



Astrodienst Ephemeris Tables for the year 2161

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 2161
geocentric

JANUARY 2161

00:00 UT

Day	Sid.t	☉	☽	♀	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
T 1	6 43 52	10°34'33	29°33	27°R30	23°20	22°15	4°54	19°51	19°53	27°20	2°R22	12°R21	11° 8	4°20	28°49	T 1
F 2	6 47 48	11°49'42	11°25	27°25	23°58	22°54	5° 6	19°56	19°57	27°22	2°21	12°17	11° 5	4°27	28°52	F 2
S 3	6 51 45	12°50'52	23°17	27° 8	24°34	23°33	5°18	20° 1	20° 0	27°24	2°20	12°14	11° 2	4°33	28°56	S 3
S 4	6 55 42	13°52'01	5°12	26°39	25° 9	24°12	5°30	20° 7	20° 4	27°26	2°19	12°12	10°59	4°40	28°59	S 4
M 5	6 59 38	14°53'10	17°16	25°58	25°43	24°51	5°41	20°12	20° 8	27°28	2°17	12°D11	10°55	4°47	29° 2	M 5
T 6	7 3 35	15°54'19	29°33	25° 6	26°15	25°30	5°53	20°17	20°11	27°31	2°16	12°12	10°52	4°54	29° 6	T 6
W 7	7 7 31	16°55'27	12° 8	24° 4	26°45	26° 8	6° 5	20°22	20°15	27°33	2°15	12°14	10°49	5° 0	29° 9	W 7
T 8	7 11 28	17°56'35	25° 6	22°55	27°14	26°47	6°16	20°27	20°18	27°35	2°14	12°15	10°46	5° 7	29°12	T 8
F 9	7 15 24	18°57'43	8°10	21°39	27°41	27°26	6°28	20°32	20°22	27°37	2°13	12°R16	10°43	5°14	29°16	F 9
S 10	7 19 21	19°58'51	22°20	20°19	28° 7	28° 5	6°39	20°37	20°25	27°40	2°12	12°16	10°39	5°20	29°19	S 10
S 11	7 23 17	20°59'58	6°36	18°59	28°30	28°44	6°50	20°41	20°29	27°42	2°10	12°14	10°36	5°27	29°23	S 11
M12	7 27 14	22° 1'05	21°14	17°40	28°52	29°23	7° 2	20°46	20°33	27°44	2° 9	12°10	10°33	5°34	29°26	M12
T 13	7 31 11	23° 2'12	6° 7	16°24	29°12	0° 2	7°13	20°50	20°36	27°46	2° 8	12° 4	10°30	5°41	29°30	T 13
W14	7 35 7	24° 3'19	21° 7	15°15	29°29	0°41	7°24	20°55	20°40	27°49	2° 7	11°57	10°27	5°47	29°34	W14
T 15	7 39 4	25° 4'25	6° 4	14°14	29°45	1°20	7°35	20°59	20°43	27°51	2° 6	11°51	10°24	5°54	29°37	T 15
F 16	7 43 0	26° 5'31	20°51	13°21	29°58	1°59	7°46	21° 4	20°47	27°53	2° 5	11°45	10°20	6° 1	29°41	F 16
S 17	7 46 57	27° 6'37	5°19	12°37	0°10	2°38	7°57	21° 8	20°50	27°56	2° 4	11°41	10°17	6° 8	29°45	S 17
S 18	7 50 53	28° 7'43	19°27	12° 3	0°19	3°17	8° 7	21°12	20°54	27°58	2° 3	11°39	10°14	6°14	29°48	S 18
M19	7 54 50	29° 8'48	3°13	11°39	0°25	3°56	8°18	21°16	20°57	28° 0	2° 2	11°D38	10°11	6°21	29°52	M19
T 20	7 58 46	0° 9'54	16°38	11°24	0°30	4°35	8°29	21°20	21° 1	28° 2	2° 1	11°39	10° 8	6°28	29°56	T 20
W21	8 2 43	1°10'59	29°45	11°D18	0°R32	5°14	8°39	21°24	21° 5	28° 5	2° 0	11°41	10° 5	6°34	29°59	W21
T 22	8 6 40	2°12'04	12°35	11°20	0°31	5°53	8°50	21°28	21° 8	28° 7	1°59	11°R41	10° 1	6°41	0° 4	T 22
F 23	8 10 36	3°13'09	25°12	11°31	0°28	6°32	9° 0	21°32	21°12	28° 9	1°58	11°40	9°58	6°48	0° 7	F 23
S 24	8 14 33	4°14'13	7°38	11°48	0°23	7°11	9°10	21°35	21°15	28°12	1°57	11°37	9°55	6°55	0°11	S 24
S 25	8 18 29	5°15'17	19°54	12°12	0°15	7°50	9°20	21°39	21°19	28°14	1°56	11°31	9°52	7° 1	0°15	S 25
M26	8 22 26	6°16'20	2° 4	12°42	0° 4	8°29	9°30	21°42	21°22	28°16	1°55	11°22	9°49	7° 8	0°19	M26
T 27	8 26 22	7°17'22	14° 7	13°18	29°51	9° 8	9°40	21°46	21°26	28°18	1°54	11°12	9°45	7°15	0°23	T 27
W28	8 30 19	8°18'23	26° 4	13°59	29°36	9°47	9°50	21°49	21°29	28°21	1°53	11° 0	9°42	7°21	0°27	W28
T 29	8 34 15	9°19'24	7°58	14°44	29°18	10°26	9°59	21°52	21°32	28°23	1°52	10°48	9°39	7°28	0°31	T 29
F 30	8 38 12	10°20'23	19°49	15°33	28°58	11° 5	10° 9	21°56	21°36	28°25	1°51	10°37	9°36	7°35	0°35	F 30
S 31	8 42 9	11°21'22	1°40	16°26	28°35	11°44	10°18	21°59	21°39	28°27	1°50	10°28	9°33	7°42	0°39	S 31

Day	☉	☾		♀		♀		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		
	decl	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	
T 1	22s59	6s51	5n 5	20s30	0n 8	13s55	0s12	17s43	0n37	20s20	0n47	15s34	2n12	22s22	0s26	20s13	0n28	17n16	6s 8	22s15	22s 5	5s 9	6s27	5n46						
F 2	22 53	2 27	5 13	20 14	0 26	13 34	0 3	17 53	0 37	20 22	0 47	15 35	2 12	22 22	0 26	20 13	0 28	17 16	6 8	22 15	22 5	5 6	6 27	5 46						
S 3	22 48	2n 2	5 7	19 59	0 45	13 13	0n 7	18 3	0 36	20 24	0 47	15 37	2 12	22 21	0 26	20 13	0 28	17 16	6 8	22 14	22 5	5 4	6 26	5 46						
S 4	22 42	6 28	4 48	19 46	1 4	12 52	0 17	18 14	0 36	20 26	0 47	15 38	2 12	22 21	0 26	20 12	0 28	17 16	6 8	22 14	22 4	5 1	6 25	5 45						
M 5	22 35	10 43	4 16	19 34	1 23	12 31	0 27	18 24	0 35	20 28	0 47	15 39	2 12	22 20	0 26	20 12	0 28	17 16	6 8	22 14	22 4	4 59	6 24	5 45						
T 6	22 28	14 37	3 32	19 25	1 43	12 10	0 37	18 33	0 35	20 30	0 47	15 40	2 12	22 20	0 26	20 11	0 28	17 16	6 8	22 14	22 3	4 56	6 23	5 45						
W 7	22 21	17 57	2 37	19 17	2 1	11 50	0 48	18 43	0 34	20 32	0 47	15 42	2 13	22 19	0 26	20 11	0 28	17 16	6 8	22 14	22 3	4 54	6 22	5 44						
T 8	22 13	20 31	1 32	19 12	2 19	11 30	0 59	18 53	0 34	20 34	0 47	15 43	2 13	22 19	0 26	20 10	0 28	17 16	6 8	22 15	22 2	4 51	6 22	5 44						
F 9	22 5	22 2	0 21	19 8	2 35	11 10	1 10	19 2	0 33	20 36	0 47	15 44	2 13	22 18	0 26	20 10	0 28	17 16	6 8	22 15	22 2	4 49	6 21	5 44						
S 10	21 56	22 17	0s54	19 6	2 49	10 50	1 22	19 11	0 32	20 38	0 47	15 45	2 13	22 17	0 26	20 10	0 28	17 17	6 7	22 15	22 1	4 46	6 20	5 44						
S 11	21 47	21 7	2 8	19 6	3 1	10 31	1 34	19 20	0 32	20 40	0 47	15 46	2 13	22 17	0 26	20 9	0 28	17 17	6 7	22 14	22 1	4 44	6 19	5 43						
M12	21 37	18 31	3 16	19 7	3 10	10 12	1 46	19 29	0 31	20 42	0 47	15 47	2 13	22 16	0 26	20 9	0 27	17 17	6 7	22 14	22 1	4 41	6 18	5 43						
T 13	21 27	14 41	4 11	19 9	3 17	9 54	1 58	19 38	0 31	20 43	0 47	15 48	2 14	22 16	0 26	20 8	0 27	17 17	6 7	22 13	22 0	4 39	6 17	5 43						
W14	21 17	9 53	4 49	19 13	3 21	9 36	2 11	19 47	0 30	20 45	0 47	15 49	2 14	22 15	0 26	20 8	0 27	17 17	6 7	22 12	22 0	4 36	6 16	5 42						
T 15	21 6	4 31	5 7	19 18	3 23	9 18	2 24	19 56	0 30	20 47	0 47	15 50	2 14	22 15	0 26	20 7	0 27	17 17	6 7	22 11	21 59	4 34	6 15	5 42						
F 16	20 55	1s 3	5 5	19 24	3 22	9 1	2 37	20 4	0 29	20 49	0 47	15 51	2 14	22 14	0 26	20 7	0 27	17 17	6 7	22 10	21 59	4 31	6 14	5 42						
S 17	20 43	6 27	4 43	19 30	3 20	8 44	2 51	20 12	0 28	20 50	0 47	15 52	2 14	22 14	0 26	20 7	0 27	17 17	6 7	22 10	21 58	4 29	6 13	5 42						
S 18	20 31	11 22	4 4	19 37	3 16	8 28	3 5	20 20	0 28	20 52	0 47	15 53	2 14	22 13	0 26	20 6	0 27	17 18	6 7	22 10	21 58	4 26	6 12	5 42						
M19	20 19	15 35	3 12	19 45	3 10	8 13	3 19	20 28	0 27	20 54	0 47	15 54	2 15	22 13	0 26	20 6	0 27	17 18	6 6	22 10	21 57	4 24	6 10	5 41						
T 20	20 6	18 53	2 11	19 53	3 4	7 58	3 33	20 36	0 27	20 55	0 47	15 55	2 15	22 12	0 26	20 5	0 27	17 18	6 6	22 10	21 57	4 21	6 9	5 41						
W21	19 53	21 7	1 4	20 1	2 56	7 44	3 47	20 44	0 26	20 57	0 47	15 55	2 15	22 12	0 26	20 5	0 27	17 18	6 6	22 10	21 56	4 19	6 8	5 41						
T 22	19 39	22 12	0n 5	20 10	2 47	7 31	4 1	20 51	0 25	20 59	0 47	15 56	2 15	22 11	0 26	20 4	0 27	17 18	6 6	22 10	21 56	4 16	6 7	5 41						
F 23	19 25	22 8	1 12	20 18	2 38	7 18	4 16	20 59	0 25	21 0	0 47	15 57	2 15	22 11	0 26	20 4	0 27	17 18	6 6	22 10	21 55	4 14	6 6	5 40						
S 24	19 11	20 57	2 15	20 26	2 28	7 6	4 31	21 6	0 24	21 2	0 47	15 58	2 15	22 10	0 26	20 3	0 27	17 18	6 6	22 9	21 55	4 11	6 5	5 40						
S 25	18 56	18 48	3 10	20 34	2 18	6 55	4 45	21 13	0 23	21 3	0 47	15 59	2 16	22 9	0 26	20 3	0 27	17 18	6 6	22 9	21 55	4 9	6 4	5 40						
M26	18 41	15 51	3 56	20 41	2 8	6 45	5 0	21 20	0 23	21 5	0 47	15 59	2 16	22 9	0 26	20 3	0 27	17 19	6 6	22 7	21 54	4 6	6 2	5 40						
T 27	18 26	12 15	4 31	20 48	1 57	6 36	5 15	21 26	0 22	21 6	0 47	16 0	2 16	22 8	0 26	20 2	0 27	17 19	6 5	22 6	21 54	4 4	6 1	5 40						
W28	18 10	8 12	4 54	20 55	1 47	6 27	5 29	21 33	0 21	21 7	0 47	16 1	2 16	22 8	0 26	20 2	0 27	17 19	6 5	22 4	21 53	4 1	6 0	5 40						
T 29	17 54	3 53	5 3	21 1	1 36	6 20	5 43	21 39	0 21	21 9	0 47	16 1	2 16	22 7	0 26	20 1	0 27	17 19	6 5	22 3	21 53	3 59	5 59	5 39						
F 30	17 38	0n34	5 0	21 6	1 26	6 14	5 58	21 45	0 20	21 10	0 47	16 2	2 17	22 7	0 26	20 1	0 27	17 19	6 5	22 1	21 52	3 56	5 58	5 39						
S 31	17s21	5n 0	4n43	21s10	1n15	6s 8	6n11	21s51	0n19	21s11	0n47	16s 2	2n17	22s 6	0s26	20s 0	0n27	17n19	6s 5	22s 0	01s52	3s54	5s56	5n39						

ASTRODIENST EPHEMERIS for the year 2161
geocentric

FEBRUARY 2161

00:00 UT

Day	Sid.t	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
S 1	8 46 5	12 ²² 19	13 ³⁴ 34	17 ²² 22	28 ¹¹ 11	12 ²³ 23	10 ²⁸ 28	22 ¹¹ 11	21 ⁴³ 43	28 ³⁰ 30	1 ⁴⁹ 49	10 ²¹ 21	9 ³⁰ 30	7 ⁴⁸ 48	0 ⁴³ 43	S 1
M 2	8 50 2	13 ²³ 15	25 ³⁶ 36	18 ²¹ 21	27 ⁴⁴ 44	13 ² 2	10 ³⁷ 37	22 ⁴ 4	21 ⁴⁶ 46	28 ³² 32	1 ⁴⁸ 48	10 ¹⁷ 17	9 ²⁶ 26	7 ⁵⁵ 55	0 ⁴⁷ 47	M 2
T 3	8 53 58	14 ²⁴ 10	7 ⁴⁸ 48	19 ²³ 23	27 ¹⁵ 15	13 ⁴¹ 41	10 ⁴⁶ 46	22 ⁷ 7	21 ⁴⁹ 49	28 ³⁴ 34	1 ⁴⁷ 47	10 ¹⁵ 15	9 ²³ 23	8 ² 2	0 ⁵¹ 51	T 3
W 4	8 57 55	15 ²⁵ 03	20 ¹⁷ 17	20 ²⁸ 28	26 ⁴⁴ 44	14 ²⁰ 20	10 ⁵⁵ 55	22 ¹⁰ 10	21 ⁵³ 53	28 ³⁶ 36	1 ⁴⁷ 47	10 ¹⁵ 15	9 ²⁰ 20	8 ⁹ 9	0 ⁵⁶ 56	W 4
T 5	9 1 51	16 ²⁵ 55	3 ¹¹ 8	21 ³⁴ 34	26 ¹² 12	14 ⁵⁹ 59	11 ⁴ 4	22 ¹² 12	21 ⁵⁶ 56	28 ³⁸ 38	1 ⁴⁶ 46	10 ¹⁶ 16	9 ¹⁷ 17	8 ¹⁵ 15	1 ⁰ 0	T 5
F 6	9 5 48	17 ²⁶ 46	16 ²⁴ 24	22 ⁴³ 43	25 ³⁸ 38	15 ³⁸ 38	11 ¹³ 13	22 ¹⁵ 15	21 ⁵⁹ 59	28 ⁴¹ 41	1 ⁴⁵ 45	10 ¹⁶ 16	9 ¹⁴ 14	8 ²² 22	1 ⁴ 4	F 6
S 7	9 9 44	18 ²⁷ 36	0 ⁵⁹ 9	23 ⁵⁴ 54	25 ³ 3	16 ¹⁷ 17	11 ²¹ 21	22 ¹⁷ 17	22 ³ 3	28 ⁴³ 43	1 ⁴⁴ 44	10 ¹⁴ 14	9 ¹¹ 11	8 ²⁹ 29	1 ⁸ 8	S 7
S 8	9 13 41	19 ²⁸ 24	14 ²⁵ 25	25 ⁷ 7	24 ²⁷ 27	16 ⁵⁶ 56	11 ³⁰ 30	22 ¹⁹ 19	22 ⁶ 6	28 ⁴⁵ 45	1 ⁴³ 43	10 ¹⁰ 10	9 ⁷ 7	8 ³⁵ 35	1 ¹² 12	S 8
M 9	9 17 38	20 ²⁹ 11	29 ⁷ 7	26 ²² 22	23 ⁵¹ 51	17 ³⁵ 35	11 ³⁸ 38	22 ²² 22	22 ⁹ 9	28 ⁴⁷ 47	1 ⁴³ 43	10 ³ 3	9 ⁴ 4	8 ⁴² 42	1 ¹⁶ 16	M 9
T 10	9 21 34	21 ²⁹ 56	14 ¹² 12	27 ³⁸ 38	23 ¹³ 13	18 ¹⁴ 14	11 ⁴⁷ 47	22 ²⁴ 24	22 ¹³ 13	28 ⁴⁹ 49	1 ⁴² 42	9 ⁵⁴ 54	9 ¹ 1	8 ⁴⁹ 49	1 ²⁰ 20	T 10
W11	9 25 31	22 ³⁰ 40	29 ³⁰ 30	28 ⁵⁵ 55	22 ³⁶ 36	18 ⁵² 52	11 ⁵⁵ 55	22 ²⁶ 26	22 ¹⁶ 16	28 ⁵¹ 51	1 ⁴¹ 41	9 ⁴⁴ 44	8 ⁵⁸ 58	8 ⁵⁶ 56	1 ²⁵ 25	W11
T 12	9 29 27	23 ³¹ 23	14 ¹⁴ 48	0 ¹⁴ 14	21 ⁵⁹ 59	19 ³¹ 31	12 ³ 3	22 ²⁸ 28	22 ¹⁹ 19	28 ⁵³ 53	1 ⁴¹ 41	9 ³³ 33	8 ⁵⁵ 55	9 ² 2	1 ²⁹ 29	T 12
F 13	9 33 24	24 ³² 04	29 ⁵⁶ 56	1 ³⁵ 35	21 ²² 22	20 ¹⁰ 10	12 ¹¹ 11	22 ²⁹ 29	22 ²² 22	28 ⁵⁶ 56	1 ⁴⁰ 40	9 ²³ 23	8 ⁵¹ 51	9 ⁹ 9	1 ³³ 33	F 13
S 14	9 37 20	25 ³² 45	14 ⁴⁵ 45	2 ⁵⁶ 56	20 ⁴⁵ 45	20 ⁴⁹ 49	12 ¹⁸ 18	22 ³¹ 31	22 ²⁵ 25	28 ⁵⁸ 58	1 ³⁹ 39	9 ¹⁵ 15	8 ⁴⁸ 48	9 ¹⁶ 16	1 ³⁷ 37	S 14
S 15	9 41 17	26 ³³ 24	29 ⁸ 8	4 ¹⁹ 19	20 ⁹ 9	21 ²⁸ 28	12 ²⁶ 26	22 ³³ 33	22 ²⁸ 28	29 ⁰ 0	1 ³⁹ 39	9 ¹⁰ 10	8 ⁴⁵ 45	9 ²³ 23	1 ⁴¹ 41	S 15
M16	9 45 13	27 ³⁴ 02	13 ¹¹ 4	5 ⁴³ 43	19 ³⁵ 35	22 ⁷ 7	12 ³³ 33	22 ³⁴ 34	22 ³¹ 31	29 ² 2	1 ³⁸ 38	9 ⁸ 8	8 ⁴² 42	9 ²⁹ 29	1 ⁴⁶ 46	M16
T 17	9 49 10	28 ³⁴ 40	26 ³² 32	7 ⁸ 8	19 ² 2	22 ⁴⁶ 46	12 ⁴¹ 41	22 ³⁵ 35	22 ³⁵ 35	29 ⁴ 4	1 ³⁷ 37	9 ⁷ 7	8 ³⁹ 39	9 ³⁶ 36	1 ⁵⁰ 50	T 17
W18	9 53 7	29 ³⁵ 16	9 ¹³ 35	8 ³⁴ 34	18 ³⁰ 30	23 ²⁵ 25	12 ⁴⁸ 48	22 ³⁷ 37	22 ³⁸ 38	29 ⁶ 6	1 ³⁷ 37	9 ⁷ 7	8 ³⁶ 36	9 ⁴³ 43	1 ⁵⁴ 54	W18
T 19	9 57 3	0 ³⁵ 51	22 ³¹ 31	10 ¹ 1	17 ⁵⁹ 59	24 ⁴ 4	12 ⁵⁵ 55	22 ³⁸ 38	22 ⁴¹ 41	29 ⁸ 8	1 ³⁶ 36	9 ⁶ 6	8 ³² 32	9 ⁴⁹ 49	1 ⁵⁸ 58	T 19
F 20	10 1 0	1 ³⁶ 24	4 ³⁵ 45	11 ²⁹ 29	17 ³¹ 31	24 ⁴³ 43	13 ² 2	22 ³⁹ 39	22 ⁴⁴ 44	29 ¹⁰ 10	1 ³⁶ 36	9 ⁴ 4	8 ²⁹ 29	9 ⁵⁶ 56	2 ² 2	F 20
S 21	10 4 56	2 ³⁶ 57	16 ⁵⁹ 59	12 ⁵⁸ 58	17 ⁵ 5	25 ²² 22	13 ⁹ 9	22 ⁴⁰ 40	22 ⁴⁷ 47	29 ¹² 12	1 ³⁵ 35	8 ⁵⁹ 59	8 ²⁶ 26	10 ³ 3	2 ⁷ 7	S 21
S 22	10 8 53	3 ³⁷ 28	29 ⁴ 4	14 ²⁹ 29	16 ⁴⁰ 40	26 ¹ 1	13 ¹⁵ 15	22 ⁴¹ 41	22 ⁴⁹ 49	29 ¹⁴ 14	1 ³⁵ 35	8 ⁵¹ 51	8 ²³ 23	10 ¹⁰ 10	2 ¹¹ 11	S 22
M23	10 12 49	4 ³⁷ 58	11 ⁴ 4	16 ⁰ 0	16 ¹⁸ 18	26 ⁴⁰ 40	13 ²² 22	22 ⁴¹ 41	22 ⁵² 52	29 ¹⁶ 16	1 ³⁴ 34	8 ⁴⁰ 40	8 ²⁰ 20	10 ¹⁶ 16	2 ¹⁵ 15	M23
T 24	10 16 46	5 ³⁸ 26	22 ⁵⁹ 59	17 ³² 32	15 ⁵⁹ 59	27 ¹⁹ 19	13 ²⁸ 28	22 ⁴² 42	22 ⁵⁵ 55	29 ¹⁸ 18	1 ³⁴ 34	8 ²⁷ 27	8 ¹⁷ 17	10 ²³ 23	2 ¹⁹ 19	T 24
W25	10 20 42	6 ³⁸ 52	4 ³⁵ 52	19 ⁵ 5	15 ⁴¹ 41	27 ⁵⁸ 58	13 ³⁴ 34	22 ⁴³ 43	22 ⁵⁸ 58	29 ²⁰ 20	1 ³³ 33	8 ¹² 12	8 ¹³ 13	10 ³⁰ 30	2 ²³ 23	W25
T 26	10 24 39	7 ³⁹ 17	16 ⁴⁴ 44	20 ³⁹ 39	15 ²⁶ 26	28 ³⁶ 36	13 ⁴⁰ 40	22 ⁴³ 43	23 ¹ 1	29 ²² 22	1 ³³ 33	7 ⁵⁷ 57	8 ¹⁰ 10	10 ³⁶ 36	2 ²⁸ 28	T 26
F 27	10 28 36	8 ³⁹ 40	28 ³⁶ 36	22 ¹⁴ 14	15 ¹⁴ 14	29 ¹⁵ 15	13 ⁴⁶ 46	22 ⁴³ 43	23 ⁴ 4	29 ²³ 23	1 ³³ 33	7 ⁴³ 43	8 ⁷ 7	10 ⁴³ 43	2 ³² 32	F 27
S 28	10 32 32	9 ⁴⁰ 02	10 ³⁰ 30	23 ⁵⁰ 50	15 ⁴ 4	29 ⁵⁴ 54	13 ⁵² 52	22 ⁴⁴ 44	23 ⁶ 6	29 ²⁵ 25	1 ³² 32	7 ³⁰ 30	8 ¹⁴ 14	10 ⁴⁵ 45	2 ³⁶ 36	S 28

