



Astrodienst Ephemeris Tables for the year 1628

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 1628

geocentric

JANUARY 1628 GC

00:00 UT

Day	Sid.t	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
S 1	6 40 15	10 ³¹ 1'00	8 ¹¹ 40	26°R48	16 ³ 19	21 ⁸ 41	18 ⁷ 25	10 ¹ 51	5°R42	28 ¹ 59	18°R14	28°R59	29 ⁵ 55	6 ⁷ 52	28 ⁷ 48	S 1
S 2	6 44 11	11°12'11	20°32	26 ³ 45	17°34	21°46	18°38	10°53	5 ¹ 41	29° 0	18 ⁸ 13	28 ⁵ 57	29°52	6°59	28°49	S 2
M 3	6 48 8	12°13'22	2 ⁷ 22	26°31	18°50	21°51	18°51	10°55	5°39	29° 0	18°12	28°54	29°49	7° 5	28°50	M 3
T 4	6 52 5	13°14'33	14°12	26° 4	20° 5	21°57	19° 4	10°57	5°38	29° 1	18°12	28°51	29°46	7°12	28°52	T 4
W 5	6 56 1	14°15'44	26° 6	25°26	21°20	22° 4	19°17	10°59	5°37	29° 2	18°11	28°49	29°43	7°19	28°53	W 5
T 6	6 59 58	15°16'55	8 ³ 5	24°37	22°36	22°11	19°30	11° 0	5°35	29° 3	18°11	28°47	29°40	7°25	28°54	T 6
F 7	7 3 54	16°18'05	20°11	23°39	23°51	22°19	19°43	11° 2	5°34	29° 4	18°10	28°46	29°36	7°32	28°56	F 7
S 8	7 7 51	17°19'15	2 ¹ 26	22°31	25° 7	22°28	19°56	11° 3	5°33	29° 5	18°10	28°D46	29°33	7°39	28°58	S 8
S 9	7 11 47	18°20'25	14°52	21°18	26°22	22°37	20° 9	11° 5	5°31	29° 5	18° 9	28°47	29°30	7°46	28°59	S 9
M10	7 15 44	19°21'33	27°29	20° 1	27°37	22°47	20°22	11° 6	5°30	29° 6	18° 9	28°48	29°27	7°52	29° 1	M10
T 11	7 19 41	20°22'42	10 ¹ 19	18°42	28°53	22°58	20°34	11° 7	5°28	29° 7	18° 8	28°48	29°24	7°59	29° 3	T 11
W12	7 23 37	21°23'49	23°24	17°24	0 ¹ 8	23° 9	20°47	11° 8	5°26	29° 8	18° 8	28°49	29°20	8° 6	29° 4	W12
T 13	7 27 34	22°24'56	6 ¹ 45	16° 9	1°23	23°21	21° 0	11° 9	5°25	29° 8	18° 7	28°50	29°17	8°12	29° 6	T 13
F 14	7 31 30	23°26'01	20°24	15° 0	2°39	23°33	21°12	11° 9	5°23	29° 9	18° 7	28°R50	29°14	8°19	29° 8	F 14
S 15	7 35 27	24°27'06	4 ¹ 21	13°57	3°54	23°46	21°25	11°10	5°21	29° 9	18° 6	28°50	29°11	8°26	29°10	S 15
S 16	7 39 23	25°28'10	18°36	13° 3	5° 9	23°59	21°37	11°10	5°20	29°10	18° 6	28°50	29° 8	8°32	29°12	S 16
M17	7 43 20	26°29'13	3 ¹ 11	12°17	6°25	24°13	21°49	11°11	5°18	29°10	18° 6	28°49	29° 5	8°39	29°14	M17
T 18	7 47 16	27°30'15	17°48	11°40	7°40	24°28	22° 2	11°11	5°16	29°11	18° 5	28°49	29° 1	8°46	29°16	T 18
W19	7 51 13	28°31'16	2 ⁵ 35	11°12	8°55	24°43	22°14	11°11	5°14	29°11	18° 5	28°D49	28°58	8°52	29°18	W19
T 20	7 55 10	29°32'16	17°21	10°54	10°10	24°58	22°26	11°R12	5°12	29°12	18° 5	28°49	28°55	8°59	29°20	T 20
F 21	7 59 6	0 ¹ 33'15	1 ¹ 59	10°44	11°26	25°14	22°38	11°12	5°10	29°12	18° 5	28°R49	28°52	9° 6	29°23	F 21
S 22	8 3 3	1°34'13	16°22	10°D43	12°41	25°31	22°51	11°11	5° 8	29°12	18° 4	28°49	28°49	9°13	29°25	S 22
S 23	8 6 59	2°35'10	0 ¹ 24	10°49	13°56	25°48	23° 3	11°11	5° 6	29°12	18° 4	28°49	28°46	9°19	29°27	S 23
M24	8 10 56	3°36'07	14° 3	11° 3	15°11	26° 5	23°15	11°11	5° 4	29°13	18° 4	28°48	28°42	9°26	29°30	M24
T 25	8 14 52	4°37'02	2 ¹ 18	11°23	16°26	26°23	23°26	11°10	5° 2	29°13	18° 4	28°48	28°39	9°33	29°32	T 25
W26	8 18 49	5°37'57	10 ¹ 9	11°49	17°42	26°41	23°38	11°10	5° 0	29°13	18° 4	28°47	28°36	9°39	29°34	W26
T 27	8 22 45	6°38'51	22°40	12°21	18°57	27° 0	23°50	11° 9	4°58	29°13	18° 4	28°46	28°33	9°46	29°37	T 27
F 28	8 26 42	7°39'45	4 ¹ 53	12°58	20°12	27°19	24° 2	11° 8	4°55	29°13	18° 3	28°D46	28°30	9°53	29°39	F 28
S 29	8 30 39	8°40'37	16°54	13°39	21°27	27°38	24°13	11° 8	4°53	29°13	18° 3	28°46	28°26	9°59	29°42	S 29
S 30	8 34 35	9°41'29	28°46	14°25	22°42	27°58	24°25	11° 7	4°51	29°13	18° 3	28°47	28°23	10° 6	29°45	S 30
M31	8 38 32	10 ¹ 42'19	10 ¹ 36	15°315	23 ¹ 57	28 ⁸ 19	24 ⁷ 36	11 ¹ 6	4 ¹ 48	29°R13	18 ³ 3	28 ⁵ 48	28 ⁵ 20	10 ¹ 13	29 ⁷ 47	M31

Day	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
	decl	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	
S 1	23s 6	9s30	5n11	20s28	0n23	23s26	0s58	20n19	2n11	22s33	0n26	2s 5	2n25	10n10	0n47	S 1
S 2	23 1	13 12	4 53	20 11	0 41	23 19	0 59	20 21	2 11	22 34	0 26	2 5	2 26	10 11	0 47	S 2
M 3	22 55	16 22	4 23	19 55	1 0	23 10	1 1	20 23	2 12	22 36	0 25	2 6	2 26	10 11	0 47	M 3
T 4	22 50	18 52	3 42	19 41	1 19	23 1	1 3	20 25	2 12	22 37	0 25	2 6	2 26	10 12	0 47	T 4
W 5	22 43	20 35	2 51	19 29	1 38	22 51	1 5	20 27	2 12	22 38	0 25	2 6	2 27	10 12	0 47	W 5
T 6	22 37	21 22	1 52	19 20	1 57	22 41	1 6	20 29	2 13	22 39	0 25	2 7	2 27	10 13	0 47	T 6
F 7	22 29	21 11	0 47	19 12	2 15	22 29	1 8	20 31	2 13	22 40	0 25	2 7	2 27	10 13	0 47	F 7
S 8	22 22	19 59	0s20	19 7	2 31	22 17	1 9	20 34	2 13	22 41	0 25	2 7	2 27	10 14	0 48	S 8
S 9	22 14	17 49	1 28	19 3	2 47	22 5	1 11	20 36	2 13	22 42	0 25	2 8	2 28	10 15	0 48	S 9
M10	22 5	14 46	2 33	19 2	3 0	21 52	1 12	20 39	2 13	22 43	0 25	2 8	2 28	10 15	0 48	M10
T 11	21 56	10 58	3 31	19 2	3 10	21 38	1 14	20 42	2 13	22 44	0 25	2 8	2 28	10 16	0 48	T 11
W12	21 47	6 35	4 19	19 4	3 19	21 23	1 15	20 45	2 14	22 45	0 25	2 8	2 29	10 16	0 48	W12
T 13	21 37	1 49	4 54	19 7	3 25	21 8	1 16	20 48	2 14	22 46	0 25	2 8	2 29	10 17	0 48	T 13
F 14	21 27	3n 8	5 14	19 12	3 28	20 52	1 18	20 51	2 14	22 47	0 25	2 8	2 29	10 18	0 48	F 14
S 15	21 16	8 2	5 16	19 17	3 29	20 36	1 19	20 55	2 14	22 48	0 25	2 8	2 29	10 18	0 48	S 15
S 16	21 5	12 36	4 59	19 24	3 28	20 19	1 20	20 58	2 14	22 49	0 25	2 8	2 30	10 19	0 48	S 16
M17	20 54	16 31	4 23	19 31	3 25	20 1	1 21	21 2	2 14	22 49	0 25	2 8	2 30	10 20	0 48	M17
T 18	20 42	19 28	3 29	19 39	3 20	19 43	1 22	21 5	2 14	22 50	0 25	2 8	2 30	10 20	0 48	T 18
W19	20 30	21 7	2 21	19 48	3 13	19 24	1 23	21 9	2 14	22 51	0 25	2 8	2 31	10 21	0 48	W19
T 20	20 17	21 19	1 3	19 57	3 6	19 5	1 24	21 13	2 14	22 52	0 25	2 7	2 31	10 22	0 48	T 20
F 21	20 4	20 3	0n18	20 6	2 57	18 45	1 25	21 16	2 14	22 52	0 24	2 7	2 31	10 23	0 48	F 21
S 22	19 51	17 29	1 36	20 16	2 48	18 24	1 26	21 20	2 14	22 53	0 24	2 7	2 31	10 23	0 48	S 22
S 23	19 37	13 57	2 47	20 25	2 38	18 3	1 26	21 24	2 14	22 54	0 24	2 6	2 32	10 24	0 48	S 23
M24	19 23	9 45	3 46	20 34	2 28	17 42	1 27	21 28	2 13	22 55	0 24	2 6	2 32	10 25	0 48	M24
T 25	19 9	5 13	4 31	20 43	2 18	17 20	1 27	21 33	2 13	22 55	0 24	2 6	2 32	10 26	0 48	T 25
W26	18 54	0 35	5 1	20 51	2 7	16 57	1 28	21 37	2 13	22 56	0 24	2 5	2 33	10 27	0 48	W26
T 27	18 39	3s57	5 16	20 59	1 56	16 34	1 28	21 41	2 13	22 56	0 24	2 5	2 33	10 27	0 48	T 27
F 28	18 23	8 13	5 16	21 7	1 45	16 11	1 29	21 45	2 13	22 57	0 24	2 4	2 33	10 28	0 48	F 28
S 29	18 8	12 5	5 2	21 14	1 34	15 47	1 29	21 50	2 13	22 58	0 24	2 4	2 33	10 29	0 48	S 29
S 30	17 52	15 27	4 35	21 20	1 23	15 23	1 29	21 54	2 13	22 58	0 24	2 3	2 34	10 30	0 48	S 30
M31	17s35	18s10	3n57	21s25	1n12	14s58	1s30	21n58	2n12	22s59	0n24	2s 2	2n34	10n31	0n48	M31

Julian Day Number = 2315674.5, Delta T = 59.58 sec
 Ecliptic obliquity = 23°29'10, Nutation = -0°00'15, out-of-bounds declination in red
 Ayanamsha: Fagan/Bradley = 19°32'54, Lahiri = 18°39'54Greg. Calendar

ASTRODIENST EPHEMERIS for the year 1628
geocentric

FEBRUARY 1628 GC

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
T 1	8 42 28	11 ⁴³ 09	22 ²⁷ 27	16 ³⁸ 8	25 ²⁸ 12	28 ³⁹ 39	24 ²⁷ 48	11 ¹⁰ R 4	4 ¹⁰ R46	29 ¹⁰ R13	18 ¹⁰ D 3	28 ¹⁰ 49	28 ¹⁰ 17	10 ¹⁰ 219	29 ¹⁰ 50	T 1
W 2	8 46 25	12 ⁴³ 58	4 ³⁸ 24	17 ¹⁰ 4	26 ²⁷ 27	29 ¹⁰ 0	24 ²⁵ 59	11 ¹⁰ 3	4 ¹⁰ 44	29 ¹⁰ 13	18 ¹⁰ 3	28 ¹⁰ 50	28 ¹⁰ 14	10 ¹⁰ 26	29 ¹⁰ 53	W 2
T 3	8 50 21	13 ⁴⁴ 45	16 ²⁹ 29	18 ¹⁰ 3	27 ⁴² 27	29 ¹⁰ 21	25 ¹⁰ 10	11 ¹⁰ 2	4 ¹⁰ 41	29 ¹⁰ 13	18 ¹⁰ 3	28 ¹⁰ 51	28 ¹⁰ 11	10 ¹⁰ 33	29 ¹⁰ 55	T 3
F 4	8 54 18	14 ⁴⁵ 32	28 ⁴⁶ 19	19 ¹⁰ 5	28 ⁵⁷ 28	29 ¹⁰ 43	25 ¹⁰ 21	11 ¹⁰ 0	4 ¹⁰ 39	29 ¹⁰ 13	18 ¹⁰ 3	28 ¹⁰ R52	28 ¹⁰ 7	10 ¹⁰ 40	29 ¹⁰ 58	F 4
S 5	8 58 14	15 ⁴⁶ 17	11 ⁴⁶ 16	20 ¹⁰ 10	0 ¹⁰ 12	0 ¹⁰ 11	25 ¹⁰ 32	10 ¹⁰ 59	4 ¹⁰ 37	29 ¹⁰ 13	18 ¹⁰ 3	28 ¹⁰ 51	28 ¹⁰ 4	10 ¹⁰ 46	0 ¹⁰ 1	S 5
S 6	9 2 11	16 ⁴⁷ 01	24 ¹⁰ 1	21 ¹⁰ 17	1 ¹⁰ 27	0 ¹⁰ 28	25 ¹⁰ 43	10 ¹⁰ 57	4 ¹⁰ 34	29 ¹⁰ 13	18 ¹⁰ 4	28 ¹⁰ 50	28 ¹⁰ 1	10 ¹⁰ 53	0 ¹⁰ 4	S 6
M 7	9 6 8	17 ⁴⁷ 43	7 ¹⁰ 0	22 ¹⁰ 26	2 ¹⁰ 42	0 ¹⁰ 50	25 ¹⁰ 54	10 ¹⁰ 55	4 ¹⁰ 32	29 ¹⁰ 13	18 ¹⁰ 4	28 ¹⁰ 48	27 ¹⁰ 58	11 ¹⁰ 0	0 ¹⁰ 7	M 7
T 8	9 10 4	18 ⁴⁸ 24	20 ¹⁰ 14	23 ¹⁰ 36	3 ¹⁰ 57	1 ¹⁰ 13	26 ¹⁰ 5	10 ¹⁰ 53	4 ¹⁰ 29	29 ¹⁰ 12	18 ¹⁰ 4	28 ¹⁰ 45	27 ¹⁰ 55	11 ¹⁰ 6	0 ¹⁰ 10	T 8
W 9	9 14 1	19 ⁴⁹ 03	3 ¹⁰ 40	24 ¹⁰ 49	5 ¹⁰ 12	1 ¹⁰ 37	26 ¹⁰ 15	10 ¹⁰ 51	4 ¹⁰ 27	29 ¹⁰ 12	18 ¹⁰ 4	28 ¹⁰ 42	27 ¹⁰ 52	11 ¹⁰ 13	0 ¹⁰ 13	W 9
T 10	9 17 57	20 ⁴⁹ 41	17 ¹⁰ 19	26 ¹⁰ 4	6 ¹⁰ 27	2 ¹⁰ 0	26 ¹⁰ 26	10 ¹⁰ 49	4 ¹⁰ 24	29 ¹⁰ 12	18 ¹⁰ 4	28 ¹⁰ 39	27 ¹⁰ 48	11 ¹⁰ 20	0 ¹⁰ 16	T 10
F 11	9 21 54	21 ⁵⁰ 16	1 ¹⁰ 8	27 ¹⁰ 20	7 ¹⁰ 42	2 ¹⁰ 24	26 ¹⁰ 36	10 ¹⁰ 47	4 ¹⁰ 22	29 ¹⁰ 11	18 ¹⁰ 4	28 ¹⁰ 36	27 ¹⁰ 45	11 ¹⁰ 26	0 ¹⁰ 19	F 11
S 12	9 25 50	22 ⁵⁰ 50	15 ¹⁰ 7	28 ¹⁰ 37	8 ¹⁰ 57	2 ¹⁰ 48	26 ¹⁰ 47	10 ¹⁰ 45	4 ¹⁰ 19	29 ¹⁰ 11	18 ¹⁰ 5	28 ¹⁰ 35	27 ¹⁰ 42	11 ¹⁰ 33	0 ¹⁰ 22	S 12
S 13	9 29 47	23 ⁵¹ 23	29 ¹⁰ 14	29 ¹⁰ 56	10 ¹⁰ 12	3 ¹⁰ 13	26 ¹⁰ 57	10 ¹⁰ 42	4 ¹⁰ 17	29 ¹⁰ 10	18 ¹⁰ 5	28 ¹⁰ D35	27 ¹⁰ 39	11 ¹⁰ 40	0 ¹⁰ 25	S 13
M14	9 33 43	24 ⁵¹ 53	13 ¹⁰ 26	1 ¹⁰ 17	11 ¹⁰ 26	3 ¹⁰ 37	27 ¹⁰ 7	10 ¹⁰ 40	4 ¹⁰ 14	29 ¹⁰ 10	18 ¹⁰ 5	28 ¹⁰ 36	27 ¹⁰ 36	11 ¹⁰ 46	0 ¹⁰ 28	M14
T 15	9 37 40	25 ⁵² 21	27 ¹⁰ 43	2 ¹⁰ 38	12 ¹⁰ 41	4 ¹⁰ 2	27 ¹⁰ 17	10 ¹⁰ 37	4 ¹⁰ 11	29 ¹⁰ 9	18 ¹⁰ 5	28 ¹⁰ 37	27 ¹⁰ 32	11 ¹⁰ 53	0 ¹⁰ 31	T 15
W16	9 41 37	26 ⁵² 48	12 ¹⁰ 2	4 ¹⁰ 1	13 ¹⁰ 56	4 ¹⁰ 28	27 ¹⁰ 27	10 ¹⁰ 35	4 ¹⁰ 9	29 ¹⁰ 9	18 ¹⁰ 6	28 ¹⁰ 39	27 ¹⁰ 29	12 ¹⁰ 0	0 ¹⁰ 34	W16
T 17	9 45 33	27 ⁵³ 13	26 ¹⁰ 19	5 ¹⁰ 25	15 ¹⁰ 11	4 ¹⁰ 53	27 ¹⁰ 37	10 ¹⁰ 32	4 ¹⁰ 6	29 ¹⁰ 8	18 ¹⁰ 6	28 ¹⁰ R39	27 ¹⁰ 26	12 ¹⁰ 6	0 ¹⁰ 37	T 17
F 18	9 49 30	28 ⁵³ 36	10 ¹⁰ 21	6 ¹⁰ 51	16 ¹⁰ 25	5 ¹⁰ 19	27 ¹⁰ 46	10 ¹⁰ 29	4 ¹⁰ 4	29 ¹⁰ 8	18 ¹⁰ 6	28 ¹⁰ 39	27 ¹⁰ 23	12 ¹⁰ 13	0 ¹⁰ 41	F 18
S 19	9 53 26	29 ⁵³ 57	24 ¹⁰ 33	8 ¹⁰ 17	17 ¹⁰ 40	5 ¹⁰ 45	27 ¹⁰ 56	10 ¹⁰ 26	4 ¹⁰ 1	29 ¹⁰ 7	18 ¹⁰ 7	28 ¹⁰ 37	27 ¹⁰ 20	12 ¹⁰ 20	0 ¹⁰ 44	S 19
S 20	9 57 23	0 ¹⁰ 54 ¹⁶	8 ¹⁰ 21	9 ¹⁰ 45	18 ¹⁰ 55	6 ¹⁰ 11	28 ¹⁰ 6	10 ¹⁰ 23	3 ¹⁰ 58	29 ¹⁰ 6	18 ¹⁰ 7	28 ¹⁰ 33	27 ¹⁰ 17	12 ¹⁰ 26	0 ¹⁰ 47	S 20
M21	10 1 19	1 ¹⁰ 54 ³³	21 ¹⁰ 51	11 ¹⁰ 14	20 ¹⁰ 9	6 ¹⁰ 37	28 ¹⁰ 15	10 ¹⁰ 20	3 ¹⁰ 56	29 ¹⁰ 6	18 ¹⁰ 8	28 ¹⁰ 28	27 ¹⁰ 13	12 ¹⁰ 33	0 ¹⁰ 50	M21
T 22	10 5 16	2 ¹⁰ 54 ⁴⁹	5 ¹⁰ 3	12 ¹⁰ 44	21 ¹⁰ 24	7 ¹⁰ 4	28 ¹⁰ 24	10 ¹⁰ 17	3 ¹⁰ 53	29 ¹⁰ 5	18 ¹⁰ 8	28 ¹⁰ 22	27 ¹⁰ 10	12 ¹⁰ 40	0 ¹⁰ 54	T 22
W23	10 9 12	3 ¹⁰ 55 ⁰⁴	17 ¹⁰ 54	14 ¹⁰ 15	22 ¹⁰ 38	7 ¹⁰ 31	28 ¹⁰ 33	10 ¹⁰ 14	3 ¹⁰ 50	29 ¹⁰ 4	18 ¹⁰ 8	28 ¹⁰ 16	27 ¹⁰ 7	12 ¹⁰ 47	0 ¹⁰ 57	W23
T 24	10 13 9	4 ¹⁰ 55 ¹⁶	0 ¹⁰ 12 ⁴⁷	15 ¹⁰ 47	23 ¹⁰ 53	7 ¹⁰ 58	28 ¹⁰ 42	10 ¹⁰ 11	3 ¹⁰ 48	29 ¹⁰ 4	18 ¹⁰ 9	28 ¹⁰ 11	27 ¹⁰ 4	12 ¹⁰ 53	1 ¹⁰ 0	T 24
F 25	10 17 5	5 ¹⁰ 55 ²⁷	12 ¹⁰ 42	17 ¹⁰ 20	25 ¹⁰ 7	8 ¹⁰ 25	28 ¹⁰ 51	10 ¹⁰ 7	3 ¹⁰ 45	29 ¹⁰ 3	18 ¹⁰ 9	28 ¹⁰ 7	27 ¹⁰ 1	13 ¹⁰ 0	1 ¹⁰ 4	F 25
S 26	10 21 2	6 ¹⁰ 55 ³⁷	24 ¹⁰ 45	18 ¹⁰ 55	26 ¹⁰ 22	8 ¹⁰ 53	29 ¹⁰ 0	10 ¹⁰ 4	3 ¹⁰ 43	29 ¹⁰ 2	18 ¹⁰ 10	28 ¹⁰ 4	26 ¹⁰ 57	13 ¹⁰ 7	1 ¹⁰ 7	S 26
S 27	10 24 59	7 ¹⁰ 55 ⁴⁵	6 ¹⁰ 21 ³⁹	20 ¹⁰ 30	27 ¹⁰ 36	9 ¹⁰ 20	29 ¹⁰ 9	10 ¹⁰ 0	3 ¹⁰ 40	29 ¹⁰ 1	18 ¹⁰ 10	28 ¹⁰ D 3	26 ¹⁰ 54	13 ¹⁰ 13	1 ¹⁰ 11	S 27
M28	10 28 55	8 ¹⁰ 55 ⁵²	18 ¹⁰ 29	22 ¹⁰ 6	28 ¹⁰ 51	9 ¹⁰ 48	29 ¹⁰ 17	9 ¹⁰ 57	3 ¹⁰ 37	29 ¹⁰ 0	18 ¹⁰ 11	28 ¹⁰ 4	26 ¹⁰ 51	13 ¹⁰ 20	1 ¹⁰ 14	M28
T 29	10 32 52	9 ¹⁰ 55 ⁵⁶	0 ¹⁰ 20	23 ¹⁰ 44	0 ¹⁰ 1	10 ¹⁰ 11 ⁶	29 ¹⁰ 26	9 ¹⁰ 53	3 ¹⁰ 35	28 ¹⁰ 59	18 ¹⁰ 12	28 ¹⁰ 5	26 ¹⁰ 48	13 ¹⁰ 27	1 ¹⁰ 17	T 29

