



Astrodienst Ephemeris Tables for the year 2198

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 2198

geocentric

JANUARY 2198

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
M 1	6 44 1	10 ³ 49'26	12 ² 6	9 ³ 58	27 ¹¹ 8	20°R39	10 ³ 21	7 ² 7	17°R56	17 ¹ 48	21°R21	16°D30	15 ² 31	9 ³ 58	22 ¹¹ 40	M 1
T 2	6 47 58	11°50'35	26°14	11°34	27°52	20 ² 16	10°35	7°14	17 ¹ 53	17°48	21 ¹ 20	16 ² 31	15°28	10° 4	22°46	T 2
W 3	6 51 54	12°51'45	10 ¹ 31	13°11	28°38	19°52	10°49	7°20	17°51	17°48	21°19	16°32	15°25	10°11	22°52	W 3
T 4	6 55 51	13°52'54	24°56	14°47	29°24	19°29	11° 3	7°27	17°49	17°49	21°18	16°34	15°22	10°18	22°59	T 4
F 5	6 59 47	14°54'04	9 ² 25	16°24	0 ² 11	19° 5	11°17	7°34	17°47	17°49	21°16	16°R35	15°19	10°24	23° 5	F 5
S 6	7 3 44	15°55'15	23°52	18° 1	1° 0	18°41	11°31	7°41	17°45	17°49	21°15	16°35	15°15	10°31	23°11	S 6
S 7	7 7 41	16°56'25	8 ³ 14	19°39	1°49	18°17	11°44	7°47	17°42	17°50	21°14	16°33	15°12	10°38	23°18	S 7
M 8	7 11 37	17°57'36	22°24	21°17	2°39	17°53	11°58	7°54	17°40	17°50	21°13	16°30	15° 9	10°44	23°24	M 8
T 9	7 15 34	18°58'47	6 ² 17	22°55	3°29	17°29	12°12	8° 1	17°38	17°50	21°12	16°25	15° 6	10°51	23°30	T 9
W10	7 19 30	19°59'57	19°51	24°34	4°21	17° 5	12°26	8° 8	17°36	17°51	21°11	16°20	15° 3	10°58	23°36	W10
T 11	7 23 27	21° 1'07	3 ² 3	26°13	5°13	16°42	12°40	8°15	17°34	17°51	21°10	16°14	14°59	11° 4	23°42	T 11
F 12	7 27 23	22° 2'16	15°52	27°52	6° 6	16°18	12°54	8°22	17°32	17°52	21° 8	16° 8	14°56	11°11	23°47	F 12
S 13	7 31 20	23° 3'25	28°22	29°32	6°59	15°55	13° 7	8°29	17°30	17°52	21° 7	16° 4	14°53	11°18	23°53	S 13
S 14	7 35 17	24° 4'34	10 ¹ 34	1 ² 12	7°53	15°32	13°21	8°36	17°28	17°53	21° 6	16° 1	14°50	11°24	23°59	S 14
M15	7 39 13	25° 5'42	22°33	2°52	8°48	15°10	13°35	8°43	17°26	17°53	21° 5	16°D 0	14°47	11°31	24° 4	M15
T 16	7 43 10	26° 6'49	4 ² 25	4°33	9°44	14°48	13°49	8°50	17°25	17°54	21° 3	16° 0	14°44	11°38	24°10	T 16
W17	7 47 6	27° 7'56	16°14	6°14	10°40	14°27	14° 2	8°57	17°23	17°55	21° 2	16° 2	14°40	11°44	24°15	W17
T 18	7 51 3	28° 9'02	28° 5	7°55	11°36	14° 6	14°16	9° 4	17°21	17°55	21° 1	16° 3	14°37	11°51	24°20	T 18
F 19	7 54 59	29°10'08	10 ¹ 4	9°36	12°33	13°45	14°30	9°11	17°19	17°56	20°59	16°R 5	14°34	11°58	24°26	F 19
S 20	7 58 56	0 ² 11'12	22°14	11°17	13°31	13°25	14°43	9°18	17°18	17°57	20°58	16° 5	14°31	12° 4	24°31	S 20
S 21	8 2 52	1°12'17	4 ² 39	12°57	14°29	13° 6	14°57	9°25	17°16	17°58	20°57	16° 3	14°28	12°11	24°36	S 21
M22	8 6 49	2°13'20	17°21	14°38	15°28	12°47	15°10	9°32	17°14	17°58	20°56	15°59	14°25	12°18	24°41	M22
T 23	8 10 46	3°14'23	0 ² 21	16°18	16°27	12°29	15°24	9°40	17°13	17°59	20°54	15°52	14°21	12°24	24°45	T 23
W24	8 14 42	4°15'25	13°39	17°57	17°26	12°11	15°38	9°47	17°11	18° 0	20°53	15°45	14°18	12°31	24°50	W24
T 25	8 18 39	5°16'27	27°13	19°36	18°26	11°55	15°51	9°54	17°10	18° 1	20°51	15°36	14°15	12°38	24°55	T 25
F 26	8 22 35	6°17'28	10 ¹ 59	21°13	19°27	11°39	16° 5	10° 1	17° 8	18° 2	20°50	15°27	14°12	12°44	24°59	F 26
S 27	8 26 32	7°18'28	24°55	22°49	20°28	11°23	16°18	10° 8	17° 7	18° 3	20°49	15°19	14° 9	12°51	25° 4	S 27
S 28	8 30 28	8°19'28	8 ² 57	24°23	21°29	11° 9	16°31	10°15	17° 6	18° 4	20°47	15°14	14° 5	12°58	25° 8	S 28
M29	8 34 25	9°20'27	23° 3	25°55	22°30	10°55	16°45	10°22	17° 4	18° 5	20°46	15°10	14° 2	13° 4	25°13	M29
T 30	8 38 21	10°21'26	7 ¹ 9	27°24	23°32	10°42	16°58	10°30	17° 3	18° 6	20°44	15°D 9	13°59	13°11	25°17	T 30
W31	8 42 18	11 ² 22'24	21 ¹ 16	28 ² 49	24 ² 35	10 ² 29	17 ² 11	10 ² 37	17 ² 2	18 ² 7	20 ² 43	15 ² 9	13 ² 56	13 ² 18	25 ² 21	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
M 1	22s58	9s 8	4s44	24s41	1s39	15s43	3n53	25n37	3n50	22s58	0n 3	19s 1	0s34	22n55	0n 4	5n30	1s36	22n 9	8n13	22s44	22s38	17n38	16s37	1n52					
T 2	22 53	13 53	4 3	24 37	1 43	15 51	3 55	25 42	3 52	22 57	0 2	18 59	0 34	22 55	0 4	5 30	1 36	22 9	8 14	22 44	22 37	17 39	16 38	1 52					
W 3	22 48	17 54	3 5	24 32	1 47	15 59	3 57	25 48	3 53	22 56	0 2	18 58	0 34	22 55	0 4	5 30	1 36	22 10	8 14	22 44	22 37	17 41	16 39	1 53					
T 4	22 41	20 52	1 56	24 25	1 50	16 7	3 58	25 53	3 55	22 55	0 2	18 56	0 34	22 55	0 4	5 30	1 36	22 10	8 14	22 44	22 37	17 42	16 40	1 53					
F 5	22 35	22 29	0 39	24 17	1 54	16 16	3 59	25 57	3 56	22 54	0 2	18 54	0 34	22 55	0 4	5 30	1 36	22 11	8 14	22 44	22 36	17 43	16 41	1 54					
S 6	22 28	22 36	0n40	24 8	1 57	16 25	4 0	26 2	3 58	22 53	0 2	18 53	0 34	22 54	0 4	5 30	1 36	22 11	8 15	22 44	22 36	17 45	16 42	1 54					
S 7	22 20	21 14	1 56	23 56	1 59	16 34	4 1	26 7	3 59	22 52	0 2	18 51	0 34	22 54	0 4	5 30	1 36	22 12	8 15	22 44	22 36	17 46	16 44	1 55					
M 8	22 13	18 32	3 4	23 44	2 1	16 43	4 2	26 11	4 0	22 51	0 2	18 49	0 34	22 54	0 4	5 31	1 36	22 13	8 15	22 44	22 35	17 48	16 45	1 55					
T 9	22 4	14 49	3 59	23 30	2 3	16 52	4 2	26 15	4 1	22 49	0 2	18 48	0 34	22 54	0 4	5 31	1 36	22 13	8 15	22 43	22 35	17 49	16 46	1 55					
W10	21 55	10 25	4 39	23 14	2 5	17 1	4 2	26 19	4 2	22 48	0 2	18 46	0 34	22 54	0 4	5 31	1 36	22 14	8 15	22 43	22 34	17 51	16 47	1 56					
T 11	21 46	5 39	5 3	22 57	2 6	17 11	4 2	26 23	4 3	22 47	0 2	18 44	0 34	22 54	0 4	5 31	1 36	22 14	8 16	22 42	22 34	17 52	16 48	1 56					
F 12	21 37	0 47	5 12	22 38	2 7	17 20	4 1	26 27	4 3	22 46	0 2	18 42	0 34	22 53	0 4	5 31	1 36	22 15	8 16	22 42	22 34	17 53	16 49	1 57					
S 13	21 27	4n 0	5 4	22 18	2 7	17 29	4 1	26 30	4 4	22 45	0 1	18 41	0 34	22 53	0 4	5 32	1 36	22 15	8 16	22 41	22 33	17 55	16 50	1 57					
S 14	21 16	8 31	4 44	21 56	2 7	17 39	4 0	26 33	4 4	22 43	0 1	18 39	0 34	22 53	0 4	5 32	1 36	22 16	8 16	22 41	22 33	17 56	16 51	1 58					
M15	21 5	12 38	4 11	21 33	2 7	17 48	3 59	26 36	4 5	22 42	0 1	18 37	0 34	22 53	0 4	5 32	1 36	22 17	8 16	22 41	22 33	17 58	16 51	1 58					
T 16	20 54	16 14	3 27	21 8	2 6	17 57	3 58	26 39	4 5	22 41	0 1	18 35	0 35	22 53	0 4	5 33	1 35	22 17	8 17	22 41	22 32	17 59	16 52	1 59					
W17	20 43	19 9	2 35	20 42	2 4	18 6	3 57	26 41	4 5	22 39	0 1	18 33	0 35	22 53	0 4	5 33	1 35	22 18	8 17	22 41	22 32	18 0	16 53	1 59					
T 18	20 31	21 16	1 36	20 14	2 2	18 15	3 56	26 44	4 5	22 38	0 1	18 32	0 35	22 52	0 4	5 33	1 35	22 18	8 17	22 41	22 32	18 2	16 54	2 0					
F 19	20 18	22 28	0 33	19 45	2 0	18 24	3 54	26 46	4 5	22 37	0 1	18 30	0 35	22 52	0 4	5 33	1 35	22 19	8 17	22 41	22 31	18 3	16 55	2 0					
S 20	20 5	22 38	0s33	19 15	1 57	18 33	3 53	26 48	4 5	22 35	0 1	18 28	0 35	22 52	0 4	5 34	1 35	22 20	8 17	22 41	22 31	18 4	16 56	2 1					
S 21	19 52	21 41	1 39	18 43	1 53	18 42	3 51	26 50	4 5	22 34	0 1	18 26	0 35	22 52	0 4	5 34	1 35	22 20	8 17	22 41	22 31	18 6	16 56	2 1					
M22	19 39	19 38	2 41	18 9	1 48	18 50	3 49	26 51	4 4	22 32	0 1	18 24	0 35	22 52	0 4	5 35	1 35	22 21	8 18	22 41	22 30	18 7	16 57	2 2					
T 23	19 25	16 32	3 36	17 35	1 43	18 58	3 47	26 53	4 4	22 31	0 0	18 22	0 35	22 52	0 4	5 35	1 35	22 21	8 18	22 40	22 30	18 8	16 58	2 2					
W24	19 10	12 33	4 20	16 59	1 38	19 6	3 44	26 54	4 4	22 30	0 0	18 21	0 35	22 51	0 4	5 35	1 35	22 22	8 18	22 39	22 29	18 10	16 58	2 3					
T 25	18 56	7 52	4 51	16 22	1 31	19 13	3 42	26 55	4 3	22 28	0 0	18 19	0 35	22 51	0 4	5 36	1 35	22 23	8 18	22 38	22 29	18 11	16 59	2 3					
F 26	18 41	2 43	5 6	15 44	1 24	19 21	3 40	26 56	4 2	22 27	0 0	18 17	0 35	22 51	0 4	5 36	1 35	22 23	8 18	22 37	22 29	18 12	17 0	2 4					
S 27	18 25	2s37	5 2	15 6	1 16	19 28	3 37	26 56	4 2	22 25	0 0	18 15	0 35	22 51	0 4	5 36	1 35	22 24	8 18	22 36	22 28	18 14	17 0	2 4					
S 28	18 10	7 51	4 41	14 26	1 7	19 35	3 34	26 57	4 1	22 24	0 0	18 13	0 35	22 51	0 4	5 37	1 35	22 24	8 18	22 36	22 28	18 15	17 1	2 5					
M29	17 54	12 42	4 3	13 46	0 58	19 41	3 31	26 57	4 0	22 22	0s 0	18 11	0 35	22 51	0 4	5 37	1 35	22 25	8 19	22 35	22 28	18 16	17 1	2 5					
T 30	17 38	16 52	3 9	13 6	0 47	19 47	3 28	26 57	3 59	22 20	0 0	18 9	0 35	22 51	0 4	5 38	1 35	22 25	8 19	22 35	22 27	18 18	17 2	2 6					
W31	17s21	20s 4	2s 5	12s26	0s36	19s53	3n25	26n57	3n58	22s19	0s 0	18s 8	0s36	22n51	0n 4	5n38	1s35	22n26	8n19	22s35	22s27	18n19	17s 2	2n 6					

