	23°31	26°33	17°27	S 8
M 9	17 8 12	17°41'04	7 ^{III} 42	9°56	14°58	10°20	14° 4	11°36	16°10	3°19	22°54	24°24	23°28	26°40	17°29	M 9
T 10	17 12 8	18°38'20	22° 7	11°24	16°11	11° 4	14°14	11°33	16°11	3°18	22°55	24°25	23°25	26°46	17°32	T 10
W11	17 16 5	19°35'36	6 ^{III} 42	12°49	17°23	11°47	14°24	11°30	16°12	3°17	22°56	24°26	23°22	26°53	17°34	W11
T 12	17 20 2	20°32'51	21°22	14°12	18°35	12°31	14°33	11°27	16°13	3°16	22°57	24°R27	23°18	27° 0	17°36	T 12
F 13	17 23 58	21°30'05	6 ^{III} 2	15°32	19°47	13°15	14°43	11°24	16°14	3°15	22°59	24°27	23°15	27° 6	17°38	F 13
S 14	17 27 55	22°27'19	20°36	16°49	21° 0	13°58	14°52	11°21	16°15	3°14	23° 0	24°25	23°12	27°13	17°40	S 14
S 15	17 31 51	23°24'32	4 ^{III} 56	18° 3	22°12	14°41	15° 2	11°18	16°16	3°13	23° 1	24°22	23° 9	27°20	17°42	S 15
M16	17 35 48	24°21'45	18°58	19°14	23°24	15°25	15°11	11°16	16°17	3°12	23° 2	24°18	23° 6	27°26	17°44	M16
T 17	17 39 44	25°18'58	2 ^{III} 38	20°23	24°36	16° 8	15°20	11°13	16°18	3°11	23° 3	24°13	23° 3	27°33	17°46	T 17
W18	17 43 41	26°16'10	15°55	21°28	25°48	16°51	15°29	11°11	16°19	3°10	23° 5	24° 9	22°59	27°40	17°48	W18
T 19	17 47 38	27°13'22	28°47	22°30	27° 0	17°35	15°38	11° 8	16°21	3°10	23° 6	24° 5	22°56	27°46	17°49	T 19
F 20	17 51 34	28°10'34	11 ^{III} 19	23°29	28°12	18°18	15°46	11° 6	16°22	3° 9	23° 7	24° 2	22°53	27°53	17°51	F 20
S 21	17 55 31	29° 7'46	23°33	24°24	29°24	19° 1	15°55	11° 3	16°24	3° 8	23° 8	24° 1	22°50	28° 0	17°53	S 21
S 22	17 59 27	0 ^{III} 4'58	5 ^{IV} 34	25°16	0 ^{III} 36	19°44	16° 3	11° 1	16°25	3° 7	23° 9	24°D 1	22°47	28° 6	17°54	S 22
M23	18 3 24	1° 2'10	17°26	26° 5	1°48	20°27	16°12	10°59	16°26	3° 7	23°10	24° 2	22°44	28°13	17°56	M23
T 24	18 7 20	1°59'22	29°15	26°49	3° 0	21°10	16°20	10°57	16°28	3° 6	23°11	24° 3	22°40	28°20	17°58	T 24
W25	18 11 17	2°56'34	11 ^{III} 5	27°30	4°12	21°52	16°28	10°55	16°30	3° 5	23°12	24° 5	22°37	28°26	17°59	W25
T 26	18 15 13	3°53'46	23° 1	28° 8	5°23	22°35	16°36	10°53	16°31	3° 5	23°14	24°R 6	22°34	28°33	18° 0	T 26
F 27	18 19 10	4°50'59	5 ^{III} 7	28°41	6°35	23°18	16°43	10°52	16°33	3° 4	23°15	24° 5	22°31	28°40	18° 2	F 27
S 28	18 23 7	5°48'11	17°25	29°10	7°47	24° 0	16°51	10°50	16°35	3° 4	23°16	24° 3	22°28	28°46	18° 3	S 28
S 29	18 27 3	6°45'24	29°58	29°35	8°58	24°43	16°58	10°48	16°37	3° 3	23°17	23°58	22°24	28°53	18° 4	S 29
M30	18 31 0	7°42'37	12°47	29°55	10°10	25°25	17° 6	10°47	16°38	3 ^{III} 3	23°18	23°52	22°21	29° 0	18° 6	M30

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S 1	22n 0	25n32	2n21	25n30	2n 4	24n47	1n24	12n20	0s45	3n55	1s12	13s 6	2n31	6n13	0n46	S 1
M 2	22 8	26 45	3 19	25 34	2 5	24 45	1 26	12 35	0 44	3 59	1 12	13 5	2 31	6 13	0 46	M 2
T 3	22 16	26 36	4 8	25 36	2 6	24 43	1 27	12 50	0 44	4 3	1 13	13 4	2 30	6 12	0 46	T 3
W 4	22 24	25 0	4 45	25 35	2 6	24 40	1 29	13 6	0 43	4 7	1 13	13 3	2 30	6 12	0 46	W 4
T 5	22 31	22 3	5 8	25 32	2 6	24 36	1 31	13 20	0 43	4 10	1 13	13 2	2 30	6 12	0 46	T 5
F 6	22 37	17 52	5 15	25 27	2 4	24 32	1 32	13 35	0 42	4 14	1 13	13 1	2 30	6 12	0 46	F 6
S 7	22 44	12 42	5 4	25 21	2 2	24 27	1 33	13 50	0 41	4 18	1 13	13 0	2 30	6 11	0 46	S 7
S 8	22 50	6 48	4 36	25 12	1 59	24 21	1 35	14 4	0 41	4 22	1 14	12 59	2 29	6 11	0 46	S 8
M 9	22 55	0 27	3 50	25 3	1 56	24 14	1 36	14 19	0 40	4 26	1 14	12 59	2 29	6 11	0 46	M 9
T 10	23 0	6s 1	2 49	24 51	1 52	24 7	1 37	14 33	0 40	4 29	1 14	12 58	2 29	6 10	0 46	T 10
W11	23 5	12 16	1 36	24 38	1 47	23 59	1 38	14 47	0 39	4 33	1 14	12 57	2 29	6 10	0 46	W11
T 12	23 9	17 52	0 17	24 24	1 41	23 50	1 39	15 1	0 38	4 36	1 14	12 56	2 29	6 9	0 46	T 12
F 13	23 13	22 24	1s 3	24 9	1 35	23 41	1 40	15 15	0 38	4 40	1 15	12 56	2 28	6 9	0 46	F 13
S 14	23 16	25 28	2 19	23 53	1 28	23 31	1 41	15 28	0 37	4 43	1 15	12 55	2 28	6 8	0 46	S 14
S 15	23 19	26 48	3 24	23 35	1 20	23 20	1 42	15 42	0 37	4 47	1 15	12 54	2 28	6 8	0 46	S 15
M16	23 22	26 21	4 15	23 17	1 12	23 9	1 43	15 55	0 36	4 50	1 15	12 54	2 28	6 7	0 46	M16
T 17	23 24	24 19	4 51	22 59	1 3	22 57	1 44	16 8	0 35	4 53	1 15	12 53	2 28	6 7	0 46	T 17
W18	23 26	21 1	5 9	22 39	0 53	22 44	1 44	16 21	0 35	4 57	1 16	12 53	2 27	6 6	0 46	W18
T 19	23 28	16 47	5 11	22 19	0 43	22 31	1 45	16 34	0 34	5 0	1 16	12 52	2 27	6 6	0 46	T 19
F 20	23 29	11 56	4 58	21 59	0 33	22 17	1 45	16 47	0 33	5 3	1 16	12 52	2 27	6 5	0 45	F 20
S 21	23 29	6 44	4 32	21 38	0 21	22 3	1 46	16 59	0 33	5 6	1 16	12 51	2 27	6 5	0 45	S 21
S 22	23 29	1 22	3 54	21 17	0 10	21 47	1 46	17 11	0 32	5 9	1 16	12 51	2 27	6 4	0 45	S 22
M23	23 29	3n59	3 7	20 56	0s 3	21 32	1 46	17 23	0 31	5 12	1 17	12 50	2 26	6 3	0 45	M23
T 24	23 28	9 11	2 11	20 35	0 15	21 15	1 47	17 35	0 31	5 15	1 17	12 50	2 26	6 3	0 45	T 24
W25	23 27	14 4	1 10	20 14	0 29	20 59	1 47	17 47	0 30	5 18	1 17	12 49	2 26	6 2	0 45	W25
T 26	23 26	18 28	0 6	19 53	0 42	20 41	1 47	17 59	0 29	5 21	1 17	12 49	2 26	6 1	0 45	T 26
F 27	23 24	22 10	1n 0	19 33	0 56	20 23	1 47	18 10	0 29	5 23	1 18	12 49	2 25	6 1	0 45	F 27
S 28	23 22	24 56	2 3	19 13	1 10	20 5	1 47	18 22	0 28	5 26	1 18	12 48	2 25	6 0	0 45	S 28
S 29	23 19	26 31	3 2	18 54	1 25	19 46	1 46	18 33	0 27	5 29	1 18	12 48	2 25	5 59	0 45	S 29
M30	23n16	26n44	3n53	18n35	1s40	19n26	1n46	18n44	0s27	5n31	1s18	12s48	2n25	5n59	0n45	M30

Julian Day Number = 2316921.5, Delta T = 56.84 sec
 Ecliptic obliquity = 23°29'19, Nutation = - 0°00'15, out-of-bounds declination in red
 Ayanamsha: Fagan/Bradley = 19°35'45, Lahiri = 18°42'45Greg. Calendar