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	17s18	20s 8	3n 8	21s29	1n 2	14s33	1s30	22n 3	2n12	22s59	0n24	2s 2	2n34	10n32	0n48	9s33	1n47	3n23	14s24	20n26	20n33	18s15	2n29	2n47			
W 2	17 1	21 13	2 11	21 33	0 51	14 8	1 30	22 7	2 12	23 0	0 24	2 1	2 34	10 33	0 48	9 33	1 47	3 23	14 24	20 26	20 33	18 17	2 30	2 47			
T 3	16 44	21 21	1 8	21 35	0 41	13 42	1 30	22 12	2 12	23 0	0 24	2 0	2 35	10 33	0 48	9 33	1 47	3 23	14 24	20 26	20 34	18 18	2 31	2 46			
F 4	16 26	20 26	0 1	21 37	0 31	13 16	1 30	22 16	2 11	23 1	0 24	1 59	2 35	10 34	0 48	9 33	1 47	3 24	14 23	20 26	20 35	18 20	2 32	2 46			
S 5	16 8	18 31	1s 8	21 37	0 21	12 49	1 30	22 21	2 11	23 1	0 24	1 58	2 35	10 35	0 48	9 32	1 48	3 24	14 23	20 26	20 35	18 21	2 33	2 46			
S 6	15 50	15 39	2 15	21 37	0 11	12 22	1 29	22 25	2 11	23 1	0 24	1 57	2 36	10 36	0 48	9 32	1 48	3 24	14 23	20 26	20 36	18 23	2 34	2 46			
M 7	15 32	11 59	3 15	21 35	0 2	11 55	1 29	22 30	2 11	23 2	0 24	1 56	2 36	10 37	0 48	9 32	1 48	3 25	14 22	20 27	20 37	18 24	2 35	2 46			
T 8	15 13	7 39	4 7	21 32	0s 7	11 27	1 29	22 34	2 10	23 2	0 24	1 55	2 36	10 38	0 48	9 32	1 48	3 25	14 22	20 27	20 37	18 26	2 36	2 45			
W 9	14 54	2 54	4 45	21 28	0 16	10 59	1 28	22 39	2 10	23 2	0 24	1 54	2 36	10 39	0 48	9 32	1 48	3 25	14 22	20 28	20 38	18 27	2 37	2 45			
T 10	14 35	2n 4	5 9	21 23	0 24	10 31	1 28	22 43	2 10	23 3	0 23	1 53	2 37	10 40	0 48	9 32	1 48	3 26	14 21	20 28	20 38	18 29	2 38	2 45			
F 11	14 15	6 59	5 14	21 16	0 33	10 3	1 27	22 48	2 10	23 3	0 23	1 52	2 37	10 41	0 48	9 31	1 48	3 26	14 21	20 29	20 39	18 30	2 39	2 45			
S 12	13 56	11 35	5 2	21 8	0 41	9 34	1 27	22 52	2 9	23 3	0 23	1 51	2 37	10 42	0 48	9 31	1 48	3 26	14 21	20 29	20 40	18 32	2 40	2 45			
S 13	13 36	15 37	4 31	20 59	0 48	9 5	1 26	22 57	2 9	23 4	0 23	1 50	2 37	10 43	0 48	9 31	1 48	3 27	14 20	20 29	20 40	18 33	2 41	2 45			
M14	13 16	18 46	3 43	20 49	0 56	8 36	1 25	23 1	2 9	23 4	0 23	1 49	2 38	10 44	0 48	9 31	1 48	3 27	14 20	20 29	20 41	18 35	2 42	2 45			
T 15	12 55	20 46	2 42	20 38	1 3	8 7	1 25	23 6	2 8	23 4	0 23	1 48	2 38	10 45	0 48	9 31	1 48	3 28	14 20	20 29	20 42	18 36	2 43	2 44			
W16	12 35	21 27	1 30	20 25	1 10	7 37	1 24	23 10	2 8	23 4	0 23	1 46	2 38	10 46	0 48	9 30	1 48	3 28	14 20	20 28	20 42	18 38	2 44	2 44			
T 17	12 14	20 43	0 13	20 11	1 16	7 7	1 23	23 15	2 8	23 5	0 23	1 45	2 38	10 47	0 48	9 30	1 48	3 28	14 19	20 28	20 43	18 39	2 45	2 44			
F 18	11 53	18 40	1n 5	19 55	1 22	6 37	1 22	23 19	2 7	23 5	0 23	1 44	2 38	10 47	0 48	9 30	1 48	3 29	14 19	20 28	20 43	18 41	2 46	2 44			
S 19	11 32	15 31	2 17	19 39	1 28	6 7	1 21	23 24	2 7	23 5	0 23	1 42	2 39	10 48	0 48	9 30	1 48	3 29	14 19	20 29	20 44	18 42	2 48	2 44			
S 20	11 10	11 33	3 20	19 20	1 33	5 37	1 19	23 28	2 7	23 5	0 23	1 41	2 39	10 49	0 48	9 29	1 48	3 30	14 18	20 29	20 45	18 44	2 49	2 44			
M21	10 49	7 4	4 10	19 1	1 38	5 6	1 18	23 32	2 6	23 5	0 23	1 40	2 39	10 50	0 48	9 29	1 48	3 30	14 18	20 30	20 45	18 45	2 50	2 44			
T 22	10 27	2 22	4 46	18 40	1 43	4 36	1 17	23 36	2 6	23 6	0 23	1 38	2 39	10 51	0 48	9 29	1 49	3 30	14 18	20 32	20 46	18 47	2 51	2 43			
W23	10 5	2s19	5 6	18 18	1 48	4 5	1 16	23 40	2 6	23 6	0 23	1 37	2 40	10 52	0 48	9 28	1 49	3 31	14 17	20 33	20 47	18 48	2 52	2 43			
T 24	9 44	6 48	5 11	17 55	1 52	3 34	1 14	23 45	2 5	23 6	0 23	1 35	2 40	10 53	0 48	9 28	1 49	3 31	14 17	20 34	20 47	18 50	2 54	2 43			
F 25	9 21	10 54	5 1	17 30	1 55	3 3	1 13	23 49	2 5	23 6	0 23	1 34	2 40	10 54	0 48	9 28	1 49	3 32	14 17	20 35	20 48	18 51	2 55	2 43			
S 26	8 59	14 29	4 38	17 4	1 59	2 32	1 11	23 53	2 5	23 6	0 23	1 32	2 40	10 55	0 48	9 27	1 49	3 32	14 16	20 35	20 48	18 52	2 56	2 43			
S 27	8 37	17 28	4 4	16 36	2 2	2 1	1 10	23 57	2 4	23 6	0 23	1 31	2 40	10 56	0 48	9 27	1 49	3 33	14 16	20 36	20 49	18 54	2 57	2 43			
M28	8 14	19 41	3 19	16 8	2 4	1 30	1 8	24 0	2 4	23 6	0 23	1 29	2 41	10 57	0 48	9 27	1 49	3 33	14 16	20 35	20 50	18 55	2 59	2 43			
T 29	7s52	21s 4	2n25	15s37	2s 6	0s59	1s 6	24n 4	2n 4	23s 6	0n23	1s28	2n41	10n58	0n48	9s26	1n49	3n33	14s15	20n35	20n50	18s57	3n 0	2n42			