Day	☉	☾		♂		♀		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂	
	decl	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat
S 1	17s 4	9n16	4n15	21s13	1n 5	6s 4	6n25	21s57	0n18	21s13	0n48	16s 3	2n17	22s 6	0s26	20s 0	0n27	17n20	6s 5	21s59	21s51	3s51	5s55	5n39			
M 2	16 47	13 13	3 34	21 16	0 55	6 1	6 38	22 3	0 18	21 14	0 48	16 4	2 17	22 5	0 26	19 59	0 27	17 20	6 5	21 58	21 51	3 49	5 54	5 39			
T 3	16 30	16 41	2 44	21 17	0 45	5 59	6 51	22 8	0 17	21 15	0 48	16 4	2 17	22 5	0 26	19 59	0 27	17 20	6 5	21 58	21 50	3 46	5 53	5 39			
W 4	16 12	19 29	1 44	21 17	0 35	5 58	7 3	22 14	0 16	21 16	0 48	16 4	2 18	22 4	0 26	19 59	0 27	17 20	6 4	21 58	21 50	3 44	5 51	5 38			
T 5	15 54	21 23	0 38	21 17	0 25	5 57	7 14	22 19	0 15	21 18	0 48	16 5	2 18	22 4	0 26	19 58	0 27	17 20	6 4	21 58	21 49	3 41	5 50	5 38			
F 6	15 35	22 11	0s33	21 15	0 16	5 58	7 25	22 24	0 15	21 19	0 48	16 5	2 18	22 3	0 26	19 58	0 27	17 20	6 4	21 58	21 49	3 39	5 49	5 38			
S 7	15 17	21 41	1 44	21 12	0 7	6 0	7 35	22 29	0 14	21 20	0 48	16 6	2 18	22 3	0 26	19 57	0 27	17 20	6 4	21 58	21 48	3 36	5 47	5 38			
S 8	14 58	19 49	2 51	21 8	0s 2	6 3	7 44	22 33	0 13	21 21	0 48	16 6	2 18	22 2	0 26	19 57	0 27	17 21	6 4	21 57	21 48	3 34	5 46	5 38			
M 9	14 39	16 35	3 49	21 3	0 11	6 7	7 53	22 38	0 12	21 22	0 48	16 7	2 19	22 2	0 26	19 56	0 27	17 21	6 4	21 56	21 47	3 31	5 45	5 38			
T 10	14 19	12 13	4 32	20 56	0 20	6 11	8 0	22 42	0 12	21 23	0 48	16 7	2 19	22 1	0 26	19 56	0 27	17 21	6 3	21 55	21 47	3 29	5 43	5 38			
W11	14 0	7 0	4 57	20 49	0 28	6 17	8 7	22 46	0 11	21 24	0 48	16 7	2 19	22 1	0 26	19 56	0 27	17 21	6 3	21 53	21 46	3 26	5 42	5 38			
T 12	13 40	1 22	5 0	20 40	0 36	6 23	8 13	22 50	0 10	21 25	0 48	16 7	2 19	22 0	0 26	19 55	0 27	17 21	6 3	21 52	21 46	3 24	5 41	5 38			
F 13	13 20	4s18	4 42	20 30	0 43	6 30	8 18	22 54	0 9	21 26	0 48	16 8	2 19	22 0	0 26	19 55	0 27	17 21	6 3	21 50	21 45	3 21	5 39	5 37			
S 14	13 0	9 35	4 6	20 19	0 51	6 37	8 22	22 58	0 8	21 27	0 48	16 8	2 20	21 59	0 26	19 54	0 27	17 22	6 3	21 49	21 45	3 19	5 38	5 37			
S 15	12 39	14 11	3 15	20 6	0 58	6 46	8 25	23 1	0 7	21 28	0 48	16 8	2 20	21 59	0 26	19 54	0 27	17 22	6 3	21 48	21 44	3 17	5 36	5 37			
M16	12 18	17 52	2 13	19 52	1 5	6 54	8 26	23 4	0 7	21 29	0 48	16 8	2 20	21 58	0 26	19 53	0 27	17 22	6 2	21 48	21 44	3 14	5 35	5 37			
T 17	11 57	20 26	1 6	19 37	1 11	7 3	8 27	23 7	0 6	21 30	0 48	16 8	2 20	21 58	0 26	19 53	0 27	17 22	6 2	21 48	21 43	3 12	5 34	5 37			
W18	11 36	21 50	0n 2	19 21	1 17	7 13	8 28	23 10	0 5	21 31	0 48	16 8	2 21	21 57	0 26	19 53	0 27	17 22	6 2	21 48	21 43	3 9	5 32	5 37			
T 19	11 15	22 3	1 9	19 3	1 23	7 22	8 27	23 13	0 4	21 32	0 48	16 9	2 21	21 57	0 26	19 52	0 27	17 23	6 2	21 48	21 42	3 7	5 31	5 37			
F 20	10 54	21 9	2 11	18 45	1 29	7 32	8 25	23 16	0 3	21 32	0 48	16 9	2 21	21 56	0 26	19 52	0 27	17 23	6 2	21 47	21 42	3 4	5 29	5 37			
S 21	10 32	19 16	3 6	18 25	1 34	7 42	8 23	23 18	0 2	21 33	0 49	16 9	2 21	21 56	0 26	19 51	0 27	17 23	6 2	21 47	21 41	3 2	5 28	5 37			
S 22	10 10	16 33	3 51	18 3	1 39	7 52	8 19	23 20	0 1	21 34	0 49	16 9	2 21	21 55	0 26	19 51	0 27	17 23	6 1	21 45	21 41	2 59	5 26	5 37			
M23	9 48	13 10	4 26	17 41	1 44	8 3	8 15	23 22	0 0	21 35	0 49	16 9	2 22	21 55	0 26	19 51	0 27	17 23	6 1	21 44	21 40	2 57	5 25	5 37			
T24	9 26	9 18	4 48	17 17	1 48	8 13	8 11	23 24	0s 0	21 35	0 49	16 9	2 22	21 54	0 26	19 50	0 27	17 23	6 1	21 42	21 40	2 54	5 24	5 37			
W25	9 4	5 5	4 59	16 51	1 52	8 23	8 6	23 26	0 1	21 36	0 49	16 9	2 22	21 54	0 26	19 50	0 27	17 24	6 1	21 39	21 39	2 52	5 22	5 37			
T 26	8 41	0 41	4 56	16 25	1 55	8 33	8 0	23 27	0 2	21 37	0 49	16 8	2 22	21 54	0 26	19 49	0 27	17 24	6 1	21 37	21 39	2 49	5 21	5 37			
F 27	8 19	3n44	4 40	15 57	1 59	8 42	7 53	23 28	0 3	21 37	0 49	16 8	2 22	21 53	0 27	19 49	0 27	17 24	6 1	21 35	21 38	2 47	5 19	5 37			
S 28	7s56	8n 1	4n12	15s28	2s 1	8s52	7n46	23s29	0s 4	21s38	0n49	16s 8	2n23	21s53	0s27	19s49	0n27	17n24	6s 0	21s33	21s38	2s44	5s18	5n37			

ASTRODIENST EPHEMERIS for the year 2161

geocentric

MARCH 2161

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
S 1	10 36 29	10°40'21	22°28	25°27	14°R56	0°33	13°57	22°44	23°9	29°27	1°R32	7°R21	8°1	10°57	2°40	S 1
M 2	10 40 25	11°40'39	4°32	27°6	14°51	1°12	14°3	22°R44	23°12	29°29	1°32	7°15	7°57	11°3	2°44	M 2
T 3	10 44 22	12°40'55	16°46	28°45	14°48	1°51	14°8	22°44	23°14	29°31	1°31	7°11	7°54	11°10	2°49	T 3
W 4	10 48 18	13°41'09	29°13	0°25	14°D48	2°29	14°13	22°44	23°17	29°32	1°31	7°10	7°51	11°17	2°53	W 4
T 5	10 52 15	14°41'20	11°59	2°6	14°50	3°8	14°18	22°43	23°19	29°34	1°31	7°10	7°48	11°24	2°57	T 5
F 6	10 56 11	15°41'30	25°8	3°48	14°54	3°47	14°22	22°43	23°22	29°36	1°31	7°10	7°45	11°30	3°1	F 6
S 7	11 0 8	16°41'38	8°43	5°31	15°1	4°26	14°27	22°42	23°24	29°38	1°30	7°8	7°42	11°37	3°5	S 7
S 8	11 4 4	17°41'44	22°47	7°16	15°10	5°5	14°31	22°42	23°27	29°39	1°30	7°4	7°38	11°44	3°9	S 8
M 9	11 8 1	18°41'47	7°20	9°1	15°21	5°43	14°36	22°41	23°29	29°41	1°30	6°58	7°35	11°50	3°13	M 9
T 10	11 11 58	19°41'48	22°17	10°48	15°35	6°22	14°40	22°40	23°32	29°43	1°30	6°49	7°32	11°57	3°17	T 10
W 11	11 15 54	20°41'48	7°32	12°35	15°50	7°1	14°44	22°39	23°34	29°44	1°30	6°39	7°29	12°4	3°21	W 11
T 12	11 19 51	21°41'45	22°53	14°24	16°7	7°39	14°47	22°38	23°36	29°46	1°30	6°28	7°26	12°11	3°26	T 12
F 13	11 23 47	22°41'40	8°10	16°14	16°27	8°18	14°51	22°37	23°39	29°47	1°30	6°18	7°22	12°17	3°30	F 13
S 14	11 27 44	23°41'34	23°10	18°5	16°48	8°57	14°54	22°36	23°41	29°49	1°30	6°10	7°19	12°24	3°34	S 14
S 15	11 31 40	24°41'26	7°46	19°57	17°11	9°35	14°57	22°35	23°43	29°50	1°D30	6°4	7°16	12°31	3°38	S 15
M 16	11 35 37	25°41'16	21°54	21°50	17°36	10°14	15°0	22°34	23°45	29°52	1°30	6°1	7°13	12°37	3°42	M 16
T 17	11 39 33	26°41'04	5°32	23°45	18°2	10°53	15°3	22°32	23°47	29°53	1°30	6°D 1	7°10	12°44	3°45	T 17
W 18	11 43 30	27°40'51	18°42	25°40	18°31	11°31	15°6	22°30	23°49	29°55	1°30	6°1	7°7	12°51	3°49	W 18
T 19	11 47 27	28°40'37	1°28	27°36	19°0	12°10	15°8	22°29	23°51	29°56	1°30	6°R 1	7°3	12°58	3°53	T 19
F 20	11 51 23	29°40'20	13°54	29°34	19°32	12°48	15°10	22°27	23°53	29°58	1°30	6°0	7°0	13°4	3°57	F 20
S 21	11 55 20	0°40'02	26°5	1°32	20°4	13°27	15°13	22°25	23°55	29°59	1°30	5°57	6°57	13°11	4°1	S 21
S 22	11 59 16	1°39'42	8°6	3°31	20°38	14°5	15°14	22°23	23°57	0°0	1°30	5°51	6°54	13°18	4°5	S 22
M 23	12 3 13	2°39'20	20°1	5°31	21°14	14°44	15°16	22°21	23°59	0°2	1°30	5°43	6°51	13°25	4°9	M 23
T 24	12 7 9	3°38'57	1°52	7°32	21°51	15°22	15°18	22°19	24°0	0°3	1°30	5°33	6°48	13°31	4°13	T 24
W 25	12 11 6	4°38'31	13°44	9°33	22°29	16°1	15°19	22°17	24°2	0°4	1°31	5°21	6°44	13°38	4°16	W 25
T 26	12 15 2	5°38'04	25°36	11°34	23°8	16°39	15°20	22°14	24°4	0°5	1°31	5°9	6°41	13°45	4°20	T 26
F 27	12 18 59	6°37'34	7°32	13°35	23°48	17°18	15°21	22°12	24°6	0°6	1°31	4°57	6°38	13°51	4°24	F 27
S 28	12 22 56	7°37'03	19°32	15°36	24°29	17°56	15°22	22°10	24°7	0°8	1°31	4°48	6°35	13°58	4°27	S 28
S 29	12 26 52	8°36'29	1°38	17°37	25°12	18°34	15°23	22°7	24°9	0°9	1°32	4°40	6°32	14°5	4°31	S 29
M 30	12 30 49	9°35'54	13°52	19°37	25°55	19°13	15°23	22°4	24°10	0°10	1°32	4°36	6°28	14°12	4°35	M 30
T 31	12 34 45	10°35'16	26°15	21°35	26°39	19°51	15°23	22°4	24°12	0°11	1°32	4°33	6°25	14°18	4°38	T 31