ASTRODIENST EPHEMERIS for the year 1631

geocentric

JULY 1631 GC

00:00 UT

Day	Sid.t	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
T 1	18 34 56	8 ⁵³ 39'49	25 ⁵² 52	0 ¹¹ 11	11 ¹² 21	26 ⁸ 8	17 ¹⁷ 13	10 ¹⁰ R45	16 ¹⁶ 40	3 ³ R 2	23 ⁸ 19	23 ¹⁰ R45	22 ⁸ 18	29 ¹⁷ 6	18 ¹⁷ 7	T 1
W 2	18 38 53	9 ³⁷ 02	9 ¹¹ 11	0 ²³	12 ³³	26 ⁵⁰	17 ²⁰	10 ¹⁰ M44	16 ⁴²	3 ³ M 2	23 ²⁰	23 ⁸ 37	22 ¹⁵	29 ¹³	18 ⁸ 8	W 2
T 3	18 42 49	10 ³⁴ 14	22 ⁴³	0 ²⁹	13 ⁴⁴	27 ³²	17 ²⁷	10 ⁴³	16 ⁴⁴	3 ³ 1	23 ²¹	23 ³⁰	22 ¹²	29 ²⁰	18 ⁹ 9	T 3
F 4	18 46 46	11 ³¹ 27	6 ¹⁷ 26	0 ^{R31}	14 ⁵⁶	28 ¹⁵	17 ³³	10 ⁴²	16 ⁴⁶	3 ³ 1	23 ²²	23 ²⁴	22 ⁹	29 ²⁶	18 ¹⁰	F 4
S 5	18 50 42	12 ²⁸ 39	20 ¹⁹	0 ²⁹	16 ⁷	28 ⁵⁷	17 ⁴⁰	10 ⁴¹	16 ⁴⁸	3 ³ 1	23 ²³	23 ²⁰	22 ⁵	29 ³³	18 ¹¹	S 5
S 6	18 54 39	13 ²⁵ 51	4 ¹⁹	0 ²¹	17 ¹⁸	29 ³⁹	17 ⁴⁶	10 ⁴⁰	16 ⁵¹	3 ³ 0	23 ²⁴	23 ¹⁸	22 ²	29 ⁴⁰	18 ¹²	S 6
M 7	18 58 36	14 ²³ 03	18 ²⁶	0 ⁹	18 ³⁰	0 ¹¹ 21	17 ⁵³	10 ³⁹	16 ⁵³	3 ³ 0	23 ²⁴	23 ^{D18}	21 ⁵⁹	29 ⁴⁶	18 ¹³	M 7
T 8	19 2 32	15 ²⁰ 15	2 ¹¹ 37	29 ⁵³	19 ⁴¹	1 ³	17 ⁵⁹	10 ³⁸	16 ⁵⁵	3 ³ 0	23 ²⁵	23 ¹⁹	21 ⁵⁶	29 ⁵³	18 ¹⁴	T 8
W 9	19 6 29	16 ¹⁷ 28	16 ⁵²	29 ³¹	20 ⁵²	1 ⁴⁴	18 ⁴	10 ³⁸	16 ⁵⁷	3 ³ 0	23 ²⁶	23 ^{R20}	21 ⁵³	29 ⁵⁹	18 ¹⁴	W 9
T 10	19 10 25	17 ¹⁴ 40	1 ¹⁷ 9	29 ⁶	22 ³	2 ²⁶	18 ¹⁰	10 ³⁷	16 ⁵⁹	2 ⁵⁹	23 ²⁷	23 ²⁰	21 ⁵⁰	0 ⁸ 6	18 ¹⁵	T 10
F 11	19 14 22	18 ¹¹ 52	15 ²³	28 ³⁷	23 ¹⁴	3 ⁸	18 ¹⁶	10 ³⁷	17 ²	2 ⁵⁹	23 ²⁸	23 ¹⁸	21 ⁴⁶	0 ¹³	18 ¹⁶	F 11
S 12	19 18 18	19 ⁹ 0'05	29 ³³	28 ⁵	24 ²⁵	3 ⁴⁹	18 ²¹	10 ³⁶	17 ⁴	2 ⁵⁹	23 ²⁹	23 ¹³	21 ⁴³	0 ¹⁹	18 ¹⁶	S 12
S 13	19 22 15	20 ⁶ 18	13 ³³	27 ²⁹	25 ³⁶	4 ³¹	18 ²⁶	10 ³⁶	17 ⁷	2 ⁵⁹	23 ³⁰	23 ⁷	21 ⁴⁰	0 ²⁶	18 ¹⁷	S 13
M14	19 26 11	21 ³ 31	27 ¹⁹	26 ⁵¹	26 ⁴⁷	5 ¹²	18 ³¹	10 ³⁶	17 ⁹	2 ⁵⁹	23 ³¹	22 ⁵⁸	21 ³⁷	0 ³³	18 ¹⁷	M14
T 15	19 30 8	22 ⁰ 0'45	10 ⁴⁸	26 ¹¹	27 ⁵⁷	5 ⁵⁴	18 ³⁶	10 ^{D36}	17 ¹²	2 ^{D59}	23 ³¹	22 ⁴⁹	21 ³⁴	0 ³⁹	18 ¹⁸	T 15
W16	19 34 5	22 ⁵⁸ 00	23 ⁵⁸	25 ³⁰	29 ⁸	6 ³⁵	18 ⁴¹	10 ³⁶	17 ¹⁴	2 ⁵⁹	23 ³²	22 ³⁹	21 ³⁰	0 ⁴⁶	18 ¹⁸	W16
T 17	19 38 1	23 ⁵⁵ 15	6 ¹⁷ 47	24 ⁴⁸	0 ¹⁹ 19	7 ¹⁶	18 ⁴⁶	10 ³⁶	17 ¹⁷	2 ⁵⁹	23 ³³	22 ³⁰	21 ²⁷	0 ⁵³	18 ¹⁹	T 17
F 18	19 41 58	24 ⁵² 31	19 ¹⁷	24 ⁶	1 ²⁹	7 ⁵⁸	18 ⁵⁰	10 ³⁶	17 ¹⁹	2 ⁵⁹	23 ³⁴	22 ²³	21 ²⁴	0 ⁵⁹	18 ¹⁹	F 18
S 19	19 45 54	25 ⁴⁹ 47	1 ¹⁷ 31	23 ²⁶	2 ⁴⁰	8 ³⁹	18 ⁵⁴	10 ³⁷	17 ²²	2 ⁵⁹	23 ³⁴	22 ¹⁸	21 ²¹	1 ⁶	18 ¹⁹	S 19
S 20	19 49 51	26 ⁴⁷ 05	13 ³¹	22 ⁴⁷	3 ⁵⁰	9 ²⁰	18 ⁵⁸	10 ³⁷	17 ²⁵	2 ⁵⁹	23 ³⁵	22 ¹⁵	21 ¹⁸	1 ¹³	18 ¹⁹	S 20
M21	19 53 47	27 ⁴⁴ 23	25 ²³	22 ¹⁰	5 ¹	10 ¹	19 ²	10 ³⁸	17 ²⁷	2 ⁵⁹	23 ³⁶	22 ^{D14}	21 ¹⁵	1 ¹⁹	18 ¹⁹	M21
T 22	19 57 44	28 ⁴¹ 43	7 ⁸ 12	21 ³⁶	6 ¹¹	10 ⁴²	19 ⁶	10 ³⁸	17 ³⁰	3 ³ 0	23 ³⁶	22 ¹⁴	21 ¹¹	1 ²⁶	18 ¹⁹	T 22
W23	20 1 40	29 ³⁹ 03	19 ³	21 ⁷	7 ²¹	11 ²²	19 ⁹	10 ³⁹	17 ³³	3 ³ 0	23 ³⁷	22 ^{R14}	21 ⁸	1 ³³	18 ^{R19}	W23
T 24	20 5 37	0 ¹⁸ 36'25	1 ¹¹ 2	20 ⁴¹	8 ³¹	12 ³	19 ¹²	10 ⁴⁰	17 ³⁶	3 ³ 0	23 ³⁸	22 ¹⁴	21 ⁵	1 ³⁹	18 ¹⁹	T 24
F 25	20 9 34	1 ³³ 48	13 ¹³	20 ²⁰	9 ⁴¹	12 ⁴⁴	19 ¹⁶	10 ⁴¹	17 ³⁹	3 ³ 0	23 ³⁸	22 ¹²	21 ²	1 ⁴⁶	18 ¹⁹	F 25
S 26	20 13 30	2 ³¹ 11	25 ⁴⁰	20 ⁵	10 ⁵¹	13 ²⁴	19 ¹⁸	10 ⁴²	17 ⁴²	3 ³ 1	23 ³⁹	22 ⁸	20 ⁵⁹	1 ⁵³	18 ¹⁹	S 26
S 27	20 17 27	3 ²⁸ 36	8 ²⁶	19 ⁵⁵	12 ¹	14 ⁵	19 ²¹	10 ⁴³	17 ⁴⁴	3 ³ 1	23 ³⁹	22 ¹	20 ⁵⁶	1 ⁵⁹	18 ¹⁹	S 27
M28	20 21 23	4 ²⁶ 02	21 ³³	19 ^{D51}	13 ¹¹	14 ⁴⁵	19 ²⁴	10 ⁴⁴	17 ⁴⁷	3 ³ 2	23 ⁴⁰	21 ⁵²	20 ⁵²	2 ⁶	18 ¹⁹	M28
T 29	20 25 20	5 ²³ 29	4 ¹⁸ 59	19 ⁵⁴	14 ²¹	15 ²⁶	19 ²⁶	10 ⁴⁶	17 ⁵⁰	3 ³ 2	23 ⁴¹	21 ⁴¹	20 ⁴⁹	2 ¹³	18 ¹⁸	T 29
W30	20 29 16	6 ²⁰ 56	18 ⁵³	20 ³	15 ³¹	16 ⁶	19 ²⁸	10 ⁴⁷	17 ⁵³	3 ³ 2	23 ⁴¹	21 ³⁰	20 ⁴⁶	2 ¹⁹	18 ¹⁸	W30
T 31	20 33 13	7 ¹⁸ 25	2 ¹⁷ 41	20 ⁵⁸ 18	16 ¹⁷ 40	16 ¹¹ 46	19 ¹⁷ 30	10 ¹¹ 49	17 ¹⁷ 57	3 ³ M 3	23 ⁸ 42	21 ⁸ 19	20 ⁸ 43	2 ⁸ 26	18 ¹⁷ 18	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
T 1	23n12	25n29	4n32	18n17	1s55	19n 6	1n46	18n54	0s26	5n34	1 s19	12s48	2n24	5n58	0n45	10s50	1n50	5n25	13s38	18n45	18n23	9n17	8n24	1n24							
W 2	23 8	22 47	4 58	17 59	2 10	18 45	1 45	19 5	0 25	5 36	1 19	12 48	2 24	5 57	0 45	10 50	1 50	5 25	13 38	18 43	18 22	9 20	8 25	1 24							
T 3	23 4	18 49	5 8	17 43	2 25	18 24	1 45	19 15	0 25	5 39	1 19	12 47	2 24	5 56	0 45	10 50	1 50	5 25	13 39	18 41	18 21	9 23	8 25	1 24							