ASTRODIENST EPHEMERIS for the year 1628
geocentric

MARCH 1628 GC

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
W 1	10 36 48	10 ^h 56'00	12 ^h 31'18	25 ^h 22'22	1 ^h 19'19	10 ^h 44'44	29 ^h 34'34	9 ^h 49'49	3 ^h 32'32	28 ^h 58'58	18 ^h 12'12	28 ^h 06'06	26 ^h 45'45	13 ^h 33'33	1 ^h 21'21	W 1
T 2	10 40 45	11 ^h 56'01	24 ^h 27'27	27 ^h 02'02	2 ^h 34'34	11 ^h 13'13	29 ^h 42'42	9 ^h 45'45	3 ^h 30'30	28 ^h 57'57	18 ^h 13'13	28 ^h 08'08	26 ^h 42'42	13 ^h 40'40	1 ^h 24'24	T 2
F 3	10 44 41	12 ^h 56'01	6 ^h 55'51	28 ^h 43'43	3 ^h 48'48	11 ^h 41'41	29 ^h 50'50	9 ^h 42'42	3 ^h 27'27	28 ^h 56'56	18 ^h 13'13	28 ^h 07'07	26 ^h 38'38	13 ^h 47'47	1 ^h 28'28	F 3
S 4	10 48 38	13 ^h 55'59	19 ^h 34'34	0 ^h 25'25	5 ^h 02'02	12 ^h 10'10	29 ^h 58'58	9 ^h 38'38	3 ^h 24'24	28 ^h 55'55	18 ^h 14'14	28 ^h 05'05	26 ^h 35'35	13 ^h 53'53	1 ^h 31'31	S 4
S 5	10 52 34	14 ^h 55'56	2 ^h 36'36	2 ^h 08'08	6 ^h 16'16	12 ^h 39'39	0 ^h 36'36	9 ^h 34'34	3 ^h 22'22	28 ^h 54'54	18 ^h 15'15	28 ^h 00'00	26 ^h 32'32	14 ^h 00'00	1 ^h 35'35	S 5
M 6	10 56 31	15 ^h 55'50	15 ^h 57'57	3 ^h 52'52	7 ^h 30'30	13 ^h 08'08	0 ^h 13'13	9 ^h 30'30	3 ^h 19'19	28 ^h 53'53	18 ^h 16'16	27 ^h 54'54	26 ^h 29'29	14 ^h 07'07	1 ^h 39'39	M 6
T 7	11 0 28	16 ^h 55'42	29 ^h 37'37	5 ^h 38'38	8 ^h 45'45	13 ^h 37'37	0 ^h 21'21	9 ^h 26'26	3 ^h 17'17	28 ^h 52'52	18 ^h 16'16	27 ^h 46'46	26 ^h 26'26	14 ^h 13'13	1 ^h 42'42	T 7
W 8	11 4 24	17 ^h 55'32	13 ^h 32'32	7 ^h 24'24	9 ^h 59'59	14 ^h 06'06	0 ^h 28'28	9 ^h 21'21	3 ^h 14'14	28 ^h 51'51	18 ^h 17'17	27 ^h 37'37	26 ^h 23'23	14 ^h 20'20	1 ^h 46'46	W 8
T 9	11 8 21	18 ^h 55'21	27 ^h 37'37	9 ^h 12'12	11 ^h 13'13	14 ^h 36'36	0 ^h 35'35	9 ^h 17'17	3 ^h 12'12	28 ^h 50'50	18 ^h 18'18	27 ^h 29'29	26 ^h 19'19	14 ^h 27'27	1 ^h 49'49	T 9
F 10	11 12 17	19 ^h 55'07	11 ^h 18'49	11 ^h 01'01	12 ^h 27'27	15 ^h 06'06	0 ^h 43'43	9 ^h 13'13	3 ^h 09'09	28 ^h 49'49	18 ^h 18'18	27 ^h 22'22	26 ^h 16'16	14 ^h 33'33	1 ^h 53'53	F 10
S 11	11 16 14	20 ^h 54'50	26 ^h 03'03	12 ^h 51'51	13 ^h 41'41	15 ^h 35'35	0 ^h 49'49	9 ^h 09'09	3 ^h 07'07	28 ^h 48'48	18 ^h 19'19	27 ^h 18'18	26 ^h 13'13	14 ^h 40'40	1 ^h 57'57	S 11
S 12	11 20 10	21 ^h 54'32	10 ^h 11'15	14 ^h 43'43	14 ^h 55'55	16 ^h 05'05	0 ^h 56'56	9 ^h 04'04	3 ^h 04'04	28 ^h 46'46	18 ^h 20'20	27 ^h 15'15	26 ^h 10'10	14 ^h 47'47	2 ^h 00'00	S 12
M13	11 24 7	22 ^h 54'11	24 ^h 24'24	16 ^h 35'35	16 ^h 08'08	16 ^h 36'36	1 ^h 03'03	9 ^h 00'00	3 ^h 02'02	28 ^h 45'45	18 ^h 21'21	27 ^h 01'01	26 ^h 07'07	14 ^h 53'53	2 ^h 04'04	M13
T 14	11 28 3	23 ^h 53'48	8 ^h 28'28	18 ^h 29'29	17 ^h 22'22	17 ^h 06'06	1 ^h 09'09	8 ^h 56'56	2 ^h 59'59	28 ^h 44'44	18 ^h 22'22	27 ^h 15'15	26 ^h 03'03	15 ^h 00'00	2 ^h 07'07	T 14
W15	11 32 0	24 ^h 53'23	22 ^h 26'26	20 ^h 24'24	18 ^h 36'36	17 ^h 36'36	1 ^h 16'16	8 ^h 51'51	2 ^h 57'57	28 ^h 43'43	18 ^h 23'23	27 ^h 01'01	26 ^h 00'00	15 ^h 07'07	2 ^h 11'11	W15
T 16	11 35 57	25 ^h 52'55	6 ^h 18'18	22 ^h 20'20	19 ^h 50'50	18 ^h 07'07	1 ^h 22'22	8 ^h 47'47	2 ^h 55'55	28 ^h 41'41	18 ^h 23'23	27 ^h 15'15	25 ^h 57'57	15 ^h 13'13	2 ^h 15'15	T 16
F 17	11 39 53	26 ^h 52'25	20 ^h 02'02	24 ^h 17'17	21 ^h 04'04	18 ^h 37'37	1 ^h 28'28	8 ^h 42'42	2 ^h 52'52	28 ^h 40'40	18 ^h 24'24	27 ^h 13'13	25 ^h 54'54	15 ^h 20'20	2 ^h 18'18	F 17
S 18	11 43 50	27 ^h 51'53	3 ^h 17'37	26 ^h 16'16	22 ^h 17'17	19 ^h 08'08	1 ^h 34'34	8 ^h 38'38	2 ^h 50'50	28 ^h 39'39	18 ^h 25'25	27 ^h 08'08	25 ^h 51'51	15 ^h 27'27	2 ^h 22'22	S 18
S 19	11 47 46	28 ^h 51'18	17 ^h 02'02	28 ^h 15'15	23 ^h 31'31	19 ^h 39'39	1 ^h 39'39	8 ^h 33'33	2 ^h 48'48	28 ^h 37'37	18 ^h 26'26	27 ^h 01'01	25 ^h 48'48	15 ^h 34'34	2 ^h 26'26	S 19
M20	11 51 43	29 ^h 50'41	0 ^h 12'12	0 ^h 15'15	24 ^h 44'44	20 ^h 10'10	1 ^h 45'45	8 ^h 29'29	2 ^h 46'46	28 ^h 36'36	18 ^h 27'27	26 ^h 51'51	25 ^h 44'44	15 ^h 40'40	2 ^h 29'29	M20
T 21	11 55 39	0 ^h 50'03	13 ^h 12'12	2 ^h 16'16	25 ^h 58'58	20 ^h 41'41	1 ^h 50'50	8 ^h 24'24	2 ^h 43'43	28 ^h 35'35	18 ^h 28'28	26 ^h 40'40	25 ^h 41'41	15 ^h 47'47	2 ^h 33'33	T 21
W22	11 59 36	1 ^h 49'22	25 ^h 54'54	4 ^h 18'18	27 ^h 11'11	21 ^h 12'12	1 ^h 55'55	8 ^h 20'20	2 ^h 41'41	28 ^h 33'33	18 ^h 29'29	26 ^h 28'28	25 ^h 38'38	15 ^h 54'54	2 ^h 37'37	W22
T 23	12 3 32	2 ^h 48'39	8 ^h 11'21	6 ^h 21'21	28 ^h 25'25	21 ^h 43'43	2 ^h 00'00	8 ^h 15'15	2 ^h 39'39	28 ^h 32'32	18 ^h 30'30	26 ^h 17'17	25 ^h 35'35	16 ^h 00'00	2 ^h 40'40	T 23
F 24	12 7 29	3 ^h 47'55	20 ^h 35'35	8 ^h 24'24	29 ^h 38'38	22 ^h 15'15	2 ^h 05'05	8 ^h 10'10	2 ^h 37'37	28 ^h 30'30	18 ^h 31'31	26 ^h 08'08	25 ^h 32'32	16 ^h 07'07	2 ^h 44'44	F 24
S 25	12 11 25	4 ^h 47'08	2 ^h 36'36	10 ^h 27'27	0 ^h 52'52	22 ^h 46'46	2 ^h 10'10	8 ^h 06'06	2 ^h 35'35	28 ^h 29'29	18 ^h 32'32	26 ^h 01'01	25 ^h 29'29	16 ^h 14'14	2 ^h 48'48	S 25
S 26	12 15 22	5 ^h 46'20	14 ^h 29'29	12 ^h 30'30	2 ^h 05'05	23 ^h 18'18	2 ^h 14'14	8 ^h 01'01	2 ^h 33'33	28 ^h 27'27	18 ^h 33'33	25 ^h 56'56	25 ^h 25'25	16 ^h 20'20	2 ^h 51'51	S 26
M27	12 19 19	6 ^h 45'30	26 ^h 19'19	14 ^h 33'33	3 ^h 18'18	23 ^h 50'50	2 ^h 19'19	7 ^h 56'56	2 ^h 31'31	28 ^h 26'26	18 ^h 34'34	25 ^h 54'54	25 ^h 22'22	16 ^h 27'27	2 ^h 55'55	M27
T 28	12 23 15	7 ^h 44'39	8 ^h 39'39	16 ^h 35'35	4 ^h 31'31	24 ^h 21'21	2 ^h 23'23	7 ^h 52'52	2 ^h 29'29	28 ^h 24'24	18 ^h 35'35	25 ^h 01'01	25 ^h 19'19	16 ^h 34'34	2 ^h 59'59	T 28
W29	12 27 12	8 ^h 43'45	20 ^h 07'07	18 ^h 36'36	5 ^h 45'45	24 ^h 53'53	2 ^h 27'27	7 ^h 47'47	2 ^h 27'27	28 ^h 23'23	18 ^h 36'36	25 ^h 05'05	25 ^h 16'16	16 ^h 40'40	3 ^h 02'02	W29
T 30	12 31 8	9 ^h 42'50	2 ^h 16'16	20 ^h 36'36	6 ^h 58'58	25 ^h 25'25	2 ^h 31'31	7 ^h 42'42	2 ^h 25'25	28 ^h 21'21	18 ^h 37'37	25 ^h 54'54	25 ^h 13'13	16 ^h 47'47	3 ^h 06'06	T 30
F 31	12 35 5	10 ^h 41'53	14 ^h 42'42	22 ^h 35'35	8 ^h 11'11	25 ^h 57'57	2 ^h 35'35	7 ^h 43'43	2 ^h 23'23	28 ^h 20'20	18 ^h 38'38	25 ^h 52'52	25 ^h 09'09	16 ^h 54'54	3 ^h 10'10	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
W 1	7s29	21s30	1n25	15s 6	2s 8	0s28	1s 5	24n 8	2n 3	23s 6	0n23	1s26	2n41	10n59	0n48	9s26	1n49	3n34	14s15	20n35	20n51	18s58	3n 1	2n42					
T 2	7 6	20 57	0 20	14 33	2 10	0n 3	1 3	24 12	2 3	23 7	0 23	1 24	2 41	11 0	0 48	9 26	1 49	3 34	14 15	20 35	20 52	19 0	3 2	2 42					
F 3	6 43	19 21	0s47	13 59	2 11	0 35	1 1	24 15	2 3	23 7	0 23	1 23	2 41	11 1	0 48	9 25	1 49	3 35	14 15	20 35	20 52	19 1	3 4	2 42					
S 4	6 20	16 46	1 53	13 23	2 11	1 6	0 59	24 19	2 2	23 7	0 23	1 21	2 41	11 2	0 48	9 25	1 49	3 35	14 14	20 35	20 53	19 3	3 5	2 42					
S 5	5 57	13 18	2 55	12 46	2 11	1 37	0 57	24 22	2 2	23 7	0 23	1 19	2 42	11 3	0 48	9 24	1 49	3 36	14 14	20 36	20 53	19 4	3 6	2 42					
M 6	5 34	9 4	3 49	12 8	2 11	2 8	0 55	24 26	2 1	23 7	0 22	1 18	2 42	11 4	0 48	9 24	1 49	3 36	14 14	20 37	20 54	19 5	3 8	2 42					
T 7	5 10	4 17	4 31	11 29	2 10	2 40	0 53	24 29	2 1	23 7	0 22	1 16	2 42	11 5	0 48	9 23	1 49	3 37	14 13	20 39	20 55	19 7	3 9	2 42					
W 8	4 47	0n47	4 57	10 48	2 9	3 11	0 51	24 32	2 1	23 7	0 22	1 14	2 42	11 5	0 48	9 23	1 49	3 37	14 13	20 41	20 55	19 8	3 10	2 42					
T 9	4 24	5 53	5 7	10 6	2 7	3 42	0 49	24 35	2 0	23 7	0 22	1 12	2 42	11 6	0 48	9 23	1 49	3 38	14 13	20 42	20 56	19 10	3 12	2 41					
F 10	4 0	10 42	4 57	9 22	2 5	4 13	0 47	24 38	2 0	23 7	0 22	1 10	2 42	11 7	0 48	9 22	1 49	3 38	14 13	20 44	20 56	19 11	3 13	2 41					
S 11	3 37	14 57	4 29	8 37	2 2	4 44	0 44	24 41	2 0	23 7	0 22	1 9	2 42	11 8	0 48	9 22	1 49	3 38	14 12	20 45	20 57	19 12	3 14	2 41					
S 12	3 13	18 19	3 45	7 51	1 58	5 14	0 42	24 44	1 59	23 7	0 22	1 7	2 42	11 9	0 48	9 21	1 49	3 39	14 12	20 45	20 58	19 14	3 16	2 41					
M13	2 49	20 35	2 47	7 4	1 55	5 45	0 40	24 47	1 59	23 7	0 22	1 5	2 43	11 10	0 48	9 21	1 50	3 39	14 12	20 45	20 58	19 15	3 17	2 41					
T 14	2 26	21 34	1 39	6 15	1 50	6 16	0 37	24 49	1 58	23 7	0 22	1 3	2 43	11 11	0 48	9 20	1 50	3 40	14 11	20 45	20 59	19 17	3 18	2 41					
W15	2 2	2 21	11 0	26 5	26 1	46 6	0 35	24 52	1 58	23 7	0 22	1 1	2 43	11 12	0 48	9 20	1 50	3 40	14 11	20 45	20 59	19 18	3 20	2 41					
T 16	1 38	19 31	0n48	4 35	1 40	7 16	0 32	24 54	1 58	23 7	0 22	1 0	2 43	11 12	0 48	9 19	1 50	3 41	14 11	20 45	21 0	19 19	3 21	2 41					
F 17	1 15	16 42	1 59	3 43	1 34	7 46	0 30	24 57	1 57	23 7	0 22	0 58	2 43	11 13	0 48	9 19	1 50	3 41	14 11	20 45	21 1	19 21	3 23	2 41					
S 18	0 51	13 1	3 1	2 50	1 28	8 16	0 27	24 59	1 57	23 7	0 22	0 56	2 43	11 14	0 48	9 18	1 50	3 42	14 10	20 46	21 1	19 22	3 24	2 41					
S 19	0 27	8 42	3 53	1 56	1 21	8 46	0 25	25 1	1 56	23 7	0 22	0 54	2 43	11 15	0 48	9 18	1 50	3 42	14 10	20 48	21 2	19 24	3 25	2 41					
M20	0 4	4 3	4 31	1 1	1 13	9 16	0 22	25 3	1 56	23 7	0 22	0 52	2 43	11 16	0 48	9 17	1 50	3 43	14 10	20 50	21 2	19 25	3 27	2 41					
T 21	0n20	0s42	4 55	0 6	1 5	9 45	0 19	25 5	1 56	23 7	0 22	0 50	2 43	11 16	0 48	9 17	1 50	3 43	14 10	20 52	21 3	19 26	3 28	2 40					
W22	0 44	5 19	5 3	0n51	0 57	10 14	0 17	25 7	1 55	23 7	0 22	0 48	2 43	11 17	0 48	9 16	1 50	3 44	14 9	20 54	21 3	19 28	3 30	2 40					
T 23	1 7	9 38	4 56	1 48	0 48	10 43	0 14	25 8	1 55	23 7	0 22	0 46	2 43	11 18	0 48	9 16	1 50	3 44	14 9	20 56	21 4	19 29	3 31	2 40					
F 24	1 31	13 29	4 36	2 45	0 38	11 11	0 11	25 10	1 54	23 7	0 22	0 45	2 44	11 19	0 48	9 15	1 50	3 45	14 9	20 58	21 5	19 30	3 32	2 40					
S 25	1 54	16 44	4 4	3 43	0 28	11 40	0 9	25 11	1 54	23 6	0 22	0 43	2 44	11 19	0 48	9 15	1 50	3 45	14 9	20 59	21 5	19 32	3 34	2 40					
S 26	2 18	19 15	3 21	4 40	0 18	12 8	0 6	25 12	1 54	23 6	0 22	0 41	2 44	11 20	0 48	9 14	1 50	3 46	14 9	21 0	21 6	19 33	3 35	2 40					
M27	2 41	20 56	2 30	5 38	0 7	12 36	0 3	25 14	1 53	23 6	0 22	0 39	2 44	11 21	0 48	9 13	1 50	3 46	14 8	21 1	21 6	19 34	3 37	2 40					
T 28	3 5	21 41	1 33	6 35	0n 4	13 3	0 0	25 15	1 53	23 6	0 22	0 37	2 44	11 22	0 48	9 13	1 50	3 47	14 8	21 1	21 7	19 36	3 38	2 40					
W29	3 28	21 28	0 31	7 32	0 15	13 30	0n 3	25 16	1 52	23 6	0 21	0 35	2 44	11 22	0 48	9 12	1 50	3 47	14 8	21 1	21 8	19 37	3 39	2 40					
T 30	3 51	20 15	0s34	8 28	0 26	13 57	0 6	25 16	1 52	23 6	0 21	0 33	2 44	11 23	0 48	9 12	1 50	3 48	14 8	21 1	21 8	19 38	3 41	2 40					
F 31	4n15	18s 1	1s38	9n23	0n38	14n24	0n 8	25n17	1n52	23s 6	0n21	0s32	2n44	11n24	0n48	9s11	1n50	3n48	14s 7	21n 1	21n 9	19s40	3n42	2n40					

ASTRODIENST EPHEMERIS for the year 1628

geocentric

APRIL 1628 GC

00:00 UT

Day	Sid.t	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
S 1	12 39 1	11°40'54	27°30	24°31	9°24	26°30	2°38	7°R33	2°R21	28°R18	18°R39	25°R49	25° 6	17° 0	3°V13	S 1
S 2	12 42 58	12°39'53	10°42	26°25	10°37	27° 2	2°41	7°28	2°19	28°17	18°41	25°42	25° 3	17° 7	3°17	S 2
M 3	12 46 54	13°38'50	24°18	28°16	11°50	27°34	2°45	7°24	2°17	28°15	18°42	25°33	25° 0	17°14	3°21	M 3
T 4	12 50 51	14°37'45	8°Y19	0° 5	13° 3	28° 7	2°47	7°19	2°16	28°14	18°43	25°23	24°57	17°20	3°24	T 4
W 5	12 54 48	15°36'38	22°38	1°50	14°15	28°39	2°50	7°15	2°14	28°12	18°44	25°11	24°54	17°27	3°28	W 5
T 6	12 58 44	16°35'30	7°11	3°31	15°28	29°12	2°53	7°10	2°12	28°10	18°45	24°59	24°50	17°34	3°31	T 6
F 7	13 2 41	17°34'19	21°50	5° 8	16°41	29°44	2°55	7° 5	2°11	28° 9	18°46	24°50	24°47	17°40	3°35	F 7
S 8	13 6 37	18°33'06	6°II27	6°41	17°54	0°17	2°57	7° 1	2° 9	28° 7	18°48	24°42	24°44	17°47	3°39	S 8
S 9	13 10 34	19°31'51	20°57	8° 9	19° 6	0°50	3° 0	6°56	2° 8	28° 6	18°49	24°38	24°41	17°54	3°42	S 9
M10	13 14 30	20°30'34	5°15	9°33	20°19	1°23	3° 1	6°52	2° 6	28° 4	18°50	24°36	24°38	18° 0	3°46	M10
T 11	13 18 27	21°29'14	19°20	10°51	21°31	1°56	3° 3	6°48	2° 5	28° 2	18°51	24°35	24°34	18° 7	3°49	T 11
W12	13 22 23	22°27'52	3°II11	12° 5	22°44	2°29	3° 5	6°43	2° 3	28° 1	18°52	24°35	24°31	18°14	3°53	W12
T 13	13 26 20	23°26'28	16°48	13°13	23°56	3° 2	3° 6	6°39	2° 2	27°59	18°54	24°34	24°28	18°20	3°56	T 13
F 14	13 30 17	24°25'01	0°11	14°16	25° 8	3°35	3° 7	6°34	2° 1	27°57	18°55	24°31	24°25	18°27	4° 0	F 14
S 15	13 34 13	25°23'33	13°26	15°14	26°21	4° 9	3° 8	6°30	1°59	27°56	18°56	24°25	24°22	18°34	4° 3	S 15
S 16	13 38 10	26°22'02	26°28	16° 6	27°33	4°42	3° 9	6°26	1°58	27°54	18°57	24°16	24°19	18°40	4° 7	S 16
M17	13 42 6	27°20'29	9°18	16°53	28°45	5°15	3° 9	6°22	1°57	27°52	18°59	24° 5	24°15	18°47	4°10	M17
T 18	13 46 3	28°18'54	21°58	17°34	29°57	5°49	3°10	6°18	1°56	27°51	19° 0	23°52	24°12	18°54	4°14	T 18
W19	13 49 59	29°17'17	4°II26	18° 9	1°II 9	6°22	3°R10	6°13	1°55	27°49	19° 1	23°39	24° 9	19° 0	4°17	W19
T 20	13 53 56	0°15'39	16°42	18°39	2°21	6°56	3°10	6° 9	1°54	27°48	19° 2	23°26	24° 6	19° 7	4°20	T 20
F 21	13 57 52	1°13'58	28°48	19° 2	3°33	7°30	3°10	6° 5	1°53	27°46	19° 4	23°14	24° 3	19°14	4°24	F 21
S 22	14 1 49	2°12'16	10°46	19°21	4°44	8° 3	3° 9	6° 1	1°52	27°44	19° 5	23° 6	24° 0	19°20	4°27	S 22
S 23	14 5 46	3°10'33	22°36	19°33	5°56	8°37	3° 9	5°58	1°51	27°43	19° 6	23° 0	23°56	19°27	4°30	S 23
M24	14 9 42	4° 8'48	4°25	19°40	7° 8	9°11	3° 8	5°54	1°50	27°41	19° 8	22°56	23°53	19°34	4°34	M24
T 25	14 13 39	5° 7'01	16°14	19°R41	8°19	9°45	3° 7	5°50	1°49	27°39	19° 9	22°55	23°50	19°40	4°37	T 25
W26	14 17 35	6° 5'13	28°10	19°37	9°31	10°19	3° 6	5°46	1°49	27°38	19°10	22°D55	23°47	19°47	4°40	W26
T 27	14 21 32	7° 3'23	10°18	19°28	10°42	10°53	3° 5	5°43	1°48	27°36	19°12	22°R55	23°44	19°54	4°44	T 27
F 28	14 25 28	8° 1'32	22°43	19°15	11°54	11°27	3° 3	5°39	1°48	27°35	19°13	22°54	23°40	20° 0	4°47	F 28
S 29	14 29 25	8°59'39	5°30	18°56	13° 5	12° 1	3° 1	5°36	1°47	27°33	19°14	22°51	23°37	20° 7	4°50	S 29
S 30	14 33 21	9°57'45	18°43	18°34	14°II16	12°35	3° 0	5°32	1°46	27°31	19°16	22°46	23°34	20°14	4°V53	S 30