Day	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂
	decl	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	lat
S 1	7s33	12n 1	3n32	14s58	2s 4	9s 1	7n39	23s30	0s 5	21s39	0n49	16s 8	2n23	21s52	0s27	19s48
M 2	7 11	15 35	2 43	14 26	2 6	9 10	7 31	23 31	0 6	21 39	0 49	16 8	2 23	21 52	0 27	19 48
T 3	6 48	18 31	1 46	13 54	2 8	9 18	7 23	23 32	0 7	21 40	0 49	16 8	2 23	21 51	0 27	19 47
W 4	6 25	20 39	0 42	13 20	2 9	9 27	7 15	23 32	0 8	21 40	0 49	16 7	2 23	21 51	0 27	19 47
T 5	6 1	21 47	0s26	12 44	2 10	9 34	7 6	23 32	0 9	21 41	0 49	16 7	2 24	21 51	0 27	19 47
F 6	5 38	21 46	1 34	12 8	2 10	9 42	6 57	23 32	0 10	21 41	0 49	16 7	2 24	21 50	0 27	19 46
S 7	5 15	20 30	2 39	11 30	2 10	9 49	6 48	23 32	0 11	21 42	0 49	16 6	2 24	21 50	0 27	19 46
S 8	4 52	17 56	3 36	10 51	2 10	9 55	6 38	23 32	0 12	21 42	0 49	16 6	2 24	21 49	0 27	19 46
M 9	4 28	14 12	4 22	10 10	2 9	10 1	6 29	23 31	0 14	21 42	0 50	16 6	2 24	21 49	0 27	19 45
T 10	4 5	9 28	4 51	9 29	2 8	10 6	6 19	23 30	0 15	21 43	0 50	16 5	2 25	21 49	0 27	19 45
W 11	3 41	4 5	5 1	8 46	2 6	10 11	6 9	23 30	0 16	21 43	0 50	16 5	2 25	21 48	0 27	19 45
T 12	3 17	1s36	4 49	8 2	2 3	10 16	5 59	23 29	0 17	21 44	0 50	16 5	2 25	21 48	0 27	19 44
F 13	2 54	7 9	4 16	7 17	2 1	10 20	5 50	23 27	0 18	21 44	0 50	16 4	2 25	21 47	0 27	19 44
S 14	2 30	12 11	3 26	6 31	1 57	10 23	5 40	23 26	0 19	21 44	0 50	16 4	2 25	21 47	0 27	19 44
S 15	2 6	16 21	2 24	5 43	1 54	10 26	5 30	23 24	0 20	21 45	0 50	16 3	2 26	21 47	0 27	19 43
M 16	1 43	19 25	1 14	4 55	1 44	10 28	5 20	23 23	0 21	21 45	0 50	16 3	2 26	21 46	0 27	19 43
T 17	1 19	21 15	0 3	4 5	1 44	10 29	5 10	23 21	0 23	21 45	0 50	16 2	2 26	21 46	0 27	19 43
W 18	0 55	21 50	1n 7	3 14	1 39	10 30	5 0	23 19	0 24	21 45	0 50	16 1	2 26	21 46	0 27	19 42
T 19	0 32	21 14	2 11	2 23	1 33	10 31	4 50	23 17	0 25	21 45	0 50	16 1	2 26	21 45	0 27	19 42
F 20	0 8	19 36	3 7	1 30	1 27	10 31	4 40	23 14	0 26	21 46	0 50	16 0	2 27	21 45	0 27	19 42
S 21	0n16	17 5	3 53	0 37	1 20	10 30	4 30	23 12	0 27	21 46	0 50	16 0	2 27	21 45	0 27	19 42
S 22	0 40	13 54	4 29	0n18	1 12	10 29	4 21	23 9	0 29	21 46	0 50	15 59	2 27	21 45	0 27	19 41
M 23	1 3	10 10	4 52	1 13	1 4	10 27	4 11	23 6	0 30	21 46	0 50	15 58	2 27	21 44	0 27	19 41
T 24	1 27	6 5	5 2	2 8	0 56	10 24	4 1	23 3	0 31	21 46	0 51	15 57	2 27	21 44	0 27	19 41
W 25	1 51	1 47	5 0	3 4	0 46	10 21	3 52	23 0	0 32	21 46	0 51	15 57	2 27	21 44	0 27	19 40
T 26	2 14	2n36	4 44	4 0	0 37	10 17	3 42	22 56	0 34	21 46	0 51	15 56	2 28	21 43	0 27	19 40
F 27	2 38	6 55	4 16	4 57	0 27	10 13	3 33	22 53	0 35	21 46	0 51	15 55	2 28	21 43	0 27	19 40
S 28	3 1	10 59	3 37	5 53	0 16	10 8	3 24	22 49	0 36	21 46	0 51	15 54	2 28	21 43	0 27	19 40
S 29	3 25	14 38	2 47	6 49	0 6	10 3	3 15	22 45	0 38	21 46	0 51	15 54	2 28	21 43	0 27	19 39
M 30	3 48	17 43	1 49	7 45	0n 6	9 57	3 6	22 41	0 39	21 46	0 51	15 53	2 28	21 42	0 27	19 39
T 31	4n11	20n 1	0n44	8n40	0n17	9s51	2n57	22s37	0s40	21s46	0n51	15s52	2n28	21s42	0s27	19s39

Julian Day Number = 2510408.5, Delta T = 129.65 sec
 Ecliptic obliquity = 23°25'03, Nutation = 0°00'17, out-of-bounds declination in red
 Ayanamsha: Fagan/Bradley = 26°59'32, Lahiri = 26°06'33

ASTRODIENST EPHEMERIS for the year 2161

geocentric

APRIL 2161

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
W 1	12 38 42	11°34'36	8°11'50	23°32'32	27°22'25	20°28'29	15°18'23	21°18'59	24°28'13	0°22'12	1°28'33	4°02'33	6°27'22	14°28'25	4°28'42	W 1
T 2	12 42 38	12°33'54	21°40'20	25°27'28	28°11'21	21°07'15	15°23'23	21°18'56	24°14'14	0°13'00	1°33'42	4°27'34	6°19'19	14°32'42	4°45'21	T 2
F 3	12 46 35	13°33'09	4°28'49	27°20'28	28°58'21	21°45'15	15°23'22	21°53'20	24°16'16	0°14'00	1°33'42	4°35'16	6°16'16	14°38'42	4°49'21	F 3
S 4	12 50 31	14°32'23	18°19'29	29°10'29	29°46'22	22°23'15	15°22'22	21°50'21	24°17'17	0°15'00	1°34'40	4°35'16	6°13'13	14°45'42	4°52'21	S 4
S 5	12 54 28	15°31'33	2°02'13	0°28'57	0°28'34	23°02'23	15°21'21	21°47'21	24°18'18	0°16'00	1°34'40	4°34'40	6°09'09	14°52'42	4°56'21	S 5
M 6	12 58 25	16°30'42	16°30'20	2°40'12	1°24'24	23°40'23	15°21'21	21°44'21	24°19'19	0°17'00	1°35'40	4°31'40	6°06'06	14°59'42	4°59'21	M 6
T 7	13 2 21	17°29'48	1°10'10	4°20'20	2°14'24	24°18'24	15°19'21	21°40'21	24°20'20	0°17'00	1°35'40	4°26'40	6°03'03	15°05'05	5°03'03	T 7
W 8	13 6 18	18°28'52	16°06'06	5°55'30	3°04'04	24°55'24	15°18'21	21°37'21	24°21'21	0°18'00	1°36'40	4°19'40	6°00'00	15°12'12	5°06'06	W 8
T 9	13 10 14	19°27'53	1°12'12	7°26'26	3°56'36	25°33'25	15°17'21	21°34'21	24°22'22	0°19'00	1°36'40	4°12'40	5°57'57	15°19'19	5°09'09	T 9
F 10	13 14 11	20°26'53	16°17'17	8°52'48	4°48'26	26°11'15	15°15'21	21°30'21	24°23'23	0°20'00	1°37'40	4°06'40	5°54'54	15°26'26	5°12'12	F 10
S 11	13 18 7	21°25'50	1°11'11	10°13'10	5°41'05	26°49'15	15°13'21	21°26'21	24°24'24	0°20'00	1°38'40	4°01'40	5°50'50	15°32'32	5°16'16	S 11
S 12	13 22 4	22°24'46	15°48'11	11°29'06	6°34'27	27°27'15	15°11'21	21°23'21	24°25'25	0°21'00	1°38'40	3°57'40	5°47'47	15°39'39	5°19'19	S 12
M13	13 26 0	23°23'40	29°59'29	12°39'12	7°28'07	28°05'28	15°09'15	21°19'21	24°26'26	0°22'00	1°39'40	3°56'40	5°44'44	15°46'46	5°22'22	M13
T 14	13 29 57	24°22'32	13°27'44	8°23'28	4°18'08	28°42'15	15°07'21	21°16'21	24°27'27	0°22'00	1°39'40	3°56'40	5°41'41	15°52'52	5°25'25	T 14
W15	13 33 53	25°21'22	27°02'14	9°18'09	5°18'09	29°20'15	15°04'21	21°12'21	24°27'27	0°23'00	1°40'40	3°58'40	5°38'38	15°59'59	5°28'28	W15
T 16	13 37 50	26°20'10	9°28'54	15°35'10	10°13'10	29°58'15	15°01'21	21°08'21	24°28'28	0°24'00	1°41'40	3°59'40	5°34'34	16°06'06	5°31'31	T 16
F 17	13 41 47	27°18'57	22°25'16	16°22'11	11°09'09	0°28'35	14°58'21	21°04'21	24°29'29	0°24'00	1°41'40	4°00'40	5°31'31	16°13'13	5°34'34	F 17
S 18	13 45 43	28°17'42	4°22'40	17°03'12	12°06'12	1°13'13	14°55'21	21°00'21	24°29'29	0°25'00	1°42'40	4°00'40	5°28'28	16°19'19	5°37'37	S 18
S 19	13 49 40	29°16'25	16°42'17	17°37'13	13°03'03	1°50'50	14°52'21	20°56'21	24°30'30	0°25'00	1°43'40	3°58'40	5°25'25	16°26'26	5°40'40	S 19
M20	13 53 36	0°15'07	28°37'18	18°05'14	14°00'28	2°28'28	14°49'14	20°52'21	24°30'30	0°25'00	1°44'40	3°55'40	5°22'22	16°33'33	5°43'43	M20
T 21	13 57 33	1°13'47	10°28'18	18°27'14	14°58'03	3°05'05	14°45'21	20°48'21	24°31'31	0°26'00	1°44'40	3°51'40	5°19'19	16°39'39	5°45'45	T 21
W22	14 1 29	2°12'25	22°20'18	18°43'15	15°57'03	3°42'42	14°41'21	20°44'21	24°31'31	0°26'00	1°45'40	3°46'40	5°15'15	16°46'46	5°48'48	W22
T 23	14 5 26	3°11'01	4°15'18	18°53'16	16°55'16	4°19'19	14°37'21	20°40'21	24°31'31	0°26'00	1°46'40	3°40'40	5°12'12	16°53'53	5°51'51	T 23
F 24	14 9 22	4°09'36	16°16'18	18°57'17	17°54'17	4°57'57	14°33'21	20°35'21	24°32'32	0°27'00	1°47'40	3°35'40	5°09'09	17°00'00	5°54'54	F 24
S 25	14 13 19	5°08'09	28°25'18	18°55'18	18°54'54	5°34'34	14°29'21	20°31'21	24°32'32	0°27'00	1°48'40	3°30'40	5°06'06	17°06'06	5°56'56	S 25
S 26	14 17 16	6°06'40	10°28'43	18°47'19	19°54'19	6°11'11	14°24'21	20°27'21	24°32'32	0°27'00	1°49'40	3°27'40	5°03'03	17°13'13	5°59'59	S 26
M27	14 21 12	7°05'09	23°11'18	18°34'20	20°54'20	6°48'48	14°20'21	20°23'21	24°32'32	0°27'00	1°50'40	3°25'40	4°59'59	17°20'20	6°01'01	M27
T 28	14 25 9	8°03'36	5°11'50	18°17'21	21°54'21	7°25'25	14°15'21	20°18'21	24°32'32	0°28'00	1°50'40	3°25'40	4°56'56	17°27'27	6°04'04	T 28
W29	14 29 5	9°02'01	18°42'17	17°54'22	22°55'22	8°01'01	14°10'21	20°14'21	24°32'32	0°28'00	1°51'40	3°26'40	4°53'53	17°33'33	6°06'06	W29
T 30	14 33 2	10°02'25	1°28'48	17°28'23	23°56'23	8°28'28	14°05'21	20°11'21	24°32'32	0°28'00	1°52'40	3°27'40	4°50'50	17°40'40	6°08'08	T 30

Day	☉	☾		♀		♀		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂	
	decl	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat
W 1	4n34	21n22	0s23	9n34	0n29	9s44	2n48	22s33	0s42	21s46	0n51	15s51	2n29	21s42	0s27	19s39	0n27	17n30	5s54	21s2	21s21	1s25	4s31	5n39			
T 2	4 58	21 39	1 31	10 28	0 40	9 36	2 39	22 28	0 43	21 46	0 51	15 50	2 29	21 42	0 27	19 39	0 27	17 30	5 54	21 2	21 21	1 23	4 29	5 39			
F 3	5 21	20 44	2 35	11 20	0 52	9 28	2 31	22 24	0 45	21 46	0 51	15 49	2 29	21 42	0 27	19 38	0 27	17 30	5 54	21 2	21 20	1 21	4 28	5 39			
S 4	5 44	18 39	3 33	12 10	1 4	9 20	2 22	22 19	0 46	21 46	0 51	15 48	2 29	21 41	0 27	19 38	0 27	17 31	5 54	21 2	21 19	1 18	4 27	5 40			
S 5	6 6	15 25	4 20	12 58	1 16	9 10	2 14	22 14	0 47	21 46	0 51	15 48	2 29	21 41	0 28	19 38	0 27	17 31	5 54	21 2	21 19	1 16	4 25	5 40			
M 6	6 29	11 13	4 53	13 45	1 27	9 1	2 6	22 9	0 49	21 46	0 51	15 47	2 29	21 41	0 28	19 38	0 27	17 31	5 54	21 1	21 18	1 13	4 24	5 40			
T 7	6 52	6 15	5 7	14 29	1 38	8 51	1 57	22 4	0 50	21 46	0 51	15 46	2 29	21 41	0 28	19 38	0 27	17 31	5 53	21 0	21 18	1 11	4 22	5 40			
W 8	7 14	0 51	5 1	15 12	1 49	8 40	1 49	21 58	0 52	21 45	0 51	15 45	2 29	21 41	0 28	19 37	0 27	17 31	5 53	20 59	21 17	1 8	4 21	5 40			
T 9	7 37	4s40	4 35	15 51	1 59	8 29	1 42	21 53	0 53	21 45	0 51	15 44	2 30	21 41	0 28	19 37	0 27	17 31	5 53	20 58	21 17	1 6	4 20	5 40			
F 10	7 59	9 55	3 49	16 28	2 9	8 17	1 34	21 47	0 55	21 45	0 51	15 43	2 30	21 40	0 28	19 37	0 27	17 32	5 53	20 57	21 16	1 3	4 18	5 41			
S 11	8 21	14 30	2 48	17 3	2 18	8 5	1 26	21 42	0 56	21 45	0 52	15 42	2 30	21 40	0 28	19 37	0 27	17 32	5 53	20 56	21 16	1 1	4 17	5 41			
S 12	8 43	18 6	1 37	17 35	2 26	7 52	1 19	21 36	0 58	21 44	0 52	15 41	2 30	21 40	0 28	19 37	0 27	17 32	5 53	20 55	21 15	0 59	4 16	5 41			
M13	9 5	20 29	0 21	18 3	2 33	7 39	1 11	21 30	0 59	21 44	0 52	15 40	2 30	21 40	0 28	19 37	0 27	17 32	5 52	20 55	21 15	0 56	4 14	5 41			
T 14	9 26	21 33	0n53	18 29	2 40	7 26	1 4	21 24	1 1	21 44	0 52	15 39	2 30	21 40	0 28	19 36	0 27	17 32	5 52	20 55	21 14	0 54	4 13	5 41			
W15	9 48	21 21	2 2	18 52	2 46	7 12	0 57	21 17	1 3	21 44	0 52	15 37	2 30	21 40	0 28	19 36	0 27	17 32	5 52	20 55	21 13	0 51	4 12	5 42			
T 16	10 9	20 0	3 3	19 13	2 50	6 57	0 50	21 11	1 4	21 43	0 52	15 36	2 30	21 40	0 28	19 36	0 27	17 33	5 52	20 56	21 13	0 49	4 10	5 42			
F 17	10 30	17 43	3 33	19 30	2 54	6 43	0 43	21 5	1 6	21 43	0 52	15 35	2 30	21 40	0 28	19 36	0 27	17 33	5 52	20 56	21 12	0 46	4 9	5 42			
S 18	10 52	14 41	4 32	19 44	2 57	6 27	0 37	20 58	1 7	21 42	0 52	15 34	2 30	21 40	0 28	19 36	0 27	17 33	5 51	20 56	21 12	0 44	4 8	5 42			
S 19	11 12	11 5	4 58	19 55	2 58	6 12	0 30	20 51	1 9	21 42	0 52	15 33	2 31	21 40	0 28	19 36	0 27	17 33	5 51	20 55	21 11	0 41	4 7	5 43			
M20	11 33	7 6	5 10	20 3	2 58	5 55	0 24	20 44	1 11	21 42	0 52	15 32	2 31	21 40	0 28	19 36	0 27	17 33	5 51	20 55	21 11	0 39	4 5	5 43			
T 21	11 53	2 52	5 9	20 8	2 57	5 39	0 17	20 38	1 12	21 41	0 52	15 31	2 31	21 40	0 28	19 36	0 27	17 33	5 51	20 54	21 10	0 37	4 4	5 43			
W22	12 14	1n29	4 55	20 10	2 54	5 22	0 11	20 30	1 14	21 41	0 52	15 30	2 31	21 39	0 28	19 36	0 27	17 34	5 51	20 53	21 9	0 34	4 3	5 43			
T 23	12 34	5 48	4 29	20 9	2 51	5 5	0 5	20 23	1 16	21 40	0 52	15 29	2 31	21 39	0 28	19 36	0 27	17 34	5 51	20 52	21 9	0 32	4 2	5 43			
F 24	12 54	9 55	3 50	20 6	2 46	4 47	0s1	20 16	1 18	21 40	0 52	15 27	2 31	21 39	0 28	19 35	0 27	17 34	5 51	20 51	21 8	0 29	4 1	5 44			
S 25	13 13	13 42	3 0	19 59	2 39	4 29	0 7	20 9	1 19	21 39	0 52	15 26	2 31	21 39	0 28	19 35	0 27	17 34	5 50	20 50	21 8	0 27	3 59	5 44			
S 26	13 33	16 57	2 1	19 49	2 31	4 11	0 12	20 1	1 21	21 39	0 52	15 25	2 31	21 39	0 28	19 35	0 27	17 34	5 50	20 50	21 7	0 25	3 58	5 44			
M27	13 52	19 27	0 56	19 37	2 22	3 53	0 18	19 54	1 23	21 38	0 52	15 24	2 31	21 39	0 28	19 35	0 27	17 34	5 50	20 49	21 7	0 22	3 57	5 44			
T 28	14 11	21 3	0s13	19 22	2 12	3 34	0 23	19 46	1 25	21 38	0 52	15 23	2 31	21 39	0 28	19 35	0 27	17 34	5 50	20 49	21 6	0 20	3 56	5 45			
W29	14 30	21 33	1 23	19 4	2 0	3 15	0 28	19 38	1 27	21 37	0 52	15 22	2 31	21 40	0 28	19 35	0 27	17 35	5 50	20 49	21 5	0 17	3 55	5 45			
T30	14n48	20n54	2s30	18n44	1n47	2s55	0s34	19s31	1s28	21s37	0n52	15s20	2n31	21s40	0s28	19s35	0n27	17n35	5s50	20s50	21s5	0s15	3s54	5n45			