F 4	22 59	13 48	5 0	17 28	2 41	18 3	1 44	19 25	0 24	5 41	1 19	12 47	2 24	5 55	0 45	10 50	1 49	5 25	13 39	18 40	18 21	9 26	8 26	1 24							
S 5	22 54	8 3	4 35	17 14	2 55	17 41	1 43	19 35	0 23	5 43	1 20	12 47	2 23	5 54	0 45	10 50	1 49	5 25	13 39	18 39	18 20	9 29	8 26	1 24							
S 6	22 49	1 50	3 53	17 1	3 10	17 18	1 42	19 45	0 22	5 45	1 20	12 47	2 23	5 54	0 45	10 50	1 49	5 25	13 39	18 38	18 19	9 32	8 26	1 24							
M 7	22 43	4s31	2 56	16 50	3 24	16 55	1 42	19 55	0 22	5 48	1 20	12 47	2 23	5 53	0 45	10 49	1 49	5 25	13 39	18 38	18 18	9 35	8 27	1 24							
T 8	22 36	10 42	1 49	16 40	3 38	16 32	1 41	20 4	0 21	5 50	1 20	12 47	2 23	5 52	0 45	10 49	1 49	5 25	13 40	18 38	18 17	9 38	8 27	1 24							
W 9	22 30	16 21	0 35	16 31	3 51	16 8	1 39	20 13	0 20	5 52	1 21	12 47	2 22	5 51	0 45	10 49	1 49	5 25	13 40	18 39	18 16	9 42	8 27	1 24							
T 10	22 22	21 7	0s42	16 25	4 3	15 44	1 38	20 22	0 20	5 54	1 21	12 47	2 22	5 50	0 45	10 49	1 49	5 25	13 40	18 39	18 16	9 45	8 28	1 24							
F 11	22 15	24 36	1 56	16 19	4 15	15 20	1 37	20 31	0 19	5 56	1 21	12 48	2 22	5 49	0 45	10 49	1 49	5 25	13 40	18 38	18 15	9 48	8 28	1 24							
S 12	22 7	26 31	3 1	16 16	4 25	14 55	1 36	20 40	0 18	5 57	1 21	12 48	2 22	5 48	0 45	10 49	1 49	5 25	13 40	18 37	18 14	9 51	8 28	1 24							
S 13	21 59	26 42	3 56	16 14	4 34	14 30	1 34	20 48	0 17	5 59	1 22	12 48	2 21	5 47	0 45	10 49	1 49	5 25	13 41	18 35	18 13	9 54	8 28	1 24							
M14	21 50	25 14	4 35	16 14	4 41	14 4	1 33	20 57	0 17	6 1	1 22	12 48	2 21	5 46	0 45	10 50	1 49	5 25	13 41	18 33	18 12	9 57	8 29	1 24							
T 15	21 41	22 20	4 58	16 15	4 47	13 38	1 31	21 5	0 16	6 2	1 22	12 48	2 21	5 45	0 45	10 50	1 49	5 25	13 41	18 31	18 11	10 0	8 29	1 24							
W16	21 32	18 20	5 4	16 18	4 52	13 12	1 29	21 12	0 15	6 4	1 22	12 49	2 20	5 44	0 44	10 50	1 49	5 25	13 41	18 28	18 11	10 3	8 29	1 24							
T 17	21 22	13 36	4 55	16 23	4 55	12 45	1 28	21 20	0 14	6 5	1 23	12 49	2 20	5 43	0 44	10 50	1 49	5 25	13 41	18 26	18 10	10 6	8 29	1 24							
F 18	21 12	8 25	4 32	16 29	4 56	12 18	1 26	21 28	0 13	6 7	1 23	12 49	2 20	5 42	0 44	10 50	1 49	5 25	13 42	18 24	18 9	10 9	8 29	1 24							
S 19	21 1	3 1	3 57	16 36	4 55	11 51	1 24	21 35	0 13	6 8	1 23	12 50	2 20	5 41	0 44	10 50	1 49	5 25	13 42	18 23	18 8	10 12	8 29	1 24							
S 20	20 51	2n25	3 11	16 45	4 53	11 23	1 22	21 42	0 12	6 9	1 23	12 50	2 19	5 40	0 44	10 50	1 49	5 25	13 42	18 22	18 7	10 16	8 29	1 24							
M21	20 39	7 42	2 18	16 55	4 49	10 56	1 20	21 49	0 11	6 11	1 24	12 50	2 19	5 39	0 44	10 50	1 49	5 25	13 42	18 22	18 6	10 19	8 29	1 24							
T 22	20 28	12 42	1 19	17 6	4 43	10 28	1 17	21 56	0 10	6 12	1 24	12 51	2 19	5 38	0 44	10 50	1 48	5 25	13 42	18 22	18 6	10 22	8 29	1 24							
W23	20 16	17 15	0 17	17 17	4 35	9 59	1 15	22 2	0 10	6 13	1 24	12 51	2 19	5 37	0 44	10 50	1 48	5 25	13 43	18 22	18 5	10 25	8 29	1 24							
T 24	20 4	21 10	0n47	17 30	4 27	9 31	1 13	22 8	0 9	6 14	1 25	12 52	2 18	5 35	0 44	10 50	1 48	5 25	13 43	18 22	18 4	10 28	8 29	1 24							
F 25	19 51	24 14	1 49	17 43	4 17	9 2	1 10	22 14	0 8	6 15	1 25	12 52	2 18	5 34	0 44	10 51	1 48	5 25	13 43	18 21	18 3	10 31	8 29	1 24							
S 26	19 38	26 13	2 48	17 56	4 5	8 33	1 8	22 20	0 7	6 16	1 25	12 53	2 18	5 33	0 44	10 51	1 48	5 25	13 43	18 20	18 2	10 34	8 29	1 24							
S 27	19 25	26 52	3 39	18 10	3 53	8 4	1 5	22 26	0 6	6 16	1 25	12 54	2 18	5 32	0 44	10 51	1 48	5 24	13 44	18 19	18 1	10 37	8 29	1 24							
M28	19 12	26 3	4 21	18 24	3 39	7 35	1 2	22 31	0 5	6 17	1 26	12 54	2 17	5 31	0 44	10 51	1 48	5 24	13 44	18 16	18 1	10 40	8 29	1 24							
T 29	18 58	23 44	4 49	18 38	3 25	7 5	1 0	22 37	0 5	6 18	1 26	12 55	2 17	5 30	0 44	10 51	1 48	5 24	13 44	18 13	18 0	10 43	8 29	1 24							
W30	18 43	20 4	5 1	18 51	3 10	6 36	0 57	22 42	0 4	6 18	1 26	12 55	2 17	5 38	0 44	10 52	1 48	5 24	13 44	18 10	17 59	10 46	8 29	1 24							
T 31	18n29	15n 8	4n56	19n 4	2s55	6n 6	0n54	22n47	0s 3	6n19	1s26	12s56	2n16	5n27	0n44	10s52	1n48	5n24	13s45	18n 8	17n58	10n49	8n29	1n24							