ASTRODIENST EPHEMERIS for the year 2198

geocentric

FEBRUARY 2198

00:00 UT

Day	Sid.t	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
T 1	8 46 15	12 ²³ 22'22	5 ²⁷ 21	0 ¹¹ 11	25 ²⁷ 37	10 ¹⁸ 18	17 ³² 25	10 ²² 44	17 ¹⁷ R 1	18 ¹⁷ Y 8	20 ¹⁸ R42	15 ²⁷ 10	13 ²⁷ 53	13 ²⁸ 24	25 ²⁶ 25	T 1
F 2	8 50 11	13 ²⁴ 19	19 ²⁴	1 ²⁸	26 ⁴⁰	10 ²⁸ 7	17 ³⁸	10 ⁵¹	17 ¹¹ II 0	18 ¹⁰	20 ¹⁸ Q40	15 ¹⁸ R10	13 ⁵⁰	13 ³¹	25 ²⁹	F 2
S 3	8 54 8	14 ²⁵ 16	3 ³² 24	2 ⁴⁰	27 ⁴⁴	9 ⁵⁷	17 ⁵¹	10 ⁵⁸	16 ⁵⁹	18 ¹¹	20 ³⁹	15 ⁹	13 ⁴⁶	13 ³⁸	25 ³³	S 3
S 4	8 58 4	15 ²⁶ 12	17 ¹⁷	3 ⁴⁶	28 ⁴⁷	9 ⁴⁸	18 ⁴	11 ⁵	16 ⁵⁷	18 ¹²	20 ³⁷	15 ⁵	13 ⁴³	13 ⁴⁴	25 ³⁶	S 4
M 5	9 2 1	16 ²⁷ 06	1 ²²	4 ⁴⁵	29 ⁵¹	9 ⁴⁰	18 ¹⁷	11 ¹²	16 ⁵⁷	18 ¹³	20 ³⁶	14 ⁵⁸	13 ⁴⁰	13 ⁵¹	25 ⁴⁰	M 5
T 6	9 5 57	17 ²⁸ 00	14 ³⁶	5 ³⁶	0 ⁵⁵	9 ³²	18 ³⁰	11 ²⁰	16 ⁵⁶	18 ¹⁵	20 ³⁴	14 ⁴⁸	13 ³⁷	13 ⁵⁸	25 ⁴⁴	T 6
W 7	9 9 54	18 ²⁸ 53	27 ⁵⁵	6 ¹⁹	2 ⁰	9 ²⁵	18 ⁴³	11 ²⁷	16 ⁵⁵	18 ¹⁶	20 ³³	14 ³⁷	13 ³⁴	14 ⁴	25 ⁴⁷	W 7
T 8	9 13 50	19 ²⁹ 44	10 ¹¹ 57	6 ⁵³	3 ⁴	9 ²⁰	18 ⁵⁶	11 ³⁴	16 ⁵⁴	18 ¹⁷	20 ³²	14 ²⁵	13 ³¹	14 ¹¹	25 ⁵⁰	T 8
F 9	9 17 47	20 ³⁰ 34	23 ⁴¹	7 ¹⁷	4 ⁹	9 ¹⁴	19 ⁹	11 ⁴¹	16 ⁵³	18 ¹⁹	20 ³⁰	14 ¹⁴	13 ²⁷	14 ¹⁸	25 ⁵³	F 9
S 10	9 21 44	21 ³¹ 23	6 ¹⁹ 9	7 ³⁰	5 ¹⁵	9 ¹⁰	19 ²²	11 ⁴⁸	16 ⁵²	18 ²⁰	20 ²⁹	14 ³	13 ²⁴	14 ²⁴	25 ⁵⁶	S 10
S 11	9 25 40	22 ³² 10	18 ²⁰	7 ¹⁸ 33	6 ²⁰	9 ⁷	19 ³⁵	11 ⁵⁵	16 ⁵²	18 ²¹	20 ²⁷	13 ⁵⁶	13 ²¹	14 ³¹	25 ⁵⁹	S 11
M12	9 29 37	23 ³² 56	0 ⁸ 20	7 ²⁵	7 ²⁶	9 ⁴	19 ⁴⁷	12 ²	16 ⁵¹	18 ²³	20 ²⁶	13 ⁵⁰	13 ¹⁸	14 ³⁸	26 ²	M12
T 13	9 33 33	24 ³³ 40	12 ¹¹	7 ⁶	8 ³¹	9 ²	20 ⁰	12 ⁹	16 ⁵¹	18 ²⁴	20 ²⁴	13 ⁴⁸	13 ¹⁵	14 ⁴⁴	26 ⁵	T 13
W14	9 37 30	25 ³⁴ 23	23 ⁵⁹	6 ³⁷	9 ³⁸	9 ¹	20 ¹³	12 ¹⁶	16 ⁵⁰	18 ²⁶	20 ²³	13 ¹⁰ D47	13 ¹¹	14 ⁵¹	26 ⁸	W14
T 15	9 41 26	26 ³⁵ 05	5 ¹¹ 50	5 ⁵⁸	10 ⁴⁴	9 ¹⁰ D 1	20 ²⁵	12 ²³	16 ⁵⁰	18 ²⁷	20 ²²	13 ⁴⁷	13 ⁸	14 ⁵⁸	26 ¹⁰	T 15
F 16	9 45 23	27 ³⁵ 44	17 ⁴⁸	5 ¹⁰	11 ⁵⁰	9 ¹	20 ³⁸	12 ³⁰	16 ⁴⁹	18 ²⁹	20 ²⁰	13 ¹⁰ R47	13 ⁵	15 ⁴	26 ¹³	F 16
S 17	9 49 19	28 ³⁶ 22	29 ⁵⁹	4 ¹⁵	12 ⁵⁷	9 ²	20 ⁵⁰	12 ³⁷	16 ⁴⁹	18 ³¹	20 ¹⁹	13 ⁴⁶	13 ²	15 ¹¹	26 ¹⁵	S 17
S 18	9 53 16	29 ³⁶ 59	12 ²⁸ 29	3 ¹³	14 ⁴	9 ⁴	21 ²	12 ⁴⁴	16 ⁴⁹	18 ³²	20 ¹⁷	13 ⁴³	12 ⁵⁹	15 ¹⁸	26 ¹⁷	S 18
M19	9 57 13	0 ¹¹ 37'33	25 ²⁰	2 ⁸	15 ¹¹	9 ⁷	21 ¹⁵	12 ⁵¹	16 ⁴⁸	18 ³⁴	20 ¹⁶	13 ³⁷	12 ⁵⁶	15 ²⁴	26 ¹⁹	M19
T 20	10 1 9	1 ³⁸ 06	8 ¹² 34	1 ⁰	16 ¹⁸	9 ¹⁰	21 ²⁷	12 ⁵⁸	16 ⁴⁸	18 ³⁶	20 ¹⁴	13 ²⁸	12 ⁵²	15 ³¹	26 ²¹	T 20
W21	10 5 6	2 ³⁸ 38	22 ¹²	29 ²² 52	17 ²⁵	9 ¹⁴	21 ³⁹	13 ⁵	16 ⁴⁸	18 ³⁷	20 ¹³	13 ¹⁷	12 ⁴⁹	15 ³⁸	26 ²³	W21
T 22	10 9 2	3 ³⁹ 07	6 ¹¹ 10	28 ⁴⁴	18 ³³	9 ¹⁹	21 ⁵¹	13 ¹²	16 ⁴⁸	18 ³⁹	20 ¹²	13 ⁵	12 ⁴⁶	15 ⁴⁴	26 ²⁵	T 22
F 23	10 12 59	4 ³⁹ 36	20 ²⁴	27 ⁴⁰	19 ⁴⁰	9 ²⁴	22 ³	13 ¹⁹	16 ¹⁰ D48	18 ⁴¹	20 ¹⁰	12 ⁵³	12 ⁴³	15 ⁵¹	26 ²⁷	F 23
S 24	10 16 55	5 ⁴⁰ 02	4 ²⁴ 49	26 ³⁹	20 ⁴⁸	9 ³⁰	22 ¹⁵	13 ²⁵	16 ⁴⁸	18 ⁴²	20 ⁹	12 ⁴²	12 ⁴⁰	15 ⁵⁸	26 ²⁸	S 24
S 25	10 20 52	6 ⁴⁰ 27	19 ¹⁷	25 ⁴⁴	21 ⁵⁶	9 ³⁷	22 ²⁷	13 ³²	16 ⁴⁸	18 ⁴⁴	20 ⁷	12 ³³	12 ³⁶	16 ⁴	26 ³⁰	S 25
M26	10 24 48	7 ⁴⁰ 51	3 ¹¹ 43	24 ⁵⁵	23 ⁵	9 ⁴⁴	22 ³⁹	13 ³⁹	16 ⁴⁸	18 ⁴⁶	20 ⁶	12 ²⁷	12 ³³	16 ¹¹	26 ³¹	M26
T 27	10 28 45	8 ⁴¹ 14	18 ³	24 ¹²	24 ¹³	9 ⁵²	22 ⁵⁰	13 ⁴⁶	16 ⁴⁸	18 ⁴⁸	20 ⁵	12 ²⁴	12 ³⁰	16 ¹⁸	26 ³²	T 27
W28	10 32 41	9 ¹¹ 41'35	2 ²⁷ 14	23 ²² 37	25 ²⁸ 21	10 ²⁸ 0	23 ³² 2	13 ²² 52	16 ¹¹ II49	18 ¹⁷ Y50	20 ¹⁸ Q 3	12 ²⁷ 23	12 ²⁷ 27	16 ¹⁸ Q24	26 ³³	W28

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	17s 4	22s 2	0s52	11s46	0s24	19s58	3n22	26n57	3n57	22s17	0s 0	18s 6	0s36	22n51	0n 4	5n39	1s35	22n27	8n19	22s35	22s26	18n20	17s 3	2n 7			
F 2	16 47	22 37	0n23	11 6	0 11	20 3	3 19	26 57	3 56	22 16	0 0	18 4	0 36	22 50	0 4	5 39	1 35	22 27	8 19	22 35	22 26	18 22	17 3	2 7			
S 3	16 29	21 46	1 36	10 28	0n 3	20 8	3 16	26 57	3 55	22 14	0 1	18 2	0 36	22 50	0 4	5 40	1 35	22 28	8 19	22 35	22 26	18 23	17 4	2 8			
S 4	16 11	19 36	2 43	9 51	0 17	20 12	3 12	26 56	3 54	22 12	0 1	18 0	0 36	22 50	0 4	5 40	1 35	22 28	8 19	22 35	22 25	18 24	17 4	2 8			
M 5	15 53	16 20	3 39	9 15	0 33	20 16	3 9	26 56	3 52	22 11	0 1	17 58	0 36	22 50	0 4	5 41	1 35	22 29	8 19	22 34	22 25	18 25	17 4	2 9			
T 6	15 35	12 15	4 22	8 42	0 48	20 19	3 5	26 55	3 51	22 9	0 1	17 56	0 36	22 50	0 4	5 41	1 35	22 29	8 19	22 33	22 25	18 27	17 5	2 9			
W 7	15 16	7 38	4 50	8 11	1 5	20 22	3 2	26 54	3 50	22 7	0 1	17 54	0 36	22 50	0 4	5 42	1 34	22 30	8 19	22 32	22 24	18 28	17 5	2 10			
T 8	14 57	2 47	5 2	7 43	1 21	20 24	2 58	26 53	3 49	22 6	0 1	17 52	0 36	22 50	0 4	5 42	1 34	22 31	8 20	22 30	22 24	18 29	17 5	2 10			
F 9	14 38	2n 4	4 59	7 19	1 38	20 26	2 54	26 52	3 47	22 4	0 1	17 51	0 36	22 50	0 4	5 43	1 34	22 31	8 20	22 29	22 23	18 31	17 5	2 11			
S 10	14 19	6 44	4 41	6 58	1 55	20 28	2 51	26 51	3 46	22 2	0 1	17 49	0 36	22 50	0 4	5 44	1 34	22 32	8 20	22 28	22 23	18 32	17 6	2 11			
S 11	13 59	11 3	4 11	6 42	2 11	20 29	2 47	26 50	3 44	22 0	0 1	17 47	0 36	22 50	0 4	5 44	1 34	22 32	8 20	22 27	22 23	18 33	17 6	2 12			
M12	13 39	14 51	3 30	6 30	2 27	20 30	2 43	26 49	3 43	21 59	0 1	17 45	0 36	22 50	0 4	5 45	1 34	22 33	8 20	22 26	22 22	18 34	17 6	2 12			
T 13	13 19	18 1	2 40	6 23	2 42	20 30	2 39	26 47	3 42	21 57	0 2	17 43	0 36	22 50	0 4	5 45	1 34	22 33	8 20	22 26	22 22	18 36	17 6	2 13			
W14	12 59	20 25	1 43	6 20	2 56	20 29	2 35	26 46	3 40	21 55	0 2	17 41	0 37	22 50	0 4	5 46	1 34	22 34	8 20	22 26	22 21	18 37	17 6	2 13			
T 15	12 38	21 57	0 42	6 23	3 9	20 28	2 31	26 44	3 39	21 53	0 2	17 39	0 37	22 50	0 4	5 47	1 34	22 34	8 20	22 26	22 21	18 38	17 6	2 14			
F 16	12 18	22 30	0s21	6 30	3 20	20 27	2 27	26 43	3 37	21 52	0 2	17 37	0 37	22 50	0 4	5 47	1 34	22 35	8 20	22 26	22 21	18 39	17 6	2 15			
S 17	11 57	22 0	1 25	6 42	3 29	20 25	2 23	26 41	3 35	21 50	0 2	17 35	0 37	22 49	0 4	5 48	1 34	22 35	8 20	22 26	22 20	18 40	17 6	2 15			
S 18	11 36	20 24	2 26	6 57	3 36	20 23	2 18	26 40	3 34	21 48	0 2	17 34	0 37	22 49	0 4	5 48	1 34	22 36	8 20	22 25	22 20	18 42	17 6	2 16			
M19	11 14	17 45	3 21	7 16	3 40	20 20	2 14	26 38	3 32	21 46	0 2	17 32	0 37	22 49	0 4	5 49	1 34	22 36	8 20	22 25	22 19	18 43	17 6	2 16			
T 20	10 53	14 7	4 7	7 38	3 43	20 16	2 10	26 36	3 31	21 45	0 2	17 30	0 37	22 49	0 4	5 50	1 34	22 37	8 20	22 23	22 19	18 44	17 6	2 17			
W21	10 31	9 40	4 41	8 2	3 42	20 12	2 6	26 34	3 29	21 43	0 2	17 28	0 37	22 49	0 4	5 50	1 34	22 37	8 20	22 22	22 19	18 45	17 6	2 17			
T 22	10 9	4 37	4 58	8 27	3 40	20 8	2 1	26 32	3 28	21 41	0 2	17 26	0 37	22 49	0 4	5 51	1 34	22 38	8 20	22 21	22 18	18 47	17 6	2 18			
F 23	9 47	0s46	4 58	8 54	3 36	20 3	1 57	26 30	3 26	21 39	0 3	17 24	0 37	22 49	0 4	5 52	1 34	22 38	8 20	22 19	22 18	18 48	17 6	2 18			
S 24	9 25	6 10	4 39	9 20	3 29	19 57	1 53	26 28	3 25	21 37	0 3	17 22	0 37	22 49	0 4	5 52	1 34	22 39	8 20	22 18	22 17	18 49	17 5	2 19			
S 25	9 3	11 16	4 2	9 46	3 21	19 51	1 48	26 26	3 23	21 35	0 3	17 20	0 38	22 49	0 4	5 53	1 34	22 39	8 20	22 17	22 17	18 50	17 5	2 20			
M26	8 41	15 42	3 9	10 12	3 11	19 44	1 44	26 24	3 21	21 34	0 3	17 19	0 38	22 49	0 4	5 54	1 34	22 40	8 20	22 16	22 17	18 51	17 5	2 20			
T 27	8 18	19 11	2 5	10 36	3 1	19 37	1 40	26 22	3 20	21 32	0 3	17 17	0 38	22 49	0 4	5 55	1 34	22 40	8 20	22 15	22 16	18 52	17 5	2 21			
W28	7s56	21s27	0s53	10s59	2n49	19s29	1n35	26n20	3n18	21s30	0s 3	17s15	0s38	22n50	0n 4	5n55	1s34	22n40	8n20	22s15	22s16	18n54	17s 4	2n21			

ASTRODIENST EPHEMERIS for the year 2198

geocentric

MARCH 2198

00:00 UT

Day	Sid.t	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
T 1	10 36 38	10°41'55	16°14'14	23°R 9	26°30	10°10	23°13	13°59	16°49	18°52	20°R 2	12°R23	12°24	16°31	26°M34	T 1
F 2	10 40 35	11°42'14	0°3 4	22°48	27°39	10°19	23°25	14° 6	16°49	18°53	20°R 1	12°R23	12°21	16°38	26°35	F 2
S 3	10 44 31	12°42'31	13°44	22°34	28°47	10°30	23°36	14°12	16°50	18°55	19°59	12°20	12°17	16°44	26°36	S 3
S 4	10 48 28	13°42'46	27°14	22°D28	29°56	10°40	23°48	14°19	16°50	18°57	19°58	12°15	12°14	16°51	26°37	S 4
M 5	10 52 24	14°43'00	10°33	22°28	1°5 5	10°52	23°59	14°25	16°51	18°59	19°57	12° 7	12°11	16°58	26°37	M 5
T 6	10 56 21	15°43'13	23°42	22°34	2°15	11° 4	24°10	14°32	16°51	19° 1	19°56	11°56	12° 8	17° 4	26°38	T 6
W 7	11 0 17	16°43'23	6°40	22°47	3°24	11°16	24°21	14°38	16°52	19° 3	19°54	11°43	12° 5	17°11	26°38	W 7
T 8	11 4 14	17°43'32	19°25	23° 5	4°33	11°29	24°32	14°45	16°53	19° 5	19°53	11°29	12° 2	17°18	26°38	T 8
F 9	11 8 10	18°43'39	1°56	23°28	5°43	11°43	24°43	14°51	16°53	19° 7	19°52	11°16	11°58	17°24	26°R38	F 9
S 10	11 12 7	19°43'44	14°15	23°57	6°52	11°57	24°53	14°57	16°54	19° 9	19°51	11° 4	11°55	17°31	26°38	S 10
S 11	11 16 4	20°43'47	26°21	24°30	8° 2	12°11	25° 4	15° 4	16°55	19°11	19°49	10°54	11°52	17°38	26°38	S 11
M12	11 20 0	21°43'48	8°18	25° 7	9°12	12°26	25°14	15°10	16°56	19°13	19°48	10°47	11°49	17°44	26°38	M12
T 13	11 23 57	22°43'47	20° 7	25°49	10°22	12°42	25°25	15°16	16°57	19°15	19°47	10°43	11°46	17°51	26°37	T 13
W14	11 27 53	23°43'44	1°15	26°34	11°31	12°58	25°35	15°22	16°58	19°17	19°46	10°41	11°42	17°58	26°37	W14
T 15	11 31 50	24°43'39	13°43	27°23	12°41	13°14	25°45	15°28	16°59	19°19	19°45	10°D41	11°39	18° 4	26°36	T 15
F 16	11 35 46	25°43'32	25°40	28°15	13°52	13°31	25°55	15°34	17° 0	19°22	19°44	10°R41	11°36	18°11	26°36	F 16
S 17	11 39 43	26°43'22	7°50	29°10	15° 2	13°48	26° 5	15°40	17° 1	19°24	19°42	10°40	11°33	18°18	26°35	S 17
S 18	11 43 39	27°43'11	20°18	0°8 8	16°12	14° 6	26°15	15°46	17° 2	19°26	19°41	10°38	11°30	18°24	26°34	S 18
M19	11 47 36	28°42'57	3°10	1° 9	17°22	14°24	26°25	15°52	17° 3	19°28	19°40	10°34	11°27	18°31	26°33	M19
T 20	11 51 33	29°42'40	16°27	2°12	18°33	14°42	26°35	15°58	17° 5	19°30	19°39	10°27	11°23	18°38	26°32	T 20
W21	11 55 29	0°42'22	0°13	3°18	19°43	15° 1	26°44	16° 4	17° 6	19°32	19°38	10°17	11°20	18°44	26°31	W21
T 22	11 59 26	1°42'01	14°24	4°26	20°54	15°20	26°54	16°10	17° 7	19°34	19°37	10° 7	11°17	18°51	26°29	T 22
F 23	12 3 22	2°41'38	28°57	5°36	22° 4	15°40	27° 3	16°15	17° 9	19°37	19°36	9°56	11°14	18°57	26°28	F 23
S 24	12 7 19	3°41'14	13°45	6°48	23°15	16° 0	27°12	16°21	17°10	19°39	19°35	9°46	11°11	19° 4	26°26	S 24
S 25	12 11 15	4°40'47	28°39	8° 3	24°26	16°20	27°21	16°26	17°12	19°41	19°34	9°39	11° 7	19°11	26°25	S 25
M26	12 15 12	5°40'18	13°30	9°19	25°36	16°41	27°30	16°32	17°13	19°43	19°33	9°34	11° 4	19°17	26°23	M26
T 27	12 19 8	6°39'48	28°12	10°37	26°47	17° 2	27°39	16°37	17°15	19°45	19°32	9°31	11° 1	19°24	26°21	T 27
W28	12 23 5	7°39'16	12°39	11°57	27°58	17°23	27°48	16°43	17°17	19°48	19°32	9°D31	10°58	19°31	26°19	W28
T 29	12 27 2	8°38'42	26°49	13°18	29° 9	17°45	27°57	16°48	17°18	19°50	19°31	9°31	10°55	19°37	26°17	T 29
F 30	12 30 58	9°38'07	10°30	14°41	0°20	18° 7	28° 5	16°53	17°20	19°52	19°30	9°R32	10°52	19°44	26°15	F 30
S 31	12 34 55	10°37'30	24°13	16°6 6	1°31	18°29	28°13	16°59	17°22	19°54	19°29	9°R31	10°48	19°51	26°M13	S 31