ASTRODIENST EPHEMERIS for the year 2161
geocentric

MAY 2161

00:00 UT

Day	Sid.t	☉	☽	♊	♋	♌	♍	♎	♏	♐	♑	♒	♓	♈	♉	Day	
F 1	14 36 58	10♌58'46	15♋8	16♌R57	24♋58	9♌15	14♌R 0	20♌R 5	24♌R32	0♌28	1♌53	3♌29	4♌47	17♋47	6♌11	F 1	
S 2	14 40 55	11°57'05	28°44	16♌24	26° 0	9°51	13♌55	20♌ 1	24♌32	0°R28	1°54	3°30	4°44	17°53	6°13	S 2	
S 3	14 44 51	12°55'22	12♌36	15°49	27° 2	10°28	13°49	19°56	24°32	0°28	1°55	3°R30	4°40	18° 0	6°15	S 3	
M 4	14 48 48	13°53'37	26°45	15°12	28° 4	11° 4	13°44	19°52	24°31	0°28	1°56	3°30	4°37	18° 7	6°17	M 4	
T 5	14 52 45	14°51'50	11♌7	14°34	29° 6	11°40	13°38	19°47	24°31	0°28	1°57	3°29	4°34	18°14	6°19	T 5	
W 6	14 56 41	15°50'01	25°41	13°55	0♌9	9	12°16	13°32	19°43	24°31	0°28	1°58	3°27	4°31	18°20	6°21	W 6
T 7	15 0 38	16°48'09	10♌21	13°17	1°12	12°53	13°26	19°38	24°30	0°27	1°59	3°25	4°28	18°27	6°23	T 7	
F 8	15 4 34	17°46'16	25° 1	12°40	2°15	13°29	13°20	19°34	24°30	0°27	2° 0	3°23	4°25	18°34	6°25	F 8	
S 9	15 8 31	18°44'22	9♌35	12° 5	3°19	14° 5	13°14	19°29	24°29	0°27	2° 2	3°21	4°21	18°40	6°27	S 9	
S 10	15 12 27	19°42'25	23°55	11°31	4°23	14°40	13° 7	19°25	24°29	0°27	2° 3	3°20	4°18	18°47	6°29	S 10	
M11	15 16 24	20°40'27	7♌58	11° 1	5°27	15°16	13° 1	19°20	24°28	0°27	2° 4	3°D20	4°15	18°54	6°31	M11	
T 12	15 20 20	21°38'28	21°39	10°34	6°31	15°52	12°54	19°16	24°28	0°26	2° 5	3°21	4°12	19° 1	6°33	T 12	
W13	15 24 17	22°36'27	4♌57	10°10	7°35	16°27	12°48	19°11	24°27	0°26	2° 6	3°21	4° 9	19° 7	6°34	W13	
T 14	15 28 14	23°34'24	17°52	9°51	8°40	17° 3	12°41	19° 7	24°26	0°26	2° 7	3°22	4° 5	19°14	6°36	T 14	
F 15	15 32 10	24°32'21	0♌27	9°35	9°45	17°38	12°34	19° 2	24°25	0°25	2° 8	3°23	4° 2	19°21	6°38	F 15	
S 16	15 36 7	25°30'16	12°45	9°24	10°50	18°13	12°27	18°58	24°25	0°25	2°10	3°24	3°59	19°27	6°39	S 16	
S 17	15 40 3	26°28'09	24°51	9°18	11°55	18°48	12°20	18°53	24°24	0°24	2°11	3°R24	3°56	19°34	6°40	S 17	
M18	15 44 0	27°26'02	6♌47	9°D16	13° 0	19°23	12°13	18°49	24°23	0°24	2°12	3°24	3°53	19°41	6°42	M18	
T 19	15 47 56	28°23'53	18°40	9°18	14° 6	19°58	12° 6	18°44	24°22	0°23	2°13	3°24	3°50	19°48	6°43	T 19	
W20	15 51 53	29°21'43	0♌33	9°26	15°11	20°33	11°59	18°40	24°21	0°23	2°14	3°23	3°46	19°54	6°44	W20	
T 21	15 55 49	0♌19'32	12°31	9°37	16°17	21° 7	11°51	18°36	24°20	0°22	2°16	3°23	3°43	20° 1	6°46	T 21	
F 22	15 59 46	1°17'19	24°37	9°54	17°23	21°41	11°44	18°31	24°19	0°22	2°17	3°22	3°40	20° 8	6°47	F 22	
S 23	16 3 43	2°15'06	6♌54	10°14	18°29	22°16	11°36	18°27	24°17	0°21	2°18	3°22	3°37	20°14	6°48	S 23	
S 24	16 7 39	3°12'51	19°24	10°39	19°36	22°50	11°29	18°23	24°16	0°20	2°20	3°D22	3°34	20°21	6°49	S 24	
M25	16 11 36	4°10'35	2♌ 9	11° 8	20°42	23°24	11°21	18°18	24°15	0°20	2°21	3°R22	3°31	20°28	6°50	M25	
T 26	16 15 32	5° 8'18	15° 9	11°42	21°49	23°57	11°14	18°14	24°14	0°19	2°22	3°22	3°27	20°35	6°51	T 26	
W27	16 19 29	6° 6'00	28°24	12°19	22°55	24°31	11° 6	18°10	24°12	0°18	2°23	3°22	3°24	20°41	6°52	W27	
T 28	16 23 25	7° 3'40	11♌53	13° 0	24° 2	25° 4	10°59	18° 6	24°11	0°17	2°25	3°22	3°21	20°48	6°53	T 28	
F 29	16 27 22	8° 1'18	25°35	13°45	25° 9	25°38	10°51	18° 2	24°10	0°16	2°26	3°21	3°18	20°55	6°53	F 29	
S 30	16 31 18	8°58'56	9♌28	14°33	26°16	26°11	10°44	17°58	24° 8	0°16	2°27	3°21	3°15	21° 2	6°54	S 30	
S 31	16 35 15	9♌56'32	23♌30	15♌26	27♌23	26♌44	10♌36	17♌54	24♌7	0♌15	2♌29	3♌20	3♌11	21♌8	6♌55	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	15n 6	19n 5	3s30	18n22	1n33	2s35	0s39	19s23	1s30	21s36	0n52	15s19	2n31	21s40	0s28	19s35	0n27	17n35	5s49	20s50	21s 4	0s12	3s53	5n45	
S 2	15 24	16 10	4 19	17 59	1 18	2 15	0 43	19 15	1 32	21 35	0 52	15 18	2 31	21 40	0 28	19 35	0 27	17 35	5 49	20 50	21 4	0 10	3 52	5 46	
S 3	15 42	12 18	4 55	17 33	1 2	1 55	0 48	19 7	1 34	21 35	0 52	15 17	2 31	21 40	0 28	19 35	0 27	17 35	5 49	20 50	21 3	0 8	3 51	5 46	
M 4	16 0	7 41	5 13	17 7	0 46	1 35	0 53	18 59	1 36	21 34	0 52	15 16	2 31	21 40	0 28	19 35	0 27	17 35	5 49	20 50	21 3	0 5	3 50	5 46	
T 5	16 17	2 34	5 12	16 39	0 29	1 14	0 57	18 50	1 38	21 33	0 52	15 15	2 31	21 40	0 28	19 35	0 27	17 35	5 49	20 50	21 2	0 3	3 49	5 47	
W 6	16 34	2s45	4 52	16 12	0 12	0 53	1 1	18 42	1 40	21 33	0 52	15 13	2 31	21 40	0 28	19 35	0 27	17 36	5 49	20 49	21 1	0 0	3 48	5 47	
T 7	16 50	7 58	4 12	15 44	0s 5	0 32	1 6	18 34	1 42	21 32	0 52	15 12	2 31	21 40	0 29	19 35	0 27	17 36	5 49	20 49	21 1	0n 2	3 47	5 47	
F 8	17 7	12 43	3 16	15 16	0 23	0 10	1 10	18 25	1 44	21 31	0 52	15 11	2 31	21 40	0 29	19 35	0 27	17 36	5 48	20 49	21 0	0 4	3 46	5 47	
S 9	17 23	16 41	2 8	14 49	0 40	0n11	1 14	18 17	1 46	21 30	0 52	15 10	2 31	21 40	0 29	19 35	0 27	17 36	5 48	20 48	21 0	0 7	3 45	5 48	
S 10	17 39	19 34	0 52	14 22	0 57	0 33	1 17	18 8	1 48	21 30	0 52	15 9	2 31	21 40	0 29	19 35	0 27	17 36	5 48	20 48	20 59	0 9	3 44	5 48	
M11	17 54	21 12	0n26	13 57	1 13	0 55	1 21	18 0	1 50	21 29	0 52	15 7	2 31	21 41	0 29	19 35	0 27	17 36	5 48	20 48	20 58	0 12	3 43	5 48	
T 12	18 9	21 30	1 40	13 34	1 29	1 17	1 25	17 51	1 52	21 28	0 52	15 6	2 31	21 41	0 29	19 35	0 27	17 36	5 48	20 48	20 58	0 14	3 42	5 49	
W13	18 24	20 33	2 46	13 12	1 44	1 40	1 28	17 42	1 54	21 27	0 52	15 5	2 31	21 41	0 29	19 36	0 27	17 36	5 48	20 48	20 57	0 17	3 41	5 49	
T 14	18 39	18 33	3 42	12 52	1 59	2 2	1 31	17 34	1 56	21 27	0 52	15 4	2 31	21 41	0 29	19 36	0 27	17 36	5 48	20 49	20 57	0 19	3 40	5 49	
F 15	18 53	15 42	4 26	12 35	2 12	2 24	1 34	17 25	1 59	21 26	0 52	15 3	2 31	21 41	0 29	19 36	0 27	17 37	5 47	20 49	20 56	0 21	3 39	5 49	
S 16	19 7	12 13	4 57	12 19	2 25	2 47	1 37	17 16	2 1	21 25	0 52	15 2	2 31	21 41	0 29	19 36	0 27	17 37	5 47	20 49	20 56	0 24	3 38	5 50	
S 17	19 21	8 18	5 13	12 6	2 36	3 10	1 40	17 7	2 3	21 24	0 52	15 0	2 31	21 42	0 29	19 36	0 27	17 37	5 47	20 49	20 55	0 26	3 38	5 50	
M18	19 34	4 7	5 16	11 56	2 47	3 33	1 43	16 58	2 5	21 23	0 51	14 59	2 31	21 42	0 29	19 36	0 27	17 37	5 47	20 49	20 54	0 29	3 37	5 50	
T 19	19 47	0n13	5 6	11 47	2 56	3 56	1 46	16 50	2 7	21 22	0 51	14 58	2 30	21 42	0 29	19 36	0 27	17 37	5 47	20 49	20 54	0 31	3 36	5 51	
W20	20 0	4 32	4 42	11 42	3 5	4 19	1 48	16 41	2 10	21 21	0 51	14 57	2 30	21 42	0 29	19 36	0 27	17 37	5 47	20 49	20 53	0 33	3 35	5 51	
T 21	20 12	8 43	4 6	11 38	3 13	4 42	1 51	16 32	2 12	21 20	0 51	14 56	2 30	21 42	0 29	19 36	0 27	17 37	5 47	20 49	20 53	0 36	3 35	5 51	
F 22	20 24	12 36	3 19	11 37	3 19	5 5	1 53	16 23	2 14	21 20	0 51	14 55	2 30	21 43	0 29	19 36	0 27	17 37	5 47	20 49	20 52	0 38	3 34	5 52	
S 23	20 36	16 2	2 22	11 38	3 25	5 28	1 55	16 14	2 16	21 19	0 51	14 54	2 30	21 43	0 29	19 37	0 28	17 37	5 46	20 49	20 51	0 40	3 33	5 52	
S 24	20 47	18 48	1 17	11 42	3 29	5 51	1 57	16 5	2 19	21 18	0 51	14 53	2 30	21 43	0 29	19 37	0 28	17 38	5 46	20 49	20 51	0 43	3 33	5 52	
M25	20 58	20 41	0 7	11 47	3 33	6 14	1 59	15 56	2 21	21 17	0 51	14 52	2 30	21 43	0 29	19 37	0 28	17 38	5 46	20 49	20 50	0 45	3 32	5 52	
T 26	21 8	21 31	1s 5	11 55	3 35	6 37	2 1	15 47	2 24	21 16	0 51	14 51	2 30	21 44	0 29	19 37	0 28	17 38	5 46	20 49	20 50	0 48	3 31	5 53	
W27	21 18	21 10	2 14	12 4	3 37	7 0	2 3	15 38	2 26	21 15	0 51	14 50	2 30	21 44	0 29	19 37	0 28	17 38	5 46	20 49	20 49	0 50	3 31	5 53	
T 28	21 28	19 36	3 18	12 16	3 38	7 23	2 4	15 29	2 28	21 14	0 51	14 49	2 29	21 44	0 29	19 37	0 28	17 38	5 46	20 48	20 48	0 52	3 30	5 53	
F 29	21 38	16 54	4 11	12 29	3 38	7 47	2 6	15 20	2 31	21 13	0 51	14 48	2 29	21 44	0 29	19 38	0 28	17 38	5 46	20 48	20 48	0 55	3 30	5 54	
S 30	21 47	13 12	4 50	12 44	3 37	8 10	2 7	15 11	2 33	21 12	0 50	14 47	2 29	21 45	0 29	19 38	0 28	17 38	5 46	20 48	20 47	0 57	3 29	5 54	
S 31	21n55	8n45	5s12	13n 0	3s36	8n32	2s 8	15s 2	2s36	21s11	0n50	14s46	2n29	21s45	0s29	19s38	0n28	17n38	5s46	20s48	20s47	1n 0	3s28	5n54	

ASTRODIENST EPHEMERIS for the year 2161
geocentric

JUNE 2161

00:00 UT

Day	Sid.t	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
M 1	16 39 12	10♏54'06	7♏40	16♏21	28♏31	27♏16	10°R28	17°R50	24°R 5	0°R14	2♏30	3°D20	3♏ 8	21♏15	6♏55	M 1
T 2	16 43 8	11°51'39	21°54	17°20	29°38	27°49	10♏21	17♏46	24♏ 4	0♏13	2°31	3♏20	3° 5	21°22	6°56	T 2
W 3	16 47 5	12°49'10	6♏11	18°22	0♏46	28°21	10°13	17°42	24° 2	0°12	2°33	3°21	3° 2	21°28	6°56	W 3
T 4	16 51 1	13°46'40	20°27	19°27	1°53	28°53	10° 5	17°38	24° 1	0°11	2°34	3°21	2°59	21°35	6°56	T 4
F 5	16 54 58	14°44'09	4♏39	20°36	3° 1	29°25	9°58	17°34	23°59	0°10	2°36	3°22	2°56	21°42	6°57	F 5
S 6	16 58 54	15°41'37	18°45	21°47	4° 9	29°57	9°50	17°30	23°57	0° 9	2°37	3°23	2°52	21°49	6°57	S 6
S 7	17 2 51	16°39'04	2♏40	23° 2	5°17	0♏28	9°43	17°27	23°55	0° 8	2°38	3°R23	2°49	21°55	6°57	S 7
M 8	17 6 47	17°36'29	16°22	24°19	6°25	0°59	9°35	17°23	23°54	0° 7	2°40	3°23	2°46	22° 2	6°57	M 8
T 9	17 10 44	18°33'54	29°49	25°40	7°33	1°30	9°28	17°20	23°52	0° 6	2°41	3°22	2°43	22° 9	6°58	T 9
W10	17 14 41	19°31'18	12♏57	27° 3	8°42	2° 1	9°20	17°16	23°50	0° 5	2°43	3°20	2°40	22°15	6°58	W10
T 11	17 18 37	20°28'41	25°48	28°29	9°50	2°32	9°13	17°13	23°48	0° 4	2°44	3°18	2°37	22°22	6°58	T 11
F 12	17 22 34	21°26'04	8♏22	29°58	10°59	3° 2	9° 5	17° 9	23°46	0° 2	2°45	3°15	2°33	22°29	6°57	F 12
S 13	17 26 30	22°23'25	20°40	1♏30	12° 7	3°32	8°58	17° 6	23°44	0° 1	2°47	3°13	2°30	22°36	6°57	S 13
S 14	17 30 27	23°20'47	2♏46	3° 5	13°16	4° 2	8°51	17° 3	23°42	0° 0	2°48	3°11	2°27	22°42	6°57	S 14
M15	17 34 23	24°18'07	14°43	4°42	14°25	4°32	8°44	17° 0	23°40	29♏59	2°50	3° 9	2°24	22°49	6°57	M15
T 16	17 38 20	25°15'27	26°37	6°22	15°33	5° 1	8°37	16°57	23°38	29°58	2°51	3°D 9	2°21	22°56	6°56	T 16
W17	17 42 16	26°12'47	8♏30	8° 5	16°42	5°30	8°30	16°54	23°36	29°56	2°53	3°10	2°17	23° 2	6°56	W17
T 18	17 46 13	27°10'07	20°29	9°51	17°51	5°58	8°23	16°51	23°34	29°55	2°54	3°11	2°14	23° 9	6°56	T 18
F 19	17 50 10	28° 7'26	2♏37	11°39	19° 0	6°27	8°16	16°48	23°32	29°54	2°55	3°13	2°11	23°16	6°55	F 19
S 20	17 54 6	29° 4'45	14°59	13°30	20°10	6°55	8° 9	16°45	23°30	29°52	2°57	3°14	2° 8	23°23	6°54	S 20
S 21	17 58 3	0♏ 2'03	27°39	15°23	21°19	7°22	8° 2	16°43	23°28	29°51	2°58	3°R15	2° 5	23°29	6°54	S 21
M22	18 1 59	0°59'21	10♏37	17°19	22°28	7°50	7°56	16°40	23°26	29°50	3° 0	3°15	2° 2	23°36	6°53	M22
T 23	18 5 56	1°56'39	23°56	19°18	23°38	8°17	7°49	16°37	23°24	29°48	3° 1	3°14	1°58	23°43	6°52	T 23
W24	18 9 52	2°53'56	7♏35	21°18	24°47	8°43	7°43	16°35	23°22	29°47	3° 3	3°11	1°55	23°49	6°52	W24
T 25	18 13 49	3°51'13	21°31	23°21	25°57	9°10	7°37	16°33	23°19	29°46	3° 4	3° 7	1°52	23°56	6°51	T 25
F 26	18 17 46	4°48'30	5♏40	25°25	27° 6	9°36	7°31	16°30	23°17	29°44	3° 6	3° 2	1°49	24° 3	6°50	F 26
S 27	18 21 42	5°45'45	19°58	27°31	28°16	10° 1	7°25	16°28	23°15	29°43	3° 7	2°58	1°46	24°10	6°49	S 27
S 28	18 25 39	6°43'00	4♏20	29°39	29°26	10°26	7°19	16°26	23°13	29°41	3° 8	2°54	1°43	24°16	6°48	S 28
M29	18 29 35	7°40'15	18°41	1♏48	0♏36	10°51	7°13	16°24	23°10	29°40	3°10	2°51	1°39	24°23	6°47	M29
T 30	18 33 32	8♏37'29	2♏58	3♏58	1♏46	11♏15	7♏ 7	16♏22	23♏ 8	29♏38	3♏11	2°D50	1♏36	24♏30	6♏46	T 30