ASTRODIENST EPHEMERIS for the year 1631

geocentric

AUGUST 1631 GC

00:00 UT

Day	Sid.t	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
F 1	20 37 9	8♂15'54	16♂49	20♂40	17♂50	17♂26	19♂32	10♂50	18♂0	3♂3	23♂42	21♂9	20♂40	2♂33	18♂17	F 1
S 2	20 41 6	9°13'24	1♂1	21°9	18°59	18°6	19°33	10°52	18°3	3°4	23°43	21♂2	20°36	2°39	18♂16	S 2
S 3	20 45 3	10°10'55	15°15	21°44	20°9	18°46	19°35	10°54	18°6	3°5	23°43	20°58	20°33	2°46	18°16	S 3
M 4	20 48 59	11°8'27	29°27	22°26	21°18	19°26	19°36	10°55	18°9	3°5	23°43	20°57	20°30	2°53	18°15	M 4
T 5	20 52 56	12°6'00	13♂35	23°14	22°27	20°6	19°37	10°57	18°12	3°6	23°44	20°56	20°27	2°59	18°15	T 5
W 6	20 56 52	13°3'33	27°39	24°9	23°37	20°45	19°38	11°0	18°16	3°7	23°44	20°56	20°24	3°6	18°14	W 6
T 7	21 0 49	14°1'08	11♂37	25°10	24°46	21°25	19°38	11°2	18°19	3°7	23°45	20°55	20°21	3°12	18°13	T 7
F 8	21 4 45	14°58'43	25°29	26°17	25°54	22°4	19°39	11°4	18°22	3°8	23°45	20°52	20°17	3°19	18°12	F 8
S 9	21 8 42	15°56'20	9♂31	27°30	27°3	22°44	19°R39	11°6	18°25	3°9	23°45	20°46	20°14	3°26	18°11	S 9
S 10	21 12 39	16°53'57	22°49	28°49	28°12	23°23	19°39	11°9	18°29	3°10	23°46	20°37	20°11	3°32	18°10	S 10
M 11	21 16 35	17°51'36	6♂13	0♂13	29°21	24°2	19°39	11°11	18°32	3°10	23°46	20°26	20°8	3°39	18°9	M 11
T 12	21 20 32	18°49'16	19°23	1°42	0♂29	24°42	19°38	11°14	18°35	3°11	23°46	20°14	20°5	3°46	18°8	T 12
W 13	21 24 28	19°46'57	2♂19	3°15	1°38	25°21	19°38	11°17	18°39	3°12	23°46	20°1	20°2	3°52	18°7	W 13
T 14	21 28 25	20°44'39	14°58	4°53	2°46	26°0	19°37	11°19	18°42	3°13	23°47	19°49	19°58	3°59	18°6	T 14
F 15	21 32 21	21°42'23	27°21	6°35	3°54	26°38	19°36	11°22	18°46	3°14	23°47	19°39	19°55	4°6	18°5	F 15
S 16	21 36 18	22°40'09	9♂30	8°20	5°2	27°17	19°35	11°25	18°49	3°15	23°47	19°32	19°52	4°12	18°3	S 16
S 17	21 40 14	23°37'56	21°28	10°9	6°10	27°56	19°33	11°28	18°53	3°16	23°47	19°27	19°49	4°19	18°2	S 17
M 18	21 44 11	24°35'45	3♂18	12°0	7°18	28°35	19°32	11°31	18°56	3°17	23°47	19°24	19°46	4°26	18°1	M 18
T 19	21 48 7	25°33'35	15°6	13°53	8°26	29°13	19°30	11°35	19°0	3°18	23°47	19°24	19°42	4°32	17°59	T 19
W 20	21 52 4	26°31'28	26°57	15°48	9°33	29°52	19°28	11°38	19°3	3°19	23°47	19°24	19°39	4°39	17°58	W 20
T 21	21 56 1	27°29'22	8♂56	17°44	10°41	0♂30	19°26	11°41	19°7	3°20	23°48	19°23	19°36	4°46	17°56	T 21
F 22	21 59 57	28°27'18	21°8	19°42	11°48	1°8	19°23	11°45	19°10	3°22	23°48	19°22	19°33	4°52	17°55	F 22
S 23	22 3 54	29°25'16	3♂38	21°40	12°55	1°46	19°21	11°48	19°14	3°23	23°48	19°18	19°30	4°59	17°53	S 23
S 24	22 7 50	0♂23'16	16°31	23°38	14°2	2°25	19°18	11°52	19°18	3°24	23°R48	19°11	19°27	5°6	17°51	S 24
M 25	22 11 47	1°21'17	29°48	25°37	15°9	3°3	19°15	11°56	19°21	3°25	23°48	19°2	19°23	5°12	17°50	M 25
T 26	22 15 43	2°19'21	13♂30	27°35	16°16	3°40	19°12	12°0	19°25	3°27	23°48	18°52	19°20	5°19	17°48	T 26
W 27	22 19 40	3°17'26	27°34	29°33	17°23	4°18	19°8	12°3	19°29	3°28	23°48	18°40	19°17	5°25	17°46	W 27
T 28	22 23 36	4°15'32	11♂56	1♂31	18°29	4°56	19°5	12°7	19°32	3°29	23°47	18°29	19°14	5°32	17°44	T 28
F 29	22 27 33	5°13'41	26°29	3°28	19°36	5°33	19°1	12°11	19°36	3°31	23°47	18°20	19°11	5°39	17°42	F 29
S 30	22 31 30	6°11'50	11♂6	5°24	20°42	6°11	18°57	12°16	19°40	3°32	23°47	18°13	19°7	5°45	17°40	S 30
S 31	22 35 26	7♂10'02	25♂42	7♂19	21♂48	6♂48	18♂53	12♂20	19♂43	3♂33	23♂47	18♂9	19♂4	5♂52	17♂38	S 31

Day	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
F 1	18n14	9n23	4n32	19n17	2s39	5n36	0n51	22n51	0s2	6n19	1s27	12s57	2n16	5n26	0n44	F 1
S 2	17 59	3 8	3 52	19 28	2 23	5 6	0 48	22 56	0 1	6 20	1 27	12 58	2 16	5 25	0 44	S 2
S 3	17 44	3s18	2 57	19 39	2 7	4 35	0 44	23 0	0 0	6 20	1 27	12 59	2 16	5 23	0 44	S 3
M 4	17 28	9 34	1 51	19 48	1 50	4 5	0 41	23 4	0n0	6 20	1 28	12 59	2 15	5 22	0 44	M 4
T 5	17 12	15 20	0 39	19 56	1 34	3 35	0 38	23 8	0 1	6 20	1 28	13 0	2 15	5 21	0 44	T 5
W 6	16 56	20 15	0s35	20 3	1 18	3 4	0 34	23 12	0 2	6 20	1 28	13 1	2 15	5 20	0 44	W 6
T 7	16 39	24 0	1 47	20 8	1 2	2 33	0 31	23 15	0 3	6 20	1 28	13 2	2 15	5 18	0 44	T 7
F 8	16 23	26 16	2 52	20 11	0 47	2 3	0 27	23 19	0 4	6 20	1 29	13 3	2 14	5 17	0 44	F 8
S 9	16 5	26 55	3 46	20 11	0 31	1 32	0 24	23 22	0 5	6 20	1 29	13 4	2 14	5 16	0 44	S 9
S 10	15 48	25 56	4 26	20 10	0 17	1 1	0 20	23 25	0 5	6 20	1 29	13 5	2 14	5 14	0 44	S 10
M 11	15 31	23 27	4 51	20 6	0 3	0 30	0 16	23 28	0 6	6 19	1 29	13 6	2 14	5 13	0 44	M 11
T 12	15 13	19 47	5 0	19 59	0n10	0s0	0 12	23 30	0 7	6 19	1 30	13 7	2 13	5 12	0 44	T 12
W 13	14 55	15 14	4 53	19 50	0 23	0 31	0 8	23 33	0 8	6 18	1 30	13 8	2 13	5 10	0 44	W 13
T 14	14 36	10 7	4 32	19 39	0 35	1 2	0 4	23 35	0 9	6 18	1 30	13 9	2 13	5 9	0 44	T 14
F 15	14 18	4 42	3 59	19 24	0 45	1 33	0 0	23 37	0 10	6 17	1 30	13 10	2 13	5 7	0 44	F 15
S 16	13 59	0n48	3 14	19 7	0 56	2 4	0s4	23 38	0 11	6 17	1 31	13 11	2 12	5 6	0 44	S 16
S 17	13 40	6 11	2 22	18 47	1 5	2 34	0 8	23 40	0 12	6 16	1 31	13 13	2 12	5 5	0 44	S 17
M 18	13 21	11 19	1 24	18 24	1 13	3 5	0 12	23 41	0 13	6 15	1 31	13 14	2 12	5 3	0 44	M 18
T 19	13 2	16 2	0 23	17 58	1 20	3 36	0 16	23 43	0 14	6 14	1 31	13 15	2 12	5 2	0 44	T 19
W 20	12 42	20 10	0n40	17 31	1 27	4 7	0 21	23 44	0 14	6 13	1 32	13 16	2 11	5 1	0 44	W 20
T 21	12 22	23 30	1 42	17 0	1 32	4 37	0 25	23 45	0 15	6 12	1 32	13 18	2 11	4 59	0 44	T 21
F 22	12 2	25 51	2 40	16 28	1 37	5 8	0 30	23 45	0 16	6 11	1 32	13 19	2 11	4 58	0 44	F 22
S 23	11 42	26 58	3 32	15 54	1 40	5 38	0 34	23 46	0 17	6 10	1 32	13 20	2 11	4 56	0 44	S 23
S 24	11 22	26 40	4 14	15 17	1 43	6 8	0 38	23 46	0 18	6 8	1 33	13 21	2 10	4 55	0 44	S 24
M 25	11 1	24 52	4 45	14 39	1 45	6 39	0 43	23 46	0 19	6 7	1 33	13 23	2 10	4 53	0 44	M 25
T 26	10 40	21 36	5 0	14 0	1 46	7 9	0 48	23 46	0 20	6 6	1 33	13 24	2 10	4 52	0 44	T 26
W 27	10 19	17 0	4 58	13 19	1 47	7 39	0 52	23 46	0 21	6 4	1 33	13 26	2 10	4 50	0 44	W 27
T 28	9 58	11 22	4 37	12 37	1 47	8 8	0 57	23 46	0 22	6 2	1 34	13 27	2 10	4 49	0 44	T 28
F 29	9 37	5 2	3 58	11 54	1 46	8 38	1 2	23 45	0 23	6 1	1 34	13 28	2 9	4 48	0 44	F 29
S 30	9 15	1s36	3 3	11 10	1 44	9 7	1 7	23 44	0 24	5 59	1 34	13 30	2 9	4 46	0 43	S 30
S 31	8n54	8s9	1n56	10n25	1n42	9s37	1s11	23n44	0n25	5n57	1s34	13s31	2n9	4n45	0n43	S 31

Julian Day Number = 2316982.5, Delta T = 56.71 sec
 Ecciptic obliquity = 23°29'20, Nutation = - 0°00'12, out-of-bounds declination in red
 Ayanamsha: Fagan/Bradley = 19°35'53, Lahiri = 18°42'54Greg. Calendar