Day	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂
	decl	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	lat
T 1	7s33	22s22	0n20	11s20	2n36	19s21	1n31	26n18	3n17	21s28	0s 3	17s13	0s38	22n50	0n 4	5n56
F 2	7 10	21 53	1 32	11 39	2 23	19 12	1 27	26 15	3 15	21 26	0 3	17 11	0 38	22 50	0 4	5 57
S 3	6 47	20 6	2 37	11 56	2 10	19 2	1 22	26 13	3 14	21 25	0 3	17 9	0 38	22 50	0 4	5 58
S 4	6 24	17 12	3 33	12 11	1 56	18 52	1 18	26 11	3 12	21 23	0 4	17 8	0 38	22 50	0 4	5 58
M 5	6 1	13 27	4 16	12 24	1 42	18 42	1 13	26 8	3 11	21 21	0 4	17 6	0 38	22 50	0 4	5 59
T 6	5 37	9 7	4 45	12 35	1 29	18 31	1 9	26 5	3 9	21 19	0 4	17 4	0 38	22 50	0 4	6 0
W 7	5 14	4 25	4 59	12 44	1 15	18 19	1 5	26 3	3 7	21 17	0 4	17 2	0 39	22 50	0 4	6 1
T 8	4 51	0n22	4 57	12 50	1 2	18 7	1 0	26 0	3 6	21 15	0 4	17 0	0 39	22 50	0 4	6 1
F 9	4 27	5 4	4 41	12 55	0 49	17 55	0 56	25 58	3 4	21 14	0 4	16 59	0 39	22 50	0 4	6 2
S 10	4 4	9 29	4 12	12 58	0 36	17 42	0 52	25 55	3 3	21 12	0 4	16 57	0 39	22 50	0 4	6 3
S 11	3 40	13 27	3 32	12 59	0 23	17 28	0 48	25 52	3 1	21 10	0 4	16 55	0 39	22 50	0 4	6 4
M12	3 17	16 49	2 43	12 58	0 11	17 14	0 43	25 49	3 0	21 8	0 4	16 53	0 39	22 50	0 4	6 5
T 13	2 53	19 28	1 47	12 55	0s 1	17 0	0 39	25 46	2 58	21 6	0 5	16 52	0 39	22 50	0 4	6 5
W14	2 29	21 17	0 46	12 50	0 12	16 45	0 35	25 43	2 57	21 5	0 5	16 50	0 39	22 50	0 4	6 6
T 15	2 6	22 9	0s16	12 43	0 23	16 29	0 31	25 40	2 55	21 3	0 5	16 48	0 39	22 51	0 4	6 7
F 16	1 42	22 2	1 19	12 35	0 33	16 13	0 27	25 37	2 54	21 1	0 5	16 47	0 39	22 51	0 4	6 8
S 17	1 18	20 52	2 19	12 25	0 43	15 57	0 23	25 34	2 53	20 59	0 5	16 45	0 40	22 51	0 4	6 9
S 18	0 54	18 41	3 14	12 14	0 53	15 40	0 19	25 30	2 51	20 58	0 5	16 43	0 40	22 51	0 4	6 9
M19	0 31	15 31	4 1	12 1	1 2	15 23	0 15	25 27	2 50	20 56	0 5	16 42	0 40	22 51	0 4	6 10
T 20	0 7	11 29	4 37	11 46	1 10	15 5	0 11	25 23	2 48	20 54	0 5	16 40	0 40	22 51	0 4	6 11
W21	0n17	6 44	4 58	11 30	1 19	14 47	0 7	25 20	2 47	20 52	0 5	16 38	0 40	22 51	0 4	6 12
T 22	0 41	1 29	5 2	11 13	1 26	14 28	0 3	25 16	2 45	20 51	0 6	16 37	0 40	22 51	0 4	6 13
F 23	1 4	3s58	4 46	10 54	1 34	14 9	0s 1	25 13	2 44	20 49	0 6	16 35	0 40	22 52	0 4	6 13
S 24	1 28	9 17	4 12	10 33	1 40	13 50	0 5	25 9	2 43	20 47	0 6	16 34	0 40	22 52	0 4	6 14
S 25	1 51	14 5	3 20	10 12	1 47	13 30	0 8	25 5	2 41	20 46	0 6	16 32	0 40	22 52	0 4	6 15
M26	2 15	18 0	2 14	9 48	1 53	13 10	0 12	25 1	2 40	20 44	0 6	16 31	0 41	22 52	0 4	6 16
T 27	2 39	20 43	1 0	9 24	1 58	12 49	0 16	24 57	2 39	20 42	0 6	16 29	0 41	22 52	0 4	6 17
W28	3 2	22 1	0n17	8 58	2 3	12 28	0 19	24 53	2 37	20 41	0 6	16 28	0 41	22 52	0 4	6 18
T 29	3 25	21 51	1 31	8 31	2 7	12 7	0 23	24 49	2 36	20 39	0 6	16 26	0 41	22 53	0 4	6 19
F 30	3 49	20 21	2 39	8 3	2 11	11 45	0 26	24 45	2 35	20 38	0 7	16 25	0 41	22 53	0 4	6 19
S 31	4n12	17s42	3n36	7s33	2s15	11s23	0s29	24n40	2n33	20s36	0s 7	16s23	0s41	22n53	0n 4	6n20

Julian Day Number = 2523922.5, Delta T = 161.21 sec
 Ecliptic obliquity = 23°24'46, Nutation = 0°00'17, out-of-bounds declination in red
 Ayanamsha: Fagan/Bradley = 27°30'34, Lahiri = 26°37'35

ASTRODIENST EPHEMERIS for the year 2198

geocentric

MAY 2198

00:00 UT

Day	Sid.t	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
T 1	14 37 8	11°13'36	13°13'36	12°15'15	8°17'33	1°15'57	1°18'18	19°18'33	18°18'38	21°19'4	19°19'16	7°19'52	9°19'10	23°18'17	24°19'25	T 1
W 2	14 41 4	11°59'56	25°31'14	14°24'46	9°46'26	2°26'12	1°22'19	19°19'6	18°41'21	21°21'6	19°19'16	7°19'48	9°19'7	23°24'24	24°19'21	W 2
T 3	14 45 1	12°58'15	7°14'47	16°33'10	10°58'25	1°25'19	1°25'19	19°19'8	18°44'21	21°21'8	19°19'16	7°19'44	9°19'0	23°30'24	24°19'17	T 3
F 4	14 48 57	13°56'32	19°44'18	18°43'12	10°10'32	1°28'19	1°28'19	19°19'11	18°47'21	21°21'10	19°19'16	7°19'40	9°19'0	23°37'24	24°19'12	F 4
S 5	14 52 54	14°54'48	1°18'43	20°51'13	13°22'35	1°30'19	1°30'19	19°19'13	18°50'21	21°21'12	19°19'16	7°19'36	8°19'57	23°44'24	24°19'8	S 5
S 6	14 56 51	15°53'02	13°34'23	23°0'14	14°34'42	1°33'19	1°33'19	19°19'15	18°53'21	21°21'15	19°19'16	7°19'34	8°19'54	23°50'24	24°19'3	S 6
M 7	15 0 47	16°51'14	25°22'25	25°7'15	15°47'45	1°36'19	1°36'19	19°19'18	18°56'21	21°21'17	19°19'17	7°19'32	8°19'51	23°57'23	24°19'59	M 7
T 8	15 4 44	17°49'25	7°11'9	27°13'16	16°59'52	1°38'19	1°38'19	19°19'20	18°59'21	21°21'19	19°19'17	7°19'32	8°19'48	24°3'23	24°19'54	T 8
W 9	15 8 40	18°47'33	18°58'29	17°18'11	15°54'52	1°40'19	1°40'19	19°19'22	19°2'21	21°21'21	19°19'17	7°19'32	8°19'45	24°10'23	24°19'50	W 9
T 10	15 12 37	19°45'40	0°51'11	19°23'6	12°25'6	1°42'19	1°42'19	19°19'24	19°6'21	21°21'23	19°19'17	7°19'33	8°19'41	24°17'23	24°19'45	T 10
F 11	15 16 33	20°43'45	12°51'3	20°36'5	13°22'6	1°43'19	1°43'19	19°19'26	19°9'21	21°21'25	19°19'17	7°19'34	8°19'38	24°23'23	24°19'41	F 11
S 12	15 20 30	21°41'49	25°3'5	21°48'7	14°15'7	1°45'19	1°45'19	19°19'27	19°12'21	21°21'27	19°19'18	7°19'36	8°19'35	24°30'23	24°19'36	S 12
S 13	15 24 26	22°39'50	7°12'29	23°0'7	15°56'8	1°46'19	1°46'19	19°19'29	19°15'21	21°21'29	19°19'18	7°19'37	8°19'32	24°37'23	24°19'32	S 13
M14	15 28 23	23°37'50	20°15'9	24°13'8	16°27'8	1°47'19	1°47'19	19°19'31	19°19'21	21°21'31	19°19'18	7°19'37	8°19'29	24°43'23	24°19'27	M14
T 15	15 32 20	24°35'47	3°11'24	10°58'25	16°58'8	1°48'19	1°48'19	19°19'32	19°22'21	21°21'33	19°19'19	7°19'37	8°19'25	24°50'23	24°19'23	T 15
W16	15 36 16	25°33'43	16°59'12	12°45'26	17°29'9	1°49'19	1°49'19	19°19'33	19°25'21	21°21'35	19°19'19	7°19'36	8°19'22	24°57'23	24°19'18	W16
T 17	15 40 13	26°31'37	1°12'0	14°30'27	10°0'10	1°49'19	1°49'19	19°19'35	19°28'21	21°21'37	19°19'20	7°19'35	8°19'19	25°3'23	24°19'14	T 17
F 18	15 44 9	27°29'29	15°27'16	16°10'29	10°31'10	1°50'19	1°50'19	19°19'36	19°32'21	21°21'39	19°19'20	7°19'34	8°19'16	25°10'23	24°19'9	F 18
S 19	15 48 6	28°27'19	0°16'16	17°48'0	11°3'11	1°50'19	1°50'19	19°19'37	19°35'21	21°21'41	19°19'21	7°19'33	8°19'13	25°17'23	24°19'5	S 19
S 20	15 52 2	29°25'08	15°21'19	19°22'12	11°34'11	1°50'19	1°50'19	19°19'38	19°39'21	21°21'43	19°19'21	7°19'32	8°19'10	25°23'23	24°19'0	S 20
M21	15 55 59	0°11'22	5°12'56	20°53'2	12°6'12	1°50'19	1°50'19	19°19'39	19°42'21	21°21'45	19°19'22	7°19'32	8°19'6	25°30'23	24°19'56	M21
T 22	15 59 55	1°20'42	15°44'22	22°20'3	13°52'12	1°49'19	1°49'19	19°19'40	19°45'21	21°21'46	19°19'22	7°19'32	8°19'3	25°37'22	24°19'51	T 22
W23	16 3 52	2°18'27	0°33'43	23°44'5	13°9'13	1°49'19	1°49'19	19°19'40	19°49'21	21°21'48	19°19'23	7°19'32	8°19'0	25°43'22	24°19'47	W23
T 24	16 7 49	3°16'11	15°23'25	25°4'6	13°41'13	1°48'19	1°48'19	19°19'41	19°52'21	21°21'50	19°19'23	7°19'33	8°19'7	25°50'22	24°19'42	T 24
F 25	16 11 45	4°13'53	29°39'26	20°27'29	14°13'14	1°47'19	1°47'19	19°19'42	19°56'21	21°21'52	19°19'24	7°19'33	8°19'7	25°56'22	24°19'38	F 25
S 26	16 15 42	5°11'34	13°28'27	27°33'8	14°45'14	1°46'19	1°46'19	19°19'42	19°59'21	21°21'54	19°19'25	7°19'33	8°19'7	26°3'22	24°19'34	S 26
S 27	16 19 38	6°9'15	26°51'28	28°42'9	15°17'15	1°45'19	1°45'19	19°19'42	20°3'21	21°21'55	19°19'25	7°19'33	8°19'7	26°10'22	24°19'29	S 27
M28	16 23 35	7°6'54	9°14'49	29°47'11	15°49'15	1°43'19	1°43'19	19°19'42	20°6'21	21°21'57	19°19'26	7°19'33	8°19'7	26°16'22	24°19'25	M28
T 29	16 27 31	8°4'32	22°26'0	30°48'12	16°22'16	1°41'19	1°41'19	19°19'43	20°10'21	21°21'59	19°19'27	7°19'33	8°19'7	26°23'22	24°19'21	T 29
W30	16 31 28	9°2'10	4°14'45	1°46'13	13°32'16	1°39'19	1°39'19	19°19'43	20°13'22	21°22'1	19°19'28	7°19'33	8°19'7	26°30'22	24°19'17	W30
T 31	16 35 24	9°11'59	4°16'51	2°39'14	14°45'17	1°37'19	1°37'19	19°19'42	20°11'22	21°22'2	19°19'28	7°19'34	8°19'7	26°36'22	24°19'12	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
T 1	15n 7	1s49	5n13	15n22	0s 8	1n53	1s38	21n37	1n58	20s 2	0s11	15s49	0s45	23n 0	0n 4	6n46	1s33	22n50	8n14	21s36	21s48	19n56	16s 3	2n53	
W 2	15 25	2n48	4 59	16 11	0n 3	2 21	1 39	21 29	1 57	20 1	0 11	15 48	0 46	23 0	0 4	6 47	1 33	22 50	8 14	21 35	21 48	19 57	16 2	2 54	
T 3	15 43	7 14	4 32	16 59	0 13	2 48	1 40	21 22	1 56	20 0	0 11	15 48	0 46	23 0	0 4	6 48	1 33	22 50	8 14	21 34	21 47	19 58	16 0	2 54	
F 4	16 0	11 20	3 53	17 45	0 24	3 15	1 41	21 14	1 55	20 0	0 11	15 47	0 46	23 1	0 4	6 48	1 33	22 49	8 14	21 34	21 47	19 59	15 59	2 54	
S 5	16 18	14 57	3 5	18 30	0 34	3 43	1 41	21 6	1 54	19 59	0 12	15 46	0 46	23 1	0 4	6 49	1 33	22 49	8 13	21 33	21 46	20 0	15 57	2 55	
S 6	16 35	17 56	2 8	19 13	0 45	4 10	1 42	20 58	1 53	19 59	0 12	15 46	0 46	23 1	0 4	6 50	1 34	22 49	8 13	21 33	21 46	20 1	15 56	2 55	
M 7	16 51	20 10	1 7	19 55	0 55	4 37	1 43	20 50	1 52	19 59	0 12	15 45	0 46	23 1	0 4	6 51	1 34	22 49	8 13	21 33	21 45	20 1	15 55	2 56	
T 8	17 8	21 31	0 2	20 34	1 5	5 5	1 43	20 41	1 51	19 58	0 12	15 45	0 47	23 2	0 4	6 51	1 34	22 49	8 13	21 32	21 45	20 2	15 53	2 56	
W 9	17 24	21 55	1s 3	21 11	1 15	5 32	1 43	20 33	1 50	19 58	0 12	15 44	0 47	23 2	0 4	6 52	1 34	22 48	8 13	21 33	21 44	20 3	15 52	2 56	
T 10	17 39	21 19	2 6	21 46	1 24	5 59	1 44	20 24	1 49	19 58	0 12	15 44	0 47	23 2	0 4	6 53	1 34	22 48	8 13	21 33	21 44	20 4	15 50	2 57	
F 11	17 55	19 45	3 3	22 19	1 32	6 26	1 44	20 16	1 48	19 57	0 13	15 43	0 47	23 3	0 4	6 54	1 34	22 48	8 12	21 33	21 43	20 5	15 49	2 57	
S 12	18 10	17 16	3 54	22 49	1 40	6 53	1 44	20 7	1 47	19 57	0 13	15 43	0 47	23 3	0 4	6 54	1 34	22 48	8 12	21 33	21 43	20 5	15 47	2 57	
S 13	18 25	13 57	4 35	23 16	1 48	7 19	1 44	19 58	1 46	19 57	0 13	15 43	0 47	23 3	0 4	6 55	1 34	22 48	8 12	21 33	21 42	20 6	15 46	2 58	
M14	18 40	9 55	5 3	23 41	1 55	7 46	1 44	19 49	1 45	19 57	0 13	15 42	0 47	23 3	0 4	6 56	1 34	22 47	8 12	21 33	21 42	20 7	15 45	2 58	
T 15	18 54	5 20	5 16	24 3	2 1	8 12	1 44	19 40	1 44	19 57	0 13	15 42	0 48	23 4	0 4	6 57	1 34	22 47	8 12	21 33	21 41	20 8	15 43	2 58	
W16	19 8	0 20	5 13	24 23	2 6	8 38	1 44	19 31	1 43	19 57	0 13	15 42	0 48	23 4	0 4	6 57	1 34	22 47	8 12	21 33	21 41	20 9	15 42	2 59	
T 17	19 21	4s51	4 51	24 40	2 11	9 5	1 44	19 22	1 42	19 57	0 14	15 41	0 48	23 4	0 4	6 58	1 34	22 46	8 12	21 33	21 40	20 9	15 40	2 59	
F 18	19 35	9 56	4 11	24 55	2 14	9 30	1 43	19 12	1 41	19 57	0 14	15 41	0 48	23 4	0 4	6 59	1 34	22 46	8 11	21 33	21 40	20 10	15 39	2 59	
S 19	19 48	14 34	3 13	25 8	2 17	9 56	1 43	19 3	1 41	19 57	0 14	15 41	0 48	23 5	0 4	6 59	1 34	22 46	8 11	21 33	21 39	20 11	15 38	2 59	
S 20	20 0	18 20	2 0	25 18	2 19	10 22	1 43	18 53	1 40	19 57	0 14	15 41	0 48	23 5	0 4	7 0	1 34	22 45	8 11	21 33	21 39	20 12	15 36	3 0	
M21	20 12	20 53	0 39	25 26	2 20	10 47	1 42	18 44	1 39	19 58	0 14	15 41	0 49	23 5	0 4	7 1	1 34	22 45	8 11	21 33	21 38	20 12	15 35	3 0	
T 22	20 24	21 54	0n45	25 32	2 21	11 12	1 41	18 34	1 38	19 58	0 14	15 40	0 49	23 6	0 4	7 1	1 34	22 45	8 11	21 33	21 38	20 13	15 33	3 0	
W23	20 36	21 19	2 5	25 36	2 20	11 37	1 41	18 24	1 37	19 58	0 15	15 40	0 49	23 6	0 4	7 2	1 34	22 45	8 11	21 33	21 37	20 14	15 32	3 0	
T 24	20 47	19 17	3 15	25 38	2 19	12 2	1 40	18 14	1 36	19 59	0 15	15 40	0 49	23 6	0 4	7 3	1 34	22 44	8 10	21 33	21 37	20 15	15 31	3 1	
F 25	20 58	16 6	4 11	25 38	2 17	12 26	1 39	18 4	1 35	19 59	0 15	15 40	0 49	23 6	0 4	7 3	1 34	22 44	8 10	21 33	21 36	20 15	15 29	3 1	
S 26	21 9	12 7	4 50	25 37	2 13	12 50	1 38	17 54	1 34	19 59	0 15	15 40	0 49	23 7	0 4	7 4	1 34	22 43	8 10	21 33	21 36	20 16	15 28	3 1	
S 27	21 19	7 39	5 12	25 34	2 9	13 14	1 37	17 43	1 33	20 0	0 15	15 40	0 50	23 7	0 5	7 4	1 34	22 43	8 10	21 33	21 35	20 17	15 27	3 1	
M28	21 28	2 58	5 18	25 29	2 4	13 37	1 36	17 33	1 33	20 0	0 15	15 41	0 50	23 7	0 5	7 5	1 34	22 43	8 10	21 33	21 35	20 18	15 26	3 2	
T 29	21 38	1n43	5 7	25 23	1 59	14 0	1 35	17 22	1 32	20 1	0 16	15 41	0 50	23 7	0 5	7 6	1 34	22 42	8 10	21 33	21 34	20 18	15 24	3 2	
W30	21 47	6 13	4 43	25 16	1 52	14 23	1 34	17 12	1 31	20 1	0 16	15 41	0 50	23 8	0 5	7 6	1 34	22 42	8 10	21 33	21 33	20 19	15 23	3 2	
T 31	21n55	10n24	4n 6	25n 7	1n44	14n46	1s33	17n 1	1n30	20s 2	0s16	15s41	0s50	23n 8	0n 5	7n 7	1s34	22n42	8n 9	21s33	21s33	20n20	15s22	3n	