Day	☉	☾		♂		♀		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂	
	decl	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat
M 1	22n 3	3n48	5s16	13n18	3s33	8n55	2s 9	14s53	2s38	21s10	0n50	14s45	2n29	21s45	0s29	19s38	0n28	17n38	5s45	20s48	20s46	1n 2	3s28	5n55			
T 2	22 11	1s23	5 0	13 38	3 30	9 18	2 10	14 44	2 41	21 9	0 50	14 44	2 29	21 45	0 29	19 38	0 28	17 38	5 45	20 48	20 45	1 4	3 28	5 55			
W 3	22 19	6 32	4 26	13 58	3 27	9 41	2 11	14 35	2 43	21 8	0 50	14 43	2 29	21 46	0 29	19 38	0 28	17 38	5 45	20 48	20 45	1 7	3 27	5 55			
T 4	22 26	11 19	3 36	14 20	3 22	10 3	2 12	14 27	2 46	21 7	0 50	14 42	2 29	21 46	0 29	19 39	0 28	17 38	5 45	20 48	20 44	1 9	3 27	5 56			
F 5	22 33	15 27	2 32	14 43	3 17	10 26	2 13	14 18	2 49	21 6	0 50	14 41	2 28	21 46	0 29	19 39	0 28	17 38	5 45	20 49	20 43	1 11	3 26	5 56			
S 6	22 39	18 40	1 20	15 7	3 11	10 48	2 13	14 9	2 51	21 5	0 50	14 40	2 28	21 47	0 29	19 39	0 28	17 39	5 45	20 49	20 43	1 14	3 26	5 56			
S 7	22 45	20 44	0 4	15 32	3 5	11 10	2 14	14 0	2 54	21 4	0 50	14 39	2 28	21 47	0 29	19 39	0 28	17 39	5 45	20 49	20 42	1 16	3 25	5 57			
M 8	22 50	21 32	1n11	15 57	2 58	11 32	2 14	13 52	2 56	21 3	0 49	14 38	2 28	21 47	0 29	19 40	0 28	17 39	5 45	20 49	20 42	1 19	3 25	5 57			
T 9	22 56	21 4	2 21	16 23	2 51	11 54	2 14	13 43	2 59	21 2	0 49	14 38	2 28	21 48	0 29	19 40	0 28	17 39	5 45	20 49	20 41	1 21	3 25	5 57			
W10	23 0	19 27	3 21	16 50	2 43	12 16	2 14	13 34	3 2	21 1	0 49	14 37	2 28	21 48	0 29	19 40	0 28	17 39	5 45	20 48	20 40	1 23	3 25	5 57			
T 11	23 5	16 52	4 10	17 17	2 35	12 37	2 14	13 26	3 5	21 0	0 49	14 36	2 27	21 48	0 29	19 40	0 28	17 39	5 45	20 48	20 40	1 26	3 24	5 58			
F 12	23 8	13 33	4 46	17 45	2 26	12 59	2 14	13 18	3 7	20 59	0 49	14 35	2 27	21 49	0 30	19 40	0 28	17 39	5 45	20 47	20 39	1 28	3 24	5 58			
S 13	23 12	9 44	5 7	18 13	2 16	13 20	2 14	13 9	3 10	20 58	0 49	14 35	2 27	21 49	0 30	19 41	0 28	17 39	5 44	20 47	20 39	1 30	3 24	5 58			
S 14	23 15	5 35	5 15	18 41	2 7	13 41	2 14	13 1	3 13	20 57	0 49	14 34	2 27	21 49	0 30	19 41	0 28	17 39	5 44	20 46	20 38	1 33	3 24	5 59			
M15	23 18	1 16	5 9	19 9	1 57	14 1	2 13	12 53	3 16	20 56	0 48	14 33	2 27	21 50	0 30	19 41	0 28	17 39	5 44	20 46	20 37	1 35	3 23	5 59			
T 16	23 20	3n 4	4 49	19 36	1 46	14 22	2 13	12 45	3 19	20 55	0 48	14 32	2 26	21 50	0 30	19 42	0 28	17 39	5 44	20 46	20 37	1 37	3 23	5 59			
W17	23 22	7 18	4 17	20 4	1 36	14 42	2 12	12 37	3 21	20 55	0 48	14 32	2 26	21 51	0 30	19 42	0 28	17 39	5 44	20 46	20 36	1 40	3 23	6 0			
T 18	23 23	11 18	3 34	20 31	1 25	15 2	2 12	12 29	3 24	20 54	0 48	14 31	2 26	21 51	0 30	19 42	0 28	17 39	5 44	20 46	20 35	1 42	3 23	6 0			
F 19	23 24	14 53	2 40	20 57	1 14	15 21	2 11	12 21	3 27	20 53	0 48	14 31	2 26	21 51	0 30	19 42	0 28	17 39	5 44	20 47	20 35	1 44	3 23	6 0			
S 20	23 25	17 53	1 39	21 22	1 2	15 40	2 10	12 13	3 30	20 52	0 48	14 30	2 26	21 52	0 30	19 43	0 28	17 39	5 44	20 47	20 34	1 47	3 23	6 1			
S 21	23 25	20 7	0 31	21 46	0 51	15 59	2 9	12 5	3 33	20 51	0 47	14 29	2 25	21 52	0 30	19 43	0 28	17 39	5 44	20 47	20 33	1 49	3 23	6 1			
M22	23 25	21 21	0s40	22 10	0 39	16 18	2 8	11 58	3 36	20 50	0 47	14 29	2 25	21 52	0 30	19 43	0 27	17 39	5 44	20 47	20 33	1 51	3 23	6 1			
T 23	23 24	21 26	1 51	22 31	0 28	16 36	2 7	11 51	3 39	20 49	0 47	14 28	2 25	21 53	0 30	19 43	0 27	17 39	5 44	20 47	20 32	1 54	3 23	6 1			
W24	23 23	20 15	2 57	22 51	0 17	16 54	2 6	11 43	3 42	20 48	0 47	14 28	2 25	21 53	0 30	19 44	0 27	17 39	5 44	20 46	20 32	1 56	3 23	6 2			
T 25	23 22	17 51	3 54	23 10	0 5	17 12	2 5	11 36	3 45	20 48	0 47	14 28	2 24	21 54	0 30	19 44	0 27	17 39	5 44	20 46	20 31	1 59	3 23	6 2			
F 26	23 20	14 21	4 37	23 26	0n 6	17 29	2 4	11 29	3 48	20 47	0 46	14 27	2 24	21 54	0 30	19 44	0 27	17 39	5 44	20 45	20 30	2 1	3 23	6 2			
S 27	23 17	10 5	5 4	23 40	0 17	17 46	2 2	11 22	3 51	20 46	0 46	14 27	2 24	21 54	0 30	19 45	0 27	17 39	5 44	20 44	20 30	2 3	3 23	6 3			
S 28	23 15	5 4	5 11	23 52	0 27	18 3	2 1	11 16	3 54	20 45	0 46	14 26	2 24	21 55	0 30	19 45	0 27	17 39	5 44	20 43	20 29	2 6	3 23	6 3			
M29	23 12	0s 8	5 0	24 1	0 37	18 19	1 59	11 9	3 57	20 44	0 46	14 26	2 24	21 55	0 30	19 45	0 27	17 39	5 44	20 43	20 28	2 8	3 23	6 3			
T 30	23n 8	5s18	4s30	24n 8	0n47	18n34	1s58	11s 3	4s 1	20s44	0n46	14s26	2n23	21s56	0s30	19s46	0n27	17n39	5s44	20s42	20s28	2n10	3s23	6n 3			

ASTRODIENST EPHEMERIS for the year 2161
geocentric

JULY 2161

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
W 1	18 37 28	9♌34'42	17♊ 7	6♋ 8	2♊56	11♏39	7°R 2	16°R20	23°R 6	29°R37	3♌13	2♊50	1♌33	24♏36	6°R44	W 1
T 2	18 41 25	10°31'55	1♊ 8	8°19	4° 6	12° 3	6♏57	16♊19	23♌ 3	29♌35	3°14	2°51	1°30	24°43	6♏43	T 2
F 3	18 45 21	11°29'08	14°59	10°30	5°16	12°26	6°51	16°17	23° 1	29°34	3°16	2°52	1°27	24°50	6°42	F 3
S 4	18 49 18	12°26'20	28°39	12°41	6°26	12°49	6°46	16°16	22°59	29°32	3°17	2°R53	1°23	24°57	6°40	S 4
S 5	18 53 15	13°23'32	12♏ 9	14°51	7°36	13°11	6°42	16°14	22°56	29°31	3°19	2°53	1°20	25° 3	6°39	S 5
M 6	18 57 11	14°20'44	25°27	17° 1	8°46	13°33	6°37	16°13	22°54	29°29	3°20	2°51	1°17	25°10	6°38	M 6
T 7	19 1 8	15°17'55	8♌32	19°10	9°57	13°54	6°32	16°11	22°52	29°28	3°21	2°47	1°14	25°17	6°36	T 7
W 8	19 5 4	16°15'07	21°25	21°17	11° 7	14°15	6°28	16°10	22°49	29°26	3°23	2°41	1°11	25°23	6°34	W 8
T 9	19 9 1	17°12'18	4♏ 4	23°24	12°18	14°35	6°23	16° 9	22°47	29°25	3°24	2°33	1° 8	25°30	6°33	T 9
F 10	19 12 57	18° 9'29	16°30	25°29	13°28	14°55	6°19	16° 8	22°44	29°23	3°26	2°25	1° 4	25°37	6°31	F 10
S 11	19 16 54	19° 6'41	28°44	27°32	14°39	15°14	6°15	16° 7	22°42	29°21	3°27	2°17	1° 1	25°44	6°29	S 11
S 12	19 20 50	20° 3'53	10♏47	29°34	15°49	15°33	6°12	16° 6	22°40	29°20	3°28	2°10	0°58	25°50	6°28	S 12
M13	19 24 47	21° 1'05	22°43	1♌34	17° 0	15°51	6° 8	16° 6	22°37	29°18	3°30	2° 5	0°55	25°57	6°26	M13
T 14	19 28 44	21°58'18	4♏33	3°33	18°11	16° 8	6° 4	16° 5	22°35	29°17	3°31	2° 1	0°52	26° 4	6°24	T 14
W15	19 32 40	22°55'31	16°27	5°29	19°22	16°25	6° 1	16° 5	22°32	29°15	3°33	1°59	0°49	26°10	6°22	W15
T 16	19 36 37	23°52'45	28°25	7°24	20°33	16°42	5°58	16° 4	22°30	29°13	3°34	1°D59	0°45	26°17	6°20	T 16
F 17	19 40 33	24°49'59	10♏32	9°17	21°44	16°57	5°55	16° 4	22°27	29°12	3°35	2° 0	0°42	26°24	6°18	F 17
S 18	19 44 30	25°47'14	22°55	11° 8	22°55	17°13	5°52	16° 4	22°25	29°10	3°37	2° 1	0°39	26°30	6°16	S 18
S 19	19 48 26	26°44'29	5♊37	12°57	24° 6	17°27	5°50	16° 4	22°23	29° 8	3°38	2°R 1	0°36	26°37	6°14	S 19
M20	19 52 23	27°41'46	18°43	14°45	25°17	17°41	5°47	16°D 4	22°20	29° 7	3°39	2° 0	0°33	26°44	6°12	M20
T 21	19 56 19	28°39'02	2♌14	16°30	26°28	17°54	5°45	16° 4	22°18	29° 5	3°41	1°56	0°29	26°51	6°10	T 21
W22	20 0 16	29°36'19	16°10	18°14	27°39	18° 7	5°43	16° 4	22°15	29° 4	3°42	1°51	0°26	26°57	6° 7	W22
T 23	20 4 13	0♌33'37	0♌29	19°56	28°51	18°19	5°41	16° 4	22°13	29° 2	3°43	1°43	0°23	27° 4	6° 5	T 23
F 24	20 8 9	1°30'55	15° 4	21°35	0♌ 2	18°30	5°39	16° 4	22°11	29° 0	3°45	1°34	0°20	27°11	6° 3	F 24
S 25	20 12 6	2°28'14	29°49	23°14	1°14	18°40	5°38	16° 5	22° 8	28°59	3°46	1°25	0°17	27°17	6° 1	S 25
S 26	20 16 2	3°25'33	14♏35	24°50	2°25	18°50	5°36	16° 5	22° 6	28°57	3°47	1°17	0°14	27°24	5°58	S 26
M27	20 19 59	4°22'52	29°16	26°24	3°37	18°59	5°35	16° 6	22° 4	28°55	3°49	1°11	0°10	27°31	5°56	M27
T 28	20 23 55	5°20'12	13♌44	27°57	4°48	19° 7	5°34	16° 7	22° 1	28°54	3°50	1° 7	0° 7	27°38	5°53	T 28
W29	20 27 52	6°17'32	27°57	29°27	6° 0	19°14	5°33	16° 8	21°59	28°52	3°51	1° 5	0° 4	27°44	5°51	W29
T 30	20 31 48	7°14'52	11♊54	0♏56	7°12	19°21	5°33	16° 9	21°57	28°51	3°52	1°D 5	0° 1	27°51	5°48	T 30
F 31	20 35 45	8♌12'13	25♊33	2♏23	8♌23	19♏27	5♏32	16♊10	21♌54	28♌49	3♌54	1°R 5	29♊58	27♏58	5♏46	F 31

Day	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂
	decl	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl
W 1	23n 4	10s 9	3s43	24n12	0n56	18n50	1s56	10s56	4s 4	20s43	0n46	14s25	2n23	21s56	0s30	19s46
T 2	23 0	14 25	2 44	24 13	1 4	19 4	1 54	10 50	4 7	20 42	0 45	14 25	2 23	21 56	0 30	19 46
F 3	22 55	17 51	1 36	24 12	1 12	19 19	1 52	10 44	4 10	20 42	0 45	14 25	2 23	21 57	0 30	19 47
S 4	22 50	20 13	0 23	24 8	1 19	19 33	1 51	10 38	4 13	20 41	0 45	14 25	2 22	21 57	0 30	19 47
S 5	22 45	21 24	0n50	24 1	1 26	19 46	1 49	10 33	4 16	20 40	0 45	14 25	2 22	21 58	0 30	19 47
M 6	22 39	21 21	1 59	23 51	1 31	19 59	1 47	10 27	4 20	20 40	0 45	14 24	2 22	21 58	0 30	19 48
T 7	22 32	20 8	3 1	23 38	1 36	20 12	1 45	10 22	4 23	20 39	0 44	14 24	2 22	21 58	0 30	19 48
W 8	22 26	17 54	3 52	23 23	1 41	20 24	1 43	10 17	4 26	20 39	0 44	14 24	2 21	21 59	0 30	19 48
T 9	22 19	14 50	4 31	23 6	1 44	20 35	1 40	10 12	4 29	20 38	0 44	14 24	2 21	21 59	0 30	19 49
F 10	22 11	11 10	4 56	22 46	1 47	20 46	1 38	10 8	4 33	20 38	0 44	14 24	2 21	22 0	0 30	19 49
S 11	22 3	7 6	5 7	22 25	1 49	20 57	1 36	10 3	4 36	20 37	0 43	14 24	2 21	22 0	0 30	19 49
S 12	21 55	2 49	5 4	22 1	1 50	21 7	1 34	9 59	4 39	20 37	0 43	14 24	2 20	22 0	0 30	19 50
M13	21 47	1n31	4 48	21 35	1 50	21 16	1 31	9 55	4 42	20 36	0 43	14 24	2 20	22 1	0 30	19 50
T 14	21 38	5 47	4 20	21 8	1 50	21 25	1 29	9 51	4 46	20 36	0 43	14 24	2 20	22 1	0 30	19 50
W15	21 28	9 51	3 40	20 39	1 50	21 33	1 26	9 47	4 49	20 35	0 43	14 24	2 20	22 2	0 30	19 51
T 16	21 19	13 33	2 51	20 9	1 48	21 41	1 24	9 44	4 52	20 35	0 42	14 24	2 19	22 2	0 30	19 51
F 17	21 8	16 45	1 53	19 37	1 46	21 48	1 21	9 41	4 56	20 35	0 42	14 25	2 19	22 2	0 30	19 51
S 18	20 58	19 16	0 49	19 4	1 43	21 55	1 19	9 38	4 59	20 35	0 42	14 25	2 19	22 3	0 30	19 52
S 19	20 47	20 54	0s19	18 30	1 40	22 1	1 16	9 35	5 2	20 34	0 42	14 25	2 18	22 3	0 30	19 52
M20	20 36	21 28	1 28	17 56	1 36	22 6	1 14	9 33	5 5	20 34	0 42	14 25	2 18	22 4	0 30	19 52
T 21	20 25	20 49	2 34	17 20	1 32	22 11	1 11	9 31	5 9	20 34	0 41	14 26	2 18	22 4	0 30	19 53
W22	20 13	18 54	3 33	16 44	1 27	22 16	1 8	9 29	5 12	20 34	0 41	14 26	2 18	22 4	0 30	19 53
T 23	20 1	15 47	4 20	16 7	1 22	22 19	1 6	9 27	5 15	20 34	0 41	14 26	2 17	22 5	0 30	19 53
F 24	19 48	11 39	4 52	15 29	1 16	22 22	1 3	9 26	5 18	20 34	0 41	14 27	2 17	22 5	0 30	19 54
S 25	19 35	6 47	5 4	14 51	1 9	22 25	1 0	9 24	5 22	20 34	0 40	14 27	2 17	22 6	0 30	19 54
S 26	19 22	1 31	4 56	14 13	1 3	22 26	0 57	9 24	5 25	20 34	0 40	14 27	2 17	22 6	0 30	19 54
M27	19 9	3s49	4 29	13 35	0 56	22 28	0 54	9 23	5 28	20 34	0 40	14 28	2 16	22 6	0 30	19 55
T 28	18 55	8 52	3 44	12 56	0 48	22 28	0 52	9 23	5 31	20 34	0 40	14 28	2 16	22 7	0 30	19 55
W29	18 41	13 20	2 47	12 17	0 41	22 28	0 49	9 22	5 34	20 34	0 40	14 29	2 16	22 7	0 30	19 55
T 30	18 27	16 59	1 40	11 38	0 32	22 27	0 46	9 23	5 37	20 34	0 39	14 29	2 16	22 8	0 30	19 56
F 31	18n12	19s36	0s29	10n59	0n24	22n26	0s43	9s23	5s40	20s34	0n39	14s30	2n15	22s 8	0s30	19s56

Julian Day Number = 2510530.5, Delta T = 129.90 sec
Ecliptic obliquity = 23°25'01, Nutation = 0°00'16, out-of-bounds declination in red
Ayanamsha: Fagan/Bradley = 26°59'49, Lahiri = 26°06'50