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	
S 1	4n38	14s51	2s39	10n17	0n50	14n50	0n11	25n18	1n51	23s 6	0n21	0s30	2n44	11n24	0n48	S 1
S 2	5 1	10 52	3 34	11 10	1 1	15 16	0 14	25 18	1 51	23 6	0 21	0 28	2 44	11 25	0 48	S 2
M 3	5 24	6 12	4 18	12 0	1 12	15 41	0 17	25 18	1 50	23 6	0 21	0 26	2 44	11 25	0 48	M 3
T 4	5 47	1 6	4 48	12 49	1 23	16 6	0 20	25 18	1 50	23 6	0 21	0 24	2 44	11 26	0 48	T 4
W 5	6 9	4n10	5 0	13 36	1 34	16 31	0 23	25 18	1 50	23 6	0 21	0 22	2 44	11 27	0 48	W 5
T 6	6 32	9 18	4 54	14 21	1 45	16 55	0 26	25 18	1 49	23 6	0 21	0 21	2 44	11 27	0 48	T 6
F 7	6 55	13 56	4 28	15 3	1 55	17 19	0 29	25 18	1 49	23 6	0 21	0 19	2 44	11 28	0 48	F 7
S 8	7 17	17 44	3 45	15 43	2 4	17 42	0 32	25 17	1 48	23 6	0 21	0 17	2 44	11 28	0 48	S 8
S 9	7 39	20 23	2 48	16 21	2 13	18 5	0 35	25 17	1 48	23 6	0 21	0 15	2 44	11 29	0 48	S 9
M10	8 2	21 43	1 40	16 55	2 21	18 28	0 38	25 16	1 47	23 6	0 21	0 14	2 44	11 29	0 48	M10
T 11	8 24	21 38	0 28	17 27	2 28	18 50	0 41	25 15	1 47	23 6	0 21	0 12	2 43	11 30	0 48	T 11
W12	8 46	20 13	0n45	17 56	2 34	19 11	0 44	25 14	1 47	23 6	0 21	0 10	2 43	11 30	0 48	W12
T 13	9 7	17 39	1 55	18 23	2 40	19 33	0 46	25 13	1 46	23 6	0 21	0 9	2 43	11 31	0 48	T 13
F 14	9 29	14 10	2 56	18 46	2 45	19 53	0 49	25 12	1 46	23 6	0 21	0 7	2 43	11 31	0 48	F 14
S 15	9 50	10 1	3 47	19 7	2 48	20 13	0 52	25 11	1 45	23 6	0 21	0 5	2 43	11 32	0 48	S 15
S 16	10 12	5 28	4 26	19 25	2 51	20 33	0 55	25 9	1 45	23 6	0 21	0 4	2 43	11 32	0 47	S 16
M17	10 33	0 45	4 50	19 40	2 53	20 52	0 58	25 7	1 45	23 6	0 21	0 2	2 43	11 32	0 47	M17
T 18	10 54	3s56	5 0	19 52	2 53	21 10	1 1	25 6	1 44	23 6	0 20	0 1	2 43	11 33	0 47	T 18
W19	11 15	8 24	4 55	20 2	2 52	21 28	1 4	25 4	1 44	23 7	0 20	0n 1	2 43	11 33	0 47	W19
T 20	11 35	12 27	4 36	20 8	2 50	21 45	1 6	25 1	1 43	23 7	0 20	0 2	2 43	11 33	0 47	T 20
F 21	11 56	15 57	4 5	20 12	2 47	22 2	1 9	24 59	1 43	23 7	0 20	0 4	2 43	11 34	0 47	F 21
S 22	12 16	18 45	3 23	20 13	2 43	22 18	1 12	24 57	1 42	23 7	0 20	0 5	2 43	11 34	0 47	S 22
S 23	12 36	20 44	2 33	20 11	2 37	22 34	1 14	24 54	1 42	23 7	0 20	0 7	2 42	11 34	0 47	S 23
M24	12 56	21 48	1 37	20 6	2 30	22 49	1 17	24 51	1 42	23 7	0 20	0 8	2 42	11 35	0 47	M24
T 25	13 15	21 55	0 35	19 58	2 22	23 3	1 20	24 49	1 41	23 7	0 20	0 10	2 42	11 35	0 47	T 25
W26	13 35	21 1	0s28	19 48	2 13	23 17	1 22	24 46	1 41	23 7	0 20	0 11	2 42	11 35	0 47	W26
T 27	13 54	19 9	1 31	19 36	2 2	23 30	1 25	24 42	1 40	23 7	0 20	0 12	2 42	11 35	0 47	T 27
F 28	14 13	16 21	2 31	19 21	1 51	23 42	1 27	24 39	1 40	23 7	0 20	0 14	2 42	11 35	0 47	F 28
S 29	14 31	12 42	3 26	19 3	1 38	23 54	1 30	24 36	1 40	23 7	0 20	0 15	2 42	11 36	0 47	S 29
S 30	14n50	8s19	4s11	18n44	1n24	24n 5	1n32	24n32	1n39	23s 8	0n20	0n16	2n42	11n36	0n47	S 30

Julian Day Number = 2315765.5, Delta T = 59.38 sec
 Ecliptic obliquity = 23°29'12", Nutation = - 0°00'16", out-of-bounds declination in red
 Ayanamsha: Fagan/Bradley = 19°33'06", Lahiri = 18°40'07"Greg. Calendar

ASTRODIENST EPHEMERIS for the year 1628

geocentric

MAY 1628 GC

00:00 UT

Day	Sid.t	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
M 1	14 37 18	10♌55'49	2♊25	18°R 8	15♊28	13♌9	2°R57	5°R29	1°R46	27°R30	19♌17	22°R39	23♌31	20♌20	4♊56	M 1
T 2	14 41 15	11°53'52	16°34	17♌39	16°39	13°44	2♌55	5♌25	1♌46	27♌28	19°18	22♌29	23°28	20°27	4°59	T 2
W 3	14 45 11	12°51'54	1♌7	17°7	17°50	14°18	2°53	5°22	1°45	27°27	19°20	22°19	23°25	20°34	5°2	W 3
T 4	14 49 8	13°49'54	15°58	16°33	19°1	14°52	2°50	5°19	1°45	27°25	19°21	22°9	23°21	20°40	5°5	T 4
F 5	14 53 4	14°47'52	0♊58	15°58	20°12	15°27	2°47	5°16	1°45	27°24	19°22	22°0	23°18	20°47	5°8	F 5
S 6	14 57 1	15°45'49	15°58	15°22	21°22	16°1	2°44	5°13	1°45	27°22	19°24	21°53	23°15	20°54	5°11	S 6
S 7	15 0 57	16°43'44	0♌49	14°46	22°33	16°36	2°41	5°10	1°44	27°20	19°25	21°49	23°12	21°0	5°14	S 7
M 8	15 4 54	17°41'38	15°24	14°10	23°44	17°10	2°38	5°7	1°44	27°19	19°26	21°D48	23°9	21°7	5°17	M 8
T 9	15 8 50	18°39'29	29°40	13°36	24°54	17°45	2°34	5°5	1°D44	27°17	19°28	21°48	23°6	21°14	5°20	T 9
W10	15 12 47	19°37'19	13♌36	13°3	26°5	18°20	2°31	5°2	1°44	27°16	19°29	21°R48	23°2	21°20	5°23	W10
T 11	15 16 44	20°35'07	27°11	12°32	27°15	18°54	2°27	4°59	1°44	27°14	19°30	21°48	22°59	21°27	5°26	T 11
F 12	15 20 40	21°32'53	10♌28	12°4	28°25	19°29	2°23	4°57	1°45	27°13	19°32	21°47	22°56	21°34	5°29	F 12
S 13	15 24 37	22°30'38	23°28	11°40	29°36	20°4	2°19	4°54	1°45	27°12	19°33	21°43	22°53	21°40	5°31	S 13
S 14	15 28 33	23°28'21	6♌14	11°18	0♌46	20°39	2°14	4°52	1°45	27°10	19°35	21°37	22°50	21°47	5°34	S 14
M15	15 32 30	24°26'02	18°48	11°1	1°56	21°14	2°10	4°50	1°45	27°9	19°36	21°28	22°46	21°54	5°37	M15
T 16	15 36 26	25°23'42	1♌11	10°47	3°6	21°49	2°5	4°48	1°46	27°7	19°37	21°18	22°43	22°0	5°39	T 16
W17	15 40 23	26°21'20	13°24	10°38	4°16	22°24	2°1	4°46	1°46	27°6	19°39	21°8	22°40	22°7	5°42	W17
T 18	15 44 19	27°18'57	25°29	10°33	5°25	22°59	1°56	4°44	1°47	27°5	19°40	20°58	22°37	22°14	5°45	T 18
F 19	15 48 16	28°16'33	7♌27	10°D32	6°35	23°34	1°51	4°42	1°47	27°3	19°41	20°50	22°34	22°20	5°47	F 19
S 20	15 52 13	29°14'08	19°19	10°36	7°44	24°9	1°45	4°40	1°48	27°2	19°43	20°44	22°31	22°27	5°50	S 20
S 21	15 56 9	0♊11'42	1♌7	10°45	8°54	24°44	1°40	4°39	1°48	27°1	19°44	20°39	22°27	22°34	5°52	S 21
M22	16 0 6	1°9'14	12°55	10°58	10°3	25°19	1°34	4°37	1°49	26°59	19°45	20°37	22°24	22°40	5°55	M22
T 23	16 4 2	2°6'46	24°45	11°16	11°12	25°54	1°29	4°36	1°50	26°58	19°47	20°D37	22°21	22°47	5°57	T 23
W24	16 7 59	3°4'17	6♌42	11°37	12°21	26°30	1°23	4°34	1°50	26°57	19°48	20°38	22°18	22°54	5°59	W24
T 25	16 11 55	4°1'47	18°50	12°4	13°30	27°5	1°17	4°33	1°51	26°55	19°49	20°39	22°15	23°0	6°2	T 25
F 26	16 15 52	4°59'16	1♌14	12°34	14°39	27°40	1°11	4°32	1°52	26°54	19°51	20°R40	22°12	23°7	6°4	F 26
S 27	16 19 48	5°56'44	13°59	13°9	15°48	28°15	1°5	4°31	1°53	26°53	19°52	20°40	22°8	23°14	6°6	S 27
S 28	16 23 45	6°54'12	27°9	13°47	16°57	28°51	0°59	4°30	1°54	26°52	19°53	20°38	22°5	23°20	6°8	S 28
M29	16 27 42	7°51'39	10♊46	14°30	18°5	29°26	0°52	4°29	1°55	26°51	19°55	20°34	22°2	23°27	6°10	M29
T 30	16 31 38	8°49'05	24°52	15°16	19°13	0♌2	0°46	4°28	1°56	26°50	19°56	20°29	21°59	23°34	6°12	T 30
W31	16 35 35	9♊46'30	9♌25	16♌6	20♌22	0♌37	0♌39	4♌27	1♌57	26♌49	19♌57	20♌23	21♌56	23♌40	6♊14	W31

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
M 1	15n 8	3s23	4s44	18n22	1n 9	24n16	1n35	24n28	1n39	23s 8	0n20	0n17	2n41	11n36	0n47	8s53
T 2	15 26	1n53	5 1	17 59	0 54	24 25	1 37	24 24	1 38	23 8	0 20	0 18	2 41	11 36	0 47	8 53
W 3	15 44	7 13	4 59	17 35	0 37	24 35	1 39	24 20	1 38	23 8	0 19	0 20	2 41	11 36	0 47	8 52
T 4	16 1 12	14 4	3 37	17 9	0 21	24 43	1 41	24 16	1 37	23 8	0 19	0 21	2 41	11 36	0 47	8 52
F 5	16 19 16	33 3	56 16	42 0	3	24 51	1 44	24 12	1 37	23 8	0 19	0 22	2 41	11 36	0 47	8 51
S 6	16 35 19	47 2	59 16	15 0s14	24 58	1 46	24 7	1 37	23 8	0 19	0 23	2 41	11 36	0 47	8 51	1 50
S 7	16 52 21	40 1	49 15	48 0 32	25 4	1 48	24 3	1 36	23 8	0 19	0 24	2 40	11 36	0 47	8 50	1 50
M 8	17 9 22	2 0	34 15	21 0 49	25 10	1 50	23 58	1 36	23 9	0 19	0 25	2 40	11 36	0 47	8 49	1 50
T 9	17 25 20	57 0n42	14 54	1 6	25 15	1 52	23 53	1 35	23 9	0 19	0 26	2 40	11 36	0 47	8 49	1 50
W10	17 40 18	35 1	54 14	28 1 23	25 19	1 54	23 48	1 35	23 9	0 19	0 26	2 40	11 36	0 47	8 48	1 50
T 11	17 56 15	15 2	57 14	4 1 39	25 23	1 55	23 42	1 34	23 9	0 19	0 27	2 40	11 36	0 47	8 48	1 50
F 12	18 11 11	12 3	50 13	41 1 54	25 26	1 57	23 37	1 34	23 9	0 19	0 28	2 39	11 36	0 46	8 47	1 50
S 13	18 26 6	43 4	29 13	19 2 9	25 28	1 59	23 32	1 34	23 9	0 19	0 29	2 39	11 36	0 46	8 47	1 50
S 14	18 41 2	1 4	54 13	0 2 22	25 30	2 0	23 26	1 33	23 10	0 19	0 30	2 39	11 36	0 46	8 46	1 50
M15	18 55 2s41	5 5	12 42	2 35	25 30	2 2	23 20	1 33	23 10	0 18	0 30	2 39	11 36	0 46	8 46	1 50
T 16	19 9 7	12 5	0 12	27 2 47	25 30	2 3	23 14	1 32	23 10	0 18	0 31	2 39	11 35	0 46	8 45	1 50
W17	19 23 11	24 4	43 12	14 2 58	25 30	2 5	23 8	1 32	23 10	0 18	0 32	2 38	11 35	0 46	8 45	1 50
T 18	19 36 15	5 4	12 12	3 3 7	25 28	2 6	23 2	1 31	23 10	0 18	0 32	2 38	11 35	0 46	8 45	1 50
F 19	19 49 18	8 3	31 11	55 3 16	25 26	2 7	22 55	1 31	23 10	0 18	0 33	2 38	11 35	0 46	8 44	1 50
S 20	20 2 20	23 2	40 11	49 3 23	25 24	2 8	22 49	1 31	23 11	0 18	0 33	2 38	11 35	0 46	8 44	1 50
S 21	20 14 21	46 1	43 11	46 3 30	25 20	2 9	22 42	1 30	23 11	0 18	0 34	2 38	11 34	0 46	8 43	1 50
M22	20 26 22	10 0	41 11	45 3 35	25 16	2 10	22 35	1 30	23 11	0 18	0 34	2 37	11 34	0 46	8 43	1 50
T 23	20 38 21	35 0s22	11 46	3 39	25 12	2 11	22 28	1 29	23 11	0 18	0 34	2 37	11 34	0 46	8 42	1 50
W24	20 49 20	1 1	26 11	49 3 42	25 6	2 12	22 21	1 29	23 11	0 18	0 35	2 37	11 33	0 46	8 42	1 50
T 25	21 0 17	32 2	27 11	55 3 44	25 0	2 13	22 14	1 28	23 11	0 17	0 35	2 37	11 33	0 46	8 42	1 50
F 26	21 10 14	12 3	3 22	12 3 46	24 53	2 13	22 6	1 28	23 12	0 17	0 35	2 36	11 33	0 46	8 41	1 50
S 27	21 20 10	8 4	9 12	13 3 46	24 46	2 14	21 59	1 28	23 12	0 17	0 36	2 36	11 32	0 46	8 41	1 50
S 28	21 30 5	29 4	45 12	25 3 45	24 38	2 14	21 51	1 27	23 12	0 17	0 36	2 36	11 32	0 46	8 40	1 50
M29	21 40 0	25 5	5 12	39 3 44	24 29	2 14	21 43	1 27	23 12	0 17	0 36	2 36	11 32	0 46	8 40	1 50
T 30	21 49 4n51	5 9	12 55	3 42	24 20	2 15	21 35	1 26	23 12	0 17	0 36	2 36	11 31	0 46	8 40	1 49
W31	21n58	10n 1	4s53	13n12	3s39	24n10	2n15	21n27	1n26	23s12	0n17	0n36	2n35	11n31	0n46	8s39

Julian Day Number = 2315795.5, Delta T = 59.31 sec
 Ecliptic obliquity = 23°29'12", Nutation = - 0°00'17", out-of-bounds declination in red
 Ayanamsha: Fagan/Bradley = 19°33'10", Lahiri = 18°40'11"Greg. Calendar