ASTRODIENST EPHEMERIS for the year 2198

geocentric

JUNE 2198

00:00 UT

Day	Sid.t	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
F 1	16 39 21	10 ^{II} 57'22	28 ^Y 47	3 ^Ω 29	15 ^Ω 57	17 ^Ω 59	1°R35	19°R42	20 ^{II} 20	22 ^Y 4	19 ^Ω 29	7 [♂] 34	7 [♂] 31	26 ^Ω 43	22°R 8	F 1
S 2	16 43 18	11°54'56	10 ^Ω 38	4°14	17°10	18°32	1 [♂] 33	19 [♂] 42	20°24	22° 5	19°30	7°34	7°28	26°50	22 [♂] 4	S 2
S 3	16 47 14	12°52'30	22°25	4°55	18°23	19° 5	1°30	19°42	20°27	22° 7	19°31	7°35	7°25	26°56	22° 0	S 3
M 4	16 51 11	13°50'03	4 ^{II} 12	5°32	19°35	19°38	1°27	19°41	20°31	22° 9	19°32	7°R35	7°22	27° 3	21°56	M 4
T 5	16 55 7	14°47'34	16° 1	6° 4	20°48	20°11	1°24	19°41	20°34	22°10	19°33	7°35	7°19	27°10	21°52	T 5
W 6	16 59 4	15°45'05	27°56	6°32	22° 1	20°44	1°21	19°40	20°38	22°12	19°34	7°34	7°16	27°16	21°48	W 6
T 7	17 3 0	16°42'35	9 ^Ω 57	6°55	23°13	21°17	1°18	19°39	20°41	22°13	19°35	7°34	7°12	27°23	21°45	T 7
F 8	17 6 57	17°40'03	22° 7	7°14	24°26	21°50	1°14	19°38	20°45	22°15	19°36	7°32	7° 9	27°30	21°41	F 8
S 9	17 10 53	18°37'31	4 ^Ω 28	7°28	25°39	22°24	1°10	19°37	20°48	22°16	19°37	7°31	7° 6	27°36	21°37	S 9
S 10	17 14 50	19°34'57	17° 3	7°38	26°52	22°57	1° 7	19°36	20°52	22°18	19°38	7°29	7° 3	27°43	21°33	S 10
M 11	17 18 47	20°32'22	29°53	7°43	28° 4	23°31	1° 2	19°35	20°55	22°19	19°39	7°28	7° 0	27°50	21°30	M 11
T 12	17 22 43	21°29'46	13 [♂] 2	7°R43	29°17	24° 4	0°58	19°34	20°59	22°20	19°40	7°27	6°56	27°56	21°26	T 12
W 13	17 26 40	22°27'09	26°32	7°39	0 ^{II} 30	24°38	0°54	19°33	21° 3	22°22	19°41	7°D27	6°53	28° 3	21°23	W 13
T 14	17 30 36	23°24'31	10 ^Ω 23	7°31	1°43	25°12	0°49	19°31	21° 6	22°23	19°42	7°28	6°50	28° 9	21°20	T 14
F 15	17 34 33	24°21'52	24°36	7°18	2°55	25°46	0°45	19°30	21°10	22°24	19°43	7°29	6°47	28°16	21°16	F 15
S 16	17 38 29	25°19'12	9 [♂] 9	7° 2	4° 8	26°19	0°40	19°28	21°13	22°26	19°44	7°30	6°44	28°23	21°13	S 16
S 17	17 42 26	26°16'31	23°58	6°42	5°21	26°53	0°35	19°26	21°17	22°27	19°46	7°31	6°41	28°29	21°10	S 17
M 18	17 46 22	27°13'49	8 [♂] 58	6°18	6°34	27°28	0°30	19°25	21°20	22°28	19°47	7°R31	6°37	28°36	21° 7	M 18
T 19	17 50 19	28°11'06	24° 1	5°51	7°47	28° 2	0°24	19°23	21°24	22°29	19°48	7°31	6°34	28°43	21° 4	T 19
W 20	17 54 16	29° 8'23	8 ^Ω 57	5°22	9° 0	28°36	0°19	19°21	21°27	22°30	19°49	7°29	6°31	28°49	21° 1	W 20
T 21	17 58 12	0 ^Ω 5'40	23°40	4°50	10°13	29°10	0°13	19°19	21°31	22°32	19°51	7°27	6°28	28°56	20°58	T 21
F 22	18 2 9	1° 2'55	8 [♂] 2	4°17	11°26	29°44	0° 8	19°17	21°34	22°33	19°52	7°23	6°25	29° 3	20°55	F 22
S 23	18 6 5	2° 0'11	21°58	3°43	12°38	0 [♂] 19	0° 2	19°14	21°38	22°34	19°53	7°20	6°22	29° 9	20°53	S 23
S 24	18 10 2	2°57'26	5 [♂] 27	3° 9	13°51	0°53	29 ^Ω 56	19°12	21°41	22°35	19°55	7°17	6°18	29°16	20°50	S 24
M 25	18 13 58	3°54'41	18°31	2°34	15° 4	1°28	29°50	19°10	21°45	22°36	19°56	7°15	6°15	29°23	20°48	M 25
T 26	18 17 55	4°51'56	1 ^Y 10	2° 1	16°17	2° 3	29°43	19° 7	21°48	22°37	19°57	7°D14	6°12	29°29	20°45	T 26
W 27	18 21 51	5°49'11	13°30	1°28	17°30	2°37	29°37	19° 5	21°52	22°38	19°59	7°15	6° 9	29°36	20°43	W 27
T 28	18 25 48	6°46'25	25°34	0°58	18°43	3°12	29°31	19° 2	21°55	22°39	20° 0	7°16	6° 6	29°42	20°41	T 28
F 29	18 29 45	7°43'40	7 ^Ω 28	0°29	19°57	3°47	29°24	18°59	21°59	22°39	20° 2	7°17	6° 2	29°49	20°39	F 29
S 30	18 33 41	8 ^Ω 40'54	19 ^Ω 16	0 ^Ω 4	21 ^{II} 10	4 [♂] 22	29 ^Ω 17	18 [♂] 56	22 ^{II} 2	22 ^Y 40	20 ^Ω 3	7 [♂] 19	5 [♂] 59	29 ^Ω 56	20 [♂] 37	S 30

Day	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂
	decl	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	lat
F 1	22n 4	14n 8	3n19	24n58	1n36	15n 8	1s32	16n50	1n29	20s 3	0s16	15s41	0s50	23n 8	0n 5	7n 7
S 2	22 12	17 17	2 24	24 47	1 26	15 30	1 30	16 39	1 28	20 3	0 16	15 41	0 50	23 8	0 5	7 8
S 3	22 19	19 42	1 23	24 36	1 16	15 51	1 29	16 28	1 28	20 4	0 16	15 42	0 51	23 9	0 5	7 9
M 4	22 26	21 16	0 19	24 23	1 5	16 12	1 28	16 17	1 27	20 5	0 17	15 42	0 51	23 9	0 5	7 9
T 5	22 33	21 54	0s47	24 10	0 53	16 33	1 26	16 6	1 26	20 6	0 17	15 42	0 51	23 9	0 5	7 10
W 6	22 39	21 33	1 51	23 56	0 41	16 53	1 24	15 55	1 25	20 7	0 17	15 43	0 51	23 9	0 5	7 10
T 7	22 45	20 13	2 50	23 41	0 28	17 13	1 23	15 43	1 24	20 8	0 17	15 43	0 51	23 10	0 5	7 11
F 8	22 50	17 56	3 43	23 26	0 14	17 33	1 21	15 32	1 23	20 9	0 17	15 44	0 51	23 10	0 5	7 11
S 9	22 56	14 49	4 26	23 11	0s 1	17 52	1 19	15 20	1 23	20 10	0 17	15 44	0 52	23 10	0 5	7 12
S 10	23 0	10 59	4 57	22 55	0 16	18 10	1 18	15 8	1 22	20 11	0 18	15 44	0 52	23 10	0 5	7 12
M 11	23 5	6 36	5 14	22 39	0 32	18 28	1 16	14 56	1 21	20 12	0 18	15 45	0 52	23 11	0 5	7 13
T 12	23 8	1 48	5 15	22 23	0 49	18 46	1 14	14 45	1 20	20 13	0 18	15 45	0 52	23 11	0 5	7 13
W 13	23 12	3s12	4 59	22 6	1 5	19 3	1 12	14 33	1 19	20 14	0 18	15 46	0 52	23 11	0 5	7 14
T 14	23 15	8 11	4 26	21 50	1 22	19 20	1 10	14 20	1 19	20 15	0 18	15 47	0 52	23 11	0 5	7 14
F 15	23 18	12 52	3 36	21 34	1 39	19 36	1 8	14 8	1 18	20 16	0 19	15 47	0 53	23 12	0 5	7 14
S 16	23 20	16 54	2 31	21 18	1 56	19 52	1 6	13 56	1 17	20 17	0 19	15 48	0 53	23 12	0 5	7 15
S 17	23 22	19 57	1 14	21 2	2 13	20 7	1 4	13 44	1 16	20 19	0 19	15 49	0 53	23 12	0 5	7 15
M 18	23 23	21 38	0n 8	20 46	2 30	20 22	1 2	13 31	1 15	20 20	0 19	15 49	0 53	23 12	0 5	7 16
T 19	23 24	21 47	1 30	20 31	2 46	20 36	1 0	13 19	1 15	20 21	0 19	15 50	0 53	23 13	0 5	7 16
W 20	23 25	20 22	2 45	20 17	3 2	20 49	0 58	13 6	1 14	20 23	0 19	15 51	0 53	23 13	0 5	7 16
T 21	23 25	17 36	3 48	20 3	3 17	21 2	0 56	12 53	1 13	20 24	0 20	15 52	0 53	23 13	0 5	7 17
F 22	23 24	13 49	4 35	19 50	3 31	21 15	0 53	12 41	1 12	20 25	0 20	15 52	0 54	23 13	0 5	7 17
S 23	23 24	9 23	5 4	19 38	3 44	21 27	0 51	12 28	1 12	20 27	0 20	15 53	0 54	23 14	0 5	7 17
S 24	23 23	4 37	5 15	19 27	3 56	21 38	0 49	12 15	1 11	20 28	0 20	15 54	0 54	23 14	0 5	7 18
M 25	23 21	0n12	5 9	19 17	4 7	21 48	0 46	12 2	1 10	20 30	0 20	15 55	0 54	23 14	0 5	7 18
T 26	23 19	4 52	4 48	19 8	4 16	21 59	0 44	11 49	1 9	20 31	0 20	15 56	0 54	23 14	0 5	7 18
W 27	23 17	9 13	4 14	19 0	4 24	22 8	0 42	11 36	1 8	20 33	0 21	15 57	0 54	23 15	0 5	7 19
T 28	23 14	13 7	3 30	18 54	4 31	22 17	0 39	11 22	1 8	20 34	0 21	15 58	0 55	23 15	0 5	7 19
F 29	23 11	16 27	2 37	18 49	4 36	22 25	0 37	11 9	1 7	20 36	0 21	15 59	0 55	23 15	0 5	7 19
S 30	23n 8	19n 5	1n38	18n46	4s39	22n33	0s35	10n56	1n 6	20s37	0s21	16s 0	0s55	23n15	0n 5	7n20