ASTRODIENST EPHEMERIS for the year 1631

geocentric

SEPTEMBER 1631 GC

00:00 UT

Day	Sid.t	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
M 1	22 39 23	8 ^m 8'15	10 ^m 9	9 ^m 13	22 ^m 54	7 ^m 26	18°R49	12 ^m 24	19 ^m 47	3 ^m 35	23°R47	18°R 7	19 ^m 1	5 ^m 59	17°R36	M 1
T 2	22 43 19	9° 6'29	24°26	11° 6	23°59	8° 3	18°Y44	12°28	19°51	3°36	23°B47	18°D 7	18°58	6° 5	17°Y34	T 2
W 3	22 47 16	10° 4'45	8 ^m 30	12°58	25° 5	8°40	18°40	12°33	19°55	3°38	23°47	18°R 7	18°55	6°12	17°32	W 3
T 4	22 51 12	11° 3'03	22°21	14°50	26°10	9°17	18°35	12°37	19°58	3°39	23°46	18°B 7	18°52	6°19	17°30	T 4
F 5	22 55 9	12° 1'22	5 ^m 59	16°39	27°15	9°54	18°30	12°42	20° 2	3°41	23°46	18° 4	18°48	6°25	17°28	F 5
S 6	22 59 5	12°59'43	19°25	18°28	28°20	10°30	18°25	12°47	20° 6	3°42	23°46	18° 0	18°45	6°32	17°26	S 6
S 7	23 3 2	13°58'05	2 ^m 38	20°16	29°25	11° 7	18°19	12°51	20°10	3°44	23°46	17°52	18°42	6°39	17°24	S 7
M 8	23 6 59	14°56'29	15°40	22° 3	0 ^m 30	11°43	18°14	12°56	20°13	3°45	23°45	17°43	18°39	6°45	17°21	M 8
T 9	23 10 55	15°54'55	28°29	23°48	1°34	12°20	18° 8	13° 1	20°17	3°47	23°45	17°32	18°36	6°52	17°19	T 9
W10	23 14 52	16°53'22	11 ^m 6	25°33	2°38	12°56	18° 3	13° 6	20°21	3°49	23°45	17°21	18°33	6°59	17°17	W10
T 11	23 18 48	17°51'51	23°30	27°16	3°42	13°32	17°57	13°11	20°25	3°50	23°44	17°11	18°29	7° 5	17°14	T 11
F 12	23 22 45	18°50'22	5 ^m Y43	28°58	4°46	14° 8	17°51	13°16	20°28	3°52	23°44	17° 2	18°26	7°12	17°12	F 12
S 13	23 26 41	19°48'55	17°45	0 ^m 39	5°49	14°44	17°44	13°21	20°32	3°54	23°44	16°56	18°23	7°19	17°10	S 13
S 14	23 30 38	20°47'31	29°39	2°19	6°52	15°20	17°38	13°26	20°36	3°56	23°43	16°52	18°20	7°25	17° 7	S 14
M15	23 34 34	21°46'08	11 ^m 27	3°59	7°55	15°56	17°32	13°31	20°40	3°57	23°43	16°D50	18°17	7°32	17° 5	M15
T 16	23 38 31	22°44'48	23°13	5°37	8°58	16°32	17°25	13°37	20°44	3°59	23°42	16°50	18°13	7°38	17° 2	T 16
W17	23 42 28	23°43'29	5 ^m II 3	7°14	10° 0	17° 7	17°18	13°42	20°47	4° 1	23°42	16°51	18°10	7°45	16°59	W17
T 18	23 46 24	24°42'13	17° 0	8°50	11° 3	17°42	17°11	13°47	20°51	4° 3	23°41	16°52	18° 7	7°52	16°57	T 18
F 19	23 50 21	25°41'00	29°11	10°25	12° 4	18°18	17° 5	13°53	20°55	4° 5	23°41	16°R52	18° 4	7°58	16°54	F 19
S 20	23 54 17	26°39'48	11 ^m 39	12° 0	13° 6	18°53	16°57	13°58	20°59	4° 6	23°40	16°51	18° 1	8° 5	16°52	S 20
S 21	23 58 14	27°38'39	24°31	13°33	14° 7	19°28	16°50	14° 4	21° 2	4° 8	23°40	16°48	17°58	8°12	16°49	S 21
M22	0 2 10	28°37'33	7 ^m L49	15° 6	15° 8	20° 3	16°43	14°10	21° 6	4°10	23°39	16°43	17°54	8°18	16°46	M22
T 23	0 6 7	29°36'28	21°35	16°37	16° 9	20°37	16°36	14°15	21°10	4°12	23°39	16°36	17°51	8°25	16°44	T 23
W24	0 10 3	0 ^m 35'26	5 ^m 47	18° 8	17° 9	21°12	16°28	14°21	21°14	4°14	23°38	16°29	17°48	8°32	16°41	W24
T 25	0 14 0	1°34'25	20°22	19°37	18° 9	21°46	16°21	14°27	21°17	4°16	23°37	16°22	17°45	8°38	16°38	T 25
F 26	0 17 57	2°33'27	5 ^m 14	21° 6	19° 9	22°21	16°13	14°33	21°21	4°18	23°37	16°15	17°42	8°45	16°36	F 26
S 27	0 21 53	3°32'31	20°13	22°34	20° 8	22°55	16° 5	14°39	21°25	4°20	23°36	16°11	17°39	8°52	16°33	S 27
S 28	0 25 50	4°31'37	5 ^m IL 2	24° 1	21° 7	23°29	15°57	14°45	21°29	4°22	23°35	16° 9	17°35	8°58	16°30	S 28
M29	0 29 46	5°30'44	20° 1	25°27	22° 6	24° 3	15°50	14°51	21°32	4°24	23°35	16°D 8	17°32	9° 5	16°27	M29
T 30	0 33 43	6 ^m 29'54	4 ^m A35	26 ^m 52	23 ^m L 4	24 ^m 36	15°Y42	14 ^m L57	21 ^m 36	4 ^m L26	23°B34	16°B 9	17°B29	9°B11	16°Y24	T 30

Day	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
	decl	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat
M 1	8n32	14s14	0n42	9n40	1n40	10s 6	1s16	23n43	0n26	5n56	1s35	13s33	2n 9	4n43	0n43	11s 4	1n46
T 2	8 10	19 28	0s34	8 54	1 37	10 35	1 21	23 41	0 27	5 54	1 35	13 34	2 8	4 42	0 43	11 5	1 46
W 3	7 48	23 31	1 46	8 8	1 33	11 4	1 26	23 40	0 28	5 52	1 35	13 36	2 8	4 40	0 43	11 5	1 46
T 4	7 26	26 7	2 52	7 22	1 29	11 32	1 31	23 38	0 29	5 50	1 35	13 38	2 8	4 39	0 43	11 6	1 46
F 5	7 4	27 7	3 46	6 35	1 25	12 0	1 36	23 37	0 30	5 48	1 35	13 39	2 8	4 37	0 43	11 6	1 46
S 6	6 42	26 29	4 27	5 48	1 20	12 28	1 41	23 35	0 31	5 46	1 36	13 41	2 8	4 36	0 43	11 7	1 46
S 7	6 19	24 22	4 53	5 1	1 15	12 56	1 46	23 33	0 32	5 43	1 36	13 42	2 7	4 34	0 43	11 8	1 46
M 8	5 57	21 0	5 3	4 14	1 10	13 24	1 51	23 31	0 33	5 41	1 36	13 44	2 7	4 33	0 43	11 8	1 46
T 9	5 34	16 41	4 58	3 27	1 4	13 51	1 56	23 28	0 34	5 39	1 36	13 46	2 7	4 31	0 43	11 9	1 46
W10	5 11	11 42	4 38	2 40	0 59	14 18	2 1	23 26	0 35	5 36	1 36	13 47	2 7	4 30	0 43	11 9	1 46
T 11	4 48	6 20	4 6	1 54	0 52	14 45	2 6	23 23	0 36	5 34	1 36	13 49	2 7	4 28	0 43	11 10	1 46
F 12	4 25	0 49	3 22	1 7	0 46	15 11	2 10	23 21	0 37	5 32	1 37	13 51	2 6	4 27	0 43	11 11	1 46
S 13	4 2	4n41	2 29	0 21	0 40	15 37	2 15	23 18	0 38	5 29	1 37	13 52	2 6	4 25	0 43	11 11	1 46
S 14	3 39	9 57	1 31	0s25	0 33	16 3	2 20	23 15	0 39	5 27	1 37	13 54	2 6	4 24	0 43	11 12	1 46
M15	3 16	14 50	0 29	1 11	0 26	16 28	2 25	23 12	0 40	5 24	1 37	13 56	2 6	4 22	0 43	11 12	1 46
T 16	2 53	19 10	0n34	1 56	0 20	16 53	2 30	23 9	0 41	5 21	1 37	13 58	2 6	4 21	0 43	11 13	1 46
W17	2 30	22 46	1 37	2 41	0 13	17 18	2 35	23 5	0 42	5 19	1 37	13 59	2 5	4 19	0 43	11 14	1 45
T 18	2 7	25 26	2 35	3 26	0 5	17 43	2 40	23 2	0 43	5 16	1 37	14 1	2 5	4 18	0 43	11 14	1 45
F 19	1 43	26 57	3 28	4 10	0s 2	18 7	2 45	22 58	0 44	5 13	1 38	14 3	2 5	4 16	0 43	11 15	1 45
S 20	1 20	27 10	4 12	4 53	0 9	18 30	2 50	22 54	0 45	5 10	1 38	14 5	2 5	4 15	0 43	11 16	1 45
S 21	0 56	25 57	4 46	5 36	0 16	18 53	2 55	22 50	0 46	5 7	1 38	14 7	2 5	4 13	0 43	11 16	1 45
M22	0 33	23 15	5 5	6 19	0 24	19 16	3 0	22 46	0 47	5 5	1 38	14 8	2 5	4 12	0 43	11 17	1 45
T 23	0 9	19 11	5 7	7 1	0 31	19 39	3 5	22 42	0 49	5 2	1 38	14 10	2 4	4 10	0 43	11 18	1 45
W24	0s14	13 55	4 51	7 43	0 38	20 1	3 9	22 38	0 50	4 59	1 38	14 12	2 4	4 9	0 43	11 18	1 45
T 25	0 38	7 45	4 16	8 24	0 46	20 23	3 14	22 34	0 51	4 56	1 38	14 14	2 4	4 8	0 43	11 19	1 45
F 26	1 1	1 2	3 23	9 4	0 53	20 44	3 19	22 29	0 52	4 53	1 38	14 16	2 4	4 6	0 43	11 20	1 45
S 27	1 25	5s49	2 16	9 44	1 0	21 5	3 23	22 25	0 53	4 50	1 38	14 18	2 4	4 5	0 43	11 20	1 45
S 28	1 48	12 21	0 59	10 23	1 8	21 25	3 28	22 20	0 54	4 47	1 38	14 20	2 4	4 3	0 43	11 21	1 45
M29	2 12	18 7	0s21	11 1	1 15	21 45	3 33	22 15	0 55	4 44	1 38	14 22	2 3	4 2	0 43	11 22	1 45
T 30	2s35	22s43	1s39	11s39	1s22	22s 4	3s37	22n10	0n56	4n41	1s38	14s23	2n 3	4n 0	0n43	11s22	1n45

Julian Day Number = 2317013.5, Delta T = 56.64 sec
 Ecliptic obliquity = 23°29'20, Nutation = - 0°00'12, out-of-bounds declination in red
 Ayanamsha: Fagan/Bradley = 19°35'58, Lahiri = 18°42'58Greg. Calendar