ASTRODIENST EPHEMERIS for the year 1628

geocentric

JUNE 1628 GC

00:00 UT

Day	Sid.t	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
T 1	16 39 31	10 ^{II} 43'55	24 ⁸ 20	17 ⁸ 0	21 ²⁶ 30	1 ¹⁰ 13	0°R32	4°R27	1 ¹⁰ 59	26°R47	19 ⁸ 58	20°R18	21 ²⁶ 52	23 ⁷ 47	6 ^Y 16	T 1
F 2	16 43 28	11°41'19	9 ^{II} 28	17°58	22°38	1°48	0 ²⁵ 25	4 ²⁶ 26	2°0	26 ⁴⁶ 46	20°0	20 ²⁰ 12	21°49	23°54	6°18	F 2
S 3	16 47 24	12°38'43	24°40	18°58	23°46	2°24	0°19	4°26	2°1	26°45	20°1	20°9	21°46	24°0	6°20	S 3
S 4	16 51 21	13°36'05	9 ²⁶ 47	20°3	24°54	3°0	0°12	4°26	2°2	26°44	20°2	20°7	21°43	24°7	6°22	S 4
M 5	16 55 17	14°33'27	24°38	21°10	26°1	3°36	0°5	4°25	2°4	26°43	20°3	20°D 7	21°40	24°14	6°24	M 5
T 6	16 59 14	15°30'47	9 ²⁶ 9	22°21	27°9	4°11	29 ²⁷ 57	4°D25	2°5	26°42	20°5	20°7	21°37	24°20	6°26	T 6
W 7	17 3 11	16°28'07	23°16	23°35	28°16	4°47	29°50	4°25	2°7	26°41	20°6	20°9	21°33	24°27	6°27	W 7
T 8	17 7 7	17°25'25	6 ¹⁰ 58	24°53	29°23	5°23	29°43	4°26	2°8	26°41	20°7	20°10	21°30	24°34	6°29	T 8
F 9	17 11 4	18°22'43	20°16	26°13	0 ¹⁰ 30	5°59	29°36	4°26	2°10	26°40	20°8	20°R10	21°27	24°40	6°31	F 9
S 10	17 15 0	19°20'00	3 ²⁶ 13	27°37	1°37	6°35	29°28	4°26	2°12	26°39	20°10	20°10	21°24	24°47	6°32	S 10
S 11	17 18 57	20°17'15	15°52	29°4	2°44	7°11	29°21	4°26	2°13	26°38	20°11	20°7	21°21	24°54	6°34	S 11
M12	17 22 53	21°14'31	28°16	0 ^{II} 33	3°50	7°47	29°13	4°27	2°15	26°37	20°12	20°4	21°17	25°0	6°35	M12
T 13	17 26 50	22°11'45	10 ¹⁰ 28	2°6	4°57	8°23	29°6	4°28	2°17	26°36	20°13	20°0	21°14	25°7	6°37	T 13
W14	17 30 46	23°8'59	22°31	3°42	6°3	8°59	28°58	4°28	2°19	26°36	20°14	19°55	21°11	25°14	6°38	W14
T 15	17 34 43	24°6'12	4 ²⁷ 27	5°21	7°9	9°35	28°50	4°29	2°20	26°35	20°16	19°51	21°8	25°20	6°39	T 15
F 16	17 38 40	25°3'24	16°18	7°3	8°15	10°11	28°43	4°30	2°22	26°34	20°17	19°47	21°5	25°27	6°41	F 16
S 17	17 42 36	26°0'37	28°7	8°48	9°20	10°47	28°35	4°31	2°24	26°34	20°18	19°45	21°2	25°34	6°42	S 17
S 18	17 46 33	26°57'49	9 ²⁶ 56	10°35	10°26	11°23	28°27	4°32	2°26	26°33	20°19	19°43	20°58	25°40	6°43	S 18
M19	17 50 29	27°55'00	21°46	12°26	11°31	11°59	28°20	4°34	2°28	26°32	20°20	19°D43	20°55	25°47	6°44	M19
T 20	17 54 26	28°52'12	3 ²⁶ 41	14°19	12°36	12°35	28°12	4°35	2°31	26°32	20°21	19°43	20°52	25°54	6°45	T 20
W21	17 58 22	29°49'23	15°43	16°14	13°41	13°12	28°4	4°36	2°33	26°31	20°22	19°45	20°49	26°0	6°46	W21
T 22	18 2 19	0 ²⁶ 46'34	27°57	18°12	14°45	13°48	27°57	4°38	2°35	26°31	20°23	19°46	20°46	26°7	6°47	T 22
F 23	18 6 15	1°43'45	10 ¹⁰ 24	20°13	15°50	14°24	27°49	4°39	2°37	26°30	20°24	19°47	20°43	26°14	6°48	F 23
S 24	18 10 12	2°40'57	23°9	22°15	16°54	15°1	27°41	4°41	2°39	26°30	20°25	19°48	20°39	26°20	6°49	S 24
S 25	18 14 9	3°38'08	6 ^Y 16	24°20	17°58	15°37	27°34	4°43	2°42	26°30	20°26	19°R49	20°36	26°27	6°50	S 25
M26	18 18 5	4°35'20	19°48	26°26	19°2	16°13	27°26	4°45	2°44	26°29	20°28	19°R48	20°33	26°34	6°51	M26
T 27	18 22 2	5°32'31	3 ⁸ 45	28°33	20°5	16°50	27°19	4°47	2°46	26°29	20°29	19°47	20°30	26°40	6°51	T 27
W28	18 25 58	6°29'44	18°7	0 ²⁶ 42	21°8	17°26	27°11	4°49	2°49	26°28	20°30	19°45	20°27	26°47	6°52	W28
T 29	18 29 55	7°26'56	2 ^{II} 52	2°51	22°11	18°3	27°4	4°51	2°51	26°28	20°31	19°44	20°23	26°54	6°53	T 29
F 30	18 33 51	8°24'09	17 ^{II} 53	5°2	23°14	18°140	26°56	4°53	2°54	26°28	20°31	19°43	20°20	27°0	6°Y53	F 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
T 1	22n 6	14n44	4s17	13n31	3s35	23n59	2n15	21n19	1n25	23s12	0n17	0n36	2n35	11n30	0n46	8s39	1n49	4n12	14s 3	21n57	21n42	20s55	4n57	2n41			
F 2	22 14	18 34	3 23	13 51	3 30	23 48	2 15	21 11	1 25	23 13	0 17	0 36	2 35	11 30	0 46	8 39	1 49	4 13	14 3	21 58	21 43	20 56	4 58	2 41			
S 3	22 21	21 9	2 14	14 13	3 25	23 36	2 14	21 2	1 25	23 13	0 16	0 36	2 35	11 29	0 46	8 38	1 49	4 13	14 3	21 58	21 43	20 57	4 59	2 41			
S 4	22 29	22 12	0 56	14 35	3 19	23 23	2 14	20 53	1 24	23 13	0 16	0 36	2 34	11 29	0 46	8 38	1 49	4 13	14 3	21 59	21 44	20 58	5 0	2 41			
M 5	22 35	21 39	0n25	14 59	3 13	23 10	2 14	20 45	1 24	23 13	0 16	0 36	2 34	11 28	0 46	8 38	1 49	4 13	14 3	21 59	21 44	20 59	5 1	2 41			
T 6	22 42	19 39	1 42	15 24	3 5	22 57	2 13	20 36	1 23	23 13	0 16	0 36	2 34	11 28	0 45	8 37	1 49	4 14	14 4	21 59	21 45	21 0	5 1	2 41			
W 7	22 48	16 29	2 51	15 50	2 58	22 43	2 13	20 27	1 23	23 13	0 16	0 35	2 34	11 27	0 45	8 37	1 49	4 14	14 4	21 58	21 45	21 1	5 2	2 41			
T 8	22 53	12 30	3 49	16 17	2 49	22 28	2 12	20 17	1 22	23 13	0 16	0 35	2 33	11 26	0 45	8 37	1 49	4 14	14 4	21 58	21 46	21 2	5 3	2 41			
F 9	22 59	8 1	4 32	16 44	2 41	22 13	2 11	20 8	1 22	23 13	0 16	0 35	2 33	11 26	0 45	8 36	1 49	4 14	14 4	21 58	21 46	21 3	5 3	2 41			
S 10	23 3	3 18	5 0	17 12	2 32	21 57	2 10	19 59	1 21	23 14	0 16	0 34	2 33	11 25	0 45	8 36	1 49	4 14	14 4	21 58	21 47	21 5	5 4	2 41			
S 11	23 8	1s27	5 12	17 41	2 22	21 41	2 9	19 49	1 21	23 14	0 15	0 34	2 33	11 25	0 45	8 36	1 49	4 15	14 4	21 59	21 47	21 6	5 5	2 41			
M12	23 12	6 3	5 10	18 9	2 12	21 24	2 8	19 40	1 21	23 14	0 15	0 34	2 32	11 24	0 45	8 36	1 49	4 15	14 4	21 59	21 48	21 7	5 5	2 41			
T 13	23 15	10 20	4 53	18 38	2 1	21 7	2 6	19 30	1 20	23 14	0 15	0 33	2 32	11 23	0 45	8 35	1 49	4 15	14 4	22 0	21 48	21 8	5 6	2 42			
W14	23 19	14 10	4 24	19 7	1 51	20 49	2 5	19 20	1 20	23 14	0 15	0 33	2 32	11 22	0 45	8 35	1 49	4 15	14 4	22 0	21 49	21 9	5 7	2 42			
T 15	23 21	17 24	3 44	19 36	1 40	20 30	2 3	19 10	1 19	23 14	0 15	0 32	2 32	11 22	0 45	8 35	1 49	4 15	14 5	22 1	21 49	21 10	5 7	2 42			
F 16	23 24	19 54	2 54	20 5	1 28	20 12	2 1	19 0	1 19	23 14	0 15	0 31	2 31	11 21	0 45	8 35	1 49	4 15	14 5	22 1	21 50	21 11	5 8	2 42			
S 17	23 26	21 32	1 56	20 33	1 17	19 52	2 0	18 49	1 18	23 14	0 15	0 31	2 31	11 20	0 45	8 35	1 49	4 16	14 5	22 2	21 50	21 12	5 8	2 42			
S 18	23 27	22 13	0 54	21 0	1 5	19 33	1 58	18 39	1 18	23 14	0 15	0 30	2 31	11 20	0 45	8 34	1 49	4 16	14 5	22 2	21 51	21 13	5 9	2 42			
M19	23 28	21 55	0s11	21 27	0 54	19 13	1 56	18 28	1 17	23 14	0 14	0 29	2 31	11 19	0 45	8 34	1 49	4 16	14 5	22 2	21 51	21 14	5 10	2 42			
T 20	23 29	20 36	1 16	21 52	0 42	18 52	1 53	18 18	1 17	23 14	0 14	0 29	2 30	11 18	0 45	8 34	1 49	4 16	14 5	22 2	21 52	21 15	5 10	2 42			
W21	23 29	18 22	2 19	22 16	0 30	18 31	1 51	18 7	1 17	23 14	0 14	0 28	2 30	11 17	0 45	8 34	1 48	4 16	14 5	22 2	21 52	21 16	5 11	2 42			
T 22	23 29	15 16	3 16	22 39	0 19	18 10	1 49	17 56	1 16	23 14	0 14	0 27	2 30	11 16	0 45	8 34	1 48	4 16	14 6	22 2	21 53	21 17	5 11	2 42			
F 23	23 29	11 27	4 5	23 0	0 7	17 49	1 46	17 45	1 16	23 14	0 14	0 26	2 30	11 16	0 45	8 34	1 48	4 16	14 6	22 1	21 53	21 18	5 11	2 42			
S 24	23 28	7 3	4 43	23 20	0n 4	17 27	1 43	17 34	1 15	23 14	0 14	0 25	2 30	11 15	0 45	8 34	1 48	4 16	14 6	22 1	21 54	21 19	5 12	2 42			
S 25	23 26	2 13	5 8	23 37	0 15	17 4	1 41	17 23	1 15	23 14	0 14	0 24	2 29	11 14	0 45	8 33	1 48	4 17	14 6	22 1	21 54	21 20	5 12	2 43			
M26	23 24	2n52	5 17	23 52	0 26	16 42	1 38	17 11	1 14	23 14	0 13	0 23	2 29	11 13	0 45	8 33	1 48	4 17	14 6	22 1	21 55	21 21	5 13	2 43			
T 27	23 22	7 58	5 7	24 5	0 36	16 19	1 34	17 0	1 14	23 14	0 13	0 22	2 29	11 12	0 45	8 33	1 48	4 17	14 6	22 2	21 55	21 22	5 13	2 43			
W28	23 20	12 48	4 39	24 15	0 46	15 55	1 31	16 48	1 13	23 14	0 13	0 21	2 29	11 11	0 45	8 33	1 48	4 17	14 7	22 2	21 56	21 23	5 13	2 43			
T 29	23 17	16 59	3 51	24 22	0 55	15 32	1 28	16 36	1 13	23 14	0 13	0 20	2 28	11 10	0 45	8 33	1 48	4 17	14 7	22 2	21 56	21 24	5 14	2 43			
F 30	23n13	20n 9	2s48	24n27	1n 3	15n 8	1n24	16n25	11n13	23s14	0n13	0n19	2n28	11n 9	0n45	8s33	1n48	4n17	14s 7	22n 2	21n57	21s25	5n14	2n43			

ASTRODIENST EPHEMERIS for the year 1628

geocentric

AUGUST 1628 GC

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
T 1	20 40 1	8♂57'41	26♂4	3♂43	23♂21	8♂28	23°R53	6♂52	4♂32	26♂36	20♂54	19°R40	18♂39	0♂33	6°R43	T 1
W 2	20 43 58	9°55'12	10♂23	5° 5	24° 9	9° 6	23♂49	6°57	4°35	26°37	20°54	19♂37	18°35	0°40	6°Y42	W 2
T 3	20 47 54	10°52'44	24°19	6°25	24°55	9°44	23°46	7° 2	4°39	26°38	20°55	19°35	18°32	0°46	6°40	T 3
F 4	20 51 51	11°50'17	7♂49	7°43	25°41	10°21	23°43	7° 7	4°42	26°39	20°55	19°32	18°29	0°53	6°39	F 4
S 5	20 55 47	12°47'51	20°54	9° 0	26°26	10°59	23°40	7°13	4°46	26°40	20°55	19°29	18°26	1° 0	6°38	S 5
S 6	20 59 44	13°45'26	3♂35	10°14	27°10	11°37	23°37	7°18	4°49	26°41	20°56	19°28	18°23	1° 6	6°36	S 6
M 7	21 3 41	14°43'02	15°57	11°26	27°53	12°15	23°35	7°23	4°53	26°42	20°56	19°D28	18°20	1°13	6°35	M 7
T 8	21 7 37	15°40'38	28° 3	12°36	28°35	12°53	23°33	7°29	4°57	26°43	20°56	19°28	18°16	1°20	6°33	T 8
W 9	21 11 34	16°38'16	9♂58	13°44	29°16	13°31	23°31	7°34	5° 0	26°44	20°56	19°30	18°13	1°26	6°32	W 9
T 10	21 15 30	17°35'55	21°48	14°49	29°56	14° 9	23°29	7°40	5° 4	26°45	20°57	19°31	18°10	1°33	6°30	T 10
F 11	21 19 27	18°33'35	3♂36	15°52	0♂35	14°47	23°27	7°45	5° 7	26°46	20°57	19°33	18° 7	1°40	6°29	F 11
S 12	21 23 23	19°31'16	15°27	16°53	1°13	15°25	23°25	7°51	5°11	26°47	20°57	19°R34	18° 4	1°46	6°27	S 12
S 13	21 27 20	20°28'58	27°24	17°50	1°50	16° 3	23°24	7°57	5°15	26°48	20°57	19°34	18° 1	1°53	6°25	S 13
M14	21 31 16	21°26'42	9♂31	18°45	2°25	16°41	23°23	8° 2	5°18	26°49	20°57	19°32	17°57	2° 0	6°24	M14
T 15	21 35 13	22°24'27	21°48	19°37	2°59	17°19	23°22	8° 8	5°22	26°50	20°57	19°29	17°54	2° 6	6°22	T 15
W16	21 39 10	23°22'13	4♂18	20°26	3°32	17°58	23°21	8°14	5°26	26°51	20°58	19°24	17°51	2°13	6°20	W16
T 17	21 43 6	24°20'01	17° 1	21°11	4° 4	18°36	23°20	8°20	5°30	26°53	20°58	19°19	17°48	2°20	6°18	T 17
F 18	21 47 3	25°17'50	29°58	21°53	4°34	19°14	23°20	8°26	5°33	26°54	20°58	19°13	17°45	2°26	6°16	F 18
S 19	21 50 59	26°15'41	13°Y 7	22°32	5° 2	19°53	23°20	8°32	5°37	26°55	20°58	19° 7	17°41	2°33	6°14	S 19
S 20	21 54 56	27°13'33	26°30	23° 6	5°29	20°31	23°D20	8°38	5°41	26°56	20°R58	19° 2	17°38	2°40	6°12	S 20
M21	21 58 52	28°11'28	10♂6	23°36	5°55	21° 9	23°20	8°44	5°44	26°58	20°58	18°59	17°35	2°46	6°10	M21
T 22	22 2 49	29° 9'24	23°55	24° 1	6°19	21°48	23°20	8°50	5°48	26°59	20°58	18°D58	17°32	2°53	6° 8	T 22
W23	22 6 45	0♂7'22	7♂18	24°22	6°41	22°26	23°21	8°56	5°52	27° 1	20°58	18°58	17°29	2°59	6° 6	W23
T 24	22 10 42	1° 5'23	22° 8	24°38	7° 1	23° 5	23°21	9° 3	5°56	27° 2	20°58	18°59	17°26	3° 6	6° 4	T 24
F 25	22 14 38	2° 3'25	6♂30	24°49	7°20	23°44	23°22	9° 9	5°59	27° 3	20°58	19° 0	17°22	3°13	6° 2	F 25
S 26	22 18 35	3° 1'29	20°59	24°R54	7°37	24°22	23°23	9°15	6° 3	27° 5	20°57	19°R 1	17°19	3°19	5°59	S 26
S 27	22 22 32	3°59'35	5♂32	24°53	7°51	25° 1	23°24	9°22	6° 7	27° 6	20°57	19° 0	17°16	3°26	5°57	S 27
M28	22 26 28	4°57'43	20° 3	24°46	8° 4	25°40	23°26	9°28	6°11	27° 8	20°57	18°56	17°13	3°33	5°55	M28
T 29	22 30 25	5°55'52	4♂26	24°33	8°15	26°18	23°28	9°35	6°14	27° 9	20°57	18°51	17°10	3°39	5°53	T 29
W30	22 34 21	6°54'03	18°35	24°14	8°24	26°57	23°29	9°41	6°18	27°11	20°57	18°44	17° 7	3°46	5°50	W30
T 31	22 38 18	7♂52'16	2♂25	23♂48	8♂30	27♂36	23♂31	9♂48	6♂22	27♂13	20♂57	18♂36	17♂3	3♂53	5°Y48	T 31