Julian Day Number = 2524014.5, Delta T = 161.46 sec

Ecliptic obliquity = 23°24'45, Nutation = 0°00'15, out-of-bounds declination in red

Ayanamsha: Fagan/Bradley = 27°30'47, Lahiri = 26°37'48

ASTRODIENST EPHEMERIS for the year 2198

geocentric

JULY 2198

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
S 1	18 37 38	9°38'09	1°11' 2	29°R42	22°11'23	4°11'57	29°R11	18°R54	22°11' 6	22°V41	20°R 4	7°R20	5°R56	0°11' 2	20°R35	S 1
M 2	18 41 34	10°35'23	12°52	29°11'24	23°36	5°32	29°R 4	18°R51	22° 9	22°42	20° 6	7°R20	5°53	0° 9	20°M33	M 2
T 3	18 45 31	11°32'38	24°47	29°10	24°49	6° 7	28°57	18°48	22°13	22°43	20° 7	7°19	5°50	0°16	20°31	T 3
W 4	18 49 27	12°29'52	6°50	29° 0	26° 2	6°42	28°50	18°45	22°16	22°43	20° 9	7°16	5°47	0°22	20°29	W 4
T 5	18 53 24	13°27'06	19° 3	28°54	27°15	7°17	28°43	18°41	22°19	22°44	20°10	7°11	5°43	0°29	20°28	T 5
F 6	18 57 21	14°24'20	1°R28	28°D53	28°29	7°53	28°35	18°38	22°23	22°45	20°12	7° 5	5°40	0°36	20°26	F 6
S 7	19 1 17	15°21'34	14° 6	28°58	29°42	8°28	28°28	18°35	22°26	22°45	20°14	6°59	5°37	0°42	20°25	S 7
S 8	19 5 14	16°18'48	26°56	29° 7	0°55	9° 3	28°21	18°32	22°29	22°46	20°15	6°52	5°34	0°49	20°24	S 8
M 9	19 9 10	17°16'02	10°11' 0	29°21	2° 8	9°39	28°13	18°28	22°33	22°47	20°17	6°47	5°31	0°56	20°23	M 9
T 10	19 13 7	18°13'15	23°18	29°40	3°22	10°14	28° 6	18°25	22°36	22°47	20°18	6°42	5°28	1° 2	20°22	T 10
W11	19 17 3	19°10'28	6°50	0°54	4°35	10°50	27°58	18°21	22°39	22°48	20°20	6°40	5°24	1° 9	20°21	W11
T 12	19 21 0	20° 7'41	20°37	0°34	5°48	11°26	27°51	18°17	22°42	22°48	20°22	6°D39	5°21	1°16	20°20	T 12
F 13	19 24 56	21° 4'53	4°11'39	1° 8	7° 1	12° 1	27°43	18°14	22°46	22°49	20°23	6°40	5°18	1°22	20°19	F 13
S 14	19 28 53	22° 2'06	18°56	1°48	8°15	12°37	27°35	18°10	22°49	22°49	20°25	6°41	5°15	1°29	20°18	S 14
S 15	19 32 50	22°59'19	3°R25	2°32	9°28	13°13	27°28	18° 6	22°52	22°49	20°26	6°R42	5°12	1°35	20°18	S 15
M16	19 36 46	23°56'31	18° 3	3°22	10°42	13°49	27°20	18° 2	22°55	22°50	20°28	6°41	5° 8	1°42	20°17	M16
T 17	19 40 43	24°53'44	2°R46	4°16	11°55	14°25	27°12	17°59	22°58	22°50	20°30	6°39	5° 5	1°49	20°17	T 17
W18	19 44 39	25°50'57	17°26	5°15	13° 8	15° 1	27° 5	17°55	23° 2	22°50	20°32	6°35	5° 2	1°55	20°17	W18
T 19	19 48 36	26°48'10	1°R57	6°19	14°22	15°37	26°57	17°51	23° 5	22°51	20°33	6°28	4°59	2° 2	20°17	T 19
F 20	19 52 32	27°45'23	16°13	7°28	15°35	16°13	26°49	17°47	23° 8	22°51	20°35	6°20	4°56	2° 9	20°D17	F 20
S 21	19 56 29	28°42'37	0°R 7	8°41	16°49	16°50	26°41	17°43	23°11	22°51	20°37	6°12	4°53	2°15	20°17	S 21
S 22	20 0 25	29°39'51	13°37	9°59	18° 2	17°26	26°34	17°38	23°14	22°51	20°38	6° 4	4°49	2°22	20°17	S 22
M23	20 4 22	0°R37'06	26°42	11°22	19°16	18° 2	26°26	17°34	23°17	22°51	20°40	5°58	4°46	2°29	20°17	M23
T 24	20 8 19	1°34'22	9°V23	12°48	20°29	18°39	26°18	17°30	23°20	22°51	20°42	5°53	4°43	2°35	20°17	T 24
W25	20 12 15	2°31'38	21°44	14°19	21°43	19°15	26°11	17°26	23°23	22°51	20°44	5°51	4°40	2°42	20°18	W25
T 26	20 16 12	3°28'56	3°R49	15°54	22°57	19°52	26° 3	17°22	23°26	22°R51	20°45	5°D50	4°37	2°49	20°19	T 26
F 27	20 20 8	4°26'14	15°43	17°33	24°10	20°28	25°55	17°17	23°29	22°51	20°47	5°51	4°34	2°55	20°19	F 27
S 28	20 24 5	5°23'33	27°31	19°16	25°24	21° 5	25°48	17°13	23°31	22°51	20°49	5°52	4°30	3° 2	20°20	S 28
S 29	20 28 1	6°20'53	9°11'19	21° 2	26°38	21°41	25°40	17° 9	23°34	22°51	20°51	5°R52	4°27	3° 8	20°21	S 29
M30	20 31 58	7°18'13	21°11	22°52	27°51	22°18	25°33	17° 4	23°37	22°51	20°53	5°51	4°24	3°15	20°22	M30
T 31	20 35 54	8°R15'35	3°R13	24°R44	29°R 5	22°11'55	25°R25	17°R 0	23°11'40	22°V51	20°R54	5°R47	4°R21	3°11'22	20°M23	T 31

Day	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂
	decl	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	lat
S 1	23n 4	20n54	0n34	18n44	4s41	22n40	0s32	10n42	1n 5	20s39	0s21	16s 1	0s55	23n15	0n 5	7n20
M 2	22 59	21 49	0s30	18 43	4 42	22 46	0 30	10 29	1 5	20 40	0 21	16 2	0 55	23 16	0 5	7 20
T 3	22 55	21 45	1 34	18 44	4 41	22 51	0 27	10 15	1 4	20 42	0 22	16 3	0 55	23 16	0 5	7 20
W 4	22 50	20 40	2 34	18 46	4 39	22 56	0 25	10 1	1 3	20 44	0 22	16 4	0 55	23 16	0 5	7 20
T 5	22 44	18 38	3 28	18 49	4 35	23 1	0 22	9 48	1 2	20 45	0 22	16 5	0 56	23 16	0 5	7 21
F 6	22 38	15 42	4 13	18 54	4 30	23 4	0 20	9 34	1 2	20 47	0 22	16 6	0 56	23 16	0 5	7 21
S 7	22 32	12 1	4 46	19 0	4 24	23 7	0 17	9 20	1 1	20 48	0 22	16 7	0 56	23 17	0 5	7 21
S 8	22 25	7 44	5 6	19 7	4 17	23 10	0 15	9 6	1 0	20 50	0 22	16 9	0 56	23 17	0 5	7 21
M 9	22 18	3 2	5 10	19 15	4 9	23 11	0 12	8 52	1 0	20 52	0 23	16 10	0 56	23 17	0 5	7 21
T 10	22 10	1s54	4 57	19 24	4 0	23 12	0 10	8 38	0 59	20 53	0 23	16 11	0 56	23 17	0 5	7 22
W11	22 3	6 49	4 28	19 34	3 51	23 13	0 7	8 24	0 58	20 55	0 23	16 12	0 56	23 17	0 5	7 22
T 12	21 54	11 30	3 44	19 44	3 40	23 12	0 5	8 9	0 57	20 57	0 23	16 14	0 56	23 18	0 5	7 22
F 13	21 46	15 39	2 45	19 55	3 29	23 11	0 2	7 55	0 57	20 58	0 23	16 15	0 57	23 18	0 5	7 22
S 14	21 37	18 57	1 35	20 7	3 17	23 10	0n 0	7 41	0 56	21 0	0 23	16 16	0 57	23 18	0 5	7 22
S 15	21 27	21 6	0 18	20 18	3 5	23 7	0 3	7 26	0 55	21 2	0 23	16 17	0 57	23 18	0 5	7 22
M16	21 18	21 52	1n 1	20 30	2 52	23 4	0 5	7 12	0 54	21 3	0 24	16 19	0 57	23 18	0 5	7 22
T 17	21 8	21 7	2 16	20 42	2 39	23 0	0 8	6 57	0 55	21 5	0 24	16 20	0 57	23 19	0 5	7 22
W18	20 57	18 57	3 22	20 53	2 26	22 56	0 10	6 43	0 53	21 7	0 24	16 21	0 57	23 19	0 5	7 22
T 19	20 46	15 35	4 13	21 4	2 12	22 51	0 12	6 28	0 52	21 8	0 24	16 23	0 57	23 19	0 5	7 22
F 20	20 35	11 22	4 48	21 14	1 58	22 45	0 15	6 13	0 52	21 10	0 24	16 24	0 57	23 19	0 5	7 22
S 21	20 24	6 39	5 5	21 24	1 44	22 39	0 17	5 59	0 51	21 11	0 24	16 25	0 58	23 19	0 5	7 22
S 22	20 12	1 45	5 4	21 32	1 30	22 31	0 20	5 44	0 50	21 13	0 24	16 27	0 58	23 19	0 5	7 22
M23	20 0	3n 5	4 47	21 40	1 16	22 24	0 22	5 29	0 50	21 15	0 25	16 28	0 58	23 20	0 5	7 22
T 24	19 47	7 38	4 16	21 46	1 2	22 15	0 24	5 14	0 49	21 16	0 25	16 29	0 58	23 20	0 5	7 22
W25	19 34	11 46	3 34	21 50	0 49	22 6	0 27	4 59	0 48	21 18	0 25	16 31	0 58	23 20	0 5	7 22
T 26	19 21	15 20	2 43	21 53	0 35	21 56	0 29	4 44	0 47	21 19	0 25	16 32	0 58	23 20	0 5	7 22
F 27	19 8	18 13	1 46	21 54	0 22	21 46	0 31	4 29	0 47	21 21	0 25	16 34	0 58	23 20	0 5	7 22
S 28	18 54	20 19	0 45	21 53	0 9	21 35	0 33	4 14	0 46	21 22	0 25	16 35	0 58	23 20	0 5	7 22
S 29	18 40	21 31	0s19	21 49	0n 3	21 23	0 36	3 59	0 45	21 24	0 25	16 36	0 58	23 21	0 5	7 22
M30	18 25	21 46	1 21	21 44	0 15	21 11	0 38	3 44	0 45	21 25	0 25	16 38	0 59	23 21	0 5	7 22
T 31	18n11	21n 2	2s21	21n35	0n27	20n58	0n40	3n29	0n44	21s27	0s26	16s39	0s59	23n21	0n 5	7n22

Julian Day Number = 2524044.5, Delta T = 161.54 sec
 Ecliptic obliquity = 23°24'44, Nutation = 0°00'16, out-of-bounds declination in red
 Ayanamsha: Fagan/Bradley = 27°30'51, Lahiri = 26°37'52