ASTRODIENST EPHEMERIS for the year 1631

geocentric

OCTOBER 1631 GC

00:00 UT

Day	Sid.t	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
W 1	0 37 39	7 ^h 29'06"	18 ^h 51'	28 ^h 16'	24 ^h 12'	25 ^h 10'	15 ^h R34	15 ^h 13'	21 ^h 40'	4 ^h 28'	23 ^h R33	16 ^h 11'	17 ^h 26'	9 ^h 18'	16 ^h R22	W 1
T 2	0 41 36	8 ^h 28'19"	2 ^h 347'	29 ^h 40'	24 ^h 59'	25 ^h 43'	15 ^h Y26	15 ^h 9'	21 ^h 43'	4 ^h 30'	23 ^h 32'	16 ^h R12	17 ^h 23'	9 ^h 25'	16 ^h Y19	T 2
F 3	0 45 32	9 ^h 27'34"	16 ^h 22'	1 ^h 11'	25 ^h 56'	26 ^h 17'	15 ^h 18'	15 ^h 15'	21 ^h 47'	4 ^h 32'	23 ^h 32'	16 ^h 12'	17 ^h 19'	9 ^h 31'	16 ^h 16'	F 3
S 4	0 49 29	10 ^h 26'51"	29 ^h 38'	2 ^h 23'	26 ^h 52'	26 ^h 50'	15 ^h 10'	15 ^h 22'	21 ^h 51'	4 ^h 34'	23 ^h 31'	16 ^h 10'	17 ^h 16'	9 ^h 38'	16 ^h 13'	S 4
S 5	0 53 26	11 ^h 26'09"	12 ^h 38'	3 ^h 42'	27 ^h 48'	27 ^h 23'	15 ^h 2'	15 ^h 28'	21 ^h 54'	4 ^h 36'	23 ^h 30'	16 ^h 7'	17 ^h 13'	9 ^h 45'	16 ^h 10'	S 5
M 6	0 57 22	12 ^h 25'29"	25 ^h 23'	5 ^h 1'	28 ^h 43'	27 ^h 55'	14 ^h 54'	15 ^h 34'	21 ^h 58'	4 ^h 38'	23 ^h 29'	16 ^h 2'	17 ^h 10'	9 ^h 51'	16 ^h 7'	M 6
T 7	1 1 19	13 ^h 24'51"	7 ^h 54'	6 ^h 18'	29 ^h 38'	28 ^h 28'	14 ^h 45'	15 ^h 41'	22 ^h 1'	4 ^h 40'	23 ^h 29'	15 ^h 57'	17 ^h 7'	9 ^h 58'	16 ^h 5'	T 7
W 8	1 5 15	14 ^h 24'15"	20 ^h 14'	7 ^h 35'	0 ^h 32'	29 ^h 0'	14 ^h 37'	15 ^h 47'	22 ^h 5'	4 ^h 43'	23 ^h 28'	15 ^h 51'	17 ^h 4'	10 ^h 5'	16 ^h 2'	W 8
T 9	1 9 12	15 ^h 23'41"	2 ^h Y24'	8 ^h 49'	1 ^h 26'	29 ^h 33'	14 ^h 29'	15 ^h 53'	22 ^h 9'	4 ^h 45'	23 ^h 27'	15 ^h 46'	17 ^h 0'	10 ^h 11'	15 ^h 59'	T 9
F 10	1 13 8	16 ^h 23'09"	14 ^h 25'	10 ^h 2'	2 ^h 19'	0 ^h 15'	14 ^h 21'	16 ^h 0'	22 ^h 12'	4 ^h 47'	23 ^h 26'	15 ^h 41'	16 ^h 57'	10 ^h 18'	15 ^h 56'	F 10
S 11	1 17 5	17 ^h 22'39"	26 ^h 20'	11 ^h 14'	3 ^h 11'	0 ^h 37'	14 ^h 13'	16 ^h 6'	22 ^h 16'	4 ^h 49'	23 ^h 25'	15 ^h 38'	16 ^h 54'	10 ^h 25'	15 ^h 53'	S 11
S 12	1 21 1	18 ^h 22'11"	8 ^h 9'	12 ^h 23'	4 ^h 3'	1 ^h 9'	14 ^h 5'	16 ^h 13'	22 ^h 19'	4 ^h 51'	23 ^h 24'	15 ^h 37'	16 ^h 51'	10 ^h 31'	15 ^h 50'	S 12
M13	1 24 58	19 ^h 21'45"	19 ^h 56'	13 ^h 31'	4 ^h 54'	1 ^h 40'	13 ^h 57'	16 ^h 20'	22 ^h 23'	4 ^h 53'	23 ^h 23'	15 ^h D36	16 ^h 48'	10 ^h 38'	15 ^h 47'	M13
T 14	1 28 54	20 ^h 21'21"	1 ^h II43'	14 ^h 37'	5 ^h 45'	2 ^h 12'	13 ^h 49'	16 ^h 26'	22 ^h 26'	4 ^h 56'	23 ^h 22'	15 ^h 37'	16 ^h 44'	10 ^h 45'	15 ^h 45'	T 14
W15	1 32 51	21 ^h 21'00"	13 ^h 34'	15 ^h 40'	6 ^h 34'	2 ^h 43'	13 ^h 41'	16 ^h 33'	22 ^h 30'	4 ^h 58'	23 ^h 22'	15 ^h 39'	16 ^h 41'	10 ^h 51'	15 ^h 42'	W15
T 16	1 36 48	22 ^h 20'41"	25 ^h 32'	16 ^h 41'	7 ^h 23'	3 ^h 14'	13 ^h 33'	16 ^h 40'	22 ^h 33'	5 ^h 0'	23 ^h 21'	15 ^h 41'	16 ^h 38'	10 ^h 58'	15 ^h 39'	T 16
F 17	1 40 44	23 ^h 20'24"	7 ^h 342'	17 ^h 39'	8 ^h 11'	3 ^h 45'	13 ^h 25'	16 ^h 46'	22 ^h 36'	5 ^h 2'	23 ^h 20'	15 ^h 42'	16 ^h 35'	11 ^h 4'	15 ^h 36'	F 17
S 18	1 44 41	24 ^h 20'09"	20 ^h 8'	18 ^h 34'	8 ^h 59'	4 ^h 15'	13 ^h 17'	16 ^h 53'	22 ^h 40'	5 ^h 4'	23 ^h 19'	15 ^h R43	16 ^h 32'	11 ^h 11'	15 ^h 33'	S 18
S 19	1 48 37	25 ^h 19'57"	2 ^h 155'	19 ^h 25'	9 ^h 45'	4 ^h 46'	13 ^h 10'	17 ^h 0'	22 ^h 43'	5 ^h 7'	23 ^h 18'	15 ^h 43'	16 ^h 29'	11 ^h 18'	15 ^h 31'	S 19
M20	1 52 34	26 ^h 19'46"	16 ^h 7'	20 ^h 13'	10 ^h 31'	5 ^h 16'	13 ^h 2'	17 ^h 7'	22 ^h 46'	5 ^h 9'	23 ^h 17'	15 ^h 42'	16 ^h 25'	11 ^h 24'	15 ^h 28'	M20
T 21	1 56 30	27 ^h 19'39"	29 ^h 45'	20 ^h 56'	11 ^h 16'	5 ^h 46'	12 ^h 54'	17 ^h 13'	22 ^h 50'	5 ^h 11'	23 ^h 16'	15 ^h 40'	16 ^h 22'	11 ^h 31'	15 ^h 25'	T 21
W22	2 0 27	28 ^h 19'33"	13 ^h 152'	21 ^h 35'	11 ^h 59'	6 ^h 16'	12 ^h 47'	17 ^h 20'	22 ^h 53'	5 ^h 13'	23 ^h 15'	15 ^h 38'	16 ^h 19'	11 ^h 38'	15 ^h 22'	W22
T 23	2 4 23	29 ^h 19'29"	28 ^h 25'	22 ^h 9'	12 ^h 42'	6 ^h 46'	12 ^h 39'	17 ^h 27'	22 ^h 56'	5 ^h 16'	23 ^h 14'	15 ^h 35'	16 ^h 16'	11 ^h 44'	15 ^h 19'	T 23
F 24	2 8 20	0 ^h 19'27"	13 ^h 19'	22 ^h 37'	13 ^h 24'	7 ^h 15'	12 ^h 32'	17 ^h 34'	22 ^h 59'	5 ^h 18'	23 ^h 13'	15 ^h 33'	16 ^h 13'	11 ^h 51'	15 ^h 17'	F 24
S 25	2 12 17	1 ^h 19'28"	28 ^h 27'	22 ^h 59'	14 ^h 5'	7 ^h 44'	12 ^h 25'	17 ^h 41'	23 ^h 3'	5 ^h 20'	23 ^h 12'	15 ^h 32'	16 ^h 10'	11 ^h 58'	15 ^h 14'	S 25
S 26	2 16 13	2 ^h 19'30"	13 ^h 140'	23 ^h 13'	14 ^h 44'	8 ^h 13'	12 ^h 17'	17 ^h 48'	23 ^h 6'	5 ^h 22'	23 ^h 11'	15 ^h D32	16 ^h 6'	12 ^h 4'	15 ^h 11'	S 26
M27	2 20 10	3 ^h 19'35"	28 ^h 47'	23 ^h R21	15 ^h 23'	8 ^h 42'	12 ^h 10'	17 ^h 55'	23 ^h 9'	5 ^h 24'	23 ^h 10'	15 ^h 32'	16 ^h 3'	12 ^h 11'	15 ^h 9'	M27
T 28	2 24 6	4 ^h 19'41"	13 ^h 141'	23 ^h 20'	16 ^h 0'	9 ^h 10'	12 ^h 3'	18 ^h 2'	23 ^h 12'	5 ^h 27'	23 ^h 9'	15 ^h 33'	16 ^h 0'	12 ^h 18'	15 ^h 6'	T 28
W29	2 28 3	5 ^h 19'49"	28 ^h 14'	23 ^h 10'	16 ^h 36'	9 ^h 39'	11 ^h 57'	18 ^h 9'	23 ^h 15'	5 ^h 29'	23 ^h 7'	15 ^h 34'	15 ^h 57'	12 ^h 24'	15 ^h 3'	W29