Day	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂
	decl	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	lat
T 1	18n 3	15n48	3n 8	10n11	0n 1	1n 5	1s42	9n18	0n58	23s13	0n 8	0s34	2n21	10n33	0n44	8s38
W 2	17 48	11 27	4 4	9 33	0s 8	0 39	1 50	9 3	0 57	23 13	0 8	0 36	2 21	10 32	0 44	8 38
T 3	17 32	6 37	4 45	8 55	0 17	0 13	1 58	8 49	0 57	23 13	0 8	0 39	2 21	10 30	0 44	8 39
F 4	17 16	1 37	5 9	8 17	0 26	0s13	2 7	8 34	0 56	23 13	0 7	0 41	2 21	10 29	0 44	8 39
S 5	17 0	3s18	5 15	7 39	0 36	0 39	2 15	8 19	0 56	23 13	0 7	0 43	2 21	10 28	0 44	8 39
S 6	16 44	7 57	5 6	7 2	0 46	1 4	2 24	8 4	0 55	23 13	0 7	0 45	2 20	10 26	0 44	8 40
M 7	16 27	12 8	4 42	6 26	0 56	1 30	2 33	7 49	0 55	23 13	0 7	0 47	2 20	10 25	0 44	8 40
T 8	16 10	15 45	4 7	5 50	1 6	1 55	2 42	7 34	0 54	23 13	0 7	0 50	2 20	10 24	0 44	8 41
W 9	15 53	18 41	3 21	5 14	1 16	2 19	2 51	7 19	0 54	23 13	0 7	0 52	2 20	10 22	0 44	8 41
T 10	15 35	20 48	2 27	4 40	1 26	2 44	3 0	7 4	0 53	23 13	0 7	0 54	2 20	10 21	0 44	8 41
F 11	15 18	22 0	1 27	4 6	1 37	3 8	3 10	6 49	0 53	23 13	0 6	0 57	2 20	10 20	0 44	8 42
S 12	15 0	22 13	0 23	3 33	1 47	3 32	3 19	6 34	0 52	23 13	0 6	0 59	2 19	10 18	0 44	8 42
S 13	14 41	21 25	0s43	3 1	1 58	3 55	3 29	6 19	0 52	23 13	0 6	1 1	2 19	10 17	0 44	8 43
M14	14 23	19 38	1 47	2 29	2 8	4 18	3 39	6 3	0 51	23 13	0 6	1 4	2 19	10 16	0 44	8 43
T 15	14 4	16 54	2 47	2 0	2 19	4 41	3 48	5 48	0 51	23 13	0 6	1 6	2 19	10 14	0 44	8 44
W16	13 45	13 22	3 40	1 31	2 29	5 3	3 58	5 32	0 50	23 14	0 6	1 9	2 19	10 13	0 44	8 44
T 17	13 26	9 10	4 23	1 4	2 39	5 25	4 8	5 17	0 50	23 14	0 6	1 11	2 19	10 12	0 44	8 45
F 18	13 7	4 30	4 54	0 38	2 49	5 46	4 19	5 1	0 49	23 14	0 5	1 14	2 19	10 10	0 44	8 45
S 19	12 47	0n27	5 9	0 14	2 59	6 7	4 29	4 46	0 49	23 14	0 5	1 16	2 18	10 9	0 44	8 46
S 20	12 28	5 27	5 8	0s 9	3 9	6 27	4 39	4 30	0 48	23 14	0 5	1 19	2 18	10 7	0 44	8 46
M21	12 8	10 17	4 50	0 29	3 18	6 47	4 49	4 15	0 48	23 14	0 5	1 21	2 18	10 6	0 44	8 47
T 22	11 47	14 40	4 15	0 48	3 28	7 6	5 0	3 59	0 47	23 14	0 5	1 24	2 18	10 5	0 44	8 47
W23	11 27	18 19	3 24	1 4	3 36	7 24	5 10	3 43	0 47	23 15	0 5	1 26	2 18	10 3	0 44	8 48
T 24	11 7	20 55	2 21	1 18	3 44	7 42	5 21	3 28	0 46	23 15	0 5	1 29	2 18	10 2	0 44	8 48
F 25	10 46	22 12	1 7	1 29	3 52	7 59	5 31	3 12	0 46	23 15	0 4	1 31	2 18	10 1	0 44	8 49
S 26	10 25	22 1	0n11	1 37	3 59	8 15	5 42	2 56	0 45	23 15	0 4	1 34	2 18	9 59	0 44	8 49
S 27	10 4	20 21	1 28	1 43	4 5	8 31	5 52	2 40	0 45	23 15	0 4	1 37	2 18	9 58	0 44	8 50
M28	9 43	17 21	2 40	1 45	4 10	8 45	6 3	2 24	0 44	23 15	0 4	1 39	2 17	9 56	0 44	8 51
T 29	9 21	13 19	3 40	1 44	4 15	8 59	6 13	2 9	0 44	23 16	0 4	1 42	2 17	9 55	0 44	8 51
W30	9 0	8 36	4 26	1 39	4 18	9 12	6 23	1 53	0 43	23 16	0 4	1 45	2 17	9 54	0 44	8 52
T 31	8n38	3n33	4n55	1s30	4s19	9s24	6s33	1n37	0n43	23s16	0n 4	1s47	2n17	9n52	0n44	8s52

Julian Day Number = 2315887.5, Delta T = 59.10 sec

Ecliptic obliquity = 23°29'12, Nutation = - 0°00'15, out-of-bounds declination in red

Ayanamsha: Fagan/Bradley = 19°33'23, Lahiri = 18°40'23Greg. Calendar

ASTRODIENST EPHEMERIS for the year 1628
geocentric

SEPTEMBER 1628 GC

00:00 UT

Day	Sid.t	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
F 1	22 42 14	8♍50'30	15♌53	23°R16	8♌35	28♍15	23♌34	9♌54	6♍26	27♌14	20°R56	18°R28	17♍0	3♌59	5°R45	F 1
S 2	22 46 11	9°48'46	28°58	22♍38	8°R37	28°54	23°36	10°1	6°30	27°16	20♌56	18♍20	16°57	4°6	5°Y43	S 2
S 3	22 50 7	10°47'04	11♍40	21°54	8°36	29°33	23°39	10°8	6°33	27°17	20°56	18°15	16°54	4°13	5°41	S 3
M 4	22 54 4	11°45'23	24°3	21°5	8°34	0♌12	23°41	10°14	6°37	27°19	20°56	18°11	16°51	4°19	5°38	M 4
T 5	22 58 1	12°43'44	6♌9	20°11	8°29	0°51	23°44	10°21	6°41	27°21	20°55	18°9	16°47	4°26	5°36	T 5
W 6	23 1 57	13°42'07	18°5	19°13	8°21	1°30	23°47	10°28	6°45	27°23	20°55	18°D 9	16°44	4°33	5°33	W 6
T 7	23 5 54	14°40'31	29°54	18°13	8°11	2°9	23°51	10°35	6°48	27°24	20°55	18°10	16°41	4°39	5°30	T 7
F 8	23 9 50	15°38'56	11♌343	17°11	7°59	2°48	23°54	10°42	6°52	27°26	20°54	18°11	16°38	4°46	5°28	F 8
S 9	23 13 47	16°37'24	23°36	16°9	7°45	3°27	23°58	10°49	6°56	27°28	20°54	18°R11	16°35	4°53	5°25	S 9
S 10	23 17 43	17°35'53	5♌38	15°9	7°28	4°7	24°2	10°56	7°0	27°30	20°53	18°9	16°32	4°59	5°23	S 10
M11	23 21 40	18°34'23	17°53	14°11	7°8	4°46	24°6	11°2	7°3	27°32	20°53	18°5	16°28	5°6	5°20	M11
T 12	23 25 36	19°32'56	0♌24	13°18	6°47	5°25	24°10	11°9	7°7	27°33	20°53	17°59	16°25	5°12	5°17	T 12
W13	23 29 33	20°31'30	13°11	12°30	6°23	6°5	24°14	11°16	7°11	27°35	20°52	17°50	16°22	5°19	5°15	W13
T 14	23 33 30	21°30'06	26°15	11°49	5°58	6°44	24°19	11°23	7°14	27°37	20°52	17°40	16°19	5°26	5°12	T 14
F 15	23 37 26	22°28'44	9°Y36	11°16	5°30	7°24	24°23	11°31	7°18	27°39	20°51	17°29	16°16	5°32	5°9	F 15
S 16	23 41 23	23°27'25	23°9	10°52	5°0	8°3	24°28	11°38	7°22	27°41	20°51	17°18	16°12	5°39	5°7	S 16
S 17	23 45 19	24°26'07	6♌54	10°38	4°29	8°43	24°33	11°45	7°25	27°43	20°50	17°9	16°9	5°46	5°4	S 17
M18	23 49 16	25°24'52	20°47	10°D33	3°57	9°22	24°38	11°52	7°29	27°45	20°49	17°2	16°6	5°52	5°1	M18
T 19	23 53 12	26°23'38	4♌46	10°38	3°23	10°2	24°44	11°59	7°33	27°47	20°49	16°58	16°3	5°59	4°58	T 19
W20	23 57 9	27°22'28	18°49	10°53	2°48	10°41	24°49	12°6	7°36	27°49	20°48	16°56	16°0	6°6	4°55	W20
T 21	0 1 5	28°21'19	2♌55	11°18	2°12	11°21	24°55	12°13	7°40	27°51	20°48	16°D56	15°57	6°12	4°53	T 21
F 22	0 5 2	29°20'13	17°3	11°53	1°36	12°1	25°1	12°20	7°43	27°53	20°47	16°R56	15°53	6°19	4°50	F 22
S 23	0 8 59	0♌19'09	1♌11	12°36	0°59	12°41	25°7	12°28	7°47	27°55	20°46	16°56	15°50	6°26	4°47	S 23
S 24	0 12 55	1°18'08	15°19	13°28	0°23	13°21	25°13	12°35	7°50	27°57	20°46	16°53	15°47	6°32	4°44	S 24
M25	0 16 52	2°17'09	29°24	14°27	29♍46	14°1	25°19	12°42	7°54	27°59	20°45	16°48	15°44	6°39	4°42	M25
T 26	0 20 48	3°16'12	13♍23	15°33	29°9	14°41	25°25	12°49	7°58	28°1	20°44	16°39	15°41	6°45	4°39	T 26
W27	0 24 45	4°15'17	27°11	16°46	28°34	15°21	25°32	12°57	8°1	28°3	20°44	16°29	15°38	6°52	4°36	W27
T 28	0 28 41	5°14'24	10♌44	18°4	27°59	16°1	25°39	13°4	8°4	28°5	20°43	16°16	15°34	6°59	4°33	T 28
F 29	0 32 38	6°13'33	24°1	19°28	27°25	16°41	25°46	13°11	8°8	28°7	20°42	16°4	15°31	7°5	4°30	F 29
S 30	0 36 34	7♌12'44	6♍58	20♍55	26♍52	17♌21	25♌53	13♌19	8♍11	28♌9	20♌41	15♌52	15♌28	7♌12	4°Y27	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	decl	lat	decl	lat
F 1	8n16	1s32	5n 7	1s18	4s20	9s35	6s43	1n21	0n42	23s16	0n 3	1s50	2n17	9n51	0n44	8s53	1n45	4n 8	14s22	22n13	22n24	22s16	4n50	2n46							
S 2	7 54	6 25	5 2	1 2	4 18	9 45	6 53	1 5	0 42	23 17	0 3	1 53	2 17	9 49	0 44	8 54	1 45	4 8	14 23	22 14	22 25	22 17	4 49	2 46							
S 3	7 32	10 53	4 42	0 41	4 15	9 53	7 3	0 49	0 41	23 17	0 3	1 55	2 17	9 48	0 44	8 54	1 45	4 7	14 23	22 14	22 25	22 17	4 48	2 46							
M 4	7 10	14 47	4 10	0 18	4 10	10 1	7 12	0 33	0 41	23 17	0 3	1 58	2 17	9 47	0 44	8 55	1 45	4 7	14 23	22 15	22 25	22 18	4 47	2 46							
T 5	6 48	18 0	3 26	0n10	4 4	10 7	7 22	0 17	0 40	23 17	0 3	2 1	2 17	9 45	0 44	8 55	1 44	4 7	14 23	22 15	22 26	22 19	4 46	2 46							
W 6	6 25	20 23	2 35	0 40	3 55	10 12	7 30	0 1	0 40	23 18	0 3	2 4	2 17	9 44	0 44	8 56	1 44	4 6	14 24	22 15	22 26	22 19	4 45	2 46							
T 7	6 3	21 53	1 37	1 14	3 44	10 16	7 39	0s15	0 39	23 18	0 3	2 6	2 16	9 42	0 44	8 57	1 44	4 6	14 24	22 15	22 27	22 20	4 44	2 46							
F 8	5 40	22 24	0 35	1 49	3 32	10 19	7 47	0 32	0 39	23 18	0 3	2 9	2 16	9 41	0 44	8 57	1 44	4 6	14 24	22 15	22 27	22 20	4 43	2 46							
S 9	5 17	21 54	0s29	2 27	3 17	10 20	7 54	0 48	0 38	23 19	0 2	2 12	2 16	9 40	0 44	8 58	1 44	4 5	14 24	22 15	22 27	22 21	4 42	2 46							
S 10	4 55	20 23	1 32	3 5	3 1	10 20	8 2	1 4	0 38	23 19	0 2	2 15	2 16	9 38	0 44	8 59	1 44	4 5	14 25	22 15	22 28	22 22	4 41	2 46							
M11	4 32	17 55	2 32	3 43	2 44	10 18	8 8	1 20	0 37	23 19	0 2	2 17	2 16	9 37	0 44	8 59	1 44	4 5	14 25	22 16	22 28	22 22	4 40	2 46							
T 12	4 9	14 33	3 26	4 20	2 26	10 15	8 14	1 36	0 37	23 19	0 2	2 20	2 16	9 36	0 44	9 0	1 44	4 4	14 25	22 17	22 29	22 23	4 39	2 46							
W13	3 46	10 28	4 10	4 56	2 6	10 10	8 19	1 52	0 36	23 20	0 2	2 23	2 16	9 34	0 44	9 1	1 44	4 4	14 25	22 18	22 29	22 24	4 38	2 46							
T 14	3 23	5 48	4 42	5 30	1 47	10 4	8 24	2 8	0 36	23 20	0 2	2 26	2 16	9 33	0 44	9 2	1 44	4 4	14 26	22 19	22 29	22 24	4 37	2 46							
F 15	2 59	0 47	5 0	6 1	1 27	9 57	8 28	2 24	0 35	23 20	0 2	2 29	2 16	9 31	0 44	9 2	1 44	4 3	14 26	22 21	22 30	22 25	4 36	2 46							
S 16	2 36	4n21	5 1	6 28	1 7	9 48	8 31	2 40	0 35	23 21	0 2	2 31	2 16	9 30	0 44	9 3	1 44	4 3	14 26	22 22	22 30	22 25	4 34	2 46							
S 17	2 13	9 21	4 45	6 52	0 47	9 38	8 33	2 56	0 34	23 21	0 1	2 34	2 16	9 29	0 44	9 4	1 44	4 3	14 26	22 23	22 30	22 26	4 33	2 46							
M18	1 50	13 56	4 12	7 11	0 28	9 26	8 35	3 12	0 33	23 21	0 1	2 37	2 16	9 27	0 44	9 4	1 44	4 2	14 27	22 24	22 31	22 26	4 32	2 46							
T 19	1 26	17 47	3 24	7 26	0 10	9 13	8 35	3 29	0 33	23 22	0 1	2 40	2 16	9 26	0 44	9 5	1 44	4 2	14 27	22 24	22 31	22 27	4 31	2 46							
W20	1 3	20 38	2 24	7 36	0n 7	8 59	8 35	3 45	0 32	23 22	0 1	2 43	2 16	9 25	0 44	9 6	1 44	4 2	14 27	22 25	22 32	22 28	4 30	2 46							
T 21	0 39	22 13	1 14	7 42	0 23	8 43	8 33	4 1	0 32	23 22	0 1	2 46	2 16	9 23	0 44	9 7	1 44	4 1	14 27	22 25	22 32	22 28	4 29	2 46							
F 22	0 16	22 24	0n 1	7 42	0 38	8 27	8 31	4 17	0 31	23 23	0 1	2 48	2 16	9 22	0 44	9 7	1 44	4 1	14 27	22 25	22 32	22 29	4 28	2 46							
S 23	0s 8	21 9	1 15	7 38	0 51	8 9	8 28	4 33	0 31	23 23	0 1	2 51	2 16	9 21	0 44	9 8	1 44	4 1	14 28	22 25	22 33	22 29	4 26	2 46							
S 24	0 31	18 34	2 24	7 29	1 3	7 51	8 24	4 49	0 30	23 23	0 1	2 54	2 16	9 19	0 44	9 9	1 44	4 0	14 28	22 25	22 33	22 30	4 25	2 46							
M25	0 55	14 54	3 25	7 16	1 14	7 31	8 19	5 5	0 30	23 24	0 0	2 57	2 15	9 18	0 44	9 10	1 44	4 0	14 28	22 26	22 33	22 30	4 24	2 46							
T 26	1 18	10 25	4 12	6 59	1 24	7 11	8 13	5 21	0 29	23 24	0 0	3 0	2 15	9 17	0 44	9 10	1 44	4 0	14 28	22 27	22 34	22 31	4 23	2 46							
W27	1 42	5 28	4 44	6 39	1 32	6 51	8 6	5 37	0 29	23 24	0 0	3 3	2 15	9 16	0 44	9 11	1 44	3 59	14 28	22 28	22 34	22 31	4 22	2 45							
T 28	2 5	0 20	4 59	6 14	1 39	6 30	7 58	5 53	0 28	23 25	0 0	3 5	2 15	9 14	0 44	9 12	1 44	3 59	14 29	22 30	22 35	22 32	4 20	2 45							
F 29	2 29	4s43	4 58	5 47	1 45	6 9	7 50	6 9	0 28	23 25	0s 0	3 8	2 15	9 13	0 44	9 13	1 44	3 58	14 29	22 31	22 35	22 32	4 19	2 45							
S 30	2s52	9s26	4n41	5n17	1n49	5s47	7s41	6s25	0n27	23s25	0s 0	3s11	2n15	9n12	0n44	9s13	1n44	3n58	14s29	22n33	22n35	22s33	4n18	2n45							