ASTRODIENST EPHEMERIS for the year 2198
geocentric

AUGUST 2198

00:00 UT

Day	Sid.t	☉	☽	♊	♋	♌	♍	♎	♏	♐	♑	♒	♓	♈	♉	Day
W 1	20 39 51	9♌12'58	15♊25	26♊40	0♌19	23♎32	25°R18	16°R56	23♐43	22°R51	20♌56	5°R41	4♌18	3♐28	20♌24	W 1
T 2	20 43 48	10°10'21	27°53	28°37	1°33	24° 9	25♐11	16°51	23°45	22°Y51	20°58	5♌33	4°14	3°35	20°26	T 2
F 3	20 47 44	11° 7'45	10♌35	0♌37	2°46	24°46	25° 4	16°47	23°48	22°50	21° 0	5°23	4°11	3°42	20°27	F 3
S 4	20 51 41	12° 5'10	23°33	2°38	4° 0	25°23	24°56	16°42	23°51	22°50	21° 2	5°12	4° 8	3°48	20°29	S 4
S 5	20 55 37	13° 2'36	6♎45	4°41	5°14	26° 0	24°49	16°38	23°53	22°50	21° 4	5° 1	4° 5	3°55	20°30	S 5
M 6	20 59 34	14° 0'03	20°10	6°45	6°28	26°37	24°42	16°33	23°56	22°49	21° 5	4°51	4° 2	4° 2	20°32	M 6
T 7	21 3 30	14°57'30	3♌45	8°49	7°42	27°14	24°36	16°29	23°58	22°49	21° 7	4°43	3°59	4° 8	20°34	T 7
W 8	21 7 27	15°54'58	17°31	10°54	8°56	27°52	24°29	16°24	24° 1	22°49	21° 9	4°37	3°55	4°15	20°36	W 8
T 9	21 11 23	16°52'26	1♌24	12°59	10°10	28°29	24°22	16°20	24° 3	22°48	21°11	4°35	3°52	4°22	20°38	T 9
F 10	21 15 20	17°49'56	15°24	15° 4	11°24	29° 6	24°16	16°16	24° 6	22°48	21°13	4°D34	3°49	4°28	20°40	F 10
S 11	21 19 17	18°47'26	29°32	17° 8	12°38	29°44	24° 9	16°11	24° 8	22°47	21°15	4°R34	3°46	4°35	20°42	S 11
S 12	21 23 13	19°44'57	13♌44	19°12	13°52	0♌21	24° 3	16° 7	24°11	22°47	21°16	4°34	3°43	4°42	20°45	S 12
M13	21 27 10	20°42'28	28° 1	21°15	15° 6	0°59	23°57	16° 2	24°13	22°46	21°18	4°32	3°40	4°48	20°47	M13
T 14	21 31 6	21°40'01	12♐19	23°16	16°20	1°37	23°51	15°58	24°15	22°46	21°20	4°28	3°36	4°55	20°50	T 14
W15	21 35 3	22°37'34	26°35	25°17	17°34	2°14	23°45	15°53	24°17	22°45	21°22	4°21	3°33	5° 1	20°52	W15
T 16	21 38 59	23°35'09	10♌44	27°17	18°48	2°52	23°39	15°49	24°20	22°44	21°24	4°12	3°30	5° 8	20°55	T 16
F 17	21 42 56	24°32'44	24°41	29°15	20° 2	3°30	23°33	15°45	24°22	22°44	21°26	4° 1	3°27	5°15	20°58	F 17
S 18	21 46 52	25°30'21	8♋22	1♎13	21°16	4° 8	23°28	15°40	24°24	22°43	21°28	3°49	3°24	5°21	21° 1	S 18
S 19	21 50 49	26°27'58	21°43	3° 8	22°30	4°46	23°22	15°36	24°26	22°42	21°29	3°37	3°20	5°28	21° 4	S 19
M20	21 54 46	27°25'38	4°Y42	5° 3	23°44	5°24	23°17	15°31	24°28	22°42	21°31	3°27	3°17	5°35	21° 7	M20
T 21	21 58 42	28°23'18	17°21	6°56	24°58	6° 2	23°12	15°27	24°30	22°41	21°33	3°20	3°14	5°41	21°10	T 21
W22	22 2 39	29°21'01	29°40	8°48	26°12	6°40	23° 7	15°23	24°32	22°40	21°35	3°15	3°11	5°48	21°13	W22
T 23	22 6 35	0♎18'44	11♐45	10°38	27°27	7°18	23° 2	15°19	24°34	22°39	21°37	3°12	3° 8	5°55	21°17	T 23
F 24	22 10 32	1°16'30	23°39	12°27	28°41	7°56	22°58	15°14	24°36	22°38	21°39	3°11	3° 5	6° 1	21°20	F 24
S 25	22 14 28	2°14'17	5♐28	14°14	29°55	8°34	22°53	15°10	24°38	22°37	21°40	3°11	3° 1	6° 8	21°24	S 25
S 26	22 18 25	3°12'06	17°17	16° 0	1♎ 9	9°12	22°49	15° 6	24°39	22°36	21°42	3°11	2°58	6°15	21°28	S 26
M27	22 22 21	4° 9'56	29°11	17°45	2°24	9°51	22°45	15° 2	24°41	22°35	21°44	3° 9	2°55	6°21	21°31	M27
T 28	22 26 18	5° 7'49	11♐17	19°28	3°38	10°29	22°41	14°58	24°43	22°34	21°46	3° 5	2°52	6°28	21°35	T 28
W29	22 30 15	6° 5'42	23°37	21°10	4°52	11° 8	22°37	14°54	24°44	22°33	21°48	2°59	2°49	6°34	21°39	W29
T 30	22 34 11	7° 3'38	6♌15	22°51	6° 7	11°46	22°33	14°50	24°46	22°32	21°49	2°50	2°46	6°41	21°43	T 30
F 31	22 38 8	8♎1'35	19♌12	24♎30	7♎21	12♌25	22♐30	14°46	24♐48	22°Y31	21♌51	2♌39	2♌42	6♐48	21♌47	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	decl	lat	
W 1	17n56	19n18	3s15	21n25	0n37	20n45	0n42	3n14	0n43	21s28	0s26	16s41	0s59	23n21	0n 5	7n22	1s38	22n 9	8n 5	21s14	20s59	20n54	14s52	3n 4										
T 2	17 40	16 38	4 1	21 11	0 47	20 31	0 44	2 58	0 43	21 30	0 26	16 42	0 59	23 21	0 5	7 22	1 38	22 8	8 5	21 12	20 58	20 54	14 52	3 4										
F 3	17 25	13 9	4 35	20 55	0 57	20 16	0 46	2 43	0 42	21 31	0 26	16 44	0 59	23 21	0 5	7 21	1 38	22 8	8 5	21 11	20 58	20 55	14 53	3 4										
S 4	17 9	8 59	4 57	20 36	1 5	20 1	0 48	2 28	0 41	21 33	0 26	16 45	0 59	23 21	0 5	7 21	1 38	22 7	8 5	21 9	20 57	20 55	14 53	3 4										
S 5	16 53	4 20	5 3	20 15	1 13	19 45	0 50	2 13	0 41	21 34	0 26	16 46	0 59	23 21	0 5	7 21	1 38	22 7	8 5	21 7	20 56	20 55	14 54	3 4										
M 6	16 36	0s35	4 52	19 51	1 20	19 28	0 52	1 57	0 40	21 35	0 26	16 48	0 59	23 22	0 5	7 21	1 38	22 6	8 5	21 5	20 56	20 56	14 54	3 4										
T 7	16 20	5 33	4 25	19 25	1 26	19 11	0 54	1 42	0 39	21 37	0 26	16 49	0 59	23 22	0 5	7 21	1 38	22 5	8 5	21 3	20 55	20 56	14 55	3 4										
W 8	16 3	10 18	3 43	18 56	1 31	18 54	0 56	1 26	0 39	21 38	0 26	16 51	0 59	23 22	0 5	7 21	1 38	22 5	8 5	21 2	20 55	20 56	14 55	3 4										
T 9	15 46	14 33	2 46	18 25	1 35	18 36	0 57	1 11	0 38	21 39	0 27	16 52	0 59	23 22	0 5	7 20	1 38	22 4	8 5	21 2	20 54	20 57	14 56	3 4										
F 10	15 28	18 2	1 40	17 53	1 39	18 17	0 59	0 55	0 37	21 41	0 27	16 54	1 0	23 22	0 5	7 20	1 38	22 4	8 6	21 2	20 53	20 57	14 56	3 4										
S 11	15 11	20 28	0 27	17 18	1 42	17 58	1 1	0 40	0 37	21 42	0 27	16 55	1 0	23 22	0 5	7 20	1 38	22 3	8 6	21 2	20 53	20 58	14 57	3 4										
S 12	14 53	21 37	0n49	16 42	1 44	17 39	1 2	0 24	0 36	21 43	0 27	16 56	1 0	23 22	0 5	7 20	1 38	22 3	8 6	21 2	20 52	20 58	14 58	3 4										
M13	14 34	21 23	2 1	16 4	1 45	17 19	1 4	0 9	0 35	21 44	0 27	16 58	1 0	23 22	0 5	7 19	1 38	22 2	8 6	21 1	20 52	20 58	14 58	3 4										
T 14	14 16	19 45	3 6	15 24	1 46	16 58	1 5	0s 7	0 35	21 45	0 27	16 59	1 0	23 23	0 5	7 19	1 38	22 2	8 6	21 1	20 51	20 59	14 59	3 4										
W15	13 57	16 54	3 59	14 44	1 45	16 37	1 7	0 22	0 34	21 46	0 27	17 1	1 0	23 23	0 5	7 19	1 39	22 1	8 6	20 59	20 50	20 59	15 0	3 4										
T 16	13 39	13 5	4 37	14 2	1 45	16 15	1 8	0 38	0 33	21 47	0 27	17 2	1 0	23 23	0 5	7 19	1 39	22 0	8 6	20 58	20 50	20 59	15 1	3 4										
F 17	13 20	8 36	4 57	13 20	1 43	15 54	1 10	0 53	0 33	21 48	0 27	17 3	1 0	23 23	0 5	7 18	1 39	22 0	8 6	20 56	20 49	21 0	15 2	3 3										
S 18	13 0	3 47	5 0	12 37	1 41	15 31	1 11	1 9	0 32	21 49	0 27	17 5	1 0	23 23	0 5	7 18	1 39	21 59	8 6	20 53	20 49	21 0	15 2	3 3										
S 19	12 41	1n 6	4 46	11 53	1 39	15 8	1 12	1 25	0 31	21 50	0 27	17 6	1 0	23 23	0 5	7 18	1 39	21 59	8 6	20 51	20 48	21 0	15 3	3 3										
M20	12 21	5 49	4 18	11 8	1 36	14 45	1 14	1 40	0 31	21 51	0 27	17 7	1 0	23 23	0 5	7 17	1 39	21 58	8 6	20 49	20 47	21 0	15 4	3 3										
T 21	12 1	10 9	3 38	10 23	1 32	14 21	1 15	1 56	0 30	21 52	0 28	17 9	1 0	23 23	0 5	7 17	1 39	21 58	8 6	20 48	20 47	21 1	15 5	3 3										
W22	11 41	13 57	2 48	9 38	1 28	13 57	1 16	2 12	0 29	21 53	0 28	17 10	1 0	23 23	0 5	7 17	1 39	21 57	8 7	20 47	20 46	21 1	15 6	3 3										
T 23	11 21	17 6	1 51	8 52	1 24	13 33	1 17	2 27	0 29	21 54	0 28	17 11	1 0	23 23	0 5	7 16	1 39	21 57	8 7	20 46	20 46	21 1	15 7	3 3										
F 24	11 1	19 29	0 50	8 6	1 19	13 8	1 18	2 43	0 28	21 55	0 28	17 13	1 0	23 24	0 5	7 16	1 39	21 56	8 7	20 46	20 45	21 2	15 8	3 3										
S 25	10 40	21 0	0s12	7 20	1 14	12 43	1 19	2 59	0 27	21 56	0 28	17 14	1 1	23 24	0 5	7 15	1 39	21 56	8 7	20 46	20 44	21 2	15 9	3 3										
S 26	10 19	21 35	1 14	6 34	1 8	12 17	1 20	3 14	0 27	21 57	0 28	17 15	1 1	23 24	0 5	7 15	1 39	21 55	8 7	20 46	20 44	21 2	15 10	3 3										
M27	9 58	21 11	2 13	5 48	1 2	11 52	1 20	3 30	0 26	21 57	0 28	17 16	1 1	23 24	0 6	7 15	1 39	21 55	8 7	20 46	20 43	21 2	15 11	3 3										
T 28	9 37	19 50	3 7	5 2	0 56	11 25	1 21	3 46	0 25	21 58	0 28	17 18	1 1	23 24	0 6	7 14	1 39	21 54	8 7	20 45	20 42	21 3	15 12	3 3										
W29	9 16	17 31	3 53	4 16	0 50	10 59	1 22	4 1	0 25	21 59	0 28	17 19	1 1	23 24	0 6	7 14	1 39	21 54	8 7	20 44	20 42	21 3	15 13	3 3										
T 30	8 55	14 20	4 29	3 30	0 43	10 32	1 22	4 17	0 24	21 59	0 28	17 20	1 1	23 24	0 6	7 13	1 39	21 53	8 7	20 42	20 41	21 3	15 14	3 3										
F 31	8n33	10n24	4s53	2n44	0n36	10n 5	1n23	4s33	0n23	22s 0	0s28	17s21	1s 1	23n24	0n 6	7n13	1s39	21n53	8n 8	20s40	20s41	21n 3	15s15	3n 3										