T 30	2 31 59	6 ^h 19'58"	12 ^h 323'	22 ^h 51'	17 ^h 11'	10 ^h 7'	11 ^h 50'	18 ^h 16'	23 ^h 18'	5 ^h 31'	23 ^h 6'	15 ^h 35'	15 ^h 54'	12 ^h 31'	15 ^h 1'	T 30
F 31	2 35 56	7 ^h 120'09"	26 ^h 3 6'	22 ^h 123'	17 ^h 144'	10 ^h 134'	11 ^h Y43'	18 ^h 123'	23 ^h 121'	5 ^h 133'	23 ^h 5'	15 ^h 35'	15 ^h 50'	12 ^h 37'	14 ^h Y58'	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
W 1	2s59	25s49	2s49	12s16	1s29	22s23	3s41	22n 5	0n58	4n37	1s38	14s25	2n 3	3n59	0n43	11s23	1n45	5n 8	13s59	16n43	17n 4	13n56	7n42	1n22			
T 2	3 22	27 14	3 47	12 52	1 36	22 42	3 46	22 0	0 59	4 34	1 38	14 27	2 3	3 57	0 43	11 24	1 45	5 7	14 0	16 43	17 3	13 59	7 41	1 22			
F 3	3 45	26 58	4 31	13 28	1 43	23 0	3 50	21 55	1 0	4 31	1 38	14 29	2 3	3 56	0 44	11 25	1 45	5 7	14 0	16 43	17 2	14 2	7 40	1 22			
S 4	4 9	25 8	4 59	14 2	1 50	23 18	3 54	21 50	1 1	4 28	1 39	14 31	2 3	3 54	0 44	11 25	1 45	5 7	14 0	16 43	17 1	14 5	7 39	1 22			
S 5	4 32	22 1	5 11	14 36	1 56	23 35	3 58	21 45	1 2	4 25	1 39	14 33	2 2	3 53	0 44	11 26	1 45	5 6	14 0	16 42	17 1	14 8	7 38	1 22			
M 6	4 55	17 55	5 8	15 9	2 3	23 51	4 2	21 39	1 3	4 22	1 38	14 35	2 2	3 52	0 44	11 27	1 45	5 6	14 0	16 40	17 0	14 11	7 37	1 22			
T 7	5 18	13 6	4 49	15 41	2 9	24 7	4 6	21 34	1 5	4 19	1 38	14 37	2 2	3 50	0 44	11 28	1 45	5 6	14 0	16 39	16 59	14 14	7 35	1 22			
W 8	5 41	7 50	4 18	16 11	2 15	24 23	4 10	21 28	1 6	4 16	1 38	14 39	2 2	3 49	0 44	11 28	1 45	5 5	14 1	16 37	16 58	14 16	7 34	1 22			
T 9	6 4	2 20	3 35	16 41	2 21	24 38	4 14	21 23	1 7	4 13	1 38	14 41	2 2	3 47	0 44	11 29	1 45	5 5	14 1	16 35	16 57	14 19	7 33	1 21			
F 10	6 27	3n12	2 43	17 10	2 26	24 52	4 17	21 17	1 8	4 10	1 38	14 43	2 2	3 46	0 44	11 30	1 45	5 5	14 1	16 34	16 56	14 22	7 32	1 21			
S 11	6 50	8 34	1 44	17 38	2 32	25 6	4 21	21 12	1 10	4 6	1 38	14 45	2 2	3 45	0 44	11 30	1 45	5 4	14 1	16 33	16 55	14 25	7 31	1 21			
S 12	7 13	13 37	0 41	18 4	2 37	25 20	4 24	21 6	1 11	4 3	1 38	14 47	2 2	3 43	0 44	11 31	1 45	5 4	14 1	16 33	16 54	14 28	7 30	1 21			
M13	7 36	18 9	0n24	18 29	2 41	25 33	4 28	21 0	1 12	4 0	1 38	14 49	2 1	3 42	0 44	11 32	1 45	5 4	14 1	16 33	16 53	14 31	7 28	1 21			
T 14	7 58	21 59	1 28	18 53	2 46	25 45	4 31	20 54	1 13	3 57	1 38	14 51	2 1	3 41	0 44	11 33	1 45	5 3	14 1	16 33	16 52	14 34	7 27	1 21			
W15	8 21	24 56	2 28	19 16	2 50	25 57	4 34	20 48	1 15	3 54	1 38	14 53	2 1	3 39	0 44	11 33	1 45	5 3	14 2	16 34	16 52	14 37	7 26	1 21			
T 16	8 43	26 47	3 23	19 37	2 53	26 8	4 37	20 42	1 16	3 51	1 38	14 55	2 1	3 38	0 44	11 34	1 45	5 3	14 2	16 34	16 51	14 40	7 25	1 21			
F 17	9 5	27 25	4 9	19 57	2 56	26 19	4 39	20 36	1 17	3 48	1 38	14 57	2 1	3 37	0 44	11 35	1 45	5 2	14 2	16 34	16 50	14 43	7 24	1 21			
S 18	9 27	26 41	4 45	20 15	2 59	26 29	4 42	20 30	1 19	3 45	1 38	14 59	2 1	3 35	0 44	11 36	1 45	5 2	14 2	16 35	16 49	14 46	7 23	1 21			
S 19	9 49	24 33	5 8	20 31	3 0	26 39	4 44	20 24	1 20	3 42	1 38	15 1	2 1	3 34	0 44	11 36	1 45	5 1	14 2	16 35	16 48	14 48	7 21	1 21			
M20	10 11	21 4	5 16	20 45	3 2	26 48	4 47	20 18	1 21	3 40	1 38	15 3	2 1	3 33	0 44	11 37	1 45	5 1	14 2	16 34	16 47	14 51	7 20	1 20			
T 21	10 33	16 22	5 7	20 57	3 2	26 56	4 49	20 12	1 23	3 37	1 37	15 5	2 1	3 31	0 44	11 38	1 45	5 1	14 2	16 34	16 46	14 54	7 19	1 20			
W22	10 54	10 38	4 39	21 7	3 2	27 4	4 50	20 6	1 24	3 34	1 37	15 7	2 1	3 30	0 44	11 39	1 45	5 1	14 2	16 33	16 45	14 57	7 18	1 20			
T 23	11 15	4 11	3 52	21 15	3 1	27 12	4 52	20 0	1 25	3 31	1 37	15 9	2 0	3 29	0 44	11 39	1 45	5 0	14 2	16 33	16 44	15 0	7 17	1 20			
F 24	11 37	2s40	2 49	21 20	2 59	27 19	4 54	19 54	1 27	3 28	1 37	15 11	2 0	3 28	0 44	11 40	1 45	5 0	14 3	16 32	16 43	15 3	7 16	1 20			
S 25	11 58	9 30	1 33	21 23	2 55	27 25	4 55	19 47	1 29	3 26	1 37	15 13	2 0	3 26	0 44	11 41	1 45	5 0	14 3	16 32	16 42	15 6	7 14	1 20			
S 26	12 18	15 49	0 10	21 22	2 51	27 31	4 56	19 41	1 29	3 23	1 37	15 15	2 0	3 25	0 44	11 42	1 45	4 59	14 3	16 31	16 41	15 9	7 13	1 20			
M27	12 39	21 7	1s13	21 19	2 45	27 36	4 57	19 35	1 31	3 20	1 37	15 17	2 0	3 24	0 44	11 42	1 45	4 59	14 3	16 32	16 41	15 12	7 12	1 20			
T 28	12 59	24 58	2 30	21 12	2 38	27 41	4 57	19 29	1 32	3 18	1 36	15 19	2 0	3 23	0 44	11 43	1 45	4 59	14 3	16 32	16 40	15 14	7 11	1 20			
W29	13 20	27 4	3 36	21 1	2 30	27 45	4 57	19 23	1 34	3 15	1 36	15 21	2 0	3 21	0 44	11 44	1 45	4 58	14 3	16 32	16 39	15 17	7 10	1 20			
T 30	13 40	27 20	4 26	20 47	2 20	27 48	4 58	19 17	1 35	3 13	1 36	15 23	2 0	3 20	0 44	11 45	1 45	4 58	14 3	16 32	16 38	15 20	7 9	1 19			
F 31	13s59	25s52	5s 0	20s28	2s 8	27s51	4s57	19n10	1n37	3n10	1s36	15s25	2n 0	3n19	0n44	11s45	1n45	4n58	14s 3	16n32	16n37	15n23	7n 8	1n19			