ASTRODIENST EPHEMERIS for the year 2161

geocentric

AUGUST 2161

00:00 UT

Day	Sid.t	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
S 1	20 39 42	9♎ 9'35	8♌56	3♍48	9♎35	19♏32	5°R32	16♍11	21°R52	28°R47	3♎55	1°R 5	29♍55	28♏ 4	5°R43	S 1
S 2	20 43 38	10° 6'57	22° 6	5°11	10°47	19°37	5°D32	16°12	21♎50	28♎46	3°56	1♌ 3	29°51	28°11	5♏41	S 2
M 3	20 47 35	11° 4'19	5♎ 2	6°32	11°59	19°40	5♌32	16°14	21°48	28°44	3°57	0°59	29°48	28°18	5°38	M 3
T 4	20 51 31	12° 1'42	17°48	7°51	13°11	19°43	5°32	16°15	21°45	28°43	3°58	0°52	29°45	28°24	5°35	T 4
W 5	20 55 28	12°59'06	0♎23	9° 8	14°23	19°45	5°33	16°16	21°43	28°41	4° 0	0°43	29°42	28°31	5°33	W 5
T 6	20 59 24	13°56'31	12°47	10°23	15°35	19°47	5°34	16°18	21°41	28°40	4° 1	0°31	29°39	28°38	5°30	T 6
F 7	21 3 21	14°53'56	25° 3	11°35	16°47	19°R47	5°34	16°20	21°39	28°38	4° 2	0°18	29°35	28°45	5°27	F 7
S 8	21 7 17	15°51'23	7♏ 9	12°45	17°59	19°47	5°35	16°22	21°37	28°37	4° 3	0° 5	29°32	28°51	5°24	S 8
S 9	21 11 14	16°48'50	19° 8	13°53	19°11	19°46	5°37	16°24	21°35	28°35	4° 4	29♍54	29°29	28°58	5°22	S 9
M10	21 15 11	17°46'19	1°Y 0	14°59	20°24	19°44	5°38	16°26	21°32	28°33	4° 5	29°44	29°26	29° 5	5°19	M10
T 11	21 19 7	18°43'49	12°50	16° 2	21°36	19°41	5°40	16°28	21°30	28°32	4° 6	29°37	29°23	29°11	5°16	T 11
W12	21 23 4	19°41'20	24°41	17° 3	22°48	19°38	5°41	16°30	21°28	28°30	4° 7	29°32	29°20	29°18	5°13	W12
T 13	21 27 0	20°38'53	6♏36	18° 0	24° 1	19°33	5°43	16°32	21°26	28°29	4° 9	29°30	29°16	29°25	5°10	T 13
F 14	21 30 57	21°36'27	18°42	18°55	25°13	19°28	5°45	16°34	21°24	28°28	4°10	29°D29	29°13	29°32	5° 7	F 14
S 15	21 34 53	22°34'02	1♏ 2	19°47	26°26	19°22	5°48	16°37	21°22	28°26	4°11	29°R29	29°10	29°38	5° 4	S 15
S 16	21 38 50	23°31'39	13°42	20°36	27°39	19°16	5°50	16°40	21°20	28°25	4°12	29°29	29° 7	29°45	5° 1	S 16
M17	21 42 46	24°29'17	26°48	21°21	28°51	19° 8	5°53	16°42	21°19	28°23	4°13	29°27	29° 4	29°52	4°58	M17
T 18	21 46 43	25°26'57	10♎21	22° 3	0♎ 4	19° 0	5°56	16°45	21°17	28°22	4°14	29°22	29° 0	29°58	4°56	T 18
W19	21 50 40	26°24'38	24°24	22°41	1°17	18°51	5°59	16°48	21°15	28°20	4°15	29°15	28°57	0°Y 5	4°53	W19
T 20	21 54 36	27°22'21	8♎53	23°15	2°30	18°41	6° 2	16°51	21°13	28°19	4°16	29° 6	28°54	0°12	4°50	T 20
F 21	21 58 33	28°20'05	23°45	23°45	3°42	18°31	6° 5	16°54	21°11	28°18	4°16	28°55	28°51	0°18	4°47	F 21
S 22	22 2 29	29°17'50	8♍50	24°11	4°55	18°20	6° 9	16°57	21°10	28°16	4°17	28°44	28°48	0°25	4°44	S 22
S 23	22 6 26	0♍15'37	23°58	24°32	6° 8	18° 9	6°12	17° 0	21° 8	28°15	4°18	28°34	28°45	0°32	4°41	S 23
M24	22 10 22	1°13'25	8♌59	24°49	7°21	17°57	6°16	17° 3	21° 6	28°14	4°19	28°26	28°41	0°39	4°38	M24
T 25	22 14 19	2°11'14	23°45	25° 0	8°34	17°44	6°20	17° 6	21° 5	28°12	4°20	28°20	28°38	0°45	4°35	T 25
W26	22 18 15	3° 9'04	8♍10	25° 5	9°47	17°31	6°24	17°10	21° 3	28°11	4°21	28°17	28°35	0°52	4°32	W26
T 27	22 22 12	4° 6'55	22°11	25°R 6	11° 1	17°17	6°29	17°13	21° 1	28°10	4°22	28°17	28°32	0°59	4°29	T 27
F 28	22 26 9	5° 4'48	5♌50	25° 0	12°14	17° 3	6°33	17°17	21° 0	28° 9	4°22	28°17	28°29	1° 5	4°26	F 28
S 29	22 30 5	6° 2'42	19° 7	24°49	13°27	16°48	6°38	17°21	20°58	28° 8	4°23	28°16	28°26	1°12	4°23	S 29
S 30	22 34 2	7° 0'37	2♎ 6	24°31	14°40	16°34	6°43	17°24	20°57	28° 6	4°24	28°14	28°22	1°19	4°20	S 30
M31	22 37 58	7♍58'33	14♎49	24♍ 8	15♎54	16♏18	6♌48	17♍28	20♎56	28♎ 5	4♎25	28♍10	28♍19	1°Y25	4♏17	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	decl	lat
S 1	17n57	21s 5	0n42	10n21	0n15	22n24	0s40	9s24	5s43	20s34	0n39	14s30	2n15	22s 8	0s30	19s56	0n27	17n38	5s43	20s21	20s 7	3n24	3s40	6n10			
S 2	17 42	21 22	1 49	9 42	0 6	22 22	0 37	9 25	5 46	20 34	0 39	14 31	2 15	22 9	0 30	19 57	0 27	17 38	5 43	20 21	20 6	3 26	3 41	6 10			
M 3	17 26	20 30	2 50	9 3	0s 3	22 18	0 34	9 26	5 49	20 35	0 38	14 32	2 15	22 9	0 30	19 57	0 27	17 38	5 43	20 20	20 5	3 29	3 41	6 10			
T 4	17 10	18 35	3 41	8 25	0 13	22 15	0 31	9 27	5 52	20 35	0 38	14 32	2 14	22 9	0 30	19 57	0 27	17 38	5 43	20 19	20 5	3 31	3 42	6 10			
W 5	16 54	15 49	4 20	7 47	0 23	22 10	0 29	9 29	5 54	20 35	0 38	14 33	2 14	22 10	0 30	19 58	0 27	17 38	5 43	20 17	20 4	3 33	3 43	6 10			
T 6	16 38	12 22	4 47	7 10	0 33	22 5	0 26	9 31	5 57	20 35	0 38	14 34	2 14	22 10	0 30	19 58	0 27	17 38	5 43	20 14	20 3	3 35	3 44	6 11			
F 7	16 21	8 27	5 0	6 33	0 43	21 59	0 23	9 33	6 0	20 36	0 38	14 34	2 13	22 10	0 30	19 58	0 27	17 38	5 44	20 12	20 3	3 38	3 45	6 11			
S 8	16 4	4 15	4 59	5 57	0 53	21 53	0 20	9 35	6 2	20 36	0 37	14 35	2 13	22 11	0 30	19 59	0 27	17 38	5 44	20 9	20 2	3 40	3 46	6 11			
S 9	15 47	0n 4	4 44	5 21	1 4	21 46	0 17	9 38	6 4	20 37	0 37	14 36	2 13	22 11	0 30	19 59	0 27	17 38	5 44	20 7	20 1	3 42	3 47	6 11			
M10	15 30	4 21	4 18	4 46	1 14	21 38	0 14	9 41	6 7	20 37	0 37	14 37	2 13	22 11	0 30	19 59	0 27	17 38	5 44	20 4	20 1	3 44	3 48	6 11			
T 11	15 12	8 27	3 40	4 12	1 25	21 30	0 11	9 44	6 9	20 38	0 37	14 38	2 12	22 12	0 30	20 0	0 27	17 38	5 44	20 3	20 0	3 47	3 49	6 11			
W12	14 54	12 14	2 53	3 38	1 36	21 21	0 8	9 47	6 11	20 38	0 37	14 38	2 12	22 12	0 30	20 0	0 27	17 38	5 44	20 2	19 59	3 49	3 50	6 11			
T 13	14 36	15 34	1 58	3 6	1 47	21 12	0 6	9 51	6 13	20 39	0 36	14 39	2 12	22 12	0 30	20 0	0 27	17 38	5 44	20 1	19 59	3 51	3 51	6 11			
F 14	14 17	18 17	0 57	2 34	1 58	21 2	0 3	9 55	6 15	20 39	0 36	14 40	2 12	22 13	0 30	20 1	0 27	17 37	5 44	20 1	19 58	3 53	3 52	6 11			
S 15	13 59	20 13	0s 8	2 4	2 9	20 51	0n 0	9 59	6 17	20 40	0 36	14 41	2 11	22 13	0 30	20 1	0 27	17 37	5 44	20 1	19 57	3 56	3 53	6 11			
S 16	13 40	21 11	1 15	1 34	2 20	20 40	0 3	10 3	6 19	20 40	0 36	14 42	2 11	22 13	0 30	20 1	0 27	17 37	5 44	20 1	19 56	3 58	3 54	6 11			
M17	13 21	21 4	2 19	1 7	2 31	20 28	0 6	10 7	6 20	20 41	0 35	14 43	2 11	22 13	0 30	20 2	0 27	17 37	5 44	20 1	19 56	4 0	3 55	6 11			
T 18	13 2	19 43	3 18	0 40	2 42	20 15	0 8	10 12	6 22	20 42	0 35	14 44	2 11	22 14	0 30	20 2	0 27	17 37	5 44	20 0	19 55	4 2	3 56	6 11			
W19	12 42	17 10	4 7	0 15	2 53	20 2	0 11	10 16	6 23	20 43	0 35	14 45	2 10	22 14	0 30	20 2	0 27	17 37	5 44	19 58	19 54	4 5	3 57	6 11			
T 20	12 22	13 29	4 42	0s 8	3 3	19 49	0 14	10 21	6 24	20 43	0 35	14 46	2 10	22 14	0 30	20 2	0 27	17 37	5 44	19 56	19 54	4 7	3 58	6 11			
F 21	12 3	8 53	4 59	0 29	3 14	19 34	0 16	10 26	6 25	20 44	0 35	14 47	2 10	22 15	0 30	20 3	0 27	17 37	5 44	19 54	19 53	4 9	3 59	6 11			
S 22	11 42	3 41	4 56	0 49	3 24	19 20	0 19	10 31	6 26	20 45	0 34	14 48	2 10	22 15	0 30	20 3	0 27	17 37	5 44	19 52	19 52	4 11	4 0	6 11			
S 23	11 22	1s46	4 32	1 6	3 34	19 4	0 22	10 36	6 26	20 46	0 34	14 50	2 9	22 15	0 30	20 3	0 27	17 37	5 44	19 49	19 52	4 14	4 1	6 11			
M24	11 2	7 4	3 49	1 21	3 43	18 48	0 24	10 42	6 27	20 47	0 34	14 51	2 9	22 15	0 30	20 4	0 27	17 37	5 44	19 47	19 51	4 16	4 2	6 11			
T 25	10 41	11 52	2 52	1 33	3 52	18 32	0 27	10 47	6 27	20 47	0 34	14 52	2 9	22 16	0 30	20 4	0 27	17 37	5 44	19 46	19 50	4 18	4 4	6 11			
W26	10 20	15 51	1 44	1 43	4 0	18 15	0 29	10 52	6 27	20 48	0 34	14 53	2 9	22 16	0 30	20 4	0 27	17 36	5 44	19 46	19 50	4 20	4 5	6 11			
T 27	9 59	18 49	0 32	1 50	4 7	17 58	0 32	10 57	6 27	20 49	0 33	14 54	2 9	22 16	0 30	20 4	0 27	17 36	5 45	19 45	19 49	4 23	4 6	6 11			
F 28	9 38	20 36	0n40	1 54	4 14	17 40	0 34	11 3	6 27	20 50	0 33	14 55	2 8	22 16	0 30	20 5	0 27	17 36	5 45	19 45	19 48	4 25	4 7	6 11			
S 29	9 17	21 11	1 48	1 55	4 20	17 21	0 37	11 8	6 26	20 51	0 33	14 57	2 8	22 16	0 30	20 5	0 27	17 36	5 45	19 45	19 47	4 27	4 8	6 11			
S 30	8 56	20 35	2 49	1 52	4 24	17 2	0 39	11 13	6 26	20 52	0 33	14 58	2 8	22 17	0 30	20 5	0 27	17 36	5 45	19 45	19 47	4 29	4 9	6 11			
M31	8n34	18s57	3n40	1s46	4s28	16n43	0n41	11s19	6s25	20s53	0n33	14s59	2n 8	22s17	0s30	20s 5	0n27	17n36	5s45	19s44	19s46	4n31	4s10	6n11			

ASTRODIENST EPHEMERIS for the year 2161

geocentric

SEPTEMBER 2161

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
T 1	22 41 55	8 ^h 56'31	27 ^h 32'0	23 ^h R39	17 ^h Ω 7	16 ^h R 3	6 ^h 53	17 ^h Ω32	20 ^h R54	28 ^h R 4	4 ^h 26	28 ^h R 3	28 ^h Ω16	1 ^h Υ32	4 ^h R14	T 1
W 2	22 45 51	9 ^h 54'30	9 ^h 40	23 ^h Ω 3	18 ^h 20	15 ^h Υ47	6 ^h 58	17 ^h 36	20 ^h 353	28 ^h 3 3	4 ^h 26	27 ^h Ω53	28 ^h 13	1 ^h 39	4 ^h Υ11	W 2
T 3	22 49 48	10 ^h 52'31	21 ^h 52	22 ^h 23	19 ^h 34	15 ^h 31	7 ^h 4	17 ^h 40	20 ^h 52	28 ^h 2	4 ^h 27	27 ^h 41	28 ^h 10	1 ^h 46	4 ^h 8	T 3
F 4	22 53 44	11 ^h 50'33	3 ^h 56	21 ^h 37	20 ^h 47	15 ^h 15	7 ^h 9	17 ^h 44	20 ^h 50	28 ^h 1	4 ^h 28	27 ^h 27	28 ^h 6	1 ^h 52	4 ^h 5	F 4
S 5	22 57 41	12 ^h 48'36	15 ^h 55	20 ^h 47	22 ^h 1	14 ^h 59	7 ^h 15	17 ^h 49	20 ^h 49	28 ^h 0	4 ^h 28	27 ^h 14	28 ^h 3	1 ^h 59	4 ^h 2	S 5
S 6	23 1 37	13 ^h 46'41	27 ^h 49	19 ^h 53	23 ^h 14	14 ^h 43	7 ^h 21	17 ^h 53	20 ^h 48	27 ^h 59	4 ^h 29	27 ^h 2	28 ^h 0	2 ^h 6	3 ^h 59	S 6
M 7	23 5 34	14 ^h 44'48	9 ^h Υ39	18 ^h 56	24 ^h 28	14 ^h 27	7 ^h 27	17 ^h 57	20 ^h 47	27 ^h 58	4 ^h 30	26 ^h 52	27 ^h 57	2 ^h 12	3 ^h 56	M 7
T 8	23 9 31	15 ^h 42'57	21 ^h 29	17 ^h 58	25 ^h 42	14 ^h 11	7 ^h 33	18 ^h 2	20 ^h 46	27 ^h 57	4 ^h 30	26 ^h 44	27 ^h 54	2 ^h 19	3 ^h 53	T 8
W 9	23 13 27	16 ^h 41'08	3 ^h Ω20	16 ^h 59	26 ^h 55	13 ^h 55	7 ^h 40	18 ^h 6	20 ^h 45	27 ^h 56	4 ^h 31	26 ^h 39	27 ^h 51	2 ^h 26	3 ^h 50	W 9
T 10	23 17 24	17 ^h 39'20	15 ^h 16	16 ^h 1	28 ^h 9	13 ^h 39	7 ^h 46	18 ^h 11	20 ^h 44	27 ^h 55	4 ^h 31	26 ^h 36	27 ^h 47	2 ^h 32	3 ^h 47	T 10
F 11	23 21 20	18 ^h 37'35	27 ^h 21	15 ^h 5	29 ^h 23	13 ^h 23	7 ^h 53	18 ^h 15	20 ^h 43	27 ^h 54	4 ^h 32	26 ^h D36	27 ^h 44	2 ^h 39	3 ^h 44	F 11
S 12	23 25 17	19 ^h 35'52	9 ^h Ω39	14 ^h 12	0 ^h Υ37	13 ^h 8	8 ^h 0	18 ^h 20	20 ^h 42	27 ^h 53	4 ^h 32	26 ^h 36	27 ^h 41	2 ^h 46	3 ^h 41	S 12
S 13	23 29 13	20 ^h 34'10	22 ^h 17	13 ^h 25	1 ^h 51	12 ^h 52	8 ^h 7	18 ^h 25	20 ^h 41	27 ^h 52	4 ^h 33	26 ^h R36	27 ^h 38	2 ^h 53	3 ^h 38	S 13
M14	23 33 10	21 ^h 32'31	5 ^h Ω18	12 ^h 43	3 ^h 5	12 ^h 37	8 ^h 14	18 ^h 30	20 ^h 40	27 ^h 52	4 ^h 33	26 ^h 36	27 ^h 35	2 ^h 59	3 ^h 36	M14
T 15	23 37 6	22 ^h 30'54	18 ^h 46	12 ^h 8	4 ^h 19	12 ^h 23	8 ^h 21	18 ^h 35	20 ^h 40	27 ^h 51	4 ^h 34	26 ^h 33	27 ^h 32	3 ^h 6	3 ^h 33	T 15
W16	23 41 3	23 ^h 29'19	2 ^h Ω44	11 ^h 41	5 ^h 33	12 ^h 9	8 ^h 29	18 ^h 40	20 ^h 39	27 ^h 50	4 ^h 34	26 ^h 28	27 ^h 28	3 ^h 13	3 ^h 30	W16
T 17	23 45 0	24 ^h 27'46	17 ^h 11	11 ^h 22	6 ^h 47	11 ^h 55	8 ^h 36	18 ^h 45	20 ^h 38	27 ^h 49	4 ^h 35	26 ^h 20	27 ^h 25	3 ^h 19	3 ^h 27	T 17
F 18	23 48 56	25 ^h 26'16	2 ^h Υ 3	11 ^h 13	8 ^h 1	11 ^h 42	8 ^h 44	18 ^h 50	20 ^h 38	27 ^h 49	4 ^h 35	26 ^h 12	27 ^h 22	3 ^h 26	3 ^h 25	F 18
S 19	23 52 53	26 ^h 24'47	17 ^h 13	11 ^h D13	9 ^h 15	11 ^h 29	8 ^h 52	18 ^h 55	20 ^h 37	27 ^h 48	4 ^h 35	26 ^h 3	27 ^h 19	3 ^h 33	3 ^h 22	S 19
S 20	23 56 49	27 ^h 23'20	2 ^h Ω30	11 ^h 22	10 ^h 29	11 ^h 17	8 ^h 59	19 ^h 0	20 ^h 37	27 ^h 47	4 ^h 36	25 ^h 54	27 ^h 16	3 ^h 39	3 ^h 19	S 20
M21	0 0 46	28 ^h 21'55	17 ^h 45	11 ^h 41	11 ^h 44	11 ^h 5	9 ^h 7	19 ^h 6	20 ^h 36	27 ^h 47	4 ^h 36	25 ^h 47	27 ^h 12	3 ^h 46	3 ^h 17	M21
T 22	0 4 42	29 ^h 20'31	2 ^h Ω45	12 ^h 9	12 ^h 58	10 ^h 54	9 ^h 16	19 ^h 11	20 ^h 36	27 ^h 46	4 ^h 36	25 ^h 43	27 ^h 9	3 ^h 53	3 ^h 14	T 22
W23	0 8 39	0 ^h Ω19'10	17 ^h 24	12 ^h 47	14 ^h 12	10 ^h 43	9 ^h 24	19 ^h 17	20 ^h 35	27 ^h 46	4 ^h 36	25 ^h 41	27 ^h 6	3 ^h 59	3 ^h 11	W23
T 24	0 12 35	1 ^h 17'50	1 ^h Υ37	13 ^h 32	15 ^h 26	10 ^h 34	9 ^h 32	19 ^h 22	20 ^h 35	27 ^h 45	4 ^h 37	25 ^h D41	27 ^h 3	4 ^h 6	3 ^h 9	T 24
F 25	0 16 32	2 ^h 16'32	15 ^h 24	14 ^h 26	16 ^h 41	10 ^h 25	9 ^h 41	19 ^h 28	20 ^h 35	27 ^h 45	4 ^h 37	25 ^h 42	27 ^h 0	4 ^h 13	3 ^h 6	F 25
S 26	0 20 29	3 ^h 15'16	28 ^h 45	15 ^h 28	17 ^h 55	10 ^h 16	9 ^h 50	19 ^h 33	20 ^h 35	27 ^h 44	4 ^h 37	25 ^h R43	26 ^h 57	4 ^h 20	3 ^h 4	S 26
S 27	0 24 25	4 ^h 14'01	11 ^h 342	16 ^h 36	19 ^h 10	10 ^h 9	9 ^h 58	19 ^h 39	20 ^h 35	27 ^h 44	4 ^h 37	25 ^h 42	26 ^h 53	4 ^h 26	3 ^h 1	S 27
M28	0 28 22	5 ^h 12'48	24 ^h 21	17 ^h 51	20 ^h 24	10 ^h 2	10 ^h 7	19 ^h 45	20 ^h 34	27 ^h 43	4 ^h 37	25 ^h 40	26 ^h 50	4 ^h 33	2 ^h 59	M28
T 29	0 32 18	6 ^h 11'37	6 ^h Ω44	19 ^h 11	21 ^h 38	9 ^h 56	10 ^h 16	19 ^h 51	20 ^h 34	27 ^h 43	4 ^h 38	25 ^h 36	26 ^h 47	4 ^h 40	2 ^h 57	T 29
W30	0 36 15	7 ^h Ω10'27	18 ^h Ω56	20 ^h Υ37	22 ^h Υ53	9 ^h Υ51	10 ^h Υ25	19 ^h Ω56	20 ^h D34	27 ^h 343	4 ^h 338	25 ^h Ω30	26 ^h Ω44	4 ^h Υ46	2 ^h Υ54	W30