ASTRODIENST EPHEMERIS for the year 2198

geocentric

SEPTEMBER 2198

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
S 1	22 42 4	8 ^h 59 ^m 34 ^s	2 ^h 29 ^m	26 ^h 8 ^m	8 ^h 35 ^m	13 ^h 4 ^m	22°R27	14°R42	24 ^h 49 ^m	22°R30	21 ^h 53 ^m	2°R26	2 ^h 39 ^m	6 ^h 54 ^m	21 ^h 52 ^m	S 1
S 2	22 46 1	9°57'34"	16° 4'	27°45'	9°50'	13°42'	22 ^h 24 ^m	14 ^h 38 ^m	24°51'	22 ^h 29 ^m	21°55'	2 ^h 14 ^m	2°36'	7° 1'	21°56'	S 2
M 3	22 49 57	10°55'36"	29°54'	29°20'	11° 4'	14°21'	22°21'	14°34'	24°52'	22°28'	21°57'	2° 3'	2°33'	7° 8'	22° 0'	M 3
T 4	22 53 54	11°53'40"	13 ^h 55 ^m	0 ^h 54 ^m	12°19'	15° 0'	22°18'	14°31'	24°53'	22°27'	21°58'	1°54'	2°30'	7°14'	22° 5'	T 4
W 5	22 57 50	12°51'44"	28° 2'	2°27'	13°33'	15°39'	22°16'	14°27'	24°55'	22°26'	22° 0'	1°48'	2°26'	7°21'	22° 9'	W 5
T 6	23 1 147	13°49'51"	12 ^h 12 ^m	3°59'	14°47'	16°18'	22°13'	14°23'	24°56'	22°24'	22° 2'	1°45'	2°23'	7°28'	22°14'	T 6
F 7	23 5 43	14°47'59"	26°22'	5°29'	16° 2'	16°57'	22°11'	14°20'	24°57'	22°23'	22° 4'	1°D44	2°20'	7°34'	22°19'	F 7
S 8	23 9 40	15°46'08"	10 ^h 31 ^m	6°58'	17°16'	17°36'	22° 9'	14°16'	24°58'	22°22'	22° 5'	1°R44	2°17'	7°41'	22°23'	S 8
S 9	23 13 37	16°44'18"	24°37'	8°26'	18°31'	18°15'	22° 7'	14°13'	24°59'	22°21'	22° 7'	1°43'	2°14'	7°48'	22°28'	S 9
M10	23 17 33	17°42'31"	8 ^h 30 ^m	9°53'	19°45'	18°54'	22° 6'	14°10'	25° 0'	22°19'	22° 9'	1°42'	2°11'	7°54'	22°33'	M10
T 11	23 21 30	18°40'44"	22°38'	11°18'	21° 0'	19°33'	22° 4'	14° 6'	25° 2'	22°18'	22°10'	1°38'	2° 7'	8° 1'	22°38'	T 11
W12	23 25 26	19°38'59"	6 ^h 29 ^m	12°42'	22°14'	20°12'	22° 3'	14° 3'	25° 2'	22°17'	22°12'	1°32'	2° 4'	8° 7'	22°44'	W12
T 13	23 29 23	20°37'15"	20°13'	14° 4'	23°29'	20°52'	22° 2'	14° 0'	25° 3'	22°15'	22°14'	1°23'	2° 1'	8°14'	22°49'	T 13
F 14	23 33 19	21°35'33"	3 ^h 45 ^m	15°25'	24°44'	21°31'	22° 1'	13°57'	25° 4'	22°14'	22°15'	1°12'	1°58'	8°21'	22°54'	F 14
S 15	23 37 16	22°33'53"	17° 4'	16°45'	25°58'	22°11'	22° 1'	13°54'	25° 5'	22°13'	22°17'	1° 1'	1°55'	8°27'	22°59'	S 15
S 16	23 41 12	23°32'15"	0 ^h 7 ^m	18° 3'	27°13'	22°50'	22° 0'	13°51'	25° 6'	22°11'	22°19'	0°49'	1°51'	8°34'	23° 5'	S 16
M17	23 45 9	24°30'38"	12°54'	19°20'	28°27'	23°30'	22° 0'	13°48'	25° 7'	22°10'	22°20'	0°40'	1°48'	8°41'	23°10'	M17
T 18	23 49 6	25°29'03"	25°24'	20°35'	29°42'	24° 9'	22°D 0	13°45'	25° 7'	22° 8'	22°22'	0°32'	1°45'	8°47'	23°16'	T 18
W19	23 53 2	26°27'31"	7 ^h 38 ^m	21°49'	0 ^h 56 ^m	24°49'	22° 0'	13°43'	25° 8'	22° 7'	22°24'	0°27'	1°42'	8°54'	23°21'	W19
T 20	23 56 59	27°26'00"	19°40'	23° 0'	2°11'	25°29'	22° 0'	13°40'	25° 8'	22° 5'	22°25'	0°25'	1°39'	9° 1'	23°27'	T 20
F 21	0 0 55	28°24'32"	1 ^h 33 ^m	24°10'	3°26'	26° 8'	22° 1'	13°38'	25° 9'	22° 4'	22°27'	0°D24	1°36'	9° 7'	23°33'	F 21
S 22	0 4 52	29°23'05"	13°21'	25°18'	4°40'	26°48'	22° 2'	13°35'	25° 9'	22° 2'	22°28'	0°25'	1°32'	9°14'	23°39'	S 22
S 23	0 8 48	0 ^h 21'41"	25° 9'	26°24'	5°55'	27°28'	22° 3'	13°33'	25°10'	22° 1'	22°30'	0°R25	1°29'	9°21'	23°45'	S 23
M24	0 12 45	1°20'20"	7 ^h 34 ^m	27°28'	7°10'	28° 8'	22° 4'	13°31'	25°10'	21°59'	22°31'	0°25'	1°26'	9°27'	23°51'	M24
T 25	0 16 41	2°19'00"	19°10'	28°30'	8°24'	28°48'	22° 5'	13°28'	25°11'	21°58'	22°33'	0°24'	1°23'	9°34'	23°57'	T 25
W26	0 20 38	3°17'42"	1 ^h 32 ^m	29°29'	9°39'	29°28'	22° 7'	13°26'	25°11'	21°56'	22°34'	0°20'	1°20'	9°41'	24° 3'	W26
T 27	0 24 35	4°16'27"	14°14'	0 ^h 25 ^m	10°54'	0 ^h 28 ^m	22° 8'	13°24'	25°11'	21°55'	22°36'	0°14'	1°17'	9°47'	24° 9'	T 27
F 28	0 28 31	5°15'14"	27°19'	1°18'	12° 8'	0°49'	22°10'	13°22'	25°11'	21°53'	22°37'	0° 6'	1°13'	9°54'	24°15'	F 28
S 29	0 32 28	6°14'03"	10 ^h 49 ^m	2° 9'	13°23'	1°29'	22°12'	13°21'	25°11'	21°52'	22°39'	29 ^h 58 ^m	1°10'	10° 0'	24°21'	S 29
S 30	0 36 24	7 ^h 12'54"	24 ^h 41 ^m	2 ^h 56 ^m	14 ^h 38 ^m	2 ^h 28 ^m	22 ^h 14 ^m	13 ^h 19 ^m	25°R11	21 ^h 50 ^m	22 ^h 40 ^m	29 ^h 49 ^m	1 ^h 7 ^m	10 ^h 7 ^m	24 ^h 28 ^m	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	8n11	5n54	5 s 1	1n59	0n29	9n38	1n23	4s48	0n23	22s 1	0s28	17s22	1 s 1	23n24	0n 6	7n13	1s39	21n52	8n 8	20s38	20s40	21n 4	15s16	3n 3			
S 2	7 50	1 0	4 52	1 14	0 22	9 10	1 24	5 4	0 22	22 1	0 28	17 24	1 1	23 24	0 6	7 12	1 39	21 52	8 8	20 35	20 39	21 4	15 17	3 3			
M 3	7 28	4s 2	4 26	0 29	0 15	8 42	1 24	5 19	0 21	22 2	0 28	17 25	1 1	23 24	0 6	7 12	1 39	21 51	8 8	20 33	20 39	21 4	15 18	3 3			
T 4	7 6	8 56	3 44	0s15	0 7	8 14	1 24	5 35	0 21	22 2	0 28	17 26	1 1	23 24	0 6	7 11	1 39	21 51	8 8	20 31	20 38	21 4	15 20	3 2			
W 5	6 43	13 23	2 48	0 59	0s 1	7 46	1 25	5 51	0 20	22 3	0 28	17 27	1 1	23 25	0 6	7 11	1 40	21 51	8 8	20 30	20 38	21 5	15 21	3 2			
T 6	6 21	17 5	1 42	1 43	0 9	7 17	1 25	6 6	0 19	22 3	0 29	17 28	1 1	23 25	0 6	7 10	1 40	21 50	8 8	20 29	20 37	21 5	15 22	3 2			
F 7	5 59	19 47	0 28	2 26	0 17	6 48	1 25	6 22	0 19	22 3	0 29	17 29	1 1	23 25	0 6	7 10	1 40	21 50	8 9	20 29	20 36	21 5	15 23	3 2			
S 8	5 36	21 14	0n47	3 9	0 25	6 19	1 25	6 37	0 18	22 4	0 29	17 30	1 1	23 25	0 6	7 9	1 40	21 49	8 9	20 29	20 36	21 5	15 24	3 2			
S 9	5 14	21 20	1 58	3 51	0 33	5 50	1 25	6 53	0 17	22 4	0 29	17 31	1 1	23 25	0 6	7 9	1 40	21 49	8 9	20 29	20 35	21 5	15 26	3 2			
M10	4 51	20 5	3 3	4 32	0 41	5 21	1 25	7 8	0 17	22 4	0 29	17 32	1 1	23 25	0 6	7 8	1 40	21 48	8 9	20 29	20 34	21 6	15 27	3 2			
T 11	4 28	17 38	3 56	5 13	0 49	4 52	1 25	7 24	0 16	22 5	0 29	17 33	1 1	23 25	0 6	7 8	1 40	21 48	8 9	20 28	20 34	21 6	15 28	3 2			
W12	4 6	14 12	4 34	5 54	0 57	4 22	1 24	7 39	0 16	22 5	0 29	17 34	1 1	23 25	0 6	7 7	1 40	21 48	8 9	20 27	20 33	21 6	15 30	3 2			
T 13	3 43	10 2	4 57	6 33	1 6	3 52	1 24	7 54	0 15	22 5	0 29	17 35	1 1	23 25	0 6	7 7	1 40	21 47	8 10	20 25	20 33	21 6	15 31	3 2			
F 14	3 20	5 26	5 2	7 12	1 14	3 22	1 24	8 10	0 14	22 5	0 29	17 36	1 1	23 25	0 6	7 6	1 40	21 47	8 10	20 23	20 32	21 6	15 32	3 2			
S 15	2 57	0 38	4 51	7 51	1 22	2 52	1 23	8 25	0 14	22 5	0 29	17 37	1 1	23 25	0 6	7 6	1 40	21 46	8 10	20 20	20 31	21 7	15 34	3 2			
S 16	2 34	4n 5	4 24	8 28	1 31	2 22	1 23	8 40	0 13	22 6	0 29	17 38	1 1	23 25	0 6	7 5	1 40	21 46	8 10	20 18	20 31	21 7	15 35	3 2			
M17	2 11	8 32	3 45	9 5	1 39	1 52	1 22	8 55	0 12	22 6	0 29	17 38	1 1	23 25	0 6	7 4	1 40	21 46	8 10	20 16	20 30	21 7	15 36	3 2			
T 18	1 48	12 32	2 55	9 41	1 47	1 22	1 22	9 11	0 12	22 6	0 29	17 39	1 1	23 25	0 6	7 4	1 40	21 45	8 11	20 14	20 29	21 7	15 38	3 2			
W19	1 24	15 55	1 59	10 16	1 55	0 52	1 21	9 26	0 11	22 6	0 29	17 40	1 1	23 25	0 6	7 3	1 40	21 45	8 11	20 13	20 29	21 7	15 39	3 2			
T 20	1 1	18 33	0 57	10 50	2 3	0 22	1 20	9 41	0 10	22 6	0 29	17 41	1 1	23 25	0 6	7 3	1 40	21 45	8 11	20 13	20 28	21 7	15 41	3 2			
F 21	0 38	20 21	0s 6	11 23	2 11	0s 9	1 19	9 56	0 10	22 6	0 29	17 42	1 1	23 25	0 6	7 2	1 40	21 44	8 11	20 13	20 27	21 8	15 42	3 2			
S 22	0 15	21 14	1 9	11 56	2 18	0 39	1 18	10 11	0 9	22 6	0 29	17 42	1 1	23 25	0 6	7 2	1 40	21 44	8 11	20 13	20 27	21 8	15 43	3 2			
S 23	0s 9	21 11	2 9	12 27	2 26	1 10	1 18	10 26	0 8	22 5	0 29	17 43	1 1	23 25	0 6	7 1	1 40	21 44	8 12	20 13	20 26	21 8	15 45	3 2			
M24	0 32	20 10	3 4	12 57	2 33	1 40	1 17	10 41	0 8	22 5	0 29	17 44	1 1	23 25	0 6	7 0	1 40	21 43	8 12	20 13	20 25	21 8	15 46	3 2			
T 25	0 55	18 14	3 51	13 25	2 40	2 10	1 16	10 55	0 7	22 5	0 29	17 44	1 1	23 25	0 6	7 0	1 40	21 43	8 12	20 13	20 25	21 8	15 48	3 2			
W26	1 19	15 25	4 29	13 53	2 47	2 41	1 14	11 10	0 7	22 5	0 29	17 45	1 1	23 25	0 6	6 59	1 40	21 43	8 12	20 12	20 24	21 8	15 49	3 2			
T 27	1 42	11 50	4 55	14 19	2 54	3 11	1 13	11 25	0 6	22 5	0 29	17 45	1 1	23 25	0 6	6 59	1 40	21 43	8 12	20 11	20 24	21 8	15 51	3 2			
F 28	2 5	7 36	5 6	14 44	3 0	3 41	1 12	11 40	0 5	22 4	0 29	17 46	1 1	23 25	0 6	6 58	1 40	21 42	8 13	20 9	20 23	21 8	15 52	3 2			
S 29	2 28	2 52	5 1	15 7	3 6	4 11	1 11	11 54	0 5	22 4	0 29	17 46	1 1	23 25	0 6	6 57	1 40	21 42	8 13	20 7	20 22	21 8	15 54	3 2			
S 30	2s52	2s 9	4s38	15s28	3s12	4s42	1n 9	12s 9	0n 4	22s 4	0s29	17s47	1s 1	23n25	0n 6	6n57	1s40	21n42	8n13	20s 5	20s22	21n 9	15s55	3n 3			

ASTRODIENST EPHEMERIS for the year 2198

geocentric

OCTOBER 2198

00:00 UT

Day	Sid.t	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
M 1	0 40 21	8♂11'47	8♂52	3♂39	15♂52	2♂50	22♂17	13°R17	25°R11	21°R48	22♂41	29°R40	1♂ 4	10♂14	24♂34	M 1
T 2	0 44 17	9°10'42	23°17	4°19	17° 7	3°30	22°20	13♂16	25♂11	21°Y47	22°43	29♂34	1° 1	10°20	24°40	T 2
W 3	0 48 14	10° 9'39	7♂50	4°54	18°22	4°11	22°22	13°14	25°11	21°45	22°44	29°30	0°57	10°27	24°47	W 3
T 4	0 52 10	11° 8'38	22°25	5°24	19°37	4°51	22°25	13°13	25°11	21°43	22°45	29°28	0°54	10°34	24°54	T 4
F 5	0 56 7	12° 7'39	6♂56	5°50	20°51	5°32	22°29	13°12	25°11	21°42	22°47	29°D28	0°51	10°40	25° 0	F 5
S 6	1 0 3	13° 6'41	21°18	6° 9	22° 6	6°12	22°32	13°10	25°10	21°40	22°48	29°29	0°48	10°47	25° 7	S 6
S 7	1 4 0	14° 5'46	5♂30	6°23	23°21	6°53	22°36	13° 9	25°10	21°38	22°49	29°30	0°45	10°54	25°14	S 7
M 8	1 7 57	15° 4'52	19°30	6°31	24°36	7°34	22°39	13° 8	25°10	21°37	22°51	29°R30	0°42	11° 0	25°20	M 8
T 9	1 11 53	16° 4'00	3♂17	6°R32	25°50	8°15	22°43	13° 7	25° 9	21°35	22°52	29°29	0°38	11° 7	25°27	T 9
W10	1 15 50	17° 3'09	16°51	6°25	27° 5	8°56	22°47	13° 7	25° 9	21°33	22°53	29°26	0°35	11°14	25°34	W10
T 11	1 19 46	18° 2'20	0♂13	6°11	28°20	9°37	22°52	13° 6	25° 8	21°32	22°54	29°20	0°32	11°20	25°41	T 11
F 12	1 23 43	19° 1'33	13°22	5°49	29°35	10°18	22°56	13° 5	25° 8	21°30	22°55	29°14	0°29	11°27	25°48	F 12
S 13	1 27 39	20° 0'48	26°17	5°19	0♂49	10°59	23° 1	13° 5	25° 7	21°28	22°57	29° 7	0°26	11°33	25°55	S 13
S 14	1 31 36	21° 0'05	9°Y 0	4°40	2° 4	11°40	23° 6	13° 5	25° 6	21°27	22°58	29° 0	0°22	11°40	26° 2	S 14
M15	1 35 32	21°59'23	21°29	3°54	3°19	12°21	23°11	13° 4	25° 6	21°25	22°59	28°55	0°19	11°47	26° 9	M15
T 16	1 39 29	22°58'44	3♂46	3° 0	4°34	13° 2	23°16	13° 4	25° 5	21°23	23° 0	28°50	0°16	11°53	26°16	T 16
W17	1 43 26	23°58'07	15°52	1°59	5°48	13°43	23°21	13°D 4	25° 4	21°22	23° 1	28°48	0°13	12° 0	26°23	W17
T 18	1 47 22	24°57'32	27°49	0°53	7° 3	14°25	23°27	13° 4	25° 3	21°20	23° 2	28°D47	0°10	12° 7	26°31	T 18
F 19	1 51 19	25°56'59	9♂39	29♂42	8°18	15° 6	23°32	13° 4	25° 2	21°18	23° 3	28°47	0° 7	12°13	26°38	F 19
S 20	1 55 15	26°56'29	21°26	28°29	9°33	15°48	23°38	13° 4	25° 1	21°17	23° 4	28°49	0° 3	12°20	26°45	S 20
S 21	1 59 12	27°56'00	3♂14	27°15	10°47	16°29	23°44	13° 5	25° 0	21°15	23° 5	28°51	0° 0	12°27	26°52	S 21
M22	2 3 8	28°55'34	15° 8	26° 3	12° 2	17°11	23°50	13° 5	24°59	21°13	23° 6	28°52	29♂57	12°33	27° 0	M22
T 23	2 7 5	29°55'11	27°12	24°55	13°17	17°52	23°56	13° 6	24°58	21°12	23° 7	28°R53	29°54	12°40	27° 7	T 23
W24	2 11 1	0♂54'49	9♂32	23°52	14°32	18°34	24° 3	13° 6	24°57	21°10	23° 8	28°53	29°51	12°47	27°15	W24
T 25	2 14 58	1°54'30	22°12	22°58	15°47	19°16	24°10	13° 7	24°56	21° 9	23° 9	28°51	29°48	12°53	27°22	T 25
F 26	2 18 55	2°54'13	5♂15	22°12	17° 1	19°58	24°16	13° 8	24°55	21° 7	23° 9	28°48	29°44	13° 0	27°30	F 26
S 27	2 22 51	3°53'58	18°45	21°37	18°16	20°40	24°23	13° 9	24°53	21° 5	23°10	28°45	29°41	13° 7	27°37	S 27
S 28	2 26 48	4°53'45	2♂42	21°12	19°31	21°22	24°30	13°10	24°52	21° 4	23°11	28°41	29°38	13°13	27°45	S 28
M29	2 30 44	5°53'34	17° 3	20°59	20°46	22° 4	24°38	13°11	24°51	21° 2	23°12	28°38	29°35	13°20	27°52	M29
T 30	2 34 41	6°53'26	1♂44	20°D58	22° 1	22°46	24°45	13°12	24°49	21° 0	23°12	28°36	29°32	13°26	28° 0	T 30
W31	2 38 37	7♂53'20	16♂38	21♂ 7	23♂15	23♂28	24♂53	13♂14	24♂48	20°Y59	23♂13	28♂34	29♂28	13♂33	28♂ 8	W31