ASTRODIENST EPHEMERIS for the year 1628

geocentric

OCTOBER 1628 GC

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
S 1	0 40 31	8♂11'57	19♂36	22♂26	26°R21	18♂1	26♂0	13♂26	8♂15	28♂11	20°R41	15°R42	15♂25	7♂19	4°R25	S 1
M 2	0 44 27	9°11'12	1♂56	24° 0	25♂51	18°41	26° 7	13°33	8°18	28°14	20♂40	15♂35	15°22	7°25	4°Y22	M 2
T 3	0 48 24	10°10'29	14° 2	25°37	25°23	19°21	26°15	13°41	8°21	28°16	20°39	15°30	15°18	7°32	4°19	T 3
W 4	0 52 21	11° 9'48	25°56	27°15	24°57	20° 2	26°22	13°48	8°25	28°18	20°38	15°28	15°15	7°39	4°16	W 4
T 5	0 56 17	12° 9'09	7♂45	28°56	24°33	20°42	26°30	13°55	8°28	28°20	20°37	15°27	15°12	7°45	4°13	T 5
F 6	1 0 14	13° 8'31	19°33	0♂37	24°11	21°23	26°38	14° 3	8°31	28°22	20°36	15°27	15° 9	7°52	4°11	F 6
S 7	1 4 10	14° 7'55	1♂27	2°19	23°51	22° 3	26°46	14°10	8°35	28°24	20°36	15°26	15° 6	7°59	4° 8	S 7
S 8	1 8 7	15° 7'21	13°31	4° 2	23°34	22°43	26°54	14°17	8°38	28°27	20°35	15°24	15° 3	8° 5	4° 5	S 8
M 9	1 12 3	16° 6'49	25°50	5°46	23°19	23°24	27° 3	14°25	8°41	28°29	20°34	15°20	14°59	8°12	4° 2	M 9
T 10	1 16 0	17° 6'18	8♂29	7°30	23° 7	24° 5	27°11	14°32	8°44	28°31	20°33	15°12	14°56	8°19	4° 0	T 10
W11	1 19 56	18° 5'50	21°29	9°13	22°57	24°45	27°20	14°39	8°47	28°33	20°32	15° 3	14°53	8°25	3°57	W11
T 12	1 23 53	19° 5'23	4°Y51	10°57	22°49	25°26	27°28	14°46	8°50	28°35	20°31	14°51	14°50	8°32	3°54	T 12
F 13	1 27 50	20° 4'58	18°34	12°41	22°44	26° 7	27°37	14°54	8°53	28°38	20°30	14°38	14°47	8°38	3°52	F 13
S 14	1 31 46	21° 4'35	2♂33	14°24	22°41	26°47	27°46	15° 1	8°57	28°40	20°29	14°26	14°43	8°45	3°49	S 14
S 15	1 35 43	22° 4'15	16°45	16° 7	22°D41	27°28	27°55	15° 8	9° 0	28°42	20°28	14°16	14°40	8°52	3°46	S 15
M16	1 39 39	23° 3'56	1♂4	17°49	22°43	28° 9	28° 5	15°16	9° 3	28°44	20°27	14° 8	14°37	8°58	3°44	M16
T 17	1 43 36	24° 3'40	15°24	19°31	22°48	28°50	28°14	15°23	9° 5	28°47	20°26	14° 2	14°34	9° 5	3°41	T 17
W18	1 47 32	25° 3'26	29°41	21°13	22°55	29°31	28°23	15°30	9° 8	28°49	20°25	14° 0	14°31	9°12	3°39	W18
T 19	1 51 29	26° 3'15	13♂54	22°54	23° 4	0♂12	28°33	15°37	9°11	28°51	20°24	13°D59	14°28	9°18	3°36	T 19
F 20	1 55 25	27° 3'05	27°59	24°35	23°15	0°53	28°43	15°45	9°14	28°53	20°23	14°R 0	14°24	9°25	3°34	F 20
S 21	1 59 22	28° 2'58	11♂58	26°15	23°29	1°34	28°52	15°52	9°17	28°56	20°22	13°59	14°21	9°32	3°31	S 21
S 22	2 3 19	29° 2'54	25°48	27°55	23°44	2°15	29° 2	15°59	9°20	28°58	20°21	13°56	14°18	9°38	3°29	S 22
M23	2 7 15	0♂25	9♂30	29°34	24° 2	2°56	29°12	16° 6	9°22	29° 0	20°20	13°51	14°15	9°45	3°26	M23
T 24	2 11 12	1° 2'50	23° 3	1♂13	24°21	3°38	29°22	16°14	9°25	29° 2	20°19	13°43	14°12	9°52	3°24	T 24
W25	2 15 8	2° 2'52	6♂26	2°51	24°43	4°19	29°33	16°21	9°28	29° 5	20°18	13°33	14° 9	9°58	3°21	W25
T 26	2 19 5	3° 2'56	19°37	4°28	25° 6	5° 0	29°43	16°28	9°30	29° 7	20°17	13°21	14° 5	10° 5	3°19	T 26
F 27	2 23 1	4° 3'01	2♂34	6° 6	25°32	5°42	29°53	16°35	9°33	29° 9	20°16	13° 8	14° 2	10°11	3°17	F 27
S 28	2 26 58	5° 3'09	15°16	7°42	25°58	6°23	0♂4	16°42	9°35	29°11	20°15	12°56	13°59	10°18	3°14	S 28
S 29	2 30 54	6° 3'18	27°44	9°19	26°27	7° 5	0°15	16°49	9°38	29°14	20°14	12°46	13°56	10°25	3°12	S 29
M30	2 34 51	7° 3'29	9♂57	10°54	26°57	7°46	0°25	16°56	9°40	29°16	20°13	12°39	13°53	10°31	3°10	M30
T 31	2 38 48	8♂34	21♂59	12♂30	27♂29	8♂28	0♂36	17♂3	9♂43	29♂18	20♂11	12♂34	13♂49	10♂38	3°Y 8	T 31

Day	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂
	decl	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	lat
S 1	3s15	13s39	4n10	4n44	1n53	5s26	7s31	6s40	0n26	23s26	0s 0	3s14	2n15	9n10	0n44	9s14
M 2	3 39	17 11	3 29	4 9	1 55	5 5	7 20	6 56	0 26	23 26	0 0	3 17	2 15	9 9	0 44	9 15
T 3	4 2	19 55	2 38	3 32	1 56	4 43	7 9	7 12	0 25	23 26	0 0	3 20	2 15	9 8	0 44	9 16
W 4	4 26	21 44	1 42	2 53	1 57	4 23	6 58	7 28	0 25	23 27	0 1	3 22	2 15	9 7	0 44	9 17
T 5	4 49	22 35	0 41	2 13	1 57	4 2	6 45	7 43	0 24	23 27	0 1	3 25	2 15	9 6	0 44	9 17
F 6	5 12	22 25	0s22	1 31	1 56	3 42	6 33	7 59	0 24	23 27	0 1	3 28	2 15	9 4	0 44	9 18
S 7	5 35	21 14	1 24	0 49	1 54	3 22	6 20	8 15	0 23	23 28	0 1	3 31	2 15	9 3	0 44	9 19
S 8	5 58	19 5	2 23	0 6	1 52	3 4	6 7	8 30	0 23	23 28	0 1	3 34	2 15	9 2	0 44	9 20
M 9	6 21	16 1	3 16	0s38	1 49	2 46	5 54	8 46	0 22	23 28	0 1	3 37	2 15	9 1	0 44	9 20
T 10	6 44	12 8	4 2	1 22	1 46	2 28	5 40	9 1	0 21	23 29	0 1	3 39	2 15	9 0	0 44	9 21
W11	7 7	7 36	4 36	2 6	1 42	2 12	5 27	9 17	0 21	23 29	0 1	3 42	2 15	8 58	0 44	9 21
T 12	7 29	2 36	4 56	2 51	1 38	1 56	5 13	9 32	0 20	23 29	0 1	3 45	2 16	8 57	0 44	9 23
F 13	7 52	2n40	5 0	3 35	1 33	1 41	4 59	9 48	0 20	23 29	0 2	3 48	2 16	8 56	0 44	9 24
S 14	8 14	7 54	4 46	4 20	1 28	1 28	4 45	10 3	0 19	23 30	0 2	3 51	2 16	8 55	0 44	9 24
S 15	8 37	12 49	4 14	5 4	1 23	1 15	4 32	10 18	0 19	23 30	0 2	3 53	2 16	8 54	0 44	9 25
M16	8 59	17 3	3 26	5 49	1 17	1 3	4 18	10 33	0 18	23 30	0 2	3 56	2 16	8 53	0 44	9 26
T 17	9 21	20 17	2 25	6 33	1 12	0 53	4 4	10 48	0 18	23 30	0 2	3 59	2 16	8 52	0 44	9 27
W18	9 43	22 14	1 15	7 17	1 6	0 43	3 51	11 4	0 17	23 31	0 2	4 2	2 16	8 51	0 44	9 28
T 19	10 5	22 45	0 0	8 0	1 0	0 34	3 38	11 19	0 16	23 31	0 2	4 4	2 16	8 50	0 45	9 28
F 20	10 27	21 48	1n14	8 43	0 54	0 27	3 24	11 33	0 16	23 31	0 2	4 7	2 16	8 49	0 45	9 29
S 21	10 48	19 31	2 22	9 25	0 47	0 20	3 11	11 48	0 15	23 31	0 2	4 10	2 16	8 48	0 45	9 30
S 22	11 9	16 7	3 22	10 7	0 41	0 14	2 59	12 3	0 15	23 31	0 2	4 13	2 16	8 47	0 45	9 31
M23	11 31	11 53	4 10	10 48	0 34	0 10	2 46	12 18	0 14	23 32	0 3	4 15	2 16	8 46	0 45	9 32
T 24	11 52	7 5	4 43	11 29	0 28	0 6	2 34	12 32	0 14	23 32	0 3	4 18	2 16	8 45	0 45	9 32
W25	12 13	2 1	5 0	12 9	0 21	0 4	2 22	12 47	0 13	23 32	0 3	4 21	2 16	8 44	0 45	9 33
T 26	12 33	3s 3	5 0	12 49	0 14	0 2	2 10	13 1	0 12	23 32	0 3	4 23	2 16	8 43	0 45	9 34
F 27	12 54	7 55	4 45	13 27	0 8	0 1	1 58	13 16	0 12	23 32	0 3	4 26	2 16	8 42	0 45	9 35
S 28	13 14	12 22	4 16	14 6	0 1	0 2	1 47	13 30	0 11	23 32	0 3	4 29	2 16	8 41	0 45	9 36
S 29	13 34	16 12	3 35	14 43	0s 6	0 3	1 35	13 44	0 11	23 32	0 3	4 31	2 16	8 40	0 45	9 36
M30	13 54	19 16	2 45	15 20	0 12	0 5	1 24	13 58	0 10	23 32	0 3	4 34	2 17	8 39	0 45	9 37
T 31	14s13	21s27	1n47	15s55	0s19	0s 7	1s14	14s12	0n 9	23s32	0s 3	4s37	2n17	8n38	0n45	9s38

Julian Day Number = 2315948.5, Delta T = 58.97 sec

Ecliptic obliquity = 23°29'13", Nutation = - 0°00'17", out-of-bounds declination in red