Day	☉	☾		♀		♀		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		
	decl	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	
T 1	8n13	16s26	4n19	1s36	4s30	16n23	0n44	11s24	6s24	20s54	0n32	15s 1	2n 7	22s17	0s30	20s 6	0n27	17n36	5s45	19s42	19s45	4n34	4s11	6n11				
W 2	7 51	13 13	4 46	1 23	4 30	16 3	0 46	11 29	6 23	20 55	0 32	15 2	2 7	22 17	0 30	20 6	0 27	17 36	5 45	19 40	19 45	4 36	4 13	6 10				
T 3	7 29	9 29	4 59	1 6	4 29	15 42	0 48	11 34	6 22	20 57	0 32	15 3	2 7	22 17	0 30	20 6	0 27	17 36	5 45	19 37	19 44	4 38	4 14	6 10				
F 4	7 7	5 25	4 59	0 45	4 26	15 21	0 50	11 38	6 20	20 58	0 32	15 5	2 7	22 18	0 30	20 6	0 27	17 36	5 45	19 34	19 43	4 40	4 15	6 10				
S 5	6 45	1 10	4 45	0 21	4 22	14 59	0 52	11 43	6 18	20 59	0 32	15 6	2 6	22 18	0 30	20 7	0 27	17 36	5 45	19 31	19 43	4 42	4 16	6 10				
S 6	6 22	3n 6	4 19	0n 6	4 15	14 37	0 54	11 48	6 16	21 0	0 31	15 7	2 6	22 18	0 30	20 7	0 27	17 35	5 45	19 29	19 42	4 45	4 17	6 10				
M 7	6 0	7 13	3 42	0 36	4 6	14 14	0 56	11 52	6 14	21 1	0 31	15 9	2 6	22 18	0 30	20 7	0 26	17 35	5 45	19 26	19 41	4 47	4 18	6 10				
T 8	5 38	11 4	2 55	1 8	3 56	13 51	0 58	11 56	6 12	21 2	0 31	15 10	2 6	22 18	0 30	20 7	0 26	17 35	5 45	19 24	19 40	4 49	4 20	6 10				
W 9	5 15	14 30	2 0	1 42	3 44	13 28	1 0	12 0	6 10	21 4	0 31	15 12	2 6	22 18	0 30	20 7	0 26	17 35	5 45	19 23	19 40	4 51	4 21	6 10				
T 10	4 52	17 21	1 0	2 17	3 30	13 4	1 2	12 4	6 7	21 5	0 31	15 13	2 5	22 19	0 30	20 8	0 26	17 35	5 45	19 23	19 39	4 54	4 22	6 9				
F 11	4 30	19 29	0s 4	2 53	3 14	12 40	1 4	12 7	6 4	21 6	0 31	15 15	2 5	22 19	0 30	20 8	0 26	17 35	5 46	19 23	19 38	4 56	4 23	6 9				
S 12	4 7	20 44	1 9	3 29	2 57	12 16	1 5	12 11	6 1	21 7	0 30	15 16	2 5	22 19	0 30	20 8	0 26	17 35	5 46	19 23	19 38	4 58	4 24	6 9				
S 13	3 44	20 59	2 12	4 4	2 39	11 51	1 7	12 14	5 58	21 9	0 30	15 18	2 5	22 19	0 30	20 8	0 26	17 35	5 46	19 23	19 37	5 0	4 25	6 9				
M14	3 21	20 8	3 11	4 37	2 20	11 26	1 9	12 17	5 55	21 10	0 30	15 19	2 5	22 19	0 30	20 8	0 26	17 35	5 46	19 23	19 36	5 2	4 27	6 9				
T 15	2 58	18 7	4 1	5 9	2 1	11 1	1 10	12 19	5 52	21 11	0 30	15 21	2 4	22 19	0 30	20 9	0 26	17 35	5 46	19 22	19 35	5 4	4 28	6 9				
W16	2 35	15 0	4 39	5 37	1 41	10 35	1 12	12 21	5 48	21 13	0 30	15 22	2 4	22 19	0 30	20 9	0 26	17 35	5 46	19 21	19 35	5 7	4 29	6 8				
T 17	2 12	10 54	5 1	6 2	1 21	10 9	1 13	12 23	5 44	21 14	0 29	15 24	2 4	22 19	0 30	20 9	0 26	17 34	5 46	19 19	19 34	5 9	4 30	6 8				
F 18	1 49	6 1	5 3	6 24	1 2	9 42	1 14	12 25	5 40	21 15	0 29	15 25	2 4	22 19	0 30	20 9	0 26	17 34	5 46	19 17	19 33	5 11	4 31	6 8				
S 19	1 25	0 41	4 44	6 41	0 43	9 16	1 16	12 26	5 36	21 17	0 29	15 27	2 4	22 19	0 30	20 9	0 26	17 34	5 46	19 15	19 32	5 13	4 32	6 8				
S 20	1 2	4s45	4 5	6 55	0 25	8 49	1 17	12 27	5 32	21 18	0 29	15 29	2 3	22 19	0 30	20 9	0 26	17 34	5 46	19 13	19 32	5 15	4 34	6 8				
M21	0 39	9 52	3 9	7 4	0 7	8 22	1 18	12 28	5 28	21 19	0 29	15 30	2 3	22 20	0 30	20 10	0 26	17 34	5 46	19 11	19 31	5 18	4 35	6 7				
T 22	0 16	14 17	2 0	7 8	0n 9	7 54	1 19	12 28	5 24	21 21	0 29	15 32	2 3	22 20	0 30	20 10	0 26	17 34	5 46	19 10	19 30	5 20	4 36	6 7				
W23	0s 8	17 43	0 44	7 8	0 24	7 27	1 20	12 28	5 20	21 22	0 28	15 33	2 3	22 20	0 30	20 10	0 26	17 34	5 47	19 10	19 30	5 22	4 37	6 7				
T 24	0 31	19 57	0n32	7 4	0 39	6 59	1 21	12 27	5 15	21 24	0 28	15 35	2 3	22 20	0 29	20 10	0 26	17 34	5 47	19 10	19 29	5 24	4 38	6 7				
F 25	0 54	20 54	1 44	6 55	0 52	6 31	1 22	12 27	5 11	21 25	0 28	15 37	2 3	22 20	0 29	20 10	0 26	17 34	5 47	19 10	19 28	5 26	4 39	6 6				
S 26	1 18	20 37	2 48	6 42	1 3	6 3	1 23	12 26	5 6	21 27	0 28	15 38	2 2	22 20	0 29	20 10	0 26	17 34	5 47	19 10	19 27	5 28	4 40	6 6				
S 27	1 41	19 13	3 42	6 25	1 14	5 34	1 24	12 24	5 1	21 28	0 28	15 40	2 2	22 20	0 29	20 10	0 26	17 34	5 47	19 10	19 27	5 31	4 41	6 6				
M28	2 4	16 55	4 23	6 4	1 23	5 6	1 25	12 22	4 57	21 30	0 28	15 42	2 2	22 20	0 29	20 10	0 26	17 33	5 47	19 10	19 26	5 33	4 43	6 6				
T 29	2 27	13 52	4 51	5 40	1 31	4 37	1 25	12 20	4 52	21 31	0 27	15 44	2 2	22 20	0 29	20 10	0 26	17 33	5 47	19 9	19 25	5 35	4 44	6 5				
W30	2s51	10s17	5n 5	5n13	1n37	4n 8	1n26	12s18	4s47	21s32	0n27	15s45	2n 2	22s20	0s29	20s11	0n26	17n33	5s47	19s 7	19s24	5n37	4s45	6n 5				

ASTRODIENST EPHEMERIS for the year 2161
geocentric

OCTOBER 2161

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
T 1	0 40 11	8♂ 9'19	0♂59	22♂ 6	24♂ 7	9°R46	10♂35	20♂ 2	20♂34	27°R42	4♂38	25°R22	26♂41	4♂53	2°R52	T 1
F 2	0 44 8	9° 8'13	12°56	23°39	25°22	9♂43	10°44	20° 8	20°35	27♂42	4°38	25♂14	26°37	5° 0	2♂50	F 2
S 3	0 48 4	10° 7'09	24°49	25°16	26°37	9°40	10°54	20°14	20°35	27°42	4°38	25° 5	26°34	5° 6	2°48	S 3
S 4	0 52 1	11° 6'07	6♂40	26°55	27°51	9°38	11° 3	20°20	20°35	27°42	4°R38	24°57	26°31	5°13	2°45	S 4
M 5	0 55 57	12° 5'06	18°31	28°35	29° 6	9°36	11°13	20°26	20°35	27°42	4°38	24°50	26°28	5°20	2°43	M 5
T 6	0 59 54	13° 4'08	0♂23	0♂18	0♂21	9°D36	11°23	20°32	20°35	27°41	4°38	24°45	26°25	5°27	2°41	T 6
W 7	1 3 51	14° 3'12	12°19	2° 2	1°35	9°36	11°33	20°39	20°36	27°41	4°38	24°42	26°22	5°33	2°39	W 7
T 8	1 7 47	15° 2'18	24°21	3°47	2°50	9°37	11°43	20°45	20°36	27°41	4°38	24°D41	26°18	5°40	2°37	T 8
F 9	1 11 44	16° 1'27	6♂31	5°32	4° 5	9°39	11°53	20°51	20°37	27°D41	4°38	24°42	26°15	5°47	2°35	F 9
S 10	1 15 40	17° 0'37	18°54	7°18	5°20	9°41	12° 3	20°57	20°37	27°41	4°38	24°43	26°12	5°53	2°33	S 10
S 11	1 19 37	17°59'50	1♂33	9° 4	6°34	9°45	12°13	21° 4	20°38	27°41	4°37	24°45	26° 9	6° 0	2°32	S 11
M12	1 23 33	18°59'06	14°32	10°50	7°49	9°49	12°24	21°10	20°38	27°41	4°37	24°R46	26° 6	6° 7	2°30	M12
T 13	1 27 30	19°58'23	27°54	12°36	9° 4	9°54	12°34	21°17	20°39	27°41	4°37	24°46	26° 3	6°13	2°28	T 13
W14	1 31 26	20°57'43	11♂24	14°22	10°19	9°59	12°45	21°23	20°40	27°42	4°37	24°44	25°59	6°20	2°26	W14
T 15	1 35 23	21°57'05	25°56	16° 7	11°34	10° 6	12°55	21°30	20°41	27°42	4°37	24°41	25°56	6°27	2°25	T 15
F 16	1 39 20	22°56'30	10♂35	17°52	12°49	10°13	13° 6	21°36	20°41	27°42	4°36	24°37	25°53	6°33	2°23	F 16
S 17	1 43 16	23°55'57	25°33	19°37	14° 4	10°21	13°17	21°43	20°42	27°42	4°36	24°32	25°50	6°40	2°22	S 17
S 18	1 47 13	24°55'25	10♂43	21°21	15°19	10°30	13°28	21°49	20°43	27°42	4°36	24°28	25°47	6°47	2°20	S 18
M19	1 51 9	25°54'57	25°54	23° 4	16°34	10°39	13°39	21°56	20°44	27°43	4°36	24°25	25°43	6°53	2°19	M19
T 20	1 55 6	26°54'30	10♂58	24°47	17°49	10°49	13°50	22° 3	20°45	27°43	4°35	24°23	25°40	7° 0	2°17	T 20
W21	1 59 2	27°54'05	25°44	26°29	19° 4	11° 0	14° 1	22° 9	20°46	27°43	4°35	24°D22	25°37	7° 7	2°16	W21
T 22	2 2 59	28°53'42	10♂7	28°11	20°19	11°11	14°13	22°16	20°47	27°44	4°34	24°23	25°34	7°14	2°15	T 22
F 23	2 6 55	29°53'20	24° 3	29°52	21°34	11°23	14°24	22°23	20°48	27°44	4°34	24°24	25°31	7°20	2°14	F 23
S 24	2 10 52	0♂53'01	7♂33	1♂32	22°49	11°36	14°35	22°30	20°50	27°45	4°34	24°26	25°28	7°27	2°12	S 24
S 25	2 14 49	1°52'43	20°36	3°12	24° 4	11°50	14°47	22°37	20°51	27°45	4°33	24°27	25°24	7°34	2°11	S 25
M26	2 18 45	2°52'27	3♂18	4°51	25°19	12° 4	14°59	22°43	20°52	27°46	4°33	24°R28	25°21	7°40	2°10	M26
T 27	2 22 42	3°52'13	15°41	6°30	26°34	12°19	15°10	22°50	20°54	27°46	4°32	24°27	25°18	7°47	2° 9	T 27
W28	2 26 38	4°52'00	27°50	8° 8	27°50	12°34	15°22	22°57	20°55	27°47	4°32	24°26	25°15	7°54	2° 8	W28
T 29	2 30 35	5°51'49	9♂49	9°45	29° 5	12°50	15°34	23° 4	20°56	27°48	4°31	24°23	25°12	8° 0	2° 8	T 29
F 30	2 34 31	6°51'39	21°42	11°22	0♂20	13° 7	15°46	23°11	20°58	27°48	4°31	24°21	25° 9	8° 7	2° 7	F 30
S 31	2 38 28	7♂51'32	3♂32	12♂59	1♂35	13♂24	15♂58	23♂18	20♂59	27♂49	4♂30	24♂18	25♂ 5	8♂14	2♂ 6	S 31

Day	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂
	decl	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl
T 1	3s14	6s21	5n 6	4n42	1n43	3n39	1n26	12s15	4s42	21s34	0n27	15s47	2n 2	22s20	0s29	20s11
F 2	3 37	2 11	4 53	4 9	1 47	3 10	1 27	12 12	4 38	21 35	0 27	15 49	2 1	22 20	0 29	20 11
S 3	4 0	2n 2	4 28	3 34	1 51	2 41	1 27	12 9	4 33	21 37	0 27	15 50	2 1	22 20	0 29	20 11
S 4	4 23	6 10	3 50	2 57	1 53	2 11	1 27	12 5	4 28	21 38	0 27	15 52	2 1	22 20	0 29	20 11
M 5	4 46	10 4	3 3	2 18	1 54	1 42	1 28	12 1	4 23	21 40	0 26	15 54	2 1	22 19	0 29	20 11
T 6	5 9	13 36	2 8	1 38	1 55	1 12	1 28	11 57	4 18	21 41	0 26	15 56	2 1	22 19	0 29	20 11
W 7	5 32	16 35	1 7	0 56	1 54	0 43	1 28	11 52	4 13	21 43	0 26	15 57	2 1	22 19	0 29	20 11
T 8	5 55	18 52	0 2	0 14	1 53	0 13	1 28	11 47	4 8	21 44	0 26	15 59	2 0	22 19	0 29	20 11
F 9	6 18	20 20	1s 4	0s29	1 52	0s16	1 28	11 42	4 4	21 46	0 26	16 1	2 0	22 19	0 29	20 11
S 10	6 41	20 49	2 8	1 13	1 49	0 46	1 28	11 37	3 59	21 47	0 26	16 3	2 0	22 19	0 29	20 11
S 11	7 3	20 17	3 8	1 58	1 46	1 16	1 28	11 31	3 54	21 49	0 26	16 5	2 0	22 19	0 29	20 11
M12	7 26	18 40	3 59	2 42	1 43	1 46	1 27	11 25	3 49	21 50	0 25	16 6	2 0	22 19	0 29	20 11
T 13	7 48	16 0	4 39	3 27	1 39	2 15	1 27	11 19	3 44	21 52	0 25	16 8	2 0	22 19	0 29	20 11
W14	8 10	12 23	5 5	4 12	1 35	2 45	1 27	11 12	3 40	21 53	0 25	16 10	2 0	22 19	0 29	20 11
T 15	8 33	7 57	5 12	4 57	1 30	3 15	1 26	11 5	3 35	21 55	0 25	16 12	2 0	22 18	0 29	20 11
F 16	8 55	2 57	5 1	5 41	1 25	3 44	1 26	10 58	3 30	21 56	0 25	16 14	1 59	22 18	0 29	20 11
S 17	9 17	2s20	4 28	6 26	1 20	4 14	1 25	10 51	3 26	21 58	0 25	16 15	1 59	22 18	0 29	20 11
S 18	9 38	7 34	3 37	7 10	1 15	4 43	1 25	10 43	3 21	21 59	0 25	16 17	1 59	22 18	0 29	20 11
M19	10 0	12 20	2 30	7 54	1 9	5 13	1 24	10 36	3 16	22 1	0 24	16 19	1 59	22 18	0 29	20 11
T 20	10 22	16 15	1 13	8 37	1 3	5 42	1 23	10 28	3 12	22 2	0 24	16 21	1 59	22 18	0 29	20 11
W21	10 43	19 3	0n 7	9 20	0 57	6 11	1 22	10 19	3 7	22 4	0 24	16 23	1 59	22 18	0 29	20 11
T 22	11 4	20 32	1 26	10 2	0 51	6 40	1 22	10 11	3 3	22 5	0 24	16 24	1 59	22 17	0 29	20 11
F 23	11 25	20 41	2 36	10 43	0 44	7 9	1 21	10 2	2 59	22 7	0 24	16 26	1 59	22 17	0 29	20 11
S 24	11 46	19 37	3 36	11 24	0 38	7 38	1 20	9 53	2 54	22 8	0 24	16 28	1 59	22 17	0 29	20 11
S 25	12 7	17 31	4 22	12 5	0 31	8 7	1 19	9 44	2 50	22 10	0 24	16 30	1 58	22 17	0 29	20 11
M26	12 27	14 38	4 54	12 45	0 25	8 35	1 17	9 35	2 46	22 11	0 23	16 32	1 58	22 16	0 29	20 11
T 27	12 48	11 9	5 12	13 24	0 18	9 3	1 16	9 25	2 41	22 12	0 23	16 33	1 58	22 16	0 29	20 10
W28	13 8	7 17	5 15	14 2	0 11	9 31	1 15	9 16	2 37	22 14	0 23	16 35	1 58	22 16	0 29	20 10
T 29	13 28	3 11	5 4	14 39	0 4	9 59	1 14	9 6	2 33	22 15	0 23	16 37	1 58	22 16	0 29	20 10
F 30	13 48	1n 0	4 40	15 16	0s 2	10 27	1 12	8 56	2 29	22 17	0 23	16 39	1 58	22 16	0 29	20 10
S 31	14s 7	5n 9	4n 5	15s52	0s 9	10s54	1n11	8s45	2s25	22s18	0n23	16s41	1n58	22s15	0s29	20s10

Julian Day Number = 2510622.5, Delta T = 130.09 sec
Ecliptic obliquity = 23°25'01, Nutation = 0°00'14, out-of-bounds declination in red
Ayanamsha: Fagan/Bradley = 27°00'02, Lahiri = 26°07'02