Day	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂
	decl	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	lat
M 1	3s15	7s10	3s58	15s48	3s17	5s12	1n 8	12s23	0n 3	22s 3	0s29	17s47	1s 1	23n26	0n 6	6n56
T 2	3 38	11 52	3 2	16 6	3 21	5 41	1 7	12 37	0 3	22 3	0 29	17 48	1 1	23 26	0 6	6 56
W 3	4 1	15 54	1 54	16 22	3 25	6 11	1 5	12 52	0 2	22 2	0 29	17 48	1 1	23 26	0 6	6 55
T 4	4 24	18 58	0 38	16 35	3 29	6 41	1 4	13 6	0 2	22 2	0 29	17 49	1 1	23 26	0 6	6 54
F 5	4 47	20 47	0n40	16 46	3 31	7 11	1 2	13 20	0 1	22 1	0 29	17 49	1 1	23 26	0 6	6 54
S 6	5 10	21 12	1 55	16 54	3 33	7 40	1 0	13 34	0 0	22 1	0 29	17 49	1 1	23 26	0 6	6 53
S 7	5 33	20 15	3 3	17 0	3 34	8 9	0 59	13 48	0s 0	22 0	0 29	17 50	1 1	23 26	0 6	6 52
M 8	5 56	18 4	3 58	17 2	3 34	8 38	0 57	14 2	0 1	22 0	0 29	17 50	1 1	23 26	0 6	6 52
T 9	6 19	14 53	4 38	17 1	3 32	9 7	0 55	14 16	0 1	21 59	0 29	17 50	1 1	23 26	0 6	6 51
W10	6 41	10 57	5 2	16 57	3 30	9 36	0 53	14 29	0 2	21 58	0 30	17 50	1 1	23 26	0 6	6 51
T 11	7 4	6 33	5 10	16 48	3 26	10 4	0 51	14 43	0 3	21 58	0 30	17 50	1 1	23 26	0 6	6 50
F 12	7 27	1 54	5 1	16 36	3 21	10 32	0 49	14 57	0 3	21 57	0 30	17 51	1 1	23 26	0 6	6 49
S 13	7 49	2n45	4 36	16 19	3 14	11 0	0 47	15 10	0 4	21 56	0 30	17 51	1 1	23 26	0 6	6 49
S 14	8 11	7 13	3 58	15 58	3 5	11 28	0 45	15 23	0 5	21 55	0 30	17 51	1 1	23 26	0 6	6 48
M15	8 33	11 18	3 9	15 32	2 54	11 56	0 43	15 36	0 5	21 55	0 30	17 51	1 1	23 26	0 6	6 47
T 16	8 55	14 50	2 12	15 2	2 42	12 23	0 41	15 50	0 6	21 54	0 30	17 51	1 1	23 25	0 6	6 47
W17	9 17	17 41	1 10	14 28	2 28	12 53	0 39	16 3	0 6	21 53	0 30	17 51	1 1	23 25	0 6	6 46
T 18	9 39	19 44	0 5	13 49	2 12	13 16	0 37	16 15	0 7	21 52	0 30	17 51	1 1	23 25	0 6	6 46
F 19	10 1	20 54	0s59	13 8	1 54	13 42	0 35	16 28	0 8	21 51	0 30	17 51	1 1	23 25	0 6	6 45
S 20	10 22	21 7	2 1	12 25	1 35	14 8	0 32	16 41	0 8	21 50	0 30	17 51	1 1	23 25	0 6	6 44
S 21	10 44	20 24	2 58	11 40	1 16	14 34	0 30	16 53	0 9	21 49	0 30	17 51	1 1	23 25	0 6	6 44
M22	11 5	18 47	3 48	10 54	0 55	14 59	0 28	17 6	0 9	21 48	0 30	17 50	1 1	23 25	0 6	6 43
T 23	11 26	16 19	4 28	10 10	0 34	15 24	0 26	17 18	0 10	21 47	0 30	17 50	1 1	23 25	0 6	6 42
W24	11 47	13 4	4 57	9 28	0 14	15 49	0 23	17 30	0 11	21 46	0 30	17 50	1 1	23 25	0 6	6 42
T 25	12 7	9 10	5 13	8 49	0n 6	16 13	0 21	17 42	0 11	21 45	0 30	17 50	1 1	23 25	0 6	6 41
F 26	12 28	4 43	5 13	8 15	0 25	16 36	0 18	17 54	0 12	21 44	0 30	17 49	1 1	23 25	0 6	6 41
S 27	12 48	0s 6	4 56	7 45	0 43	16 59	0 16	18 6	0 12	21 42	0 30	17 49	1 1	23 25	0 6	6 40
S 28	13 8	5 4	4 21	7 21	0 59	17 22	0 14	18 17	0 13	21 41	0 30	17 49	1 1	23 25	0 6	6 39
M29	13 28	9 55	3 29	7 3	1 14	17 45	0 11	18 29	0 14	21 40	0 30	17 49	1 1	23 25	0 6	6 39
T 30	13 48	14 18	2 23	6 50	1 27	18 7	0 9	18 40	0 14	21 38	0 30	17 48	1 0	23 25	0 6	6 38
W31	14s 7	17s50	1s 5	6s43	1n38	18s28	0n 6	18s51	0s15	21s37	0s30	17s48	1s 0	23n25	0n 6	6n38

Julian Day Number = 2524136.5, Delta T = 161.78 sec
 Ecliptic obliquity = 23°24'45, Nutation = 0°00'15, out-of-bounds declination in red
 Ayanamsha: Fagan/Bradley = 27°31'04, Lahiri = 26°38'04

ASTRODIENST EPHEMERIS for the year 2198
geocentric

DECEMBER 2198

00:00 UT

Day	Sid.t	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
S 1	4 40 51	9♂ 3'54	10♂ 8	2♂34	1♂53	15♂42	29♂51	14♂42	23°R44	20°R18	23°R21	28°R32	27♂50	16♂59	2♂11	S 1
S 2	4 44 47	10° 4'40	24°57	4° 8	3° 8	16°26	0♂ 2	14°47	23♂42	20♂17	23♂21	28♂30	27°47	17° 6	2°19	S 2
M 3	4 48 44	11° 5'27	9♂23	5°43	4°22	17°10	0°14	14°51	23°39	20°16	23°21	28°29	27°44	17°13	2°27	M 3
T 4	4 52 40	12° 6'15	23°23	7°18	5°37	17°54	0°25	14°55	23°37	20°15	23°20	28°28	27°40	17°19	2°35	T 4
W 5	4 56 37	13° 7'04	6♂56	8°52	6°52	18°38	0°37	15° 0	23°34	20°14	23°20	28°D27	27°37	17°26	2°43	W 5
T 6	5 0 33	14° 7'54	20° 4	10°26	8° 6	19°22	0°49	15° 5	23°32	20°13	23°20	28°27	27°34	17°33	2°51	T 6
F 7	5 4 30	15° 8'45	2♂50	12° 1	9°21	20° 6	1° 1	15° 9	23°29	20°13	23°19	28°28	27°31	17°39	2°58	F 7
S 8	5 8 26	16° 9'37	15°17	13°35	10°36	20°51	1°13	15°14	23°27	20°12	23°19	28°29	27°28	17°46	3° 6	S 8
S 9	5 12 23	17°10'29	27°29	15° 9	11°50	21°35	1°25	15°19	23°24	20°11	23°19	28°31	27°25	17°53	3°14	S 9
M10	5 16 20	18°11'22	9♂31	16°43	13° 5	22°19	1°37	15°24	23°22	20°10	23°18	28°32	27°21	17°59	3°22	M10
T 11	5 20 16	19°12'16	21°25	18°17	14°20	23° 4	1°49	15°29	23°19	20°10	23°18	28°33	27°18	18° 6	3°29	T 11
W12	5 24 13	20°13'11	3♂15	19°52	15°34	23°48	2° 1	15°34	23°17	20° 9	23°17	28°R33	27°15	18°13	3°37	W12
T 13	5 28 9	21°14'07	15° 3	21°26	16°49	24°33	2°13	15°39	23°14	20° 8	23°17	28°32	27°12	18°19	3°45	T 13
F 14	5 32 6	22°15'04	26°52	23° 0	18° 3	25°17	2°26	15°44	23°11	20° 8	23°16	28°30	27° 9	18°26	3°52	F 14
S 15	5 36 2	23°16'02	8♂43	24°35	19°18	26° 2	2°38	15°49	23° 9	20° 7	23°16	28°26	27° 6	18°32	4° 0	S 15
S 16	5 39 59	24°17'00	20°38	26° 9	20°33	26°46	2°51	15°54	23° 6	20° 7	23°15	28°22	27° 2	18°39	4° 8	S 16
M17	5 43 55	25°18'00	2♂40	27°44	21°47	27°31	3° 3	16° 0	23° 4	20° 6	23°14	28°17	26°59	18°46	4°15	M17
T 18	5 47 52	26°19'00	14°50	29°18	23° 2	28°16	3°16	16° 5	23° 1	20° 6	23°14	28°12	26°56	18°52	4°23	T 18
W19	5 51 49	27°20'02	27°12	0♂53	24°16	29° 1	3°29	16°11	22°59	20° 5	23°13	28° 8	26°53	18°59	4°30	W19
T 20	5 55 45	28°21'04	9♂47	2°28	25°31	29°45	3°42	16°16	22°56	20° 5	23°12	28° 5	26°50	19° 6	4°38	T 20
F 21	5 59 42	29°22'07	22°40	4° 3	26°45	0♂30	3°55	16°22	22°54	20° 5	23°12	28° 4	26°46	19°12	4°45	F 21
S 22	6 3 38	0♂23'11	5♂52	5°38	28° 0	1°15	4° 7	16°27	22°51	20° 4	23°11	28°D 4	26°43	19°19	4°52	S 22
S 23	6 7 35	1°24'16	19°28	7°13	29°14	2° 0	4°20	16°33	22°49	20° 4	23°10	28° 5	26°40	19°26	5° 0	S 23
M24	6 11 31	2°25'22	3♂28	8°49	0♂28	2°45	4°34	16°39	22°46	20° 4	23° 9	28° 6	26°37	19°32	5° 7	M24
T 25	6 15 28	3°26'29	17°53	10°24	1°43	3°30	4°47	16°45	22°43	20° 3	23° 8	28° 8	26°34	19°39	5°15	T 25
W26	6 19 24	4°27'36	2♂40	12° 0	2°57	4°16	5° 0	16°51	22°41	20° 3	23° 8	28°R 8	26°31	19°46	5°22	W26
T 27	6 23 21	5°28'44	17°44	13°36	4°12	5° 1	5°13	16°57	22°39	20° 3	23° 7	28° 6	26°27	19°52	5°29	T 27
F 28	6 27 18	6°29'53	2♂57	15°12	5°26	5°46	5°26	17° 3	22°36	20° 3	23° 6	28° 3	26°24	19°59	5°36	F 28
S 29	6 31 14	7°31'02	18° 9	16°49	6°40	6°31	5°40	17° 9	22°34	20° 3	23° 5	27°58	26°21	20° 6	5°43	S 29
S 30	6 35 11	8°32'11	3♂ 9	18°25	7°55	7°17	5°53	17°15	22°31	20° 3	23° 4	27°52	26°18	20°12	5°50	S 30
M31	6 39 7	9♂33'21	17♂48	20♂ 1	9♂ 9	8♂ 2	6♂ 7	17♂21	22♂29	20°D 3	23♂ 3	27♂45	26♂15	20♂19	5♂57	M31

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	21s47	19s31	3n31	20s33	0n 6	24s33	1s 9	23s11	0s32	20s39	0s31	17s21	1s 0	23n23	0n 7	6n23	1s39	21n45	8n31	19s49	19s39	21n 6	17s28	3n10	
S 2	21 56	16 47	4 25	20 58	0s 1	24 33	1 11	23 16	0 33	20 37	0 31	17 20	1 0	23 23	0 7	6 23	1 39	21 45	8 31	19 48	19 39	21 5	17 29	3 11	
M 3	22 5	13 4	5 0	21 22	0 8	24 33	1 13	23 21	0 34	20 35	0 31	17 19	1 0	23 22	0 7	6 23	1 39	21 45	8 32	19 48	19 38	21 5	17 30	3 11	
T 4	22 13	8 44	5 16	21 44	0 14	24 32	1 15	23 26	0 34	20 32	0 31	17 17	1 0	23 22	0 7	6 22	1 39	21 46	8 32	19 48	19 37	21 5	17 32	3 11	
W 5	22 21	4 6	5 14	22 6	0 21	24 31	1 17	23 30	0 35	20 30	0 31	17 16	1 0	23 22	0 7	6 22	1 39	21 46	8 32	19 48	19 36	21 5	17 33	3 11	
T 6	22 28	0n36	4 55	22 27	0 28	24 28	1 19	23 34	0 35	20 27	0 31	17 15	1 0	23 22	0 7	6 22	1 39	21 47	8 33	19 48	19 36	21 4	17 34	3 12	
F 7	22 35	5 8	4 22	22 46	0 34	24 25	1 20	23 38	0 36	20 25	0 31	17 13	1 0	23 22	0 7	6 21	1 39	21 47	8 33	19 48	19 35	21 4	17 35	3 12	
S 8	22 42	9 21	3 37	23 4	0 41	24 21	1 22	23 42	0 36	20 22	0 31	17 12	1 0	23 22	0 7	6 21	1 39	21 47	8 33	19 48	19 34	21 4	17 36	3 12	
S 9	22 48	13 7	2 44	23 22	0 47	24 17	1 24	23 45	0 37	20 19	0 31	17 10	1 0	23 22	0 7	6 21	1 39	21 48	8 34	19 48	19 34	21 4	17 38	3 13	
M10	22 53	16 17	1 43	23 38	0 53	24 11	1 26	23 49	0 37	20 17	0 31	17 9	1 0	23 22	0 7	6 21	1 39	21 48	8 34	19 49	19 33	21 4	17 39	3 13	
T 11	22 58	18 44	0 39	23 52	0 59	24 5	1 27	23 52	0 38	20 14	0 31	17 8	1 0	23 22	0 7	6 20	1 39	21 49	8 34	19 49	19 32	21 3	17 40	3 13	
W12	23 3	20 21	0s26	24 6	1 5	23 58	1 29	23 54	0 38	20 11	0 31	17 6	1 0	23 21	0 7	6 20	1 39	21 49	8 34	19 49	19 31	21 3	17 41	3 14	
T 13	23 7	21 5	1 30	24 18	1 10	23 51	1 30	23 57	0 39	20 9	0 31	17 4	1 0	23 21	0 7	6 20	1 39	21 50	8 35	19 49	19 31	21 3	17 42	3 14	
F 14	23 11	20 53	2 30	24 29	1 16	23 43	1 32	23 59	0 39	20 6	0 31	17 3	0 59	23 21	0 7	6 20	1 39	21 50	8 35	19 48	19 30	21 3	17 43	3 14	
S 15	23 14	19 45	3 23	24 39	1 21	23 34	1 33	24 1	0 40	20 3	0 31	17 1	0 59	23 21	0 7	6 20	1 39	21 51	8 35	19 47	19 29	21 2	17 44	3 15	
S 16	23 17	17 44	4 8	24 47	1 26	23 24	1 34	24 3	0 40	20 0	0 31	17 0	0 59	23 21	0 7	6 20	1 39	21 51	8 36	19 46	19 28	21 2	17 45	3 15	
M17	23 20	14 57	4 43	24 54	1 31	23 14	1 36	24 4	0 41	19 57	0 31	16 58	0 59	23 21	0 7	6 19	1 39	21 51	8 36	19 45	19 28	21 2	17 46	3 15	
T 18	23 22	11 30	5 5	25 0	1 36	23 2	1 37	24 5	0 41	19 54	0 31	16 57	0 59	23 21	0 7	6 19	1 39	21 52	8 36	19 44	19 27	21 2	17 47	3 16	
W19	23 23	7 31	5 13	25 5	1 40	22 51	1 38	24 6	0 42	19 52	0 31	16 55	0 59	23 21	0 7	6 19	1 39	21 52	8 36	19 43	19 26	21 1	17 48	3 16	
T 20	23 24	3 9	5 7	25 7	1 44	22 38	1 39	24 7	0 42	19 49	0 31	16 53	0 59	23 20	0 7	6 19	1 39	21 53	8 37	19 43	19 26	21 1	17 49	3 16	
F 21	23 25	1s27	4 45	25 9	1 48	22 25	1 40	24 7	0 43	19 46	0 31	16 52	0 59	23 20	0 7	6 19	1 39	21 53	8 37	19 42	19 25	21 1	17 50	3 17	
S 22	23 25	6 7	4 8	25 9	1 52	22 11	1 41	24 8	0 43	19 43	0 31	16 50	0 59	23 20	0 7	6 19	1 39	21 54	8 37	19 42	19 24	21 0	17 51	3 17	
S 23	23 24	10 38	3 16	25 8	1 55	21 57	1 42	24 8	0 44	19 40	0 31	16 48	0 59	23 20	0 7	6 19	1 38	21 55	8 38	19 43	19 23	21 0	17 52	3 17	
M24	23 23	14 42	2 11	25 5	1 58	21 42	1 43	24 7	0 44	19 36	0 31	16 46	0 59	23 20	0 7	6 19	1 38	21 55	8 38	19 43	19 23	21 0	17 53	3 18	
T 25	23 22	18 2	0 56	25 1	2 1	21 26	1 43	24 7	0 45	19 33	0 31	16 45	0 59	23 20	0 7	6 19	1 38	21 56	8 38	19 43	19 22	21 0	17 54	3 18	
W26	23 20	20 16	0n25	24 55	2 4	21 10	1 44	24 6	0 45	19 30	0 31	16 43	0 59	23 20	0 7	6 19	1 38	21 56	8 38	19 43	19 21	20 59	17 55	3 18	
T 27	23 18	21 6	1 45	24 48	2 6	20 53	1 45	24 5	0 46	19 27	0 31	16 41	0 59	23 20	0 7	6 19	1 38	21 57	8 39	19 43	19 20	20 59	17 56	3 19	
F 28	23 15	20 25	2 58	24 39	2 8	20 35	1 45	24 3	0 46	19 24	0 32	16 39	0 59	23 19	0 7	6 19	1 38	21 57	8 39	19 42	19 20	20 59	17 57	3 19	
S 29	23 12	18 14	3 59	24 29	2 9	20 17	1 45	24 2	0 47	19 21	0 32	16 37	0 59	23 19	0 7	6 19	1 38	21 58	8 39	19 41	19 20	20 58	17 58	3 20	
S 30	23 8	14 51	4 42	24 18	2 10	19 58	1 46	24 0	0 47	19 17	0 32	16 36	0 59	23 19	0 7	6 19	1 38	21 58	8 39	19 40	19 18	20 58	17 58	3 20	
M31	23 s 4	10s38	5n 5	24s 4	2s11	19s39	1s46	23s57	0s47	19s14	0s32	16s34	1s 0	23n19	0n 7	6n19	1s38	21n59	8n40	19s38	19s17	20n58	17s59	3n20	