Ayanamsha: Fagan/Bradley = 19°33'31", Lahiri = 18°40'32"Greg. Calendar

ASTRODIENST EPHEMERIS for the year 1628
geocentric

NOVEMBER 1628 GC

00:00 UT

Day	Sid.t	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
W 1	2 42 44	9♉ 3'56	3♊51	14♈ 5	28♏ 2	9♈ 9	0♊47	17♏10	9♏45	29♏20	20°R10	12°R32	13♊46	10♊45	3°R 5	W 1
T 2	2 46 41	10° 4'12	15°38	15°40	28°36	9°51	0°58	17°17	9°47	29°22	20♊ 9	12°D31	13°43	10°51	3°Y 3	T 2
F 3	2 50 37	11° 4'30	27°25	17°14	29°12	10°33	1° 9	17°24	9°50	29°25	20° 8	12♊32	13°40	10°58	3° 1	F 3
S 4	2 54 34	12° 4'49	9♈17	18°48	29°50	11°15	1°21	17°31	9°52	29°27	20° 7	12°R33	13°37	11° 5	2°59	S 4
S 5	2 58 30	13° 5'10	21°20	20°22	0♊28	11°56	1°32	17°38	9°54	29°29	20° 6	12°32	13°34	11°11	2°57	S 5
M 6	3 2 27	14° 5'31	3♊38	21°55	1° 8	12°38	1°43	17°45	9°56	29°31	20° 5	12°30	13°30	11°18	2°55	M 6
T 7	3 6 23	15° 5'55	16°17	23°28	1°49	13°20	1°55	17°52	9°58	29°33	20° 4	12°26	13°27	11°25	2°53	T 7
W 8	3 10 20	16° 6'19	29°21	25° 1	2°31	14° 2	2° 6	17°58	10° 0	29°36	20° 3	12°19	13°24	11°31	2°52	W 8
T 9	3 14 17	17° 6'45	12♏50	26°33	3°14	14°44	2°18	18° 5	10° 2	29°38	20° 1	12°11	13°21	11°38	2°50	T 9
F 10	3 18 13	18° 7'13	26°45	28° 5	3°59	15°26	2°30	18°12	10° 4	29°40	20° 0	12° 2	13°18	11°45	2°48	F 10
S 11	3 22 10	19° 7'42	11♊ 3	29°37	4°44	16° 8	2°42	18°18	10° 6	29°42	19°59	11°53	13°15	11°51	2°46	S 11
S 12	3 26 6	20° 8'13	25°38	1♊ 9	5°30	16°50	2°53	18°25	10° 8	29°44	19°58	11°45	13°11	11°58	2°45	S 12
M13	3 30 3	21° 8'45	10♊22	2°40	6°17	17°33	3° 5	18°32	10°10	29°46	19°57	11°39	13° 8	12° 4	2°43	M13
T 14	3 33 59	22° 9'19	25° 9	4°11	7° 6	18°15	3°17	18°38	10°12	29°48	19°56	11°36	13° 5	12°11	2°41	T 14
W15	3 37 56	23° 9'55	9♊51	5°42	7°55	18°57	3°30	18°45	10°13	29°51	19°55	11°D35	13° 2	12°18	2°40	W15
T 16	3 41 52	24°10'32	24°22	7°13	8°45	19°39	3°42	18°51	10°15	29°53	19°54	11°35	12°59	12°24	2°38	T 16
F 17	3 45 49	25°11'11	8♊40	8°43	9°35	20°22	3°54	18°58	10°17	29°55	19°52	11°36	12°55	12°31	2°37	F 17
S 18	3 49 46	26°11'52	22°41	10°13	10°27	21° 4	4° 6	19° 4	10°18	29°57	19°51	11°R37	12°52	12°38	2°35	S 18
S 19	3 53 42	27°12'34	6♏27	11°43	11°19	21°47	4°19	19°10	10°20	29°59	19°50	11°37	12°49	12°44	2°34	S 19
M20	3 57 39	28°13'19	19°57	13°12	12°12	22°29	4°31	19°17	10°21	0♈ 1	19°49	11°35	12°46	12°51	2°33	M20
T 21	4 1 35	29°14'04	3♊12	14°41	13° 6	23°12	4°44	19°23	10°23	0° 3	19°48	11°30	12°43	12°58	2°31	T 21
W22	4 5 32	0♊14'51	16°13	16°10	14° 0	23°54	4°56	19°29	10°24	0° 5	19°47	11°25	12°40	13° 4	2°30	W22
T 23	4 9 28	1°15'40	29° 2	17°38	14°55	24°37	5° 9	19°35	10°25	0° 7	19°46	11°17	12°36	13°11	2°29	T 23
F 24	4 13 25	2°16'30	11♈38	19° 5	15°51	25°20	5°22	19°41	10°26	0° 9	19°45	11°10	12°33	13°18	2°28	F 24
S 25	4 17 21	3°17'22	24° 3	20°32	16°47	26° 3	5°35	19°47	10°28	0°11	19°44	11° 3	12°30	13°24	2°27	S 25
S 26	4 21 18	4°18'14	6♊16	21°58	17°44	26°46	5°48	19°53	10°29	0°13	19°42	10°57	12°27	13°31	2°26	S 26
M27	4 25 15	5°19'08	18°20	23°23	18°42	27°28	6° 0	19°59	10°30	0°15	19°41	10°53	12°24	13°37	2°25	M27
T 28	4 29 11	6°20'03	0♊15	24°47	19°40	28°11	6°13	20° 5	10°31	0°17	19°40	10°50	12°21	13°44	2°24	T 28
W29	4 33 8	7°20'59	12° 5	26°10	20°38	28°54	6°26	20°10	10°32	0°19	19°39	10°D50	12°17	13°51	2°23	W29
T 30	4 37 4	8♊21'56	23♊51	27♊32	21♊37	29♈37	6♊40	20♊16	10♏33	0♈20	19♊38	10♊50	12♊14	13♊57	2°Y23	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	14s33	22s40	0n46	16s30	0s26	0s11	1s 3	14s26	0n 9	23s33	0s 3	4s39	2n17	8n37	0n45	9s39	1n44	3n47	14s33	22n54	22n46	22s47	3n42	2n41	
T 2	14 52	22 51	0s17	17 5	0 32	0 16	0 53	14 40	0 8	23 33	0 4	4 42	2 17	8 36	0 45	9 39	1 44	3 47	14 33	22 54	22 47	22 47	3 41	2 41	
F 3	15 11	22 0	1 19	17 38	0 39	0 21	0 43	14 54	0 8	23 33	0 4	4 44	2 17	8 36	0 45	9 40	1 44	3 46	14 33	22 54	22 47	22 47	3 40	2 41	
S 4	15 29	20 11	2 18	18 10	0 45	0 27	0 34	15 7	0 7	23 33	0 4	4 47	2 17	8 35	0 45	9 41	1 44	3 46	14 33	22 54	22 47	22 48	3 39	2 41	
S 5	15 48	17 27	3 13	18 42	0 52	0 34	0 24	15 21	0 6	23 33	0 4	4 49	2 17	8 34	0 45	9 42	1 44	3 46	14 33	22 54	22 48	22 48	3 38	2 40	
M 6	16 6	13 54	3 59	19 13	0 58	0 41	0 15	15 34	0 6	23 32	0 4	4 52	2 17	8 33	0 45	9 42	1 44	3 46	14 33	22 54	22 48	22 48	3 37	2 40	
T 7	16 24	9 39	4 35	19 42	1 4	0 49	0 6	15 47	0 5	23 32	0 4	4 54	2 17	8 32	0 45	9 43	1 44	3 45	14 33	22 54	22 48	22 49	3 36	2 40	
W 8	16 41	4 49	4 58	20 11	1 10	0 58	0n 2	16 0	0 5	23 32	0 4	4 57	2 17	8 32	0 45	9 44	1 44	3 45	14 33	22 55	22 49	22 49	3 35	2 40	
T 9	16 59	0n23	5 6	20 39	1 16	1 8	0 11	16 13	0 4	23 32	0 4	4 59	2 18	8 31	0 45	9 45	1 44	3 45	14 33	22 56	22 49	22 49	3 34	2 40	
F 10	17 16	5 44	4 56	21 6	1 22	1 18	0 19	16 26	0 4	23 32	0 4	5 2	2 18	8 30	0 45	9 45	1 44	3 44	14 33	22 56	22 49	22 50	3 33	2 40	
S 11	17 32	10 56	4 28	21 32	1 27	1 29	0 27	16 39	0 3	23 32	0 4	5 4	2 18	8 30	0 45	9 46	1 44	3 44	14 33	22 57	22 50	22 50	3 32	2 39	
S 12	17 49	15 37	3 42	21 56	1 32	1 40	0 34	16 52	0 2	23 32	0 5	5 6	2 18	8 29	0 45	9 47	1 44	3 44	14 33	22 58	22 50	22 50	3 32	2 39	
M13	18 5	19 24	2 40	22 20	1 38	1 52	0 42	17 4	0 2	23 32	0 5	5 9	2 18	8 28	0 45	9 48	1 44	3 44	14 33	22 58	22 50	22 51	3 31	2 39	
T 14	18 21	21 56	1 28	22 42	1 43	2 5	0 49	17 17	0 1	23 31	0 5	5 11	2 18	8 28	0 45	9 48	1 44	3 43	14 32	22 59	22 51	22 51	3 30	2 39	
W15	18 36	22 58	0 9	23 4	1 48	2 18	0 56	17 29	0 1	23 31	0 5	5 14	2 18	8 27	0 45	9 49	1 44	3 43	14 32	22 59	22 51	22 51	3 29	2 39	
T 16	18 51	22 25	1n 9	23 24	1 52	2 31	1 2	17 41	0s 0	23 31	0 5	5 16	2 18	8 27	0 46	9 50	1 44	3 43	14 32	22 59	22 51	22 51	3 28	2 38	
F 17	19 6	20 24	2 21	23 43	1 56	2 45	1 9	17 53	0 1	23 31	0 5	5 18	2 19	8 26	0 46	9 50	1 44	3 43	14 32	22 59	22 51	22 52	3 28	2 38	
S 18	19 20	17 11	3 24	24 1	2 1	3 0	1 15	18 5	0 1	23 30	0 5	5 20	2 19	8 25	0 46	9 51	1 44	3 42	14 32	22 59	22 52	22 52	3 27	2 38	
S 19	19 34	13 5	4 14	24 17	2 4	3 15	1 21	18 17	0 2	23 30	0 5	5 23	2 19	8 25	0 46	9 52	1 44	3 42	14 32	22 59	22 52	22 52	3 26	2 38	
M20	19 48	8 24	4 48	24 33	2 8	3 30	1 27	18 28	0 3	23 30	0 5	5 25	2 19	8 24	0 46	9 53	1 44	3 42	14 32	22 59	22 52	22 52	3 25	2 38	
T 21	20 2	3 25	5 6	24 47	2 11	3 46	1 32	18 40	0 3	23 29	0 5	5 27	2 19	8 24	0 46	9 53	1 44	3 42	14 32	22 59	22 53	22 53	3 25	2 37	
W22	20 15	1s39	5 9	24 59	2 14	4 2	1 38	18 51	0 4	23 29	0 5	5 29	2 19	8 23	0 46	9 54	1 44	3 42	14 32	23 0	22 53	22 53	3 24	2 37	
T 23	20 27	6 33	4 55	25 11	2 17	4 19	1 43	19 2	0 4	23 29	0 6	5 31	2 19	8 23	0 46	9 55	1 44	3 41	14 32	23 0	22 53	22 53	3 23	2 37	
F 24	20 39	11 7	4 27	25 21	2 19	4 36	1 48	19 13	0 5	23 28	0 6	5 34	2 20	8 23	0 46	9 55	1 44	3 41	14 32	23 1	22 54	22 53	3 23	2 37	
S 25	20 51	15 9	3 47	25 29	2 21	4 53	1 52	19 24	0 6	23 28	0 6	5 36	2 20	8 22	0 46	9 56	1 44	3 41	14 32	23 2	22 54	22 53	3 22	2 37	
S 26	21 3	18 29	2 57	25 36	2 22	5 10	1 57	19 34	0 6	23 27	0 6	5 38	2 20	8 22	0 46	9 57	1 44	3 41	14 32	23 2	22 54	22 54	3 22	2 36	
M27	21 14	20 59	2 0	25 42	2 23	5 28	2 1	19 45	0 7	23 27	0 6	5 40	2 20	8 21	0 46	9 57	1 44	3 41	14 31	23 2	22 54	22 54	3 21	2 36	
T 28	21 25	22 32	0 58	25 46	2 23	5 46	2 5	19 55	0 7	23 26	0 6	5 42	2 20	8 21	0 46	9 58	1 44	3 41	14 31	23 3	22 55	22 54	3 21	2 36	
W29	21 35	23 3	0s 7	25 49	2 23	6 5	2 9	20 5	0 8	23 26	0 6	5 44	2 20	8 21	0 46	9 58	1 44	3 40	14 31	23 3	22 55	22 54	3 20	2 36	
T 30	21s45	22s32	1s11	25s50	2s22	6s23	2n13	20s15	0s 9	23s25	0s 6	5s46	2n21	8n20	0n46	9s59	1n44	3n40	14s31	23n 3	22n55	22s54	3n20	2n36	

ASTRODIENST EPHEMERIS for the year 1628
geocentric

DECEMBER 1628 GC

00:00 UT

Day	Sid.t	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
F 1	4 41 1	9 ^h 22'54	5 ^h 37	28 ^h 52	22 ^h 36	0 ^h 20	6 ^h 53	20 ^h 22	10 ^h 33	0 ^h 22	19 ^h 37	10 ^h 52	12 ^h 11	14 ^h 3	2 ^h 22	F 1
S 2	4 44 57	10°23'52	17°29	0 ^h 10	23°36	1° 4	7° 6	20°27	10°34	0°24	19 ^h 36	10°54	12° 8	14°11	2 ^h 21	S 2
S 3	4 48 54	11°24'51	29°29	1°26	24°37	1°47	7°19	20°33	10°35	0°26	19°35	10°56	12° 5	14°17	2°21	S 3
M 4	4 52 50	12°25'51	11 ^h 44	2°40	25°37	2°30	7°32	20°38	10°36	0°28	19°34	10°R56	12° 1	14°24	2°20	M 4
T 5	4 56 47	13°26'51	24°19	3°51	26°39	3°13	7°46	20°44	10°36	0°30	19°33	10°56	11°58	14°31	2°20	T 5
W 6	5 0 44	14°27'52	7 ^h 17	4°59	27°40	3°56	7°59	20°49	10°37	0°31	19°32	10°54	11°55	14°37	2°19	W 6
T 7	5 4 40	15°28'54	20°42	6° 2	28°42	4°40	8°12	20°54	10°37	0°33	19°31	10°51	11°52	14°44	2°19	T 7
F 8	5 8 37	16°29'56	4 ^h 35	7° 2	29°45	5°23	8°26	20°59	10°38	0°35	19°30	10°47	11°49	14°51	2°18	F 8
S 9	5 12 33	17°30'58	18°55	7°56	0 ^h 47	6° 7	8°39	21° 5	10°38	0°36	19°29	10°44	11°46	14°57	2°18	S 9
S 10	5 16 30	18°32'01	3 ^h 38	8°45	1°50	6°50	8°53	21°10	10°39	0°38	19°28	10°41	11°42	15° 4	2°18	S 10
M 11	5 20 26	19°33'05	18°37	9°27	2°54	7°34	9° 6	21°15	10°39	0°40	19°27	10°39	11°39	15°11	2°18	M 11
T 12	5 24 23	20°34'10	3 ^h 45	10° 1	3°58	8°17	9°20	21°19	10°39	0°41	19°26	10°D38	11°36	15°17	2°18	T 12
W 13	5 28 19	21°35'15	18°50	10°28	5° 2	9° 1	9°34	21°24	10°39	0°43	19°25	10°38	11°33	15°24	2°D18	W 13
T 14	5 32 16	22°36'21	3 ^h 46	10°45	6° 6	9°44	9°47	21°29	10°39	0°44	19°24	10°38	11°30	15°30	2°18	T 14
F 15	5 36 13	23°37'27	18°24	10°R52	7°11	10°28	10° 1	21°34	10°39	0°46	19°23	10°40	11°27	15°37	2°18	F 15
S 16	5 40 9	24°38'34	2 ^h 41	10°48	8°16	11°12	10°15	21°38	10°R39	0°48	19°22	10°41	11°23	15°44	2°18	S 16
S 17	5 44 6	25°39'42	16°35	10°33	9°21	11°56	10°28	21°43	10°39	0°49	19°22	10°42	11°20	15°50	2°18	S 17
M 18	5 48 2	26°40'51	0 ^h 6	10° 6	10°27	12°40	10°42	21°47	10°39	0°50	19°21	10°R42	11°17	15°57	2°18	M 18
T 19	5 51 59	27°42'00	13°15	9°28	11°33	13°23	10°56	21°52	10°39	0°52	19°20	10°41	11°14	16° 4	2°19	T 19
W 20	5 55 55	28°43'10	26° 5	8°38	12°39	14° 7	11°10	21°56	10°39	0°53	19°19	10°40	11°11	16°10	2°19	W 20
T 21	5 59 52	29°44'20	8 ^h 39	7°38	13°45	14°51	11°24	22° 0	10°39	0°55	19°18	10°39	11° 7	16°17	2°20	T 21
F 22	6 3 48	0 ^h 45'31	20°59	6°29	14°52	15°35	11°38	22° 4	10°38	0°56	19°17	10°37	11° 4	16°24	2°20	F 22
S 23	6 7 45	1°46'43	3 ^h 9	5°13	15°59	16°20	11°51	22° 8	10°38	0°57	19°16	10°36	11° 1	16°30	2°21	S 23
S 24	6 11 42	2°47'55	15° 9	3°53	17° 6	17° 4	12° 5	22°12	10°37	0°59	19°16	10°35	10°58	16°37	2°21	S 24
M 25	6 15 38	3°49'07	27° 3	2°31	18°13	17°48	12°19	22°16	10°37	1° 0	19°15	10°34	10°55	16°44	2°22	M 25
T 26	6 19 35	4°50'19	8 ^h 53	1°11	19°20	18°32	12°33	22°20	10°36	1° 1	19°14	10°D34	10°52	16°50	2°23	T 26
W 27	6 23 31	5°51'31	20°40	29 ^h 53	20°28	19°16	12°47	22°23	10°36	1° 2	19°13	10°34	10°48	16°57	2°23	W 27
T 28	6 27 28	6°52'43	2 ^h 27	28°42	21°36	20° 1	13° 1	22°27	10°35	1° 4	19°13	10°34	10°45	17° 3	2°24	T 28
F 29	6 31 24	7°53'55	14°17	27°38	22°44	20°45	13°15	22°30	10°34	1° 5	19°12	10°35	10°42	17°10	2°25	F 29
S 30	6 35 21	8°55'07	26°11	26°43	23°52	21°29	13°29	22°34	10°34	1° 6	19°11	10°35	10°39	17°17	2°26	S 30
S 31	6 39 18	9 ^h 56'18	8 ^h 15	25 ^h 58	25 ^h 1	22 ^h 14	13 ^h 43	22 ^h 37	10 ^h 33	1 ^h 7	19 ^h 11	10 ^h 35	10 ^h 36	17 ^h 23	2 ^h 27	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
F 1	21s54	21s 2	2s12	25s50	2s21	6s42	2n16	20s25	0s 9	23s25	0s 6	5s48	2n21	8n20	0n46	10s 0	1n44	3n40	14s31	23n 2	22n56	22s55	3n19	2n35	
S 2	22 3	18 36	3 8	25 48	2 19	7 1	2 20	20 34	0 10	23 24	0 6	5 50	2 21	8 20	0 46	10 0	1 44	3 40	14 31	23 2	22 56	22 55	3 19	2 35	
S 3	22 12	15 21	3 56	25 45	2 16	7 20	2 23	20 44	0 10	23 23	0 6	5 52	2 21	8 20	0 46	10 1	1 45	3 40	14 31	23 2	22 56	22 55	3 18	2 35	
M 4	22 20	11 24	4 35	25 40	2 13	7 40	2 26	20 53	0 11	23 23	0 7	5 54	2 21	8 19	0 46	10 1	1 45	3 40	14 31	23 2	22 57	22 55	3 18	2 35	
T 5	22 28	6 53	5 2	25 34	2 8	7 59	2 29	21 2	0 12	23 22	0 7	5 55	2 22	8 19	0 46	10 2	1 45	3 40	14 30	23 2	22 57	22 55	3 17	2 35	
W 6	22 35	1 55	5 14	25 27	2 3	8 19	2 31	21 11	0 12	23 21	0 7	5 57	2 22	8 19	0 46	10 3	1 45	3 40	14 30	23 2	22 57	22 55	3 17	2 34	
T 7	22 42	3n18	5 10	25 18	1 57	8 38	2 34	21 20	0 13	23 21	0 7	5 59	2 22	8 19	0 46	10 3	1 45	3 39	14 30	23 3	22 57	22 56	3 17	2 34	
F 8	22 48	8 33	4 48	25 8	1 50	8 58	2 36	21 28	0 14	23 20	0 7	6 1	2 22	8 19	0 46	10 4	1 45	3 39	14 30	23 3	22 58	22 56	3 16	2 34	
S 9	22 54	13 30	4 8	24 56	1 42	9 18	2 38	21 36	0 14	23 19	0 7	6 2	2 22	8 19	0 47	10 4	1 45	3 39	14 30	23 3	22 58	22 56	3 16	2 34	
S 10	22 59	17 48	3 10	24 44	1 32	9 38	2 40	21 44	0 15	23 18	0 7	6 4	2 23	8 19	0 47	10 5	1 45	3 39	14 30	23 3	22 58	22 56	3 16	2 33	
M 11	23 4	21 2	1 59	24 31	1 22	9 58	2 42	21 52	0 15	23 18	0 7	6 6	2 23	8 18	0 47	10 5	1 45	3 39	14 29	23 4	22 58	22 56	3 15	2 33	
T 12	23 9	22 48	0 38	24 16	1 10	10 18	2 43	22 0	0 16	23 17	0 7	6 7	2 23	8 18	0 47	10 6	1 45	3 39	14 29	23 4	22 59	22 56	3 15	2 33	
W 13	23 13	22 54	0n45	24 1	0 57	10 38	2 45	22 7	0 17	23 16	0 7	6 9	2 23	8 18	0 47	10 6	1 45	3 39	14 29	23 4	22 59	22 56	3 15	2 33	
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S 17	23 25	9 45	4 50	22 56	0n 8	11 58	2 49	22 35	0 19	23 12	0 8	6 15	2 24	8 19	0 47	10 8	1 45	3 39	14 28	23 3	23 0	22 57	3 14	2 32	
M 18	23 27	4 43	5 12	22 39	0 27	12 18	2 50	22 41	0 20	23 11	0 8	6 17	2 24	8 19	0 47	10 9	1 45	3 39	14 28	23 3	23 0	22 57	3 14	2 32	
T 19	23 28	0s23	5 17	22 23	0 46	12 38	2 50	22 47	0 20	23 10	0 8	6 18	2 25	8 19	0 47	10 9	1 45	3 39	14 28	23 3	23 1	22 57	3 14	2 32	
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T 26	23 24	23 2	0 9	20 41	2 48	14 52	2 50	23 24	0 25	23 2	0 9	6 27	2 26	8 20	0 47	10 12	1 46	3 39	14 26	23 4	23 3	22 57	3 14	2 30	
W 27	23 21	22 49	0s56	20 31	2 58	15 11	2 49	23 29	0 25	23 1	0 9	6 28	2 26	8 20	0 47	10 12	1 46	3 39	14 26	23 4	23 3	22 57	3 15	2 30	
T 28	23 18	21 35	1 59	20 23	3 6	15 29	2 49	23 33	0 26	23 0	0 9	6 29	2 27	8 21	0 47	10 13	1 46	3 39	14 26	23 4	23 3	22 57	3 15	2 30	
F 29	23 15	19 24	2 57	20 17	3 11	15 47	2 48	23 36	0 27	22 58	0 9	6 30	2 27	8 21	0 47	10 13	1 46	3 39	14 25	23 4	23 3	22 58	3 15	2 29	
S 30	23 11	16 23	3 48	20 13	3 14	16 5	2 47	23 40	0 27	22 57	0 9	6 31	2 27	8 21	0 47	10 13	1 46	3 39	14 25	23 4	23 4	22 58	3 15	2 29	
S 31	23s 7	12s39	4s29	20s11	3n15	16s22	2n46	23s43	0s28	22s56	0s 9	6s32	2n27	8n22	0n47	10s14	1n46	3n39	14s25	23n 4	23n 4	22s58	3n15	2n29	