ASTRODIENST EPHEMERIS for the year 2161
geocentric

NOVEMBER 2161

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
S 1	2 42 24	8♉51'26	15♊23	14♉35	2♉50	13♉42	16♉10	23♉25	21♉1	27♉50	4♉29	24♉15	25♉2	8♊20	2♊5	S 1
M 2	2 46 21	9°51'22	27°17	16°10	4° 5	14° 0	16°22	23°32	21° 3	27°51	4♉29	24♉13	24°59	8°27	2♉5	M 2
T 3	2 50 18	10°51'20	9♉15	17°45	5°21	14°19	16°34	23°39	21° 4	27°51	4°28	24°12	24°56	8°34	2° 4	T 3
W 4	2 54 14	11°51'19	21°21	19°19	6°36	14°38	16°46	23°46	21° 6	27°52	4°28	24°D12	24°53	8°40	2° 4	W 4
T 5	2 58 11	12°51'21	3♉35	20°53	7°51	14°58	16°59	23°53	21° 8	27°53	4°27	24°12	24°49	8°47	2° 3	T 5
F 6	3 2 7	13°51'25	15°59	22°27	9° 6	15°18	17°11	24° 0	21°10	27°54	4°26	24°12	24°46	8°54	2° 3	F 6
S 7	3 6 4	14°51'30	28°35	24° 0	10°22	15°39	17°23	24° 7	21°12	27°55	4°26	24°13	24°43	9° 1	2° 3	S 7
S 8	3 10 0	15°51'38	11♉25	25°33	11°37	16° 1	17°36	24°15	21°14	27°56	4°25	24°14	24°40	9° 7	2° 2	S 8
M 9	3 13 57	16°51'48	24°31	27° 6	12°52	16°22	17°48	24°22	21°16	27°57	4°24	24°15	24°37	9°14	2° 2	M 9
T 10	3 17 53	17°52'00	7♉54	28°38	14° 8	16°45	18° 1	24°29	21°18	27°58	4°23	24°15	24°34	9°21	2° 2	T 10
W11	3 21 50	18°52'13	21°36	0♉9	15°23	17° 7	18°13	24°36	21°20	27°59	4°23	24°R15	24°30	9°27	2° 2	W11
T 12	3 25 47	19°52'29	5♉38	1°41	16°38	17°30	18°26	24°43	21°22	28° 0	4°22	24°15	24°27	9°34	2°D 2	T 12
F 13	3 29 43	20°52'47	19°58	3°12	17°53	17°54	18°39	24°50	21°24	28° 1	4°21	24°15	24°24	9°41	2° 2	F 13
S 14	3 33 40	21°53'07	4♉34	4°42	19° 9	18°18	18°52	24°57	21°26	28° 2	4°20	24°15	24°21	9°47	2° 2	S 14
S 15	3 37 36	22°53'28	19°21	6°12	20°24	18°42	19° 5	25° 5	21°28	28° 3	4°19	24°14	24°18	9°54	2° 2	S 15
M16	3 41 33	23°53'52	4♉12	7°42	21°40	19° 7	19°17	25°12	21°30	28° 5	4°18	24°D14	24°14	10° 1	2° 3	M16
T 17	3 45 29	24°54'17	19° 1	9°12	22°55	19°32	19°30	25°19	21°33	28° 6	4°18	24°R14	24°11	10° 7	2° 3	T 17
W18	3 49 26	25°54'45	3♉40	10°41	24°10	19°57	19°43	25°26	21°35	28° 7	4°17	24°14	24° 8	10°14	2° 3	W18
T 19	3 53 22	26°55'13	18° 1	12°10	25°26	20°23	19°56	25°33	21°37	28° 9	4°16	24°14	24° 5	10°21	2° 4	T 19
F 20	3 57 19	27°55'44	2♉1	13°38	26°41	20°49	20° 9	25°40	21°40	28°10	4°15	24°14	24° 2	10°27	2° 4	F 20
S 21	4 1 16	28°56'15	15°36	15° 6	27°57	21°16	20°22	25°47	21°42	28°11	4°14	24°13	23°59	10°34	2° 5	S 21
S 22	4 5 12	29°56'48	28°46	16°33	29°12	21°43	20°36	25°55	21°45	28°13	4°13	24°13	23°55	10°41	2° 5	S 22
M23	4 9 9	0♉57'22	11♉33	18° 0	0♉27	22°10	20°49	26° 2	21°47	28°14	4°12	24°12	23°52	10°47	2° 6	M23
T 24	4 13 5	1°57'58	24° 0	19°26	1°43	22°38	21° 2	26° 9	21°50	28°15	4°11	24°12	23°49	10°54	2° 7	T 24
W25	4 17 2	2°58'34	6♉11	20°51	2°58	23° 6	21°15	26°16	21°52	28°17	4°10	24°D12	23°46	11° 1	2° 8	W25
T 26	4 20 58	3°59'12	18°10	22°16	4°14	23°34	21°29	26°23	21°55	28°18	4° 9	24°12	23°43	11° 8	2° 9	T 26
F 27	4 24 55	4°59'50	0♊2	23°40	5°29	24° 2	21°42	26°30	21°58	28°20	4° 8	24°13	23°40	11°14	2° 9	F 27
S 28	4 28 51	6° 0'30	11°51	25° 3	6°44	24°31	21°55	26°37	22° 1	28°21	4° 7	24°14	23°36	11°21	2°10	S 28
S 29	4 32 48	7° 1'11	23°43	26°24	8° 0	25° 0	22° 9	26°44	22° 3	28°23	4° 6	24°15	23°33	11°28	2°12	S 29
M30	4 36 45	8♉1'54	5♉40	27♉45	9♉15	25♉29	22♉22	26♉52	22♉6	28♉25	4♉5	24♉16	23♉30	11♊34	2♉13	M30

Day	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
S 1	14s26	9n 6	3n19	16s27	0s16	11s21	1n10	8s35	2s21	22s19	0n23	16s43	1n58	22s15	0s29	S 1
M 2	14 45	12 44	2 24	17 1	0 23	11 48	1 8	8 24	2 17	22 21	0 23	16 44	1 58	22 15	0 29	M 2
T 3	15 4	15 52	1 22	17 35	0 29	12 15	1 7	8 13	2 14	22 22	0 22	16 46	1 58	22 14	0 29	T 3
W 4	15 23	18 20	0 16	18 7	0 36	12 41	1 5	8 2	2 10	22 23	0 22	16 48	1 58	22 14	0 29	W 4
T 5	15 41	20 0	0s52	18 39	0 43	13 7	1 3	7 51	2 6	22 25	0 22	16 50	1 57	22 14	0 29	T 5
F 6	15 59	20 43	1 58	19 9	0 49	13 33	1 2	7 40	2 3	22 26	0 22	16 52	1 57	22 14	0 29	F 6
S 7	16 17	20 25	3 0	19 39	0 55	13 58	1 0	7 29	1 59	22 27	0 22	16 53	1 57	22 13	0 29	S 7
S 8	16 34	19 3	3 53	20 8	1 2	14 23	0 58	7 17	1 55	22 29	0 22	16 55	1 57	22 13	0 29	S 8
M 9	16 51	16 40	4 36	20 36	1 8	14 48	0 56	7 6	1 52	22 30	0 22	16 57	1 57	22 13	0 29	M 9
T 10	17 8	13 22	5 5	21 2	1 14	15 12	0 54	6 54	1 49	22 31	0 22	16 59	1 57	22 12	0 29	T 10
W11	17 25	9 17	5 17	21 28	1 20	15 36	0 53	6 42	1 45	22 32	0 21	17 0	1 57	22 12	0 29	W11
T 12	17 41	4 36	5 11	21 53	1 26	15 59	0 51	6 30	1 42	22 34	0 21	17 2	1 57	22 12	0 29	T 12
F 13	17 58	0s25	4 46	22 16	1 31	16 22	0 49	6 18	1 39	22 35	0 21	17 4	1 57	22 11	0 29	F 13
S 14	18 13	5 31	4 2	22 39	1 37	16 45	0 47	6 5	1 35	22 36	0 21	17 6	1 57	22 11	0 29	S 14
S 15	18 29	10 22	3 2	23 0	1 42	17 7	0 45	5 53	1 32	22 37	0 21	17 7	1 57	22 11	0 29	S 15
M16	18 44	14 37	1 49	23 20	1 47	17 29	0 43	5 40	1 29	22 38	0 21	17 9	1 57	22 10	0 29	M16
T 17	18 59	17 55	0 29	23 39	1 52	17 50	0 40	5 28	1 26	22 39	0 21	17 11	1 57	22 10	0 29	T 17
W18	19 13	20 1	0n52	23 57	1 57	18 11	0 38	5 15	1 23	22 41	0 21	17 13	1 57	22 9	0 29	W18
T 19	19 27	20 45	2 8	24 14	2 1	18 31	0 36	5 2	1 20	22 42	0 21	17 14	1 57	22 9	0 29	T 19
F 20	19 41	20 9	3 15	24 29	2 5	18 51	0 34	4 49	1 17	22 43	0 20	17 16	1 57	22 9	0 29	F 20
S 21	19 54	18 24	4 8	24 43	2 9	19 10	0 32	4 36	1 14	22 44	0 20	17 18	1 57	22 8	0 29	S 21
S 22	20 7	15 42	4 47	24 56	2 12	19 29	0 29	4 23	1 11	22 45	0 20	17 19	1 57	22 8	0 29	S 22
M23	20 20	12 20	5 10	25 8	2 16	19 47	0 27	4 9	1 9	22 46	0 20	17 21	1 57	22 7	0 29	M23
T 24	20 32	8 31	5 17	25 18	2 19	20 5	0 25	3 56	1 6	22 47	0 20	17 23	1 57	22 7	0 28	T 24
W25	20 44	4 25	5 11	25 27	2 21	20 22	0 23	3 42	1 3	22 48	0 20	17 24	1 57	22 7	0 28	W25
T 26	20 56	0 13	4 50	25 35	2 23	20 38	0 20	3 29	1 0	22 49	0 20	17 26	1 57	22 6	0 28	T 26
F 27	21 7	3n57	4 18	25 41	2 25	20 54	0 18	3 15	0 58	22 50	0 20	17 28	1 57	22 6	0 28	F 27
S 28	21 17	7 58	3 34	25 46	2 26	21 9	0 16	3 1	0 55	22 51	0 20	17 29	1 57	22 5	0 28	S 28
S 29	21 28	11 42	2 41	25 49	2 27	21 24	0 13	2 47	0 53	22 52	0 20	17 31	1 57	22 5	0 28	S 29
M30	21s38	15n 0	1n41	25s51	2s28	21s38	0n11	2s34	0s50	22s52	0n19	17s33	1n57	22s 4	0s28	M30

Julian Day Number = 2510653.5, Delta T = 130.15 sec
Ecliptic obliquity = 23°25'01, Nutation = 0°00'13, out-of-bounds declination in red
Ayanamsha: Fagan/Bradley = 27°00'06, Lahiri = 26°07'07

ASTRODIENST EPHEMERIS for the year 2161
geocentric

DECEMBER 2161

00:00 UT

Day	Sid.t	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
T 1	4 40 41	9♂ 2'37	17♂47	29♂ 4	10♂31	25♂59	22♂35	26♂59	22♂ 9	28♂26	4♂R 4	24♂17	23♂27	11♂41	2♂14	T 1
W 2	4 44 38	10° 3'22	0♂ 4	0♂21	11°46	26°29	22°49	27° 6	22°12	28°28	4♂ 3	24♂R17	23°24	11°48	2°15	W 2
T 3	4 48 34	11° 4'07	12°34	1°36	13° 1	26°59	23° 2	27°13	22°15	28°30	4° 2	24°16	23°20	11°54	2°16	T 3
F 4	4 52 31	12° 4'54	25°18	2°50	14°17	27°29	23°16	27°20	22°17	28°31	4° 1	24°14	23°17	12° 1	2°18	F 4
S 5	4 56 27	13° 5'43	8♂15	4° 0	15°32	28° 0	23°29	27°27	22°20	28°33	3°59	24°12	23°14	12° 8	2°19	S 5
S 6	5 0 24	14° 6'32	21°27	5° 8	16°48	28°31	23°43	27°34	22°23	28°35	3°58	24° 9	23°11	12°14	2°21	S 6
M 7	5 4 20	15° 7'23	4♂51	6°12	18° 3	29° 2	23°56	27°41	22°26	28°36	3°57	24° 6	23° 8	12°21	2°22	M 7
T 8	5 8 17	16° 8'15	18°27	7°13	19°19	29°33	24°10	27°48	22°29	28°38	3°56	24° 3	23° 5	12°28	2°24	T 8
W 9	5 12 14	17° 9'09	2♂15	8° 9	20°34	0♂ 4	24°23	27°54	22°32	28°40	3°55	24° 1	23° 1	12°34	2°25	W 9
T 10	5 16 10	18°10'03	16°14	9° 0	21°49	0°36	24°37	28° 1	22°35	28°42	3°54	24°D 1	22°58	12°41	2°27	T 10
F 11	5 20 7	19°10'59	0♂21	9°45	23° 5	1° 8	24°51	28° 8	22°39	28°44	3°53	24° 1	22°55	12°48	2°29	F 11
S 12	5 24 3	20°11'56	14°36	10°24	24°20	1°40	25° 4	28°15	22°42	28°46	3°51	24° 2	22°52	12°54	2°31	S 12
S 13	5 28 0	21°12'55	28°57	10°56	25°36	2°12	25°18	28°22	22°45	28°47	3°50	24° 4	22°49	13° 1	2°33	S 13
M14	5 31 56	22°13'54	13♂20	11°19	26°51	2°44	25°32	28°29	22°48	28°49	3°49	24° 5	22°46	13° 8	2°34	M14
T 15	5 35 53	23°14'55	27°42	11°33	28° 7	3°17	25°45	28°35	22°51	28°51	3°48	24°R 5	22°42	13°14	2°36	T 15
W16	5 39 49	24°15'57	11♂58	11°R38	29°22	3°50	25°59	28°42	22°54	28°53	3°47	24° 4	22°39	13°21	2°38	W16
T 17	5 43 46	25°17'00	26° 3	11°31	0♂38	4°23	26°13	28°49	22°58	28°55	3°46	24° 1	22°36	13°28	2°41	T 17
F 18	5 47 43	26°18'03	9♂53	11°14	1°53	4°56	26°26	28°55	23° 1	28°57	3°44	23°57	22°33	13°34	2°43	F 18
S 19	5 51 39	27°19'07	23°24	10°45	3° 9	5°29	26°40	29° 2	23° 4	28°59	3°43	23°51	22°30	13°41	2°45	S 19
S 20	5 55 36	28°20'11	6♂33	10° 4	4°24	6° 3	26°54	29° 9	23° 7	29° 1	3°42	23°45	22°26	13°48	2°47	S 20
M21	5 59 32	29°21'16	19°22	9°12	5°40	6°36	27° 7	29°15	23°11	29° 3	3°41	23°40	22°23	13°54	2°49	M21
T 22	6 3 29	0♂22'21	1♂52	8°10	6°55	7°10	27°21	29°22	23°14	29° 5	3°40	23°35	22°20	14° 1	2°52	T 22
W23	6 7 25	1°23'27	14° 4	6°59	8°10	7°44	27°35	29°28	23°17	29° 7	3°38	23°31	22°17	14° 8	2°54	W23
T 24	6 11 22	2°24'33	26° 4	5°42	9°26	8°18	27°48	29°35	23°21	29° 9	3°37	23°30	22°14	14°15	2°57	T 24
F 25	6 15 18	3°25'39	7♂56	4°21	10°41	8°52	28° 2	29°41	23°24	29°11	3°36	23°D29	22°11	14°21	2°59	F 25
S 26	6 19 15	4°26'45	19°46	2°58	11°57	9°27	28°15	29°47	23°28	29°14	3°35	23°31	22° 7	14°28	3° 2	S 26
S 27	6 23 12	5°27'51	1♂37	1°37	13°12	10° 1	28°29	29°54	23°31	29°16	3°34	23°32	22° 4	14°35	3° 4	S 27
M28	6 27 8	6°28'58	13°36	0°20	14°28	10°36	28°43	29°59	23°34	29°18	3°32	23°34	22° 1	14°41	3° 7	M28
T 29	6 31 5	7°30'05	25°47	29♂ 9	15°43	11°10	28°56	0♂ 6	23°38	29°20	3°31	23°R34	21°58	14°48	3°10	T 29
W30	6 35 1	8°31'12	8♂14	28° 6	16°58	11°45	29°10	0°12	23°41	29°22	3°30	23°33	21°55	14°55	3°12	W30
T 31	6 38 58	9♂32'19	20♂58	27♂12	18♂14	12♂20	29♂24	0♂18	23♂45	29♂24	3♂29	23♂30	21♂52	15♂ 1	3♂15	T 31

Day	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂
	decl	decl lat	decl lat	decl lat	decl lat	decl lat	decl lat	decl lat	decl lat	decl lat	decl lat	decl lat	decl lat	decl lat	decl lat	decl lat
T 1	21s47	17n41	0n36	25s52	2s27	21s52	0n 8	2s20	0s48	22s53	0n19	17s34	1n57	22s 4	0s28	20s 3
W 2	21 56	19 37	0s32	25 51	2 26	22 5	0 6	2 6	0 45	22 54	0 19	17 36	1 57	22 3	0 28	20 3
T 3	22 5	20 38	1 39	25 49	2 25	22 17	0 4	1 51	0 43	22 55	0 19	17 37	1 57	22 3	0 28	20 3
F 4	22 13	20 37	2 43	25 46	2 23	22 28	0 1	1 37	0 41	22 56	0 19	17 39	1 57	22 2	0 28	20 2
S 5	22 21	19 30	3 40	25 41	2 20	22 39	0s 1	1 23	0 38	22 56	0 19	17 41	1 57	22 2	0 28	20 2
S 6	22 28	17 20	4 25	25 35	2 16	22 49	0 3	1 9	0 36	22 57	0 19	17 42	1 57	22 2	0 28	20 2
M 7	22 35	14 13	4 57	25 28	2 12	22 59	0 6	0 54	0 34	22 58	0 19	17 44	1 57	22 1	0 28	20 1
T 8	22 42	10 18	5 13	25 19	2 6	23 7	0 8	0 40	0 32	22 59	0 19	17 45	1 57	22 1	0 28	20 1
W 9	22 48	5 48	5 12	25 9	2 0	23 16	0 11	0 26	0 30	22 59	0 19	17 47	1 57	22 0	0 28	20 1
T 10	22 53	0 57	4 52	24 59	1 52	23 23	0 13	0 11	0 28	23 0	0 18	17 48	1 57	22 0	0 28	20 0
F 11	22 59	4s 1	4 14	24 47	1 44	23 30	0 15	0n 3	0 26	23 1	0 18	17 50	1 57	21 59	0 28	20 0
S 12	23 3	8 50	3 20	24 34	1 34	23 36	0 18	0 18	0 24	23 1	0 18	17 51	1 57	21 58	0 28	20 0
S 13	23 8	13 11	2 14	24 20	1 23	23 41	0 20	0 33	0 22	23 2	0 18	17 53	1 57	21 58	0 28	19 59
M14	23 11	16 46	0 59	24 6	1 10	23 45	0 23	0 47	0 20	23 2	0 18	17 54	1 57	21 57	0 28	19 59
T 15	23 15	19 18	0n20	23 51	0 56	23 49	0 25	1 2	0 18	23 3	0 18	17 55	1 57	21 57	0 28	19 59
W16	23 18	20 37	1 37	23 36	0 41	23 52	0 27	1 17	0 16	23 3	0 18	17 57	1 57	21 56	0 28	19 58
T 17	23 20	20 35	2 46	23 30	0 25	23 54	0 29	1 32	0 14	23 4	0 18	17 58	1 57	21 56	0 28	19 58
F 18	23 22	19 19	3 45	23 4	0 7	23 56	0 32	1 46	0 12	23 4	0 18	18 0	1 57	21 55	0 28	19 57
S 19	23 23	16 58	4 29	22 48	0n11	23 57	0 34	2 1	0 10	23 5	0 18	18 1	1 57	21 55	0 28	19 57
S 20	23 24	13 49	4 58	22 32	0 31	23 57	0 36	2 16	0 9	23 5	0 18	18 2	1 57	21 54	0 28	19 57
M21	23 25	10 5	5 11	22 16	0 50	23 56	0 38	2 31	0 7	23 6	0 17	18 4	1 57	21 54	0 28	19 56
T 22	23 25	6 0	5 14	22 0	1 10	23 55	0 41	2 46	0 5	23 6	0 17	18 5	1 57	21 53	0 28	19 56
W23	23 25	1 46	4 52	21 44	1 30	23 53	0 43	3 1	0 3	23 6	0 17	18 6	1 57	21 52	0 28	19 55
T 24	23 24	2n28	4 23	21 29	1 49	23 50	0 45	3 16	0 2	23 7	0 17	18 8	1 57	21 52	0 28	19 55
F 25	23 22	6 33	3 43	21 14	2 6	23 46	0 47	3 31	0 0	23 7	0 17	18 9	1 57	21 51	0 28	19 55
S 26	23 21	10 24	2 53	21 1	2 22	23 42	0 49	3 46	0n 1	23 7	0 17	18 10	1 58	21 51	0 28	19 54
S 27	23 18	13 51	1 56	20 49	2 36	23 37	0 51	4 1	0 3	23 8	0 17	18 12	1 58	21 50	0 28	19 54
M28	23 15	16 46	0 54	20 38	2 47	23 31	0 53	4 16	0 4	23 8	0 17	18 13	1 58	21 50	0 28	19 53
T 29	23 12	19 0	0s12	20 29	2 56	23 24	0 55	4 30	0 6	23 8	0 17	18 14	1 58	21 49	0 28	19 53
W30	23 9	20 22	1 19	20 22	3 2	23 17	0 57	4 45	0 7	23 8	0 17	18 15	1 58	21 48	0 28	19 52
T 31	23s 4	20n44	2s23	20s17	3n 6	23s 9	0s59	5n 0	0n 9	23s 8	0n17	18s16	1n58	21s48	0s28	19s52

Julian Day Number = 2510683.5, Delta T = 130.21 sec
Ecliptic obliquity = 23°25'00, Nutation = 0°00'13, out-of-bounds declination in red
Ayanamsha: Fagan/Bradley = 27°00'10, Lahiri = 26°07'11