ASTRODIENST EPHEMERIS for the year 1631
geocentric

NOVEMBER 1631 GC

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
S 1	2 39 52	8♍20'22	9♋24	21°R45	18♌16	11♏ 2	11°R37	18♍30	23♎24	5♍36	23°R 4	15°R35	15♌47	12♌44	14°R55	S 1
S 2	2 43 49	9°20'35	22°20	20♍57	18°46	11°29	11°V31	18°37	23°27	5°38	23♌ 3	15♌35	15°44	12°51	14°V53	S 2
M 3	2 47 46	10°20'51	4♌56	20° 0	19°15	11°56	11°24	18°44	23°30	5°40	23° 2	15°35	15°41	12°57	14°50	M 3
T 4	2 51 42	11°21'08	17°17	18°55	19°42	12°23	11°18	18°51	23°33	5°42	23° 1	15°34	15°38	13° 4	14°48	T 4
W 5	2 55 39	12°21'26	29°25	17°43	20° 7	12°49	11°13	18°59	23°35	5°45	23° 0	15°34	15°35	13°11	14°45	W 5
T 6	2 59 35	13°21'46	11°V24	16°25	20°31	13°15	11° 7	19° 6	23°38	5°47	22°59	15°33	15°31	13°17	14°43	T 6
F 7	3 3 32	14°22'07	23°17	15° 6	20°53	13°41	11° 1	19°13	23°41	5°49	22°58	15°33	15°28	13°24	14°41	F 7
S 8	3 7 28	15°22'30	5♌ 6	13°46	21°13	14° 7	10°56	19°20	23°44	5°51	22°57	15°D33	15°25	13°31	14°38	S 8
S 9	3 11 25	16°22'55	16°54	12°28	21°31	14°32	10°51	19°27	23°46	5°54	22°55	15°R33	15°22	13°37	14°36	S 9
M10	3 15 21	17°23'21	28°42	11°15	21°47	14°57	10°46	19°34	23°49	5°56	22°54	15°33	15°19	13°44	14°34	M10
T 11	3 19 18	18°23'49	10♏34	10°10	22° 1	15°22	10°41	19°41	23°52	5°58	22°53	15°33	15°16	13°51	14°31	T 11
W12	3 23 15	19°24'19	22°30	9°13	22°13	15°46	10°36	19°48	23°54	6° 0	22°52	15°32	15°12	13°57	14°29	W12
T 13	3 27 11	20°24'50	4♌35	8°27	22°23	16°10	10°32	19°56	23°57	6° 2	22°51	15°32	15° 9	14° 4	14°27	T 13
F 14	3 31 8	21°25'23	16°50	7°53	22°30	16°34	10°27	20° 3	23°59	6° 5	22°50	15°31	15° 6	14°11	14°25	F 14
S 15	3 35 4	22°25'58	29°18	7°30	22°35	16°57	10°23	20°10	24° 1	6° 7	22°49	15°30	15° 3	14°17	14°23	S 15
S 16	3 39 1	23°26'34	12♏ 4	7°18	22°38	17°20	10°19	20°17	24° 4	6° 9	22°48	15°30	15° 0	14°24	14°21	S 16
M17	3 42 57	24°27'13	25° 9	7°D18	22°R39	17°43	10°15	20°24	24° 6	6°11	22°46	15°D30	14°56	14°30	14°19	M17
T 18	3 46 54	25°27'53	8♎38	7°29	22°37	18° 5	10°12	20°31	24° 8	6°13	22°45	15°30	14°53	14°37	14°17	T 18
W19	3 50 50	26°28'34	22°31	7°49	22°33	18°27	10° 8	20°38	24°11	6°15	22°44	15°30	14°50	14°44	14°15	W19
T 20	3 54 47	27°29'18	6♌49	8°19	22°26	18°49	10° 5	20°45	24°13	6°18	22°43	15°31	14°47	14°50	14°13	T 20
F 21	3 58 44	28°30'02	21°29	8°57	22°16	19°10	10° 2	20°53	24°15	6°20	22°42	15°32	14°44	14°57	14°11	F 21
S 22	4 2 40	29°30'49	6♍27	9°41	22° 5	19°31	9°59	21° 0	24°17	6°22	22°41	15°33	14°41	15° 4	14° 9	S 22
S 23	4 6 37	0♌31'37	21°36	10°32	21°51	19°51	9°57	21° 7	24°19	6°24	22°40	15°R33	14°37	15°10	14° 7	S 23
M24	4 10 33	1°32'26	6♌47	11°29	21°34	20°11	9°54	21°14	24°21	6°26	22°39	15°32	14°34	15°17	14° 6	M24
T25	4 14 30	2°33'17	21°49	12°31	21°15	20°31	9°52	21°21	24°23	6°28	22°37	15°31	14°31	15°24	14° 4	T25
W26	4 18 26	3°34'08	6♌35	13°37	20°54	20°50	9°50	21°28	24°25	6°30	22°36	15°28	14°28	15°30	14° 2	W26
T27	4 22 23	4°35'01	20°58	14°46	20°31	21° 9	9°48	21°35	24°27	6°32	22°35	15°26	14°25	15°37	14° 1	T27
F 28	4 26 20	5°35'54	4♌53	15°59	20° 5	21°27	9°47	21°42	24°29	6°34	22°34	15°23	14°22	15°44	13°59	F 28
S 29	4 30 16	6°36'49	18°20	17°14	19°38	21°45	9°45	21°49	24°31	6°36	22°33	15°21	14°18	15°50	13°58	S 29
S 30	4 34 13	7♌37'44	1♌20	18♍32	19♌ 9	22♏ 2	9°V44	21♍56	24♎32	6♍38	22♌32	15♌20	14♌15	15♌57	13°V56	S 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
S 1	14s19	23s 0	5s16	20s 5	1s54	27s54	4s57	19n 4	1n38	3n 8	1s36	15s27	2n 0	3n18	0n44	11s46	1n45	4n57	14s 3	16n32	16n36	15n26	7n 7	1n19			
S 2	14 38	19 4	5 15	19 37	1 39	27 56	4 56	18 58	1 40	3 6	1 35	15 29	2 0	3 17	0 44	11 47	1 45	4 57	14 3	16 32	16 35	15 29	7 5	1 19			
M 3	14 57	14 22	5 0	19 6	1 22	27 57	4 55	18 52	1 41	3 4	1 35	15 31	2 0	3 16	0 44	11 48	1 45	4 57	14 3	16 32	16 34	15 32	7 4	1 19			
T 4	15 16	9 11	4 30	18 31	1 4	27 58	4 53	18 46	1 43	3 2	1 35	15 33	2 0	3 15	0 44	11 48	1 45	4 56	14 3	16 32	16 33	15 34	7 3	1 19			
W 5	15 35	3 44	3 49	17 52	0 45	27 58	4 51	18 40	1 44	2 59	1 35	15 35	1 59	3 14	0 44	11 49	1 45	4 56	14 3	16 32	16 32	15 37	7 2	1 19			
T 6	15 53	1n47	2 59	17 11	0 25	27 57	4 49	18 34	1 46	2 57	1 35	15 37	1 59	3 12	0 44	11 50	1 45	4 56	14 3	16 32	16 31	15 40	7 1	1 19			
F 7	16 11	7 12	2 1	16 28	0 4	27 56	4 47	18 28	1 47	2 55	1 34	15 39	1 59	3 11	0 44	11 50	1 45	4 56	14 3	16 32	16 30	15 43	7 0	1 19			
S 8	16 29	12 20	0 58	15 44	0n17	27 55	4 44	18 22	1 49	2 54	1 34	15 41	1 59	3 10	0 44	11 51	1 45	4 55	14 3	16 32	16 30	15 46	6 59	1 18			
S 9	16 46	17 2	0n 7	15 2	0 37	27 53	4 40	18 16	1 51	2 52	1 34	15 43	1 59	3 9	0 44	11 52	1 45	4 55	14 3	16 32	16 29	15 49	6 58	1 18			
M10	17 3	21 5	1 13	14 21	0 56	27 50	4 37	18 10	1 52	2 50	1 34	15 45	1 59	3 8	0 44	11 53	1 45	4 55	14 3	16 32	16 28	15 51	6 57	1 18			
T 11	17 20	24 18	2 15	13 44	1 14	27 47	4 32	18 4	1 54	2 48	1 33	15 47	1 59	3 7	0 44	11 53	1 45	4 55	14 3	16 32	16 27	15 54	6 56	1 18			
W12	17 37	26 28	3 11	13 11	1 30	27 43	4 28	17 59	1 55	2 47	1 33	15 49	1 59	3 6	0 44	11 54	1 45	4 54	14 3	16 32	16 26	15 57	6 55	1 18			
T 13	17 53	27 25	4 0	12 43	1 44	27 38	4 23	17 53	1 57	2 45	1 33	15 51	1 59	3 5	0 44	11 55	1 45	4 54	14 3	16 31	16 25	16 0	6 54	1 18			
F 14	18 9	27 2	4 39	12 20	1 56	27 33	4 17	17 47	1 59	2 44	1 33	15 53	1 59	3 4	0 44	11 55	1 45	4 54	14 3	16 31	16 24	16 3	6 53	1 18			
S 15	18 25	25 18	5 5	12 3	2 6	27 27	4 11	17 42	2 0	2 42	1 32	15 55	1 59	3 4	0 44	11 56	1 45	4 54	14 3	16 31	16 23	16 6	6 52	1 18			
S 16	18 40	22 17	5 17	11 51	2 15	27 21	4 4	17 36	2 2	2 41	1 32	15 56	1 59	3 3	0 45	11 57	1 45	4 53	14 3	16 31	16 22	16 8	6 51	1 17			
M17	18 55	18 4	5 13	11 45	2 21	27 14	3 57	17 31	2 4	2 40	1 32	15 58	1 59	3 2	0 45	11 58	1 45	4 53	14 3	16 31	16 21	16 11	6 50	1 17			
T 18	19 10	12 51	4 52	11 45	2 25	27 6	3 49	17 26	2 6	2 39	1 31	16 0	1 59	3 1	0 45	11 58	1 45	4 53	14 3	16 31	16 20	16 14	6 49	1 17			
W19	19 24	6 52	4 14	11 48	2 28	26 57	3 41	17 21	2 7	2 37	1 31	16 2	1 59	3 0	0 45	11 59	1 45	4 53	14 3	16 31	16 19	16 17	6 49	1 17			
T 20	19 38	0 20	3 19	11 57	2 30	26 48	3 32	17 16	2 9	2 36	1 31	16 4	1 59	2 59	0 45	12 0	1 45	4 52	14 3	16 31	16 18	16 20	6 48	1 17			
F 21	19 52	6s23	2 10	12 8	2 30	26 38	3 23	17 11	2 11	2 36	1 31	16 6	1 59	2 58	0 45	12 0	1 45	4 52	14 3	16 32	16 17	16 22	6 47	1 17			
S 22	20 5	12 55	0 50	12 23	2 29	26 28	3 13	17 6	2 13	2 35	1 30	16 8	1 59	2 58	0 45	12 1	1 45	4 52	14 3	16 32	16 16	16 25	6 46	1 17			
S 23	20 18	18 44	0s33	12 41	2 27	26 16	3 2	17 1	2 15	2 34	1 30	16 10	1 59	2 57	0 45	12 2	1 45	4 52	14 3	16 32	16 16	16 28	6 45	1 16			
M24	20 31	23 22	1 55	13 2	2 24	26 4	2 51	16 56	2 16	2 33	1 30	16 11	1 59	2 56	0 45	12 2	1 45	4 52	14 3	16 32	16 15	16 31	6 44	1 16			
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S 30	21s38	15s45	5s 4	15s34	1n53	24s37	1s34	16n31	2n28	2n31	1s28	16s22	1n59	2n52	0n45	12s 6	1n45	4n51	14s 2	16n28	16n 9	16n48	6n40	1n16			

